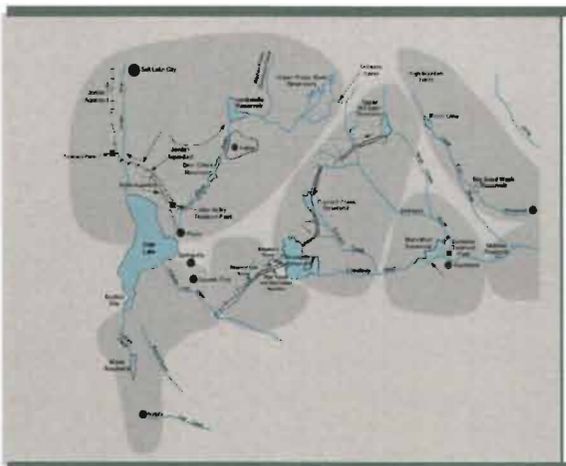
WATER SUPPLY APPENDIX

Volume 5 - Provo River

Central Utah Project Completion Program



Supplement to the 1988 Definite Plan Report for the Bonneville Unit

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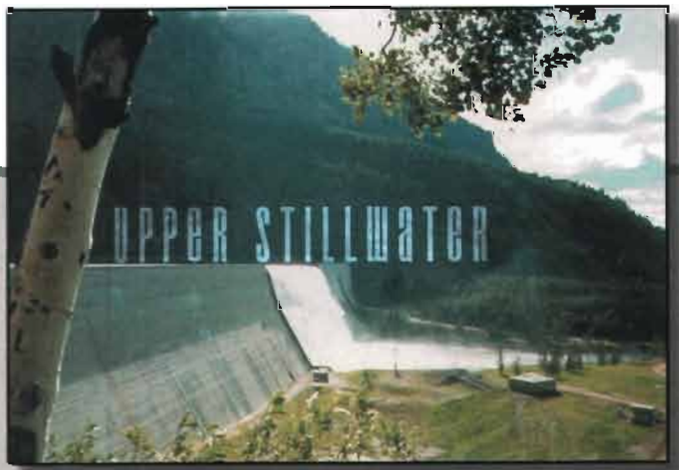


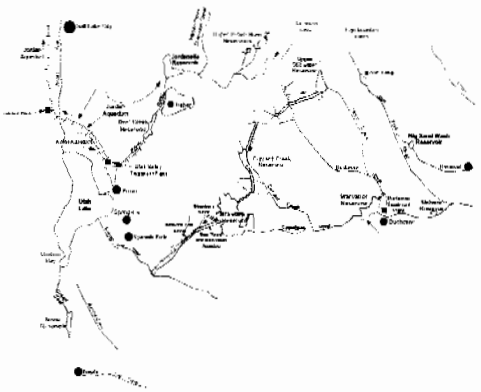
UTAH RECLAMATION MITIGATION AND CONSERVATION COMMISSION

Volume 5-Provo River

WATER SUPPLY APPENDIX

Volume 5 – Provo River

Central Utah Project Completion Program



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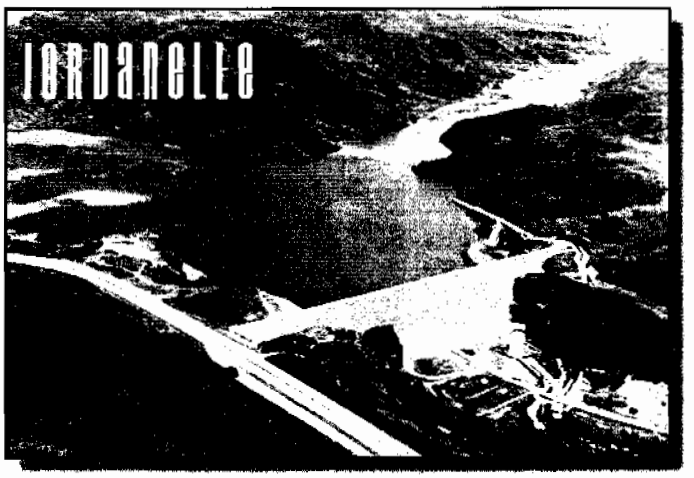

UTAH RECLAMATION MITIGATION AND CONSERVATION COMMISSION

Volume 5–Provo River

SUPPLEMENT TO THE BONNEVILLE UNIT DEFINITE PLAN REPORT

WATER SUPPLY APPENDIX, VOLUME 5 – PROVO RIVER

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WITH THE ASSISTANCE OF:

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Mayya Group International, LLC

October 2004

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Central Utah Project Completion Program

Chapter 1

October 2004

UTAH RECLAMATION
MITIGATION
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This volume describes the water supply and operations of the Provo River System with emphasis on the water deliveries to the Lower Provo River through the Bonneville Unit's Utah Lake Drainage Basin Water Delivery System. This Volume 5 supports the 2004 Supplement to the 1988 Bonneville Unit Definite Plan Report (DPR) and Volume 1of the Water Supply Appendix to the DPR.

Included in the discussion is a review of the historical development on the Provo River by the Provo Reservoir Water Users Company, the Provo River Project, and the Bonneville Unit's Municipal and Industrial System with Jordanelle Dam and Reservoir as the key features.

This Chapter describes the Provo River developments that preceded the Bonneville Unit, and that formed the setting in which the Bonneville Unit was formulated. The historical water supply developments are important in that the Bonneville Unit facilities supplement the historical development and operate in combination with the historical developments. In particular, Bonneville Unit water will be delivered through existing diversion and conveyance facilities, minimizing the cost of providing the water.

BASIN GEOGRAPHY

The Provo River watershed is made up of high mountains, low mountains, and valleys. For reference, the Provo River is divided into three parts--the upper Provo River upstream of Jordanelle Reservoir, the middle Provo River between Jordanelle and Deer Creek Reservoirs, and the lower river downstream of Deer Creek Reservoir. The upper Provo River has a long narrow watershed, from the Trial Lake area in the extreme western Uinta Mountains down into the southern end of Kamas (Rhodes) Valley, then down upper Provo River Canyon into Jordanelle Reservoir. The area is vegetated with sage-grass, oak, mahogany, with aspen and evergreen forests on the mountains to the west of the reservoir. Below Jordanelle Reservoir, the River enters the Heber Valley, a wide, flat alluvial valley which receives runoff from the Wasatch Mountains on the west and the Uinta National Forest on the east. Large agricultural diversions from the River in the Heber Valley create significant sustained return flows during the dry summer months. Below Deer Creek Dam, the Provo River flows southwest through the narrow Provo River Canyon, which bisects the Wasatch Mountains. After leaving the Canyon, the Provo River meanders across the benches of the Utah Valley, before emptying into Utah Lake north of Provo Bay. The drainage area of the Provo River is 673 square miles at the Provo City gage above Utah Lake.

NATURAL RUNOFF

Natural runoff into the Provo River is highly seasonal. Snowmelt runoff during March through July carries up to 60 percent of the annual natural flow of the watershed. The average natural streamflow of the basin is 364,000 acre-feet, with wet years typically exceeding 500,000 acre-feet and dry years often below 250,000 acre-feet. Average historical streamflows are significantly lower due to diversions and water use within the basin. Average historical streamflow is 153,000 acre-feet per year at the gage near Provo City. Upper basin streamflows are augmented by large transbasin

diversions from the Weber and the Duchesne rivers. These transbasin diversions average 85,600 acre-feet per year under full operation. The source of these transbasin flows, the Weber-Provo Diversion Canal and the Duchesne Tunnel, are discussed in Chapter 2.

DAMS ON LOWER PROVO RIVER

Beginning in the 1850s, settlers in the Heber and Utah valleys began to divert water from the Provo River to irrigate lands. Small diversion dams and irrigation canals were constructed to divert and convey natural river flows. Most of these diversions from the river are still in use, although much of the land that was originally irrigated has now been urbanized. The Utah Reclamation Mitigation and Conservation Commission has plans to rehabilitate four of these lower Provo River dams, to pass instream flows as part of the June sucker Recovery Implementation Program.

PROVO RIVER PROJECT FACILITIES

The Provo River Project (PRP), constructed during the 1930s, 1940s, and 1950s, involved a major expansion in diversion and use of Provo River and trans-basin water. Developed primarily as an irrigation project, it provided irrigation water in Wasatch County, central and northern Utah County, and southern Salt Lake County, west of the Jordan River. The PRP also provided M&I water for Salt Lake and Utah Counties. The Provo River Project provides a supplemental water supply for irrigation of highly urbanized farmlands in Utah, Salt Lake, Summit, and Wasatch Counties.

BONNEVILLE UNIT

Municipal and Industrial System

The Bonneville Unit M&I System provides M&I water to Salt Lake, Utah, and Wasatch counties and supplemental irrigation water to Summit and Wasatch counties. The system also provides flood control, recreation, and fish and wildlife benefits. Jordanelle Dam is the major feature of the M&I System. The 300-foot-high dam located on the Provo River about 6 miles north of Heber City was completed in April 1993. The reservoir has an active capacity of 314,006 acre-feet. Provo River water that historically flowed into Utah Lake is stored in Jordanelle Reservoir and in Deer Creek Reservoir. As part of the M&I System, Utah Lake water originating from the Provo River is replaced by Bonneville Unit return flows to the lake, water rights previously acquired by the District in Utah Lake, direct releases of water from Strawberry Reservoir to Utah Lake, and flows that are surplus to Utah Lake rights. The Bonneville Unit M&I water for northern Utah County (20,000 acre-feet per year) and Salt Lake County (70,000 acre-feet per year) is released from Jordanelle Reservoir and then re-diverted from the Provo River into the Olmsted Flowline or diverted under direct flow water rights. From this diversion, the water is conveyed to the Salt Lake County area by the 38-mile-long Jordan Aqueduct and to northern Utah County through the 14-mile-long Alpine Aqueduct. Water for use in Wasatch County (2,400 acre-feet of M&I water and 12,100 acre-feet of irrigation water) is released from Jordanelle Reservoir for delivery through local irrigation canals, current secondary M&I systems, and a future M&I treated water system. Water for use in Summit County (3,000 acre-

feet of irrigation water) is provided from Washington, Trial, and Lost lakes in the headwaters of the Provo River or directly from the Provo River, both facilitated through an exchange with storage in Jordanelle Reservoir.

Wasatch County Water Efficiency Project

The Wasatch County Water Efficiency Project and Daniel Replacement Project improves water use efficiency in Heber Valley by delivering pressurized irrigation water and making it possible for farmers to convert from flood to sprinkler irrigation. Water conserved by the project is used to supplement flows of Heber Valley streams. The project provides the Daniel Irrigation Company with replacement water after its diversion from the upper Strawberry River basin was terminated as provided in Section 303 of CUPCA. Water conserved by the project from the Bonneville Unit agricultural supply is used to provide the replacement water. This project is described in the *Final Environmental Impact Statement–Wasatch County Water Efficiency Project and Daniel Replacement Project* (CUWCD 1996a), and the *Wasatch County Water Efficiency Project Feasibility Study* (CUWCD 1997a). The Mitigation Commission signed its Record of Decision on March 12, 1997, and the Department of the Interior signed its Record of Decision on March 21, 1997, both selecting the Proposed Action for implementation. Construction has been completed and the project is operational. During the 2002 irrigation season, the Wasatch County Water Efficiency Project reported water conservation savings of 24,492 acre-feet.

Utah Lake Drainage Basin Water Delivery System

The Utah Lake Drainage Basin Water Delivery System (ULS) affects the Provo River system in two ways. ULS will deliver 30,000 acre-feet per year of Strawberry Reservoir M&I water to Salt Lake County through the Provo Reservoir Canal and the Jordan Aqueduct (facilities that convey Provo River water), and ULS will release 16,000 acre-feet per year of Strawberry Reservoir water to the lower Provo River to supplement streamflows. The water for Salt Lake County would be delivered to the existing Provo Reservoir Canal and/or the Jordan Aqueduct for conveyance to treatment plants in Salt Lake County. During the summer months the M&I water would be delivered to the Provo Reservoir Canal. During the winter months when the Provo Reservoir Canal was not operating, the M&I water would be delivered to the Jordan Aqueduct. The 16,000 acre-feet of Bonneville Unit water would be delivered to the lower Provo River to assist in meeting in-stream flow objectives and would be subsequently exchanged from Utah Lake to Jordanelle Reservoir. The water for release to the Provo River for delivery to Utah Lake would be delivered in all 12 months of the year. Releases to the lower Provo River would be made from the Spanish Fork-Provo Reservoir Canal Pipeline a short distance below the Upper East Union Diversion Dam.

Central Utah Project Completion Program

Chapter 2

Chapter 2

October 2004

UTAH RECLAMATION
MITIGATION
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Water storage and conveyance facilities on the Provo River are shown on Figure 2-1 and include the features identified below.

- Diversions dams on lower Provo River that were constructed prior to both the Provo River Project and the Bonneville Unit
- Provo River Project Facilities
    - Deer Creek Dam and Reservoir
    - Salt Lake Aqueduct
    - Murdock Diversion Dam and Provo Reservoir Canal Enclosure
    - Weber-Provo Diversion Canal
    - Duchesne Tunnel
- Bonneville Unit's Municipal and Industrial System
    - Jordanelle Dam and Reservoir
    - Olmsted Diversion Dam
    - Olmsted Flowline
    - Jordan Aqueduct
    - Alpine Aqueduct
- Utah Lake Drainage Basin Water Delivery System
    - Spanish Fork Canyon – Provo Reservoir Canal Pipeline delivery point below the Upper East Union Diversion Dam

DIVERSION DAMS ON LOWER PROVO RIVER

Shortly after the turn of the century, a privately owned water speculation company was formed, known as the Provo Reservoir Water Users Company (PRWUC). The PRWUC was created to sell water to farmers in northern Utah County and southern Salt Lake County. The PRWUC constructed canals in Utah and Salt Lake counties and enlarged several high mountain lakes at the headwaters of the Provo River. In addition, the company acquired storage water in the Weber River Project and other Weber River transbasin supplies.

Water rights disputes between the PRWUC and other Provo River diverters led to adjudication of the River under the Provo River Decree (Morse), in 1921. The Morse Decree established water duties, divisions, and priority classes. Although rights in the Wasatch Division in the Heber Valley were junior to those on the lower Provo River, the Decree recognized that return flows from the Heber Valley sustained late summer flows on the lower Provo River, and gave them a higher priority.

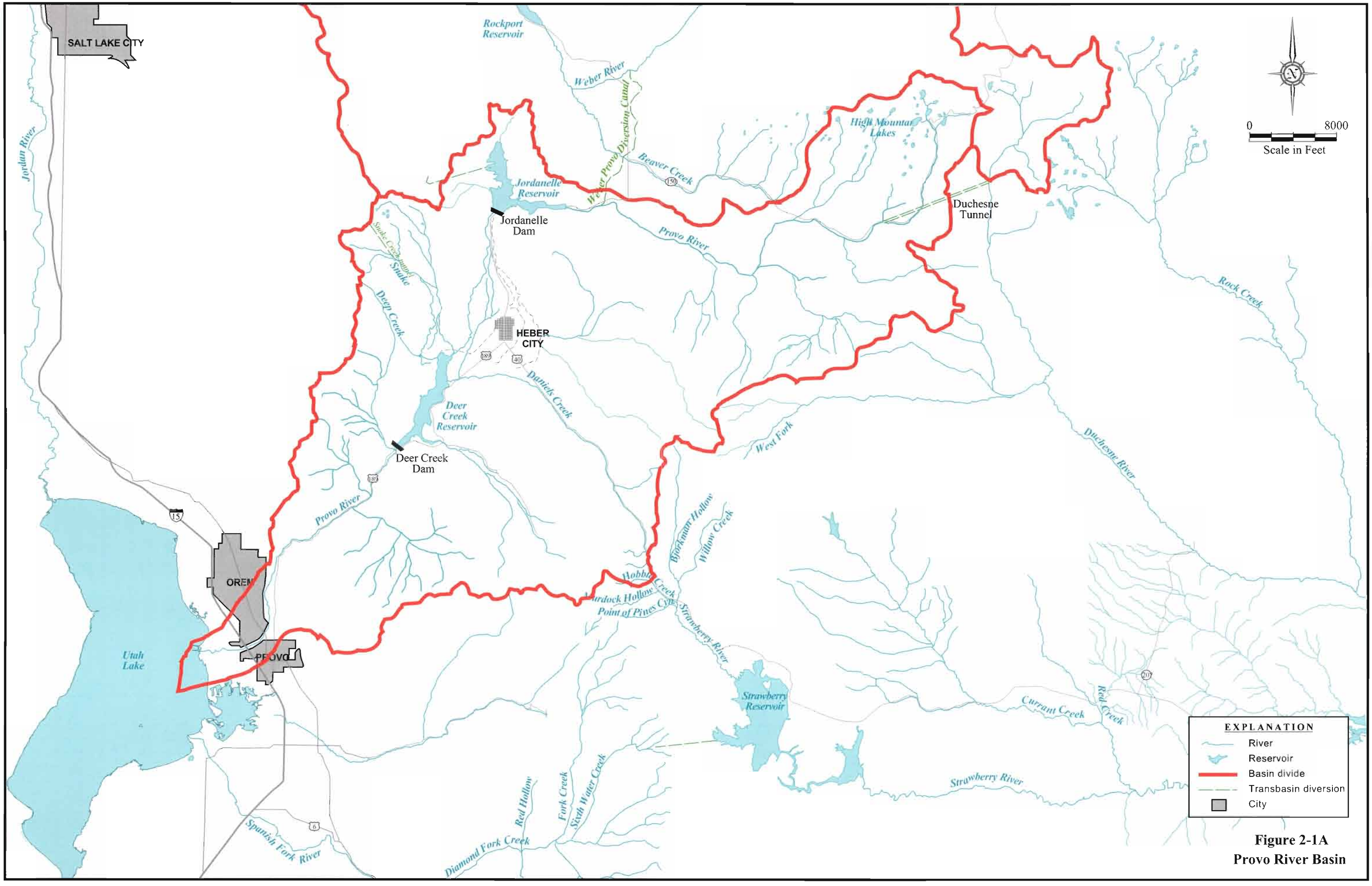


Figure 2-1A
Provo River Basin

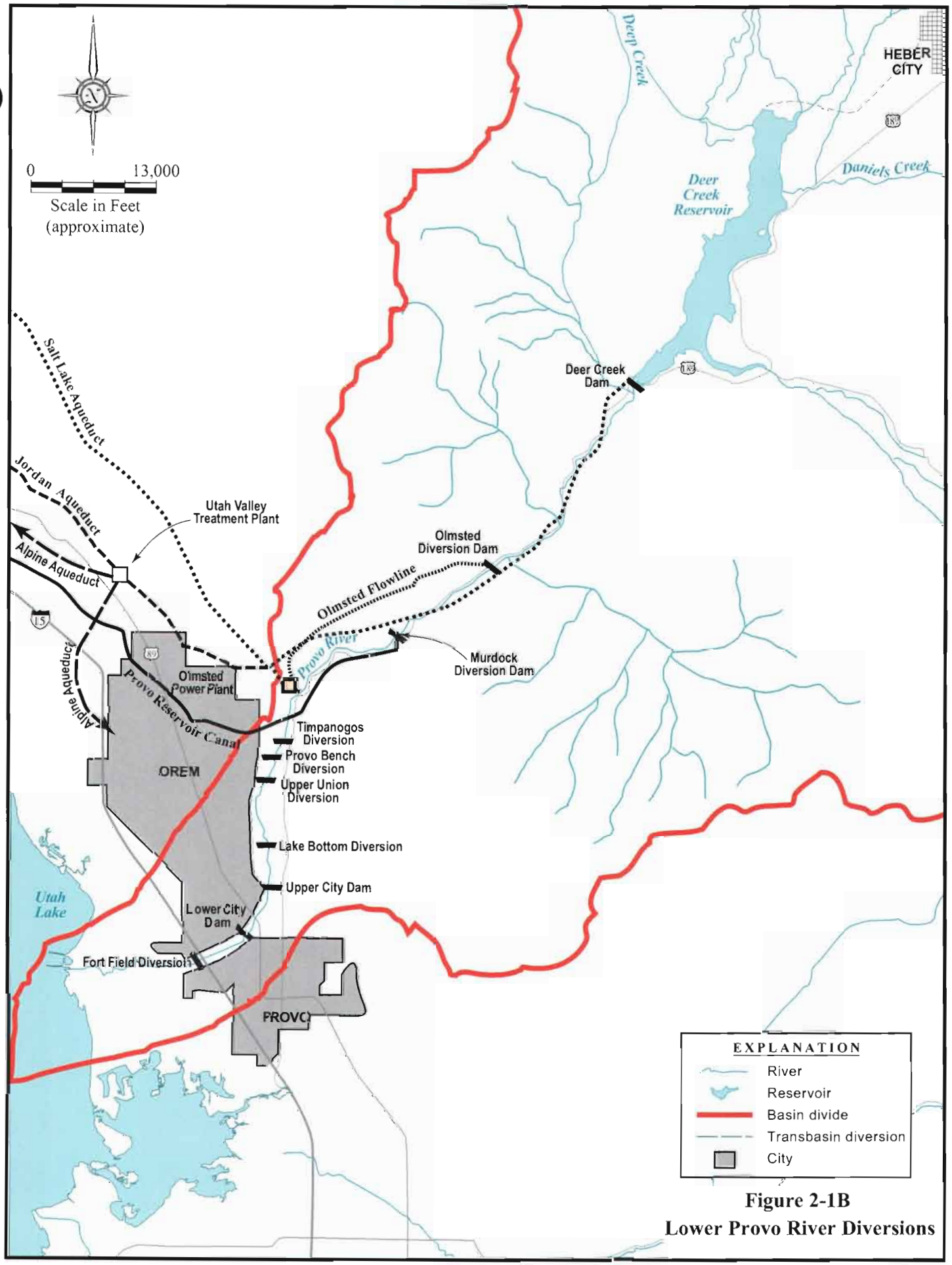


Figure 2-1B
Lower Provo River Diversions

Provo Bench Diversion

The Provo Bench Diversion is approximately one mile downstream of the Murdock Diversion. It diverts water from the Provo River and from the tailrace of the Olmsted Power Plant to the Provo Bench and North Union Canals.

Other Lower Provo River Diversions

There are six other diversion dams on the Provo River below the Provo Bench Diversion, including Timpanogos Diversion, Upper East Union and West Union Diversion, Lake Bottom Diversion, Upper City Dam, Lower City Dam, and Fort Field Diversion. None of these diverts PRP or M&I water.

PROVO RIVER PROJECT FACILITIES

The Provo River Project (PRP), constructed during the 1930s, 1940s, and 1950s, involved a major expansion in diversion and use of Provo River and transbasin water. Developed primarily as an irrigation project, it provided irrigation water in Wasatch County, central and northern Utah county, and southern Salt Lake county, west of the Jordan River. In many of these areas the irrigation supply is now a supplemental water supply for irrigation of highly urbanized farmlands in Utah, Salt Lake, and Wasatch Counties. In addition, the PRP provides M&I water for Salt Lake and Utah Counties.

The project features include Deer Creek Dam and Reservoir, Provo Reservoir Canal, Murdock Diversion Dam, Salt Lake Aqueduct, enlarged Weber-Provo Diversion Canal, and the Duchesne Tunnel. Deer Creek Dam has a hydropower plant with two 2,475-kilowatt generators, placed in operation in 1958.

All features of the Deer Creek Division of the PRP are operated and maintained by the Provo River Water Users Association. The Metropolitan Water District of Salt Lake City operates and maintains the Salt Lake Aqueduct. The Salt Lake Aqueduct, constructed by the United States as part of the Provo River Project, extends from its intake at the base of Deer Creek Dam, down along the Provo River to Orem, and then northerly into Salt Lake County to its Terminal Reservoir at 3300 South and I-215 in Salt Lake City, Utah.

Deer Creek Dam and Reservoir

The PRP water supply is made available by developing storage in Deer Creek Reservoir and enlarging transbasin diversions into the Provo River Basin. The key structure of the project, Deer Creek Dam, is located on the Provo River about 16 miles northeast of Provo, Utah. The impounded Deer Creek Reservoir has an active storage of 152,564 acre-feet, including 2,864 acre-feet of dead storage. Dead storage includes space reserved for sedimentation. The reservoir (completed in 1941) stores Provo River runoff, plus transbasin diversion of surplus water from the Weber River, diverted by the enlarged Weber-Provo Diversion Canal, and of surplus water from the headwaters of the

Duchesne River, diverted by the 6-mile Duchesne Tunnel as discussed below.

Transbasin Diversions Into Headwaters of Provo River

A general schematic of the major transbasin diversions into the Provo River is shown below in Figure 2-2.

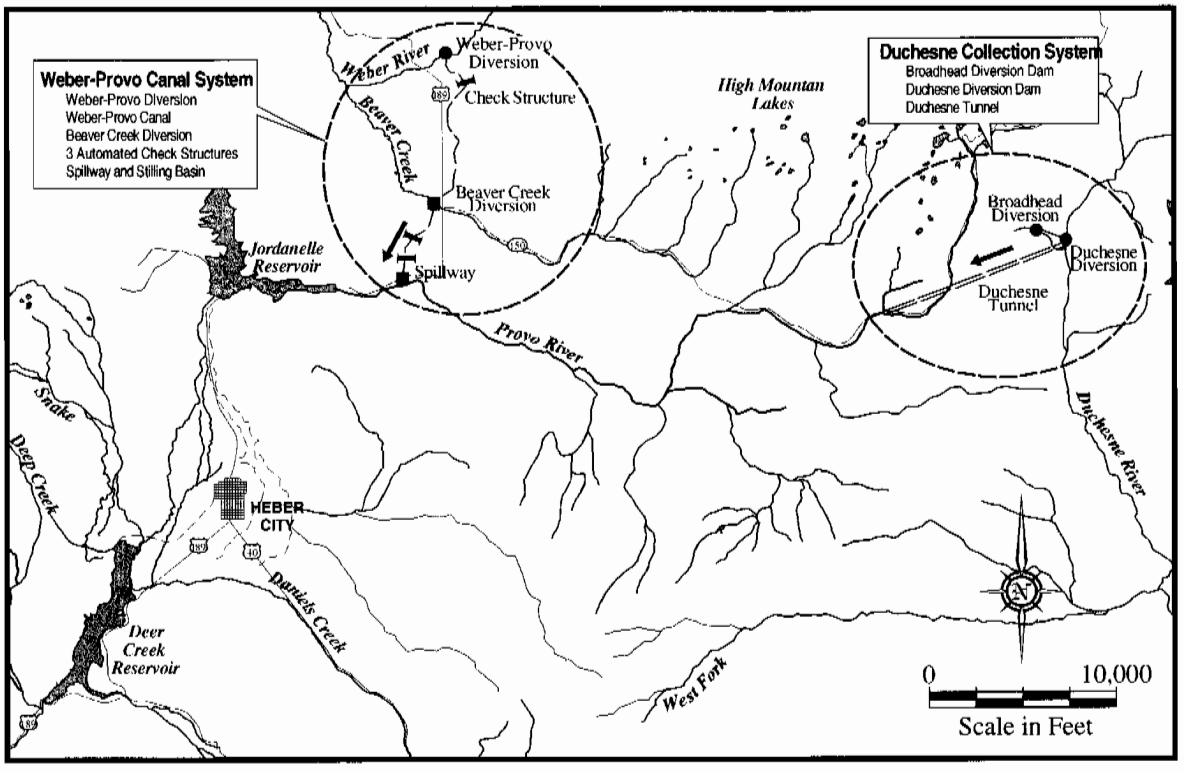


Figure 2-2
Major Transbasin Diversions into the Provo River

Weber-Provo Diversion Canal. The Provo River Project included two transbasin diversions to increase the water supply in the Provo River Basin. These are the Weber-Provo Diversion Canal providing water from the upper Weber River watershed, and the Duchesne Tunnel providing water from the upper Duchesne River watershed.

The Weber-Provo Diversion Dam and Canal was originally part of the Weber River Project. The canal was enlarged to supply additional water from the Weber River to the Provo River upstream of Deer Creek Reservoir. (The point of discharge is above Jordanelle Reservoir.) The dam on the Weber River is located 1 mile east of Oakley, Utah, and the 9-mile diversion canal has a capacity of 1,000 cubic feet per second with unlined, earth-lined, and concrete-lined sections.

Duchesne Tunnel. The Duchesne Tunnel conveys up to 600 cfs of water from a diversion dam on the North Fork of the Duchesne River to the Provo River drainage basin. The horseshoe-shaped, concrete-lined, 9.25 foot diameter tunnel is 6 miles long. The Duchesne Diversion Dam is about 30 miles east of Heber City, and is a rockfill weir with concrete core wall, 23 feet high.

PRP Points of Diversion and Conveyance Routes from the Provo River

PRP diversions out of the Provo River Basin occur at and downstream of Deer Creek Dam. In addition, PRP diversions occur, by exchange, on the upper Provo River. Figure 2-1B shows the locations of the major PRP diversions and the general routes of pipelines and canals to Salt Lake County.

Salt Lake Aqueduct Diversion. A turnout at the base of Deer Creek Dam diverts reservoir water into the Salt Lake Aqueduct, constructed as part of the Provo River Project. The Salt Lake Aqueduct carries water to a point near Salt Lake City to supplement the city's supply.

The 42-mile Salt Lake Aqueduct, a 69-inch diameter concrete pipeline with a capacity of 150 cubic feet per second, provides water to Salt Lake City. Water delivery is regulated through the aqueduct's Terminal Reservoir near Salt Lake City. Two tunnels are a part of the aqueduct: the concrete-lined, 78-inch-diameter, horseshoe-shaped Alpine-Draper Tunnel which is 15,037 feet long; and the Olmsted Tunnel, identical in cross section with the Alpine-Draper Tunnel, but 3,614 feet long. The concrete terminal reservoir, with a capacity of 1,228 acre-feet, completes the system. Ownership of the Salt Lake Aqueduct is in the process of being transferred from the Bureau of Reclamation to the Metropolitan Water District of Salt Lake and Sandy. Public Law 108-382 was enacted October 30, 2004, which authorizes the Secretary of the Interior to transfer the aqueduct pending execution of necessary agreements.

Murdock Diversion Dam and Provo Reservoir Canal. The Murdock Diversion near the mouth of Provo Canyon diverts water into the 23-mile-long Provo Reservoir Canal Enclosure to provide irrigation and M&I water for use in Salt Lake County, and northern Utah County. The Murdock Diversion was constructed by the United States as part of the Provo River Project. Murdock Diversion Dam is a concrete ogee weir structure, 22 feet high.

The Provo Reservoir Canal, also known locally as the Murdock Canal, takes water from the Provo River at the Murdock Diversion Dam, about 7 miles downstream of Deer Creek Dam. This 23-mile-long canal serves the 46,609 acres in the PRP's Deer Creek Division. The Provo Reservoir Canal has a diversion capacity of 550 cubic feet per second and a total length of 23 miles, consisting of unlined and concrete-lined sections. NEPA compliance for converting the Provo Reservoir Canal to an enclosed conveyance facility has been completed by Reclamation. The enclosed canal would continue to convey PRP water to Salt Lake County water treatment plants and other users. Ownership of the Provo Reservoir Canal is in the process of being transferred from the Bureau of Reclamation to the Provo River Water Users Association. Public Law 108-382 was enacted October

30, 2004, which authorizes the Secretary of the Interior to transfer the canal pending execution of necessary agreements.

The Jordan Narrows Siphon and Pumping Plant, with a capacity of 65 cfs, furnishes water from the Provo Reservoir Canal and Jordan River to lands on the west side of Utah Lake and the Jordan River. The South Lateral, with a capacity of 40 cfs, delivers water supplies from the Jordan Narrows pump to the area south of the pump and west of the Jordan River.

Interconnections. Interconnections between the Salt Lake Aqueduct and the Olmsted Flowline in northern Utah County provide flexibility in use of available flow capacity of the aqueducts. The Transfer Pumps allow water to be pumped from the Olmsted Flowline into the Salt Lake Aqueduct or vice versa. This could be a factor in the conveyance of ULS System water to Salt Lake County from the end of the Spanish Fork Provo Reservoir Canal Pipeline at the Provo River, since the Spanish Fork Provo Reservoir Canal Pipeline will be capable of releasing water into the Olmsted Flowline upstream of the Transfer Pumps. See Figure 2-3 for a general schematic of this interconnection.

BONNEVILLE UNIT MUNICIPAL AND INDUSTRIAL SYSTEM

Jordanelle Dam and Reservoir

The 300-foot-high earth-fill dam located on the Provo River about 6 miles north of Heber City was completed in April 1993. The reservoir provides M&I water for Salt Lake, Utah, and Wasatch Counties. The operation of the reservoir contributes to instream flow needs on the Provo River and to the June sucker Recovery Implementation Program. Total capacity of the reservoir is 363,354 acre-feet with an active capacity: of 314,006 acre-feet and exclusive flood control capacity of 49,348 acre-feet.

Olmsted Diversion Dam

The Olmsted Diversion Dam, five miles downstream of Deer Creek Reservoir, diverts culinary water into the Olmsted Flowline to serve northern Utah and southern Salt Lake counties, as discussed below. The Olmsted diversion was originally constructed by Utah Power as part of the Olmsted Hydropower Plant and subsequently acquired and upgraded as a part of the Bonneville Unit Municipal and Industrial System.

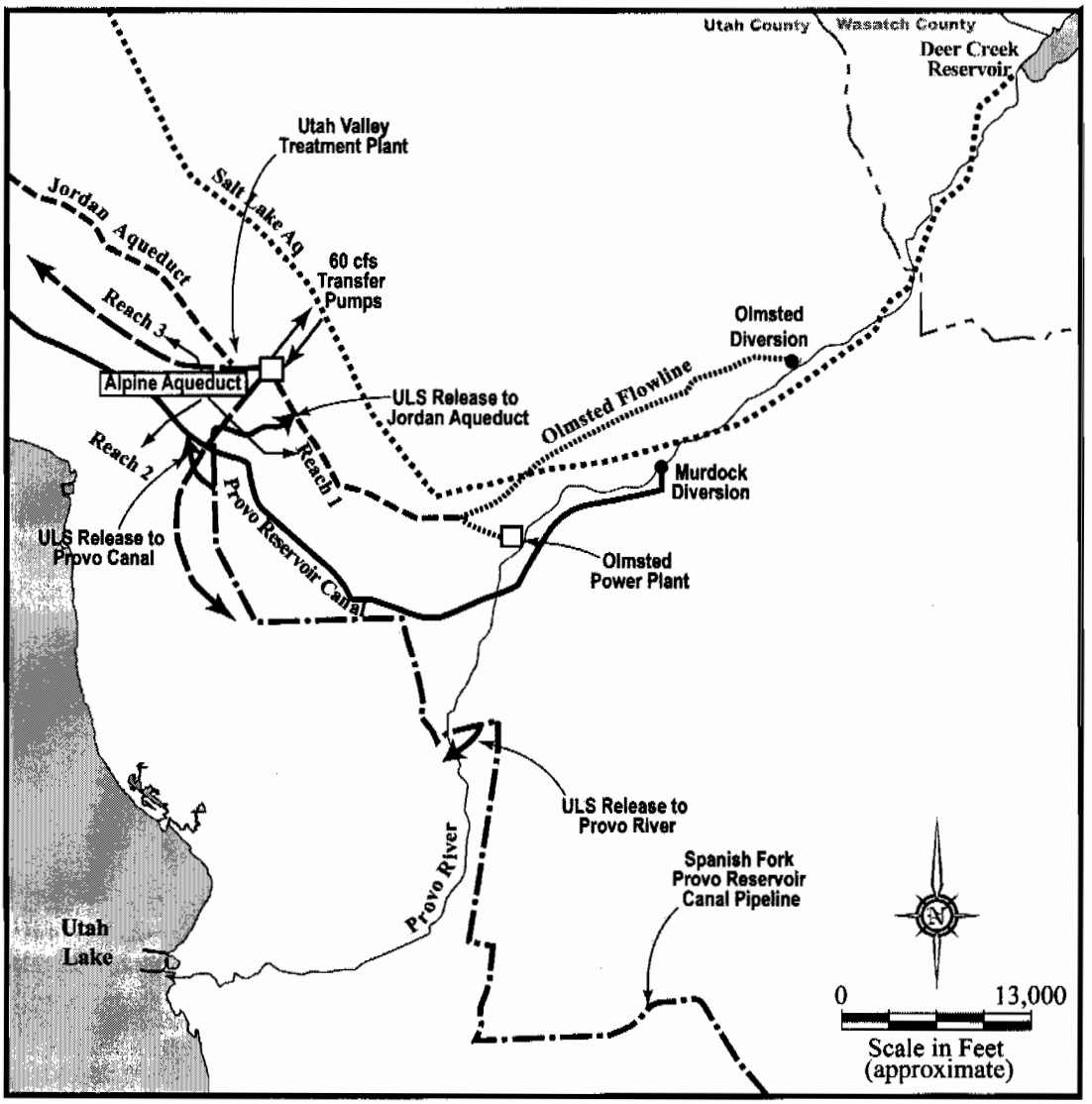


Figure 2-3
General Schematic of Interconnections between ULS, Bonneville Unit, and PRP Facilities

Olmsted Flowline

The Olmsted Flowline was originally constructed between 1948 and 1952 by Utah Power as part of the Olmsted Hydropower Project. The Flowline is an 8.5-foot diameter steel pipe approximately 4.5 miles long. It conveys raw water from the Olmsted Diversion Dam to the inlet of the Alpine Tunnel and the Olmsted Hydropower Plant. The Alpine Tunnel Inlet Structure diverts flow from the Olmsted Flowline into the Alpine/Jordan Aqueduct System. The Flowline is the upstream end of the Olmsted-Alpine-Jordan Aqueduct System that conveys up to 450 cfs of Bonneville Unit water to northern Utah and Salt Lake Counties. As part of the Olmsted Flowline Rehabilitation and

Replacement Project, the Flowline has been replaced in the same alignment with new steel pipe of up to 10-foot diameter.

Jordan Aqueduct

The Jordan Aqueduct is a 36-mile long aqueduct that extends from the Olmsted Flowline near the mouth of Provo Canyon in a northwesterly direction to the Point of the Mountain and the Jordan Water Purification Plant. The aqueduct continues down the west-side of the Salt Lake Valley and terminates near 2100 South and 4000 West. About 70,000 acre-feet of water will be delivered to the Salt Lake Valley annually through the aqueduct from storage releases from Jordanelle Reservoir.

Alpine Aqueduct

The Alpine Aqueduct is located in Utah Valley and extends from the Olmsted Flowline near the mouth of Provo Canyon north to Lehi and south to Provo. The aqueduct conveys water from the Provo River to the Utah Valley Purification Plant. It carries treated water to Orem and Provo, Utah, and to communities at the northern end of Utah Valley.

BONNEVILLE UNIT UTAH LAKE DRAINAGE BASIN WATER DELIVERY SYSTEM

The Spanish Fork – Provo Reservoir Canal Pipeline would be constructed from the Spanish Fork Canyon Pipeline along U.S. Highway 89 through Mapleton, 400 East in Springville, then back to Highway 89 en route to Provo, and through residential streets in Provo, discharging to the Provo River, the Provo Reservoir Canal at 800 North in Orem, and the Jordan Aqueduct, a distance of 18 miles. The Provo Reservoir Canal would convey ULS water to Salt Lake County water treatment plants. Past the Provo Reservoir Canal turnout, the Spanish Fork – Provo Reservoir Canal Pipeline would continue to parallel the Provo Reservoir Canal for about another 1.5 miles, connecting to the Jordan Aqueduct near the Utah Valley Water Treatment Plant. This extended pipeline segment would allow conveyance of ULS water to Salt Lake County water treatment plants through the Jordan Aqueduct during the winter months (November – March), when the Provo Reservoir Canal is non-operational. See Figure 2-3 for a schematic of how the ULS System Pipeline ties into the existing facilities and into the Provo River.

Central Utah Project Completion Program

Chapter 3

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

DEER CREEK RESERVOIR/JORDANELLE RESERVOIR OPERATING AGREEMENT

Reservoir operations of Deer Creek Reservoir and Jordanelle Reservoir are coordinated under the Deer Creek Reservoir / Jordanelle Reservoir Operating Agreement executed in 1994 (Reservoir Operating Agreement). This agreement acknowledges the water rights and water right priorities of both projects, and specifies when each project can store water. The parties to the Reservoir Operating Agreement are the United States, the State of Utah, the Provo River Water Users Association, and the Central Utah Water Conservancy District.

The agreement provides accounting procedures to allow PRP and Bonneville Unit water to be stored on a space available basis in Deer Creek Reservoir for later exchange to Jordanelle Reservoir. For example, there is a 125 cfs minimum instream flow between Jordanelle and Deer Creek Reservoirs. At certain times of the year, the rate of release from Jordanelle Reservoir to meet the instream flow exceeds the required downstream Bonneville Unit deliveries. Pursuant to the Reservoir Operating Agreement, Bonneville Unit water not needed for immediate delivery is stored on a space available basis in Deer Creek Reservoir until needed by the Bonneville Unit petitioners. If, after final accounting is made at the end of the storage season, any (PRP) water remains in Jordanelle Reservoir, it will be released to Deer Creek Reservoir at the request of PRWUA and under the direction of the Utah State Engineer.

WATER QUALITY MANAGEMENT PLAN

The Jordanelle Reservoir Water Quality Technical Advisory Committee (JTAC) was formed in 1982 due to concerns over eutrophication in Deer Creek Reservoir. JTAC subsequently developed a reservoir management plan for Deer Creek Reservoir and for the then proposed Jordanelle Dam and Reservoir. The resulting Upper Provo River Water Quality Management Plan was implemented in 1984.

The primary goal of the Water Quality Management Plan is to protect and enhance water quality in Deer Creek Reservoir. Cooperating federal, state, and local agencies are accomplishing this goal through a comprehensive watershed protection program, which includes water quality monitoring, implementation of pollution control facilities, development of code revisions, and more restrictive discharge permits. The result has been improved water quality in Deer Creek Reservoir with less severe algal blooms reducing taste and odor problems.

STRAWBERRY TO JORDANELLE EXCHANGE

Because the Bonneville Unit's rights to Provo River water are junior in priority to those of most other Provo River and Utah Lake water users, the M&I System's water supply depends on the exchange of water from Utah Lake to Jordanelle Reservoir. Approximately 84,510 acre-feet of excess water is required in Utah Lake to complete the exchange to Jordanelle Reservoir. This includes: 44,310 acre-feet that would be released from Strawberry Reservoir as described in the Water Supply Appendix Volume 4; 9,660 acre-feet of Bonneville Unit water return flows to Utah Lake; and DOI acquiring the District's secondary water rights in Utah Lake to yield a firm average

annual supply of at least 30,540 acre-feet. The exchanged water would be stored in Jordanelle Reservoir for M&I delivery to Wasatch County, Salt Lake County and northern Utah County under existing contracts. See Figure 3-1 below for a schematic showing the relationship of the exchange between Strawberry Reservoir and Jordanelle Reservoir.

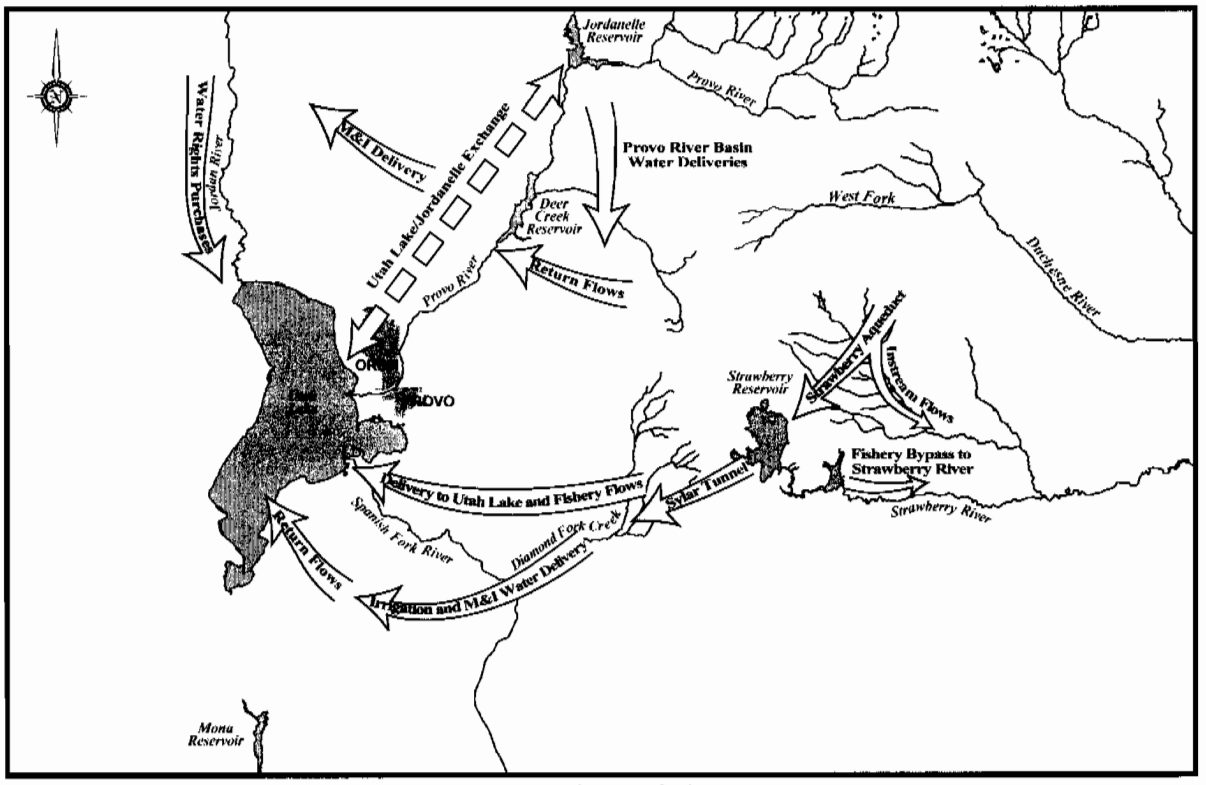


Figure 3-1
Exchange Mechanisms Between Strawberry and Jordanelle

OTHER EXCHANGES AFFECTING PROVO RIVER OPERATION

Under Bonneville Unit operation, the M&I System water supply is provided by exchanges operating under the provisions of the Utah Lake Distribution Plan (see Figure 3-2), and under Application A40524. The five basic components of the water supply are:

- System storage in Jordanelle or Deer Creek;
- System storage conversion under the Distribution Plan;
- Direct exchange (or conversion) using the acquired Utah Lake water rights;
- Direct exchange of system storage with imported Bonneville Unit Strawberry Reservoir water delivered or returning to Utah Lake; and
- Direct diversion (without storage) of Provo River water under Application A40524

The mechanisms for using these categories of rights by the Bonneville Unit are discussed in the following subsections. The discussion centers on system storage and priority storage. System storage

is defined under the Utah Lake Distribution Plan as all of the total active storage in Utah Lake, excluding 125,000 acre-feet of primary storage, plus water stored in upstream reservoirs under later priority date water rights that is subject to call by Utah Lake rights. Upstream system storage is held by the user owning the water rights under which it was stored, i.e., either Bonneville Unit or PRP. Priority storage is legal storage under a water right. Such stored water is not subject to call by other right(s) and can be diverted and used in accordance with the owner's right.

System Storage in Jordanelle or Deer Creek

The Distribution Plan permits the storage of Provo River water in Jordanelle or Deer Creek reservoirs after the needs of prior direct diversion rights are met. Particularly in the winter when most of the direct diversion rights on the Provo River are not being diverted, surplus flows can be stored as system storage. Surplus flows up to 429 cfs can also be stored as Bonneville Unit system storage, under the hydropower rights (applications number A2636 and A2637) associated with the Olmsted Hydropower Plant. However, because the Olmsted Hydropower Plant's rights are non-consumptive, they only allow the water to be stored as system storage, and not to be directly used or stored as priority storage.

System storage is not directly usable by the Bonneville Unit. If required by the higher priority users of Utah Lake and Jordan River water, the Bonneville Unit could be forced to release system storage to Utah Lake to keep those water users whole. Before system storage can be diverted to the M&I System water users, it must be changed to priority storage, either by conversion (under the terms of the Distribution Plan), or by exchange (under other water rights).

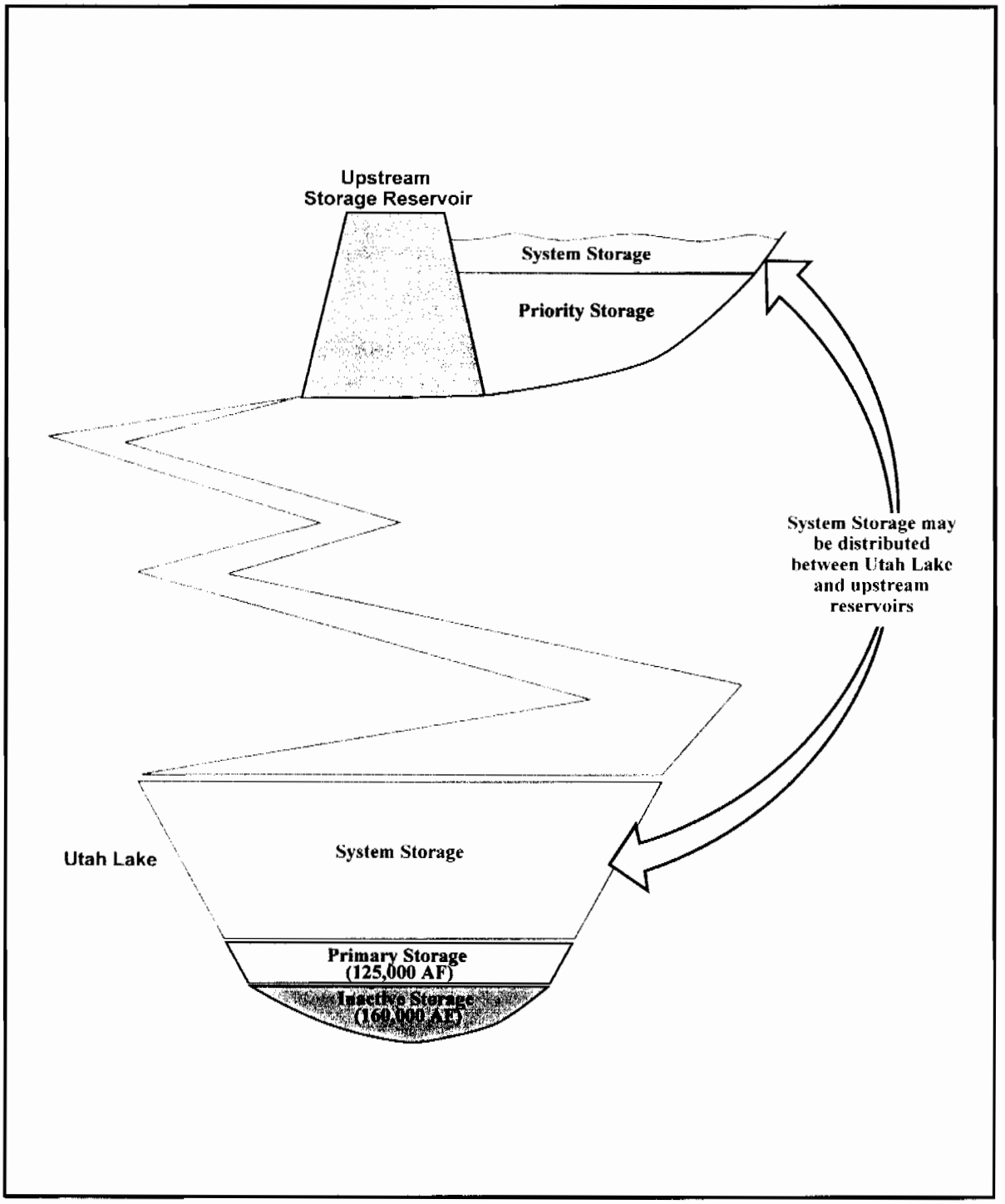


Figure 3-2
Utah Lake Distribution Plan Schematic

System Storage Conversion Under the Distribution Plan

The Bonneville Unit can convert system storage water stored in Jordanelle and Deer Creek reservoirs when the total storage in Utah Lake crosses the system storage conversion line. The conversion line is established by the Distribution Plan at a level to be sure that Utah Lake contains enough water to guarantee that all of its higher priority rights can be met. Under this exchange mechanism, the Bonneville Unit system storage in Jordanelle and Deer Creek reservoirs becomes Bonneville Unit priority storage and the volume of water converted reduces the remaining volume of system storage. This conversion may continue to occur until the system storage volume decreases to reach the conversion line again.

Direct Exchange (or Conversion) Using Utah Lake Rights

By holding its acquired Utah Lake rights in Utah Lake (rather than releasing them to downstream users), the Bonneville Unit has two additional options for changing the Bonneville Unit system storage to priority storage. The Bonneville Unit can ask the State Engineer to lower the system storage conversion line by the appropriate volume associated with its acquired rights, making it possible to convert (see above) at a lower Lake level. Or the District and DOI can directly exchange their Utah Lake water rights for Bonneville Unit System Storage in Jordanelle and Deer Creek Reservoirs even when the conversion line is not crossed, if the State Engineer determines that this can be done without impairing prior rights.

Exchange With Strawberry Reservoir Water Delivered or Returning to Utah Lake

Under Bonneville Unit operation, a special storage account has been created in Utah Lake for storing transbasin diversion water imported by the project. This account holds water released directly from Strawberry Reservoir to Utah Lake, as well as project return flows from Strawberry Reservoir water that enters the Lake. Because the Bonneville Unit water delivered through the ULS System is new water to the Utah Lake drainage, the District has the right to capture and re-divert this return flow. Any water stored in this Utah Lake account will be held on a space-available basis. When Utah Lake is full and begins to spill, water held in the account will be the first water to spill. Water stored in this account will be subject to evaporation losses. The evaporation losses will be equal to the incremental amount of evaporation caused by the increased storage in Utah Lake. No seepage losses are charged on water stored in Utah Lake.

Water held in the Utah Lake account will be used to make exchanges with Bonneville Unit system storage held in Jordanelle and Deer Creek reservoirs. It will be used to maximize the amount of priority storage. In some years all of the system storage in Jordanelle and Deer Creek reservoirs can be converted to priority storage under one of the previously described mechanisms. This generally occurs when there is a large quantity of system storage available. In those years, the water in the Utah Lake account will remain in the account for exchange in subsequent years. In other years, system storage is held in Jordanelle Reservoir, but the total system storage throughout the system is below the amount required for conversion to priority storage. In those years, water held in the

Bonneville Unit's Utah Lake account will be exchanged with the system storage in Jordanelle Reservoir.

Direct Diversion of Provo River Water Under Application A40524

Application A40524 permits the diversion of up to 400 cfs of surplus Provo River natural flow to meet Bonneville Unit M&I water demands at the Olmsted Diversion Dam or at the Murdock Diversion Dam. The water is not storable, but must be diverted to use. Because surplus flows, above the rights of other Provo River water right holders only tend to exist in the winter and spring, this right is somewhat limited. Modeling studies estimate that an average of 7,600 acre-feet per year may be diverted under Application A40524. By diverting under this Application, less demand is placed upon Jordanelle Reservoir storage.

JUNE SUCKER RECOVERY IMPLEMENTATION PROGRAM (JSRIP)

The June sucker (Chasmistes liorus), occurs naturally only in Utah Lake and spawns naturally only in the lower Provo River. Provo River diversions have resulted in hydrological and habitat changes in the lower river. In essence, the flows of the lower Provo River discharging into Utah Lake have declined to the point that they fail to attract sufficient numbers of the June sucker to migrate upriver for spawning and fail to provide sufficient flow for incubation and out-migration of juvenile suckers to Utah Lake. Increasing the discharge from the Provo River to Utah Lake during the spawning cycle can mitigate the decline in attraction. The species has been listed as endangered under the Endangered Species Act and the last 4.9 miles of the Provo River have been designated as critical habitat. The study team has developed the JSRIP to develop ways and means to counteract the decline.

The Bonneville Unit completion plan includes measures to increase the flows in the lower Provo River during the spawning season. Under the Water Management Improvement Program, Section 207 of CUPCA, conserved water has been and will continue to be accumulated in Jordanelle Reservoir for release when needed to provide flows in the lower river. The target hydrographic flow pattern to attract the June sucker to enter the Provo River and migrate upstream for spawning is to mimic the natural flow of the river during the June sucker spawning season. The release pattern was developed in cooperation with the JSRIP and is included in the Provo River operational analysis. Section 207 project water would provide a total of 12,165 acre-feet of conserved water for June sucker attraction flows in the lower Provo River. This includes about 2,875 acre-feet of existing contracted Bonneville Unit M&I System water conserved from Section 207 projects in northern Utah County, about 1,000 acre-feet of water conserved from Section 207 piping of the Upper East Union and East River Bottom canals, about 290 acre-feet of water conserved from Section 207 piping of the Timpanogos Canal, and 8,000 acre-feet of water conserved by enclosing the Provo Reservoir Canal or other future 207 projects in north Utah County.

PROVO RESERVOIR CANAL ENCLOSURE

In early 2002 the Provo River Water Users Association requested the authority to enclose the Provo Reservoir Canal. In response to this request, Reclamation prepared an Environmental Assessment. The final EA and Finding of No Significant Impact on the canal enclosure were signed by Reclamation on April 30, 2003 (Reclamation 2003). Under this plan the Provo River Water Users Association would enclose the Provo Reservoir Canal. Under the ULS Proposed Plan, the ULS would deliver about 24,490 acre-feet of the total 30,000 acre-feet of ULS M&I water to Salt Lake County for treatment and distribution as a culinary supply via the enclosed Provo Reservoir Canal. The remaining 5,510 acre-feet of M&I water would be delivered via the Jordan Aqueduct. The water conserved by enclosing the Provo Reservoir Canal would total 8,000 acre-feet in seepage-loss savings. It is anticipated that the Provo Reservoir Canal enclosure project would receive Section 207 funding. However, enclosure of the PRC is not required in order for ULS M&I water to be conveyed in the PRC.

MITIGATION COMMISSION PROGRAM RELATING TO OPERATION OF PROVO RIVER

The Provo River watershed is a high priority resource area for the Utah Reclamation Mitigation and Conservation Commission (Mitigation Commission). Priority goals are to complete unfulfilled mitigation requirements of the Bonneville Unit and ongoing Title III projects. In order to facilitate planning for this program, the Provo River is subdivided into three distinct segments.

- Lower Provo River (Utah Lake to Deer Creek Dam)
- Middle Provo River (Deer Creek Dam to Jordanelle Dam)
- Upper Provo River (Jordanelle Dam to headwaters)

Lower Provo River - Deer Creek Dam to Utah Lake

The Commission's program for the lower Provo River contains a number of components including: study of instream flows; acquisition of water rights; June sucker recovery; stream restoration and changes to diversion dams, and water quality improvements. These components are discussed in the following sections of this Chapter.

Existing Minimum Instream Flows. There are two existing minimum instream flow requirements on the Lower Provo River. The first of these is a 100 cfs minimum flow from below the confluence of Deer Creek and the Provo River (just below Deer Creek Dam) to the Olmsted Diversion Dam. This requirement is met using natural flows of the Provo River, deliveries of Bonneville Unit and PRP water to Olmsted and the Provo Reservoir Canal, and (if necessary) by diverting PRP water at

Olmsted and pumping it back into the Salt Lake Aqueduct using the Transfer Pump. The location of Provo River minimum flow requirements are shown graphically on Figure 3-3.

The other minimum instream flow requirement on the Lower Provo River is a 25-cfs, winter-time only minimum flow between Olmsted Diversion Dam and Utah Lake. This minimum flow is met by natural flows, gains, and return flows of the Provo River, and by releases of Bonneville Unit water from Deer Creek and Jordanelle reservoirs.

High Flows Study. The Mitigation Commission initiated in 2002 the first phase of a comprehensive study to determine relationships among flow levels, aquatic habitat and other ecological functions on the Provo River System.

Acquisition of Water Rights. CUPCA Section 303(c)(4) states that "Upon the acquisition of the water rights in the Provo Drainage identified in Section 302, in the Provo River from the Olmsted Diversion to Utah Lake, a minimum of seventy-five cubic feet per second" shall be provided to the yield and operating plans for the Bonneville Unit of the Central Utah Project. The Act states the purchases would be limited to willing sellers below Heber Valley. Toward this goal, CUPCA has authorized funds for acquiring up to 25,000 acre-feet of water rights in the Utah Lake Drainage Basin. The District has acquired with Mitigation Commission funds irrigation company water shares representing about 3,300 acre-feet, which would allow such water to flow undiverted to Utah Lake, thereby increasing the summertime flow in the lower Provo River.

The Mitigation Commission is participating in the Utah Lake System to convey 16,000 acre-feet of Strawberry Reservoir water to the lower Provo River. This water will be released to assist in meeting the 75 cfs target flow and to meet deliveries to Utah Lake for the Jordanelle exchange.

June Sucker Recovery. The Mitigation Commission is participating with other Federal, State and Local entities in implementing reasonable and prudent alternatives for the restoration of the June sucker. Refer to discussion presented earlier on the JSRIP.

Stream Restoration and Changes to Diversions. This component includes planning for and implementing actions to improve the biotic, hydraulic and geomorphic conditions of the riverine and riparian system. This could include measures to combine, relocate or redesign and reconstruct diversion dams. Some potential water conservation projects might involve combining diversions, resulting in elimination of one or more structures. Ecological studies will identify possible modifications in selected reaches of the river channel to provide the diversity of habitat conditions necessary to support all life stages of aquatic biota including June sucker in the lower river.

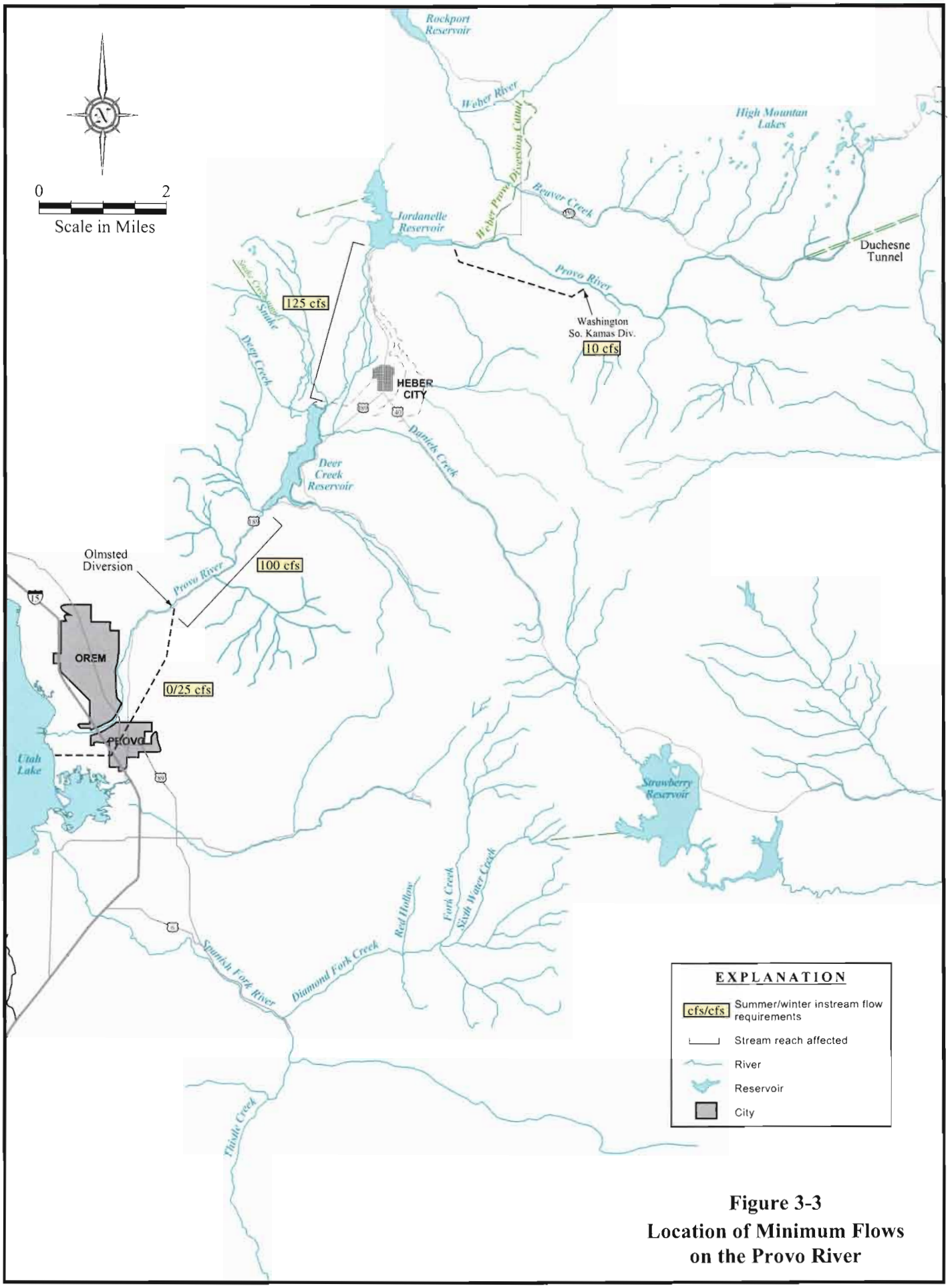


Figure 3-3
Location of Minimum Flows on the Provo River

Water Quality Improvements. The Mitigation Commission is working cooperatively with the Provo River Water Users Association, other water-user organizations and interested parties, in pursuit of agreements and measures to achieve better water quality in lower reaches of the Provo River. Measures may include changes to operation of Deer Creek Dam to increase dissolved oxygen content in releases during the summer months.

Middle Provo River - Deer Creek Reservoir to Jordanelle Dam

The Commission's program for the middle Provo River focuses on completion of unfulfilled mitigation requirements of the Bonneville Unit. Additionally, the Commission will continue cooperative efforts with the District, the U.S. Bureau of Reclamation and others to assure that instream flows and water quality requirements of the 1987 Final Supplement to the Final Environmental Impact Statement for the Bonneville Unit's Municipal and Industrial System are achieved. Those requirements are captured in the following projects.

Existing Minimum Instream Flows. There is an existing minimum instream flow requirement of 125 cfs on the Middle Provo River, between Jordanelle and Deer Creek. This requirement is met using natural flows, gains, and return flows of the Provo River, deliveries of Bonneville Unit and PRP water to downstream diversions, and transfers of Bonneville Unit and PRP water to Deer Creek Reservoir. The location of this Provo River minimum flow requirement is shown graphically on Figure 3-3.

Daniel Replacement Project. The Daniel Replacement Project has been completed. This project terminates the diversion of an annual average of 2,900 acre-feet of water from the upper Strawberry tributaries into Daniels Creek for irrigation in Wasatch County. The irrigation water is replaced by a delivery of 2,900 acre-feet from Jordanelle Reservoir. The 2,900 acre-feet of water left in the upper Strawberry tributaries flows into Strawberry Reservoir for downstream deliveries.

Fish and Riparian Habitat Restoration Project. In 1999, the Mitigation Commission began the Provo River Restoration Project (PRRP) between Jordanelle Dam and Deer Creek Reservoir to restore the middle Provo River's pattern and ecological function to a more natural condition. The project is expected to be completed in 2006. PRRP consists of restoring the straightened river channel to a meandering channel mimicking historic conditions, reconnecting the river to existing remnants of historic secondary channels, and constructing small side channels to recreate aquatic features.

Middle Provo River Diversion Dams. The 1987 Final Supplement to the Municipal and Industrial System committed the U.S. Bureau of Reclamation to be sure that instream flows released from Jordanelle Dam could be bypassed all the way to Deer Creek Reservoir. Some diversion dams in this reach are incapable of accurately measuring or delivering bypasses for instream flows. No funding, or responsible party, was identified for this item. The Commission's plan includes funding for this program element to implement the mitigation measures of the 1988 Definite Plan

Report. Modifications to these diversion dams will be implemented in concert with the selected action of the Provo River Restoration Project.

Upper Provo River - Jordanelle Reservoir To Headwaters

The following elements form the basis of the program for the upper Provo River relating to water operation.

Existing Minimum Instream Flows. There is an existing minimum instream flow requirement of 10 cfs on the Upper Provo River, below the Washington/South Kamas Diversion. This requirement is met using natural flows, gains, and return flows of the Provo River, transbasin diversions of PRP water from the Duchesne Tunnel, and releases of Bonneville Unit water from the Head of River Reservoirs. The location of this Upper Provo River minimum flow requirement is shown graphically on Figure 3-3.

Upper Provo River Reservoir Stabilization Project. This project is complete. The primary goal of the project is to stabilize 12 lakes, formerly used as irrigation storage facilities since the early 1900's, for fishery and recreation purposes. In addition to stabilizing the lakes at levels beneficial to fish and recreation, the project will mitigate impacts from heavy recreational use of the area by hardening dispersed camping areas and relocating trails away from fragile environmental resources. Water rights from the 12 lakes have been transferred downstream to Jordanelle Reservoir or to the three lakes in the upper Provo River drainage that are still used for irrigation water storage.

Central Utah Project Completion Program

Chapter 4

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

MUNICIPAL AND INDUSTRIAL SYSTEM

Bonneville Unit M&I System conduits are currently in service and are delivering 50,000 acre-feet of Bonneville Unit M&I System water currently available for use as well as assisting in the distribution of Provo River Project water. Under full operation, the M&I System will deliver 70,000 acre-feet of Bonneville M&I water to Salt Lake County, 15,100 acre-feet of agricultural water to Summit and Wasatch counties, 2,400 acre-feet of M&I water to Wasatch County, and 20,000 acre-feet of M&I water to northern Utah County, for a total of 107,500 acre-feet per year. The M&I System is projected to reach full operation by 2009.

Bonneville Unit M&I System diversions provide M&I water to northern and central Utah County. The aggregate diversion for Salt Lake County is 70,000 acre-feet (average annual amount) which is divided among the Jordan Valley Water Conservancy District and the Metropolitan Water District of Salt Lake and Sandy. Table 4-1 shows the division of M&I System water.

Table 4-1
Bonneville Unit Municipal and Industrial System Water Allocation

Petitioner	Use	Bonneville Unit Water Amount (acre-feet)	Bonneville Unit Water of Use (acre-feet)
Summit County Irrigators	Summit County Irrigation	3,000	3,000
Wasatch County Irrigators	Wasatch County Irrigation	12,100	9,200
	Daniel Replacement Project		2,900
Wasatch County M&I Users	Wasatch County M&I	2,400	2,400
North Utah County M&I Users	North Utah County M&I	20,000	17,125
	June Sucker RIP (Section 207)		2,875
Salt Lake County M&I Users	Salt Lake County M&I		
	Jordan Valley Water Conservancy District	50,000	50,000
	Metropolitan Water District of Salt Lake and Sandy	20,000	20,000
	Totals	107,500	107,500

WASATCH COUNTY WATER EFFICIENCY PROJECT

The Wasatch County Water Efficiency Project (WCWEP) is not, per se, a water supply project. It does not develop new, or additional supplies of water either for M&I or agricultural use. Instead, it uses the existing water supplies more efficiently, allowing water to be reallocated to meet environmental needs. In particular, WCWEP delivers Bonneville Unit M&I System water and natural flows of the Provo River to Heber Valley irrigation companies using pressurized sprinkler systems. Use of sprinklers rather than flood irrigation conserves sufficient water to allow 2,900 acre-feet of M&I System water to be delivered as a replacement supply to the Daniel Irrigation Company, and increases flow in Heber Valley streams by up to 22,900 acre-feet.

UTAH LAKE DRAINAGE BASIN WATER DELIVERY SYSTEM

Delivery to Lower Provo River

Up to 16,000 acre-feet of Bonneville Unit water would be delivered to the lower Provo River to assist in meeting the 75-cfs in-stream flow target. This water would be subsequently exchanged from Utah Lake to Jordanelle Reservoir. This water would be conveyed through the Spanish Fork–Provo Reservoir Canal Pipeline and discharged to the Provo River at the pipeline crossing when needed to make the Utah Lake–Jordanelle Reservoir exchange and when flows in the Provo River are less than 75 cfs. The interconnection between the ULS deliveries and the Provo River is shown schematically in Figure 4-1. The Provo River Discharge Structure would be located just downstream of the Upper Union Diversion, as shown on Figure 2-3. A minimum 75 cfs flow normally occurs in the river between the Olmsted and Murdock diversions during the summer months when releases are made from Deer Creek Reservoir for conveyance through the Provo Reservoir Canal and for downstream natural flow diversions. The pattern of delivery of the 16,000 acre-feet of ULS water is shown in Table 4-2.

Table 4-2
ULS DELIVERIES TO SUPPLEMENT THE LOWER PROVO RIVER

Estimated Average Deliveries to the Lower Provo River Deliveries in cfs													
Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	36	18	18	17	13	8	9	41	19	17	31	37	22
Wet Years	0	0	0	0	0	0	0	0	0	0	0	0	0
Dry Years	38	11	26	20	1	1	24	65	30	25	14	37	25
Deliveries in acre-feet													
Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	2,225	1,071	1,123	1,062	718	500	523	2,537	1,118	1,073	1,877	2,173	16,000
Wet Years	0	0	0	0	0	0	0	0	0	0	0	0	0
Dry Years	2,313	670	1,572	1,243	51	80	1,440	3,971	1,800	1,559	865	2,204	17,768

Wet Years: Average of flows from 1952, 1983, and 1986
Dry Years: Average of flows from 1961, 1977, and 1992

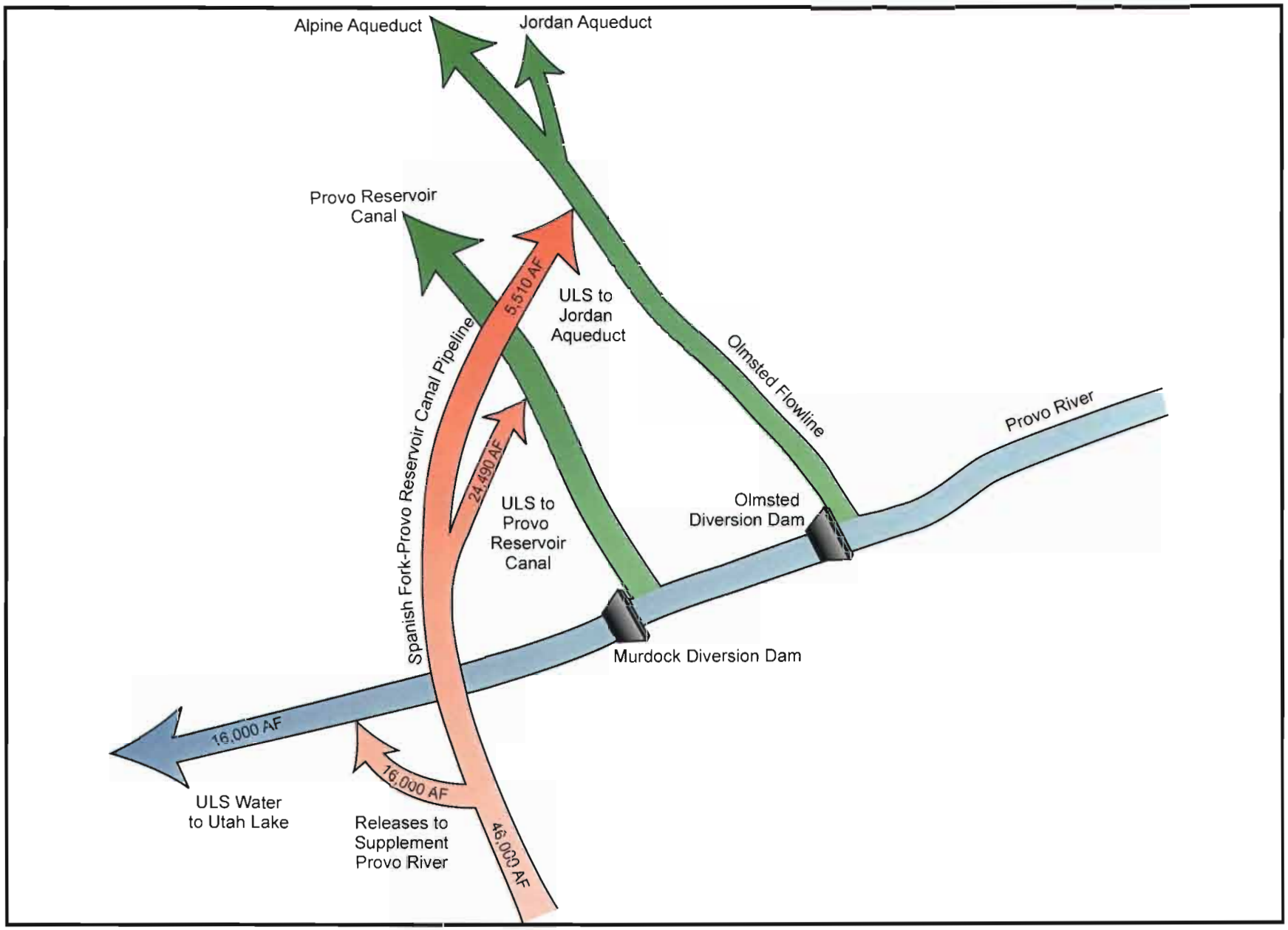


Figure 4-1
Utah Lake System Interconnections to the Provo River

Delivery to Provo Reservoir Canal

30,000 acre-feet of ULS M&I water would be conveyed to Salt Lake County through a combination of Jordan Aqueduct and enclosed Provo Reservoir Canal conveyance facilities to water treatment plants for treatment and culinary supply. This water would be delivered to Salt Lake County through the Spanish Fork–Provo Reservoir Canal Pipeline to the Provo Reservoir Canal and Jordan Aqueduct and then conveyed into Salt Lake County.

OTHER SECTION 207 PROJECT WATER

Other Section 207 project water would provide a total of 12,165 acre-feet of conserved water in the Provo River. This includes about 2,875 acre-feet of existing contracted Bonneville Unit M&I System water conserved from Section 207 projects in northern Utah County, about 1,000 acre-feet of water conserved from Section 207 piping of the Upper East Union and East River Bottom canals, about 290 acre-feet of water conserved from Section 207 piping of the Timpanogos Canal, and 8,000 acre-feet of water conserved by enclosing the Provo Reservoir Canal or other future 207 projects in north Utah County.

The following water quantities and sources comprise the water that would be released to the lower Provo River annually for June sucker spawning and rearing flows under the Preferred Alternative:

- 2,875 acre-feet Northern Utah County 207 project savings already assigned to DOI
- 1,000 acre-feet Upper East Union and East River Bottom canals piping to be assigned to DOI
- 290 acre-feet Timpanogos Canal piping already assigned to DOI
- 8,000 acre-feet Provo Reservoir Canal savings or other future 207 project savings to be assigned to DOI

12,165 acre-feet Total water released to the lower Provo River

MITIGATION COMMISSION ACQUISITION OF WATER RIGHTS

CUPCA Section 303(c)(4) states that "Upon the acquisition of the water rights in the Provo Drainage identified in section 302, in the Provo River from the Olmsted Diversion to Utah Lake, a minimum of seventy-five cubic feet per second" shall be provided from the yield and operating plans for the Bonneville Unit of the CUP. The Act states the purchases would be limited to willing sellers below Heber Valley. Toward this goal, CUPCA has authorized funds for acquiring up to 25,000 acre-feet of water rights in the Utah Lake Drainage Basin. The District has acquired with Mitigation Commission funds irrigation company water shares representing about 3,300 acre-feet, which would allow such water to flow undiverted to Utah Lake, thereby increasing the summertime flow in the lower Provo River.

This water comes from the following sources:

- Timpanogos Canal Section 207 Project 714 acre-feet
- Timpanogos Canal Water Rights 223 acre-feet

• Upper East Union Canal Water Rights	93 acre-feet
• East River Bottom Canal Water Rights	474 acre-feet
• Fort Field/Little Dry Creek Water Stock	295 acre-feet
• Provo Bench/Tanner Deed Water Stock	353 acre-feet
• West Union/West Smith Water Stock	925 acre-feet
• North Union/Tanner Deed Water Stock	223 acre-feet
Total	3,300 acre-feet

Unlike the Section 207 project water, none of the water acquired by the Mitigation Commission is storage water and thus it cannot be regulated by reservoir operations. Instead, the water would be allowed to flow past the diversion location associated with the original water right or share, and the water would continue to flow to Utah Lake. Figure 4-2 displays how the individual elements would combine to increase the flow of the lower Provo River. This water would increase the flow in the river only during the April 1 to October 31 summer irrigation season because these are irrigation water rights. The accumulation of conserved water flowing to Utah Lake is shown on Figure 4-2. An appropriate filing with the State Engineer will be made to implement this action.

Table of Net Change on Utah Lake

Water Purchase	Volume	Baseline Return Flow	Net Impact
Timpanogos Canal Section 207 Water	714	714	0
Timpanogos Canal Water Rights Purchase	223	112	111
Provo Bench/Tanner Deed Water Stock	353	177	176
North Union/Tanner Deed Water Stock	223	112	111
Upper East Union Water Rights Purchase	93	47	46
East River Bottom Water Rights Purchase	474	237	237
West Union/West Smith Water Stock	925	463	462
Fort Field/Little Dry Creek Water Rights Purchase	295	148	147
Total	**3,300**	**2,010**	**1,290**

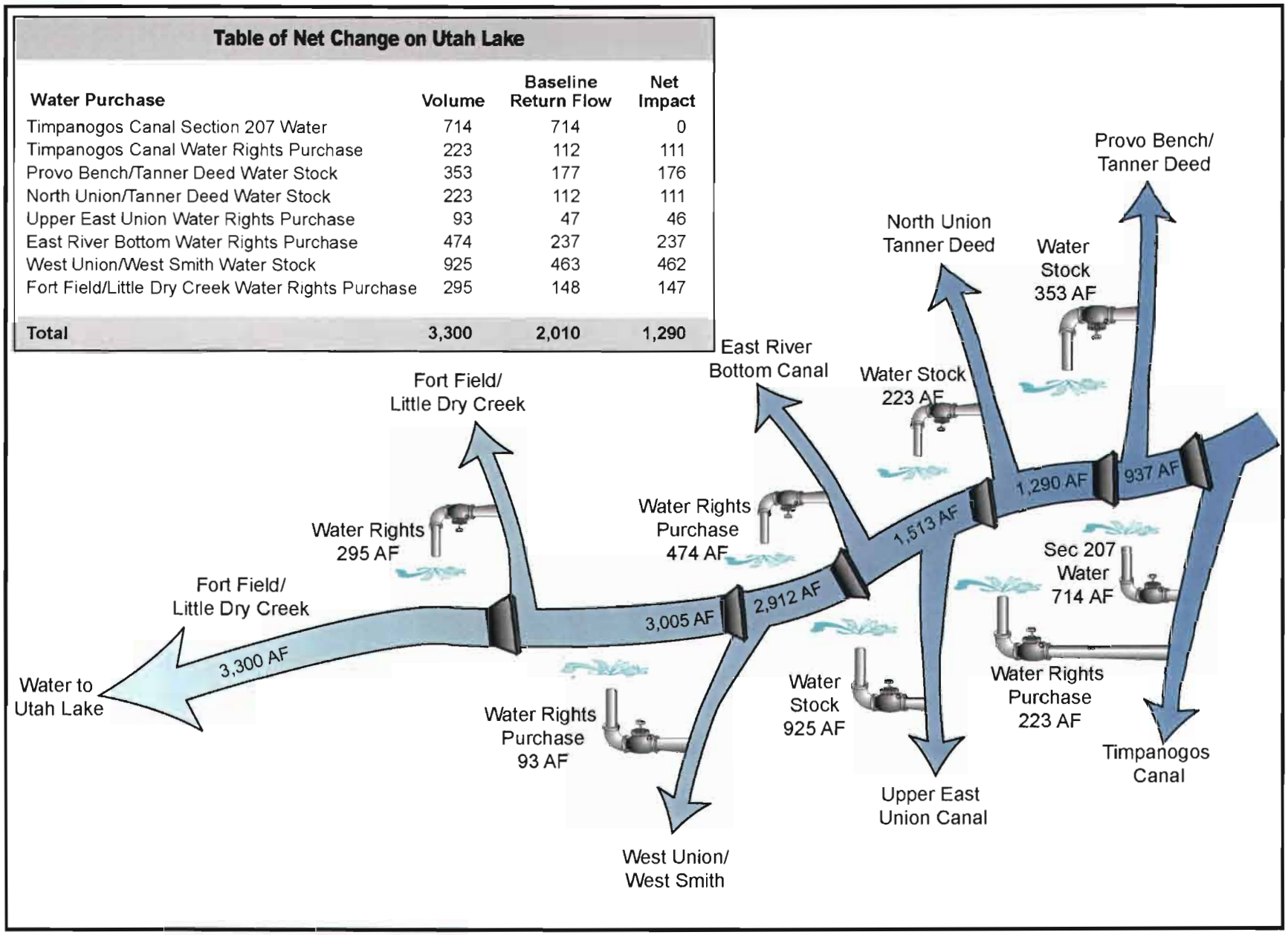


Figure 4-2
Water Acquired With Mitigation Commission Funds
For 75-cfs Target Flow in the Lower Provo River

Central Utah Project Completion Program

Chapter 5

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

The following sections summarize the results of the operational analysis for average, wet, and dry year conditions (in terms of natural runoff) in the Provo River Basin. The wet-year analysis is based on the three wettest years of record, which were 1952, 1983, and 1986. The dry-year analysis is based on the three driest years of record, which were 1961, 1977, and 1992. The modeled results from the three wettest years were averaged to calculate the wet-year values presented below; the dry-year values were similarly averaged. The average flow listed is the average of all 50 monthly values for each month shown.

The reservoir storage volumes and water levels are presented as end-of-month values. The streamflows and deliveries are presented as monthly totals (in acre-feet) or average values in cfs, essentially by dividing the discharge in acre-feet during the month by the number of days in the month and then converting to the flow rate in cubic-feet per second (cfs).

Analysis of Bonneville Unit operations on the Provo River produced river flows at nine locations and diversions at six locations. In addition, the analysis sub-divided all flows and diversions into three types or ownerships of water, Central Utah Project (or Bonneville Unit), Provo River Project, and Non-Project. The summaries included below only document total streamflows and Bonneville Unit diversions. Average monthly streamflows are listed in Table 5-1 on the next two pages. Complete tables of all model results are included in Attachment A (Provo River Flows by Ownership) and Attachment B (Provo River Spreadsheet Model Printout).

Streamflow data are provided at the following locations:

1) Provo River release from Jordanelle
2) Provo River from Timpanogos Diversion to River Ditch
3) Provo River from River Ditich to Snake Creek
4) Provo River from Snake Creek to inlet of Deer Creek Reservoir
5) Provo River from outlet of Deer Creek Reservoir to North Fork of Provo River
6) Provo River from North Fork to Olmsted
7) Provo River from Olmsted Diversion Dam to Murdock Diversion Dam
8) Provo River from Murdock Diversion Dam to Interstate 15
9) Provo River from Interstate 15 to Utah Lake

Diversion and delivery data are provided for the following:

1) Average deliveries through the Salt Lake Aqueduct
2) Average diversions into the Olmsted Flowline
3) Average diversions into the Provo Reservoir Canal
4) Average deliveries of ULS water to Jordan Aqueduct
5) Average deliveries of ULS water to Provo Reservoir Canal

Reservoir data are provided for –

1) Jordanelle Reservoir Storage Volumes and Water Levels
2) Deer Creek Reservoir Storage Volumes and Water Levels

Table 5-1
PROVO RIVER FLOWS UNDER BONNEVILLE UNIT OPERATIONS

Estimated Average Provo River Release from Jordanelle Reservoir

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	157	144	141	138	141	186	206	648	909	634	482	330	344
Wet Years	151	159	145	142	177	840	300	909	1,519	630	396	335	476
Dry Years	159	142	135	137	134	137	162	383	383	437	375	280	239

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	9,655	8,575	8,676	8,482	7,888	11,453	12,250	39,859	54,085	38,979	29,651	19,635	249,188
Wet Years	9,275	9,439	8,925	8,731	9,945	51,645	17,828	55,867	90,410	38,712	24,336	19,928	345,041
Dry Years	9,775	8,422	8,288	8,453	7,514	8,409	9,664	23,527	22,803	26,879	23,068	16,662	173,464

Estimated Average Provo River Flows from Timpanogos Diversion to River Ditch

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	153	144	141	138	141	186	204	622	872	581	435	307	328
Wet Years	147	159	145	142	177	840	299	891	1,486	580	340	313	461
Dry Years	155	142	135	137	134	137	161	367	351	396	339	263	227

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	9,426	8,575	8,676	8,482	7,888	11,453	12,135	38,273	51,897	35,752	26,721	18,249	237,527
Wet Years	9,046	9,439	8,925	8,731	9,945	51,645	17,772	54,763	88,395	35,670	20,889	18,631	333,851
Dry Years	9,546	8,422	8,288	8,453	7,514	8,409	9,576	22,580	20,889	24,353	20,840	15,620	164,490

Estimated Average Provo River Flows from River Ditch to Snake Creek

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	127	136	130	129	135	185	185	478	693	410	299	218	261
Wet Years	125	158	130	131	178	842	307	812	1,308	403	195	220	401
Dry Years	128	132	127	128	130	128	129	251	240	266	245	188	175

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	7,794	8,082	7,975	7,930	7,579	11,349	11,033	29,381	41,253	25,196	18,407	12,997	188,976
Wet Years	7,686	9,423	7,974	8,079	9,953	51,748	18,238	49,896	77,803	24,751	11,985	13,080	290,617
Dry Years	7,868	7,830	7,829	7,853	7,280	7,867	7,679	15,423	14,307	16,362	15,075	11,173	126,546

Estimated Average Provo River Flows from Snake Creek to Inlet of Deer Creek Reservoir

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	242	268	228	224	232	281	270	557	804	513	427	356	367
Wet Years	286	348	246	237	320	982	514	1,003	1,394	522	368	411	553
Dry Years	218	244	224	211	217	198	173	306	322	322	348	279	255

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	14,870	15,938	14,036	13,790	12,970	17,260	16,064	34,265	47,859	31,573	26,229	21,168	266,021
Wet Years	17,578	20,725	15,102	14,549	17,929	60,351	30,589	61,678	82,971	32,089	22,596	24,467	400,624
Dry Years	13,395	14,542	13,792	12,989	12,204	12,172	10,279	18,813	19,130	19,801	21,375	16,626	185,118

Estimated Average Provo River Flows from Outlet of Deer Creek Reservoir to North Fork of Provo River

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	165	106	105	105	119	186	305	798	904	648	542	448	370
Wet Years	123	111	104	100	202	1,078	637	1,293	1,610	821	524	473	591
Dry Years	152	101	100	101	103	108	250	493	396	443	464	321	253

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	10,117	6,321	6,449	6,459	6,639	11,421	18,150	49,066	53,816	39,840	33,320	26,666	268,263
Wet Years	7,544	6,617	6,408	6,149	11,269	66,298	37,877	79,482	95,794	50,489	32,199	28,155	428,282
Dry Years	9,343	6,037	6,149	6,183	5,769	6,624	14,903	30,308	23,554	27,207	28,503	19,079	183,659

TABLE 5-1 (Continued)

Estimated Average Provo River Flows from North Fork of Provo River to Olmsted Diversion Dam

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	178	121	117	115	129	197	327	856	972	694	569	469	396
Wet Years	153	124	128	121	230	1,105	685	1,380	1,763	905	578	503	641
Dry Years	158	113	109	109	110	115	260	511	406	458	472	337	264

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	10,942	7,179	7,164	7,093	7,197	12,136	19,429	52,621	57,830	42,644	35,006	27,915	287,155
Wet Years	9,405	7,381	7,851	7,469	12,824	67,937	40,759	84,856	104,873	55,643	35,540	29,941	464,479
Dry Years	9,702	6,748	6,718	6,674	6,189	7,085	15,478	31,407	24,180	28,135	29,013	20,070	191,399

Estimated Average Provo River Flows from Olmsted Diversion Dam to Murdock Diversion Dam

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	113	70	57	55	72	148	287	765	813	430	299	281	283
Wet Years	119	84	88	77	211	1,079	707	1,338	1,642	687	345	343	561
Dry Years	84	53	42	43	50	37	157	323	213	123	157	155	120

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	6,967	4,167	3,488	3,369	4,031	9,112	17,089	47,021	48,369	26,459	18,398	16,725	205,196
Wet Years	7,295	5,009	5,421	4,742	11,735	66,324	42,061	82,271	97,688	42,262	21,182	20,398	406,389
Dry Years	5,137	3,181	2,559	2,648	2,806	2,254	9,345	19,870	12,663	7,557	9,666	9,225	86,910

Estimated Average Provo River Flows from Murdock Diversion Dam to Interstate 15

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	129	90	77	74	86	158	251	553	563	231	196	182	216
Wet Years	100	86	92	80	215	1,083	707	1,204	1,381	347	153	147	467
Dry Years	108	67	69	65	52	39	137	189	130	104	136	138	103

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	7,914	5,363	4,722	4,524	4,833	9,717	14,926	34,004	33,506	14,174	12,080	10,818	156,582
Wet Years	6,145	5,122	5,633	4,893	11,970	66,568	42,097	74,011	82,200	21,312	9,423	8,741	338,114
Dry Years	6,624	3,957	4,225	3,971	2,924	2,409	8,160	11,629	7,717	6,379	8,361	8,186	74,543

Estimated Average Provo River Flows from Interstate 15 to Utah Lake

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	77	94	75	69	81	153	222	445	433	110	61	62	157
Wet Years	87	85	95	81	212	1,082	719	1,145	1,276	210	27	21	420
Dry Years	56	60	59	57	45	29	82	107	74	46	77	50	62

Flows in acre-feet

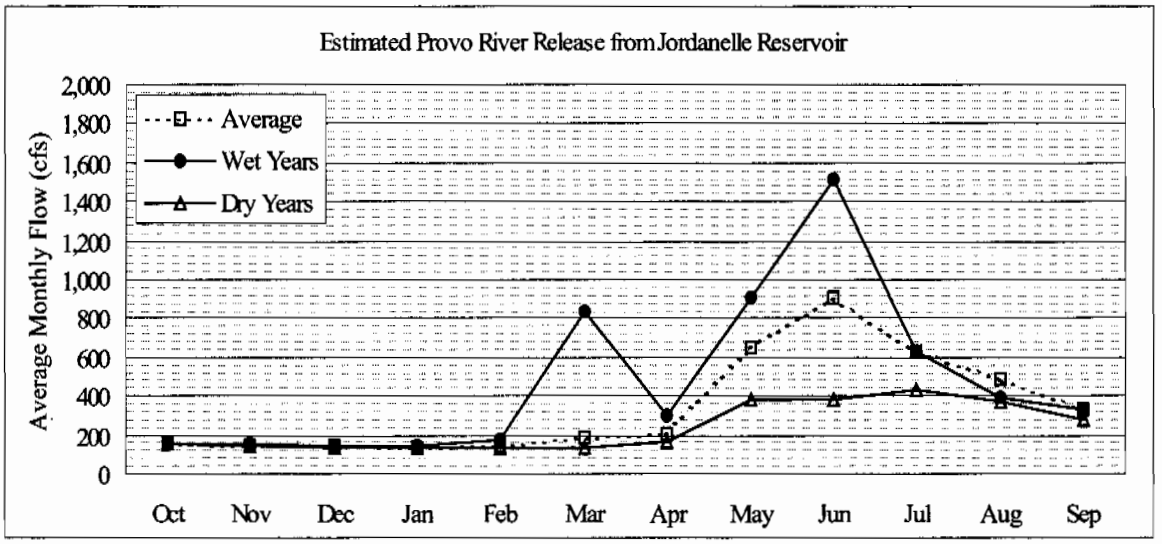
Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	4,735	5,589	4,581	4,252	4,535	9,421	13,223	27,362	25,774	6,791	3,744	3,694	113,702
Wet Years	5,334	5,075	5,839	4,957	11,815	66,557	42,761	70,381	75,922	12,891	1,676	1,229	304,437
Dry Years	3,466	3,561	3,638	3,516	2,554	1,801	4,879	6,558	4,410	2,833	4,763	2,963	44,944

Wet Years: Average of flows from 1952, 1983, and 1986
Dry Years: Average of flows from 1961, 1977, and 1992

PROVO RIVER RELEASE FROM JORDANELLE

The simulated average streamflow for the 50-year period 1950-1999 is 249,189 acre-feet or 344 cfs. The flow ranges from 125 cfs to a maximum of 1,643 cfs. Wet year flow averages 345,041 acre-feet. Dry year flow averages 173,463 acre-feet. There are no quantified diversions in this reach. Average monthly streamflow results are listed in Table 5-1, and displayed graphically in Figure 5-1.

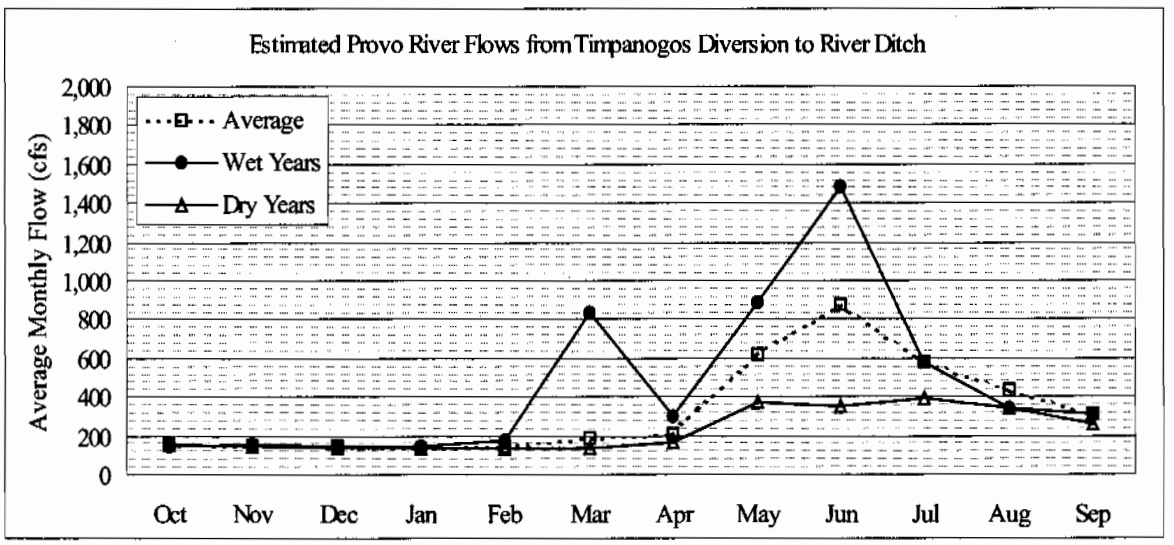
Figure 5-1
Estimated Provo River Release from Jordanelle Reservoir Under Bonneville Unit



PROVO RIVER FROM TIMPANOGOS DIVERSION TO RIVER DITCH

The simulated average streamflow for the 50-year period 1950-1999 is 237,529 acre-feet or 328 cfs. The flow ranges from 125 cfs to a maximum of 1,613 cfs. Wet year flow averages 333,850 acre-feet. Dry year flow averages 164,490 acre-feet. The Timpanogos Diversions averages 11,660 acre-feet, of which 4,530 is Bonneville Unit water. Average monthly streamflow results are listed in Table 5-1, and displayed graphically in Figure 5-2.

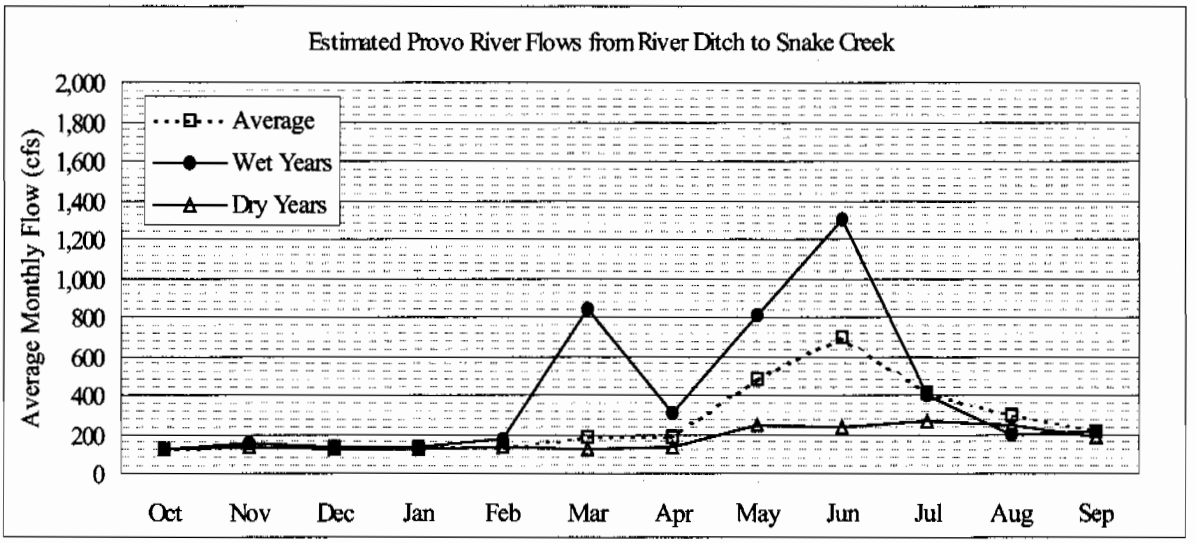
Figure 5-2
Estimated Provo River Flows from Timpanogos Diversion to River Ditch Under Bonneville Unit



PROVO RIVER FROM RIVER DITCH TO SNAKE CREEK

The simulated average streamflow for the 50-year period 1950-1999 is 188,976 acre-feet or 261 cfs. The flow ranges from 125 cfs to a maximum of 1,441 cfs. Wet year flow averages 290,617 acre-feet. Dry year flow averages 126,546 acre-feet. The River Ditch Diversion of Bonneville Unit water averages 9,970 acre-feet. Average monthly streamflow results are listed in Table 5-1, and displayed graphically in Figure 5-3.

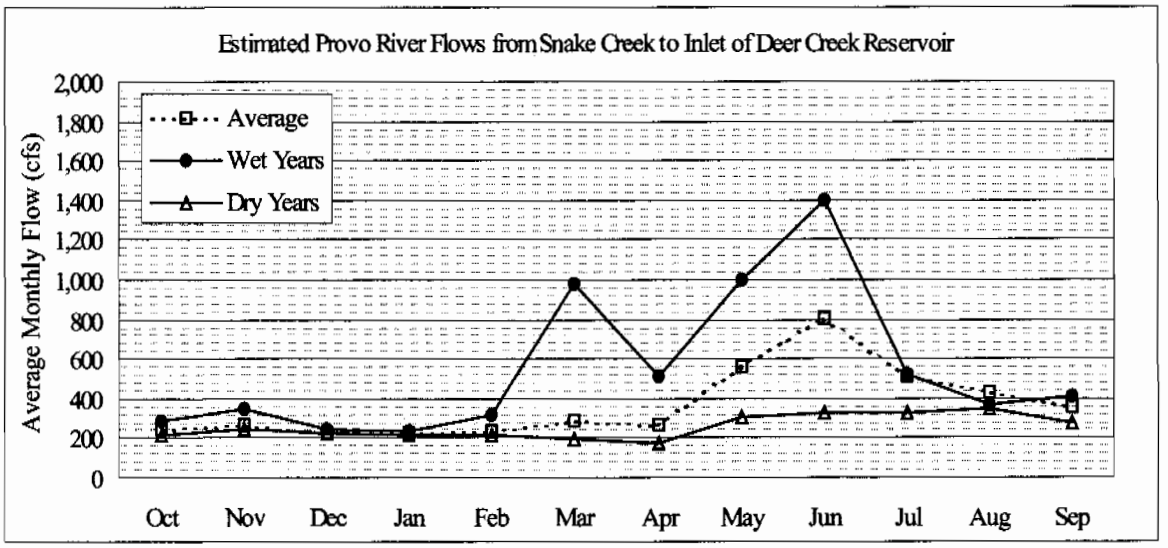
Figure 5-3
Estimated Provo River Flows from River Ditch to Snake Creek under Bonneville Unit



PROVO RIVER FROM SNAKE CREEK TO INLET OF DEER CREEK RESERVOIR

The simulated average streamflow for the 50-year period 1950-1999 is 266,021 acre-feet or 367 cfs. The flow ranges from 125 cfs to a maximum of 1,571 cfs. Wet year flow averages 400,624 acre-feet. Dry year flow averages 185,118 acre-feet. There are no quantified diversions in the reach. Average monthly streamflow results are listed in Table 5-1, and displayed graphically in Figure 5-4.

Figure 5-4
Estimated Provo River Flows from Snake Creek to Inlet of Deer Creek Reservoir Under Bonneville Unit



PROVO RIVER FROM OUTLET OF DEER CREEK RESERVOIR TO NORTH FORK

The simulated average streamflow for the 50-year period 1950-1999 is 268,263 acre-feet or 370 cfs. The flow ranges from 100 cfs to a maximum of 1,765 cfs. Wet year flow averages 428,282 acre-feet. Dry year flow averages 183,659 acre-feet. The Salt Lake Aqueduct diverts an average of 54,594 acre-feet of PRP water above this reach. Average monthly streamflow results are listed in Table 5-1, and displayed graphically in Figure 5-5. Salt Lake Aqueduct deliveries are shown in Table 5-2.

Figure 5-5
Estimated Provo River Flows from Outlet of Deer Creek Reservoir to North Fork of Provo River Under Bonneville Unit

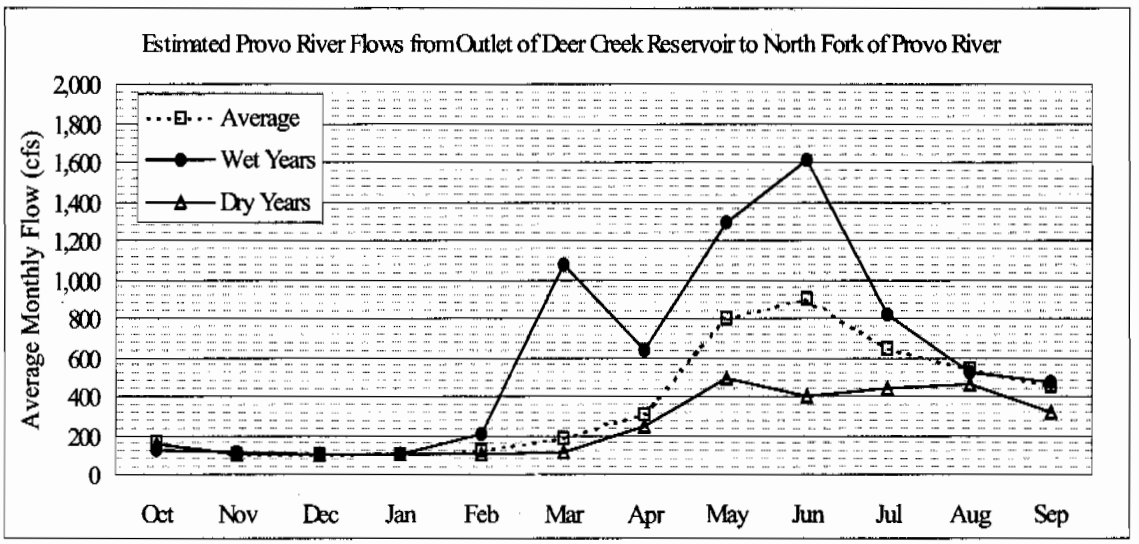


Table 5-2
PROVO RIVER DELIVERIES UNDER BONNEVILLE UNIT OPERATIONS

Estimated Average Deliveries through Salt Lake Aqueduct

Deliveries in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	87	70	59	50	45	46	18	41	129	114	120	123	75
Wet Years	99	75	66	58	62	64	19	41	129	119	125	130	82
Dry Years	41	61	35	22	19	20	10	41	129	46	42	59	44

Deliveries in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	5,360	4,186	3,631	3,075	2,516	2,814	1,060	2,530	7,700	7,022	7,394	7,306	54,594
Wet Years	6,100	4,490	4,038	3,573	3,453	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,644
Dry Years	2,534	3,630	2,145	1,327	1,039	1,232	617	2,530	7,700	2,819	2,600	3,526	31,698

Estimated Average Diversions into Olmsted Aqueduct

Diversions in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	110	76	79	87	86	78	97	285	368	400	376	307	197
Wet Years	109	69	73	80	71	74	78	258	386	386	368	325	188
Dry Years	118	81	84	84	89	84	115	300	378	416	392	329	187

Diversions in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	6,737	4,566	4,919	5,364	4,786	4,836	5,708	17,567	21,945	24,751	23,179	18,406	142,765
Wet Years	6,305	4,238	4,763	5,106	4,015	3,857	1,877	13,711	22,505	25,445	24,387	20,266	136,474
Dry Years	6,267	5,284	5,799	5,409	4,795	6,242	7,951	18,845	16,364	22,501	21,392	14,554	135,403

Estimated Average Diversions into Provo Reservoir Canal (excluding ULS water)

Diversions in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	53	0	0	0	0	0	46	125	179	188	165	130	74
Wet Years	55	0	0	0	0	0	37	103	184	236	191	151	80
Dry Years	44	0	0	0	0	0	36	105	129	112	107	90	52

Diversions in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	3,260	0	0	0	0	0	2,716	7,673	10,640	11,548	10,162	7,755	53,754
Wet Years	3,395	0	0	0	0	0	2,227	6,319	10,976	14,532	11,737	8,960	58,145
Dry Years	2,703	0	0	0	0	0	2,171	6,466	7,656	6,882	6,565	5,358	37,800

Estimated Average Deliveries of ULS water into the Jordan Aqueduct

Deliveries in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	0	0	0	0	0	0	0	0	0	0	0	0	0
Wet Years	0	20	20	15	17	20	0	0	0	0	0	0	8
Dry Years	0	20	20	15	17	20	0	0	0	0	0	0	8

Deliveries in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
Wet Years	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
Dry Years	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510

Estimated Average Deliveries of ULS water into Provo Reservoir Canal

Deliveries in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	35	0	0	0	0	0	31	44	75	82	78	61	34
Wet Years	35	0	0	0	0	0	31	44	75	82	78	61	34
Dry Years	35	0	0	0	0	0	31	44	75	82	78	61	34

Deliveries in acre-feet

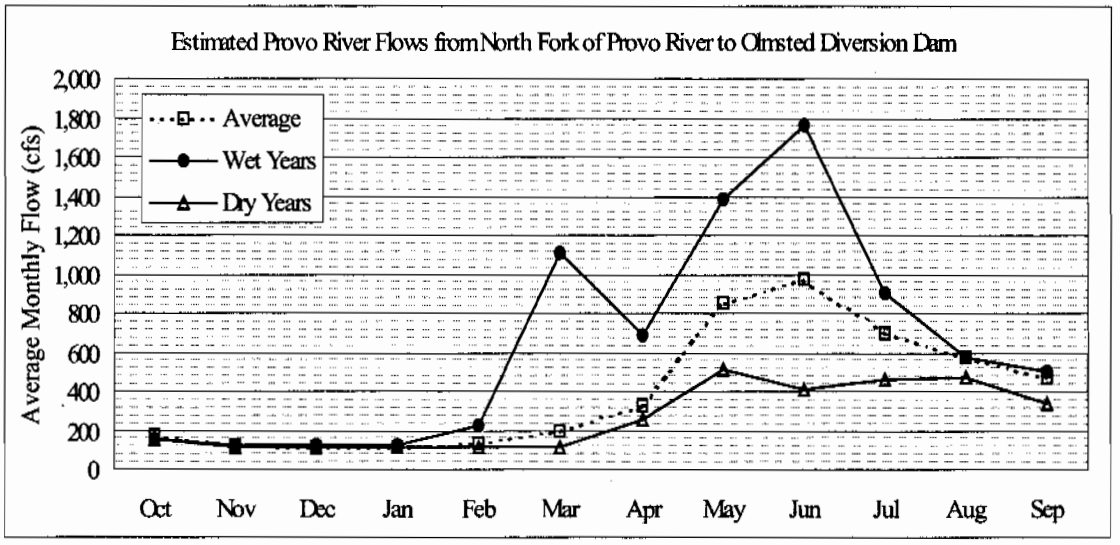
Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
Wet Years	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
Dry Years	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490

Wet Years: Average of flows from 1952, 1983, and 1986
Dry Years: Average of flows from 1961, 1977, and 1992

PROVO RIVER FROM NORTH FORK TO OLMSTED

The simulated average streamflow for the 50-year period 1950-1999 is 287,155 acre-feet or 396 cfs. The flow ranges from 102 cfs to a maximum of 1,899 cfs. Wet year flow averages 464,479 acre-feet. Dry year flow averages 191,399 acre-feet. There are no quantified diversions in the reach. Average monthly streamflow results are listed in Table 5-1, and displayed graphically in Figure 5-6.

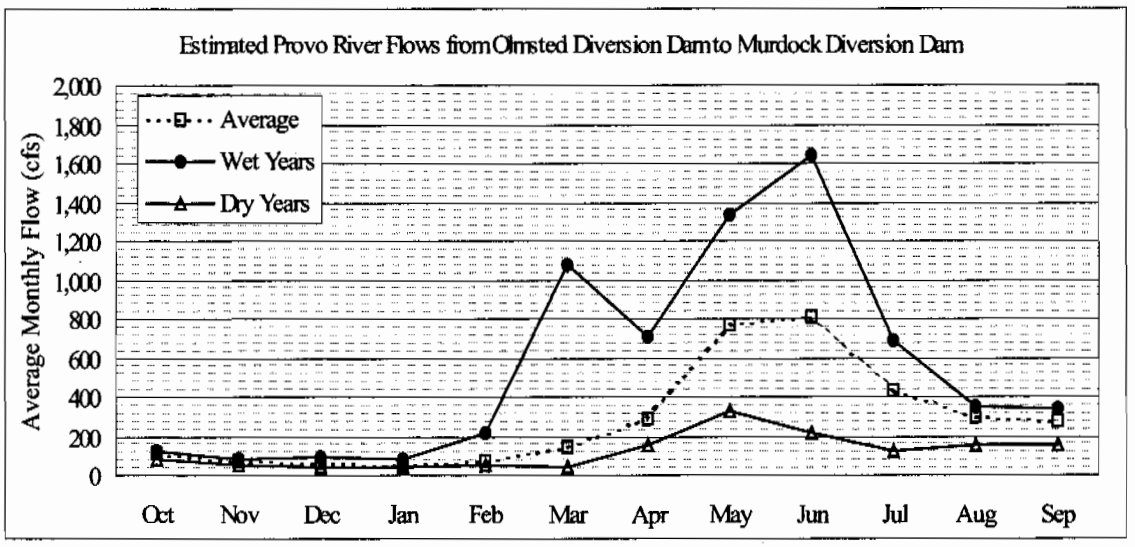
Figure 5-6
Estimated Provo River Flows from North Fork of Provo River to Olmsted Diversion Dam Under Bonneville Unit



PROVO RIVER FROM OLMSTED DIVERSION DAM TO MURDOCK DIVERSION DAM

The simulated average streamflow for the 50-year period 1950-1999 is 205,196 acre-feet or 287 cfs. The flow ranges from 27 cfs to a maximum of 1,790 cfs. Wet year flow averages 406,389 acre-feet. Dry year flow averages 86,910 acre-feet. The Olmsted Aqueduct diverts an average of 142,765 acre-feet, including 87,125 of Bonneville Unit and 17,991 acre-feet of PRP water. Average monthly streamflow results are listed in Table 5-1, and displayed graphically in Figure 5-7. Olmsted Flowline diversions are shown in Table 5-2, as are deliveries from the ULS System into the Jordan Aqueduct.

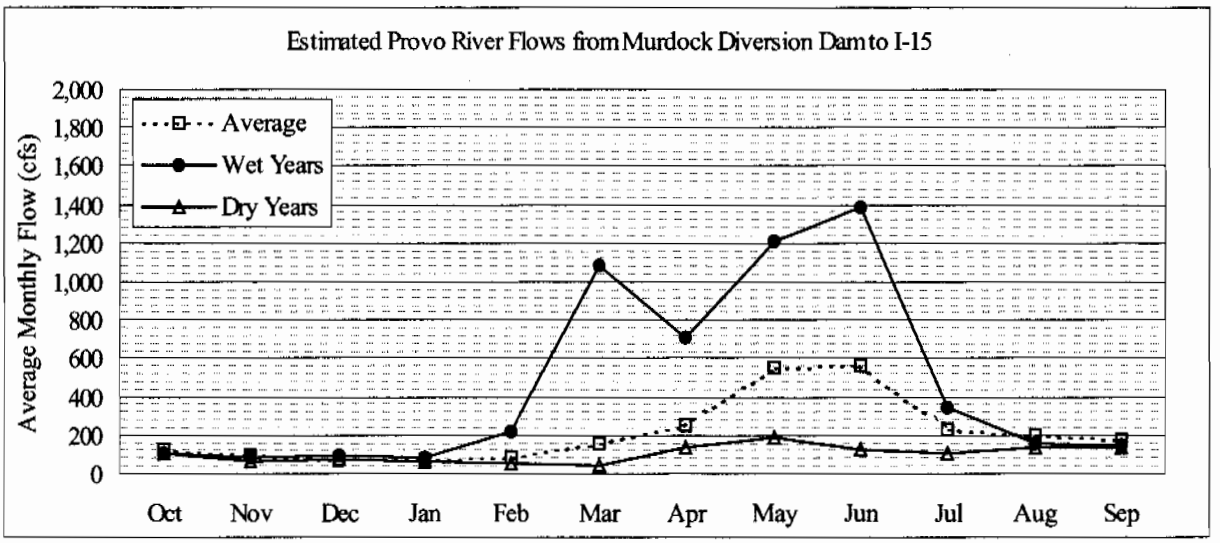
Figure 5-7
Estimated Provo River Flows from Olmsted Diversion Dam to Murdock Diversion Dam Under Bonneville Unit



PROVO RIVER FROM MURDOCK DIVERSION DAM TO INTERSTATE 15

The simulated average streamflow for the 50-year period 1950-1999 is 156,582 acre-feet or 216 cfs. The flow ranges from 28 cfs to a maximum of 1,566 cfs. Wet year flow averages 338,114 acre-feet. Dry year flow averages 74,543 acre-feet. The Provo Reservoir Canal diverts an average of 53,754 acre-feet of Provo River water. It also conveys 24,490 acre-feet of Bonneville Unit water from Strawberry Reservoir. One mile below this location the Spanish Fork-Provo Reservoir Canal Pipeline releases 16,000 acre-feet of Bonneville Unit water from Strawberry Reservoir into the Provo River. Average monthly streamflow results (including the 16,000 acre-feet of ULS water) are listed in Table 5-1, and displayed graphically in Figure 5-8. Provo Reservoir Canal diversions are shown in Table 5-2. ULS deliveries to the Provo Reservoir Canal are shown on Table 5-2.

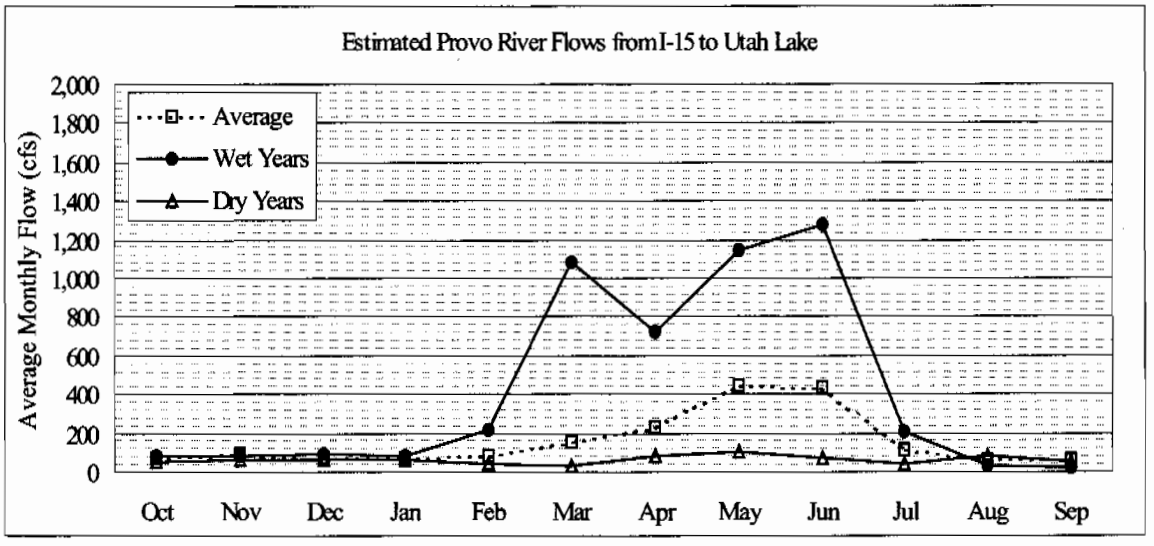
Figure 5-8
Estimated Provo River Flows from Murdock Diversion Dam to I-15
Under Bonneville Unit



PROVO RIVER FROM INTERSTATE 15 TO UTAH LAKE

The simulated average streamflow for the 50-year period 1950-1999 is 113,702 acre-feet or 157 cfs. The flow ranges from 6 cfs to a maximum of 1,575 cfs. Wet year flow averages 304,437 acre-feet. Dry year flow averages 44,944 acre-feet. The Provo Bench Canal diverts an average of 2,341 acre-feet of PRP water. Streamflows under the Bonneville Unit in this reach include 12,165 acre-feet of conserved June sucker water and 3,300 acre-feet of Mitigation Commission water purchases toward the 75-cfs target flow, in addition to the 16,000 acre-feet of ULS water. Average monthly streamflow results are listed in Table 5-1, and displayed graphically in Figure 5-9.

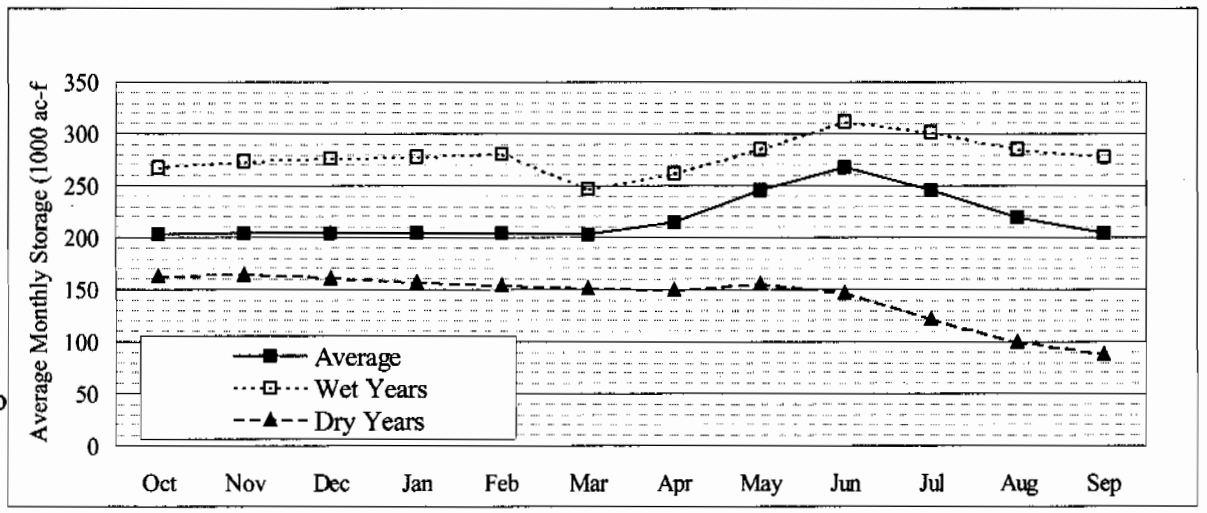
Figure 5-9
Estimated Provo River Flows from I-15 to Utah Lake Under Bonneville Unit



JORDANELLE RESERVOIR STORAGE VOLUMES AND WATER LEVELS

The total water supply capacity of Jordanelle Reservoir is 314,006 acre-feet, which includes a dead storage pool of 3,000 acre-feet. The model analysis indicated that during average water years the reservoir storage would be approximately 200,000 acre-feet during the fall and winter and that the seasonal runoff would increase the storage to approximately 264,000 acre-feet in June, after which releases would exceed inflow and the volume in storage would decline. Figure 5-10 shows a plot of the monthly average storage content. In wet years, the volume of water varied between approximately 272,000 to 279,000 acre-feet in the winter and the seasonal runoff would increase the storage to approximately 310,500 acre-feet in June, after which the volume in storage would decline. In dry years, the maximum volume of water rose to approximately 156,200 acre-feet in November and declined to approximately 77,700 acre-feet at the end of September.

Figure 5-10
Jordanelle Reservoir Monthly Volumes under Bonneville Unit



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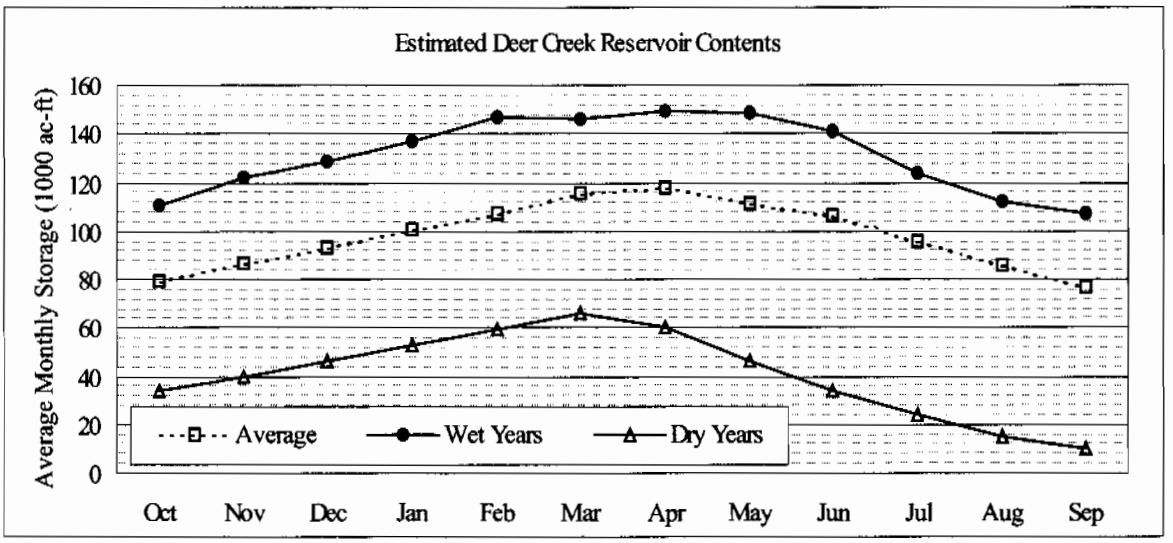
Jordanelle Reservoir water levels would vary with the storage volumes presented above. The water level at full conservation pool is 6,166.4 feet (above mean sea level). In average years the water level during the winter months would range between 6114 and 6117 feet, and would then rise to approximately 6147 feet by the end of June, after which it would decline to its winter levels. During wet years, the water level during the winter months would range between 6151 and 6155 feet, and would then rise to approximately 6165 feet by the end of June, after which it would decline to its winter levels. During dry years, the water level during the winter months would range between 6093 and 6099 feet, and would then decline gradually to approximately 6089 feet by the end of June and to approximately 6084 feet by the end of September, after which it would rise sharply to its winter levels.

DEER CREEK RESERVOIR STORAGE VOLUMES AND WATER LEVELS

The total water supply capacity of Deer Creek Reservoir is 152,564 acre-feet, which includes a dead storage pool of about 2,864 acre-feet. The model analysis indicated that during average water years the reservoir storage would be approximately 80,000 to 110,000 acre-feet during the fall and winter and that the seasonal runoff would increase the storage to approximately 120,000 acre-feet in April, after which releases would exceed inflow and the volume in storage would decline. Figure 5-11 shows a plot of the monthly average storage content. In wet years, the volume of water varied between approximately 130,000 to 150,000 acre-feet in the winter and the seasonal runoff would increase the storage to approximately 152,500 acre-feet in April, after which the volume in storage would decline. In dry years, the maximum volume of water rose to approximately 65,000 acre-feet in March and declined to approximately 10,000 acre-feet at the end of September.

Figure 5-11
Deer Creek Reservoir Monthly Volumes Under Bonneville Unit



Deer Creek Reservoir water levels would vary with the storage volumes presented above. The water level at full conservation pool is approximately 5,416 feet (above mean sea level). In average years the water level during the winter months would range between 5,382 and 5,394 feet, and would then rise to approximately 5,400 feet by the end of June, after which it would decline to its winter levels. During wet years, the water level during the winter months would be several feet higher, up to the full pool level of 5,416 feet. During dry years, the water surface level may not rise above 5,370 feet.

Central Utah Project Completion Program

Chapter 6

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

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Central Utah Project Completion Program

Attachment A

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

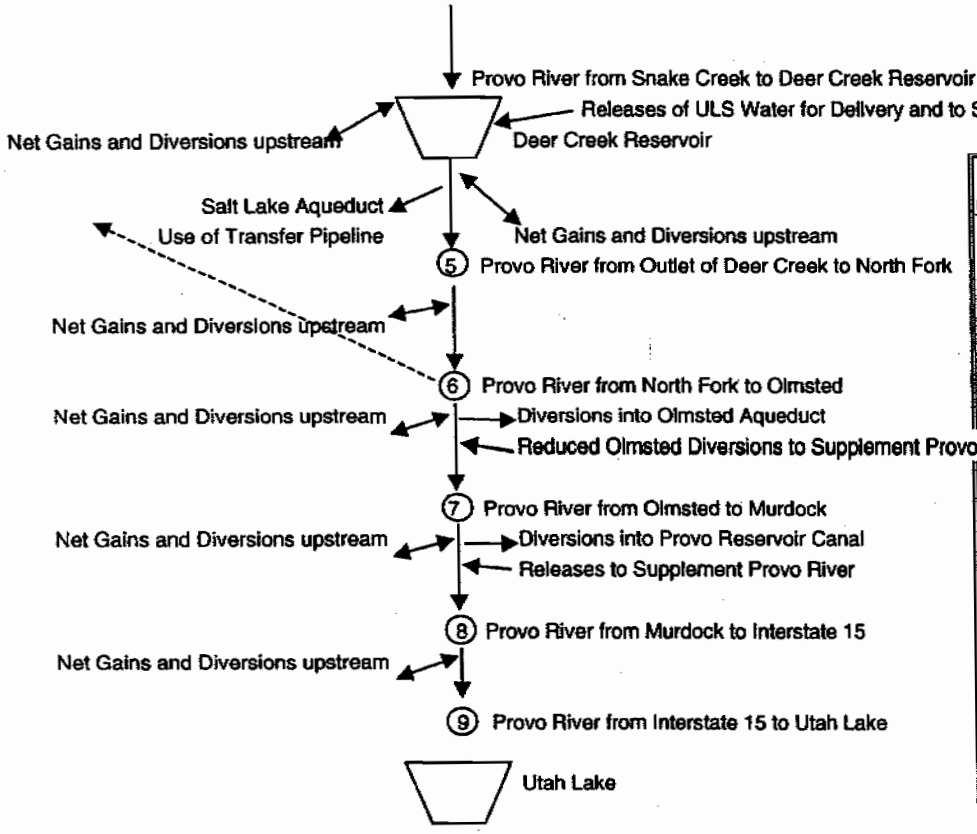
Utah Lake Drainage Basin Water Delivery System Bonneville Unit, Central Utah Project
Draft 2004 Supplement to the 1988 Definite Plan Report

DRAFT Water Supply Appendix
Volume V Attachment A

March 2004

STREAM FLOWS – PROVO RIVER

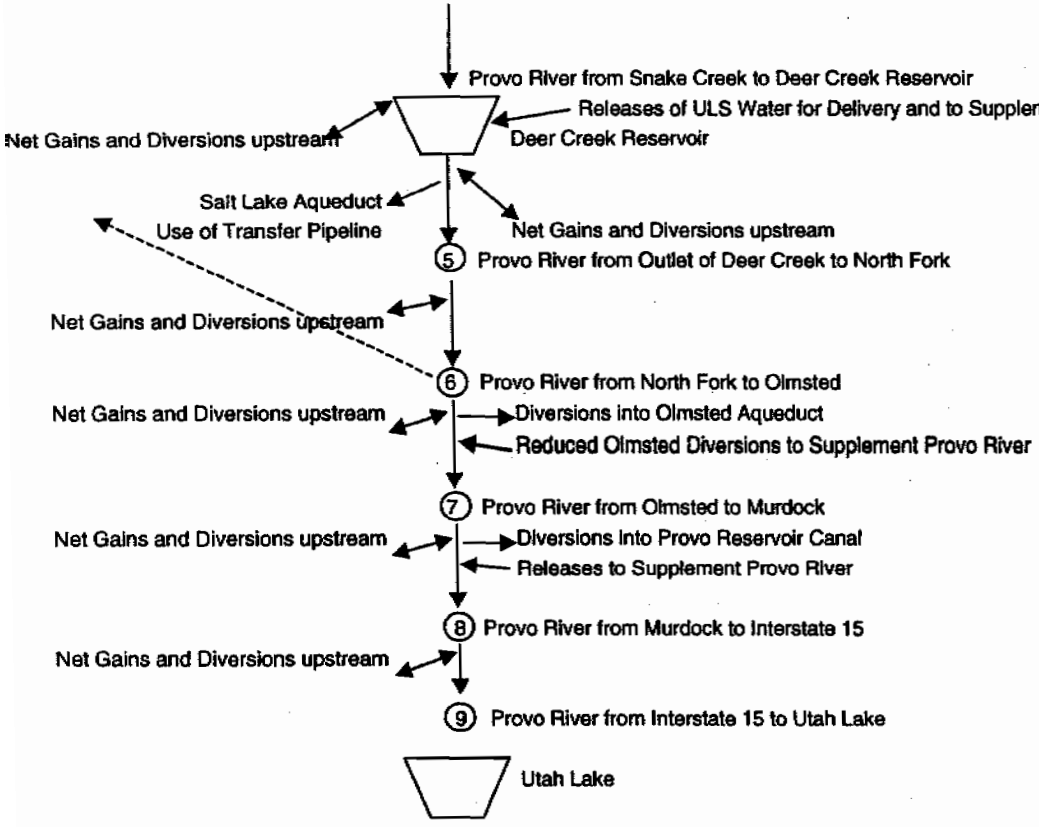
PROVO RIVER SPREADSHEET MODEL - SCHEMATIC



JUNE SUCKER WATER

Change in Flow	
(3,205)	CUP Releases for Delivery at Olmsted Reduced
3,205	CUP Deliveries made from Conserved Non-Project Water (Conserved Water stored and subsequently released from Deer Creek)
2,875	CUP Deliveries at Olmsted Reduced (Water released from storage as needed)
4,000	PRP Deliveries at Murdock Reduced (Water released from storage as needed)
4,000	Non-Project Deliveries at Murdock Reduced (1,580 left in River, 2,420 Stored & Released from Deer Creek)
1,290	Non-Project Deliveries downstream of Murdock Reduced (505 left in River, 785 Stored & Released from Deer Creek)
12,165	**Total Volume**

PROVO RIVER SPREADSHEET MODEL - SCHEMATIC



	75 CFS TARGET FLOW WATER (all changes take place in Reach 9)
714	Timpanogos Canal-Section 207 Water (Water left in River without Storage or change in timing)
223	Timpanogos Canal- Water Rights (Water left in River without Storage or change in timing)
93	Upper East Union Canal-Water Rights (Water left in River without Storage or change in timing)
474	East River Bottom Canal-Water Rights (Water left in River without Storage or change in timing)
295	Fort Field/Little Dry Creek-Water Rights (Water left in River without Storage or change in timing)
353	Provo Bench/Tanner Deed-Water Stock (Water left in River without Storage or change in timing)
925	West Union/West Smith-Water Stock (Water left in River without Storage or change in timing)
223	North Union/Tanner Deed-Water Stock (Water left in River without Storage or change in timing)
3,300	Total Volume

10/6/2003

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Bonneville Unit Operations - Provo River Flows by Ownership
Summary of Flows (acre-feet)

Node	Location and Description		Average Annual Flow (ac-ft)
P-0	Foreign Water into Jordanelle	-PRP Water	85,600
P-1	Provo River Release from Jordanelle		
P-1a	Provo River Release from Jordanelle	-Total	249,189
P-1b	Provo River Release from Jordanelle	-CUP Water	92,299
P-1c	Provo River Release from Jordanelle	-PRP Water	77,141
P-1d	Provo River Release from Jordanelle	-Non-Project	79,748
P-2	Provo River from Timpanogos to River Ditch		
P-2e	Diversions into Timpanogos Canal	-Total	-11,660
P-2f	Diversions into Timpanogos Canal	-CUP Delivery	-4,530
P-2g	Diversions into Timpanogos Canal	-Non-Project	-7,130
P-2a	Provo River from Timpanogos to River Ditch	-Total	237,529
P-2b	Provo River from Timpanogos to River Ditch	-CUP Water	87,769
P-2c	Provo River from Timpanogos to River Ditch	-PRP Water	77,141
P-2d	Provo River from Timpanogos to River Ditch	-Non-Project	72,618
P-3	Provo River from River Ditch to Snake Creek		
	Net Gains and Diversions upstream	-Total	-48,553
	Diversions upstream	-WCWEP Conserved Water	-6,060
	Diversions upstream	-CUP Delivery	-9,970
	Net Gains and Diversions upstream	-Non-Project	-32,523
P-3a	Provo River from River Ditch to Snake Creek	-Total	188,976
P-3b	Provo River from River Ditch to Snake Creek	-CUP Water	77,799
P-3c	Provo River from River Ditch to Snake Creek	-PRP Water	77,141
P-3d	Provo River from River Ditch to Snake Creek	-Non-Project	34,036
P-4	Provo River from Snake Creek to Deer Creek Reservoir		
	Net Gains and Diversions upstream	-Non-Project	77,045
P-4a	Provo River from Snake Creek to Deer Creek Reservoir	-Total	266,021
P-4b	Provo River from Snake Creek to Deer Creek Reservoir	-CUP Water	77,799
P-4c	Provo River from Snake Creek to Deer Creek Reservoir	-PRP Water	77,141
P-4d	Provo River from Snake Creek to Deer Creek Reservoir	-Non-Project	111,080

Bonneville Unit Operations - Provo River Flows by Ownership
Summary of Flows (acre-feet)

Node	Location and Description		Average Annual Flow (ac-ft)
P-5	Provo River from Outlet of Deer Creek to North Fork		
	Net Gains and Diversions upstream	-Total	56,837
	CUP Return Flow Gains above Deer Creek	-CUP Water	10,701
	Other CUP Gains upstream	-CUP Water	1,738
	Net Gains and Diversions upstream	-PRP Water	27,952
	Net Gains and Diversions upstream	-Non-Project	13,240
	Net Gains committed to June sucker by exchange	-Non-Project	3,205
P-5e	Diversions into Salt Lake Aqueduct	-Total	-54,594
	Use of Transfer Pipeline/Pump Station	-PRP Water	3,490
P-5f	Diversions into Salt Lake Aqueduct	-CUP Delivery	0
P-5g	Diversions into Salt Lake Aqueduct	-PRP Delivery	-54,594
P-5a	Provo River from Outlet of Deer Creek to North Fork	-Total	268,263
P-5b	Provo River from Outlet of Deer Creek to North Fork	-CUP Water	93,443
	Baseline CUP Releases	-CUP Water	90,238
P-5b-i	June Sucker Water by Exchange from Non-Project	-CUP Water	3,205
P-5c	Provo River from Outlet of Deer Creek to North Fork	-PRP Water	50,499
P-5d	Provo River from Outlet of Deer Creek to North Fork	-Non-Project	124,321
P-6	Provo River from North Fork to Olmsted		
	Net Gains and Diversions upstream	-Non-Project	18,892
P-6a	Provo River from North Fork to Olmsted	-Total	287,155
P-6b	Provo River from North Fork to Olmsted	-CUP Water	93,443
P-6c	Provo River from North Fork to Olmsted	-PRP Water	50,499
P-6d	Provo River from North Fork to Olmsted	-Non-Project	143,212
P-7	Provo River from Olmsted to Murdock		
	Net Other Gains and Diversions upstream (not Olmsted)	-Total	60,806
P-7e	Diversions into Olmsted Aqueduct	-Total	-142,765
P-7f	Diversions into Olmsted Aqueduct	-CUP Delivery	-87,125
P-7f-i	Undiverted Water at Olmsted for ULS Supplement of Provo River	-ULS Delivery	0
	Related Action Conservation for June sucker	-CUP Water	2,875
P-7g	Source of CUP Diversion is Non-Storage Water	Natural Flow Water	-7,641
P-7h	Diversions into Olmsted Aqueduct	-PRP Delivery	-17,991
P-7h-i	Water Diverted at Olmsted / Transfer Pump	-PRP Water	-3,490
P-7i	Diversions into Olmsted Aqueduct	-Non-Project	-37,649
P-7a	Provo River from Olmsted to Murdock	-Total	205,196
P-7b	Provo River from Olmsted to Murdock	-CUP Water	13,959
P-7c	Provo River from Olmsted to Murdock	-PRP Water	32,509
P-7d	Provo River from Olmsted to Murdock	-Non-Project	158,728

Bonneville Unit Operations - Provo River Flows by Ownership

Summary of Flows (acre-feet)

Node	Location and Description		Average Annual Flow (ac-ft)
P-8	Provo River from Murdock to Interstate 15		
	Net Gains and Diversions upstream (not Murdock)	-Non-Project	-37,435
P-8e	Diversions into Provo Reservoir Canal	-Total	-53,754
P-8f	Total ULS Diversions	-ULS Delivery	-30,000
	Delivery of PRP Water to CUP by contract	-CUP Water	4,000
	Delivery of PRP Water to CUP by contract	-PRP Water	-4,000
P-8f-i	Portion of ULS Conveyed through Provo Reservoir Canal	-ULS Delivery	-24,490
P-8f-ii	Portion of ULS Conveyed through Jordan Aqueduct	-ULS Delivery	-5,510
P-8g	Portion of ULS Conveyed through Provo Reservoir Canal	-PRP Delivery	-13,421
P-8h	Portion of ULS Conveyed through Provo Reservoir Canal	-Non-Project	-15,843
P-8a	Provo River from Murdock to Interstate 15	-Total	156,582
P-8b	Provo River from Murdock to Interstate 15	-CUP Water	36,044
P-8b-i	Total ULS Supplement to Provo River	-CUP ULS Water	16,000
P-8b-ii	Releases of ULS Supplemental Water from Pipeline	-CUP ULS Water	16,000
P-8c	Provo River from Murdock to Interstate 15	-PRP Water	15,088
P-8d	Provo River from Murdock to Interstate 15	-Non-Project	105,450
P-9	Provo River from Interstate 15 to Utah Lake		
	Net Gains and Diversions upstream (not Provo Bench)	-Non-Project	-40,540
P-9e	PRP Diversion to Provo Bench Canal	-PRP Delivery	-2,341
P-9a	Provo River from Interstate 15 to Utah Lake	-Total	113,702
P-9b	Provo River from Interstate 15 to Utah Lake	-CUP Water	36,044
	Baseline Flows for 25-cfs Winter IFR and Operational Spills	-CUP Water	7,879
	Releases of ULS Fish and Wildlife Water	-CUP ULS Water	16,000
	June Sucker Water Accounting - Total	**-CUP Water**	**12,165**
P-9b-i	June Sucker Releases from Conserved Water	-CUP Water	2,875
	Reduced Provo River Project Diversions	-CUP Water	4,000
	Reduced Non-Project Diversions	-CUP Water	5,290
P-9b-ii	Portion Unstored (used as it occurs)	-CUP Water	2,085
	Portion Stored in Deer Creek	-CUP Water	3,205
P-9b-iii	Releases of Stored Non-Project Water for June sucker	-CUP Water	1,488
P-9b-iv	Remaining Related Action Releases of Non-Project	-CUP Water	1,717
P-9b-v	**Water Purchases by Mitigation Commission for 75-cfs target**	**-URMCC Water**	**3,300**
	Timpanogos Canal-Section 207 Water	-URMCC Water	714
	Timpanogos Canal- Water Rights	-URMCC Water	223
	Upper East Union Canal-Water Rights	-URMCC Water	93
	East River Bottom Canal-Water Rights	-URMCC Water	474
	Fort Field/Little Dry Creek-Water Rights	-URMCC Water	295
	Provo Bench/Tanner Deed-Water Stock	-URMCC Water	353
	West Union/West Smith-Water Stock	-URMCC Water	925
	North Union/Tanner Deed-Water Stock	-URMCC Water	223
P-9c	Provo River from Interstate 15 to Utah Lake	-PRP Water	12,747
P-9d	Provo River from Interstate 15 to Utah Lake	-Non-Project	61,611

P-0
Bonneville Unit Operations (cfs)
Foreign Water into Jordanelle
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	22	79	15	4	3	4	247	748	263	142	14	8	130
1951	6	90	78	72	75	71	229	468	494	101	31	10	144
1952	29	81	68	60	53	59	119	265	308	85	27	15	97
1953	8	65	52	54	52	62	139	230	669	61	20	5	118
1954	3	61	32	6	7	55	186	242	85	24	11	9	60
1955	6	56	22	5	6	5	0	385	216	4	1	0	59
1956	0	65	37	74	66	80	87	1,010	630	39	13	7	176
1957	7	60	12	7	7	7	94	516	1,389	152	26	10	190
1958	11	72	64	60	67	14	107	925	368	26	11	10	145
1959	6	59	16	6	6	6	77	126	349	48	10	12	60
1960	23	91	30	8	9	10	93	329	220	20	0	0	69
1961	7	58	40	6	5	7	14	143	89	0	0	40	34
1962	41	83	33	21	20	70	363	729	881	82	1	0	194
1963	0	55	23	3	6	6	99	413	401	41	6	18	89
1964	12	68	26	8	6	7	9	844	1,125	92	16	2	184
1965	5	60	26	10	62	53	151	610	1,380	287	5	77	226
1966	68	83	58	64	56	74	251	673	121	11	0	7	123
1967	12	78	17	9	8	8	102	618	838	176	30	12	159
1968	11	76	68	60	59	66	23	523	667	63	37	0	138
1969	9	74	66	59	57	16	247	291	712	56	15	3	133
1970	28	62	53	55	65	69	88	697	352	56	17	18	130
1971	12	81	82	89	82	82	262	248	699	95	10	12	146
1972	90	88	78	77	74	117	232	324	238	37	0	3	113
1973	109	94	85	74	70	68	100	278	689	70	16	36	141
1974	61	85	46	13	11	97	169	333	721	50	11	5	133
1975	41	67	61	56	56	63	76	460	660	119	42	9	143
1976	96	83	30	0	58	65	167	388	188	14	0	0	91
1977	3	53	27	5	5	5	11	62	113	0	0	0	24
1978	4	44	30	8	8	8	205	580	1,318	84	2	0	190
1979	3	56	57	56	52	57	113	679	211	36	19	0	112
1980	5	52	24	7	7	49	186	724	472	90	8	4	136
1981	8	67	63	55	55	50	218	350	463	12	0	6	112
1982	21	80	22	8	8	76	176	269	325	186	36	122	111
1983	205	101	20	4	63	73	108	207	361	112	114	88	121
1984	142	107	101	88	76	78	171	238	316	196	0	87	133
1985	121	111	82	77	67	71	101	344	238	65	28	10	110
1986	117	103	99	73	94	187	149	323	353	251	11	52	151
1987	120	99	78	80	72	78	237	456	231	33	5	0	124
1988	6	55	34	6	6	6	153	313	144	20	6	4	63
1989	7	57	30	9	9	7	149	498	327	5	3	1	92
1990	1	39	23	6	45	16	138	291	309	3	0	0	72
1991	7	44	36	39	43	43	4	375	589	3	1	0	98
1992	0	65	37	3	3	27	3	95	91	3	0	7	28
1993	5	40	40	41	43	64	122	98	101	95	0	0	54
1994	48	49	14	48	51	64	204	269	247	84	25	0	92
1995	15	71	62	56	45	108	178	599	230	598	0	0	165
1996	50	78	18	65	59	94	215	183	722	221	27	11	145
1997	7	81	29	63	76	115	197	307	254	90	0	64	107
1998	13	52	81	80	79	106	199	175	275	204	35	63	113
1999	145	66	93	79	82	100	198	192	326	189	42	42	130
Average	36	71	46	38	42	54	143	409	455	91	15	18	118
Maximum	205	111	101	89	94	187	363	1,010	1,389	598	114	122	226
Minimum	0	39	12	0	3	4	0	62	85	0	0	0	24

P-0

Bonneville Unit Operations (acre-feet)

Foreign Water into Jordanelle

PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,358	4,675	936	241	173	269	14,681	46,019	15,642	8,757	837	462	94,052
1951	366	5,349	4,810	4,416	4,175	4,348	13,603	28,779	29,423	6,200	1,894	614	103,977
1952	1,766	4,829	4,166	3,685	3,069	3,636	7,090	16,269	18,311	5,236	1,645	903	70,605
1953	462	3,848	3,194	3,300	2,915	3,839	8,293	14,167	39,809	3,761	1,251	289	85,126
1954	168	3,645	1,988	350	389	3,374	11,082	14,878	5,080	1,504	665	552	43,675
1955	390	3,328	1,365	334	308	338	3	23,702	12,864	217	33	0	42,880
1956	20	3,869	2,274	4,547	3,814	4,896	5,187	62,094	37,510	2,404	825	427	127,867
1957	430	3,549	763	418	373	449	5,621	31,722	82,626	9,371	1,598	613	137,533
1958	693	4,262	3,948	3,679	3,743	883	6,380	56,896	21,877	1,590	695	571	105,216
1959	393	3,491	1,010	378	309	351	4,591	7,733	20,744	2,932	595	732	43,260
1960	1,443	5,396	1,845	513	525	620	5,522	20,244	13,099	1,237	0	0	50,443
1961	446	3,471	2,470	363	299	418	812	8,795	5,282	0	0	2,379	24,735
1962	2,521	4,960	2,026	1,305	1,126	4,280	21,571	44,850	52,407	5,013	44	0	140,103
1963	0	3,271	1,394	190	331	340	5,874	25,372	23,851	2,497	377	1,077	64,573
1964	722	4,019	1,622	478	369	420	555	51,864	66,950	5,628	986	123	133,736
1965	333	3,596	1,594	601	3,459	3,266	8,961	37,501	82,141	17,624	322	4,565	163,964
1966	4,208	4,954	3,550	3,954	3,136	4,541	14,918	41,366	7,202	687	0	435	88,953
1967	751	4,651	1,075	556	446	479	6,090	37,968	49,834	10,803	1,874	734	115,262
1968	694	4,544	4,178	3,704	3,398	4,086	1,373	32,172	39,708	3,902	2,257	28	100,042
1969	543	4,406	4,060	3,656	3,165	966	14,719	17,894	42,352	3,435	897	195	96,287
1970	1,727	3,685	3,252	3,406	3,634	4,219	5,237	42,827	20,924	3,435	1,038	1,050	94,432
1971	739	4,833	5,059	5,502	4,562	5,059	15,597	15,239	41,568	5,854	626	714	105,352
1972	5,511	5,237	4,800	4,732	4,260	7,195	13,803	19,931	14,165	2,264	9	167	82,076
1973	6,712	5,613	5,223	4,569	3,869	4,203	5,968	17,120	40,971	4,333	992	2,160	101,732
1974	3,763	5,083	2,826	778	617	5,974	10,043	20,470	42,891	3,071	676	319	96,511
1975	2,539	3,964	3,777	3,459	3,133	3,886	4,505	28,257	39,293	7,296	2,604	565	103,279
1976	5,880	4,916	1,840	0	3,348	3,983	9,909	23,848	11,206	835	0	0	65,765
1977	162	3,151	1,670	314	283	314	627	3,831	6,750	0	0	0	17,100
1978	241	2,607	1,865	468	422	468	12,223	35,642	78,452	5,192	134	28	137,740
1979	163	3,305	3,509	3,470	2,905	3,499	6,721	41,745	12,577	2,184	1,143	3	81,223
1980	296	3,088	1,469	438	410	2,987	11,061	44,521	28,089	5,512	484	228	98,583
1981	504	3,983	3,892	3,392	3,068	3,049	12,956	21,526	27,563	709	0	329	80,971
1982	1,291	4,733	1,335	468	422	4,643	10,457	16,556	19,343	11,466	2,200	7,278	80,192
1983	12,581	6,032	1,237	237	3,521	4,464	6,398	12,733	21,454	6,877	6,980	5,240	87,753
1984	8,735	6,340	6,205	5,397	4,387	4,820	10,198	14,660	18,803	12,076	0	5,193	96,812
1985	7,465	6,580	5,060	4,752	3,694	4,387	6,013	21,120	14,152	3,972	1,712	605	79,514
1986	7,163	6,132	6,069	4,483	5,243	11,487	8,889	19,852	21,013	15,410	663	3,065	109,470
1987	7,378	5,894	4,769	4,946	4,010	4,773	14,110	28,027	13,736	2,007	282	0	89,930
1988	372	3,276	2,109	346	348	372	9,089	19,253	8,587	1,233	393	223	45,602
1989	432	3,382	1,841	536	512	439	8,857	30,615	19,482	311	192	77	66,675
1990	47	2,319	1,432	343	2,516	1,010	8,195	17,869	18,371	166	3	22	52,293
1991	430	2,597	2,217	2,369	2,406	2,618	261	23,060	35,034	159	35	0	71,186
1992	0	3,841	2,264	198	179	1,638	191	5,849	5,419	199	0	416	20,195
1993	321	2,383	2,469	2,525	2,394	3,919	7,234	6,013	6,013	5,855	0	28	39,154
1994	2,942	2,906	862	2,961	2,815	3,913	12,156	16,533	14,692	5,176	1,552	28	66,536
1995	901	4,219	3,839	3,450	2,493	6,665	10,610	36,814	13,690	36,745	0	28	119,454
1996	3,103	4,622	1,109	3,991	3,409	5,795	12,788	11,245	42,986	13,583	1,683	634	104,950
1997	441	4,815	1,783	3,886	4,238	7,082	11,736	18,889	15,107	5,549	0	3,820	77,346
1998	815	3,091	4,963	4,943	4,369	6,537	11,834	10,766	16,346	12,525	2,148	3,751	82,088
1999	8,911	3,900	5,695	4,873	4,542	6,159	11,765	11,822	19,388	11,627	2,601	2,524	93,808
Average	2,185	4,213	2,854	2,358	2,351	3,347	8,527	25,138	27,096	5,568	899	1,064	85,600
Maximum	12,581	6,580	6,205	5,502	5,243	11,487	21,571	62,094	82,626	36,745	6,980	7,278	163,964
Minimum	0	2,319	763	0	173	269	3	3,831	5,080	0	0	0	17,100

P-1a
Bonneville Unit Operations (acre-feet)
Provo River Release from Jordanelle
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	8,862	8,926	8,072	7,695	6,994	7,686	10,188	58,040	70,676	29,928	27,221	18,181	262,468
1951	8,777	8,926	9,223	9,223	8,331	9,223	8,383	71,351	73,455	28,909	26,741	22,402	284,944
1952	9,147	8,926	9,223	9,223	8,628	11,671	21,557	81,967	77,399	23,407	23,273	19,083	303,504
1953	9,181	7,529	8,152	7,795	7,132	7,992	9,115	26,237	85,357	32,622	28,537	18,817	248,467
1954	9,785	8,368	8,820	8,456	7,436	9,379	14,054	32,107	18,937	28,304	28,955	19,147	193,748
1955	9,659	8,328	8,562	8,575	7,763	8,206	8,939	24,902	34,061	35,317	29,364	19,797	203,474
1956	9,117	8,109	7,956	8,049	7,604	8,092	10,554	24,943	58,463	62,899	45,946	22,480	274,214
1957	9,890	7,832	8,032	7,961	6,993	8,244	9,185	17,710	78,104	55,433	34,820	19,144	263,348
1958	9,930	8,877	9,204	8,479	7,637	7,836	8,703	48,172	42,462	35,786	29,633	18,652	235,369
1959	9,802	7,868	8,270	8,236	7,328	8,038	11,012	28,588	41,441	33,769	29,624	17,405	211,382
1960	10,160	9,060	8,462	8,311	7,728	7,980	8,641	25,611	38,530	36,968	31,960	21,829	215,241
1961	9,284	8,926	8,418	8,431	7,575	8,170	9,192	18,467	25,134	28,561	25,989	15,765	173,910
1962	9,498	8,682	8,776	8,691	7,023	8,103	8,832	21,498	42,086	67,784	55,111	30,211	276,294
1963	10,069	8,238	8,793	8,655	7,538	8,259	8,729	27,610	48,381	55,036	33,332	16,605	241,243
1964	10,079	8,229	8,629	8,653	7,844	8,355	8,005	17,279	40,701	70,249	56,287	29,890	274,200
1965	9,335	8,514	7,999	8,333	7,195	8,550	8,102	24,120	67,972	47,275	24,109	24,697	246,202
1966	9,479	8,421	9,223	8,858	7,539	9,223	13,355	45,712	26,827	33,246	28,127	17,806	217,816
1967	9,905	7,905	8,101	8,191	7,331	7,842	8,444	21,846	46,030	37,496	33,245	25,755	222,091
1968	10,216	8,926	9,223	8,596	7,618	9,223	8,271	21,419	84,362	32,606	25,127	20,039	245,626
1969	10,131	8,926	9,223	8,723	8,331	8,419	8,070	78,915	65,770	27,418	22,115	15,687	271,727
1970	10,003	8,926	9,223	8,790	7,792	8,331	8,671	57,863	51,905	32,281	28,631	18,500	250,936
1971	10,101	8,926	9,223	9,223	8,331	9,770	8,336	55,363	94,113	30,081	26,627	17,089	287,184
1972	10,141	8,926	9,223	9,223	8,673	10,060	8,880	74,382	48,391	31,523	26,159	15,876	261,456
1973	9,885	8,926	9,223	9,223	8,331	9,382	7,527	49,287	70,758	29,203	25,347	19,878	256,970
1974	10,247	8,926	9,122	8,510	7,457	7,920	8,236	78,582	78,119	33,776	32,498	19,414	302,808
1975	9,745	8,675	8,880	8,433	7,602	7,904	8,286	24,412	97,759	55,183	34,215	21,316	292,410
1976	10,563	9,167	9,074	8,882	7,814	8,036	8,455	51,225	35,830	33,348	30,423	22,631	235,448
1977	9,731	8,416	8,362	8,470	7,588	8,318	10,343	14,398	18,929	20,625	17,733	19,396	152,309
1978	8,657	7,930	7,870	8,072	7,264	7,686	8,375	23,472	75,537	68,271	50,986	21,098	295,220
1979	9,969	7,914	8,341	8,355	7,429	8,938	8,490	23,689	26,084	34,475	28,681	18,090	190,456
1980	9,775	8,007	8,208	7,686	7,349	8,765	7,859	17,821	37,071	34,307	27,183	19,421	193,452
1981	9,688	9,623	9,723	8,389	7,365	8,046	9,930	30,198	57,425	29,264	24,834	16,103	220,590
1982	9,860	9,237	9,544	8,175	7,206	9,383	7,784	49,063	69,427	44,184	27,249	21,396	272,510
1983	9,328	9,727	8,923	8,561	14,263	74,042	7,925	29,435	96,189	45,733	28,300	25,592	358,017
1984	9,731	7,919	8,427	8,404	15,962	26,291	45,681	58,328	75,441	45,540	25,485	23,175	350,385
1985	8,715	8,230	8,198	8,227	7,278	7,686	33,430	79,223	38,720	35,086	32,343	22,079	289,217
1986	9,350	9,664	8,630	8,409	6,942	69,222	24,001	56,201	97,643	46,995	21,436	15,110	373,602
1987	8,657	8,516	8,601	9,223	7,774	13,891	30,406	61,402	20,732	33,264	38,783	29,050	270,299
1988	9,454	8,217	8,096	8,216	7,435	7,724	12,971	27,876	27,635	20,019	22,340	14,104	174,088
1989	10,210	8,470	8,477	8,571	7,545	8,648	14,994	33,542	47,183	39,903	27,780	15,849	231,171
1990	10,257	7,702	9,026	8,789	7,815	8,413	9,809	23,019	35,307	22,386	18,935	14,854	176,311
1991	9,457	8,757	8,624	8,717	7,606	8,029	9,856	20,236	36,739	37,593	26,005	17,032	198,651
1992	10,309	7,925	8,083	8,459	7,377	8,739	9,456	37,717	24,346	31,451	25,483	14,825	194,170
1993	10,298	7,482	7,729	7,729	6,985	7,729	7,702	21,568	43,816	41,386	26,698	14,599	203,722
1994	9,700	7,493	7,821	7,754	7,051	7,918	9,215	23,472	32,451	32,875	24,989	13,343	184,082
1995	9,096	7,931	7,989	7,754	7,095	7,808	9,268	21,726	28,317	87,713	35,053	14,171	243,921
1996	9,229	9,764	9,936	9,223	8,628	9,329	8,003	49,937	82,680	33,585	31,715	21,744	283,773
1997	9,765	8,926	9,223	9,223	8,331	7,686	34,616	67,119	63,595	40,413	25,592	19,054	303,544
1998	10,333	9,472	9,201	7,894	7,611	7,686	8,349	55,739	61,362	36,241	23,449	21,303	258,640
1999	8,177	9,457	8,429	8,391	6,942	8,769	24,310	60,148	64,614	39,253	28,078	22,250	288,819
Average	9,655	8,575	8,676	8,482	7,888	11,453	12,250	39,859	54,085	38,979	29,651	19,635	249,189
Maximum	10,563	9,764	9,936	9,223	15,962	74,042	45,681	81,967	97,759	87,713	56,287	30,211	373,602
Minimum	8,177	7,482	7,729	7,686	6,942	7,686	7,527	14,398	18,929	20,019	17,733	13,343	152,309

P-1a
Bonneville Unit Operations (cfs)
Provo River Release from Jordanelle
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	144	150	131	125	126	125	171	944	1,188	487	443	306	363
1951	143	150	150	150	150	150	141	1,160	1,234	470	435	376	394
1952	149	150	150	150	150	190	362	1,333	1,301	381	379	321	418
1953	149	127	133	127	128	130	153	427	1,435	531	464	316	343
1954	159	141	143	138	134	153	236	522	318	460	471	322	268
1955	157	140	139	139	140	133	150	405	572	574	478	333	281
1956	148	136	129	131	132	132	177	406	983	1,023	747	378	378
1957	161	132	131	129	126	134	154	288	1,313	902	566	322	364
1958	161	149	150	138	138	127	146	783	714	582	482	313	325
1959	159	132	135	134	132	131	185	465	696	549	482	293	292
1960	165	152	138	135	134	130	145	417	648	601	520	367	297
1961	151	150	137	137	136	133	154	300	422	465	423	265	240
1962	154	146	143	141	126	132	148	350	707	1,102	896	508	382
1963	164	138	143	141	136	134	147	449	813	895	542	279	333
1964	164	138	140	141	136	136	135	281	684	1,143	915	502	378
1965	152	143	130	136	130	139	136	392	1,142	769	392	415	340
1966	154	142	150	144	136	150	224	743	451	541	457	299	301
1967	161	133	132	133	132	128	142	355	774	610	541	433	307
1968	166	150	150	140	132	150	139	348	1,418	530	409	337	338
1969	165	150	150	142	150	137	136	1,283	1,105	446	360	264	375
1970	163	150	150	143	140	135	146	941	872	525	466	311	347
1971	164	150	150	150	150	159	140	900	1,582	489	433	287	397
1972	165	150	150	150	151	164	149	1,210	813	513	425	267	360
1973	161	150	150	150	150	153	127	802	1,189	475	412	334	355
1974	167	150	148	138	134	129	138	1,278	1,313	549	529	326	418
1975	158	146	144	137	137	129	139	397	1,643	898	556	358	404
1976	172	154	148	144	136	131	142	833	602	542	495	380	324
1977	158	141	136	138	137	135	174	234	318	335	288	326	210
1978	141	133	128	131	131	125	141	382	1,269	1,110	829	355	408
1979	162	133	136	136	134	145	143	385	438	561	466	304	263
1980	159	135	133	125	128	143	132	290	623	558	442	326	266
1981	158	162	158	136	133	131	167	491	965	476	404	271	305
1982	160	155	155	133	130	153	131	798	1,167	719	443	360	376
1983	152	163	145	139	257	1,204	133	479	1,617	744	460	430	495
1984	158	133	137	137	278	428	768	949	1,268	741	414	389	483
1985	142	138	133	134	131	125	562	1,288	651	571	526	371	400
1986	152	162	140	137	125	1,126	403	914	1,641	764	349	254	516
1987	141	143	140	150	140	226	511	999	348	541	631	488	373
1988	154	138	132	134	129	126	218	453	464	326	363	237	240
1989	166	142	138	139	136	141	252	546	793	649	452	266	319
1990	167	129	147	143	141	137	165	374	593	364	308	250	244
1991	154	147	140	142	137	131	166	329	617	611	423	286	274
1992	168	133	131	138	128	142	159	613	409	512	414	249	267
1993	167	126	126	126	126	126	129	351	736	673	434	245	281
1994	158	126	127	126	127	129	155	382	545	535	406	224	254
1995	148	133	130	126	128	127	156	353	476	1,427	570	238	337
1996	150	164	162	150	150	152	135	812	1,390	546	516	365	391
1997	159	150	150	150	150	125	582	1,092	1,069	657	416	320	419
1998	168	159	150	128	137	125	140	907	1,031	589	381	358	357
1999	133	159	137	136	125	143	409	978	1,086	638	457	374	399
Average	157	144	141	138	141	186	206	648	909	634	482	330	344
Maximum	172	164	162	150	278	1,204	768	1,333	1,643	1,427	915	508	516
Minimum	133	126	126	125	125	125	127	234	318	326	288	224	210

P-1b
Bonneville Unit Operations (acre-feet)
Provo River Release from Jordanelle
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,228	3,284	4,707	5,402	4,880	5,380	2,205	2,345	3,845	10,817	14,300	10,314	71,707
1951	5,506	2,651	2,721	5,873	5,231	3,570	2,256	2,280	5,079	12,845	14,882	10,279	73,173
1952	4,822	3,092	3,074	4,334	3,030	3,570	429	2,192	3,756	8,752	12,095	8,833	57,979
1953	5,525	3,180	5,314	6,171	5,603	7,513	6,883	5,452	3,722	12,895	18,559	11,615	92,431
1954	5,987	5,176	5,398	7,162	6,025	4,891	5,896	7,900	8,779	17,338	23,242	14,611	112,406
1955	7,101	5,195	5,513	7,936	6,957	7,457	6,863	7,983	7,699	18,850	23,425	16,577	121,554
1956	6,176	3,621	5,419	6,466	6,347	5,547	5,381	4,852	7,570	16,041	20,908	16,457	104,784
1957	5,865	3,886	5,075	6,778	6,057	6,596	4,794	5,204	4,899	11,964	15,267	10,946	87,330
1958	6,082	4,868	3,927	6,799	4,915	5,308	2,991	3,352	7,140	14,032	19,381	12,753	91,547
1959	6,548	5,115	5,078	7,616	6,476	7,127	6,849	9,590	8,833	19,482	22,928	14,100	119,743
1960	6,257	3,621	6,815	7,616	6,472	6,015	3,528	7,103	7,955	19,121	25,923	19,206	119,632
1961	4,789	7,126	7,137	7,608	6,845	7,606	7,438	10,414	7,497	21,109	22,439	10,322	120,331
1962	6,504	5,801	6,425	7,613	6,351	7,353	3,412	4,852	6,728	11,593	16,671	14,491	97,793
1963	5,572	3,886	5,689	7,131	6,145	6,882	7,438	5,933	8,422	15,636	19,087	12,164	103,986
1964	5,368	3,621	6,107	6,875	6,195	6,648	7,305	3,470	5,694	11,865	17,625	15,391	96,164
1965	6,193	3,665	4,077	4,577	4,167	4,750	3,632	4,010	5,854	9,471	11,840	7,240	69,475
1966	4,706	4,343	2,810	5,070	4,391	3,394	2,887	4,525	8,310	18,588	20,821	12,549	92,394
1967	5,848	3,976	4,871	6,426	5,881	5,796	6,704	5,734	5,604	11,847	15,594	9,694	87,975
1968	5,717	4,605	3,626	6,257	5,558	4,099	4,667	5,116	4,021	12,804	16,329	10,504	83,303
1969	5,397	3,923	3,999	5,709	4,666	4,877	1,613	2,280	5,344	11,875	14,361	9,869	73,913
1970	5,102	4,485	4,978	5,152	4,741	4,684	7,358	5,734	4,802	13,117	18,244	10,836	89,233
1971	5,097	1,875	2,335	3,041	2,451	2,257	2,861	3,427	4,109	11,684	15,904	10,417	65,458
1972	4,656	2,334	2,335	3,129	2,350	937	1,046	2,699	4,932	13,215	17,773	10,920	66,326
1973	4,842	2,474	2,953	4,364	4,127	2,953	3,730	3,074	4,815	12,078	16,852	9,341	71,601
1974	5,420	4,837	4,199	6,565	5,705	6,777	6,474	4,516	5,797	14,766	21,140	13,267	99,463
1975	4,676	5,849	5,176	6,472	5,295	5,791	6,890	8,197	1,563	10,744	21,053	10,398	92,105
1976	4,719	5,301	3,923	5,457	5,735	5,632	5,543	2,745	6,926	16,948	21,767	17,264	101,962
1977	4,839	5,637	5,660	7,240	6,449	5,690	4,666	6,841	10,010	11,928	15,424	16,111	100,494
1978	4,981	5,072	7,085	7,506	6,192	6,275	7,349	8,619	8,002	18,729	22,104	15,629	117,544
1979	2,669	4,409	5,646	6,754	5,361	4,618	4,657	3,678	6,923	17,442	23,462	14,016	99,635
1980	4,165	5,161	5,419	6,565	5,482	5,448	4,814	2,700	4,141	12,166	18,258	11,323	85,641
1981	4,018	5,255	5,419	6,280	5,768	6,024	6,962	5,799	7,123	12,629	19,266	12,086	96,628
1982	4,092	3,104	5,326	6,110	5,227	5,227	5,340	4,572	5,052	11,751	17,610	10,066	83,478
1983	4,385	5,466	5,293	6,772	4,764	3,744	651	3,259	4,845	14,952	18,629	9,472	82,233
1984	3,875	5,166	2,691	5,088	3,034	3,713	1,523	4,502	4,834	12,849	15,894	12,402	75,572
1985	3,518	5,165	5,806	6,956	4,840	3,716	1,697	5,288	6,339	18,777	21,115	12,884	96,102
1986	4,112	3,024	5,424	6,879	6,916	4,667	2,822	6,249	6,434	17,209	12,618	9,479	85,832
1987	3,879	5,664	5,441	7,016	4,606	3,975	4,294	2,787	6,758	14,518	26,356	17,187	102,481
1988	3,532	5,098	5,379	7,135	5,371	5,250	7,230	9,303	4,562	10,716	20,111	10,691	94,380
1989	3,398	5,403	5,717	7,551	7,038	6,811	6,055	7,808	11,823	17,399	23,974	13,214	116,191
1990	5,449	5,277	5,747	6,535	5,173	5,626	3,484	5,485	5,920	10,693	14,453	11,530	85,372
1991	5,077	5,339	5,559	7,692	6,645	5,832	4,887	3,985	6,822	15,310	19,741	11,868	98,757
1992	4,740	6,388	6,537	7,382	6,197	7,706	7,869	12,186	6,647	19,341	21,550	11,743	118,286
1993	6,035	5,594	5,743	7,100	5,962	7,046	4,211	3,917	5,836	11,014	16,973	12,291	91,722
1994	4,190	5,348	5,448	7,012	5,574	5,316	7,481	5,292	6,508	14,400	18,841	10,549	95,960
1995	4,115	4,791	4,783	4,990	4,181	3,284	2,997	4,252	6,028	10,251	13,597	9,121	72,391
1996	3,738	5,479	5,611	6,730	5,470	3,975	4,986	4,369	3,764	13,217	16,906	10,320	84,565
1997	3,493	3,804	5,653	6,126	6,261	7,686	6,977	4,999	6,414	17,004	21,387	12,818	102,622
1998	4,316	5,361	5,405	6,703	6,142	5,419	1,438	4,628	5,322	12,034	16,207	11,444	84,420
1999	4,182	5,371	5,416	6,703	4,344	3,738	1,415	4,569	5,258	12,945	15,757	11,175	80,874
Average	4,910	4,563	4,998	6,369	5,392	5,284	4,618	5,201	6,101	14,135	18,573	12,155	92,299
Maximum	7,101	7,126	7,137	7,936	7,038	7,706	7,869	12,186	11,823	21,109	26,356	19,206	121,554
Minimum	2,669	1,875	2,335	3,041	2,350	937	429	2,192	1,563	8,752	11,840	7,240	57,979

P-1b
Bonneville Unit Operations (cfs)
Provo River Release from Jordanelle
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	69	55	77	88	88	88	37	38	65	176	233	173	99
1951	90	45	44	96	94	58	38	37	85	209	242	173	101
1952	69	55	77	88	85	88	37	38	65	176	233	173	80
1953	90	45	44	96	94	58	38	37	85	209	242	173	128
1954	78	52	50	70	55	58	7	36	63	142	197	148	155
1955	90	53	86	100	101	122	116	89	63	210	302	195	168
1956	97	87	88	116	105	80	99	128	148	282	378	246	144
1957	115	87	90	129	125	121	115	130	129	307	381	279	121
1958	100	61	88	105	114	90	90	79	127	261	340	277	126
1959	95	65	83	110	109	107	81	85	82	195	248	184	165
1960	99	82	64	111	85	86	50	55	120	228	315	214	165
1961	107	86	83	124	117	116	115	156	148	317	373	237	166
1962	102	61	111	124	117	98	59	116	134	311	422	323	135
1963	78	120	116	124	123	124	125	169	126	343	365	173	144
1964	106	97	104	124	110	120	57	79	113	189	271	244	132
1965	91	65	93	116	111	112	125	96	142	254	310	204	96
1966	87	61	99	112	112	108	123	56	96	193	287	259	128
1967	101	62	66	74	75	77	61	65	98	154	193	122	122
1968	77	73	46	82	76	55	49	74	140	302	339	211	115
1969	95	67	79	105	106	94	113	93	94	193	254	163	102
1970	93	77	59	102	100	67	78	83	68	208	266	177	123
1971	88	66	65	93	84	79	27	37	90	193	234	166	90
1972	83	75	81	84	82	76	124	93	81	213	297	182	91
1973	83	32	38	49	44	37	48	56	69	190	259	175	99
1974	76	39	38	51	42	15	18	44	83	215	289	184	137
1975	79	42	48	71	74	48	63	50	81	196	274	157	127
1976	88	81	68	107	99	110	109	73	97	240	344	223	140
1977	76	98	84	105	95	94	116	133	26	175	342	175	139
1978	77	89	64	89	103	92	93	45	116	276	354	290	162
1979	79	95	92	118	116	93	78	111	168	194	251	271	138
1980	81	85	115	122	108	102	124	140	134	305	360	263	118
1981	43	74	92	110	97	75	78	60	116	284	382	236	133
1982	68	87	88	107	99	89	81	44	70	198	297	190	115
1983	65	88	88	102	104	98	117	94	120	205	313	203	114
1984	67	52	87	99	91	85	90	74	85	191	286	169	104
1985	71	92	86	110	86	61	11	53	81	243	303	159	133
1986	63	87	44	83	55	60	26	73	81	209	259	208	119
1987	57	87	94	113	87	60	29	86	107	305	343	217	142
1988	67	51	88	112	120	76	47	102	108	280	205	159	130
1989	63	95	88	114	83	65	72	45	114	236	429	289	160
1990	57	86	87	116	97	85	122	151	77	174	327	180	118
1991	55	91	93	123	127	111	102	127	199	283	390	222	136
1992	89	89	93	106	90	91	59	89	99	174	235	194	163
1993	83	90	90	125	120	95	82	65	115	249	321	199	127
1994	77	107	106	120	112	125	132	198	112	315	350	197	133
1995	98	94	93	115	107	115	71	64	98	179	276	207	100
1996	68	90	89	114	97	86	126	86	109	234	306	177	116
1997	67	81	78	81	75	53	50	69	101	167	221	153	142
1998	61	92	91	109	98	65	84	71	63	215	275	173	117
1999	57	64	92	100	113	125	117	81	108	277	348	215	112
Average	80	75	80	103	96	86	78	83	102	229	301	204	127
Maximum	115	120	116	129	127	125	132	198	199	343	429	323	168
Minimum	43	32	38	49	42	15	7	36	26	142	193	122	80

P-1c
Bonneville Unit Operations (acre-feet)
Provo River Release from Jordanelle
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,021	5,561	2,400	1,959	1,758	2,181	3,183	35,377	42,573	7,592	2,724	3,333	110,662
1951	1,218	4,266	6,161	2,842	2,863	5,467	4,477	50,440	36,281	4,897	2,219	5,947	127,077
1952	1,280	2,186	3,608	2,460	2,860	4,680	7,743	36,938	36,014	1,613	76	2,651	102,110
1953	1,222	3,177	2,316	1,515	1,340	173	801	8,434	51,656	6,633	2,236	3,010	82,514
1954	1,580	2,231	1,845	819	1,135	2,804	4,943	6,826	0	0	2,308	2,225	26,716
1955	912	1,863	1,518	64	185	343	488	3,338	13,279	2,585	2,003	1,071	27,648
1956	813	3,008	1,543	762	527	1,336	2,046	8,807	34,330	27,213	13,257	1,428	95,070
1957	950	2,701	1,703	615	711	634	2,244	2,206	51,694	15,362	5,613	4,241	88,674
1958	985	3,375	3,191	562	1,845	1,506	3,996	34,905	21,509	6,463	3,788	2,315	84,440
1959	905	1,922	1,743	44	291	349	2,465	4,117	17,983	1,266	1,994	1,218	34,298
1960	1,235	3,951	544	44	448	1,044	3,910	4,074	16,422	9,041	2,246	1,067	44,025
1961	2,590	1,064	516	48	61	49	0	0	10,043	732	141	2,175	17,420
1962	1,086	1,800	803	46	369	208	2,664	5,505	21,204	34,333	23,245	9,220	100,482
1963	1,479	2,424	1,248	465	797	502	0	10,154	24,237	23,588	7,318	1,564	73,774
1964	1,336	2,952	986	506	621	649	0	4,638	18,043	35,473	23,157	8,525	96,886
1965	1,264	3,774	2,732	2,329	1,947	2,062	2,329	7,447	36,395	21,213	3,427	10,366	95,285
1966	1,706	3,589	5,179	2,806	2,574	5,602	5,669	18,253	5,631	4,773	3,786	2,669	62,236
1967	1,360	3,462	1,788	931	749	1,380	622	5,029	27,518	2,905	1,344	3,256	50,343
1968	1,344	3,515	3,860	1,456	1,694	3,501	2,836	5,530	58,785	3,660	785	4,231	91,198
1969	1,284	4,214	4,142	2,804	3,001	2,846	4,405	64,213	22,797	0	0	1,536	111,243
1970	1,487	4,080	3,090	2,660	2,301	3,002	0	31,033	33,255	4,678	1,540	3,038	90,163
1971	1,532	6,298	4,660	5,016	5,279	4,933	3,452	39,430	43,196	3,889	1,166	2,251	121,102
1972	1,914	6,240	5,199	4,313	5,497	6,941	6,493	44,895	29,574	1,421	517	337	113,341
1973	1,827	6,264	4,479	3,897	3,628	5,474	3,619	36,327	31,377	3,357	0	5,166	105,414
1974	1,121	3,482	2,286	690	690	645	875	58,703	34,742	3,277	1,619	1,851	109,982
1975	1,855	1,852	2,549	1,214	1,605	1,852	459	8,066	60,897	28,545	1,671	4,359	114,924
1976	1,405	3,332	2,912	1,817	1,059	1,137	1,281	36,088	12,318	3,084	3,234	1,969	69,636
1977	1,801	1,546	1,472	720	741	1,435	2,732	1,456	862	0	0	0	12,766
1978	2,160	1,442	366	110	457	1,411	0	206	41,367	28,876	16,289	2,461	95,144
1979	2,994	2,315	2,040	932	1,329	2,963	2,139	8,750	5,029	430	1,416	1,936	32,274
1980	1,861	1,342	1,315	1,121	1,251	2,454	2,625	7,564	20,159	4,019	1,891	4,042	49,644
1981	2,140	3,701	2,440	1,219	1,175	1,224	396	12,167	26,765	5,113	2,449	2,471	61,261
1982	1,233	3,106	801	535	715	2,119	927	26,586	33,012	13,870	483	3,065	86,453
1983	1,397	877	2,300	915	5,914	25,824	2,436	17,162	43,121	16,596	45	3,956	120,542
1984	1,550	993	3,135	2,598	8,227	10,673	17,136	33,850	39,881	13,295	0	2,370	133,708
1985	1,330	884	853	730	2,102	3,447	17,713	34,231	20,691	27	1,119	1,866	84,995
1986	1,413	5,115	1,039	807	26	30,883	13,756	30,829	48,278	12,637	0	0	144,784
1987	2,601	1,712	1,633	1,453	2,736	5,338	19,437	42,727	3,216	4,110	5,693	5,965	96,622
1988	2,464	1,496	1,441	344	1,137	1,522	128	4,335	12,466	0	0	817	26,150
1989	4,038	1,461	1,422	325	161	1,148	0	10,927	21,124	10,541	810	684	52,641
1990	1,704	1,565	1,452	1,021	1,285	1,522	3,212	2,184	16,479	0	0	0	30,424
1991	2,398	1,564	1,478	187	350	1,301	2,278	1,291	16,723	9,351	1,021	1,647	39,588
1992	2,076	1,249	1,132	532	1,180	221	0	10,374	9,935	0	1,080	1,118	28,897
1993	687	416	420	343	319	447	825	682	13,749	8,195	3,712	0	29,793
1994	1,952	1,194	1,219	717	1,411	2,390	0	1,383	6,758	8,335	2,840	0	28,198
1995	2,988	2,647	2,903	2,566	2,761	4,402	4,441	3,722	12,643	28,958	0	1,634	69,662
1996	2,487	1,566	1,586	1,290	3,019	5,354	2,693	34,029	35,983	2,791	8,015	6,643	105,457
1997	1,432	2,648	1,941	1,600	597	0	14,141	33,192	33,259	2,216	67	2,111	93,204
1998	1,034	863	826	479	261	842	5,234	26,343	30,224	13,286	7	1,717	81,116
1999	1,657	1,120	1,071	776	2,599	4,729	10,779	35,962	34,422	6,380	3,312	4,277	107,084
Average	1,662	2,668	2,146	1,280	1,712	3,459	3,881	19,015	26,358	8,932	3,233	2,796	77,141
Maximum	4,038	6,298	6,161	5,016	8,227	30,883	19,437	64,213	60,897	35,473	23,245	10,366	144,784
Minimum	687	416	366	44	26	0	0	0	0	0	0	0	12,766

P-1c
Bonneville Unit Operations (cfs)
Provo River Release from Jordanelle
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	33	93	39	32	32	35	53	575	715	123	44	56	153
1951	20	72	100	46	52	89	75	820	610	80	36	100	176
1952	21	37	59	40	50	76	130	601	605	26	1	45	141
1953	20	53	38	25	24	3	13	137	868	108	36	51	114
1954	26	37	30	13	20	46	83	111	0	0	38	37	37
1955	15	31	25	1	3	6	8	54	223	42	33	18	38
1956	13	51	25	12	9	22	34	143	577	443	216	24	131
1957	15	45	28	10	13	10	38	36	869	250	91	71	122
1958	16	57	52	9	33	24	67	568	361	105	62	39	117
1959	15	32	28	1	5	6	41	67	302	21	32	20	47
1960	20	66	9	1	8	17	66	66	276	147	37	18	61
1961	42	18	8	1	1	1	0	0	169	12	2	37	24
1962	18	30	13	1	7	3	45	90	356	558	378	155	139
1963	24	41	20	8	14	8	0	165	407	384	119	26	102
1964	22	50	16	8	11	11	0	75	303	577	377	143	133
1965	21	63	44	38	35	34	39	121	612	345	56	174	132
1966	28	60	84	46	46	91	95	297	95	78	62	45	86
1967	22	58	29	15	13	22	10	82	462	47	22	55	70
1968	22	59	63	24	29	57	48	90	988	60	13	71	126
1969	21	71	67	46	54	46	74	1,044	383	0	0	26	154
1970	24	69	50	43	41	49	0	505	559	76	25	51	125
1971	25	106	76	82	95	80	58	641	726	63	19	38	167
1972	31	105	85	70	96	113	109	730	497	23	8	6	156
1973	30	105	73	63	65	89	61	591	527	55	0	87	146
1974	18	59	37	11	12	10	15	955	584	53	26	31	152
1975	30	31	41	20	29	30	8	131	1,023	464	27	73	159
1976	23	56	47	30	18	18	22	587	207	50	53	33	96
1977	29	26	24	12	13	23	46	24	14	0	0	0	18
1978	35	24	6	2	8	23	0	3	695	470	265	41	131
1979	49	39	33	15	24	48	36	142	85	7	23	33	45
1980	30	23	21	18	22	40	44	123	339	65	31	68	68
1981	35	62	40	20	21	20	7	198	450	83	40	42	85
1982	20	52	13	9	13	34	16	432	555	226	8	52	119
1983	23	15	37	15	106	420	41	279	725	270	1	66	167
1984	25	17	51	42	143	174	288	551	670	216	0	40	184
1985	22	15	14	12	38	56	298	557	348	0	18	31	117
1986	23	86	17	13	0	502	231	501	811	206	0	0	200
1987	42	29	27	24	49	87	327	695	54	67	93	100	133
1988	40	25	23	6	20	25	2	71	210	0	0	14	36
1989	66	25	23	5	3	19	0	178	355	171	13	11	73
1990	28	26	24	17	23	25	54	36	277	0	0	0	42
1991	39	26	24	3	6	21	38	21	281	152	17	28	55
1992	34	21	18	9	21	4	0	169	167	0	18	19	40
1993	11	7	7	6	6	7	14	11	231	133	60	0	41
1994	32	20	20	12	25	39	0	22	114	136	46	0	39
1995	49	44	47	42	50	72	75	61	212	471	0	27	96
1996	40	26	26	21	52	87	45	553	605	45	130	112	145
1997	23	45	32	26	11	0	238	540	559	36	1	35	129
1998	17	15	13	8	5	14	88	428	508	216	0	29	112
1999	27	19	17	13	47	77	181	585	579	104	54	72	148
Average	27	45	35	21	30	56	65	309	443	145	53	47	106
Maximum	66	106	100	82	143	502	327	1,044	1,023	577	378	174	200
Minimum	11	7	6	1	0	0	0	0	0	0	0	0	18

P-1d
Bonneville Unit Operations (acre-feet)
Provo River Release from Jordanelle
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,612	81	966	333	357	125	4,800	20,318	24,258	11,519	10,197	4,533	80,099
1951	2,053	2,009	341	509	237	186	1,650	18,631	32,094	11,166	9,640	6,176	84,693
1952	3,045	3,648	2,541	2,430	2,738	3,421	13,385	42,836	37,628	13,042	11,102	7,599	143,415
1953	2,433	1,172	522	109	190	306	1,431	12,351	29,980	13,093	7,743	4,192	73,522
1954	2,218	960	1,577	475	276	1,684	3,214	17,381	10,158	10,965	3,406	2,312	54,626
1955	1,646	1,270	1,532	575	620	407	1,588	13,581	13,084	13,883	3,936	2,150	54,272
1956	2,129	1,480	994	821	730	1,209	3,127	11,284	16,563	19,645	11,782	4,595	74,360
1957	3,075	1,245	1,254	568	225	1,014	2,148	10,300	21,511	28,107	13,940	3,956	87,343
1958	2,862	635	2,087	1,118	877	1,022	1,715	9,915	13,813	15,291	6,464	3,583	59,382
1959	2,349	830	1,449	576	561	562	1,698	14,882	14,625	13,021	4,701	2,087	57,341
1960	2,669	1,488	1,103	651	807	921	1,203	14,434	14,153	8,807	3,791	1,556	51,583
1961	1,904	735	765	774	669	514	1,754	8,053	7,594	6,721	3,409	3,268	36,159
1962	1,908	1,081	1,548	1,032	303	542	2,756	11,141	14,155	21,858	15,195	6,500	78,019
1963	3,017	1,928	1,856	1,059	596	875	1,291	11,523	15,722	15,812	6,927	2,877	63,483
1964	3,375	1,657	1,536	1,271	1,027	1,059	699	9,171	16,965	22,911	15,506	5,974	81,150
1965	1,878	1,076	1,189	1,427	1,081	1,738	2,141	12,663	25,723	16,591	8,842	7,091	81,441
1966	3,067	490	1,235	982	574	228	4,799	22,934	12,885	9,885	3,520	2,587	63,186
1967	2,696	467	1,442	835	702	666	1,118	11,083	12,908	22,744	16,307	12,805	83,772
1968	3,154	806	1,737	882	366	1,623	768	10,773	21,555	16,143	8,013	5,304	71,125
1969	3,450	789	1,082	209	664	695	2,052	12,421	37,629	15,543	7,755	4,282	86,571
1970	3,415	361	1,156	978	750	645	1,313	21,116	13,848	14,485	8,846	4,626	71,539
1971	3,472	753	2,228	1,166	601	2,580	2,022	12,506	46,808	14,507	9,558	4,421	100,623
1972	3,571	352	1,689	1,781	826	2,182	1,341	26,788	13,885	16,887	7,869	4,619	81,788
1973	3,217	187	1,792	963	576	956	178	9,886	34,566	13,767	8,496	5,371	79,955
1974	3,706	606	2,637	1,254	1,062	498	887	15,363	37,580	15,733	9,739	4,297	93,362
1975	3,214	974	1,155	747	701	261	937	8,149	35,298	15,894	11,491	6,559	85,381
1976	4,439	533	2,240	1,607	1,021	1,268	1,631	12,392	16,586	13,316	5,422	3,397	63,850
1977	3,092	1,233	1,231	510	398	1,193	2,945	6,100	8,057	8,697	2,309	3,285	39,049
1978	1,516	1,416	419	456	615	0	1,026	14,647	26,169	20,667	12,593	3,008	82,532
1979	4,306	1,190	655	669	739	1,358	1,694	11,261	14,132	16,603	3,803	2,138	58,547
1980	3,749	1,505	1,474	0	616	863	421	7,556	12,771	18,123	7,035	4,056	58,168
1981	3,530	667	1,864	890	423	798	2,572	12,232	23,537	11,522	3,119	1,547	62,701
1982	4,534	3,027	3,417	1,530	1,264	2,036	1,517	17,905	31,363	18,563	9,156	8,266	102,579
1983	3,545	3,384	1,330	873	3,585	44,474	4,838	9,014	48,223	14,186	9,626	12,164	155,242
1984	4,305	1,760	2,602	718	4,701	11,904	27,021	19,977	30,726	19,396	9,590	8,403	141,105
1985	3,867	2,181	1,539	541	336	523	14,020	39,704	11,690	16,282	10,109	7,329	108,120
1986	3,825	1,525	2,167	723	0	33,672	7,424	19,122	42,931	17,148	8,818	5,631	142,986
1987	2,177	1,140	1,526	754	432	4,577	6,675	15,888	10,758	14,636	6,734	5,898	71,195
1988	3,459	1,623	1,276	737	928	952	5,613	14,237	10,607	9,302	2,229	2,596	53,559
1989	2,774	1,606	1,338	694	347	689	8,939	14,807	14,235	11,963	2,997	1,951	62,340
1990	3,105	860	1,827	1,233	1,357	1,266	3,112	15,350	12,908	11,692	4,481	3,325	60,516
1991	1,982	1,853	1,588	838	611	896	2,692	14,960	13,194	12,932	5,243	3,517	60,306
1992	3,494	289	414	545	0	811	1,587	15,158	7,764	12,110	2,853	1,964	46,988
1993	3,576	1,473	1,567	286	704	237	2,666	16,968	24,231	22,177	6,013	2,309	82,207
1994	3,558	951	1,155	25	66	212	1,735	16,797	19,185	10,140	3,307	2,794	59,924
1995	1,993	494	303	198	153	122	1,831	13,752	9,646	48,504	21,456	3,417	101,868
1996	3,004	2,718	2,739	1,203	139	0	324	11,539	42,933	17,577	6,794	4,781	93,751
1997	4,841	2,474	1,629	1,497	1,473	0	13,498	28,928	23,922	21,193	4,138	4,125	107,717
1998	4,983	3,248	2,971	711	1,208	1,425	1,677	24,769	25,816	10,922	7,234	8,141	93,104
1999	2,338	2,966	1,942	911	0	302	12,116	19,616	24,933	19,928	9,009	6,798	100,861
Average	3,083	1,344	1,533	834	785	2,710	3,752	15,643	21,626	15,912	7,845	4,683	79,748
Maximum	4,983	3,648	3,417	2,430	4,701	44,474	27,021	42,836	48,223	48,504	21,456	12,805	155,242
Minimum	1,516	81	303	0	0	0	178	6,100	7,594	6,721	2,229	1,547	36,159

P-1d
Bonneville Unit Operations (cfs)
Provo River Release from Jordanelle
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	42	1	16	5	6	2	81	330	408	187	166	76	111
1951	33	34	6	8	4	3	28	303	539	182	157	104	117
1952	50	61	41	40	48	56	225	697	632	212	181	128	198
1953	40	20	8	2	3	5	24	201	504	213	126	70	102
1954	36	16	26	8	5	27	54	283	171	178	55	39	75
1955	27	21	25	9	11	7	27	221	220	226	64	36	75
1956	35	25	16	13	13	20	53	184	278	320	192	77	102
1957	50	21	20	9	4	16	36	168	362	457	227	66	121
1958	47	11	34	18	16	17	29	161	232	249	105	60	82
1959	38	14	24	9	10	9	29	242	246	212	76	35	79
1960	43	25	18	11	14	15	20	235	238	143	62	26	71
1961	31	12	12	13	12	8	29	131	128	109	55	55	50
1962	31	18	25	17	5	9	46	181	238	355	247	109	108
1963	49	32	30	17	11	14	22	187	264	257	113	48	88
1964	55	28	25	21	18	17	12	149	285	373	252	100	112
1965	31	18	19	23	19	28	36	206	432	270	144	119	112
1966	50	8	20	16	10	4	81	373	217	161	57	43	87
1967	44	8	23	14	13	11	19	180	217	370	265	215	116
1968	51	14	28	14	6	26	13	175	362	263	130	89	98
1969	56	13	18	3	12	11	34	202	632	253	126	72	120
1970	56	6	19	16	14	10	22	343	233	236	144	78	99
1971	56	13	36	19	11	42	34	203	787	236	155	74	139
1972	58	6	27	29	14	35	23	436	233	275	128	78	113
1973	52	3	29	16	10	16	3	161	581	224	138	90	110
1974	60	10	43	20	19	8	15	250	632	256	158	72	129
1975	52	16	19	12	13	4	16	133	593	258	187	110	118
1976	72	9	36	26	18	21	27	202	279	217	88	57	88
1977	50	21	20	8	7	19	49	99	135	141	38	55	54
1978	25	24	7	7	11	0	17	238	440	336	205	51	114
1979	70	20	11	11	13	22	28	183	237	270	62	36	81
1980	61	25	24	0	11	14	7	123	215	295	114	68	80
1981	57	11	30	14	8	13	43	199	396	187	51	26	87
1982	74	51	56	25	23	33	25	291	527	302	149	139	142
1983	58	57	22	14	65	723	81	147	810	231	157	204	214
1984	70	30	42	12	82	194	454	325	516	315	156	141	194
1985	63	37	25	9	6	9	236	646	196	265	164	123	149
1986	62	26	35	12	0	548	125	311	721	279	143	95	198
1987	35	19	25	12	8	74	112	258	181	238	110	99	98
1988	56	27	21	12	16	15	94	232	178	151	36	44	74
1989	45	27	22	11	6	11	150	241	239	195	49	33	86
1990	50	14	30	20	24	21	52	250	217	190	73	56	84
1991	32	31	26	14	11	15	45	243	222	210	85	59	83
1992	57	5	7	9	0	13	27	247	130	197	46	33	65
1993	58	25	25	5	13	4	45	276	407	361	98	39	114
1994	58	16	19	0	1	3	29	273	322	165	54	47	83
1995	32	8	5	3	3	2	31	224	162	789	349	57	141
1996	49	46	45	20	2	0	5	188	722	286	110	80	129
1997	79	42	27	24	27	0	227	470	402	345	67	69	149
1998	81	55	48	12	22	23	28	403	434	178	118	137	129
1999	38	50	32	15	0	5	204	319	419	324	147	114	139
Average	50	23	25	14	14	44	63	254	363	259	128	79	110
Maximum	81	61	56	40	82	723	454	697	810	789	349	215	214
Minimum	25	1	5	0	0	0	3	99	128	109	36	26	50

P-2a

Bonneville Unit Operations (acre-feet)

Provo River from Timpanogos to River Ditch

Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	8,633	8,926	8,072	7,695	6,994	7,686	10,132	56,021	67,948	26,579	24,220	16,673	249,579
1951	8,548	8,926	9,223	9,223	8,331	9,223	8,209	69,360	70,732	25,390	23,646	21,070	271,880
1952	8,918	8,926	9,223	9,223	8,628	11,671	21,501	80,706	74,701	20,828	19,895	17,555	291,774
1953	8,952	7,529	8,152	7,795	7,132	7,992	9,059	24,295	82,676	28,899	25,322	17,258	235,061
1954	9,556	8,368	8,820	8,456	7,436	9,379	13,838	30,187	16,795	25,198	26,288	17,822	182,144
1955	9,430	8,328	8,562	8,575	7,763	8,206	8,786	23,174	32,111	31,685	26,179	18,241	191,042
1956	8,888	8,109	7,956	8,049	7,604	8,092	10,352	23,315	55,954	59,741	43,068	21,033	262,163
1957	9,661	7,832	8,032	7,961	6,993	8,244	9,129	16,050	76,102	51,719	31,590	17,595	250,908
1958	9,701	8,877	9,204	8,479	7,637	7,836	8,646	46,715	40,269	32,695	26,575	17,130	223,764
1959	9,573	7,868	8,270	8,236	7,328	8,038	10,956	26,682	39,049	30,389	26,689	15,958	199,037
1960	9,931	9,060	8,462	8,311	7,728	7,980	8,585	24,984	37,085	34,449	29,938	20,956	207,469
1961	9,055	8,926	8,418	8,431	7,575	8,170	9,136	17,855	23,469	26,576	24,340	14,994	166,944
1962	9,269	8,682	8,776	8,691	7,023	8,103	8,757	19,816	40,201	64,260	52,323	28,828	264,727
1963	9,840	8,238	8,793	8,655	7,538	8,259	8,581	25,852	45,829	51,995	31,060	15,394	230,033
1964	9,850	8,229	8,629	8,653	7,844	8,355	7,949	15,998	38,617	66,416	52,986	28,305	261,831
1965	9,106	8,514	7,999	8,333	7,195	8,550	8,046	22,132	65,529	43,716	21,018	23,136	233,275
1966	9,250	8,421	9,223	8,858	7,539	9,223	13,299	43,934	24,558	30,203	25,486	16,490	206,485
1967	9,676	7,905	8,101	8,191	7,331	7,842	8,388	20,214	44,154	33,874	30,120	24,246	210,043
1968	9,987	8,926	9,223	8,596	7,618	9,223	8,215	19,918	82,444	28,912	21,896	18,472	233,430
1969	9,902	8,926	9,223	8,723	8,331	8,419	8,014	77,076	63,867	23,916	18,982	14,310	259,689
1970	9,774	8,926	9,223	8,790	7,792	8,331	8,615	56,259	50,025	28,623	25,418	16,933	238,710
1971	9,872	8,926	9,223	9,223	8,331	9,770	8,280	53,553	91,867	26,594	23,574	15,585	274,797
1972	9,912	8,926	9,223	9,223	8,673	10,060	8,824	72,073	46,086	28,395	23,239	14,376	249,011
1973	9,656	8,926	9,223	9,223	8,331	9,382	7,471	47,737	68,822	25,699	22,167	18,595	245,232
1974	10,018	8,926	9,122	8,510	7,457	7,920	8,180	76,683	75,586	30,690	29,602	17,950	290,644
1975	9,516	8,675	8,880	8,433	7,602	7,904	8,230	23,153	95,961	52,465	30,961	19,750	281,530
1976	10,334	9,167	9,074	8,882	7,814	8,036	8,399	49,466	33,187	30,252	27,493	21,212	223,315
1977	9,502	8,416	8,362	8,470	7,588	8,318	10,252	13,756	17,039	17,997	15,466	18,378	143,545
1978	8,428	7,930	7,870	8,072	7,264	7,686	8,319	21,677	72,939	64,989	48,047	19,671	282,893
1979	9,740	7,914	8,341	8,355	7,429	8,938	8,434	21,983	23,571	31,293	25,855	16,670	178,524
1980	9,546	8,007	8,208	7,686	7,349	8,765	7,803	16,568	34,899	31,120	24,322	18,328	182,602
1981	9,459	9,623	9,723	8,389	7,365	8,046	9,655	28,400	54,734	26,018	22,047	14,753	208,213
1982	9,631	9,237	9,544	8,175	7,206	9,383	7,728	47,803	67,627	40,782	24,167	19,858	261,142
1983	9,099	9,727	8,923	8,561	14,263	74,042	7,869	28,517	94,596	42,474	24,563	24,403	347,036
1984	9,502	7,919	8,427	8,404	15,962	26,291	45,625	57,216	73,698	42,299	22,206	21,500	339,048
1985	8,486	8,230	8,198	8,227	7,278	7,686	33,349	77,881	36,878	31,658	29,122	20,501	277,495
1986	9,121	9,664	8,630	8,409	6,942	69,222	23,945	55,067	95,890	43,708	18,208	13,934	362,741
1987	8,428	8,516	8,601	9,223	7,774	13,891	29,927	59,418	18,077	29,946	35,940	27,659	257,401
1988	9,225	8,217	8,096	8,216	7,435	7,724	12,416	26,103	25,362	17,400	20,002	12,992	163,190
1989	9,981	8,470	8,477	8,571	7,545	8,648	14,425	31,239	44,589	36,934	25,150	14,539	218,568
1990	10,028	7,702	9,026	8,789	7,815	8,413	9,694	21,432	33,120	19,153	16,000	13,467	164,638
1991	9,228	8,757	8,624	8,717	7,606	8,029	9,742	18,649	34,551	34,361	23,070	15,644	186,978
1992	10,081	7,925	8,083	8,459	7,377	8,739	9,341	36,131	22,159	28,486	22,715	13,487	182,982
1993	10,069	7,482	7,729	7,729	6,985	7,729	7,588	19,981	41,628	38,154	23,763	13,212	192,049
1994	9,471	7,493	7,821	7,754	7,051	7,918	9,101	21,885	30,264	29,642	22,136	12,006	172,541
1995	8,867	7,931	7,989	7,754	7,095	7,808	9,154	20,139	26,129	84,480	32,118	12,784	232,249
1996	9,000	9,764	9,936	9,223	8,628	9,329	7,889	48,350	80,493	30,352	28,780	20,357	272,100
1997	9,536	8,926	9,223	9,223	8,331	7,686	34,502	65,532	61,408	37,180	22,658	17,666	291,871
1998	10,104	9,472	9,201	7,894	7,611	7,686	8,234	54,153	59,175	33,008	20,514	19,915	246,967
1999	7,948	9,457	8,429	8,391	6,942	8,769	24,196	58,561	62,427	36,020	25,143	20,863	277,146
Average	9,426	8,575	8,676	8,482	7,888	11,453	12,135	38,273	51,897	35,752	26,721	18,249	237,529
Maximum	10,334	9,764	9,936	9,223	15,962	74,042	45,625	80,706	95,961	84,480	52,986	28,828	362,741
Minimum	7,948	7,482	7,729	7,686	6,942	7,686	7,471	13,756	16,795	17,400	15,466	12,006	143,545

P-2a

Bonneville Unit Operations (cfs)

Provo River from Timpanogos to River Ditch

Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	140	150	131	125	126	125	170	911	1,142	432	394	280	345
1951	139	150	150	150	150	150	138	1,128	1,189	413	385	354	376
1952	145	150	150	150	150	190	361	1,313	1,255	339	324	295	402
1953	146	127	133	127	128	130	152	395	1,389	470	412	290	325
1954	155	141	143	138	134	153	233	491	282	410	428	300	252
1955	153	140	139	139	140	133	148	377	540	515	426	307	264
1956	145	136	129	131	132	132	174	379	940	972	700	353	361
1957	157	132	131	129	126	134	153	261	1,279	841	514	296	347
1958	158	149	150	138	138	127	145	760	677	532	432	288	309
1959	156	132	135	134	132	131	184	434	656	494	434	268	275
1960	162	152	138	135	134	130	144	406	623	560	487	352	286
1961	147	150	137	137	136	133	154	290	394	432	396	252	231
1962	151	146	143	141	126	132	147	322	676	1,045	851	484	366
1963	160	138	143	141	136	134	144	420	770	846	505	259	318
1964	160	138	140	141	136	136	134	260	649	1,080	862	476	361
1965	148	143	130	136	130	139	135	360	1,101	711	342	389	322
1966	150	142	150	144	136	150	224	715	413	491	415	277	285
1967	157	133	132	133	132	128	141	329	742	551	490	407	290
1968	162	150	150	140	132	150	138	324	1,386	470	356	310	322
1969	161	150	150	142	150	137	135	1,254	1,073	389	309	241	359
1970	159	150	150	143	140	135	145	915	841	466	413	285	330
1971	161	150	150	150	150	159	139	871	1,544	433	383	262	380
1972	161	150	150	150	151	164	148	1,172	775	462	378	242	343
1973	157	150	150	150	150	153	126	776	1,157	418	361	313	339
1974	163	150	148	138	134	129	137	1,247	1,270	499	481	302	401
1975	155	146	144	137	137	129	138	377	1,613	853	504	332	389
1976	168	154	148	144	136	131	141	805	558	492	447	356	308
1977	155	141	136	138	137	135	172	224	286	293	252	309	198
1978	137	133	128	131	131	125	140	353	1,226	1,057	781	331	391
1979	158	133	136	136	134	145	142	358	396	509	421	280	247
1980	155	135	133	125	128	143	131	269	587	506	396	308	252
1981	154	162	158	136	133	131	162	462	920	423	359	248	288
1982	157	155	155	133	130	153	130	777	1,137	663	393	334	361
1983	148	163	145	139	257	1,204	132	464	1,590	691	399	410	479
1984	155	133	137	137	278	428	767	931	1,239	688	361	361	467
1985	138	138	133	134	131	125	560	1,267	620	515	474	345	383
1986	148	162	140	137	125	1,126	402	896	1,612	711	296	234	501
1987	137	143	140	150	140	226	503	966	304	487	585	465	356
1988	150	138	132	134	129	126	209	425	426	283	325	218	225
1989	162	142	138	139	136	141	242	508	749	601	409	244	302
1990	163	129	147	143	141	137	163	349	557	312	260	226	227
1991	150	147	140	142	137	131	164	303	581	559	375	263	258
1992	164	133	131	138	128	142	157	588	372	463	369	227	252
1993	164	126	126	126	126	126	128	325	700	621	386	222	265
1994	154	126	127	126	127	129	153	356	509	482	360	202	238
1995	144	133	130	126	128	127	154	328	439	1,374	522	215	321
1996	146	164	162	150	150	152	133	786	1,353	494	468	342	375
1997	155	150	150	150	150	125	580	1,066	1,032	605	369	297	403
1998	164	159	150	128	137	125	138	881	994	537	334	335	341
1999	129	159	137	136	125	143	407	952	1,049	586	409	351	383
Average	153	144	141	138	141	186	204	622	872	581	435	307	328
Maximum	168	164	162	150	278	1,204	767	1,313	1,613	1,374	862	484	501
Minimum	129	126	126	125	125	125	126	224	282	283	252	202	198

P-2b
Bonneville Unit Operations (acre-feet)
Provo River from Timpanogos to River Ditch
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,057	3,284	4,707	5,402	4,880	5,380	2,205	2,345	3,503	8,960	12,699	9,648	67,070
1951	5,335	2,651	2,721	5,873	5,231	3,570	2,256	2,280	4,738	10,914	13,215	9,754	68,536
1952	4,651	3,092	3,074	4,334	3,030	3,570	429	2,192	3,414	7,454	9,993	8,110	53,342
1953	5,354	3,180	5,314	6,171	5,603	7,513	6,883	5,452	3,380	11,038	16,958	10,948	87,794
1954	5,816	5,176	5,398	7,162	6,025	4,891	5,896	7,578	8,089	15,829	21,878	14,028	107,769
1955	6,930	5,195	5,513	7,936	6,957	7,457	6,863	7,983	7,311	17,017	21,840	15,916	116,918
1956	6,005	3,621	5,419	6,466	6,347	5,547	5,381	4,852	6,685	14,462	19,496	15,866	100,147
1957	5,694	3,886	5,075	6,778	6,057	6,596	4,794	5,204	4,557	10,107	13,666	10,280	82,693
1958	5,911	4,868	3,927	6,799	4,915	5,308	2,991	3,352	6,490	12,476	17,786	12,088	86,910
1959	6,377	5,115	5,078	7,616	6,476	7,127	6,849	9,383	8,106	17,933	21,537	13,508	115,106
1960	6,086	3,621	6,815	7,616	6,472	6,015	3,528	7,063	7,407	18,004	24,668	18,746	116,043
1961	4,619	7,126	7,137	7,608	6,845	7,606	7,438	10,388	6,773	19,849	21,371	9,980	116,741
1962	6,333	5,801	6,425	7,613	6,351	7,353	3,412	4,852	6,386	9,662	15,140	13,829	93,156
1963	5,401	3,886	5,689	7,131	6,145	6,882	7,438	5,602	7,503	14,212	17,837	11,622	99,349
1964	5,197	3,621	6,107	6,875	6,195	6,648	7,305	3,470	5,352	10,009	16,024	14,724	91,527
1965	6,022	3,665	4,077	4,577	4,167	4,750	3,632	4,010	5,512	7,614	10,239	6,574	64,838
1966	4,535	4,343	2,810	5,070	4,391	3,394	2,887	4,492	7,504	16,990	19,396	11,945	87,757
1967	5,677	3,976	4,871	6,426	5,881	5,796	6,704	5,734	5,263	9,939	13,990	9,082	83,338
1968	5,546	4,605	3,626	6,257	5,558	4,099	4,667	5,116	3,679	10,947	14,728	9,838	78,666
1969	5,226	3,923	3,999	5,709	4,666	4,877	1,613	2,280	5,002	9,943	12,701	9,336	69,276
1970	4,931	4,485	4,978	5,152	4,741	4,684	7,358	5,734	4,461	11,261	16,643	10,170	84,596
1971	4,927	1,875	2,335	3,041	2,451	2,257	2,861	3,427	3,767	9,827	14,303	9,750	60,821
1972	4,485	2,334	2,335	3,129	2,350	937	1,046	2,313	4,257	11,733	16,427	10,344	61,690
1973	4,671	2,474	2,953	4,364	4,127	2,953	3,730	3,074	4,473	10,146	15,119	8,881	66,965
1974	5,249	4,837	4,199	6,565	5,705	6,777	6,474	4,333	4,882	13,302	19,808	12,695	94,827
1975	4,505	5,849	5,176	6,472	5,295	5,791	6,890	8,197	1,222	9,431	19,051	9,590	87,468
1976	4,548	5,301	3,923	5,457	5,735	5,632	5,543	2,686	5,913	15,471	20,425	16,690	97,325
1977	4,668	5,637	5,660	7,240	6,449	5,690	4,666	6,841	9,449	10,679	14,236	15,689	96,904
1978	4,811	5,072	7,085	7,506	6,192	6,275	7,349	8,619	7,182	17,101	20,659	15,056	112,907
1979	2,498	4,409	5,646	6,754	5,361	4,618	4,657	3,645	6,017	15,895	22,073	13,425	94,998
1980	3,994	5,161	5,419	6,565	5,482	5,448	4,814	2,700	3,466	10,314	16,660	10,981	81,004
1981	3,847	5,255	5,419	6,280	5,768	6,024	6,962	5,799	6,191	11,144	17,879	11,509	92,077
1982	3,921	3,104	5,326	6,110	5,227	5,227	5,340	4,572	4,708	9,896	16,009	9,400	78,841
1983	4,214	5,466	5,293	6,772	4,764	3,744	651	3,259	4,503	13,292	16,526	9,110	77,596
1984	3,705	5,166	2,691	5,088	3,034	3,713	1,523	4,502	4,492	11,205	14,135	11,680	70,935
1985	3,347	5,165	5,806	6,956	4,840	3,716	1,697	5,288	5,977	17,022	19,455	12,196	91,465
1986	3,941	3,024	5,424	6,879	6,916	4,667	2,822	6,249	6,092	15,314	10,806	9,062	81,195
1987	3,708	5,664	5,441	7,016	4,606	3,975	4,294	2,787	5,917	12,921	24,932	16,583	97,844
1988	3,361	5,098	5,379	7,135	5,371	5,250	7,230	9,303	4,006	9,493	18,933	10,230	90,790
1989	3,227	5,403	5,717	7,551	7,038	6,811	6,055	7,517	10,912	15,981	22,668	12,674	111,554
1990	5,278	5,277	5,747	6,535	5,173	5,626	3,484	5,437	5,370	9,050	12,920	10,945	80,842
1991	4,907	5,339	5,559	7,692	6,645	5,832	4,887	3,937	6,272	13,666	18,208	11,283	94,227
1992	4,569	6,388	6,537	7,382	6,197	7,706	7,869	12,138	6,097	17,697	20,017	11,159	113,756
1993	5,865	5,594	5,743	7,100	5,962	7,046	4,211	3,870	5,286	9,370	15,440	11,706	87,192
1994	4,019	5,348	5,448	7,012	5,574	5,316	7,481	5,244	5,958	12,756	17,308	9,965	91,430
1995	3,944	4,791	4,783	4,990	4,181	3,284	2,997	4,205	5,478	8,607	12,064	8,536	67,861
1996	3,567	5,479	5,611	6,730	5,470	3,975	4,986	4,321	3,214	11,573	15,373	9,735	80,035
1997	3,322	3,804	5,653	6,126	6,261	7,686	6,977	4,952	5,864	15,360	19,854	12,233	98,092
1998	4,145	5,361	5,405	6,703	6,142	5,419	1,438	4,580	4,772	10,390	14,674	10,860	79,889
1999	4,011	5,371	5,416	6,703	4,344	3,738	1,415	4,522	4,708	11,301	14,224	10,591	76,344
Average	4,739	4,563	4,998	6,369	5,392	5,284	4,618	5,154	5,551	12,491	17,040	11,571	87,769
Maximum	6,930	7,126	7,137	7,936	7,038	7,706	7,869	12,138	10,912	19,849	24,932	18,746	116,918
Minimum	2,498	1,875	2,335	3,041	2,350	937	429	2,192	1,222	7,454	9,993	6,574	53,342

P-2b
Bonneville Unit Operations (cfs)
Provo River from Timpanogos to River Ditch
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	66	55	77	88	88	88	37	38	59	146	207	162	93
1951	87	45	44	96	94	58	38	37	80	177	215	164	95
1952	76	52	50	70	53	58	7	36	57	121	163	136	73
1953	87	53	86	100	101	122	116	89	57	180	276	184	121
1954	95	87	88	116	108	80	99	123	136	257	356	236	149
1955	113	87	90	129	125	121	115	130	123	277	355	267	162
1956	98	61	88	105	110	90	90	79	112	235	317	267	138
1957	93	65	83	110	109	107	81	85	77	164	222	173	114
1958	96	82	64	111	89	86	50	55	109	203	289	203	120
1959	104	86	83	124	117	116	115	153	136	292	350	227	159
1960	99	61	111	124	113	98	59	115	124	293	401	315	160
1961	75	120	116	124	123	124	125	169	114	323	348	168	161
1962	103	97	104	124	114	120	57	79	107	157	246	232	129
1963	88	65	93	116	111	112	125	91	126	231	290	195	137
1964	85	61	99	112	108	108	123	56	90	163	261	247	126
1965	98	62	66	74	75	77	61	65	93	124	167	110	90
1966	74	73	46	82	79	55	49	73	126	276	315	201	121
1967	92	67	79	105	106	94	113	93	88	162	228	153	115
1968	90	77	59	102	97	67	78	83	62	178	240	165	108
1969	85	66	65	93	84	79	27	37	84	162	207	157	96
1970	80	75	81	84	85	76	124	93	75	183	271	171	117
1971	80	32	38	49	44	37	48	56	63	160	233	164	84
1972	73	39	38	51	41	15	18	38	72	191	267	174	85
1973	76	42	48	71	74	48	63	50	75	165	246	149	93
1974	85	81	68	107	103	110	109	70	82	216	322	213	131
1975	73	98	84	105	95	94	116	133	21	153	310	161	121
1976	74	89	64	89	100	92	93	44	99	252	332	280	134
1977	76	95	92	118	116	93	78	111	159	174	232	264	134
1978	78	85	115	122	112	102	124	140	121	278	336	253	156
1979	41	74	92	110	97	75	78	59	101	259	359	226	131
1980	65	87	88	107	95	89	81	44	58	168	271	185	112
1981	63	88	88	102	104	98	117	94	104	181	291	193	127
1982	64	52	87	99	94	85	90	74	79	161	260	158	109
1983	69	92	86	110	86	61	11	53	76	216	269	153	107
1984	60	87	44	83	53	60	26	73	75	182	230	196	98
1985	54	87	94	113	87	60	29	86	100	277	316	205	126
1986	64	51	88	112	125	76	47	102	102	249	176	152	112
1987	60	95	88	114	83	65	72	45	99	210	405	279	135
1988	55	86	87	116	93	85	122	151	67	154	308	172	125
1989	52	91	93	123	127	111	102	122	183	260	369	213	154
1990	86	89	93	106	93	91	59	88	90	147	210	184	112
1991	80	90	90	125	120	95	82	64	105	222	296	190	130
1992	74	107	106	120	108	125	132	197	102	288	326	188	157
1993	95	94	93	115	107	115	71	63	89	152	251	197	120
1994	65	90	89	114	100	86	126	85	100	207	282	167	126
1995	64	81	78	81	75	53	50	68	92	140	196	143	94
1996	58	92	91	109	95	65	84	70	54	188	250	164	110
1997	54	64	92	100	113	125	117	81	99	250	323	206	135
1998	67	90	88	109	111	88	24	74	80	169	239	183	110
1999	65	90	88	109	78	61	24	74	79	184	231	178	105
Average	77	77	81	104	96	86	78	84	93	203	277	194	121
Maximum	113	120	116	129	127	125	132	197	183	323	405	315	162
Minimum	41	32	38	49	41	15	7	36	21	121	163	110	73

P-2c
Bonneville Unit Operations (acre-feet)
Provo River from Timpanogos to River Ditch
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,021	5,561	2,400	1,959	1,758	2,181	3,183	35,377	42,573	7,592	2,724	3,333	110,662
1951	1,218	4,266	6,161	2,842	2,863	5,467	4,477	50,440	36,281	4,897	2,219	5,947	127,077
1952	1,280	2,186	3,608	2,460	2,860	4,680	7,743	36,938	36,014	1,613	76	2,651	102,110
1953	1,222	3,177	2,316	1,515	1,340	173	801	8,434	51,656	6,633	2,236	3,010	82,514
1954	1,580	2,231	1,845	819	1,135	2,804	4,943	6,826	0	0	2,308	2,225	26,716
1955	912	1,863	1,518	64	185	343	488	3,338	13,279	2,585	2,003	1,071	27,648
1956	813	3,008	1,543	762	527	1,336	2,046	8,807	34,330	27,213	13,257	1,428	95,070
1957	950	2,701	1,703	615	711	634	2,244	2,206	51,694	15,362	5,613	4,241	88,674
1958	985	3,375	3,191	562	1,845	1,506	3,996	34,905	21,509	6,463	3,788	2,315	84,440
1959	905	1,922	1,743	44	291	349	2,465	4,117	17,983	1,266	1,994	1,218	34,298
1960	1,235	3,951	544	44	448	1,044	3,910	4,074	16,422	9,041	2,246	1,067	44,025
1961	2,590	1,064	516	48	61	49	0	0	10,043	732	141	2,175	17,420
1962	1,086	1,800	803	46	369	208	2,664	5,505	21,204	34,333	23,245	9,220	100,482
1963	1,479	2,424	1,248	465	797	502	0	10,154	24,237	23,588	7,318	1,564	73,774
1964	1,336	2,952	986	506	621	649	0	4,638	18,043	35,473	23,157	8,525	96,886
1965	1,264	3,774	2,732	2,329	1,947	2,062	2,329	7,447	36,395	21,213	3,427	10,366	95,285
1966	1,706	3,589	5,179	2,806	2,574	5,602	5,669	18,253	5,631	4,773	3,786	2,669	62,236
1967	1,360	3,462	1,788	931	749	1,380	622	5,029	27,518	2,905	1,344	3,256	50,343
1968	1,344	3,515	3,860	1,456	1,694	3,501	2,836	5,530	58,785	3,660	785	4,231	91,198
1969	1,284	4,214	4,142	2,804	3,001	2,846	4,405	64,213	22,797	0	0	1,536	111,243
1970	1,487	4,080	3,090	2,660	2,301	3,002	0	31,033	33,255	4,678	1,540	3,038	90,163
1971	1,532	6,298	4,660	5,016	5,279	4,933	3,452	39,430	43,196	3,889	1,166	2,251	121,102
1972	1,914	6,240	5,199	4,313	5,497	6,941	6,493	44,895	29,574	1,421	517	337	113,341
1973	1,827	6,264	4,479	3,897	3,628	5,474	3,619	36,327	31,377	3,357	0	5,166	105,414
1974	1,121	3,482	2,286	690	690	645	875	58,703	34,742	3,277	1,619	1,851	109,982
1975	1,855	1,852	2,549	1,214	1,605	1,852	459	8,066	60,897	28,545	1,671	4,359	114,924
1976	1,405	3,332	2,912	1,817	1,059	1,137	1,281	36,088	12,318	3,084	3,234	1,969	69,636
1977	1,801	1,546	1,472	720	741	1,435	2,732	1,456	862	0	0	0	12,766
1978	2,160	1,442	366	110	457	1,411	0	206	41,367	28,876	16,289	2,461	95,144
1979	2,994	2,315	2,040	932	1,329	2,963	2,139	8,750	5,029	430	1,416	1,936	32,274
1980	1,861	1,342	1,315	1,121	1,251	2,454	2,625	7,564	20,159	4,019	1,891	4,042	49,644
1981	2,140	3,701	2,440	1,219	1,175	1,224	396	12,167	26,765	5,113	2,449	2,471	61,261
1982	1,233	3,106	801	535	715	2,119	927	26,586	33,012	13,870	483	3,065	86,453
1983	1,397	877	2,300	915	5,914	25,824	2,436	17,162	43,121	16,596	45	3,956	120,542
1984	1,550	993	3,135	2,598	8,227	10,673	17,136	33,850	39,881	13,295	0	2,370	133,708
1985	1,330	884	853	730	2,102	3,447	17,713	34,231	20,691	27	1,119	1,866	84,995
1986	1,413	5,115	1,039	807	26	30,883	13,756	30,829	48,278	12,637	0	0	144,784
1987	2,601	1,712	1,633	1,453	2,736	5,338	19,437	42,727	3,216	4,110	5,693	5,965	96,622
1988	2,464	1,496	1,441	344	1,137	1,522	128	4,335	12,466	0	0	817	26,150
1989	4,038	1,461	1,422	325	161	1,148	0	10,927	21,124	10,541	810	684	52,641
1990	1,704	1,565	1,452	1,021	1,285	1,522	3,212	2,184	16,479	0	0	0	30,424
1991	2,398	1,564	1,478	187	350	1,301	2,278	1,291	16,723	9,351	1,021	1,647	39,588
1992	2,076	1,249	1,132	532	1,180	221	0	10,374	9,935	0	1,080	1,118	28,897
1993	687	416	420	343	319	447	825	682	13,749	8,195	3,712	0	29,793
1994	1,952	1,194	1,219	717	1,411	2,390	0	1,383	6,758	8,335	2,840	0	28,198
1995	2,988	2,647	2,903	2,566	2,761	4,402	4,441	3,722	12,643	28,958	0	1,634	69,662
1996	2,487	1,566	1,586	1,290	3,019	5,354	2,693	34,029	35,983	2,791	8,015	6,643	105,457
1997	1,432	2,648	1,941	1,600	597	0	14,141	33,192	33,259	2,216	67	2,111	93,204
1998	1,034	863	826	479	261	842	5,234	26,343	30,224	13,286	7	1,717	81,116
1999	1,657	1,120	1,071	776	2,599	4,729	10,779	35,962	34,422	6,380	3,312	4,277	107,084
Average	1,662	2,668	2,146	1,280	1,712	3,459	3,881	19,015	26,358	8,932	3,233	2,796	77,141
Maximum	4,038	6,298	6,161	5,016	8,227	30,883	19,437	64,213	60,897	35,473	23,245	10,366	144,784
Minimum	687	416	366	44	26	0	0	0	0	0	0	0	12,766

P-2c
Bonneville Unit Operations (cfs)
Provo River from Timpanogos to River Ditch
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	33	93	39	32	32	35	53	575	715	123	44	56	153
1951	20	72	100	46	52	89	75	820	610	80	36	100	176
1952	21	37	59	40	50	76	130	601	605	26	1	45	141
1953	20	53	38	25	24	3	13	137	868	108	36	51	114
1954	26	37	30	13	20	46	83	111	0	0	38	37	37
1955	15	31	25	1	3	6	8	54	223	42	33	18	38
1956	13	51	25	12	9	22	34	143	577	443	216	24	131
1957	15	45	28	10	13	10	38	36	869	250	91	71	122
1958	16	57	52	9	33	24	67	568	361	105	62	39	117
1959	15	32	28	1	5	6	41	67	302	21	32	20	47
1960	20	66	9	1	8	17	66	66	276	147	37	18	61
1961	42	18	8	1	1	1	0	0	169	12	2	37	24
1962	18	30	13	1	7	3	45	90	356	558	378	155	139
1963	24	41	20	8	14	8	0	165	407	384	119	26	102
1964	22	50	16	8	11	11	0	75	303	577	377	143	133
1965	21	63	44	38	35	34	39	121	612	345	56	174	132
1966	28	60	84	46	46	91	95	297	95	78	62	45	86
1967	22	58	29	15	13	22	10	82	462	47	22	55	70
1968	22	59	63	24	29	57	48	90	988	60	13	71	126
1969	21	71	67	46	54	46	74	1,044	383	0	0	26	154
1970	24	69	50	43	41	49	0	505	559	76	25	51	125
1971	25	106	76	82	95	80	58	641	726	63	19	38	167
1972	31	105	85	70	96	113	109	730	497	23	8	6	156
1973	30	105	73	63	65	89	61	591	527	55	0	87	146
1974	18	59	37	11	12	10	15	955	584	53	26	31	152
1975	30	31	41	20	29	30	8	131	1,023	464	27	73	159
1976	23	56	47	30	18	18	22	587	207	50	53	33	96
1977	29	26	24	12	13	23	46	24	14	0	0	0	18
1978	35	24	6	2	8	23	0	3	695	470	265	41	131
1979	49	39	33	15	24	48	36	142	85	7	23	33	45
1980	30	23	21	18	22	40	44	123	339	65	31	68	68
1981	35	62	40	20	21	20	7	198	450	83	40	42	85
1982	20	52	13	9	13	34	16	432	555	226	8	52	119
1983	23	15	37	15	106	420	41	279	725	270	1	66	167
1984	25	17	51	42	143	174	288	551	670	216	0	40	184
1985	22	15	14	12	38	56	298	557	348	0	18	31	117
1986	23	86	17	13	0	502	231	501	811	206	0	0	200
1987	42	29	27	24	49	87	327	695	54	67	93	100	133
1988	40	25	23	6	20	25	2	71	210	0	0	14	36
1989	66	25	23	5	3	19	0	178	355	171	13	11	73
1990	28	26	24	17	23	25	54	36	277	0	0	0	42
1991	39	26	24	3	6	21	38	21	281	152	17	28	55
1992	34	21	18	9	21	4	0	169	167	0	18	19	40
1993	11	7	7	6	6	7	14	11	231	133	60	0	41
1994	32	20	20	12	25	39	0	22	114	136	46	0	39
1995	49	44	47	42	50	72	75	61	212	471	0	27	96
1996	40	26	26	21	52	87	45	553	605	45	130	112	145
1997	23	45	32	26	11	0	238	540	559	36	1	35	129
1998	17	15	13	8	5	14	88	428	508	216	0	29	112
1999	27	19	17	13	47	77	181	585	579	104	54	72	148
Average	27	45	35	21	30	56	65	309	443	145	53	47	106
Maximum	66	106	100	82	143	502	327	1,044	1,023	577	378	174	200
Minimum	11	7	6	1	0	0	0	0	0	0	0	0	18

P-2d
Bonneville Unit Operations (acre-feet)
Provo River from Timpanogos to River Ditch
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,554	81	966	333	357	125	4,744	18,299	21,872	10,027	8,797	3,692	71,847
1951	1,995	2,009	341	509	237	186	1,476	16,640	29,713	9,579	8,212	5,369	76,266
1952	2,987	3,648	2,541	2,430	2,738	3,421	13,329	41,575	35,272	11,760	9,827	6,794	136,322
1953	2,375	1,172	522	109	190	306	1,375	10,409	27,640	11,227	6,128	3,300	64,753
1954	2,160	960	1,577	475	276	1,684	2,998	15,783	8,706	9,368	2,102	1,569	47,659
1955	1,588	1,270	1,532	575	620	407	1,435	11,853	11,522	12,083	2,336	1,255	46,476
1956	2,071	1,480	994	821	730	1,209	2,925	9,657	14,939	18,066	10,315	3,739	66,946
1957	3,017	1,245	1,254	568	225	1,014	2,091	8,640	19,851	26,251	12,311	3,074	79,540
1958	2,804	635	2,087	1,118	877	1,022	1,659	8,458	12,270	13,756	5,001	2,726	52,413
1959	2,291	830	1,449	576	561	562	1,642	13,182	12,961	11,189	3,158	1,231	49,632
1960	2,611	1,488	1,103	651	807	921	1,147	13,847	13,255	7,404	3,024	1,143	47,401
1961	1,846	735	765	774	669	514	1,698	7,467	6,653	5,995	2,828	2,839	32,783
1962	1,850	1,081	1,548	1,032	303	542	2,681	9,459	12,611	20,265	13,939	5,778	71,090
1963	2,959	1,928	1,856	1,059	596	875	1,143	10,096	14,089	14,195	5,905	2,208	56,910
1964	3,317	1,657	1,536	1,271	1,027	1,059	643	7,889	15,223	20,935	13,805	5,056	73,417
1965	1,820	1,076	1,189	1,427	1,081	1,738	2,085	10,675	23,622	14,888	7,353	6,196	73,152
1966	3,009	490	1,235	982	574	228	4,743	21,189	11,423	8,440	2,304	1,876	56,492
1967	2,638	467	1,442	835	702	666	1,062	9,451	11,374	21,030	14,787	11,907	76,361
1968	3,096	806	1,737	882	366	1,623	712	9,272	19,980	14,305	6,383	4,403	63,566
1969	3,392	789	1,082	209	664	695	1,996	10,583	36,067	13,973	6,281	3,438	79,170
1970	3,357	361	1,156	978	750	645	1,257	19,492	12,310	12,685	7,235	3,725	63,951
1971	3,414	753	2,228	1,166	601	2,580	1,966	10,696	44,903	12,877	8,105	3,583	92,874
1972	3,513	352	1,689	1,781	826	2,182	1,285	24,865	12,255	15,242	6,295	3,696	73,980
1973	3,159	187	1,792	963	576	956	122	8,335	32,973	12,195	7,048	4,548	72,854
1974	3,648	606	2,637	1,254	1,062	498	831	13,646	35,962	14,111	8,175	3,404	85,835
1975	3,156	974	1,155	747	701	261	881	6,889	33,842	14,490	10,240	5,801	79,138
1976	4,381	533	2,240	1,607	1,021	1,268	1,575	10,692	14,955	11,697	3,833	2,553	56,353
1977	3,034	1,233	1,231	510	398	1,193	2,854	5,459	6,728	7,318	1,230	2,689	33,875
1978	1,458	1,416	419	456	615	0	970	12,853	24,390	19,013	11,099	2,154	74,842
1979	4,248	1,190	655	669	739	1,358	1,638	9,587	12,524	14,968	2,367	1,309	51,252
1980	3,691	1,505	1,474	0	616	863	365	6,303	11,274	16,787	5,771	3,305	51,954
1981	3,472	667	1,864	890	423	798	2,297	10,434	21,779	9,761	1,718	773	54,876
1982	4,476	3,027	3,417	1,530	1,264	2,036	1,461	16,645	29,907	17,016	7,675	7,393	95,848
1983	3,487	3,384	1,330	873	3,585	44,474	4,782	8,096	46,971	12,586	7,993	11,337	148,898
1984	4,247	1,760	2,602	718	4,701	11,904	26,965	18,864	29,325	17,798	8,071	7,450	134,405
1985	3,809	2,181	1,539	541	336	523	13,938	38,362	10,210	14,609	8,549	6,438	101,035
1986	3,767	1,525	2,167	723	0	33,672	7,368	17,989	41,520	15,757	7,402	4,872	136,762
1987	2,119	1,140	1,526	754	432	4,577	6,196	13,904	8,944	12,915	5,315	5,111	62,935
1988	3,401	1,623	1,276	737	928	952	5,058	12,464	8,891	7,908	1,069	1,945	46,250
1989	2,716	1,606	1,338	694	347	689	8,370	12,794	12,554	10,413	1,672	1,181	54,374
1990	3,047	860	1,827	1,233	1,357	1,266	2,998	13,812	11,271	10,103	3,080	2,521	53,373
1991	1,924	1,853	1,588	838	611	896	2,577	13,421	11,556	11,343	3,841	2,714	53,163
1992	3,436	289	414	545	0	811	1,472	13,619	6,126	10,789	1,617	1,211	40,329
1993	3,518	1,473	1,567	286	704	237	2,551	15,429	22,594	20,588	4,612	1,506	75,064
1994	3,500	951	1,155	25	66	212	1,620	15,258	17,548	8,551	1,987	2,041	52,913
1995	1,935	494	303	198	153	122	1,716	12,213	8,009	46,915	20,054	2,614	94,726
1996	2,946	2,718	2,739	1,203	139	0	209	10,000	41,296	15,988	5,392	3,978	86,608
1997	4,783	2,474	1,629	1,497	1,473	0	13,384	27,389	22,284	19,604	2,736	3,322	100,575
1998	4,925	3,248	2,971	711	1,208	1,425	1,562	23,230	24,179	9,333	5,832	7,338	85,961
1999	2,280	2,966	1,942	911	0	302	12,001	18,078	23,296	18,339	7,607	5,995	93,718
Average	3,025	1,344	1,533	834	785	2,710	3,637	14,105	19,988	14,329	6,448	3,882	72,618
Maximum	4,925	3,648	3,417	2,430	4,701	44,474	26,965	41,575	46,971	46,915	20,054	11,907	148,898
Minimum	1,458	81	303	0	0	0	122	5,459	6,126	5,995	1,069	773	32,783

P-2d
Bonneville Unit Operations (cfs)
Provo River from Timpanogos to River Ditch
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	42	1	16	5	6	2	80	298	368	163	143	62	99
1951	32	34	6	8	4	3	25	271	499	156	134	90	105
1952	49	61	41	40	48	56	224	676	593	191	160	114	188
1953	39	20	8	2	3	5	23	169	465	183	100	55	89
1954	35	16	26	8	5	27	50	257	146	152	34	26	66
1955	26	21	25	9	11	7	24	193	194	197	38	21	64
1956	34	25	16	13	13	20	49	157	251	294	168	63	92
1957	49	21	20	9	4	16	35	141	334	427	200	52	110
1958	46	11	34	18	16	17	28	138	206	224	81	46	72
1959	37	14	24	9	10	9	28	214	218	182	51	21	69
1960	42	25	18	11	14	15	19	225	223	120	49	19	65
1961	30	12	12	13	12	8	29	121	112	98	46	48	45
1962	30	18	25	17	5	9	45	154	212	330	227	97	98
1963	48	32	30	17	11	14	19	164	237	231	96	37	79
1964	54	28	25	21	18	17	11	128	256	340	225	85	101
1965	30	18	19	23	19	28	35	174	397	242	120	104	101
1966	49	8	20	16	10	4	80	345	192	137	37	32	78
1967	43	8	23	14	13	11	18	154	191	342	240	200	105
1968	50	14	28	14	6	26	12	151	336	233	104	74	88
1969	55	13	18	3	12	11	34	172	606	227	102	58	109
1970	55	6	19	16	14	10	21	317	207	206	118	63	88
1971	56	13	36	19	11	42	33	174	755	209	132	60	128
1972	57	6	27	29	14	35	22	404	206	246	102	62	102
1973	51	3	29	16	10	16	2	136	554	195	115	76	101
1974	59	10	43	20	19	8	14	222	604	229	133	57	119
1975	51	16	19	12	13	4	15	112	569	236	167	97	109
1976	71	9	36	26	18	21	26	174	251	190	62	43	78
1977	49	21	20	8	7	19	48	89	113	119	20	45	47
1978	24	24	7	7	11	0	16	209	410	309	181	36	103
1979	69	20	11	11	13	22	28	156	210	243	38	22	71
1980	60	25	24	0	11	14	6	103	189	273	94	56	72
1981	56	11	30	14	8	13	39	170	366	159	28	13	76
1982	73	51	56	25	23	33	25	271	503	277	125	124	132
1983	57	57	22	14	65	723	80	132	789	205	130	191	206
1984	69	30	42	12	82	194	453	307	493	289	131	125	185
1985	62	37	25	9	6	9	234	624	172	238	139	108	140
1986	61	26	35	12	0	548	124	293	698	256	120	82	189
1987	34	19	25	12	8	74	104	226	150	210	86	86	87
1988	55	27	21	12	16	15	85	203	149	129	17	33	64
1989	44	27	22	11	6	11	141	208	211	169	27	20	75
1990	50	14	30	20	24	21	50	225	189	164	50	42	74
1991	31	31	26	14	11	15	43	218	194	184	62	46	73
1992	56	5	7	9	0	13	25	221	103	175	26	20	56
1993	57	25	25	5	13	4	43	251	380	335	75	25	104
1994	57	16	19	0	1	3	27	248	295	139	32	34	73
1995	31	8	5	3	3	2	29	199	135	763	326	44	131
1996	48	46	45	20	2	0	4	163	694	260	88	67	119
1997	78	42	27	24	27	0	225	445	375	319	45	56	139
1998	80	55	48	12	22	23	26	378	406	152	95	123	119
1999	37	50	32	15	0	5	202	294	392	298	124	101	129
Average	49	23	25	14	14	44	61	229	336	233	105	65	100
Maximum	80	61	56	40	82	723	453	676	789	763	326	200	206
Minimum	24	1	5	0	0	0	2	89	103	98	17	13	45

P-2e
Bonneville Unit Operations (acre-feet)
Diversions into Timpanogos Canal
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	229	0	0	0	0	0	56	2,020	2,728	3,349	3,001	1,507	12,889
1951	229	0	0	0	0	0	175	1,991	2,723	3,519	3,095	1,332	13,064
1952	229	0	0	0	0	0	56	1,261	2,698	2,580	3,378	1,528	11,729
1953	229	0	0	0	0	0	56	1,942	2,681	3,723	3,216	1,559	13,406
1954	229	0	0	0	0	0	216	1,920	2,142	3,106	2,667	1,325	11,604
1955	229	0	0	0	0	0	152	1,728	1,950	3,633	3,184	1,556	12,432
1956	229	0	0	0	0	0	202	1,628	2,510	3,158	2,879	1,446	12,051
1957	229	0	0	0	0	0	56	1,660	2,002	3,714	3,230	1,549	12,440
1958	229	0	0	0	0	0	56	1,457	2,193	3,090	3,059	1,521	11,606
1959	229	0	0	0	0	0	56	1,907	2,392	3,380	2,935	1,448	12,346
1960	229	0	0	0	0	0	56	627	1,445	2,519	2,022	873	7,772
1961	229	0	0	0	0	0	56	612	1,664	1,985	1,648	771	6,966
1962	229	0	0	0	0	0	75	1,682	1,886	3,524	2,788	1,383	11,566
1963	229	0	0	0	0	0	148	1,757	2,552	3,041	2,272	1,211	11,210
1964	229	0	0	0	0	0	56	1,282	2,084	3,833	3,302	1,585	12,370
1965	229	0	0	0	0	0	56	1,988	2,443	3,559	3,090	1,561	12,926
1966	229	0	0	0	0	0	56	1,778	2,269	3,043	2,640	1,316	11,331
1967	229	0	0	0	0	0	56	1,632	1,876	3,622	3,124	1,509	12,048
1968	229	0	0	0	0	0	56	1,501	1,917	3,694	3,231	1,567	12,196
1969	229	0	0	0	0	0	56	1,838	1,903	3,502	3,133	1,376	12,038
1970	229	0	0	0	0	0	56	1,624	1,879	3,657	3,213	1,567	12,226
1971	229	0	0	0	0	0	56	1,810	2,246	3,487	3,054	1,505	12,387
1972	229	0	0	0	0	0	56	2,309	2,305	3,127	2,920	1,500	12,445
1973	229	0	0	0	0	0	56	1,551	1,935	3,504	3,180	1,283	11,738
1974	229	0	0	0	0	0	56	1,900	2,534	3,086	2,896	1,464	12,164
1975	229	0	0	0	0	0	56	1,260	1,798	2,718	3,253	1,566	10,880
1976	229	0	0	0	0	0	56	1,759	2,644	3,096	2,931	1,419	12,133
1977	229	0	0	0	0	0	91	642	1,889	2,628	2,267	1,018	8,764
1978	229	0	0	0	0	0	56	1,795	2,598	3,282	2,939	1,427	12,326
1979	229	0	0	0	0	0	56	1,707	2,514	3,181	2,825	1,420	11,932
1980	229	0	0	0	0	0	56	1,253	2,172	3,187	2,861	1,093	10,850
1981	229	0	0	0	0	0	275	1,798	2,691	3,246	2,787	1,350	12,377
1982	229	0	0	0	0	0	56	1,260	1,800	3,402	3,082	1,538	11,367
1983	229	0	0	0	0	0	56	918	1,593	3,259	3,736	1,189	10,981
1984	229	0	0	0	0	0	56	1,112	1,743	3,242	3,279	1,676	11,336
1985	229	0	0	0	0	0	81	1,342	1,843	3,428	3,221	1,578	11,722
1986	229	0	0	0	0	0	56	1,134	1,753	3,286	3,228	1,176	10,861
1987	229	0	0	0	0	0	478	1,984	2,655	3,318	2,843	1,391	12,898
1988	229	0	0	0	0	0	555	1,773	2,273	2,618	2,338	1,112	10,898
1989	229	0	0	0	0	0	568	2,303	2,593	2,968	2,631	1,310	12,603
1990	229	0	0	0	0	0	115	1,587	2,188	3,233	2,935	1,388	11,673
1991	229	0	0	0	0	0	115	1,587	2,188	3,233	2,935	1,388	11,673
1992	229	0	0	0	0	0	115	1,587	2,188	2,965	2,768	1,337	11,189
1993	229	0	0	0	0	0	115	1,587	2,188	3,233	2,935	1,388	11,673
1994	229	0	0	0	0	0	115	1,587	2,188	3,233	2,853	1,337	11,540
1995	229	0	0	0	0	0	115	1,587	2,188	3,233	2,935	1,388	11,673
1996	229	0	0	0	0	0	115	1,587	2,188	3,233	2,935	1,388	11,673
1997	229	0	0	0	0	0	115	1,587	2,188	3,233	2,935	1,388	11,673
1998	229	0	0	0	0	0	115	1,587	2,188	3,233	2,935	1,388	11,673
1999	229	0	0	0	0	0	115	1,587	2,188	3,233	2,935	1,388	11,673
Average	229	0	0	0	0	0	115	1,586	2,188	3,227	2,930	1,386	11,660
Maximum	229	0	0	0	0	0	568	2,309	2,728	3,833	3,736	1,676	13,406
Minimum	229	0	0	0	0	0	56	612	1,445	1,985	1,648	771	6,966

P-2e
Bonneville Unit Operations (cfs)
Diversions into Timpanogos Canal
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	4	0	0	0	0	0	1	33	46	54	49	25	18
1951	4	0	0	0	0	0	3	32	46	57	50	22	18
1952	4	0	0	0	0	0	1	21	45	42	55	26	16
1953	4	0	0	0	0	0	1	32	45	61	52	26	19
1954	4	0	0	0	0	0	4	31	36	51	43	22	16
1955	4	0	0	0	0	0	3	28	33	59	52	26	17
1956	4	0	0	0	0	0	3	26	42	51	47	24	17
1957	4	0	0	0	0	0	1	27	34	60	53	26	17
1958	4	0	0	0	0	0	1	24	37	50	50	26	16
1959	4	0	0	0	0	0	1	31	40	55	48	24	17
1960	4	0	0	0	0	0	1	10	24	41	33	15	11
1961	4	0	0	0	0	0	1	10	28	32	27	13	10
1962	4	0	0	0	0	0	1	27	32	57	45	23	16
1963	4	0	0	0	0	0	2	29	43	49	37	20	15
1964	4	0	0	0	0	0	1	21	35	62	54	27	17
1965	4	0	0	0	0	0	1	32	41	58	50	26	18
1966	4	0	0	0	0	0	1	29	38	49	43	22	16
1967	4	0	0	0	0	0	1	27	32	59	51	25	17
1968	4	0	0	0	0	0	1	24	32	60	53	26	17
1969	4	0	0	0	0	0	1	30	32	57	51	23	17
1970	4	0	0	0	0	0	1	26	32	59	52	26	17
1971	4	0	0	0	0	0	1	29	38	57	50	25	17
1972	4	0	0	0	0	0	1	38	39	51	47	25	17
1973	4	0	0	0	0	0	1	25	33	57	52	22	16
1974	4	0	0	0	0	0	1	31	43	50	47	25	17
1975	4	0	0	0	0	0	1	20	30	44	53	26	15
1976	4	0	0	0	0	0	1	29	44	50	48	24	17
1977	4	0	0	0	0	0	2	10	32	43	37	17	12
1978	4	0	0	0	0	0	1	29	44	53	48	24	17
1979	4	0	0	0	0	0	1	28	42	52	46	24	16
1980	4	0	0	0	0	0	1	20	36	52	47	18	15
1981	4	0	0	0	0	0	5	29	45	53	45	23	17
1982	4	0	0	0	0	0	1	20	30	55	50	26	16
1983	4	0	0	0	0	0	1	15	27	53	61	20	15
1984	4	0	0	0	0	0	1	18	29	53	53	28	16
1985	4	0	0	0	0	0	1	22	31	56	52	27	16
1986	4	0	0	0	0	0	1	18	29	53	53	20	15
1987	4	0	0	0	0	0	8	32	45	54	46	23	18
1988	4	0	0	0	0	0	9	29	38	43	38	19	15
1989	4	0	0	0	0	0	10	37	44	48	43	22	17
1990	4	0	0	0	0	0	2	26	37	53	48	23	16
1991	4	0	0	0	0	0	2	26	37	53	48	23	16
1992	4	0	0	0	0	0	2	26	37	48	45	22	15
1993	4	0	0	0	0	0	2	26	37	53	48	23	16
1994	4	0	0	0	0	0	2	26	37	53	46	22	16
1995	4	0	0	0	0	0	2	26	37	53	48	23	16
1996	4	0	0	0	0	0	2	26	37	53	48	23	16
1997	4	0	0	0	0	0	2	26	37	53	48	23	16
1998	4	0	0	0	0	0	2	26	37	53	48	23	16
1999	4	0	0	0	0	0	2	26	37	53	48	23	16
Average	4	0	0	0	0	0	2	26	37	52	48	23	16
Maximum	4	0	0	0	0	0	10	38	46	62	61	28	19
Minimum	4	0	0	0	0	0	1	10	24	32	27	13	10

P-2f
Bonneville Unit Operations (acre-feet)
Diversions into Timpanogos Canal
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	171	0	0	0	0	0	0	0	342	1,857	1,601	666	4,637
1951	171	0	0	0	0	0	0	0	342	1,932	1,667	525	4,637
1952	171	0	0	0	0	0	0	0	342	1,298	2,103	723	4,637
1953	171	0	0	0	0	0	0	0	342	1,857	1,601	666	4,637
1954	171	0	0	0	0	0	0	321	690	1,509	1,364	582	4,637
1955	171	0	0	0	0	0	0	0	388	1,833	1,585	660	4,637
1956	171	0	0	0	0	0	0	0	885	1,579	1,411	590	4,637
1957	171	0	0	0	0	0	0	0	342	1,857	1,601	666	4,637
1958	171	0	0	0	0	0	0	0	650	1,556	1,596	664	4,637
1959	171	0	0	0	0	0	0	207	728	1,548	1,391	592	4,637
1960	171	0	0	0	0	0	0	39	547	1,117	1,256	460	3,590
1961	171	0	0	0	0	0	0	27	723	1,260	1,068	342	3,590
1962	171	0	0	0	0	0	0	0	342	1,932	1,531	661	4,637
1963	171	0	0	0	0	0	0	331	919	1,424	1,250	542	4,637
1964	171	0	0	0	0	0	0	0	342	1,857	1,601	666	4,637
1965	171	0	0	0	0	0	0	0	342	1,857	1,601	666	4,637
1966	171	0	0	0	0	0	0	33	807	1,598	1,425	604	4,637
1967	171	0	0	0	0	0	0	0	342	1,908	1,604	611	4,637
1968	171	0	0	0	0	0	0	0	342	1,857	1,601	666	4,637
1969	171	0	0	0	0	0	0	0	342	1,932	1,660	533	4,637
1970	171	0	0	0	0	0	0	0	342	1,857	1,601	666	4,637
1971	171	0	0	0	0	0	0	0	342	1,857	1,601	666	4,637
1972	171	0	0	0	0	0	0	387	675	1,483	1,346	576	4,637
1973	171	0	0	0	0	0	0	0	342	1,932	1,733	460	4,637
1974	171	0	0	0	0	0	0	183	916	1,463	1,333	571	4,637
1975	171	0	0	0	0	0	0	0	342	1,314	2,002	808	4,637
1976	171	0	0	0	0	0	0	59	1,013	1,477	1,342	575	4,637
1977	171	0	0	0	0	0	0	0	560	1,249	1,188	422	3,590
1978	171	0	0	0	0	0	0	0	820	1,628	1,445	573	4,637
1979	171	0	0	0	0	0	0	33	906	1,547	1,389	591	4,637
1980	171	0	0	0	0	0	0	0	675	1,851	1,597	342	4,637
1981	171	0	0	0	0	0	0	0	932	1,485	1,387	577	4,551
1982	171	0	0	0	0	0	0	0	344	1,856	1,600	666	4,637
1983	171	0	0	0	0	0	0	0	342	1,659	2,103	362	4,637
1984	171	0	0	0	0	0	0	0	342	1,643	1,759	722	4,637
1985	171	0	0	0	0	0	0	0	362	1,756	1,661	687	4,637
1986	171	0	0	0	0	0	0	0	342	1,895	1,812	417	4,637
1987	171	0	0	0	0	0	0	0	841	1,597	1,424	604	4,637
1988	171	0	0	0	0	0	0	0	556	1,224	1,178	461	3,590
1989	171	0	0	0	0	0	0	291	912	1,418	1,306	539	4,637
1990	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
1991	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
1992	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
1993	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
1994	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
1995	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
1996	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
1997	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
1998	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
1999	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
Average	171	0	0	0	0	0	0	48	550	1,644	1,533	584	4,530
Maximum	171	0	0	0	0	0	0	387	1,013	1,932	2,103	808	4,637
Minimum	171	0	0	0	0	0	0	0	342	1,117	1,068	342	3,590

P-2f
Bonneville Unit Operations (cfs)
Diversions into Timpanogos Canal
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	3	0	0	0	0	0	0	0	6	30	26	11	6
1951	3	0	0	0	0	0	0	0	6	31	27	9	6
1952	3	0	0	0	0	0	0	0	6	21	34	12	6
1953	3	0	0	0	0	0	0	0	6	30	26	11	6
1954	3	0	0	0	0	0	0	5	12	25	22	10	6
1955	3	0	0	0	0	0	0	0	7	30	26	11	6
1956	3	0	0	0	0	0	0	0	15	26	23	10	6
1957	3	0	0	0	0	0	0	0	6	30	26	11	6
1958	3	0	0	0	0	0	0	0	11	25	26	11	6
1959	3	0	0	0	0	0	0	3	12	25	23	10	6
1960	3	0	0	0	0	0	0	1	9	18	20	8	5
1961	3	0	0	0	0	0	0	0	12	20	17	6	5
1962	3	0	0	0	0	0	0	0	6	31	25	11	6
1963	3	0	0	0	0	0	0	5	15	23	20	9	6
1964	3	0	0	0	0	0	0	0	6	30	26	11	6
1965	3	0	0	0	0	0	0	0	6	30	26	11	6
1966	3	0	0	0	0	0	0	1	14	26	23	10	6
1967	3	0	0	0	0	0	0	0	6	31	26	10	6
1968	3	0	0	0	0	0	0	0	6	30	26	11	6
1969	3	0	0	0	0	0	0	0	6	31	27	9	6
1970	3	0	0	0	0	0	0	0	6	30	26	11	6
1971	3	0	0	0	0	0	0	0	6	30	26	11	6
1972	3	0	0	0	0	0	0	6	11	24	22	10	6
1973	3	0	0	0	0	0	0	0	6	31	28	8	6
1974	3	0	0	0	0	0	0	3	15	24	22	10	6
1975	3	0	0	0	0	0	0	0	6	21	33	14	6
1976	3	0	0	0	0	0	0	1	17	24	22	10	6
1977	3	0	0	0	0	0	0	0	9	20	19	7	5
1978	3	0	0	0	0	0	0	0	14	26	24	10	6
1979	3	0	0	0	0	0	0	1	15	25	23	10	6
1980	3	0	0	0	0	0	0	0	11	30	26	6	6
1981	3	0	0	0	0	0	0	0	16	24	23	10	6
1982	3	0	0	0	0	0	0	0	6	30	26	11	6
1983	3	0	0	0	0	0	0	0	6	27	34	6	6
1984	3	0	0	0	0	0	0	0	6	27	29	12	6
1985	3	0	0	0	0	0	0	0	6	29	27	12	6
1986	3	0	0	0	0	0	0	0	6	31	29	7	6
1987	3	0	0	0	0	0	0	0	14	26	23	10	6
1988	3	0	0	0	0	0	0	0	9	20	19	8	5
1989	3	0	0	0	0	0	0	5	15	23	21	9	6
1990	3	0	0	0	0	0	0	1	9	27	25	10	6
1991	3	0	0	0	0	0	0	1	9	27	25	10	6
1992	3	0	0	0	0	0	0	1	9	27	25	10	6
1993	3	0	0	0	0	0	0	1	9	27	25	10	6
1994	3	0	0	0	0	0	0	1	9	27	25	10	6
1995	3	0	0	0	0	0	0	1	9	27	25	10	6
1996	3	0	0	0	0	0	0	1	9	27	25	10	6
1997	3	0	0	0	0	0	0	1	9	27	25	10	6
1998	3	0	0	0	0	0	0	1	9	27	25	10	6
1999	3	0	0	0	0	0	0	1	9	27	25	10	6
Average	3	0	0	0	0	0	0	1	9	27	25	10	6
Maximum	3	0	0	0	0	0	0	6	17	31	34	14	6
Minimum	3	0	0	0	0	0	0	0	6	18	17	6	5

P-2g
Bonneville Unit Operations (acre-feet)
Diversions into Timpanogos Canal
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	58	0	0	0	0	0	56	2,020	2,386	1,492	1,400	841	8,252
1951	58	0	0	0	0	0	175	1,991	2,381	1,587	1,428	807	8,427
1952	58	0	0	0	0	0	56	1,261	2,356	1,281	1,276	805	7,093
1953	58	0	0	0	0	0	56	1,942	2,339	1,866	1,615	893	8,769
1954	58	0	0	0	0	0	216	1,598	1,452	1,597	1,303	742	6,967
1955	58	0	0	0	0	0	152	1,728	1,562	1,800	1,600	896	7,795
1956	58	0	0	0	0	0	202	1,628	1,625	1,579	1,467	856	7,414
1957	58	0	0	0	0	0	56	1,660	1,660	1,857	1,629	883	7,803
1958	58	0	0	0	0	0	56	1,457	1,544	1,534	1,463	857	6,969
1959	58	0	0	0	0	0	56	1,699	1,664	1,831	1,544	856	7,709
1960	58	0	0	0	0	0	56	587	898	1,403	766	413	4,182
1961	58	0	0	0	0	0	56	586	941	726	581	429	3,376
1962	58	0	0	0	0	0	75	1,682	1,544	1,593	1,256	722	6,930
1963	58	0	0	0	0	0	148	1,427	1,633	1,617	1,022	669	6,573
1964	58	0	0	0	0	0	56	1,282	1,742	1,976	1,701	918	7,733
1965	58	0	0	0	0	0	56	1,988	2,101	1,703	1,489	895	8,290
1966	58	0	0	0	0	0	56	1,745	1,462	1,445	1,216	712	6,694
1967	58	0	0	0	0	0	56	1,632	1,534	1,714	1,520	897	7,411
1968	58	0	0	0	0	0	56	1,501	1,575	1,838	1,630	901	7,559
1969	58	0	0	0	0	0	56	1,838	1,561	1,570	1,474	844	7,401
1970	58	0	0	0	0	0	56	1,624	1,538	1,800	1,612	901	7,589
1971	58	0	0	0	0	0	56	1,810	1,904	1,630	1,452	838	7,750
1972	58	0	0	0	0	0	56	1,922	1,629	1,645	1,574	924	7,808
1973	58	0	0	0	0	0	56	1,551	1,594	1,572	1,448	823	7,101
1974	58	0	0	0	0	0	56	1,717	1,618	1,622	1,563	893	7,527
1975	58	0	0	0	0	0	56	1,260	1,456	1,404	1,251	758	6,243
1976	58	0	0	0	0	0	56	1,700	1,631	1,619	1,589	844	7,497
1977	58	0	0	0	0	0	91	642	1,329	1,379	1,079	596	5,174
1978	58	0	0	0	0	0	56	1,795	1,778	1,654	1,494	854	7,689
1979	58	0	0	0	0	0	56	1,674	1,608	1,635	1,436	829	7,295
1980	58	0	0	0	0	0	56	1,253	1,496	1,336	1,263	751	6,213
1981	58	0	0	0	0	0	275	1,798	1,759	1,761	1,401	774	7,825
1982	58	0	0	0	0	0	56	1,260	1,456	1,547	1,481	872	6,730
1983	58	0	0	0	0	0	56	918	1,251	1,600	1,634	827	6,344
1984	58	0	0	0	0	0	56	1,112	1,401	1,598	1,520	954	6,700
1985	58	0	0	0	0	0	81	1,342	1,480	1,673	1,560	891	7,085
1986	58	0	0	0	0	0	56	1,134	1,411	1,391	1,416	759	6,224
1987	58	0	0	0	0	0	478	1,984	1,814	1,721	1,419	787	8,261
1988	58	0	0	0	0	0	555	1,773	1,717	1,395	1,160	650	7,309
1989	58	0	0	0	0	0	568	2,013	1,682	1,550	1,325	770	7,966
1990	58	0	0	0	0	0	115	1,539	1,637	1,589	1,402	803	7,143
1991	58	0	0	0	0	0	115	1,539	1,637	1,589	1,402	803	7,143
1992	58	0	0	0	0	0	115	1,539	1,637	1,322	1,235	753	6,658
1993	58	0	0	0	0	0	115	1,539	1,637	1,589	1,402	803	7,143
1994	58	0	0	0	0	0	115	1,539	1,637	1,589	1,320	753	7,010
1995	58	0	0	0	0	0	115	1,539	1,637	1,589	1,402	803	7,143
1996	58	0	0	0	0	0	115	1,539	1,637	1,589	1,402	803	7,143
1997	58	0	0	0	0	0	115	1,539	1,637	1,589	1,402	803	7,143
1998	58	0	0	0	0	0	115	1,539	1,637	1,589	1,402	803	7,143
1999	58	0	0	0	0	0	115	1,539	1,637	1,589	1,402	803	7,143
Average	58	0	0	0	0	0	115	1,538	1,638	1,583	1,397	801	7,130
Maximum	58	0	0	0	0	0	568	2,020	2,386	1,976	1,701	954	8,769
Minimum	58	0	0	0	0	0	56	586	898	726	581	413	3,376

P-2g
Bonneville Unit Operations (cfs)
Diversions into Timpanogos Canal
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	1	0	0	0	0	0	1	33	40	24	23	14	11
1951	1	0	0	0	0	0	3	32	40	26	23	14	12
1952	1	0	0	0	0	0	1	21	40	21	21	14	10
1953	1	0	0	0	0	0	1	32	39	30	26	15	12
1954	1	0	0	0	0	0	4	26	24	26	21	12	10
1955	1	0	0	0	0	0	3	28	26	29	26	15	11
1956	1	0	0	0	0	0	3	26	27	26	24	14	10
1957	1	0	0	0	0	0	1	27	28	30	26	15	11
1958	1	0	0	0	0	0	1	24	26	25	24	14	10
1959	1	0	0	0	0	0	1	28	28	30	25	14	11
1960	1	0	0	0	0	0	1	10	15	23	12	7	6
1961	1	0	0	0	0	0	1	10	16	12	9	7	5
1962	1	0	0	0	0	0	1	27	26	26	20	12	10
1963	1	0	0	0	0	0	2	23	27	26	17	11	9
1964	1	0	0	0	0	0	1	21	29	32	28	15	11
1965	1	0	0	0	0	0	1	32	35	28	24	15	11
1966	1	0	0	0	0	0	1	28	25	24	20	12	9
1967	1	0	0	0	0	0	1	27	26	28	25	15	10
1968	1	0	0	0	0	0	1	24	26	30	27	15	10
1969	1	0	0	0	0	0	1	30	26	26	24	14	10
1970	1	0	0	0	0	0	1	26	26	29	26	15	10
1971	1	0	0	0	0	0	1	29	32	27	24	14	11
1972	1	0	0	0	0	0	1	31	27	27	26	16	11
1973	1	0	0	0	0	0	1	25	27	26	24	14	10
1974	1	0	0	0	0	0	1	28	27	26	25	15	10
1975	1	0	0	0	0	0	1	20	24	23	20	13	9
1976	1	0	0	0	0	0	1	28	27	26	26	14	10
1977	1	0	0	0	0	0	2	10	22	22	18	10	7
1978	1	0	0	0	0	0	1	29	30	27	24	14	11
1979	1	0	0	0	0	0	1	27	27	27	23	14	10
1980	1	0	0	0	0	0	1	20	25	22	21	13	9
1981	1	0	0	0	0	0	5	29	30	29	23	13	11
1982	1	0	0	0	0	0	1	20	24	25	24	15	9
1983	1	0	0	0	0	0	1	15	21	26	27	14	9
1984	1	0	0	0	0	0	1	18	24	26	25	16	9
1985	1	0	0	0	0	0	1	22	25	27	25	15	10
1986	1	0	0	0	0	0	1	18	24	23	23	13	9
1987	1	0	0	0	0	0	8	32	30	28	23	13	11
1988	1	0	0	0	0	0	9	29	29	23	19	11	10
1989	1	0	0	0	0	0	10	33	28	25	22	13	11
1990	1	0	0	0	0	0	2	25	28	26	23	13	10
1991	1	0	0	0	0	0	2	25	28	26	23	13	10
1992	1	0	0	0	0	0	2	25	28	21	20	13	9
1993	1	0	0	0	0	0	2	25	28	26	23	13	10
1994	1	0	0	0	0	0	2	25	28	26	21	13	10
1995	1	0	0	0	0	0	2	25	28	26	23	13	10
1996	1	0	0	0	0	0	2	25	28	26	23	13	10
1997	1	0	0	0	0	0	2	25	28	26	23	13	10
1998	1	0	0	0	0	0	2	25	28	26	23	13	10
1999	1	0	0	0	0	0	2	25	28	26	23	13	10
Average	1	0	0	0	0	0	2	25	28	26	23	13	10
Maximum	1	0	0	0	0	0	10	33	40	32	28	16	12
Minimum	1	0	0	0	0	0	1	10	15	12	9	7	5

P-3a
Bonneville Unit Operations (acre-feet)
Provo River from River Ditch to Snake Creek
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	7,686	8,845	7,686	7,686	6,942	7,750	9,602	47,012	55,784	16,965	15,863	11,497	203,317
1951	7,686	9,035	8,882	8,714	8,094	9,037	7,438	60,062	57,699	17,029	14,760	15,867	224,303
1952	7,686	9,010	8,551	8,864	8,280	11,355	22,785	73,814	62,497	10,614	11,060	11,880	246,396
1953	7,686	7,594	7,686	7,686	6,942	7,686	7,684	13,886	69,384	18,039	16,114	11,881	182,269
1954	7,976	7,438	7,929	7,981	7,175	8,820	11,463	20,112	7,906	15,804	18,960	13,535	135,100
1955	8,017	7,573	7,942	8,039	7,254	8,005	7,438	12,960	20,773	20,380	17,942	13,468	139,791
1956	7,686	7,438	7,686	7,686	7,190	7,686	7,438	13,927	43,432	48,176	34,700	16,396	209,441
1957	7,686	7,438	7,686	7,686	6,942	7,686	7,438	7,686	65,126	39,367	23,026	11,737	199,506
1958	7,686	8,242	8,550	7,686	7,219	7,686	8,091	38,257	28,750	21,124	18,008	12,348	173,647
1959	7,686	7,438	7,686	7,686	6,942	7,686	9,517	16,031	26,172	19,406	18,089	11,102	145,441
1960	7,686	8,403	7,686	7,686	7,190	7,686	7,438	16,687	25,972	28,023	24,203	17,035	165,696
1961	7,782	8,191	7,686	7,686	6,942	7,686	7,438	12,071	16,835	19,403	18,124	10,348	130,191
1962	7,686	8,757	7,686	7,686	6,942	7,686	7,438	10,533	28,651	53,443	44,262	24,433	215,202
1963	8,119	7,438	7,700	7,686	6,942	7,686	7,438	16,761	33,821	41,945	24,145	10,270	179,952
1964	7,686	7,472	7,686	7,686	7,190	7,686	7,438	8,268	26,378	54,029	43,748	23,500	208,768
1965	7,686	7,438	7,686	7,686	6,942	7,686	7,438	11,816	51,843	31,455	11,750	16,792	176,218
1966	7,686	7,931	8,595	7,876	6,965	8,995	12,418	33,089	15,528	20,163	18,018	11,671	158,935
1967	7,686	7,438	7,686	7,686	6,942	7,686	7,438	11,428	32,722	21,446	21,016	18,147	157,322
1968	7,686	8,120	8,570	7,714	7,252	8,715	7,503	10,646	70,457	17,541	12,315	11,582	178,100
1969	7,686	8,137	8,141	8,514	7,667	7,724	7,438	66,494	52,757	12,460	9,776	8,290	205,083
1970	7,686	8,565	8,067	8,253	7,433	7,686	7,438	46,433	37,657	16,698	15,966	11,204	183,087
1971	7,686	8,533	7,909	8,395	7,730	9,141	7,438	42,857	78,320	14,949	14,140	9,156	216,254
1972	7,686	8,574	8,158	8,338	7,995	9,606	7,568	60,586	33,636	16,857	13,959	8,569	191,532
1973	7,686	8,739	8,009	8,338	7,785	9,035	7,444	39,401	56,858	14,517	12,824	12,188	192,824
1974	7,686	8,320	7,719	7,736	6,942	7,686	7,438	66,226	63,640	19,434	19,958	12,385	235,170
1975	7,686	7,701	7,725	7,732	6,981	7,793	7,438	16,263	85,759	40,089	21,718	13,052	229,938
1976	7,964	8,634	7,831	7,877	7,401	7,899	7,651	38,764	22,323	19,359	19,031	16,263	170,998
1977	7,936	7,664	7,914	7,960	7,267	7,987	7,730	8,458	9,924	8,375	8,576	14,175	103,967
1978	7,686	7,438	7,686	7,686	6,942	7,805	7,438	11,141	59,904	54,678	39,072	14,263	231,739
1979	7,686	7,438	7,686	7,686	6,993	8,904	7,438	12,390	12,905	19,876	17,614	12,571	129,187
1980	7,686	7,480	7,686	7,927	7,190	8,608	7,438	10,265	23,511	20,143	15,331	11,587	134,852
1981	7,686	8,956	8,904	7,686	6,942	7,686	7,438	17,966	44,238	15,303	13,946	9,685	156,438
1982	7,686	8,536	9,099	7,686	6,942	9,565	7,438	39,778	56,779	28,999	14,881	13,781	211,171
1983	7,686	9,802	7,686	7,688	13,825	74,608	8,034	25,849	85,221	30,659	14,989	18,866	304,913
1984	7,686	7,438	7,686	7,686	15,408	26,200	45,539	51,008	63,832	30,987	13,571	15,699	292,741
1985	7,686	7,438	7,686	7,686	6,942	8,031	32,951	69,620	26,606	20,789	20,087	14,362	229,886
1986	7,686	9,456	7,686	7,686	7,753	69,281	23,895	50,025	85,691	32,980	9,906	8,496	320,541
1987	7,686	7,438	7,686	8,469	7,342	13,474	25,872	47,360	8,990	19,270	27,650	22,594	203,831
1988	7,686	7,438	7,686	7,686	7,190	7,686	7,438	15,759	16,523	7,729	12,899	8,998	114,719
1989	8,644	7,742	7,993	8,072	7,295	8,751	9,106	19,582	34,168	26,341	17,075	10,177	164,944
1990	8,039	8,563	8,014	8,034	7,230	7,983	7,740	11,205	21,976	8,272	8,439	8,061	113,555
1991	7,932	7,681	7,924	7,991	7,205	7,914	7,670	8,465	23,122	22,962	15,317	9,645	133,828
1992	7,886	7,636	7,887	7,914	7,629	7,928	7,869	25,741	16,163	21,310	18,524	8,995	145,481
1993	9,234	7,481	7,849	7,847	8,432	10,609	7,776	10,003	31,402	27,860	14,670	8,011	151,174
1994	7,729	7,481	7,729	7,729	7,178	8,113	7,481	11,746	20,808	20,759	15,667	7,438	129,857
1995	7,686	7,438	7,686	7,686	7,250	8,129	7,438	11,504	17,998	75,159	22,573	7,438	187,982
1996	7,686	9,725	8,967	9,129	8,810	10,800	8,244	38,342	69,546	19,093	19,775	15,084	225,201
1997	7,686	7,886	9,427	8,883	7,001	8,986	35,524	60,345	54,918	28,141	15,889	13,467	258,153
1998	7,686	8,918	7,686	7,686	6,942	8,461	9,298	49,476	53,012	24,975	13,040	15,507	212,687
1999	8,047	8,609	7,686	7,686	7,028	8,467	24,119	50,941	54,734	26,424	17,381	16,340	237,463
Average	7,794	8,082	7,975	7,930	7,579	11,349	11,033	29,381	41,253	25,196	18,407	12,997	188,976
Maximum	9,234	9,802	9,427	9,129	15,408	74,608	45,539	73,814	85,759	75,159	44,262	24,433	320,541
Minimum	7,686	7,438	7,686	7,686	6,942	7,686	7,438	7,686	7,906	7,729	8,439	7,438	103,967

P-3a

Bonneville Unit Operations (cfs)

Provo River from River Ditch to Snake Creek

Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	125	149	125	125	125	126	161	765	938	276	258	193	281
1951	125	152	144	142	146	147	125	977	970	277	240	267	310
1952	125	151	139	144	144	185	383	1,201	1,050	173	180	200	339
1953	125	128	125	125	125	125	129	226	1,166	293	262	200	252
1954	130	125	129	130	129	143	193	327	133	257	308	227	187
1955	130	127	129	131	131	130	125	211	349	331	292	226	193
1956	125	125	125	125	125	125	125	227	730	784	564	276	289
1957	125	125	125	125	125	125	125	125	1,095	640	375	197	276
1958	125	139	139	125	130	125	136	622	483	344	293	208	240
1959	125	125	125	125	125	125	160	261	440	316	294	187	201
1960	125	141	125	125	125	125	125	271	436	456	394	286	228
1961	127	138	125	125	125	125	125	196	283	316	295	174	180
1962	125	147	125	125	125	125	125	171	482	869	720	411	297
1963	132	125	125	125	125	125	125	273	568	682	393	173	249
1964	125	126	125	125	125	125	125	134	443	879	712	395	288
1965	125	125	125	125	125	125	125	192	871	512	191	282	243
1966	125	133	140	128	125	146	209	538	261	328	293	196	220
1967	125	125	125	125	125	125	125	186	550	349	342	305	217
1968	125	136	139	125	126	142	126	173	1,184	285	200	195	245
1969	125	137	132	138	138	126	125	1,081	887	203	159	139	283
1970	125	144	131	134	134	125	125	755	633	272	260	188	253
1971	125	143	129	137	139	149	125	697	1,316	243	230	154	299
1972	125	144	133	136	139	156	127	985	565	274	227	144	264
1973	125	147	130	136	140	147	125	641	956	236	209	205	266
1974	125	140	126	126	125	125	125	1,077	1,070	316	325	208	325
1975	125	129	126	126	126	127	125	265	1,441	652	353	219	318
1976	130	145	127	128	129	128	129	630	375	315	310	273	236
1977	129	129	129	129	131	130	130	138	167	136	139	238	144
1978	125	125	125	125	125	127	125	181	1,007	889	635	240	320
1979	125	125	125	125	126	145	125	202	217	323	286	211	178
1980	125	126	125	129	125	140	125	167	395	328	249	195	186
1981	125	151	145	125	125	125	125	292	743	249	227	163	216
1982	125	143	148	125	125	156	125	647	954	472	242	232	292
1983	125	165	125	125	249	1,213	135	420	1,432	499	244	317	421
1984	125	125	125	125	268	426	765	830	1,073	504	221	264	403
1985	125	125	125	125	125	131	554	1,132	447	338	327	241	318
1986	125	159	125	125	140	1,127	402	814	1,440	536	161	143	443
1987	125	125	125	138	132	219	435	770	151	313	450	380	282
1988	125	125	125	125	125	125	125	256	278	126	210	151	158
1989	141	130	130	131	131	142	153	318	574	428	278	171	228
1990	131	144	130	131	130	130	130	182	369	135	137	135	157
1991	129	129	129	130	130	129	129	138	389	373	249	162	185
1992	128	128	128	129	133	129	132	419	272	347	301	151	200
1993	150	126	128	128	152	173	131	163	528	453	239	135	209
1994	126	126	126	126	129	132	126	191	350	338	255	125	179
1995	125	125	125	125	131	132	125	187	302	1,222	367	125	260
1996	125	163	146	148	153	176	139	624	1,169	311	322	254	310
1997	125	133	153	144	126	146	597	981	923	458	258	226	357
1998	125	150	125	125	125	138	156	805	891	406	212	261	294
1999	131	145	125	125	127	138	405	829	920	430	283	275	328
Average	127	136	130	129	135	185	185	478	693	410	299	218	261
Maximum	150	165	153	148	268	1,213	765	1,201	1,441	1,222	720	411	443
Minimum	125	125	125	125	125	125	125	125	133	126	137	125	144

P-3b
Bonneville Unit Operations (acre-feet)
Provo River from River Ditch to Snake Creek
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,960	3,284	4,707	5,402	4,880	5,380	2,205	2,345	3,445	8,645	10,938	6,439	60,630
1951	4,559	2,651	2,721	5,873	5,231	3,570	2,256	2,280	4,679	10,585	10,232	6,704	61,342
1952	3,976	3,092	3,074	4,334	3,030	3,570	429	2,192	3,356	7,233	8,645	5,998	48,929
1953	4,559	3,180	5,314	6,171	5,603	7,513	6,883	5,452	3,322	10,555	11,797	7,221	77,570
1954	4,761	5,176	5,398	7,162	6,025	4,891	5,896	7,524	7,906	13,447	16,083	10,061	94,330
1955	5,949	5,195	5,513	7,936	6,957	7,457	6,863	7,983	7,245	16,589	15,369	11,199	104,255
1956	4,940	3,621	5,419	6,466	6,347	5,547	5,381	4,852	6,534	14,082	13,233	10,935	87,356
1957	4,675	3,886	5,075	6,778	6,057	6,596	4,794	5,204	4,499	9,791	11,114	6,792	75,261
1958	4,912	4,868	3,927	6,799	4,915	5,308	2,991	3,352	6,379	12,148	12,426	7,321	75,346
1959	5,353	5,115	5,078	7,616	6,476	7,127	6,849	9,347	7,939	16,936	15,525	8,529	101,891
1960	5,088	3,621	6,815	7,616	6,472	6,015	3,528	7,057	7,305	16,880	21,387	15,558	107,343
1961	3,942	7,126	7,137	7,608	6,845	7,606	7,438	10,383	6,542	18,101	17,413	7,762	107,905
1962	6,059	5,801	6,425	7,613	6,351	7,353	3,412	4,852	6,328	9,218	11,586	9,978	84,975
1963	4,587	3,886	5,689	7,131	6,145	6,882	7,438	5,546	7,240	13,398	14,082	8,292	90,316
1964	4,763	3,621	6,107	6,875	6,195	6,648	7,305	3,470	5,294	9,304	11,068	9,624	80,275
1965	5,000	3,665	4,077	4,577	4,167	4,750	3,632	4,010	5,454	7,298	7,946	4,732	59,308
1966	3,324	4,343	2,810	5,070	4,391	3,394	2,887	4,487	7,360	14,810	13,259	7,694	73,828
1967	5,000	3,976	4,871	6,426	5,881	5,796	6,704	5,734	5,204	9,615	11,026	6,263	76,496
1968	4,471	4,605	3,626	6,257	5,558	4,099	4,667	5,116	3,621	10,585	10,232	6,175	69,013
1969	4,295	3,923	3,999	5,709	4,666	4,877	1,613	2,280	4,944	9,615	8,215	5,911	60,047
1970	3,927	4,485	4,978	5,152	4,741	4,684	7,358	5,734	4,402	10,938	11,026	5,293	72,717
1971	3,854	1,875	2,335	3,041	2,451	2,257	2,861	3,427	3,709	9,438	10,232	5,469	50,950
1972	3,589	2,334	2,335	3,129	2,350	937	1,046	2,247	4,062	11,379	10,762	5,226	49,396
1973	3,589	2,474	2,953	4,364	4,127	2,953	3,730	3,074	4,415	9,703	10,412	5,645	57,438
1974	4,383	4,837	4,199	6,565	5,705	6,777	6,474	4,302	4,688	12,935	14,753	8,069	83,688
1975	3,448	5,849	5,176	6,472	5,295	5,791	6,890	8,197	1,163	9,130	17,258	7,655	82,325
1976	3,845	5,301	3,923	5,457	5,735	5,632	5,543	2,676	5,729	14,220	14,263	12,030	84,354
1977	3,699	5,637	5,660	7,240	6,449	5,690	4,666	6,841	8,805	8,375	8,032	12,544	83,638
1978	4,258	5,072	7,085	7,506	6,192	6,275	7,349	8,619	7,043	16,725	16,391	10,074	102,589
1979	1,488	4,409	5,646	6,754	5,361	4,618	4,657	3,640	5,857	14,668	15,628	8,902	81,627
1980	2,961	5,161	5,419	6,565	5,482	5,448	4,814	2,700	3,351	9,931	12,970	7,078	71,879
1981	3,134	5,255	5,419	6,280	5,768	6,024	6,962	5,799	6,033	10,190	11,497	6,819	79,179
1982	2,931	3,104	5,326	6,110	5,227	5,227	5,340	4,572	4,650	9,580	12,086	6,237	70,390
1983	3,164	5,466	5,293	6,772	4,764	3,744	651	3,259	4,445	12,154	13,886	7,091	70,689
1984	2,931	5,166	2,691	5,088	3,034	3,713	1,523	4,502	4,434	10,817	11,535	9,479	64,913
1985	2,770	5,165	5,806	6,956	4,840	3,716	1,697	5,288	5,915	16,061	15,118	8,196	81,530
1986	2,931	3,024	5,424	6,879	6,916	4,667	2,822	6,249	6,034	14,531	8,470	7,438	75,385
1987	2,931	5,664	5,441	7,016	4,606	3,975	4,294	2,787	5,774	11,136	18,416	12,789	84,829
1988	2,441	5,098	5,379	7,135	5,371	5,250	7,230	9,303	3,826	7,729	12,743	6,215	77,722
1989	2,459	5,403	5,717	7,551	7,038	6,811	6,055	7,468	10,697	15,231	15,579	8,280	98,288
1990	4,391	5,277	5,747	6,535	5,173	5,626	3,484	5,429	5,247	8,272	8,439	7,250	70,869
1991	4,026	5,339	5,559	7,692	6,645	5,832	4,887	3,929	6,149	12,889	13,726	7,588	84,261
1992	3,689	6,388	6,537	7,382	6,197	7,706	7,869	12,130	5,974	16,920	15,535	7,463	103,790
1993	4,984	5,594	5,743	7,100	5,962	7,046	4,211	3,861	5,163	8,593	10,958	8,011	77,226
1994	3,139	5,348	5,448	7,012	5,574	5,316	7,481	5,236	5,835	11,979	12,827	6,269	81,464
1995	3,063	4,791	4,783	4,990	4,181	3,284	2,997	4,197	5,355	7,830	7,582	4,841	57,895
1996	2,687	5,479	5,611	6,730	5,470	3,975	4,986	4,313	3,091	10,796	10,891	6,040	70,069
1997	2,441	3,804	5,653	6,126	6,261	7,686	6,977	4,944	5,741	14,583	15,372	8,538	88,127
1998	3,264	5,361	5,405	6,703	6,142	5,419	1,438	4,572	4,650	9,612	10,193	7,164	69,924
1999	3,131	5,371	5,416	6,703	4,344	3,738	1,415	4,513	4,585	10,523	9,742	6,895	66,378
Average	3,854	4,563	4,998	6,369	5,392	5,284	4,618	5,145	5,428	11,714	12,558	7,876	77,799
Maximum	6,059	7,126	7,137	7,936	7,038	7,706	7,869	12,130	10,697	18,101	21,387	15,558	107,905
Minimum	1,488	1,875	2,335	3,041	2,350	937	429	2,192	1,163	7,233	7,582	4,732	48,929

P-3b
Bonneville Unit Operations (cfs)
Provo River from River Ditch to Snake Creek
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	48	55	77	88	88	88	37	38	58	141	178	108	84
1951	74	45	44	96	94	58	38	37	79	172	166	113	85
1952	48	55	77	88	85	88	37	38	58	141	178	108	67
1953	74	45	44	96	94	58	38	37	79	172	166	113	107
1954	65	52	50	70	55	58	7	36	56	118	141	101	130
1955	74	53	86	100	101	122	116	89	56	172	192	121	144
1956	77	87	88	116	105	80	99	122	133	219	262	169	120
1957	97	87	90	129	125	121	115	130	122	270	250	188	104
1958	80	61	88	105	114	90	90	79	110	229	215	184	104
1959	76	65	83	110	109	107	81	85	76	159	181	114	141
1960	80	82	64	111	85	86	50	55	107	198	202	123	148
1961	87	86	83	124	117	116	115	152	133	275	252	143	149
1962	83	61	111	124	117	98	59	115	123	275	348	261	117
1963	64	120	116	124	123	124	125	169	110	294	283	130	125
1964	99	97	104	124	110	120	57	79	106	150	188	168	111
1965	75	65	93	116	111	112	125	90	122	218	229	139	82
1966	77	61	99	112	112	108	123	56	89	151	180	162	102
1967	81	62	66	74	75	77	61	65	92	119	129	80	106
1968	54	73	46	82	76	55	49	73	124	241	216	129	95
1969	81	67	79	105	106	94	113	93	87	156	179	105	83
1970	73	77	59	102	100	67	78	83	61	172	166	104	100
1971	70	66	65	93	84	79	27	37	83	156	134	99	70
1972	64	75	81	84	82	76	124	93	74	178	179	89	68
1973	63	32	38	49	44	37	48	56	62	154	166	92	79
1974	58	39	38	51	42	15	18	37	68	185	175	88	116
1975	58	42	48	71	74	48	63	50	74	158	169	95	114
1976	71	81	68	107	99	110	109	70	79	210	240	136	116
1977	56	98	84	105	95	94	116	133	20	148	281	129	116
1978	63	89	64	89	103	92	93	44	96	231	232	202	142
1979	60	95	92	118	116	93	78	111	148	136	131	211	113
1980	69	85	115	122	108	102	124	140	118	272	267	169	99
1981	24	74	92	110	97	75	78	59	98	239	254	150	109
1982	48	87	88	107	99	89	81	44	56	162	211	119	97
1983	51	88	88	102	104	98	117	94	101	166	187	115	98
1984	48	52	87	99	91	85	90	74	78	156	197	105	89
1985	51	92	86	110	86	61	11	53	75	198	226	119	113
1986	48	87	44	83	55	60	26	73	75	176	188	159	104
1987	45	87	94	113	87	60	29	86	99	261	246	138	117
1988	48	51	88	112	120	76	47	102	101	236	138	125	107
1989	48	95	88	114	83	65	72	45	97	181	300	215	136
1990	40	86	87	116	97	85	122	151	64	126	207	104	98
1991	40	91	93	123	127	111	102	121	180	248	253	139	116
1992	71	89	93	106	90	91	59	88	88	135	137	122	143
1993	65	90	90	125	120	95	82	64	103	210	223	128	107
1994	60	107	106	120	112	125	132	197	100	275	253	125	113
1995	81	94	93	115	107	115	71	63	87	140	178	135	80
1996	51	90	89	114	97	86	126	85	98	195	209	105	97
1997	50	81	78	81	75	53	50	68	90	127	123	81	122
1998	44	92	91	109	98	65	84	70	52	176	177	102	97
1999	40	64	92	100	113	125	117	80	96	237	250	143	92
Average	63	75	80	103	96	86	78	82	91	190	205	132	107
Maximum	99	120	116	129	127	125	132	197	180	294	348	261	149
Minimum	24	32	38	49	42	15	7	36	20	118	123	80	67

P-3c
Bonneville Unit Operations (acre-feet)
Provo River from River Ditch to Snake Creek
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,021	5,561	2,400	1,959	1,758	2,181	3,183	35,377	42,573	7,592	2,724	3,333	110,662
1951	1,218	4,266	6,161	2,842	2,863	5,467	4,477	50,440	36,281	4,897	2,219	5,947	127,077
1952	1,280	2,186	3,608	2,460	2,860	4,680	7,743	36,938	36,014	1,613	76	2,651	102,110
1953	1,222	3,177	2,316	1,515	1,340	173	801	8,434	51,656	6,633	2,236	3,010	82,514
1954	1,580	2,231	1,845	819	1,135	2,804	4,943	6,826	0	0	2,308	2,225	26,716
1955	912	1,863	1,518	64	185	343	488	3,338	13,279	2,585	2,003	1,071	27,648
1956	813	3,008	1,543	762	527	1,336	2,046	8,807	34,330	27,213	13,257	1,428	95,070
1957	950	2,701	1,703	615	711	634	2,244	2,206	51,694	15,362	5,613	4,241	88,674
1958	985	3,375	3,191	562	1,845	1,506	3,996	34,905	21,509	6,463	3,788	2,315	84,440
1959	905	1,922	1,743	44	291	349	2,465	4,117	17,983	1,266	1,994	1,218	34,298
1960	1,235	3,951	544	44	448	1,044	3,910	4,074	16,422	9,041	2,246	1,067	44,025
1961	2,590	1,064	516	48	61	49	0	0	10,043	732	141	2,175	17,420
1962	1,086	1,800	803	46	369	208	2,664	5,505	21,204	34,333	23,245	9,220	100,482
1963	1,479	2,424	1,248	465	797	502	0	10,154	24,237	23,588	7,318	1,564	73,774
1964	1,336	2,952	986	506	621	649	0	4,638	18,043	35,473	23,157	8,525	96,886
1965	1,264	3,774	2,732	2,329	1,947	2,062	2,329	7,447	36,395	21,213	3,427	10,366	95,285
1966	1,706	3,589	5,179	2,806	2,574	5,602	5,669	18,253	5,631	4,773	3,786	2,669	62,236
1967	1,360	3,462	1,788	931	749	1,380	622	5,029	27,518	2,905	1,344	3,256	50,343
1968	1,344	3,515	3,860	1,456	1,694	3,501	2,836	5,530	58,785	3,660	785	4,231	91,198
1969	1,284	4,214	4,142	2,804	3,001	2,846	4,405	64,213	22,797	0	0	1,536	111,243
1970	1,487	4,080	3,090	2,660	2,301	3,002	0	31,033	33,255	4,678	1,540	3,038	90,163
1971	1,532	6,298	4,660	5,016	5,279	4,933	3,452	39,430	43,196	3,889	1,166	2,251	121,102
1972	1,914	6,240	5,199	4,313	5,497	6,941	6,493	44,895	29,574	1,421	517	337	113,341
1973	1,827	6,264	4,479	3,897	3,628	5,474	3,619	36,327	31,377	3,357	0	5,166	105,414
1974	1,121	3,482	2,286	690	690	645	875	58,703	34,742	3,277	1,619	1,851	109,982
1975	1,855	1,852	2,549	1,214	1,605	1,852	459	8,066	60,897	28,545	1,671	4,359	114,924
1976	1,405	3,332	2,912	1,817	1,059	1,137	1,281	36,088	12,318	3,084	3,234	1,969	69,636
1977	1,801	1,546	1,472	720	741	1,435	2,732	1,456	862	0	0	0	12,766
1978	2,160	1,442	366	110	457	1,411	0	206	41,367	28,876	16,289	2,461	95,144
1979	2,994	2,315	2,040	932	1,329	2,963	2,139	8,750	5,029	430	1,416	1,936	32,274
1980	1,861	1,342	1,315	1,121	1,251	2,454	2,625	7,564	20,159	4,019	1,891	4,042	49,644
1981	2,140	3,701	2,440	1,219	1,175	1,224	396	12,167	26,765	5,113	2,449	2,471	61,261
1982	1,233	3,106	801	535	715	2,119	927	26,586	33,012	13,870	483	3,065	86,453
1983	1,397	877	2,300	915	5,914	25,824	2,436	17,162	43,121	16,596	45	3,956	120,542
1984	1,550	993	3,135	2,598	8,227	10,673	17,136	33,850	39,881	13,295	0	2,370	133,708
1985	1,330	884	853	730	2,102	3,447	17,713	34,231	20,691	27	1,119	1,866	84,995
1986	1,413	5,115	1,039	807	26	30,883	13,756	30,829	48,278	12,637	0	0	144,784
1987	2,601	1,712	1,633	1,453	2,736	5,338	19,437	42,727	3,216	4,110	5,693	5,965	96,622
1988	2,464	1,496	1,441	344	1,137	1,522	128	4,335	12,466	0	0	817	26,150
1989	4,038	1,461	1,422	325	161	1,148	0	10,927	21,124	10,541	810	684	52,641
1990	1,704	1,565	1,452	1,021	1,285	1,522	3,212	2,184	16,479	0	0	0	30,424
1991	2,398	1,564	1,478	187	350	1,301	2,278	1,291	16,723	9,351	1,021	1,647	39,588
1992	2,076	1,249	1,132	532	1,180	221	0	10,374	9,935	0	1,080	1,118	28,897
1993	687	416	420	343	319	447	825	682	13,749	8,195	3,712	0	29,793
1994	1,952	1,194	1,219	717	1,411	2,390	0	1,383	6,758	8,335	2,840	0	28,198
1995	2,988	2,647	2,903	2,566	2,761	4,402	4,441	3,722	12,643	28,958	0	1,634	69,662
1996	2,487	1,566	1,586	1,290	3,019	5,354	2,693	34,029	35,983	2,791	8,015	6,643	105,457
1997	1,432	2,648	1,941	1,600	597	0	14,141	33,192	33,259	2,216	67	2,111	93,204
1998	1,034	863	826	479	261	842	5,234	26,343	30,224	13,286	7	1,717	81,116
1999	1,657	1,120	1,071	776	2,599	4,729	10,779	35,962	34,422	6,380	3,312	4,277	107,084
Average	1,662	2,668	2,146	1,280	1,712	3,459	3,881	19,015	26,358	8,932	3,233	2,796	77,141
Maximum	4,038	6,298	6,161	5,016	8,227	30,883	19,437	64,213	60,897	35,473	23,245	10,366	144,784
Minimum	687	416	366	44	26	0	0	0	0	0	0	0	12,766

P-3c
Bonneville Unit Operations (cfs)
Provo River from River Ditch to Snake Creek
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	33	93	39	32	32	35	53	575	715	123	44	56	153
1951	20	72	100	46	52	89	75	820	610	80	36	100	176
1952	21	37	59	40	50	76	130	601	605	26	1	45	141
1953	20	53	38	25	24	3	13	137	868	108	36	51	114
1954	26	37	30	13	20	46	83	111	0	0	38	37	37
1955	15	31	25	1	3	6	8	54	223	42	33	18	38
1956	13	51	25	12	9	22	34	143	577	443	216	24	131
1957	15	45	28	10	13	10	38	36	869	250	91	71	122
1958	16	57	52	9	33	24	67	568	361	105	62	39	117
1959	15	32	28	1	5	6	41	67	302	21	32	20	47
1960	20	66	9	1	8	17	66	66	276	147	37	18	61
1961	42	18	8	1	1	1	0	0	169	12	2	37	24
1962	18	30	13	1	7	3	45	90	356	558	378	155	139
1963	24	41	20	8	14	8	0	165	407	384	119	26	102
1964	22	50	16	8	11	11	0	75	303	577	377	143	133
1965	21	63	44	38	35	34	39	121	612	345	56	174	132
1966	28	60	84	46	46	91	95	297	95	78	62	45	86
1967	22	58	29	15	13	22	10	82	462	47	22	55	70
1968	22	59	63	24	29	57	48	90	988	60	13	71	126
1969	21	71	67	46	54	46	74	1,044	383	0	0	26	154
1970	24	69	50	43	41	49	0	505	559	76	25	51	125
1971	25	106	76	82	95	80	58	641	726	63	19	38	167
1972	31	105	85	70	96	113	109	730	497	23	8	6	156
1973	30	105	73	63	65	89	61	591	527	55	0	87	146
1974	18	59	37	11	12	10	15	955	584	53	26	31	152
1975	30	31	41	20	29	30	8	131	1,023	464	27	73	159
1976	23	56	47	30	18	18	22	587	207	50	53	33	96
1977	29	26	24	12	13	23	46	24	14	0	0	0	18
1978	35	24	6	2	8	23	0	3	695	470	265	41	131
1979	49	39	33	15	24	48	36	142	85	7	23	33	45
1980	30	23	21	18	22	40	44	123	339	65	31	68	68
1981	35	62	40	20	21	20	7	198	450	83	40	42	85
1982	20	52	13	9	13	34	16	432	555	226	8	52	119
1983	23	15	37	15	106	420	41	279	725	270	1	66	167
1984	25	17	51	42	143	174	288	551	670	216	0	40	184
1985	22	15	14	12	38	56	298	557	348	0	18	31	117
1986	23	86	17	13	0	502	231	501	811	206	0	0	200
1987	42	29	27	24	49	87	327	695	54	67	93	100	133
1988	40	25	23	6	20	25	2	71	210	0	0	14	36
1989	66	25	23	5	3	19	0	178	355	171	13	11	73
1990	28	26	24	17	23	25	54	36	277	0	0	0	42
1991	39	26	24	3	6	21	38	21	281	152	17	28	55
1992	34	21	18	9	21	4	0	169	167	0	18	19	40
1993	11	7	7	6	6	7	14	11	231	133	60	0	41
1994	32	20	20	12	25	39	0	22	114	136	46	0	39
1995	49	44	47	42	50	72	75	61	212	471	0	27	96
1996	40	26	26	21	52	87	45	553	605	45	130	112	145
1997	23	45	32	26	11	0	238	540	559	36	1	35	129
1998	17	15	13	8	5	14	88	428	508	216	0	29	112
1999	27	19	17	13	47	77	181	585	579	104	54	72	148
Average	27	45	35	21	30	56	65	309	443	145	53	47	106
Maximum	66	106	100	82	143	502	327	1,044	1,023	577	378	174	200
Minimum	11	7	6	1	0	0	0	0	0	0	0	0	18

P-3d
Bonneville Unit Operations (acre-feet)
Provo River from River Ditch to Snake Creek
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,704	0	580	324	305	189	4,214	9,290	9,767	728	2,200	1,724	32,024
1951	1,909	2,118	0	0	0	0	705	7,342	16,738	1,546	2,308	3,216	35,883
1952	2,430	3,732	1,869	2,071	2,390	3,105	14,613	34,683	23,126	1,768	2,339	3,230	95,357
1953	1,904	1,237	56	0	0	0	0	0	14,406	850	2,082	1,649	22,185
1954	1,635	30	686	0	15	1,125	623	5,762	0	2,357	570	1,249	14,054
1955	1,156	515	912	39	111	206	87	1,639	250	1,206	570	1,198	7,889
1956	1,933	809	724	458	316	803	11	269	2,567	6,882	8,210	4,033	27,015
1957	2,061	851	908	293	174	456	401	276	8,934	14,214	6,299	704	35,570
1958	1,789	0	1,433	325	459	872	1,103	0	861	2,513	1,794	2,711	13,861
1959	1,428	400	865	26	175	210	203	2,567	250	1,203	570	1,354	9,252
1960	1,363	831	327	26	269	627	0	5,557	2,246	2,103	570	410	14,328
1961	1,250	0	33	29	36	30	0	1,688	250	570	570	410	4,867
1962	542	1,156	458	27	222	125	1,362	176	1,119	9,892	9,432	5,234	29,745
1963	2,053	1,128	763	90	0	302	0	1,062	2,345	4,959	2,745	414	15,862
1964	1,586	900	593	304	373	390	132	160	3,042	9,252	9,524	5,351	31,607
1965	1,422	0	876	780	828	874	1,477	359	9,994	2,943	377	1,694	21,624
1966	2,656	0	607	0	0	0	3,862	10,349	2,537	581	972	1,308	22,871
1967	1,326	0	1,027	330	313	510	112	665	0	8,927	8,645	8,628	30,482
1968	1,871	0	1,084	0	0	1,115	0	0	8,050	3,296	1,297	1,176	17,890
1969	2,108	0	0	0	0	0	1,420	0	25,016	2,845	1,561	843	33,793
1970	2,272	0	0	441	391	0	80	9,666	0	1,082	3,400	2,873	20,206
1971	2,301	360	914	338	0	1,951	1,124	0	31,414	1,621	2,742	1,436	44,202
1972	2,183	0	624	896	148	1,728	29	13,444	0	4,057	2,680	3,006	28,795
1973	2,271	0	578	78	30	609	95	0	21,066	1,456	2,413	1,377	29,972
1974	2,182	0	1,234	480	547	264	89	3,220	24,210	3,221	3,586	2,465	41,499
1975	2,383	0	0	46	80	150	89	0	23,699	2,415	2,790	1,038	32,688
1976	2,715	0	997	602	608	1,131	827	0	4,276	2,055	1,533	2,264	17,008
1977	2,436	481	783	0	77	862	332	160	257	0	544	1,631	7,563
1978	1,269	924	235	70	293	119	89	2,316	11,495	9,076	6,392	1,729	34,007
1979	3,204	714	0	0	303	1,324	642	0	2,018	4,778	570	1,732	15,286
1980	2,864	978	952	241	457	706	0	0	0	6,194	470	467	13,329
1981	2,412	0	1,045	187	0	438	80	0	11,441	0	0	396	15,999
1982	3,522	2,326	2,972	1,041	1,000	2,218	1,171	8,620	19,117	5,549	2,312	4,479	54,328
1983	3,125	3,459	93	0	3,147	45,040	4,947	5,429	37,655	1,909	1,059	7,819	113,681
1984	3,205	1,279	1,861	0	4,147	11,813	26,879	12,657	19,517	6,876	2,036	3,850	94,120
1985	3,586	1,389	1,027	0	0	868	13,541	30,101	0	4,701	3,849	4,299	63,361
1986	3,342	1,317	1,223	0	811	33,731	7,318	12,946	31,379	5,811	1,436	1,057	100,373
1987	2,154	62	611	0	0	4,160	2,141	1,846	0	4,024	3,541	3,840	22,380
1988	2,781	844	866	207	683	914	80	2,120	231	0	156	1,965	10,847
1989	2,147	878	854	195	97	792	3,051	1,187	2,347	569	686	1,213	14,016
1990	1,944	1,721	815	478	772	836	1,043	3,593	250	0	0	811	12,262
1991	1,508	777	888	112	210	781	506	3,245	250	722	570	410	9,979
1992	2,121	0	218	0	252	0	0	3,237	254	4,390	1,909	414	12,794
1993	3,563	1,472	1,687	404	2,151	3,117	2,739	5,459	12,491	11,072	0	0	44,155
1994	2,638	939	1,063	0	193	407	0	5,127	8,215	446	0	1,169	20,195
1995	1,635	0	0	129	308	443	0	3,586	0	38,371	14,990	964	60,425
1996	2,513	2,679	1,770	1,109	321	1,471	565	0	30,472	5,506	869	2,401	49,675
1997	3,813	1,434	1,833	1,157	143	1,300	14,406	22,210	15,917	11,342	449	2,817	76,822
1998	3,387	2,694	1,456	503	539	2,200	2,626	18,561	18,139	2,077	2,840	6,625	61,648
1999	3,260	2,119	1,199	206	86	0	11,925	10,465	15,727	9,520	4,327	5,168	64,001
Average	2,277	851	832	281	476	2,606	2,535	5,221	9,467	4,549	2,616	2,325	34,036
Maximum	3,813	3,732	2,972	2,071	4,147	45,040	26,879	34,683	37,655	38,371	14,990	8,628	113,681
Minimum	542	0	0	0	0	0	0	0	0	0	0	0	4,867

P-3d
Bonneville Unit Operations (cfs)
Provo River from River Ditch to Snake Creek
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	44	0	9	5	5	3	71	151	164	12	36	29	44
1951	31	36	0	0	0	0	12	119	281	25	38	54	50
1952	40	63	30	34	42	51	246	564	389	29	38	54	131
1953	31	21	1	0	0	0	0	0	242	14	34	28	31
1954	27	1	11	0	0	18	10	94	0	38	9	21	19
1955	19	9	15	1	2	3	1	27	4	20	9	20	11
1956	31	14	12	7	6	13	0	4	43	112	134	68	37
1957	34	14	15	5	3	7	7	4	150	231	102	12	49
1958	29	0	23	5	8	14	19	0	14	41	29	46	19
1959	23	7	14	0	3	3	3	42	4	20	9	23	13
1960	22	14	5	0	5	10	0	90	38	34	9	7	20
1961	20	0	1	0	1	0	0	27	4	9	9	7	7
1962	9	19	7	0	4	2	23	3	19	161	153	88	41
1963	33	19	12	1	0	5	0	17	39	81	45	7	22
1964	26	15	10	5	6	6	2	3	51	150	155	90	44
1965	23	0	14	13	15	14	25	6	168	48	6	28	30
1966	43	0	10	0	0	0	65	168	43	9	16	22	32
1967	22	0	17	5	6	8	2	11	0	145	141	145	42
1968	30	0	18	0	0	18	0	0	135	54	21	20	25
1969	34	0	0	0	0	0	24	0	420	46	25	14	47
1970	37	0	0	7	7	0	1	157	0	18	55	48	28
1971	37	6	15	6	0	32	19	0	528	26	45	24	61
1972	36	0	10	15	3	28	0	219	0	66	44	51	40
1973	37	0	9	1	1	10	2	0	354	24	39	23	41
1974	35	0	20	8	10	4	1	52	407	52	58	41	57
1975	39	0	0	1	1	2	1	0	398	39	45	17	45
1976	44	0	16	10	11	18	14	0	72	33	25	38	23
1977	40	8	13	0	1	14	6	3	4	0	9	27	10
1978	21	16	4	1	5	2	1	38	193	148	104	29	47
1979	52	12	0	0	5	22	11	0	34	78	9	29	21
1980	47	16	15	4	8	11	0	0	0	101	8	8	18
1981	39	0	17	3	0	7	1	0	192	0	0	7	22
1982	57	39	48	17	18	36	20	140	321	90	38	75	75
1983	51	58	2	0	57	733	83	88	633	31	17	131	157
1984	52	21	30	0	72	192	452	206	328	112	33	65	130
1985	58	23	17	0	0	14	228	490	0	76	63	72	88
1986	54	22	20	0	15	549	123	211	527	95	23	18	139
1987	35	1	10	0	0	68	36	30	0	65	58	65	31
1988	45	14	14	3	12	15	1	34	4	0	3	33	15
1989	35	15	14	3	2	13	51	19	39	9	11	20	19
1990	32	29	13	8	14	14	18	58	4	0	0	14	17
1991	25	13	14	2	4	13	8	53	4	12	9	7	14
1992	35	0	4	0	4	0	0	53	4	71	31	7	18
1993	58	25	27	7	39	51	46	89	210	180	0	0	61
1994	43	16	17	0	3	7	0	83	138	7	0	20	28
1995	27	0	0	2	6	7	0	58	0	624	244	16	83
1996	41	45	29	18	6	24	9	0	512	90	14	40	68
1997	62	24	30	19	3	21	242	361	268	184	7	47	106
1998	55	45	24	8	10	36	44	302	305	34	46	111	85
1999	53	36	20	3	2	0	200	170	264	155	70	87	88
Average	37	14	14	5	8	42	43	85	159	74	43	39	47
Maximum	62	63	48	34	72	733	452	564	633	624	244	145	157
Minimum	9	0	0	0	0	0	0	0	0	0	0	0	7

P-4a
Bonneville Unit Operations (acre-feet)
Provo River from Snake Creek to Deer Creek Reservoir
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	14,631	16,195	12,822	15,943	13,313	14,735	18,940	56,830	62,981	24,166	23,882	19,976	294,415
1951	16,334	20,044	16,114	14,662	14,284	15,220	15,809	69,028	65,314	25,880	23,791	26,305	322,786
1952	16,814	20,568	15,648	16,001	13,871	16,984	39,827	83,877	69,587	18,390	19,518	21,635	352,721
1953	16,983	18,980	15,342	16,819	13,658	13,335	14,010	20,609	76,557	25,289	25,017	20,453	277,054
1954	14,464	14,597	13,583	14,841	13,707	14,262	14,489	20,731	13,011	23,254	27,005	20,812	204,755
1955	14,624	14,943	14,238	13,970	11,804	14,582	11,100	17,094	28,617	25,930	25,252	21,046	213,200
1956	13,981	15,361	15,924	14,435	12,326	12,610	11,007	18,429	49,188	53,526	41,700	23,643	282,131
1957	12,575	15,631	14,507	14,525	13,947	12,365	10,556	15,354	73,446	45,269	30,069	20,472	278,715
1958	13,811	16,066	14,375	12,201	13,095	14,177	14,146	42,040	34,634	27,460	25,030	19,724	246,759
1959	14,050	15,101	13,615	13,454	12,403	13,048	11,729	19,692	31,698	25,773	24,615	18,106	213,283
1960	14,141	15,363	12,349	13,196	11,924	13,647	9,751	19,646	32,288	36,155	27,920	22,956	229,335
1961	13,083	14,276	13,192	12,438	11,434	12,575	9,876	15,915	22,543	24,230	24,047	16,052	189,661
1962	14,352	14,503	12,198	12,212	14,170	12,447	13,549	16,819	33,960	59,878	50,399	30,799	285,286
1963	12,838	13,164	12,374	11,913	10,894	11,407	11,393	21,029	38,931	48,304	29,307	17,418	238,972
1964	13,034	15,480	13,624	12,036	10,643	10,772	13,125	10,985	29,093	61,020	50,406	30,341	270,559
1965	13,244	13,776	15,566	12,461	12,489	10,573	12,003	19,544	61,689	39,725	21,271	27,077	259,418
1966	15,235	16,160	14,887	13,375	10,951	15,867	15,417	36,016	23,360	26,014	24,138	19,545	230,966
1967	14,446	14,670	14,327	13,215	11,682	14,247	11,072	20,630	42,182	27,976	30,198	27,457	242,102
1968	13,918	15,461	14,390	12,651	13,043	13,919	11,976	16,263	78,261	25,897	21,958	21,034	258,769
1969	15,240	17,029	13,598	16,708	13,439	12,432	15,575	70,913	61,661	20,816	20,135	18,043	295,590
1970	15,400	17,936	15,067	14,841	13,195	11,974	10,282	48,236	44,250	25,154	24,898	19,409	260,641
1971	15,345	17,954	14,592	13,696	12,169	13,566	10,322	45,528	82,663	23,349	23,333	19,243	291,760
1972	15,451	17,890	15,484	14,521	12,686	15,175	10,883	62,064	40,911	25,912	22,130	17,055	270,162
1973	17,175	18,826	14,937	13,906	12,602	14,612	16,581	47,784	64,413	24,406	24,049	22,857	292,147
1974	16,026	16,560	12,989	14,500	12,437	14,336	12,049	66,945	72,803	29,040	28,339	21,127	317,150
1975	14,284	17,468	13,785	12,986	11,711	14,874	12,415	22,966	93,472	44,682	31,487	22,912	313,041
1976	14,820	16,718	13,018	13,701	13,412	14,935	11,813	38,811	26,257	25,256	25,803	24,084	238,628
1977	13,861	15,241	14,943	14,068	12,823	13,045	10,511	12,844	15,268	11,703	15,666	21,604	171,577
1978	13,344	11,535	14,329	12,701	11,354	15,918	12,096	15,300	64,478	61,607	47,489	23,496	303,646
1979	14,225	15,774	13,345	12,792	12,307	16,631	10,999	17,327	20,996	24,591	25,080	21,110	205,177
1980	13,179	14,849	12,898	18,782	13,540	14,988	15,290	22,217	32,133	29,588	23,418	22,283	233,162
1981	14,937	16,530	16,585	13,298	12,480	13,178	9,524	20,226	49,536	20,314	20,131	17,281	224,020
1982	13,910	15,151	15,224	12,846	12,771	18,698	15,131	40,907	65,276	34,775	25,137	26,458	296,283
1983	18,204	22,233	15,494	14,544	18,905	85,171	17,751	34,527	88,088	37,270	27,485	30,921	410,592
1984	16,481	15,408	13,755	13,169	21,002	34,268	54,812	56,741	71,254	39,210	25,589	27,920	389,607
1985	19,434	15,928	15,917	14,966	13,222	18,743	43,105	75,189	33,204	29,258	29,448	24,664	333,077
1986	17,714	19,374	14,165	13,101	21,011	78,898	34,190	66,629	91,240	40,607	20,786	20,845	438,559
1987	20,199	14,743	13,969	15,662	13,024	19,199	30,561	48,700	17,616	26,205	36,685	30,959	287,520
1988	13,198	15,435	14,896	13,810	13,637	14,916	12,022	18,196	24,378	11,554	20,305	14,474	186,821
1989	14,596	12,183	13,665	13,260	13,013	16,731	10,352	25,579	42,520	31,737	23,828	17,474	234,936
1990	12,943	20,314	11,226	11,859	10,451	11,387	9,732	12,787	25,549	11,374	13,898	12,800	164,318
1991	15,676	11,778	12,770	12,047	10,780	11,724	9,353	10,395	27,122	28,147	20,755	14,275	184,823
1992	13,242	14,109	13,242	12,459	12,355	10,897	10,450	27,681	19,580	23,468	24,413	12,221	194,116
1993	13,476	12,100	12,687	12,428	13,573	16,972	11,220	10,605	34,171	30,144	19,905	12,169	199,449
1994	12,894	14,739	12,767	13,973	11,378	12,242	9,615	12,181	26,004	23,885	20,508	12,971	183,158
1995	12,635	13,649	12,708	12,662	11,445	12,228	8,953	13,054	23,684	78,422	28,139	11,358	238,936
1996	14,879	16,656	14,520	14,007	13,022	16,021	11,973	40,822	73,380	22,727	24,745	21,518	284,267
1997	14,020	15,843	15,137	14,195	11,117	14,312	41,270	69,246	66,166	34,616	23,963	22,363	342,248
1998	13,194	16,309	11,776	14,146	10,727	14,751	15,751	60,572	65,065	33,186	23,567	25,630	304,676
1999	20,942	16,304	13,246	13,506	13,282	13,416	28,827	57,756	62,463	31,488	24,818	24,016	320,065
Average	14,870	15,938	14,036	13,790	12,970	17,260	16,064	34,265	47,859	31,573	26,229	21,168	266,021
Maximum	20,942	22,233	16,585	18,782	21,011	85,171	54,812	83,877	93,472	78,422	50,406	30,959	438,559
Minimum	12,575	11,535	11,226	11,859	10,451	10,573	8,953	10,395	13,011	11,374	13,898	11,358	164,318

P-4a

Bonneville Unit Operations (cfs)

Provo River from Snake Creek to Deer Creek Reservoir

Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	238	272	209	259	240	240	318	924	1,058	393	388	336	407
1951	266	337	262	238	257	248	266	1,123	1,098	421	387	442	446
1952	273	346	254	260	241	276	669	1,364	1,169	299	317	364	486
1953	276	319	250	274	246	217	235	335	1,287	411	407	344	383
1954	235	245	221	241	247	232	243	337	219	378	439	350	283
1955	238	251	232	227	213	237	187	278	481	422	411	354	294
1956	227	258	259	235	214	205	185	300	827	871	678	397	389
1957	205	263	236	236	251	201	177	250	1,234	736	489	344	385
1958	225	270	234	198	236	231	238	684	582	447	407	331	341
1959	229	254	221	219	223	212	197	320	533	419	400	304	295
1960	230	258	201	215	207	222	164	320	543	588	454	386	316
1961	213	240	215	202	206	205	166	259	379	394	391	270	262
1962	233	244	198	199	255	202	228	274	571	974	820	518	394
1963	209	221	201	194	196	186	191	342	654	786	477	293	330
1964	212	260	222	196	185	175	221	179	489	992	820	510	373
1965	215	232	253	203	225	172	202	318	1,037	646	346	455	358
1966	248	272	242	218	197	258	259	586	393	423	393	328	319
1967	235	247	233	215	210	232	186	336	709	455	491	461	334
1968	226	260	234	206	227	226	201	265	1,315	421	357	354	356
1969	248	286	221	272	242	202	262	1,153	1,036	339	327	303	408
1970	250	301	245	241	238	195	173	785	744	409	405	326	360
1971	250	302	237	223	219	221	173	740	1,389	380	379	323	403
1972	251	301	252	236	221	247	183	1,009	688	421	360	287	372
1973	279	316	243	226	227	238	279	777	1,083	397	391	384	404
1974	261	278	211	236	224	233	202	1,089	1,224	472	461	355	438
1975	232	294	224	211	211	242	209	374	1,571	727	512	385	432
1976	241	281	212	223	233	243	199	631	441	411	420	405	329
1977	225	256	243	229	231	212	177	209	257	190	255	363	237
1978	217	194	233	207	204	259	203	249	1,084	1,002	772	395	419
1979	231	265	217	208	222	270	185	282	353	400	408	355	283
1980	214	250	210	305	235	244	257	361	540	481	381	374	321
1981	243	278	270	216	225	214	160	329	833	330	327	290	309
1982	226	255	248	209	230	304	254	665	1,097	566	409	445	409
1983	296	374	252	237	340	1,385	298	562	1,480	606	447	520	567
1984	268	259	224	214	365	557	921	923	1,198	638	416	469	537
1985	316	268	259	243	238	305	724	1,223	558	476	479	415	460
1986	288	326	230	213	378	1,283	575	1,084	1,533	660	338	350	606
1987	329	248	227	255	235	312	514	792	296	426	597	520	397
1988	215	259	242	225	237	243	202	296	410	188	330	243	257
1989	237	205	222	216	234	272	174	416	715	516	388	294	325
1990	210	341	183	193	188	185	164	208	429	185	226	215	227
1991	255	198	208	196	194	191	157	169	456	458	338	240	255
1992	215	237	215	203	215	177	176	450	329	382	397	205	267
1993	219	203	206	202	244	276	189	172	574	490	324	205	276
1994	210	248	208	227	205	199	162	198	437	388	334	218	253
1995	205	229	207	206	206	199	150	212	398	1,275	458	191	330
1996	242	280	236	228	226	261	201	664	1,233	370	402	362	392
1997	228	266	246	231	200	233	694	1,126	1,112	563	390	376	473
1998	215	274	192	230	193	240	265	985	1,093	540	383	431	421
1999	341	274	215	220	239	218	484	939	1,050	512	404	404	442
Average	242	268	228	224	232	281	270	557	804	513	427	356	367
Maximum	341	374	270	305	378	1,385	921	1,364	1,571	1,275	820	520	606
Minimum	205	194	183	193	185	172	150	169	219	185	226	191	227

P-4b
Bonneville Unit Operations (acre-feet)
Provo River from Snake Creek to Deer Creek Reservoir
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,960	3,284	4,707	5,402	4,880	5,380	2,205	2,345	3,445	8,645	10,938	6,439	60,630
1951	4,559	2,651	2,721	5,873	5,231	3,570	2,256	2,280	4,679	10,585	10,232	6,704	61,342
1952	3,976	3,092	3,074	4,334	3,030	3,570	429	2,192	3,356	7,233	8,645	5,998	48,929
1953	4,559	3,180	5,314	6,171	5,603	7,513	6,883	5,452	3,322	10,555	11,797	7,221	77,570
1954	4,761	5,176	5,398	7,162	6,025	4,891	5,896	7,524	7,906	13,447	16,083	10,061	94,330
1955	5,949	5,195	5,513	7,936	6,957	7,457	6,863	7,983	7,245	16,589	15,369	11,199	104,255
1956	4,940	3,621	5,419	6,466	6,347	5,547	5,381	4,852	6,534	14,082	13,233	10,935	87,356
1957	4,675	3,886	5,075	6,778	6,057	6,596	4,794	5,204	4,499	9,791	11,114	6,792	75,261
1958	4,912	4,868	3,927	6,799	4,915	5,308	2,991	3,352	6,379	12,148	12,426	7,321	75,346
1959	5,353	5,115	5,078	7,616	6,476	7,127	6,849	9,347	7,939	16,936	15,525	8,529	101,891
1960	5,088	3,621	6,815	7,616	6,472	6,015	3,528	7,057	7,305	16,880	21,387	15,558	107,343
1961	3,942	7,126	7,137	7,608	6,845	7,606	7,438	10,383	6,542	18,101	17,413	7,762	107,905
1962	6,059	5,801	6,425	7,613	6,351	7,353	3,412	4,852	6,328	9,218	11,586	9,978	84,975
1963	4,587	3,886	5,689	7,131	6,145	6,882	7,438	5,546	7,240	13,398	14,082	8,292	90,316
1964	4,763	3,621	6,107	6,875	6,195	6,648	7,305	3,470	5,294	9,304	11,068	9,624	80,275
1965	5,000	3,665	4,077	4,577	4,167	4,750	3,632	4,010	5,454	7,298	7,946	4,732	59,308
1966	3,324	4,343	2,810	5,070	4,391	3,394	2,887	4,487	7,360	14,810	13,259	7,694	73,828
1967	5,000	3,976	4,871	6,426	5,881	5,796	6,704	5,734	5,204	9,615	11,026	6,263	76,496
1968	4,471	4,605	3,626	6,257	5,558	4,099	4,667	5,116	3,621	10,585	10,232	6,175	69,013
1969	4,295	3,923	3,999	5,709	4,666	4,877	1,613	2,280	4,944	9,615	8,215	5,911	60,047
1970	3,927	4,485	4,978	5,152	4,741	4,684	7,358	5,734	4,402	10,938	11,026	5,293	72,717
1971	3,854	1,875	2,335	3,041	2,451	2,257	2,861	3,427	3,709	9,438	10,232	5,469	50,950
1972	3,589	2,334	2,335	3,129	2,350	937	1,046	2,247	4,062	11,379	10,762	5,226	49,396
1973	3,589	2,474	2,953	4,364	4,127	2,953	3,730	3,074	4,415	9,703	10,412	5,645	57,438
1974	4,383	4,837	4,199	6,565	5,705	6,777	6,474	4,302	4,688	12,935	14,753	5,069	83,688
1975	3,448	5,849	5,176	6,472	5,295	5,791	6,890	8,197	1,163	9,130	17,258	7,655	82,325
1976	3,845	5,301	3,923	5,457	5,735	5,632	5,543	2,676	5,729	14,220	14,263	12,030	84,354
1977	3,699	5,637	5,660	7,240	6,449	5,690	4,666	6,841	8,805	8,375	8,032	12,544	83,638
1978	4,258	5,072	7,085	7,506	6,192	6,275	7,349	8,619	7,043	16,725	16,391	10,074	102,589
1979	1,488	4,409	5,646	6,754	5,361	4,618	4,657	3,640	5,857	14,668	15,628	8,902	81,627
1980	2,961	5,161	5,419	6,565	5,482	5,448	4,814	2,700	3,351	9,931	12,970	7,078	71,879
1981	3,134	5,255	5,419	6,280	5,768	6,024	6,962	5,799	6,033	10,190	11,497	6,819	79,179
1982	2,931	3,104	5,326	6,110	5,227	5,227	5,340	4,572	4,650	9,580	12,086	6,237	70,390
1983	3,164	5,466	5,293	6,772	4,764	3,744	651	3,259	4,445	12,154	13,886	7,091	70,689
1984	2,931	5,166	2,691	5,088	3,034	3,713	1,523	4,502	4,434	10,817	11,535	9,479	64,913
1985	2,770	5,165	5,806	6,956	4,840	3,716	1,697	5,288	5,915	16,061	15,118	8,196	81,530
1986	2,931	3,024	5,424	6,879	6,916	4,667	2,822	6,249	6,034	14,531	8,470	7,438	75,385
1987	2,931	5,664	5,441	7,016	4,606	3,975	4,294	2,787	5,774	11,136	18,416	12,789	84,829
1988	2,441	5,098	5,379	7,135	5,371	5,250	7,230	9,303	3,826	7,729	12,743	6,215	77,722
1989	2,459	5,403	5,717	7,551	7,038	6,811	6,055	7,468	10,697	15,231	15,579	8,280	98,288
1990	4,391	5,277	5,747	6,535	5,173	5,626	3,484	5,429	5,247	8,272	8,439	7,250	70,869
1991	4,026	5,339	5,559	7,692	6,645	5,832	4,887	3,929	6,149	12,889	13,726	7,588	84,261
1992	3,689	6,388	6,537	7,382	6,197	7,706	7,869	12,130	5,974	16,920	15,535	7,463	103,790
1993	4,984	5,594	5,743	7,100	5,962	7,046	4,211	3,861	5,163	8,593	10,958	8,011	77,226
1994	3,139	5,348	5,448	7,012	5,574	5,316	7,481	5,236	5,835	11,979	12,827	6,269	81,464
1995	3,063	4,791	4,783	4,990	4,181	3,284	2,997	4,197	5,355	7,830	7,582	4,841	57,895
1996	2,687	5,479	5,611	6,730	5,470	3,975	4,986	4,313	3,091	10,796	10,891	6,040	70,069
1997	2,441	3,804	5,653	6,126	6,261	7,686	6,977	4,944	5,741	14,583	15,372	8,538	88,127
1998	3,264	5,361	5,405	6,703	6,142	5,419	1,438	4,572	4,650	9,612	10,193	7,164	69,924
1999	3,131	5,371	5,416	6,703	4,344	3,738	1,415	4,513	4,585	10,523	9,742	6,895	66,378
Average	3,854	4,563	4,998	6,369	5,392	5,284	4,618	5,145	5,428	11,714	12,558	7,876	77,799
Maximum	6,059	7,126	7,137	7,936	7,038	7,706	7,869	12,130	10,697	18,101	21,387	15,558	107,905
Minimum	1,488	1,875	2,335	3,041	2,350	937	429	2,192	1,163	7,233	7,582	4,732	48,929

P-4b
Bonneville Unit Operations (cfs)
Provo River from Snake Creek to Deer Creek Reservoir
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	48	55	77	88	88	88	37	38	58	141	178	108	84
1951	74	45	44	96	94	58	38	37	79	172	166	113	85
1952	65	52	50	70	53	58	7	36	56	118	141	101	67
1953	74	53	86	100	101	122	116	89	56	172	192	121	107
1954	77	87	88	116	108	80	99	122	133	219	262	169	130
1955	97	87	90	129	125	121	115	130	122	270	250	188	144
1956	80	61	88	105	110	90	90	79	110	229	215	184	120
1957	76	65	83	110	109	107	81	85	76	159	181	114	104
1958	80	82	64	111	89	86	50	55	107	198	202	123	104
1959	87	86	83	124	117	116	115	152	133	275	252	143	141
1960	83	61	111	124	113	98	59	115	123	275	348	261	148
1961	64	120	116	124	123	124	125	169	110	294	283	130	149
1962	99	97	104	124	114	120	57	79	106	150	188	168	117
1963	75	65	93	116	111	112	125	90	122	218	229	139	125
1964	77	61	99	112	108	108	123	56	89	151	180	162	111
1965	81	62	66	74	75	77	61	65	92	119	129	80	82
1966	54	73	46	82	79	55	49	73	124	241	216	129	102
1967	81	67	79	105	106	94	113	93	87	156	179	105	106
1968	73	77	59	102	97	67	78	83	61	172	166	104	95
1969	70	66	65	93	84	79	27	37	83	156	134	99	83
1970	64	75	81	84	85	76	124	93	74	178	179	89	100
1971	63	32	38	49	44	37	48	56	62	154	166	92	70
1972	58	39	38	51	41	15	18	37	68	185	175	88	68
1973	58	42	48	71	74	48	63	50	74	158	169	95	79
1974	71	81	68	107	103	110	109	70	79	210	240	136	116
1975	56	98	84	105	95	94	116	133	20	148	281	129	114
1976	63	89	64	89	100	92	93	44	96	231	232	202	116
1977	60	95	92	118	116	93	78	111	148	136	131	211	116
1978	69	85	115	122	112	102	124	140	118	272	267	169	142
1979	24	74	92	110	97	75	78	59	98	239	254	150	113
1980	48	87	88	107	95	89	81	44	56	162	211	119	99
1981	51	88	88	102	104	98	117	94	101	166	187	115	109
1982	48	52	87	99	94	85	90	74	78	156	197	105	97
1983	51	92	86	110	86	61	11	53	75	198	226	119	98
1984	48	87	44	83	53	60	26	73	75	176	188	159	89
1985	45	87	94	113	87	60	29	86	99	261	246	138	113
1986	48	51	88	112	125	76	47	102	101	236	138	125	104
1987	48	95	88	114	83	65	72	45	97	181	300	215	117
1988	40	86	87	116	93	85	122	151	64	126	207	104	107
1989	40	91	93	123	127	111	102	121	180	248	253	139	136
1990	71	89	93	106	93	91	59	88	88	135	137	122	98
1991	65	90	90	125	120	95	82	64	103	210	223	128	116
1992	60	107	106	120	108	125	132	197	100	275	253	125	143
1993	81	94	93	115	107	115	71	63	87	140	178	135	107
1994	51	90	89	114	100	86	126	85	98	195	209	105	113
1995	50	81	78	81	75	53	50	68	90	127	123	81	80
1996	44	92	91	109	95	65	84	70	52	176	177	102	97
1997	40	64	92	100	113	125	117	80	96	237	250	143	122
1998	53	90	88	109	111	88	24	74	78	156	166	120	97
1999	51	90	88	109	78	61	24	73	77	171	158	116	92
Average	63	77	81	104	96	86	78	84	91	191	204	132	107
Maximum	99	120	116	129	127	125	132	197	180	294	348	261	149
Minimum	24	32	38	49	41	15	7	36	20	118	123	80	67

P-4c
Bonneville Unit Operations (acre-feet)
Provo River from Snake Creek to Deer Creek Reservoir
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,021	5,561	2,400	1,959	1,758	2,181	3,183	35,377	42,573	7,592	2,724	3,333	110,662
1951	1,218	4,266	6,161	2,842	2,863	5,467	4,477	50,440	36,281	4,897	2,219	5,947	127,077
1952	1,280	2,186	3,608	2,460	2,860	4,680	7,743	36,938	36,014	1,613	76	2,651	102,110
1953	1,222	3,177	2,316	1,515	1,340	173	801	8,434	51,656	6,633	2,236	3,010	82,514
1954	1,580	2,231	1,845	819	1,135	2,804	4,943	6,826	0	0	2,308	2,225	26,716
1955	912	1,863	1,518	64	185	343	488	3,338	13,279	2,585	2,003	1,071	27,648
1956	813	3,008	1,543	762	527	1,336	2,046	8,807	34,330	27,213	13,257	1,428	95,070
1957	950	2,701	1,703	615	711	634	2,244	2,206	51,694	15,362	5,613	4,241	88,674
1958	985	3,375	3,191	562	1,845	1,506	3,996	34,905	21,509	6,463	3,788	2,315	84,440
1959	905	1,922	1,743	44	291	349	2,465	4,117	17,983	1,266	1,994	1,218	34,298
1960	1,235	3,951	544	44	448	1,044	3,910	4,074	16,422	9,041	2,246	1,067	44,025
1961	2,590	1,064	516	48	61	49	0	0	10,043	732	141	2,175	17,420
1962	1,086	1,800	803	46	369	208	2,664	5,505	21,204	34,333	23,245	9,220	100,482
1963	1,479	2,424	1,248	465	797	502	0	10,154	24,237	23,588	7,318	1,564	73,774
1964	1,336	2,952	986	506	621	649	0	4,638	18,043	35,473	23,157	8,525	96,886
1965	1,264	3,774	2,732	2,329	1,947	2,062	2,329	7,447	36,395	21,213	3,427	10,366	95,285
1966	1,706	3,589	5,179	2,806	2,574	5,602	5,669	18,253	5,631	4,773	3,786	2,669	62,236
1967	1,360	3,462	1,788	931	749	1,380	622	5,029	27,518	2,905	1,344	3,256	50,343
1968	1,344	3,515	3,860	1,456	1,694	3,501	2,836	5,530	58,785	3,660	785	4,231	91,198
1969	1,284	4,214	4,142	2,804	3,001	2,846	4,405	64,213	22,797	0	0	1,536	111,243
1970	1,487	4,080	3,090	2,660	2,301	3,002	0	31,033	33,255	4,678	1,540	3,038	90,163
1971	1,532	6,298	4,660	5,016	5,279	4,933	3,452	39,430	43,196	3,889	1,166	2,251	121,102
1972	1,914	6,240	5,199	4,313	5,497	6,941	6,493	44,895	29,574	1,421	517	337	113,341
1973	1,827	6,264	4,479	3,897	3,628	5,474	3,619	36,327	31,377	3,357	0	5,166	105,414
1974	1,121	3,482	2,286	690	690	645	875	58,703	34,742	3,277	1,619	1,851	109,982
1975	1,855	1,852	2,549	1,214	1,605	1,852	459	8,066	60,897	28,545	1,671	4,359	114,924
1976	1,405	3,332	2,912	1,817	1,059	1,137	1,281	36,088	12,318	3,084	3,234	1,969	69,636
1977	1,801	1,546	1,472	720	741	1,435	2,732	1,456	862	0	0	0	12,766
1978	2,160	1,442	366	110	457	1,411	0	206	41,367	28,876	16,289	2,461	95,144
1979	2,994	2,315	2,040	932	1,329	2,963	2,139	8,750	5,029	430	1,416	1,936	32,274
1980	1,861	1,342	1,315	1,121	1,251	2,454	2,625	7,564	20,159	4,019	1,891	4,042	49,644
1981	2,140	3,701	2,440	1,219	1,175	1,224	396	12,167	26,765	5,113	2,449	2,471	61,261
1982	1,233	3,106	801	535	715	2,119	927	26,586	33,012	13,870	483	3,065	86,453
1983	1,397	877	2,300	915	5,914	25,824	2,436	17,162	43,121	16,596	45	3,956	120,542
1984	1,550	993	3,135	2,598	8,227	10,673	17,136	33,850	39,881	13,295	0	2,370	133,708
1985	1,330	884	853	730	2,102	3,447	17,713	34,231	20,691	27	1,119	1,866	84,995
1986	1,413	5,115	1,039	807	26	30,883	13,756	30,829	48,278	12,637	0	0	144,784
1987	2,601	1,712	1,633	1,453	2,736	5,338	19,437	42,727	3,216	4,110	5,693	5,965	96,622
1988	2,464	1,496	1,441	344	1,137	1,522	128	4,335	12,466	0	0	817	26,150
1989	4,038	1,461	1,422	325	161	1,148	0	10,927	21,124	10,541	810	684	52,641
1990	1,704	1,565	1,452	1,021	1,285	1,522	3,212	2,184	16,479	0	0	0	30,424
1991	2,398	1,564	1,478	187	350	1,301	2,278	1,291	16,723	9,351	1,021	1,647	39,588
1992	2,076	1,249	1,132	532	1,180	221	0	10,374	9,935	0	1,080	1,118	28,897
1993	687	416	420	343	319	447	825	682	13,749	8,195	3,712	0	29,793
1994	1,952	1,194	1,219	717	1,411	2,390	0	1,383	6,758	8,335	2,840	0	28,198
1995	2,988	2,647	2,903	2,566	2,761	4,402	4,441	3,722	12,643	28,958	0	1,634	69,662
1996	2,487	1,566	1,586	1,290	3,019	5,354	2,693	34,029	35,983	2,791	8,015	6,643	105,457
1997	1,432	2,648	1,941	1,600	597	0	14,141	33,192	33,259	2,216	67	2,111	93,204
1998	1,034	863	826	479	261	842	5,234	26,343	30,224	13,286	7	1,717	81,116
1999	1,657	1,120	1,071	776	2,599	4,729	10,779	35,962	34,422	6,380	3,312	4,277	107,084
Average	1,662	2,668	2,146	1,280	1,712	3,459	3,881	19,015	26,358	8,932	3,233	2,796	77,141
Maximum	4,038	6,298	6,161	5,016	8,227	30,883	19,437	64,213	60,897	35,473	23,245	10,366	144,784
Minimum	687	416	366	44	26	0	0	0	0	0	0	0	12,766

P-4c
Bonneville Unit Operations (cfs)
Provo River from Snake Creek to Deer Creek Reservoir
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	33	93	39	32	32	35	53	575	715	123	44	56	153
1951	20	72	100	46	52	89	75	820	610	80	36	100	176
1952	33	93	39	32	31	35	53	575	715	123	44	56	141
1953	20	72	100	46	52	89	75	820	610	80	36	100	114
1954	21	37	59	40	52	76	130	601	605	26	1	45	37
1955	20	53	38	25	24	3	13	137	868	108	36	51	38
1956	26	37	30	13	20	46	83	111	0	0	38	37	131
1957	15	31	25	1	3	6	8	54	223	42	33	18	122
1958	13	51	25	12	9	22	34	143	577	443	216	24	117
1959	15	45	28	10	13	10	38	36	869	250	91	71	47
1960	16	57	52	9	32	24	67	568	361	105	62	39	61
1961	15	32	28	1	5	6	41	67	302	21	32	20	24
1962	20	66	9	1	8	17	66	66	276	147	37	18	139
1963	42	18	8	1	1	1	0	0	169	12	2	37	102
1964	18	30	13	1	6	3	45	90	356	558	378	155	133
1965	24	41	20	8	14	8	0	165	407	384	119	26	132
1966	22	50	16	8	11	11	0	75	303	577	377	143	86
1967	21	63	44	38	35	34	39	121	612	345	56	174	70
1968	28	60	84	46	45	91	95	297	95	78	62	45	126
1969	22	58	29	15	13	22	10	82	462	47	22	55	154
1970	22	59	63	24	31	57	48	90	988	60	13	71	125
1971	21	71	67	46	54	46	74	1,044	383	0	0	26	167
1972	24	69	50	43	40	49	0	505	559	76	25	51	156
1973	25	106	76	82	95	80	58	641	726	63	19	38	146
1974	31	105	85	70	99	113	109	730	497	23	8	6	152
1975	30	105	73	63	65	89	61	591	527	55	0	87	159
1976	18	59	37	11	12	10	15	955	584	53	26	31	96
1977	30	31	41	20	29	30	8	131	1,023	464	27	73	18
1978	23	56	47	30	19	18	22	587	207	50	53	33	131
1979	29	26	24	12	13	23	46	24	14	0	0	0	45
1980	35	24	6	2	8	23	0	3	695	470	265	41	68
1981	49	39	33	15	24	48	36	142	85	7	23	33	85
1982	30	23	21	18	23	40	44	123	339	65	31	68	119
1983	35	62	40	20	21	20	7	198	450	83	40	42	167
1984	20	52	13	9	12	34	16	432	555	226	8	52	184
1985	23	15	37	15	106	420	41	279	725	270	1	66	117
1986	25	17	51	42	148	174	288	551	670	216	0	40	200
1987	22	15	14	12	38	56	298	557	348	0	18	31	133
1988	23	86	17	13	0	502	231	501	811	206	0	0	36
1989	42	29	27	24	49	87	327	695	54	67	93	100	73
1990	40	25	23	6	20	25	2	71	210	0	0	14	42
1991	66	25	23	5	3	19	0	178	355	171	13	11	55
1992	28	26	24	17	22	25	54	36	277	0	0	0	40
1993	39	26	24	3	6	21	38	21	281	152	17	28	41
1994	34	21	18	9	21	4	0	169	167	0	18	19	39
1995	11	7	7	6	6	7	14	11	231	133	60	0	96
1996	32	20	20	12	25	39	0	22	114	136	46	0	145
1997	49	44	47	42	50	72	75	61	212	471	0	27	129
1998	40	26	26	21	54	87	45	553	605	45	130	112	112
1999	23	45	32	26	11	0	238	540	559	36	1	35	148
Average	27	47	37	22	31	57	62	317	448	143	53	48	106
Maximum	66	106	100	82	148	502	327	1,044	1,023	577	378	174	200
Minimum	11	7	6	1	0	0	0	0	0	0	0	0	18

P-4d
Bonneville Unit Operations (acre-feet)
Provo River from Snake Creek to Deer Creek Reservoir
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	9,649	7,350	5,716	8,581	6,676	7,173	13,552	19,108	16,964	7,930	10,219	10,203	123,123
1951	10,558	13,128	7,232	5,947	6,190	6,183	9,076	16,308	24,354	10,398	11,340	13,654	134,366
1952	11,558	15,290	8,965	9,208	7,981	8,735	31,655	44,747	30,216	9,544	10,798	12,986	201,682
1953	11,202	12,623	7,712	9,133	6,716	5,649	6,325	6,723	21,580	8,101	10,985	10,222	116,970
1954	8,123	7,190	6,341	6,860	6,546	6,566	3,649	6,381	5,105	9,807	8,615	8,526	83,708
1955	7,762	7,884	7,208	5,969	4,662	6,782	3,749	5,773	8,094	6,757	7,880	8,776	81,297
1956	8,229	8,732	8,962	7,207	5,452	5,727	3,580	4,770	8,324	12,232	15,210	11,281	99,705
1957	6,950	9,044	7,729	7,132	7,179	5,135	3,519	7,943	17,253	20,116	13,342	9,439	114,780
1958	7,915	7,823	7,258	4,841	6,334	7,363	7,159	3,783	6,745	8,849	8,816	10,087	86,973
1959	7,792	8,063	6,795	5,794	5,635	5,571	2,414	6,228	5,776	7,570	7,096	8,358	77,093
1960	7,818	7,791	4,990	5,536	5,003	6,588	2,313	8,515	8,561	10,235	4,287	6,330	77,966
1961	6,551	6,085	5,540	4,782	4,528	4,919	2,438	5,531	5,958	5,397	6,492	6,115	64,337
1962	7,207	6,902	4,970	4,554	7,449	4,887	7,473	6,462	6,429	16,326	15,568	11,600	99,830
1963	6,772	6,855	5,437	4,317	3,952	4,022	3,955	5,330	7,454	11,318	7,907	7,563	74,882
1964	6,934	8,907	6,531	4,654	3,826	3,475	5,820	2,877	5,757	16,243	16,182	12,192	93,398
1965	6,980	6,338	8,756	5,555	6,375	3,761	6,041	8,087	19,840	11,213	9,899	11,978	104,824
1966	10,205	8,228	6,898	5,499	3,986	6,872	6,861	13,276	10,369	6,432	7,092	9,183	94,902
1967	8,086	7,232	7,668	5,859	5,052	7,071	3,746	9,867	9,460	15,456	17,828	17,938	115,263
1968	8,102	7,341	6,903	4,938	5,791	6,318	4,473	5,618	15,855	11,651	10,941	10,629	98,558
1969	9,662	8,892	5,456	8,194	5,773	4,709	9,557	4,419	33,920	11,201	11,920	10,596	124,299
1970	9,986	9,371	7,000	7,030	6,153	4,288	2,923	11,469	6,593	9,538	12,332	11,078	97,761
1971	9,960	9,781	7,597	5,639	4,440	6,375	4,009	2,671	35,758	10,022	11,935	11,522	119,708
1972	9,948	9,316	7,950	7,079	4,839	7,297	3,344	14,923	7,275	13,112	10,851	11,492	107,425
1973	11,759	10,087	7,505	5,646	4,848	6,186	9,232	8,382	28,621	11,346	13,637	12,046	129,295
1974	10,522	8,240	6,504	7,245	6,042	6,914	4,700	3,939	33,373	12,827	11,967	11,207	123,479
1975	8,980	9,768	6,060	5,299	4,810	7,231	5,066	6,703	31,411	7,007	12,558	10,898	115,791
1976	9,571	8,084	6,183	6,427	6,619	8,167	4,989	47	8,210	7,952	8,305	10,085	84,638
1977	8,361	8,058	7,812	6,108	5,633	5,920	3,113	4,546	5,600	3,329	7,634	9,060	75,173
1978	6,926	5,021	6,878	5,085	4,705	8,231	4,747	6,475	16,069	16,006	14,809	10,962	105,913
1979	9,744	9,050	5,659	5,105	5,617	9,051	4,203	4,937	10,110	9,493	8,036	10,271	91,276
1980	8,357	8,347	6,164	11,096	6,806	7,086	7,851	11,952	8,622	15,638	8,558	11,163	111,640
1981	9,663	7,574	8,726	5,799	5,538	5,930	2,166	2,259	16,739	5,011	6,185	7,992	83,580
1982	9,746	8,941	9,097	6,201	6,828	11,351	8,864	9,749	27,614	11,325	12,567	17,156	139,440
1983	13,643	15,889	7,901	6,856	8,227	55,603	14,664	14,107	40,521	8,521	13,555	19,874	219,361
1984	12,000	9,249	7,929	5,483	9,741	19,881	36,152	18,389	26,939	15,098	14,054	16,071	190,986
1985	15,333	9,878	9,257	7,280	6,280	11,580	23,694	35,670	6,597	13,170	13,211	14,601	166,552
1986	13,370	11,235	7,703	5,415	14,068	43,348	17,613	29,551	36,928	13,438	12,315	13,407	218,391
1987	14,666	7,367	6,894	7,193	5,682	9,886	6,830	3,186	8,625	10,959	12,576	12,205	106,069
1988	8,293	8,841	8,075	6,330	7,130	8,144	4,664	4,557	8,087	3,825	7,562	7,442	82,949
1989	8,099	5,319	6,526	5,383	5,814	8,773	4,297	7,184	10,699	5,965	7,440	8,510	84,007
1990	6,848	13,472	4,027	4,303	3,993	4,239	3,036	5,175	3,823	3,102	5,459	5,550	63,025
1991	9,252	4,875	5,734	4,168	3,786	4,591	2,189	5,175	4,250	5,906	6,009	5,040	60,974
1992	7,477	6,473	5,573	4,546	4,977	2,970	2,581	5,177	3,670	6,548	7,797	3,640	61,429
1993	7,805	6,090	6,525	4,985	7,292	9,479	6,184	6,061	15,259	13,356	5,235	4,159	92,430
1994	7,803	8,197	6,100	6,244	4,393	4,537	2,134	5,563	13,411	3,571	4,841	6,701	73,495
1995	6,584	6,211	5,022	5,105	4,503	4,542	1,515	5,136	5,686	41,634	20,557	4,884	111,379
1996	9,705	9,610	7,323	5,986	4,533	6,692	4,294	2,480	34,305	9,140	5,839	8,835	108,741
1997	10,147	9,391	7,543	6,469	4,259	6,626	20,152	31,111	27,165	17,817	8,523	11,714	160,917
1998	8,895	10,085	5,545	6,964	4,324	8,491	9,080	29,657	30,192	10,288	13,367	16,749	153,636
1999	16,154	9,813	6,759	6,026	6,340	4,950	16,633	17,280	23,455	14,584	11,764	12,844	146,603
Average	9,353	8,707	6,893	6,141	5,867	8,517	7,565	10,105	16,072	10,926	10,438	10,496	111,080
Maximum	16,154	15,889	9,257	11,096	14,068	55,603	36,152	44,747	40,521	41,634	20,557	19,874	219,361
Minimum	6,551	4,875	4,027	4,168	3,786	2,970	1,515	47	3,670	3,102	4,287	3,640	60,974

P-4d
Bonneville Unit Operations (cfs)
Provo River from Snake Creek to Deer Creek Reservoir
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	157	124	93	140	120	117	228	311	285	129	166	171	170
1951	172	221	118	97	111	101	153	265	409	169	184	229	186
1952	188	257	146	150	139	142	532	728	508	155	176	218	278
1953	182	212	125	149	121	92	106	109	363	132	179	172	162
1954	132	121	103	112	118	107	61	104	86	159	140	143	116
1955	126	133	117	97	84	110	63	94	136	110	128	147	112
1956	134	147	146	117	95	93	60	78	140	199	247	190	137
1957	113	152	126	116	129	84	59	129	290	327	217	159	159
1958	129	131	118	79	114	120	120	62	113	144	143	170	120
1959	127	136	111	94	101	91	41	101	97	123	115	140	106
1960	127	131	81	90	87	107	39	138	144	166	70	106	107
1961	107	102	90	78	82	80	41	90	100	88	106	103	89
1962	117	116	81	74	134	79	126	105	108	266	253	195	138
1963	110	115	88	70	71	65	66	87	125	184	129	127	103
1964	113	150	106	76	67	57	98	47	97	264	263	205	129
1965	114	107	142	90	115	61	102	132	333	182	161	201	145
1966	166	138	112	89	72	112	115	216	174	105	115	154	131
1967	132	122	125	95	91	115	63	160	159	251	290	301	159
1968	132	123	112	80	101	103	75	91	266	189	178	179	136
1969	157	149	89	133	104	77	161	72	570	182	194	178	172
1970	162	157	114	114	111	70	49	187	111	155	201	186	135
1971	162	164	124	92	80	104	67	43	601	163	194	194	165
1972	162	157	129	115	84	119	56	243	122	213	176	193	148
1973	191	170	122	92	87	101	155	136	481	185	222	202	179
1974	171	138	106	118	109	112	79	64	561	209	195	188	171
1975	146	164	99	86	87	118	85	109	528	114	204	183	160
1976	156	136	101	105	115	133	84	1	138	129	135	169	117
1977	136	135	127	99	101	96	52	74	94	54	124	152	104
1978	113	84	112	83	85	134	80	105	270	260	241	184	146
1979	158	152	92	83	101	147	71	80	170	154	131	173	126
1980	136	140	100	180	118	115	132	194	145	254	139	188	154
1981	157	127	142	94	100	96	36	37	281	81	101	134	115
1982	159	150	148	101	123	185	149	159	464	184	204	288	193
1983	222	267	129	112	148	904	246	229	681	139	220	334	303
1984	195	155	129	89	169	323	608	299	453	246	229	270	263
1985	249	166	151	118	113	188	398	580	111	214	215	245	230
1986	217	189	125	88	253	705	296	481	621	219	200	225	302
1987	239	124	112	117	102	161	115	52	145	178	205	205	147
1988	135	149	131	103	124	132	78	74	136	62	123	125	114
1989	132	89	106	88	105	143	72	117	180	97	121	143	116
1990	111	226	65	70	72	69	51	84	64	50	89	93	87
1991	150	82	93	68	68	75	37	84	71	96	98	85	84
1992	122	109	91	74	87	48	43	84	62	106	127	61	85
1993	127	102	106	81	131	154	104	99	256	217	85	70	128
1994	127	138	99	102	79	74	36	90	225	58	79	113	102
1995	107	104	82	83	81	74	25	84	96	677	334	82	154
1996	158	162	119	97	79	109	72	40	577	149	95	148	150
1997	165	158	123	105	77	108	339	506	457	290	139	197	222
1998	145	169	90	113	78	138	153	482	507	167	217	281	212
1999	263	165	110	98	114	81	280	281	394	237	191	216	203
Average	152	146	112	100	105	139	127	164	270	178	170	176	153
Maximum	263	267	151	180	253	904	608	728	681	677	334	334	303
Minimum	107	82	65	68	67	48	25	1	62	50	70	61	84

P-5a
Bonneville Unit Operations (acre-feet)
Provo River from Outlet of Deer Creek to North Fork
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	9,393	6,971	8,367	6,149	5,554	6,149	17,970	60,605	71,445	39,294	28,884	22,802	283,581
1951	13,595	6,978	6,250	6,149	5,554	6,149	18,425	74,214	75,716	40,268	28,805	28,360	310,462
1952	7,922	7,847	6,927	6,149	5,752	20,323	44,449	94,428	82,308	36,219	26,604	24,953	363,881
1953	10,337	6,399	6,149	6,149	5,554	8,677	14,475	44,959	75,807	35,201	33,413	25,926	273,046
1954	14,063	6,200	6,149	6,149	5,554	6,149	20,087	38,253	25,719	38,047	35,567	28,667	230,602
1955	15,707	6,200	6,149	6,149	5,554	6,149	11,387	36,157	39,710	41,163	35,850	29,166	239,339
1956	11,605	5,950	6,149	6,149	5,752	6,149	16,446	36,048	40,715	37,007	33,078	28,904	233,950
1957	11,595	6,532	6,149	6,149	5,554	6,149	9,479	27,391	54,667	38,104	32,660	27,010	231,438
1958	12,755	6,200	6,149	6,149	5,554	6,149	9,609	46,169	45,576	35,784	32,815	25,846	238,753
1959	12,497	6,200	6,149	6,149	5,554	6,149	18,083	38,063	41,257	35,803	33,487	27,608	236,996
1960	12,954	5,950	6,149	6,149	5,752	6,149	15,275	35,510	39,125	47,260	37,128	31,599	248,999
1961	11,417	6,130	6,149	6,200	5,554	7,523	17,230	30,995	19,426	22,856	22,956	15,920	172,355
1962	12,315	6,665	6,518	6,297	5,554	6,201	6,200	34,097	36,235	34,505	32,085	27,508	214,179
1963	12,841	7,334	6,149	6,149	5,554	6,149	14,228	36,662	38,978	38,338	32,689	26,950	232,020
1964	16,916	9,651	6,200	6,149	5,752	6,149	12,211	23,471	33,596	36,969	34,118	29,727	220,908
1965	14,489	7,042	7,676	6,149	5,554	6,149	9,266	32,635	70,601	35,620	25,951	21,689	242,819
1966	9,329	5,950	12,050	10,889	9,393	16,165	18,391	55,947	34,409	34,775	31,985	26,357	265,640
1967	12,409	6,915	7,118	6,149	5,554	6,149	14,802	33,562	51,578	34,549	32,499	27,142	238,424
1968	12,998	6,808	7,109	6,149	5,752	6,149	7,976	36,946	77,337	35,576	30,604	26,235	259,639
1969	10,401	6,712	7,119	6,149	5,554	7,206	21,536	84,928	73,798	38,435	30,570	25,139	317,547
1970	7,562	5,984	6,149	6,149	5,554	6,149	13,417	55,492	49,732	39,321	33,558	25,441	254,507
1971	8,412	6,386	6,317	6,149	5,554	6,149	14,644	55,546	85,979	33,819	30,436	24,654	284,045
1972	8,796	6,216	6,729	6,149	5,752	12,608	13,813	66,785	49,839	41,084	29,744	24,131	271,645
1973	8,784	6,428	6,549	6,149	5,554	6,149	19,439	57,654	76,237	43,596	33,165	28,597	298,302
1974	8,823	6,203	6,149	6,149	5,554	6,149	13,330	72,572	85,250	47,601	37,588	29,675	325,041
1975	11,395	6,388	6,149	6,149	5,554	6,149	8,127	32,630	97,984	51,763	41,671	31,993	305,955
1976	9,730	5,950	6,149	6,149	5,752	6,149	12,447	48,257	43,172	34,459	33,938	29,900	242,050
1977	8,574	6,028	6,149	6,149	5,554	6,149	12,180	24,516	24,347	33,317	35,828	28,971	197,760
1978	10,296	5,950	6,149	6,123	5,527	6,692	8,231	34,381	31,329	40,848	36,562	30,680	222,769
1979	8,624	5,950	6,149	6,149	5,554	6,149	15,895	33,128	38,870	37,504	37,514	28,350	229,834
1980	10,115	5,950	6,149	6,149	5,752	6,149	8,966	46,403	51,477	37,806	37,168	30,511	252,593
1981	7,278	5,950	6,149	6,149	5,554	6,149	12,962	31,418	39,779	33,465	33,395	27,527	215,774
1982	6,998	5,977	6,149	6,149	5,554	6,149	10,850	69,805	68,048	53,815	37,863	26,128	303,483
1983	7,150	6,037	6,149	6,149	17,148	85,366	23,205	61,471	100,042	53,441	34,364	30,701	431,222
1984	7,931	5,950	6,149	11,093	17,122	30,959	59,979	86,906	77,964	55,194	36,717	31,817	427,780
1985	8,256	5,950	6,149	6,149	9,435	16,374	51,698	79,742	44,862	41,244	36,838	27,764	334,462
1986	7,561	5,966	6,149	6,149	10,906	93,204	45,978	82,548	105,033	61,808	35,629	28,811	489,742
1987	7,182	6,267	6,149	6,149	17,267	14,559	30,104	57,197	32,267	37,765	43,706	33,506	292,119
1988	8,060	5,950	6,149	6,149	5,752	6,149	19,806	34,775	28,762	38,139	40,155	24,785	224,631
1989	19,248	6,125	6,149	6,149	5,554	6,149	19,818	41,113	42,631	39,433	40,080	25,824	258,270
1990	11,728	5,952	6,149	6,149	5,544	6,137	6,224	38,786	38,319	37,215	28,717	25,746	216,666
1991	7,199	5,953	6,149	6,149	5,554	6,149	8,928	23,197	38,591	41,685	32,953	20,814	203,319
1992	8,038	5,952	6,149	6,200	6,200	6,200	15,299	35,412	26,890	25,449	26,726	12,345	180,860
1993	7,285	6,107	6,149	6,149	5,554	6,149	5,964	25,349	27,297	30,349	29,439	29,091	184,880
1994	6,961	5,950	6,149	6,149	5,554	6,149	14,758	33,327	33,711	35,637	34,085	20,464	208,893
1995	7,241	5,950	6,149	6,149	5,554	6,149	5,950	29,575	26,438	41,722	27,549	21,205	189,629
1996	6,868	6,018	6,149	11,755	5,752	7,560	20,027	58,636	79,735	45,168	31,744	26,313	305,725
1997	8,807	5,950	6,149	6,149	5,554	13,419	53,910	86,073	79,286	48,166	36,835	28,120	378,416
1998	8,297	5,981	6,149	6,149	5,554	6,149	11,758	77,733	75,386	45,276	29,695	25,029	303,155
1999	7,113	6,006	6,149	6,149	9,302	15,105	32,248	71,815	63,556	50,107	30,614	26,903	325,066
Average	10,117	6,321	6,449	6,459	6,639	11,421	18,150	49,066	53,816	39,840	33,320	26,666	268,263
Maximum	19,248	9,651	12,050	11,755	17,267	93,204	59,979	94,428	105,033	61,808	43,706	33,506	489,742
Minimum	6,868	5,950	6,149	6,123	5,527	6,137	5,950	23,197	19,426	22,856	22,956	12,345	172,355

P-5a
Bonneville Unit Operations (cfs)
Provo River from Outlet of Deer Creek to North Fork
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	153	117	136	100	100	100	302	986	1,201	639	470	383	392
1951	221	117	102	100	100	100	310	1,207	1,272	655	468	477	429
1952	129	132	113	100	100	331	747	1,536	1,383	589	433	419	501
1953	168	108	100	100	100	141	243	731	1,274	573	543	436	377
1954	229	104	100	100	100	100	338	622	432	619	578	482	319
1955	255	104	100	100	100	100	191	588	667	669	583	490	331
1956	189	100	100	100	100	100	276	586	684	602	538	486	322
1957	189	110	100	100	100	100	159	445	919	620	531	454	320
1958	207	104	100	100	100	100	161	751	766	582	534	434	330
1959	203	104	100	100	100	100	304	619	693	582	545	464	327
1960	211	100	100	100	100	100	257	578	658	769	604	531	343
1961	186	103	100	101	100	122	290	504	326	372	373	268	238
1962	200	112	106	102	100	101	104	555	609	561	522	462	296
1963	209	123	100	100	100	100	239	596	655	624	532	453	320
1964	275	162	101	100	100	100	205	382	565	601	555	500	304
1965	236	118	125	100	100	100	156	531	1,187	579	422	365	335
1966	152	100	196	177	169	263	309	910	578	566	520	443	367
1967	202	116	116	100	100	100	249	546	867	562	529	456	329
1968	211	114	116	100	100	100	134	601	1,300	579	498	441	358
1969	169	113	116	100	100	117	362	1,381	1,240	625	497	422	439
1970	123	101	100	100	100	100	225	903	836	640	546	428	352
1971	137	107	103	100	100	100	246	903	1,445	550	495	414	392
1972	143	104	109	100	100	205	232	1,086	838	668	484	406	374
1973	143	108	107	100	100	100	327	938	1,281	709	539	481	412
1974	143	104	100	100	100	100	224	1,180	1,433	774	611	499	449
1975	185	107	100	100	100	100	137	531	1,647	842	678	538	423
1976	158	100	100	100	100	100	209	785	726	560	552	503	333
1977	139	101	100	100	100	100	205	399	409	542	583	487	273
1978	167	100	100	100	100	109	138	559	527	664	595	516	308
1979	140	100	100	100	100	100	267	539	653	610	610	476	317
1980	165	100	100	100	100	100	151	755	865	615	605	513	348
1981	118	100	100	100	100	100	218	511	669	544	543	463	298
1982	114	100	100	100	100	100	182	1,135	1,144	875	616	439	419
1983	116	101	100	100	309	1,388	390	1,000	1,681	869	559	516	596
1984	129	100	100	180	298	504	1,008	1,413	1,310	898	597	535	589
1985	134	100	100	100	170	266	869	1,297	754	671	599	467	462
1986	123	100	100	100	196	1,516	773	1,343	1,765	1,005	579	484	676
1987	117	105	100	100	311	237	506	930	542	614	711	563	404
1988	131	100	100	100	100	100	333	566	483	620	653	417	309
1989	313	103	100	100	100	100	333	669	716	641	652	434	357
1990	191	100	100	100	100	100	105	631	644	605	467	433	299
1991	117	100	100	100	100	100	150	377	649	678	536	350	281
1992	131	100	100	101	108	101	257	576	452	414	435	207	249
1993	118	103	100	100	100	100	100	412	459	494	479	489	255
1994	113	100	100	100	100	100	248	542	567	580	554	344	289
1995	118	100	100	100	100	100	100	481	444	679	448	356	262
1996	112	101	100	191	100	123	337	954	1,340	735	516	442	421
1997	143	100	100	100	100	218	906	1,400	1,332	783	599	473	523
1998	135	101	100	100	100	100	198	1,264	1,267	736	483	421	419
1999	116	101	100	100	167	246	542	1,168	1,068	815	498	452	449
Average	165	106	105	105	119	186	305	798	904	648	542	448	370
Maximum	313	162	196	191	311	1,516	1,008	1,536	1,765	1,005	711	563	676
Minimum	112	100	100	100	100	100	100	377	326	372	373	207	238

P-5b
Bonneville Unit Operations (acre-feet)
Provo River from Outlet of Deer Creek to North Fork
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,613	3,522	4,936	4,024	3,132	4,000	9,023	4,278	6,413	11,569	13,259	9,359	78,127
1951	6,348	2,805	2,685	4,458	3,730	2,855	2,810	3,644	7,664	16,034	12,259	9,559	74,850
1952	5,687	3,305	3,185	3,213	1,235	2,047	686	3,577	6,164	13,574	11,559	8,959	63,190
1953	5,765	3,305	5,424	4,196	3,952	6,318	8,360	11,084	6,569	12,870	13,260	10,060	91,163
1954	6,542	5,326	4,644	4,684	3,967	3,114	7,675	11,052	14,243	19,438	17,338	12,938	110,960
1955	8,526	5,345	5,059	5,596	4,934	5,891	8,412	10,693	11,368	17,863	16,163	14,763	114,613
1956	7,507	3,905	5,443	4,430	4,695	4,088	7,475	7,901	10,381	16,576	15,076	14,676	102,155
1957	6,479	4,205	5,353	5,084	4,467	5,277	6,066	8,235	7,259	11,959	12,959	9,559	86,903
1958	6,748	5,325	4,051	5,207	3,372	4,017	4,766	4,479	11,840	14,459	14,159	9,959	88,382
1959	8,081	5,400	4,957	5,376	4,642	5,679	9,075	12,537	12,626	19,025	17,125	12,225	116,748
1960	7,781	3,805	5,626	5,399	4,737	4,419	5,275	9,450	12,226	19,325	23,925	19,625	121,594
1961	6,181	5,979	5,290	6,153	5,255	7,424	12,375	13,825	9,726	19,725	18,725	9,925	120,583
1962	10,018	6,409	6,451	6,229	4,800	6,081	4,436	8,066	9,252	11,747	13,747	13,047	100,281
1963	6,211	4,105	5,649	5,284	4,467	5,602	10,275	8,515	11,415	15,710	16,010	11,510	104,755
1964	7,026	3,805	5,845	4,994	4,623	5,336	9,224	6,290	9,180	11,976	13,976	13,876	96,151
1965	6,848	3,954	4,222	3,189	2,324	3,284	5,692	8,069	9,159	10,659	10,659	7,959	76,019
1966	4,572	4,795	2,485	2,847	4,493	3,744	4,975	8,502	11,935	18,231	16,031	11,131	93,741
1967	6,848	4,308	5,122	4,684	4,267	4,371	8,975	9,778	8,059	11,659	12,759	9,059	89,889
1968	6,248	5,020	3,711	4,393	3,901	2,447	5,664	11,055	6,264	12,359	11,659	8,759	81,480
1969	6,048	4,247	4,134	4,272	2,889	3,429	529	3,365	7,764	14,734	12,459	8,759	72,628
1970	5,327	4,884	4,443	3,240	3,174	3,310	9,319	6,675	7,032	16,204	13,351	8,251	85,211
1971	5,648	2,025	1,747	1,047	578	659	4,219	4,565	10,717	11,959	12,359	8,259	63,782
1972	5,448	2,545	1,847	1,147	564	0	0	3,127	7,264	16,834	12,859	9,059	60,694
1973	5,348	2,705	2,547	2,547	2,578	1,547	3,350	4,465	7,664	15,434	12,859	8,559	69,603
1974	5,837	5,261	3,978	3,978	3,564	5,001	12,365	5,939	11,856	16,379	16,837	11,831	102,826
1975	5,774	6,341	4,900	4,044	3,292	4,241	6,294	16,330	3,911	9,163	18,282	9,817	92,389
1976	6,797	5,738	3,357	3,259	4,018	4,110	9,200	7,079	11,500	15,914	15,535	14,233	100,739
1977	5,933	5,845	5,383	4,992	4,334	3,979	6,381	8,953	13,141	19,937	18,675	14,822	112,373
1978	6,654	5,265	5,346	5,624	5,089	6,692	7,287	12,762	9,607	17,484	17,105	12,172	111,087
1979	3,709	4,611	3,785	4,655	3,656	3,105	14,931	7,576	10,393	16,895	17,693	11,976	102,984
1980	5,507	5,657	5,272	4,828	3,971	4,144	6,427	5,959	5,975	12,758	14,841	9,712	85,049
1981	4,739	5,764	5,756	4,698	4,131	4,796	9,509	10,725	9,017	11,987	13,178	9,521	93,822
1982	4,509	3,593	5,651	4,505	3,602	4,183	9,879	6,296	8,201	14,426	15,042	9,913	89,799
1983	4,661	5,913	5,323	4,956	2,900	2,278	2,936	4,354	8,499	17,045	16,615	11,387	86,868
1984	5,442	5,567	2,082	2,572	915	1,885	2,028	7,748	8,102	15,473	16,516	13,448	81,778
1985	5,563	5,566	4,743	4,980	5,289	2,082	2,257	9,291	12,830	18,645	17,383	11,666	100,296
1986	5,073	3,138	5,471	5,088	6,058	3,161	3,657	9,344	9,417	19,694	15,829	10,307	96,238
1987	4,694	6,132	5,587	5,336	5,015	2,376	5,155	7,325	12,215	14,344	20,733	16,388	105,300
1988	4,093	5,587	5,711	5,377	3,845	3,822	8,875	12,910	6,677	18,963	18,290	8,843	102,994
1989	3,758	5,588	5,747	5,702	5,175	5,311	8,973	10,445	13,629	16,795	16,711	10,797	108,631
1990	5,778	5,394	5,271	5,969	3,080	5,089	1,486	11,132	9,025	13,559	16,124	13,056	94,961
1991	5,514	5,585	5,645	5,953	5,105	4,416	5,955	6,339	8,820	14,735	14,945	9,816	92,830
1992	5,978	5,168	4,718	6,052	6,071	6,020	12,377	13,238	8,944	19,422	18,979	9,636	116,600
1993	7,046	6,099	5,783	5,385	4,387	5,809	3,870	10,348	8,820	12,282	14,748	13,054	97,631
1994	4,473	5,725	5,352	5,189	3,850	3,848	10,641	8,638	10,601	15,823	16,621	11,199	101,959
1995	4,659	5,239	5,036	3,721	2,333	1,690	2,805	10,422	8,526	11,006	11,510	7,853	74,799
1996	4,232	6,019	5,974	5,015	3,877	2,376	4,200	5,591	5,682	15,549	12,491	8,638	79,642
1997	3,970	4,022	5,441	3,652	4,387	7,623	7,631	7,665	11,275	19,509	17,432	12,010	104,615
1998	5,603	5,788	5,159	4,306	4,252	3,790	4,501	7,184	8,879	14,749	11,950	10,164	86,327
1999	4,625	5,801	5,172	4,306	3,778	4,141	4,109	7,174	8,857	16,080	11,928	10,142	86,114
Average	5,809	4,829	4,730	4,517	3,855	4,018	6,448	8,280	9,332	15,371	15,210	11,045	93,443
Maximum	10,018	6,409	6,451	6,229	6,071	7,623	14,931	16,330	14,243	19,937	23,925	19,625	121,594
Minimum	3,709	2,025	1,747	1,047	564	0	0	3,127	3,911	9,163	10,659	7,853	60,694

P-5b
Bonneville Unit Operations (cfs)
Provo River from Outlet of Deer Creek to North Fork
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	75	59	80	65	56	65	152	70	108	188	216	157	108
1951	103	47	44	72	67	46	47	59	129	261	199	161	103
1952	92	56	52	52	21	33	12	58	104	221	188	151	87
1953	94	56	88	68	71	103	141	180	110	209	216	169	126
1954	106	90	76	76	71	51	129	180	239	316	282	217	153
1955	139	90	82	91	89	96	141	174	191	291	263	248	158
1956	122	66	89	72	82	66	126	128	174	270	245	247	141
1957	105	71	87	83	80	86	102	134	122	194	211	161	120
1958	110	89	66	85	61	65	80	73	199	235	230	167	122
1959	131	91	81	87	84	92	153	204	212	309	279	205	161
1960	127	64	92	88	82	72	89	154	205	314	389	330	168
1961	101	100	86	100	95	121	208	225	163	321	305	167	167
1962	163	108	105	101	86	99	75	131	155	191	224	219	139
1963	101	69	92	86	80	91	173	138	192	256	260	193	145
1964	114	64	95	81	80	87	155	102	154	195	227	233	132
1965	111	66	69	52	42	53	96	131	154	173	173	134	105
1966	74	81	40	46	81	61	84	138	201	297	261	187	129
1967	111	72	83	76	77	71	151	159	135	190	208	152	124
1968	102	84	60	71	68	40	95	180	105	201	190	147	112
1969	98	71	67	69	52	56	9	55	130	240	203	147	100
1970	87	82	72	53	57	54	157	109	118	264	217	139	118
1971	92	34	28	17	10	11	71	74	180	194	201	139	88
1972	89	43	30	19	10	0	0	51	122	274	209	152	84
1973	87	45	41	41	46	25	56	73	129	251	209	144	96
1974	95	88	65	65	64	81	208	97	199	266	274	199	142
1975	94	107	80	66	59	69	106	266	66	149	297	165	128
1976	111	96	55	53	70	67	155	115	193	259	253	239	139
1977	96	98	88	81	78	65	107	146	221	324	304	249	155
1978	108	88	87	91	92	109	122	208	161	284	278	205	153
1979	60	77	62	76	66	50	251	123	175	275	288	201	142
1980	90	95	86	79	69	67	108	97	100	207	241	163	117
1981	77	97	94	76	74	78	160	174	152	195	214	160	130
1982	73	60	92	73	65	68	166	102	138	235	245	167	124
1983	76	99	87	81	52	37	49	71	143	277	270	191	120
1984	89	94	34	42	16	31	34	126	136	252	269	226	113
1985	90	94	77	81	95	34	38	151	216	303	283	196	139
1986	83	53	89	83	109	51	61	152	158	320	257	173	133
1987	76	103	91	87	90	39	87	119	205	233	337	275	145
1988	67	94	93	87	67	62	149	210	112	308	297	149	142
1989	61	94	93	93	93	86	151	170	229	273	272	181	150
1990	94	91	86	97	55	83	25	181	152	221	262	219	131
1991	90	94	92	97	92	72	100	103	148	240	243	165	128
1992	97	87	77	98	106	98	208	215	150	316	309	162	161
1993	115	103	94	88	79	94	65	168	148	200	240	219	135
1994	73	96	87	84	69	63	179	140	178	257	270	188	141
1995	76	88	82	61	42	27	47	170	143	179	187	132	103
1996	69	101	97	82	67	39	71	91	95	253	203	145	110
1997	65	68	88	59	79	124	128	125	189	317	284	202	145
1998	91	97	84	70	77	62	76	117	149	240	194	171	119
1999	75	97	84	70	68	67	69	117	149	262	194	170	119
Average	94	81	77	73	69	65	108	135	157	250	247	186	129
Maximum	163	108	105	101	109	124	251	266	239	324	389	330	168
Minimum	60	34	28	17	10	0	0	51	66	149	173	132	84

P-5c
Bonneville Unit Operations (acre-feet)
Provo River from Outlet of Deer Creek to North Fork
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,590	5	5	1,746	1,890	1,740	872	38,481	5,841	12,358	5,629	3,607	74,766
1951	2,235	48	125	1,691	1,729	213	872	21,161	6,208	10,440	6,642	4,334	55,698
1952	2,235	48	147	838	1,598	6	6,038	8,537	10,132	9,003	5,139	3,256	46,977
1953	2,235	48	724	1,953	1,602	5	872	13,965	29,259	7,314	7,557	4,990	70,525
1954	2,235	48	1,035	1,342	1,466	1,446	2,797	4,638	4,232	7,439	7,688	5,084	39,449
1955	2,235	195	644	511	575	206	2,796	4,637	4,055	7,845	8,112	3,624	35,436
1956	0	202	705	1,606	1,012	1,989	2,796	4,636	4,223	6,950	7,165	4,709	35,993
1957	2,235	48	286	1,011	1,021	795	2,797	4,659	18,904	7,627	7,883	5,225	52,491
1958	2,235	48	181	848	1,335	2,005	2,797	28,411	9,726	7,502	7,753	5,131	67,972
1959	2,235	101	805	708	868	372	2,796	4,729	4,141	7,752	8,014	5,318	37,839
1960	2,235	203	451	671	972	1,619	2,796	4,648	4,100	8,126	8,406	5,600	39,829
1961	0	45	814	5	266	5	2,025	4,652	4,138	0	0	0	11,951
1962	0	107	6	6	642	6	872	6,537	4,161	8,001	8,275	5,506	34,120
1963	2,235	48	424	787	949	442	2,796	4,689	4,058	7,658	7,916	5,248	37,251
1964	2,235	99	6	1,118	1,119	786	2,796	4,613	4,170	7,783	8,047	5,342	38,115
1965	2,235	48	25	1,650	2,301	1,488	2,796	4,657	39,301	8,202	5,238	3,326	71,267
1966	2,235	94	0	65	126	6	2,796	17,051	4,054	6,909	7,132	4,686	45,155
1967	2,235	154	6	1,338	1,201	1,778	2,796	4,648	23,280	7,159	7,393	4,873	56,861
1968	2,235	48	162	1,233	1,851	918	872	6,552	17,513	6,658	6,871	4,498	49,412
1969	2,235	48	0	1,876	1,713	66	851	8,573	6,407	10,596	6,806	4,451	43,621
1970	2,235	161	557	1,861	2,006	1,477	2,796	33,016	10,610	7,470	7,720	5,108	75,017
1971	2,235	48	99	2,175	2,020	1,780	2,796	10,613	4,852	5,101	5,205	3,303	40,227
1972	2,235	48	90	2,227	2,008	5	7,961	5,152	5,481	9,160	5,303	3,373	43,042
1973	2,235	48	162	1,882	1,434	1,651	872	8,547	8,080	10,533	6,740	4,404	46,588
1974	2,235	48	555	577	559	984	965	8,722	20,951	12,986	9,304	6,244	64,130
1975	2,488	48	531	453	776	223	965	6,801	14,767	13,108	9,304	6,244	55,708
1976	2,488	119	717	1,160	1,734	2,038	965	16,225	4,521	8,986	9,304	6,244	54,501
1977	2,488	183	766	1,090	1,190	2,130	2,868	4,763	4,647	8,986	9,304	6,244	44,659
1978	0	642	802	443	395	0	944	6,828	4,425	8,986	9,304	6,244	39,014
1979	2,488	547	1,142	450	1,682	2,136	965	6,785	4,423	8,986	9,304	6,244	45,153
1980	2,488	293	877	1,321	1,781	1,011	965	6,716	10,649	8,986	9,304	6,244	50,636
1981	2,488	186	392	1,376	1,353	1,260	2,889	4,896	4,787	8,986	9,304	6,244	44,162
1982	2,488	193	392	1,519	1,824	1,965	971	8,768	10,539	20,634	9,304	6,244	64,842
1983	2,489	125	826	1,193	3,514	4,454	6,208	8,687	10,419	16,290	9,304	6,244	69,753
1984	2,488	383	1,004	5,134	4,378	4,810	11,120	8,809	10,424	24,706	9,304	6,244	88,805
1985	2,488	384	1,406	1,168	5	3,821	6,970	8,714	9,503	8,986	9,304	6,244	58,995
1986	2,488	297	678	1,061	0	10,656	6,944	8,690	10,421	24,354	9,304	6,244	81,137
1987	2,488	136	561	813	3,254	3,936	11,763	20,296	6,114	11,413	9,304	6,244	76,322
1988	2,488	363	392	753	629	755	2,889	4,864	4,426	8,986	9,304	6,244	42,095
1989	2,488	154	392	436	369	43	2,889	4,883	4,424	8,986	9,304	6,244	40,612
1990	2,488	558	877	128	2,455	946	965	6,700	4,425	8,986	963	0	29,491
1991	0	369	392	146	313	1,658	2,026	4,787	4,423	8,986	9,304	693	33,097
1992	0	784	1,172	5	0	11	2,025	4,858	3,118	0	0	0	11,973
1993	0	8	365	597	1,049	340	2,094	6,687	4,419	8,986	9,304	6,244	40,093
1994	2,488	226	796	801	1,043	570	2,889	4,861	4,423	8,986	9,304	2,334	38,722
1995	0	202	392	1,942	2,413	2,038	1,601	6,687	4,419	9,946	9,304	6,244	45,187
1996	2,488	0	175	0	1,875	0	944	8,794	5,847	15,408	9,304	6,282	51,117
1997	2,494	248	708	747	884	0	11,564	8,687	10,419	14,054	9,304	6,244	65,354
1998	2,588	194	989	1,557	1,048	2,358	6,705	8,687	10,419	16,267	9,304	6,244	66,360
1999	2,488	206	977	1,564	5	4,944	9,113	8,687	10,419	19,495	9,304	6,244	73,447
Average	1,988	178	515	1,112	1,325	1,478	3,249	9,254	8,694	10,061	7,738	4,909	50,499
Maximum	2,590	784	1,406	5,134	4,378	10,656	11,763	38,481	39,301	24,706	9,304	6,282	88,805
Minimum	0	0	0	0	0	0	851	4,613	3,118	0	0	0	11,951

P-5c
Bonneville Unit Operations (cfs)
Provo River from Outlet of Deer Creek to North Fork
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	42	0	0	28	34	28	15	626	98	201	92	61	103
1951	36	1	2	28	31	3	15	344	104	170	108	73	77
1952	36	1	2	14	28	0	101	139	170	146	84	55	65
1953	36	1	12	32	29	0	15	227	492	119	123	84	97
1954	36	1	17	22	26	24	47	75	71	121	125	85	54
1955	36	3	10	8	10	3	47	75	68	128	132	61	49
1956	0	3	11	26	18	32	47	75	71	113	117	79	50
1957	36	1	5	16	18	13	47	76	318	124	128	88	73
1958	36	1	3	14	24	33	47	462	163	122	126	86	94
1959	36	2	13	12	16	6	47	77	70	126	130	89	52
1960	36	3	7	11	17	26	47	76	69	132	137	94	55
1961	0	1	13	0	5	0	34	76	70	0	0	0	17
1962	0	2	0	0	12	0	15	106	70	130	135	93	47
1963	36	1	7	13	17	7	47	76	68	125	129	88	51
1964	36	2	0	18	19	13	47	75	70	127	131	90	53
1965	36	1	0	27	41	24	47	76	660	133	85	56	98
1966	36	2	0	1	2	0	47	277	68	112	116	79	62
1967	36	3	0	22	22	29	47	76	391	116	120	82	79
1968	36	1	3	20	32	15	15	107	294	108	112	76	68
1969	36	1	0	31	31	1	14	139	108	172	111	75	60
1970	36	3	9	30	36	24	47	537	178	122	126	86	104
1971	36	1	2	35	36	29	47	173	82	83	85	56	56
1972	36	1	1	36	35	0	134	84	92	149	86	57	59
1973	36	1	3	31	26	27	15	139	136	171	110	74	64
1974	36	1	9	9	10	16	16	142	352	211	151	105	89
1975	40	1	9	7	14	4	16	111	248	213	151	105	77
1976	40	2	12	19	30	33	16	264	76	146	151	105	75
1977	40	3	12	18	21	35	48	77	78	146	151	105	62
1978	0	11	13	7	7	0	16	111	74	146	151	105	54
1979	40	9	19	7	30	35	16	110	74	146	151	105	62
1980	40	5	14	21	31	16	16	109	179	146	151	105	70
1981	40	3	6	22	24	20	49	80	80	146	151	105	61
1982	40	3	6	25	33	32	16	143	177	336	151	105	90
1983	40	2	13	19	63	72	104	141	175	265	151	105	96
1984	40	6	16	83	76	78	187	143	175	402	151	105	122
1985	40	6	23	19	0	62	117	142	160	146	151	105	81
1986	40	5	11	17	0	173	117	141	175	396	151	105	112
1987	40	2	9	13	59	64	198	330	103	186	151	105	105
1988	40	6	6	12	11	12	49	79	74	146	151	105	58
1989	40	3	6	7	7	1	49	79	74	146	151	105	56
1990	40	9	14	2	44	15	16	109	74	146	16	0	41
1991	0	6	6	2	6	27	34	78	74	146	151	12	46
1992	0	13	19	0	0	0	34	79	52	0	0	0	16
1993	0	0	6	10	19	6	35	109	74	146	151	105	55
1994	40	4	13	13	19	9	49	79	74	146	151	39	53
1995	0	3	6	32	43	33	27	109	74	162	151	105	62
1996	40	0	3	0	33	0	16	143	98	251	151	106	70
1997	41	4	12	12	16	0	194	141	175	229	151	105	90
1998	42	3	16	25	19	38	113	141	175	265	151	105	92
1999	40	3	16	25	0	80	153	141	175	317	151	105	101
Average	32	3	8	18	24	24	55	151	146	164	126	82	70
Maximum	42	13	23	83	76	173	198	626	660	402	151	106	122
Minimum	0	0	0	0	0	0	14	75	52	0	0	0	16

P-5d
Bonneville Unit Operations (acre-feet)
Provo River from Outlet of Deer Creek to North Fork
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,190	3,443	3,426	378	532	409	8,075	17,846	59,191	15,368	9,996	9,835	130,687
1951	5,011	4,126	3,440	0	95	3,081	14,743	49,409	61,844	13,794	9,904	14,467	179,914
1952	0	4,495	3,595	2,098	2,919	18,270	37,726	82,314	66,013	13,642	9,906	12,738	253,715
1953	2,337	3,047	0	0	0	2,354	5,243	19,910	39,979	15,016	12,596	10,876	111,358
1954	5,286	827	470	122	121	1,588	9,615	22,562	7,245	11,170	10,542	10,645	80,193
1955	4,947	660	445	41	45	51	178	20,826	24,287	15,455	11,575	10,779	89,290
1956	4,098	1,844	0	112	44	71	6,175	23,511	26,111	13,480	10,837	9,519	95,801
1957	2,881	2,280	509	53	66	76	616	14,497	28,504	18,519	11,818	12,226	92,045
1958	3,771	828	1,916	93	847	126	2,046	13,278	24,011	13,823	10,903	10,756	82,399
1959	2,181	699	387	64	44	97	6,211	20,798	24,491	9,026	8,348	10,064	82,410
1960	2,938	1,942	71	78	42	110	7,204	21,412	22,800	19,809	4,796	6,374	87,576
1961	5,235	106	44	42	33	93	2,829	12,518	5,562	3,131	4,231	5,995	39,821
1962	2,298	149	61	63	112	114	892	19,494	22,822	14,757	10,062	8,955	79,779
1963	4,395	3,182	75	77	138	104	1,157	23,458	23,506	14,969	8,762	10,192	90,015
1964	7,656	5,747	349	36	9	26	190	12,567	20,247	17,210	12,096	10,509	86,642
1965	5,406	3,040	3,429	1,309	928	1,376	777	19,909	22,141	16,759	10,054	10,404	95,533
1966	2,522	1,061	9,565	7,977	4,774	12,414	10,619	30,394	18,421	9,635	8,822	10,540	126,744
1967	3,326	2,454	1,990	126	86	0	3,031	19,136	20,240	15,732	12,347	13,210	91,675
1968	4,515	1,740	3,236	522	0	2,783	1,440	19,339	53,560	16,559	12,074	12,978	128,747
1969	2,118	2,418	2,986	0	951	3,712	20,156	72,991	59,627	13,105	11,306	11,929	201,298
1970	0	939	1,149	1,047	373	1,361	1,302	15,801	32,090	15,647	12,488	12,083	94,280
1971	529	4,313	4,470	2,926	2,956	3,709	7,629	40,369	70,410	16,760	12,873	13,093	180,036
1972	1,113	3,623	4,792	2,774	3,180	12,602	5,851	58,507	37,095	15,090	11,582	11,698	167,908
1973	1,201	3,676	3,839	1,719	1,542	2,951	15,216	44,643	60,494	17,629	13,567	15,635	182,111
1974	751	895	1,615	1,593	1,431	163	0	57,910	52,442	18,237	11,447	11,600	158,085
1975	3,133	0	718	1,651	1,485	1,684	868	9,499	79,306	29,497	14,085	15,931	157,858
1976	445	93	2,075	1,729	0	0	2,283	24,953	27,151	9,559	9,099	9,423	86,810
1977	153	0	0	66	30	40	2,932	10,800	6,560	4,394	7,849	7,904	40,728
1978	3,642	43	0	56	43	0	0	14,791	17,297	14,378	10,153	12,264	72,667
1979	2,427	792	1,221	1,043	215	908	0	18,767	24,054	11,623	10,517	10,130	81,697
1980	2,120	0	0	0	0	994	1,574	33,728	34,853	16,062	13,023	14,555	116,908
1981	51	0	0	74	70	92	564	15,796	25,976	12,493	10,913	11,762	77,790
1982	0	2,192	105	124	128	0	0	54,741	49,308	18,756	13,517	9,971	148,841
1983	0	0	0	0	10,735	78,633	14,060	48,429	81,124	20,107	8,444	13,069	274,601
1984	0	0	3,062	3,387	11,830	24,264	46,831	70,349	59,438	15,015	10,897	12,125	257,198
1985	204	0	0	0	4,141	10,471	42,471	61,736	22,529	13,613	10,151	9,854	175,170
1986	0	2,532	0	0	4,847	79,387	35,377	64,513	85,195	17,760	10,495	12,260	312,367
1987	0	0	0	0	8,998	8,247	13,186	29,575	13,939	12,008	13,669	10,875	110,496
1988	1,479	0	45	18	1,278	1,571	8,043	17,001	17,659	10,191	12,560	9,698	79,542
1989	13,001	383	10	10	10	794	7,956	25,785	24,577	13,653	14,065	8,783	109,027
1990	3,462	0	0	52	10	102	3,774	20,955	24,870	14,671	11,630	12,690	92,214
1991	1,685	0	111	49	135	74	947	12,070	25,348	17,964	8,704	10,306	77,393
1992	2,061	0	259	143	129	170	896	17,317	14,829	6,027	7,747	2,709	52,287
1993	239	0	0	166	118	0	0	8,313	14,058	9,082	5,387	9,793	47,156
1994	0	0	0	158	661	1,730	1,228	19,828	18,687	10,829	8,160	6,931	68,212
1995	2,582	510	721	486	808	2,420	1,545	12,466	13,494	20,770	6,735	7,108	69,643
1996	147	0	0	6,740	0	5,184	14,884	44,251	68,206	14,211	9,949	11,393	174,966
1997	2,343	1,681	0	1,749	283	5,796	34,715	69,720	57,592	14,603	10,099	9,867	208,447
1998	106	0	0	285	254	0	552	61,861	56,089	14,259	8,440	8,621	150,468
1999	0	0	0	278	5,518	6,020	19,026	55,954	44,280	14,532	9,381	10,516	165,505
Average	2,320	1,315	1,204	830	1,460	5,924	8,453	31,532	35,791	14,408	10,372	10,713	124,321
Maximum	13,001	5,747	9,565	7,977	11,830	79,387	46,831	82,314	85,195	29,497	14,085	15,931	312,367
Minimum	0	0	0	0	0	0	0	8,313	5,562	3,131	4,231	2,709	39,821

P-5d
Bonneville Unit Operations (cfs)
Provo River from Outlet of Deer Creek to North Fork
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	36	58	56	6	10	7	136	290	995	250	163	165	181
1951	82	69	56	0	2	50	248	804	1,039	224	161	243	249
1952	0	76	58	34	51	297	634	1,339	1,109	222	161	214	350
1953	38	51	0	0	0	38	88	324	672	244	205	183	154
1954	86	14	8	2	2	26	162	367	122	182	171	179	111
1955	80	11	7	1	1	1	3	339	408	251	188	181	123
1956	67	31	0	2	1	1	104	382	439	219	176	160	132
1957	47	38	8	1	1	1	10	236	479	301	192	205	127
1958	61	14	31	2	15	2	34	216	404	225	177	181	114
1959	35	12	6	1	1	2	104	338	412	147	136	169	114
1960	48	33	1	1	1	2	121	348	383	322	78	107	121
1961	85	2	1	1	1	2	48	204	93	51	69	101	55
1962	37	3	1	1	2	2	15	317	384	240	164	150	110
1963	71	53	1	1	2	2	19	382	395	243	143	171	124
1964	125	97	6	1	0	0	3	204	340	280	197	177	119
1965	88	51	56	21	17	22	13	324	372	273	164	175	132
1966	41	18	156	130	86	202	178	494	310	157	143	177	175
1967	54	41	32	2	2	0	51	311	340	256	201	222	127
1968	73	29	53	8	0	45	24	315	900	269	196	218	177
1969	34	41	49	0	17	60	339	1,187	1,002	213	184	200	278
1970	0	16	19	17	7	22	22	257	539	254	203	203	130
1971	9	72	73	48	53	60	128	657	1,183	273	209	220	249
1972	18	61	78	45	55	205	98	952	623	245	188	197	231
1973	20	62	62	28	28	48	256	726	1,017	287	221	263	252
1974	12	15	26	26	26	3	0	942	881	297	186	195	218
1975	51	0	12	27	27	27	15	154	1,333	480	229	268	218
1976	7	2	34	28	0	0	38	406	456	155	148	158	120
1977	2	0	0	1	1	1	49	176	110	71	128	133	56
1978	59	1	0	1	1	0	0	241	291	234	165	206	100
1979	39	13	20	17	4	15	0	305	404	189	171	170	113
1980	34	0	0	0	0	16	26	549	586	261	212	245	161
1981	1	0	0	1	1	1	9	257	437	203	177	198	107
1982	0	37	2	2	2	0	0	890	829	305	220	168	206
1983	0	0	0	0	193	1,279	236	788	1,363	327	137	220	379
1984	0	0	50	55	206	395	787	1,144	999	244	177	204	354
1985	3	0	0	0	75	170	714	1,004	379	221	165	166	242
1986	0	43	0	0	87	1,291	595	1,049	1,432	289	171	206	431
1987	0	0	0	0	162	134	222	481	234	195	222	183	153
1988	24	0	1	0	22	26	135	277	297	166	204	163	110
1989	211	6	0	0	0	13	134	419	413	222	229	148	151
1990	56	0	0	1	0	2	63	341	418	239	189	213	127
1991	27	0	2	1	2	1	16	196	426	292	142	173	107
1992	34	0	4	2	2	3	15	282	249	98	126	46	72
1993	4	0	0	3	2	0	0	135	236	148	88	165	65
1994	0	0	0	3	12	28	21	322	314	176	133	116	94
1995	42	9	12	8	15	39	26	203	227	338	110	119	96
1996	2	0	0	110	0	84	250	720	1,146	231	162	191	241
1997	38	28	0	28	5	94	583	1,134	968	238	164	166	288
1998	2	0	0	5	5	0	9	1,006	943	232	137	145	208
1999	0	0	0	5	99	98	320	910	744	236	153	177	229
Average	38	22	20	14	26	96	142	513	602	234	169	180	172
Maximum	211	97	156	130	206	1,291	787	1,339	1,432	480	229	268	431
Minimum	0	0	0	0	0	0	0	135	93	51	69	46	55

P-5e
Bonneville Unit Operations (acre-feet)
Diversions into Salt Lake Aqueduct
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	6,100	4,490	4,490	2,859	2,145	2,175	1,150	2,530	7,700	7,290	7,700	7,710	56,340
1951	6,100	4,490	4,490	2,916	2,306	3,703	1,150	2,530	7,700	7,290	7,700	7,710	58,085
1952	6,100	4,490	4,490	3,768	2,298	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,137
1953	6,100	4,490	3,890	2,707	2,577	3,910	1,150	2,530	7,700	7,290	7,700	7,710	57,755
1954	6,100	4,490	3,510	3,263	2,569	2,469	1,150	2,530	7,700	7,290	7,700	7,710	56,482
1955	6,100	4,490	3,851	4,094	3,461	3,710	1,150	2,530	7,700	7,290	7,700	7,710	59,786
1956	299	2,340	1,502	2,870	2,738	1,926	1,150	2,530	7,700	7,290	7,700	7,710	45,756
1957	6,100	4,490	4,333	3,595	3,159	3,121	1,150	2,530	7,700	7,290	7,700	7,710	58,877
1958	6,100	4,490	4,375	3,757	2,700	1,910	1,150	2,530	7,700	7,290	7,700	7,710	57,413
1959	6,100	4,490	3,690	3,897	3,167	3,544	1,150	2,530	7,700	7,290	7,700	7,710	58,969
1960	6,100	4,410	4,061	3,934	2,924	2,296	1,150	2,530	7,700	7,290	7,700	7,710	57,805
1961	1,469	3,010	1,601	321	1	349	698	2,530	7,700	910	3	2,381	20,972
1962	3,544	3,975	1,956	1,244	432	3,910	1,150	2,530	7,700	7,290	7,700	7,710	49,141
1963	6,100	4,490	4,164	3,818	3,087	3,474	1,150	2,530	7,700	7,290	7,700	7,710	59,214
1964	6,100	4,490	4,490	3,487	2,777	3,129	1,150	2,530	7,700	7,290	7,700	7,710	58,554
1965	6,100	4,490	4,490	3,011	1,898	2,427	1,150	2,530	7,700	7,290	7,700	7,710	56,496
1966	6,100	4,443	4,490	4,600	4,030	3,910	1,150	2,530	7,700	7,290	7,700	7,710	61,653
1967	6,100	4,490	4,490	3,268	2,834	2,137	1,150	2,530	7,700	7,290	7,700	7,710	57,400
1968	6,100	4,490	4,490	3,373	2,040	3,003	1,150	2,530	7,700	7,290	7,700	7,710	57,575
1969	6,100	4,490	4,490	2,724	2,552	3,910	1,150	2,530	7,700	7,290	7,700	7,710	58,346
1970	6,100	4,490	4,049	2,745	2,029	2,438	1,150	2,530	7,700	7,290	7,700	7,710	55,932
1971	6,100	4,490	4,490	2,431	2,015	2,135	1,150	2,530	7,700	7,290	7,700	7,710	55,741
1972	6,100	4,490	4,490	2,477	1,888	3,910	1,150	2,530	7,700	7,290	7,700	7,710	57,435
1973	6,100	4,490	4,490	2,724	2,746	2,265	1,150	2,530	7,700	7,290	7,700	7,710	56,895
1974	6,100	4,490	4,122	4,042	3,477	2,931	1,150	2,530	7,700	7,290	7,700	7,710	59,242
1975	6,100	4,490	4,077	4,152	3,259	3,693	1,150	2,530	7,700	7,290	7,700	7,710	59,851
1976	6,100	4,488	3,773	3,451	2,162	1,877	1,150	2,530	7,700	7,290	7,700	7,710	55,932
1977	6,100	4,490	3,729	3,515	2,989	1,780	1,150	2,530	7,700	7,290	7,700	7,710	56,684
1978	3,598	1,421	1,010	0	0	399	1,150	2,530	7,700	7,290	7,700	7,710	40,508
1979	6,100	4,118	3,354	4,156	2,354	1,780	1,150	2,530	7,700	7,290	7,700	7,710	55,942
1980	6,100	4,297	3,618	3,284	2,116	2,905	1,150	2,530	7,700	7,290	7,700	7,710	56,401
1981	6,100	4,444	4,103	3,229	2,826	2,655	1,150	2,530	7,700	7,290	7,700	7,710	57,438
1982	6,100	4,490	4,103	3,087	2,212	1,945	1,150	2,530	7,700	7,290	7,700	7,710	56,016
1983	6,100	4,490	3,812	3,413	4,030	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,835
1984	6,100	4,200	3,522	4,600	3,891	3,910	1,150	2,530	7,700	7,290	7,700	7,710	60,304
1985	6,100	4,200	3,124	3,474	4,174	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,062
1986	6,100	4,490	3,812	3,539	4,030	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,961
1987	6,100	4,490	3,934	3,792	4,030	3,910	1,150	2,530	7,700	7,290	7,700	7,710	60,337
1988	6,100	4,297	4,103	3,853	3,267	3,160	1,150	2,530	7,700	7,290	7,700	7,710	58,860
1989	6,100	4,490	4,104	4,170	3,810	3,872	1,150	2,530	7,700	7,290	7,700	7,710	60,627
1990	6,100	4,199	1,182	155	0	0	1,150	2,530	7,700	7,290	7,700	52	38,057
1991	454	2,207	1,758	2,158	2,031	896	70	2,530	7,700	7,290	7,700	7,710	42,504
1992	32	3,391	1,104	144	128	1,567	2	2,530	7,700	258	98	486	17,439
1993	399	2,569	2,036	1,855	1,278	3,503	0	2,530	7,700	7,290	7,700	7,710	44,570
1994	6,100	4,342	3,798	3,804	2,992	3,346	1,150	2,530	7,700	7,290	7,700	7,710	58,463
1995	2,014	3,779	3,377	1,447	19	1,877	493	2,530	7,700	7,290	7,700	7,710	45,937
1996	6,100	4,490	4,315	4,600	2,155	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,650
1997	6,100	4,473	3,782	3,859	3,160	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,364
1998	6,100	4,490	3,522	3,048	2,988	1,557	1,150	2,530	7,700	7,290	7,700	7,710	55,786
1999	6,100	4,490	3,522	3,041	4,030	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,174
Average	5,360	4,186	3,631	3,075	2,516	2,814	1,060	2,530	7,700	7,022	7,394	7,306	54,594
Maximum	6,100	4,490	4,490	4,600	4,174	3,910	1,150	2,530	7,700	7,290	7,700	7,710	61,653
Minimum	32	1,421	1,010	0	0	0	0	2,530	7,700	258	3	52	17,439

P-5e
Bonneville Unit Operations (cfs)
Diversions into Salt Lake Aqueduct
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	99	75	73	47	39	35	19	41	129	119	125	130	78
1951	99	75	73	47	42	60	19	41	129	119	125	130	80
1952	99	75	73	61	40	64	19	41	129	119	125	130	81
1953	99	75	63	44	46	64	19	41	129	119	125	130	80
1954	99	75	57	53	46	40	19	41	129	119	125	130	78
1955	99	75	63	67	62	60	19	41	129	119	125	130	83
1956	5	39	24	47	48	31	19	41	129	119	125	130	63
1957	99	75	70	58	57	51	19	41	129	119	125	130	81
1958	99	75	71	61	49	31	19	41	129	119	125	130	79
1959	99	75	60	63	57	58	19	41	129	119	125	130	81
1960	99	74	66	64	51	37	19	41	129	119	125	130	80
1961	24	51	26	5	0	6	12	41	129	15	0	40	29
1962	58	67	32	20	8	64	19	41	129	119	125	130	68
1963	99	75	68	62	56	57	19	41	129	119	125	130	82
1964	99	75	73	57	48	51	19	41	129	119	125	130	81
1965	99	75	73	49	34	39	19	41	129	119	125	130	78
1966	99	75	73	75	73	64	19	41	129	119	125	130	85
1967	99	75	73	53	51	35	19	41	129	119	125	130	79
1968	99	75	73	55	35	49	19	41	129	119	125	130	79
1969	99	75	73	44	46	64	19	41	129	119	125	130	81
1970	99	75	66	45	37	40	19	41	129	119	125	130	77
1971	99	75	73	40	36	35	19	41	129	119	125	130	77
1972	99	75	73	40	33	64	19	41	129	119	125	130	79
1973	99	75	73	44	49	37	19	41	129	119	125	130	79
1974	99	75	67	66	63	48	19	41	129	119	125	130	82
1975	99	75	66	68	59	60	19	41	129	119	125	130	83
1976	99	75	61	56	38	31	19	41	129	119	125	130	77
1977	99	75	61	57	54	29	19	41	129	119	125	130	78
1978	59	24	16	0	0	6	19	41	129	119	125	130	56
1979	99	69	55	68	42	29	19	41	129	119	125	130	77
1980	99	72	59	53	37	47	19	41	129	119	125	130	78
1981	99	75	67	53	51	43	19	41	129	119	125	130	79
1982	99	75	67	50	40	32	19	41	129	119	125	130	77
1983	99	75	62	56	73	64	19	41	129	119	125	130	83
1984	99	71	57	75	68	64	19	41	129	119	125	130	83
1985	99	71	51	57	75	64	19	41	129	119	125	130	82
1986	99	75	62	58	73	64	19	41	129	119	125	130	83
1987	99	75	64	62	73	64	19	41	129	119	125	130	83
1988	99	72	67	63	57	51	19	41	129	119	125	130	81
1989	99	75	67	68	69	63	19	41	129	119	125	130	84
1990	99	71	19	3	0	0	19	41	129	119	125	1	53
1991	7	37	29	35	37	15	1	41	129	119	125	130	59
1992	1	57	18	2	2	25	0	41	129	4	2	8	24
1993	6	43	33	30	23	57	0	41	129	119	125	130	62
1994	99	73	62	62	54	54	19	41	129	119	125	130	81
1995	33	64	55	24	0	31	8	41	129	119	125	130	63
1996	99	75	70	75	37	64	19	41	129	119	125	130	82
1997	99	75	62	63	57	64	19	41	129	119	125	130	82
1998	99	75	57	50	54	25	19	41	129	119	125	130	77
1999	99	75	57	49	73	64	19	41	129	119	125	130	82
Average	87	70	59	50	45	46	18	41	129	114	120	123	75
Maximum	99	75	73	75	75	64	19	41	129	119	125	130	85
Minimum	1	24	16	0	0	0	0	41	129	4	0	1	24

P-5f
Bonneville Unit Operations (acre-feet)
Diversions into Salt Lake Aqueduct
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

P-5f
Bonneville Unit Operations (cfs)
Diversions into Salt Lake Aqueduct
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

P-5g
Bonneville Unit Operations (acre-feet)
Diversions into Salt Lake Aqueduct
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	6,100	4,490	4,490	2,859	2,145	2,175	1,150	2,530	7,700	7,290	7,700	7,710	56,340
1951	6,100	4,490	4,490	2,916	2,306	3,703	1,150	2,530	7,700	7,290	7,700	7,710	58,085
1952	6,100	4,490	4,490	3,768	2,298	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,137
1953	6,100	4,490	3,890	2,707	2,577	3,910	1,150	2,530	7,700	7,290	7,700	7,710	57,755
1954	6,100	4,490	3,510	3,263	2,569	2,469	1,150	2,530	7,700	7,290	7,700	7,710	56,482
1955	6,100	4,490	3,851	4,094	3,461	3,710	1,150	2,530	7,700	7,290	7,700	7,710	59,786
1956	299	2,340	1,502	2,870	2,738	1,926	1,150	2,530	7,700	7,290	7,700	7,710	45,756
1957	6,100	4,490	4,333	3,595	3,159	3,121	1,150	2,530	7,700	7,290	7,700	7,710	58,877
1958	6,100	4,490	4,375	3,757	2,700	1,910	1,150	2,530	7,700	7,290	7,700	7,710	57,413
1959	6,100	4,490	3,690	3,897	3,167	3,544	1,150	2,530	7,700	7,290	7,700	7,710	58,969
1960	6,100	4,410	4,061	3,934	2,924	2,296	1,150	2,530	7,700	7,290	7,700	7,710	57,805
1961	1,469	3,010	1,601	321	1	349	698	2,530	7,700	910	3	2,381	20,972
1962	3,544	3,975	1,956	1,244	432	3,910	1,150	2,530	7,700	7,290	7,700	7,710	49,141
1963	6,100	4,490	4,164	3,818	3,087	3,474	1,150	2,530	7,700	7,290	7,700	7,710	59,214
1964	6,100	4,490	4,490	3,487	2,777	3,129	1,150	2,530	7,700	7,290	7,700	7,710	58,554
1965	6,100	4,490	4,490	3,011	1,898	2,427	1,150	2,530	7,700	7,290	7,700	7,710	56,496
1966	6,100	4,443	4,490	4,600	4,030	3,910	1,150	2,530	7,700	7,290	7,700	7,710	61,653
1967	6,100	4,490	4,490	3,268	2,834	2,137	1,150	2,530	7,700	7,290	7,700	7,710	57,400
1968	6,100	4,490	4,490	3,373	2,040	3,003	1,150	2,530	7,700	7,290	7,700	7,710	57,575
1969	6,100	4,490	4,490	2,724	2,552	3,910	1,150	2,530	7,700	7,290	7,700	7,710	58,346
1970	6,100	4,490	4,049	2,745	2,029	2,438	1,150	2,530	7,700	7,290	7,700	7,710	55,932
1971	6,100	4,490	4,490	2,431	2,015	2,135	1,150	2,530	7,700	7,290	7,700	7,710	55,741
1972	6,100	4,490	4,490	2,477	1,888	3,910	1,150	2,530	7,700	7,290	7,700	7,710	57,435
1973	6,100	4,490	4,490	2,724	2,746	2,265	1,150	2,530	7,700	7,290	7,700	7,710	56,895
1974	6,100	4,490	4,122	4,042	3,477	2,931	1,150	2,530	7,700	7,290	7,700	7,710	59,242
1975	6,100	4,490	4,077	4,152	3,259	3,693	1,150	2,530	7,700	7,290	7,700	7,710	59,851
1976	6,100	4,488	3,773	3,451	2,162	1,877	1,150	2,530	7,700	7,290	7,700	7,710	55,932
1977	6,100	4,490	3,729	3,515	2,989	1,780	1,150	2,530	7,700	7,290	7,700	7,710	56,684
1978	3,598	1,421	1,010	0	0	399	1,150	2,530	7,700	7,290	7,700	7,710	40,508
1979	6,100	4,118	3,354	4,156	2,354	1,780	1,150	2,530	7,700	7,290	7,700	7,710	55,942
1980	6,100	4,297	3,618	3,284	2,116	2,905	1,150	2,530	7,700	7,290	7,700	7,710	56,401
1981	6,100	4,444	4,103	3,229	2,826	2,655	1,150	2,530	7,700	7,290	7,700	7,710	57,438
1982	6,100	4,490	4,103	3,087	2,212	1,945	1,150	2,530	7,700	7,290	7,700	7,710	56,016
1983	6,100	4,490	3,812	3,413	4,030	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,835
1984	6,100	4,200	3,522	4,600	3,891	3,910	1,150	2,530	7,700	7,290	7,700	7,710	60,304
1985	6,100	4,200	3,124	3,474	4,174	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,062
1986	6,100	4,490	3,812	3,539	4,030	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,961
1987	6,100	4,490	3,934	3,792	4,030	3,910	1,150	2,530	7,700	7,290	7,700	7,710	60,337
1988	6,100	4,297	4,103	3,853	3,267	3,160	1,150	2,530	7,700	7,290	7,700	7,710	58,860
1989	6,100	4,490	4,104	4,170	3,810	3,872	1,150	2,530	7,700	7,290	7,700	7,710	60,627
1990	6,100	4,199	1,182	155	0	0	1,150	2,530	7,700	7,290	7,700	52	38,057
1991	454	2,207	1,758	2,158	2,031	896	70	2,530	7,700	7,290	7,700	7,710	42,504
1992	32	3,391	1,104	144	128	1,567	2	2,530	7,700	258	98	486	17,439
1993	399	2,569	2,036	1,855	1,278	3,503	0	2,530	7,700	7,290	7,700	7,710	44,570
1994	6,100	4,342	3,798	3,804	2,992	3,346	1,150	2,530	7,700	7,290	7,700	7,710	58,463
1995	2,014	3,779	3,377	1,447	19	1,877	493	2,530	7,700	7,290	7,700	7,710	45,937
1996	6,100	4,490	4,315	4,600	2,155	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,650
1997	6,100	4,473	3,782	3,859	3,160	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,364
1998	6,100	4,490	3,522	3,048	2,988	1,557	1,150	2,530	7,700	7,290	7,700	7,710	55,786
1999	6,100	4,490	3,522	3,041	4,030	3,910	1,150	2,530	7,700	7,290	7,700	7,710	59,174
Average	5,360	4,186	3,631	3,075	2,516	2,814	1,060	2,530	7,700	7,022	7,394	7,306	54,594
Maximum	6,100	4,490	4,490	4,600	4,174	3,910	1,150	2,530	7,700	7,290	7,700	7,710	61,653
Minimum	32	1,421	1,010	0	0	0	0	2,530	7,700	258	3	52	17,439

P-5g
Bonneville Unit Operations (cfs)
Diversions into Salt Lake Aqueduct
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	99	75	73	47	39	35	19	41	129	119	125	130	78
1951	99	75	73	47	42	60	19	41	129	119	125	130	80
1952	99	75	73	61	40	64	19	41	129	119	125	130	81
1953	99	75	63	44	46	64	19	41	129	119	125	130	80
1954	99	75	57	53	46	40	19	41	129	119	125	130	78
1955	99	75	63	67	62	60	19	41	129	119	125	130	83
1956	5	39	24	47	48	31	19	41	129	119	125	130	63
1957	99	75	70	58	57	51	19	41	129	119	125	130	81
1958	99	75	71	61	49	31	19	41	129	119	125	130	79
1959	99	75	60	63	57	58	19	41	129	119	125	130	81
1960	99	74	66	64	51	37	19	41	129	119	125	130	80
1961	24	51	26	5	0	6	12	41	129	15	0	40	29
1962	58	67	32	20	8	64	19	41	129	119	125	130	68
1963	99	75	68	62	56	57	19	41	129	119	125	130	82
1964	99	75	73	57	48	51	19	41	129	119	125	130	81
1965	99	75	73	49	34	39	19	41	129	119	125	130	78
1966	99	75	73	75	73	64	19	41	129	119	125	130	85
1967	99	75	73	53	51	35	19	41	129	119	125	130	79
1968	99	75	73	55	35	49	19	41	129	119	125	130	79
1969	99	75	73	44	46	64	19	41	129	119	125	130	81
1970	99	75	66	45	37	40	19	41	129	119	125	130	77
1971	99	75	73	40	36	35	19	41	129	119	125	130	77
1972	99	75	73	40	33	64	19	41	129	119	125	130	79
1973	99	75	73	44	49	37	19	41	129	119	125	130	79
1974	99	75	67	66	63	48	19	41	129	119	125	130	82
1975	99	75	66	68	59	60	19	41	129	119	125	130	83
1976	99	75	61	56	38	31	19	41	129	119	125	130	77
1977	99	75	61	57	54	29	19	41	129	119	125	130	78
1978	59	24	16	0	0	6	19	41	129	119	125	130	56
1979	99	69	55	68	42	29	19	41	129	119	125	130	77
1980	99	72	59	53	37	47	19	41	129	119	125	130	78
1981	99	75	67	53	51	43	19	41	129	119	125	130	79
1982	99	75	67	50	40	32	19	41	129	119	125	130	77
1983	99	75	62	56	73	64	19	41	129	119	125	130	83
1984	99	71	57	75	68	64	19	41	129	119	125	130	83
1985	99	71	51	57	75	64	19	41	129	119	125	130	82
1986	99	75	62	58	73	64	19	41	129	119	125	130	83
1987	99	75	64	62	73	64	19	41	129	119	125	130	83
1988	99	72	67	63	57	51	19	41	129	119	125	130	81
1989	99	75	67	68	69	63	19	41	129	119	125	130	84
1990	99	71	19	3	0	0	19	41	129	119	125	1	53
1991	7	37	29	35	37	15	1	41	129	119	125	130	59
1992	1	57	18	2	2	25	0	41	129	4	2	8	24
1993	6	43	33	30	23	57	0	41	129	119	125	130	62
1994	99	73	62	62	54	54	19	41	129	119	125	130	81
1995	33	64	55	24	0	31	8	41	129	119	125	130	63
1996	99	75	70	75	37	64	19	41	129	119	125	130	82
1997	99	75	62	63	57	64	19	41	129	119	125	130	82
1998	99	75	57	50	54	25	19	41	129	119	125	130	77
1999	99	75	57	49	73	64	19	41	129	119	125	130	82
Average	87	70	59	50	45	46	18	41	129	114	120	123	75
Maximum	99	75	73	75	75	64	19	41	129	119	125	130	85
Minimum	1	24	16	0	0	0	0	41	129	4	0	1	24

P-6a
Bonneville Unit Operations (acre-feet)
Provo River from North Fork to Olmsted
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	9,626	7,723	9,731	6,963	6,251	7,149	19,628	64,517	75,148	42,538	30,484	24,081	303,838
1951	13,752	7,150	7,819	7,635	6,783	7,342	18,911	78,082	78,411	43,677	31,659	29,519	330,739
1952	9,412	8,069	8,279	7,434	6,513	21,072	46,936	101,449	89,790	40,426	29,243	26,384	395,006
1953	11,076	6,538	7,558	7,415	6,374	9,221	15,551	47,242	80,818	36,514	33,998	26,288	288,592
1954	14,310	7,394	6,934	6,723	6,045	6,553	21,469	42,356	28,545	40,227	37,041	29,825	247,419
1955	15,998	6,753	6,578	6,481	5,947	6,418	12,423	39,222	42,965	42,487	36,601	29,790	251,660
1956	12,015	6,666	7,018	6,589	6,062	6,458	17,856	39,287	43,933	38,941	33,968	29,483	248,274
1957	12,011	7,275	6,756	6,648	5,973	6,494	10,170	29,543	55,149	41,064	34,117	28,530	243,730
1958	13,213	7,422	6,736	6,576	5,964	6,508	10,300	49,571	50,189	38,473	34,332	27,376	256,659
1959	12,807	6,862	6,755	6,550	5,902	6,485	18,618	39,259	43,598	37,337	34,373	28,408	246,952
1960	13,451	6,391	6,582	6,596	6,102	6,490	16,448	38,587	41,965	48,729	37,812	32,202	261,355
1961	11,808	6,603	6,524	6,576	5,860	7,870	17,662	32,612	20,167	23,684	23,907	17,435	180,708
1962	12,762	7,128	6,900	6,719	5,935	6,588	8,517	37,518	40,166	37,674	33,678	28,728	232,313
1963	13,632	7,911	6,780	6,726	6,074	6,526	14,767	39,200	42,356	40,223	33,631	27,985	245,810
1964	17,980	10,307	6,655	6,540	6,192	6,460	12,585	26,018	37,809	39,859	35,292	30,820	236,516
1965	14,759	8,449	8,118	6,722	5,966	6,610	9,802	35,872	74,617	39,558	28,906	23,927	263,305
1966	10,548	7,268	12,732	11,400	9,759	16,689	19,414	59,502	36,926	36,359	32,590	27,228	280,415
1967	13,359	7,494	7,492	6,562	5,916	6,711	15,613	37,254	56,130	38,555	34,388	28,686	258,159
1968	13,354	7,591	7,545	6,692	6,273	6,675	8,982	39,056	81,785	38,753	32,688	27,598	276,991
1969	11,333	8,150	7,786	6,997	6,117	7,773	25,771	91,645	79,019	42,922	32,739	26,864	347,117
1970	9,246	7,845	6,647	6,579	5,918	6,539	14,009	58,119	53,676	41,832	34,791	26,902	272,102
1971	10,011	7,592	6,650	6,590	6,036	6,462	15,376	57,560	89,428	36,403	31,765	25,923	299,796
1972	9,628	7,183	7,158	6,458	6,044	13,012	14,583	69,364	53,850	42,869	30,771	25,118	286,038
1973	9,887	7,187	6,895	6,561	5,966	6,556	20,640	62,965	82,027	46,664	34,945	30,022	320,316
1974	9,446	7,377	6,678	6,551	5,831	6,598	14,084	74,289	86,519	48,262	38,485	29,904	334,021
1975	11,583	7,427	6,857	6,708	6,023	6,595	9,565	36,008	105,297	57,019	44,823	33,702	331,605
1976	10,838	7,915	7,258	6,931	6,368	6,612	13,327	51,143	45,759	36,397	34,937	30,716	258,200
1977	9,176	6,712	6,792	6,616	5,892	6,455	12,399	25,314	25,149	34,306	36,167	29,273	204,250
1978	10,670	6,445	6,713	6,507	5,907	7,682	10,837	38,966	37,994	45,149	38,879	32,004	247,753
1979	9,018	6,250	6,428	6,553	5,903	6,645	16,908	38,076	43,108	39,611	38,741	29,417	246,657
1980	10,562	6,969	6,630	6,826	6,326	7,351	10,946	54,131	59,283	42,537	39,217	32,172	282,947
1981	8,667	7,177	7,061	6,663	6,027	6,473	13,479	34,015	42,337	35,154	34,129	28,244	229,426
1982	7,917	6,628	6,546	6,525	5,954	7,196	12,521	76,021	74,203	58,587	40,541	27,957	330,595
1983	9,344	6,737	7,694	7,111	18,331	86,319	24,381	63,801	112,966	61,243	39,452	33,225	470,603
1984	9,414	7,524	7,214	12,351	18,167	34,188	60,872	93,129	87,339	60,407	40,171	33,990	464,765
1985	8,955	7,367	7,053	7,290	9,963	17,867	53,403	85,055	50,023	44,796	38,868	29,552	360,193
1986	9,460	7,336	7,580	7,862	13,629	96,419	50,961	89,319	111,862	65,260	37,926	30,214	527,827
1987	9,903	7,546	6,969	7,144	18,261	15,465	30,905	59,942	32,790	38,402	43,963	33,640	304,930
1988	8,902	6,769	6,527	6,566	6,087	6,507	20,158	36,525	29,947	38,980	40,320	24,922	232,209
1989	19,397	6,386	6,687	6,628	5,913	6,529	20,321	41,829	43,086	40,028	40,375	26,048	263,224
1990	11,728	6,502	7,018	6,898	6,050	6,726	6,781	41,243	39,612	40,195	30,354	27,005	230,112
1991	7,926	6,468	6,468	6,266	5,714	6,402	8,986	24,909	40,026	41,736	33,520	21,820	210,238
1992	8,122	6,929	6,840	6,830	6,815	6,930	16,374	36,294	27,223	26,416	26,964	13,502	189,239
1993	8,234	6,951	6,823	6,948	6,157	7,425	9,414	33,818	34,058	36,299	33,074	30,983	220,181
1994	8,516	6,612	6,924	6,860	6,230	6,890	15,948	35,594	34,884	36,568	35,310	20,933	221,268
1995	8,369	6,835	6,839	6,907	6,237	6,276	7,707	32,652	32,108	44,579	30,733	23,947	213,189
1996	8,110	7,280	7,233	12,394	6,574	8,822	21,937	62,067	83,408	48,305	33,929	27,638	327,697
1997	9,093	6,472	7,472	6,818	6,015	15,148	57,014	91,693	84,033	51,834	39,382	30,063	405,035
1998	9,248	6,582	6,699	6,554	5,773	6,914	13,469	83,534	81,205	51,142	33,655	27,335	332,111
1999	8,506	6,788	6,604	6,610	9,762	15,711	32,708	75,874	68,791	53,194	32,676	28,443	345,666
Average	10,942	7,179	7,164	7,093	7,197	12,136	19,429	52,621	57,830	42,644	35,006	27,915	287,155
Maximum	19,397	10,307	12,732	12,394	18,331	96,419	60,872	101,449	112,966	65,260	44,823	33,990	527,827
Minimum	7,917	6,250	6,428	6,266	5,714	6,276	6,781	24,909	20,167	23,684	23,907	13,502	180,708

P-6a
Bonneville Unit Operations (cfs)
Provo River from North Fork to Olmsted
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	157	130	158	113	113	116	330	1,049	1,263	692	496	405	420
1951	224	120	127	124	122	119	318	1,270	1,318	710	515	496	457
1952	153	136	135	121	113	343	789	1,650	1,509	657	476	443	544
1953	180	110	123	121	115	150	261	768	1,358	594	553	442	399
1954	233	124	113	109	109	107	361	689	480	654	602	501	342
1955	260	113	107	105	107	104	209	638	722	691	595	501	348
1956	195	112	114	107	105	105	300	639	738	633	552	495	342
1957	195	122	110	108	108	106	171	480	927	668	555	479	337
1958	215	125	110	107	107	106	173	806	843	626	558	460	355
1959	208	115	110	107	106	105	313	639	733	607	559	477	341
1960	219	107	107	107	106	106	276	628	705	793	615	541	360
1961	192	111	106	107	106	128	297	530	339	385	389	293	250
1962	208	120	112	109	107	107	143	610	675	613	548	483	321
1963	222	133	110	109	109	106	248	638	712	654	547	470	340
1964	292	173	108	106	108	105	212	423	635	648	574	518	326
1965	240	142	132	109	107	107	165	583	1,254	643	470	402	364
1966	172	122	207	185	176	271	326	968	621	591	530	458	387
1967	217	126	122	107	107	109	262	606	943	627	559	482	357
1968	217	128	123	109	109	109	151	635	1,374	630	532	464	382
1969	184	137	127	114	110	126	433	1,491	1,328	698	532	451	479
1970	150	132	108	107	107	106	235	945	902	680	566	452	376
1971	163	128	108	107	109	105	258	936	1,503	592	517	436	414
1972	157	121	116	105	105	212	245	1,128	905	697	500	422	394
1973	161	121	112	107	107	107	347	1,024	1,379	759	568	505	442
1974	154	124	109	107	105	107	237	1,208	1,454	785	626	503	461
1975	188	125	112	109	108	107	161	586	1,770	927	729	566	458
1976	176	133	118	113	111	108	224	832	769	592	568	516	356
1977	149	113	110	108	106	105	208	412	423	558	588	492	282
1978	174	108	109	106	106	125	182	634	639	734	632	538	342
1979	147	105	105	107	106	108	284	619	724	644	630	494	341
1980	172	117	108	111	110	120	184	880	996	692	638	541	390
1981	141	121	115	108	109	105	227	553	712	572	555	475	317
1982	129	111	106	106	107	117	210	1,236	1,247	953	659	470	457
1983	152	113	125	116	330	1,404	410	1,038	1,899	996	642	558	650
1984	153	126	117	201	316	556	1,023	1,515	1,468	982	653	571	640
1985	146	124	115	119	179	291	898	1,383	841	729	632	497	498
1986	154	123	123	128	245	1,568	856	1,453	1,880	1,061	617	508	729
1987	161	127	113	116	329	252	519	975	551	625	715	565	421
1988	145	114	106	107	106	106	339	594	503	634	656	419	320
1989	315	107	109	108	106	106	342	680	724	651	657	438	364
1990	191	109	114	112	109	109	114	671	666	654	494	454	318
1991	129	109	105	102	103	104	151	405	673	679	545	367	290
1992	132	116	111	111	118	113	275	590	458	430	439	227	261
1993	134	117	111	113	111	121	158	550	572	590	538	521	304
1994	139	111	113	112	112	112	268	579	586	595	574	352	306
1995	136	115	111	112	112	102	130	531	540	725	500	402	294
1996	132	122	118	202	114	143	369	1,009	1,402	786	552	464	451
1997	148	109	122	111	108	246	958	1,491	1,412	843	641	505	559
1998	150	111	109	107	104	112	226	1,359	1,365	832	547	459	459
1999	138	114	107	107	176	256	550	1,234	1,156	865	531	478	477
Average	178	121	117	115	129	197	327	856	972	694	569	469	396
Maximum	315	173	207	202	330	1,568	1,023	1,650	1,899	1,061	729	571	729
Minimum	129	105	105	102	103	102	114	405	339	385	389	227	250

P-6b
Bonneville Unit Operations (acre-feet)
Provo River from North Fork to Olmsted
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,613	3,522	4,936	4,024	3,132	4,000	9,023	4,278	6,413	11,569	13,259	9,359	78,127
1951	6,348	2,805	2,685	4,458	3,730	2,855	2,810	3,644	7,664	16,034	12,259	9,559	74,850
1952	5,687	3,305	3,185	3,213	1,235	2,047	686	3,577	6,164	13,574	11,559	8,959	63,190
1953	5,765	3,305	5,424	4,196	3,952	6,318	8,360	11,084	6,569	12,870	13,260	10,060	91,163
1954	6,542	5,326	4,644	4,684	3,967	3,114	7,675	11,052	14,243	19,438	17,338	12,938	110,960
1955	8,526	5,345	5,059	5,596	4,934	5,891	8,412	10,693	11,368	17,863	16,163	14,763	114,613
1956	7,507	3,905	5,443	4,430	4,695	4,088	7,475	7,901	10,381	16,576	15,076	14,676	102,155
1957	6,479	4,205	5,353	5,084	4,467	5,277	6,066	8,235	7,259	11,959	12,959	9,559	86,903
1958	6,748	5,325	4,051	5,207	3,372	4,017	4,766	4,479	11,840	14,459	14,159	9,959	88,382
1959	8,081	5,400	4,957	5,376	4,642	5,679	9,075	12,537	12,626	19,025	17,125	12,225	116,748
1960	7,781	3,805	5,626	5,399	4,737	4,419	5,275	9,450	12,226	19,325	23,925	19,625	121,594
1961	6,181	5,979	5,290	6,153	5,255	7,424	12,375	13,825	9,726	19,725	18,725	9,925	120,583
1962	10,018	6,409	6,451	6,229	4,800	6,081	4,436	8,066	9,252	11,747	13,747	13,047	100,281
1963	6,211	4,105	5,649	5,284	4,467	5,602	10,275	8,515	11,415	15,710	16,010	11,510	104,755
1964	7,026	3,805	5,845	4,994	4,623	5,336	9,224	6,290	9,180	11,976	13,976	13,876	96,151
1965	6,848	3,954	4,222	3,189	2,324	3,284	5,692	8,069	9,159	10,659	10,659	7,959	76,019
1966	4,572	4,795	2,485	2,847	4,493	3,744	4,975	8,502	11,935	18,231	16,031	11,131	93,741
1967	6,848	4,308	5,122	4,684	4,267	4,371	8,975	9,778	8,059	11,659	12,759	9,059	89,889
1968	6,248	5,020	3,711	4,393	3,901	2,447	5,664	11,055	6,264	12,359	11,659	8,759	81,480
1969	6,048	4,247	4,134	4,272	2,889	3,429	529	3,365	7,764	14,734	12,459	8,759	72,628
1970	5,327	4,884	4,443	3,240	3,174	3,310	9,319	6,675	7,032	16,204	13,351	8,251	85,211
1971	5,648	2,025	1,747	1,047	578	659	4,219	4,565	10,717	11,959	12,359	8,259	63,782
1972	5,448	2,545	1,847	1,147	564	0	0	3,127	7,264	16,834	12,859	9,059	60,694
1973	5,348	2,705	2,547	2,547	2,578	1,547	3,350	4,465	7,664	15,434	12,859	8,559	69,603
1974	5,837	5,261	3,978	3,978	3,564	5,001	12,365	5,939	11,856	16,379	16,837	11,831	102,826
1975	5,774	6,341	4,900	4,044	3,292	4,241	6,294	16,330	3,911	9,163	18,282	9,817	92,389
1976	6,797	5,738	3,357	3,259	4,018	4,110	9,200	7,079	11,500	15,914	15,535	14,233	100,739
1977	5,933	5,845	5,383	4,992	4,334	3,979	6,381	8,953	13,141	19,937	18,675	14,822	112,373
1978	6,654	5,265	5,346	5,624	5,089	6,692	7,287	12,762	9,607	17,484	17,105	12,172	111,087
1979	3,709	4,611	3,785	4,655	3,656	3,105	14,931	7,576	10,393	16,895	17,693	11,976	102,984
1980	5,507	5,657	5,272	4,828	3,971	4,144	6,427	5,959	5,975	12,758	14,841	9,712	85,049
1981	4,739	5,764	5,756	4,698	4,131	4,796	9,509	10,725	9,017	11,987	13,178	9,521	93,822
1982	4,509	3,593	5,651	4,505	3,602	4,183	9,879	6,296	8,201	14,426	15,042	9,913	89,799
1983	4,661	5,913	5,323	4,956	2,900	2,278	2,936	4,354	8,499	17,045	16,615	11,387	86,868
1984	5,442	5,567	2,082	2,572	915	1,885	2,028	7,748	8,102	15,473	16,516	13,448	81,778
1985	5,563	5,566	4,743	4,980	5,289	2,082	2,257	9,291	12,830	18,645	17,383	11,666	100,296
1986	5,073	3,138	5,471	5,088	6,058	3,161	3,657	9,344	9,417	19,694	15,829	10,307	96,238
1987	4,694	6,132	5,587	5,336	5,015	2,376	5,155	7,325	12,215	14,344	20,733	16,388	105,300
1988	4,093	5,587	5,711	5,377	3,845	3,822	8,875	12,910	6,677	18,963	18,290	8,843	102,994
1989	3,758	5,588	5,747	5,702	5,175	5,311	8,973	10,445	13,629	16,795	16,711	10,797	108,631
1990	5,778	5,394	5,271	5,969	3,080	5,089	1,486	11,132	9,025	13,559	16,124	13,056	94,961
1991	5,514	5,585	5,645	5,953	5,105	4,416	5,955	6,339	8,820	14,735	14,945	9,816	92,830
1992	5,978	5,168	4,718	6,052	6,071	6,020	12,377	13,238	8,944	19,422	18,979	9,636	116,600
1993	7,046	6,099	5,783	5,385	4,387	5,809	3,870	10,348	8,820	12,282	14,748	13,054	97,631
1994	4,473	5,725	5,352	5,189	3,850	3,848	10,641	8,638	10,601	15,823	16,621	11,199	101,959
1995	4,659	5,239	5,036	3,721	2,333	1,690	2,805	10,422	8,526	11,006	11,510	7,853	74,799
1996	4,232	6,019	5,974	5,015	3,877	2,376	4,200	5,591	5,682	15,549	12,491	8,638	79,642
1997	3,970	4,022	5,441	3,652	4,387	7,623	7,631	7,665	11,275	19,509	17,432	12,010	104,615
1998	5,603	5,788	5,159	4,306	4,252	3,790	4,501	7,184	8,879	14,749	11,950	10,164	86,327
1999	4,625	5,801	5,172	4,306	3,778	4,141	4,109	7,174	8,857	16,080	11,928	10,142	86,114
Average	5,809	4,829	4,730	4,517	3,855	4,018	6,448	8,280	9,332	15,371	15,210	11,045	93,443
Maximum	10,018	6,409	6,451	6,229	6,071	7,623	14,931	16,330	14,243	19,937	23,925	19,625	121,594
Minimum	3,709	2,025	1,747	1,047	564	0	0	3,127	3,911	9,163	10,659	7,853	60,694

P-6b
Bonneville Unit Operations (cfs)
Provo River from North Fork to Olmsted
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	75	59	80	65	56	65	152	70	108	188	216	157	108
1951	103	47	44	72	67	46	47	59	129	261	199	161	103
1952	92	56	52	52	21	33	12	58	104	221	188	151	87
1953	94	56	88	68	71	103	141	180	110	209	216	169	126
1954	106	90	76	76	71	51	129	180	239	316	282	217	153
1955	139	90	82	91	89	96	141	174	191	291	263	248	158
1956	122	66	89	72	82	66	126	128	174	270	245	247	141
1957	105	71	87	83	80	86	102	134	122	194	211	161	120
1958	110	89	66	85	61	65	80	73	199	235	230	167	122
1959	131	91	81	87	84	92	153	204	212	309	279	205	161
1960	127	64	92	88	82	72	89	154	205	314	389	330	168
1961	101	100	86	100	95	121	208	225	163	321	305	167	167
1962	163	108	105	101	86	99	75	131	155	191	224	219	139
1963	101	69	92	86	80	91	173	138	192	256	260	193	145
1964	114	64	95	81	80	87	155	102	154	195	227	233	132
1965	111	66	69	52	42	53	96	131	154	173	173	134	105
1966	74	81	40	46	81	61	84	138	201	297	261	187	129
1967	111	72	83	76	77	71	151	159	135	190	208	152	124
1968	102	84	60	71	68	40	95	180	105	201	190	147	112
1969	98	71	67	69	52	56	9	55	130	240	203	147	100
1970	87	82	72	53	57	54	157	109	118	264	217	139	118
1971	92	34	28	17	10	11	71	74	180	194	201	139	88
1972	89	43	30	19	10	0	0	51	122	274	209	152	84
1973	87	45	41	41	46	25	56	73	129	251	209	144	96
1974	95	88	65	65	64	81	208	97	199	266	274	199	142
1975	94	107	80	66	59	69	106	266	66	149	297	165	128
1976	111	96	55	53	70	67	155	115	193	259	253	239	139
1977	96	98	88	81	78	65	107	146	221	324	304	249	155
1978	108	88	87	91	92	109	122	208	161	284	278	205	153
1979	60	77	62	76	66	50	251	123	175	275	288	201	142
1980	90	95	86	79	69	67	108	97	100	207	241	163	117
1981	77	97	94	76	74	78	160	174	152	195	214	160	130
1982	73	60	92	73	65	68	166	102	138	235	245	167	124
1983	76	99	87	81	52	37	49	71	143	277	270	191	120
1984	89	94	34	42	16	31	34	126	136	252	269	226	113
1985	90	94	77	81	95	34	38	151	216	303	283	196	139
1986	83	53	89	83	109	51	61	152	158	320	257	173	133
1987	76	103	91	87	90	39	87	119	205	233	337	275	145
1988	67	94	93	87	67	62	149	210	112	308	297	149	142
1989	61	94	93	93	93	86	151	170	229	273	272	181	150
1990	94	91	86	97	55	83	25	181	152	221	262	219	131
1991	90	94	92	97	92	72	100	103	148	240	243	165	128
1992	97	87	77	98	106	98	208	215	150	316	309	162	161
1993	115	103	94	88	79	94	65	168	148	200	240	219	135
1994	73	96	87	84	69	63	179	140	178	257	270	188	141
1995	76	88	82	61	42	27	47	170	143	179	187	132	103
1996	69	101	97	82	67	39	71	91	95	253	203	145	110
1997	65	68	88	59	79	124	128	125	189	317	284	202	145
1998	91	97	84	70	77	62	76	117	149	240	194	171	119
1999	75	97	84	70	68	67	69	117	149	262	194	170	119
Average	94	81	77	73	69	65	108	135	157	250	247	186	129
Maximum	163	108	105	101	109	124	251	266	239	324	389	330	168
Minimum	60	34	28	17	10	0	0	51	66	149	173	132	84

P-6c
Bonneville Unit Operations (acre-feet)
Provo River from North Fork to Olmsted
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,590	5	5	1,746	1,890	1,740	872	38,481	5,841	12,358	5,629	3,607	74,766
1951	2,235	48	125	1,691	1,729	213	872	21,161	6,208	10,440	6,642	4,334	55,698
1952	2,235	48	147	838	1,598	6	6,038	8,537	10,132	9,003	5,139	3,256	46,977
1953	2,235	48	724	1,953	1,602	5	872	13,965	29,259	7,314	7,557	4,990	70,525
1954	2,235	48	1,035	1,342	1,466	1,446	2,797	4,638	4,232	7,439	7,688	5,084	39,449
1955	2,235	195	644	511	575	206	2,796	4,637	4,055	7,845	8,112	3,624	35,436
1956	0	202	705	1,606	1,012	1,989	2,796	4,636	4,223	6,950	7,165	4,709	35,993
1957	2,235	48	286	1,011	1,021	795	2,797	4,659	18,904	7,627	7,883	5,225	52,491
1958	2,235	48	181	848	1,335	2,005	2,797	28,411	9,726	7,502	7,753	5,131	67,972
1959	2,235	101	805	708	868	372	2,796	4,729	4,141	7,752	8,014	5,318	37,839
1960	2,235	203	451	671	972	1,619	2,796	4,648	4,100	8,126	8,406	5,600	39,829
1961	0	45	814	5	266	5	2,025	4,652	4,138	0	0	0	11,951
1962	0	107	6	6	642	6	872	6,537	4,161	8,001	8,275	5,506	34,120
1963	2,235	48	424	787	949	442	2,796	4,689	4,058	7,658	7,916	5,248	37,251
1964	2,235	99	6	1,118	1,119	786	2,796	4,613	4,170	7,783	8,047	5,342	38,115
1965	2,235	48	25	1,650	2,301	1,488	2,796	4,657	39,301	8,202	5,238	3,326	71,267
1966	2,235	94	0	65	126	6	2,796	17,051	4,054	6,909	7,132	4,686	45,155
1967	2,235	154	6	1,338	1,201	1,778	2,796	4,648	23,280	7,159	7,393	4,873	56,861
1968	2,235	48	162	1,233	1,851	918	872	6,552	17,513	6,658	6,871	4,498	49,412
1969	2,235	48	0	1,876	1,713	66	851	8,573	6,407	10,596	6,806	4,451	43,621
1970	2,235	161	557	1,861	2,006	1,477	2,796	33,016	10,610	7,470	7,720	5,108	75,017
1971	2,235	48	99	2,175	2,020	1,780	2,796	10,613	4,852	5,101	5,205	3,303	40,227
1972	2,235	48	90	2,227	2,008	5	7,961	5,152	5,481	9,160	5,303	3,373	43,042
1973	2,235	48	162	1,882	1,434	1,651	872	8,547	8,080	10,533	6,740	4,404	46,588
1974	2,235	48	555	577	559	984	965	8,722	20,951	12,986	9,304	6,244	64,130
1975	2,488	48	531	453	776	223	965	6,801	14,767	13,108	9,304	6,244	55,708
1976	2,488	119	717	1,160	1,734	2,038	965	16,225	4,521	8,986	9,304	6,244	54,501
1977	2,488	183	766	1,090	1,190	2,130	2,868	4,763	4,647	8,986	9,304	6,244	44,659
1978	0	642	802	443	395	0	944	6,828	4,425	8,986	9,304	6,244	39,014
1979	2,488	547	1,142	450	1,682	2,136	965	6,785	4,423	8,986	9,304	6,244	45,153
1980	2,488	293	877	1,321	1,781	1,011	965	6,716	10,649	8,986	9,304	6,244	50,636
1981	2,488	186	392	1,376	1,353	1,260	2,889	4,896	4,787	8,986	9,304	6,244	44,162
1982	2,488	193	392	1,519	1,824	1,965	971	8,768	10,539	20,634	9,304	6,244	64,842
1983	2,489	125	826	1,193	3,514	4,454	6,208	8,687	10,419	16,290	9,304	6,244	69,753
1984	2,488	383	1,004	5,134	4,378	4,810	11,120	8,809	10,424	24,706	9,304	6,244	88,805
1985	2,488	384	1,406	1,168	5	3,821	6,970	8,714	9,503	8,986	9,304	6,244	58,995
1986	2,488	297	678	1,061	0	10,656	6,944	8,690	10,421	24,354	9,304	6,244	81,137
1987	2,488	136	561	813	3,254	3,936	11,763	20,296	6,114	11,413	9,304	6,244	76,322
1988	2,488	363	392	753	629	755	2,889	4,864	4,426	8,986	9,304	6,244	42,095
1989	2,488	154	392	436	369	43	2,889	4,883	4,424	8,986	9,304	6,244	40,612
1990	2,488	558	877	128	2,455	946	965	6,700	4,425	8,986	963	0	29,491
1991	0	369	392	146	313	1,658	2,026	4,787	4,423	8,986	9,304	693	33,097
1992	0	784	1,172	5	0	11	2,025	4,858	3,118	0	0	0	11,973
1993	0	8	365	597	1,049	340	2,094	6,687	4,419	8,986	9,304	6,244	40,093
1994	2,488	226	796	801	1,043	570	2,889	4,861	4,423	8,986	9,304	2,334	38,722
1995	0	202	392	1,942	2,413	2,038	1,601	6,687	4,419	9,946	9,304	6,244	45,187
1996	2,488	0	175	0	1,875	0	944	8,794	5,847	15,408	9,304	6,282	51,117
1997	2,494	248	708	747	884	0	11,564	8,687	10,419	14,054	9,304	6,244	65,354
1998	2,588	194	989	1,557	1,048	2,358	6,705	8,687	10,419	16,267	9,304	6,244	66,360
1999	2,488	206	977	1,564	5	4,944	9,113	8,687	10,419	19,495	9,304	6,244	73,447
Average	1,988	178	515	1,112	1,325	1,478	3,249	9,254	8,694	10,061	7,738	4,909	50,499
Maximum	2,590	784	1,406	5,134	4,378	10,656	11,763	38,481	39,301	24,706	9,304	6,282	88,805
Minimum	0	0	0	0	0	0	851	4,613	3,118	0	0	0	11,951

P-6c
Bonneville Unit Operations (cfs)
Provo River from North Fork to Olmsted
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	42	0	0	28	34	28	15	626	98	201	92	61	103
1951	36	1	2	28	31	3	15	344	104	170	108	73	77
1952	36	1	2	14	28	0	101	139	170	146	84	55	65
1953	36	1	12	32	29	0	15	227	492	119	123	84	97
1954	36	1	17	22	26	24	47	75	71	121	125	85	54
1955	36	3	10	8	10	3	47	75	68	128	132	61	49
1956	0	3	11	26	18	32	47	75	71	113	117	79	50
1957	36	1	5	16	18	13	47	76	318	124	128	88	73
1958	36	1	3	14	24	33	47	462	163	122	126	86	94
1959	36	2	13	12	16	6	47	77	70	126	130	89	52
1960	36	3	7	11	17	26	47	76	69	132	137	94	55
1961	0	1	13	0	5	0	34	76	70	0	0	0	17
1962	0	2	0	0	12	0	15	106	70	130	135	93	47
1963	36	1	7	13	17	7	47	76	68	125	129	88	51
1964	36	2	0	18	19	13	47	75	70	127	131	90	53
1965	36	1	0	27	41	24	47	76	660	133	85	56	98
1966	36	2	0	1	2	0	47	277	68	112	116	79	62
1967	36	3	0	22	22	29	47	76	391	116	120	82	79
1968	36	1	3	20	32	15	15	107	294	108	112	76	68
1969	36	1	0	31	31	1	14	139	108	172	111	75	60
1970	36	3	9	30	36	24	47	537	178	122	126	86	104
1971	36	1	2	35	36	29	47	173	82	83	85	56	56
1972	36	1	1	36	35	0	134	84	92	149	86	57	59
1973	36	1	3	31	26	27	15	139	136	171	110	74	64
1974	36	1	9	9	10	16	16	142	352	211	151	105	89
1975	40	1	9	7	14	4	16	111	248	213	151	105	77
1976	40	2	12	19	30	33	16	264	76	146	151	105	75
1977	40	3	12	18	21	35	48	77	78	146	151	105	62
1978	0	11	13	7	7	0	16	111	74	146	151	105	54
1979	40	9	19	7	30	35	16	110	74	146	151	105	62
1980	40	5	14	21	31	16	16	109	179	146	151	105	70
1981	40	3	6	22	24	20	49	80	80	146	151	105	61
1982	40	3	6	25	33	32	16	143	177	336	151	105	90
1983	40	2	13	19	63	72	104	141	175	265	151	105	96
1984	40	6	16	83	76	78	187	143	175	402	151	105	122
1985	40	6	23	19	0	62	117	142	160	146	151	105	81
1986	40	5	11	17	0	173	117	141	175	396	151	105	112
1987	40	2	9	13	59	64	198	330	103	186	151	105	105
1988	40	6	6	12	11	12	49	79	74	146	151	105	58
1989	40	3	6	7	7	1	49	79	74	146	151	105	56
1990	40	9	14	2	44	15	16	109	74	146	16	0	41
1991	0	6	6	2	6	27	34	78	74	146	151	12	46
1992	0	13	19	0	0	0	34	79	52	0	0	0	16
1993	0	0	6	10	19	6	35	109	74	146	151	105	55
1994	40	4	13	13	19	9	49	79	74	146	151	39	53
1995	0	3	6	32	43	33	27	109	74	162	151	105	62
1996	40	0	3	0	33	0	16	143	98	251	151	106	70
1997	41	4	12	12	16	0	194	141	175	229	151	105	90
1998	42	3	16	25	19	38	113	141	175	265	151	105	92
1999	40	3	16	25	0	80	153	141	175	317	151	105	101
Average	32	3	8	18	24	24	55	151	146	164	126	82	70
Maximum	42	13	23	83	76	173	198	626	660	402	151	106	122
Minimum	0	0	0	0	0	0	14	75	52	0	0	0	16

P-6d
Bonneville Unit Operations (acre-feet)
Provo River from North Fork to Olmsted
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,423	4,195	4,790	1,192	1,229	1,409	9,733	21,758	62,894	18,612	11,596	11,115	150,944
1951	5,169	4,298	5,009	1,486	1,324	4,274	15,229	53,277	64,539	17,204	12,758	15,626	200,191
1952	1,490	4,717	4,947	3,383	3,680	19,019	40,213	89,335	73,495	17,849	12,545	14,169	284,840
1953	3,077	3,186	1,409	1,266	820	2,898	6,318	22,193	44,990	16,329	13,181	11,237	126,904
1954	5,533	2,021	1,255	696	612	1,992	10,997	26,665	10,071	13,350	12,016	11,802	97,010
1955	5,237	1,213	874	373	438	320	1,214	23,891	27,542	16,779	12,326	11,403	101,611
1956	4,508	2,560	870	552	354	380	7,585	26,750	29,329	15,414	11,727	10,097	110,125
1957	3,297	3,023	1,116	552	485	421	1,307	16,649	28,986	21,479	13,275	13,747	104,336
1958	4,229	2,050	2,503	520	1,257	485	2,737	16,680	28,624	16,512	12,420	12,287	100,305
1959	2,491	1,361	993	465	392	433	6,746	21,994	26,832	10,560	9,234	10,865	92,365
1960	3,435	2,383	504	525	392	451	8,377	24,489	25,640	21,278	5,481	6,977	99,932
1961	5,627	579	419	418	339	440	3,262	14,135	6,303	3,959	5,182	7,510	48,174
1962	2,744	612	443	485	493	501	3,209	22,915	26,753	17,926	11,656	10,175	97,912
1963	5,186	3,759	706	654	658	481	1,696	25,996	26,884	16,854	9,705	11,226	103,804
1964	8,720	6,403	804	427	449	337	564	15,114	24,460	20,100	13,270	11,602	102,249
1965	5,676	4,447	3,871	1,882	1,340	1,837	1,313	23,146	26,157	20,697	13,009	12,642	116,018
1966	3,741	2,379	10,247	8,488	5,140	12,938	11,642	33,949	20,938	11,219	9,427	11,411	141,520
1967	4,276	3,033	2,364	539	448	562	3,842	22,828	24,792	19,738	14,236	14,754	111,409
1968	4,871	2,523	3,672	1,065	521	3,309	2,446	21,449	58,008	19,736	14,158	14,340	146,099
1969	3,050	3,856	3,653	848	1,514	4,279	24,391	79,708	64,848	17,592	13,475	13,654	230,868
1970	1,683	2,800	1,647	1,477	737	1,751	1,894	18,428	36,034	18,158	13,721	13,544	111,874
1971	2,128	5,519	4,803	3,367	3,438	4,023	8,361	42,383	73,859	19,344	14,201	14,362	195,787
1972	1,945	4,590	5,221	3,083	3,472	13,006	6,621	61,086	41,106	16,876	12,610	12,686	182,301
1973	2,304	4,435	4,185	2,131	1,954	3,358	16,417	49,954	66,284	20,697	15,347	17,060	204,125
1974	1,374	2,069	2,144	1,995	1,708	612	754	59,627	53,711	18,898	12,344	11,829	167,065
1975	3,321	1,039	1,426	2,210	1,954	2,130	2,306	12,877	86,619	34,748	17,237	17,640	183,508
1976	1,553	2,058	3,185	2,511	616	463	3,163	27,839	29,738	11,497	10,098	10,239	102,960
1977	755	684	643	533	368	346	3,150	11,598	7,362	5,383	8,188	8,207	47,218
1978	4,016	538	564	440	423	990	2,606	19,376	23,962	18,679	12,470	13,588	97,652
1979	2,821	1,092	1,500	1,447	564	1,405	1,013	23,715	28,292	13,730	11,744	11,197	98,520
1980	2,567	1,019	481	677	574	2,196	3,554	41,456	42,659	20,793	15,072	16,216	147,263
1981	1,440	1,227	912	588	543	416	1,081	18,393	28,534	14,182	11,647	12,479	91,442
1982	919	2,843	502	500	528	1,047	1,671	60,957	55,463	23,528	16,195	11,800	175,953
1983	2,193	700	1,545	962	11,918	79,586	15,236	50,759	94,048	27,909	13,532	15,593	313,981
1984	1,483	1,574	4,127	4,645	12,875	27,493	47,724	76,572	68,813	20,228	14,351	14,298	294,182
1985	903	1,417	904	1,141	4,669	11,964	44,176	67,049	27,690	17,165	12,181	11,642	200,902
1986	1,899	3,902	1,431	1,713	7,570	82,602	40,360	71,284	92,024	21,212	12,792	13,663	350,452
1987	2,721	1,279	820	995	9,992	9,153	13,987	32,320	14,462	12,645	13,927	11,008	123,308
1988	2,321	819	423	435	1,613	1,929	8,394	18,751	18,844	11,032	12,725	9,835	87,120
1989	13,150	644	548	489	369	1,174	8,459	26,501	25,032	14,248	14,360	9,007	113,981
1990	3,462	550	869	801	516	691	4,331	23,412	26,163	17,651	13,267	13,949	105,661
1991	2,411	515	430	166	295	327	1,005	13,782	26,783	18,015	9,271	11,311	84,311
1992	2,144	977	950	773	744	900	1,971	18,199	15,162	6,994	7,985	3,866	60,666
1993	1,187	844	674	965	721	1,276	3,450	16,782	20,819	15,032	9,022	11,685	82,458
1994	1,555	662	775	869	1,337	2,471	2,418	22,095	19,860	11,760	9,385	7,401	80,587
1995	3,710	1,395	1,411	1,245	1,491	2,547	3,302	15,543	19,164	23,627	9,919	9,850	93,203
1996	1,389	1,262	1,085	7,379	822	6,446	16,794	47,682	71,879	17,348	12,134	12,718	196,938
1997	2,629	2,203	1,323	2,418	744	7,525	37,819	75,340	62,339	18,271	12,646	11,810	235,066
1998	1,057	601	551	690	473	766	2,263	67,662	61,908	20,125	12,401	10,927	179,424
1999	1,393	782	455	739	5,978	6,626	19,486	60,013	49,515	17,619	11,443	12,056	186,105
Average	3,144	2,173	1,920	1,464	2,018	6,640	9,732	35,087	39,804	17,212	12,058	11,962	143,212
Maximum	13,150	6,403	10,247	8,488	12,875	82,602	47,724	89,335	94,048	34,748	17,237	17,640	350,452
Minimum	755	515	419	166	295	320	564	11,598	6,303	3,959	5,182	3,866	47,218

P-6d
Bonneville Unit Operations (cfs)
Provo River from North Fork to Olmsted
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	39	71	78	19	22	23	164	354	1,057	303	189	187	209
1951	84	72	81	24	24	70	256	867	1,085	280	207	263	277
1952	39	71	78	19	21	23	164	354	1,057	303	189	187	392
1953	84	72	81	24	24	70	256	867	1,085	280	207	263	175
1954	24	79	80	55	66	309	676	1,453	1,235	290	204	238	134
1955	50	54	23	21	15	47	106	361	756	266	214	189	140
1956	90	34	20	11	11	32	185	434	169	217	195	198	152
1957	85	20	14	6	8	5	20	389	463	273	200	192	144
1958	73	43	14	9	6	6	127	435	493	251	191	170	139
1959	54	51	18	9	9	7	22	271	487	349	216	231	128
1960	69	34	41	8	22	8	46	271	481	269	202	206	138
1961	41	23	16	8	7	7	113	358	451	172	150	183	67
1962	56	40	8	9	7	7	141	398	431	346	89	117	135
1963	92	10	7	7	6	7	55	230	106	64	84	126	143
1964	45	10	7	8	9	8	54	373	450	292	190	171	141
1965	84	63	11	11	12	8	29	423	452	274	158	189	160
1966	142	108	13	7	8	5	9	246	411	327	216	195	195
1967	92	75	63	31	24	30	22	376	440	337	212	212	154
1968	61	40	167	138	89	210	196	552	352	182	153	192	201
1969	70	51	38	9	8	9	65	371	417	321	232	248	319
1970	79	42	60	17	9	54	41	349	975	321	230	241	155
1971	50	65	59	14	27	70	410	1,296	1,090	286	219	229	270
1972	27	47	27	24	13	28	32	300	606	295	223	228	251
1973	35	93	78	55	62	65	141	689	1,241	315	231	241	282
1974	32	77	85	50	63	212	111	993	691	274	205	213	231
1975	37	75	68	35	35	55	276	812	1,114	337	250	287	253
1976	22	35	35	32	30	10	13	970	903	307	201	199	142
1977	54	17	23	36	35	35	39	209	1,456	565	280	296	65
1978	25	35	52	41	11	8	53	453	500	187	164	172	135
1979	12	11	10	9	7	6	53	189	124	88	133	138	136
1980	65	9	9	7	7	16	44	315	403	304	203	228	203
1981	46	18	24	24	10	23	17	386	475	223	191	188	126
1982	42	17	8	11	10	36	60	674	717	338	245	273	243
1983	23	21	15	10	10	7	18	299	480	231	189	210	434
1984	15	48	8	8	9	17	28	991	932	383	263	198	405
1985	36	12	25	16	215	1,294	256	826	1,581	454	220	262	278
1986	24	26	67	76	232	447	802	1,245	1,156	329	233	240	484
1987	15	24	15	19	84	195	742	1,090	465	279	198	196	170
1988	31	66	23	28	132	1,343	678	1,159	1,547	345	208	230	120
1989	44	21	13	16	180	149	235	526	243	206	227	185	157
1990	38	14	7	7	29	31	141	305	317	179	207	165	146
1991	214	11	9	8	7	19	142	431	421	232	234	151	116
1992	56	9	14	13	9	11	73	381	440	287	216	234	84
1993	39	9	7	3	5	5	17	224	450	293	151	190	114
1994	35	16	15	13	13	15	33	296	255	114	130	65	111
1995	19	14	11	16	13	21	58	273	350	244	147	196	129
1996	25	11	13	14	23	40	41	359	334	191	153	124	271
1997	60	23	23	20	27	41	55	253	322	384	161	166	325
1998	23	21	18	120	15	105	282	775	1,208	282	197	214	248
1999	43	37	22	39	13	122	636	1,225	1,048	297	206	198	257
Average	53	39	34	24	35	107	165	554	674	279	196	202	198
Maximum	214	108	167	138	232	1,343	802	1,453	1,581	565	280	296	484
Minimum	12	9	7	3	5	5	9	189	106	64	84	65	65

P-7a
Bonneville Unit Operations (acre-feet)
Provo River from Olmsted to Murdock
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,728	4,180	5,930	3,021	2,650	3,296	20,003	61,424	68,051	30,791	16,747	15,469	236,290
1951	9,039	3,024	5,228	4,129	3,925	4,926	17,174	74,844	68,978	29,791	19,292	19,970	260,320
1952	5,709	2,970	4,315	4,004	2,618	17,406	48,597	101,922	85,205	31,483	19,202	19,527	342,958
1953	8,003	3,170	4,981	4,288	3,123	7,297	13,703	41,490	74,293	21,178	18,158	14,891	214,577
1954	8,795	3,917	3,018	2,479	2,456	1,996	18,005	34,809	14,333	19,150	17,852	16,106	142,917
1955	8,144	2,455	2,021	2,043	1,760	2,059	6,729	29,656	30,668	22,245	17,532	14,440	139,751
1956	5,457	3,082	4,167	1,966	1,866	2,078	14,171	32,393	31,928	20,194	16,635	13,626	147,565
1957	5,433	2,952	2,270	2,107	2,117	2,025	6,014	23,138	46,060	26,559	18,679	18,235	155,590
1958	7,521	4,174	2,288	1,980	1,958	2,053	7,580	44,867	39,910	21,964	18,340	17,217	169,852
1959	5,696	2,870	2,180	1,989	1,774	2,028	12,980	27,743	30,180	15,608	14,541	14,766	132,353
1960	6,449	2,486	1,664	1,965	1,837	2,042	14,731	29,892	28,487	26,275	12,403	10,785	139,015
1961	7,216	2,409	2,454	2,083	2,163	2,214	8,950	19,672	9,461	4,520	6,438	9,158	76,737
1962	4,313	2,464	2,358	2,169	2,016	2,052	8,438	31,380	29,011	23,382	17,182	14,362	139,127
1963	7,599	2,546	2,324	2,245	2,493	2,192	8,178	32,379	30,700	22,100	15,171	15,600	143,529
1964	11,662	6,245	1,940	2,031	1,986	2,137	6,599	21,488	28,217	25,613	18,842	16,095	142,853
1965	9,034	4,616	3,107	3,068	2,319	2,479	7,413	30,913	63,678	27,756	18,220	17,050	189,653
1966	8,019	5,075	9,611	9,551	7,491	14,645	18,840	53,569	25,195	16,582	14,915	15,873	199,366
1967	8,416	3,338	1,991	2,517	2,169	3,219	10,795	30,455	46,640	25,383	19,943	19,403	174,270
1968	8,399	3,823	2,565	3,032	3,208	2,682	5,144	33,419	73,475	25,085	19,972	18,929	199,734
1969	7,222	5,145	4,219	4,544	2,992	5,647	27,078	90,208	70,698	30,827	20,042	19,409	288,030
1970	6,581	6,652	3,243	2,798	2,427	2,388	10,077	53,562	45,690	27,639	19,736	18,691	199,485
1971	6,749	4,629	2,145	2,648	2,893	2,687	16,160	52,931	82,084	23,829	18,983	18,272	234,011
1972	5,897	4,206	2,754	2,341	1,833	12,419	15,668	65,736	46,232	28,419	17,309	16,552	219,367
1973	6,681	3,605	2,096	2,506	2,573	2,664	18,505	58,930	73,615	32,996	21,011	21,803	246,986
1974	5,378	4,512	2,505	2,065	1,870	2,272	11,942	68,136	74,586	29,830	18,903	16,572	238,572
1975	6,900	4,031	2,827	2,822	2,607	3,001	4,575	28,240	100,367	42,840	26,731	22,714	247,656
1976	5,599	6,644	4,491	3,349	3,043	3,034	14,059	47,268	37,128	17,678	16,570	15,195	174,057
1977	4,311	3,271	2,572	2,479	1,888	2,083	10,676	17,507	11,545	10,891	13,951	12,361	93,536
1978	5,692	2,525	2,393	2,485	2,568	5,977	7,834	31,891	27,322	26,468	18,973	18,641	152,768
1979	6,121	2,511	1,591	2,041	1,884	2,535	14,753	34,420	33,351	20,056	18,358	16,446	154,067
1980	6,423	4,861	2,876	3,213	3,001	2,697	7,712	53,142	52,450	28,891	21,937	21,992	209,195
1981	6,242	5,947	4,480	2,406	2,548	2,189	7,694	28,106	33,539	20,236	17,844	17,295	148,525
1982	4,779	3,965	2,904	2,090	2,209	5,068	12,551	71,183	65,404	45,000	23,557	17,939	256,650
1983	8,798	5,615	5,242	4,655	17,699	85,761	25,210	60,187	106,510	46,974	24,079	21,888	412,616
1984	6,670	7,253	6,148	12,410	19,513	36,980	61,398	89,959	80,236	47,421	25,013	21,130	414,132
1985	5,630	7,371	4,943	4,668	8,750	19,754	54,215	80,903	40,492	29,379	19,908	18,025	294,036
1986	7,376	6,444	6,706	5,569	14,887	95,804	52,377	84,705	101,349	48,331	20,265	19,781	463,592
1987	10,159	6,197	4,436	4,970	18,214	15,282	28,434	56,898	23,518	22,323	22,102	15,741	228,275
1988	6,453	3,877	2,050	1,632	1,841	2,004	15,180	25,829	22,934	16,587	18,513	14,437	131,335
1989	16,472	3,012	2,042	1,750	1,902	2,074	15,175	32,585	28,131	19,256	19,795	13,222	155,415
1990	5,513	4,060	3,940	3,852	2,075	3,492	5,467	34,896	29,409	24,962	17,073	16,911	151,649
1991	7,338	2,677	2,261	1,979	1,883	1,958	6,192	19,520	29,505	22,528	14,445	13,880	124,167
1992	3,886	3,862	2,650	3,382	4,366	2,467	8,408	22,429	16,983	7,260	8,610	6,156	90,458
1993	5,968	3,971	2,819	3,652	2,856	6,011	13,214	32,606	26,998	24,492	19,426	18,952	160,965
1994	8,931	2,892	2,988	2,885	2,973	2,946	9,455	28,365	22,347	16,516	15,332	9,299	124,930
1995	6,759	4,350	4,433	4,411	4,018	5,127	6,066	27,260	24,339	30,703	19,184	18,397	155,048
1996	7,852	6,381	5,452	9,593	3,848	8,998	19,090	56,153	75,858	33,212	19,751	18,104	264,291
1997	4,957	2,678	5,523	3,453	2,622	15,432	54,583	88,134	74,774	36,124	21,366	18,629	328,275
1998	4,777	4,698	4,113	2,606	1,951	3,588	14,953	81,875	74,660	37,162	21,937	17,956	270,275
1999	6,628	4,720	3,164	2,527	7,891	14,439	31,718	72,013	61,915	38,478	19,152	18,336	280,979
Average	6,967	4,167	3,488	3,369	4,031	9,112	17,089	47,021	48,369	26,459	18,398	16,725	205,196
Maximum	16,472	7,371	9,611	12,410	19,513	95,804	61,398	101,922	106,510	48,331	26,731	22,714	463,592
Minimum	3,886	2,409	1,591	1,632	1,760	1,958	4,575	17,507	9,461	4,520	6,438	6,156	76,737

P-7a
Bonneville Unit Operations (cfs)
Provo River from Olmsted to Murdock
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	77	70	96	49	48	54	336	999	1,144	501	272	260	326
1951	147	51	85	67	71	80	289	1,217	1,159	485	314	336	360
1952	93	50	70	65	46	283	817	1,658	1,432	512	312	328	472
1953	130	53	81	70	56	119	230	675	1,249	344	295	250	296
1954	143	66	49	40	44	32	303	566	241	311	290	271	197
1955	132	41	33	33	32	33	113	482	515	362	285	243	193
1956	89	52	68	32	32	34	238	527	537	328	271	229	203
1957	88	50	37	34	38	33	101	376	774	432	304	306	215
1958	122	70	37	32	35	33	127	730	671	357	298	289	235
1959	93	48	35	32	32	33	218	451	507	254	236	248	183
1960	105	42	27	32	32	33	248	486	479	427	202	181	192
1961	117	40	40	34	39	36	150	320	159	74	105	154	106
1962	70	41	38	35	36	33	142	510	488	380	279	241	192
1963	124	43	38	37	45	36	137	527	516	359	247	262	198
1964	190	105	32	33	35	35	111	349	474	417	306	270	197
1965	147	78	51	50	42	40	125	503	1,070	451	296	287	262
1966	130	85	156	155	135	238	317	871	423	270	243	267	275
1967	137	56	32	41	39	52	181	495	784	413	324	326	241
1968	137	64	42	49	56	44	86	544	1,235	408	325	318	275
1969	117	86	69	74	54	92	455	1,467	1,188	501	326	326	398
1970	107	112	53	46	44	39	169	871	768	450	321	314	276
1971	110	78	35	43	52	44	272	861	1,380	388	309	307	323
1972	96	71	45	38	32	202	263	1,069	777	462	282	278	302
1973	109	61	34	41	46	43	311	958	1,237	537	342	366	341
1974	87	76	41	34	34	37	201	1,108	1,254	485	307	279	330
1975	112	68	46	46	47	49	77	459	1,687	697	435	382	342
1976	91	112	73	54	53	49	236	769	624	288	269	255	240
1977	70	55	42	40	34	34	179	285	194	177	227	208	129
1978	93	42	39	40	46	97	132	519	459	430	309	313	211
1979	100	42	26	33	34	41	248	560	561	326	299	276	213
1980	104	82	47	52	52	44	130	864	881	470	357	370	288
1981	102	100	73	39	46	36	129	457	564	329	290	291	205
1982	78	67	47	34	40	82	211	1,158	1,099	732	383	301	355
1983	143	94	85	76	319	1,395	424	979	1,790	764	392	368	570
1984	108	122	100	202	339	601	1,032	1,463	1,348	771	407	355	570
1985	92	124	80	76	158	321	911	1,316	681	478	324	303	406
1986	120	108	109	91	268	1,558	880	1,378	1,703	786	330	332	640
1987	165	104	72	81	328	249	478	925	395	363	359	265	315
1988	105	65	33	27	32	33	255	420	385	270	301	243	181
1989	268	51	33	28	34	34	255	530	473	313	322	222	215
1990	90	68	64	63	37	57	92	568	494	406	278	284	209
1991	119	45	37	32	34	32	104	317	496	366	235	233	172
1992	63	65	43	55	76	40	141	365	285	118	140	103	125
1993	97	67	46	59	51	98	222	530	454	398	316	319	222
1994	145	49	49	47	54	48	159	461	376	269	249	156	173
1995	110	73	72	72	72	83	102	443	409	499	312	309	214
1996	128	107	89	156	67	146	321	913	1,275	540	321	304	364
1997	81	45	90	56	47	251	917	1,433	1,257	588	348	313	453
1998	78	79	67	42	35	58	251	1,332	1,255	604	357	302	373
1999	108	79	51	41	142	235	533	1,171	1,041	626	311	308	388
Average	113	70	57	55	72	148	287	765	813	430	299	281	283
Maximum	268	124	156	202	339	1,558	1,032	1,658	1,790	786	435	382	640
Minimum	63	40	26	27	32	32	77	285	159	74	105	103	106

P-7b
Bonneville Unit Operations (acre-feet)
Provo River from Olmsted to Murdock
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	839	317	1,751	2,177	1,754	2,553	7,823	414	149	210	0	0	17,986
1951	768	0	0	1,711	1,552	908	1,819	280	0	2,875	0	0	9,912
1952	1,122	0	0	1,466	0	0	1,400	13	0	3,515	0	0	7,516
1953	769	0	3,039	1,649	1,474	3,771	6,270	4,204	0	610	0	0	21,783
1954	768	2,221	1,796	1,538	1,389	48	2,875	2,283	0	0	0	0	12,918
1955	768	1,440	1,537	1,538	1,389	1,538	2,875	1,412	0	0	0	0	12,496
1956	0	0	2,758	1,538	1,438	1,538	2,875	1,562	0	0	0	0	11,709
1957	0	0	1,668	1,538	1,389	1,538	2,875	1,556	0	0	0	0	10,562
1958	768	1,620	666	1,538	694	1,572	2,875	0	2,380	0	0	0	12,114
1959	768	1,595	1,809	1,538	1,389	1,538	2,875	1,524	0	0	0	0	13,036
1960	768	0	1,538	1,538	1,438	1,538	2,875	1,238	0	0	0	0	10,932
1961	768	1,488	1,500	1,454	1,584	1,482	2,875	1,113	0	0	0	0	12,263
1962	768	1,243	1,404	1,447	1,389	1,482	4,431	1,892	0	0	0	0	14,056
1963	0	0	1,537	1,538	1,389	1,538	2,875	1,560	0	0	0	0	10,436
1964	0	0	1,359	1,538	1,438	1,538	2,875	1,603	0	0	0	0	10,350
1965	768	349	1,537	1,942	1,746	1,538	4,002	2,089	0	0	0	0	13,971
1966	768	1,890	0	0	1,915	2,098	2,875	2,092	0	0	0	0	11,639
1967	768	503	1,537	1,538	1,389	1,724	2,875	2,299	0	0	0	0	12,632
1968	768	1,515	126	1,147	1,566	0	1,873	4,575	0	0	0	0	11,571
1969	768	1,442	1,148	1,826	612	882	338	0	0	2,875	0	0	9,890
1970	768	1,779	1,596	593	1,097	263	3,619	0	0	3,553	0	0	13,268
1971	768	320	0	0	0	0	3,619	0	3,853	0	0	0	8,561
1972	768	241	0	0	0	738	714	0	0	2,875	0	0	5,336
1973	768	0	0	0	0	0	1,260	0	0	2,875	0	0	4,903
1974	768	748	0	0	0	1,538	10,197	0	2,960	1,379	0	0	17,591
1975	768	1,632	954	0	0	0	33	7,533	0	0	0	0	10,920
1976	768	2,012	0	0	1,588	1,930	9,808	3,363	2,870	0	0	0	22,339
1977	768	1,627	1,632	1,538	1,389	1,567	3,619	940	0	0	0	0	13,080
1978	768	1,627	1,562	1,751	1,879	3,531	2,696	4,455	0	0	0	0	18,270
1979	768	811	330	563	1,247	827	12,399	3,074	0	0	0	0	20,020
1980	768	2,323	2,502	1,667	1,541	590	2,424	2,296	0	1,071	0	0	15,182
1981	768	2,332	2,244	1,538	1,389	1,537	3,619	3,450	0	0	0	0	16,877
1982	1,347	63	2,364	1,538	1,389	2,298	9,702	411	752	2,123	0	0	21,986
1983	1,807	2,676	2,494	1,795	0	0	3,650	0	0	2,875	0	0	15,296
1984	1,346	2,919	0	0	0	0	1,851	2,462	0	2,875	0	0	11,454
1985	768	2,133	1,778	1,722	2,140	0	1,787	2,836	2,875	0	0	0	16,038
1986	1,248	0	2,348	1,829	3,454	0	1,912	1,555	0	2,875	0	0	15,220
1987	2,328	1,816	1,778	1,979	2,214	0	1,741	3,415	3,195	1,477	0	0	19,942
1988	768	1,665	1,925	1,538	201	0	2,875	1,704	0	0	0	0	10,678
1989	768	1,488	1,766	1,538	1,393	908	2,875	1,893	0	0	0	0	12,629
1990	812	2,746	3,189	3,397	1,831	3,204	0	4,688	0	0	0	0	19,868
1991	1,642	1,957	1,771	1,538	1,389	1,537	2,875	1,418	0	0	0	0	14,126
1992	779	1,741	1,429	2,385	3,074	1,121	2,875	574	0	0	0	0	13,977
1993	2,616	1,686	1,679	1,538	1,389	1,863	3,596	4,856	0	0	0	0	19,223
1994	1,337	1,703	1,700	1,538	852	0	2,875	1,357	0	0	0	0	11,362
1995	1,006	1,709	2,407	2,523	1,726	0	665	4,029	0	0	0	0	14,064
1996	2,934	2,587	2,462	501	1,609	0	0	0	0	2,875	0	0	12,967
1997	768	0	1,788	0	1,389	3,775	1,174	1,332	1,173	2,875	0	0	14,275
1998	768	2,355	2,390	1,538	1,389	1,905	4,325	1,174	1,173	2,875	0	0	19,891
1999	1,543	2,368	2,403	1,538	1,566	2,256	3,932	1,174	1,173	2,875	0	0	20,827
Average	930	1,254	1,464	1,326	1,281	1,204	3,304	1,834	451	911	0	0	13,959
Maximum	2,934	2,919	3,189	3,397	3,454	3,775	12,399	7,533	3,853	3,553	0	0	22,339
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	4,903

P-7b
Bonneville Unit Operations (cfs)
Provo River from Olmsted to Murdock
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	14	5	28	35	32	42	131	7	3	3	0	0	25
1951	12	0	0	28	28	15	31	5	0	47	0	0	14
1952	18	0	0	24	0	0	24	0	0	57	0	0	10
1953	12	0	49	27	27	61	105	68	0	10	0	0	30
1954	12	37	29	25	25	1	48	37	0	0	0	0	18
1955	12	24	25	25	25	25	48	23	0	0	0	0	17
1956	0	0	45	25	25	25	48	25	0	0	0	0	16
1957	0	0	27	25	25	25	48	25	0	0	0	0	15
1958	12	27	11	25	12	26	48	0	40	0	0	0	17
1959	12	27	29	25	25	25	48	25	0	0	0	0	18
1960	12	0	25	25	25	25	48	20	0	0	0	0	15
1961	12	25	24	24	29	24	48	18	0	0	0	0	17
1962	12	21	23	24	25	24	74	31	0	0	0	0	19
1963	0	0	25	25	25	25	48	25	0	0	0	0	14
1964	0	0	22	25	25	25	48	26	0	0	0	0	14
1965	12	6	25	32	31	25	67	34	0	0	0	0	19
1966	12	32	0	0	34	34	48	34	0	0	0	0	16
1967	12	8	25	25	25	28	48	37	0	0	0	0	17
1968	12	25	2	19	27	0	31	74	0	0	0	0	16
1969	12	24	19	30	11	14	6	0	0	47	0	0	14
1970	12	30	26	10	20	4	61	0	0	58	0	0	18
1971	12	5	0	0	0	0	61	0	65	0	0	0	12
1972	12	4	0	0	0	12	12	0	0	47	0	0	7
1973	12	0	0	0	0	0	21	0	0	47	0	0	7
1974	12	13	0	0	0	25	171	0	50	22	0	0	24
1975	12	27	16	0	0	0	1	123	0	0	0	0	15
1976	12	34	0	0	28	31	165	55	48	0	0	0	31
1977	12	27	27	25	25	25	61	15	0	0	0	0	18
1978	12	27	25	28	34	57	45	72	0	0	0	0	25
1979	12	14	5	9	22	13	208	50	0	0	0	0	28
1980	12	39	41	27	27	10	41	37	0	17	0	0	21
1981	12	39	37	25	25	25	61	56	0	0	0	0	23
1982	22	1	38	25	25	37	163	7	13	35	0	0	30
1983	29	45	41	29	0	0	61	0	0	47	0	0	21
1984	22	49	0	0	0	0	31	40	0	47	0	0	16
1985	12	36	29	28	39	0	30	46	48	0	0	0	22
1986	20	0	38	30	62	0	32	25	0	47	0	0	21
1987	38	31	29	32	40	0	29	56	54	24	0	0	28
1988	12	28	31	25	4	0	48	28	0	0	0	0	15
1989	12	25	29	25	25	15	48	31	0	0	0	0	17
1990	13	46	52	55	33	52	0	76	0	0	0	0	27
1991	27	33	29	25	25	25	48	23	0	0	0	0	20
1992	13	29	23	39	53	18	48	9	0	0	0	0	19
1993	43	28	27	25	25	30	60	79	0	0	0	0	27
1994	22	29	28	25	15	0	48	22	0	0	0	0	16
1995	16	29	39	41	31	0	11	66	0	0	0	0	19
1996	48	43	40	8	28	0	0	0	0	47	0	0	18
1997	12	0	29	0	25	61	20	22	20	47	0	0	20
1998	12	40	39	25	25	31	73	19	20	47	0	0	27
1999	25	40	39	25	28	37	66	19	20	47	0	0	29
Average	15	21	24	22	23	20	56	30	8	15	0	0	19
Maximum	48	49	52	55	62	61	208	123	65	58	0	0	31
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	7

P-7c
Bonneville Unit Operations (acre-feet)
Provo River from Olmsted to Murdock
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,239	0	0	0	0	0	437	37,180	3,692	9,706	2,935	1,929	57,117
1951	1,121	0	0	0	0	0	437	19,859	4,088	7,327	3,404	2,265	38,502
1952	1,121	0	0	0	0	0	5,602	7,235	8,048	6,661	2,708	1,766	33,143
1953	1,121	0	0	0	0	0	437	12,665	27,254	3,732	3,828	2,569	51,607
1954	1,121	0	0	0	0	0	2,361	3,311	2,048	3,976	3,889	2,613	19,320
1955	1,121	0	0	0	0	0	2,361	3,311	2,048	4,779	4,085	1,937	19,644
1956	0	0	0	0	0	0	2,361	3,311	2,048	3,558	3,646	2,439	17,365
1957	1,121	0	0	0	0	0	2,361	3,311	16,898	3,877	3,979	2,678	34,226
1958	1,121	0	0	0	0	0	2,361	27,002	7,715	3,819	3,919	2,634	48,572
1959	1,121	0	0	0	0	0	2,361	3,311	2,048	3,935	4,040	2,721	19,538
1960	1,121	0	0	0	0	0	2,361	3,311	2,048	4,108	5,934	2,852	21,736
1961	0	0	0	0	0	0	2,004	3,231	2,048	0	0	0	7,284
1962	0	0	0	0	0	0	437	5,235	2,048	4,050	4,161	2,808	18,741
1963	1,121	0	0	0	0	0	2,361	3,311	2,048	3,891	3,995	2,689	19,417
1964	1,121	0	0	0	0	0	2,361	3,311	2,048	3,949	4,055	2,732	19,579
1965	1,121	0	0	0	0	0	2,361	3,311	37,262	5,810	2,754	1,799	54,418
1966	1,121	0	0	0	0	0	2,361	15,751	2,048	3,544	3,631	2,428	30,886
1967	1,121	0	0	0	0	0	2,361	3,311	21,245	3,660	3,752	2,515	37,966
1968	1,121	0	0	0	0	0	437	5,235	15,508	3,428	3,510	2,341	31,581
1969	1,121	0	0	0	0	0	437	7,235	4,260	7,399	3,480	2,320	26,253
1970	1,121	0	0	0	0	0	2,361	31,763	8,606	3,804	3,904	2,624	54,184
1971	1,121	0	0	0	0	0	2,361	9,311	2,695	2,690	2,739	1,788	22,705
1972	1,121	0	0	0	0	0	7,526	3,859	3,372	6,734	2,784	1,820	27,217
1973	1,121	0	0	0	0	0	437	7,235	5,994	7,370	3,450	2,298	27,906
1974	1,121	0	0	0	0	0	480	7,331	18,630	8,506	4,638	3,150	43,856
1975	1,239	0	0	0	0	0	480	5,331	12,563	8,628	7,509	3,150	38,900
1976	1,239	0	0	0	0	0	480	14,812	2,219	4,506	4,638	3,150	31,044
1977	1,239	0	0	0	0	0	2,404	3,407	2,219	4,506	4,638	3,150	21,562
1978	0	0	0	0	0	0	480	5,331	2,219	6,404	4,638	3,150	22,222
1979	1,239	0	0	0	0	0	480	5,331	2,488	4,506	4,638	3,150	21,831
1980	1,239	0	0	0	0	0	480	5,331	8,219	4,506	4,638	3,150	27,562
1981	1,239	0	0	0	0	0	2,404	3,407	2,582	4,506	4,638	3,150	21,926
1982	1,239	0	0	0	0	0	480	7,331	8,219	18,023	4,638	3,150	43,080
1983	1,239	0	0	0	3,514	4,453	5,723	7,331	8,219	14,783	7,023	3,150	55,434
1984	1,239	0	0	5,134	4,314	4,810	10,656	7,331	8,219	22,169	6,863	3,150	73,884
1985	1,239	0	0	0	0	3,821	6,480	7,331	7,218	8,867	4,638	3,150	42,744
1986	1,239	0	0	0	0	10,635	6,480	7,331	8,219	23,762	4,638	3,150	65,453
1987	1,239	0	0	0	3,249	3,931	11,278	18,801	3,792	6,933	6,534	3,150	58,908
1988	1,239	0	0	0	0	0	2,404	3,407	2,219	4,506	4,638	3,150	21,562
1989	1,239	0	0	0	0	0	2,404	3,407	2,219	4,506	4,638	3,150	21,562
1990	1,239	0	0	0	0	0	480	5,331	2,219	4,506	774	0	14,548
1991	0	0	0	0	0	0	2,004	3,327	2,219	4,506	4,638	579	17,272
1992	0	0	0	0	0	0	2,004	3,327	1,605	0	0	0	6,936
1993	0	0	0	0	0	0	480	5,331	2,219	4,506	4,638	3,150	20,324
1994	1,239	0	0	0	0	0	2,404	3,407	2,219	4,506	4,638	1,339	19,751
1995	0	0	0	0	0	0	480	5,331	2,219	5,284	4,638	3,150	21,101
1996	1,239	0	0	0	0	0	480	7,331	3,408	10,928	4,638	3,150	31,174
1997	1,239	0	0	0	0	0	11,101	7,331	8,219	12,006	5,077	3,150	48,122
1998	1,239	0	0	0	0	0	6,241	7,331	8,219	11,787	4,638	3,150	42,605
1999	1,239	0	0	0	0	4,938	8,629	7,331	8,219	15,016	4,638	3,150	53,159
Average	991	0	0	103	222	652	2,783	7,877	6,547	6,689	4,130	2,516	32,509
Maximum	1,239	0	0	5,134	4,314	10,635	11,278	37,180	37,262	23,762	7,509	3,150	73,884
Minimum	0	0	0	0	0	0	437	3,231	1,605	0	0	0	6,936

P-7c
Bonneville Unit Operations (cfs)
Provo River from Olmsted to Murdock
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	20	0	0	0	0	0	7	605	62	158	48	32	79
1951	18	0	0	0	0	0	7	323	69	119	55	38	53
1952	18	0	0	0	0	0	94	118	135	108	44	30	46
1953	18	0	0	0	0	0	7	206	458	61	62	43	71
1954	18	0	0	0	0	0	40	54	34	65	63	44	27
1955	18	0	0	0	0	0	40	54	34	78	66	33	27
1956	0	0	0	0	0	0	40	54	34	58	59	41	24
1957	18	0	0	0	0	0	40	54	284	63	65	45	47
1958	18	0	0	0	0	0	40	439	130	62	64	44	67
1959	18	0	0	0	0	0	40	54	34	64	66	46	27
1960	18	0	0	0	0	0	40	54	34	67	97	48	30
1961	0	0	0	0	0	0	34	53	34	0	0	0	10
1962	0	0	0	0	0	0	7	85	34	66	68	47	26
1963	18	0	0	0	0	0	40	54	34	63	65	45	27
1964	18	0	0	0	0	0	40	54	34	64	66	46	27
1965	18	0	0	0	0	0	40	54	626	94	45	30	75
1966	18	0	0	0	0	0	40	256	34	58	59	41	43
1967	18	0	0	0	0	0	40	54	357	60	61	42	52
1968	18	0	0	0	0	0	7	85	261	56	57	39	44
1969	18	0	0	0	0	0	7	118	72	120	57	39	36
1970	18	0	0	0	0	0	40	517	145	62	63	44	75
1971	18	0	0	0	0	0	40	151	45	44	45	30	31
1972	18	0	0	0	0	0	126	63	57	110	45	31	37
1973	18	0	0	0	0	0	7	118	101	120	56	39	39
1974	18	0	0	0	0	0	8	119	313	138	75	53	61
1975	20	0	0	0	0	0	8	87	211	140	122	53	54
1976	20	0	0	0	0	0	8	241	37	73	75	53	43
1977	20	0	0	0	0	0	40	55	37	73	75	53	30
1978	0	0	0	0	0	0	8	87	37	104	75	53	31
1979	20	0	0	0	0	0	8	87	42	73	75	53	30
1980	20	0	0	0	0	0	8	87	138	73	75	53	38
1981	20	0	0	0	0	0	40	55	43	73	75	53	30
1982	20	0	0	0	0	0	8	119	138	293	75	53	60
1983	20	0	0	0	63	72	96	119	138	240	114	53	77
1984	20	0	0	83	75	78	179	119	138	361	112	53	102
1985	20	0	0	0	0	62	109	119	121	144	75	53	59
1986	20	0	0	0	0	173	109	119	138	386	75	53	90
1987	20	0	0	0	59	64	190	306	64	113	106	53	81
1988	20	0	0	0	0	0	40	55	37	73	75	53	30
1989	20	0	0	0	0	0	40	55	37	73	75	53	30
1990	20	0	0	0	0	0	8	87	37	73	13	0	20
1991	0	0	0	0	0	0	34	54	37	73	75	10	24
1992	0	0	0	0	0	0	34	54	27	0	0	0	10
1993	0	0	0	0	0	0	8	87	37	73	75	53	28
1994	20	0	0	0	0	0	40	55	37	73	75	23	27
1995	0	0	0	0	0	0	8	87	37	86	75	53	29
1996	20	0	0	0	0	0	8	119	57	178	75	53	43
1997	20	0	0	0	0	0	187	119	138	195	83	53	66
1998	20	0	0	0	0	0	105	119	138	192	75	53	59
1999	20	0	0	0	0	80	145	119	138	244	75	53	73
Average	16	0	0	2	4	11	47	128	110	109	67	42	45
Maximum	20	0	0	83	75	173	190	605	626	386	122	53	102
Minimum	0	0	0	0	0	0	7	53	27	0	0	0	10

P-7d
Bonneville Unit Operations (acre-feet)
Provo River from Olmsted to Murdock
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,650	3,863	4,180	843	896	743	11,743	23,830	64,210	20,875	13,812	13,541	161,187
1951	7,150	3,024	5,228	2,418	2,373	4,018	14,917	54,705	64,891	19,589	15,887	17,705	211,905
1952	3,466	2,970	4,315	2,538	2,618	17,406	41,594	94,674	77,156	21,307	16,495	17,761	302,299
1953	6,114	3,170	1,942	2,639	1,650	3,526	6,997	24,621	47,040	16,836	14,330	12,322	141,187
1954	6,906	1,696	1,222	941	1,068	1,948	12,769	29,214	12,284	15,173	13,963	13,493	110,678
1955	6,255	1,015	484	505	371	522	1,492	24,933	28,619	17,465	13,447	12,504	107,612
1956	5,457	3,082	1,409	428	428	541	8,935	27,520	29,880	16,636	12,988	11,187	118,491
1957	4,812	2,952	602	569	729	488	778	18,271	29,162	22,683	14,700	15,557	110,802
1958	5,631	2,554	1,622	442	1,264	481	2,343	17,865	29,815	18,145	14,421	14,582	109,167
1959	3,807	1,275	371	451	385	490	7,743	22,908	28,131	11,674	10,500	12,045	99,779
1960	4,559	2,485	127	427	399	504	9,495	25,343	26,439	22,166	6,469	7,934	106,347
1961	6,447	921	954	629	579	732	4,071	15,328	7,412	4,520	6,438	9,158	57,190
1962	3,544	1,221	954	722	627	570	3,570	24,253	26,963	19,332	13,021	11,554	106,331
1963	6,478	2,546	787	707	1,105	655	2,942	27,508	28,651	18,209	11,177	12,911	113,676
1964	10,541	6,244	581	493	548	600	1,362	16,574	26,168	21,664	14,787	13,363	112,925
1965	7,145	4,267	1,570	1,125	573	941	1,050	25,512	26,416	21,947	15,466	15,252	121,263
1966	6,130	3,185	9,611	9,551	5,576	12,547	13,603	35,726	23,146	13,038	11,283	13,445	156,841
1967	6,526	2,835	454	979	781	1,495	5,558	24,845	25,395	21,723	16,190	16,888	123,671
1968	6,509	2,308	2,439	1,885	1,642	2,681	2,834	23,608	57,968	21,657	16,462	16,588	156,582
1969	5,332	3,703	3,071	2,718	2,381	4,765	26,303	82,973	66,438	20,553	16,562	17,089	251,887
1970	4,692	4,873	1,648	2,204	1,331	2,124	4,096	21,799	37,085	20,281	15,833	16,067	132,033
1971	4,859	4,309	2,145	2,647	2,893	2,687	10,180	43,620	75,536	21,138	16,245	16,485	202,745
1972	4,008	3,966	2,754	2,340	1,833	11,681	7,427	61,877	42,860	18,811	14,526	14,732	186,814
1973	4,791	3,605	2,096	2,505	2,573	2,664	16,808	51,695	67,622	22,751	17,562	19,505	214,177
1974	3,488	3,764	2,505	2,064	1,869	734	1,265	60,805	52,996	19,945	14,265	13,422	177,125
1975	4,893	2,400	1,874	2,821	2,607	3,000	4,062	15,376	87,805	34,212	19,222	19,564	197,836
1976	3,592	4,632	4,491	3,348	1,455	1,104	3,771	29,093	32,039	13,172	11,932	12,045	120,674
1977	2,304	1,645	940	941	500	516	4,653	13,160	9,327	6,385	9,313	9,211	58,893
1978	4,923	897	830	734	689	2,445	4,658	22,106	25,104	20,063	14,336	15,491	112,276
1979	4,114	1,700	1,260	1,477	637	1,708	1,874	26,016	30,863	15,550	13,720	13,296	112,216
1980	4,416	2,538	374	1,546	1,460	2,107	4,808	45,516	44,232	23,314	17,299	18,842	166,451
1981	4,235	3,615	2,236	868	1,160	651	1,671	21,249	30,958	15,730	13,206	14,145	109,723
1982	2,194	3,902	540	552	821	2,770	2,369	63,441	56,434	24,854	18,920	14,789	191,585
1983	5,753	2,939	2,748	2,860	14,185	81,307	15,836	52,856	98,292	29,316	17,056	18,738	341,886
1984	4,085	4,334	6,148	7,276	15,199	32,170	48,891	80,166	72,018	22,377	18,150	17,980	328,794
1985	3,623	5,238	3,165	2,946	6,610	15,932	45,948	70,736	30,399	20,512	15,271	14,875	235,255
1986	4,889	6,444	4,358	3,740	11,433	85,169	43,985	75,819	93,130	21,694	15,627	16,631	382,920
1987	6,593	4,382	2,658	2,991	12,750	11,352	15,415	34,681	16,531	13,913	15,568	12,591	149,426
1988	4,446	2,212	125	94	1,640	2,004	9,900	20,718	20,715	12,080	13,875	11,287	99,095
1989	14,465	1,524	276	212	509	1,166	9,895	27,285	25,912	14,749	15,158	10,072	121,224
1990	3,462	1,314	751	455	244	288	4,986	24,877	27,190	20,456	16,299	16,911	117,233
1991	5,696	721	490	441	494	421	1,313	14,776	27,286	18,021	9,807	13,302	92,769
1992	3,107	2,121	1,221	997	1,293	1,346	3,528	18,529	15,377	7,260	8,610	6,156	69,545
1993	3,352	2,285	1,140	2,114	1,467	4,148	9,138	22,419	24,779	19,986	14,788	15,802	121,419
1994	6,355	1,190	1,288	1,347	2,122	2,945	4,175	23,601	20,128	12,010	10,695	7,960	93,816
1995	5,754	2,641	2,026	1,889	2,292	5,126	4,921	17,900	22,121	25,420	14,546	15,247	119,883
1996	3,679	3,794	2,990	9,092	2,239	8,997	18,610	48,822	72,450	19,409	15,114	14,954	220,149
1997	2,950	2,678	3,734	3,452	1,234	11,657	42,309	79,471	65,382	21,243	16,289	15,479	265,879
1998	2,770	2,343	1,723	1,068	562	1,683	4,387	73,371	65,268	22,500	17,299	14,806	207,779
1999	3,846	2,352	761	989	6,325	7,244	19,157	63,508	52,523	20,588	14,514	15,186	206,994
Average	5,046	2,913	2,024	1,940	2,528	7,256	11,003	37,310	41,371	18,859	14,269	14,209	158,728
Maximum	14,465	6,444	9,611	9,551	15,199	85,169	48,891	94,674	98,292	34,212	19,222	19,564	382,920
Minimum	2,194	721	125	94	244	288	778	13,160	7,412	4,520	6,438	6,156	57,190

P-7d
Bonneville Unit Operations (cfs)
Provo River from Olmsted to Murdock
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	43	65	68	14	16	12	197	388	1,079	340	225	228	223
1951	116	51	85	39	43	65	251	890	1,091	319	258	298	293
1952	56	50	70	41	46	283	699	1,540	1,297	347	268	298	416
1953	99	53	32	43	30	57	118	400	791	274	233	207	195
1954	112	29	20	15	19	32	215	475	206	247	227	227	153
1955	102	17	8	8	7	8	25	406	481	284	219	210	149
1956	89	52	23	7	7	9	150	448	502	271	211	188	163
1957	70	50	10	9	13	8	13	297	490	369	239	261	153
1958	92	43	26	7	23	8	39	291	501	295	235	245	151
1959	62	21	6	7	7	8	130	373	473	190	171	202	138
1960	74	42	2	7	7	8	160	412	444	361	105	133	146
1961	105	15	16	10	10	12	68	249	125	74	105	154	79
1962	58	21	16	12	11	9	60	394	453	314	212	194	147
1963	105	43	13	11	20	11	49	447	482	296	182	217	157
1964	171	105	9	8	10	10	23	270	440	352	240	225	156
1965	116	72	26	18	10	15	18	415	444	357	252	256	168
1966	100	54	156	155	100	204	229	581	389	212	184	226	217
1967	106	48	7	16	14	24	93	404	427	353	263	284	171
1968	106	39	40	31	29	44	48	384	974	352	268	279	216
1969	87	62	50	44	43	77	442	1,349	1,117	334	269	287	348
1970	76	82	27	36	24	35	69	355	623	330	258	270	182
1971	79	72	35	43	52	44	171	709	1,269	344	264	277	280
1972	65	67	45	38	32	190	125	1,006	720	306	236	248	257
1973	78	61	34	41	46	43	282	841	1,136	370	286	328	296
1974	57	63	41	34	34	12	21	989	891	324	232	226	245
1975	80	40	30	46	47	49	68	250	1,476	556	313	329	273
1976	58	78	73	54	25	18	63	473	538	214	194	202	166
1977	37	28	15	15	9	8	78	214	157	104	151	155	81
1978	80	15	14	12	12	40	78	360	422	326	233	260	155
1979	67	29	20	24	11	28	31	423	519	253	223	223	155
1980	72	43	6	25	25	34	81	740	743	379	281	317	229
1981	69	61	36	14	21	11	28	346	520	256	215	238	152
1982	36	66	9	9	15	45	40	1,032	948	404	308	249	265
1983	94	49	45	47	255	1,322	266	860	1,652	477	277	315	472
1984	66	73	100	118	264	523	822	1,304	1,210	364	295	302	453
1985	59	88	51	48	119	259	772	1,150	511	334	248	250	325
1986	80	108	71	61	206	1,385	739	1,233	1,565	353	254	280	529
1987	107	74	43	49	230	185	259	564	278	226	253	212	206
1988	72	37	2	2	29	33	166	337	348	196	226	190	137
1989	235	26	4	3	9	19	166	444	435	240	247	169	167
1990	56	22	12	7	4	5	84	405	457	333	265	284	162
1991	93	12	8	7	9	7	22	240	459	293	160	224	128
1992	51	36	20	16	22	22	59	301	258	118	140	103	96
1993	55	38	19	34	26	67	154	365	416	325	241	266	168
1994	103	20	21	22	38	48	70	384	338	195	174	134	130
1995	94	44	33	31	41	83	83	291	372	413	237	256	166
1996	60	64	49	148	39	146	313	794	1,218	316	246	251	303
1997	48	45	61	56	22	190	711	1,293	1,099	345	265	260	367
1998	45	39	28	17	10	27	74	1,193	1,097	366	281	249	287
1999	63	40	12	16	114	118	322	1,033	883	335	236	255	286
Average	82	49	33	32	45	118	185	607	695	307	232	239	219
Maximum	235	108	156	155	264	1,385	822	1,540	1,652	556	313	329	529
Minimum	36	12	2	2	4	5	13	214	125	74	105	103	79

P-7e
Bonneville Unit Operations (acre-feet)
Diversions into Olmsted Aqueduct
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	6,066	4,005	4,205	4,946	4,489	4,540	3,936	15,471	19,647	21,492	18,923	14,453	122,173
1951	7,420	3,648	3,825	5,791	5,129	3,512	5,318	16,020	21,303	23,998	20,999	17,810	134,773
1952	7,220	4,148	4,247	3,938	4,098	3,406	1,123	15,642	19,706	20,998	19,493	17,018	121,036
1953	6,837	4,248	4,324	5,853	5,302	3,905	5,765	17,080	21,272	21,426	20,468	15,096	131,575
1954	7,614	4,048	5,235	5,842	5,266	5,646	9,844	22,782	19,463	27,668	25,691	20,246	159,344
1955	9,598	4,995	5,344	5,511	4,874	5,506	6,935	20,182	25,514	27,668	23,502	19,746	159,374
1956	8,234	4,902	4,705	5,406	5,312	5,689	7,519	19,116	25,379	25,836	21,536	19,213	152,847
1957	8,320	5,048	4,986	5,911	5,320	5,395	4,935	15,214	20,769	24,286	20,952	17,248	138,384
1958	7,820	4,548	4,581	5,348	5,235	5,405	3,635	10,655	24,481	24,303	21,974	16,892	134,877
1959	9,153	4,801	5,305	5,508	5,067	5,472	9,718	20,428	26,385	26,354	23,283	18,416	159,889
1960	8,679	4,903	5,551	5,471	5,172	5,419	4,086	19,506	25,234	24,657	27,668	24,308	160,654
1961	6,249	5,045	5,714	5,305	4,765	6,605	10,202	20,005	13,526	20,487	19,946	12,866	130,713
1962	9,286	5,407	5,506	5,306	4,941	5,406	2,979	17,152	22,841	22,675	21,235	19,641	142,375
1963	8,052	5,048	5,524	5,887	5,249	5,742	9,858	19,715	26,150	26,949	22,308	17,987	158,468
1964	8,829	4,799	5,006	5,218	5,319	5,286	7,135	11,449	22,484	24,287	22,107	20,396	142,314
1965	7,455	4,448	3,725	4,250	4,101	4,588	4,101	18,922	21,896	21,956	18,646	16,056	130,141
1966	5,645	3,894	3,800	4,264	3,926	3,006	7,134	21,408	22,720	24,545	22,062	17,960	140,364
1967	7,920	4,754	4,606	5,838	5,301	5,778	8,461	20,199	20,597	24,063	21,903	17,986	147,404
1968	7,320	4,348	4,762	5,833	5,451	4,718	5,818	18,600	20,968	24,099	20,522	17,485	139,923
1969	7,120	3,648	4,000	5,676	5,213	3,965	2,299	17,007	20,813	23,961	21,287	17,459	132,448
1970	7,016	4,061	4,757	5,861	5,306	5,877	7,372	16,734	21,844	23,472	21,988	17,288	141,575
1971	6,720	2,448	3,199	4,575	3,820	3,380	5,433	18,141	19,768	22,012	19,761	16,343	125,600
1972	6,520	3,048	3,290	4,727	3,707	5	3,114	16,604	19,732	23,071	18,863	15,441	118,122
1973	6,259	3,448	4,062	5,782	5,234	4,550	3,835	17,142	20,796	25,306	22,780	19,200	138,394
1974	7,206	5,379	5,886	5,908	4,965	5,801	4,454	19,793	22,232	26,987	25,190	18,680	152,480
1975	6,377	5,642	5,830	5,850	5,290	5,817	8,347	17,636	18,333	24,542	27,668	21,170	152,501
1976	8,589	4,633	5,427	5,772	5,429	5,571	2,193	18,930	25,716	23,523	23,087	20,856	149,725
1977	6,675	5,286	5,869	5,898	5,357	5,858	3,225	14,065	18,479	25,906	25,242	19,823	141,683
1978	6,010	5,058	5,414	5,153	4,713	4,514	6,364	19,670	23,316	27,668	25,517	20,832	154,228
1979	4,874	5,257	5,950	5,258	5,313	5,766	4,325	18,140	26,776	26,157	26,371	19,211	153,398
1980	6,129	4,415	4,999	5,835	5,476	5,918	6,939	16,944	19,780	25,695	25,038	14,324	141,491
1981	6,394	4,406	4,906	5,890	5,317	5,872	8,043	17,774	26,060	21,971	21,353	17,716	145,701
1982	5,480	4,511	4,514	5,641	5,259	5,203	2,643	19,712	20,649	27,669	27,400	19,956	148,635
1983	5,086	4,247	4,948	5,707	4,122	3,632	989	8,671	23,508	27,668	27,668	23,809	140,054
1984	7,614	3,916	4,439	3,925	2,243	3,238	1,950	14,436	23,115	27,668	27,668	25,774	145,986
1985	7,939	4,702	5,724	5,780	4,376	3,435	2,270	15,510	26,034	27,668	27,552	21,329	152,320
1986	6,609	4,320	5,094	5,673	3,827	4,535	3,518	16,821	24,299	27,668	25,999	19,970	148,332
1987	5,151	5,337	5,566	5,523	4,028	3,734	9,140	18,637	17,168	20,551	27,668	22,659	145,163
1988	5,321	5,073	5,102	5,856	5,101	5,367	11,272	20,898	15,921	26,251	25,749	13,994	145,904
1989	4,254	4,766	5,003	5,146	4,636	5,048	11,371	18,262	25,592	23,318	24,679	15,710	147,785
1990	6,230	4,091	4,312	4,052	4,634	4,184	2,416	17,328	22,806	25,804	21,341	19,143	136,343
1991	4,550	4,785	4,710	4,562	4,140	4,994	4,111	12,623	23,190	26,014	22,308	14,463	130,450
1992	5,877	5,520	5,814	5,025	4,263	6,262	10,427	22,466	17,087	21,111	18,988	10,973	133,814
1993	5,298	5,209	5,762	5,798	5,269	5,639	4,625	17,625	21,867	24,527	24,442	22,235	148,294
1994	5,968	5,133	5,801	5,806	5,263	5,771	10,072	19,496	21,708	23,798	24,777	14,251	147,841
1995	5,139	4,520	4,023	4,493	4,241	5,081	5,474	18,640	21,681	23,434	21,204	17,034	134,963
1996	4,034	4,220	4,689	4,514	5,408	3,729	6,615	18,714	19,655	24,919	22,185	17,857	136,537
1997	5,135	5,155	5,713	5,752	5,104	5,201	8,872	17,053	24,674	27,668	27,668	21,977	159,970
1998	7,467	4,512	5,111	5,679	4,482	5,596	2,592	16,670	22,158	27,013	22,626	20,131	144,037
1999	6,079	4,524	5,098	5,686	3,440	3,243	2,613	16,659	22,136	26,803	21,680	19,879	137,840
Average	6,737	4,566	4,919	5,364	4,786	4,836	5,708	17,567	21,945	24,751	23,179	18,406	142,765
Maximum	9,598	5,642	5,950	5,911	5,476	6,605	11,371	22,782	26,776	27,669	27,668	25,774	160,654
Minimum	4,034	2,448	3,199	3,925	2,243	5	989	8,671	13,526	20,487	18,646	10,973	118,122

P-7e
Bonneville Unit Operations (cfs)
Diversions into Olmsted Aqueduct
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	99	67	68	80	81	74	66	252	330	350	308	243	169
1951	121	61	62	94	92	57	89	261	358	390	342	299	186
1952	99	67	68	80	78	74	66	252	330	350	308	243	167
1953	121	61	62	94	92	57	89	261	358	390	342	299	182
1954	117	70	69	64	74	55	19	254	331	342	317	286	220
1955	111	71	70	95	95	64	97	278	357	348	333	254	220
1956	124	68	85	95	92	92	165	371	327	450	418	340	211
1957	156	84	87	90	88	90	117	328	429	450	382	332	191
1958	134	82	77	88	96	93	126	311	427	420	350	323	186
1959	135	85	81	96	96	88	83	247	349	395	341	290	221
1960	127	76	75	87	91	88	61	173	411	395	357	284	221
1961	149	81	86	90	91	89	163	332	443	429	379	309	181
1962	141	82	90	89	93	88	69	317	424	401	450	409	197
1963	102	85	93	86	86	107	171	325	227	333	324	216	219
1964	151	91	90	86	86	88	50	279	384	369	345	330	196
1965	131	85	90	96	95	93	166	321	439	438	363	302	180
1966	144	81	81	85	96	86	120	186	378	395	360	343	194
1967	121	75	61	69	74	75	69	308	368	357	303	270	204
1968	92	65	62	69	68	49	120	348	382	399	359	302	193
1969	129	80	75	95	95	94	142	329	346	391	356	302	183
1970	119	73	77	95	98	77	98	303	352	392	334	294	196
1971	116	61	65	92	94	64	39	277	350	390	346	293	173
1972	114	68	77	95	92	96	124	272	367	382	358	291	163
1973	109	41	52	74	69	55	91	295	332	358	321	275	191
1974	106	51	54	77	67	0	52	270	332	375	307	260	211
1975	102	58	66	94	94	74	64	279	350	412	370	323	211
1976	117	90	96	96	86	94	75	322	374	439	410	314	206
1977	104	95	95	95	95	95	140	287	308	399	450	356	196
1978	140	78	88	94	98	91	37	308	432	383	375	351	213
1979	109	89	95	96	96	95	54	229	311	421	411	333	212
1980	98	85	88	84	82	73	107	320	392	450	415	350	195
1981	79	88	97	86	96	94	73	295	450	425	429	323	201
1982	100	74	81	95	99	96	117	276	332	418	407	241	205
1983	104	74	80	96	96	96	135	289	438	357	347	298	193
1984	89	76	73	92	91	85	44	321	347	450	446	335	201
1985	83	71	80	93	74	59	17	141	395	450	450	400	210
1986	124	66	72	64	40	53	33	235	388	450	450	433	205
1987	129	79	93	94	79	56	38	252	438	450	448	358	201
1988	107	73	83	92	67	74	59	274	408	450	423	336	201
1989	84	90	91	90	73	61	154	303	289	334	450	381	204
1990	87	85	83	95	92	87	189	340	268	427	419	235	188
1991	69	80	81	84	83	82	191	297	430	379	401	264	180
1992	101	69	70	66	81	68	41	282	383	420	347	322	184
1993	74	80	77	74	75	81	69	205	390	423	363	243	205
1994	96	93	95	82	77	102	175	365	287	343	309	184	204
1995	86	88	94	94	95	92	78	287	367	399	398	374	186
1996	97	86	94	94	91	94	169	317	365	387	403	240	188
1997	84	76	65	73	76	83	92	303	364	381	345	286	221
1998	66	71	76	73	97	61	111	304	330	405	361	300	199
1999	84	87	93	94	92	85	149	277	415	450	450	369	190
Average	110	76	79	87	86	78	97	285	368	400	376	307	197
Maximum	156	95	97	96	99	107	191	371	450	450	450	433	221
Minimum	66	41	52	64	40	0	17	141	227	333	303	184	163

P-7f
Bonneville Unit Operations (acre-feet)
Diversions into Olmsted Aqueduct
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	3,775	4,000	4,200	3,200	2,600	2,800	1,200	4,880	7,259	11,359	13,259	9,359	67,889
1951	5,580	3,600	3,700	4,100	3,400	3,300	2,300	4,580	8,659	13,159	12,259	9,559	74,194
1952	5,380	4,100	4,100	3,100	2,500	3,400	500	4,480	7,159	10,059	11,559	8,959	65,294
1953	4,996	4,200	3,600	3,900	3,700	3,900	3,400	6,880	7,765	12,260	13,260	10,061	77,921
1954	5,774	4,000	4,200	4,500	3,800	4,200	4,800	8,769	14,243	19,438	17,338	12,938	103,998
1955	7,757	4,800	4,700	5,000	4,300	5,300	6,500	9,282	11,367	17,863	16,163	14,763	107,794
1956	7,507	4,700	4,000	3,800	4,300	3,700	4,600	6,338	10,381	16,576	15,076	14,677	95,655
1957	6,480	5,000	4,700	4,900	4,300	4,600	4,500	6,680	7,259	11,959	12,959	9,559	82,894
1958	5,980	4,500	4,400	4,500	3,900	3,400	3,200	4,480	9,459	14,459	14,159	9,959	82,394
1959	7,313	4,700	4,500	4,800	4,200	5,100	6,200	11,013	12,626	19,025	17,125	12,225	108,825
1960	7,013	4,700	5,100	4,800	4,200	3,800	2,400	8,213	12,226	19,325	23,925	19,625	115,324
1961	5,413	5,000	4,900	5,300	4,500	6,600	9,500	12,712	9,725	19,725	18,725	9,925	112,023
1962	9,249	5,300	5,500	5,300	4,300	5,400	1,100	6,174	9,252	11,747	13,747	13,047	90,115
1963	6,211	5,000	5,100	5,100	4,300	5,300	7,400	6,955	11,415	15,710	16,010	11,511	100,011
1964	7,026	4,700	5,000	4,100	4,200	4,500	6,700	4,688	9,180	11,976	13,976	13,876	89,919
1965	6,080	4,400	3,700	2,600	1,800	3,100	3,000	5,980	9,159	10,659	10,659	7,959	69,094
1966	3,804	3,800	3,800	4,200	3,800	3,000	2,100	6,715	11,935	18,231	16,031	11,131	88,545
1967	6,080	4,600	4,600	4,500	4,100	4,000	6,100	7,480	8,059	11,659	12,759	9,059	82,994
1968	5,480	4,300	4,600	4,600	3,600	3,800	5,100	6,480	7,459	12,359	11,659	8,759	78,194
1969	5,280	3,600	4,000	3,800	3,500	3,900	1,500	4,580	8,959	11,859	12,459	8,759	72,194
1970	5,175	3,900	4,200	4,000	3,300	4,400	5,700	6,675	8,342	12,651	13,351	8,251	79,943
1971	4,880	2,400	3,100	2,400	1,800	1,600	600	5,880	7,559	11,959	12,359	8,259	62,794
1972	4,680	3,000	3,200	2,500	1,700	0	100	4,479	7,959	13,959	12,859	9,059	63,494
1973	4,580	3,400	3,900	3,900	3,800	2,900	3,400	5,480	8,359	12,559	12,859	8,559	73,694
1974	5,069	5,331	5,331	5,331	4,407	4,817	3,477	7,292	10,205	15,000	16,837	11,831	94,926
1975	5,006	5,594	5,299	5,397	4,514	5,594	7,570	8,797	4,625	10,516	18,282	9,817	91,010
1976	6,029	4,514	4,710	4,612	3,695	3,533	701	5,069	8,630	15,914	15,535	14,233	87,173
1977	5,395	5,103	5,103	4,808	4,167	3,729	2,762	8,013	13,141	19,937	18,675	14,822	105,653
1978	5,886	4,416	4,612	4,710	4,318	4,514	5,901	8,307	9,607	17,484	17,105	12,172	99,030
1979	2,941	4,710	4,808	4,808	3,631	3,631	3,841	5,855	10,393	16,895	17,693	11,976	91,179
1980	4,739	4,122	4,122	4,514	3,695	4,907	5,313	5,016	7,151	11,687	14,841	9,712	79,817
1981	3,971	4,220	4,514	4,514	3,964	4,612	7,079	7,276	9,017	11,987	13,178	9,521	83,851
1982	3,971	4,318	4,122	4,122	3,435	3,238	1,486	7,178	8,625	13,656	15,042	9,913	79,104
1983	3,662	4,122	4,122	4,514	4,122	3,631	504	5,707	9,809	15,522	16,615	11,388	83,718
1984	4,904	3,533	3,435	3,925	2,180	3,238	1,486	6,639	9,411	13,951	16,516	13,448	82,664
1985	5,109	4,318	4,318	4,612	4,371	3,435	1,780	7,808	11,265	18,645	17,383	11,666	94,709
1986	4,632	4,023	4,416	4,612	3,827	4,514	3,055	9,142	10,594	18,171	15,829	10,308	93,122
1987	3,174	5,201	5,005	4,710	4,023	3,729	4,724	5,263	9,020	12,868	20,733	16,388	94,836
1988	3,325	4,710	4,710	5,103	4,472	4,612	6,000	11,206	6,676	18,963	18,290	8,843	96,909
1989	2,990	4,612	4,612	4,710	4,268	5,005	6,098	8,551	13,629	16,795	16,711	10,797	98,777
1990	4,966	3,533	3,435	3,925	2,180	3,238	1,486	6,444	9,024	13,559	16,124	13,056	80,968
1991	3,873	4,416	4,318	4,416	3,827	3,336	3,644	4,922	8,820	14,735	14,945	9,816	81,066
1992	5,199	4,736	4,642	5,020	4,263	6,252	9,502	12,663	8,943	19,422	18,979	9,636	109,256
1993	4,948	5,201	5,397	5,201	4,220	5,299	1,583	6,688	8,820	12,282	14,748	13,054	87,439
1994	4,040	4,907	5,005	5,005	4,220	5,201	7,766	7,281	10,601	15,823	16,621	11,199	97,667
1995	4,462	4,318	3,631	2,551	1,829	3,043	3,449	6,393	8,526	11,006	11,510	7,853	68,569
1996	2,107	4,220	4,514	4,514	3,533	3,729	5,509	6,884	6,858	12,674	12,491	8,638	75,669
1997	3,201	4,907	5,005	5,005	4,220	5,201	7,766	7,686	11,411	16,634	17,432	12,010	100,477
1998	5,178	4,318	4,122	4,122	3,435	3,238	1,486	7,304	8,881	13,227	11,950	10,164	77,424
1999	3,890	4,318	4,122	4,122	3,435	3,238	1,486	7,293	8,860	13,206	11,928	10,143	76,039
Average	5,083	4,388	4,404	4,355	3,683	4,010	3,947	7,011	9,366	14,622	15,210	11,045	87,125
Maximum	9,249	5,594	5,500	5,397	4,514	6,600	9,502	12,712	14,243	19,937	23,925	19,625	115,324
Minimum	2,107	2,400	3,100	2,400	1,700	0	100	4,479	4,625	10,059	10,659	7,853	62,794

P-7f
Bonneville Unit Operations (cfs)
Diversions into Olmsted Aqueduct
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	61	67	68	52	47	46	20	79	122	185	216	157	94
1951	91	61	60	67	61	54	39	74	146	214	199	161	102
1952	87	69	67	50	43	55	8	73	120	164	188	151	90
1953	81	71	59	63	67	63	57	112	130	199	216	169	108
1954	94	67	68	73	68	68	81	143	239	316	282	217	144
1955	126	81	76	81	77	86	109	151	191	291	263	248	149
1956	122	79	65	62	75	60	77	103	174	270	245	247	132
1957	105	84	76	80	77	75	76	109	122	195	211	161	115
1958	97	76	72	73	70	55	54	73	159	235	230	167	114
1959	119	79	73	78	76	83	104	179	212	309	279	205	150
1960	114	79	83	78	73	62	40	134	205	314	389	330	159
1961	88	84	80	86	81	107	160	207	163	321	305	167	155
1962	150	89	89	86	77	88	18	100	155	191	224	219	124
1963	101	84	83	83	77	86	124	113	192	256	260	193	138
1964	114	79	81	67	73	73	113	76	154	195	227	233	124
1965	99	74	60	42	32	50	50	97	154	173	173	134	95
1966	62	64	62	68	68	49	35	109	201	297	261	187	122
1967	99	77	75	73	74	65	103	122	135	190	208	152	115
1968	89	72	75	75	63	62	86	105	125	201	190	147	108
1969	86	61	65	62	63	63	25	74	151	193	203	147	100
1970	84	66	68	65	59	72	96	109	140	206	217	139	110
1971	79	40	50	39	32	26	10	96	127	195	201	139	87
1972	76	50	52	41	30	0	2	73	134	227	209	152	87
1973	74	57	63	63	68	47	57	89	140	204	209	144	102
1974	82	90	87	87	79	78	58	119	172	244	274	199	131
1975	81	94	86	88	81	91	127	143	78	171	297	165	126
1976	98	76	77	75	64	57	12	82	145	259	253	239	120
1977	88	86	83	78	75	61	46	130	221	324	304	249	146
1978	96	74	75	77	78	73	99	135	161	284	278	205	137
1979	48	79	78	78	65	59	65	95	175	275	288	201	126
1980	77	69	67	73	64	80	89	82	120	190	241	163	110
1981	65	71	73	73	71	75	119	118	152	195	214	160	116
1982	65	73	67	67	62	53	25	117	145	222	245	167	109
1983	60	69	67	73	74	59	8	93	165	252	270	191	116
1984	80	59	56	64	38	53	25	108	158	227	269	226	114
1985	83	73	70	75	79	56	30	127	189	303	283	196	131
1986	75	68	72	75	69	73	51	149	178	296	257	173	129
1987	52	87	81	77	72	61	79	86	152	209	337	275	131
1988	54	79	77	83	78	75	101	182	112	308	297	149	133
1989	49	78	75	77	77	81	102	139	229	273	272	181	136
1990	81	59	56	64	39	53	25	105	152	221	262	219	112
1991	63	74	70	72	69	54	61	80	148	240	243	165	112
1992	85	80	75	82	74	102	160	206	150	316	309	162	151
1993	80	87	88	85	76	86	27	109	148	200	240	219	121
1994	66	82	81	81	76	85	131	118	178	257	270	188	135
1995	73	73	59	41	33	49	58	104	143	179	187	132	95
1996	34	71	73	73	61	61	93	112	115	206	203	145	104
1997	52	82	81	81	76	85	131	125	192	271	284	202	139
1998	84	73	67	67	62	53	25	119	149	215	194	171	107
1999	63	73	67	67	62	53	25	119	149	215	194	170	105
Average	83	74	72	71	66	65	66	114	157	238	247	186	120
Maximum	150	94	89	88	81	107	160	207	239	324	389	330	159
Minimum	34	40	50	39	30	0	2	73	78	164	173	132	87

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Bonneville Unit Operations (acre-feet)

Undiverted Water at Olmsted for ULS Supplement of Provo River

CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

P-7f-i

Bonneville Unit Operations (cfs)

Undiverted Water at Olmsted for ULS Supplement of Provo River

CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

P-7g
Bonneville Unit Operations (acre-feet)
Diversions into Olmsted Aqueduct
Ap 40524

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	795	1,015	1,353	1,222	1,353	0	1,015	995	0	0	0	7,747
1951	0	795	1,015	1,353	1,222	1,353	1,309	1,215	995	0	0	0	9,256
1952	815	795	915	1,353	1,265	1,353	1,214	915	995	0	0	0	9,620
1953	0	895	1,215	1,353	1,222	1,353	1,309	0	1,195	0	0	0	8,541
1954	0	895	1,353	1,353	1,222	1,134	0	0	0	0	0	0	5,956
1955	0	895	1,178	941	754	946	963	0	0	0	0	0	5,677
1956	0	795	1,315	907	1,043	1,149	0	0	0	0	0	0	5,208
1957	0	795	1,015	1,353	1,222	860	1,309	0	0	0	0	0	6,553
1958	0	795	1,015	830	1,222	955	1,309	0	0	0	0	0	6,126
1959	0	895	1,353	961	946	958	0	0	0	0	0	0	5,113
1960	0	895	1,011	938	901	918	0	0	0	0	0	0	4,662
1961	0	509	1,109	601	828	657	0	0	0	0	0	0	3,704
1962	0	135	453	518	888	801	1,095	0	0	0	0	0	3,890
1963	0	895	988	1,353	1,222	1,235	0	0	0	0	0	0	5,692
1964	0	895	514	643	1,015	701	351	0	0	0	0	0	4,118
1965	0	795	1,015	1,353	1,222	1,353	1,309	0	0	0	0	0	7,046
1966	0	895	1,315	1,353	1,222	1,353	0	306	0	0	0	0	6,443
1967	0	795	1,015	1,353	1,222	1,353	0	0	0	0	0	0	5,737
1968	0	795	1,015	1,353	1,265	1,353	1,309	0	1,195	0	0	0	8,285
1969	0	795	1,015	1,353	1,222	1,353	1,309	1,215	1,195	0	0	0	9,456
1970	616	795	1,353	1,353	1,222	1,353	0	0	1,309	0	0	0	8,001
1971	0	695	1,353	1,353	1,222	941	0	1,315	695	0	0	0	7,573
1972	0	695	1,353	1,353	1,136	738	814	1,353	695	0	0	0	8,136
1973	0	695	1,353	1,353	1,222	1,353	1,309	1,015	695	0	0	0	8,994
1974	0	818	1,353	1,353	843	1,353	1,309	1,353	1,309	0	0	0	9,691
1975	0	885	1,353	1,353	1,222	1,353	1,309	0	714	1,353	0	0	9,541
1976	0	788	1,353	1,353	1,265	1,353	1,309	1,353	0	0	0	0	8,774
1977	230	885	1,353	1,353	1,222	1,317	0	0	0	0	0	0	6,360
1978	0	779	828	837	1,107	1,353	1,309	0	0	0	0	0	6,213
1979	0	910	1,353	716	1,222	1,353	1,309	1,353	0	0	0	0	8,215
1980	0	788	1,353	1,353	1,265	1,353	1,309	1,353	1,176	0	0	0	9,950
1981	0	788	1,002	1,353	1,222	1,353	1,189	0	0	0	0	0	6,906
1982	808	788	835	1,154	1,222	1,353	1,309	1,293	1,176	1,353	0	0	11,290
1983	808	885	1,293	1,353	1,222	1,353	1,218	1,353	1,309	1,353	0	0	12,146
1984	808	885	1,353	1,353	1,265	1,353	1,309	1,353	1,309	1,353	0	0	12,340
1985	314	885	1,353	1,353	1,222	1,353	1,309	1,353	1,309	0	0	0	10,450
1986	808	885	1,293	1,353	1,222	1,353	1,309	1,353	1,176	1,353	0	0	12,104
1987	808	885	1,196	1,353	1,222	1,353	1,309	1,353	0	0	0	0	9,478
1988	0	788	924	1,263	829	790	0	0	0	0	0	0	4,593
1989	0	512	631	545	485	602	0	0	0	0	0	0	2,775
1990	0	885	1,353	1,353	931	1,353	0	0	0	0	0	0	5,875
1991	0	788	444	0	110	457	564	0	0	0	0	0	2,362
1992	0	1,309	1,353	1,353	1,265	1,353	0	0	0	0	0	0	6,633
1993	518	788	1,293	1,353	1,222	1,353	1,309	1,196	0	0	0	0	9,031
1994	905	885	1,353	1,353	1,222	1,353	0	0	0	0	0	0	7,070
1995	808	788	1,002	1,353	1,222	1,353	1,309	0	0	0	0	0	7,834
1996	808	788	1,002	0	1,265	1,353	1,309	1,293	1,176	0	0	0	8,994
1997	0	885	1,353	1,353	1,222	1,353	1,309	1,353	1,309	0	0	0	10,136
1998	343	885	1,353	1,353	571	1,353	1,309	1,293	1,176	1,353	0	0	10,988
1999	808	885	1,353	1,353	1,222	1,353	1,309	1,293	1,176	0	0	0	10,751
Average	204	813	1,139	1,164	1,109	1,196	803	565	486	162	0	0	7,641
Maximum	905	1,309	1,353	1,353	1,265	1,353	1,309	1,353	1,309	1,353	0	0	12,340
Minimum	0	135	444	0	110	457	0	0	0	0	0	0	2,362

P-7g
Bonneville Unit Operations (cfs)
Diversions into Olmsted Aqueduct
Ap 40524

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	0	13	17	22	22	22	0	17	17	0	0	0	11
1951	0	13	17	22	22	22	22	20	17	0	0	0	13
1952	13	13	15	22	22	22	20	15	17	0	0	0	13
1953	0	15	20	22	22	22	22	0	20	0	0	0	12
1954	0	15	22	22	22	18	0	0	0	0	0	0	8
1955	0	15	19	15	14	15	16	0	0	0	0	0	8
1956	0	13	21	15	18	19	0	0	0	0	0	0	7
1957	0	13	17	22	22	14	22	0	0	0	0	0	9
1958	0	13	17	13	22	16	22	0	0	0	0	0	8
1959	0	15	22	16	17	16	0	0	0	0	0	0	7
1960	0	15	16	15	16	15	0	0	0	0	0	0	6
1961	0	9	18	10	15	11	0	0	0	0	0	0	5
1962	0	2	7	8	16	13	18	0	0	0	0	0	5
1963	0	15	16	22	22	20	0	0	0	0	0	0	8
1964	0	15	8	10	18	11	6	0	0	0	0	0	6
1965	0	13	17	22	22	22	22	0	0	0	0	0	10
1966	0	15	21	22	22	22	0	5	0	0	0	0	9
1967	0	13	17	22	22	22	0	0	0	0	0	0	8
1968	0	13	17	22	22	22	22	0	20	0	0	0	11
1969	0	13	17	22	22	22	22	20	20	0	0	0	13
1970	10	13	22	22	22	22	0	0	22	0	0	0	11
1971	0	12	22	22	22	15	0	21	12	0	0	0	10
1972	0	12	22	22	20	12	14	22	12	0	0	0	11
1973	0	12	22	22	22	22	22	17	12	0	0	0	12
1974	0	14	22	22	15	22	22	22	22	0	0	0	13
1975	0	15	22	22	22	22	22	0	12	22	0	0	13
1976	0	13	22	22	22	22	22	22	0	0	0	0	12
1977	4	15	22	22	22	21	0	0	0	0	0	0	9
1978	0	13	13	14	20	22	22	0	0	0	0	0	9
1979	0	15	22	12	22	22	22	22	0	0	0	0	11
1980	0	13	22	22	22	22	22	22	20	0	0	0	14
1981	0	13	16	22	22	22	20	0	0	0	0	0	10
1982	13	13	14	19	22	22	22	21	20	22	0	0	16
1983	13	15	21	22	22	22	20	22	22	22	0	0	17
1984	13	15	22	22	22	22	22	22	22	22	0	0	17
1985	5	15	22	22	22	22	22	22	22	0	0	0	14
1986	13	15	21	22	22	22	22	22	20	22	0	0	17
1987	13	15	19	22	22	22	22	22	0	0	0	0	13
1988	0	13	15	21	14	13	0	0	0	0	0	0	6
1989	0	9	10	9	9	10	0	0	0	0	0	0	4
1990	0	15	22	22	17	22	0	0	0	0	0	0	8
1991	0	13	7	0	2	7	9	0	0	0	0	0	3
1992	0	22	22	22	22	22	0	0	0	0	0	0	9
1993	8	13	21	22	22	22	22	19	0	0	0	0	12
1994	15	15	22	22	22	22	0	0	0	0	0	0	10
1995	13	13	16	22	22	22	22	0	0	0	0	0	11
1996	13	13	16	0	22	22	22	21	20	0	0	0	12
1997	0	15	22	22	22	22	22	22	22	0	0	0	14
1998	6	15	22	22	10	22	22	21	20	22	0	0	15
1999	13	15	22	22	22	22	22	21	20	0	0	0	15
Average	3	14	19	19	20	19	13	9	8	3	0	0	11
Maximum	15	22	22	22	22	22	22	22	22	22	0	0	17
Minimum	0	2	7	0	2	7	0	0	0	0	0	0	3

P-7h
Bonneville Unit Operations (acre-feet)
Diversions into Olmsted Aqueduct
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,351	5	5	1,746	1,890	1,740	435	1,302	2,149	2,652	2,694	1,679	17,649
1951	1,114	48	125	1,691	1,729	213	435	1,302	2,120	3,113	3,238	2,069	17,196
1952	1,114	48	147	838	1,598	6	436	1,302	2,083	2,342	2,431	1,490	13,834
1953	1,114	48	724	1,953	1,602	5	435	1,300	2,005	3,582	3,729	2,421	18,918
1954	1,114	48	1,035	1,342	1,466	1,446	435	1,327	2,183	3,463	3,799	2,471	20,129
1955	1,114	195	644	511	575	206	435	1,326	2,007	3,066	4,027	1,688	15,792
1956	0	202	705	1,606	1,012	1,989	435	1,325	2,174	3,392	3,518	2,270	18,629
1957	1,114	48	286	1,011	1,021	795	435	1,347	2,007	3,750	3,904	2,547	18,265
1958	1,114	48	181	848	1,335	2,005	435	1,410	2,011	3,683	3,834	2,496	19,400
1959	1,114	101	805	708	868	372	435	1,417	2,093	3,817	3,974	2,597	18,301
1960	1,114	203	451	671	972	1,619	435	1,337	2,051	4,018	2,472	2,748	18,093
1961	0	45	814	5	266	5	21	1,421	2,089	0	0	0	4,667
1962	0	107	6	6	642	6	435	1,302	2,112	3,951	4,114	2,698	15,379
1963	1,114	48	424	787	949	442	435	1,377	2,009	3,767	3,922	2,559	17,833
1964	1,114	99	6	1,118	1,119	786	435	1,302	2,121	3,834	3,992	2,610	18,536
1965	1,114	48	25	1,650	2,301	1,488	435	1,346	2,039	2,392	2,484	1,528	16,849
1966	1,114	94	0	65	126	6	435	1,300	2,005	3,365	3,501	2,258	14,269
1967	1,114	154	6	1,338	1,201	1,778	435	1,337	2,034	3,499	3,641	2,358	18,894
1968	1,114	48	162	1,233	1,851	918	435	1,317	2,006	3,230	3,361	2,157	17,831
1969	1,114	48	0	1,876	1,713	66	414	1,338	2,146	3,197	3,325	2,131	17,368
1970	1,114	161	557	1,861	2,006	1,477	435	1,252	2,004	3,666	3,816	2,484	20,833
1971	1,114	48	99	2,175	2,020	1,780	435	1,302	2,157	2,411	2,466	1,515	17,521
1972	1,114	48	90	2,227	2,008	5	435	1,293	2,109	2,426	2,519	1,553	15,826
1973	1,114	48	162	1,882	1,434	1,651	435	1,312	2,086	3,163	3,290	2,106	18,683
1974	1,114	48	555	577	559	984	485	1,391	2,321	4,480	4,667	3,094	20,274
1975	1,250	48	531	453	776	223	485	1,470	2,204	4,480	1,795	3,094	16,808
1976	1,250	119	717	1,160	1,734	2,038	485	1,412	2,302	4,480	4,667	3,094	23,457
1977	1,250	183	766	1,090	1,190	2,130	464	1,357	2,428	4,480	4,667	3,094	23,097
1978	0	642	802	443	395	0	464	1,498	2,206	2,582	4,667	3,094	16,792
1979	1,250	547	1,142	450	1,682	2,136	485	1,454	1,936	4,480	4,667	3,094	23,321
1980	1,250	293	877	1,321	1,781	1,011	485	1,385	2,430	4,480	4,667	3,094	23,073
1981	1,250	186	392	1,376	1,353	1,260	485	1,490	2,205	4,480	4,667	3,094	22,236
1982	1,250	193	392	1,519	1,824	1,965	491	1,437	2,321	2,610	4,667	3,094	21,763
1983	1,250	125	826	1,193	0	1	485	1,357	2,200	1,507	2,281	3,094	14,318
1984	1,250	383	1,004	0	64	0	464	1,479	2,205	2,537	2,441	3,094	14,921
1985	1,250	384	1,406	1,168	5	0	490	1,384	2,284	119	4,667	3,094	16,251
1986	1,250	297	678	1,061	0	21	464	1,360	2,202	592	4,667	3,094	15,684
1987	1,250	136	561	813	5	6	485	1,494	2,322	4,480	2,770	3,094	17,415
1988	1,250	363	392	753	629	755	485	1,457	2,207	4,480	4,667	3,094	20,532
1989	1,250	154	392	436	369	43	485	1,476	2,206	4,480	4,667	3,094	19,050
1990	1,250	558	877	128	2,455	946	485	1,369	2,206	4,480	190	0	14,942
1991	0	369	392	146	313	1,658	22	1,461	2,204	4,480	4,667	114	15,825
1992	0	784	1,172	5	0	11	21	1,531	1,512	0	0	0	5,037
1993	0	8	365	597	1,049	340	1,614	1,357	2,200	4,480	4,667	3,094	19,769
1994	1,250	226	796	801	1,043	570	485	1,455	2,205	4,480	4,667	995	18,971
1995	0	202	392	1,942	2,413	2,038	1,120	1,357	2,200	4,662	4,667	3,094	24,086
1996	1,250	0	175	0	1,875	0	464	1,463	2,439	4,480	4,667	3,132	19,943
1997	1,256	248	708	747	884	0	464	1,357	2,200	2,049	4,227	3,094	17,232
1998	1,349	194	989	1,557	1,048	2,358	464	1,357	2,200	4,480	4,667	3,094	23,755
1999	1,250	206	977	1,564	5	6	485	1,357	2,200	4,480	4,667	3,094	20,288
Average	997	178	515	1,009	1,103	826	466	1,377	2,147	3,372	3,608	2,393	17,991
Maximum	1,351	784	1,406	2,227	2,455	2,358	1,614	1,531	2,439	4,662	4,667	3,132	24,086
Minimum	0	0	0	0	0	0	21	1,252	1,512	0	0	0	4,667

P-7h
Bonneville Unit Operations (cfs)
Diversions into Olmsted Aqueduct
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	22	0	0	28	34	28	7	21	36	43	44	28	24
1951	18	1	2	28	31	3	7	21	36	51	53	35	24
1952	18	1	2	14	28	0	7	21	35	38	40	25	19
1953	18	1	12	32	29	0	7	21	34	58	61	41	26
1954	18	1	17	22	26	24	7	22	37	56	62	42	28
1955	18	3	10	8	10	3	7	22	34	50	65	28	22
1956	0	3	11	26	18	32	7	22	37	55	57	38	26
1957	18	1	5	16	18	13	7	22	34	61	63	43	25
1958	18	1	3	14	24	33	7	23	34	60	62	42	27
1959	18	2	13	12	16	6	7	23	35	62	65	44	25
1960	18	3	7	11	17	26	7	22	34	65	40	46	25
1961	0	1	13	0	5	0	0	23	35	0	0	0	6
1962	0	2	0	0	12	0	7	21	36	64	67	45	21
1963	18	1	7	13	17	7	7	22	34	61	64	43	25
1964	18	2	0	18	19	13	7	21	36	62	65	44	26
1965	18	1	0	27	41	24	7	22	34	39	40	26	23
1966	18	2	0	1	2	0	7	21	34	55	57	38	20
1967	18	3	0	22	22	29	7	22	34	57	59	40	26
1968	18	1	3	20	32	15	7	21	34	53	55	36	25
1969	18	1	0	31	31	1	7	22	36	52	54	36	24
1970	18	3	9	30	36	24	7	20	34	60	62	42	29
1971	18	1	2	35	36	29	7	21	36	39	40	25	24
1972	18	1	1	36	35	0	7	21	35	39	41	26	22
1973	18	1	3	31	26	27	7	21	35	51	54	35	26
1974	18	1	9	9	10	16	8	23	39	73	76	52	28
1975	20	1	9	7	14	4	8	24	37	73	29	52	23
1976	20	2	12	19	30	33	8	23	39	73	76	52	32
1977	20	3	12	18	21	35	8	22	41	73	76	52	32
1978	0	11	13	7	7	0	8	24	37	42	76	52	23
1979	20	9	19	7	30	35	8	24	33	73	76	52	32
1980	20	5	14	21	31	16	8	23	41	73	76	52	32
1981	20	3	6	22	24	20	8	24	37	73	76	52	31
1982	20	3	6	25	33	32	8	23	39	42	76	52	30
1983	20	2	13	19	0	0	8	22	37	25	37	52	20
1984	20	6	16	0	1	0	8	24	37	41	40	52	21
1985	20	6	23	19	0	0	8	23	38	2	76	52	22
1986	20	5	11	17	0	0	8	22	37	10	76	52	22
1987	20	2	9	13	0	0	8	24	39	73	45	52	24
1988	20	6	6	12	11	12	8	24	37	73	76	52	28
1989	20	3	6	7	7	1	8	24	37	73	76	52	26
1990	20	9	14	2	44	15	8	22	37	73	3	0	21
1991	0	6	6	2	6	27	0	24	37	73	76	2	22
1992	0	13	19	0	0	0	0	25	25	0	0	0	7
1993	0	0	6	10	19	6	27	22	37	73	76	52	27
1994	20	4	13	13	19	9	8	24	37	73	76	17	26
1995	0	3	6	32	43	33	19	22	37	76	76	52	33
1996	20	0	3	0	33	0	8	24	41	73	76	53	27
1997	20	4	12	12	16	0	8	22	37	33	69	52	24
1998	22	3	16	25	19	38	8	22	37	73	76	52	33
1999	20	3	16	25	0	0	8	22	37	73	76	52	28
Average	16	3	8	16	20	13	8	22	36	55	59	40	25
Maximum	22	13	23	36	44	38	27	25	41	76	76	53	33
Minimum	0	0	0	0	0	0	0	20	25	0	0	0	6

P-7i
Bonneville Unit Operations (acre-feet)
Diversions into Olmsted Aqueduct
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	940	0	0	0	0	0	2,301	9,290	10,238	7,480	2,970	3,415	36,635
1951	727	0	0	0	0	0	2,583	10,139	10,523	7,726	5,503	6,183	43,383
1952	727	0	0	0	0	0	188	9,860	10,464	8,597	5,503	6,569	41,907
1953	727	0	0	0	0	0	1,931	8,900	11,502	5,583	3,479	2,615	34,737
1954	727	0	0	0	0	0	4,609	12,686	3,037	4,768	4,554	4,836	35,217
1955	727	0	0	0	0	0	0	9,575	12,140	6,740	3,312	3,295	35,788
1956	727	0	0	0	0	0	2,484	11,453	12,823	5,868	2,942	2,267	38,564
1957	727	0	0	0	0	0	0	7,187	11,503	8,577	4,090	5,142	37,225
1958	727	0	0	0	0	0	0	4,766	13,011	6,161	3,981	4,437	33,083
1959	727	0	0	0	0	0	3,083	7,998	11,666	3,512	2,184	3,593	32,764
1960	553	0	0	0	0	0	1,251	9,956	10,957	1,314	1,271	1,935	27,237
1961	836	0	0	0	0	0	681	5,871	1,711	762	1,221	2,941	14,023
1962	37	0	0	0	0	0	1,445	9,677	11,477	6,976	3,373	3,896	36,880
1963	727	0	0	0	0	0	2,024	11,382	12,727	7,472	2,376	3,917	40,624
1964	690	0	0	0	0	0	0	5,459	11,182	8,477	4,139	3,911	33,858
1965	261	0	0	0	0	0	666	11,597	10,698	8,905	5,503	6,569	44,198
1966	727	0	0	0	0	0	4,599	13,393	8,780	2,950	2,530	4,572	37,550
1967	727	0	0	0	0	0	1,927	11,383	10,503	8,905	5,503	6,569	45,516
1968	727	0	0	0	0	0	284	10,803	11,503	8,510	5,503	6,569	43,899
1969	727	0	0	0	0	0	386	11,090	9,708	8,905	5,503	6,569	42,886
1970	727	0	0	0	0	0	1,238	8,806	11,499	7,155	4,821	6,553	40,798
1971	727	0	0	0	0	0	4,399	10,959	10,051	7,643	4,936	6,569	45,284
1972	727	0	0	0	0	0	2,579	10,831	9,664	6,686	3,486	4,829	38,802
1973	566	0	0	0	0	0	0	10,351	10,351	9,584	6,630	8,535	46,017
1974	1,024	0	0	0	0	0	493	11,109	9,705	7,507	3,687	3,755	37,280
1975	122	0	0	0	0	0	292	7,369	11,503	9,547	7,591	8,259	44,683
1976	1,311	0	0	0	0	0	1,007	12,448	14,784	3,129	2,885	3,530	39,095
1977	30	0	0	0	0	0	0	4,695	2,910	1,490	1,901	1,907	12,934
1978	124	0	0	0	0	0	0	9,865	11,503	7,603	3,745	5,566	38,405
1979	684	0	0	0	0	0	0	10,831	14,448	4,782	4,011	4,141	38,897
1980	140	0	0	0	0	0	1,141	10,543	10,199	9,528	5,531	1,518	38,600
1981	1,174	0	0	0	0	0	479	9,009	14,838	5,504	3,509	5,101	39,614
1982	259	0	0	0	0	0	666	11,098	9,703	11,402	7,691	6,949	47,769
1983	174	0	0	0	0	0	0	1,607	11,499	10,639	8,772	9,327	42,017
1984	1,460	0	0	0	0	0	0	6,319	11,498	11,181	8,711	9,232	48,401
1985	1,580	0	0	0	0	0	0	6,319	12,485	8,905	5,503	6,569	41,360
1986	727	0	0	0	0	0	0	6,319	11,504	8,905	5,503	6,569	39,526
1987	727	0	0	0	0	0	3,932	11,880	5,827	3,204	4,166	3,177	32,911
1988	747	0	0	0	0	0	4,788	8,235	7,037	2,808	2,792	2,056	28,463
1989	15	0	0	0	0	0	4,788	8,235	9,757	2,043	3,302	1,819	29,959
1990	15	0	0	0	0	0	446	9,516	11,576	7,765	5,027	6,087	40,432
1991	678	0	0	0	0	0	446	6,241	12,165	6,800	2,696	4,533	33,559
1992	678	0	0	0	0	0	904	8,272	6,631	1,689	9	1,337	19,520
1993	350	0	0	0	0	0	1,428	9,581	10,847	7,765	5,027	6,087	41,086
1994	678	0	0	0	0	0	1,821	10,760	8,902	3,496	3,490	2,057	31,204
1995	678	0	0	0	0	0	904	10,891	10,955	7,765	5,027	6,087	42,307
1996	678	0	0	0	0	0	642	10,367	10,359	7,765	5,027	6,087	40,925
1997	678	0	0	0	0	0	642	8,010	11,062	8,986	6,010	6,873	42,261
1998	940	0	0	0	0	0	642	8,010	11,077	9,306	6,010	6,873	42,857
1999	940	0	0	0	0	0	642	8,010	11,076	9,118	5,085	6,642	41,514
Average	657	0	0	0	0	0	1,295	9,179	10,431	6,758	4,360	4,968	37,649
Maximum	1,580	0	0	0	0	0	4,788	13,393	14,838	11,402	8,772	9,327	48,401
Minimum	15	0	0	0	0	0	0	1,607	1,711	762	9	1,337	12,934

P-7i
Bonneville Unit Operations (cfs)
Diversions into Olmsted Aqueduct
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	15	0	0	0	0	0	39	151	172	122	48	57	51
1951	12	0	0	0	0	0	43	165	177	126	89	104	60
1952	12	0	0	0	0	0	3	160	176	140	89	110	58
1953	12	0	0	0	0	0	32	145	193	91	57	44	48
1954	12	0	0	0	0	0	77	206	51	78	74	81	49
1955	12	0	0	0	0	0	0	156	204	110	54	55	49
1956	12	0	0	0	0	0	42	186	216	95	48	38	53
1957	12	0	0	0	0	0	0	117	193	139	67	86	51
1958	12	0	0	0	0	0	0	78	219	100	65	75	46
1959	12	0	0	0	0	0	52	130	196	57	36	60	45
1960	9	0	0	0	0	0	21	162	184	21	21	33	38
1961	14	0	0	0	0	0	11	95	29	12	20	49	19
1962	1	0	0	0	0	0	24	157	193	113	55	65	51
1963	12	0	0	0	0	0	34	185	214	122	39	66	56
1964	11	0	0	0	0	0	0	89	188	138	67	66	47
1965	4	0	0	0	0	0	11	189	180	145	89	110	61
1966	12	0	0	0	0	0	77	218	148	48	41	77	52
1967	12	0	0	0	0	0	32	185	177	145	89	110	63
1968	12	0	0	0	0	0	5	176	193	138	89	110	60
1969	12	0	0	0	0	0	6	180	163	145	89	110	59
1970	12	0	0	0	0	0	21	143	193	116	78	110	56
1971	12	0	0	0	0	0	74	178	169	124	80	110	63
1972	12	0	0	0	0	0	43	176	162	109	57	81	53
1973	9	0	0	0	0	0	0	168	174	156	108	143	64
1974	17	0	0	0	0	0	8	181	163	122	60	63	51
1975	2	0	0	0	0	0	5	120	193	155	123	139	62
1976	21	0	0	0	0	0	17	202	248	51	47	59	54
1977	0	0	0	0	0	0	0	76	49	24	31	32	18
1978	2	0	0	0	0	0	0	160	193	124	61	94	53
1979	11	0	0	0	0	0	0	176	243	78	65	70	54
1980	2	0	0	0	0	0	19	171	171	155	90	26	53
1981	19	0	0	0	0	0	8	147	249	90	57	86	55
1982	4	0	0	0	0	0	11	180	163	185	125	117	66
1983	3	0	0	0	0	0	0	26	193	173	143	157	58
1984	24	0	0	0	0	0	0	103	193	182	142	155	67
1985	26	0	0	0	0	0	0	103	210	145	89	110	57
1986	12	0	0	0	0	0	0	103	193	145	89	110	55
1987	12	0	0	0	0	0	66	193	98	52	68	53	45
1988	12	0	0	0	0	0	80	134	118	46	45	35	39
1989	0	0	0	0	0	0	80	134	164	33	54	31	41
1990	0	0	0	0	0	0	7	155	195	126	82	102	56
1991	11	0	0	0	0	0	7	102	204	111	44	76	46
1992	11	0	0	0	0	0	15	135	111	27	0	22	27
1993	6	0	0	0	0	0	24	156	182	126	82	102	57
1994	11	0	0	0	0	0	31	175	150	57	57	35	43
1995	11	0	0	0	0	0	15	177	184	126	82	102	58
1996	11	0	0	0	0	0	11	169	174	126	82	102	56
1997	11	0	0	0	0	0	11	130	186	146	98	116	58
1998	15	0	0	0	0	0	11	130	186	151	98	116	59
1999	15	0	0	0	0	0	11	130	186	148	83	112	57
Average	11	0	0	0	0	0	22	149	175	110	71	83	52
Maximum	26	0	0	0	0	0	80	218	249	185	143	157	67
Minimum	0	0	0	0	0	0	0	26	29	12	0	22	18

P-8a
Bonneville Unit Operations (acre-feet)
Provo River from Murdock to Interstate 15
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	5,311	4,292	6,134	4,271	2,750	3,439	16,900	48,307	53,171	16,478	14,036	13,399	188,489
1951	7,541	3,057	5,462	4,336	4,096	5,093	13,461	60,510	53,544	13,741	10,209	10,364	191,415
1952	4,295	3,009	4,528	4,184	2,727	17,526	48,452	88,346	70,510	14,556	10,571	9,737	278,442
1953	6,596	3,199	5,181	4,467	3,239	7,376	10,945	23,502	57,825	10,758	11,373	10,051	154,513
1954	7,333	4,087	3,135	2,564	2,529	2,057	10,413	13,230	8,921	9,836	9,556	8,125	81,786
1955	6,665	2,537	2,084	2,092	1,817	2,099	6,476	16,285	11,450	9,068	10,807	9,077	80,457
1956	4,556	3,186	4,297	2,032	1,912	2,125	9,442	17,229	14,388	11,755	11,183	9,373	91,478
1957	3,828	3,060	2,360	2,180	2,179	2,077	5,045	14,296	30,093	14,029	13,634	11,245	104,026
1958	6,063	4,346	2,375	2,043	2,020	2,105	5,715	39,928	22,267	12,809	13,479	11,717	124,866
1959	4,123	2,967	2,272	2,049	1,825	2,078	7,879	17,528	13,507	9,113	9,436	8,443	81,219
1960	5,160	2,553	1,728	2,032	1,887	2,093	11,818	16,342	11,011	25,956	6,647	6,667	93,894
1961	6,229	2,479	2,511	2,138	2,209	2,264	7,902	10,910	5,778	3,485	4,988	5,362	56,254
1962	4,438	2,533	2,415	2,232	2,073	2,109	6,716	17,003	13,652	13,195	13,039	10,128	89,533
1963	6,188	2,633	2,418	2,329	2,571	2,249	4,996	17,195	12,439	10,776	12,440	10,925	87,159
1964	10,604	6,341	4,991	4,991	2,328	2,184	6,281	15,368	13,315	12,522	13,631	12,501	105,056
1965	12,909	6,106	4,995	5,229	4,561	5,022	5,026	15,493	49,547	15,395	12,223	10,834	147,339
1966	11,314	8,715	9,773	10,257	9,319	14,724	10,571	32,589	13,231	12,661	12,161	11,907	157,223
1967	9,976	3,907	4,538	3,363	2,223	3,303	7,070	15,437	32,862	12,657	13,108	12,377	120,822
1968	11,572	5,939	4,421	4,931	4,445	5,003	4,643	17,128	56,978	12,500	13,327	12,034	152,923
1969	10,432	8,620	8,931	5,167	4,392	5,731	26,914	75,057	56,830	13,393	13,438	12,598	241,502
1970	9,222	6,870	4,489	5,005	4,449	4,962	7,302	38,610	29,071	14,915	13,665	11,580	150,140
1971	8,088	4,798	4,778	4,807	4,449	4,187	8,892	38,304	67,461	13,479	13,570	11,947	184,760
1972	8,473	4,343	4,892	5,125	4,435	12,480	11,926	50,276	32,228	14,368	13,887	12,560	174,993
1973	10,118	7,210	4,865	4,946	4,536	5,035	18,435	44,480	58,904	14,417	12,732	12,193	197,871
1974	8,024	8,090	4,790	4,934	4,605	5,044	11,085	52,150	60,018	14,160	13,893	12,645	199,438
1975	10,752	8,642	5,535	4,965	4,547	5,118	4,389	17,294	84,119	27,711	13,636	12,673	199,379
1976	7,828	7,098	4,658	4,789	4,458	5,044	12,487	28,512	16,347	12,710	12,705	11,732	128,368
1977	6,962	4,460	4,926	4,698	1,939	2,128	9,374	12,194	8,630	8,452	11,317	11,133	86,215
1978	10,304	7,061	7,087	5,486	4,861	6,126	7,942	17,316	12,202	12,562	14,096	12,375	117,419
1979	9,135	7,024	5,665	5,031	4,169	5,067	14,625	18,421	11,976	12,421	12,903	12,151	118,590
1980	10,288	9,130	6,578	4,678	4,095	4,646	6,119	35,096	38,131	12,727	14,484	18,270	164,244
1981	8,730	6,873	4,616	4,877	4,389	4,927	5,939	16,463	11,247	11,442	13,040	11,627	104,169
1982	8,463	4,991	5,070	5,107	4,527	5,223	11,588	55,711	51,565	21,261	13,109	9,859	196,473
1983	8,251	5,720	5,458	4,798	17,812	85,904	25,101	57,539	91,035	23,455	7,428	7,449	339,948
1984	4,130	7,478	6,308	12,599	19,631	37,182	61,258	81,317	64,216	23,946	8,359	6,664	333,089
1985	2,785	7,575	5,079	4,833	8,828	19,972	54,256	72,102	18,447	9,279	9,845	7,275	220,274
1986	5,887	6,637	6,914	5,698	15,371	96,275	52,738	76,147	85,054	25,925	10,271	9,037	395,953
1987	9,189	8,462	4,559	5,119	18,362	15,417	22,742	39,699	13,016	13,014	14,431	12,642	176,651
1988	7,532	3,994	2,118	1,709	1,906	2,072	8,043	15,254	13,506	12,117	14,674	12,892	95,817
1989	15,859	5,472	4,692	2,738	1,957	2,131	7,173	21,869	14,126	13,820	15,252	12,076	117,166
1990	7,936	4,557	4,779	3,990	2,216	3,628	5,902	20,617	12,904	12,803	12,860	12,459	104,652
1991	9,470	4,007	4,943	4,934	1,924	1,970	5,483	12,117	12,610	9,520	10,689	11,178	88,846
1992	6,682	4,932	5,237	5,078	4,625	2,835	7,203	11,783	8,744	7,200	8,778	8,063	81,160
1993	7,399	5,219	2,919	3,759	2,934	6,175	11,744	19,372	13,180	13,600	13,598	11,995	111,893
1994	9,446	4,183	4,816	4,827	3,980	3,078	5,857	14,052	10,132	11,006	10,611	9,570	91,560
1995	5,990	4,506	4,564	4,547	4,137	5,206	4,829	11,036	10,102	16,650	13,009	9,396	93,972
1996	10,854	6,604	5,657	9,709	4,500	9,193	18,322	41,469	60,738	16,274	13,020	11,199	207,539
1997	7,970	7,232	7,656	5,088	4,262	15,837	54,212	77,469	58,921	17,128	12,838	10,785	279,398
1998	7,525	6,612	4,592	5,107	4,711	3,832	14,060	71,075	58,986	18,160	13,806	10,011	218,478
1999	7,255	4,808	3,329	4,338	7,952	14,506	30,623	60,777	46,352	19,473	12,217	10,620	222,249
Average	7,914	5,363	4,722	4,524	4,833	9,717	14,926	34,004	33,506	14,174	12,080	10,818	156,582
Maximum	15,859	9,130	9,773	12,599	19,631	96,275	61,258	88,346	91,035	27,711	15,252	18,270	395,953
Minimum	2,785	2,479	1,728	1,709	1,817	1,970	4,389	10,910	5,778	3,485	4,988	5,362	56,254

P-8a
Bonneville Unit Operations (cfs)
Provo River from Murdock to Interstate 15
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	86	72	100	69	50	56	284	786	894	268	228	225	260
1951	123	51	89	71	74	83	226	984	900	223	166	174	264
1952	70	51	74	68	47	285	814	1,437	1,185	237	172	164	384
1953	107	54	84	73	58	120	184	382	972	175	185	169	213
1954	119	69	51	42	46	33	175	215	150	160	155	137	113
1955	108	43	34	34	33	34	109	265	192	147	176	153	111
1956	74	54	70	33	33	35	159	280	242	191	182	158	126
1957	62	51	38	35	39	34	85	233	506	228	222	189	144
1958	99	73	39	33	36	34	96	649	374	208	219	197	172
1959	67	50	37	33	33	34	132	285	227	148	153	142	112
1960	84	43	28	33	33	34	199	266	185	422	108	112	129
1961	101	42	41	35	40	37	133	177	97	57	81	90	78
1962	72	43	39	36	37	34	113	277	229	215	212	170	124
1963	101	44	39	38	46	37	84	280	209	175	202	184	120
1964	172	107	81	81	40	36	106	250	224	204	222	210	145
1965	210	103	81	85	82	82	84	252	833	250	199	182	204
1966	184	146	159	167	168	239	178	530	222	206	198	200	217
1967	162	66	74	55	40	54	119	251	552	206	213	208	167
1968	188	100	72	80	77	81	78	279	958	203	217	202	211
1969	170	145	145	84	79	93	452	1,221	955	218	219	212	334
1970	150	115	73	81	80	81	123	628	489	243	222	195	207
1971	132	81	78	78	80	68	149	623	1,134	219	221	201	255
1972	138	73	80	83	77	203	200	818	542	234	226	211	241
1973	165	121	79	80	82	82	310	723	990	234	207	205	273
1974	130	136	78	80	83	82	186	848	1,009	230	226	213	275
1975	175	145	90	81	82	83	74	281	1,414	451	222	213	275
1976	127	119	76	78	78	82	210	464	275	207	207	197	177
1977	113	75	80	76	35	35	158	198	145	137	184	187	119
1978	168	119	115	89	88	100	133	282	205	204	229	208	162
1979	149	118	92	82	75	82	246	300	201	202	210	204	164
1980	167	153	107	76	71	76	103	571	641	207	236	307	226
1981	142	116	75	79	79	80	100	268	189	186	212	195	144
1982	138	84	82	83	82	85	195	906	867	346	213	166	271
1983	134	96	89	78	321	1,397	422	936	1,530	381	121	125	470
1984	67	126	103	205	341	605	1,030	1,323	1,079	389	136	112	459
1985	45	127	83	79	159	325	912	1,173	310	151	160	122	304
1986	96	112	112	93	277	1,566	886	1,238	1,429	422	167	152	547
1987	149	142	74	83	331	251	382	646	219	212	235	212	244
1988	123	67	34	28	33	34	135	248	227	197	239	217	132
1989	258	92	76	45	35	35	121	356	237	225	248	203	162
1990	129	77	78	65	40	59	99	335	217	208	209	209	145
1991	154	67	80	80	35	32	92	197	212	155	174	188	123
1992	109	83	85	83	80	46	121	192	147	117	143	136	112
1993	120	88	47	61	53	100	197	315	222	221	221	202	155
1994	154	70	78	79	72	50	98	229	170	179	173	161	126
1995	97	76	74	74	74	85	81	179	170	271	212	158	130
1996	177	111	92	158	78	150	308	674	1,021	265	212	188	286
1997	130	122	125	83	77	258	911	1,260	990	279	209	181	386
1998	122	111	75	83	85	62	236	1,156	991	295	225	168	302
1999	118	81	54	71	143	236	515	988	779	317	199	178	307
Average	129	90	77	74	86	158	251	553	563	231	196	182	216
Maximum	258	153	159	205	341	1,566	1,030	1,437	1,530	451	248	307	547
Minimum	45	42	28	28	33	32	74	177	97	57	81	90	78

P-8b
Bonneville Unit Operations (acre-feet)
Provo River from Murdock to Interstate 15
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	3,740	317	1,751	3,311	1,754	2,553	7,935	750	690	4,153	3,323	3,810	34,087
1951	1,069	0	0	1,711	1,552	908	1,931	616	541	3,716	875	559	13,477
1952	1,423	0	0	1,466	0	0	1,512	349	541	4,360	657	402	10,710
1953	1,069	0	3,039	1,649	1,474	3,771	6,381	5,770	541	2,403	1,007	654	27,758
1954	1,069	2,221	1,796	1,538	1,389	48	3,758	4,259	1,108	1,725	1,026	667	20,605
1955	1,069	1,440	1,537	1,538	1,389	1,538	4,732	6,610	2,122	1,980	1,088	456	25,497
1956	0	0	2,758	1,538	1,438	1,538	3,585	8,006	4,897	4,034	1,384	613	29,791
1957	301	0	1,668	1,538	1,389	1,538	4,086	7,392	4,761	4,541	3,650	2,068	32,929
1958	1,069	1,620	666	1,538	694	1,572	3,184	5,737	7,302	3,946	3,631	2,512	33,471
1959	1,069	1,595	1,809	1,538	1,389	1,538	4,318	7,601	4,025	2,495	1,074	701	29,152
1960	1,069	0	1,538	1,538	1,438	1,538	3,654	6,916	2,001	1,086	1,131	742	22,650
1961	768	1,488	1,500	1,454	1,584	1,482	4,656	4,975	757	170	0	0	18,833
1962	768	1,243	1,404	1,447	1,389	1,482	4,711	8,132	4,758	4,422	3,707	3,249	36,712
1963	301	0	1,537	1,538	1,389	1,538	4,767	7,997	4,022	4,061	3,655	2,728	33,531
1964	539	0	4,344	4,441	1,716	1,538	4,772	7,358	4,716	3,902	3,674	3,820	40,819
1965	5,681	1,646	3,357	4,018	3,927	4,011	4,760	8,509	4,675	3,915	3,266	3,892	51,656
1966	5,681	5,345	59	630	3,688	2,098	3,098	2,428	4,015	3,798	3,541	4,150	38,531
1967	3,966	985	4,029	2,322	1,389	1,724	3,995	8,751	4,654	4,506	3,579	3,892	43,792
1968	5,681	3,516	1,917	2,966	2,726	2,243	1,985	10,877	541	3,902	3,503	3,870	43,726
1969	5,681	4,715	5,760	2,322	1,927	882	450	337	541	3,902	3,494	3,890	33,899
1970	5,024	1,779	2,765	2,736	3,064	2,780	4,763	2,430	541	5,602	3,626	3,920	39,030
1971	3,727	320	2,582	2,094	1,483	1,453	4,695	6,342	4,394	4,077	3,261	3,921	38,349
1972	5,119	241	2,073	2,739	2,559	738	826	337	541	3,868	3,276	3,831	26,147
1973	5,681	3,496	2,717	2,378	1,901	2,310	1,371	336	541	3,903	3,484	3,903	32,021
1974	5,681	4,156	2,206	2,809	2,694	4,243	10,323	366	3,554	6,003	3,856	3,797	49,688
1975	5,717	6,094	3,556	2,061	1,871	2,050	463	13,432	594	1,210	3,856	3,877	44,783
1976	5,717	2,250	0	1,324	2,911	3,871	9,933	9,786	7,964	3,968	3,856	3,894	55,475
1977	4,398	2,716	3,890	3,687	1,389	1,567	4,467	6,584	3,741	3,818	3,856	3,909	44,021
1978	5,380	6,090	6,174	4,695	4,115	3,531	2,821	10,723	4,814	3,902	3,856	3,896	59,996
1979	5,717	5,274	4,348	3,496	3,480	3,285	12,524	9,432	4,035	3,976	3,856	3,888	63,312
1980	5,717	6,447	6,133	3,030	2,549	2,375	2,549	3,078	594	3,906	3,856	836	41,072
1981	5,717	3,083	2,244	3,932	3,158	4,227	4,780	9,626	3,707	4,034	3,856	3,942	52,306
1982	6,296	992	4,471	4,498	3,647	2,298	9,827	778	1,346	3,333	3,856	4,023	45,365
1983	2,144	2,676	2,494	1,795	0	0	3,776	366	594	4,085	1,261	836	20,027
1984	1,684	2,919	0	0	0	0	1,977	2,828	594	4,085	1,261	836	16,185
1985	1,106	2,133	1,778	1,722	2,140	0	1,912	3,203	3,469	2,393	1,261	836	21,951
1986	1,586	0	2,348	1,829	3,454	0	2,037	1,921	594	4,085	1,261	836	19,951
1987	3,041	3,898	1,778	1,979	2,214	0	1,866	3,782	4,017	3,950	3,856	3,769	34,150
1988	3,789	1,665	1,925	1,538	201	0	4,759	7,798	4,057	4,055	3,850	3,770	37,407
1989	1,106	3,900	4,336	2,454	1,393	908	3,859	8,026	4,035	1,210	3,855	3,859	38,942
1990	4,238	3,084	3,869	3,397	1,831	3,204	1,249	10,950	4,034	3,949	2,647	3,540	45,993
1991	4,071	3,190	4,392	4,471	1,402	1,537	4,768	7,191	4,838	2,099	3,856	3,571	45,387
1992	4,426	2,661	3,886	3,966	3,226	1,361	4,691	6,633	3,981	2,640	0	3,540	41,011
1993	4,334	2,833	1,679	1,538	1,389	1,863	3,722	11,095	4,740	4,655	3,856	3,940	45,643
1994	3,285	2,876	3,382	3,350	1,742	0	3,951	7,690	4,209	4,093	3,856	3,809	42,244
1995	1,006	1,709	2,407	2,523	1,726	0	790	10,237	4,655	2,282	3,856	1,245	32,436
1996	7,686	2,587	2,462	501	2,120	0	125	366	594	4,085	3,856	4,040	28,423
1997	5,717	4,463	3,689	1,503	2,967	3,775	1,299	1,698	1,768	6,061	3,856	4,128	40,925
1998	5,717	4,192	2,794	3,989	4,120	2,064	4,450	1,540	1,768	4,085	3,856	4,096	42,671
1999	4,357	2,368	2,507	3,288	1,566	2,256	4,057	1,540	1,768	4,085	3,856	4,013	35,661
Average	3,424	2,324	2,587	2,387	1,999	1,705	3,938	5,470	2,866	3,610	2,914	2,819	36,044
Maximum	7,686	6,447	6,174	4,695	4,120	4,243	12,524	13,432	7,964	6,061	3,856	4,150	63,312
Minimum	0	0	0	0	0	0	125	336	541	170	0	0	10,710

P-8b
Bonneville Unit Operations (cfs)
Provo River from Murdock to Interstate 15
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	61	5	28	54	32	42	133	12	12	68	54	64	47
1951	17	0	0	28	28	15	32	10	9	60	14	9	19
1952	23	0	0	24	0	0	25	6	9	71	11	7	15
1953	17	0	49	27	27	61	107	94	9	39	16	11	38
1954	17	37	29	25	25	1	63	69	19	28	17	11	28
1955	17	24	25	25	25	25	80	108	36	32	18	8	35
1956	0	0	45	25	25	25	60	130	82	66	23	10	41
1957	5	0	27	25	25	25	69	120	80	74	59	35	45
1958	17	27	11	25	12	26	54	93	123	64	59	42	46
1959	17	27	29	25	25	25	73	124	68	41	17	12	40
1960	17	0	25	25	25	25	61	112	34	18	18	12	31
1961	12	25	24	24	29	24	78	81	13	3	0	0	26
1962	12	21	23	24	25	24	79	132	80	72	60	55	51
1963	5	0	25	25	25	25	80	130	68	66	59	46	46
1964	9	0	71	72	30	25	80	120	79	63	60	64	56
1965	92	28	55	65	71	65	80	138	79	64	53	65	71
1966	92	90	1	10	66	34	52	39	67	62	58	70	53
1967	65	17	66	38	25	28	67	142	78	73	58	65	60
1968	92	59	31	48	47	36	33	177	9	63	57	65	60
1969	92	79	94	38	35	14	8	5	9	63	57	65	47
1970	82	30	45	44	55	45	80	40	9	91	59	66	54
1971	61	5	42	34	27	24	79	103	74	66	53	66	53
1972	83	4	34	45	44	12	14	5	9	63	53	64	36
1973	92	59	44	39	34	38	23	5	9	63	57	66	44
1974	92	70	36	46	49	69	173	6	60	98	63	64	69
1975	93	102	58	34	34	33	8	218	10	20	63	65	62
1976	93	38	0	22	51	63	167	159	134	65	63	65	76
1977	72	46	63	60	25	25	75	107	63	62	63	66	61
1978	87	102	100	76	74	57	47	174	81	63	63	65	83
1979	93	89	71	57	63	53	210	153	68	65	63	65	87
1980	93	108	100	49	44	39	43	50	10	64	63	14	57
1981	93	52	37	64	57	69	80	157	62	66	63	66	72
1982	102	17	73	73	66	37	165	13	23	54	63	68	63
1983	35	45	41	29	0	0	63	6	10	66	21	14	28
1984	27	49	0	0	0	0	33	46	10	66	21	14	22
1985	18	36	29	28	39	0	32	52	58	39	21	14	30
1986	26	0	38	30	62	0	34	31	10	66	21	14	28
1987	49	66	29	32	40	0	31	62	68	64	63	63	47
1988	62	28	31	25	4	0	80	127	68	66	63	63	52
1989	18	66	71	40	25	15	65	131	68	20	63	65	54
1990	69	52	63	55	33	52	21	178	68	64	43	59	64
1991	66	54	71	73	25	25	80	117	81	34	63	60	63
1992	72	45	63	64	56	22	79	108	67	43	0	59	56
1993	70	48	27	25	25	30	63	180	80	76	63	66	63
1994	53	48	55	54	31	0	66	125	71	67	63	64	58
1995	16	29	39	41	31	0	13	166	78	37	63	21	45
1996	125	43	40	8	37	0	2	6	10	66	63	68	39
1997	93	75	60	24	53	61	22	28	30	99	63	69	57
1998	93	70	45	65	74	34	75	25	30	66	63	69	59
1999	71	40	41	53	28	37	68	25	30	66	63	67	49
Average	56	39	42	39	36	28	66	89	48	59	47	47	50
Maximum	125	108	100	76	74	69	210	218	134	99	63	70	87
Minimum	0	0	0	0	0	0	2	5	9	3	0	0	15

P-8b-i

Bonneville Unit Operations (acre-feet)

Releases of ULS Water to Supplement Provo River

CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,564	0	0	1,134	0	0	0	0	0	2,174	2,595	3,357	11,824
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	771	0	0	0	0	0	771
1955	0	0	0	0	0	0	1,745	3,570	0	0	0	0	5,315
1956	0	0	0	0	0	0	598	4,611	2,700	2,236	434	0	10,579
1957	0	0	0	0	0	0	1,099	4,611	2,700	2,338	2,595	1,380	14,724
1958	0	0	0	0	0	0	197	4,611	2,700	2,036	2,595	1,838	13,978
1959	0	0	0	0	0	0	1,331	4,611	1,952	899	0	0	8,794
1960	0	0	0	0	0	0	667	3,992	0	0	0	0	4,660
1961	0	0	0	0	0	0	1,781	2,689	0	0	0	0	4,470
1962	0	0	0	0	0	0	168	4,611	2,700	2,338	2,595	2,520	14,934
1963	0	0	0	0	0	0	1,779	4,611	1,836	2,033	2,595	2,037	14,892
1964	238	0	2,985	2,903	277	0	1,785	4,611	2,700	1,688	2,595	3,115	22,899
1965	4,611	1,296	1,819	2,076	2,180	2,473	647	4,611	2,700	2,046	2,595	3,479	30,535
1966	4,611	3,455	59	629	1,773	0	111	0	2,246	2,338	2,595	3,540	21,358
1967	2,897	482	2,492	785	0	0	1,008	4,611	2,700	2,338	2,595	3,255	23,164
1968	4,611	2,000	1,791	1,820	1,159	2,243	0	4,611	0	1,847	2,595	3,288	25,965
1969	4,611	3,273	4,611	496	1,315	0	0	0	0	163	2,595	3,314	20,380
1970	3,954	0	1,170	2,143	1,967	2,517	1,032	914	0	0	2,595	3,249	19,540
1971	2,658	0	2,582	2,094	1,482	1,453	964	4,611	0	2,338	2,595	3,512	24,289
1972	4,050	0	2,073	2,739	2,559	0	0	0	0	338	2,595	3,411	17,764
1973	4,611	3,496	2,716	2,377	1,901	2,310	0	0	0	174	2,595	3,334	23,515
1974	4,611	3,407	2,206	2,808	2,694	2,705	0	0	0	2,338	2,595	2,962	26,328
1975	4,611	4,463	2,603	2,060	1,870	2,050	305	4,611	0	0	2,595	3,041	28,210
1976	4,611	238	0	1,324	1,323	1,941	0	4,611	2,700	2,174	2,595	3,059	24,576
1977	3,292	1,089	2,258	2,149	0	0	722	4,611	2,700	2,338	2,595	3,073	24,828
1978	4,611	4,463	4,611	2,944	2,236	0	0	4,611	2,700	1,606	2,595	3,060	33,438
1979	4,611	4,463	4,018	2,933	2,233	2,458	0	4,611	1,618	2,008	2,595	3,053	34,601
1980	4,611	4,124	3,631	1,364	1,008	1,786	0	416	0	338	2,595	0	19,873
1981	4,611	751	0	2,394	1,770	2,689	1,036	4,611	1,268	2,012	2,595	3,106	26,844
1982	4,611	930	2,107	2,960	2,258	0	0	0	0	0	2,595	3,187	18,648
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	375	2,082	0	0	0	0	0	0	228	556	2,595	2,934	8,770
1988	2,682	0	0	0	0	0	1,758	4,611	2,437	2,338	2,589	2,935	19,351
1989	0	2,413	2,570	917	0	0	859	4,611	2,116	0	2,594	3,023	19,103
1990	3,088	339	680	0	0	0	1,124	4,611	1,922	1,655	2,595	3,540	19,553
1991	2,429	1,233	2,621	2,933	13	0	1,893	4,611	2,700	0	2,595	3,540	24,569
1992	3,647	920	2,458	1,581	152	240	1,816	4,611	2,700	2,338	0	3,540	24,004
1993	1,718	1,146	0	0	0	0	0	4,611	2,700	2,338	2,595	3,104	18,214
1994	1,610	1,173	1,682	1,813	890	0	951	4,611	2,449	2,308	2,595	3,540	23,623
1995	0	0	0	0	0	0	0	4,611	2,700	0	2,595	409	10,316
1996	4,415	0	0	0	510	0	0	0	0	0	2,595	3,204	10,724
1997	4,611	4,463	1,901	1,503	1,579	0	0	0	0	1,976	2,595	3,292	21,920
1998	4,611	1,837	404	2,452	2,731	159	0	0	0	0	2,595	3,260	18,049
1999	2,477	0	104	1,750	0	0	0	0	0	0	2,595	3,177	10,104
Average	2,225	1,071	1,123	1,062	718	500	523	2,537	1,118	1,073	1,877	2,173	16,000
Maximum	4,611	4,463	4,611	2,960	2,731	2,705	1,893	4,611	2,700	2,338	2,595	3,540	34,601
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

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Bonneville Unit Operations (cfs)

Releases of ULS Water to Supplement Provo River

CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	42	0	0	18	0	0	0	0	0	35	42	56	16
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	13	0	0	0	0	0	1
1955	0	0	0	0	0	0	29	58	0	0	0	0	7
1956	0	0	0	0	0	0	10	75	45	36	7	0	15
1957	0	0	0	0	0	0	18	75	45	38	42	23	20
1958	0	0	0	0	0	0	3	75	45	33	42	31	19
1959	0	0	0	0	0	0	22	75	33	15	0	0	12
1960	0	0	0	0	0	0	11	65	0	0	0	0	6
1961	0	0	0	0	0	0	30	44	0	0	0	0	6
1962	0	0	0	0	0	0	3	75	45	38	42	42	21
1963	0	0	0	0	0	0	30	75	31	33	42	34	21
1964	4	0	49	47	5	0	30	75	45	27	42	52	32
1965	75	22	30	34	39	40	11	75	45	33	42	58	42
1966	75	58	1	10	32	0	2	0	38	38	42	59	30
1967	47	8	41	13	0	0	17	75	45	38	42	55	32
1968	75	34	29	30	20	36	0	75	0	30	42	55	36
1969	75	55	75	8	24	0	0	0	0	3	42	56	28
1970	64	0	19	35	35	41	17	15	0	0	42	55	27
1971	43	0	42	34	27	24	16	75	0	38	42	59	34
1972	66	0	34	45	44	0	0	0	0	5	42	57	24
1973	75	59	44	39	34	38	0	0	0	3	42	56	32
1974	75	57	36	46	49	44	0	0	0	38	42	50	36
1975	75	75	42	34	34	33	5	75	0	0	42	51	39
1976	75	4	0	22	23	32	0	75	45	35	42	51	34
1977	54	18	37	35	0	0	12	75	45	38	42	52	34
1978	75	75	75	48	40	0	0	75	45	26	42	51	46
1979	75	75	65	48	40	40	0	75	27	33	42	51	48
1980	75	69	59	22	18	29	0	7	0	6	42	0	27
1981	75	13	0	39	32	44	17	75	21	33	42	52	37
1982	75	16	34	48	41	0	0	0	0	0	42	54	26
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	6	35	0	0	0	0	0	0	4	9	42	49	12
1988	44	0	0	0	0	0	30	75	41	38	42	49	27
1989	0	41	42	15	0	0	14	75	36	0	42	51	26
1990	50	6	11	0	0	0	19	75	32	27	42	59	27
1991	40	21	43	48	0	0	32	75	45	0	42	59	34
1992	59	15	40	26	3	4	31	75	45	38	0	59	33
1993	28	19	0	0	0	0	0	75	45	38	42	52	25
1994	26	20	27	29	16	0	16	75	41	38	42	59	33
1995	0	0	0	0	0	0	0	75	45	0	42	7	14
1996	72	0	0	0	9	0	0	0	0	0	42	54	15
1997	75	75	31	24	28	0	0	0	0	32	42	55	30
1998	75	31	7	40	49	3	0	0	0	0	42	55	25
1999	40	0	2	28	0	0	0	0	0	0	42	53	14
Average	36	18	18	17	13	8	9	41	19	17	31	37	22
Maximum	75	75	75	48	49	44	32	75	45	38	42	59	48
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

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Bonneville Unit Operations (acre-feet)

Releases of ULS Water to Supplement Provo River

CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,564	0	0	1,134	0	0	0	0	0	2,174	2,595	3,357	11,824
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	771	0	0	0	0	0	771
1955	0	0	0	0	0	0	1,745	3,570	0	0	0	0	5,315
1956	0	0	0	0	0	0	598	4,611	2,700	2,236	434	0	10,579
1957	0	0	0	0	0	0	1,099	4,611	2,700	2,338	2,595	1,380	14,724
1958	0	0	0	0	0	0	197	4,611	2,700	2,036	2,595	1,838	13,978
1959	0	0	0	0	0	0	1,331	4,611	1,952	899	0	0	8,794
1960	0	0	0	0	0	0	667	3,992	0	0	0	0	4,660
1961	0	0	0	0	0	0	1,781	2,689	0	0	0	0	4,470
1962	0	0	0	0	0	0	168	4,611	2,700	2,338	2,595	2,520	14,934
1963	0	0	0	0	0	0	1,779	4,611	1,836	2,033	2,595	2,037	14,892
1964	238	0	2,985	2,903	277	0	1,785	4,611	2,700	1,688	2,595	3,115	22,899
1965	4,611	1,296	1,819	2,076	2,180	2,473	647	4,611	2,700	2,046	2,595	3,479	30,535
1966	4,611	3,455	59	629	1,773	0	111	0	2,246	2,338	2,595	3,540	21,358
1967	2,897	482	2,492	785	0	0	1,008	4,611	2,700	2,338	2,595	3,255	23,164
1968	4,611	2,000	1,791	1,820	1,159	2,243	0	4,611	0	1,847	2,595	3,288	25,965
1969	4,611	3,273	4,611	496	1,315	0	0	0	0	163	2,595	3,314	20,380
1970	3,954	0	1,170	2,143	1,967	2,517	1,032	914	0	0	2,595	3,249	19,540
1971	2,658	0	2,582	2,094	1,482	1,453	964	4,611	0	2,338	2,595	3,512	24,289
1972	4,050	0	2,073	2,739	2,559	0	0	0	0	338	2,595	3,411	17,764
1973	4,611	3,496	2,716	2,377	1,901	2,310	0	0	0	174	2,595	3,334	23,515
1974	4,611	3,407	2,206	2,808	2,694	2,705	0	0	0	2,338	2,595	2,962	26,328
1975	4,611	4,463	2,603	2,060	1,870	2,050	305	4,611	0	0	2,595	3,041	28,210
1976	4,611	238	0	1,324	1,323	1,941	0	4,611	2,700	2,174	2,595	3,059	24,576
1977	3,292	1,089	2,258	2,149	0	0	722	4,611	2,700	2,338	2,595	3,073	24,828
1978	4,611	4,463	4,611	2,944	2,236	0	0	4,611	2,700	1,606	2,595	3,060	33,438
1979	4,611	4,463	4,018	2,933	2,233	2,458	0	4,611	1,618	2,008	2,595	3,053	34,601
1980	4,611	4,124	3,631	1,364	1,008	1,786	0	416	0	338	2,595	0	19,873
1981	4,611	751	0	2,394	1,770	2,689	1,036	4,611	1,268	2,012	2,595	3,106	26,844
1982	4,611	930	2,107	2,960	2,258	0	0	0	0	0	2,595	3,187	18,648
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	375	2,082	0	0	0	0	0	0	228	556	2,595	2,934	8,770
1988	2,682	0	0	0	0	0	1,758	4,611	2,437	2,338	2,589	2,935	19,351
1989	0	2,413	2,570	917	0	0	859	4,611	2,116	0	2,594	3,023	19,103
1990	3,088	339	680	0	0	0	1,124	4,611	1,922	1,655	2,595	3,540	19,553
1991	2,429	1,233	2,621	2,933	13	0	1,893	4,611	2,700	0	2,595	3,540	24,569
1992	3,647	920	2,458	1,581	152	240	1,816	4,611	2,700	2,338	0	3,540	24,004
1993	1,718	1,146	0	0	0	0	0	4,611	2,700	2,338	2,595	3,104	18,214
1994	1,610	1,173	1,682	1,813	890	0	951	4,611	2,449	2,308	2,595	3,540	23,623
1995	0	0	0	0	0	0	0	4,611	2,700	0	2,595	409	10,316
1996	4,415	0	0	0	510	0	0	0	0	0	2,595	3,204	10,724
1997	4,611	4,463	1,901	1,503	1,579	0	0	0	0	1,976	2,595	3,292	21,920
1998	4,611	1,837	404	2,452	2,731	159	0	0	0	0	2,595	3,260	18,049
1999	2,477	0	104	1,750	0	0	0	0	0	0	2,595	3,177	10,104
Average	2,225	1,071	1,123	1,062	718	500	523	2,537	1,118	1,073	1,877	2,173	16,000
Maximum	4,611	4,463	4,611	2,960	2,731	2,705	1,893	4,611	2,700	2,338	2,595	3,540	34,601
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

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Bonneville Unit Operations (cfs)

Releases of ULS Water to Supplement Provo River

CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	42	0	0	18	0	0	0	0	0	35	42	56	16
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	13	0	0	0	0	0	1
1955	0	0	0	0	0	0	29	58	0	0	0	0	7
1956	0	0	0	0	0	0	10	75	45	36	7	0	15
1957	0	0	0	0	0	0	18	75	45	38	42	23	20
1958	0	0	0	0	0	0	3	75	45	33	42	31	19
1959	0	0	0	0	0	0	22	75	33	15	0	0	12
1960	0	0	0	0	0	0	11	65	0	0	0	0	6
1961	0	0	0	0	0	0	30	44	0	0	0	0	6
1962	0	0	0	0	0	0	3	75	45	38	42	42	21
1963	0	0	0	0	0	0	30	75	31	33	42	34	21
1964	4	0	49	47	5	0	30	75	45	27	42	52	32
1965	75	22	30	34	39	40	11	75	45	33	42	58	42
1966	75	58	1	10	32	0	2	0	38	38	42	59	30
1967	47	8	41	13	0	0	17	75	45	38	42	55	32
1968	75	34	29	30	20	36	0	75	0	30	42	55	36
1969	75	55	75	8	24	0	0	0	0	3	42	56	28
1970	64	0	19	35	35	41	17	15	0	0	42	55	27
1971	43	0	42	34	27	24	16	75	0	38	42	59	34
1972	66	0	34	45	44	0	0	0	0	5	42	57	24
1973	75	59	44	39	34	38	0	0	0	3	42	56	32
1974	75	57	36	46	49	44	0	0	0	38	42	50	36
1975	75	75	42	34	34	33	5	75	0	0	42	51	39
1976	75	4	0	22	23	32	0	75	45	35	42	51	34
1977	54	18	37	35	0	0	12	75	45	38	42	52	34
1978	75	75	75	48	40	0	0	75	45	26	42	51	46
1979	75	75	65	48	40	40	0	75	27	33	42	51	48
1980	75	69	59	22	18	29	0	7	0	6	42	0	27
1981	75	13	0	39	32	44	17	75	21	33	42	52	37
1982	75	16	34	48	41	0	0	0	0	0	42	54	26
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	6	35	0	0	0	0	0	0	4	9	42	49	12
1988	44	0	0	0	0	0	30	75	41	38	42	49	27
1989	0	41	42	15	0	0	14	75	36	0	42	51	26
1990	50	6	11	0	0	0	19	75	32	27	42	59	27
1991	40	21	43	48	0	0	32	75	45	0	42	59	34
1992	59	15	40	26	3	4	31	75	45	38	0	59	33
1993	28	19	0	0	0	0	0	75	45	38	42	52	25
1994	26	20	27	29	16	0	16	75	41	38	42	59	33
1995	0	0	0	0	0	0	0	75	45	0	42	7	14
1996	72	0	0	0	9	0	0	0	0	0	42	54	15
1997	75	75	31	24	28	0	0	0	0	32	42	55	30
1998	75	31	7	40	49	3	0	0	0	0	42	55	25
1999	40	0	2	28	0	0	0	0	0	0	42	53	14
Average	36	18	18	17	13	8	9	41	19	17	31	37	22
Maximum	75	75	75	48	49	44	32	75	45	38	42	59	48
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

P-8c
Bonneville Unit Operations (acre-feet)
Provo River from Murdock to Interstate 15
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	160	0	0	0	0	0	80	36,104	1,964	3,467	610	480	42,865
1951	160	0	0	0	0	0	80	18,784	2,359	640	610	480	23,113
1952	160	0	0	0	0	0	5,245	6,160	6,320	640	610	480	19,615
1953	160	0	0	0	0	0	80	7,590	25,526	640	610	480	35,086
1954	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1955	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1956	0	0	0	0	0	0	80	160	320	640	610	480	2,290
1957	160	0	0	0	0	0	80	160	15,169	640	610	480	17,299
1958	160	0	0	0	0	0	80	23,851	5,986	640	610	480	31,807
1959	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1960	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1961	0	0	0	0	0	0	0	160	320	0	0	0	480
1962	0	0	0	0	0	0	80	160	320	640	610	480	2,290
1963	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1964	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1965	160	0	0	0	0	0	80	160	35,534	3,745	610	480	40,769
1966	160	0	0	0	0	0	80	12,600	320	640	610	480	14,890
1967	160	0	0	0	0	0	80	160	19,517	640	610	480	21,647
1968	160	0	0	0	0	0	80	160	13,779	640	610	480	15,909
1969	160	0	0	0	0	0	80	6,160	2,532	640	610	480	10,662
1970	160	0	0	0	0	0	80	28,612	6,877	640	610	480	37,459
1971	160	0	0	0	0	0	80	6,160	966	640	610	480	9,096
1972	160	0	0	0	0	0	7,169	2,784	1,644	640	610	480	13,486
1973	160	0	0	0	0	0	80	6,160	4,266	640	610	480	12,396
1974	160	0	0	0	0	0	80	6,160	16,731	640	610	480	24,861
1975	160	0	0	0	0	0	80	160	10,664	4,762	610	480	16,916
1976	160	0	0	0	0	0	80	9,642	320	640	610	480	11,932
1977	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1978	0	0	0	0	0	0	80	160	320	640	610	480	2,290
1979	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1980	160	0	0	0	0	0	80	160	6,320	640	610	480	8,450
1981	160	0	0	0	0	0	80	160	683	640	610	480	2,813
1982	160	0	0	0	0	0	80	6,160	6,320	8,288	610	480	22,098
1983	160	0	0	0	3,514	4,453	5,323	6,160	6,320	3,924	610	480	30,944
1984	160	0	0	5,134	4,314	4,810	10,256	6,160	6,320	12,360	610	480	50,603
1985	160	0	0	0	0	3,821	6,080	6,160	1,319	640	610	480	19,271
1986	160	0	0	0	0	10,635	6,080	6,160	6,320	12,008	610	480	42,453
1987	160	0	0	0	3,249	3,931	10,878	17,631	320	640	610	480	37,899
1988	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1989	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1990	160	0	0	0	0	0	80	160	320	640	610	0	1,970
1991	0	0	0	0	0	0	0	160	320	640	610	480	2,210
1992	0	0	0	0	0	0	0	160	320	0	0	0	480
1993	0	0	0	0	0	0	80	160	320	640	610	480	2,290
1994	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1995	0	0	0	0	0	0	80	160	320	1,417	610	480	3,067
1996	160	0	0	0	0	0	80	6,160	1,510	3,062	610	480	12,062
1997	160	0	0	0	0	0	10,700	6,160	6,320	1,708	610	480	26,139
1998	160	0	0	0	0	0	5,841	6,160	6,320	3,921	610	480	23,492
1999	160	0	0	0	0	4,938	8,229	6,160	6,320	7,149	610	480	34,046
Average	134	0	0	103	222	652	1,575	4,963	4,625	1,777	586	451	15,088
Maximum	160	0	0	5,134	4,314	10,635	10,878	36,104	35,534	12,360	610	480	50,603
Minimum	0	0	0	0	0	0	0	160	320	0	0	0	480

P-8c
Bonneville Unit Operations (cfs)
Provo River from Murdock to Interstate 15
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	3	0	0	0	0	0	1	587	33	56	10	8	59
1951	3	0	0	0	0	0	1	306	40	10	10	8	32
1952	3	0	0	0	0	0	88	100	106	10	10	8	27
1953	3	0	0	0	0	0	1	123	429	10	10	8	48
1954	3	0	0	0	0	0	1	3	5	10	10	8	3
1955	3	0	0	0	0	0	1	3	5	10	10	8	3
1956	0	0	0	0	0	0	1	3	5	10	10	8	3
1957	3	0	0	0	0	0	1	3	255	10	10	8	24
1958	3	0	0	0	0	0	1	388	101	10	10	8	44
1959	3	0	0	0	0	0	1	3	5	10	10	8	3
1960	3	0	0	0	0	0	1	3	5	10	10	8	3
1961	0	0	0	0	0	0	0	3	5	0	0	0	1
1962	0	0	0	0	0	0	1	3	5	10	10	8	3
1963	3	0	0	0	0	0	1	3	5	10	10	8	3
1964	3	0	0	0	0	0	1	3	5	10	10	8	3
1965	3	0	0	0	0	0	1	3	597	61	10	8	56
1966	3	0	0	0	0	0	1	205	5	10	10	8	21
1967	3	0	0	0	0	0	1	3	328	10	10	8	30
1968	3	0	0	0	0	0	1	3	232	10	10	8	22
1969	3	0	0	0	0	0	1	100	43	10	10	8	15
1970	3	0	0	0	0	0	1	465	116	10	10	8	52
1971	3	0	0	0	0	0	1	100	16	10	10	8	13
1972	3	0	0	0	0	0	120	45	28	10	10	8	19
1973	3	0	0	0	0	0	1	100	72	10	10	8	17
1974	3	0	0	0	0	0	1	100	281	10	10	8	34
1975	3	0	0	0	0	0	1	3	179	77	10	8	23
1976	3	0	0	0	0	0	1	157	5	10	10	8	16
1977	3	0	0	0	0	0	1	3	5	10	10	8	3
1978	0	0	0	0	0	0	1	3	5	10	10	8	3
1979	3	0	0	0	0	0	1	3	5	10	10	8	3
1980	3	0	0	0	0	0	1	3	106	10	10	8	12
1981	3	0	0	0	0	0	1	3	11	10	10	8	4
1982	3	0	0	0	0	0	1	100	106	135	10	8	31
1983	3	0	0	0	63	72	89	100	106	64	10	8	43
1984	3	0	0	83	75	78	172	100	106	201	10	8	70
1985	3	0	0	0	0	62	102	100	22	10	10	8	27
1986	3	0	0	0	0	173	102	100	106	195	10	8	59
1987	3	0	0	0	59	64	183	287	5	10	10	8	52
1988	3	0	0	0	0	0	1	3	5	10	10	8	3
1989	3	0	0	0	0	0	1	3	5	10	10	8	3
1990	3	0	0	0	0	0	1	3	5	10	10	0	3
1991	0	0	0	0	0	0	0	3	5	10	10	8	3
1992	0	0	0	0	0	0	0	3	5	0	0	0	1
1993	0	0	0	0	0	0	1	3	5	10	10	8	3
1994	3	0	0	0	0	0	1	3	5	10	10	8	3
1995	0	0	0	0	0	0	1	3	5	23	10	8	4
1996	3	0	0	0	0	0	1	100	25	50	10	8	17
1997	3	0	0	0	0	0	180	100	106	28	10	8	36
1998	3	0	0	0	0	0	98	100	106	64	10	8	32
1999	3	0	0	0	0	80	138	100	106	116	10	8	47
Average	2	0	0	2	4	11	26	81	78	29	10	8	21
Maximum	3	0	0	83	75	173	183	587	597	201	10	8	70
Minimum	0	0	0	0	0	0	0	3	5	0	0	0	1

P-8d
Bonneville Unit Operations (acre-feet)
Provo River from Murdock to Interstate 15
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,411	3,975	4,384	960	996	886	8,885	11,452	50,517	8,858	10,103	9,108	111,536
1951	6,312	3,057	5,462	2,625	2,544	4,185	11,450	41,110	50,644	9,385	8,724	9,325	154,825
1952	2,712	3,009	4,528	2,718	2,726	17,526	41,695	81,837	63,649	9,556	9,305	8,855	248,116
1953	5,367	3,199	2,142	2,818	1,766	3,605	4,484	10,142	31,759	7,715	9,755	8,918	91,670
1954	6,104	1,866	1,339	1,026	1,141	2,008	6,575	8,811	7,494	7,471	7,919	6,978	58,731
1955	5,436	1,097	547	554	428	561	1,664	9,516	9,009	6,448	9,109	8,141	52,510
1956	4,557	3,186	1,539	494	474	587	5,777	9,063	9,171	7,081	9,188	8,280	59,397
1957	3,368	3,060	692	642	791	539	879	6,744	10,163	8,848	9,374	8,698	53,797
1958	4,833	2,726	1,709	505	1,326	533	2,451	10,340	8,979	8,222	9,238	8,725	59,588
1959	2,894	1,372	463	511	436	540	3,481	9,767	9,162	5,978	7,752	7,262	49,617
1960	3,931	2,553	191	494	449	555	8,084	9,266	8,689	24,231	4,907	5,445	68,794
1961	5,460	991	1,011	684	625	782	3,246	5,776	4,701	3,315	4,988	5,363	36,941
1962	3,670	1,290	1,011	785	684	627	1,924	8,711	8,574	8,134	8,722	6,400	50,531
1963	5,727	2,633	881	791	1,183	711	149	9,038	8,097	6,075	8,175	7,717	51,177
1964	9,905	6,341	647	550	612	646	1,429	7,850	8,278	7,980	9,347	8,201	61,786
1965	7,068	4,461	1,638	1,210	634	1,011	186	6,824	9,338	7,735	8,346	6,463	54,914
1966	5,473	3,371	9,714	9,627	5,631	12,626	7,393	17,561	8,896	8,223	8,010	7,277	103,802
1967	5,850	2,921	509	1,041	835	1,579	2,995	6,526	8,691	7,511	8,919	8,005	55,383
1968	5,732	2,423	2,504	1,965	1,720	2,759	2,578	6,091	42,658	7,958	9,214	7,684	93,287
1969	4,591	3,905	3,171	2,845	2,465	4,849	26,384	68,561	53,758	8,851	9,334	8,228	196,942
1970	4,039	5,091	1,724	2,270	1,385	2,182	2,459	7,567	21,653	8,673	9,429	7,181	73,651
1971	4,201	4,478	2,196	2,713	2,966	2,734	4,117	25,802	62,101	8,762	9,698	7,546	137,315
1972	3,194	4,103	2,819	2,386	1,876	11,741	3,931	47,155	30,044	9,860	10,002	8,250	135,361
1973	4,277	3,713	2,148	2,568	2,635	2,725	16,984	37,983	54,098	9,874	8,638	7,810	153,454
1974	2,183	3,934	2,584	2,125	1,911	801	682	45,623	39,733	7,517	9,427	8,368	124,889
1975	4,874	2,548	1,979	2,904	2,676	3,067	3,846	3,701	72,860	21,738	9,170	8,315	137,680
1976	1,951	4,848	4,658	3,465	1,547	1,173	2,473	9,084	8,062	8,102	8,239	7,358	60,961
1977	2,404	1,745	1,036	1,011	551	561	4,827	5,450	4,569	3,994	6,851	6,744	39,744
1978	4,924	971	913	791	746	2,594	5,041	6,434	7,068	8,020	9,630	7,999	55,133
1979	3,258	1,751	1,317	1,535	689	1,782	2,021	8,829	7,621	7,805	8,437	7,782	52,828
1980	4,411	2,683	445	1,648	1,546	2,271	3,490	31,858	31,217	8,181	10,018	16,955	114,722
1981	2,852	3,790	2,372	945	1,231	700	1,079	6,677	6,857	6,768	8,574	7,205	49,049
1982	2,007	3,998	599	609	881	2,925	1,681	48,773	43,899	9,640	8,643	5,356	129,010
1983	5,947	3,044	2,964	3,003	14,298	81,450	16,002	51,013	84,121	15,446	5,557	6,133	288,977
1984	2,286	4,559	6,308	7,465	15,317	32,372	49,026	72,329	57,302	7,501	6,488	5,349	266,300
1985	1,519	5,442	3,301	3,111	6,688	16,150	46,264	62,739	13,658	6,247	7,975	5,960	179,053
1986	4,141	6,637	4,566	3,869	11,917	85,640	44,621	68,065	78,140	9,832	8,400	7,721	333,549
1987	5,988	4,565	2,781	3,140	12,898	11,487	9,998	18,287	8,678	8,423	9,965	8,393	104,602
1988	3,584	2,329	193	171	1,705	2,072	3,205	7,296	9,129	7,422	10,214	8,642	55,961
1989	14,593	1,572	356	284	564	1,223	3,234	13,683	9,771	11,970	10,787	7,738	75,774
1990	3,538	1,473	910	593	385	424	4,573	9,507	8,550	8,213	9,604	8,919	56,689
1991	5,399	818	551	463	522	433	715	4,765	7,452	6,781	6,223	7,128	41,249
1992	2,256	2,271	1,351	1,112	1,399	1,474	2,512	4,990	4,443	4,560	8,778	4,523	39,669
1993	3,065	2,387	1,240	2,221	1,545	4,312	7,942	8,116	8,120	8,305	9,132	7,575	63,960
1994	6,001	1,308	1,434	1,477	2,239	3,077	1,826	6,202	5,603	6,273	6,145	5,281	46,866
1995	4,984	2,797	2,158	2,025	2,411	5,205	3,959	639	5,127	12,950	8,544	7,671	58,469
1996	3,007	4,017	3,195	9,208	2,381	9,192	18,117	34,943	58,634	9,127	8,554	6,680	167,055
1997	2,092	2,769	3,967	3,584	1,295	12,062	42,212	69,610	50,833	9,358	8,372	6,178	212,333
1998	1,648	2,421	1,798	1,118	591	1,768	3,769	63,374	50,898	10,154	9,340	5,436	152,314
1999	2,738	2,440	822	1,050	6,386	7,311	18,337	53,077	38,264	8,238	7,751	6,128	152,542
Average	4,355	3,039	2,135	2,034	2,613	7,361	9,413	23,571	26,015	8,786	8,580	7,548	105,450
Maximum	14,593	6,637	9,714	9,627	15,317	85,640	49,026	81,837	84,121	24,231	10,787	16,955	333,549
Minimum	1,411	818	191	171	385	424	149	639	4,443	3,315	4,907	4,523	36,941

P-8d
Bonneville Unit Operations (cfs)
Provo River from Murdock to Interstate 15
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	23	67	71	16	18	14	149	186	849	144	164	153	154
1951	103	51	89	43	46	68	192	669	851	153	142	157	214
1952	44	51	74	44	47	285	701	1,331	1,070	155	151	149	342
1953	87	54	35	46	32	59	75	165	534	125	159	150	127
1954	99	31	22	17	21	33	110	143	126	122	129	117	81
1955	88	18	9	9	8	9	28	155	151	105	148	137	73
1956	74	54	25	8	8	10	97	147	154	115	149	139	82
1957	55	51	11	10	14	9	15	110	171	144	152	146	74
1958	79	46	28	8	24	9	41	168	151	134	150	147	82
1959	47	23	8	8	8	9	58	159	154	97	126	122	69
1960	64	43	3	8	8	9	136	151	146	394	80	92	95
1961	89	17	16	11	11	13	55	94	79	54	81	90	51
1962	60	22	16	13	12	10	32	142	144	132	142	108	70
1963	93	44	14	13	21	12	3	147	136	99	133	130	71
1964	161	107	11	9	11	11	24	128	139	130	152	138	85
1965	115	75	27	20	11	16	3	111	157	126	136	109	76
1966	89	57	158	157	101	205	124	286	150	134	130	122	143
1967	95	49	8	17	15	26	50	106	146	122	145	135	77
1968	93	41	41	32	30	45	43	99	717	129	150	129	129
1969	75	66	52	46	44	79	443	1,115	903	144	152	138	272
1970	66	86	28	37	25	35	41	123	364	141	153	121	102
1971	68	75	36	44	53	44	69	420	1,044	142	158	127	190
1972	52	69	46	39	33	191	66	767	505	160	163	139	186
1973	70	62	35	42	47	44	285	618	909	161	140	131	212
1974	36	66	42	35	34	13	11	742	668	122	153	141	173
1975	79	43	32	47	48	50	65	60	1,225	354	149	140	190
1976	32	81	76	56	27	19	42	148	135	132	134	124	84
1977	39	29	17	16	10	9	81	89	77	65	111	113	55
1978	80	16	15	13	13	42	85	105	119	130	157	134	76
1979	53	29	21	25	12	29	34	144	128	127	137	131	73
1980	72	45	7	27	27	37	59	518	525	133	163	285	158
1981	46	64	39	15	22	11	18	109	115	110	139	121	68
1982	33	67	10	10	16	48	28	793	738	157	141	90	178
1983	97	51	48	49	257	1,325	269	830	1,414	251	90	103	399
1984	37	77	103	121	266	527	824	1,176	963	122	106	90	367
1985	25	91	54	51	120	263	778	1,020	230	102	130	100	247
1986	67	112	74	63	215	1,393	750	1,107	1,313	160	137	130	461
1987	97	77	45	51	232	187	168	297	146	137	162	141	144
1988	58	39	3	3	30	34	54	119	153	121	166	145	77
1989	237	26	6	5	10	20	54	223	164	195	175	130	105
1990	58	25	15	10	7	7	77	155	144	134	156	150	78
1991	88	14	9	8	9	7	12	78	125	110	101	120	57
1992	37	38	22	18	24	24	42	81	75	74	143	76	55
1993	50	40	20	36	28	70	133	132	136	135	149	127	88
1994	98	22	23	24	40	50	31	101	94	102	100	89	65
1995	81	47	35	33	43	85	67	10	86	211	139	129	81
1996	49	68	52	150	41	150	304	568	985	148	139	112	230
1997	34	47	65	58	23	196	709	1,132	854	152	136	104	293
1998	27	41	29	18	11	29	63	1,031	855	165	152	91	210
1999	45	41	13	17	115	119	308	863	643	134	126	103	211
Average	71	51	35	33	47	120	158	383	437	143	140	127	146
Maximum	237	112	158	157	266	1,393	824	1,331	1,414	394	175	285	461
Minimum	23	14	3	3	7	7	3	10	75	54	80	76	51

P-8e
Bonneville Unit Operations (acre-feet)
Diversions into Provo Reservoir Canal
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	3,601	0	0	0	0	0	3,141	7,670	10,477	10,426	8,358	6,486	50,158
1951	3,394	0	0	0	0	0	3,259	8,027	10,597	10,978	9,893	7,987	54,135
1952	3,394	0	0	0	0	0	2,251	7,910	10,572	10,679	9,197	7,650	51,652
1953	3,394	0	0	0	0	0	2,985	7,506	11,008	10,481	9,465	6,790	51,629
1954	3,394	0	0	0	0	0	4,112	9,099	7,446	10,383	9,978	7,768	52,180
1955	3,394	0	0	0	0	0	2,172	7,789	11,277	12,015	9,652	6,443	52,743
1956	2,433	0	0	0	0	0	3,217	8,580	11,565	10,427	9,057	6,513	51,792
1957	3,394	0	0	0	0	0	2,172	6,785	11,009	11,886	9,873	7,962	53,081
1958	3,394	0	0	0	0	0	2,172	5,766	11,643	10,812	9,767	7,621	51,176
1959	3,394	0	0	0	0	0	3,470	7,126	11,078	9,812	9,132	7,353	51,365
1960	3,321	0	0	0	0	0	2,699	7,950	10,779	9,061	10,642	6,786	51,237
1961	2,479	0	0	0	0	0	2,102	6,231	6,888	5,361	5,297	4,838	33,195
1962	2,142	0	0	0	0	0	2,780	7,832	10,998	11,386	9,754	7,568	52,460
1963	3,394	0	0	0	0	0	3,024	8,550	11,524	11,435	9,168	7,457	54,552
1964	3,378	0	0	0	0	0	2,172	6,058	10,874	11,916	9,970	7,498	51,867
1965	3,198	0	0	0	0	0	2,452	8,640	10,670	10,852	9,242	7,683	52,738
1966	3,394	0	0	0	0	0	4,108	9,396	9,863	9,185	8,869	7,472	52,288
1967	3,394	0	0	0	0	0	2,983	8,550	10,588	11,807	10,241	8,399	55,963
1968	3,394	0	0	0	0	0	2,292	8,306	11,009	11,409	9,999	8,226	54,635
1969	3,394	0	0	0	0	0	2,335	8,427	10,253	11,546	9,969	8,204	54,128
1970	3,394	0	0	0	0	0	2,693	7,466	11,007	11,215	10,105	8,501	54,382
1971	3,394	0	0	0	0	0	4,023	8,372	10,398	10,307	8,989	7,672	53,155
1972	3,394	0	0	0	0	0	3,258	8,318	10,235	9,947	8,424	6,972	50,548
1973	3,326	0	0	0	0	0	2,172	8,116	10,524	11,803	10,413	9,009	55,364
1974	3,519	0	0	0	0	0	2,423	8,531	10,423	12,065	10,362	7,850	55,173
1975	3,257	0	0	0	0	0	2,338	6,957	11,179	12,923	14,876	9,746	61,276
1976	3,757	0	0	0	0	0	2,639	9,094	12,560	10,223	10,025	7,756	56,054
1977	3,218	0	0	0	0	0	2,215	5,832	7,563	9,533	9,611	7,073	45,045
1978	2,179	0	0	0	0	0	2,215	8,007	11,179	14,004	10,387	8,612	56,583
1979	3,493	0	0	0	0	0	2,215	8,413	12,687	10,919	10,498	8,013	56,239
1980	3,265	0	0	0	0	0	2,695	8,292	10,630	12,916	11,138	6,909	55,846
1981	3,699	0	0	0	0	0	2,417	7,647	12,583	11,222	10,287	8,417	56,272
1982	3,315	0	0	0	0	0	2,495	8,526	10,422	15,574	12,047	9,194	61,573
1983	3,279	0	0	0	0	0	2,215	4,532	11,178	16,375	14,887	10,195	62,661
1984	3,820	0	0	0	0	0	2,215	6,515	11,177	15,554	14,702	10,155	64,138
1985	3,871	0	0	0	0	0	2,215	6,515	11,592	17,014	11,126	9,034	61,368
1986	3,512	0	0	0	0	0	2,215	6,515	11,179	16,541	11,126	9,034	60,122
1987	3,512	0	0	0	0	0	3,870	8,855	8,791	10,254	12,460	7,607	55,348
1988	3,520	0	0	0	0	0	4,230	7,321	9,300	10,088	9,986	7,136	51,580
1989	3,212	0	0	0	0	0	4,230	7,321	10,445	9,766	10,200	7,036	52,209
1990	3,212	0	0	0	0	0	2,403	7,860	11,210	12,174	7,062	6,161	50,082
1991	2,412	0	0	0	0	0	2,003	6,482	11,458	11,768	9,945	5,606	49,674
1992	2,412	0	0	0	0	0	2,196	7,337	8,516	5,751	4,787	4,163	35,160
1993	2,274	0	0	0	0	0	2,816	7,888	10,903	12,174	10,926	8,832	55,813
1994	3,491	0	0	0	0	0	2,981	8,384	10,085	10,377	10,279	5,324	50,922
1995	2,412	0	0	0	0	0	2,596	8,439	10,948	12,174	10,926	8,832	56,327
1996	3,491	0	0	0	0	0	2,485	8,218	10,698	12,174	10,926	8,832	56,824
1997	3,491	0	0	0	0	0	2,485	7,226	10,994	15,119	11,779	9,162	60,256
1998	3,601	0	0	0	0	0	2,485	7,226	11,000	12,822	11,340	9,162	57,637
1999	3,601	0	0	0	0	0	2,485	7,226	11,000	12,743	10,951	9,065	57,071
Average	3,260	0	0	0	0	0	2,716	7,673	10,640	11,548	10,162	7,755	53,754
Maximum	3,871	0	0	0	0	0	4,230	9,396	12,687	17,014	14,887	10,195	64,138
Minimum	2,142	0	0	0	0	0	2,003	4,532	6,888	5,361	4,787	4,163	33,195

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Bonneville Unit Operations (cfs)

Diversions into Provo Reservoir Canal

Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	59	0	0	0	0	0	53	125	176	170	136	109	69
1951	55	0	0	0	0	0	55	131	178	179	161	134	75
1952	55	0	0	0	0	0	38	129	178	174	150	129	71
1953	55	0	0	0	0	0	50	122	185	170	154	114	71
1954	55	0	0	0	0	0	69	148	125	169	162	131	72
1955	55	0	0	0	0	0	37	127	190	195	157	108	73
1956	40	0	0	0	0	0	54	140	194	170	147	109	71
1957	55	0	0	0	0	0	37	110	185	193	161	134	73
1958	55	0	0	0	0	0	37	94	196	176	159	128	71
1959	55	0	0	0	0	0	58	116	186	160	149	124	71
1960	54	0	0	0	0	0	45	129	181	147	173	114	71
1961	40	0	0	0	0	0	35	101	116	87	86	81	46
1962	35	0	0	0	0	0	47	127	185	185	159	127	72
1963	55	0	0	0	0	0	51	139	194	186	149	125	75
1964	55	0	0	0	0	0	37	99	183	194	162	126	71
1965	52	0	0	0	0	0	41	141	179	176	150	129	73
1966	55	0	0	0	0	0	69	153	166	149	144	126	72
1967	55	0	0	0	0	0	50	139	178	192	167	141	77
1968	55	0	0	0	0	0	39	135	185	186	163	138	75
1969	55	0	0	0	0	0	39	137	172	188	162	138	75
1970	55	0	0	0	0	0	45	121	185	182	164	143	75
1971	55	0	0	0	0	0	68	136	175	168	146	129	73
1972	55	0	0	0	0	0	55	135	172	162	137	117	70
1973	54	0	0	0	0	0	37	132	177	192	169	151	76
1974	57	0	0	0	0	0	41	139	175	196	169	132	76
1975	53	0	0	0	0	0	39	113	188	210	242	164	85
1976	61	0	0	0	0	0	44	148	211	166	163	130	77
1977	52	0	0	0	0	0	37	95	127	155	156	119	62
1978	35	0	0	0	0	0	37	130	188	228	169	145	78
1979	57	0	0	0	0	0	37	137	213	178	171	135	78
1980	53	0	0	0	0	0	45	135	179	210	181	116	77
1981	60	0	0	0	0	0	41	124	211	183	167	141	78
1982	54	0	0	0	0	0	42	139	175	253	196	155	85
1983	53	0	0	0	0	0	37	74	188	266	242	171	87
1984	62	0	0	0	0	0	37	106	188	253	239	171	88
1985	63	0	0	0	0	0	37	106	195	277	181	152	85
1986	57	0	0	0	0	0	37	106	188	269	181	152	83
1987	57	0	0	0	0	0	65	144	148	167	203	128	76
1988	57	0	0	0	0	0	71	119	156	164	162	120	71
1989	52	0	0	0	0	0	71	119	176	159	166	118	72
1990	52	0	0	0	0	0	40	128	188	198	115	104	69
1991	39	0	0	0	0	0	34	105	193	191	162	94	69
1992	39	0	0	0	0	0	37	119	143	94	78	70	48
1993	37	0	0	0	0	0	47	128	183	198	178	148	77
1994	57	0	0	0	0	0	50	136	169	169	167	89	70
1995	39	0	0	0	0	0	44	137	184	198	178	148	78
1996	57	0	0	0	0	0	42	134	180	198	178	148	78
1997	57	0	0	0	0	0	42	118	185	246	192	154	83
1998	59	0	0	0	0	0	42	118	185	209	184	154	80
1999	59	0	0	0	0	0	42	118	185	207	178	152	79
Average	53	0	0	0	0	0	46	125	179	188	165	130	74
Maximum	63	0	0	0	0	0	71	153	213	277	242	171	88
Minimum	35	0	0	0	0	0	34	74	116	87	78	70	46

P-8f
Bonneville Unit Operations (acre-feet)
ULS Water Conveyed through Provo reservoir Canal
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1951	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1952	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1953	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1954	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1955	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1956	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1957	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1958	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1959	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1960	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1961	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1962	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1963	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1964	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1965	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1966	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1967	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1968	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1969	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1970	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1971	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1972	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1973	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1974	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1975	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1976	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1977	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1978	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1979	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1980	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1981	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1982	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1983	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1984	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1985	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1986	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1987	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1988	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1989	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1990	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1991	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1992	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1993	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1994	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1995	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1996	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1997	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1998	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1999	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
Average	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
Maximum	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
Minimum	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490

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Bonneville Unit Operations (cfs)

ULS Water Conveyed through Provo reservoir Canal

CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	35	0	0	0	0	0	31	44	75	82	78	61	34
1951	35	0	0	0	0	0	31	44	75	82	78	61	34
1952	35	0	0	0	0	0	31	44	75	82	78	61	34
1953	35	0	0	0	0	0	31	44	75	82	78	61	34
1954	35	0	0	0	0	0	31	44	75	82	78	61	34
1955	35	0	0	0	0	0	31	44	75	82	78	61	34
1956	35	0	0	0	0	0	31	44	75	82	78	61	34
1957	35	0	0	0	0	0	31	44	75	82	78	61	34
1958	35	0	0	0	0	0	31	44	75	82	78	61	34
1959	35	0	0	0	0	0	31	44	75	82	78	61	34
1960	35	0	0	0	0	0	31	44	75	82	78	61	34
1961	35	0	0	0	0	0	31	44	75	82	78	61	34
1962	35	0	0	0	0	0	31	44	75	82	78	61	34
1963	35	0	0	0	0	0	31	44	75	82	78	61	34
1964	35	0	0	0	0	0	31	44	75	82	78	61	34
1965	35	0	0	0	0	0	31	44	75	82	78	61	34
1966	35	0	0	0	0	0	31	44	75	82	78	61	34
1967	35	0	0	0	0	0	31	44	75	82	78	61	34
1968	35	0	0	0	0	0	31	44	75	82	78	61	34
1969	35	0	0	0	0	0	31	44	75	82	78	61	34
1970	35	0	0	0	0	0	31	44	75	82	78	61	34
1971	35	0	0	0	0	0	31	44	75	82	78	61	34
1972	35	0	0	0	0	0	31	44	75	82	78	61	34
1973	35	0	0	0	0	0	31	44	75	82	78	61	34
1974	35	0	0	0	0	0	31	44	75	82	78	61	34
1975	35	0	0	0	0	0	31	44	75	82	78	61	34
1976	35	0	0	0	0	0	31	44	75	82	78	61	34
1977	35	0	0	0	0	0	31	44	75	82	78	61	34
1978	35	0	0	0	0	0	31	44	75	82	78	61	34
1979	35	0	0	0	0	0	31	44	75	82	78	61	34
1980	35	0	0	0	0	0	31	44	75	82	78	61	34
1981	35	0	0	0	0	0	31	44	75	82	78	61	34
1982	35	0	0	0	0	0	31	44	75	82	78	61	34
1983	35	0	0	0	0	0	31	44	75	82	78	61	34
1984	35	0	0	0	0	0	31	44	75	82	78	61	34
1985	35	0	0	0	0	0	31	44	75	82	78	61	34
1986	35	0	0	0	0	0	31	44	75	82	78	61	34
1987	35	0	0	0	0	0	31	44	75	82	78	61	34
1988	35	0	0	0	0	0	31	44	75	82	78	61	34
1989	35	0	0	0	0	0	31	44	75	82	78	61	34
1990	35	0	0	0	0	0	31	44	75	82	78	61	34
1991	35	0	0	0	0	0	31	44	75	82	78	61	34
1992	35	0	0	0	0	0	31	44	75	82	78	61	34
1993	35	0	0	0	0	0	31	44	75	82	78	61	34
1994	35	0	0	0	0	0	31	44	75	82	78	61	34
1995	35	0	0	0	0	0	31	44	75	82	78	61	34
1996	35	0	0	0	0	0	31	44	75	82	78	61	34
1997	35	0	0	0	0	0	31	44	75	82	78	61	34
1998	35	0	0	0	0	0	31	44	75	82	78	61	34
1999	35	0	0	0	0	0	31	44	75	82	78	61	34
Average	35	0	0	0	0	0	31	44	75	82	78	61	34
Maximum	35	0	0	0	0	0	31	44	75	82	78	61	34
Minimum	35	0	0	0	0	0	31	44	75	82	78	61	34

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Bonneville Unit Operations (acre-feet)

Portion of ULS Water conveyed through Provo Reservoir Canal

CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1951	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1952	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1953	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1954	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1955	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1956	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1957	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1958	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1959	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1960	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1961	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1962	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1963	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1964	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1965	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1966	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1967	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1968	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1969	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1970	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1971	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1972	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1973	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1974	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1975	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1976	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1977	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1978	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1979	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1980	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1981	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1982	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1983	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1984	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1985	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1986	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1987	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1988	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1989	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1990	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1991	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1992	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1993	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1994	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1995	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1996	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1997	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1998	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
1999	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
Average	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
Maximum	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490
Minimum	2,127	0	0	0	0	0	1,815	2,685	4,440	5,040	4,783	3,600	24,490

P-8f-i

Bonneville Unit Operations (cfs)

Portion of ULS Water conveyed through Provo Reservoir Canal

CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	35	0	0	0	0	0	31	44	75	82	78	61	34
1951	35	0	0	0	0	0	31	44	75	82	78	61	34
1952	35	0	0	0	0	0	31	44	75	82	78	61	34
1953	35	0	0	0	0	0	31	44	75	82	78	61	34
1954	35	0	0	0	0	0	31	44	75	82	78	61	34
1955	35	0	0	0	0	0	31	44	75	82	78	61	34
1956	35	0	0	0	0	0	31	44	75	82	78	61	34
1957	35	0	0	0	0	0	31	44	75	82	78	61	34
1958	35	0	0	0	0	0	31	44	75	82	78	61	34
1959	35	0	0	0	0	0	31	44	75	82	78	61	34
1960	35	0	0	0	0	0	31	44	75	82	78	61	34
1961	35	0	0	0	0	0	31	44	75	82	78	61	34
1962	35	0	0	0	0	0	31	44	75	82	78	61	34
1963	35	0	0	0	0	0	31	44	75	82	78	61	34
1964	35	0	0	0	0	0	31	44	75	82	78	61	34
1965	35	0	0	0	0	0	31	44	75	82	78	61	34
1966	35	0	0	0	0	0	31	44	75	82	78	61	34
1967	35	0	0	0	0	0	31	44	75	82	78	61	34
1968	35	0	0	0	0	0	31	44	75	82	78	61	34
1969	35	0	0	0	0	0	31	44	75	82	78	61	34
1970	35	0	0	0	0	0	31	44	75	82	78	61	34
1971	35	0	0	0	0	0	31	44	75	82	78	61	34
1972	35	0	0	0	0	0	31	44	75	82	78	61	34
1973	35	0	0	0	0	0	31	44	75	82	78	61	34
1974	35	0	0	0	0	0	31	44	75	82	78	61	34
1975	35	0	0	0	0	0	31	44	75	82	78	61	34
1976	35	0	0	0	0	0	31	44	75	82	78	61	34
1977	35	0	0	0	0	0	31	44	75	82	78	61	34
1978	35	0	0	0	0	0	31	44	75	82	78	61	34
1979	35	0	0	0	0	0	31	44	75	82	78	61	34
1980	35	0	0	0	0	0	31	44	75	82	78	61	34
1981	35	0	0	0	0	0	31	44	75	82	78	61	34
1982	35	0	0	0	0	0	31	44	75	82	78	61	34
1983	35	0	0	0	0	0	31	44	75	82	78	61	34
1984	35	0	0	0	0	0	31	44	75	82	78	61	34
1985	35	0	0	0	0	0	31	44	75	82	78	61	34
1986	35	0	0	0	0	0	31	44	75	82	78	61	34
1987	35	0	0	0	0	0	31	44	75	82	78	61	34
1988	35	0	0	0	0	0	31	44	75	82	78	61	34
1989	35	0	0	0	0	0	31	44	75	82	78	61	34
1990	35	0	0	0	0	0	31	44	75	82	78	61	34
1991	35	0	0	0	0	0	31	44	75	82	78	61	34
1992	35	0	0	0	0	0	31	44	75	82	78	61	34
1993	35	0	0	0	0	0	31	44	75	82	78	61	34
1994	35	0	0	0	0	0	31	44	75	82	78	61	34
1995	35	0	0	0	0	0	31	44	75	82	78	61	34
1996	35	0	0	0	0	0	31	44	75	82	78	61	34
1997	35	0	0	0	0	0	31	44	75	82	78	61	34
1998	35	0	0	0	0	0	31	44	75	82	78	61	34
1999	35	0	0	0	0	0	31	44	75	82	78	61	34
Average	35	0	0	0	0	0	31	44	75	82	78	61	34
Maximum	35	0	0	0	0	0	31	44	75	82	78	61	34
Minimum	35	0	0	0	0	0	31	44	75	82	78	61	34

P-8f-ii
Bonneville Unit Operations (acre-feet)
Total ULS Flow to Jordan Aqueduct
CUP

Water Yea	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1951	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1952	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1953	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1954	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1955	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1956	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1957	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1958	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1959	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1960	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1961	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1962	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1963	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1964	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1965	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1966	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1967	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1968	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1969	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1970	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1971	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1972	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1973	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1974	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1975	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1976	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1977	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1978	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1979	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1980	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1981	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1982	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1983	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1984	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1985	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1986	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1987	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1988	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1989	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1990	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1991	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1992	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1993	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1994	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1995	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1996	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1997	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1998	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
1999	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
Average	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
Maximum	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510
Minimum	0	1,216	1,216	931	931	1,216	0	0	0	0	0	0	5,510

P-8f-ii
Bonneville Unit Operations (cfs)
Total ULS Flow to Jordan Aqueduct
CUP

Water Yea	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	0	20	20	15	17	20	0	0	0	0	0	0	8
1951	0	20	20	15	17	20	0	0	0	0	0	0	8
1952	0	20	20	15	16	20	0	0	0	0	0	0	8
1953	0	20	20	15	17	20	0	0	0	0	0	0	8
1954	0	20	20	15	17	20	0	0	0	0	0	0	8
1955	0	20	20	15	17	20	0	0	0	0	0	0	8
1956	0	20	20	15	16	20	0	0	0	0	0	0	8
1957	0	20	20	15	17	20	0	0	0	0	0	0	8
1958	0	20	20	15	17	20	0	0	0	0	0	0	8
1959	0	20	20	15	17	20	0	0	0	0	0	0	8
1960	0	20	20	15	16	20	0	0	0	0	0	0	8
1961	0	20	20	15	17	20	0	0	0	0	0	0	8
1962	0	20	20	15	17	20	0	0	0	0	0	0	8
1963	0	20	20	15	17	20	0	0	0	0	0	0	8
1964	0	20	20	15	16	20	0	0	0	0	0	0	8
1965	0	20	20	15	17	20	0	0	0	0	0	0	8
1966	0	20	20	15	17	20	0	0	0	0	0	0	8
1967	0	20	20	15	17	20	0	0	0	0	0	0	8
1968	0	20	20	15	16	20	0	0	0	0	0	0	8
1969	0	20	20	15	17	20	0	0	0	0	0	0	8
1970	0	20	20	15	17	20	0	0	0	0	0	0	8
1971	0	20	20	15	17	20	0	0	0	0	0	0	8
1972	0	20	20	15	16	20	0	0	0	0	0	0	8
1973	0	20	20	15	17	20	0	0	0	0	0	0	8
1974	0	20	20	15	17	20	0	0	0	0	0	0	8
1975	0	20	20	15	17	20	0	0	0	0	0	0	8
1976	0	20	20	15	16	20	0	0	0	0	0	0	8
1977	0	20	20	15	17	20	0	0	0	0	0	0	8
1978	0	20	20	15	17	20	0	0	0	0	0	0	8
1979	0	20	20	15	17	20	0	0	0	0	0	0	8
1980	0	20	20	15	16	20	0	0	0	0	0	0	8
1981	0	20	20	15	17	20	0	0	0	0	0	0	8
1982	0	20	20	15	17	20	0	0	0	0	0	0	8
1983	0	20	20	15	17	20	0	0	0	0	0	0	8
1984	0	20	20	15	16	20	0	0	0	0	0	0	8
1985	0	20	20	15	17	20	0	0	0	0	0	0	8
1986	0	20	20	15	17	20	0	0	0	0	0	0	8
1987	0	20	20	15	17	20	0	0	0	0	0	0	8
1988	0	20	20	15	16	20	0	0	0	0	0	0	8
1989	0	20	20	15	17	20	0	0	0	0	0	0	8
1990	0	20	20	15	17	20	0	0	0	0	0	0	8
1991	0	20	20	15	17	20	0	0	0	0	0	0	8
1992	0	20	20	15	16	20	0	0	0	0	0	0	8
1993	0	20	20	15	17	20	0	0	0	0	0	0	8
1994	0	20	20	15	17	20	0	0	0	0	0	0	8
1995	0	20	20	15	17	20	0	0	0	0	0	0	8
1996	0	20	20	15	16	20	0	0	0	0	0	0	8
1997	0	20	20	15	17	20	0	0	0	0	0	0	8
1998	0	20	20	15	17	20	0	0	0	0	0	0	8
1999	0	20	20	15	17	20	0	0	0	0	0	0	8
Average	0	20	20	15	17	20	0	0	0	0	0	0	8
Maximum	0	20	20	15	17	20	0	0	0	0	0	0	8
Minimum	0	20	20	15	16	20	0	0	0	0	0	0	8

P-8g
Bonneville Unit Operations (acre-feet)
Diversions into Provo Reservoir Canal
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,079	0	0	0	0	0	357	1,075	1,728	2,239	2,325	1,449	10,252
1951	961	0	0	0	0	0	357	1,075	1,728	2,687	2,794	1,785	11,389
1952	961	0	0	0	0	0	357	1,075	1,728	2,021	2,098	1,286	9,528
1953	961	0	0	0	0	0	357	1,075	1,728	3,092	3,218	2,089	12,521
1954	961	0	0	0	0	0	357	1,075	1,728	3,336	3,279	2,133	12,870
1955	961	0	0	0	0	0	357	1,075	1,728	4,139	3,475	1,457	13,194
1956	0	0	0	0	0	0	357	1,075	1,728	2,918	3,036	1,959	11,075
1957	961	0	0	0	0	0	357	1,075	1,728	3,237	3,369	2,198	12,926
1958	961	0	0	0	0	0	357	1,075	1,728	3,179	3,309	2,154	12,765
1959	961	0	0	0	0	0	357	1,075	1,728	3,295	3,430	2,241	13,088
1960	961	0	0	0	0	0	357	1,075	1,728	3,468	5,324	2,372	15,286
1961	0	0	0	0	0	0	0	1,075	1,728	0	0	0	2,804
1962	0	0	0	0	0	0	357	1,075	1,728	3,410	3,551	2,328	12,451
1963	961	0	0	0	0	0	357	1,075	1,728	3,251	3,385	2,209	12,967
1964	961	0	0	0	0	0	357	1,075	1,728	3,309	3,445	2,252	13,129
1965	961	0	0	0	0	0	357	1,075	1,728	2,065	2,144	1,319	9,649
1966	961	0	0	0	0	0	357	1,075	1,728	2,904	3,021	1,948	11,996
1967	961	0	0	0	0	0	357	1,075	1,728	3,020	3,142	2,035	12,320
1968	961	0	0	0	0	0	357	1,075	1,728	2,788	2,900	1,861	11,672
1969	961	0	0	0	0	0	357	1,075	1,728	2,759	2,870	1,840	11,591
1970	961	0	0	0	0	0	357	1,075	1,728	3,164	3,294	2,144	12,724
1971	961	0	0	0	0	0	357	1,075	1,728	2,050	2,129	1,308	9,609
1972	961	0	0	0	0	0	357	1,075	1,728	2,094	2,174	1,340	9,730
1973	961	0	0	0	0	0	357	1,075	1,728	2,730	2,840	1,818	11,510
1974	961	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	14,995
1975	1,079	0	0	0	0	0	400	1,171	1,899	3,866	6,899	2,670	17,984
1976	1,079	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	15,112
1977	1,079	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	15,112
1978	0	0	0	0	0	0	400	1,171	1,899	5,764	4,028	2,670	15,932
1979	1,079	0	0	0	0	0	400	1,171	2,168	3,866	4,028	2,670	15,381
1980	1,079	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	15,112
1981	1,079	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	15,112
1982	1,079	0	0	0	0	0	400	1,171	1,899	5,736	4,028	2,670	16,982
1983	1,079	0	0	0	0	0	400	1,171	1,899	6,858	6,413	2,670	20,490
1984	1,079	0	0	0	0	0	400	1,171	1,899	5,809	6,253	2,670	19,281
1985	1,079	0	0	0	0	0	400	1,171	1,899	8,227	4,028	2,670	19,473
1986	1,079	0	0	0	0	0	400	1,171	1,899	7,753	4,028	2,670	19,000
1987	1,079	0	0	0	0	0	400	1,171	1,899	3,866	5,924	2,670	17,009
1988	1,079	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	15,112
1989	1,079	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	15,112
1990	1,079	0	0	0	0	0	400	1,171	1,899	3,866	164	0	8,578
1991	0	0	0	0	0	0	0	1,171	1,899	3,866	4,028	99	11,062
1992	0	0	0	0	0	0	0	1,171	1,285	0	0	0	2,456
1993	0	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	14,034
1994	1,079	0	0	0	0	0	400	1,171	1,899	3,866	4,028	859	13,301
1995	0	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	14,034
1996	1,079	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	15,112
1997	1,079	0	0	0	0	0	400	1,171	1,899	6,297	4,467	2,670	17,983
1998	1,079	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	15,112
1999	1,079	0	0	0	0	0	400	1,171	1,899	3,866	4,028	2,670	15,112
Average	857	0	0	0	0	0	356	1,125	1,810	3,664	3,544	2,065	13,421
Maximum	1,079	0	0	0	0	0	400	1,171	2,168	8,227	6,899	2,670	20,490
Minimum	0	0	0	0	0	0	0	1,075	1,285	0	0	0	2,456

P-8g
Bonneville Unit Operations (cfs)
Diversions into Provo Reservoir Canal
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	18	0	0	0	0	0	6	17	29	36	38	24	14
1951	16	0	0	0	0	0	6	17	29	44	45	30	16
1952	18	0	0	0	0	0	6	17	29	36	38	24	13
1953	16	0	0	0	0	0	6	17	29	44	45	30	17
1954	16	0	0	0	0	0	6	17	29	33	34	22	18
1955	16	0	0	0	0	0	6	17	29	50	52	35	18
1956	16	0	0	0	0	0	6	17	29	54	53	36	15
1957	16	0	0	0	0	0	6	17	29	67	57	24	18
1958	0	0	0	0	0	0	6	17	29	47	49	33	18
1959	16	0	0	0	0	0	6	17	29	53	55	37	18
1960	16	0	0	0	0	0	6	17	29	52	54	36	21
1961	16	0	0	0	0	0	6	17	29	54	56	38	4
1962	16	0	0	0	0	0	6	17	29	56	87	40	17
1963	0	0	0	0	0	0	0	17	29	0	0	0	18
1964	0	0	0	0	0	0	6	17	29	55	58	39	18
1965	16	0	0	0	0	0	6	17	29	53	55	37	13
1966	16	0	0	0	0	0	6	17	29	54	56	38	17
1967	16	0	0	0	0	0	6	17	29	34	35	22	17
1968	16	0	0	0	0	0	6	17	29	47	49	33	16
1969	16	0	0	0	0	0	6	17	29	49	51	34	16
1970	16	0	0	0	0	0	6	17	29	45	47	31	18
1971	16	0	0	0	0	0	6	17	29	45	47	31	13
1972	16	0	0	0	0	0	6	17	29	51	54	36	13
1973	16	0	0	0	0	0	6	17	29	33	35	22	16
1974	16	0	0	0	0	0	6	17	29	34	35	23	21
1975	16	0	0	0	0	0	6	17	29	44	46	31	25
1976	16	0	0	0	0	0	7	19	32	63	66	45	21
1977	18	0	0	0	0	0	7	19	32	63	112	45	21
1978	18	0	0	0	0	0	7	19	32	63	66	45	22
1979	18	0	0	0	0	0	7	19	32	63	66	45	21
1980	0	0	0	0	0	0	7	19	32	94	66	45	21
1981	18	0	0	0	0	0	7	19	36	63	66	45	21
1982	18	0	0	0	0	0	7	19	32	63	66	45	23
1983	18	0	0	0	0	0	7	19	32	63	66	45	28
1984	18	0	0	0	0	0	7	19	32	93	66	45	27
1985	18	0	0	0	0	0	7	19	32	112	104	45	27
1986	18	0	0	0	0	0	7	19	32	94	102	45	26
1987	18	0	0	0	0	0	7	19	32	134	66	45	23
1988	18	0	0	0	0	0	7	19	32	126	66	45	21
1989	18	0	0	0	0	0	7	19	32	63	96	45	21
1990	18	0	0	0	0	0	7	19	32	63	66	45	12
1991	18	0	0	0	0	0	7	19	32	63	66	45	15
1992	18	0	0	0	0	0	7	19	32	63	3	0	3
1993	0	0	0	0	0	0	0	19	32	63	66	2	19
1994	0	0	0	0	0	0	0	19	22	0	0	0	18
1995	0	0	0	0	0	0	7	19	32	63	66	45	19
1996	18	0	0	0	0	0	7	19	32	63	66	14	21
1997	0	0	0	0	0	0	7	19	32	63	66	45	25
1998	18	0	0	0	0	0	7	19	32	63	66	45	21
1999	18	0	0	0	0	0	7	19	32	102	73	45	21
Average	14	0	0	0	0	0	6	18	30	59	57	34	19
Maximum	18	0	0	0	0	0	7	19	36	134	112	45	28
Minimum	0	0	0	0	0	0	0	17	22	0	0	0	3

P-8h
Bonneville Unit Operations (acre-feet)
Diversions into Provo Reservoir Canal
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	395	0	0	0	0	0	968	3,909	4,308	3,148	1,250	1,437	15,416
1951	306	0	0	0	0	0	1,087	4,266	4,428	3,251	2,316	2,602	18,256
1952	306	0	0	0	0	0	79	4,149	4,403	3,618	2,316	2,764	17,635
1953	306	0	0	0	0	0	812	3,745	4,840	2,349	1,464	1,100	14,617
1954	306	0	0	0	0	0	1,939	5,338	1,278	2,006	1,916	2,035	14,820
1955	306	0	0	0	0	0	0	4,029	5,108	2,836	1,394	1,386	15,060
1956	306	0	0	0	0	0	1,045	4,819	5,396	2,469	1,238	954	16,228
1957	306	0	0	0	0	0	0	3,024	4,841	3,609	1,721	2,164	15,664
1958	306	0	0	0	0	0	0	2,006	5,475	2,593	1,675	1,867	13,921
1959	306	0	0	0	0	0	1,297	3,365	4,909	1,478	919	1,512	13,787
1960	233	0	0	0	0	0	527	4,190	4,611	553	535	814	11,461
1961	352	0	0	0	0	0	287	2,471	720	321	514	1,238	5,901
1962	15	0	0	0	0	0	608	4,072	4,829	2,936	1,419	1,639	15,519
1963	306	0	0	0	0	0	852	4,790	5,355	3,144	1,000	1,648	17,095
1964	290	0	0	0	0	0	0	2,297	4,706	3,567	1,742	1,646	14,248
1965	110	0	0	0	0	0	280	4,880	4,502	3,747	2,316	2,764	18,599
1966	306	0	0	0	0	0	1,935	5,636	3,695	1,241	1,065	1,924	15,801
1967	306	0	0	0	0	0	811	4,790	4,420	3,747	2,316	2,764	19,153
1968	306	0	0	0	0	0	119	4,546	4,841	3,581	2,316	2,764	18,473
1969	306	0	0	0	0	0	162	4,667	4,085	3,747	2,316	2,764	18,047
1970	306	0	0	0	0	0	521	3,706	4,839	3,011	2,029	2,757	17,168
1971	306	0	0	0	0	0	1,851	4,612	4,230	3,216	2,077	2,764	19,056
1972	306	0	0	0	0	0	1,085	4,558	4,067	2,814	1,467	2,032	16,328
1973	238	0	0	0	0	0	0	4,356	4,356	4,033	2,790	3,591	19,364
1974	431	0	0	0	0	0	208	4,675	4,084	3,159	1,551	1,580	15,688
1975	51	0	0	0	0	0	123	3,101	4,841	4,017	3,194	3,475	18,803
1976	552	0	0	0	0	0	424	5,238	6,221	1,317	1,214	1,485	16,451
1977	13	0	0	0	0	0	0	1,976	1,225	627	800	803	5,442
1978	52	0	0	0	0	0	0	4,151	4,840	3,199	1,576	2,342	16,161
1979	288	0	0	0	0	0	0	4,558	6,080	2,012	1,688	1,742	16,368
1980	59	0	0	0	0	0	480	4,436	4,292	4,010	2,327	639	16,243
1981	494	0	0	0	0	0	202	3,791	6,244	2,316	1,476	2,147	16,670
1982	109	0	0	0	0	0	280	4,670	4,083	4,798	3,236	2,924	20,101
1983	73	0	0	0	0	0	0	676	4,839	4,477	3,691	3,925	17,681
1984	615	0	0	0	0	0	0	2,659	4,838	4,705	3,666	3,885	20,367
1985	665	0	0	0	0	0	0	2,659	5,254	3,747	2,316	2,764	17,405
1986	306	0	0	0	0	0	0	2,659	4,841	3,747	2,316	2,764	16,632
1987	306	0	0	0	0	0	1,655	4,999	2,452	1,348	1,753	1,337	13,849
1988	314	0	0	0	0	0	2,015	3,465	2,961	1,182	1,175	865	11,977
1989	6	0	0	0	0	0	2,015	3,465	4,106	860	1,389	765	12,607
1990	6	0	0	0	0	0	188	4,004	4,871	3,268	2,116	2,561	17,014
1991	285	0	0	0	0	0	188	2,626	5,119	2,861	1,135	1,907	14,122
1992	285	0	0	0	0	0	381	3,481	2,790	711	4	563	8,214
1993	147	0	0	0	0	0	601	4,032	4,564	3,268	2,116	2,561	17,289
1994	285	0	0	0	0	0	766	4,528	3,746	1,471	1,469	865	13,131
1995	285	0	0	0	0	0	381	4,583	4,610	3,268	2,116	2,561	17,803
1996	285	0	0	0	0	0	270	4,362	4,359	3,268	2,116	2,561	17,222
1997	285	0	0	0	0	0	270	3,370	4,655	3,781	2,529	2,892	17,784
1998	395	0	0	0	0	0	270	3,370	4,661	3,916	2,529	2,892	18,034
1999	395	0	0	0	0	0	270	3,370	4,661	3,837	2,140	2,795	17,469
Average	276	0	0	0	0	0	545	3,863	4,390	2,844	1,835	2,091	15,843
Maximum	665	0	0	0	0	0	2,015	5,636	6,244	4,798	3,691	3,925	20,367
Minimum	6	0	0	0	0	0	0	676	720	321	4	563	5,442

P-8h
Bonneville Unit Operations (cfs)
Diversions into Provo Reservoir Canal
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	6	0	0	0	0	0	16	64	72	51	20	24	21
1951	5	0	0	0	0	0	18	69	74	53	38	44	25
1952	5	0	0	0	0	0	1	67	74	59	38	46	24
1953	5	0	0	0	0	0	14	61	81	38	24	18	20
1954	5	0	0	0	0	0	33	87	21	33	31	34	20
1955	5	0	0	0	0	0	0	66	86	46	23	23	21
1956	5	0	0	0	0	0	18	78	91	40	20	16	22
1957	5	0	0	0	0	0	0	49	81	59	28	36	22
1958	5	0	0	0	0	0	0	33	92	42	27	31	19
1959	5	0	0	0	0	0	22	55	83	24	15	25	19
1960	4	0	0	0	0	0	9	68	77	9	9	14	16
1961	6	0	0	0	0	0	5	40	12	5	8	21	8
1962	0	0	0	0	0	0	10	66	81	48	23	28	21
1963	5	0	0	0	0	0	14	78	90	51	16	28	24
1964	5	0	0	0	0	0	0	37	79	58	28	28	20
1965	2	0	0	0	0	0	5	79	76	61	38	46	26
1966	5	0	0	0	0	0	33	92	62	20	17	32	22
1967	5	0	0	0	0	0	14	78	74	61	38	46	26
1968	5	0	0	0	0	0	2	74	81	58	38	46	25
1969	5	0	0	0	0	0	3	76	69	61	38	46	25
1970	5	0	0	0	0	0	9	60	81	49	33	46	24
1971	5	0	0	0	0	0	31	75	71	52	34	46	26
1972	5	0	0	0	0	0	18	74	68	46	24	34	22
1973	4	0	0	0	0	0	0	71	73	66	45	60	27
1974	7	0	0	0	0	0	3	76	69	51	25	27	22
1975	1	0	0	0	0	0	2	50	81	65	52	58	26
1976	9	0	0	0	0	0	7	85	105	21	20	25	23
1977	0	0	0	0	0	0	0	32	21	10	13	13	8
1978	1	0	0	0	0	0	0	68	81	52	26	39	22
1979	5	0	0	0	0	0	0	74	102	33	27	29	23
1980	1	0	0	0	0	0	8	72	72	65	38	11	22
1981	8	0	0	0	0	0	3	62	105	38	24	36	23
1982	2	0	0	0	0	0	5	76	69	78	53	49	28
1983	1	0	0	0	0	0	0	11	81	73	60	66	24
1984	10	0	0	0	0	0	0	43	81	77	60	65	28
1985	11	0	0	0	0	0	0	43	88	61	38	46	24
1986	5	0	0	0	0	0	0	43	81	61	38	46	23
1987	5	0	0	0	0	0	28	81	41	22	29	22	19
1988	5	0	0	0	0	0	34	56	50	19	19	15	16
1989	0	0	0	0	0	0	34	56	69	14	23	13	17
1990	0	0	0	0	0	0	3	65	82	53	34	43	24
1991	5	0	0	0	0	0	3	43	86	47	18	32	20
1992	5	0	0	0	0	0	6	57	47	12	0	9	11
1993	2	0	0	0	0	0	10	66	77	53	34	43	24
1994	5	0	0	0	0	0	13	74	63	24	24	15	18
1995	5	0	0	0	0	0	6	75	77	53	34	43	25
1996	5	0	0	0	0	0	5	71	73	53	34	43	24
1997	5	0	0	0	0	0	5	55	78	62	41	49	25
1998	6	0	0	0	0	0	5	55	78	64	41	49	25
1999	6	0	0	0	0	0	5	55	78	62	35	47	24
Average	4	0	0	0	0	0	9	63	74	46	30	35	22
Maximum	11	0	0	0	0	0	34	92	105	78	60	66	28
Minimum	0	0	0	0	0	0	0	11	12	5	0	9	8

P-9a
Bonneville Unit Operations (acre-feet)
Provo River from Interstate 15 to Utah Lake
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,611	4,580	6,641	3,895	2,443	2,944	10,719	39,853	43,035	7,727	4,100	4,463	135,012
1951	1,544	2,623	5,631	4,376	4,082	4,950	7,390	52,868	43,424	4,428	1,535	1,167	134,018
1952	2,893	2,542	4,632	4,148	2,542	17,260	49,455	87,148	62,890	5,062	1,309	957	240,837
1953	1,581	2,663	5,168	4,370	3,041	6,979	6,572	13,925	48,338	2,995	1,742	1,359	98,733
1954	1,616	4,838	2,988	2,280	2,249	1,626	4,879	5,001	1,731	2,319	1,606	1,167	32,301
1955	1,558	2,477	1,701	1,650	1,461	1,594	4,879	7,308	2,862	2,537	1,793	1,081	30,902
1956	1,777	3,320	4,147	1,689	1,535	1,634	4,879	8,703	5,643	4,611	2,083	1,256	41,279
1957	1,291	3,234	2,098	1,836	1,854	1,612	4,879	7,707	20,368	5,250	4,381	2,666	57,176
1958	1,649	4,974	2,119	1,690	1,702	1,659	4,879	30,149	13,734	4,611	4,318	3,127	74,613
1959	1,261	2,954	1,983	1,658	1,463	1,606	4,879	8,313	4,768	2,984	1,712	1,264	34,847
1960	1,374	2,611	1,743	1,672	1,524	1,623	4,879	7,657	2,756	26,635	1,533	1,227	55,234
1961	1,174	1,758	1,690	1,567	1,648	1,550	4,879	5,517	4,714	398	433	476	25,806
1962	1,096	1,550	1,550	1,550	1,469	1,550	4,879	8,803	5,516	5,123	4,427	3,800	41,315
1963	1,561	2,358	1,757	1,935	2,122	1,638	4,879	8,711	4,768	4,611	4,318	3,330	41,988
1964	4,611	6,441	4,611	4,611	1,834	1,627	4,879	7,937	5,447	4,611	4,394	4,463	55,469
1965	6,421	6,828	4,611	4,611	4,165	4,611	4,879	9,118	40,683	7,727	3,976	4,463	102,095
1966	6,363	9,630	9,951	9,951	8,988	14,344	4,879	22,453	4,768	4,403	4,182	4,682	104,596
1967	4,611	4,463	4,611	2,888	1,771	2,845	4,879	9,501	24,665	5,211	4,280	4,463	74,189
1968	6,245	6,622	4,611	4,611	4,165	4,611	4,992	11,400	48,133	4,611	4,209	4,463	108,675
1969	6,361	9,630	8,682	5,239	4,165	5,882	28,503	66,548	47,079	4,611	4,207	4,463	195,370
1970	5,510	8,198	4,611	4,611	4,165	4,611	4,879	31,504	19,475	6,311	4,334	4,463	102,674
1971	4,611	5,574	4,611	4,611	4,165	3,639	4,879	32,153	57,133	4,786	3,996	4,463	134,623
1972	5,397	4,995	4,611	4,611	4,165	12,060	9,259	41,628	22,961	4,611	4,044	4,463	122,806
1973	6,082	7,890	4,611	4,611	4,165	4,611	18,645	38,382	50,002	4,611	4,064	4,463	152,139
1974	5,970	8,395	4,611	4,611	4,165	4,611	10,323	43,718	51,995	6,712	4,593	4,463	154,169
1975	6,074	9,000	5,164	4,611	4,165	4,611	4,879	13,786	76,155	18,319	4,522	4,463	155,749
1976	5,950	8,001	4,613	4,611	4,165	4,611	12,310	20,703	8,717	4,611	4,526	4,463	87,281
1977	4,611	4,463	4,611	4,368	1,851	1,609	4,879	7,011	4,093	4,102	4,380	4,463	50,440
1978	5,737	6,411	6,266	4,758	4,165	5,731	8,907	11,338	5,572	4,611	4,598	4,463	72,557
1979	5,995	6,369	5,803	4,611	4,165	4,611	14,989	13,189	4,768	4,611	4,487	4,463	78,061
1980	6,089	9,630	6,311	4,611	4,165	4,611	5,301	31,504	29,966	4,611	4,563	17,718	129,082
1981	5,968	7,509	4,890	4,611	4,165	4,611	4,879	10,241	4,768	4,611	4,519	4,463	65,236
1982	7,581	5,021	4,611	4,611	4,165	5,045	11,809	51,240	43,084	13,146	4,495	4,463	159,270
1983	6,771	5,329	5,670	4,880	17,526	85,541	24,484	53,507	87,446	16,560	1,814	1,354	310,883
1984	3,387	8,411	6,554	12,962	19,490	37,237	60,636	76,389	60,464	17,501	1,806	1,275	306,113
1985	1,397	8,548	5,252	5,125	8,573	19,964	50,950	66,974	12,173	2,996	1,856	1,256	185,063
1986	6,337	7,356	7,215	5,843	15,377	96,870	54,344	70,487	77,431	17,050	1,906	1,377	361,591
1987	9,951	9,283	4,658	5,332	18,226	15,180	20,839	31,875	4,768	4,611	4,591	4,463	133,777
1988	4,112	4,253	2,167	1,692	1,546	1,629	4,879	8,411	4,768	4,586	4,611	4,463	47,118
1989	11,559	4,463	4,611	2,619	1,496	1,641	4,879	12,341	4,768	12,837	4,611	4,463	70,288
1990	4,611	4,463	4,471	3,648	1,893	3,260	4,879	11,646	4,768	4,611	3,348	4,127	55,726
1991	4,611	4,463	4,611	4,611	1,494	1,620	4,879	7,529	5,476	4,900	4,354	4,072	52,621
1992	4,611	4,463	4,611	4,611	4,165	2,245	4,879	7,147	4,424	4,001	9,477	3,951	58,586
1993	4,611	4,441	2,155	3,138	2,364	5,707	9,877	12,692	5,488	5,373	4,575	4,463	64,884
1994	4,611	4,463	4,611	4,611	3,607	2,710	4,879	8,230	4,768	4,611	4,354	4,239	55,695
1995	5,178	4,406	4,071	3,812	3,699	5,058	5,007	10,701	5,155	9,270	4,528	1,766	62,653
1996	9,413	7,143	5,855	9,807	4,165	8,819	16,492	35,407	53,932	7,214	4,457	4,463	167,165
1997	5,947	7,587	7,074	4,611	4,165	15,181	52,736	70,750	50,046	7,727	4,375	4,463	234,663
1998	6,055	6,602	4,611	4,611	4,165	4,611	13,236	64,559	51,179	8,339	4,447	4,463	176,879
1999	8,417	6,205	4,611	4,611	8,720	16,661	31,415	54,425	37,642	11,224	4,439	4,463	192,833
Average	4,735	5,589	4,581	4,252	4,535	9,421	13,223	27,362	25,774	6,791	3,744	3,694	113,702
Maximum	11,559	9,630	9,951	12,962	19,490	96,870	60,636	87,148	87,446	26,635	9,477	17,718	361,591
Minimum	1,096	1,550	1,550	1,550	1,461	1,550	4,879	5,001	1,731	398	433	476	25,806

P-9a
Bonneville Unit Operations (cfs)
Provo River from Interstate 15 to Utah Lake
Total

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	75	77	108	63	44	48	180	648	723	126	67	75	186
1951	25	44	92	71	73	81	124	860	730	72	25	20	185
1952	47	43	75	67	44	281	831	1,417	1,057	82	21	16	332
1953	26	45	84	71	55	114	110	226	812	49	28	23	136
1954	26	81	49	37	41	26	82	81	29	38	26	20	45
1955	25	42	28	27	26	26	82	119	48	41	29	18	43
1956	29	56	67	27	27	27	82	142	95	75	34	21	57
1957	21	54	34	30	33	26	82	125	342	85	71	45	79
1958	27	84	34	27	31	27	82	490	231	75	70	53	103
1959	21	50	32	27	26	26	82	135	80	49	28	21	48
1960	22	44	28	27	26	26	82	125	46	433	25	21	76
1961	19	30	27	25	30	25	82	90	79	6	7	8	36
1962	18	26	25	25	26	25	82	143	93	83	72	64	57
1963	25	40	29	31	38	27	82	142	80	75	70	56	58
1964	75	108	75	75	32	26	82	129	92	75	71	75	76
1965	104	115	75	75	75	75	82	148	684	126	65	75	141
1966	103	162	162	162	162	233	82	365	80	72	68	79	144
1967	75	75	75	47	32	46	82	155	415	85	70	75	102
1968	102	111	75	75	72	75	84	185	809	75	68	75	150
1969	103	162	141	85	75	96	479	1,082	791	75	68	75	270
1970	90	138	75	75	75	75	82	512	327	103	70	75	142
1971	75	94	75	75	75	59	82	523	960	78	65	75	186
1972	88	84	75	75	72	196	156	677	386	75	66	75	169
1973	99	133	75	75	75	75	313	624	840	75	66	75	210
1974	97	141	75	75	75	75	173	711	874	109	75	75	213
1975	99	151	84	75	75	75	82	224	1,280	298	74	75	215
1976	97	134	75	75	72	75	207	337	147	75	74	75	120
1977	75	75	75	71	33	26	82	114	69	67	71	75	70
1978	93	108	102	77	75	93	150	184	94	75	75	75	100
1979	98	107	94	75	75	75	252	215	80	75	73	75	108
1980	99	162	103	75	72	75	89	512	504	75	74	298	178
1981	97	126	80	75	75	75	82	167	80	75	73	75	90
1982	123	84	75	75	75	82	198	833	724	214	73	75	220
1983	110	90	92	79	316	1,391	411	870	1,470	269	29	23	429
1984	55	141	107	211	339	606	1,019	1,242	1,016	285	29	21	422
1985	23	144	85	83	154	325	856	1,089	205	49	30	21	256
1986	103	124	117	95	277	1,575	913	1,146	1,301	277	31	23	499
1987	162	156	76	87	328	247	350	518	80	75	75	75	185
1988	67	71	35	28	27	26	82	137	80	75	75	75	65
1989	188	75	75	43	27	27	82	201	80	209	75	75	97
1990	75	75	73	59	34	53	82	189	80	75	54	69	77
1991	75	75	75	75	27	26	82	122	92	80	71	68	73
1992	75	75	75	75	72	37	82	116	74	65	154	66	81
1993	75	75	35	51	43	93	166	206	92	87	74	75	90
1994	75	75	75	75	65	44	82	134	80	75	71	71	77
1995	84	74	66	62	67	82	84	174	87	151	74	30	87
1996	153	120	95	159	72	143	277	576	906	117	72	75	230
1997	97	128	115	75	75	247	886	1,151	841	126	71	75	324
1998	98	111	75	75	75	75	222	1,050	860	136	72	75	244
1999	137	104	75	75	157	271	528	885	633	183	72	75	266
Average	77	94	75	69	81	153	222	445	433	110	61	62	157
Maximum	188	162	162	211	339	1,575	1,019	1,417	1,470	433	154	298	499
Minimum	18	26	25	25	26	25	82	81	29	6	7	8	36

P-9b
Bonneville Unit Operations (acre-feet)
Provo River from Interstate 15 to Utah Lake
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	3,740	317	1,751	3,311	1,754	2,553	7,935	750	690	4,153	3,323	3,810	34,087
1951	1,069	0	0	1,711	1,552	908	1,931	616	541	3,716	875	559	13,477
1952	1,423	0	0	1,466	0	0	1,512	349	541	4,360	657	402	10,710
1953	1,069	0	3,039	1,649	1,474	3,771	6,381	5,770	541	2,403	1,007	654	27,758
1954	1,069	2,221	1,796	1,538	1,389	48	3,758	4,259	1,108	1,725	1,026	667	20,605
1955	1,069	1,440	1,537	1,538	1,389	1,538	4,732	6,610	2,122	1,980	1,088	456	25,497
1956	0	0	2,758	1,538	1,438	1,538	3,585	8,006	4,897	4,034	1,384	613	29,791
1957	301	0	1,668	1,538	1,389	1,538	4,086	7,392	4,761	4,541	3,650	2,068	32,929
1958	1,069	1,620	666	1,538	694	1,572	3,184	5,737	7,302	3,946	3,631	2,512	33,471
1959	1,069	1,595	1,809	1,538	1,389	1,538	4,318	7,601	4,025	2,495	1,074	701	29,152
1960	1,069	0	1,538	1,538	1,438	1,538	3,654	6,916	2,001	1,086	1,131	742	22,650
1961	768	1,488	1,500	1,454	1,584	1,482	4,656	4,975	757	170	0	0	18,833
1962	768	1,243	1,404	1,447	1,389	1,482	4,711	8,132	4,758	4,422	3,707	3,249	36,712
1963	301	0	1,537	1,538	1,389	1,538	4,767	7,997	4,022	4,061	3,655	2,728	33,531
1964	539	0	4,344	4,441	1,716	1,538	4,772	7,358	4,716	3,902	3,674	3,820	40,819
1965	5,681	1,646	3,357	4,018	3,927	4,011	4,760	8,509	4,675	3,915	3,266	3,892	51,656
1966	5,681	5,345	59	630	3,688	2,098	3,098	2,428	4,015	3,798	3,541	4,150	38,531
1967	3,966	985	4,029	2,322	1,389	1,724	3,995	8,751	4,654	4,506	3,579	3,892	43,792
1968	5,681	3,516	1,917	2,966	2,726	2,243	1,985	10,877	541	3,902	3,503	3,870	43,726
1969	5,681	4,715	5,760	2,322	1,927	882	450	337	541	3,902	3,494	3,890	33,899
1970	5,024	1,779	2,765	2,736	3,064	2,780	4,763	2,430	541	5,602	3,626	3,920	39,030
1971	3,727	320	2,582	2,094	1,483	1,453	4,695	6,342	4,394	4,077	3,261	3,921	38,349
1972	5,119	241	2,073	2,739	2,559	738	826	337	541	3,868	3,276	3,831	26,147
1973	5,681	3,496	2,717	2,378	1,901	2,310	1,371	336	541	3,903	3,484	3,903	32,021
1974	5,681	4,156	2,206	2,809	2,694	4,243	10,323	366	3,554	6,003	3,856	3,797	49,688
1975	5,717	6,094	3,556	2,061	1,871	2,050	463	13,432	594	1,210	3,856	3,877	44,783
1976	5,717	2,250	0	1,324	2,911	3,871	9,933	9,786	7,964	3,968	3,856	3,894	55,475
1977	4,398	2,716	3,890	3,687	1,389	1,567	4,467	6,584	3,741	3,818	3,856	3,909	44,021
1978	5,380	6,090	6,174	4,695	4,115	3,531	2,821	10,723	4,814	3,902	3,856	3,896	59,996
1979	5,717	5,274	4,348	3,496	3,480	3,285	12,524	9,432	4,035	3,976	3,856	3,888	63,312
1980	5,717	6,447	6,133	3,030	2,549	2,375	2,549	3,078	594	3,906	3,856	836	41,072
1981	5,717	3,083	2,244	3,932	3,158	4,227	4,780	9,626	3,707	4,034	3,856	3,942	52,306
1982	6,296	992	4,471	4,498	3,647	2,298	9,827	778	1,346	3,333	3,856	4,023	45,365
1983	2,144	2,676	2,494	1,795	0	0	3,776	366	594	4,085	1,261	836	20,027
1984	1,684	2,919	0	0	0	0	1,977	2,828	594	4,085	1,261	836	16,185
1985	1,106	2,133	1,778	1,722	2,140	0	1,912	3,203	3,469	2,393	1,261	836	21,951
1986	1,586	0	2,348	1,829	3,454	0	2,037	1,921	594	4,085	1,261	836	19,951
1987	3,041	3,898	1,778	1,979	2,214	0	1,866	3,782	4,017	3,950	3,856	3,769	34,150
1988	3,789	1,665	1,925	1,538	201	0	4,759	7,798	4,057	4,055	3,850	3,770	37,407
1989	1,106	3,900	4,336	2,454	1,393	908	3,859	8,026	4,035	1,210	3,855	3,859	38,942
1990	4,238	3,084	3,869	3,397	1,831	3,204	1,249	10,950	4,034	3,949	2,647	3,540	45,993
1991	4,071	3,190	4,392	4,471	1,402	1,537	4,768	7,191	4,838	2,099	3,856	3,571	45,387
1992	4,426	2,661	3,886	3,966	3,226	1,361	4,691	6,633	3,981	2,640	0	3,540	41,011
1993	4,334	2,833	1,679	1,538	1,389	1,863	3,722	11,095	4,740	4,655	3,856	3,940	45,643
1994	3,285	2,876	3,382	3,350	1,742	0	3,951	7,690	4,209	4,093	3,856	3,809	42,244
1995	1,006	1,709	2,407	2,523	1,726	0	790	10,237	4,655	2,282	3,856	1,245	32,436
1996	7,686	2,587	2,462	501	2,120	0	125	366	594	4,085	3,856	4,040	28,423
1997	5,717	4,463	3,689	1,503	2,967	3,775	1,299	1,698	1,768	6,061	3,856	4,128	40,925
1998	5,717	4,192	2,794	3,989	4,120	2,064	4,450	1,540	1,768	4,085	3,856	4,096	42,671
1999	4,357	2,368	2,507	3,288	1,566	2,256	4,057	1,540	1,768	4,085	3,856	4,013	35,661
Average	3,424	2,324	2,587	2,387	1,999	1,705	3,938	5,470	2,866	3,610	2,914	2,819	36,044
Maximum	7,686	6,447	6,174	4,695	4,120	4,243	12,524	13,432	7,964	6,061	3,856	4,150	63,312
Minimum	0	0	0	0	0	0	125	336	541	170	0	0	10,710

P-9b
Bonneville Unit Operations (cfs)
Provo River from Interstate 15 to Utah Lake
CUP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	61	5	28	54	32	42	133	12	12	68	54	64	47
1951	17	0	0	28	28	15	32	10	9	60	14	9	19
1952	23	0	0	24	0	0	25	6	9	71	11	7	15
1953	17	0	49	27	27	61	107	94	9	39	16	11	38
1954	17	37	29	25	25	1	63	69	19	28	17	11	28
1955	17	24	25	25	25	25	80	108	36	32	18	8	35
1956	0	0	45	25	25	25	60	130	82	66	23	10	41
1957	5	0	27	25	25	25	69	120	80	74	59	35	45
1958	17	27	11	25	12	26	54	93	123	64	59	42	46
1959	17	27	29	25	25	25	73	124	68	41	17	12	40
1960	17	0	25	25	25	25	61	112	34	18	18	12	31
1961	12	25	24	24	29	24	78	81	13	3	0	0	26
1962	12	21	23	24	25	24	79	132	80	72	60	55	51
1963	5	0	25	25	25	25	80	130	68	66	59	46	46
1964	9	0	71	72	30	25	80	120	79	63	60	64	56
1965	92	28	55	65	71	65	80	138	79	64	53	65	71
1966	92	90	1	10	66	34	52	39	67	62	58	70	53
1967	65	17	66	38	25	28	67	142	78	73	58	65	60
1968	92	59	31	48	47	36	33	177	9	63	57	65	60
1969	92	79	94	38	35	14	8	5	9	63	57	65	47
1970	82	30	45	44	55	45	80	40	9	91	59	66	54
1971	61	5	42	34	27	24	79	103	74	66	53	66	53
1972	83	4	34	45	44	12	14	5	9	63	53	64	36
1973	92	59	44	39	34	38	23	5	9	63	57	66	44
1974	92	70	36	46	49	69	173	6	60	98	63	64	69
1975	93	102	58	34	34	33	8	218	10	20	63	65	62
1976	93	38	0	22	51	63	167	159	134	65	63	65	76
1977	72	46	63	60	25	25	75	107	63	62	63	66	61
1978	87	102	100	76	74	57	47	174	81	63	63	65	83
1979	93	89	71	57	63	53	210	153	68	65	63	65	87
1980	93	108	100	49	44	39	43	50	10	64	63	14	57
1981	93	52	37	64	57	69	80	157	62	66	63	66	72
1982	102	17	73	73	66	37	165	13	23	54	63	68	63
1983	35	45	41	29	0	0	63	6	10	66	21	14	28
1984	27	49	0	0	0	0	33	46	10	66	21	14	22
1985	18	36	29	28	39	0	32	52	58	39	21	14	30
1986	26	0	38	30	62	0	34	31	10	66	21	14	28
1987	49	66	29	32	40	0	31	62	68	64	63	63	47
1988	62	28	31	25	4	0	80	127	68	66	63	63	52
1989	18	66	71	40	25	15	65	131	68	20	63	65	54
1990	69	52	63	55	33	52	21	178	68	64	43	59	64
1991	66	54	71	73	25	25	80	117	81	34	63	60	63
1992	72	45	63	64	56	22	79	108	67	43	0	59	56
1993	70	48	27	25	25	30	63	180	80	76	63	66	63
1994	53	48	55	54	31	0	66	125	71	67	63	64	58
1995	16	29	39	41	31	0	13	166	78	37	63	21	45
1996	125	43	40	8	37	0	2	6	10	66	63	68	39
1997	93	75	60	24	53	61	22	28	30	99	63	69	57
1998	93	70	45	65	74	34	75	25	30	66	63	69	59
1999	71	40	41	53	28	37	68	25	30	66	63	67	49
Average	56	39	42	39	36	28	66	89	48	59	47	47	50
Maximum	125	108	100	76	74	69	210	218	134	99	63	70	87
Minimum	0	0	0	0	0	0	2	5	9	3	0	0	15

P-9c
Bonneville Unit Operations (acre-feet)
Provo River from Interstate 15 to Utah Lake
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	35,944	1,644	2,827	0	0	40,415
1951	0	0	0	0	0	0	0	18,624	2,039	0	0	0	20,663
1952	0	0	0	0	0	0	5,165	6,000	6,000	0	0	0	17,165
1953	0	0	0	0	0	0	0	7,430	25,206	0	0	0	32,636
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	14,849	0	0	0	14,849
1958	0	0	0	0	0	0	0	23,691	5,666	0	0	0	29,357
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	35,214	3,105	0	0	38,319
1966	0	0	0	0	0	0	0	12,440	0	0	0	0	12,440
1967	0	0	0	0	0	0	0	0	19,197	0	0	0	19,197
1968	0	0	0	0	0	0	0	0	13,459	0	0	0	13,459
1969	0	0	0	0	0	0	0	6,000	2,212	0	0	0	8,212
1970	0	0	0	0	0	0	0	28,452	6,557	0	0	0	35,009
1971	0	0	0	0	0	0	0	6,000	646	0	0	0	6,646
1972	0	0	0	0	0	0	7,089	2,624	1,324	0	0	0	11,036
1973	0	0	0	0	0	0	0	6,000	3,946	0	0	0	9,946
1974	0	0	0	0	0	0	0	6,000	16,411	0	0	0	22,411
1975	0	0	0	0	0	0	0	0	10,344	4,122	0	0	14,466
1976	0	0	0	0	0	0	0	9,482	0	0	0	0	9,482
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	6,000	0	0	0	6,000
1981	0	0	0	0	0	0	0	0	363	0	0	0	363
1982	0	0	0	0	0	0	0	6,000	6,000	7,648	0	0	19,648
1983	0	0	0	0	3,514	4,453	5,243	6,000	6,000	3,284	0	0	28,494
1984	0	0	0	5,134	4,314	4,810	10,176	6,000	6,000	11,720	0	0	48,153
1985	0	0	0	0	0	3,821	6,000	6,000	999	0	0	0	16,821
1986	0	0	0	0	0	10,635	6,000	6,000	6,000	11,368	0	0	40,003
1987	0	0	0	0	3,249	3,931	10,798	17,471	0	0	0	0	35,449
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	777	0	0	777
1996	0	0	0	0	0	0	0	6,000	1,190	2,422	0	0	9,612
1997	0	0	0	0	0	0	10,620	6,000	6,000	1,068	0	0	23,689
1998	0	0	0	0	0	0	5,761	6,000	6,000	3,281	0	0	21,042
1999	0	0	0	0	0	4,938	8,149	6,000	6,000	6,509	0	0	31,596
Average	0	0	0	103	222	652	1,500	4,803	4,305	1,163	0	0	12,747
Maximum	0	0	0	5,134	4,314	10,635	10,798	35,944	35,214	11,720	0	0	48,153
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

P-9c
Bonneville Unit Operations (cfs)
Provo River from Interstate 15 to Utah Lake
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	0	0	0	0	0	0	0	585	28	46	0	0	56
1951	0	0	0	0	0	0	0	303	34	0	0	0	29
1952	0	0	0	0	0	0	87	98	101	0	0	0	24
1953	0	0	0	0	0	0	0	121	424	0	0	0	45
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	250	0	0	0	21
1958	0	0	0	0	0	0	0	385	95	0	0	0	41
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	592	51	0	0	53
1966	0	0	0	0	0	0	0	202	0	0	0	0	17
1967	0	0	0	0	0	0	0	0	323	0	0	0	27
1968	0	0	0	0	0	0	0	0	226	0	0	0	19
1969	0	0	0	0	0	0	0	98	37	0	0	0	11
1970	0	0	0	0	0	0	0	463	110	0	0	0	48
1971	0	0	0	0	0	0	0	98	11	0	0	0	9
1972	0	0	0	0	0	0	119	43	22	0	0	0	15
1973	0	0	0	0	0	0	0	98	66	0	0	0	14
1974	0	0	0	0	0	0	0	98	276	0	0	0	31
1975	0	0	0	0	0	0	0	0	174	67	0	0	20
1976	0	0	0	0	0	0	0	154	0	0	0	0	13
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	101	0	0	0	8
1981	0	0	0	0	0	0	0	0	6	0	0	0	1
1982	0	0	0	0	0	0	0	98	101	124	0	0	27
1983	0	0	0	0	63	72	88	98	101	53	0	0	39
1984	0	0	0	83	75	78	171	98	101	191	0	0	66
1985	0	0	0	0	0	62	101	98	17	0	0	0	23
1986	0	0	0	0	0	173	101	98	101	185	0	0	55
1987	0	0	0	0	59	64	181	284	0	0	0	0	49
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	13	0	0	1
1996	0	0	0	0	0	0	0	98	20	39	0	0	13
1997	0	0	0	0	0	0	178	98	101	17	0	0	33
1998	0	0	0	0	0	0	97	98	101	53	0	0	29
1999	0	0	0	0	0	80	137	98	101	106	0	0	44
Average	0	0	0	2	4	11	25	78	72	19	0	0	18
Maximum	0	0	0	83	75	173	181	585	592	191	0	0	66
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

P-9d
Bonneville Unit Operations (acre-feet)
Provo River from Interstate 15 to Utah Lake
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	698	4,263	4,891	584	689	391	2,363	2,530	39,944	49	118	80	56,600
1951	94	2,623	5,631	2,665	2,529	4,042	5,161	33,028	40,086	8	41	15	95,923
1952	1,339	2,542	4,632	2,682	2,542	17,260	42,778	80,420	55,666	0	39	0	209,900
1953	102	2,663	2,129	2,722	1,567	3,208	5	0	21,833	0	98	108	34,435
1954	110	2,618	1,192	742	861	1,578	744	0	0	0	41	17	7,902
1955	97	1,037	163	112	72	56	81	0	0	0	95	77	1,791
1956	1,607	3,320	1,389	152	97	97	891	0	0	0	98	101	7,751
1957	930	3,234	430	298	465	74	793	0	0	0	85	34	6,343
1958	169	3,354	1,453	153	1,008	87	1,695	0	8	0	77	51	8,056
1959	29	1,359	174	120	74	68	476	0	0	0	102	57	2,460
1960	100	2,611	206	134	86	85	744	0	0	25,539	66	72	29,642
1961	76	270	190	114	64	69	37	0	3,873	0	74	50	4,817
1962	74	307	146	104	80	68	9	0	1	0	97	48	933
1963	838	2,358	220	398	733	100	107	0	0	0	104	59	4,917
1964	3,583	6,441	267	170	119	89	88	0	0	0	82	68	10,908
1965	164	5,182	1,255	593	238	601	116	0	37	0	52	0	8,237
1966	175	4,286	9,892	9,322	5,300	12,246	1,367	6,837	0	0	96	30	49,550
1967	133	3,477	583	566	382	1,121	744	0	56	0	50	0	7,111
1968	114	3,107	2,695	1,645	1,439	2,368	3,006	0	33,376	0	51	4	47,805
1969	280	4,916	2,922	2,917	2,238	5,000	28,053	59,460	43,569	0	53	0	149,407
1970	137	6,419	1,846	1,876	1,101	1,831	30	0	11,642	0	65	0	24,947
1971	502	5,254	2,030	2,517	2,683	2,186	6	19,227	51,335	0	69	0	85,808
1972	49	4,754	2,538	1,872	1,606	11,322	1,238	38,022	20,341	36	106	48	81,933
1973	80	4,394	1,895	2,234	2,264	2,302	17,273	31,593	44,776	0	0	0	106,810
1974	159	4,239	2,406	1,803	1,471	369	0	36,600	31,272	0	94	77	78,489
1975	79	2,906	1,607	2,551	2,295	2,561	4,416	0	64,508	12,277	0	0	93,199
1976	90	5,751	4,613	3,288	1,254	740	2,377	753	0	0	107	59	19,032
1977	79	1,747	721	681	462	41	94	0	0	0	81	88	3,996
1978	79	320	93	62	50	2,199	6,086	0	1	0	94	18	9,004
1979	153	1,096	1,454	1,116	685	1,326	2,464	3,171	0	0	64	48	11,577
1980	82	3,183	178	1,581	1,616	2,236	2,710	27,910	22,659	7	51	16,817	79,029
1981	34	4,426	2,646	680	1,007	385	87	0	16	0	81	17	9,377
1982	1,188	4,029	141	114	519	2,747	1,981	44,062	34,985	1,478	0	0	91,241
1983	4,340	2,653	3,177	3,086	14,012	81,088	15,463	46,970	80,184	8,516	0	0	259,487
1984	1,626	5,492	6,554	7,828	15,176	32,427	48,483	67,066	53,282	1,078	0	0	239,012
1985	211	6,415	3,475	3,403	6,433	16,143	42,897	57,278	7,107	0	26	0	143,387
1986	4,730	7,356	4,867	4,014	11,923	86,235	46,294	61,995	70,106	933	37	0	298,490
1987	6,825	5,385	2,879	3,353	12,763	11,249	8,064	10,032	85	0	84	123	60,842
1988	127	2,588	242	155	1,345	1,629	0	0	0	0	118	117	6,319
1989	10,174	562	275	165	103	733	885	3,601	0	11,606	107	101	28,312
1990	123	1,374	602	251	61	57	3,611	0	0	0	59	12	6,151
1991	110	1,265	220	141	92	82	111	0	0	2,376	60	24	4,479
1992	29	1,797	725	646	939	884	25	0	0	1,047	9,474	67	15,633
1993	56	1,608	475	1,600	975	3,844	5,994	977	1	0	63	0	15,595
1994	928	1,587	1,229	1,261	1,865	2,710	865	0	0	0	42	57	10,544
1995	4,116	2,698	1,665	1,289	1,973	5,058	4,214	281	1	5,558	53	0	26,905
1996	1,580	4,556	3,393	9,305	2,046	8,818	16,213	28,584	51,468	32	37	0	126,031
1997	95	3,125	3,385	3,108	1,198	11,406	40,711	62,595	41,657	5	0	0	167,284
1998	254	2,410	1,817	622	45	2,547	2,948	56,603	42,818	313	14	0	110,391
1999	3,973	3,837	2,104	1,323	7,155	9,466	19,128	46,446	29,266	0	31	0	122,731
Average	1,054	3,264	1,994	1,762	2,314	7,065	7,679	16,521	17,919	1,417	251	371	61,611
Maximum	10,174	7,356	9,892	9,322	15,176	86,235	48,483	80,420	80,184	25,539	9,474	16,817	298,490
Minimum	29	270	93	62	45	41	0	0	0	0	0	0	933

P-9d
Bonneville Unit Operations (cfs)
Provo River from Interstate 15 to Utah Lake
Non-Project

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	11	72	80	10	12	6	40	41	671	1	2	1	78
1951	2	44	92	43	46	66	87	537	674	0	1	0	133
1952	11	72	80	10	12	6	40	41	671	1	2	1	289
1953	2	44	92	43	46	66	87	537	674	0	1	0	48
1954	22	43	75	44	46	281	719	1,308	936	0	1	0	11
1955	2	45	35	44	28	52	0	0	367	0	2	2	2
1956	2	44	19	12	15	26	13	0	0	0	1	0	11
1957	2	17	3	2	1	1	1	0	0	0	2	1	9
1958	26	56	23	2	2	2	15	0	0	0	2	2	11
1959	15	54	7	5	8	1	13	0	0	0	1	1	3
1960	3	56	24	2	18	1	28	0	0	0	1	1	41
1961	0	23	3	2	1	1	8	0	0	0	2	1	7
1962	2	44	3	2	2	1	13	0	0	415	1	1	1
1963	1	5	3	2	1	1	1	0	65	0	1	1	7
1964	1	5	2	2	1	1	0	0	0	0	2	1	15
1965	14	40	4	6	13	2	2	0	0	0	2	1	11
1966	58	108	4	3	2	1	1	0	0	0	1	1	68
1967	3	87	20	10	4	10	2	0	1	0	1	0	10
1968	3	72	161	152	92	199	23	111	0	0	2	1	66
1969	2	58	9	9	7	18	13	0	1	0	1	0	206
1970	2	52	44	27	26	39	51	0	561	0	1	0	34
1971	5	83	48	47	40	81	471	967	732	0	1	0	119
1972	2	108	30	31	19	30	0	0	196	0	1	0	113
1973	8	88	33	41	48	36	0	313	863	0	1	0	148
1974	1	80	41	30	29	184	21	618	342	1	2	1	108
1975	1	74	31	36	41	37	290	514	753	0	0	0	129
1976	3	71	39	29	26	6	0	595	526	0	2	1	26
1977	1	49	26	41	41	42	74	0	1,084	200	0	0	6
1978	1	97	75	53	23	12	40	12	0	0	2	1	12
1979	1	29	12	11	8	1	2	0	0	0	1	1	16
1980	1	5	2	1	1	36	102	0	0	0	2	0	109
1981	2	18	24	18	12	22	41	52	0	0	1	1	13
1982	1	53	3	26	29	36	46	454	381	0	1	283	126
1983	1	74	43	11	18	6	1	0	0	0	1	0	358
1984	19	68	2	2	9	45	33	717	588	24	0	0	329
1985	71	45	52	50	252	1,319	260	764	1,348	138	0	0	198
1986	26	92	107	127	273	527	815	1,091	895	18	0	0	412
1987	3	108	57	55	116	263	721	932	119	0	0	0	84
1988	77	124	79	65	207	1,403	778	1,008	1,178	15	1	0	9
1989	111	91	47	55	230	183	136	163	1	0	1	2	39
1990	2	43	4	3	24	26	0	0	0	0	2	2	8
1991	165	9	4	3	2	12	15	59	0	189	2	2	6
1992	2	23	10	4	1	1	61	0	0	0	1	0	22
1993	2	21	4	2	2	1	2	0	0	39	1	0	22
1994	0	30	12	11	17	14	0	0	0	17	154	1	15
1995	1	27	8	26	18	63	101	16	0	0	1	0	37
1996	15	27	20	21	32	44	15	0	0	0	1	1	174
1997	67	45	27	21	36	82	71	5	0	90	1	0	231
1998	26	77	55	151	37	143	272	465	865	1	1	0	152
1999	2	53	55	51	22	186	684	1,018	700	0	0	0	170
Average	16	55	35	29	40	112	124	247	304	23	4	6	85
Maximum	165	124	161	152	273	1,403	815	1,308	1,348	415	154	283	412
Minimum	0	5	2	1	1	1	0	0	0	0	0	0	1

P-9e
Bonneville Unit Operations (acre-feet)
PRP Diversion to Provo Bench Canal
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1951	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1952	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1953	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1954	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1955	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1956	0	0	0	0	0	0	80	160	320	640	610	480	2,290
1957	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1958	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1959	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1960	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1961	0	0	0	0	0	0	0	160	320	0	0	0	480
1962	0	0	0	0	0	0	80	160	320	640	610	480	2,290
1963	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1964	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1965	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1966	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1967	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1968	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1969	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1970	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1971	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1972	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1973	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1974	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1975	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1976	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1977	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1978	0	0	0	0	0	0	80	160	320	640	610	480	2,290
1979	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1980	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1981	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1982	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1983	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1984	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1985	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1986	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1987	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1988	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1989	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1990	160	0	0	0	0	0	80	160	320	640	610	0	1,970
1991	0	0	0	0	0	0	0	160	320	640	610	480	2,210
1992	0	0	0	0	0	0	0	160	320	0	0	0	480
1993	0	0	0	0	0	0	80	160	320	640	610	480	2,290
1994	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1995	0	0	0	0	0	0	80	160	320	640	610	480	2,290
1996	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1997	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1998	160	0	0	0	0	0	80	160	320	640	610	480	2,450
1999	160	0	0	0	0	0	80	160	320	640	610	480	2,450
Average	134	0	0	0	0	0	75	160	320	614	586	451	2,341
Maximum	160	0	0	0	0	0	80	160	320	640	610	480	2,450
Minimum	0	0	0	0	0	0	0	160	320	0	0	0	480

P-9e
Bonneville Unit Operations (cfs)
PRP Diversion to Provo Bench Canal
PRP

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	3	0	0	0	0	0	1	3	5	10	10	8	3
1951	3	0	0	0	0	0	1	3	5	10	10	8	3
1952	3	0	0	0	0	0	1	3	5	10	10	8	3
1953	3	0	0	0	0	0	1	3	5	10	10	8	3
1954	3	0	0	0	0	0	1	3	5	10	10	8	3
1955	3	0	0	0	0	0	1	3	5	10	10	8	3
1956	0	0	0	0	0	0	1	3	5	10	10	8	3
1957	3	0	0	0	0	0	1	3	5	10	10	8	3
1958	3	0	0	0	0	0	1	3	5	10	10	8	3
1959	3	0	0	0	0	0	1	3	5	10	10	8	3
1960	3	0	0	0	0	0	1	3	5	10	10	8	3
1961	0	0	0	0	0	0	0	3	5	0	0	0	1
1962	0	0	0	0	0	0	1	3	5	10	10	8	3
1963	3	0	0	0	0	0	1	3	5	10	10	8	3
1964	3	0	0	0	0	0	1	3	5	10	10	8	3
1965	3	0	0	0	0	0	1	3	5	10	10	8	3
1966	3	0	0	0	0	0	1	3	5	10	10	8	3
1967	3	0	0	0	0	0	1	3	5	10	10	8	3
1968	3	0	0	0	0	0	1	3	5	10	10	8	3
1969	3	0	0	0	0	0	1	3	5	10	10	8	3
1970	3	0	0	0	0	0	1	3	5	10	10	8	3
1971	3	0	0	0	0	0	1	3	5	10	10	8	3
1972	3	0	0	0	0	0	1	3	5	10	10	8	3
1973	3	0	0	0	0	0	1	3	5	10	10	8	3
1974	3	0	0	0	0	0	1	3	5	10	10	8	3
1975	3	0	0	0	0	0	1	3	5	10	10	8	3
1976	3	0	0	0	0	0	1	3	5	10	10	8	3
1977	3	0	0	0	0	0	1	3	5	10	10	8	3
1978	0	0	0	0	0	0	1	3	5	10	10	8	3
1979	3	0	0	0	0	0	1	3	5	10	10	8	3
1980	3	0	0	0	0	0	1	3	5	10	10	8	3
1981	3	0	0	0	0	0	1	3	5	10	10	8	3
1982	3	0	0	0	0	0	1	3	5	10	10	8	3
1983	3	0	0	0	0	0	1	3	5	10	10	8	3
1984	3	0	0	0	0	0	1	3	5	10	10	8	3
1985	3	0	0	0	0	0	1	3	5	10	10	8	3
1986	3	0	0	0	0	0	1	3	5	10	10	8	3
1987	3	0	0	0	0	0	1	3	5	10	10	8	3
1988	3	0	0	0	0	0	1	3	5	10	10	8	3
1989	3	0	0	0	0	0	1	3	5	10	10	8	3
1990	3	0	0	0	0	0	1	3	5	10	10	0	3
1991	0	0	0	0	0	0	0	3	5	10	10	8	3
1992	0	0	0	0	0	0	0	3	5	0	0	0	1
1993	0	0	0	0	0	0	1	3	5	10	10	8	3
1994	3	0	0	0	0	0	1	3	5	10	10	8	3
1995	0	0	0	0	0	0	1	3	5	10	10	8	3
1996	3	0	0	0	0	0	1	3	5	10	10	8	3
1997	3	0	0	0	0	0	1	3	5	10	10	8	3
1998	3	0	0	0	0	0	1	3	5	10	10	8	3
1999	3	0	0	0	0	0	1	3	5	10	10	8	3
Average	2	0	0	0	0	0	1	3	5	10	10	8	3
Maximum	3	0	0	0	0	0	1	3	5	10	10	8	3
Minimum	0	0	0	0	0	0	0	3	5	0	0	0	1

Central Utah Project Completion Program

Attachment B

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Attachment B

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:				1	2	3	4	5	6	7	8
Table Number:			P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number	Year	Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
1	1949	10	1,358	8,862	4,228	2,021	2,612	8,633	4,057	2,021	2,554
2	1949	11	4,675	8,926	3,284	5,561	81	8,926	3,284	5,561	81
3	1949	12	936	8,072	4,707	2,400	966	8,072	4,707	2,400	966
4	1950	1	241	7,695	5,402	1,959	333	7,695	5,402	1,959	333
5	1950	2	173	6,994	4,880	1,758	357	6,994	4,880	1,758	357
6	1950	3	269	7,686	5,380	2,181	125	7,686	5,380	2,181	125
7	1950	4	14,681	10,188	2,205	3,183	4,800	10,132	2,205	3,183	4,744
8	1950	5	46,019	58,040	2,345	35,377	20,318	56,021	2,345	35,377	18,299
9	1950	6	15,642	70,676	3,845	42,573	24,258	67,948	3,503	42,573	21,872
10	1950	7	8,757	29,928	10,817	7,592	11,519	26,579	8,960	7,592	10,027
11	1950	8	837	27,221	14,300	2,724	10,197	24,220	12,699	2,724	8,797
12	1950	9	462	18,181	10,314	3,333	4,533	16,673	9,648	3,333	3,692
13	1950	10	366	8,777	5,506	1,218	2,053	8,548	5,335	1,218	1,995
14	1950	11	5,349	8,926	2,651	4,266	2,009	8,926	2,651	4,266	2,009
15	1950	12	4,810	9,223	2,721	6,161	341	9,223	2,721	6,161	341
16	1951	1	4,416	9,223	5,873	2,842	509	9,223	5,873	2,842	509
17	1951	2	4,175	8,331	5,231	2,863	237	8,331	5,231	2,863	237
18	1951	3	4,348	9,223	3,570	5,467	186	9,223	3,570	5,467	186
19	1951	4	13,603	8,383	2,256	4,477	1,650	8,209	2,256	4,477	1,476
20	1951	5	28,779	71,351	2,280	50,440	18,631	69,360	2,280	50,440	16,640
21	1951	6	29,423	73,455	5,079	36,281	32,094	70,732	4,738	36,281	29,713
22	1951	7	6,200	28,909	12,845	4,897	11,166	25,390	10,914	4,897	9,579
23	1951	8	1,894	26,741	14,882	2,219	9,640	23,646	13,215	2,219	8,212
24	1951	9	614	22,402	10,279	5,947	6,176	21,070	9,754	5,947	5,369
25	1951	10	1,766	9,147	4,822	1,280	3,045	8,918	4,651	1,280	2,987
26	1951	11	4,829	8,926	3,092	2,186	3,648	8,926	3,092	2,186	3,648
27	1951	12	4,166	9,223	3,074	3,608	2,541	9,223	3,074	3,608	2,541
28	1952	1	3,685	9,223	4,334	2,460	2,430	9,223	4,334	2,460	2,430
29	1952	2	3,069	8,628	3,030	2,860	2,738	8,628	3,030	2,860	2,738
30	1952	3	3,636	11,671	3,570	4,680	3,421	11,671	3,570	4,680	3,421
31	1952	4	7,090	21,557	429	7,743	13,385	21,501	429	7,743	13,329
32	1952	5	16,269	81,967	2,192	36,938	42,836	80,706	2,192	36,938	41,575
33	1952	6	18,311	77,399	3,756	36,014	37,628	74,701	3,414	36,014	35,272
34	1952	7	5,236	23,407	8,752	1,613	13,042	20,828	7,454	1,613	11,760
35	1952	8	1,645	23,273	12,095	76	11,102	19,895	9,993	76	9,827
36	1952	9	903	19,083	8,833	2,651	7,599	17,555	8,110	2,651	6,794
37	1952	10	462	9,181	5,525	1,222	2,433	8,952	5,354	1,222	2,375
38	1952	11	3,848	7,529	3,180	3,177	1,172	7,529	3,180	3,177	1,172
39	1952	12	3,194	8,152	5,314	2,316	522	8,152	5,314	2,316	522
40	1953	1	3,300	7,795	6,171	1,515	109	7,795	6,171	1,515	109
41	1953	2	2,915	7,132	5,603	1,340	190	7,132	5,603	1,340	190
42	1953	3	3,839	7,992	7,513	173	306	7,992	7,513	173	306
43	1953	4	8,293	9,115	6,883	801	1,431	9,059	6,883	801	1,375
44	1953	5	14,167	26,237	5,452	8,434	12,351	24,295	5,452	8,434	10,409
45	1953	6	39,809	85,357	3,722	51,656	29,980	82,676	3,380	51,656	27,640
46	1953	7	3,761	32,622	12,895	6,633	13,093	28,899	11,038	6,633	11,227
47	1953	8	1,251	28,537	18,559	2,236	7,743	25,322	16,958	2,236	6,128
48	1953	9	289	18,817	11,615	3,010	4,192	17,258	10,948	3,010	3,300
49	1953	10	168	9,785	5,987	1,580	2,218	9,556	5,816	1,580	2,160
50	1953	11	3,645	8,368	5,176	2,231	960	8,368	5,176	2,231	960
51	1953	12	1,988	8,820	5,398	1,845	1,577	8,820	5,398	1,845	1,577
52	1954	1	350	8,456	7,162	819	475	8,456	7,162	819	475
53	1954	2	389	7,436	6,025	1,135	276	7,436	6,025	1,135	276
54	1954	3	3,374	9,379	4,891	2,804	1,684	9,379	4,891	2,804	1,684
55	1954	4	11,082	14,054	5,896	4,943	3,214	13,838	5,896	4,943	2,998
56	1954	5	14,878	32,107	7,900	6,826	17,381	30,187	7,578	6,826	15,783
57	1954	6	5,080	18,937	8,779	0	10,158	16,795	8,089	0	8,706
58	1954	7	1,504	28,304	17,338	0	10,965	25,198	15,829	0	9,368
59	1954	8	665	28,955	23,242	2,308	3,406	26,288	21,878	2,308	2,102
60	1954	9	552	19,147	14,611	2,225	2,312	17,822	14,028	2,225	1,569

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			9	10	11	12	13	14	15	16	17	18
Table Number:			P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number	Year	Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions In Reach VCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
1	1949	10	229	171	58	7,686	2,960	1,157	936	2,021	2,704	14,631
2	1949	11	0	0	0	8,845	3,284	0	0	5,561	0	16,195
3	1949	12	0	0	0	7,686	4,707	0	307	2,400	580	12,822
4	1950	1	0	0	0	7,686	5,402	0	7	1,959	324	15,943
5	1950	2	0	0	0	6,942	4,880	0	41	1,758	305	13,313
6	1950	3	0	0	0	7,750	5,380	0	0	2,181	189	14,735
7	1950	4	56	0	56	9,602	2,205	0	315	3,183	4,214	18,940
8	1950	5	2,020	0	2,020	47,012	2,345	0	1,592	35,377	9,290	56,830
9	1950	6	2,728	342	2,386	55,784	3,445	0	1,874	42,573	9,767	62,981
10	1950	7	3,349	1,857	1,492	16,965	8,645	0	326	7,592	728	24,166
11	1950	8	3,001	1,601	1,400	15,863	10,938	1,613	258	2,724	2,200	23,882
12	1950	9	1,507	666	841	11,497	6,439	3,355	254	3,333	1,724	19,976
13	1950	10	229	171	58	7,686	4,559	809	868	1,218	1,909	16,334
14	1950	11	0	0	0	9,035	2,651	0	0	4,266	2,118	20,044
15	1950	12	0	0	0	8,882	2,721	0	0	6,161	0	16,114
16	1951	1	0	0	0	8,714	5,873	0	0	2,842	0	14,662
17	1951	2	0	0	0	8,094	5,231	0	0	2,863	0	14,284
18	1951	3	0	0	0	9,037	3,570	0	0	5,467	0	15,220
19	1951	4	175	0	175	7,438	2,256	0	752	4,477	705	15,809
20	1951	5	1,991	0	1,991	60,062	2,280	0	1,556	50,440	7,342	69,028
21	1951	6	2,723	342	2,381	57,699	4,679	0	1,869	36,281	16,738	65,314
22	1951	7	3,519	1,932	1,587	17,029	10,585	0	258	4,897	1,546	25,880
23	1951	8	3,095	1,667	1,428	14,760	10,232	2,925	258	2,219	2,308	23,791
24	1951	9	1,332	525	807	15,867	6,704	3,208	254	5,947	3,216	26,305
25	1951	10	229	171	58	7,686	3,976	700	1,163	1,280	2,430	16,814
26	1951	11	0	0	0	9,010	3,092	0	0	2,186	3,732	20,568
27	1951	12	0	0	0	8,551	3,074	0	0	3,608	1,869	15,648
28	1952	1	0	0	0	8,864	4,334	0	0	2,460	2,071	16,001
29	1952	2	0	0	0	8,280	3,030	0	0	2,860	2,390	13,871
30	1952	3	0	0	0	11,355	3,570	0	0	4,680	3,105	16,984
31	1952	4	56	0	56	22,785	429	0	71	7,743	14,613	39,827
32	1952	5	1,261	0	1,261	73,814	2,192	0	1,355	36,938	34,683	83,877
33	1952	6	2,698	342	2,356	62,497	3,356	0	1,837	36,014	23,126	69,587
34	1952	7	2,580	1,298	1,281	10,614	7,233	0	290	1,613	1,768	18,390
35	1952	8	3,378	2,103	1,276	11,060	8,645	1,074	258	76	2,339	19,518
36	1952	9	1,528	723	805	11,880	5,998	2,155	254	2,651	3,230	21,635
37	1952	10	229	171	58	7,686	4,559	830	1,190	1,222	1,904	16,983
38	1952	11	0	0	0	7,594	3,180	0	0	3,177	1,237	18,980
39	1952	12	0	0	0	7,686	5,314	0	371	2,316	56	15,342
40	1953	1	0	0	0	7,686	6,171	0	87	1,515	0	16,819
41	1953	2	0	0	0	6,942	5,603	0	151	1,340	0	13,658
42	1953	3	0	0	0	7,686	7,513	0	244	173	0	13,335
43	1953	4	56	0	56	7,684	6,883	0	746	801	0	14,010
44	1953	5	1,942	0	1,942	13,886	5,452	0	1,494	8,434	0	20,609
45	1953	6	2,681	342	2,339	69,384	3,322	0	1,745	51,656	14,406	76,557
46	1953	7	3,723	1,857	1,866	18,039	10,555	182	258	6,633	850	25,289
47	1953	8	3,216	1,601	1,615	16,114	11,797	5,298	258	2,236	2,082	25,017
48	1953	9	1,559	666	893	11,881	7,221	3,916	254	3,010	1,649	20,453
49	1953	10	229	171	58	7,976	4,761	1,112	807	1,580	1,635	14,464
50	1953	11	0	0	0	7,438	5,176	0	764	2,231	30	14,597
51	1953	12	0	0	0	7,929	5,398	0	709	1,845	686	13,583
52	1954	1	0	0	0	7,981	7,162	0	378	819	0	14,841
53	1954	2	0	0	0	7,175	6,025	0	208	1,135	15	13,707
54	1954	3	0	0	0	8,820	4,891	0	0	2,804	1,125	14,262
55	1954	4	216	0	216	11,463	5,896	0	93	4,943	623	14,489
56	1954	5	1,920	321	1,598	20,112	7,524	0	1,006	6,826	5,762	20,731
57	1954	6	2,142	690	1,452	7,906	7,906	72	1,940	0	0	13,011
58	1954	7	3,106	1,509	1,597	15,804	13,447	2,304	258	0	2,357	23,254
59	1954	8	2,667	1,364	1,303	18,960	16,083	6,029	258	2,308	570	27,005
60	1954	9	1,325	582	742	13,535	10,061	4,192	254	2,225	1,249	20,812

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			19	20	21	22	23	24	25	26	27	28
Table Number:			P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number	Year	Month	Provo River from Snake Creek to Deer Creek Reservoir CUP	Provo River from Snake Creek to Deer Creek Reservoir PRP	Provo River from Snake Creek to Deer Creek Reservoir Non-Project	CUP Return Flow Gains above Deer Creek CUP	Provo River from Outlet of Deer Creek to North Fork Total	Provo River from Outlet of Deer Creek to North Fork CUP	Provo River from Outlet of Deer Creek to North Fork PRP	Provo River from Outlet of Deer Creek to North Fork Non-Project	Diversions into Salt Lake Aqueduct Total	Diversions into Salt Lake Aqueduct CUP
1	1949	10	2,960	2,021	9,649	0	9,393	4,613	2,590	2,190	6,100	0
2	1949	11	3,284	5,561	7,350	0	6,971	3,522	5	3,443	4,490	0
3	1949	12	4,707	2,400	5,716	0	8,367	4,936	5	3,426	4,490	0
4	1950	1	5,402	1,959	8,581	0	6,149	4,024	1,746	378	2,859	0
5	1950	2	4,880	1,758	6,676	0	5,554	3,132	1,890	532	2,145	0
6	1950	3	5,380	2,181	7,173	0	6,149	4,000	1,740	409	2,175	0
7	1950	4	2,205	3,183	13,552	141	17,970	9,023	872	8,075	1,150	0
8	1950	5	2,345	35,377	19,108	3,227	60,605	4,278	38,481	17,846	2,530	0
9	1950	6	3,445	42,573	16,964	2,835	71,445	6,413	5,841	59,191	7,700	0
10	1950	7	8,645	7,592	7,930	3,146	39,294	11,569	12,358	15,368	7,290	0
11	1950	8	10,938	2,724	10,219	1,122	28,884	13,259	5,629	9,996	7,700	0
12	1950	9	6,439	3,333	10,203	1,046	22,802	9,359	3,607	9,835	7,710	0
13	1950	10	4,559	1,218	10,558	0	13,595	6,348	2,235	5,011	6,100	0
14	1950	11	2,651	4,266	13,128	0	6,978	2,805	48	4,126	4,490	0
15	1950	12	2,721	6,161	7,232	0	6,250	2,685	125	3,440	4,490	0
16	1951	1	5,873	2,842	5,947	0	6,149	4,458	1,691	0	2,916	0
17	1951	2	5,231	2,863	6,190	0	5,554	3,730	1,729	95	2,306	0
18	1951	3	3,570	5,467	6,183	0	6,149	2,855	213	3,081	3,703	0
19	1951	4	2,256	4,477	9,076	259	18,425	2,810	872	14,743	1,150	0
20	1951	5	2,280	50,440	16,308	4,235	74,214	3,644	21,161	49,409	2,530	0
21	1951	6	4,679	36,281	24,354	3,386	75,716	7,664	6,208	61,844	7,700	0
22	1951	7	10,585	4,897	10,398	3,307	40,268	16,034	10,440	13,794	7,290	0
23	1951	8	10,232	2,219	11,340	1,434	28,805	12,259	6,642	9,904	7,700	0
24	1951	9	6,704	5,947	13,654	999	28,360	9,559	4,334	14,467	7,710	0
25	1951	10	3,976	1,280	11,558	0	7,922	5,687	2,235	0	6,100	0
26	1951	11	3,092	2,186	15,290	0	7,847	3,305	48	4,495	4,490	0
27	1951	12	3,074	3,608	8,965	0	6,927	3,185	147	3,595	4,490	0
28	1952	1	4,334	2,460	9,208	0	6,149	3,213	838	2,098	3,768	0
29	1952	2	3,030	2,860	7,981	0	5,752	1,235	1,598	2,919	2,298	0
30	1952	3	3,570	4,680	8,735	0	20,323	2,047	6	18,270	3,910	0
31	1952	4	429	7,743	31,655	0	44,449	686	6,038	37,726	1,150	0
32	1952	5	2,192	36,938	44,747	648	94,428	3,577	8,537	82,314	2,530	0
33	1952	6	3,356	36,014	30,216	2,721	82,308	6,164	10,132	66,013	7,700	0
34	1952	7	7,233	1,613	9,544	3,307	36,219	13,574	9,003	13,642	7,290	0
35	1952	8	8,645	76	10,798	1,696	26,604	11,559	5,139	9,906	7,700	0
36	1952	9	5,998	2,651	12,986	1,192	24,953	8,959	3,256	12,738	7,710	0
37	1952	10	4,559	1,222	11,202	0	10,337	5,765	2,235	2,337	6,100	0
38	1952	11	3,180	3,177	12,623	0	6,399	3,305	48	3,047	4,490	0
39	1952	12	5,314	2,316	7,712	0	6,149	5,424	724	0	3,890	0
40	1953	1	6,171	1,515	9,133	0	6,149	4,196	1,953	0	2,707	0
41	1953	2	5,603	1,340	6,716	0	5,554	3,952	1,602	0	2,577	0
42	1953	3	7,513	173	5,649	0	8,677	6,318	5	2,354	3,910	0
43	1953	4	6,883	801	6,325	380	14,475	8,360	872	5,243	1,150	0
44	1953	5	5,452	8,434	6,723	5,188	44,959	11,084	13,965	19,910	2,530	0
45	1953	6	3,322	51,656	21,580	3,392	75,807	6,569	29,259	39,979	7,700	0
46	1953	7	10,555	6,633	8,101	2,845	35,201	12,870	7,314	15,016	7,290	0
47	1953	8	11,797	2,236	10,985	904	33,413	13,260	7,557	12,596	7,700	0
48	1953	9	7,221	3,010	10,222	515	25,926	10,060	4,990	10,876	7,710	0
49	1953	10	4,761	1,580	8,123	0	14,063	6,542	2,235	5,286	6,100	0
50	1953	11	5,176	2,231	7,190	0	6,200	5,326	48	827	4,490	0
51	1953	12	5,398	1,845	6,341	0	6,149	4,644	1,035	470	3,510	0
52	1954	1	7,162	819	6,860	0	6,149	4,684	1,342	122	3,263	0
53	1954	2	6,025	1,135	6,546	0	5,554	3,967	1,466	121	2,569	0
54	1954	3	4,891	2,804	6,566	0	6,149	3,114	1,446	1,588	2,469	0
55	1954	4	5,896	4,943	3,649	1,419	20,087	7,675	2,797	9,615	1,150	0
56	1954	5	7,524	6,826	6,381	6,221	38,253	11,052	4,638	22,562	2,530	0
57	1954	6	7,906	0	5,105	690	25,719	14,243	4,232	7,245	7,700	0
58	1954	7	13,447	0	9,807	76	38,047	19,438	7,439	11,170	7,290	0
59	1954	8	16,083	2,308	8,615	0	35,567	17,338	7,688	10,542	7,700	0
60	1954	9	10,061	2,225	8,526	153	28,667	12,938	5,084	10,645	7,710	0

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			29	30	31	32	33	34	35	36	37	38
Table Number:			P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number	Year	Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
1	1949	10	6,100	9,626	4,613	2,590	2,423	4,728	839	1,239	2,650	6,066
2	1949	11	4,490	7,723	3,522	5	4,195	4,180	317	0	3,863	4,005
3	1949	12	4,490	9,731	4,936	5	4,790	5,930	1,751	0	4,180	4,205
4	1950	1	2,859	6,963	4,024	1,746	1,192	3,021	2,177	0	843	4,946
5	1950	2	2,145	6,251	3,132	1,890	1,229	2,650	1,754	0	896	4,489
6	1950	3	2,175	7,149	4,000	1,740	1,409	3,296	2,553	0	743	4,540
7	1950	4	1,150	19,628	9,023	872	9,733	20,003	7,823	437	11,743	3,936
8	1950	5	2,530	64,517	4,278	38,481	21,758	61,424	414	37,180	23,830	15,471
9	1950	6	7,700	75,148	6,413	5,841	62,894	68,051	149	3,692	64,210	19,647
10	1950	7	7,290	42,538	11,569	12,358	18,612	30,791	210	9,706	20,875	21,492
11	1950	8	7,700	30,484	13,259	5,629	11,596	16,747	0	2,935	13,812	18,923
12	1950	9	7,710	24,081	9,359	3,607	11,115	15,469	0	1,929	13,541	14,453
13	1950	10	6,100	13,752	6,348	2,235	5,169	9,039	768	1,121	7,150	7,420
14	1950	11	4,490	7,150	2,805	48	4,298	3,024	0	0	3,024	3,648
15	1950	12	4,490	7,819	2,685	125	5,009	5,228	0	0	5,228	3,825
16	1951	1	2,916	7,635	4,458	1,691	1,486	4,129	1,711	0	2,418	5,791
17	1951	2	2,306	6,783	3,730	1,729	1,324	3,925	1,552	0	2,373	5,129
18	1951	3	3,703	7,342	2,855	213	4,274	4,926	908	0	4,018	3,512
19	1951	4	1,150	18,911	2,810	872	15,229	17,174	1,819	437	14,917	5,318
20	1951	5	2,530	78,082	3,644	21,161	53,277	74,844	280	19,859	54,705	16,020
21	1951	6	7,700	78,411	7,664	6,208	64,539	68,978	0	4,088	64,891	21,303
22	1951	7	7,290	43,677	16,034	10,440	17,204	29,791	2,875	7,327	19,589	23,998
23	1951	8	7,700	31,659	12,259	6,642	12,758	19,292	0	3,404	15,887	20,999
24	1951	9	7,710	29,519	9,559	4,334	15,626	19,970	0	2,265	17,705	17,810
25	1951	10	6,100	9,412	5,687	2,235	1,490	5,709	1,122	1,121	3,466	7,220
26	1951	11	4,490	8,069	3,305	48	4,717	2,970	0	0	2,970	4,148
27	1951	12	4,490	8,279	3,185	147	4,947	4,315	0	0	4,315	4,247
28	1952	1	3,768	7,434	3,213	838	3,383	4,004	1,466	0	2,538	3,938
29	1952	2	2,298	6,513	1,235	1,598	3,680	2,618	0	0	2,618	4,098
30	1952	3	3,910	21,072	2,047	6	19,019	17,406	0	0	17,406	3,406
31	1952	4	1,150	46,936	686	6,038	40,213	48,597	1,400	5,602	41,594	1,123
32	1952	5	2,530	101,449	3,577	8,537	89,335	101,922	13	7,235	94,674	15,642
33	1952	6	7,700	89,790	6,164	10,132	73,495	85,205	0	8,048	77,156	19,706
34	1952	7	7,290	40,426	13,574	9,003	17,849	31,483	3,515	6,661	21,307	20,998
35	1952	8	7,700	29,243	11,559	5,139	12,545	19,202	0	2,708	16,495	19,493
36	1952	9	7,710	26,384	8,959	3,256	14,169	19,527	0	1,766	17,761	17,018
37	1952	10	6,100	11,076	5,765	2,235	3,077	8,003	769	1,121	6,114	6,837
38	1952	11	4,490	6,538	3,305	48	3,186	3,170	0	0	3,170	4,248
39	1952	12	3,890	7,558	5,424	724	1,409	4,981	3,039	0	1,942	4,324
40	1953	1	2,707	7,415	4,196	1,953	1,266	4,288	1,649	0	2,639	5,853
41	1953	2	2,577	6,374	3,952	1,602	820	3,123	1,474	0	1,650	5,302
42	1953	3	3,910	9,221	6,318	5	2,898	7,297	3,771	0	3,526	3,905
43	1953	4	1,150	15,551	8,360	872	6,318	13,703	6,270	437	6,997	5,765
44	1953	5	2,530	47,242	11,084	13,965	22,193	41,490	4,204	12,665	24,621	17,080
45	1953	6	7,700	80,818	6,569	29,259	44,990	74,293	0	27,254	47,040	21,272
46	1953	7	7,290	36,514	12,870	7,314	16,329	21,178	610	3,732	16,836	21,426
47	1953	8	7,700	33,998	13,260	7,557	13,181	18,158	0	3,828	14,330	20,468
48	1953	9	7,710	26,288	10,060	4,990	11,237	14,891	0	2,569	12,322	15,096
49	1953	10	6,100	14,310	6,542	2,235	5,533	8,795	768	1,121	6,906	7,614
50	1953	11	4,490	7,394	5,326	48	2,021	3,917	2,221	0	1,696	4,048
51	1953	12	3,510	6,934	4,644	1,035	1,255	3,018	1,796	0	1,222	5,235
52	1954	1	3,263	6,723	4,684	1,342	696	2,479	1,538	0	941	5,842
53	1954	2	2,569	6,045	3,967	1,466	612	2,456	1,389	0	1,068	5,266
54	1954	3	2,469	6,553	3,114	1,446	1,992	1,996	48	0	1,948	5,646
55	1954	4	1,150	21,469	7,675	2,797	10,997	18,005	2,875	2,361	12,769	9,844
56	1954	5	2,530	42,356	11,052	4,638	26,665	34,809	2,283	3,311	29,214	22,782
57	1954	6	7,700	28,545	14,243	4,232	10,071	14,333	0	2,048	12,284	19,463
58	1954	7	7,290	40,227	19,438	7,439	13,350	19,150	0	3,976	15,173	27,668
59	1954	8	7,700	37,041	17,338	7,688	12,016	17,852	0	3,889	13,963	25,691
60	1954	9	7,710	29,825	12,938	5,084	11,802	16,106	0	2,613	13,493	20,246

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			39	40	41	42	43	44	45	46	47	48
Table Number:			P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number	Year	Month	Diversions into Olmsted Aqueduct CUP	Diversions into Olmsted Aqueduct Ap 40524	Diversions into Olmsted Aqueduct PRP	Diversions into Olmsted Aqueduct Non-Project	Provo River from Murdock to Interstate15 Total	Provo River from Murdock to Interstate15 CUP	Provo River from Murdock to Interstate15 PRP	Provo River from Murdock to Interstate15 Non-Project	Diversions into Provo Reservoir Canal Total	ULS Water in Provo Reservoir Canal CUP
1	1949	10	3,775	0	1,351	940	5,311	3,740	160	1,411	3,601	2,127
2	1949	11	4,000	795	5	0	4,292	317	0	3,975	0	0
3	1949	12	4,200	1,015	5	0	6,134	1,751	0	4,384	0	0
4	1950	1	3,200	1,353	1,746	0	4,271	3,311	0	960	0	0
5	1950	2	2,600	1,222	1,890	0	2,750	1,754	0	996	0	0
6	1950	3	2,800	1,353	1,740	0	3,439	2,553	0	886	0	0
7	1950	4	1,200	0	435	2,301	16,900	7,935	80	8,885	3,141	1,815
8	1950	5	4,880	1,015	1,302	9,290	48,307	750	36,104	11,452	7,670	2,685
9	1950	6	7,259	995	2,149	10,238	53,171	690	1,964	50,517	10,477	4,440
10	1950	7	11,359	0	2,652	7,480	16,478	4,153	3,467	8,858	10,426	5,040
11	1950	8	13,259	0	2,694	2,970	14,036	3,323	610	10,103	8,358	4,783
12	1950	9	9,359	0	1,679	3,415	13,399	3,810	480	9,108	6,486	3,600
13	1950	10	5,580	0	1,114	727	7,541	1,069	160	6,312	3,394	2,127
14	1950	11	3,600	795	48	0	3,057	0	0	3,057	0	0
15	1950	12	3,700	1,015	125	0	5,462	0	0	5,462	0	0
16	1951	1	4,100	1,353	1,691	0	4,336	1,711	0	2,625	0	0
17	1951	2	3,400	1,222	1,729	0	4,096	1,552	0	2,544	0	0
18	1951	3	3,300	1,353	213	0	5,093	908	0	4,185	0	0
19	1951	4	2,300	1,309	435	2,583	13,461	1,931	80	11,450	3,259	1,815
20	1951	5	4,580	1,215	1,302	10,139	60,510	616	18,784	41,110	8,027	2,685
21	1951	6	8,659	995	2,120	10,523	53,544	541	2,359	50,644	10,597	4,440
22	1951	7	13,159	0	3,113	7,726	13,741	3,716	640	9,385	10,978	5,040
23	1951	8	12,259	0	3,238	5,503	10,209	875	610	8,724	9,893	4,783
24	1951	9	9,559	0	2,069	6,183	10,364	559	480	9,325	7,987	3,600
25	1951	10	5,380	815	1,114	727	4,295	1,423	160	2,712	3,394	2,127
26	1951	11	4,100	795	48	0	3,009	0	0	3,009	0	0
27	1951	12	4,100	915	147	0	4,528	0	0	4,528	0	0
28	1952	1	3,100	1,353	838	0	4,184	1,466	0	2,718	0	0
29	1952	2	2,500	1,265	1,598	0	2,727	0	0	2,726	0	0
30	1952	3	3,400	1,353	6	0	17,526	0	0	17,526	0	0
31	1952	4	500	1,214	436	188	48,452	1,512	5,245	41,695	2,251	1,815
32	1952	5	4,480	915	1,302	9,860	88,346	349	6,160	81,837	7,910	2,685
33	1952	6	7,159	995	2,083	10,464	70,510	541	6,320	63,649	10,572	4,440
34	1952	7	10,059	0	2,342	8,597	14,556	4,360	640	9,556	10,679	5,040
35	1952	8	11,559	0	2,431	5,503	10,571	657	610	9,305	9,197	4,783
36	1952	9	8,959	0	1,490	6,569	9,737	402	480	8,855	7,650	3,600
37	1952	10	4,996	0	1,114	727	6,596	1,069	160	5,367	3,394	2,127
38	1952	11	4,200	895	48	0	3,199	0	0	3,199	0	0
39	1952	12	3,600	1,215	724	0	5,181	3,039	0	2,142	0	0
40	1953	1	3,900	1,353	1,953	0	4,467	1,649	0	2,818	0	0
41	1953	2	3,700	1,222	1,602	0	3,239	1,474	0	1,766	0	0
42	1953	3	3,900	1,353	5	0	7,376	3,771	0	3,605	0	0
43	1953	4	3,400	1,309	435	1,931	10,945	6,381	80	4,484	2,985	1,815
44	1953	5	6,880	0	1,300	8,900	23,502	5,770	7,590	10,142	7,506	2,685
45	1953	6	7,765	1,195	2,005	11,502	57,825	541	25,526	31,759	11,008	4,440
46	1953	7	12,260	0	3,582	5,583	10,758	2,403	640	7,715	10,481	5,040
47	1953	8	13,260	0	3,729	3,479	11,373	1,007	610	9,755	9,465	4,783
48	1953	9	10,061	0	2,421	2,615	10,051	654	480	8,918	6,790	3,600
49	1953	10	5,774	0	1,114	727	7,333	1,069	160	6,104	3,394	2,127
50	1953	11	4,000	895	48	0	4,087	2,221	0	1,866	0	0
51	1953	12	4,200	1,353	1,035	0	3,135	1,796	0	1,339	0	0
52	1954	1	4,500	1,353	1,342	0	2,564	1,538	0	1,026	0	0
53	1954	2	3,800	1,222	1,466	0	2,529	1,389	0	1,141	0	0
54	1954	3	4,200	1,134	1,446	0	2,057	48	0	2,008	0	0
55	1954	4	4,800	0	435	4,609	10,413	3,758	80	6,575	4,112	1,815
56	1954	5	8,769	0	1,327	12,686	13,230	4,259	160	8,811	9,099	2,685
57	1954	6	14,243	0	2,183	3,037	8,921	1,108	320	7,494	7,446	4,440
58	1954	7	19,438	0	3,463	4,768	9,836	1,725	640	7,471	10,383	5,040
59	1954	8	17,338	0	3,799	4,554	9,556	1,026	610	7,919	9,978	4,783
60	1954	9	12,938	0	2,471	4,836	8,125	667	480	6,978	7,768	3,600

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			49	50	51	52	53	54	55	56	57	58	59
Table Number:			P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
Month Number	Year	Month	Diversions into Provo Reservoir Canal PRP	Diversions into Provo Reservoir Canal Non-Project	Provo River from Interstate 15 to Utah Lake Total	Provo River from Interstate 15 to Utah Lake CUP	Provo River from Interstate 15 to Utah Lake PRP	Provo River from Interstate 15 to Utah Lake Non-Project	PRP Diversion to Provo Bench Canal PRP	June Sucker Releases CUP	June Sucker Releases PRP	June Sucker Releases Non-Project	75-cfs Target Releases Non-Project
1	1949	10	1,079	395	4,611	3,740	0	698	160	0	0	0	-173
2	1949	11	0	0	4,580	317	0	4,263	0	0	0	0	0
3	1949	12	0	0	6,641	1,751	0	4,891	0	0	0	0	0
4	1950	1	0	0	3,895	3,311	0	584	0	0	0	0	0
5	1950	2	0	0	2,443	1,754	0	689	0	0	0	0	0
6	1950	3	0	0	2,944	2,553	0	391	0	0	0	0	0
7	1950	4	357	968	10,719	7,935	0	2,363	80	-2,516	0	0	-421
8	1950	5	1,075	3,909	39,853	750	35,944	2,530	160	0	0	0	-629
9	1950	6	1,728	4,308	43,035	690	1,644	39,944	320	-149	0	0	-758
10	1950	7	2,239	3,148	7,727	4,153	2,827	49	640	-210	-4,000	-1,068	-698
11	1950	8	2,325	1,250	4,100	3,323	0	118	610	0	0	0	-659
12	1950	9	1,449	1,437	4,463	3,810	0	80	480	0	0	0	-572
13	1950	10	961	306	1,544	1,069	0	94	160	0	0	0	-381
14	1950	11	0	0	2,623	0	0	2,623	0	0	0	0	0
15	1950	12	0	0	5,631	0	0	5,631	0	0	0	0	0
16	1951	1	0	0	4,376	1,711	0	2,665	0	0	0	0	0
17	1951	2	0	0	4,082	1,552	0	2,529	0	0	0	0	0
18	1951	3	0	0	4,950	908	0	4,042	0	0	0	0	0
19	1951	4	357	1,087	7,390	1,931	0	5,161	80	0	0	0	-298
20	1951	5	1,075	4,266	52,868	616	18,624	33,028	160	0	0	0	-600
21	1951	6	1,728	4,428	43,424	541	2,039	40,086	320	0	0	0	-758
22	1951	7	2,687	3,251	4,428	3,716	0	8	640	-2,875	-4,000	0	-704
23	1951	8	2,794	2,316	1,535	875	0	41	610	0	0	0	-620
24	1951	9	1,785	2,602	1,167	559	0	15	480	0	0	0	-593
25	1951	10	961	306	2,893	1,423	0	1,339	160	0	0	0	-13[illegible]
26	1951	11	0	0	2,542	0	0	2,542	0	0	0	0	[illegible]
27	1951	12	0	0	4,632	0	0	4,632	0	0	0	0	0
28	1952	1	0	0	4,148	1,466	0	2,682	0	0	0	0	0
29	1952	2	0	0	2,542	0	0	2,542	0	0	0	0	0
30	1952	3	0	0	17,260	0	0	17,260	0	0	0	0	0
31	1952	4	357	79	49,455	1,512	5,165	42,778	80	0	0	0	0
32	1952	5	1,075	4,149	87,148	349	6,000	80,420	160	0	0	0	-378
33	1952	6	1,728	4,403	62,890	541	6,000	55,666	320	0	0	0	-683
34	1952	7	2,021	3,618	5,062	4,360	0	0	640	-2,875	-4,000	-212	-702
35	1952	8	2,098	2,316	1,309	657	0	39	610	0	0	0	-614
36	1952	9	1,286	2,764	957	402	0	0	480	0	0	0	-555
37	1952	10	961	306	1,581	1,069	0	102	160	0	0	0	-410
38	1952	11	0	0	2,663	0	0	2,663	0	0	0	0	0
39	1952	12	0	0	5,168	3,039	0	2,129	0	0	0	0	0
40	1953	1	0	0	4,370	1,649	0	2,722	0	0	0	0	0
41	1953	2	0	0	3,041	1,474	0	1,567	0	0	0	0	0
42	1953	3	0	0	6,979	3,771	0	3,208	0	0	0	0	0
43	1953	4	357	812	6,572	6,381	0	5	80	-1,221	0	0	-186
44	1953	5	1,075	3,745	13,925	5,770	7,430	0	160	-1,654	-4,000	-1,230	-725
45	1953	6	1,728	4,840	48,338	541	25,206	21,833	320	0	0	0	-758
46	1953	7	3,092	2,349	2,995	2,403	0	0	640	0	0	-825	-592
47	1953	8	3,218	1,464	1,742	1,007	0	98	610	0	0	0	-637
48	1953	9	2,089	1,100	1,359	654	0	108	480	0	0	0	-596
49	1953	10	961	306	1,616	1,069	0	110	160	0	0	0	-437
50	1953	11	0	0	4,838	2,221	0	2,618	0	0	0	0	0
51	1953	12	0	0	2,988	1,796	0	1,192	0	0	0	0	0
52	1954	1	0	0	2,280	1,538	0	742	0	0	0	0	0
53	1954	2	0	0	2,249	1,389	0	861	0	0	0	0	0
54	1954	3	0	0	1,626	48	0	1,578	0	0	0	0	0
55	1954	4	357	1,939	4,879	3,758	0	744	80	-2,875	-1,924	0	-377
56	1954	5	1,075	5,338	5,001	4,259	0	0	160	0	-2,076	-1,639	-742
57	1954	6	1,728	1,278	1,731	1,108	0	0	320	0	0	-567	-6[illegible]
58	1954	7	3,336	2,006	2,319	1,725	0	0	640	0	0	-739	-59[illegible]
59	1954	8	3,279	1,916	1,606	1,026	0	41	610	0	0	0	-539
60	1954	9	2,133	2,035	1,167	667	0	17	480	0	0	0	-482

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:				1	2	3	4	5	6	7	8
Table Number:			P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number	Year	Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
61	1954	10	390	9,659	7,101	912	1,646	9,430	6,930	912	1,588
62	1954	11	3,328	8,328	5,195	1,863	1,270	8,328	5,195	1,863	1,270
63	1954	12	1,365	8,562	5,513	1,518	1,532	8,562	5,513	1,518	1,532
64	1955	1	334	8,575	7,936	64	575	8,575	7,936	64	575
65	1955	2	308	7,763	6,957	185	620	7,763	6,957	185	620
66	1955	3	338	8,206	7,457	343	407	8,206	7,457	343	407
67	1955	4	3	8,939	6,863	488	1,588	8,786	6,863	488	1,435
68	1955	5	23,702	24,902	7,983	3,338	13,581	23,174	7,983	3,338	11,853
69	1955	6	12,864	34,061	7,699	13,279	13,084	32,111	7,311	13,279	11,522
70	1955	7	217	35,317	18,850	2,585	13,883	31,685	17,017	2,585	12,083
71	1955	8	33	29,364	23,425	2,003	3,936	26,179	21,840	2,003	2,336
72	1955	9	0	19,797	16,577	1,071	2,150	18,241	15,916	1,071	1,255
73	1955	10	20	9,117	6,176	813	2,129	8,888	6,005	813	2,071
74	1955	11	3,869	8,109	3,621	3,008	1,480	8,109	3,621	3,008	1,480
75	1955	12	2,274	7,956	5,419	1,543	994	7,956	5,419	1,543	994
76	1956	1	4,547	8,049	6,466	762	821	8,049	6,466	762	821
77	1956	2	3,814	7,604	6,347	527	730	7,604	6,347	527	730
78	1956	3	4,896	8,092	5,547	1,336	1,209	8,092	5,547	1,336	1,209
79	1956	4	5,187	10,554	5,381	2,046	3,127	10,352	5,381	2,046	2,925
80	1956	5	62,094	24,943	4,852	8,807	11,284	23,315	4,852	8,807	9,657
81	1956	6	37,510	58,463	7,570	34,330	16,563	55,954	6,685	34,330	14,939
82	1956	7	2,404	62,899	16,041	27,213	19,645	59,741	14,462	27,213	18,066
83	1956	8	825	45,946	20,908	13,257	11,782	43,068	19,496	13,257	10,315
84	1956	9	427	22,480	16,457	1,428	4,595	21,033	15,866	1,428	3,739
85	1956	10	430	9,890	5,865	950	3,075	9,661	5,694	950	3,017
86	1956	11	3,549	7,832	3,886	2,701	1,245	7,832	3,886	2,701	1,245
87	1956	12	763	8,032	5,075	1,703	1,254	8,032	5,075	1,703	1,254
88	1957	1	418	7,961	6,778	615	568	7,961	6,778	615	568
89	1957	2	373	6,993	6,057	711	225	6,993	6,057	711	225
90	1957	3	449	8,244	6,596	634	1,014	8,244	6,596	634	1,014
91	1957	4	5,621	9,185	4,794	2,244	2,148	9,129	4,794	2,244	2,091
92	1957	5	31,722	17,710	5,204	2,206	10,300	16,050	5,204	2,206	8,640
93	1957	6	82,626	78,104	4,899	51,694	21,511	76,102	4,557	51,694	19,851
94	1957	7	9,371	55,433	11,964	15,362	28,107	51,719	10,107	15,362	26,251
95	1957	8	1,598	34,820	15,267	5,613	13,940	31,590	13,666	5,613	12,311
96	1957	9	613	19,144	10,946	4,241	3,956	17,595	10,280	4,241	3,074
97	1957	10	693	9,930	6,082	985	2,862	9,701	5,911	985	2,804
98	1957	11	4,262	8,877	4,868	3,375	635	8,877	4,868	3,375	635
99	1957	12	3,948	9,204	3,927	3,191	2,087	9,204	3,927	3,191	2,087
100	1958	1	3,679	8,479	6,799	562	1,118	8,479	6,799	562	1,118
101	1958	2	3,743	7,637	4,915	1,845	877	7,637	4,915	1,845	877
102	1958	3	883	7,836	5,308	1,506	1,022	7,836	5,308	1,506	1,022
103	1958	4	6,380	8,703	2,991	3,996	1,715	8,646	2,991	3,996	1,659
104	1958	5	56,896	48,172	3,352	34,905	9,915	46,715	3,352	34,905	8,458
105	1958	6	21,877	42,462	7,140	21,509	13,813	40,269	6,490	21,509	12,270
106	1958	7	1,590	35,786	14,032	6,463	15,291	32,695	12,476	6,463	13,756
107	1958	8	695	29,633	19,381	3,788	6,464	26,575	17,786	3,788	5,001
108	1958	9	571	18,652	12,753	2,315	3,583	17,130	12,088	2,315	2,726
109	1958	10	393	9,802	6,548	905	2,349	9,573	6,377	905	2,291
110	1958	11	3,491	7,868	5,115	1,922	830	7,868	5,115	1,922	830
111	1958	12	1,010	8,270	5,078	1,743	1,449	8,270	5,078	1,743	1,449
112	1959	1	378	8,236	7,616	44	576	8,236	7,616	44	576
113	1959	2	309	7,328	6,476	291	561	7,328	6,476	291	561
114	1959	3	351	8,038	7,127	349	562	8,038	7,127	349	562
115	1959	4	4,591	11,012	6,849	2,465	1,698	10,956	6,849	2,465	1,642
116	1959	5	7,733	28,588	9,590	4,117	14,882	26,682	9,383	4,117	13,182
117	1959	6	20,744	41,441	8,833	17,983	14,625	39,049	8,106	17,983	12,961
118	1959	7	2,932	33,769	19,482	1,266	13,021	30,389	17,933	1,266	11,189
119	1959	8	595	29,624	22,928	1,994	4,701	26,689	21,537	1,994	3,158
120	1959	9	732	17,405	14,100	1,218	2,087	15,958	13,508	1,218	1,231

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			9	10	11	12	13	14	15	16	17	18
Table Number:			P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number	Year	Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions In Reach VCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
61	1954	10	229	171	58	8,017	5,949	1,032	670	912	1,156	14,624
62	1954	11	0	0	0	7,573	5,195	0	601	1,863	515	14,943
63	1954	12	0	0	0	7,942	5,513	0	494	1,518	912	14,238
64	1955	1	0	0	0	8,039	7,936	0	427	64	39	13,970
65	1955	2	0	0	0	7,254	6,957	0	405	185	111	11,804
66	1955	3	0	0	0	8,005	7,457	0	160	343	206	14,582
67	1955	4	152	0	152	7,438	6,863	0	929	488	87	11,100
68	1955	5	1,728	0	1,728	12,960	7,983	0	1,223	3,338	1,639	17,094
69	1955	6	1,950	388	1,562	20,773	7,245	0	815	13,279	250	28,617
70	1955	7	3,633	1,833	1,800	20,380	16,589	126	258	2,585	1,206	25,930
71	1955	8	3,184	1,585	1,600	17,942	15,369	6,721	258	2,003	570	25,252
72	1955	9	1,556	660	896	13,468	11,199	4,990	254	1,071	1,198	21,046
73	1955	10	229	171	58	7,686	4,940	1,123	1,102	813	1,933	13,981
74	1955	11	0	0	0	7,438	3,621	0	534	3,008	809	15,361
75	1955	12	0	0	0	7,686	5,419	0	215	1,543	724	15,924
76	1956	1	0	0	0	7,686	6,466	0	289	762	458	14,435
77	1956	2	0	0	0	7,190	6,347	0	330	527	316	12,326
78	1956	3	0	0	0	7,686	5,547	0	323	1,336	803	12,610
79	1956	4	202	0	202	7,438	5,381	0	255	2,046	11	11,007
80	1956	5	1,628	0	1,628	13,927	4,852	0	1,096	8,807	269	18,429
81	1956	6	2,510	885	1,625	43,432	6,534	0	823	34,330	2,567	49,188
82	1956	7	3,158	1,579	1,579	48,176	14,082	122	258	27,213	6,882	53,526
83	1956	8	2,879	1,411	1,467	34,700	13,233	6,527	258	13,257	8,210	41,700
84	1956	9	1,446	590	856	16,396	10,935	5,236	254	1,428	4,033	23,643
85	1956	10	229	171	58	7,686	4,675	1,072	1,700	950	2,061	12,575
86	1956	11	0	0	0	7,438	3,886	0	361	2,701	851	15,631
87	1956	12	0	0	0	7,686	5,075	0	275	1,703	908	14,507
88	1957	1	0	0	0	7,686	6,778	0	219	615	293	14,525
89	1957	2	0	0	0	6,942	6,057	0	41	711	174	13,947
90	1957	3	0	0	0	7,686	6,596	0	444	634	456	12,365
91	1957	4	56	0	56	7,438	4,794	0	824	2,244	401	10,556
92	1957	5	1,660	0	1,660	7,686	5,204	0	1,375	2,206	276	15,354
93	1957	6	2,002	342	1,660	65,126	4,499	0	958	51,694	8,934	73,446
94	1957	7	3,714	1,857	1,857	39,367	9,791	0	404	15,362	14,214	45,269
95	1957	8	3,230	1,601	1,629	23,026	11,114	2,470	258	5,613	6,299	30,069
96	1957	9	1,549	666	883	11,737	6,792	3,657	254	4,241	704	20,472
97	1957	10	229	171	58	7,686	4,912	1,051	1,621	985	1,789	13,811
98	1957	11	0	0	0	8,242	4,868	0	0	3,375	0	16,066
99	1957	12	0	0	0	8,550	3,927	0	0	3,191	1,433	14,375
100	1958	1	0	0	0	7,686	6,799	0	631	562	325	12,201
101	1958	2	0	0	0	7,219	4,915	0	0	1,845	459	13,095
102	1958	3	0	0	0	7,686	5,308	0	119	1,506	872	14,177
103	1958	4	56	0	56	8,091	2,991	0	71	3,996	1,103	14,146
104	1958	5	1,457	0	1,457	38,257	3,352	0	881	34,905	0	42,040
105	1958	6	2,193	650	1,544	28,750	6,379	0	760	21,509	861	34,634
106	1958	7	3,090	1,556	1,534	21,124	12,148	69	258	6,463	2,513	27,460
107	1958	8	3,059	1,596	1,463	18,008	12,426	5,514	258	3,788	1,794	25,030
108	1958	9	1,521	664	857	12,348	7,321	5,044	254	2,315	2,711	19,724
109	1958	10	229	171	58	7,686	5,353	1,078	1,234	905	1,428	14,050
110	1958	11	0	0	0	7,438	5,115	0	342	1,922	400	15,101
111	1958	12	0	0	0	7,686	5,078	0	465	1,743	865	13,615
112	1959	1	0	0	0	7,686	7,616	0	438	44	26	13,454
113	1959	2	0	0	0	6,942	6,476	0	307	291	175	12,403
114	1959	3	0	0	0	7,686	7,127	0	280	349	210	13,048
115	1959	4	56	0	56	9,517	6,849	0	71	2,465	203	11,729
116	1959	5	1,907	207	1,699	16,031	9,347	0	1,153	4,117	2,567	19,692
117	1959	6	2,392	728	1,664	26,172	7,939	46	806	17,983	250	31,698
118	1959	7	3,380	1,548	1,831	19,406	16,936	795	258	1,266	1,203	25,773
119	1959	8	2,935	1,391	1,544	18,089	15,525	6,260	258	1,994	570	24,615
120	1959	9	1,448	592	856	11,102	8,529	5,287	254	1,218	1,354	18,106

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			19	20	21	22	23	24	25	26	27	28
Table Number:			P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number	Year	Month	Provo River from Snake Creek to Deer Creek Reservoir CUP	Provo River from Snake Creek to Deer Creek Reservoir PRP	Provo River from Snake Creek to Deer Creek Reservoir Non-Project	CUP Return Flow Gains above Deer Creek CUP	Provo River from Outlet of Deer Creek to North Fork Total	Provo River from Outlet of Deer Creek to North Fork CUP	Provo River from Outlet of Deer Creek to North Fork PRP	Provo River from Outlet of Deer Creek to North Fork Non-Project	Diversions into Salt Lake Aqueduct Total	Diversions into Salt Lake Aqueduct CUP
61	1954	10	5,949	912	7,762	0	15,707	8,526	2,235	4,947	6,100	0
62	1954	11	5,195	1,863	7,884	0	6,200	5,345	195	660	4,490	0
63	1954	12	5,513	1,518	7,208	0	6,149	5,059	644	445	3,851	0
64	1955	1	7,936	64	5,969	0	6,149	5,596	511	41	4,094	0
65	1955	2	6,957	185	4,662	0	5,554	4,934	575	45	3,461	0
66	1955	3	7,457	343	6,782	0	6,149	5,891	206	51	3,710	0
67	1955	4	6,863	488	3,749	86	11,387	8,412	2,796	178	1,150	0
68	1955	5	7,983	3,338	5,773	5,613	36,157	10,693	4,637	20,826	2,530	0
69	1955	6	7,245	13,279	8,094	2,567	39,710	11,368	4,055	24,287	7,700	0
70	1955	7	16,589	2,585	6,757	905	41,163	17,863	7,845	15,455	7,290	0
71	1955	8	15,369	2,003	7,880	0	35,850	16,163	8,112	11,575	7,700	0
72	1955	9	11,199	1,071	8,776	292	29,166	14,763	3,624	10,779	7,710	0
73	1955	10	4,940	813	8,229	0	11,605	7,507	0	4,098	299	0
74	1955	11	3,621	3,008	8,732	0	5,950	3,905	202	1,844	2,340	0
75	1955	12	5,419	1,543	8,962	0	6,149	5,443	705	0	1,502	0
76	1956	1	6,466	762	7,207	0	6,149	4,430	1,606	112	2,870	0
77	1956	2	6,347	527	5,452	0	5,752	4,695	1,012	44	2,738	0
78	1956	3	5,547	1,336	5,727	0	6,149	4,088	1,989	71	1,926	0
79	1956	4	5,381	2,046	3,580	1,030	16,446	7,475	2,796	6,175	1,150	0
80	1956	5	4,852	8,807	4,770	4,687	36,048	7,901	4,636	23,511	2,530	0
81	1956	6	6,534	34,330	8,324	3,128	40,715	10,381	4,223	26,111	7,700	0
82	1956	7	14,082	27,213	12,232	1,340	37,007	16,576	6,950	13,480	7,290	0
83	1956	8	13,233	13,257	15,210	0	33,078	15,076	7,165	10,837	7,700	0
84	1956	9	10,935	1,428	11,281	78	28,904	14,676	4,709	9,519	7,710	0
85	1956	10	4,675	950	6,950	0	11,595	6,479	2,235	2,881	6,100	0
86	1956	11	3,886	2,701	9,044	0	6,532	4,205	48	2,280	4,490	0
87	1956	12	5,075	1,703	7,729	0	6,149	5,353	286	509	4,333	0
88	1957	1	6,778	615	7,132	0	6,149	5,084	1,011	53	3,595	0
89	1957	2	6,057	711	7,179	0	5,554	4,467	1,021	66	3,159	0
90	1957	3	6,596	634	5,135	0	6,149	5,277	795	76	3,121	0
91	1957	4	4,794	2,244	3,519	826	9,479	6,066	2,797	616	1,150	0
92	1957	5	5,204	2,206	7,943	5,285	27,391	8,235	4,659	14,497	2,530	0
93	1957	6	4,499	51,694	17,253	1,529	54,667	7,259	18,904	28,504	7,700	0
94	1957	7	9,791	15,362	20,116	3,716	38,104	11,959	7,627	18,519	7,290	0
95	1957	8	11,114	5,613	13,342	1,963	32,660	12,959	7,883	11,818	7,700	0
96	1957	9	6,792	4,241	9,439	344	27,010	9,559	5,225	12,226	7,710	0
97	1957	10	4,912	985	7,915	0	12,755	6,748	2,235	3,771	6,100	0
98	1957	11	4,868	3,375	7,823	0	6,200	5,325	48	828	4,490	0
99	1957	12	3,927	3,191	7,258	0	6,149	4,051	181	1,916	4,375	0
100	1958	1	6,799	562	4,841	0	6,149	5,207	848	93	3,757	0
101	1958	2	4,915	1,845	6,334	0	5,554	3,372	1,335	847	2,700	0
102	1958	3	5,308	1,506	7,363	0	6,149	4,017	2,005	126	1,910	0
103	1958	4	2,991	3,996	7,159	0	9,609	4,766	2,797	2,046	1,150	0
104	1958	5	3,352	34,905	3,783	3,463	46,169	4,479	28,411	13,278	2,530	0
105	1958	6	6,379	21,509	6,745	3,509	45,576	11,840	9,726	24,011	7,700	0
106	1958	7	12,148	6,463	8,849	1,220	35,784	14,459	7,502	13,823	7,290	0
107	1958	8	12,426	3,788	8,816	0	32,815	14,159	7,753	10,903	7,700	0
108	1958	9	7,321	2,315	10,087	258	25,846	9,959	5,131	10,756	7,710	0
109	1958	10	5,353	905	7,792	0	12,497	8,081	2,235	2,181	6,100	0
110	1958	11	5,115	1,922	8,063	0	6,200	5,400	101	699	4,490	0
111	1958	12	5,078	1,743	6,795	0	6,149	4,957	805	387	3,690	0
112	1959	1	7,616	44	5,794	0	6,149	5,376	708	64	3,897	0
113	1959	2	6,476	291	5,635	0	5,554	4,642	868	44	3,167	0
114	1959	3	7,127	349	5,571	0	6,149	5,679	372	97	3,544	0
115	1959	4	6,849	2,465	2,414	1,392	18,083	9,075	2,796	6,211	1,150	0
116	1959	5	9,347	4,117	6,228	6,069	38,063	12,537	4,729	20,798	2,530	0
117	1959	6	7,939	17,983	5,776	3,204	41,257	12,626	4,141	24,491	7,700	0
118	1959	7	16,936	1,266	7,570	672	35,803	19,025	7,752	9,026	7,290	0
119	1959	8	15,525	1,994	7,096	0	33,487	17,125	8,014	8,348	7,700	0
120	1959	9	8,529	1,218	8,358	272	27,608	12,225	5,318	10,064	7,710	0

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			29	30	31	32	33	34	35	36	37	38
Table Number:			P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number	Year	Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
61	1954	10	6,100	15,998	8,526	2,235	5,237	8,144	768	1,121	6,255	9,598
62	1954	11	4,490	6,753	5,345	195	1,213	2,455	1,440	0	1,015	4,995
63	1954	12	3,851	6,578	5,059	644	874	2,021	1,537	0	484	5,344
64	1955	1	4,094	6,481	5,596	511	373	2,043	1,538	0	505	5,511
65	1955	2	3,461	5,947	4,934	575	438	1,760	1,389	0	371	4,874
66	1955	3	3,710	6,418	5,891	206	320	2,059	1,538	0	522	5,506
67	1955	4	1,150	12,423	8,412	2,796	1,214	6,729	2,875	2,361	1,492	6,935
68	1955	5	2,530	39,222	10,693	4,637	23,891	29,656	1,412	3,311	24,933	20,182
69	1955	6	7,700	42,965	11,368	4,055	27,542	30,668	0	2,048	28,619	25,514
70	1955	7	7,290	42,487	17,863	7,845	16,779	22,245	0	4,779	17,465	27,668
71	1955	8	7,700	36,601	16,163	8,112	12,326	17,532	0	4,085	13,447	23,502
72	1955	9	7,710	29,790	14,763	3,624	11,403	14,440	0	1,937	12,504	19,746
73	1955	10	299	12,015	7,507	0	4,508	5,457	0	0	5,457	8,234
74	1955	11	2,340	6,666	3,905	202	2,560	3,082	0	0	3,082	4,902
75	1955	12	1,502	7,018	5,443	705	870	4,167	2,758	0	1,409	4,705
76	1956	1	2,870	6,589	4,430	1,606	552	1,966	1,538	0	428	5,406
77	1956	2	2,738	6,062	4,695	1,012	354	1,866	1,438	0	428	5,312
78	1956	3	1,926	6,458	4,088	1,989	380	2,078	1,538	0	541	5,689
79	1956	4	1,150	17,856	7,475	2,796	7,585	14,171	2,875	2,361	8,935	7,519
80	1956	5	2,530	39,287	7,901	4,636	26,750	32,393	1,562	3,311	27,520	19,116
81	1956	6	7,700	43,933	10,381	4,223	29,329	31,928	0	2,048	29,880	25,379
82	1956	7	7,290	38,941	16,576	6,950	15,414	20,194	0	3,558	16,636	25,836
83	1956	8	7,700	33,968	15,076	7,165	11,727	16,635	0	3,646	12,988	21,536
84	1956	9	7,710	29,483	14,676	4,709	10,097	13,626	0	2,439	11,187	19,213
85	1956	10	6,100	12,011	6,479	2,235	3,297	5,433	0	1,121	4,312	8,320
86	1956	11	4,490	7,275	4,205	48	3,023	2,952	0	0	2,952	5,048
87	1956	12	4,333	6,756	5,353	286	1,116	2,270	1,668	0	602	4,986
88	1957	1	3,595	6,648	5,084	1,011	552	2,107	1,538	0	569	5,911
89	1957	2	3,159	5,973	4,467	1,021	485	2,117	1,389	0	729	5,320
90	1957	3	3,121	6,494	5,277	795	421	2,025	1,538	0	488	5,395
91	1957	4	1,150	10,170	6,066	2,797	1,307	6,014	2,875	2,361	778	4,935
92	1957	5	2,530	29,543	8,235	4,659	16,649	23,138	1,556	3,311	18,271	15,214
93	1957	6	7,700	55,149	7,259	18,904	28,986	46,060	0	16,898	29,162	20,769
94	1957	7	7,290	41,064	11,959	7,627	21,479	26,559	0	3,877	22,683	24,286
95	1957	8	7,700	34,117	12,959	7,883	13,275	18,679	0	3,979	14,700	20,952
96	1957	9	7,710	28,530	9,559	5,225	13,747	18,235	0	2,678	15,557	17,248
97	1957	10	6,100	13,213	6,748	2,235	4,229	7,521	768	1,121	5,631	7,820
98	1957	11	4,490	7,422	5,325	48	2,050	4,174	1,620	0	2,554	4,548
99	1957	12	4,375	6,736	4,051	181	2,503	2,288	666	0	1,622	4,581
100	1958	1	3,757	6,576	5,207	848	520	1,980	1,538	0	442	5,348
101	1958	2	2,700	5,964	3,372	1,335	1,257	1,958	694	0	1,264	5,235
102	1958	3	1,910	6,508	4,017	2,005	485	2,053	1,572	0	481	5,405
103	1958	4	1,150	10,300	4,766	2,797	2,737	7,580	2,875	2,361	2,343	3,635
104	1958	5	2,530	49,571	4,479	28,411	16,680	44,867	0	27,002	17,865	10,655
105	1958	6	7,700	50,189	11,840	9,726	28,624	39,910	2,380	7,715	29,815	24,481
106	1958	7	7,290	38,473	14,459	7,502	16,512	21,964	0	3,819	18,145	24,303
107	1958	8	7,700	34,332	14,159	7,753	12,420	18,340	0	3,919	14,421	21,974
108	1958	9	7,710	27,376	9,959	5,131	12,287	17,217	0	2,634	14,582	16,892
109	1958	10	6,100	12,807	8,081	2,235	2,491	5,696	768	1,121	3,807	9,153
110	1958	11	4,490	6,862	5,400	101	1,361	2,870	1,595	0	1,275	4,801
111	1958	12	3,690	6,755	4,957	805	993	2,180	1,809	0	371	5,305
112	1959	1	3,897	6,550	5,376	708	465	1,989	1,538	0	451	5,508
113	1959	2	3,167	5,902	4,642	868	392	1,774	1,389	0	385	5,067
114	1959	3	3,544	6,485	5,679	372	433	2,028	1,538	0	490	5,472
115	1959	4	1,150	18,618	9,075	2,796	6,746	12,980	2,875	2,361	7,743	9,718
116	1959	5	2,530	39,259	12,537	4,729	21,994	27,743	1,524	3,311	22,908	20,428
117	1959	6	7,700	43,598	12,626	4,141	26,832	30,180	0	2,048	28,131	26,385
118	1959	7	7,290	37,337	19,025	7,752	10,560	15,608	0	3,935	11,674	26,354
119	1959	8	7,700	34,373	17,125	8,014	9,234	14,541	0	4,040	10,500	23,283
120	1959	9	7,710	28,408	12,225	5,318	10,865	14,766	0	2,721	12,045	18,416

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			39	40	41	42	43	44	45	46	47	48
Table Number:			P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number	Year	Month	Diversions into Olmsted Aqueduct CUP	Diversions into Olmsted Aqueduct Ap 40524	Diversions into Olmsted Aqueduct PRP	Diversions into Olmsted Aqueduct Non-Project	Provo River from Murdock to Interstate15 Total	Provo River from Murdock to Interstate15 CUP	Provo River from Murdock to Interstate15 PRP	Provo River from Murdock to Interstate15 Non-Project	Diversions into Provo Reservoir Canal Total	ULS Water in Provo Reservoir Canal CUP
61	1954	10	7,757	0	1,114	727	6,665	1,069	160	5,436	3,394	2,127
62	1954	11	4,800	895	195	0	2,537	1,440	0	1,097	0	0
63	1954	12	4,700	1,178	644	0	2,084	1,537	0	547	0	0
64	1955	1	5,000	941	511	0	2,092	1,538	0	554	0	0
65	1955	2	4,300	754	575	0	1,817	1,389	0	428	0	0
66	1955	3	5,300	946	206	0	2,099	1,538	0	561	0	0
67	1955	4	6,500	963	435	0	6,476	4,732	80	1,664	2,172	1,815
68	1955	5	9,282	0	1,326	9,575	16,285	6,610	160	9,516	7,789	2,685
69	1955	6	11,367	0	2,007	12,140	11,450	2,122	320	9,009	11,277	4,440
70	1955	7	17,863	0	3,066	6,740	9,068	1,980	640	6,448	12,015	5,040
71	1955	8	16,163	0	4,027	3,312	10,807	1,088	610	9,109	9,652	4,783
72	1955	9	14,763	0	1,688	3,295	9,077	456	480	8,141	6,443	3,600
73	1955	10	7,507	0	0	727	4,556	0	0	4,557	2,433	2,127
74	1955	11	4,700	795	202	0	3,186	0	0	3,186	0	0
75	1955	12	4,000	1,315	705	0	4,297	2,758	0	1,539	0	0
76	1956	1	3,800	907	1,606	0	2,032	1,538	0	494	0	0
77	1956	2	4,300	1,043	1,012	0	1,912	1,438	0	474	0	0
78	1956	3	3,700	1,149	1,989	0	2,125	1,538	0	587	0	0
79	1956	4	4,600	0	435	2,484	9,442	3,585	80	5,777	3,217	1,815
80	1956	5	6,338	0	1,325	11,453	17,229	8,006	160	9,063	8,580	2,685
81	1956	6	10,381	0	2,174	12,823	14,388	4,897	320	9,171	11,565	4,440
82	1956	7	16,576	0	3,392	5,868	11,755	4,034	640	7,081	10,427	5,040
83	1956	8	15,076	0	3,518	2,942	11,183	1,384	610	9,188	9,057	4,783
84	1956	9	14,677	0	2,270	2,267	9,373	613	480	8,280	6,513	3,600
85	1956	10	6,480	0	1,114	727	3,828	301	160	3,368	3,394	2,127
86	1956	11	5,000	795	48	0	3,060	0	0	3,060	0	0
87	1956	12	4,700	1,015	286	0	2,360	1,668	0	692	0	0
88	1957	1	4,900	1,353	1,011	0	2,180	1,538	0	642	0	0
89	1957	2	4,300	1,222	1,021	0	2,179	1,389	0	791	0	0
90	1957	3	4,600	860	795	0	2,077	1,538	0	539	0	0
91	1957	4	4,500	1,309	435	0	5,045	4,086	80	879	2,172	1,815
92	1957	5	6,680	0	1,347	7,187	14,296	7,392	160	6,744	6,785	2,685
93	1957	6	7,259	0	2,007	11,503	30,093	4,761	15,169	10,163	11,009	4,440
94	1957	7	11,959	0	3,750	8,577	14,029	4,541	640	8,848	11,886	5,040
95	1957	8	12,959	0	3,904	4,090	13,634	3,650	610	9,374	9,873	4,783
96	1957	9	9,559	0	2,547	5,142	11,245	2,068	480	8,698	7,962	3,600
97	1957	10	5,980	0	1,114	727	6,063	1,069	160	4,833	3,394	2,127
98	1957	11	4,500	795	48	0	4,346	1,620	0	2,726	0	0
99	1957	12	4,400	1,015	181	0	2,375	666	0	1,709	0	0
100	1958	1	4,500	830	848	0	2,043	1,538	0	505	0	0
101	1958	2	3,900	1,222	1,335	0	2,020	694	0	1,326	0	0
102	1958	3	3,400	955	2,005	0	2,105	1,572	0	533	0	0
103	1958	4	3,200	1,309	435	0	5,715	3,184	80	2,451	2,172	1,815
104	1958	5	4,480	0	1,410	4,766	39,928	5,737	23,851	10,340	5,766	2,685
105	1958	6	9,459	0	2,011	13,011	22,267	7,302	5,986	8,979	11,643	4,440
106	1958	7	14,459	0	3,683	6,161	12,809	3,946	640	8,222	10,812	5,040
107	1958	8	14,159	0	3,834	3,981	13,479	3,631	610	9,238	9,767	4,783
108	1958	9	9,959	0	2,496	4,437	11,717	2,512	480	8,725	7,621	3,600
109	1958	10	7,313	0	1,114	727	4,123	1,069	160	2,894	3,394	2,127
110	1958	11	4,700	895	101	0	2,967	1,595	0	1,372	0	0
111	1958	12	4,500	1,353	805	0	2,272	1,809	0	463	0	0
112	1959	1	4,800	961	708	0	2,049	1,538	0	511	0	0
113	1959	2	4,200	946	868	0	1,825	1,389	0	436	0	0
114	1959	3	5,100	958	372	0	2,078	1,538	0	540	0	0
115	1959	4	6,200	0	435	3,083	7,879	4,318	80	3,481	3,470	1,815
116	1959	5	11,013	0	1,417	7,998	17,528	7,601	160	9,767	7,126	2,685
117	1959	6	12,626	0	2,093	11,666	13,507	4,025	320	9,162	11,078	4,440
118	1959	7	19,025	0	3,817	3,512	9,113	2,495	640	5,978	9,812	5,040
119	1959	8	17,125	0	3,974	2,184	9,436	1,074	610	7,752	9,132	4,783
120	1959	9	12,225	0	2,597	3,593	8,443	701	480	7,262	7,353	3,600

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			49	50	51	52	53	54	55	56	57	58	59
Table Number:			P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
Month Number	Year	Month	Diversions into Provo Reservoir Canal	Diversions into Provo Reservoir Canal	Provo River from Interstate 15 to Utah Lake	Provo River from Interstate 15 to Utah Lake	Provo River from Interstate 15 to Utah Lake	Provo River from Interstate 15 to Utah Lake	PRP Diversion to Provo Bench Canal	June Sucker Releases	June Sucker Releases	June Sucker Releases	75-cfs Target Releases
			PRP	Non-Project	Total	CUP	PRP	Non-Project	PRP	CUP	PRP	Non-Project	Non-Project
61	1954	10	961	306	1,558	1,069	0	97	160	0	0	0	-392
62	1954	11	0	0	2,477	1,440	0	1,037	0	0	0	0	0
63	1954	12	0	0	1,701	1,537	0	163	0	0	0	0	0
64	1955	1	0	0	1,650	1,538	0	112	0	0	0	0	0
65	1955	2	0	0	1,461	1,389	0	72	0	0	0	0	0
66	1955	3	0	0	1,594	1,538	0	56	0	0	0	0	0
67	1955	4	357	0	4,879	4,732	0	81	80	-2,875	-1,924	0	-66
68	1955	5	1,075	4,029	7,308	6,610	0	0	160	0	-2,076	-1,291	-699
69	1955	6	1,728	5,108	2,862	2,122	0	0	320	0	0	-1,581	-741
70	1955	7	4,139	2,836	2,537	1,980	0	0	640	0	0	-935	-558
71	1955	8	3,475	1,394	1,793	1,088	0	95	610	0	0	0	-611
72	1955	9	1,457	1,386	1,081	456	0	77	480	0	0	0	-549
73	1955	10	0	306	1,777	0	0	1,607	0	0	0	0	-171
74	1955	11	0	0	3,320	0	0	3,320	0	0	0	0	0
75	1955	12	0	0	4,147	2,758	0	1,389	0	0	0	0	0
76	1956	1	0	0	1,689	1,538	0	152	0	0	0	0	0
77	1956	2	0	0	1,535	1,438	0	97	0	0	0	0	0
78	1956	3	0	0	1,634	1,538	0	97	0	0	0	0	0
79	1956	4	357	1,045	4,879	3,585	0	891	80	-2,875	-1,924	0	-404
80	1956	5	1,075	4,819	8,703	8,006	0	0	160	0	-2,076	-1,496	-697
81	1956	6	1,728	5,396	5,643	4,897	0	0	320	0	0	-1,656	-746
82	1956	7	2,918	2,469	4,611	4,034	0	0	640	0	0	-885	-578
83	1956	8	3,036	1,238	2,083	1,384	0	98	610	0	0	0	-600
84	1956	9	1,959	954	1,256	613	0	101	480	0	0	0	-54[illegible]
85	1956	10	961	306	1,291	301	0	930	160	0	0	0	-[illegible]
86	1956	11	0	0	3,234	0	0	3,234	0	0	0	0	0
87	1956	12	0	0	2,098	1,668	0	430	0	0	0	0	0
88	1957	1	0	0	1,836	1,538	0	298	0	0	0	0	0
89	1957	2	0	0	1,854	1,389	0	465	0	0	0	0	0
90	1957	3	0	0	1,612	1,538	0	74	0	0	0	0	0
91	1957	4	357	0	4,879	4,086	0	793	80	-2,875	-1,924	0	0
92	1957	5	1,075	3,024	7,707	7,392	0	0	160	0	-2,076	-888	-316
93	1957	6	1,728	4,841	20,368	4,761	14,849	0	320	0	0	-1,520	-758
94	1957	7	3,237	3,609	5,250	4,541	0	0	640	0	0	-1,189	-710
95	1957	8	3,369	1,721	4,381	3,650	0	85	610	0	0	0	-646
96	1957	9	2,198	2,164	2,666	2,068	0	34	480	0	0	0	-565
97	1957	10	961	306	1,649	1,069	0	169	160	0	0	0	-411
98	1957	11	0	0	4,974	1,620	0	3,354	0	0	0	0	0
99	1957	12	0	0	2,119	666	0	1,453	0	0	0	0	0
100	1958	1	0	0	1,690	1,538	0	153	0	0	0	0	0
101	1958	2	0	0	1,702	694	0	1,008	0	0	0	0	0
102	1958	3	0	0	1,659	1,572	0	87	0	0	0	0	0
103	1958	4	357	0	4,879	3,184	0	1,695	80	-2,875	-1,924	0	0
104	1958	5	1,075	2,006	30,149	5,737	23,691	0	160	0	-2,076	-789	-721
105	1958	6	1,728	5,475	13,734	7,302	5,666	8	320	0	0	-1,680	-758
106	1958	7	3,179	2,593	4,611	3,946	0	0	640	0	0	-915	-665
107	1958	8	3,309	1,675	4,318	3,631	0	77	610	0	0	0	-610
108	1958	9	2,154	1,867	3,127	2,512	0	51	480	0	0	0	-563
109	1958	10	961	306	1,261	1,069	0	29	160	0	0	0	-163
110	1958	11	0	0	2,954	1,595	0	1,359	0	0	0	0	0
111	1958	12	0	0	1,983	1,809	0	174	0	0	0	0	0
112	1959	1	0	0	1,658	1,538	0	120	0	0	0	0	0
113	1959	2	0	0	1,463	1,389	0	74	0	0	0	0	0
114	1959	3	0	0	1,606	1,538	0	68	0	0	0	0	0
115	1959	4	357	1,297	4,879	4,318	0	476	80	-2,875	-1,924	0	-85
116	1959	5	1,075	3,365	8,313	7,601	0	0	160	0	-2,076	-1,129	-71[illegible]
117	1959	6	1,728	4,909	4,768	4,025	0	0	320	0	0	-1,531	-7[illegible]
118	1959	7	3,295	1,478	2,984	2,495	0	0	640	0	0	-565	-48[illegible]
119	1959	8	3,430	919	1,712	1,074	0	102	610	0	0	0	-536
120	1959	9	2,241	1,512	1,264	701	0	57	480	0	0	0	-507

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:				1	2	3	4	5	6	7	8
Table Number:			P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number	Year	Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
121	1959	10	1,443	10,160	6,257	1,235	2,669	9,931	6,086	1,235	2,611
122	1959	11	5,396	9,060	3,621	3,951	1,488	9,060	3,621	3,951	1,488
123	1959	12	1,845	8,462	6,815	544	1,103	8,462	6,815	544	1,103
124	1960	1	513	8,311	7,616	44	651	8,311	7,616	44	651
125	1960	2	525	7,728	6,472	448	807	7,728	6,472	448	807
126	1960	3	620	7,980	6,015	1,044	921	7,980	6,015	1,044	921
127	1960	4	5,522	8,641	3,528	3,910	1,203	8,585	3,528	3,910	1,147
128	1960	5	20,244	25,611	7,103	4,074	14,434	24,984	7,063	4,074	13,847
129	1960	6	13,099	38,530	7,955	16,422	14,153	37,085	7,407	16,422	13,255
130	1960	7	1,237	36,968	19,121	9,041	8,807	34,449	18,004	9,041	7,404
131	1960	8	0	31,960	25,923	2,246	3,791	29,938	24,668	2,246	3,024
132	1960	9	0	21,829	19,206	1,067	1,556	20,956	18,746	1,067	1,143
133	1960	10	446	9,284	4,789	2,590	1,904	9,055	4,619	2,590	1,846
134	1960	11	3,471	8,926	7,126	1,064	735	8,926	7,126	1,064	735
135	1960	12	2,470	8,418	7,137	516	765	8,418	7,137	516	765
136	1961	1	363	8,431	7,608	48	774	8,431	7,608	48	774
137	1961	2	299	7,575	6,845	61	669	7,575	6,845	61	669
138	1961	3	418	8,170	7,606	49	514	8,170	7,606	49	514
139	1961	4	812	9,192	7,438	0	1,754	9,136	7,438	0	1,698
140	1961	5	8,795	18,467	10,414	0	8,053	17,855	10,388	0	7,467
141	1961	6	5,282	25,134	7,497	10,043	7,594	23,469	6,773	10,043	6,653
142	1961	7	0	28,561	21,109	732	6,721	26,576	19,849	732	5,995
143	1961	8	0	25,989	22,439	141	3,409	24,340	21,371	141	2,828
144	1961	9	2,379	15,765	10,322	2,175	3,268	14,994	9,980	2,175	2,839
145	1961	10	2,521	9,498	6,504	1,086	1,908	9,269	6,333	1,086	1,850
146	1961	11	4,960	8,682	5,801	1,800	1,081	8,682	5,801	1,800	1,081
147	1961	12	2,026	8,776	6,425	803	1,548	8,776	6,425	803	1,548
148	1962	1	1,305	8,691	7,613	46	1,032	8,691	7,613	46	1,032
149	1962	2	1,126	7,023	6,351	369	303	7,023	6,351	369	303
150	1962	3	4,280	8,103	7,353	208	542	8,103	7,353	208	542
151	1962	4	21,571	8,832	3,412	2,664	2,756	8,757	3,412	2,664	2,681
152	1962	5	44,850	21,498	4,852	5,505	11,141	19,816	4,852	5,505	9,459
153	1962	6	52,407	42,086	6,728	21,204	14,155	40,201	6,386	21,204	12,611
154	1962	7	5,013	67,784	11,593	34,333	21,858	64,260	9,662	34,333	20,265
155	1962	8	44	55,111	16,671	23,245	15,195	52,323	15,140	23,245	13,939
156	1962	9	0	30,211	14,491	9,220	6,500	28,828	13,829	9,220	5,778
157	1962	10	0	10,069	5,572	1,479	3,017	9,840	5,401	1,479	2,959
158	1962	11	3,271	8,238	3,886	2,424	1,928	8,238	3,886	2,424	1,928
159	1962	12	1,394	8,793	5,689	1,248	1,856	8,793	5,689	1,248	1,856
160	1963	1	190	8,655	7,131	465	1,059	8,655	7,131	465	1,059
161	1963	2	331	7,538	6,145	797	596	7,538	6,145	797	596
162	1963	3	340	8,259	6,882	502	875	8,259	6,882	502	875
163	1963	4	5,874	8,729	7,438	0	1,291	8,581	7,438	0	1,143
164	1963	5	25,372	27,610	5,933	10,154	11,523	25,852	5,602	10,154	10,096
165	1963	6	23,851	48,381	8,422	24,237	15,722	45,829	7,503	24,237	14,089
166	1963	7	2,497	55,036	15,636	23,588	15,812	51,995	14,212	23,588	14,195
167	1963	8	377	33,332	19,087	7,318	6,927	31,060	17,837	7,318	5,905
168	1963	9	1,077	16,605	12,164	1,564	2,877	15,394	11,622	1,564	2,208
169	1963	10	722	10,079	5,368	1,336	3,375	9,850	5,197	1,336	3,317
170	1963	11	4,019	8,229	3,621	2,952	1,657	8,229	3,621	2,952	1,657
171	1963	12	1,622	8,629	6,107	986	1,536	8,629	6,107	986	1,536
172	1964	1	478	8,653	6,875	506	1,271	8,653	6,875	506	1,271
173	1964	2	369	7,844	6,195	621	1,027	7,844	6,195	621	1,027
174	1964	3	420	8,355	6,648	649	1,059	8,355	6,648	649	1,059
175	1964	4	555	8,005	7,305	0	699	7,949	7,305	0	643
176	1964	5	51,864	17,279	3,470	4,638	9,171	15,998	3,470	4,638	7,889
177	1964	6	66,950	40,701	5,694	18,043	16,965	38,617	5,352	18,043	15,223
178	1964	7	5,628	70,249	11,865	35,473	22,911	66,416	10,009	35,473	20,935
179	1964	8	986	56,287	17,625	23,157	15,506	52,986	16,024	23,157	13,805
180	1964	9	123	29,890	15,391	8,525	5,974	28,305	14,724	8,525	5,056

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			9	10	11	12	13	14	15	16	17	18
Table Number:			P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number	Year	Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions in Reach VCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
121	1959	10	229	171	58	7,686	5,088	1,049	1,330	1,235	1,363	14,141
122	1959	11	0	0	0	8,403	3,621	0	0	3,951	831	15,363
123	1959	12	0	0	0	7,686	6,815	0	618	544	327	12,349
124	1960	1	0	0	0	7,686	7,616	0	498	44	26	13,196
125	1960	2	0	0	0	7,190	6,472	0	428	448	269	11,924
126	1960	3	0	0	0	7,686	6,015	0	234	1,044	627	13,647
127	1960	4	56	0	56	7,438	3,528	0	71	3,910	0	9,751
128	1960	5	627	39	587	16,687	7,057	0	147	4,074	5,557	19,646
129	1960	6	1,445	547	898	25,972	7,305	11	142	16,422	2,246	32,288
130	1960	7	2,519	1,117	1,403	28,023	16,880	1,013	147	9,041	2,103	36,155
131	1960	8	2,022	1,256	766	24,203	21,387	3,324	147	2,246	570	27,920
132	1960	9	873	460	413	17,035	15,558	3,370	143	1,067	410	22,956
133	1960	10	229	171	58	7,782	3,942	702	73	2,590	1,250	13,083
134	1960	11	0	0	0	8,191	7,126	0	0	1,064	0	14,276
135	1960	12	0	0	0	7,686	7,137	0	183	516	33	13,192
136	1961	1	0	0	0	7,686	7,608	0	593	48	29	12,438
137	1961	2	0	0	0	6,942	6,845	0	504	61	36	11,434
138	1961	3	0	0	0	7,686	7,606	0	385	49	30	12,575
139	1961	4	56	0	56	7,438	7,438	0	668	0	0	9,876
140	1961	5	612	27	586	12,071	10,383	0	147	0	1,688	15,915
141	1961	6	1,664	723	941	16,835	6,542	118	142	10,043	250	22,543
142	1961	7	1,985	1,260	726	19,403	18,101	1,662	147	732	570	24,230
143	1961	8	1,648	1,068	581	18,124	17,413	4,093	147	141	570	24,047
144	1961	9	771	342	429	10,348	7,762	2,340	143	2,175	410	16,052
145	1961	10	229	171	58	7,686	6,059	266	796	1,086	542	14,352
146	1961	11	0	0	0	8,757	5,801	0	0	1,800	1,156	14,503
147	1961	12	0	0	0	7,686	6,425	0	849	803	458	12,198
148	1962	1	0	0	0	7,686	7,613	0	800	46	27	12,212
149	1962	2	0	0	0	6,942	6,351	0	64	369	222	14,170
150	1962	3	0	0	0	7,686	7,353	0	332	208	125	12,447
151	1962	4	75	0	75	7,438	3,412	0	819	2,664	1,362	13,549
152	1962	5	1,682	0	1,682	10,533	4,852	0	1,165	5,505	176	16,819
153	1962	6	1,886	342	1,544	28,651	6,328	0	811	21,204	1,119	33,960
154	1962	7	3,524	1,932	1,593	53,443	9,218	125	258	34,333	9,892	59,878
155	1962	8	2,788	1,531	1,256	44,262	11,586	3,569	258	23,245	9,432	50,399
156	1962	9	1,383	661	722	24,433	9,978	4,052	254	9,220	5,234	30,799
157	1962	10	229	171	58	8,119	4,587	851	1,491	1,479	2,053	12,838
158	1962	11	0	0	0	7,438	3,886	0	637	2,424	1,128	13,164
159	1962	12	0	0	0	7,700	5,689	0	881	1,248	763	12,374
160	1963	1	0	0	0	7,686	7,131	0	772	465	90	11,913
161	1963	2	0	0	0	6,942	6,145	0	475	797	0	10,894
162	1963	3	0	0	0	7,686	6,882	0	456	502	302	11,407
163	1963	4	148	0	148	7,438	7,438	0	746	0	0	11,393
164	1963	5	1,757	331	1,427	16,761	5,546	0	788	10,154	1,062	21,029
165	1963	6	2,552	919	1,633	33,821	7,240	116	740	24,237	2,345	38,931
166	1963	7	3,041	1,424	1,617	41,945	13,398	620	258	23,588	4,959	48,304
167	1963	8	2,272	1,250	1,022	24,145	14,082	3,839	258	7,318	2,745	29,307
168	1963	9	1,211	542	669	10,270	8,292	3,509	254	1,564	414	17,418
169	1963	10	229	171	58	7,686	4,763	439	1,844	1,336	1,586	13,034
170	1963	11	0	0	0	7,472	3,621	0	603	2,952	900	15,480
171	1963	12	0	0	0	7,686	6,107	0	751	986	593	13,624
172	1964	1	0	0	0	7,686	6,875	0	770	506	304	12,036
173	1964	2	0	0	0	7,190	6,195	0	521	621	373	10,643
174	1964	3	0	0	0	7,686	6,648	0	533	649	390	10,772
175	1964	4	56	0	56	7,438	7,305	0	451	0	132	13,125
176	1964	5	1,282	0	1,282	8,268	3,470	0	659	4,638	160	10,985
177	1964	6	2,084	342	1,742	26,378	5,294	0	897	18,043	3,042	29,093
178	1964	7	3,833	1,857	1,976	54,029	9,304	422	258	35,473	9,252	61,020
179	1964	8	3,302	1,601	1,701	43,748	11,068	5,075	258	23,157	9,524	50,406
180	1964	9	1,585	666	918	23,500	9,624	5,404	254	8,525	5,351	30,341

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			19	20	21	22	23	24	25	26	27	28
Table Number:			P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number	Year	Month	Provo River from Snake Creek to Deer Creek Reservoir CUP	Provo River from Snake Creek to Deer Creek Reservoir PRP	Provo River from Snake Creek to Deer Creek Reservoir Non-Project	CUP Return Flow Gains above Deer Creek CUP	Provo River from Outlet of Deer Creek to North Fork Total	Provo River from Outlet of Deer Creek to North Fork CUP	Provo River from Outlet of Deer Creek to North Fork PRP	Provo River from Outlet of Deer Creek to North Fork Non-Project	Diversions into Salt Lake Aqueduct Total	Diversions into Salt Lake Aqueduct CUP
121	1959	10	5,088	1,235	7,818	0	12,954	7,781	2,235	2,938	6,100	0
122	1959	11	3,621	3,951	7,791	0	5,950	3,805	203	1,942	4,410	0
123	1959	12	6,815	544	4,990	0	6,149	5,626	451	71	4,061	0
124	1960	1	7,616	44	5,536	0	6,149	5,399	671	78	3,934	0
125	1960	2	6,472	448	5,003	0	5,752	4,737	972	42	2,924	0
126	1960	3	6,015	1,044	6,588	0	6,149	4,419	1,619	110	2,296	0
127	1960	4	3,528	3,910	2,313	2,760	15,275	5,275	2,796	7,204	1,150	0
128	1960	5	7,057	4,074	8,515	8,355	35,510	9,450	4,648	21,412	2,530	0
129	1960	6	7,305	16,422	8,561	3,818	39,125	12,226	4,100	22,800	7,700	0
130	1960	7	16,880	9,041	10,235	0	47,260	19,325	8,126	19,809	7,290	0
131	1960	8	21,387	2,246	4,287	0	37,128	23,925	8,406	4,796	7,700	0
132	1960	9	15,558	1,067	6,330	275	31,599	19,625	5,600	6,374	7,710	0
133	1960	10	3,942	2,590	6,551	0	11,417	6,181	0	5,235	1,469	0
134	1960	11	7,126	1,064	6,085	0	6,130	5,979	45	106	3,010	0
135	1960	12	7,137	516	5,540	0	6,149	5,290	814	44	1,601	0
136	1961	1	7,608	48	4,782	0	6,200	6,153	5	42	321	0
137	1961	2	6,845	61	4,528	0	5,554	5,255	266	33	1	0
138	1961	3	7,606	49	4,919	0	7,523	7,424	5	93	349	0
139	1961	4	7,438	0	2,438	1,781	17,230	12,375	2,025	2,829	698	0
140	1961	5	10,383	0	5,531	5,531	30,995	13,825	4,652	12,518	2,530	0
141	1961	6	6,542	10,043	5,958	0	19,426	9,726	4,138	5,562	7,700	0
142	1961	7	18,101	732	5,397	0	22,856	19,725	0	3,131	910	0
143	1961	8	17,413	141	6,492	0	22,956	18,725	0	4,231	3	0
144	1961	9	7,762	2,175	6,115	852	15,920	9,925	0	5,995	2,381	0
145	1961	10	6,059	1,086	7,207	0	12,315	10,018	0	2,298	3,544	0
146	1961	11	5,801	1,800	6,902	0	6,665	6,409	107	149	3,975	0
147	1961	12	6,425	803	4,970	0	6,518	6,451	6	61	1,956	0
148	1962	1	7,613	46	4,554	0	6,297	6,229	6	63	1,244	0
149	1962	2	6,351	369	7,449	0	5,554	4,800	642	112	432	0
150	1962	3	7,353	208	4,887	0	6,201	6,081	6	114	3,910	0
151	1962	4	3,412	2,664	7,473	399	6,200	4,436	872	892	1,150	0
152	1962	5	4,852	5,505	6,462	5,657	34,097	8,066	6,537	19,494	2,530	0
153	1962	6	6,328	21,204	6,429	3,817	36,235	9,252	4,161	22,822	7,700	0
154	1962	7	9,218	34,333	16,326	2,977	34,505	11,747	8,001	14,757	7,290	0
155	1962	8	11,586	23,245	15,568	641	32,085	13,747	8,275	10,062	7,700	0
156	1962	9	9,978	9,220	11,600	221	27,508	13,047	5,506	8,955	7,710	0
157	1962	10	4,587	1,479	6,772	0	12,841	6,211	2,235	4,395	6,100	0
158	1962	11	3,886	2,424	6,855	0	7,334	4,105	48	3,182	4,490	0
159	1962	12	5,689	1,248	5,437	0	6,149	5,649	424	75	4,164	0
160	1963	1	7,131	465	4,317	0	6,149	5,284	787	77	3,818	0
161	1963	2	6,145	797	3,952	0	5,554	4,467	949	138	3,087	0
162	1963	3	6,882	502	4,022	0	6,149	5,602	442	104	3,474	0
163	1963	4	7,438	0	3,955	84	14,228	10,275	2,796	1,157	1,150	0
164	1963	5	5,546	10,154	5,330	5,170	36,662	8,515	4,689	23,458	2,530	0
165	1963	6	7,240	24,237	7,454	3,855	38,978	11,415	4,058	23,506	7,700	0
166	1963	7	13,398	23,588	11,318	984	38,338	15,710	7,658	14,969	7,290	0
167	1963	8	14,082	7,318	7,907	0	32,689	16,010	7,916	8,762	7,700	0
168	1963	9	8,292	1,564	7,563	1,293	26,950	11,510	5,248	10,192	7,710	0
169	1963	10	4,763	1,336	6,934	0	16,916	7,026	2,235	7,656	6,100	0
170	1963	11	3,621	2,952	8,907	0	9,651	3,805	99	5,747	4,490	0
171	1963	12	6,107	986	6,531	0	6,200	5,845	6	349	4,490	0
172	1964	1	6,875	506	4,654	0	6,149	4,994	1,118	36	3,487	0
173	1964	2	6,195	621	3,826	0	5,752	4,623	1,119	9	2,777	0
174	1964	3	6,648	649	3,475	0	6,149	5,336	786	26	3,129	0
175	1964	4	7,305	0	5,820	0	12,211	9,224	2,796	190	1,150	0
176	1964	5	3,470	4,638	2,877	2,478	23,471	6,290	4,613	12,567	2,530	0
177	1964	6	5,294	18,043	5,757	3,904	33,596	9,180	4,170	20,247	7,700	0
178	1964	7	9,304	35,473	16,243	3,027	36,969	11,976	7,783	17,210	7,290	0
179	1964	8	11,068	23,157	16,182	350	34,118	13,976	8,047	12,096	7,700	0
180	1964	9	9,624	8,525	12,192	342	29,727	13,876	5,342	10,509	7,710	0

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			29	30	31	32	33	34	35	36	37	38
Table Number:			P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number	Year	Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
121	1959	10	6,100	13,451	7,781	2,235	3,435	6,449	768	1,121	4,559	8,679
122	1959	11	4,410	6,391	3,805	203	2,383	2,486	0	0	2,485	4,903
123	1959	12	4,061	6,582	5,626	451	504	1,664	1,538	0	127	5,551
124	1960	1	3,934	6,596	5,399	671	525	1,965	1,538	0	427	5,471
125	1960	2	2,924	6,102	4,737	972	392	1,837	1,438	0	399	5,172
126	1960	3	2,296	6,490	4,419	1,619	451	2,042	1,538	0	504	5,419
127	1960	4	1,150	16,448	5,275	2,796	8,377	14,731	2,875	2,361	9,495	4,086
128	1960	5	2,530	38,587	9,450	4,648	24,489	29,892	1,238	3,311	25,343	19,506
129	1960	6	7,700	41,965	12,226	4,100	25,640	28,487	0	2,048	26,439	25,234
130	1960	7	7,290	48,729	19,325	8,126	21,278	26,275	0	4,108	22,166	24,657
131	1960	8	7,700	37,812	23,925	8,406	5,481	12,403	0	5,934	6,469	27,668
132	1960	9	7,710	32,202	19,625	5,600	6,977	10,785	0	2,852	7,934	24,308
133	1960	10	1,469	11,808	6,181	0	5,627	7,216	768	0	6,447	6,249
134	1960	11	3,010	6,603	5,979	45	579	2,409	1,488	0	921	5,045
135	1960	12	1,601	6,524	5,290	814	419	2,454	1,500	0	954	5,714
136	1961	1	321	6,576	6,153	5	418	2,083	1,454	0	629	5,305
137	1961	2	1	5,860	5,255	266	339	2,163	1,584	0	579	4,765
138	1961	3	349	7,870	7,424	5	440	2,214	1,482	0	732	6,605
139	1961	4	698	17,662	12,375	2,025	3,262	8,950	2,875	2,004	4,071	10,202
140	1961	5	2,530	32,612	13,825	4,652	14,135	19,672	1,113	3,231	15,328	20,005
141	1961	6	7,700	20,167	9,726	4,138	6,303	9,461	0	2,048	7,412	13,526
142	1961	7	910	23,684	19,725	0	3,959	4,520	0	0	4,520	20,487
143	1961	8	3	23,907	18,725	0	5,182	6,438	0	0	6,438	19,946
144	1961	9	2,381	17,435	9,925	0	7,510	9,158	0	0	9,158	12,866
145	1961	10	3,544	12,762	10,018	0	2,744	4,313	768	0	3,544	9,286
146	1961	11	3,975	7,128	6,409	107	612	2,464	1,243	0	1,221	5,407
147	1961	12	1,956	6,900	6,451	6	443	2,358	1,404	0	954	5,506
148	1962	1	1,244	6,719	6,229	6	485	2,169	1,447	0	722	5,306
149	1962	2	432	5,935	4,800	642	493	2,016	1,389	0	627	4,941
150	1962	3	3,910	6,588	6,081	6	501	2,052	1,482	0	570	5,406
151	1962	4	1,150	8,517	4,436	872	3,209	8,438	4,431	437	3,570	2,979
152	1962	5	2,530	37,518	8,066	6,537	22,915	31,380	1,892	5,235	24,253	17,152
153	1962	6	7,700	40,166	9,252	4,161	26,753	29,011	0	2,048	26,963	22,841
154	1962	7	7,290	37,674	11,747	8,001	17,926	23,382	0	4,050	19,332	22,675
155	1962	8	7,700	33,678	13,747	8,275	11,656	17,182	0	4,161	13,021	21,235
156	1962	9	7,710	28,728	13,047	5,506	10,175	14,362	0	2,808	11,554	19,641
157	1962	10	6,100	13,632	6,211	2,235	5,186	7,599	0	1,121	6,478	8,052
158	1962	11	4,490	7,911	4,105	48	3,759	2,546	0	0	2,546	5,048
159	1962	12	4,164	6,780	5,649	424	706	2,324	1,537	0	787	5,524
160	1963	1	3,818	6,726	5,284	787	654	2,245	1,538	0	707	5,887
161	1963	2	3,087	6,074	4,467	949	658	2,493	1,389	0	1,105	5,249
162	1963	3	3,474	6,526	5,602	442	481	2,192	1,538	0	655	5,742
163	1963	4	1,150	14,767	10,275	2,796	1,696	8,178	2,875	2,361	2,942	9,858
164	1963	5	2,530	39,200	8,515	4,689	25,996	32,379	1,560	3,311	27,508	19,715
165	1963	6	7,700	42,356	11,415	4,058	26,884	30,700	0	2,048	28,651	26,150
166	1963	7	7,290	40,223	15,710	7,658	16,854	22,100	0	3,891	18,209	26,949
167	1963	8	7,700	33,631	16,010	7,916	9,705	15,171	0	3,995	11,177	22,308
168	1963	9	7,710	27,985	11,510	5,248	11,226	15,600	0	2,689	12,911	17,987
169	1963	10	6,100	17,980	7,026	2,235	8,720	11,662	0	1,121	10,541	8,829
170	1963	11	4,490	10,307	3,805	99	6,403	6,245	0	0	6,244	4,799
171	1963	12	4,490	6,655	5,845	6	804	1,940	1,359	0	581	5,006
172	1964	1	3,487	6,540	4,994	1,118	427	2,031	1,538	0	493	5,218
173	1964	2	2,777	6,192	4,623	1,119	449	1,986	1,438	0	548	5,319
174	1964	3	3,129	6,460	5,336	786	337	2,137	1,538	0	600	5,286
175	1964	4	1,150	12,585	9,224	2,796	564	6,599	2,875	2,361	1,362	7,135
176	1964	5	2,530	26,018	6,290	4,613	15,114	21,488	1,603	3,311	16,574	11,449
177	1964	6	7,700	37,809	9,180	4,170	24,460	28,217	0	2,048	26,168	22,484
178	1964	7	7,290	39,859	11,976	7,783	20,100	25,613	0	3,949	21,664	24,287
179	1964	8	7,700	35,292	13,976	8,047	13,270	18,842	0	4,055	14,787	22,107
180	1964	9	7,710	30,820	13,876	5,342	11,602	16,095	0	2,732	13,363	20,396

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			39	40	41	42	43	44	45	46	47	48
Table Number:			P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number	Year	Month	Diversions into Olmsted Aqueduct CUP	Diversions into Olmsted Aqueduct Ap 40524	Diversions into Olmsted Aqueduct PRP	Diversions into Olmsted Aqueduct Non-Project	Provo River from Murdock to Interstate15 Total	Provo River from Murdock to Interstate15 CUP	Provo River from Murdock to Interstate15 PRP	Provo River from Murdock to Interstate15 Non-Project	Diversions into Provo Reservoir Canal Total	ULS Water in Provo Reservoir Canal CUP
121	1959	10	7,013	0	1,114	553	5,160	1,069	160	3,931	3,321	2,127
122	1959	11	4,700	895	203	0	2,553	0	0	2,553	0	0
123	1959	12	5,100	1,011	451	0	1,728	1,538	0	191	0	0
124	1960	1	4,800	938	671	0	2,032	1,538	0	494	0	0
125	1960	2	4,200	901	972	0	1,887	1,438	0	449	0	0
126	1960	3	3,800	918	1,619	0	2,093	1,538	0	555	0	0
127	1960	4	2,400	0	435	1,251	11,818	3,654	80	8,084	2,699	1,815
128	1960	5	8,213	0	1,337	9,956	16,342	6,916	160	9,266	7,950	2,685
129	1960	6	12,226	0	2,051	10,957	11,011	2,001	320	8,689	10,779	4,440
130	1960	7	19,325	0	4,018	1,314	25,956	1,086	640	24,231	9,061	5,040
131	1960	8	23,925	0	2,472	1,271	6,647	1,131	610	4,907	10,642	4,783
132	1960	9	19,625	0	2,748	1,935	6,667	742	480	5,445	6,786	3,600
133	1960	10	5,413	0	0	836	6,229	768	0	5,460	2,479	2,127
134	1960	11	5,000	509	45	0	2,479	1,488	0	991	0	0
135	1960	12	4,900	1,109	814	0	2,511	1,500	0	1,011	0	0
136	1961	1	5,300	601	5	0	2,138	1,454	0	684	0	0
137	1961	2	4,500	828	266	0	2,209	1,584	0	625	0	0
138	1961	3	6,600	657	5	0	2,264	1,482	0	782	0	0
139	1961	4	9,500	0	21	681	7,902	4,656	0	3,246	2,102	1,815
140	1961	5	12,712	0	1,421	5,871	10,910	4,975	160	5,776	6,231	2,685
141	1961	6	9,725	0	2,089	1,711	5,778	757	320	4,701	6,888	4,440
142	1961	7	19,725	0	0	762	3,485	170	0	3,315	5,361	5,040
143	1961	8	18,725	0	0	1,221	4,988	0	0	4,988	5,297	4,783
144	1961	9	9,925	0	0	2,941	5,362	0	0	5,363	4,838	3,600
145	1961	10	9,249	0	0	37	4,438	768	0	3,670	2,142	2,127
146	1961	11	5,300	135	107	0	2,533	1,243	0	1,290	0	0
147	1961	12	5,500	453	6	0	2,415	1,404	0	1,011	0	0
148	1962	1	5,300	518	6	0	2,232	1,447	0	785	0	0
149	1962	2	4,300	888	642	0	2,073	1,389	0	684	0	0
150	1962	3	5,400	801	6	0	2,109	1,482	0	627	0	0
151	1962	4	1,100	1,095	435	1,445	6,716	4,711	80	1,924	2,780	1,815
152	1962	5	6,174	0	1,302	9,677	17,003	8,132	160	8,711	7,832	2,685
153	1962	6	9,252	0	2,112	11,477	13,652	4,758	320	8,574	10,998	4,440
154	1962	7	11,747	0	3,951	6,976	13,195	4,422	640	8,134	11,386	5,040
155	1962	8	13,747	0	4,114	3,373	13,039	3,707	610	8,722	9,754	4,783
156	1962	9	13,047	0	2,698	3,896	10,128	3,249	480	6,400	7,568	3,600
157	1962	10	6,211	0	1,114	727	6,188	301	160	5,727	3,394	2,127
158	1962	11	5,000	895	48	0	2,633	0	0	2,633	0	0
159	1962	12	5,100	988	424	0	2,418	1,537	0	881	0	0
160	1963	1	5,100	1,353	787	0	2,329	1,538	0	791	0	0
161	1963	2	4,300	1,222	949	0	2,571	1,389	0	1,183	0	0
162	1963	3	5,300	1,235	442	0	2,249	1,538	0	711	0	0
163	1963	4	7,400	0	435	2,024	4,996	4,767	80	149	3,024	1,815
164	1963	5	6,955	0	1,377	11,382	17,195	7,997	160	9,038	8,550	2,685
165	1963	6	11,415	0	2,009	12,727	12,439	4,022	320	8,097	11,524	4,440
166	1963	7	15,710	0	3,767	7,472	10,776	4,061	640	6,075	11,435	5,040
167	1963	8	16,010	0	3,922	2,376	12,440	3,655	610	8,175	9,168	4,783
168	1963	9	11,511	0	2,559	3,917	10,925	2,728	480	7,717	7,457	3,600
169	1963	10	7,026	0	1,114	690	10,604	539	160	9,905	3,378	2,127
170	1963	11	4,700	895	99	0	6,341	0	0	6,341	0	0
171	1963	12	5,000	514	6	0	4,991	4,344	0	647	0	0
172	1964	1	4,100	643	1,118	0	4,991	4,441	0	550	0	0
173	1964	2	4,200	1,015	1,119	0	2,328	1,716	0	612	0	0
174	1964	3	4,500	701	786	0	2,184	1,538	0	646	0	0
175	1964	4	6,700	351	435	0	6,281	4,772	80	1,429	2,172	1,815
176	1964	5	4,688	0	1,302	5,459	15,368	7,358	160	7,850	6,058	2,685
177	1964	6	9,180	0	2,121	11,182	13,315	4,716	320	8,278	10,874	4,440
178	1964	7	11,976	0	3,834	8,477	12,522	3,902	640	7,980	11,916	5,040
179	1964	8	13,976	0	3,992	4,139	13,631	3,674	610	9,347	9,970	4,783
180	1964	9	13,876	0	2,610	3,911	12,501	3,820	480	8,201	7,498	3,600

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			49	50	51	52	53	54	55	56	57	58	59
Table Number:			P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
Month Number	Year	Month	Diversions into Provo Reservoir Canal PRP	Diversions into Provo Reservoir Canal Non-Project	Provo River from Interstate 15 to Utah Lake Total	Provo River from Interstate 15 to Utah Lake CUP	Provo River from Interstate 15 to Utah Lake PRP	Provo River from Interstate 15 to Utah Lake Non-Project	PRP Diversion to Provo Bench Canal PRP	June Sucker Releases CUP	June Sucker Releases PRP	June Sucker Releases Non-Project	75-cfs Target Releases Non-Project
121	1959	10	961	233	1,374	1,069	0	100	160	0	0	0	-205
122	1959	11	0	0	2,611	0	0	2,611	0	0	0	0	0
123	1959	12	0	0	1,743	1,538	0	206	0	0	0	0	0
124	1960	1	0	0	1,672	1,538	0	134	0	0	0	0	0
125	1960	2	0	0	1,524	1,438	0	86	0	0	0	0	0
126	1960	3	0	0	1,623	1,538	0	85	0	0	0	0	0
127	1960	4	357	527	4,879	3,654	0	744	80	-2,875	-1,924	0	-481
128	1960	5	1,075	4,190	7,657	6,916	0	0	160	0	-2,076	-1,349	-742
129	1960	6	1,728	4,611	2,756	2,001	0	0	320	0	0	-1,460	-755
130	1960	7	3,468	553	26,635	1,086	0	25,539	640	0	0	0	-11
131	1960	8	5,324	535	1,533	1,131	0	66	610	0	0	0	-336
132	1960	9	2,372	814	1,227	742	0	72	480	0	0	0	-413
133	1960	10	0	352	1,174	768	0	76	0	0	0	0	-330
134	1960	11	0	0	1,758	1,488	0	270	0	0	0	0	0
135	1960	12	0	0	1,690	1,500	0	190	0	0	0	0	0
136	1961	1	0	0	1,567	1,454	0	114	0	0	0	0	0
137	1961	2	0	0	1,648	1,584	0	64	0	0	0	0	0
138	1961	3	0	0	1,550	1,482	0	69	0	0	0	0	0
139	1961	4	0	287	4,879	4,656	0	37	0	-2,875	-2,004	0	-186
140	1961	5	1,075	2,471	5,517	4,975	0	0	160	0	-1,996	-837	-543
141	1961	6	1,728	720	4,714	757	0	3,873	320	0	0	-215	-85
142	1961	7	0	321	398	170	0	0	0	0	0	-170	-228
143	1961	8	0	514	433	0	0	74	0	0	0	0	-359
144	1961	9	0	1,238	476	0	0	50	0	0	0	0	-427
145	1961	10	0	15	1,096	768	0	74	0	0	0	0	-25
146	1961	11	0	0	1,550	1,243	0	307	0	0	0	0	0
147	1961	12	0	0	1,550	1,404	0	146	0	0	0	0	0
148	1962	1	0	0	1,550	1,447	0	104	0	0	0	0	0
149	1962	2	0	0	1,469	1,389	0	80	0	0	0	0	0
150	1962	3	0	0	1,550	1,482	0	68	0	0	0	0	0
151	1962	4	357	608	4,879	4,711	0	9	80	-2,506	0	0	-158
152	1962	5	1,075	4,072	8,803	8,132	0	0	160	-369	-4,000	-1,292	-672
153	1962	6	1,728	4,829	5,516	4,758	0	1	320	0	0	-1,517	-758
154	1962	7	3,410	2,936	5,123	4,422	0	0	640	0	0	-1,016	-701
155	1962	8	3,551	1,419	4,427	3,707	0	97	610	0	0	0	-623
156	1962	9	2,328	1,639	3,800	3,249	0	48	480	0	0	0	-504
157	1962	10	961	306	1,561	301	0	838	160	0	0	0	-422
158	1962	11	0	0	2,358	0	0	2,358	0	0	0	0	0
159	1962	12	0	0	1,757	1,537	0	220	0	0	0	0	0
160	1963	1	0	0	1,935	1,538	0	398	0	0	0	0	0
161	1963	2	0	0	2,122	1,389	0	733	0	0	0	0	0
162	1963	3	0	0	1,638	1,538	0	100	0	0	0	0	0
163	1963	4	357	852	4,879	4,767	0	107	80	-2,875	-1,924	0	-6
164	1963	5	1,075	4,790	8,711	7,997	0	0	160	0	-2,076	-1,489	-713
165	1963	6	1,728	5,355	4,768	4,022	0	0	320	0	0	-1,645	-746
166	1963	7	3,251	3,144	4,611	4,061	0	0	640	0	0	-1,010	-551
167	1963	8	3,385	1,000	4,318	3,655	0	104	610	0	0	0	-560
168	1963	9	2,209	1,648	3,330	2,728	0	59	480	0	0	0	-543
169	1963	10	961	290	4,611	539	0	3,583	160	0	0	0	-489
170	1963	11	0	0	6,441	0	0	6,441	0	0	0	0	0
171	1963	12	0	0	4,611	4,344	0	267	0	0	0	0	0
172	1964	1	0	0	4,611	4,441	0	170	0	0	0	0	0
173	1964	2	0	0	1,834	1,716	0	119	0	0	0	0	0
174	1964	3	0	0	1,627	1,538	0	89	0	0	0	0	0
175	1964	4	357	0	4,879	4,772	0	88	80	-2,875	-1,924	0	-20
176	1964	5	1,075	2,297	7,937	7,358	0	0	160	0	-2,076	-807	-580
177	1964	6	1,728	4,706	5,447	4,716	0	0	320	0	0	-1,475	-7
178	1964	7	3,309	3,567	4,611	3,902	0	0	640	0	0	-1,179	-70
179	1964	8	3,445	1,742	4,394	3,674	0	82	610	0	0	0	-639
180	1964	9	2,252	1,646	4,463	3,820	0	68	480	0	0	0	-574

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:				1	2	3	4	5	6	7	8
Table Number:			P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number	Year	Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
181	1964	10	333	9,335	6,193	1,264	1,878	9,106	6,022	1,264	1,820
182	1964	11	3,596	8,514	3,665	3,774	1,076	8,514	3,665	3,774	1,076
183	1964	12	1,594	7,999	4,077	2,732	1,189	7,999	4,077	2,732	1,189
184	1965	1	601	8,333	4,577	2,329	1,427	8,333	4,577	2,329	1,427
185	1965	2	3,459	7,195	4,167	1,947	1,081	7,195	4,167	1,947	1,081
186	1965	3	3,266	8,550	4,750	2,062	1,738	8,550	4,750	2,062	1,738
187	1965	4	8,961	8,102	3,632	2,329	2,141	8,046	3,632	2,329	2,085
188	1965	5	37,501	24,120	4,010	7,447	12,663	22,132	4,010	7,447	10,675
189	1965	6	82,141	67,972	5,854	36,395	25,723	65,529	5,512	36,395	23,622
190	1965	7	17,624	47,275	9,471	21,213	16,591	43,716	7,614	21,213	14,888
191	1965	8	322	24,109	11,840	3,427	8,842	21,018	10,239	3,427	7,353
192	1965	9	4,565	24,697	7,240	10,366	7,091	23,136	6,574	10,366	6,196
193	1965	10	4,208	9,479	4,706	1,706	3,067	9,250	4,535	1,706	3,009
194	1965	11	4,954	8,421	4,343	3,589	490	8,421	4,343	3,589	490
195	1965	12	3,550	9,223	2,810	5,179	1,235	9,223	2,810	5,179	1,235
196	1966	1	3,954	8,858	5,070	2,806	982	8,858	5,070	2,806	982
197	1966	2	3,136	7,539	4,391	2,574	574	7,539	4,391	2,574	574
198	1966	3	4,541	9,223	3,394	5,602	228	9,223	3,394	5,602	228
199	1966	4	14,918	13,355	2,887	5,669	4,799	13,299	2,887	5,669	4,743
200	1966	5	41,366	45,712	4,525	18,253	22,934	43,934	4,492	18,253	21,189
201	1966	6	7,202	26,827	8,310	5,631	12,885	24,558	7,504	5,631	11,423
202	1966	7	687	33,246	18,588	4,773	9,885	30,203	16,990	4,773	8,440
203	1966	8	0	28,127	20,821	3,786	3,520	25,486	19,396	3,786	2,304
204	1966	9	435	17,806	12,549	2,669	2,587	16,490	11,945	2,669	1,876
205	1966	10	751	9,905	5,848	1,360	2,696	9,676	5,677	1,360	2,638
206	1966	11	4,651	7,905	3,976	3,462	467	7,905	3,976	3,462	467
207	1966	12	1,075	8,101	4,871	1,788	1,442	8,101	4,871	1,788	1,442
208	1967	1	556	8,191	6,426	931	835	8,191	6,426	931	835
209	1967	2	446	7,331	5,881	749	702	7,331	5,881	749	702
210	1967	3	479	7,842	5,796	1,380	666	7,842	5,796	1,380	666
211	1967	4	6,090	8,444	6,704	622	1,118	8,388	6,704	622	1,062
212	1967	5	37,968	21,846	5,734	5,029	11,083	20,214	5,734	5,029	9,451
213	1967	6	49,834	46,030	5,604	27,518	12,908	44,154	5,263	27,518	11,374
214	1967	7	10,803	37,496	11,847	2,905	22,744	33,874	9,939	2,905	21,030
215	1967	8	1,874	33,245	15,594	1,344	16,307	30,120	13,990	1,344	14,787
216	1967	9	734	25,755	9,694	3,256	12,805	24,246	9,082	3,256	11,907
217	1967	10	694	10,216	5,717	1,344	3,154	9,987	5,546	1,344	3,096
218	1967	11	4,544	8,926	4,605	3,515	806	8,926	4,605	3,515	806
219	1967	12	4,178	9,223	3,626	3,860	1,737	9,223	3,626	3,860	1,737
220	1968	1	3,704	8,596	6,257	1,456	882	8,596	6,257	1,456	882
221	1968	2	3,398	7,618	5,558	1,694	366	7,618	5,558	1,694	366
222	1968	3	4,086	9,223	4,099	3,501	1,623	9,223	4,099	3,501	1,623
223	1968	4	1,373	8,271	4,667	2,836	768	8,215	4,667	2,836	712
224	1968	5	32,172	21,419	5,116	5,530	10,773	19,918	5,116	5,530	9,272
225	1968	6	39,708	84,362	4,021	58,785	21,555	82,444	3,679	58,785	19,980
226	1968	7	3,902	32,606	12,804	3,660	16,143	28,912	10,947	3,660	14,305
227	1968	8	2,257	25,127	16,329	785	8,013	21,896	14,728	785	6,383
228	1968	9	28	20,039	10,504	4,231	5,304	18,472	9,838	4,231	4,403
229	1968	10	543	10,131	5,397	1,284	3,450	9,902	5,226	1,284	3,392
230	1968	11	4,406	8,926	3,923	4,214	789	8,926	3,923	4,214	789
231	1968	12	4,060	9,223	3,999	4,142	1,082	9,223	3,999	4,142	1,082
232	1969	1	3,656	8,723	5,709	2,804	209	8,723	5,709	2,804	209
233	1969	2	3,165	8,331	4,666	3,001	664	8,331	4,666	3,001	664
234	1969	3	966	8,419	4,877	2,846	695	8,419	4,877	2,846	695
235	1969	4	14,719	8,070	1,613	4,405	2,052	8,014	1,613	4,405	1,996
236	1969	5	17,894	78,915	2,280	64,213	12,421	77,076	2,280	64,213	10,583
237	1969	6	42,352	65,770	5,344	22,797	37,629	63,867	5,002	22,797	36,067
238	1969	7	3,435	27,418	11,875	0	15,543	23,916	9,943	0	13,973
239	1969	8	897	22,115	14,361	0	7,755	18,982	12,701	0	6,281
240	1969	9	195	15,687	9,869	1,536	4,282	14,310	9,336	1,536	3,438

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			9	10	11	12	13	14	15	16	17	18
Table Number:			P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number	Year	Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions in Reach VCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
181	1964	10	229	171	58	7,686	5,000	1,076	644	1,264	1,422	13,244
182	1964	11	0	0	0	7,438	3,665	0	857	3,774	0	13,776
183	1964	12	0	0	0	7,686	4,077	0	249	2,732	876	15,566
184	1965	1	0	0	0	7,686	4,577	0	515	2,329	780	12,461
185	1965	2	0	0	0	6,942	4,167	0	201	1,947	828	12,489
186	1965	3	0	0	0	7,686	4,750	0	688	2,062	874	10,573
187	1965	4	56	0	56	7,438	3,632	0	529	2,329	1,477	12,003
188	1965	5	1,988	0	1,988	11,816	4,010	0	1,552	7,447	359	19,544
189	1965	6	2,443	342	2,101	51,843	5,454	0	1,514	36,395	9,994	61,689
190	1965	7	3,559	1,857	1,703	31,455	7,298	0	347	21,213	2,943	39,725
191	1965	8	3,090	1,601	1,489	11,750	7,946	2,190	258	3,427	377	21,271
192	1965	9	1,561	666	895	16,792	4,732	1,873	254	10,366	1,694	27,077
193	1965	10	229	171	58	7,686	3,324	1,281	1,422	1,706	2,656	15,235
194	1965	11	0	0	0	7,931	4,343	0	0	3,589	0	16,160
195	1965	12	0	0	0	8,595	2,810	0	53	5,179	607	14,887
196	1966	1	0	0	0	7,876	5,070	0	355	2,806	0	13,375
197	1966	2	0	0	0	6,965	4,391	0	288	2,574	0	10,951
198	1966	3	0	0	0	8,995	3,394	0	0	5,602	0	15,867
199	1966	4	56	0	56	12,418	2,887	0	71	5,669	3,862	15,417
200	1966	5	1,778	33	1,745	33,089	4,487	0	1,240	18,253	10,349	36,016
201	1966	6	2,269	807	1,462	15,528	7,360	7	574	5,631	2,537	23,360
202	1966	7	3,043	1,598	1,445	20,163	14,810	2,068	258	4,773	581	26,014
203	1966	8	2,640	1,425	1,216	18,018	13,259	6,388	258	3,786	972	24,138
204	1966	9	1,316	604	712	11,671	7,694	4,496	254	2,669	1,308	19,545
205	1966	10	229	171	58	7,686	5,000	702	1,118	1,360	1,326	14,446
206	1966	11	0	0	0	7,438	3,976	0	0	3,462	0	14,670
207	1966	12	0	0	0	7,686	4,871	0	330	1,788	1,027	14,327
208	1967	1	0	0	0	7,686	6,426	0	402	931	330	13,215
209	1967	2	0	0	0	6,942	5,881	0	310	749	313	11,682
210	1967	3	0	0	0	7,686	5,796	0	124	1,380	510	14,247
211	1967	4	56	0	56	7,438	6,704	0	233	622	112	11,072
212	1967	5	1,632	0	1,632	11,428	5,734	0	1,102	5,029	665	20,630
213	1967	6	1,876	342	1,534	32,722	5,204	0	798	27,518	0	42,182
214	1967	7	3,622	1,908	1,714	21,446	9,615	0	258	2,905	8,927	27,976
215	1967	8	3,124	1,604	1,520	21,016	11,026	2,916	258	1,344	8,645	30,198
216	1967	9	1,509	611	897	18,147	6,263	2,943	254	3,256	8,628	27,457
217	1967	10	229	171	58	7,686	4,471	1,134	1,609	1,344	1,871	13,918
218	1967	11	0	0	0	8,120	4,605	0	0	3,515	0	15,461
219	1967	12	0	0	0	8,570	3,626	0	0	3,860	1,084	14,390
220	1968	1	0	0	0	7,714	6,257	0	413	1,456	0	12,651
221	1968	2	0	0	0	7,252	5,558	0	57	1,694	0	13,043
222	1968	3	0	0	0	8,715	4,099	0	0	3,501	1,115	13,919
223	1968	4	56	0	56	7,503	4,667	0	71	2,836	0	11,976
224	1968	5	1,501	0	1,501	10,646	5,116	0	936	5,530	0	16,263
225	1968	6	1,917	342	1,575	70,457	3,621	0	814	58,785	8,050	78,261
226	1968	7	3,694	1,857	1,838	17,541	10,585	50	258	3,660	3,296	25,897
227	1968	8	3,231	1,601	1,630	12,315	10,232	4,577	258	785	1,297	21,958
228	1968	9	1,567	666	901	11,582	6,175	3,847	254	4,231	1,176	21,034
229	1968	10	229	171	58	7,686	4,295	978	1,938	1,284	2,108	15,240
230	1968	11	0	0	0	8,137	3,923	0	0	4,214	0	17,029
231	1968	12	0	0	0	8,141	3,999	0	0	4,142	0	13,598
232	1969	1	0	0	0	8,514	5,709	0	0	2,804	0	16,708
233	1969	2	0	0	0	7,667	4,666	0	0	3,001	0	13,439
234	1969	3	0	0	0	7,724	4,877	0	553	2,846	0	12,432
235	1969	4	56	0	56	7,438	1,613	0	503	4,405	1,420	15,575
236	1969	5	1,838	0	1,838	66,494	2,280	0	1,362	64,213	0	70,913
237	1969	6	1,903	342	1,561	52,757	4,944	0	1,331	22,797	25,016	61,661
238	1969	7	3,502	1,932	1,570	12,460	9,615	0	258	0	2,845	20,816
239	1969	8	3,133	1,660	1,474	9,776	8,215	4,556	800	0	1,561	20,135
240	1969	9	1,376	533	844	8,290	5,911	3,613	1,959	1,536	843	18,043

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			19	20	21	22	23	24	25	26	27	28
Table Number:			P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number	Year	Month	Provo River from Snake Creek to Deer Creek Reservoir CUP	Provo River from Snake Creek to Deer Creek Reservoir PRP	Provo River from Snake Creek to Deer Creek Reservoir Non-Project	CUP Return Flow Gains above Deer Creek CUP	Provo River from Outlet of Deer Creek to North Fork Total	Provo River from Outlet of Deer Creek to North Fork CUP	Provo River from Outlet of Deer Creek to North Fork PRP	Provo River from Outlet of Deer Creek to North Fork Non-Project	Diversions into Salt Lake Aqueduct Total	Diversions into Salt Lake Aqueduct CUP
181	1964	10	5,000	1,264	6,980	0	14,489	6,848	2,235	5,406	6,100	0
182	1964	11	3,665	3,774	6,338	0	7,042	3,954	48	3,040	4,490	0
183	1964	12	4,077	2,732	8,756	0	7,676	4,222	25	3,429	4,490	0
184	1965	1	4,577	2,329	5,555	0	6,149	3,189	1,650	1,309	3,011	0
185	1965	2	4,167	1,947	6,375	0	5,554	2,324	2,301	928	1,898	0
186	1965	3	4,750	2,062	3,761	0	6,149	3,284	1,488	1,376	2,427	0
187	1965	4	3,632	2,329	6,041	0	9,266	5,692	2,796	777	1,150	0
188	1965	5	4,010	7,447	8,087	5,286	32,635	8,069	4,657	19,909	2,530	0
189	1965	6	5,454	36,395	19,840	3,399	70,601	9,159	39,301	22,141	7,700	0
190	1965	7	7,298	21,213	11,213	3,698	35,620	10,659	8,202	16,759	7,290	0
191	1965	8	7,946	3,427	9,899	1,807	25,951	10,659	5,238	10,054	7,700	0
192	1965	9	4,732	10,366	11,978	1,054	21,689	7,959	3,326	10,404	7,710	0
193	1965	10	3,324	1,706	10,205	0	9,329	4,572	2,235	2,522	6,100	0
194	1965	11	4,343	3,589	8,228	0	5,950	4,795	94	1,061	4,443	0
195	1965	12	2,810	5,179	6,898	0	12,050	2,485	0	9,565	4,490	0
196	1966	1	5,070	2,806	5,499	0	10,889	2,847	65	7,977	4,600	0
197	1966	2	4,391	2,574	3,986	0	9,393	4,493	126	4,774	4,030	0
198	1966	3	3,394	5,602	6,872	0	16,165	3,744	6	12,414	3,910	0
199	1966	4	2,887	5,669	6,861	0	18,391	4,975	2,796	10,619	1,150	0
200	1966	5	4,487	18,253	13,276	6,650	55,947	8,502	17,051	30,394	2,530	0
201	1966	6	7,360	5,631	10,369	2,221	34,409	11,935	4,054	18,421	7,700	0
202	1966	7	14,810	4,773	6,432	488	34,775	18,231	6,909	9,635	7,290	0
203	1966	8	13,259	3,786	7,092	0	31,985	16,031	7,132	8,822	7,700	0
204	1966	9	7,694	2,669	9,183	420	26,357	11,131	4,686	10,540	7,710	0
205	1966	10	5,000	1,360	8,086	0	12,409	6,848	2,235	3,326	6,100	0
206	1966	11	3,976	3,462	7,232	0	6,915	4,308	154	2,454	4,490	0
207	1966	12	4,871	1,788	7,668	0	7,118	5,122	6	1,990	4,490	0
208	1967	1	6,426	931	5,859	0	6,149	4,684	1,338	126	3,268	0
209	1967	2	5,881	749	5,052	0	5,554	4,267	1,201	86	2,834	0
210	1967	3	5,796	1,380	7,071	0	6,149	4,371	1,778	0	2,137	0
211	1967	4	6,704	622	3,746	0	14,802	8,975	2,796	3,031	1,150	0
212	1967	5	5,734	5,029	9,867	5,527	33,562	9,778	4,648	19,136	2,530	0
213	1967	6	5,204	27,518	9,460	2,520	51,578	8,059	23,280	20,240	7,700	0
214	1967	7	9,615	2,905	15,456	3,814	34,549	11,659	7,159	15,732	7,290	0
215	1967	8	11,026	1,344	17,828	1,430	32,499	12,759	7,393	12,347	7,700	0
216	1967	9	6,263	3,256	17,938	1,156	27,142	9,059	4,873	13,210	7,710	0
217	1967	10	4,471	1,344	8,102	0	12,998	6,248	2,235	4,515	6,100	0
218	1967	11	4,605	3,515	7,341	0	6,808	5,020	48	1,740	4,490	0
219	1967	12	3,626	3,860	6,903	0	7,109	3,711	162	3,236	4,490	0
220	1968	1	6,257	1,456	4,938	0	6,149	4,393	1,233	522	3,373	0
221	1968	2	5,558	1,694	5,791	0	5,752	3,901	1,851	0	2,040	0
222	1968	3	4,099	3,501	6,318	0	6,149	2,447	918	2,783	3,003	0
223	1968	4	4,667	2,836	4,473	0	7,976	5,664	872	1,440	1,150	0
224	1968	5	5,116	5,530	5,618	5,441	36,946	11,055	6,552	19,339	2,530	0
225	1968	6	3,621	58,785	15,855	2,922	77,337	6,264	17,513	53,560	7,700	0
226	1968	7	10,585	3,660	11,651	2,249	35,576	12,359	6,658	16,559	7,290	0
227	1968	8	10,232	785	10,941	1,204	30,604	11,659	6,871	12,074	7,700	0
228	1968	9	6,175	4,231	10,629	1,446	26,235	8,759	4,498	12,978	7,710	0
229	1968	10	4,295	1,284	9,662	0	10,401	6,048	2,235	2,118	6,100	0
230	1968	11	3,923	4,214	8,892	0	6,712	4,247	48	2,418	4,490	0
231	1968	12	3,999	4,142	5,456	0	7,119	4,134	0	2,986	4,490	0
232	1969	1	5,709	2,804	8,194	0	6,149	4,272	1,876	0	2,724	0
233	1969	2	4,666	3,001	5,773	0	5,554	2,889	1,713	951	2,552	0
234	1969	3	4,877	2,846	4,709	0	7,206	3,429	66	3,712	3,910	0
235	1969	4	1,613	4,405	9,557	0	21,536	529	851	20,156	1,150	0
236	1969	5	2,280	64,213	4,419	6,521	84,928	3,365	8,573	72,991	2,530	0
237	1969	6	4,944	22,797	33,920	3,144	73,798	7,764	6,407	59,627	7,700	0
238	1969	7	9,615	0	11,201	2,115	38,435	14,734	10,596	13,105	7,290	0
239	1969	8	8,215	0	11,920	1,053	30,570	12,459	6,806	11,306	7,700	0
240	1969	9	5,911	1,536	10,596	857	25,139	8,759	4,451	11,929	7,710	0

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			29	30	31	32	33	34	35	36	37	38
Table Number:			P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number	Year	Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
181	1964	10	6,100	14,759	6,848	2,235	5,676	9,034	768	1,121	7,145	7,455
182	1964	11	4,490	8,449	3,954	48	4,447	4,616	349	0	4,267	4,448
183	1964	12	4,490	8,118	4,222	25	3,871	3,107	1,537	0	1,570	3,725
184	1965	1	3,011	6,722	3,189	1,650	1,882	3,068	1,942	0	1,125	4,250
185	1965	2	1,898	5,966	2,324	2,301	1,340	2,319	1,746	0	573	4,101
186	1965	3	2,427	6,610	3,284	1,488	1,837	2,479	1,538	0	941	4,588
187	1965	4	1,150	9,802	5,692	2,796	1,313	7,413	4,002	2,361	1,050	4,101
188	1965	5	2,530	35,872	8,069	4,657	23,146	30,913	2,089	3,311	25,512	18,922
189	1965	6	7,700	74,617	9,159	39,301	26,157	63,678	0	37,262	26,416	21,896
190	1965	7	7,290	39,558	10,659	8,202	20,697	27,756	0	5,810	21,947	21,956
191	1965	8	7,700	28,906	10,659	5,238	13,009	18,220	0	2,754	15,466	18,646
192	1965	9	7,710	23,927	7,959	3,326	12,642	17,050	0	1,799	15,252	16,056
193	1965	10	6,100	10,548	4,572	2,235	3,741	8,019	768	1,121	6,130	5,645
194	1965	11	4,443	7,268	4,795	94	2,379	5,075	1,890	0	3,185	3,894
195	1965	12	4,490	12,732	2,485	0	10,247	9,611	0	0	9,611	3,800
196	1966	1	4,600	11,400	2,847	65	8,488	9,551	0	0	9,551	4,264
197	1966	2	4,030	9,759	4,493	126	5,140	7,491	1,915	0	5,576	3,926
198	1966	3	3,910	16,689	3,744	6	12,938	14,645	2,098	0	12,547	3,006
199	1966	4	1,150	19,414	4,975	2,796	11,642	18,840	2,875	2,361	13,603	7,134
200	1966	5	2,530	59,502	8,502	17,051	33,949	53,569	2,092	15,751	35,726	21,408
201	1966	6	7,700	36,926	11,935	4,054	20,938	25,195	0	2,048	23,146	22,720
202	1966	7	7,290	36,359	18,231	6,909	11,219	16,582	0	3,544	13,038	24,545
203	1966	8	7,700	32,590	16,031	7,132	9,427	14,915	0	3,631	11,283	22,062
204	1966	9	7,710	27,228	11,131	4,686	11,411	15,873	0	2,428	13,445	17,960
205	1966	10	6,100	13,359	6,848	2,235	4,276	8,416	768	1,121	6,526	7,920
206	1966	11	4,490	7,494	4,308	154	3,033	3,338	503	0	2,835	4,754
207	1966	12	4,490	7,492	5,122	6	2,364	1,991	1,537	0	454	4,606
208	1967	1	3,268	6,562	4,684	1,338	539	2,517	1,538	0	979	5,838
209	1967	2	2,834	5,916	4,267	1,201	448	2,169	1,389	0	781	5,301
210	1967	3	2,137	6,711	4,371	1,778	562	3,219	1,724	0	1,495	5,778
211	1967	4	1,150	15,613	8,975	2,796	3,842	10,795	2,875	2,361	5,558	8,461
212	1967	5	2,530	37,254	9,778	4,648	22,828	30,455	2,299	3,311	24,845	20,199
213	1967	6	7,700	56,130	8,059	23,280	24,792	46,640	0	21,245	25,395	20,597
214	1967	7	7,290	38,555	11,659	7,159	19,738	25,383	0	3,660	21,723	24,063
215	1967	8	7,700	34,388	12,759	7,393	14,236	19,943	0	3,752	16,190	21,903
216	1967	9	7,710	28,686	9,059	4,873	14,754	19,403	0	2,515	16,888	17,986
217	1967	10	6,100	13,354	6,248	2,235	4,871	8,399	768	1,121	6,509	7,320
218	1967	11	4,490	7,591	5,020	48	2,523	3,823	1,515	0	2,308	4,348
219	1967	12	4,490	7,545	3,711	162	3,672	2,565	126	0	2,439	4,762
220	1968	1	3,373	6,692	4,393	1,233	1,065	3,032	1,147	0	1,885	5,833
221	1968	2	2,040	6,273	3,901	1,851	521	3,208	1,566	0	1,642	5,451
222	1968	3	3,003	6,675	2,447	918	3,309	2,682	0	0	2,681	4,718
223	1968	4	1,150	8,982	5,664	872	2,446	5,144	1,873	437	2,834	5,818
224	1968	5	2,530	39,056	11,055	6,552	21,449	33,419	4,575	5,235	23,608	18,600
225	1968	6	7,700	81,785	6,264	17,513	58,008	73,475	0	15,508	57,968	20,968
226	1968	7	7,290	38,753	12,359	6,658	19,736	25,085	0	3,428	21,657	24,099
227	1968	8	7,700	32,688	11,659	6,871	14,158	19,972	0	3,510	16,462	20,522
228	1968	9	7,710	27,598	8,759	4,498	14,340	18,929	0	2,341	16,588	17,485
229	1968	10	6,100	11,333	6,048	2,235	3,050	7,222	768	1,121	5,332	7,120
230	1968	11	4,490	8,150	4,247	48	3,856	5,145	1,442	0	3,703	3,648
231	1968	12	4,490	7,786	4,134	0	3,653	4,219	1,148	0	3,071	4,000
232	1969	1	2,724	6,997	4,272	1,876	848	4,544	1,826	0	2,718	5,676
233	1969	2	2,552	6,117	2,889	1,713	1,514	2,992	612	0	2,381	5,213
234	1969	3	3,910	7,773	3,429	66	4,279	5,647	882	0	4,765	3,965
235	1969	4	1,150	25,771	529	851	24,391	27,078	338	437	26,303	2,299
236	1969	5	2,530	91,645	3,365	8,573	79,708	90,208	0	7,235	82,973	17,007
237	1969	6	7,700	79,019	7,764	6,407	64,848	70,698	0	4,260	66,438	20,813
238	1969	7	7,290	42,922	14,734	10,596	17,592	30,827	2,875	7,399	20,553	23,961
239	1969	8	7,700	32,739	12,459	6,806	13,475	20,042	0	3,480	16,562	21,287
240	1969	9	7,710	26,864	8,759	4,451	13,654	19,409	0	2,320	17,089	17,459

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			39	40	41	42	43	44	45	46	47	48
Table Number:			P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number	Year	Month	Diversions into Olmsted Aqueduct CUP	Diversions into Olmsted Aqueduct Ap 40524	Diversions into Olmsted Aqueduct PRP	Diversions into Olmsted Aqueduct Non-Project	Provo River from Murdock to Interstate15 Total	Provo River from Murdock to Interstate15 CUP	Provo River from Murdock to Interstate15 PRP	Provo River from Murdock to Interstate15 Non-Project	Diversions into Provo Reservoir Canal Total	ULS Water in Provo Reservoir Canal CUP
181	1964	10	6,080	0	1,114	261	12,909	5,681	160	7,068	3,198	2,127
182	1964	11	4,400	795	48	0	6,106	1,646	0	4,461	0	0
183	1964	12	3,700	1,015	25	0	4,995	3,357	0	1,638	0	0
184	1965	1	2,600	1,353	1,650	0	5,229	4,018	0	1,210	0	0
185	1965	2	1,800	1,222	2,301	0	4,561	3,927	0	634	0	0
186	1965	3	3,100	1,353	1,488	0	5,022	4,011	0	1,011	0	0
187	1965	4	3,000	1,309	435	666	5,026	4,760	80	186	2,452	1,815
188	1965	5	5,980	0	1,346	11,597	15,493	8,509	160	6,824	8,640	2,685
189	1965	6	9,159	0	2,039	10,698	49,547	4,675	35,534	9,338	10,670	4,440
190	1965	7	10,659	0	2,392	8,905	15,395	3,915	3,745	7,735	10,852	5,040
191	1965	8	10,659	0	2,484	5,503	12,223	3,266	610	8,346	9,242	4,783
192	1965	9	7,959	0	1,528	6,569	10,834	3,892	480	6,463	7,683	3,600
193	1965	10	3,804	0	1,114	727	11,314	5,681	160	5,473	3,394	2,127
194	1965	11	3,800	895	94	0	8,715	5,345	0	3,371	0	0
195	1965	12	3,800	1,315	0	0	9,773	59	0	9,714	0	0
196	1966	1	4,200	1,353	65	0	10,257	630	0	9,627	0	0
197	1966	2	3,800	1,222	126	0	9,319	3,688	0	5,631	0	0
198	1966	3	3,000	1,353	6	0	14,724	2,098	0	12,626	0	0
199	1966	4	2,100	0	435	4,599	10,571	3,098	80	7,393	4,108	1,815
200	1966	5	6,715	306	1,300	13,393	32,589	2,428	12,600	17,561	9,396	2,685
201	1966	6	11,935	0	2,005	8,780	13,231	4,015	320	8,896	9,863	4,440
202	1966	7	18,231	0	3,365	2,950	12,661	3,798	640	8,223	9,185	5,040
203	1966	8	16,031	0	3,501	2,530	12,161	3,541	610	8,010	8,869	4,783
204	1966	9	11,131	0	2,258	4,572	11,907	4,150	480	7,277	7,472	3,600
205	1966	10	6,080	0	1,114	727	9,976	3,966	160	5,850	3,394	2,127
206	1966	11	4,600	795	154	0	3,907	985	0	2,921	0	0
207	1966	12	4,600	1,015	6	0	4,538	4,029	0	509	0	0
208	1967	1	4,500	1,353	1,338	0	3,363	2,322	0	1,041	0	0
209	1967	2	4,100	1,222	1,201	0	2,223	1,389	0	835	0	0
210	1967	3	4,000	1,353	1,778	0	3,303	1,724	0	1,579	0	0
211	1967	4	6,100	0	435	1,927	7,070	3,995	80	2,995	2,983	1,815
212	1967	5	7,480	0	1,337	11,383	15,437	8,751	160	6,526	8,550	2,685
213	1967	6	8,059	0	2,034	10,503	32,862	4,654	19,517	8,691	10,588	4,440
214	1967	7	11,659	0	3,499	8,905	12,657	4,506	640	7,511	11,807	5,040
215	1967	8	12,759	0	3,641	5,503	13,108	3,579	610	8,919	10,241	4,783
216	1967	9	9,059	0	2,358	6,569	12,377	3,892	480	8,005	8,399	3,600
217	1967	10	5,480	0	1,114	727	11,572	5,681	160	5,732	3,394	2,127
218	1967	11	4,300	795	48	0	5,939	3,516	0	2,423	0	0
219	1967	12	4,600	1,015	162	0	4,421	1,917	0	2,504	0	0
220	1968	1	4,600	1,353	1,233	0	4,931	2,966	0	1,965	0	0
221	1968	2	3,600	1,265	1,851	0	4,445	2,726	0	1,720	0	0
222	1968	3	3,800	1,353	918	0	5,003	2,243	0	2,759	0	0
223	1968	4	5,100	1,309	435	284	4,643	1,985	80	2,578	2,292	1,815
224	1968	5	6,480	0	1,317	10,803	17,128	10,877	160	6,091	8,306	2,685
225	1968	6	7,459	1,195	2,006	11,503	56,978	541	13,779	42,658	11,009	4,440
226	1968	7	12,359	0	3,230	8,510	12,500	3,902	640	7,958	11,409	5,040
227	1968	8	11,659	0	3,361	5,503	13,327	3,503	610	9,214	9,999	4,783
228	1968	9	8,759	0	2,157	6,569	12,034	3,870	480	7,684	8,226	3,600
229	1968	10	5,280	0	1,114	727	10,432	5,681	160	4,591	3,394	2,127
230	1968	11	3,600	795	48	0	8,620	4,715	0	3,905	0	0
231	1968	12	4,000	1,015	0	0	8,931	5,760	0	3,171	0	0
232	1969	1	3,800	1,353	1,876	0	5,167	2,322	0	2,845	0	0
233	1969	2	3,500	1,222	1,713	0	4,392	1,927	0	2,465	0	0
234	1969	3	3,900	1,353	66	0	5,731	882	0	4,849	0	0
235	1969	4	1,500	1,309	414	386	26,914	450	80	26,384	2,335	1,815
236	1969	5	4,580	1,215	1,338	11,090	75,057	337	6,160	68,561	8,427	2,685
237	1969	6	8,959	1,195	2,146	9,708	56,830	541	2,532	53,758	10,253	4,440
238	1969	7	11,859	0	3,197	8,905	13,393	3,902	640	8,851	11,546	5,040
239	1969	8	12,459	0	3,325	5,503	13,438	3,494	610	9,334	9,969	4,783
240	1969	9	8,759	0	2,131	6,569	12,598	3,890	480	8,228	8,204	3,600

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Month Number	Year	Month	Diversions into Provo Reservoir Canal PRP	Diversions into Provo Reservoir Canal Non-Project	Provo River from Interstate 15 to Utah Lake Total	Provo River from Interstate 15 to Utah Lake CUP	Provo River from Interstate 15 to Utah Lake PRP	Provo River from Interstate 15 to Utah Lake Non-Project	PRP Diversion to Provo Bench Canal PRP	June Sucker Releases CUP	June Sucker Releases PRP	June Sucker Releases Non-Project	75-cfs Target Releases Non-Project
Column Number:			49	50	51	52	53	54	55	56	57	58	59
Table Number:			P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
181	1964	10	961	110	6,421	5,681	0	164	160	0	0	0	-577
182	1964	11	0	0	6,828	1,646	0	5,182	0	0	0	0	0
183	1964	12	0	0	4,611	3,357	0	1,255	0	0	0	0	0
184	1965	1	0	0	4,611	4,018	0	593	0	0	0	0	0
185	1965	2	0	0	4,165	3,927	0	238	0	0	0	0	0
186	1965	3	0	0	4,611	4,011	0	601	0	0	0	0	0
187	1965	4	357	280	4,879	4,760	0	116	80	-2,875	-1,924	0	-3
188	1965	5	1,075	4,880	9,118	8,509	0	0	160	0	-2,076	-1,472	-609
189	1965	6	1,728	4,502	40,683	4,675	35,214	37	320	0	0	-1,434	-758
190	1965	7	2,065	3,747	7,727	3,915	3,105	0	640	0	0	-1,223	-707
191	1965	8	2,144	2,316	3,976	3,266	0	52	610	0	0	0	-658
192	1965	9	1,319	2,764	4,463	3,892	0	0	480	0	0	0	-571
193	1965	10	961	306	6,363	5,681	0	175	160	0	0	0	-507
194	1965	11	0	0	9,630	5,345	0	4,286	0	0	0	0	0
195	1965	12	0	0	9,951	59	0	9,892	0	0	0	0	0
196	1966	1	0	0	9,951	630	0	9,322	0	0	0	0	0
197	1966	2	0	0	8,988	3,688	0	5,300	0	0	0	0	0
198	1966	3	0	0	14,344	2,098	0	12,246	0	0	0	0	0
199	1966	4	357	1,935	4,879	3,098	0	1,367	80	-2,875	-1,924	0	-415
200	1966	5	1,075	5,636	22,453	2,428	12,440	6,837	160	0	-2,076	0	-747
201	1966	6	1,728	3,695	4,768	4,015	0	0	320	0	0	-1,228	-753
202	1966	7	2,904	1,241	4,403	3,798	0	0	640	0	0	-550	-606
203	1966	8	3,021	1,065	4,182	3,541	0	96	610	0	0	0	-546
204	1966	9	1,948	1,924	4,682	4,150	0	30	480	0	0	0	-50[illegible]
205	1966	10	961	306	4,611	3,966	0	133	160	0	0	0	-51[illegible]
206	1966	11	0	0	4,463	985	0	3,477	0	0	0	0	0
207	1966	12	0	0	4,611	4,029	0	583	0	0	0	0	0
208	1967	1	0	0	2,888	2,322	0	566	0	0	0	0	0
209	1967	2	0	0	1,771	1,389	0	382	0	0	0	0	0
210	1967	3	0	0	2,845	1,724	0	1,121	0	0	0	0	0
211	1967	4	357	811	4,879	3,995	0	744	80	-2,875	-1,924	0	-140
212	1967	5	1,075	4,790	9,501	8,751	0	0	160	0	-2,076	-1,504	-750
213	1967	6	1,728	4,420	24,665	4,654	19,197	56	320	0	0	-1,413	-758
214	1967	7	3,020	3,747	5,211	4,506	0	0	640	0	0	-1,223	-705
215	1967	8	3,142	2,316	4,280	3,579	0	50	610	0	0	0	-652
216	1967	9	2,035	2,764	4,463	3,892	0	0	480	0	0	0	-571
217	1967	10	961	306	6,245	5,681	0	114	160	0	0	0	-450
218	1967	11	0	0	6,622	3,516	0	3,107	0	0	0	0	0
219	1967	12	0	0	4,611	1,917	0	2,695	0	0	0	0	0
220	1968	1	0	0	4,611	2,966	0	1,645	0	0	0	0	0
221	1968	2	0	0	4,165	2,726	0	1,439	0	0	0	0	0
222	1968	3	0	0	4,611	2,243	0	2,368	0	0	0	0	0
223	1968	4	357	119	4,992	1,985	0	3,006	80	-1,873	0	0	-1
224	1968	5	1,075	4,546	11,400	10,877	0	0	160	-1,002	-4,000	-1,354	-524
225	1968	6	1,728	4,841	48,133	541	13,459	33,376	320	0	0	0	-758
226	1968	7	2,788	3,581	4,611	3,902	0	0	640	0	0	-1,182	-710
227	1968	8	2,900	2,316	4,209	3,503	0	51	610	0	0	0	-655
228	1968	9	1,861	2,764	4,463	3,870	0	4	480	0	0	0	-589
229	1968	10	961	306	6,361	5,681	0	280	160	0	0	0	-399
230	1968	11	0	0	9,630	4,715	0	4,916	0	0	0	0	0
231	1968	12	0	0	8,682	5,760	0	2,922	0	0	0	0	0
232	1969	1	0	0	5,239	2,322	0	2,917	0	0	0	0	0
233	1969	2	0	0	4,165	1,927	0	2,238	0	0	0	0	0
234	1969	3	0	0	5,882	882	0	5,000	0	0	0	0	0
235	1969	4	357	162	28,503	450	0	28,053	80	0	0	0	0
236	1969	5	1,075	4,667	66,548	337	6,000	59,460	160	0	0	0	-75[illegible]
237	1969	6	1,728	4,085	47,079	541	2,212	43,569	320	0	0	0	-7[illegible]
238	1969	7	2,759	3,747	4,611	3,902	0	0	640	-2,875	-4,000	0	-710
239	1969	8	2,870	2,316	4,207	3,494	0	53	610	0	0	0	-660
240	1969	9	1,840	2,764	4,463	3,890	0	0	480	0	0	0	-573

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:				1	2	3	4	5	6	7	8
Table Number:			P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number	Year	Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
241	1969	10	1,727	10,003	5,102	1,487	3,415	9,774	4,931	1,487	3,357
242	1969	11	3,685	8,926	4,485	4,080	361	8,926	4,485	4,080	361
243	1969	12	3,252	9,223	4,978	3,090	1,156	9,223	4,978	3,090	1,156
244	1970	1	3,406	8,790	5,152	2,660	978	8,790	5,152	2,660	978
245	1970	2	3,634	7,792	4,741	2,301	750	7,792	4,741	2,301	750
246	1970	3	4,219	8,331	4,684	3,002	645	8,331	4,684	3,002	645
247	1970	4	5,237	8,671	7,358	0	1,313	8,615	7,358	0	1,257
248	1970	5	42,827	57,883	5,734	31,033	21,116	56,259	5,734	31,033	19,492
249	1970	6	20,924	51,905	4,802	33,255	13,848	50,025	4,461	33,255	12,310
250	1970	7	3,435	32,281	13,117	4,678	14,485	28,623	11,261	4,678	12,685
251	1970	8	1,038	28,631	18,244	1,540	8,846	25,418	16,643	1,540	7,235
252	1970	9	1,050	18,500	10,836	3,038	4,626	16,933	10,170	3,038	3,725
253	1970	10	739	10,101	5,097	1,532	3,472	9,872	4,927	1,532	3,414
254	1970	11	4,833	8,926	1,875	6,298	753	8,926	1,875	6,298	753
255	1970	12	5,059	9,223	2,335	4,660	2,228	9,223	2,335	4,660	2,228
256	1971	1	5,502	9,223	3,041	5,016	1,166	9,223	3,041	5,016	1,166
257	1971	2	4,562	8,331	2,451	5,279	601	8,331	2,451	5,279	601
258	1971	3	5,059	9,770	2,257	4,933	2,580	9,770	2,257	4,933	2,580
259	1971	4	15,597	8,336	2,861	3,452	2,022	8,280	2,861	3,452	1,966
260	1971	5	15,239	55,363	3,427	39,430	12,506	53,553	3,427	39,430	10,696
261	1971	6	41,568	94,113	4,109	43,196	46,808	91,867	3,767	43,196	44,903
262	1971	7	5,854	30,081	11,684	3,889	14,507	26,594	9,827	3,889	12,877
263	1971	8	626	26,627	15,904	1,166	9,558	23,574	14,303	1,166	8,105
264	1971	9	714	17,089	10,417	2,251	4,421	15,585	9,750	2,251	3,583
265	1971	10	5,511	10,141	4,656	1,914	3,571	9,912	4,485	1,914	3,513
266	1971	11	5,237	8,926	2,334	6,240	352	8,926	2,334	6,240	352
267	1971	12	4,800	9,223	2,335	5,199	1,689	9,223	2,335	5,199	1,689
268	1972	1	4,732	9,223	3,129	4,313	1,781	9,223	3,129	4,313	1,781
269	1972	2	4,260	8,673	2,350	5,497	826	8,673	2,350	5,497	826
270	1972	3	7,195	10,060	937	6,941	2,182	10,060	937	6,941	2,182
271	1972	4	13,803	8,880	1,046	6,493	1,341	8,824	1,046	6,493	1,285
272	1972	5	19,931	74,382	2,699	44,895	26,788	72,073	2,313	44,895	24,865
273	1972	6	14,165	48,391	4,932	29,574	13,885	46,086	4,257	29,574	12,255
274	1972	7	2,264	31,523	13,215	1,421	16,887	28,395	11,733	1,421	15,242
275	1972	8	9	26,159	17,773	517	7,869	23,239	16,427	517	6,295
276	1972	9	167	15,876	10,920	337	4,619	14,376	10,344	337	3,696
277	1972	10	6,712	9,885	4,842	1,827	3,217	9,656	4,671	1,827	3,159
278	1972	11	5,613	8,926	2,474	6,264	187	8,926	2,474	6,264	187
279	1972	12	5,223	9,223	2,953	4,479	1,792	9,223	2,953	4,479	1,792
280	1973	1	4,569	9,223	4,364	3,897	963	9,223	4,364	3,897	963
281	1973	2	3,869	8,331	4,127	3,628	576	8,331	4,127	3,628	576
282	1973	3	4,203	9,382	2,953	5,474	956	9,382	2,953	5,474	956
283	1973	4	5,968	7,527	3,730	3,619	178	7,471	3,730	3,619	122
284	1973	5	17,120	49,287	3,074	36,327	9,886	47,737	3,074	36,327	8,335
285	1973	6	40,971	70,758	4,815	31,377	34,566	68,822	4,473	31,377	32,973
286	1973	7	4,333	29,203	12,078	3,357	13,767	25,699	10,146	3,357	12,195
287	1973	8	992	25,347	16,852	0	8,496	22,167	15,119	0	7,048
288	1973	9	2,160	19,878	9,341	5,166	5,371	18,595	8,881	5,166	4,548
289	1973	10	3,763	10,247	5,420	1,121	3,706	10,018	5,249	1,121	3,648
290	1973	11	5,083	8,926	4,837	3,482	606	8,926	4,837	3,482	606
291	1973	12	2,826	9,122	4,199	2,286	2,637	9,122	4,199	2,286	2,637
292	1974	1	778	8,510	6,565	690	1,254	8,510	6,565	690	1,254
293	1974	2	617	7,457	5,705	690	1,062	7,457	5,705	690	1,062
294	1974	3	5,974	7,920	6,777	645	498	7,920	6,777	645	498
295	1974	4	10,043	8,236	6,474	875	887	8,180	6,474	875	831
296	1974	5	20,470	78,582	4,516	58,703	15,363	76,683	4,333	58,703	13,646
297	1974	6	42,891	78,119	5,797	34,742	37,580	75,586	4,882	34,742	35,962
298	1974	7	3,071	33,776	14,766	3,277	15,733	30,690	13,302	3,277	14,111
299	1974	8	676	32,498	21,140	1,619	9,739	29,602	19,808	1,619	8,175
300	1974	9	319	19,414	13,267	1,851	4,297	17,950	12,695	1,851	3,404

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			9	10	11	12	13	14	15	16	17	18
Table Number:			P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number	Year	Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions in Reach VCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
241	1969	10	229	171	58	7,686	3,927	1,056	1,845	1,487	2,272	15,400
242	1969	11	0	0	0	8,565	4,485	0	0	4,080	0	17,936
243	1969	12	0	0	0	8,067	4,978	0	311	3,090	0	15,067
244	1970	1	0	0	0	8,253	5,152	0	0	2,660	441	14,841
245	1970	2	0	0	0	7,433	4,741	0	0	2,301	391	13,195
246	1970	3	0	0	0	7,686	4,684	0	0	3,002	0	11,974
247	1970	4	56	0	56	7,438	7,358	0	975	0	80	10,282
248	1970	5	1,624	0	1,624	46,433	5,734	0	1,092	31,033	9,666	48,236
249	1970	6	1,879	342	1,538	37,657	4,402	0	1,121	33,255	0	44,250
250	1970	7	3,657	1,857	1,800	16,698	10,938	8	258	4,678	1,082	25,154
251	1970	8	3,213	1,601	1,612	15,966	11,026	5,792	258	1,540	3,400	24,898
252	1970	9	1,567	666	901	11,204	5,293	5,163	254	3,038	2,873	19,409
253	1970	10	229	171	58	7,686	3,854	1,131	1,923	1,532	2,301	15,345
254	1970	11	0	0	0	8,533	1,875	0	0	6,298	360	17,954
255	1970	12	0	0	0	7,909	2,335	0	0	4,660	914	14,592
256	1971	1	0	0	0	8,395	3,041	0	0	5,016	338	13,696
257	1971	2	0	0	0	7,730	2,451	0	0	5,279	0	12,169
258	1971	3	0	0	0	9,141	2,257	0	0	4,933	1,951	13,566
259	1971	4	56	0	56	7,438	2,861	0	71	3,452	1,124	10,322
260	1971	5	1,810	0	1,810	42,857	3,427	0	1,327	39,430	0	45,528
261	1971	6	2,246	342	1,904	78,320	3,709	0	1,705	43,196	31,414	82,663
262	1971	7	3,487	1,857	1,630	14,949	9,438	79	258	3,889	1,621	23,349
263	1971	8	3,054	1,601	1,452	14,140	10,232	4,116	258	1,166	2,742	23,333
264	1971	9	1,505	666	838	9,156	5,469	4,517	399	2,251	1,436	19,243
265	1971	10	229	171	58	7,686	3,589	940	1,954	1,914	2,183	15,451
266	1971	11	0	0	0	8,574	2,334	0	0	6,240	0	17,890
267	1971	12	0	0	0	8,158	2,335	0	0	5,199	624	15,484
268	1972	1	0	0	0	8,338	3,129	0	0	4,313	896	14,521
269	1972	2	0	0	0	7,995	2,350	0	0	5,497	148	12,686
270	1972	3	0	0	0	9,606	937	0	0	6,941	1,728	15,175
271	1972	4	56	0	56	7,568	1,046	0	71	6,493	29	10,883
272	1972	5	2,309	387	1,922	60,586	2,247	0	1,405	44,895	13,444	62,064
273	1972	6	2,305	675	1,629	33,636	4,062	86	1,436	29,574	0	40,911
274	1972	7	3,127	1,483	1,645	16,857	11,379	110	258	1,421	4,057	25,912
275	1972	8	2,920	1,346	1,574	13,959	10,762	5,892	258	517	2,680	22,130
276	1972	9	1,500	576	924	8,569	5,226	5,440	1,871	337	3,006	17,055
277	1972	10	229	171	58	7,686	3,589	1,141	1,751	1,827	2,271	17,175
278	1972	11	0	0	0	8,739	2,474	0	0	6,264	0	18,826
279	1972	12	0	0	0	8,009	2,953	0	0	4,479	578	14,937
280	1973	1	0	0	0	8,338	4,364	0	0	3,897	78	13,906
281	1973	2	0	0	0	7,785	4,127	0	0	3,628	30	12,602
282	1973	3	0	0	0	9,035	2,953	0	0	5,474	609	14,612
283	1973	4	56	0	56	7,444	3,730	0	71	3,619	95	16,581
284	1973	5	1,551	0	1,551	39,401	3,074	0	999	36,327	0	47,784
285	1973	6	1,935	342	1,594	56,858	4,415	0	782	31,377	21,066	64,413
286	1973	7	3,504	1,932	1,572	14,517	9,703	125	258	3,357	1,456	24,406
287	1973	8	3,180	1,733	1,448	12,824	10,412	4,782	258	0	2,413	24,049
288	1973	9	1,283	460	823	12,188	5,645	3,422	254	5,166	1,377	22,857
289	1973	10	229	171	58	7,686	4,383	907	2,039	1,121	2,182	16,026
290	1973	11	0	0	0	8,320	4,837	0	0	3,482	0	16,560
291	1973	12	0	0	0	7,719	4,199	0	1,143	2,286	1,234	12,989
292	1974	1	0	0	0	7,736	6,565	0	616	690	480	14,500
293	1974	2	0	0	0	6,942	5,705	0	410	690	547	12,437
294	1974	3	0	0	0	7,686	6,777	0	186	645	264	14,336
295	1974	4	56	0	56	7,438	6,474	0	635	875	89	12,049
296	1974	5	1,900	183	1,717	66,226	4,302	0	1,179	58,703	3,220	66,945
297	1974	6	2,534	916	1,618	63,640	4,688	41	810	34,742	24,210	72,803
298	1974	7	3,086	1,463	1,622	19,434	12,935	128	258	3,277	3,221	29,040
299	1974	8	2,896	1,333	1,563	19,958	14,753	5,232	258	1,619	3,586	28,339
300	1974	9	1,464	571	893	12,385	8,069	4,908	254	1,851	2,465	21,127

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			19	20	21	22	23	24	25	26	27	28
Table Number:			P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number	Year	Month	Provo River from Snake Creek to Deer Creek Reservoir CUP	Provo River from Snake Creek to Deer Creek Reservoir PRP	Provo River from Snake Creek to Deer Creek Reservoir Non-Project	CUP Return Flow Gains above Deer Creek CUP	Provo River from Outlet of Deer Creek to North Fork Total	Provo River from Outlet of Deer Creek to North Fork CUP	Provo River from Outlet of Deer Creek to North Fork PRP	Provo River from Outlet of Deer Creek to North Fork Non-Project	Diversions into Salt Lake Aqueduct Total	Diversions into Salt Lake Aqueduct CUP
241	1969	10	3,927	1,487	9,986	0	7,562	5,327	2,235	0	6,100	0
242	1969	11	4,485	4,080	9,371	0	5,984	4,884	161	939	4,490	0
243	1969	12	4,978	3,090	7,000	0	6,149	4,443	557	1,149	4,049	0
244	1970	1	5,152	2,660	7,030	0	6,149	3,240	1,861	1,047	2,745	0
245	1970	2	4,741	2,301	6,153	0	5,554	3,174	2,006	373	2,029	0
246	1970	3	4,684	3,002	4,288	0	6,149	3,310	1,477	1,361	2,438	0
247	1970	4	7,358	0	2,923	0	13,417	9,319	2,796	1,302	1,150	0
248	1970	5	5,734	31,033	11,469	5,910	55,492	6,675	33,016	15,801	2,530	0
249	1970	6	4,402	33,255	6,593	4,072	49,732	7,032	10,610	32,090	7,700	0
250	1970	7	10,938	4,678	9,538	1,711	39,321	16,204	7,470	15,647	7,290	0
251	1970	8	11,026	1,540	12,332	308	33,558	13,351	7,720	12,488	7,700	0
252	1970	9	5,293	3,038	11,078	1,235	25,441	8,251	5,108	12,083	7,710	0
253	1970	10	3,854	1,532	9,960	0	8,412	5,648	2,235	529	6,100	0
254	1970	11	1,875	6,298	9,781	0	6,386	2,025	48	4,313	4,490	0
255	1970	12	2,335	4,660	7,597	0	6,317	1,747	99	4,470	4,490	0
256	1971	1	3,041	5,016	5,639	0	6,149	1,047	2,175	2,926	2,431	0
257	1971	2	2,451	5,279	4,440	0	5,554	578	2,020	2,956	2,015	0
258	1971	3	2,257	4,933	6,375	0	6,149	659	1,780	3,709	2,135	0
259	1971	4	2,861	3,452	4,009	0	14,644	4,219	2,796	7,629	1,150	0
260	1971	5	3,427	39,430	2,671	3,540	55,546	4,565	10,613	40,369	2,530	0
261	1971	6	3,709	43,196	35,758	2,559	85,979	10,717	4,852	70,410	7,700	0
262	1971	7	9,438	3,889	10,022	3,362	33,819	11,959	5,101	16,760	7,290	0
263	1971	8	10,232	1,166	11,935	879	30,436	12,359	5,205	12,873	7,700	0
264	1971	9	5,469	2,251	11,522	1,380	24,654	8,259	3,303	13,093	7,710	0
265	1971	10	3,589	1,914	9,948	0	8,796	5,448	2,235	1,113	6,100	0
266	1971	11	2,334	6,240	9,316	0	6,216	2,545	48	3,623	4,490	0
267	1971	12	2,335	5,199	7,950	0	6,729	1,847	90	4,792	4,490	0
268	1972	1	3,129	4,313	7,079	0	6,149	1,147	2,227	2,774	2,477	0
269	1972	2	2,350	5,497	4,839	0	5,752	564	2,008	3,180	1,888	0
270	1972	3	937	6,941	7,297	0	12,608	0	5	12,602	3,910	0
271	1972	4	1,046	6,493	3,344	0	13,813	0	7,961	5,851	1,150	0
272	1972	5	2,247	44,895	14,923	180	66,785	3,127	5,152	58,507	2,530	0
273	1972	6	4,062	29,574	7,275	3,626	49,839	7,264	5,481	37,095	7,700	0
274	1972	7	11,379	1,421	13,112	1,287	41,084	16,834	9,160	15,090	7,290	0
275	1972	8	10,762	517	10,851	347	29,744	12,859	5,303	11,582	7,700	0
276	1972	9	5,226	337	11,492	777	24,131	9,059	3,373	11,698	7,710	0
277	1972	10	3,589	1,827	11,759	0	8,784	5,348	2,235	1,201	6,100	0
278	1972	11	2,474	6,264	10,087	0	6,428	2,705	48	3,676	4,490	0
279	1972	12	2,953	4,479	7,505	0	6,549	2,547	162	3,839	4,490	0
280	1973	1	4,364	3,897	5,646	0	6,149	2,547	1,882	1,719	2,724	0
281	1973	2	4,127	3,628	4,848	0	5,554	2,578	1,434	1,542	2,746	0
282	1973	3	2,953	5,474	6,186	0	6,149	1,547	1,651	2,951	2,265	0
283	1973	4	3,730	3,619	9,232	0	19,439	3,350	872	15,216	1,150	0
284	1973	5	3,074	36,327	8,382	3,935	57,654	4,465	8,547	44,643	2,530	0
285	1973	6	4,415	31,377	28,621	2,349	76,237	7,664	8,080	60,494	7,700	0
286	1973	7	9,703	3,357	11,346	1,970	43,596	15,434	10,533	17,629	7,290	0
287	1973	8	10,412	0	13,637	1,099	33,165	12,859	6,740	13,567	7,700	0
288	1973	9	5,645	5,166	12,046	1,520	28,597	8,559	4,404	15,635	7,710	0
289	1973	10	4,383	1,121	10,522	0	8,823	5,837	2,235	751	6,100	0
290	1973	11	4,837	3,482	8,240	0	6,203	5,261	48	895	4,490	0
291	1973	12	4,199	2,286	6,504	0	6,149	3,978	555	1,615	4,122	0
292	1974	1	6,565	690	7,245	0	6,149	3,978	577	1,593	4,042	0
293	1974	2	5,705	690	6,042	0	5,554	3,564	559	1,431	3,477	0
294	1974	3	6,777	645	6,914	0	6,149	5,001	984	163	2,931	0
295	1974	4	6,474	875	4,700	0	13,330	12,365	965	0	1,150	0
296	1974	5	4,302	58,703	3,939	6,208	72,572	5,939	8,722	57,910	2,530	0
297	1974	6	4,688	34,742	33,373	3,063	85,250	11,856	20,951	52,442	7,700	0
298	1974	7	12,935	3,277	12,827	1,862	47,601	16,379	12,986	18,237	7,290	0
299	1974	8	14,753	1,619	11,967	684	37,588	16,837	9,304	11,447	7,700	0
300	1974	9	8,069	1,851	11,207	864	29,675	11,831	6,244	11,600	7,710	0

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			29	30	31	32	33	34	35	36	37	38
Table Number:			P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number	Year	Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
241	1969	10	6,100	9,246	5,327	2,235	1,683	6,581	768	1,121	4,692	7,016
242	1969	11	4,490	7,845	4,884	161	2,800	6,652	1,779	0	4,873	4,061
243	1969	12	4,049	6,647	4,443	557	1,647	3,243	1,596	0	1,648	4,757
244	1970	1	2,745	6,579	3,240	1,861	1,477	2,798	593	0	2,204	5,861
245	1970	2	2,029	5,918	3,174	2,006	737	2,427	1,097	0	1,331	5,306
246	1970	3	2,438	6,539	3,310	1,477	1,751	2,388	263	0	2,124	5,877
247	1970	4	1,150	14,009	9,319	2,796	1,894	10,077	3,619	2,361	4,096	7,372
248	1970	5	2,530	58,119	6,675	33,016	18,428	53,562	0	31,763	21,799	16,734
249	1970	6	7,700	53,676	7,032	10,610	36,034	45,690	0	8,606	37,085	21,844
250	1970	7	7,290	41,832	16,204	7,470	18,158	27,639	3,553	3,804	20,281	23,472
251	1970	8	7,700	34,791	13,351	7,720	13,721	19,736	0	3,904	15,833	21,988
252	1970	9	7,710	26,902	8,251	5,108	13,544	18,691	0	2,624	16,067	17,288
253	1970	10	6,100	10,011	5,648	2,235	2,128	6,749	768	1,121	4,859	6,720
254	1970	11	4,490	7,592	2,025	48	5,519	4,629	320	0	4,309	2,448
255	1970	12	4,490	6,650	1,747	99	4,803	2,145	0	0	2,145	3,199
256	1971	1	2,431	6,590	1,047	2,175	3,367	2,648	0	0	2,647	4,575
257	1971	2	2,015	6,036	578	2,020	3,438	2,893	0	0	2,893	3,820
258	1971	3	2,135	6,462	659	1,780	4,023	2,687	0	0	2,687	3,380
259	1971	4	1,150	15,376	4,219	2,796	8,361	16,160	3,619	2,361	10,180	5,433
260	1971	5	2,530	57,560	4,565	10,613	42,383	52,931	0	9,311	43,620	18,141
261	1971	6	7,700	89,428	10,717	4,852	73,859	82,084	3,853	2,695	75,536	19,768
262	1971	7	7,290	36,403	11,959	5,101	19,344	23,829	0	2,690	21,138	22,012
263	1971	8	7,700	31,765	12,359	5,205	14,201	18,983	0	2,739	16,245	19,761
264	1971	9	7,710	25,923	8,259	3,303	14,362	18,272	0	1,788	16,485	16,343
265	1971	10	6,100	9,628	5,448	2,235	1,945	5,897	768	1,121	4,008	6,520
266	1971	11	4,490	7,183	2,545	48	4,590	4,206	241	0	3,966	3,048
267	1971	12	4,490	7,158	1,847	90	5,221	2,754	0	0	2,754	3,290
268	1972	1	2,477	6,458	1,147	2,227	3,083	2,341	0	0	2,340	4,727
269	1972	2	1,888	6,044	564	2,008	3,472	1,833	0	0	1,833	3,707
270	1972	3	3,910	13,012	0	5	13,006	12,419	738	0	11,681	5
271	1972	4	1,150	14,583	0	7,961	6,621	15,668	714	7,526	7,427	3,114
272	1972	5	2,530	69,364	3,127	5,152	61,086	65,736	0	3,859	61,877	16,604
273	1972	6	7,700	53,850	7,264	5,481	41,106	46,232	0	3,372	42,860	19,732
274	1972	7	7,290	42,869	16,834	9,160	16,876	28,419	2,875	6,734	18,811	23,071
275	1972	8	7,700	30,771	12,859	5,303	12,610	17,309	0	2,784	14,526	18,863
276	1972	9	7,710	25,118	9,059	3,373	12,686	16,552	0	1,820	14,732	15,441
277	1972	10	6,100	9,887	5,348	2,235	2,304	6,681	768	1,121	4,791	6,259
278	1972	11	4,490	7,187	2,705	48	4,435	3,605	0	0	3,605	3,448
279	1972	12	4,490	6,895	2,547	162	4,185	2,096	0	0	2,096	4,062
280	1973	1	2,724	6,561	2,547	1,882	2,131	2,506	0	0	2,505	5,782
281	1973	2	2,746	5,966	2,578	1,434	1,954	2,573	0	0	2,573	5,234
282	1973	3	2,265	6,556	1,547	1,651	3,358	2,664	0	0	2,664	4,550
283	1973	4	1,150	20,640	3,350	872	16,417	18,505	1,260	437	16,808	3,835
284	1973	5	2,530	62,965	4,465	8,547	49,954	58,930	0	7,235	51,695	17,142
285	1973	6	7,700	82,027	7,664	8,080	66,284	73,615	0	5,994	67,622	20,796
286	1973	7	7,290	46,664	15,434	10,533	20,697	32,996	2,875	7,370	22,751	25,306
287	1973	8	7,700	34,945	12,859	6,740	15,347	21,011	0	3,450	17,562	22,780
288	1973	9	7,710	30,022	8,559	4,404	17,060	21,803	0	2,298	19,505	19,200
289	1973	10	6,100	9,446	5,837	2,235	1,374	5,378	768	1,121	3,488	7,206
290	1973	11	4,490	7,377	5,261	48	2,069	4,512	748	0	3,764	5,379
291	1973	12	4,122	6,678	3,978	555	2,144	2,505	0	0	2,505	5,886
292	1974	1	4,042	6,551	3,978	577	1,995	2,065	0	0	2,064	5,908
293	1974	2	3,477	5,831	3,564	559	1,708	1,870	0	0	1,869	4,965
294	1974	3	2,931	6,598	5,001	984	612	2,272	1,538	0	734	5,801
295	1974	4	1,150	14,084	12,365	965	754	11,942	10,197	480	1,265	4,454
296	1974	5	2,530	74,289	5,939	8,722	59,627	68,136	0	7,331	60,805	19,793
297	1974	6	7,700	86,519	11,856	20,951	53,711	74,586	2,960	18,630	52,996	22,232
298	1974	7	7,290	48,262	16,379	12,986	18,898	29,830	1,379	8,506	19,945	26,987
299	1974	8	7,700	38,485	16,837	9,304	12,344	18,903	0	4,638	14,265	25,190
300	1974	9	7,710	29,904	11,831	6,244	11,829	16,572	0	3,150	13,422	18,680

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			39	40	41	42	43	44	45	46	47	48
Table Number:			P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number	Year	Month	Diversions into Olmsted Aqueduct CUP	Diversions into Olmsted Aqueduct Ap 40524	Diversions into Olmsted Aqueduct PRP	Diversions into Olmsted Aqueduct Non-Project	Provo River from Murdock to Interstate15 Total	Provo River from Murdock to Interstate15 CUP	Provo River from Murdock to Interstate15 PRP	Provo River from Murdock to Interstate15 Non-Project	Diversions into Provo Reservoir Canal Total	ULS Water in Provo Reservoir Canal CUP
241	1969	10	5,175	616	1,114	727	9,222	5,024	160	4,039	3,394	2,127
242	1969	11	3,900	795	161	0	6,870	1,779	0	5,091	0	0
243	1969	12	4,200	1,353	557	0	4,489	2,765	0	1,724	0	0
244	1970	1	4,000	1,353	1,861	0	5,005	2,736	0	2,270	0	0
245	1970	2	3,300	1,222	2,006	0	4,449	3,064	0	1,385	0	0
246	1970	3	4,400	1,353	1,477	0	4,962	2,780	0	2,182	0	0
247	1970	4	5,700	0	435	1,238	7,302	4,763	80	2,459	2,693	1,815
248	1970	5	6,675	0	1,252	8,806	38,610	2,430	28,612	7,567	7,466	2,685
249	1970	6	8,342	1,309	2,004	11,499	29,071	541	6,877	21,653	11,007	4,440
250	1970	7	12,651	0	3,666	7,155	14,915	5,602	640	8,673	11,215	5,040
251	1970	8	13,351	0	3,816	4,821	13,665	3,626	610	9,429	10,105	4,783
252	1970	9	8,251	0	2,484	6,553	11,580	3,920	480	7,181	8,501	3,600
253	1970	10	4,880	0	1,114	727	8,088	3,727	160	4,201	3,394	2,127
254	1970	11	2,400	695	48	0	4,798	320	0	4,478	0	0
255	1970	12	3,100	1,353	99	0	4,778	2,582	0	2,196	0	0
256	1971	1	2,400	1,353	2,175	0	4,807	2,094	0	2,713	0	0
257	1971	2	1,800	1,222	2,020	0	4,449	1,483	0	2,966	0	0
258	1971	3	1,600	941	1,780	0	4,187	1,453	0	2,734	0	0
259	1971	4	600	0	435	4,399	8,892	4,695	80	4,117	4,023	1,815
260	1971	5	5,880	1,315	1,302	10,959	38,304	6,342	6,160	25,802	8,372	2,685
261	1971	6	7,559	695	2,157	10,051	67,461	4,394	966	62,101	10,398	4,440
262	1971	7	11,959	0	2,411	7,643	13,479	4,077	640	8,762	10,307	5,040
263	1971	8	12,359	0	2,466	4,936	13,570	3,261	610	9,698	8,989	4,783
264	1971	9	8,259	0	1,515	6,569	11,947	3,921	480	7,546	7,672	3,600
265	1971	10	4,680	0	1,114	727	8,473	5,119	160	3,194	3,394	2,127
266	1971	11	3,000	695	48	0	4,343	241	0	4,103	0	0
267	1971	12	3,200	1,353	90	0	4,892	2,073	0	2,819	0	0
268	1972	1	2,500	1,353	2,227	0	5,125	2,739	0	2,386	0	0
269	1972	2	1,700	1,136	2,008	0	4,435	2,559	0	1,876	0	0
270	1972	3	0	738	5	0	12,480	738	0	11,741	0	0
271	1972	4	100	814	435	2,579	11,926	826	7,169	3,931	3,258	1,815
272	1972	5	4,479	1,353	1,293	10,831	50,276	337	2,784	47,155	8,318	2,685
273	1972	6	7,959	695	2,109	9,664	32,228	541	1,644	30,044	10,235	4,440
274	1972	7	13,959	0	2,426	6,686	14,368	3,868	640	9,860	9,947	5,040
275	1972	8	12,859	0	2,519	3,486	13,887	3,276	610	10,002	8,424	4,783
276	1972	9	9,059	0	1,553	4,829	12,560	3,831	480	8,250	6,972	3,600
277	1972	10	4,580	0	1,114	566	10,118	5,681	160	4,277	3,326	2,127
278	1972	11	3,400	695	48	0	7,210	3,496	0	3,713	0	0
279	1972	12	3,900	1,353	162	0	4,865	2,717	0	2,148	0	0
280	1973	1	3,900	1,353	1,882	0	4,946	2,378	0	2,568	0	0
281	1973	2	3,800	1,222	1,434	0	4,536	1,901	0	2,635	0	0
282	1973	3	2,900	1,353	1,651	0	5,035	2,310	0	2,725	0	0
283	1973	4	3,400	1,309	435	0	18,435	1,371	80	16,984	2,172	1,815
284	1973	5	5,480	1,015	1,312	10,351	44,480	336	6,160	37,983	8,116	2,685
285	1973	6	8,359	695	2,086	10,351	58,904	541	4,266	54,098	10,524	4,440
286	1973	7	12,559	0	3,163	9,584	14,417	3,903	640	9,874	11,803	5,040
287	1973	8	12,859	0	3,290	6,630	12,732	3,484	610	8,638	10,413	4,783
288	1973	9	8,559	0	2,106	8,535	12,193	3,903	480	7,810	9,009	3,600
289	1973	10	5,069	0	1,114	1,024	8,024	5,681	160	2,183	3,519	2,127
290	1973	11	5,331	818	48	0	8,090	4,156	0	3,934	0	0
291	1973	12	5,331	1,353	555	0	4,790	2,206	0	2,584	0	0
292	1974	1	5,331	1,353	577	0	4,934	2,809	0	2,125	0	0
293	1974	2	4,407	843	559	0	4,605	2,694	0	1,911	0	0
294	1974	3	4,817	1,353	984	0	5,044	4,243	0	801	0	0
295	1974	4	3,477	1,309	485	493	11,085	10,323	80	682	2,423	1,815
296	1974	5	7,292	1,353	1,391	11,109	52,150	366	6,160	45,623	8,531	2,685
297	1974	6	10,205	1,309	2,321	9,705	60,018	3,554	16,731	39,733	10,423	4,440
298	1974	7	15,000	0	4,480	7,507	14,160	6,003	640	7,517	12,065	5,040
299	1974	8	16,837	0	4,667	3,687	13,893	3,856	610	9,427	10,362	4,783
300	1974	9	11,831	0	3,094	3,755	12,645	3,797	480	8,368	7,850	3,600

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			49	50	51	52	53	54	55	56	57	58	59
Table Number:			P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
Month Number	Year	Month	Diversions into Provo Reservoir Canal PRP	Diversions into Provo Reservoir Canal Non-Project	Provo River from Interstate 15 to Utah Lake Total	Provo River from Interstate 15 to Utah Lake CUP	Provo River from Interstate 15 to Utah Lake PRP	Provo River from Interstate 15 to Utah Lake Non-Project	PRP Diversion to Provo Bench Canal PRP	June Sucker Releases CUP	June Sucker Releases PRP	June Sucker Releases Non-Project	75-cfs Target Releases Non-Project
241	1969	10	961	306	5,510	5,024	0	137	160	0	0	0	-349
242	1969	11	0	0	8,198	1,779	0	6,419	0	0	0	0	0
243	1969	12	0	0	4,611	2,765	0	1,846	0	0	0	0	0
244	1970	1	0	0	4,611	2,736	0	1,876	0	0	0	0	0
245	1970	2	0	0	4,165	3,064	0	1,101	0	0	0	0	0
246	1970	3	0	0	4,611	2,780	0	1,831	0	0	0	0	0
247	1970	4	357	521	4,879	4,763	0	30	80	-2,875	-1,924	0	-87
248	1970	5	1,075	3,706	31,504	2,430	28,452	0	160	0	-2,076	-1,180	-622
249	1970	6	1,728	4,839	19,475	541	6,557	11,642	320	0	0	0	-735
250	1970	7	3,164	3,011	6,311	5,602	0	0	640	0	0	-1,058	-710
251	1970	8	3,294	2,029	4,334	3,626	0	65	610	0	0	0	-643
252	1970	9	2,144	2,757	4,463	3,920	0	0	480	0	0	0	-543
253	1970	10	961	306	4,611	3,727	0	502	160	0	0	0	-383
254	1970	11	0	0	5,574	320	0	5,254	0	0	0	0	0
255	1970	12	0	0	4,611	2,582	0	2,030	0	0	0	0	0
256	1971	1	0	0	4,611	2,094	0	2,517	0	0	0	0	0
257	1971	2	0	0	4,165	1,483	0	2,683	0	0	0	0	0
258	1971	3	0	0	3,639	1,453	0	2,186	0	0	0	0	0
259	1971	4	357	1,851	4,879	4,695	0	6	80	-2,875	-1,924	0	-178
260	1971	5	1,075	4,612	32,153	6,342	6,000	19,227	160	0	-2,076	-1,394	-584
261	1971	6	1,728	4,230	57,133	4,394	646	51,335	320	0	0	0	-758
262	1971	7	2,050	3,216	4,786	4,077	0	0	640	0	0	-1,097	-710
263	1971	8	2,129	2,077	3,996	3,261	0	69	610	0	0	0	-666
264	1971	9	1,308	2,764	4,463	3,921	0	0	480	0	0	0	-54[illegible]
265	1971	10	961	306	5,397	5,119	0	49	160	0	0	0	-22[illegible]
266	1971	11	0	0	4,995	241	0	4,754	0	0	0	0	0
267	1971	12	0	0	4,611	2,073	0	2,538	0	0	0	0	0
268	1972	1	0	0	4,611	2,739	0	1,872	0	0	0	0	0
269	1972	2	0	0	4,165	2,559	0	1,606	0	0	0	0	0
270	1972	3	0	0	12,060	738	0	11,322	0	0	0	0	0
271	1972	4	357	1,085	9,259	826	7,089	1,238	80	0	0	0	-106
272	1972	5	1,075	4,558	41,628	337	2,624	38,022	160	0	0	0	-645
273	1972	6	1,728	4,067	22,961	541	1,324	20,341	320	0	0	0	-755
274	1972	7	2,094	2,814	4,611	3,868	0	36	640	-2,875	-4,000	0	-708
275	1972	8	2,174	1,467	4,044	3,276	0	106	610	0	0	0	-663
276	1972	9	1,340	2,032	4,463	3,831	0	48	480	0	0	0	-584
277	1972	10	961	238	6,082	5,681	0	80	160	0	0	0	-321
278	1972	11	0	0	7,890	3,496	0	4,394	0	0	0	0	0
279	1972	12	0	0	4,611	2,717	0	1,895	0	0	0	0	0
280	1973	1	0	0	4,611	2,378	0	2,234	0	0	0	0	0
281	1973	2	0	0	4,165	1,901	0	2,264	0	0	0	0	0
282	1973	3	0	0	4,611	2,310	0	2,302	0	0	0	0	0
283	1973	4	357	0	18,645	1,371	0	17,273	80	0	0	0	0
284	1973	5	1,075	4,356	38,382	336	6,000	31,593	160	0	0	0	-453
285	1973	6	1,728	4,356	50,002	541	3,946	44,776	320	0	0	0	-739
286	1973	7	2,730	4,033	4,611	3,903	0	0	640	-2,875	-4,000	0	-708
287	1973	8	2,840	2,790	4,064	3,484	0	0	610	0	0	0	-580
288	1973	9	1,818	3,591	4,463	3,903	0	0	480	0	0	0	-560
289	1973	10	961	431	5,970	5,681	0	159	160	0	0	0	-130
290	1973	11	0	0	8,395	4,156	0	4,239	0	0	0	0	0
291	1973	12	0	0	4,611	2,206	0	2,406	0	0	0	0	0
292	1974	1	0	0	4,611	2,809	0	1,803	0	0	0	0	0
293	1974	2	0	0	4,165	2,694	0	1,471	0	0	0	0	0
294	1974	3	0	0	4,611	4,243	0	369	0	0	0	0	0
295	1974	4	400	208	10,323	10,323	0	0	80	-1,496	0	0	0
296	1974	5	1,171	4,675	43,718	366	6,000	36,600	160	0	0	0	-75[illegible]
297	1974	6	1,899	4,084	51,995	3,554	16,411	31,272	320	0	0	0	-7[illegible]
298	1974	7	3,866	3,159	6,712	6,003	0	0	640	-1,379	-4,000	-1,076	-71[illegible]
299	1974	8	4,028	1,551	4,593	3,856	0	94	610	0	0	0	-643
300	1974	9	2,670	1,580	4,463	3,797	0	77	480	0	0	0	-589

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:				1	2	3	4	5	6	7	8
Table Number:			P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number	Year	Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
301	1974	10	2,539	9,745	4,676	1,855	3,214	9,516	4,505	1,855	3,156
302	1974	11	3,964	8,675	5,849	1,852	974	8,675	5,849	1,852	974
303	1974	12	3,777	8,880	5,176	2,549	1,155	8,880	5,176	2,549	1,155
304	1975	1	3,459	8,433	6,472	1,214	747	8,433	6,472	1,214	747
305	1975	2	3,133	7,602	5,295	1,605	701	7,602	5,295	1,605	701
306	1975	3	3,886	7,904	5,791	1,852	261	7,904	5,791	1,852	261
307	1975	4	4,505	8,286	6,890	459	937	8,230	6,890	459	881
308	1975	5	28,257	24,412	8,197	8,066	8,149	23,153	8,197	8,066	6,889
309	1975	6	39,293	97,759	1,563	60,897	35,298	95,961	1,222	60,897	33,842
310	1975	7	7,296	55,183	10,744	28,545	15,894	52,465	9,431	28,545	14,490
311	1975	8	2,604	34,215	21,053	1,671	11,491	30,961	19,051	1,671	10,240
312	1975	9	565	21,316	10,398	4,359	6,559	19,750	9,590	4,359	5,801
313	1975	10	5,880	10,563	4,719	1,405	4,439	10,334	4,548	1,405	4,381
314	1975	11	4,916	9,167	5,301	3,332	533	9,167	5,301	3,332	533
315	1975	12	1,840	9,074	3,923	2,912	2,240	9,074	3,923	2,912	2,240
316	1976	1	0	8,882	5,457	1,817	1,607	8,882	5,457	1,817	1,607
317	1976	2	3,348	7,814	5,735	1,059	1,021	7,814	5,735	1,059	1,021
318	1976	3	3,983	8,036	5,632	1,137	1,268	8,036	5,632	1,137	1,268
319	1976	4	9,909	8,455	5,543	1,281	1,631	8,399	5,543	1,281	1,575
320	1976	5	23,848	51,225	2,745	36,088	12,392	49,466	2,686	36,088	10,692
321	1976	6	11,206	35,830	6,926	12,318	16,586	33,187	5,913	12,318	14,955
322	1976	7	835	33,348	16,948	3,084	13,316	30,252	15,471	3,084	11,697
323	1976	8	0	30,423	21,767	3,234	5,422	27,493	20,425	3,234	3,833
324	1976	9	0	22,631	17,264	1,969	3,397	21,212	16,690	1,969	2,553
325	1976	10	162	9,731	4,839	1,801	3,092	9,502	4,668	1,801	3,034
326	1976	11	3,151	8,416	5,637	1,546	1,233	8,416	5,637	1,546	1,233
327	1976	12	1,670	8,362	5,660	1,472	1,231	8,362	5,660	1,472	1,231
328	1977	1	314	8,470	7,240	720	510	8,470	7,240	720	510
329	1977	2	283	7,588	6,449	741	398	7,588	6,449	741	398
330	1977	3	314	8,318	5,690	1,435	1,193	8,318	5,690	1,435	1,193
331	1977	4	627	10,343	4,666	2,732	2,945	10,252	4,666	2,732	2,854
332	1977	5	3,831	14,398	6,841	1,456	6,100	13,756	6,841	1,456	5,459
333	1977	6	6,750	18,929	10,010	862	8,057	17,039	9,449	862	6,728
334	1977	7	0	20,625	11,928	0	8,697	17,997	10,679	0	7,318
335	1977	8	0	17,733	15,424	0	2,309	15,466	14,236	0	1,230
336	1977	9	0	19,396	16,111	0	3,285	18,378	15,689	0	2,689
337	1977	10	241	8,657	4,981	2,160	1,516	8,428	4,811	2,160	1,458
338	1977	11	2,607	7,930	5,072	1,442	1,416	7,930	5,072	1,442	1,416
339	1977	12	1,865	7,870	7,085	366	419	7,870	7,085	366	419
340	1978	1	468	8,072	7,506	110	456	8,072	7,506	110	456
341	1978	2	422	7,264	6,192	457	615	7,264	6,192	457	615
342	1978	3	468	7,686	6,275	1,411	0	7,686	6,275	1,411	0
343	1978	4	12,223	8,375	7,349	0	1,026	8,319	7,349	0	970
344	1978	5	35,642	23,472	8,619	206	14,647	21,677	8,619	206	12,853
345	1978	6	78,452	75,537	8,002	41,367	26,169	72,939	7,182	41,367	24,390
346	1978	7	5,192	68,271	18,729	28,876	20,667	64,989	17,101	28,876	19,013
347	1978	8	134	50,986	22,104	16,289	12,593	48,047	20,659	16,289	11,099
348	1978	9	28	21,098	15,629	2,461	3,008	19,671	15,056	2,461	2,154
349	1978	10	163	9,969	2,669	2,994	4,306	9,740	2,498	2,994	4,248
350	1978	11	3,305	7,914	4,409	2,315	1,190	7,914	4,409	2,315	1,190
351	1978	12	3,509	8,341	5,646	2,040	655	8,341	5,646	2,040	655
352	1979	1	3,470	8,355	6,754	932	669	8,355	6,754	932	669
353	1979	2	2,905	7,429	5,361	1,329	739	7,429	5,361	1,329	739
354	1979	3	3,499	8,938	4,618	2,963	1,358	8,938	4,618	2,963	1,358
355	1979	4	6,721	8,490	4,657	2,139	1,694	8,434	4,657	2,139	1,638
356	1979	5	41,745	23,689	3,678	8,750	11,261	21,983	3,645	8,750	9,587
357	1979	6	12,577	26,084	6,923	5,029	14,132	23,571	6,017	5,029	12,524
358	1979	7	2,184	34,475	17,442	430	16,603	31,293	15,895	430	14,968
359	1979	8	1,143	28,681	23,462	1,416	3,803	25,855	22,073	1,416	2,367
360	1979	9	3	18,090	14,016	1,936	2,138	16,670	13,425	1,936	1,309

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			9	10	11	12	13	14	15	16	17	18
Table Number:			P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number	Year	Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions in Reach vCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
301	1974	10	229	171	58	7,686	3,448	1,114	1,639	1,855	2,383	14,284
302	1974	11	0	0	0	7,701	5,849	0	231	1,852	0	17,468
303	1974	12	0	0	0	7,725	5,176	0	223	2,549	0	13,785
304	1975	1	0	0	0	7,732	6,472	0	595	1,214	46	12,986
305	1975	2	0	0	0	6,981	5,295	0	525	1,605	80	11,711
306	1975	3	0	0	0	7,793	5,791	0	173	1,852	150	14,874
307	1975	4	56	0	56	7,438	6,890	0	675	459	89	12,415
308	1975	5	1,260	0	1,260	16,263	8,197	0	631	8,066	0	22,966
309	1975	6	1,798	342	1,456	85,759	1,163	0	699	60,897	23,699	93,472
310	1975	7	2,718	1,314	1,404	40,089	9,130	84	707	28,545	2,415	44,682
311	1975	8	3,253	2,002	1,251	21,718	17,258	1,574	258	1,671	2,790	31,487
312	1975	9	1,566	808	758	13,052	7,655	1,948	254	4,359	1,038	22,912
313	1975	10	229	171	58	7,964	3,845	731	2,069	1,405	2,715	14,820
314	1975	11	0	0	0	8,634	5,301	0	0	3,332	0	16,718
315	1975	12	0	0	0	7,831	3,923	0	990	2,912	997	13,018
316	1976	1	0	0	0	7,877	5,457	0	800	1,817	602	13,701
317	1976	2	0	0	0	7,401	5,735	0	329	1,059	608	13,412
318	1976	3	0	0	0	7,899	5,632	0	109	1,137	1,131	14,935
319	1976	4	56	0	56	7,651	5,543	0	640	1,281	827	11,813
320	1976	5	1,759	59	1,700	38,764	2,676	0	1,178	36,088	0	38,811
321	1976	6	2,644	1,013	1,631	22,323	5,729	13	810	12,318	4,276	26,257
322	1976	7	3,096	1,477	1,619	19,359	14,220	1,084	258	3,084	2,055	25,256
323	1976	8	2,931	1,342	1,589	19,031	14,263	6,431	258	3,234	1,533	25,803
324	1976	9	1,419	575	844	16,263	12,030	4,944	254	1,969	2,264	24,084
325	1976	10	229	171	58	7,936	3,699	1,018	1,397	1,801	2,436	13,861
326	1976	11	0	0	0	7,664	5,637	0	599	1,546	481	15,241
327	1976	12	0	0	0	7,914	5,660	0	357	1,472	783	14,943
328	1977	1	0	0	0	7,960	7,240	0	406	720	0	14,068
329	1977	2	0	0	0	7,267	6,449	0	256	741	77	12,823
330	1977	3	0	0	0	7,987	5,690	0	264	1,435	862	13,045
331	1977	4	91	0	91	7,730	4,666	0	936	2,732	332	10,511
332	1977	5	642	0	642	8,458	6,841	0	303	1,456	160	12,844
333	1977	6	1,889	560	1,329	9,924	8,805	595	383	862	257	15,268
334	1977	7	2,628	1,249	1,379	8,375	8,375	2,267	1,560	0	0	11,703
335	1977	8	2,267	1,188	1,079	8,576	8,032	6,505	341	0	544	15,666
336	1977	9	1,018	422	596	14,175	12,544	3,331	254	0	1,631	21,604
337	1977	10	229	171	58	7,686	4,258	568	105	2,160	1,269	13,344
338	1977	11	0	0	0	7,438	5,072	0	392	1,442	924	11,535
339	1977	12	0	0	0	7,686	7,085	0	147	366	235	14,329
340	1978	1	0	0	0	7,686	7,506	0	307	110	70	12,701
341	1978	2	0	0	0	6,942	6,192	0	256	457	293	11,354
342	1978	3	0	0	0	7,805	6,275	0	0	1,411	119	15,918
343	1978	4	56	0	56	7,438	7,349	0	746	0	89	12,096
344	1978	5	1,795	0	1,795	11,141	8,619	0	1,307	206	2,316	15,300
345	1978	6	2,598	820	1,778	59,904	7,043	0	1,028	41,367	11,495	64,478
346	1978	7	3,282	1,628	1,654	54,678	16,725	107	258	28,876	9,076	61,607
347	1978	8	2,939	1,445	1,494	39,072	16,391	4,359	258	16,289	6,392	47,489
348	1978	9	1,427	573	854	14,263	10,074	5,294	254	2,461	1,729	23,496
349	1978	10	229	171	58	7,686	1,488	1,063	1,793	2,994	3,204	14,225
350	1978	11	0	0	0	7,438	4,409	0	0	2,315	714	15,774
351	1978	12	0	0	0	7,686	5,646	0	0	2,040	0	13,345
352	1979	1	0	0	0	7,686	6,754	0	0	932	0	12,792
353	1979	2	0	0	0	6,993	5,361	0	275	1,329	303	12,307
354	1979	3	0	0	0	8,904	4,618	0	0	2,963	1,324	16,631
355	1979	4	56	0	56	7,438	4,657	0	838	2,139	642	10,999
356	1979	5	1,707	33	1,674	12,390	3,640	0	1,150	8,750	0	17,327
357	1979	6	2,514	906	1,608	12,905	5,857	7	799	5,029	2,018	20,996
358	1979	7	3,181	1,547	1,635	19,876	14,668	1,045	258	430	4,778	24,591
359	1979	8	2,825	1,389	1,436	17,614	15,628	6,728	258	1,416	570	25,080
360	1979	9	1,420	591	829	12,571	8,902	4,792	254	1,936	1,732	21,110

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			19	20	21	22	23	24	25	26	27	28
Table Number:			P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number	Year	Month	Provo River from Snake Creek to Deer Creek Reservoir CUP	Provo River from Snake Creek to Deer Creek Reservoir PRP	Provo River from Snake Creek to Deer Creek Reservoir Non-Project	CUP Return Flow Gains above Deer Creek CUP	Provo River from Outlet of Deer Creek to North Fork Total	Provo River from Outlet of Deer Creek to North Fork CUP	Provo River from Outlet of Deer Creek to North Fork PRP	Provo River from Outlet of Deer Creek to North Fork Non-Project	Diversions into Salt Lake Aqueduct Total	Diversions into Salt Lake Aqueduct CUP
301	1974	10	3,448	1,855	8,980	0	11,395	5,774	2,488	3,133	6,100	0
302	1974	11	5,849	1,852	9,768	0	6,388	6,341	48	0	4,490	0
303	1974	12	5,176	2,549	6,060	0	6,149	4,900	531	718	4,077	0
304	1975	1	6,472	1,214	5,299	0	6,149	4,044	453	1,651	4,152	0
305	1975	2	5,295	1,605	4,810	0	5,554	3,292	776	1,485	3,259	0
306	1975	3	5,791	1,852	7,231	0	6,149	4,241	223	1,684	3,693	0
307	1975	4	6,890	459	5,066	0	8,127	6,294	965	868	1,150	0
308	1975	5	8,197	8,066	6,703	3,241	32,630	16,330	6,801	9,499	2,530	0
309	1975	6	1,163	60,897	31,411	3,124	97,984	3,911	14,767	79,306	7,700	0
310	1975	7	9,130	28,545	7,007	1,866	51,768	9,163	13,108	29,497	7,290	0
311	1975	8	17,258	1,671	12,558	1,955	41,671	18,282	9,304	14,085	7,700	0
312	1975	9	7,655	4,359	10,898	1,609	31,993	9,817	6,244	15,931	7,710	0
313	1975	10	3,845	1,405	9,571	0	9,730	6,797	2,488	445	6,100	0
314	1975	11	5,301	3,332	8,084	0	5,950	5,738	119	93	4,488	0
315	1975	12	3,923	2,912	6,183	0	6,149	3,357	717	2,075	3,773	0
316	1976	1	5,457	1,817	6,427	0	6,149	3,259	1,160	1,729	3,451	0
317	1976	2	5,735	1,059	6,619	0	5,752	4,018	1,734	0	2,162	0
318	1976	3	5,632	1,137	8,167	0	6,149	4,110	2,038	0	1,877	0
319	1976	4	5,543	1,281	4,989	0	12,447	9,200	965	2,283	1,150	0
320	1976	5	2,676	36,088	47	5,910	48,257	7,079	16,225	24,953	2,530	0
321	1976	6	5,729	12,318	8,210	2,647	43,172	11,500	4,521	27,151	7,700	0
322	1976	7	14,220	3,084	7,952	774	34,459	15,914	8,986	9,559	7,290	0
323	1976	8	14,263	3,234	8,305	150	33,938	15,535	9,304	9,099	7,700	0
324	1976	9	12,030	1,969	10,085	582	29,900	14,233	6,244	9,423	7,710	0
325	1976	10	3,699	1,801	8,361	0	8,574	5,933	2,488	153	6,100	0
326	1976	11	5,637	1,546	8,058	0	6,028	5,845	183	0	4,490	0
327	1976	12	5,660	1,472	7,812	0	6,149	5,383	766	0	3,729	0
328	1977	1	7,240	720	6,108	0	6,149	4,992	1,090	66	3,515	0
329	1977	2	6,449	741	5,633	0	5,554	4,334	1,190	30	2,989	0
330	1977	3	5,690	1,435	5,920	0	6,149	3,979	2,130	40	1,780	0
331	1977	4	4,666	2,732	3,113	1,236	12,180	6,381	2,868	2,932	1,150	0
332	1977	5	6,841	1,456	4,546	2,297	24,516	8,953	4,763	10,800	2,530	0
333	1977	6	8,805	862	5,600	969	24,347	13,141	4,647	6,560	7,700	0
334	1977	7	8,375	0	3,329	0	33,317	19,937	8,986	4,394	7,290	0
335	1977	8	8,032	0	7,634	43	35,828	18,675	9,304	7,849	7,700	0
336	1977	9	12,544	0	9,060	206	28,971	14,822	6,244	7,904	7,710	0
337	1977	10	4,258	2,160	6,926	0	10,296	6,654	0	3,642	3,598	0
338	1977	11	5,072	1,442	5,021	0	5,950	5,265	642	43	1,421	0
339	1977	12	7,085	366	6,878	0	6,149	5,346	802	0	1,010	0
340	1978	1	7,506	110	5,085	0	6,123	5,624	443	56	0	0
341	1978	2	6,192	457	4,705	0	5,527	5,089	395	43	0	0
342	1978	3	6,275	1,411	8,231	0	6,692	6,692	0	0	399	0
343	1978	4	7,349	0	4,747	0	8,231	7,287	944	0	1,150	0
344	1978	5	8,619	206	6,475	6,309	34,381	12,762	6,828	14,791	2,530	0
345	1978	6	7,043	41,367	16,069	3,837	31,329	9,607	4,425	17,297	7,700	0
346	1978	7	16,725	28,876	16,006	1,813	40,848	17,484	8,986	14,378	7,290	0
347	1978	8	16,391	16,289	14,809	24	36,562	17,105	9,304	10,153	7,700	0
348	1978	9	10,074	2,461	10,962	550	30,680	12,172	6,244	12,264	7,710	0
349	1978	10	1,488	2,994	9,744	0	8,624	3,709	2,488	2,427	6,100	0
350	1978	11	4,409	2,315	9,050	0	5,950	4,611	547	792	4,118	0
351	1978	12	5,646	2,040	5,659	0	6,149	3,785	1,142	1,221	3,354	0
352	1979	1	6,754	932	5,105	0	6,149	4,655	450	1,043	4,156	0
353	1979	2	5,361	1,329	5,617	0	5,554	3,656	1,682	215	2,354	0
354	1979	3	4,618	2,963	9,051	0	6,149	3,105	2,136	908	1,780	0
355	1979	4	4,657	2,139	4,203	0	15,895	14,931	965	0	1,150	0
356	1979	5	3,640	8,750	4,937	6,304	33,128	7,576	6,785	18,767	2,530	0
357	1979	6	5,857	5,029	10,110	3,600	38,870	10,393	4,423	24,054	7,700	0
358	1979	7	14,668	430	9,493	491	37,504	16,895	8,986	11,623	7,290	0
359	1979	8	15,628	1,416	8,036	820	37,514	17,693	9,304	10,517	7,700	0
360	1979	9	8,902	1,936	10,271	310	28,350	11,976	6,244	10,130	7,710	0

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			29	30	31	32	33	34	35	36	37	38
Table Number:			P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number	Year	Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
301	1974	10	6,100	11,583	5,774	2,488	3,321	6,900	768	1,239	4,893	6,377
302	1974	11	4,490	7,427	6,341	48	1,039	4,031	1,632	0	2,400	5,642
303	1974	12	4,077	6,857	4,900	531	1,426	2,827	954	0	1,874	5,830
304	1975	1	4,152	6,708	4,044	453	2,210	2,822	0	0	2,821	5,850
305	1975	2	3,259	6,023	3,292	776	1,954	2,607	0	0	2,607	5,290
306	1975	3	3,693	6,595	4,241	223	2,130	3,001	0	0	3,000	5,817
307	1975	4	1,150	9,565	6,294	965	2,306	4,575	33	480	4,062	8,347
308	1975	5	2,530	36,008	16,330	6,801	12,877	28,240	7,533	5,331	15,376	17,636
309	1975	6	7,700	105,297	3,911	14,767	86,619	100,367	0	12,563	87,805	18,333
310	1975	7	7,290	57,019	9,163	13,108	34,748	42,840	0	8,628	34,212	24,542
311	1975	8	7,700	44,823	18,282	9,304	17,237	26,731	0	7,509	19,222	27,668
312	1975	9	7,710	33,702	9,817	6,244	17,640	22,714	0	3,150	19,564	21,170
313	1975	10	6,100	10,838	6,797	2,488	1,553	5,599	768	1,239	3,592	8,589
314	1975	11	4,488	7,915	5,738	119	2,058	6,644	2,012	0	4,632	4,633
315	1975	12	3,773	7,258	3,357	717	3,185	4,491	0	0	4,491	5,427
316	1976	1	3,451	6,931	3,259	1,160	2,511	3,349	0	0	3,348	5,772
317	1976	2	2,162	6,368	4,018	1,734	616	3,043	1,588	0	1,455	5,429
318	1976	3	1,877	6,612	4,110	2,038	463	3,034	1,930	0	1,104	5,571
319	1976	4	1,150	13,327	9,200	965	3,163	14,059	9,808	480	3,771	2,193
320	1976	5	2,530	51,143	7,079	16,225	27,839	47,268	3,363	14,812	29,093	18,930
321	1976	6	7,700	45,759	11,500	4,521	29,738	37,128	2,870	2,219	32,039	25,716
322	1976	7	7,290	36,397	15,914	8,986	11,497	17,678	0	4,506	13,172	23,523
323	1976	8	7,700	34,937	15,535	9,304	10,098	16,570	0	4,638	11,932	23,087
324	1976	9	7,710	30,716	14,233	6,244	10,239	15,195	0	3,150	12,045	20,856
325	1976	10	6,100	9,176	5,933	2,488	755	4,311	768	1,239	2,304	6,675
326	1976	11	4,490	6,712	5,845	183	684	3,271	1,627	0	1,645	5,286
327	1976	12	3,729	6,792	5,383	766	643	2,572	1,632	0	940	5,869
328	1977	1	3,515	6,616	4,992	1,090	533	2,479	1,538	0	941	5,898
329	1977	2	2,989	5,892	4,334	1,190	368	1,888	1,389	0	500	5,357
330	1977	3	1,780	6,455	3,979	2,130	346	2,083	1,567	0	516	5,858
331	1977	4	1,150	12,399	6,381	2,868	3,150	10,676	3,619	2,404	4,653	3,225
332	1977	5	2,530	25,314	8,953	4,763	11,598	17,507	940	3,407	13,160	14,065
333	1977	6	7,700	25,149	13,141	4,647	7,362	11,545	0	2,219	9,327	18,479
334	1977	7	7,290	34,306	19,937	8,986	5,383	10,891	0	4,506	6,385	25,906
335	1977	8	7,700	36,167	18,675	9,304	8,188	13,951	0	4,638	9,313	25,242
336	1977	9	7,710	29,273	14,822	6,244	8,207	12,361	0	3,150	9,211	19,823
337	1977	10	3,598	10,670	6,654	0	4,016	5,692	768	0	4,923	6,010
338	1977	11	1,421	6,445	5,265	642	538	2,525	1,627	0	897	5,058
339	1977	12	1,010	6,713	5,346	802	564	2,393	1,562	0	830	5,414
340	1978	1	0	6,507	5,624	443	440	2,485	1,751	0	734	5,153
341	1978	2	0	5,907	5,089	395	423	2,568	1,879	0	689	4,713
342	1978	3	399	7,682	6,692	0	990	5,977	3,531	0	2,445	4,514
343	1978	4	1,150	10,837	7,287	944	2,606	7,834	2,696	480	4,658	6,364
344	1978	5	2,530	38,966	12,762	6,828	19,376	31,891	4,455	5,331	22,106	19,670
345	1978	6	7,700	37,994	9,607	4,425	23,962	27,322	0	2,219	25,104	23,316
346	1978	7	7,290	45,149	17,484	8,986	18,679	26,468	0	6,404	20,063	27,668
347	1978	8	7,700	38,879	17,105	9,304	12,470	18,973	0	4,638	14,336	25,517
348	1978	9	7,710	32,004	12,172	6,244	13,588	18,641	0	3,150	15,491	20,832
349	1978	10	6,100	9,018	3,709	2,488	2,821	6,121	768	1,239	4,114	4,874
350	1978	11	4,118	6,250	4,611	547	1,092	2,511	811	0	1,700	5,257
351	1978	12	3,354	6,428	3,785	1,142	1,500	1,591	330	0	1,260	5,950
352	1979	1	4,156	6,553	4,655	450	1,447	2,041	563	0	1,477	5,258
353	1979	2	2,354	5,903	3,656	1,682	564	1,884	1,247	0	637	5,313
354	1979	3	1,780	6,645	3,105	2,136	1,405	2,535	827	0	1,708	5,766
355	1979	4	1,150	16,908	14,931	965	1,013	14,753	12,399	480	1,874	4,325
356	1979	5	2,530	38,076	7,576	6,785	23,715	34,420	3,074	5,331	26,016	18,140
357	1979	6	7,700	43,108	10,393	4,423	28,292	33,351	0	2,488	30,863	26,776
358	1979	7	7,290	39,611	16,895	8,986	13,730	20,056	0	4,506	15,550	26,157
359	1979	8	7,700	38,741	17,693	9,304	11,744	18,358	0	4,638	13,720	26,371
360	1979	9	7,710	29,417	11,976	6,244	11,197	16,446	0	3,150	13,296	19,211

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			39	40	41	42	43	44	45	46	47	48
Table Number:			P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number	Year	Month	Diversions into Olmsted Aqueduct CUP	Diversions into Olmsted Aqueduct Ap 40524	Diversions into Olmsted Aqueduct PRP	Diversions into Olmsted Aqueduct Non-Project	Provo River from Murdock to Interstate15 Total	Provo River from Murdock to Interstate15 CUP	Provo River from Murdock to Interstate15 PRP	Provo River from Murdock to Interstate15 Non-Project	Diversions into Provo Reservoir Canal Total	ULS Water in Provo Reservoir Canal CUP
301	1974	10	5,006	0	1,250	122	10,752	5,717	160	4,874	3,257	2,127
302	1974	11	5,594	885	48	0	8,642	6,094	0	2,548	0	0
303	1974	12	5,299	1,353	531	0	5,535	3,556	0	1,979	0	0
304	1975	1	5,397	1,353	453	0	4,965	2,061	0	2,904	0	0
305	1975	2	4,514	1,222	776	0	4,547	1,871	0	2,676	0	0
306	1975	3	5,594	1,353	223	0	5,118	2,050	0	3,067	0	0
307	1975	4	7,570	1,309	485	292	4,389	463	80	3,846	2,338	1,815
308	1975	5	8,797	0	1,470	7,369	17,294	13,432	160	3,701	6,957	2,685
309	1975	6	4,625	714	2,204	11,503	84,119	594	10,664	72,860	11,179	4,440
310	1975	7	10,516	1,353	4,480	9,547	27,711	1,210	4,762	21,738	12,923	5,040
311	1975	8	18,282	0	1,795	7,591	13,636	3,856	610	9,170	14,876	4,783
312	1975	9	9,817	0	3,094	8,259	12,673	3,877	480	8,315	9,746	3,600
313	1975	10	6,029	0	1,250	1,311	7,828	5,717	160	1,951	3,757	2,127
314	1975	11	4,514	788	119	0	7,098	2,250	0	4,848	0	0
315	1975	12	4,710	1,353	717	0	4,658	0	0	4,658	0	0
316	1976	1	4,612	1,353	1,160	0	4,789	1,324	0	3,465	0	0
317	1976	2	3,695	1,265	1,734	0	4,458	2,911	0	1,547	0	0
318	1976	3	3,533	1,353	2,038	0	5,044	3,871	0	1,173	0	0
319	1976	4	701	1,309	485	1,007	12,487	9,933	80	2,473	2,639	1,815
320	1976	5	5,069	1,353	1,412	12,448	28,512	9,786	9,642	9,084	9,094	2,685
321	1976	6	8,630	0	2,302	14,784	16,347	7,964	320	8,062	12,560	4,440
322	1976	7	15,914	0	4,480	3,129	12,710	3,968	640	8,102	10,223	5,040
323	1976	8	15,535	0	4,667	2,885	12,705	3,856	610	8,239	10,025	4,783
324	1976	9	14,233	0	3,094	3,530	11,732	3,894	480	7,358	7,756	3,600
325	1976	10	5,395	230	1,250	30	6,962	4,398	160	2,404	3,218	2,127
326	1976	11	5,103	885	183	0	4,460	2,716	0	1,745	0	0
327	1976	12	5,103	1,353	766	0	4,926	3,890	0	1,036	0	0
328	1977	1	4,808	1,353	1,090	0	4,698	3,687	0	1,011	0	0
329	1977	2	4,167	1,222	1,190	0	1,939	1,389	0	551	0	0
330	1977	3	3,729	1,317	2,130	0	2,128	1,567	0	561	0	0
331	1977	4	2,762	0	464	0	9,374	4,467	80	4,827	2,215	1,815
332	1977	5	8,013	0	1,357	4,695	12,194	6,584	160	5,450	5,832	2,685
333	1977	6	13,141	0	2,428	2,910	8,630	3,741	320	4,569	7,563	4,440
334	1977	7	19,937	0	4,480	1,490	8,452	3,818	640	3,994	9,533	5,040
335	1977	8	18,675	0	4,667	1,901	11,317	3,856	610	6,851	9,611	4,783
336	1977	9	14,822	0	3,094	1,907	11,133	3,909	480	6,744	7,073	3,600
337	1977	10	5,886	0	0	124	10,304	5,380	0	4,924	2,179	2,127
338	1977	11	4,416	779	642	0	7,061	6,090	0	971	0	0
339	1977	12	4,612	828	802	0	7,087	6,174	0	913	0	0
340	1978	1	4,710	837	443	0	5,486	4,695	0	791	0	0
341	1978	2	4,318	1,107	395	0	4,861	4,115	0	746	0	0
342	1978	3	4,514	1,353	0	0	6,126	3,531	0	2,594	0	0
343	1978	4	5,901	1,309	464	0	7,942	2,821	80	5,041	2,215	1,815
344	1978	5	8,307	0	1,498	9,865	17,316	10,723	160	6,434	8,007	2,685
345	1978	6	9,607	0	2,206	11,503	12,202	4,814	320	7,068	11,179	4,440
346	1978	7	17,484	0	2,582	7,603	12,562	3,902	640	8,020	14,004	5,040
347	1978	8	17,105	0	4,667	3,745	14,096	3,856	610	9,630	10,387	4,783
348	1978	9	12,172	0	3,094	5,566	12,375	3,896	480	7,999	8,612	3,600
349	1978	10	2,941	0	1,250	684	9,135	5,717	160	3,258	3,493	2,127
350	1978	11	4,710	910	547	0	7,024	5,274	0	1,751	0	0
351	1978	12	4,808	1,353	1,142	0	5,665	4,348	0	1,317	0	0
352	1979	1	4,808	716	450	0	5,031	3,496	0	1,535	0	0
353	1979	2	3,631	1,222	1,682	0	4,169	3,480	0	689	0	0
354	1979	3	3,631	1,353	2,136	0	5,067	3,285	0	1,782	0	0
355	1979	4	3,841	1,309	485	0	14,625	12,524	80	2,021	2,215	1,815
356	1979	5	5,855	1,353	1,454	10,831	18,421	9,432	160	8,829	8,413	2,685
357	1979	6	10,393	0	1,936	14,448	11,976	4,035	320	7,621	12,687	4,440
358	1979	7	16,895	0	4,480	4,782	12,421	3,976	640	7,805	10,919	5,040
359	1979	8	17,693	0	4,667	4,011	12,903	3,856	610	8,437	10,498	4,783
360	1979	9	11,976	0	3,094	4,141	12,151	3,888	480	7,782	8,013	3,600

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			49	50	51	52	53	54	55	56	57	58	59
Table Number:			P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
Month Number	Year	Month	Diversions into Provo Reservoir Canal PRP	Diversions into Provo Reservoir Canal Non-Project	Provo River from Interstate 15 to Utah Lake Total	Provo River from Interstate 15 to Utah Lake CUP	Provo River from Interstate 15 to Utah Lake PRP	Provo River from Interstate 15 to Utah Lake Non-Project	PRP Diversion to Provo Bench Canal PRP	June Sucker Releases CUP	June Sucker Releases PRP	June Sucker Releases Non-Project	75-cfs Target Releases Non-Project
301	1974	10	1,079	51	6,074	5,717	0	79	160	0	0	0	-278
302	1974	11	0	0	9,000	6,094	0	2,906	0	0	0	0	0
303	1974	12	0	0	5,164	3,556	0	1,607	0	0	0	0	0
304	1975	1	0	0	4,611	2,061	0	2,551	0	0	0	0	0
305	1975	2	0	0	4,165	1,871	0	2,295	0	0	0	0	0
306	1975	3	0	0	4,611	2,050	0	2,561	0	0	0	0	0
307	1975	4	400	123	4,879	463	0	4,416	80	-463	0	0	0
308	1975	5	1,171	3,101	13,786	13,432	0	0	160	-2,412	-4,000	-922	-353
309	1975	6	1,899	4,841	76,155	594	10,344	64,508	320	0	0	0	-709
310	1975	7	3,866	4,017	18,319	1,210	4,122	12,277	640	0	0	0	-710
311	1975	8	6,899	3,194	4,522	3,856	0	0	610	0	0	0	-666
312	1975	9	2,670	3,475	4,463	3,877	0	0	480	0	0	0	-585
313	1975	10	1,079	552	5,950	5,717	0	90	160	0	0	0	-142
314	1975	11	0	0	8,001	2,250	0	5,751	0	0	0	0	0
315	1975	12	0	0	4,613	0	0	4,613	0	0	0	0	0
316	1976	1	0	0	4,611	1,324	0	3,288	0	0	0	0	0
317	1976	2	0	0	4,165	2,911	0	1,254	0	0	0	0	0
318	1976	3	0	0	4,611	3,871	0	740	0	0	0	0	0
319	1976	4	400	424	12,310	9,933	0	2,377	80	0	0	0	0
320	1976	5	1,171	5,238	20,703	9,786	9,482	753	160	-2,875	-4,000	-1,446	-683
321	1976	6	1,899	6,221	8,717	7,964	0	0	320	0	0	-1,800	-753
322	1976	7	3,866	1,317	4,611	3,968	0	0	640	0	0	-584	-643
323	1976	8	4,028	1,214	4,526	3,856	0	107	610	0	0	0	-562
324	1976	9	2,670	1,485	4,463	3,894	0	59	480	0	0	0	-50[illegible]
325	1976	10	1,079	13	4,611	4,398	0	79	160	0	0	0	-13[illegible]
326	1976	11	0	0	4,463	2,716	0	1,747	0	0	0	0	0
327	1976	12	0	0	4,611	3,890	0	721	0	0	0	0	0
328	1977	1	0	0	4,368	3,687	0	681	0	0	0	0	0
329	1977	2	0	0	1,851	1,389	0	462	0	0	0	0	0
330	1977	3	0	0	1,609	1,567	0	41	0	0	0	0	0
331	1977	4	400	0	4,879	4,467	0	94	80	-2,875	-1,924	0	-318
332	1977	5	1,171	1,976	7,011	6,584	0	0	160	0	-2,076	-666	-427
333	1977	6	1,899	1,225	4,093	3,741	0	0	320	0	0	-447	-351
334	1977	7	3,866	627	4,102	3,818	0	0	640	0	0	-269	-284
335	1977	8	4,028	800	4,380	3,856	0	81	610	0	0	0	-443
336	1977	9	2,670	803	4,463	3,909	0	88	480	0	0	0	-466
337	1977	10	0	52	5,737	5,380	0	79	0	0	0	0	-278
338	1977	11	0	0	6,411	6,090	0	320	0	0	0	0	0
339	1977	12	0	0	6,266	6,174	0	93	0	0	0	0	0
340	1978	1	0	0	4,758	4,695	0	62	0	0	0	0	0
341	1978	2	0	0	4,165	4,115	0	50	0	0	0	0	0
342	1978	3	0	0	5,731	3,531	0	2,199	0	0	0	0	0
343	1978	4	400	0	8,907	2,821	0	6,086	80	0	0	0	0
344	1978	5	1,171	4,151	11,338	10,723	0	0	160	-2,875	-4,000	-1,290	-616
345	1978	6	1,899	4,840	5,572	4,814	0	1	320	0	0	-1,520	-758
346	1978	7	5,764	3,199	4,611	3,902	0	0	640	0	0	-1,086	-710
347	1978	8	4,028	1,576	4,598	3,856	0	94	610	0	0	0	-647
348	1978	9	2,670	2,342	4,463	3,896	0	18	480	0	0	0	-549
349	1978	10	1,079	288	5,995	5,717	0	153	160	0	0	0	-125
350	1978	11	0	0	6,369	5,274	0	1,096	0	0	0	0	0
351	1978	12	0	0	5,803	4,348	0	1,454	0	0	0	0	0
352	1979	1	0	0	4,611	3,496	0	1,116	0	0	0	0	0
353	1979	2	0	0	4,165	3,480	0	685	0	0	0	0	0
354	1979	3	0	0	4,611	3,285	0	1,326	0	0	0	0	0
355	1979	4	400	0	14,989	12,524	0	2,464	80	-1,217	0	0	0
356	1979	5	1,171	4,558	13,189	9,432	0	3,171	160	-1,658	-4,000	-1,381	-58[illegible]
357	1979	6	2,168	6,080	4,768	4,035	0	0	320	0	0	-1,823	-7[illegible]
358	1979	7	3,866	2,012	4,611	3,976	0	0	640	0	0	-757	-636
359	1979	8	4,028	1,688	4,487	3,856	0	64	610	0	0	0	-567
360	1979	9	2,670	1,742	4,463	3,888	0	48	480	0	0	0	-526

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:				1	2	3	4	5	6	7	8
Table Number:			P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number	Year	Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
361	1979	10	296	9,775	4,165	1,861	3,749	9,546	3,994	1,861	3,691
362	1979	11	3,088	8,007	5,161	1,342	1,505	8,007	5,161	1,342	1,505
363	1979	12	1,469	8,208	5,419	1,315	1,474	8,208	5,419	1,315	1,474
364	1980	1	438	7,686	6,565	1,121	0	7,686	6,565	1,121	0
365	1980	2	410	7,349	5,482	1,251	616	7,349	5,482	1,251	616
366	1980	3	2,987	8,765	5,448	2,454	863	8,765	5,448	2,454	863
367	1980	4	11,061	7,859	4,814	2,625	421	7,803	4,814	2,625	365
368	1980	5	44,521	17,821	2,700	7,564	7,556	16,568	2,700	7,564	6,303
369	1980	6	28,089	37,071	4,141	20,159	12,771	34,899	3,466	20,159	11,274
370	1980	7	5,512	34,307	12,166	4,019	18,123	31,120	10,314	4,019	16,787
371	1980	8	484	27,183	18,258	1,891	7,035	24,322	16,660	1,891	5,771
372	1980	9	228	19,421	11,323	4,042	4,056	18,328	10,981	4,042	3,305
373	1980	10	504	9,688	4,018	2,140	3,530	9,459	3,847	2,140	3,472
374	1980	11	3,983	9,623	5,255	3,701	667	9,623	5,255	3,701	667
375	1980	12	3,892	9,723	5,419	2,440	1,864	9,723	5,419	2,440	1,864
376	1981	1	3,392	8,389	6,280	1,219	890	8,389	6,280	1,219	890
377	1981	2	3,068	7,365	5,768	1,175	423	7,365	5,768	1,175	423
378	1981	3	3,049	8,046	6,024	1,224	798	8,046	6,024	1,224	798
379	1981	4	12,956	9,930	6,962	396	2,572	9,655	6,962	396	2,297
380	1981	5	21,526	30,198	5,799	12,167	12,232	28,400	5,799	12,167	10,434
381	1981	6	27,563	57,425	7,123	26,765	23,537	54,734	6,191	26,765	21,779
382	1981	7	709	29,264	12,629	5,113	11,522	26,018	11,144	5,113	9,761
383	1981	8	0	24,834	19,266	2,449	3,119	22,047	17,879	2,449	1,718
384	1981	9	329	16,103	12,086	2,471	1,547	14,753	11,509	2,471	773
385	1981	10	1,291	9,860	4,092	1,233	4,534	9,631	3,921	1,233	4,476
386	1981	11	4,733	9,237	3,104	3,106	3,027	9,237	3,104	3,106	3,027
387	1981	12	1,335	9,544	5,326	801	3,417	9,544	5,326	801	3,417
388	1982	1	468	8,175	6,110	535	1,530	8,175	6,110	535	1,530
389	1982	2	422	7,206	5,227	715	1,264	7,206	5,227	715	1,264
390	1982	3	4,643	9,383	5,227	2,119	2,036	9,383	5,227	2,119	2,036
391	1982	4	10,457	7,784	5,340	927	1,517	7,728	5,340	927	1,461
392	1982	5	16,556	49,063	4,572	26,586	17,905	47,803	4,572	26,586	16,645
393	1982	6	19,343	69,427	5,052	33,012	31,363	67,627	4,708	33,012	29,907
394	1982	7	11,466	44,184	11,751	13,870	18,563	40,782	9,896	13,870	17,016
395	1982	8	2,200	27,249	17,610	483	9,156	24,167	16,009	483	7,675
396	1982	9	7,278	21,396	10,066	3,065	8,266	19,858	9,400	3,065	7,393
397	1982	10	12,581	9,328	4,385	1,397	3,545	9,099	4,214	1,397	3,487
398	1982	11	6,032	9,727	5,466	877	3,384	9,727	5,466	877	3,384
399	1982	12	1,237	8,923	5,293	2,300	1,330	8,923	5,293	2,300	1,330
400	1983	1	237	8,561	6,772	915	873	8,561	6,772	915	873
401	1983	2	3,521	14,263	4,764	5,914	3,585	14,263	4,764	5,914	3,585
402	1983	3	4,464	74,042	3,744	25,824	44,474	74,042	3,744	25,824	44,474
403	1983	4	6,398	7,925	651	2,436	4,838	7,869	651	2,436	4,782
404	1983	5	12,733	29,435	3,259	17,162	9,014	28,517	3,259	17,162	8,096
405	1983	6	21,454	96,189	4,845	43,121	48,223	94,596	4,503	43,121	46,971
406	1983	7	6,877	45,733	14,952	16,596	14,186	42,474	13,292	16,596	12,586
407	1983	8	6,980	28,300	18,629	45	9,626	24,563	16,526	45	7,993
408	1983	9	5,240	25,592	9,472	3,956	12,164	24,403	9,110	3,956	11,337
409	1983	10	8,735	9,731	3,875	1,550	4,305	9,502	3,705	1,550	4,247
410	1983	11	6,340	7,919	5,166	993	1,760	7,919	5,166	993	1,760
411	1983	12	6,205	8,427	2,691	3,135	2,602	8,427	2,691	3,135	2,602
412	1984	1	5,397	8,404	5,088	2,598	718	8,404	5,088	2,598	718
413	1984	2	4,387	15,962	3,034	8,227	4,701	15,962	3,034	8,227	4,701
414	1984	3	4,820	26,291	3,713	10,673	11,904	26,291	3,713	10,673	11,904
415	1984	4	10,198	45,681	1,523	17,136	27,021	45,625	1,523	17,136	26,965
416	1984	5	14,660	58,328	4,502	33,850	19,977	57,216	4,502	33,850	18,864
417	1984	6	18,803	75,441	4,834	39,881	30,726	73,698	4,492	39,881	29,325
418	1984	7	12,076	45,540	12,849	13,295	19,396	42,299	11,205	13,295	17,798
419	1984	8	0	25,485	15,894	0	9,590	22,206	14,135	0	8,071
420	1984	9	5,193	23,175	12,402	2,370	8,403	21,500	11,680	2,370	7,450

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			9	10	11	12	13	14	15	16	17	18
Table Number:			P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number	Year	Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions in Reach VCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
361	1979	10	229	171	58	7,686	2,961	1,088	1,642	1,861	2,864	13,179
362	1979	11	0	0	0	7,480	5,161	0	420	1,342	978	14,849
363	1979	12	0	0	0	7,686	5,419	0	416	1,315	952	12,898
364	1980	1	0	0	0	7,927	6,565	0	0	1,121	241	18,782
365	1980	2	0	0	0	7,190	5,482	0	127	1,251	457	13,540
366	1980	3	0	0	0	8,608	5,448	0	0	2,454	706	14,988
367	1980	4	56	0	56	7,438	4,814	0	71	2,625	0	15,290
368	1980	5	1,253	0	1,253	10,265	2,700	0	623	7,564	0	22,217
369	1980	6	2,172	675	1,496	23,511	3,351	0	696	20,159	0	32,133
370	1980	7	3,187	1,851	1,336	20,143	9,931	75	258	4,019	6,194	29,588
371	1980	8	2,861	1,597	1,263	15,331	12,970	3,705	258	1,891	470	23,418
372	1980	9	1,093	342	751	11,587	7,078	4,167	254	4,042	467	22,283
373	1980	10	229	171	58	7,686	3,134	741	1,583	2,140	2,412	14,937
374	1980	11	0	0	0	8,956	5,255	0	0	3,701	0	16,530
375	1980	12	0	0	0	8,904	5,419	0	72	2,440	1,045	16,585
376	1981	1	0	0	0	7,686	6,280	0	560	1,219	187	13,298
377	1981	2	0	0	0	6,942	5,768	0	337	1,175	0	12,480
378	1981	3	0	0	0	7,686	6,024	0	287	1,224	438	13,178
379	1981	4	275	0	275	7,438	6,962	0	843	396	80	9,524
380	1981	5	1,798	0	1,798	17,966	5,799	0	1,312	12,167	0	20,226
381	1981	6	2,691	932	1,759	44,238	6,033	0	838	26,765	11,441	49,536
382	1981	7	3,246	1,485	1,761	15,303	10,190	761	258	5,113	0	20,314
383	1981	8	2,787	1,387	1,401	13,946	11,497	6,661	258	2,449	0	20,131
384	1981	9	1,350	577	774	9,685	6,819	4,977	254	2,471	396	17,281
385	1981	10	229	171	58	7,686	2,931	1,042	1,698	1,233	3,522	13,910
386	1981	11	0	0	0	8,536	3,104	0	0	3,106	2,326	15,151
387	1981	12	0	0	0	9,099	5,326	0	354	801	2,972	15,224
388	1982	1	0	0	0	7,686	6,110	0	389	535	1,041	12,846
389	1982	2	0	0	0	6,942	5,227	0	210	715	1,000	12,771
390	1982	3	0	0	0	9,565	5,227	0	0	2,119	2,218	18,698
391	1982	4	56	0	56	7,438	5,340	0	275	927	1,171	15,131
392	1982	5	1,260	0	1,260	39,778	4,572	0	631	26,586	8,620	40,907
393	1982	6	1,800	344	1,456	56,779	4,650	0	699	33,012	19,117	65,276
394	1982	7	3,402	1,856	1,547	28,999	9,580	0	258	13,870	5,549	34,775
395	1982	8	3,082	1,600	1,481	14,881	12,086	3,957	258	483	2,312	25,137
396	1982	9	1,538	666	872	13,781	6,237	3,305	254	3,065	4,479	26,458
397	1982	10	229	171	58	7,686	3,164	1,107	1,307	1,397	3,125	18,204
398	1982	11	0	0	0	9,802	5,466	0	0	877	3,459	22,233
399	1982	12	0	0	0	7,686	5,293	0	0	2,300	93	15,494
400	1983	1	0	0	0	7,688	6,772	0	0	915	0	14,544
401	1983	2	0	0	0	13,825	4,764	0	0	5,914	3,147	18,905
402	1983	3	0	0	0	74,608	3,744	0	0	25,824	45,040	85,171
403	1983	4	56	0	56	8,034	651	0	71	2,436	4,947	17,751
404	1983	5	918	0	918	25,849	3,259	0	200	17,162	5,429	34,527
405	1983	6	1,593	342	1,251	85,221	4,445	0	441	43,121	37,655	88,088
406	1983	7	3,259	1,659	1,600	30,659	12,154	929	258	16,596	1,909	37,270
407	1983	8	3,736	2,103	1,634	14,989	13,886	2,474	258	45	1,059	27,485
408	1983	9	1,189	362	827	18,866	7,091	2,121	254	3,956	7,819	30,921
409	1983	10	229	171	58	7,686	2,931	807	1,628	1,550	3,205	16,481
410	1983	11	0	0	0	7,438	5,166	0	383	993	1,279	15,408
411	1983	12	0	0	0	7,686	2,691	0	108	3,135	1,861	13,755
412	1984	1	0	0	0	7,686	5,088	0	0	2,598	0	13,169
413	1984	2	0	0	0	15,408	3,034	0	0	8,227	4,147	21,002
414	1984	3	0	0	0	26,200	3,713	0	0	10,673	11,813	34,268
415	1984	4	56	0	56	45,539	1,523	0	71	17,136	26,879	54,812
416	1984	5	1,112	0	1,112	51,008	4,502	0	445	33,850	12,657	56,741
417	1984	6	1,743	342	1,401	63,832	4,434	0	663	39,881	19,517	71,254
418	1984	7	3,242	1,643	1,598	30,987	10,817	119	258	13,295	6,876	39,210
419	1984	8	3,279	1,759	1,520	13,571	11,535	2,495	258	0	2,036	25,589
420	1984	9	1,676	722	954	15,699	9,479	2,252	254	2,370	3,850	27,920

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			19	20	21	22	23	24	25	26	27	28
Table Number:			P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number	Year	Month	Provo River from Snake Creek to Deer Creek Reservoir CUP	Provo River from Snake Creek to Deer Creek Reservoir PRP	Provo River from Snake Creek to Deer Creek Reservoir Non-Project	CUP Return Flow Gains above Deer Creek CUP	Provo River from Outlet of Deer Creek to North Fork Total	Provo River from Outlet of Deer Creek to North Fork CUP	Provo River from Outlet of Deer Creek to North Fork PRP	Provo River from Outlet of Deer Creek to North Fork Non-Project	Diversions into Salt Lake Aqueduct Total	Diversions into Salt Lake Aqueduct CUP
361	1979	10	2,961	1,861	8,357	0	10,115	5,507	2,488	2,120	6,100	0
362	1979	11	5,161	1,342	8,347	0	5,950	5,657	293	0	4,297	0
363	1979	12	5,419	1,315	6,164	0	6,149	5,272	877	0	3,618	0
364	1980	1	6,565	1,121	11,096	0	6,149	4,828	1,321	0	3,284	0
365	1980	2	5,482	1,251	6,806	0	5,752	3,971	1,781	0	2,116	0
366	1980	3	5,448	2,454	7,086	0	6,149	4,144	1,011	994	2,905	0
367	1980	4	4,814	2,625	7,851	0	8,966	6,427	965	1,574	1,150	0
368	1980	5	2,700	7,564	11,952	4,405	46,403	5,959	6,716	33,728	2,530	0
369	1980	6	3,351	20,159	8,622	3,753	51,477	5,975	10,649	34,853	7,700	0
370	1980	7	9,931	4,019	15,638	2,550	37,806	12,758	8,986	16,062	7,290	0
371	1980	8	12,970	1,891	8,558	734	37,168	14,841	9,304	13,023	7,700	0
372	1980	9	7,078	4,042	11,163	1,340	30,511	9,712	6,244	14,555	7,710	0
373	1980	10	3,134	2,140	9,663	0	7,278	4,739	2,488	51	6,100	0
374	1980	11	5,255	3,701	7,574	0	5,950	5,764	186	0	4,444	0
375	1980	12	5,419	2,440	8,726	0	6,149	5,756	392	0	4,103	0
376	1981	1	6,280	1,219	5,799	0	6,149	4,698	1,376	74	3,229	0
377	1981	2	5,768	1,175	5,538	0	5,554	4,131	1,353	70	2,826	0
378	1981	3	6,024	1,224	5,930	0	6,149	4,796	1,260	92	2,655	0
379	1981	4	6,962	396	2,166	731	12,962	9,509	2,889	564	1,150	0
380	1981	5	5,799	12,167	2,259	7,069	31,418	10,725	4,896	15,796	2,530	0
381	1981	6	6,033	26,765	16,739	3,500	39,779	9,017	4,787	25,976	7,700	0
382	1981	7	10,190	5,113	5,011	336	33,465	11,987	8,986	12,493	7,290	0
383	1981	8	11,497	2,449	6,185	263	33,395	13,178	9,304	10,913	7,700	0
384	1981	9	6,819	2,471	7,992	962	27,527	9,521	6,244	11,762	7,710	0
385	1981	10	2,931	1,233	9,746	0	6,998	4,509	2,488	0	6,100	0
386	1981	11	3,104	3,106	8,941	0	5,977	3,593	193	2,192	4,490	0
387	1981	12	5,326	801	9,097	0	6,149	5,651	392	105	4,103	0
388	1982	1	6,110	535	6,201	0	6,149	4,505	1,519	124	3,087	0
389	1982	2	5,227	715	6,828	0	5,554	3,602	1,824	128	2,212	0
390	1982	3	5,227	2,119	11,351	0	6,149	4,183	1,965	0	1,945	0
391	1982	4	5,340	927	8,864	0	10,850	9,879	971	0	1,150	0
392	1982	5	4,572	26,586	9,749	4,689	69,805	6,296	8,768	54,741	2,530	0
393	1982	6	4,650	33,012	27,614	1,555	68,048	8,201	10,539	49,308	7,700	0
394	1982	7	9,580	13,870	11,325	2,262	53,815	14,426	20,634	18,756	7,290	0
395	1982	8	12,086	483	12,567	1,222	37,863	15,042	9,304	13,517	7,700	0
396	1982	9	6,237	3,065	17,156	1,232	26,128	9,913	6,244	9,971	7,710	0
397	1982	10	3,164	1,397	13,643	0	7,150	4,661	2,489	0	6,100	0
398	1982	11	5,466	877	15,889	0	6,037	5,913	125	0	4,490	0
399	1982	12	5,293	2,300	7,901	0	6,149	5,323	826	0	3,812	0
400	1983	1	6,772	915	6,856	0	6,149	4,956	1,193	0	3,413	0
401	1983	2	4,764	5,914	8,227	0	17,148	2,900	3,514	10,735	4,030	0
402	1983	3	3,744	25,824	55,603	0	85,366	2,278	4,454	78,633	3,910	0
403	1983	4	651	2,436	14,664	0	23,205	2,936	6,208	14,060	1,150	0
404	1983	5	3,259	17,162	14,107	715	61,471	4,354	8,687	48,429	2,530	0
405	1983	6	4,445	43,121	40,521	1,634	100,042	8,499	10,419	81,124	7,700	0
406	1983	7	12,154	16,596	8,521	1,777	53,441	17,045	16,290	20,107	7,290	0
407	1983	8	13,886	45	13,555	2,336	34,364	16,615	9,304	8,444	7,700	0
408	1983	9	7,091	3,956	19,874	731	30,701	11,387	6,244	13,069	7,710	0
409	1983	10	2,931	1,550	12,000	0	7,931	5,442	2,488	0	6,100	0
410	1983	11	5,166	993	9,249	0	5,950	5,567	383	0	4,200	0
411	1983	12	2,691	3,135	7,929	0	6,149	2,082	1,004	3,062	3,522	0
412	1984	1	5,088	2,598	5,483	0	11,093	2,572	5,134	3,387	4,600	0
413	1984	2	3,034	8,227	9,741	0	17,122	915	4,378	11,830	3,891	0
414	1984	3	3,713	10,673	19,881	0	30,959	1,885	4,810	24,264	3,910	0
415	1984	4	1,523	17,136	36,152	0	59,979	2,028	11,120	46,831	1,150	0
416	1984	5	4,502	33,850	18,389	2,071	86,906	7,748	8,809	70,349	2,530	0
417	1984	6	4,434	39,881	26,939	3,157	77,964	8,102	10,424	59,438	7,700	0
418	1984	7	10,817	13,295	15,098	1,455	55,194	15,473	24,706	15,015	7,290	0
419	1984	8	11,535	0	14,054	1,663	36,717	16,516	9,304	10,897	7,700	0
420	1984	9	9,479	2,370	16,071	1,265	31,817	13,448	6,244	12,125	7,710	0

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			29	30	31	32	33	34	35	36	37	38
Table Number:			P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number	Year	Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
361	1979	10	6,100	10,562	5,507	2,488	2,567	6,423	768	1,239	4,416	6,129
362	1979	11	4,297	6,969	5,657	293	1,019	4,861	2,323	0	2,538	4,415
363	1979	12	3,618	6,630	5,272	877	481	2,876	2,502	0	374	4,999
364	1980	1	3,284	6,826	4,828	1,321	677	3,213	1,667	0	1,546	5,835
365	1980	2	2,116	6,326	3,971	1,781	574	3,001	1,541	0	1,460	5,476
366	1980	3	2,905	7,351	4,144	1,011	2,196	2,697	590	0	2,107	5,918
367	1980	4	1,150	10,946	6,427	965	3,554	7,712	2,424	480	4,808	6,939
368	1980	5	2,530	54,131	5,959	6,716	41,456	53,142	2,296	5,331	45,516	16,944
369	1980	6	7,700	59,283	5,975	10,649	42,659	52,450	0	8,219	44,232	19,780
370	1980	7	7,290	42,537	12,758	8,986	20,793	28,891	1,071	4,506	23,314	25,695
371	1980	8	7,700	39,217	14,841	9,304	15,072	21,937	0	4,638	17,299	25,038
372	1980	9	7,710	32,172	9,712	6,244	16,216	21,992	0	3,150	18,842	14,324
373	1980	10	6,100	8,667	4,739	2,488	1,440	6,242	768	1,239	4,235	6,394
374	1980	11	4,444	7,177	5,764	186	1,227	5,947	2,332	0	3,615	4,406
375	1980	12	4,103	7,061	5,756	392	912	4,480	2,244	0	2,236	4,906
376	1981	1	3,229	6,663	4,698	1,376	588	2,406	1,538	0	868	5,890
377	1981	2	2,826	6,027	4,131	1,353	543	2,548	1,389	0	1,160	5,317
378	1981	3	2,655	6,473	4,796	1,260	416	2,189	1,537	0	651	5,872
379	1981	4	1,150	13,479	9,509	2,889	1,081	7,694	3,619	2,404	1,671	8,043
380	1981	5	2,530	34,015	10,725	4,896	18,393	28,106	3,450	3,407	21,249	17,774
381	1981	6	7,700	42,337	9,017	4,787	28,534	33,539	0	2,582	30,958	26,060
382	1981	7	7,290	35,154	11,987	8,986	14,182	20,236	0	4,506	15,730	21,971
383	1981	8	7,700	34,129	13,178	9,304	11,647	17,844	0	4,638	13,206	21,353
384	1981	9	7,710	28,244	9,521	6,244	12,479	17,295	0	3,150	14,145	17,716
385	1981	10	6,100	7,917	4,509	2,488	919	4,779	1,347	1,239	2,194	5,480
386	1981	11	4,490	6,628	3,593	193	2,843	3,965	63	0	3,902	4,511
387	1981	12	4,103	6,546	5,651	392	502	2,904	2,364	0	540	4,514
388	1982	1	3,087	6,525	4,505	1,519	500	2,090	1,538	0	552	5,641
389	1982	2	2,212	5,954	3,602	1,824	528	2,209	1,389	0	821	5,259
390	1982	3	1,945	7,196	4,183	1,965	1,047	5,068	2,298	0	2,770	5,203
391	1982	4	1,150	12,521	9,879	971	1,671	12,551	9,702	480	2,369	2,643
392	1982	5	2,530	76,021	6,296	8,768	60,957	71,183	411	7,331	63,441	19,712
393	1982	6	7,700	74,203	8,201	10,539	55,463	65,404	752	8,219	56,434	20,649
394	1982	7	7,290	58,587	14,426	20,634	23,528	45,000	2,123	18,023	24,854	27,669
395	1982	8	7,700	40,541	15,042	9,304	16,195	23,557	0	4,638	18,920	27,400
396	1982	9	7,710	27,957	9,913	6,244	11,800	17,939	0	3,150	14,789	19,956
397	1982	10	6,100	9,344	4,661	2,489	2,193	8,798	1,807	1,239	5,753	5,086
398	1982	11	4,490	6,737	5,913	125	700	5,615	2,676	0	2,939	4,247
399	1982	12	3,812	7,694	5,323	826	1,545	5,242	2,494	0	2,748	4,948
400	1983	1	3,413	7,111	4,956	1,193	962	4,655	1,795	0	2,860	5,707
401	1983	2	4,030	18,331	2,900	3,514	11,918	17,699	0	3,514	14,185	4,122
402	1983	3	3,910	86,319	2,278	4,454	79,586	85,761	0	4,453	81,307	3,632
403	1983	4	1,150	24,381	2,936	6,208	15,236	25,210	3,650	5,723	15,836	989
404	1983	5	2,530	63,801	4,354	8,687	50,759	60,187	0	7,331	52,856	8,671
405	1983	6	7,700	112,966	8,499	10,419	94,048	106,510	0	8,219	98,292	23,508
406	1983	7	7,290	61,243	17,045	16,290	27,909	46,974	2,875	14,783	29,316	27,668
407	1983	8	7,700	39,452	16,615	9,304	13,532	24,079	0	7,023	17,056	27,668
408	1983	9	7,710	33,225	11,387	6,244	15,593	21,888	0	3,150	18,738	23,809
409	1983	10	6,100	9,414	5,442	2,488	1,483	6,670	1,346	1,239	4,085	7,614
410	1983	11	4,200	7,524	5,567	383	1,574	7,253	2,919	0	4,334	3,916
411	1983	12	3,522	7,214	2,082	1,004	4,127	6,148	0	0	6,148	4,439
412	1984	1	4,600	12,351	2,572	5,134	4,645	12,410	0	5,134	7,276	3,925
413	1984	2	3,891	18,167	915	4,378	12,875	19,513	0	4,314	15,199	2,243
414	1984	3	3,910	34,188	1,885	4,810	27,493	36,980	0	4,810	32,170	3,238
415	1984	4	1,150	60,872	2,028	11,120	47,724	61,398	1,851	10,656	48,891	1,950
416	1984	5	2,530	93,129	7,748	8,809	76,572	89,959	2,462	7,331	80,166	14,436
417	1984	6	7,700	87,339	8,102	10,424	68,813	80,236	0	8,219	72,018	23,115
418	1984	7	7,290	60,407	15,473	24,706	20,228	47,421	2,875	22,169	22,377	27,668
419	1984	8	7,700	40,171	16,516	9,304	14,351	25,013	0	6,863	18,150	27,668
420	1984	9	7,710	33,990	13,448	6,244	14,298	21,130	0	3,150	17,980	25,774

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			39	40	41	42	43	44	45	46	47	48
Table Number:			P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number	Year	Month	Diversions into Olmsted Aqueduct CUP	Diversions into Olmsted Aqueduct Ap 40524	Diversions into Olmsted Aqueduct PRP	Diversions into Olmsted Aqueduct Non-Project	Provo River from Murdock to Interstate15 Total	Provo River from Murdock to Interstate15 CUP	Provo River from Murdock to Interstate15 PRP	Provo River from Murdock to Interstate15 Non-Project	Diversions into Provo Reservoir Canal Total	ULS Water in Provo Reservoir Canal CUP
361	1979	10	4,739	0	1,250	140	10,288	5,717	160	4,411	3,265	2,127
362	1979	11	4,122	788	293	0	9,130	6,447	0	2,683	0	0
363	1979	12	4,122	1,353	877	0	6,578	6,133	0	445	0	0
364	1980	1	4,514	1,353	1,321	0	4,678	3,030	0	1,648	0	0
365	1980	2	3,695	1,265	1,781	0	4,095	2,549	0	1,546	0	0
366	1980	3	4,907	1,353	1,011	0	4,646	2,375	0	2,271	0	0
367	1980	4	5,313	1,309	485	1,141	6,119	2,549	80	3,490	2,695	1,815
368	1980	5	5,016	1,353	1,385	10,543	35,096	3,078	160	31,858	8,292	2,685
369	1980	6	7,151	1,176	2,430	10,199	38,131	594	6,320	31,217	10,630	4,440
370	1980	7	11,687	0	4,480	9,528	12,727	3,906	640	8,181	12,916	5,040
371	1980	8	14,841	0	4,667	5,531	14,484	3,856	610	10,018	11,138	4,783
372	1980	9	9,712	0	3,094	1,518	18,270	836	480	16,955	6,909	3,600
373	1980	10	3,971	0	1,250	1,174	8,730	5,717	160	2,852	3,699	2,127
374	1980	11	4,220	788	186	0	6,873	3,083	0	3,790	0	0
375	1980	12	4,514	1,002	392	0	4,616	2,244	0	2,372	0	0
376	1981	1	4,514	1,353	1,376	0	4,877	3,932	0	945	0	0
377	1981	2	3,964	1,222	1,353	0	4,389	3,158	0	1,231	0	0
378	1981	3	4,612	1,353	1,260	0	4,927	4,227	0	700	0	0
379	1981	4	7,079	1,189	485	479	5,939	4,780	80	1,079	2,417	1,815
380	1981	5	7,276	0	1,490	9,009	16,463	9,626	160	6,677	7,647	2,685
381	1981	6	9,017	0	2,205	14,838	11,247	3,707	683	6,857	12,583	4,440
382	1981	7	11,987	0	4,480	5,504	11,442	4,034	640	6,768	11,222	5,040
383	1981	8	13,178	0	4,667	3,509	13,040	3,856	610	8,574	10,287	4,783
384	1981	9	9,521	0	3,094	5,101	11,627	3,942	480	7,205	8,417	3,600
385	1981	10	3,971	808	1,250	259	8,463	6,296	160	2,007	3,315	2,127
386	1981	11	4,318	788	193	0	4,991	992	0	3,998	0	0
387	1981	12	4,122	835	392	0	5,070	4,471	0	599	0	0
388	1982	1	4,122	1,154	1,519	0	5,107	4,498	0	609	0	0
389	1982	2	3,435	1,222	1,824	0	4,527	3,647	0	881	0	0
390	1982	3	3,238	1,353	1,965	0	5,223	2,298	0	2,925	0	0
391	1982	4	1,486	1,309	491	666	11,588	9,827	80	1,681	2,495	1,815
392	1982	5	7,178	1,293	1,437	11,098	55,711	778	6,160	48,773	8,526	2,685
393	1982	6	8,625	1,176	2,321	9,703	51,565	1,346	6,320	43,899	10,422	4,440
394	1982	7	13,656	1,353	2,610	11,402	21,261	3,333	8,288	9,640	15,574	5,040
395	1982	8	15,042	0	4,667	7,691	13,109	3,856	610	8,643	12,047	4,783
396	1982	9	9,913	0	3,094	6,949	9,859	4,023	480	5,356	9,194	3,600
397	1982	10	3,662	808	1,250	174	8,251	2,144	160	5,947	3,279	2,127
398	1982	11	4,122	885	125	0	5,720	2,676	0	3,044	0	0
399	1982	12	4,122	1,293	826	0	5,458	2,494	0	2,964	0	0
400	1983	1	4,514	1,353	1,193	0	4,798	1,795	0	3,003	0	0
401	1983	2	4,122	1,222	0	0	17,812	0	3,514	14,298	0	0
402	1983	3	3,631	1,353	1	0	85,904	0	4,453	81,450	0	0
403	1983	4	504	1,218	485	0	25,101	3,776	5,323	16,002	2,215	1,815
404	1983	5	5,707	1,353	1,357	1,607	57,539	366	6,160	51,013	4,532	2,685
405	1983	6	9,809	1,309	2,200	11,499	91,035	594	6,320	84,121	11,178	4,440
406	1983	7	15,522	1,353	1,507	10,639	23,455	4,085	3,924	15,446	16,375	5,040
407	1983	8	16,615	0	2,281	8,772	7,428	1,261	610	5,557	14,887	4,783
408	1983	9	11,388	0	3,094	9,327	7,449	836	480	6,133	10,195	3,600
409	1983	10	4,904	808	1,250	1,460	4,130	1,684	160	2,286	3,820	2,127
410	1983	11	3,533	885	383	0	7,478	2,919	0	4,559	0	0
411	1983	12	3,435	1,353	1,004	0	6,308	0	0	6,308	0	0
412	1984	1	3,925	1,353	0	0	12,599	0	5,134	7,465	0	0
413	1984	2	2,180	1,265	64	0	19,631	0	4,314	15,317	0	0
414	1984	3	3,238	1,353	0	0	37,182	0	4,810	32,372	0	0
415	1984	4	1,486	1,309	464	0	61,258	1,977	10,256	49,026	2,215	1,815
416	1984	5	6,639	1,353	1,479	6,319	81,317	2,828	6,160	72,329	6,515	2,685
417	1984	6	9,411	1,309	2,205	11,498	64,216	594	6,320	57,302	11,177	4,440
418	1984	7	13,951	1,353	2,537	11,181	23,946	4,085	12,360	7,501	15,554	5,040
419	1984	8	16,516	0	2,441	8,711	8,359	1,261	610	6,488	14,702	4,783
420	1984	9	13,448	0	3,094	9,232	6,664	836	480	5,349	10,155	3,600

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			49	50	51	52	53	54	55	56	57	58	59
Table Number:			P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
Month Number	Year	Month	Diversions into Provo Reservoir Canal PRP	Diversions into Provo Reservoir Canal Non-Project	Provo River from Interstate 15 to Utah Lake Total	Provo River from Interstate 15 to Utah Lake CUP	Provo River from Interstate 15 to Utah Lake PRP	Provo River from Interstate 15 to Utah Lake Non-Project	PRP Diversion to Provo Bench Canal PRP	June Sucker Releases CUP	June Sucker Releases PRP	June Sucker Releases Non-Project	75-cfs Target Releases Non-Project
361	1979	10	1,079	59	6,089	5,717	0	82	160	0	0	0	-290
362	1979	11	0	0	9,630	6,447	0	3,183	0	0	0	0	0
363	1979	12	0	0	6,311	6,133	0	178	0	0	0	0	0
364	1980	1	0	0	4,611	3,030	0	1,581	0	0	0	0	0
365	1980	2	0	0	4,165	2,549	0	1,616	0	0	0	0	0
366	1980	3	0	0	4,611	2,375	0	2,236	0	0	0	0	0
367	1980	4	400	480	5,301	2,549	0	2,710	80	-2,170	0	0	-43
368	1980	5	1,171	4,436	31,504	3,078	0	27,910	160	-705	-4,000	0	-516
369	1980	6	1,899	4,292	29,966	594	6,000	22,659	320	0	0	0	-713
370	1980	7	3,866	4,010	4,611	3,906	0	7	640	0	0	-1,286	-698
371	1980	8	4,028	2,327	4,563	3,856	0	51	610	0	0	0	-657
372	1980	9	2,670	639	17,718	836	0	16,817	480	0	0	0	-65
373	1980	10	1,079	494	5,968	5,717	0	34	160	0	0	0	-216
374	1980	11	0	0	7,509	3,083	0	4,426	0	0	0	0	0
375	1980	12	0	0	4,890	2,244	0	2,646	0	0	0	0	0
376	1981	1	0	0	4,611	3,932	0	680	0	0	0	0	0
377	1981	2	0	0	4,165	3,158	0	1,007	0	0	0	0	0
378	1981	3	0	0	4,611	4,227	0	385	0	0	0	0	0
379	1981	4	400	202	4,879	4,780	0	87	80	-2,875	-1,924	0	-12
380	1981	5	1,171	3,791	10,241	9,626	0	0	160	0	-2,076	-1,198	-615
381	1981	6	1,899	6,244	4,768	3,707	363	16	320	0	0	-1,845	-682
382	1981	7	3,866	2,316	4,611	4,034	0	0	640	0	0	-811	-578
383	1981	8	4,028	1,476	4,519	3,856	0	81	610	0	0	0	-582
384	1981	9	2,670	2,147	4,463	3,942	0	17	480	0	0	0	-504
385	1981	10	1,079	109	7,581	6,296	0	1,188	160	0	0	0	-9
386	1981	11	0	0	5,021	992	0	4,029	0	0	0	0	0
387	1981	12	0	0	4,611	4,471	0	141	0	0	0	0	0
388	1982	1	0	0	4,611	4,498	0	114	0	0	0	0	0
389	1982	2	0	0	4,165	3,647	0	519	0	0	0	0	0
390	1982	3	0	0	5,045	2,298	0	2,747	0	0	0	0	0
391	1982	4	400	280	11,809	9,827	0	1,981	80	0	0	0	0
392	1982	5	1,171	4,670	51,240	778	6,000	44,062	160	0	0	0	-401
393	1982	6	1,899	4,083	43,084	1,346	6,000	34,985	320	-752	0	0	-753
394	1982	7	5,736	4,798	13,146	3,333	7,648	1,478	640	-2,123	-4,000	0	-687
395	1982	8	4,028	3,236	4,495	3,856	0	0	610	0	0	0	-639
396	1982	9	2,670	2,924	4,463	4,023	0	0	480	0	0	0	-440
397	1982	10	1,079	73	6,771	2,144	0	4,340	160	0	0	0	-287
398	1982	11	0	0	5,329	2,676	0	2,653	0	0	0	0	0
399	1982	12	0	0	5,670	2,494	0	3,177	0	0	0	0	0
400	1983	1	0	0	4,880	1,795	0	3,086	0	0	0	0	0
401	1983	2	0	0	17,526	0	3,514	14,012	0	0	0	0	0
402	1983	3	0	0	85,541	0	4,453	81,088	0	0	0	0	0
403	1983	4	400	0	24,484	3,776	5,243	15,463	80	0	0	0	-2
404	1983	5	1,171	676	53,507	366	6,000	46,970	160	0	0	0	-171
405	1983	6	1,899	4,839	87,446	594	6,000	80,184	320	0	0	0	-668
406	1983	7	6,858	4,477	16,560	4,085	3,284	8,516	640	-2,875	-4,000	0	-675
407	1983	8	6,413	3,691	1,814	1,261	0	0	610	0	0	0	-553
408	1983	9	2,670	3,925	1,354	836	0	0	480	0	0	0	-518
409	1983	10	1,079	615	3,387	1,684	0	1,626	160	0	0	0	-78
410	1983	11	0	0	8,411	2,919	0	5,492	0	0	0	0	0
411	1983	12	0	0	6,554	0	0	6,554	0	0	0	0	0
412	1984	1	0	0	12,962	0	5,134	7,828	0	0	0	0	0
413	1984	2	0	0	19,490	0	4,314	15,176	0	0	0	0	0
414	1984	3	0	0	37,237	0	4,810	32,427	0	0	0	0	0
415	1984	4	400	0	60,636	1,977	10,176	48,483	80	0	0	0	0
416	1984	5	1,171	2,659	76,389	2,828	6,000	67,066	160	0	0	0	-494
417	1984	6	1,899	4,838	60,464	594	6,000	53,282	320	0	0	0	-5
418	1984	7	5,809	4,705	17,501	4,085	11,720	1,078	640	-2,875	-4,000	0	-61
419	1984	8	6,253	3,666	1,806	1,261	0	0	610	0	0	0	-546
420	1984	9	2,670	3,885	1,275	836	0	0	480	0	0	0	-439

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:				1	2	3	4	5	6	7	8
Table Number:			P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number	Year	Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
421	1984	10	7,465	8,715	3,518	1,330	3,867	8,486	3,347	1,330	3,809
422	1984	11	6,580	8,230	5,165	884	2,181	8,230	5,165	884	2,181
423	1984	12	5,060	8,198	5,806	853	1,539	8,198	5,806	853	1,539
424	1985	1	4,752	8,227	6,956	730	541	8,227	6,956	730	541
425	1985	2	3,694	7,278	4,840	2,102	336	7,278	4,840	2,102	336
426	1985	3	4,387	7,686	3,716	3,447	523	7,686	3,716	3,447	523
427	1985	4	6,013	33,430	1,697	17,713	14,020	33,349	1,697	17,713	13,938
428	1985	5	21,120	79,223	5,288	34,231	39,704	77,881	5,288	34,231	38,362
429	1985	6	14,152	38,720	6,339	20,691	11,690	36,878	5,977	20,691	10,210
430	1985	7	3,972	35,086	18,777	27	16,282	31,658	17,022	27	14,609
431	1985	8	1,712	32,343	21,115	1,119	10,109	29,122	19,455	1,119	8,549
432	1985	9	605	22,079	12,884	1,866	7,329	20,501	12,196	1,866	6,438
433	1985	10	7,163	9,350	4,112	1,413	3,825	9,121	3,941	1,413	3,767
434	1985	11	6,132	9,664	3,024	5,115	1,525	9,664	3,024	5,115	1,525
435	1985	12	6,069	8,630	5,424	1,039	2,167	8,630	5,424	1,039	2,167
436	1986	1	4,483	8,409	6,879	807	723	8,409	6,879	807	723
437	1986	2	5,243	6,942	6,916	26	0	6,942	6,916	26	0
438	1986	3	11,487	69,222	4,667	30,883	33,672	69,222	4,667	30,883	33,672
439	1986	4	8,889	24,001	2,822	13,756	7,424	23,945	2,822	13,756	7,368
440	1986	5	19,852	56,201	6,249	30,829	19,122	55,067	6,249	30,829	17,989
441	1986	6	21,013	97,643	6,434	48,278	42,931	95,890	6,092	48,278	41,520
442	1986	7	15,410	46,995	17,209	12,637	17,148	43,708	15,314	12,637	15,757
443	1986	8	663	21,436	12,618	0	8,818	18,208	10,806	0	7,402
444	1986	9	3,065	15,110	9,479	0	5,631	13,934	9,062	0	4,872
445	1986	10	7,378	8,657	3,879	2,601	2,177	8,428	3,708	2,601	2,119
446	1986	11	5,894	8,516	5,664	1,712	1,140	8,516	5,664	1,712	1,140
447	1986	12	4,769	8,601	5,441	1,633	1,526	8,601	5,441	1,633	1,526
448	1987	1	4,946	9,223	7,016	1,453	754	9,223	7,016	1,453	754
449	1987	2	4,010	7,774	4,606	2,736	432	7,774	4,606	2,736	432
450	1987	3	4,773	13,891	3,975	5,338	4,577	13,891	3,975	5,338	4,577
451	1987	4	14,110	30,406	4,294	19,437	6,675	29,927	4,294	19,437	6,196
452	1987	5	28,027	61,402	2,787	42,727	15,888	59,418	2,787	42,727	13,904
453	1987	6	13,736	20,732	6,758	3,216	10,758	18,077	5,917	3,216	8,944
454	1987	7	2,007	33,264	14,518	4,110	14,636	29,946	12,921	4,110	12,915
455	1987	8	282	38,783	26,356	5,693	6,734	35,940	24,932	5,693	5,315
456	1987	9	0	29,050	17,187	5,965	5,898	27,659	16,583	5,965	5,111
457	1987	10	372	9,454	3,532	2,464	3,459	9,225	3,361	2,464	3,401
458	1987	11	3,276	8,217	5,098	1,496	1,623	8,217	5,098	1,496	1,623
459	1987	12	2,109	8,096	5,379	1,441	1,276	8,096	5,379	1,441	1,276
460	1988	1	346	8,216	7,135	344	737	8,216	7,135	344	737
461	1988	2	348	7,435	5,371	1,137	928	7,435	5,371	1,137	928
462	1988	3	372	7,724	5,250	1,522	952	7,724	5,250	1,522	952
463	1988	4	9,089	12,971	7,230	128	5,613	12,416	7,230	128	5,058
464	1988	5	19,253	27,876	9,303	4,335	14,237	26,103	9,303	4,335	12,464
465	1988	6	8,587	27,635	4,562	12,466	10,607	25,362	4,006	12,466	8,891
466	1988	7	1,233	20,019	10,716	0	9,302	17,400	9,493	0	7,908
467	1988	8	393	22,340	20,111	0	2,229	20,002	18,933	0	1,069
468	1988	9	223	14,104	10,691	817	2,596	12,992	10,230	817	1,945
469	1988	10	432	10,210	3,398	4,038	2,774	9,981	3,227	4,038	2,716
470	1988	11	3,382	8,470	5,403	1,461	1,606	8,470	5,403	1,461	1,606
471	1988	12	1,841	8,477	5,717	1,422	1,338	8,477	5,717	1,422	1,338
472	1989	1	536	8,571	7,551	325	694	8,571	7,551	325	694
473	1989	2	512	7,545	7,038	161	347	7,545	7,038	161	347
474	1989	3	439	8,648	6,811	1,148	689	8,648	6,811	1,148	689
475	1989	4	8,857	14,994	6,055	0	8,939	14,425	6,055	0	8,370
476	1989	5	30,615	33,542	7,808	10,927	14,807	31,239	7,517	10,927	12,794
477	1989	6	19,482	47,183	11,823	21,124	14,235	44,589	10,912	21,124	12,554
478	1989	7	311	39,903	17,399	10,541	11,963	36,934	15,981	10,541	10,413
479	1989	8	192	27,780	23,974	810	2,997	25,150	22,668	810	1,672
480	1989	9	77	15,849	13,214	684	1,951	14,539	12,674	684	1,181

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			9	10	11	12	13	14	15	16	17	18
Table Number:			P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number	Year	Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions in Reach VCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
421	1984	10	229	171	58	7,686	2,770	594	820	1,330	3,586	19,434
422	1984	11	0	0	0	7,438	5,165	0	631	884	1,389	15,928
423	1984	12	0	0	0	7,686	5,806	0	408	853	1,027	15,917
424	1985	1	0	0	0	7,686	6,956	0	431	730	0	14,966
425	1985	2	0	0	0	6,942	4,840	0	0	2,102	0	13,222
426	1985	3	0	0	0	8,031	3,716	0	0	3,447	868	18,743
427	1985	4	81	0	81	32,951	1,697	0	71	17,713	13,541	43,105
428	1985	5	1,342	0	1,342	69,620	5,288	0	736	34,231	30,101	75,189
429	1985	6	1,843	362	1,480	26,606	5,915	0	727	20,691	0	33,204
430	1985	7	3,428	1,756	1,673	20,789	16,061	717	258	27	4,701	29,258
431	1985	8	3,221	1,661	1,560	20,087	15,118	4,393	258	1,119	3,849	29,448
432	1985	9	1,578	687	891	14,362	8,196	4,208	254	1,866	4,299	24,664
433	1985	10	229	171	58	7,686	2,931	1,063	1,325	1,413	3,342	17,714
434	1985	11	0	0	0	9,456	3,024	0	0	5,115	1,317	19,374
435	1985	12	0	0	0	7,686	5,424	0	752	1,039	1,223	14,165
436	1986	1	0	0	0	7,686	6,879	0	576	807	0	13,101
437	1986	2	0	0	0	7,753	6,916	0	0	26	811	21,011
438	1986	3	0	0	0	69,281	4,667	0	0	30,883	33,731	78,898
439	1986	4	56	0	56	23,895	2,822	0	71	13,756	7,318	34,190
440	1986	5	1,134	0	1,134	50,025	6,249	0	472	30,829	12,946	66,629
441	1986	6	1,753	342	1,411	85,691	6,034	0	739	48,278	31,379	91,240
442	1986	7	3,286	1,895	1,391	32,980	14,531	499	258	12,637	5,811	40,607
443	1986	8	3,228	1,812	1,416	9,906	8,470	2,197	1,551	0	1,436	20,786
444	1986	9	1,176	417	759	8,496	7,438	1,683	1,719	0	1,057	20,845
445	1986	10	229	171	58	7,686	2,931	810	773	2,601	2,154	20,199
446	1986	11	0	0	0	7,438	5,664	0	858	1,712	62	14,743
447	1986	12	0	0	0	7,686	5,441	0	729	1,633	611	13,969
448	1987	1	0	0	0	8,469	7,016	0	600	1,453	0	15,662
449	1987	2	0	0	0	7,342	4,606	0	344	2,736	0	13,024
450	1987	3	0	0	0	13,474	3,975	0	0	5,338	4,160	19,199
451	1987	4	478	0	478	25,872	4,294	0	424	19,437	2,141	30,561
452	1987	5	1,984	0	1,984	47,360	2,787	0	1,546	42,727	1,846	48,700
453	1987	6	2,655	841	1,814	8,990	5,774	0	2,770	3,216	0	17,616
454	1987	7	3,318	1,597	1,721	19,270	11,136	1,640	258	4,110	4,024	26,205
455	1987	8	2,843	1,424	1,419	27,650	18,416	6,799	258	5,693	3,541	36,685
456	1987	9	1,391	604	787	22,594	12,789	4,001	254	5,965	3,840	30,959
457	1987	10	229	171	58	7,686	2,441	965	1,372	2,464	2,781	13,198
458	1987	11	0	0	0	7,438	5,098	0	620	1,496	844	15,435
459	1987	12	0	0	0	7,686	5,379	0	326	1,441	866	14,896
460	1988	1	0	0	0	7,686	7,135	0	422	344	207	13,810
461	1988	2	0	0	0	7,190	5,371	0	195	1,137	683	13,637
462	1988	3	0	0	0	7,686	5,250	0	30	1,522	914	14,916
463	1988	4	555	0	555	7,438	7,230	0	1,425	128	80	12,022
464	1988	5	1,773	0	1,773	15,759	9,303	0	1,280	4,335	2,120	18,196
465	1988	6	2,273	556	1,717	16,523	3,826	93	842	12,466	231	24,378
466	1988	7	2,618	1,224	1,395	7,729	7,729	1,686	1,967	0	0	11,554
467	1988	8	2,338	1,178	1,160	12,899	12,743	6,491	258	0	156	20,305
468	1988	9	1,112	461	650	8,998	6,215	4,266	918	817	1,965	14,474
469	1988	10	229	171	58	8,644	2,459	801	73	4,038	2,147	14,596
470	1988	11	0	0	0	7,742	5,403	0	580	1,461	878	12,183
471	1988	12	0	0	0	7,993	5,717	0	385	1,422	854	13,665
472	1989	1	0	0	0	8,072	7,551	0	397	325	195	13,260
473	1989	2	0	0	0	7,295	7,038	0	199	161	97	13,013
474	1989	3	0	0	0	8,751	6,811	0	0	1,148	792	16,731
475	1989	4	568	0	568	9,106	6,055	0	538	0	3,051	10,352
476	1989	5	2,303	291	2,013	19,582	7,468	0	1,535	10,927	1,187	25,579
477	1989	6	2,593	912	1,682	34,168	10,697	65	891	21,124	2,347	42,520
478	1989	7	2,968	1,418	1,550	26,341	15,231	552	258	10,541	569	31,737
479	1989	8	2,631	1,306	1,325	17,075	15,579	7,442	258	810	686	23,828
480	1989	9	1,310	539	770	10,177	8,280	4,662	254	684	1,213	17,474

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			19	20	21	22	23	24	25	26	27	28
Table Number:			P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number	Year	Month	Provo River from Snake Creek to Deer Creek Reservoir CUP	Provo River from Snake Creek to Deer Creek Reservoir PRP	Provo River from Snake Creek to Deer Creek Reservoir Non-Project	CUP Return Flow Gains above Deer Creek CUP	Provo River from Outlet of Deer Creek to North Fork Total	Provo River from Outlet of Deer Creek to North Fork CUP	Provo River from Outlet of Deer Creek to North Fork PRP	Provo River from Outlet of Deer Creek to North Fork Non-Project	Diversions into Salt Lake Aqueduct Total	Diversions into Salt Lake Aqueduct CUP
421	1984	10	2,770	1,330	15,333	0	8,256	5,563	2,488	204	6,100	0
422	1984	11	5,165	884	9,878	0	5,950	5,566	384	0	4,200	0
423	1984	12	5,806	853	9,257	0	6,149	4,743	1,406	0	3,124	0
424	1985	1	6,956	730	7,280	0	6,149	4,980	1,168	0	3,474	0
425	1985	2	4,840	2,102	6,280	0	9,435	5,289	5	4,141	4,174	0
426	1985	3	3,716	3,447	11,580	0	16,374	2,082	3,821	10,471	3,910	0
427	1985	4	1,697	17,713	23,694	0	51,698	2,257	6,970	42,471	1,150	0
428	1985	5	5,288	34,231	35,670	0	79,742	9,291	8,714	61,736	2,530	0
429	1985	6	5,915	20,691	6,597	1,769	44,862	12,830	9,503	22,529	7,700	0
430	1985	7	16,061	27	13,170	466	41,244	18,645	8,986	13,613	7,290	0
431	1985	8	15,118	1,119	13,211	684	36,838	17,383	9,304	10,151	7,700	0
432	1985	9	8,196	1,866	14,601	1,423	27,764	11,666	6,244	9,854	7,710	0
433	1985	10	2,931	1,413	13,370	0	7,561	5,073	2,488	0	6,100	0
434	1985	11	3,024	5,115	11,235	0	5,966	3,138	297	2,532	4,490	0
435	1985	12	5,424	1,039	7,703	0	6,149	5,471	678	0	3,812	0
436	1986	1	6,879	807	5,415	0	6,149	5,088	1,061	0	3,539	0
437	1986	2	6,916	26	14,068	0	10,906	6,058	0	4,847	4,030	0
438	1986	3	4,667	30,883	43,348	0	93,204	3,161	10,656	79,387	3,910	0
439	1986	4	2,822	13,756	17,613	0	45,978	3,657	6,944	35,377	1,150	0
440	1986	5	6,249	30,829	29,551	3,040	82,548	9,344	8,690	64,513	2,530	0
441	1986	6	6,034	48,278	36,928	1,573	105,033	9,417	10,421	85,195	7,700	0
442	1986	7	14,531	12,637	13,438	2,547	61,808	19,694	24,354	17,760	7,290	0
443	1986	8	8,470	0	12,315	2,268	35,629	15,829	9,304	10,495	7,700	0
444	1986	9	7,438	0	13,407	1,881	28,811	10,307	6,244	12,260	7,710	0
445	1986	10	2,931	2,601	14,666	0	7,182	4,694	2,488	0	6,100	0
446	1986	11	5,664	1,712	7,367	0	6,267	6,132	136	0	4,490	0
447	1986	12	5,441	1,633	6,894	0	6,149	5,587	561	0	3,934	0
448	1987	1	7,016	1,453	7,193	0	6,149	5,336	813	0	3,792	0
449	1987	2	4,606	2,736	5,682	0	17,267	5,015	3,254	8,998	4,030	0
450	1987	3	3,975	5,338	9,886	0	14,559	2,376	3,936	8,247	3,910	0
451	1987	4	4,294	19,437	6,830	0	30,104	5,155	11,763	13,186	1,150	0
452	1987	5	2,787	42,727	3,186	0	57,197	7,325	20,296	29,575	2,530	0
453	1987	6	5,774	3,216	8,625	2,509	32,267	12,215	6,114	13,939	7,700	0
454	1987	7	11,136	4,110	10,959	923	37,765	14,344	11,413	12,008	7,290	0
455	1987	8	18,416	5,693	12,576	510	43,706	20,733	9,304	13,669	7,700	0
456	1987	9	12,789	5,965	12,205	748	33,506	16,388	6,244	10,875	7,710	0
457	1987	10	2,441	2,464	8,293	0	8,060	4,093	2,488	1,479	6,100	0
458	1987	11	5,098	1,496	8,841	0	5,950	5,587	363	0	4,297	0
459	1987	12	5,379	1,441	8,075	0	6,149	5,711	392	45	4,103	0
460	1988	1	7,135	344	6,330	0	6,149	5,377	753	18	3,853	0
461	1988	2	5,371	1,137	7,130	0	5,752	3,845	629	1,278	3,267	0
462	1988	3	5,250	1,522	8,144	0	6,149	3,822	755	1,571	3,160	0
463	1988	4	7,230	128	4,664	4,242	19,806	8,875	2,889	8,043	1,150	0
464	1988	5	9,303	4,335	4,557	4,396	34,775	12,910	4,864	17,001	2,530	0
465	1988	6	3,826	12,466	8,087	2,676	28,762	6,677	4,426	17,659	7,700	0
466	1988	7	7,729	0	3,825	0	38,139	18,963	8,986	10,191	7,290	0
467	1988	8	12,743	0	7,562	0	40,155	18,290	9,304	12,560	7,700	0
468	1988	9	6,215	817	7,442	214	24,785	8,843	6,244	9,698	7,710	0
469	1988	10	2,459	4,038	8,099	0	19,248	3,758	2,488	13,001	6,100	0
470	1988	11	5,403	1,461	5,319	0	6,125	5,588	154	383	4,490	0
471	1988	12	5,717	1,422	6,526	0	6,149	5,747	392	10	4,104	0
472	1989	1	7,551	325	5,383	0	6,149	5,702	436	10	4,170	0
473	1989	2	7,038	161	5,814	0	5,554	5,175	369	10	3,810	0
474	1989	3	6,811	1,148	8,773	0	6,149	5,311	43	794	3,872	0
475	1989	4	6,055	0	4,297	4,297	19,818	8,973	2,889	7,956	1,150	0
476	1989	5	7,468	10,927	7,184	7,025	41,113	10,445	4,883	25,785	2,530	0
477	1989	6	10,697	21,124	10,699	3,260	42,631	13,629	4,424	24,577	7,700	0
478	1989	7	15,231	10,541	5,965	0	39,433	16,795	8,986	13,653	7,290	0
479	1989	8	15,579	810	7,440	10	40,080	16,711	9,304	14,065	7,700	0
480	1989	9	8,280	684	8,510	280	25,824	10,797	6,244	8,783	7,710	0

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			29	30	31	32	33	34	35	36	37	38
Table Number:			P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number	Year	Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
421	1984	10	6,100	8,955	5,563	2,488	903	5,630	768	1,239	3,623	7,939
422	1984	11	4,200	7,367	5,566	384	1,417	7,371	2,133	0	5,238	4,702
423	1984	12	3,124	7,053	4,743	1,406	904	4,943	1,778	0	3,165	5,724
424	1985	1	3,474	7,290	4,980	1,168	1,141	4,668	1,722	0	2,946	5,780
425	1985	2	4,174	9,963	5,289	5	4,669	8,750	2,140	0	6,610	4,376
426	1985	3	3,910	17,867	2,082	3,821	11,964	19,754	0	3,821	15,932	3,435
427	1985	4	1,150	53,403	2,257	6,970	44,176	54,215	1,787	6,480	45,948	2,270
428	1985	5	2,530	85,055	9,291	8,714	67,049	80,903	2,836	7,331	70,736	15,510
429	1985	6	7,700	50,023	12,830	9,503	27,690	40,492	2,875	7,218	30,399	26,034
430	1985	7	7,290	44,796	18,645	8,986	17,165	29,379	0	8,867	20,512	27,668
431	1985	8	7,700	38,868	17,383	9,304	12,181	19,908	0	4,638	15,271	27,552
432	1985	9	7,710	29,552	11,666	6,244	11,642	18,025	0	3,150	14,875	21,329
433	1985	10	6,100	9,460	5,073	2,488	1,899	7,376	1,248	1,239	4,889	6,609
434	1985	11	4,490	7,336	3,138	297	3,902	6,444	0	0	6,444	4,320
435	1985	12	3,812	7,580	5,471	678	1,431	6,706	2,348	0	4,358	5,094
436	1986	1	3,539	7,862	5,088	1,061	1,713	5,569	1,829	0	3,740	5,673
437	1986	2	4,030	13,629	6,058	0	7,570	14,887	3,454	0	11,433	3,827
438	1986	3	3,910	96,419	3,161	10,656	82,602	95,804	0	10,635	85,169	4,535
439	1986	4	1,150	50,961	3,657	6,944	40,360	52,377	1,912	6,480	43,985	3,518
440	1986	5	2,530	89,319	9,344	8,690	71,284	84,705	1,555	7,331	75,819	16,821
441	1986	6	7,700	111,862	9,417	10,421	92,024	101,349	0	8,219	93,130	24,299
442	1986	7	7,290	65,260	19,694	24,354	21,212	48,331	2,875	23,762	21,694	27,668
443	1986	8	7,700	37,926	15,829	9,304	12,792	20,265	0	4,638	15,627	25,999
444	1986	9	7,710	30,214	10,307	6,244	13,663	19,781	0	3,150	16,631	19,970
445	1986	10	6,100	9,903	4,694	2,488	2,721	10,159	2,328	1,239	6,593	5,151
446	1986	11	4,490	7,546	6,132	136	1,279	6,197	1,816	0	4,382	5,337
447	1986	12	3,934	6,969	5,587	561	820	4,436	1,778	0	2,658	5,566
448	1987	1	3,792	7,144	5,336	813	995	4,970	1,979	0	2,991	5,523
449	1987	2	4,030	18,261	5,015	3,254	9,992	18,214	2,214	3,249	12,750	4,028
450	1987	3	3,910	15,465	2,376	3,936	9,153	15,282	0	3,931	11,352	3,734
451	1987	4	1,150	30,905	5,155	11,763	13,987	28,434	1,741	11,278	15,415	9,140
452	1987	5	2,530	59,942	7,325	20,296	32,320	56,898	3,415	18,801	34,681	18,637
453	1987	6	7,700	32,790	12,215	6,114	14,462	23,518	3,195	3,792	16,531	17,168
454	1987	7	7,290	38,402	14,344	11,413	12,645	22,323	1,477	6,933	13,913	20,551
455	1987	8	7,700	43,963	20,733	9,304	13,927	22,102	0	6,534	15,568	27,668
456	1987	9	7,710	33,640	16,388	6,244	11,008	15,741	0	3,150	12,591	22,659
457	1987	10	6,100	8,902	4,093	2,488	2,321	6,453	768	1,239	4,446	5,321
458	1987	11	4,297	6,769	5,587	363	819	3,877	1,665	0	2,212	5,073
459	1987	12	4,103	6,527	5,711	392	423	2,050	1,925	0	125	5,102
460	1988	1	3,853	6,566	5,377	753	435	1,632	1,538	0	94	5,856
461	1988	2	3,267	6,087	3,845	629	1,613	1,841	201	0	1,640	5,101
462	1988	3	3,160	6,507	3,822	755	1,929	2,004	0	0	2,004	5,367
463	1988	4	1,150	20,158	8,875	2,889	8,394	15,180	2,875	2,404	9,900	11,272
464	1988	5	2,530	36,525	12,910	4,864	18,751	25,829	1,704	3,407	20,718	20,898
465	1988	6	7,700	29,947	6,677	4,426	18,844	22,934	0	2,219	20,715	15,921
466	1988	7	7,290	38,980	18,963	8,986	11,032	16,587	0	4,506	12,080	26,251
467	1988	8	7,700	40,320	18,290	9,304	12,725	18,513	0	4,638	13,875	25,749
468	1988	9	7,710	24,922	8,843	6,244	9,835	14,437	0	3,150	11,287	13,994
469	1988	10	6,100	19,397	3,758	2,488	13,150	16,472	768	1,239	14,465	4,254
470	1988	11	4,490	6,386	5,588	154	644	3,012	1,488	0	1,524	4,766
471	1988	12	4,104	6,687	5,747	392	548	2,042	1,766	0	276	5,003
472	1989	1	4,170	6,628	5,702	436	489	1,750	1,538	0	212	5,146
473	1989	2	3,810	5,913	5,175	369	369	1,902	1,393	0	509	4,636
474	1989	3	3,872	6,529	5,311	43	1,174	2,074	908	0	1,166	5,048
475	1989	4	1,150	20,321	8,973	2,889	8,459	15,175	2,875	2,404	9,895	11,371
476	1989	5	2,530	41,829	10,445	4,883	26,501	32,585	1,893	3,407	27,285	18,262
477	1989	6	7,700	43,086	13,629	4,424	25,032	28,131	0	2,219	25,912	25,592
478	1989	7	7,290	40,028	16,795	8,986	14,248	19,256	0	4,506	14,749	23,318
479	1989	8	7,700	40,375	16,711	9,304	14,360	19,795	0	4,638	15,158	24,679
480	1989	9	7,710	26,048	10,797	6,244	9,007	13,222	0	3,150	10,072	15,710

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			39	40	41	42	43	44	45	46	47	48
Table Number:			P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number	Year	Month	Diversions into Olmsted Aqueduct CUP	Diversions into Olmsted Aqueduct Ap 40524	Diversions into Olmsted Aqueduct PRP	Diversions into Olmsted Aqueduct Non-Project	Provo River from Murdock to Interstate15 Total	Provo River from Murdock to Interstate15 CUP	Provo River from Murdock to Interstate15 PRP	Provo River from Murdock to Interstate15 Non-Project	Diversions into Provo Reservoir Canal Total	ULS Water in Provo Reservoir Canal CUP
421	1984	10	5,109	314	1,250	1,580	2,785	1,106	160	1,519	3,871	2,127
422	1984	11	4,318	885	384	0	7,575	2,133	0	5,442	0	0
423	1984	12	4,318	1,353	1,406	0	5,079	1,778	0	3,301	0	0
424	1985	1	4,612	1,353	1,168	0	4,833	1,722	0	3,111	0	0
425	1985	2	4,371	1,222	5	0	8,828	2,140	0	6,688	0	0
426	1985	3	3,435	1,353	0	0	19,972	0	3,821	16,150	0	0
427	1985	4	1,780	1,309	490	0	54,256	1,912	6,080	46,264	2,215	1,815
428	1985	5	7,808	1,353	1,384	6,319	72,102	3,203	6,160	62,739	6,515	2,685
429	1985	6	11,265	1,309	2,284	12,485	18,447	3,469	1,319	13,658	11,592	4,440
430	1985	7	18,645	0	119	8,905	9,279	2,393	640	6,247	17,014	5,040
431	1985	8	17,383	0	4,667	5,503	9,845	1,261	610	7,975	11,126	4,783
432	1985	9	11,666	0	3,094	6,569	7,275	836	480	5,960	9,034	3,600
433	1985	10	4,632	808	1,250	727	5,887	1,586	160	4,141	3,512	2,127
434	1985	11	4,023	885	297	0	6,637	0	0	6,637	0	0
435	1985	12	4,416	1,293	678	0	6,914	2,348	0	4,566	0	0
436	1986	1	4,612	1,353	1,061	0	5,698	1,829	0	3,869	0	0
437	1986	2	3,827	1,222	0	0	15,371	3,454	0	11,917	0	0
438	1986	3	4,514	1,353	21	0	96,275	0	10,635	85,640	0	0
439	1986	4	3,055	1,309	464	0	52,738	2,037	6,080	44,621	2,215	1,815
440	1986	5	9,142	1,353	1,360	6,319	76,147	1,921	6,160	68,065	6,515	2,685
441	1986	6	10,594	1,176	2,202	11,504	85,054	594	6,320	78,140	11,179	4,440
442	1986	7	18,171	1,353	592	8,905	25,925	4,085	12,008	9,832	16,541	5,040
443	1986	8	15,829	0	4,667	5,503	10,271	1,261	610	8,400	11,126	4,783
444	1986	9	10,308	0	3,094	6,569	9,037	836	480	7,721	9,034	3,600
445	1986	10	3,174	808	1,250	727	9,189	3,041	160	5,988	3,512	2,127
446	1986	11	5,201	885	136	0	8,462	3,898	0	4,565	0	0
447	1986	12	5,005	1,196	561	0	4,559	1,778	0	2,781	0	0
448	1987	1	4,710	1,353	813	0	5,119	1,979	0	3,140	0	0
449	1987	2	4,023	1,222	5	0	18,362	2,214	3,249	12,898	0	0
450	1987	3	3,729	1,353	6	0	15,417	0	3,931	11,487	0	0
451	1987	4	4,724	1,309	485	3,932	22,742	1,866	10,878	9,998	3,870	1,815
452	1987	5	5,263	1,353	1,494	11,880	39,699	3,782	17,631	18,287	8,855	2,685
453	1987	6	9,020	0	2,322	5,827	13,016	4,017	320	8,678	8,791	4,440
454	1987	7	12,868	0	4,480	3,204	13,014	3,950	640	8,423	10,254	5,040
455	1987	8	20,733	0	2,770	4,166	14,431	3,856	610	9,965	12,460	4,783
456	1987	9	16,388	0	3,094	3,177	12,642	3,769	480	8,393	7,607	3,600
457	1987	10	3,325	0	1,250	747	7,532	3,789	160	3,584	3,520	2,127
458	1987	11	4,710	788	363	0	3,994	1,665	0	2,329	0	0
459	1987	12	4,710	924	392	0	2,118	1,925	0	193	0	0
460	1988	1	5,103	1,263	753	0	1,709	1,538	0	171	0	0
461	1988	2	4,472	829	629	0	1,906	201	0	1,705	0	0
462	1988	3	4,612	790	755	0	2,072	0	0	2,072	0	0
463	1988	4	6,000	0	485	4,788	8,043	4,759	80	3,205	4,230	1,815
464	1988	5	11,206	0	1,457	8,235	15,254	7,798	160	7,296	7,321	2,685
465	1988	6	6,676	0	2,207	7,037	13,506	4,057	320	9,129	9,300	4,440
466	1988	7	18,963	0	4,480	2,808	12,117	4,055	640	7,422	10,088	5,040
467	1988	8	18,290	0	4,667	2,792	14,674	3,850	610	10,214	9,986	4,783
468	1988	9	8,843	0	3,094	2,056	12,892	3,770	480	8,642	7,136	3,600
469	1988	10	2,990	0	1,250	15	15,859	1,106	160	14,593	3,212	2,127
470	1988	11	4,612	512	154	0	5,472	3,900	0	1,572	0	0
471	1988	12	4,612	631	392	0	4,692	4,336	0	356	0	0
472	1989	1	4,710	545	436	0	2,738	2,454	0	284	0	0
473	1989	2	4,268	485	369	0	1,957	1,393	0	564	0	0
474	1989	3	5,005	602	43	0	2,131	908	0	1,223	0	0
475	1989	4	6,098	0	485	4,788	7,173	3,859	80	3,234	4,230	1,815
476	1989	5	8,551	0	1,476	8,235	21,869	8,026	160	13,683	7,321	2,685
477	1989	6	13,629	0	2,206	9,757	14,126	4,035	320	9,771	10,445	4,440
478	1989	7	16,795	0	4,480	2,043	13,820	1,210	640	11,970	9,766	5,040
479	1989	8	16,711	0	4,667	3,302	15,252	3,855	610	10,787	10,200	4,783
480	1989	9	10,797	0	3,094	1,819	12,076	3,859	480	7,738	7,036	3,600

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			49	50	51	52	53	54	55	56	57	58	59
Table Number:			P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
Month Number	Year	Month	Diversions into Provo Reservoir Canal PRP	Diversions into Provo Reservoir Canal Non-Project	Provo River from Interstate 15 to Utah Lake Total	Provo River from Interstate 15 to Utah Lake CUP	Provo River from Interstate 15 to Utah Lake PRP	Provo River from Interstate 15 to Utah Lake Non-Project	PRP Diversion to Provo Bench Canal PRP	June Sucker Releases CUP	June Sucker Releases PRP	June Sucker Releases Non-Project	75-cfs Target Releases Non-Project
421	1984	10	1,079	665	1,397	1,106	0	211	160	0	0	0	-80
422	1984	11	0	0	8,548	2,133	0	6,415	0	0	0	0	0
423	1984	12	0	0	5,252	1,778	0	3,475	0	0	0	0	0
424	1985	1	0	0	5,125	1,722	0	3,403	0	0	0	0	0
425	1985	2	0	0	8,573	2,140	0	6,433	0	0	0	0	0
426	1985	3	0	0	19,964	0	3,821	16,143	0	0	0	0	0
427	1985	4	400	0	50,950	1,912	6,000	42,897	80	0	0	0	-140
428	1985	5	1,171	2,659	66,974	3,203	6,000	57,278	160	0	0	0	-494
429	1985	6	1,899	5,254	12,173	3,469	999	7,107	320	-2,875	-4,000	0	-597
430	1985	7	8,227	3,747	2,996	2,393	0	0	640	0	0	-1,183	-603
431	1985	8	4,028	2,316	1,856	1,261	0	26	610	0	0	0	-569
432	1985	9	2,670	2,764	1,256	836	0	0	480	0	0	0	-420
433	1985	10	1,079	306	6,337	1,586	0	4,730	160	0	0	0	-20
434	1985	11	0	0	7,356	0	0	7,356	0	0	0	0	0
435	1985	12	0	0	7,215	2,348	0	4,867	0	0	0	0	0
436	1986	1	0	0	5,843	1,829	0	4,014	0	0	0	0	0
437	1986	2	0	0	15,377	3,454	0	11,923	0	0	0	0	0
438	1986	3	0	0	96,870	0	10,635	86,235	0	0	0	0	0
439	1986	4	400	0	54,344	2,037	6,000	46,294	80	0	0	0	-13
440	1986	5	1,171	2,659	70,487	1,921	6,000	61,995	160	0	0	0	-570
441	1986	6	1,899	4,841	77,431	594	6,000	70,106	320	0	0	0	-731
442	1986	7	7,753	3,747	17,050	4,085	11,368	933	640	-2,875	-4,000	0	-664
443	1986	8	4,028	2,316	1,906	1,261	0	37	610	0	0	0	-608
444	1986	9	2,670	2,764	1,377	836	0	0	480	0	0	0	-541
445	1986	10	1,079	306	9,951	3,041	0	6,825	160	0	0	0	-[illegible]
446	1986	11	0	0	9,283	3,898	0	5,385	0	0	0	0	0
447	1986	12	0	0	4,658	1,778	0	2,879	0	0	0	0	0
448	1987	1	0	0	5,332	1,979	0	3,353	0	0	0	0	0
449	1987	2	0	0	18,226	2,214	3,249	12,763	0	0	0	0	0
450	1987	3	0	0	15,180	0	3,931	11,249	0	0	0	0	0
451	1987	4	400	1,655	20,839	1,866	10,798	8,064	80	0	0	0	-111
452	1987	5	1,171	4,999	31,875	3,782	17,471	10,032	160	0	0	0	-591
453	1987	6	1,899	2,452	4,768	4,017	0	85	320	-2,875	-1,573	0	-666
454	1987	7	3,866	1,348	4,611	3,950	0	0	640	0	-2,427	-708	-661
455	1987	8	5,924	1,753	4,591	3,856	0	84	610	0	0	0	-651
456	1987	9	2,670	1,337	4,463	3,769	0	123	480	0	0	0	-570
457	1987	10	1,079	314	4,112	3,789	0	127	160	0	0	0	-197
458	1987	11	0	0	4,253	1,665	0	2,588	0	0	0	0	0
459	1987	12	0	0	2,167	1,925	0	242	0	0	0	0	0
460	1988	1	0	0	1,692	1,538	0	155	0	0	0	0	0
461	1988	2	0	0	1,546	201	0	1,345	0	0	0	0	0
462	1988	3	0	0	1,629	0	0	1,629	0	0	0	0	0
463	1988	4	400	2,015	4,879	4,759	0	0	80	-2,875	-1,924	0	-120
464	1988	5	1,171	3,465	8,411	7,798	0	0	160	0	-2,076	-1,115	-613
465	1988	6	1,899	2,961	4,768	4,057	0	0	320	0	0	-1,025	-711
466	1988	7	3,866	1,182	4,586	4,055	0	0	640	0	0	-506	-531
467	1988	8	4,028	1,175	4,611	3,850	0	118	610	0	0	0	-644
468	1988	9	2,670	865	4,463	3,770	0	117	480	0	0	0	-576
469	1988	10	1,079	6	11,559	1,106	0	10,174	160	0	0	0	-279
470	1988	11	0	0	4,463	3,900	0	562	0	0	0	0	0
471	1988	12	0	0	4,611	4,336	0	275	0	0	0	0	0
472	1989	1	0	0	2,619	2,454	0	165	0	0	0	0	0
473	1989	2	0	0	1,496	1,393	0	103	0	0	0	0	0
474	1989	3	0	0	1,641	908	0	733	0	0	0	0	0
475	1989	4	400	2,015	4,879	3,859	0	885	80	-2,875	-1,924	0	-135
476	1989	5	1,171	3,465	12,341	8,026	0	3,601	160	0	-2,076	-1,155	-71[illegible]
477	1989	6	1,899	4,106	4,768	4,035	0	0	320	0	0	-1,324	-7[illegible]
478	1989	7	3,866	860	12,837	1,210	0	11,606	640	0	0	0	-2[illegible]
479	1989	8	4,028	1,389	4,611	3,855	0	107	610	0	0	0	-650
480	1989	9	2,670	765	4,463	3,859	0	101	480	0	0	0	-503

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:				1	2	3	4	5	6	7	8
Table Number:			P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number	Year	Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
481	1989	10	47	10,257	5,449	1,704	3,105	10,028	5,278	1,704	3,047
482	1989	11	2,319	7,702	5,277	1,565	860	7,702	5,277	1,565	860
483	1989	12	1,432	9,026	5,747	1,452	1,827	9,026	5,747	1,452	1,827
484	1990	1	343	8,789	6,535	1,021	1,233	8,789	6,535	1,021	1,233
485	1990	2	2,516	7,815	5,173	1,285	1,357	7,815	5,173	1,285	1,357
486	1990	3	1,010	8,413	5,626	1,522	1,266	8,413	5,626	1,522	1,266
487	1990	4	8,195	9,809	3,484	3,212	3,112	9,694	3,484	3,212	2,998
488	1990	5	17,869	23,019	5,485	2,184	15,350	21,432	5,437	2,184	13,812
489	1990	6	18,371	35,307	5,920	16,479	12,908	33,120	5,370	16,479	11,271
490	1990	7	166	22,386	10,693	0	11,692	19,153	9,050	0	10,103
491	1990	8	3	18,935	14,453	0	4,481	16,000	12,920	0	3,080
492	1990	9	22	14,854	11,530	0	3,325	13,467	10,945	0	2,521
493	1990	10	430	9,457	5,077	2,398	1,982	9,228	4,907	2,398	1,924
494	1990	11	2,597	8,757	5,339	1,564	1,853	8,757	5,339	1,564	1,853
495	1990	12	2,217	8,624	5,559	1,478	1,588	8,624	5,559	1,478	1,588
496	1991	1	2,369	8,717	7,692	187	838	8,717	7,692	187	838
497	1991	2	2,406	7,606	6,645	350	611	7,606	6,645	350	611
498	1991	3	2,618	8,029	5,832	1,301	896	8,029	5,832	1,301	896
499	1991	4	261	9,856	4,887	2,278	2,692	9,742	4,887	2,278	2,577
500	1991	5	23,060	20,236	3,985	1,291	14,960	18,649	3,937	1,291	13,421
501	1991	6	35,034	36,739	6,822	16,723	13,194	34,551	6,272	16,723	11,556
502	1991	7	159	37,593	15,310	9,351	12,932	34,361	13,666	9,351	11,343
503	1991	8	35	26,005	19,741	1,021	5,243	23,070	18,208	1,021	3,841
504	1991	9	0	17,032	11,868	1,647	3,517	15,644	11,283	1,647	2,714
505	1991	10	0	10,309	4,740	2,076	3,494	10,081	4,569	2,076	3,436
506	1991	11	3,841	7,925	6,388	1,249	289	7,925	6,388	1,249	289
507	1991	12	2,264	8,083	6,537	1,132	414	8,083	6,537	1,132	414
508	1992	1	198	8,459	7,382	532	545	8,459	7,382	532	545
509	1992	2	179	7,377	6,197	1,180	0	7,377	6,197	1,180	0
510	1992	3	1,638	8,739	7,706	221	811	8,739	7,706	221	811
511	1992	4	191	9,456	7,869	0	1,587	9,341	7,869	0	1,472
512	1992	5	5,849	37,717	12,186	10,374	15,158	36,131	12,138	10,374	13,619
513	1992	6	5,419	24,346	6,647	9,935	7,764	22,159	6,097	9,935	6,126
514	1992	7	199	31,451	19,341	0	12,110	28,486	17,697	0	10,789
515	1992	8	0	25,483	21,550	1,080	2,853	22,715	20,017	1,080	1,617
516	1992	9	416	14,825	11,743	1,118	1,964	13,487	11,159	1,118	1,211
517	1992	10	321	10,298	6,035	687	3,576	10,069	5,865	687	3,518
518	1992	11	2,383	7,482	5,594	416	1,473	7,482	5,594	416	1,473
519	1992	12	2,469	7,729	5,743	420	1,567	7,729	5,743	420	1,567
520	1993	1	2,525	7,729	7,100	343	286	7,729	7,100	343	286
521	1993	2	2,394	6,985	5,962	319	704	6,985	5,962	319	704
522	1993	3	3,919	7,729	7,046	447	237	7,729	7,046	447	237
523	1993	4	7,234	7,702	4,211	825	2,666	7,588	4,211	825	2,551
524	1993	5	6,013	21,568	3,917	682	16,968	19,981	3,870	682	15,429
525	1993	6	6,013	43,816	5,836	13,749	24,231	41,628	5,286	13,749	22,594
526	1993	7	5,855	41,386	11,014	8,195	22,177	38,154	9,370	8,195	20,588
527	1993	8	0	26,698	16,973	3,712	6,013	23,763	15,440	3,712	4,612
528	1993	9	28	14,599	12,291	0	2,309	13,212	11,706	0	1,506
529	1993	10	2,942	9,700	4,190	1,952	3,558	9,471	4,019	1,952	3,500
530	1993	11	2,906	7,493	5,348	1,194	951	7,493	5,348	1,194	951
531	1993	12	862	7,821	5,448	1,219	1,155	7,821	5,448	1,219	1,155
532	1994	1	2,961	7,754	7,012	717	25	7,754	7,012	717	25
533	1994	2	2,815	7,051	5,574	1,411	66	7,051	5,574	1,411	66
534	1994	3	3,913	7,918	5,316	2,390	212	7,918	5,316	2,390	212
535	1994	4	12,156	9,215	7,481	0	1,735	9,101	7,481	0	1,620
536	1994	5	16,533	23,472	5,292	1,383	16,797	21,885	5,244	1,383	15,258
537	1994	6	14,692	32,451	6,508	6,758	19,185	30,264	5,958	6,758	17,548
538	1994	7	5,176	32,875	14,400	8,335	10,140	29,642	12,756	8,335	8,551
539	1994	8	1,552	24,989	18,841	2,840	3,307	22,136	17,308	2,840	1,987
540	1994	9	28	13,343	10,549	0	2,794	12,006	9,965	0	2,041

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			9	10	11	12	13	14	15	16	17	18
Table Number:			P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number	Year	Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions Into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions in Reach VCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
481	1989	10	229	171	58	8,039	4,391	929	1,453	1,704	1,944	12,943
482	1989	11	0	0	0	8,563	5,277	0	0	1,565	1,721	20,314
483	1989	12	0	0	0	8,014	5,747	0	806	1,452	815	11,226
484	1990	1	0	0	0	8,034	6,535	0	601	1,021	478	11,859
485	1990	2	0	0	0	7,230	5,173	0	466	1,285	772	10,451
486	1990	3	0	0	0	7,983	5,626	0	342	1,522	836	11,387
487	1990	4	115	0	115	7,740	3,484	0	840	3,212	1,043	9,732
488	1990	5	1,587	48	1,539	11,205	5,429	0	1,024	2,184	3,593	12,787
489	1990	6	2,188	550	1,637	21,976	5,247	32	869	16,479	250	25,549
490	1990	7	3,233	1,644	1,589	8,272	8,272	539	1,626	0	0	11,374
491	1990	8	2,935	1,533	1,402	8,439	8,439	4,574	1,725	0	0	13,898
492	1990	9	1,388	584	803	8,061	7,250	3,897	1,632	0	811	12,800
493	1990	10	229	171	58	7,932	4,026	922	197	2,398	1,508	15,676
494	1990	11	0	0	0	7,681	5,339	0	857	1,564	777	11,778
495	1990	12	0	0	0	7,924	5,559	0	557	1,478	888	12,770
496	1991	1	0	0	0	7,991	7,692	0	578	187	112	12,047
497	1991	2	0	0	0	7,205	6,645	0	319	350	210	10,780
498	1991	3	0	0	0	7,914	5,832	0	92	1,301	781	11,724
499	1991	4	115	0	115	7,670	4,887	0	952	2,278	506	9,353
500	1991	5	1,587	48	1,539	8,465	3,929	0	1,024	1,291	3,245	10,395
501	1991	6	2,188	550	1,637	23,122	6,149	32	869	16,723	250	27,122
502	1991	7	3,233	1,644	1,589	22,962	12,889	539	261	9,351	722	28,147
503	1991	8	2,935	1,533	1,402	15,317	13,726	4,574	252	1,021	570	20,755
504	1991	9	1,388	584	803	9,645	7,588	3,897	248	1,647	410	14,275
505	1991	10	229	171	58	7,886	3,689	922	1,585	2,076	2,121	13,242
506	1991	11	0	0	0	7,636	6,388	0	230	1,249	0	14,109
507	1991	12	0	0	0	7,887	6,537	0	182	1,132	218	13,242
508	1992	1	0	0	0	7,914	7,382	0	434	532	0	12,459
509	1992	2	0	0	0	7,629	6,197	0	0	1,180	252	12,355
510	1992	3	0	0	0	7,928	7,706	0	646	221	0	10,897
511	1992	4	115	0	115	7,869	7,869	0	113	0	0	10,450
512	1992	5	1,587	48	1,539	25,741	12,130	0	1,024	10,374	3,237	27,681
513	1992	6	2,188	550	1,637	16,163	5,974	32	869	9,935	254	19,580
514	1992	7	2,965	1,644	1,322	21,310	16,920	539	261	0	4,390	23,468
515	1992	8	2,768	1,533	1,235	18,524	15,535	4,574	252	1,080	1,909	24,413
516	1992	9	1,337	584	753	8,995	7,463	3,897	248	1,118	414	12,221
517	1992	10	229	171	58	9,234	4,984	922	73	687	3,563	13,476
518	1992	11	0	0	0	7,481	5,594	0	0	416	1,472	12,100
519	1992	12	0	0	0	7,849	5,743	0	0	420	1,687	12,687
520	1993	1	0	0	0	7,847	7,100	0	0	343	404	12,428
521	1993	2	0	0	0	8,432	5,962	0	0	319	2,151	13,573
522	1993	3	0	0	0	10,609	7,046	0	0	447	3,117	16,972
523	1993	4	115	0	115	7,776	4,211	0	113	825	2,739	11,220
524	1993	5	1,587	48	1,539	10,003	3,861	0	1,024	682	5,459	10,605
525	1993	6	2,188	550	1,637	31,402	5,163	32	869	13,749	12,491	34,171
526	1993	7	3,233	1,644	1,589	27,860	8,593	539	261	8,195	11,072	30,144
527	1993	8	2,935	1,533	1,402	14,670	10,958	4,574	252	3,712	0	19,905
528	1993	9	1,388	584	803	8,011	8,011	3,897	248	0	0	12,169
529	1993	10	229	171	58	7,729	3,139	922	1,528	1,952	2,638	12,894
530	1993	11	0	0	0	7,481	5,348	0	10	1,194	939	14,739
531	1993	12	0	0	0	7,729	5,448	0	73	1,219	1,063	12,767
532	1994	1	0	0	0	7,729	7,012	0	20	717	0	13,973
533	1994	2	0	0	0	7,178	5,574	0	0	1,411	193	11,378
534	1994	3	0	0	0	8,113	5,316	0	0	2,390	407	12,242
535	1994	4	115	0	115	7,481	7,481	0	113	0	0	9,615
536	1994	5	1,587	48	1,539	11,746	5,236	0	1,024	1,383	5,127	12,181
537	1994	6	2,188	550	1,637	20,808	5,835	32	869	6,758	8,215	26,004
538	1994	7	3,233	1,644	1,589	20,759	11,979	539	261	8,335	446	23,885
539	1994	8	2,853	1,533	1,320	15,667	12,827	4,574	252	2,840	0	20,508
540	1994	9	1,337	584	753	7,438	6,269	3,897	248	0	1,169	12,971

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			19	20	21	22	23	24	25	26	27	28
Table Number:			P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number	Year	Month	Provo River from Snake Creek to Deer Creek Reservoir CUP	Provo River from Snake Creek to Deer Creek Reservoir PRP	Provo River from Snake Creek to Deer Creek Reservoir Non-Project	CUP Return Flow Gains above Deer Creek CUP	Provo River from Outlet of Deer Creek to North Fork Total	Provo River from Outlet of Deer Creek to North Fork CUP	Provo River from Outlet of Deer Creek to North Fork PRP	Provo River from Outlet of Deer Creek to North Fork Non-Project	Diversions into Salt Lake Aqueduct Total	Diversions into Salt Lake Aqueduct CUP
481	1989	10	4,391	1,704	6,848	0	11,728	5,778	2,488	3,462	6,100	0
482	1989	11	5,277	1,565	13,472	0	5,952	5,394	558	0	4,199	0
483	1989	12	5,747	1,452	4,027	0	6,149	5,271	877	0	1,182	0
484	1990	1	6,535	1,021	4,303	0	6,149	5,969	128	52	155	0
485	1990	2	5,173	1,285	3,993	0	5,544	3,080	2,455	10	0	0
486	1990	3	5,626	1,522	4,239	0	6,137	5,089	946	102	0	0
487	1990	4	3,484	3,212	3,036	593	6,224	1,486	965	3,774	1,150	0
488	1990	5	5,429	2,184	5,175	5,014	38,786	11,132	6,700	20,955	2,530	0
489	1990	6	5,247	16,479	3,823	3,106	38,319	9,025	4,425	24,870	7,700	0
490	1990	7	8,272	0	3,102	1,964	37,215	13,559	8,986	14,671	7,290	0
491	1990	8	8,439	0	5,459	0	28,717	16,124	963	11,630	7,700	0
492	1990	9	7,250	0	5,550	18	25,746	13,056	0	12,690	52	0
493	1990	10	4,026	2,398	9,252	0	7,199	5,514	0	1,685	454	0
494	1990	11	5,339	1,564	4,875	0	5,953	5,585	369	0	2,207	0
495	1990	12	5,559	1,478	5,734	0	6,149	5,645	392	111	1,758	0
496	1991	1	7,692	187	4,168	0	6,149	5,953	146	49	2,158	0
497	1991	2	6,645	350	3,786	0	5,554	5,105	313	135	2,031	0
498	1991	3	5,832	1,301	4,591	0	6,149	4,416	1,658	74	896	0
499	1991	4	4,887	2,278	2,189	593	8,928	5,955	2,026	947	70	0
500	1991	5	3,929	1,291	5,175	5,014	23,197	6,339	4,787	12,070	2,530	0
501	1991	6	6,149	16,723	4,250	3,106	38,591	8,820	4,423	25,348	7,700	0
502	1991	7	12,889	9,351	5,906	1,964	41,685	14,735	8,986	17,964	7,290	0
503	1991	8	13,726	1,021	6,009	0	32,953	14,945	9,304	8,704	7,700	0
504	1991	9	7,588	1,647	5,040	804	20,814	9,816	693	10,306	7,710	0
505	1991	10	3,689	2,076	7,477	0	8,038	5,978	0	2,061	32	0
506	1991	11	6,388	1,249	6,473	0	5,952	5,168	784	0	3,391	0
507	1991	12	6,537	1,132	5,573	0	6,149	4,718	1,172	259	1,104	0
508	1992	1	7,382	532	4,546	0	6,200	6,052	5	143	144	0
509	1992	2	6,197	1,180	4,977	0	6,200	6,071	0	129	128	0
510	1992	3	7,706	221	2,970	0	6,200	6,020	11	170	1,567	0
511	1992	4	7,869	0	2,581	593	15,299	12,377	2,025	896	2	0
512	1992	5	12,130	10,374	5,177	5,014	35,412	13,238	4,858	17,317	2,530	0
513	1992	6	5,974	9,935	3,670	0	26,890	8,944	3,118	14,829	7,700	0
514	1992	7	16,920	0	6,548	0	25,449	19,422	0	6,027	258	0
515	1992	8	15,535	1,080	7,797	0	26,726	18,979	0	7,747	98	0
516	1992	9	7,463	1,118	3,640	0	12,345	9,636	0	2,709	486	0
517	1992	10	4,984	687	7,805	0	7,285	7,046	0	239	399	0
518	1992	11	5,594	416	6,090	0	6,107	6,099	8	0	2,569	0
519	1992	12	5,743	420	6,525	0	6,149	5,783	365	0	2,036	0
520	1993	1	7,100	343	4,985	0	6,149	5,385	597	166	1,855	0
521	1993	2	5,962	319	7,292	0	5,554	4,387	1,049	118	1,278	0
522	1993	3	7,046	447	9,479	0	6,149	5,809	340	0	3,503	0
523	1993	4	4,211	825	6,184	593	5,964	3,870	2,094	0	0	0
524	1993	5	3,861	682	6,061	5,014	25,349	10,348	6,687	8,313	2,530	0
525	1993	6	5,163	13,749	15,259	3,106	27,297	8,820	4,419	14,058	7,700	0
526	1993	7	8,593	8,195	13,356	1,964	30,349	12,282	8,986	9,082	7,290	0
527	1993	8	10,958	3,712	5,235	740	29,439	14,748	9,304	5,387	7,700	0
528	1993	9	8,011	0	4,159	804	29,091	13,054	6,244	9,793	7,710	0
529	1993	10	3,139	1,952	7,803	0	6,961	4,473	2,488	0	6,100	0
530	1993	11	5,348	1,194	8,197	0	5,950	5,725	226	0	4,342	0
531	1993	12	5,448	1,219	6,100	0	6,149	5,352	796	0	3,798	0
532	1994	1	7,012	717	6,244	0	6,149	5,189	801	158	3,804	0
533	1994	2	5,574	1,411	4,393	0	5,554	3,850	1,043	661	2,992	0
534	1994	3	5,316	2,390	4,537	0	6,149	3,848	570	1,730	3,346	0
535	1994	4	7,481	0	2,134	593	14,758	10,641	2,889	1,228	1,150	0
536	1994	5	5,236	1,383	5,563	5,014	33,327	8,638	4,861	19,828	2,530	0
537	1994	6	5,835	6,758	13,411	3,106	33,711	10,601	4,423	18,687	7,700	0
538	1994	7	11,979	8,335	3,571	0	35,637	15,823	8,986	10,829	7,290	0
539	1994	8	12,827	2,840	4,841	0	34,085	16,621	9,304	8,160	7,700	0
540	1994	9	6,269	0	6,701	0	20,464	11,199	2,334	6,931	7,710	0

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			29	30	31	32	33	34	35	36	37	38
Table Number:			P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number	Year	Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
481	1989	10	6,100	11,728	5,778	2,488	3,462	5,513	812	1,239	3,462	6,230
482	1989	11	4,199	6,502	5,394	558	550	4,060	2,746	0	1,314	4,091
483	1989	12	1,182	7,018	5,271	877	869	3,940	3,189	0	751	4,312
484	1990	1	155	6,898	5,969	128	801	3,852	3,397	0	455	4,052
485	1990	2	0	6,050	3,080	2,455	516	2,075	1,831	0	244	4,634
486	1990	3	0	6,726	5,089	946	691	3,492	3,204	0	288	4,184
487	1990	4	1,150	6,781	1,486	965	4,331	5,467	0	480	4,986	2,416
488	1990	5	2,530	41,243	11,132	6,700	23,412	34,896	4,688	5,331	24,877	17,328
489	1990	6	7,700	39,612	9,025	4,425	26,163	29,409	0	2,219	27,190	22,806
490	1990	7	7,290	40,195	13,559	8,986	17,651	24,962	0	4,506	20,456	25,804
491	1990	8	7,700	30,354	16,124	963	13,267	17,073	0	774	16,299	21,341
492	1990	9	52	27,005	13,056	0	13,949	16,911	0	0	16,911	19,143
493	1990	10	454	7,926	5,514	0	2,411	7,338	1,642	0	5,696	4,550
494	1990	11	2,207	6,468	5,585	369	515	2,677	1,957	0	721	4,785
495	1990	12	1,758	6,468	5,645	392	430	2,261	1,771	0	490	4,710
496	1991	1	2,158	6,266	5,953	146	166	1,979	1,538	0	441	4,562
497	1991	2	2,031	5,714	5,105	313	295	1,883	1,389	0	494	4,140
498	1991	3	896	6,402	4,416	1,658	327	1,958	1,537	0	421	4,994
499	1991	4	70	8,986	5,955	2,026	1,005	6,192	2,875	2,004	1,313	4,111
500	1991	5	2,530	24,909	6,339	4,787	13,782	19,520	1,418	3,327	14,776	12,623
501	1991	6	7,700	40,026	8,820	4,423	26,783	29,505	0	2,219	27,286	23,190
502	1991	7	7,290	41,736	14,735	8,986	18,015	22,528	0	4,506	18,021	26,014
503	1991	8	7,700	33,520	14,945	9,304	9,271	14,445	0	4,638	9,807	22,308
504	1991	9	7,710	21,820	9,816	693	11,311	13,880	0	579	13,302	14,463
505	1991	10	32	8,122	5,978	0	2,144	3,886	779	0	3,107	5,877
506	1991	11	3,391	6,929	5,168	784	977	3,862	1,741	0	2,121	5,520
507	1991	12	1,104	6,840	4,718	1,172	950	2,650	1,429	0	1,221	5,814
508	1992	1	144	6,830	6,052	5	773	3,382	2,385	0	997	5,025
509	1992	2	128	6,815	6,071	0	744	4,366	3,074	0	1,293	4,263
510	1992	3	1,567	6,930	6,020	11	900	2,467	1,121	0	1,346	6,262
511	1992	4	2	16,374	12,377	2,025	1,971	8,408	2,875	2,004	3,528	10,427
512	1992	5	2,530	36,294	13,238	4,858	18,199	22,429	574	3,327	18,529	22,466
513	1992	6	7,700	27,223	8,944	3,118	15,162	16,983	0	1,605	15,377	17,087
514	1992	7	258	26,416	19,422	0	6,994	7,260	0	0	7,260	21,111
515	1992	8	98	26,964	18,979	0	7,985	8,610	0	0	8,610	18,988
516	1992	9	486	13,502	9,636	0	3,866	6,156	0	0	6,156	10,973
517	1992	10	399	8,234	7,046	0	1,187	5,968	2,616	0	3,352	5,298
518	1992	11	2,569	6,951	6,099	8	844	3,971	1,686	0	2,285	5,209
519	1992	12	2,036	6,823	5,783	365	674	2,819	1,679	0	1,140	5,762
520	1993	1	1,855	6,948	5,385	597	965	3,652	1,538	0	2,114	5,798
521	1993	2	1,278	6,157	4,387	1,049	721	2,856	1,389	0	1,467	5,269
522	1993	3	3,503	7,425	5,809	340	1,276	6,011	1,863	0	4,148	5,639
523	1993	4	0	9,414	3,870	2,094	3,450	13,214	3,596	480	9,138	4,625
524	1993	5	2,530	33,818	10,348	6,687	16,782	32,606	4,856	5,331	22,419	17,625
525	1993	6	7,700	34,058	8,820	4,419	20,819	26,998	0	2,219	24,779	21,867
526	1993	7	7,290	36,299	12,282	8,986	15,032	24,492	0	4,506	19,986	24,527
527	1993	8	7,700	33,074	14,748	9,304	9,022	19,426	0	4,638	14,788	24,442
528	1993	9	7,710	30,983	13,054	6,244	11,685	18,952	0	3,150	15,802	22,235
529	1993	10	6,100	8,516	4,473	2,488	1,555	8,931	1,337	1,239	6,355	5,968
530	1993	11	4,342	6,612	5,725	226	662	2,892	1,703	0	1,190	5,133
531	1993	12	3,798	6,924	5,352	796	775	2,988	1,700	0	1,288	5,801
532	1994	1	3,804	6,860	5,189	801	869	2,885	1,538	0	1,347	5,806
533	1994	2	2,992	6,230	3,850	1,043	1,337	2,973	852	0	2,122	5,263
534	1994	3	3,346	6,890	3,848	570	2,471	2,946	0	0	2,945	5,771
535	1994	4	1,150	15,948	10,641	2,889	2,418	9,455	2,875	2,404	4,175	10,072
536	1994	5	2,530	35,594	8,638	4,861	22,095	28,365	1,357	3,407	23,601	19,496
537	1994	6	7,700	34,884	10,601	4,423	19,860	22,347	0	2,219	20,128	21,708
538	1994	7	7,290	36,568	15,823	8,986	11,760	16,516	0	4,506	12,010	23,798
539	1994	8	7,700	35,310	16,621	9,304	9,385	15,332	0	4,638	10,695	24,777
540	1994	9	7,710	20,933	11,199	2,334	7,401	9,299	0	1,339	7,960	14,251

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			39	40	41	42	43	44	45	46	47	48
Table Number:			P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number	Year	Month	Diversions into Olmsted Aqueduct CUP	Diversions into Olmsted Aqueduct Ap 40524	Diversions into Olmsted Aqueduct PRP	Diversions into Olmsted Aqueduct Non-Project	Provo River from Murdock to Interstate15 Total	Provo River from Murdock to Interstate15 CUP	Provo River from Murdock to Interstate15 PRP	Provo River from Murdock to Interstate15 Non-Project	Diversions into Provo Reservoir Canal Total	ULS Water in Provo Reservoir Canal CUP
481	1989	10	4,966	0	1,250	15	7,936	4,238	160	3,538	3,212	2,127
482	1989	11	3,533	885	558	0	4,557	3,084	0	1,473	0	0
483	1989	12	3,435	1,353	877	0	4,779	3,869	0	910	0	0
484	1990	1	3,925	1,353	128	0	3,990	3,397	0	593	0	0
485	1990	2	2,180	931	2,455	0	2,216	1,831	0	385	0	0
486	1990	3	3,238	1,353	946	0	3,628	3,204	0	424	0	0
487	1990	4	1,486	0	485	446	5,902	1,249	80	4,573	2,403	1,815
488	1990	5	6,444	0	1,369	9,516	20,617	10,950	160	9,507	7,860	2,685
489	1990	6	9,024	0	2,206	11,576	12,904	4,034	320	8,550	11,210	4,440
490	1990	7	13,559	0	4,480	7,765	12,803	3,949	640	8,213	12,174	5,040
491	1990	8	16,124	0	190	5,027	12,860	2,647	610	9,604	7,062	4,783
492	1990	9	13,056	0	0	6,087	12,459	3,540	0	8,919	6,161	3,600
493	1990	10	3,873	0	0	678	9,470	4,071	0	5,399	2,412	2,127
494	1990	11	4,416	788	369	0	4,007	3,190	0	818	0	0
495	1990	12	4,318	444	392	0	4,943	4,392	0	551	0	0
496	1991	1	4,416	0	146	0	4,934	4,471	0	463	0	0
497	1991	2	3,827	110	313	0	1,924	1,402	0	522	0	0
498	1991	3	3,336	457	1,658	0	1,970	1,537	0	433	0	0
499	1991	4	3,644	564	22	446	5,483	4,768	0	715	2,003	1,815
500	1991	5	4,922	0	1,461	6,241	12,117	7,191	160	4,765	6,482	2,685
501	1991	6	8,820	0	2,204	12,165	12,610	4,838	320	7,452	11,458	4,440
502	1991	7	14,735	0	4,480	6,800	9,520	2,099	640	6,781	11,768	5,040
503	1991	8	14,945	0	4,667	2,696	10,689	3,856	610	6,223	9,945	4,783
504	1991	9	9,816	0	114	4,533	11,178	3,571	480	7,128	5,606	3,600
505	1991	10	5,199	0	0	678	6,682	4,426	0	2,256	2,412	2,127
506	1991	11	4,736	1,309	784	0	4,932	2,661	0	2,271	0	0
507	1991	12	4,642	1,353	1,172	0	5,237	3,886	0	1,351	0	0
508	1992	1	5,020	1,353	5	0	5,078	3,966	0	1,112	0	0
509	1992	2	4,263	1,265	0	0	4,625	3,226	0	1,399	0	0
510	1992	3	6,252	1,353	11	0	2,835	1,361	0	1,474	0	0
511	1992	4	9,502	0	21	904	7,203	4,691	0	2,512	2,196	1,815
512	1992	5	12,663	0	1,531	8,272	11,783	6,633	160	4,990	7,337	2,685
513	1992	6	8,943	0	1,512	6,631	8,744	3,981	320	4,443	8,516	4,440
514	1992	7	19,422	0	0	1,689	7,200	2,640	0	4,560	5,751	5,040
515	1992	8	18,979	0	0	9	8,778	0	0	8,778	4,787	4,783
516	1992	9	9,636	0	0	1,337	8,063	3,540	0	4,523	4,163	3,600
517	1992	10	4,948	518	0	350	7,399	4,334	0	3,065	2,274	2,127
518	1992	11	5,201	788	8	0	5,219	2,833	0	2,387	0	0
519	1992	12	5,397	1,293	365	0	2,919	1,679	0	1,240	0	0
520	1993	1	5,201	1,353	597	0	3,759	1,538	0	2,221	0	0
521	1993	2	4,220	1,222	1,049	0	2,934	1,389	0	1,545	0	0
522	1993	3	5,299	1,353	340	0	6,175	1,863	0	4,312	0	0
523	1993	4	1,583	1,309	1,614	1,428	11,744	3,722	80	7,942	2,816	1,815
524	1993	5	6,688	1,196	1,357	9,581	19,372	11,095	160	8,116	7,888	2,685
525	1993	6	8,820	0	2,200	10,847	13,180	4,740	320	8,120	10,903	4,440
526	1993	7	12,282	0	4,480	7,765	13,600	4,655	640	8,305	12,174	5,040
527	1993	8	14,748	0	4,667	5,027	13,598	3,856	610	9,132	10,926	4,783
528	1993	9	13,054	0	3,094	6,087	11,995	3,940	480	7,575	8,832	3,600
529	1993	10	4,040	905	1,250	678	9,446	3,285	160	6,001	3,491	2,127
530	1993	11	4,907	885	226	0	4,183	2,876	0	1,308	0	0
531	1993	12	5,005	1,353	796	0	4,816	3,382	0	1,434	0	0
532	1994	1	5,005	1,353	801	0	4,827	3,350	0	1,477	0	0
533	1994	2	4,220	1,222	1,043	0	3,980	1,742	0	2,239	0	0
534	1994	3	5,201	1,353	570	0	3,078	0	0	3,077	0	0
535	1994	4	7,766	0	485	1,821	5,857	3,951	80	1,826	2,981	1,815
536	1994	5	7,281	0	1,455	10,760	14,052	7,690	160	6,202	8,384	2,685
537	1994	6	10,601	0	2,205	8,902	10,132	4,209	320	5,603	10,085	4,440
538	1994	7	15,823	0	4,480	3,496	11,006	4,093	640	6,273	10,377	5,040
539	1994	8	16,621	0	4,667	3,490	10,611	3,856	610	6,145	10,279	4,783
540	1994	9	11,199	0	995	2,057	9,570	3,809	480	5,281	5,324	3,600

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			49	50	51	52	53	54	55	56	57	58	59
Table Number:			P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
Month Number	Year	Month	Diversions into Provo Reservoir Canal PRP	Diversions into Provo Reservoir Canal Non-Project	Provo River from Interstate 15 to Utah Lake Total	Provo River from Interstate 15 to Utah Lake CUP	Provo River from Interstate 15 to Utah Lake PRP	Provo River from Interstate 15 to Utah Lake Non-Project	PRP Diversion to Provo Bench Canal PRP	June Sucker Releases CUP	June Sucker Releases PRP	June Sucker Releases Non-Project	75-cfs Target Releases Non-Project
481	1989	10	1,079	6	4,611	4,238	0	123	160	0	0	0	-250
482	1989	11	0	0	4,463	3,084	0	1,374	0	0	0	0	-5
483	1989	12	0	0	4,471	3,869	0	602	0	0	0	0	0
484	1990	1	0	0	3,648	3,397	0	251	0	0	0	0	0
485	1990	2	0	0	1,893	1,831	0	61	0	0	0	0	0
486	1990	3	0	0	3,260	3,204	0	57	0	0	0	0	0
487	1990	4	400	188	4,879	1,249	0	3,611	80	0	0	0	-19
488	1990	5	1,171	4,004	11,646	10,950	0	0	160	-2,875	-4,000	-1,284	-695
489	1990	6	1,899	4,871	4,768	4,034	0	0	320	0	0	-1,518	-734
490	1990	7	3,866	3,268	4,611	3,949	0	0	640	0	0	-1,085	-662
491	1990	8	164	2,116	3,348	2,647	0	59	610	0	0	0	-642
492	1990	9	0	2,561	4,127	3,540	0	12	0	0	0	0	-575
493	1990	10	0	285	4,611	4,071	0	110	0	0	0	0	-431
494	1990	11	0	0	4,463	3,190	0	1,265	0	0	0	0	-8
495	1990	12	0	0	4,611	4,392	0	220	0	0	0	0	0
496	1991	1	0	0	4,611	4,471	0	141	0	0	0	0	0
497	1991	2	0	0	1,494	1,402	0	92	0	0	0	0	0
498	1991	3	0	0	1,620	1,537	0	82	0	0	0	0	0
499	1991	4	0	188	4,879	4,768	0	111	0	-2,875	-2,004	0	0
500	1991	5	1,171	2,626	7,529	7,191	0	0	160	0	-1,996	-796	-338
501	1991	6	1,899	5,119	5,476	4,838	0	0	320	0	0	-1,543	-638
502	1991	7	3,866	2,861	4,900	2,099	0	2,376	640	0	0	-889	-425
503	1991	8	4,028	1,135	4,354	3,856	0	60	610	0	0	0	-438
504	1991	9	99	1,907	4,072	3,571	0	24	480	0	0	0	-47[illegible]
505	1991	10	0	285	4,611	4,426	0	29	0	0	0	0	-1[illegible]
506	1991	11	0	0	4,463	2,661	0	1,797	0	0	0	0	[illegible]
507	1991	12	0	0	4,611	3,886	0	725	0	0	0	0	0
508	1992	1	0	0	4,611	3,966	0	646	0	0	0	0	0
509	1992	2	0	0	4,165	3,226	0	939	0	0	0	0	0
510	1992	3	0	0	2,245	1,361	0	884	0	0	0	0	0
511	1992	4	0	381	4,879	4,691	0	25	0	-2,875	-2,004	0	-164
512	1992	5	1,171	3,481	7,147	6,633	0	0	160	0	-1,996	-1,081	-514
513	1992	6	1,285	2,790	4,424	3,981	0	0	320	0	0	-878	-443
514	1992	7	0	711	4,001	2,640	0	1,047	0	0	0	-302	-313
515	1992	8	0	4	9,477	0	0	9,474	0	0	0	0	-3
516	1992	9	0	563	3,951	3,540	0	67	0	0	0	0	-344
517	1992	10	0	147	4,611	4,334	0	56	0	0	0	0	-221
518	1992	11	0	0	4,441	2,833	0	1,608	0	0	0	0	0
519	1992	12	0	0	2,155	1,679	0	475	0	0	0	0	0
520	1993	1	0	0	3,138	1,538	0	1,600	0	0	0	0	0
521	1993	2	0	0	2,364	1,389	0	975	0	0	0	0	0
522	1993	3	0	0	5,707	1,863	0	3,844	0	0	0	0	0
523	1993	4	400	601	9,877	3,722	0	5,994	80	0	0	0	-161
524	1993	5	1,171	4,032	12,692	11,095	0	977	160	-2,875	-4,000	-1,261	-620
525	1993	6	1,899	4,564	5,488	4,740	0	1	320	0	0	-1,446	-747
526	1993	7	3,866	3,268	5,373	4,655	0	0	640	0	0	-1,107	-718
527	1993	8	4,028	2,116	4,575	3,856	0	63	610	0	0	0	-656
528	1993	9	2,670	2,561	4,463	3,940	0	0	480	0	0	0	-523
529	1993	10	1,079	285	4,611	3,285	0	928	160	0	0	0	-398
530	1993	11	0	0	4,463	2,876	0	1,587	0	0	0	0	0
531	1993	12	0	0	4,611	3,382	0	1,229	0	0	0	0	0
532	1994	1	0	0	4,611	3,350	0	1,261	0	0	0	0	0
533	1994	2	0	0	3,607	1,742	0	1,865	0	0	0	0	0
534	1994	3	0	0	2,710	0	0	2,710	0	0	0	0	0
535	1994	4	400	766	4,879	3,951	0	865	80	-2,875	-1,924	0	-63
536	1994	5	1,171	4,528	8,230	7,690	0	0	160	0	-2,076	-1,355	-54[illegible]
537	1994	6	1,899	3,746	4,768	4,209	0	0	320	0	0	-1,165	-5[illegible]
538	1994	7	3,866	1,471	4,611	4,093	0	0	640	0	0	-575	-51[illegible]
539	1994	8	4,028	1,469	4,354	3,856	0	42	610	0	0	0	-455
540	1994	9	859	865	4,239	3,809	0	57	480	0	0	0	-373

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:				1	2	3	4	5.	6	7	8
Table Number:			P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number	Year	Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
541	1994	10	901	9,096	4,115	2,988	1,993	8,867	3,944	2,988	1,935
542	1994	11	4,219	7,931	4,791	2,647	494	7,931	4,791	2,647	494
543	1994	12	3,839	7,989	4,783	2,903	303	7,989	4,783	2,903	303
544	1995	1	3,450	7,754	4,990	2,566	198	7,754	4,990	2,566	198
545	1995	2	2,493	7,095	4,181	2,761	153	7,095	4,181	2,761	153
546	1995	3	6,665	7,808	3,284	4,402	122	7,808	3,284	4,402	122
547	1995	4	10,610	9,268	2,997	4,441	1,831	9,154	2,997	4,441	1,716
548	1995	5	36,814	21,726	4,252	3,722	13,752	20,139	4,205	3,722	12,213
549	1995	6	13,690	28,317	6,028	12,643	9,646	26,129	5,478	12,643	8,009
550	1995	7	36,745	87,713	10,251	28,958	48,504	84,480	8,607	28,958	46,915
551	1995	8	0	35,053	13,597	0	21,456	32,118	12,064	0	20,054
552	1995	9	28	14,171	9,121	1,634	3,417	12,784	8,536	1,634	2,614
553	1995	10	3,103	9,229	3,738	2,487	3,004	9,000	3,567	2,487	2,946
554	1995	11	4,622	9,764	5,479	1,566	2,718	9,764	5,479	1,566	2,718
555	1995	12	1,109	9,936	5,611	1,586	2,739	9,936	5,611	1,586	2,739
556	1996	1	3,991	9,223	6,730	1,290	1,203	9,223	6,730	1,290	1,203
557	1996	2	3,409	8,628	5,470	3,019	139	8,628	5,470	3,019	139
558	1996	3	5,795	9,329	3,975	5,354	0	9,329	3,975	5,354	0
559	1996	4	12,788	8,003	4,986	2,693	324	7,889	4,986	2,693	209
560	1996	5	11,245	49,937	4,369	34,029	11,539	48,350	4,321	34,029	10,000
561	1996	6	42,986	82,680	3,764	35,983	42,933	80,493	3,214	35,983	41,296
562	1996	7	13,583	33,585	13,217	2,791	17,577	30,352	11,573	2,791	15,988
563	1996	8	1,683	31,715	16,906	8,015	6,794	28,780	15,373	8,015	5,392
564	1996	9	634	21,744	10,320	6,643	4,781	20,357	9,735	6,643	3,978
565	1996	10	441	9,765	3,493	1,432	4,841	9,536	3,322	1,432	4,783
566	1996	11	4,815	8,926	3,804	2,648	2,474	8,926	3,804	2,648	2,474
567	1996	12	1,783	9,223	5,653	1,941	1,629	9,223	5,653	1,941	1,629
568	1997	1	3,886	9,223	6,126	1,600	1,497	9,223	6,126	1,600	1,497
569	1997	2	4,238	8,331	6,261	597	1,473	8,331	6,261	597	1,473
570	1997	3	7,082	7,686	7,686	0	0	7,686	7,686	0	0
571	1997	4	11,736	34,616	6,977	14,141	13,498	34,502	6,977	14,141	13,384
572	1997	5	18,889	67,119	4,999	33,192	28,928	65,532	4,952	33,192	27,389
573	1997	6	15,107	63,595	6,414	33,259	23,922	61,408	5,864	33,259	22,284
574	1997	7	5,549	40,413	17,004	2,216	21,193	37,180	15,360	2,216	19,604
575	1997	8	0	25,592	21,387	67	4,138	22,658	19,854	67	2,736
576	1997	9	3,820	19,054	12,818	2,111	4,125	17,666	12,233	2,111	3,322
577	1997	10	815	10,333	4,316	1,034	4,983	10,104	4,145	1,034	4,925
578	1997	11	3,091	9,472	5,361	863	3,248	9,472	5,361	863	3,248
579	1997	12	4,963	9,201	5,405	826	2,971	9,201	5,405	826	2,971
580	1998	1	4,943	7,894	6,703	479	711	7,894	6,703	479	711
581	1998	2	4,369	7,611	6,142	261	1,208	7,611	6,142	261	1,208
582	1998	3	6,537	7,686	5,419	842	1,425	7,686	5,419	842	1,425
583	1998	4	11,834	8,349	1,438	5,234	1,677	8,234	1,438	5,234	1,562
584	1998	5	10,766	55,739	4,628	26,343	24,769	54,153	4,580	26,343	23,230
585	1998	6	16,346	61,362	5,322	30,224	25,816	59,175	4,772	30,224	24,179
586	1998	7	12,525	36,241	12,034	13,286	10,922	33,008	10,390	13,286	9,333
587	1998	8	2,148	23,449	16,207	7	7,234	20,514	14,674	7	5,832
588	1998	9	3,751	21,303	11,444	1,717	8,141	19,915	10,860	1,717	7,338
589	1998	10	8,911	8,177	4,182	1,657	2,338	7,948	4,011	1,657	2,280
590	1998	11	3,900	9,457	5,371	1,120	2,966	9,457	5,371	1,120	2,966
591	1998	12	5,695	8,429	5,416	1,071	1,942	8,429	5,416	1,071	1,942
592	1999	1	4,873	8,391	6,703	776	911	8,391	6,703	776	911
593	1999	2	4,542	6,942	4,344	2,599	0	6,942	4,344	2,599	0
594	1999	3	6,159	8,769	3,738	4,729	302	8,769	3,738	4,729	302
595	1999	4	11,765	24,310	1,415	10,779	12,116	24,196	1,415	10,779	12,001
596	1999	5	11,822	60,148	4,569	35,962	19,616	58,561	4,522	35,962	18,078
597	1999	6	19,388	64,614	5,258	34,422	24,933	62,427	4,708	34,422	23,296
598	1999	7	11,627	39,253	12,945	6,380	19,928	36,020	11,301	6,380	18,339
599	1999	8	2,601	28,078	15,757	3,312	9,009	25,143	14,224	3,312	7,607
600	1999	9	2,524	22,250	11,175	4,277	6,798	20,863	10,591	4,277	5,995

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			9	10	11	12	13	14	15	16	17	18
Table Number:			P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number	Year	Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions in Reach VCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
541	1994	10	229	171	58	7,686	3,063	922	1,073	2,988	1,635	12,635
542	1994	11	0	0	0	7,438	4,791	0	0	2,647	0	13,649
543	1994	12	0	0	0	7,686	4,783	0	0	2,903	0	12,708
544	1995	1	0	0	0	7,686	4,990	0	0	2,566	129	12,662
545	1995	2	0	0	0	7,250	4,181	0	0	2,761	308	11,445
546	1995	3	0	0	0	8,129	3,284	0	0	4,402	443	12,228
547	1995	4	115	0	115	7,438	2,997	0	113	4,441	0	8,953
548	1995	5	1,587	48	1,539	11,504	4,197	0	1,024	3,722	3,586	13,054
549	1995	6	2,188	550	1,637	17,998	5,355	32	869	12,643	0	23,684
550	1995	7	3,233	1,644	1,589	75,159	7,830	539	261	28,958	38,371	78,422
551	1995	8	2,935	1,533	1,402	22,573	7,582	4,574	1,848	0	14,990	28,139
552	1995	9	1,388	584	803	7,438	4,841	3,897	1,649	1,634	964	11,358
553	1995	10	229	171	58	7,686	2,687	922	1,188	2,487	2,513	14,879
554	1995	11	0	0	0	9,725	5,479	0	135	1,566	2,679	16,656
555	1995	12	0	0	0	8,967	5,611	0	817	1,586	1,770	14,520
556	1996	1	0	0	0	9,129	6,730	0	0	1,290	1,109	14,007
557	1996	2	0	0	0	8,810	5,470	0	0	3,019	321	13,022
558	1996	3	0	0	0	10,800	3,975	0	0	5,354	1,471	16,021
559	1996	4	115	0	115	8,244	4,986	0	113	2,693	565	11,973
560	1996	5	1,587	48	1,539	38,342	4,313	0	1,024	34,029	0	40,822
561	1996	6	2,188	550	1,637	69,546	3,091	32	869	35,983	30,472	73,380
562	1996	7	3,233	1,644	1,589	19,093	10,796	539	261	2,791	5,506	22,727
563	1996	8	2,935	1,533	1,402	19,775	10,891	4,574	252	8,015	869	24,745
564	1996	9	1,388	584	803	15,084	6,040	3,897	248	6,643	2,401	21,518
565	1996	10	229	171	58	7,686	2,441	922	1,655	1,432	3,813	14,020
566	1996	11	0	0	0	7,886	3,804	0	0	2,648	1,434	15,843
567	1996	12	0	0	0	9,427	5,653	0	0	1,941	1,833	15,137
568	1997	1	0	0	0	8,883	6,126	0	0	1,600	1,157	14,195
569	1997	2	0	0	0	7,001	6,261	0	1,059	597	143	11,117
570	1997	3	0	0	0	8,986	7,686	0	0	0	1,300	14,312
571	1997	4	115	0	115	35,524	6,977	0	113	14,141	14,406	41,270
572	1997	5	1,587	48	1,539	60,345	4,944	0	1,039	33,192	22,210	69,246
573	1997	6	2,188	550	1,637	54,918	5,741	32	869	33,259	15,917	66,166
574	1997	7	3,233	1,644	1,589	28,141	14,583	539	261	2,216	11,342	34,616
575	1997	8	2,935	1,533	1,402	15,889	15,372	4,574	252	67	449	23,963
576	1997	9	1,388	584	803	13,467	8,538	3,897	248	2,111	2,817	22,363
577	1997	10	229	171	58	7,686	3,264	922	2,065	1,034	3,387	13,194
578	1997	11	0	0	0	8,918	5,361	0	441	863	2,694	16,309
579	1997	12	0	0	0	7,686	5,405	0	1,206	826	1,456	11,776
580	1998	1	0	0	0	7,686	6,703	0	166	479	503	14,146
581	1998	2	0	0	0	6,942	6,142	0	533	261	539	10,727
582	1998	3	0	0	0	8,461	5,419	0	0	842	2,200	14,751
583	1998	4	115	0	115	9,298	1,438	0	113	5,234	2,626	15,751
584	1998	5	1,587	48	1,539	49,476	4,572	0	1,024	26,343	18,561	60,572
585	1998	6	2,188	550	1,637	53,012	4,650	32	869	30,224	18,139	65,065
586	1998	7	3,233	1,644	1,589	24,975	9,612	539	261	13,286	2,077	33,186
587	1998	8	2,935	1,533	1,402	13,040	10,193	4,574	252	7	2,840	23,567
588	1998	9	1,388	584	803	15,507	7,164	3,897	248	1,717	6,625	25,630
589	1998	10	229	171	58	8,047	3,131	922	73	1,657	3,260	20,942
590	1998	11	0	0	0	8,609	5,371	0	676	1,120	2,119	16,304
591	1998	12	0	0	0	7,686	5,416	0	592	1,071	1,199	13,246
592	1999	1	0	0	0	7,686	6,703	0	561	776	206	13,506
593	1999	2	0	0	0	7,028	4,344	0	0	2,599	86	13,282
594	1999	3	0	0	0	8,467	3,738	0	0	4,729	0	13,416
595	1999	4	115	0	115	24,119	1,415	0	113	10,779	11,925	28,827
596	1999	5	1,587	48	1,539	50,941	4,513	0	1,180	35,962	10,465	57,756
597	1999	6	2,188	550	1,637	54,734	4,585	32	869	34,422	15,727	62,463
598	1999	7	3,233	1,644	1,589	26,424	10,523	539	261	6,380	9,520	31,488
599	1999	8	2,935	1,533	1,402	17,381	9,742	4,574	252	3,312	4,327	24,818
600	1999	9	1,388	584	803	16,340	6,895	3,897	248	4,277	5,168	24,016

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			19	20	21	22	23	24	25	26	27	28
Table Number:			P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number	Year	Month	Provo River from Snake Creek to Deer Creek Reservoir CUP	Provo River from Snake Creek to Deer Creek Reservoir PRP	Provo River from Snake Creek to Deer Creek Reservoir Non-Project	CUP Return Flow Gains above Deer Creek CUP	Provo River from Outlet of Deer Creek to North Fork Total	Provo River from Outlet of Deer Creek to North Fork CUP	Provo River from Outlet of Deer Creek to North Fork PRP	Provo River from Outlet of Deer Creek to North Fork Non-Project	Diversions into Salt Lake Aqueduct Total	Diversions Into Salt Lake Aqueduct CUP
541	1994	10	3,063	2,988	6,584	0	7,241	4,659	0	2,582	2,014	0
542	1994	11	4,791	2,647	6,211	0	5,950	5,239	202	510	3,779	0
543	1994	12	4,783	2,903	5,022	0	6,149	5,036	392	721	3,377	0
544	1995	1	4,990	2,566	5,105	0	6,149	3,721	1,942	486	1,447	0
545	1995	2	4,181	2,761	4,503	0	5,554	2,333	2,413	808	19	0
546	1995	3	3,284	4,402	4,542	0	6,149	1,690	2,038	2,420	1,877	0
547	1995	4	2,997	4,441	1,515	593	5,950	2,805	1,601	1,545	493	0
548	1995	5	4,197	3,722	5,136	5,014	29,575	10,422	6,687	12,466	2,530	0
549	1995	6	5,355	12,643	5,686	3,106	26,438	8,526	4,419	13,494	7,700	0
550	1995	7	7,830	28,958	41,634	1,964	41,722	11,006	9,946	20,770	7,290	0
551	1995	8	7,582	0	20,557	740	27,549	11,510	9,304	6,735	7,700	0
552	1995	9	4,841	1,634	4,884	804	21,205	7,853	6,244	7,108	7,710	0
553	1995	10	2,687	2,487	9,705	0	6,868	4,232	2,488	147	6,100	0
554	1995	11	5,479	1,566	9,610	0	6,018	6,019	0	0	4,490	0
555	1995	12	5,611	1,586	7,323	0	6,149	5,974	175	0	4,315	0
556	1996	1	6,730	1,290	5,986	0	11,755	5,015	0	6,740	4,600	0
557	1996	2	5,470	3,019	4,533	0	5,752	3,877	1,875	0	2,155	0
558	1996	3	3,975	5,354	6,692	0	7,560	2,376	0	5,184	3,910	0
559	1996	4	4,986	2,693	4,294	0	20,027	4,200	944	14,884	1,150	0
560	1996	5	4,313	34,029	2,480	5,014	58,636	5,591	8,794	44,251	2,530	0
561	1996	6	3,091	35,983	34,305	2,217	79,735	5,682	5,847	68,206	7,700	0
562	1996	7	10,796	2,791	9,140	1,964	45,168	15,549	15,408	14,211	7,290	0
563	1996	8	10,891	8,015	5,839	740	31,744	12,491	9,304	9,949	7,700	0
564	1996	9	6,040	6,643	8,835	804	26,313	8,638	6,282	11,393	7,710	0
565	1996	10	2,441	1,432	10,147	0	8,807	3,970	2,494	2,343	6,100	0
566	1996	11	3,804	2,648	9,391	0	5,950	4,022	248	1,681	4,473	0
567	1996	12	5,653	1,941	7,543	0	6,149	5,441	708	0	3,782	0
568	1997	1	6,126	1,600	6,469	0	6,149	3,652	747	1,749	3,859	0
569	1997	2	6,261	597	4,259	0	5,554	4,387	884	283	3,160	0
570	1997	3	7,686	0	6,626	0	13,419	7,623	0	5,796	3,910	0
571	1997	4	6,977	14,141	20,152	0	53,910	7,631	11,564	34,715	1,150	0
572	1997	5	4,944	33,192	31,111	5,014	86,073	7,665	8,687	69,720	2,530	0
573	1997	6	5,741	33,259	27,165	2,146	79,286	11,275	10,419	57,592	7,700	0
574	1997	7	14,583	2,216	17,817	1,964	48,166	19,509	14,054	14,603	7,290	0
575	1997	8	15,372	67	8,523	740	36,835	17,432	9,304	10,099	7,700	0
576	1997	9	8,538	2,111	11,714	804	28,120	12,010	6,244	9,867	7,710	0
577	1997	10	3,264	1,034	8,895	0	8,297	5,603	2,588	106	6,100	0
578	1997	11	5,361	863	10,085	0	5,981	5,788	194	0	4,490	0
579	1997	12	5,405	826	5,545	0	6,149	5,159	989	0	3,522	0
580	1998	1	6,703	479	6,964	0	6,149	4,306	1,557	285	3,048	0
581	1998	2	6,142	261	4,324	0	5,554	4,252	1,048	254	2,988	0
582	1998	3	5,419	842	8,491	0	6,149	3,790	2,358	0	1,557	0
583	1998	4	1,438	5,234	9,080	593	11,758	4,501	6,705	552	1,150	0
584	1998	5	4,572	26,343	29,657	0	77,733	7,184	8,687	61,861	2,530	0
585	1998	6	4,650	30,224	30,192	2,222	75,386	8,879	10,419	56,089	7,700	0
586	1998	7	9,612	13,286	10,288	1,964	45,276	14,749	16,267	14,259	7,290	0
587	1998	8	10,193	7	13,367	740	29,695	11,950	9,304	8,440	7,700	0
588	1998	9	7,164	1,717	16,749	804	25,029	10,164	6,244	8,621	7,710	0
589	1998	10	3,131	1,657	16,154	0	7,113	4,625	2,488	0	6,100	0
590	1998	11	5,371	1,120	9,813	0	6,006	5,801	206	0	4,490	0
591	1998	12	5,416	1,071	6,759	0	6,149	5,172	977	0	3,522	0
592	1999	1	6,703	776	6,026	0	6,149	4,306	1,564	278	3,041	0
593	1999	2	4,344	2,599	6,340	0	9,302	3,778	5	5,518	4,030	0
594	1999	3	3,738	4,729	4,950	0	15,105	4,141	4,944	6,020	3,910	0
595	1999	4	1,415	10,779	16,633	0	32,248	4,109	9,113	19,026	1,150	0
596	1999	5	4,513	35,962	17,280	0	71,815	7,174	8,687	55,954	2,530	0
597	1999	6	4,585	34,422	23,455	2,416	63,556	8,857	10,419	44,280	7,700	0
598	1999	7	10,523	6,380	14,584	1,964	50,107	16,080	19,495	14,532	7,290	0
599	1999	8	9,742	3,312	11,764	740	30,614	11,928	9,304	9,381	7,700	0
600	1999	9	6,895	4,277	12,844	804	26,903	10,142	6,244	10,516	7,710	0

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			29	30	31	32	33	34	35	36	37	38
Table Number:			P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number	Year	Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
541	1994	10	2,014	8,369	4,659	0	3,710	6,759	1,006	0	5,754	5,139
542	1994	11	3,779	6,835	5,239	202	1,395	4,350	1,709	0	2,641	4,520
543	1994	12	3,377	6,839	5,036	392	1,411	4,433	2,407	0	2,026	4,023
544	1995	1	1,447	6,907	3,721	1,942	1,245	4,411	2,523	0	1,889	4,493
545	1995	2	19	6,237	2,333	2,413	1,491	4,018	1,726	0	2,292	4,241
546	1995	3	1,877	6,276	1,690	2,038	2,547	5,127	0	0	5,126	5,081
547	1995	4	493	7,707	2,805	1,601	3,302	6,066	665	480	4,921	5,474
548	1995	5	2,530	32,652	10,422	6,687	15,543	27,260	4,029	5,331	17,900	18,640
549	1995	6	7,700	32,108	8,526	4,419	19,164	24,339	0	2,219	22,121	21,681
550	1995	7	7,290	44,579	11,006	9,946	23,627	30,703	0	5,284	25,420	23,434
551	1995	8	7,700	30,733	11,510	9,304	9,919	19,184	0	4,638	14,546	21,204
552	1995	9	7,710	23,947	7,853	6,244	9,850	18,397	0	3,150	15,247	17,034
553	1995	10	6,100	8,110	4,232	2,488	1,389	7,852	2,934	1,239	3,679	4,034
554	1995	11	4,490	7,280	6,019	0	1,262	6,381	2,587	0	3,794	4,220
555	1995	12	4,315	7,233	5,974	175	1,085	5,452	2,462	0	2,990	4,689
556	1996	1	4,600	12,394	5,015	0	7,379	9,593	501	0	9,092	4,514
557	1996	2	2,155	6,574	3,877	1,875	822	3,848	1,609	0	2,239	5,408
558	1996	3	3,910	8,822	2,376	0	6,446	8,998	0	0	8,997	3,729
559	1996	4	1,150	21,937	4,200	944	16,794	19,090	0	480	18,610	6,615
560	1996	5	2,530	62,067	5,591	8,794	47,682	56,153	0	7,331	48,822	18,714
561	1996	6	7,700	83,408	5,682	5,847	71,879	75,858	0	3,408	72,450	19,655
562	1996	7	7,290	48,305	15,549	15,408	17,348	33,212	2,875	10,928	19,409	24,919
563	1996	8	7,700	33,929	12,491	9,304	12,134	19,751	0	4,638	15,114	22,185
564	1996	9	7,710	27,638	8,638	6,282	12,718	18,104	0	3,150	14,954	17,857
565	1996	10	6,100	9,093	3,970	2,494	2,629	4,957	768	1,239	2,950	5,135
566	1996	11	4,473	6,472	4,022	248	2,203	2,678	0	0	2,678	5,155
567	1996	12	3,782	7,472	5,441	708	1,323	5,523	1,788	0	3,734	5,713
568	1997	1	3,859	6,818	3,652	747	2,418	3,453	0	0	3,452	5,752
569	1997	2	3,160	6,015	4,387	884	744	2,622	1,389	0	1,234	5,104
570	1997	3	3,910	15,148	7,623	0	7,525	15,432	3,775	0	11,657	5,201
571	1997	4	1,150	57,014	7,631	11,564	37,819	54,583	1,174	11,101	42,309	8,872
572	1997	5	2,530	91,693	7,665	8,687	75,340	88,134	1,332	7,331	79,471	17,053
573	1997	6	7,700	84,033	11,275	10,419	62,339	74,774	1,173	8,219	65,382	24,674
574	1997	7	7,290	51,834	19,509	14,054	18,271	36,124	2,875	12,006	21,243	27,668
575	1997	8	7,700	39,382	17,432	9,304	12,646	21,366	0	5,077	16,289	27,668
576	1997	9	7,710	30,063	12,010	6,244	11,810	18,629	0	3,150	15,479	21,977
577	1997	10	6,100	9,248	5,603	2,588	1,057	4,777	768	1,239	2,770	7,467
578	1997	11	4,490	6,582	5,788	194	601	4,698	2,355	0	2,343	4,512
579	1997	12	3,522	6,699	5,159	989	551	4,113	2,390	0	1,723	5,111
580	1998	1	3,048	6,554	4,306	1,557	690	2,606	1,538	0	1,068	5,679
581	1998	2	2,988	5,773	4,252	1,048	473	1,951	1,389	0	562	4,482
582	1998	3	1,557	6,914	3,790	2,358	766	3,588	1,905	0	1,683	5,596
583	1998	4	1,150	13,469	4,501	6,705	2,263	14,953	4,325	6,241	4,387	2,592
584	1998	5	2,530	83,534	7,184	8,687	67,662	81,875	1,174	7,331	73,371	16,670
585	1998	6	7,700	81,205	8,879	10,419	61,908	74,660	1,173	8,219	65,268	22,158
586	1998	7	7,290	51,142	14,749	16,267	20,125	37,162	2,875	11,787	22,500	27,013
587	1998	8	7,700	33,655	11,950	9,304	12,401	21,937	0	4,638	17,299	22,626
588	1998	9	7,710	27,335	10,164	6,244	10,927	17,956	0	3,150	14,806	20,131
589	1998	10	6,100	8,506	4,625	2,488	1,393	6,628	1,543	1,239	3,846	6,079
590	1998	11	4,490	6,788	5,801	206	782	4,720	2,368	0	2,352	4,524
591	1998	12	3,522	6,604	5,172	977	455	3,164	2,403	0	761	5,098
592	1999	1	3,041	6,610	4,306	1,564	739	2,527	1,538	0	989	5,686
593	1999	2	4,030	9,762	3,778	5	5,978	7,891	1,566	0	6,325	3,440
594	1999	3	3,910	15,711	4,141	4,944	6,626	14,439	2,256	4,938	7,244	3,243
595	1999	4	1,150	32,708	4,109	9,113	19,486	31,718	3,932	8,629	19,157	2,613
596	1999	5	2,530	75,874	7,174	8,687	60,013	72,013	1,174	7,331	63,508	16,659
597	1999	6	7,700	68,791	8,857	10,419	49,515	61,915	1,173	8,219	52,523	22,136
598	1999	7	7,290	53,194	16,080	19,495	17,619	38,478	2,875	15,016	20,588	26,803
599	1999	8	7,700	32,676	11,928	9,304	11,443	19,152	0	4,638	14,514	21,680
600	1999	9	7,710	28,443	10,142	6,244	12,056	18,336	0	3,150	15,186	19,879

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			39	40	41	42	43	44	45	46	47	48
Table Number:			P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number	Year	Month	Diversions into Olmsted Aqueduct CUP	Diversions into Olmsted Aqueduct Ap 40524	Diversions into Olmsted Aqueduct PRP	Diversions into Olmsted Aqueduct Non-Project	Provo River from Murdock to Interstate15 Total	Provo River from Murdock to Interstate15 CUP	Provo River from Murdock to Interstate15 PRP	Provo River from Murdock to Interstate15 Non-Project	Diversions into Provo Reservoir Canal Total	ULS Water in Provo Reservoir Canal CUP
541	1994	10	4,462	808	0	678	5,990	1,006	0	4,984	2,412	2,127
542	1994	11	4,318	788	202	0	4,506	1,709	0	2,797	0	0
543	1994	12	3,631	1,002	392	0	4,564	2,407	0	2,158	0	0
544	1995	1	2,551	1,353	1,942	0	4,547	2,523	0	2,025	0	0
545	1995	2	1,829	1,222	2,413	0	4,137	1,726	0	2,411	0	0
546	1995	3	3,043	1,353	2,038	0	5,206	0	0	5,205	0	0
547	1995	4	3,449	1,309	1,120	904	4,829	790	80	3,959	2,596	1,815
548	1995	5	6,393	0	1,357	10,891	11,036	10,237	160	639	8,439	2,685
549	1995	6	8,526	0	2,200	10,955	10,102	4,655	320	5,127	10,948	4,440
550	1995	7	11,006	0	4,662	7,765	16,650	2,282	1,417	12,950	12,174	5,040
551	1995	8	11,510	0	4,667	5,027	13,009	3,856	610	8,544	10,926	4,783
552	1995	9	7,853	0	3,094	6,087	9,396	1,245	480	7,671	8,832	3,600
553	1995	10	2,107	808	1,250	678	10,854	7,686	160	3,007	3,491	2,127
554	1995	11	4,220	788	0	0	6,604	2,587	0	4,017	0	0
555	1995	12	4,514	1,002	175	0	5,657	2,462	0	3,195	0	0
556	1996	1	4,514	0	0	0	9,709	501	0	9,208	0	0
557	1996	2	3,533	1,265	1,875	0	4,500	2,120	0	2,381	0	0
558	1996	3	3,729	1,353	0	0	9,193	0	0	9,192	0	0
559	1996	4	5,509	1,309	464	642	18,322	125	80	18,117	2,485	1,815
560	1996	5	6,884	1,293	1,463	10,367	41,469	366	6,160	34,943	8,218	2,685
561	1996	6	6,858	1,176	2,439	10,359	60,738	594	1,510	58,634	10,698	4,440
562	1996	7	12,674	0	4,480	7,765	16,274	4,085	3,062	9,127	12,174	5,040
563	1996	8	12,491	0	4,667	5,027	13,020	3,856	610	8,554	10,926	4,783
564	1996	9	8,638	0	3,132	6,087	11,199	4,040	480	6,680	8,832	3,600
565	1996	10	3,201	0	1,256	678	7,970	5,717	160	2,092	3,491	2,127
566	1996	11	4,907	885	248	0	7,232	4,463	0	2,769	0	0
567	1996	12	5,005	1,353	708	0	7,656	3,689	0	3,967	0	0
568	1997	1	5,005	1,353	747	0	5,088	1,503	0	3,584	0	0
569	1997	2	4,220	1,222	884	0	4,262	2,967	0	1,295	0	0
570	1997	3	5,201	1,353	0	0	15,837	3,775	0	12,062	0	0
571	1997	4	7,766	1,309	464	642	54,212	1,299	10,700	42,212	2,485	1,815
572	1997	5	7,686	1,353	1,357	8,010	77,469	1,698	6,160	69,610	7,226	2,685
573	1997	6	11,411	1,309	2,200	11,062	58,921	1,768	6,320	50,833	10,994	4,440
574	1997	7	16,634	0	2,049	8,986	17,128	6,061	1,708	9,358	15,119	5,040
575	1997	8	17,432	0	4,227	6,010	12,838	3,856	610	8,372	11,779	4,783
576	1997	9	12,010	0	3,094	6,873	10,785	4,128	480	6,178	9,162	3,600
577	1997	10	5,178	343	1,349	940	7,525	5,717	160	1,648	3,601	2,127
578	1997	11	4,318	885	194	0	6,612	4,192	0	2,421	0	0
579	1997	12	4,122	1,353	989	0	4,592	2,794	0	1,798	0	0
580	1998	1	4,122	1,353	1,557	0	5,107	3,989	0	1,118	0	0
581	1998	2	3,435	571	1,048	0	4,711	4,120	0	591	0	0
582	1998	3	3,238	1,353	2,358	0	3,832	2,064	0	1,768	0	0
583	1998	4	1,486	1,309	464	642	14,060	4,450	5,841	3,769	2,485	1,815
584	1998	5	7,304	1,293	1,357	8,010	71,075	1,540	6,160	63,374	7,226	2,685
585	1998	6	8,881	1,176	2,200	11,077	58,986	1,768	6,320	50,898	11,000	4,440
586	1998	7	13,227	1,353	4,480	9,306	18,160	4,085	3,921	10,154	12,822	5,040
587	1998	8	11,950	0	4,667	6,010	13,806	3,856	610	9,340	11,340	4,783
588	1998	9	10,164	0	3,094	6,873	10,011	4,096	480	5,436	9,162	3,600
589	1998	10	3,890	808	1,250	940	7,255	4,357	160	2,738	3,601	2,127
590	1998	11	4,318	885	206	0	4,808	2,368	0	2,440	0	0
591	1998	12	4,122	1,353	977	0	3,329	2,507	0	822	0	0
592	1999	1	4,122	1,353	1,564	0	4,338	3,288	0	1,050	0	0
593	1999	2	3,435	1,222	5	0	7,952	1,566	0	6,386	0	0
594	1999	3	3,238	1,353	6	0	14,506	2,256	4,938	7,311	0	0
595	1999	4	1,486	1,309	485	642	30,623	4,057	8,229	18,337	2,485	1,815
596	1999	5	7,293	1,293	1,357	8,010	60,777	1,540	6,160	53,077	7,226	2,685
597	1999	6	8,860	1,176	2,200	11,076	46,352	1,768	6,320	38,264	11,000	4,440
598	1999	7	13,206	0	4,480	9,118	19,473	4,085	7,149	8,238	12,743	5,040
599	1999	8	11,928	0	4,667	5,085	12,217	3,856	610	7,751	10,951	4,783
600	1999	9	10,143	0	3,094	6,642	10,620	4,013	480	6,128	9,065	3,600

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:			49	50	51	52	53	54	55	56	57	58	59
Table Number:			P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
Month Number	Year	Month	Diversions into Provo Reservoir Canal PRP	Diversions into Provo Reservoir Canal Non-Project	Provo River from Interstate 15 to Utah Lake Total	Provo River from Interstate 15 to Utah Lake CUP	Provo River from Interstate 15 to Utah Lake PRP	Provo River from Interstate 15 to Utah Lake Non-Project	PRP Diversion to Provo Bench Canal PRP	June Sucker Releases CUP	June Sucker Releases PRP	June Sucker Releases Non-Project	75-cfs Target Releases Non-Project
541	1994	10	0	285	5,178	1,006	0	4,116	0	0	0	0	-57
542	1994	11	0	0	4,406	1,709	0	2,698	0	0	0	0	0
543	1994	12	0	0	4,071	2,407	0	1,665	0	0	0	0	0
544	1995	1	0	0	3,812	2,523	0	1,289	0	0	0	0	0
545	1995	2	0	0	3,699	1,726	0	1,973	0	0	0	0	0
546	1995	3	0	0	5,058	0	0	5,058	0	0	0	0	0
547	1995	4	400	381	5,007	790	0	4,214	80	-665	0	0	-2
548	1995	5	1,171	4,583	10,701	10,237	0	281	160	-2,210	-4,000	-1,230	-183
549	1995	6	1,899	4,610	5,155	4,655	0	1	320	0	0	-1,360	-500
550	1995	7	3,866	3,268	9,270	2,282	777	5,558	640	0	0	-1,072	-653
551	1995	8	4,028	2,116	4,528	3,856	0	53	610	0	0	0	-620
552	1995	9	2,670	2,561	1,766	1,245	0	0	480	0	0	0	-521
553	1995	10	1,079	285	9,413	7,686	0	1,580	160	0	0	0	-147
554	1995	11	0	0	7,143	2,587	0	4,556	0	0	0	0	0
555	1995	12	0	0	5,855	2,462	0	3,393	0	0	0	0	0
556	1996	1	0	0	9,807	501	0	9,305	0	0	0	0	0
557	1996	2	0	0	4,165	2,120	0	2,046	0	0	0	0	0
558	1996	3	0	0	8,819	0	0	8,818	0	0	0	0	0
559	1996	4	400	270	16,492	125	0	16,213	80	0	0	0	-153
560	1996	5	1,171	4,362	35,407	366	6,000	28,584	160	0	0	0	-456
561	1996	6	1,899	4,359	53,932	594	1,190	51,468	320	0	0	0	-681
562	1996	7	3,866	3,268	7,214	4,085	2,422	32	640	-2,875	-4,000	0	-675
563	1996	8	4,028	2,116	4,457	3,856	0	37	610	0	0	0	-565
564	1996	9	2,670	2,561	4,463	4,040	0	0	480	0	0	0	-42[illegible]
565	1996	10	1,079	285	5,947	5,717	0	95	160	0	0	0	-1[illegible]
566	1996	11	0	0	7,587	4,463	0	3,125	0	0	0	0	[illegible]
567	1996	12	0	0	7,074	3,689	0	3,385	0	0	0	0	0
568	1997	1	0	0	4,611	1,503	0	3,108	0	0	0	0	0
569	1997	2	0	0	4,165	2,967	0	1,198	0	0	0	0	0
570	1997	3	0	0	15,181	3,775	0	11,406	0	0	0	0	0
571	1997	4	400	270	52,736	1,299	10,620	40,711	80	0	0	0	-105
572	1997	5	1,171	3,370	70,750	1,698	6,000	62,595	160	0	0	0	-456
573	1997	6	1,899	4,655	50,046	1,768	6,000	41,657	320	0	0	0	-622
574	1997	7	6,297	3,781	7,727	6,061	1,068	5	640	-2,875	-4,000	0	-593
575	1997	8	4,467	2,529	4,375	3,856	0	0	610	0	0	0	-519
576	1997	9	2,670	2,892	4,463	4,128	0	0	480	0	0	0	-335
577	1997	10	1,079	395	6,055	5,717	0	254	160	0	0	0	-84
578	1997	11	0	0	6,602	4,192	0	2,410	0	0	0	0	0
579	1997	12	0	0	4,611	2,794	0	1,817	0	0	0	0	0
580	1998	1	0	0	4,611	3,989	0	622	0	0	0	0	0
581	1998	2	0	0	4,165	4,120	0	45	0	0	0	0	0
582	1998	3	0	0	4,611	2,064	0	2,547	0	0	0	0	0
583	1998	4	400	270	13,236	4,450	5,761	2,948	80	0	0	0	-78
584	1998	5	1,171	3,370	64,559	1,540	6,000	56,603	160	0	0	0	-416
585	1998	6	1,899	4,661	51,179	1,768	6,000	42,818	320	0	0	0	-593
586	1998	7	3,866	3,916	8,339	4,085	3,281	313	640	-2,875	-4,000	0	-659
587	1998	8	4,028	2,529	4,447	3,856	0	14	610	0	0	0	-576
588	1998	9	2,670	2,892	4,463	4,096	0	0	480	0	0	0	-367
589	1998	10	1,079	395	8,417	4,357	0	3,973	160	0	0	0	-86
590	1998	11	0	0	6,205	2,368	0	3,837	0	0	0	0	0
591	1998	12	0	0	4,611	2,507	0	2,104	0	0	0	0	0
592	1999	1	0	0	4,611	3,288	0	1,323	0	0	0	0	0
593	1999	2	0	0	8,720	1,566	0	7,155	0	0	0	0	0
594	1999	3	0	0	16,661	2,256	4,938	9,466	0	0	0	0	0
595	1999	4	400	270	31,415	4,057	8,149	19,128	80	0	0	0	-81
596	1999	5	1,171	3,370	54,425	1,540	6,000	46,446	160	0	0	0	-43[illegible]
597	1999	6	1,899	4,661	37,642	1,768	6,000	29,266	320	0	0	0	-6[illegible]
598	1999	7	3,866	3,837	11,224	4,085	6,509	0	640	-2,875	-4,000	0	-63[illegible]
599	1999	8	4,028	2,140	4,439	3,856	0	31	610	0	0	0	-552
600	1999	9	2,670	2,795	4,463	4,013	0	0	480	0	0	0	-450

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:		1	2	3	4	5	6	7	8
Table Number:	P-0	P-1a	P-1b	P-1c	P-1d	P-2a	P-2b	P-2c	P-2d
Month Number Year Month	Foreign Water into Jordanelle PRP	Provo River Release from Jordanelle Total	Provo River Release from Jordanelle CUP	Provo River Release from Jordanelle PRP	Provo River Release from Jordanelle Non-Project	Provo River from Timpanogos to River Ditch Total	Provo River from Timpanogos to River Ditch CUP	Provo River from Timpanogos to River Ditch PRP	Provo River from Timpanogos to River Ditch Non-Project
Average Annual:	85,600	249,189	92,299	77,141	79,748	237,529	87,769	77,141	72,618
Maximum Monthly:	82,626	97,759	26,356	64,213	48,504	95,961	24,932	64,213	46,971
Minimum Monthly:	0	6,942	429	0	0	6,942	429	0	0
Change from Baseline:	0	0	0	0	0	0	0	0	0
Formula:	from Baseline	(2)+(3)+(4)	Calculated separately	Calculated separately	Calculated separately	(6)+(7)+(8)	(2)-(10)	(3)	(4)-(11)

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:	9	10	11	12	13	14	15	16	17	18
Table Number:	P-2e	P-2f	P-2g	P-3a	P-3b			P-3c	P-3d	P-4a
Month Number Year Month	Diversions into Timpanogos Canal Total	Diversions into Timpanogos Canal CUP	Diversions into Timpanogos Canal Non-Project	Provo from River Ditch to Snake Creek Total	Provo from River Ditch to Snake Creek CUP	Diversions in Reach CUP	Diversions in Reach VCWEP Mitigatio	Provo from River Ditch to Snake Creek PRP	Provo from River Ditch to Snake Creek Non-Project	Provo River from Snake Creek to Deer Creek Reservoir Total
Average Annual:	11,660	4,530	7,130	188,976	77,799	9,970	6,060	77,141	34,036	266,021
Maximum Monthly:	3,833	2,103	2,386	85,759	21,387	7,442	2,770	64,213	45,040	93,472
Minimum Monthly:	0	0	0	6,942	429	0	0	0	0	8,953
Change from Baseline:	0	0	0	0	0	0	0	0	0	0
Formula:	(10)+(11)	from Baseline	from Baseline	(13)+(16)+(17)	(6)-(14)	from Baseline	from Baseline	(7)	(8)+gain-diversions	(19)+(20)+(21)

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:	19	20	21	22	23	24	25	26	27	28
Table Number:	P-4b	P-4c	P-4d		P-5a	P-5b	P-5c	P-5d	P-5e	P-5f
Month Number Year Month	Provo River from Snake Creek to Deer Creek Reservoir	Provo River from Snake Creek to Deer Creek Reservoir	Provo River from Snake Creek to Deer Creek Reservoir	CUP Return Flow Gains above Deer Creek	Provo River from Outlet of Deer Creek to North Fork	Provo River from Outlet of Deer Creek to North Fork	Provo River from Outlet of Deer Creek to North Fork	Provo River from Outlet of Deer Creek to North Fork	Diversions into Salt Lake Aqueduct	Diversions into Salt Lake Aqueduct
	CUP	PRP	Non-Project	CUP	Total	CUP	PRP	Non-Project	Total	CUP
Average Annual:	77,799	77,141	111,080	10,701	268,263	93,443	50,499	124,321	54,594	0
Maximum Monthly:	21,387	64,213	55,603	8,355	105,033	23,925	39,301	85,195	7,710	0
Minimum Monthly:	429	0	47	0	5,527	0	0	0	0	0
Change from Baseline:	0	0	0	0	3,489	3,205	3,490	-3,205	-3,489	0
Formula:	(13)	(16)	(17)+gain-diversions	from Baseline	(24)+(25)+(26)	Calculated separately	Calculated separately	Calculated separately	(28)+(29)	from Baseline

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:	29	30	31	32	33	34	35	36	37	38
Table Number:	P-5g	P-6a	P-6b	P-6c	P-6d	P-7a	P-7b	P-7c	P-7d	P-7e
Month Number Year Month	Diversions into Salt Lake Aqueduct PRP	Provo River from North Fork to Olmsted Total	Provo River from North Fork to Olmsted CUP	Provo River from North Fork to Olmsted PRP	Provo River from North Fork to Olmsted Non-Project	Provo River from Olmsted to Murdock Total	Provo River from Olmsted to Murdock CUP	Provo River from Olmsted to Murdock PRP	Provo River from Olmsted to Murdock Non-Project	Diversions into Olmsted Aqueduct Total
Average Annual:	54,594	287,155	93,443	50,499	143,213	205,196	13,959	32,509	158,729	142,765
Maximum Monthly:	7,710	112,966	23,925	39,301	94,048	106,510	12,399	37,262	98,292	27,669
Minimum Monthly:	0	5,714	0	0	166	1,591	0	0	94	5
Change from Baseline:	-3,489	3,489	3,205	3,490	-3,205	-11,286	6,080	-14,161	-3,205	14,775
Formula:	Calculated separately	(31)+(32)+(33)	(24)	(25)	(26)+gains	(35)+(36)+(37)	(31)-(39)	(32)-(41)	(33)+gains-(40)-(42)-diversions	(39)+(40)+(41)+(42)

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

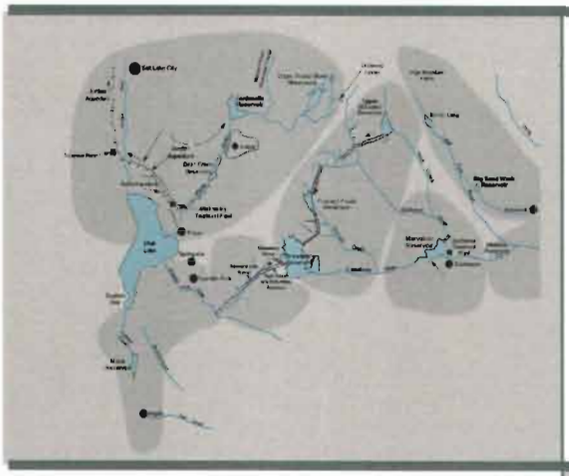
Column Number:	39	40	41	42	43	44	45	46	47	48
Table Number:	P-7f	P-7g	P-7h	P-7i	P-8a	P-8b	P-8c	P-8d	P-8e	P-8f
Month Number Year Month	Diversions into Olmsted Aqueduct	Diversions into Olmsted Aqueduct	Diversions into Olmsted Aqueduct	Diversions into Olmsted Aqueduct	Provo River from Murdock to Interstate15	Provo River from Murdock to Interstate15	Provo River from Murdock to Interstate15	Provo River from Murdock to Interstate15	Diversions into Provo Reservoir Canal	ULS Water in Provo Reservoir Canal
	CUP	Ap 40524	PRP	Non-Project	Total	CUP	PRP	Non-Project	Total	CUP
Average Annual:	87,125	7,641	17,991	37,649	156,582	36,044	15,088	105,450	53,754	24,490
Maximum Monthly:	23,925	1,353	4,667	14,838	96,275	13,432	36,104	85,640	17,014	5,040
Minimum Monthly:	0	0	0	0	1,709	0	0	149	0	0
Change from Baseline:	-2,875	0	17,650	0	26,079	28,165	0	-2,085	2,329	24,490
Formula:	Calculated separately	from Baseline	Calculated separately	from Baseline	(44)+(45)+(46)	Calculated separately	(36)-(49)+(57)	(37)+gains-(50)-diversions	(48)+(49)+(50)	Calculated separately

PROVO RIVER SPREADSHEET MODEL - Monthly values in acre-feet

Column Number:	49	50	51	52	53	54	55	56	57	58	59
Table Number:	P-8g	P-8h	P-9a	P-9b	P-9c	P-9d	P-9e				
Month Number Year Month	Diversions into Provo Reservoir Canal	Diversions into Provo Reservoir Canal	Provo River from Interstate 15 to Utah Lake	Provo River from Interstate 15 to Utah Lake	Provo River from Interstate 15 to Utah Lake	Provo River from Interstate 15 to Utah Lake	PRP Diversion to Provo Bench Canal	June Sucker Releases	June Sucker Releases	June Sucker Releases	75-cfs Target Releases
	PRP	Non-Project	Total	CUP	PRP	Non-Project	PRP	CUP	PRP	Non-Project	Non-Project
Average Annual:	13,421	15,843	113,702	36,044	12,747	61,611	2,341	-2,875	-4,000	-2,085	-3,300
Maximum Monthly:	8,227	6,244	96,870	13,432	35,944	86,235	640	0	0	0	0
Minimum Monthly:	0	0	398	0	0	0	0	-2,875	-4,000	-1,845	-758
Change from Baseline:	-18,161	-4,000	31,465	28,165	0	0	0	-2,875	-4,000	-2,085	-3,300
Formula:	Calculated separately	Calculated separately	(52)+(53)+(54)	(44)	(45)-(55)	(46)+gains-diversions	Calculated separately	Calculated separately	Calculated separately	Calculated separately	Calculated separately

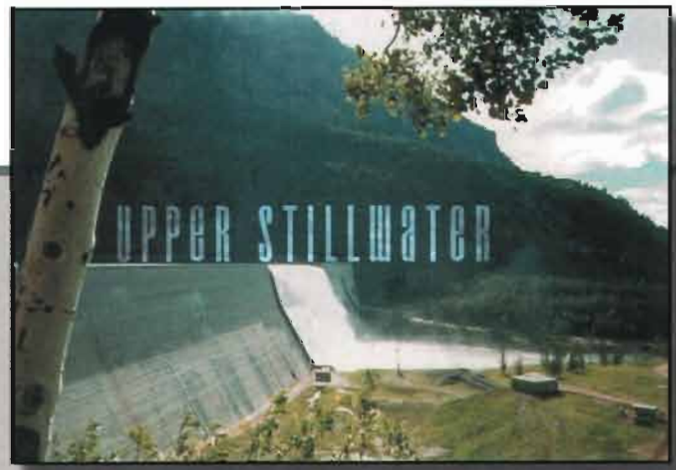
WATER SUPPLY APPENDIX
Volume 6 - Utah Lake and Jordan River

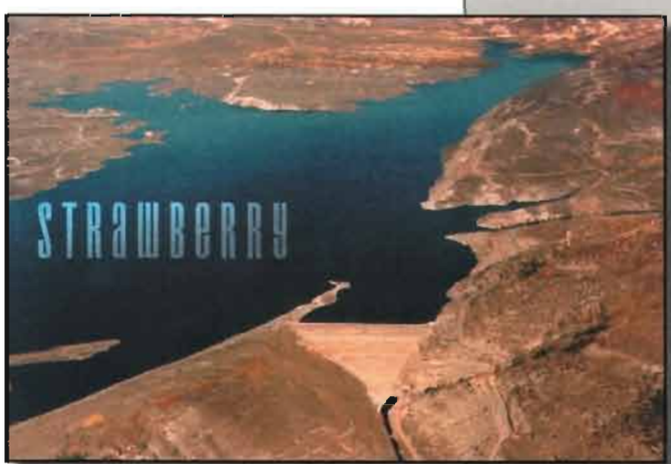
Central Utah Project Completion Program



Supplement to the 1988 Definite Plan Report for the Bonneville Unit

October 2004





UTAH RECLAMATION MITIGATION AND CONSERVATION COMMISSION

Volume 6-Utah Lake and Jordan River

SUPPLEMENT TO THE BONNEVILLE UNIT DEFINITE PLAN REPORT

WATER SUPPLY APPENDIX, VOLUME 6
UTAH LAKE AND JORDAN RIVER

CUP
COMPLETION ACT
CENTRAL UTAH WATER CONSERVANCY DISTRICT

PREPARED BY:

Central Utah Water Conservancy District
355 West University Parkway
Orem, UT 84058

UNDER THE DIRECTION OF:

Mark Breitenbach, Project Manager
Central Utah Water Conservancy District
Telephone: (801) 226-7105
Facsimile: (801) 226-7150

WITH THE ASSISTANCE OF:

MWH Americas, Inc.
Mayya Group International, LLC

October 2004

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Central Utah Project Completion Program

Chapter 1

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

SCOPE OF THIS APPENDIX VOLUME

This volume describes and documents the analysis of Utah Lake and Jordan River operations under full Bonneville Unit development as described in the 2004 Supplement to the 1988 Bonneville Unit Definite Plan Report (DPR). Specific topics include water rights, water exchanges, Utah Lake levels, Jordan River flows, and water quality. This volume supports the supplement to the 1988 DPR and Volume 1 of the Water Supply Appendix to the DPR.

Other Chapters and Attachments in this Volume 6 include the following:

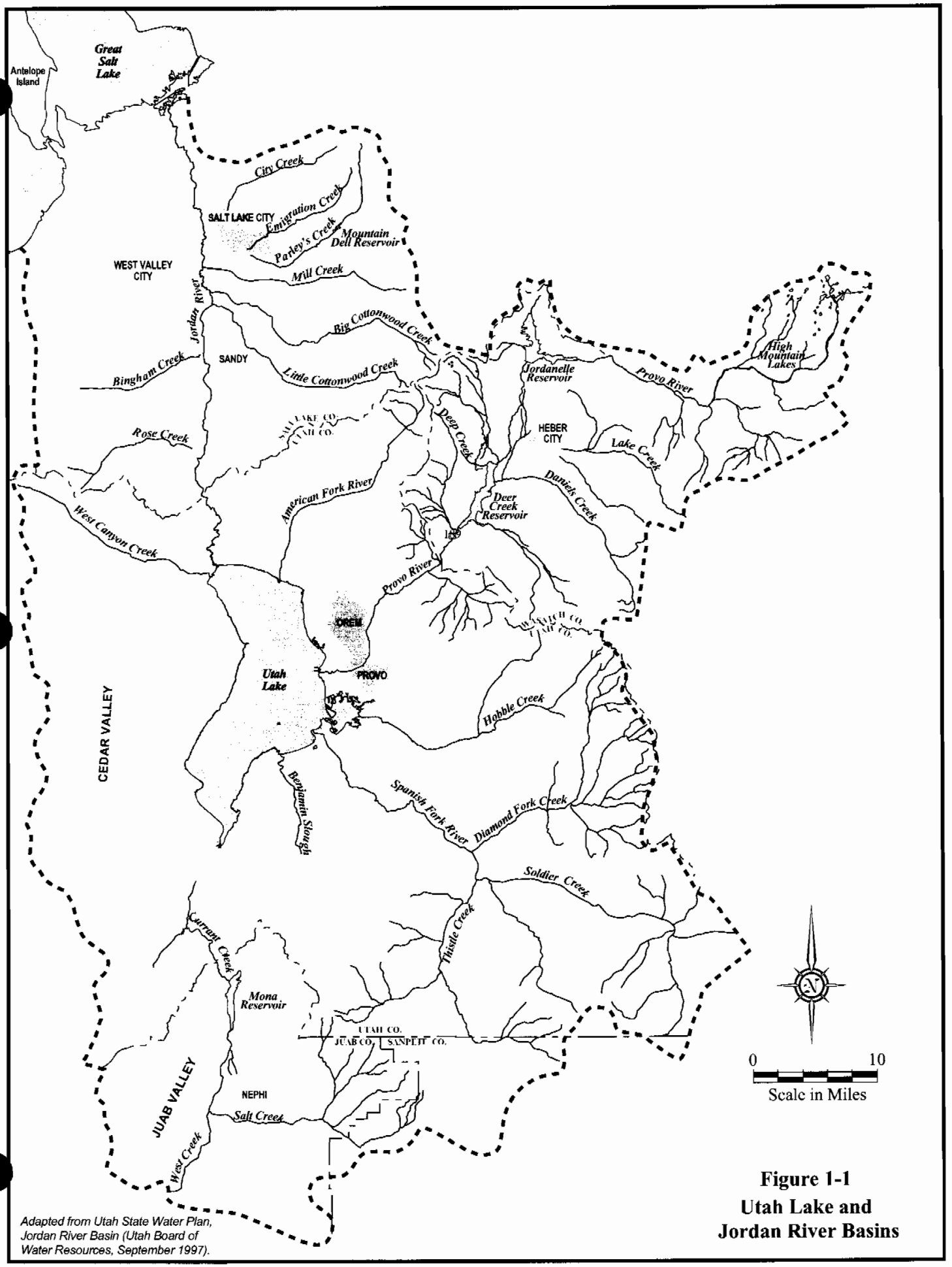
Chapter 2 – Overview of Bonneville Unit Operations Relating to Utah Lake
Chapter 3 – Hydrologic Setting and Current Operation
Chapter 4 – Water Rights, Return Flows, and Exchanges
Chapter 5 – Yield of Central Utah Water Conservancy District's Utah Lake Water Rights
Chapter 6 – Utah Lake Operation With Bonneville Unit
Chapter 7 – Jordan River Operation With Bonneville Unit
Chapter 8 – Water Quality
Chapter 9 – References
Attachment A – Interim Water Distribution Plan for Utah Lake
Attachment B – Utah Lake Modeling Results – Bonneville Unit Conditions
Attachment C – Utah Lake Spreadsheet Model – Bonneville Unit Conditions
Attachment D – Flow of Jordan River – Bonneville Unit Conditions
Attachment E – Utah Lake Salinity Analysis (LKSIM 2000) – Bonneville Unit Conditions

BACKGROUND ON UTAH LAKE OPERATIONS

Utah Lake is a shallow, semi-saline remnant of ancient Lake Bonneville, a 20,000-square-mile lake that covered much of northern and central Utah more than 10,000 years ago. From geological evidence, it appears that Lake Bonneville reached a peak depth of about 1,050 feet before spilling into the Snake River Valley tributary to the Columbia River. The overflow and erosion at Red Rock Pass is believed to be the first major event that caused drawdown of the lake. The ensuing drier years resulted in further reductions in Lake Bonneville. Great Salt Lake and Utah Lake are the remaining separate bodies of water that occupy the lowest portions of Salt Lake and Utah Valleys. Utah Lake drains to the Great Salt Lake by way of the Jordan River; the Great Salt Lake is a highly saline terminal lake.

INFLOW AND OUTFLOW

Major perennial streams that feed Utah Lake are, from north to south, the American Fork River, Provo River, Hobble Creek, and Spanish Fork River. Figure 1-1 shows Utah Lake, major tributary streams, the Jordan River, and the Jordan River tributary streams in Utah and Salt Lake Valleys.



Adapted from Utah State Water Plan, Jordan River Basin (Utah Board of Water Resources, September 1997).

Figure 1-1
Utah Lake and Jordan River Basins

Utah Lake has a surface area of 150 square miles and an average depth of 9.2 feet (Jackson and Stevens 1981). It's bottom is highly silted, resulting in high turbidity that is most pronounced during periods of wind when wave action stirs up the lake bed sediments. The lake serves as an important irrigation and industrial water supply for lands and uses in northern Utah and Salt Lake counties. While the water is adequate for most irrigation and industrial uses, it is not suitable for municipal and manufacturing purposes because of its relatively high salinity, suspended solids, and organic matter. Historically, the lake provided fish, and the shoreline provided small game for the Indian cultures and the early settlers. The lake continues to provide a warm-water commercial and public fishery, boating and recreational opportunities, and important waterfowl habitat.

Utah Lake was developed as a storage reservoir in 1872, when gates were placed at the Jordan River outlet at the north end of the naturally formed lake. The storage provided by Utah Lake has been used primarily to supplement irrigation diversions from the Jordan River. Utah Lake water is also used to facilitate water exchanges by using lake water on lands that were formerly irrigated from Wasatch Front streams, thus allowing the higher quality mountain streams to be used for domestic and municipal uses. While generally adequate for irrigation, because of high total dissolved solids (TDS). Utah Lake water is not suitable for domestic use without blending it with other higher quality waters.

WATER STORAGE

During years of high inflow to Utah Lake, the control gate structure on Utah Lake and the hydraulic constrictions of the Jordan River have caused the lake to rise and flood adjacent, primarily agricultural lands. The resulting conflict between the landowners adjacent to the lake and the water users was eventually settled in 1885 by an agreement in which a "compromise level" of the lake was agreed upon and a marker was set at elevation 4,489.34 (subsequently modified to 4,489.045) feet above sea level. Whenever runoff forecasts during the lake filling season indicated the lake level would exceed that elevation, the outlet gates were opened prior to and during the flood inflow season to permit outflow discharges comparable to natural outflow conditions until the lake level again subsided to compromise level after the flood period. At compromise level, the lake has a total surface area of about 95,000 acres and a total capacity of about 870,000 acre-feet.

A pumping plant was installed at the outlet to the Jordan River in 1902 to permit lowering the lake below its natural outlet, thereby increasing the active capacity of the lake as a reservoir. The pumping plant has been modified and enlarged several times to a capacity of about 1,050 cubic feet per second (cfs). The pumps are capable of lowering the lake 9 to 10 feet below the compromise level. However, lowering the lake more than 8.7 feet below compromise level has required dredging to provide a flow channel from the lake to the pumps. Additional pumps were installed and used at Pelican Point in 1934 and 1935. These pumps were capable of drawing the lake down to 12 feet below the compromise level. The Pelican Point pumping facilities were later dismantled. The maximum depth of the lake is about 14 feet below the compromise level.

Over the years, parties with vested interests in the lake disagreed over the exact elevation of the compromise level. In 1985, a more accurate elevation was established through a new agreement as 4,489.045 feet above mean sea level. New control gates near the head of Jordan River were installed in 1985, and the channel from Utah Lake to the Jordan Narrows was enlarged to facilitate greater discharge than historically permitted. The Jordan Narrows are approximately 5-3/4 miles north of the lake's outlet, straight line distance.

Revised operating procedures for the lake provide that, whenever the level of Utah Lake is at or below compromise level, the gates shall be closed except as necessary for water delivery. Whenever the lake is above compromise level, the control gates shall be fully opened, except for when they must be partially closed to limit the discharge from the lake and the downstream tributary accretions to 3,400 cfs, as measured at 21st South in Salt Lake City, upstream of the Surplus Canal diversion structure.

The level of Utah Lake has varied widely in response to climatic conditions. Water surface elevations have ranged from a low of about 4,477.2 feet in 1935 to a high of 4,494.7 feet in June of 1984. Annual fluctuations in the lake level range from 2.4 to 6.1 feet and result from varying winter and spring inflows, evaporation, and release of water for irrigation, domestic, and industrial uses. Historical releases for irrigation and industrial uses average about 252,000 acre-feet annually to meet primary and secondary storage rights and direct flow rights. The historical annual inflow for the 1950 to 1999 period common to Bonneville Unit operations studies averaged nearly 617,000 acre-feet. However, the historical inflow varied from about 286,000 acre-feet in 1961 to nearly 1,300,000 acre-feet in 1984.

At intervals of about 30 years, Utah Lake has risen to levels significantly above compromise level. In 1922 and 1952, the lake peaked at about 3.5 feet above the compromise level, and the Jordan River flow at the Jordan Narrows, located about 10 miles north of Utah Lake, was about 1,400 cfs. The more recent 1983 to 1985 high elevation cycle resulted in a lake level of about 5.65 feet above compromise level and a peak outflow at the Jordan Narrows of over 3,000 cfs. It is estimated that with the gate structure and Jordan River channel improvement from the lake to the Jordan Narrows, the peak level for the 1983 to 1985 high runoff period would be reduced to about 2.7 feet above compromise level. Peak discharge at the Jordan Narrows would be about 2,500 cfs based on present conditions. The evaporation rate on Utah Lake is about 4 feet annually, resulting in an average annual evaporation loss of about 330,000 acre-feet.

STATE ENGINEER'S WATER DISTRIBUTION PLAN

In 1992, the Utah State Engineer completed and distributed a plan entitled "Distribution of Water Within the Utah Lake Drainage Basin" (Distribution Plan) (Utah Division of Water Rights, 1992). The purpose of the Distribution Plan was to establish a general framework within which the water rights within the basin could be administered. A detailed description of the Distribution Plan is provided in Attachment A, Interim Water Distribution Plan for the Utah Lake Drainage Basin. Figure 1-2 is a schematic drawing of various storage terms used in the Distribution Plan.

The Distribution Plan includes the following definitions:

- Booth Decree: A 1909 court case Salt Lake City Corp., Utah and Salt Lake Canal Co., East Jordan Irrigation Co., North Jordan Irrigation Co., and South Jordan Canal Co. (Plaintiffs) versus J. A. Gardner and A. J. Evans (Defendants). The Booth Decree covered water rights in Utah Lake and the Jordan River.

- Inactive Storage (Utah Lake): The portion of Utah Lake that is not accessible to the pumps and, therefore, cannot be diverted. The inactive storage has been set at 160,000 acre-feet (8.7 feet below compromise level).

- Morse Decree: A 1901 decree resulting from a series of court cases including Case 2861, Salt Lake City Corp. (Plaintiffs) versus Salt Lake City Water and Electrical Power Co. (Defendant); Case No. 3449, J. Geoghegan (Plaintiff) versus Salt Lake City Corp. (Defendant); and Case No. 3459, J. Geoghegan (Plaintiff) versus Utah and Salt Lake Canal Co. (Defendant). This decree defined the water rights on the Jordan River with respect to each other.

- Priority Storage: Legal storage under a water right. Such water stored is not subject to call by other right(s) and can be diverted and used in accordance with the right.

- Primary Storage (Utah Lake): The first 125,000 acre-feet of active storage in Utah Lake, which is set aside to satisfy the diversion requirement of the primary rights in Utah Lake in years of successive drought.

- Primary Water Rights (Utah Lake): The water rights defined in the Morse Decree to have storage rights in Utah Lake.

- Secondary Water Rights (Utah Lake): The storage rights in Utah Lake established by applications to appropriate water and as confirmed by the Booth Decree.

- System Storage: Includes the total active storage in Utah Lake, excluding the primary storage, plus water stored in upstream reservoirs under later priority date water rights that is subject to call by Utah Lake rights. The maximum value of system storage is 585,000 acre-feet.

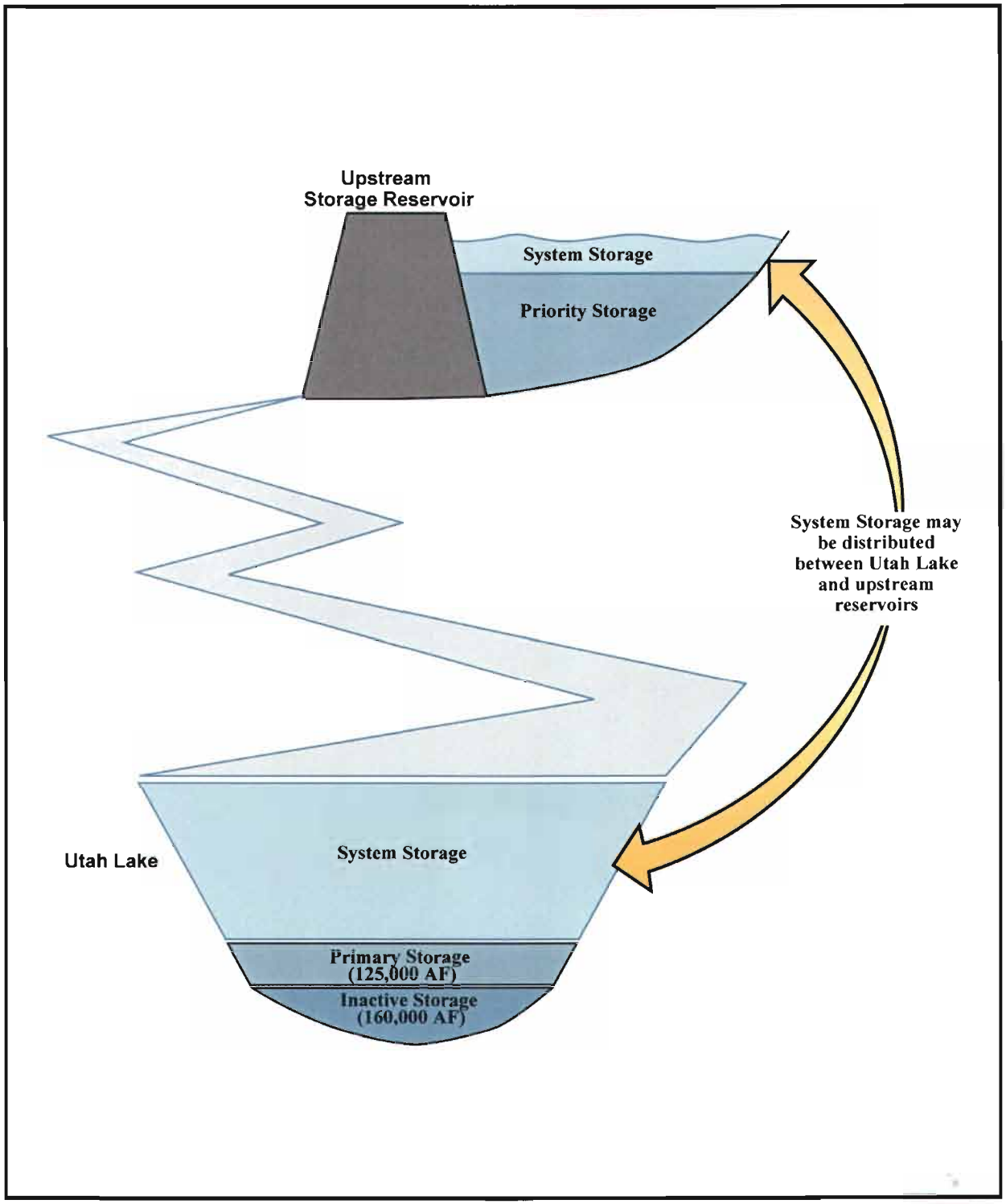


Figure 1-2
Utah Lake Distribution Plan Schematic

The Distribution Plan sets forth the quantity of Utah Lake storage associated with the primary and secondary Utah Lake-Jordan River water rights and the relationship between Utah Lake water rights and the water rights on tributary streams. The plan provides that the Utah Lake drawdown be limited to 8.7 feet below the compromise level, resulting in 160,000 acre-feet of inactive capacity and 710,000 acre-feet of active capacity for Utah Lake. The first 125,000 acre-feet of active storage is dedicated to providing for primary water rights during drought periods. The remaining 585,000 acre-feet of active storage is referred to as system storage and is used to supply the diversion requirements of both primary and secondary water rights.

The system storage may be held in Utah Lake or upstream storage, subject to call for Utah Lake uses. To establish the relationship between water rights in Utah Lake and water rights in upstream reservoirs, which are generally later in priority, criteria were developed to maximize beneficial use of water while still protecting prior rights. The plan requires a system storage target of 585,000 acre-feet from November 1 through April 14. The target value gradually decreases thereafter to a minimum of 125,000 acre-feet on October 31. Whenever the total system storage in Utah Lake and upstream reservoirs exceeds the specified target values for system storage, any excess system storage may be converted to priority storage in upstream reservoirs according to the priority of the upstream rights. Once converted, priority storage is under the full control of the owner and no longer subject to calls by Utah Lake users.

BACKGROUND ON JORDAN RIVER OPERATIONS

The Jordan River is 44 miles long (not including meanders) and flows north from the outlet of Utah Lake to the Great Salt Lake. As the Jordan River flows to the Great Salt Lake, it is fed by tributary streams. Seven major streams (Little Cottonwood Creek, Big Cottonwood Creek, Mill Creek, Parley's Creek, Emigration Creek, Red Butte Creek, and City Creek) and 13 smaller streams originate in the Wasatch Range east of the river. Six streams (such as Bingham Creek and Butterfield Creek) originate in the Oquirrh Mountains on the west side of the river.

Historical Use

Before settlement of the Salt Lake Valley, the Jordan River meandered from its entry into Salt Lake Valley at the Jordan Narrows across a broad floodplain to the Great Salt Lake (Utah Division of Water Rights, 1997). A forest of cottonwood trees traced its path along the valley floor. Numerous oxbows, marsh areas, and riparian zones provided home to a diverse community of wildlife. The Jordan River is reported to have been an excellent fishery in the early years following the first settlement of the valley. Since that time, the forest has been cut, the river channeled, the water polluted, the oxbows and wetlands filled, and much of the wildlife displaced. A considerable amount of pollution resulted from mining operations in both the Wasatch Front canyons and the Oquirrh Mountains. These mining activities have affected Jordan River quality since before the turn of the century but were at a peak from the early to middle part of this century. While some short sections of the Jordan River may have been straightened or channelized at an earlier date, the bulk

of the Jordan River channelizing occurred during the 1950s and 1960s under the concept that a channelized river was the best method for handling flood flows.

The history of water development and use in the Jordan River Basin covers a period of over 150 years. Initial use was primarily to irrigate cropland. Only small amounts were diverted for culinary or community use. This has changed in that now the major demand in Salt Lake Valley is for M&I water. The main body of Mormon Pioneers arrived in the Salt Lake Valley in July 1847. Water was diverted from City Creek and conveyed in ditches to irrigate land near where the Salt Lake City and County Building now stands. By the spring of 1848, over 5,000 acres had been brought under irrigation and by 1850, farming communities had been established on Big Cottonwood Creek, Mill Creek, Little Cottonwood Creek, Parley's Creek, Emigration Canyon, and along the Jordan River. During this period, many of the ditches and canals were constructed to divert water from streams entering the valley from the east and from the Jordan River. Some of these are still in use.

By 1860, practically all of the waters of the mountain streams had been appropriated for agricultural uses and by families dependent upon farming for their livelihood. Salt Lake City was almost entirely dependent upon City Creek, and the need for additional water resources was recognized. As early as 1864, Salt Lake City began looking into boring artesian wells and bringing water from Utah Lake and/or the Jordan River to the city.

In 1882, construction on the Jordan and Salt Lake City Canal was completed and Jordan River water was brought to Salt Lake City. While this water was adequate for irrigation of crops, it was not suitable for domestic use. This led to the first Exchange Agreement in 1888 whereby Jordan River water was exchanged for higher quality water from Emigration Canyon and Parley's Creek. Over the years, many other water exchange agreements were made in the valley. The development of Utah Lake into a storage reservoir made more water available in the Jordan River.

Current Conditions

At intervals along its length, flows from the Jordan River are diverted, then replenished from seepage, wastewater discharge, and irrigation return flow. The largest diversions occur at, and just downstream of the Jordan Narrows, located about 10 miles north of Utah Lake near the Utah-Salt Lake County line.

The upper 10-mile section of the Jordan River is slow and meandering. The channel is wide and was dredged in the mid-1980s to increase its capacity to release flows from Utah Lake. Like Utah Lake, the river carries a high silt and nutrient load. Its substrate is primarily adobe clay with silt in the backwaters.

Figure 1-3 is a map of the Jordan River system and its principal canals. Tributary flows from the Wasatch Front streams enter the River periodically, although most are dry for the majority of the year. Irrigation withdrawals occur at a number of locations. Despite withdrawals, the Wasatch Front streams are all shown as terminating at the Jordan River. On the other hand, the Oquirrh Mountain streams, except for Bingham Creek, are depicted as terminating short of the Jordan River. Because of the intermittent and ephemeral nature of these streams for much of the year, surface water flows often do not reach the Jordan River.

Although there are no established instream flow requirements within the Jordan River Basin, there are established water rights for several private and public bird refuges along the shores of the Great Salt Lake. Currently these water rights provide that water flows continually in the Jordan River and many of its tributaries.

UTAH LAKE'S ROLE IN BONNEVILLE UNIT OPERATIONS

The CUPCA, enacted on October 30, 1992, modified the authorization for the Bonneville Unit with changes to various features and systems that affect the operation of Utah Lake and certain provisions about Utah Lake itself. On December 19, 2002, Public Law 107-366 was enacted which amended CUPCA and authorized construction of alternate features to deliver M&I water. The greatest change facilitated by these two Acts has been the redirection of the remaining available Bonneville Unit water supply from irrigation use to M&I use. Other changes included provisions for instream flows in certain streams tributary to Utah Lake.

CUPCA prohibited construction of certain features in Utah Lake previously proposed as part of the Irrigation and Drainage System, namely facilities to pump water from Utah Lake to the Mosida area west of the lake, and diking-off of Goshen and Provo Bays in Utah Lake. (Some of these changes were anticipated in the 1988 DPR).

A number of changes have occurred in the Bonneville Unit as result of studies conducted and projects planned and completed under CUPCA. The quantity of water available for transbasin diversion from Strawberry Reservoir was reduced because more fishery flow releases were required from the Strawberry Collection System to tributaries of the Duchesne River. The reduction in transbasin diversion was matched by a reduction in water delivery along the Wasatch Front. The District purchased water rights in Utah Lake, which the federal government will acquire to combine with Strawberry Reservoir water in exchange for Provo River water stored in Jordanelle Reservoir.

Project water stored in Strawberry Reservoir that was to be delivered to Utah Lake through the Spanish Fork River was reduced; provisions were made to convey roughly 60 percent of this project water to the lower Provo River and Hobble Creek for release to Utah Lake, thereby contributing to instream flows for the June sucker Restoration Implementation Project (JSRIP) and other fish and wildlife benefits.

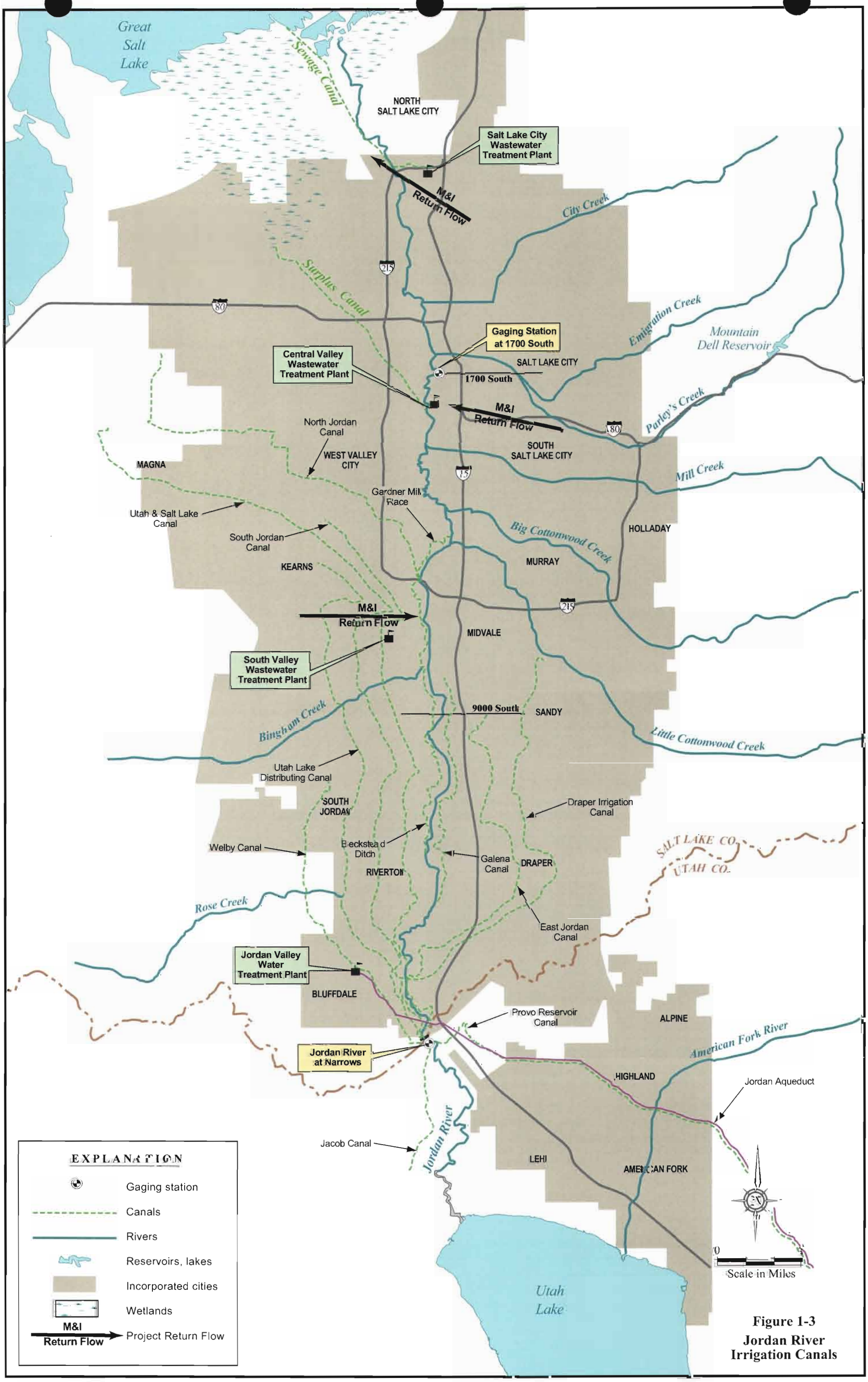


Figure 1-3
Jordan River Irrigation Canals

Diamond Fork System operation now requires the maintenance of statutorily mandated minimum flows in Diamond Fork Creek and Sixth Water Creek. The minimum flow provisions could occasionally result in the release of more water to Utah Lake than is needed for the exchange to Jordanelle Reservoir.

Provo River operations require the maintenance of minimum flows. CUPCA directed the CUWCD to acquire Provo River water rights to help meet the minimum flows on the lower Provo River. Diversions from the Provo River to northern Utah County were reduced through conservation measures by water user agencies resulting in their "turning back" some of the project water to Interior. The conserved water will be stored in Jordanelle Reservoir and be seasonally released for June sucker spawning flow augmentation in the Provo River.

These minor changes in the Bonneville Unit plan do not essentially alter the way that Utah Lake is intended to operate. They do however modify the volumes of project and non-project water delivered to and withdrawn from the Lake, which must be done without impacting the Lake or Jordan River flows or water deliveries.

Central Utah Project Completion Program

Chapter 2

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

OVERVIEW OF BONNEVILLE UNIT OPERATIONS RELATING TO UTAH LAKE

Under the Bonneville Unit, Utah Lake will serve as a common operational interface between the Bonneville Unit M&I and ULS Systems. Project water from Strawberry Reservoir will be conveyed through the Diamond Fork System to the ULS System and through the ULS System to the Lake. Non-project water flows out of Utah Lake and into the Jordan River, which flows from Utah Lake to the Great Salt Lake. The Jordan River also conveys Utah Lake water to users who divert the water from the river. The delivery and withdrawal (by exchange) of Bonneville Unit water to and from Utah Lake is shown on Figure 2-1.

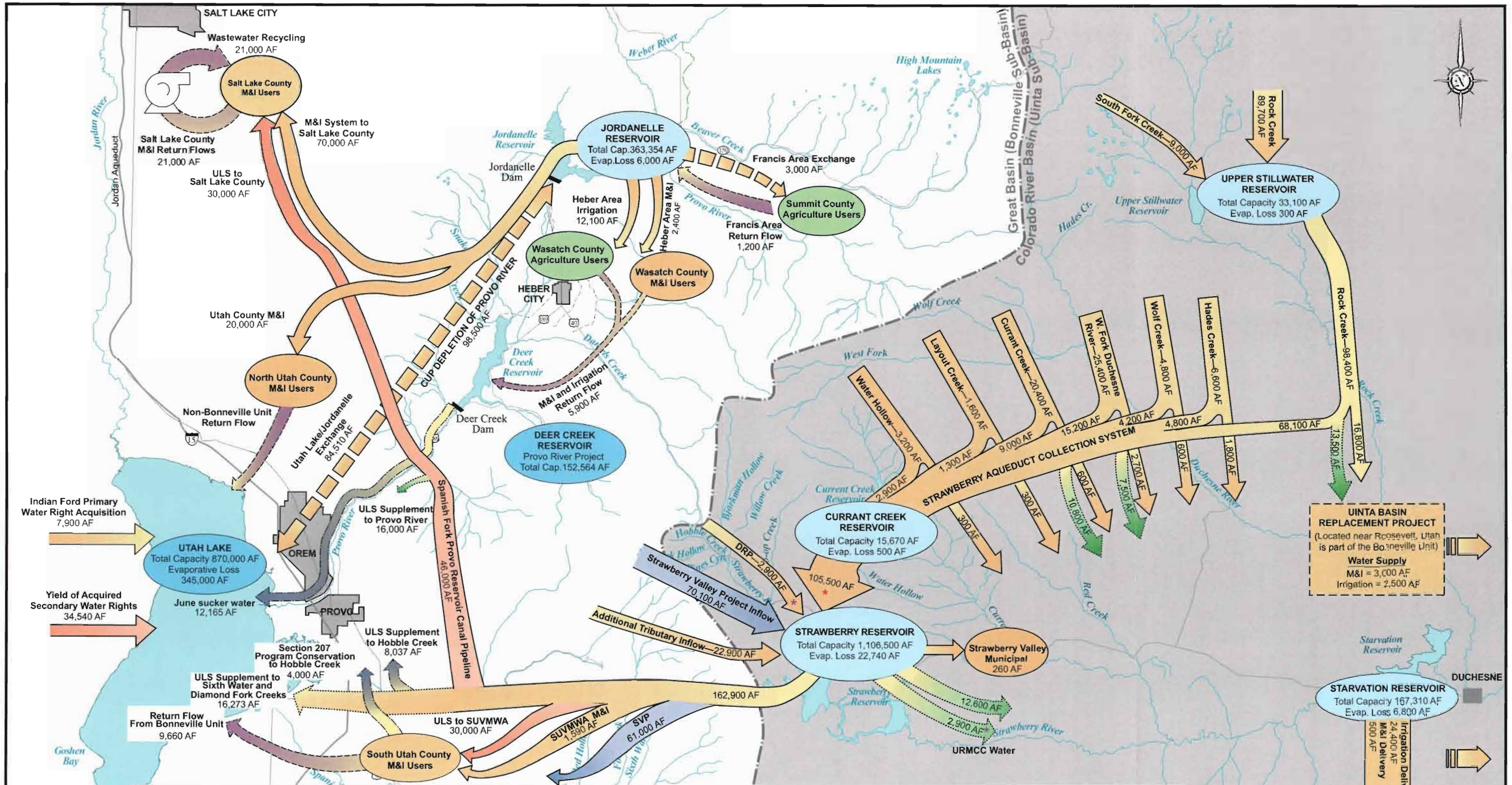
The operation of the Bonneville Unit is intertwined with Utah Lake's inflow, elevations, water quality, and outflows, even though project deliveries to Utah Lake are only about 7 percent of the historical average inflow to the Lake of 617,000 acre-feet. The M&I System's operation reduced the amount of Provo River inflow to Utah Lake by about 98,500, but releases from Strawberry Reservoir, project return flows, and acquisition of water rights in Utah Lake replace the depleted water as needed to preserve the lake's operating regime with that of historic conditions. Utah Lake will receive the following project water originating in Strawberry Reservoir:

- Water from Strawberry Reservoir for exchange to Jordanelle Reservoir (to replace Bonneville Unit M&I water withheld from Utah Lake by Jordanelle Dam and Provo River diversions),
- Return flows from Bonneville Unit M&I water use in southern Utah County, and
- Water to meet instream flow requirements on Diamond Fork and Sixth Water creeks, if required, in excess of needs for water for exchange to Jordanelle Reservoir.

The following subsections describe the relationships between the Bonneville Unit systems and Utah Lake and/or the Jordan River.

DIAMOND FORK SYSTEM

The Diamond Fork System provides the conveyance facilities for transbasin diversion of project water from Strawberry Reservoir in the Colorado River Basin to the Utah Lake drainage basin. The Diamond Fork System conveys CUP and SVP water in two parallel tracks--Diamond Fork Creek and a closed pipeline system with outlets to the creeks. At the end of the Diamond Fork System, the transbasin diversion is either conveyed in the pipelines of the ULS System or released into the Spanish Fork River. Both the ULS pipelines and the Spanish Fork River convey Bonneville Unit water to Utah Lake. However, the division of flow does not affect the average annual amount of water delivered to the Lake of 40,310 acre-feet.



Depletions to the Provo River

Description of Depletion	Average Annual Acre-Feet
M&I Salt Lake County	70,000
M&I North Utah County	20,000
Francis Area Agriculture	3,000
Wasatch County Agriculture	9,200
Daniels Replacement Project	2,900
M&I Wasatch County	2,400
Jordanelle Evaporation & Storage	6,000
Francis Area Return	-1,200
Wasatch County Agric. Return	-4,400
Wasatch County M&I Return	-1,500
Indian Ford/ Utah Lake Rights	-7,900
Total	**98,500**

Depletions to Utah Lake

Description of Depletion	Average Annual Acre-Feet
Provo River Depletion	98,500
Strawberry to Supplement Sixth Water and Diamond Fork	-16,273
Strawberry to Supplement Hobble Creek	-8,037
Strawberry to Supplement Provo River	-16,000
North Utah County M&I Return	
So Utah Return	-9,660
Yield of Utah Lake Rights	-34,540
Total	**13,990**

Depletions to the Colorado River

Description of Depletion	Average Annual Acre-Feet
Strawberry Collection System Operation	
Bonneville Unit water released to the Basin	-101,900
Strawberry Valley M&I use	-260
Strawberry Reservoir evaporation (BU portion)	-17,700
Upper Stillwater Reservoir evaporation	-300
Currant Creek Reservoir evaporation	-500
Starvation Collection System Operation	
Duchesne River area Irrigation	-12,200
Duchesne River area M&I use	-250
Starvation Reservoir evaporation	-6,800
Uinta Basin Replacement Project	
Roosevelt area M&I use	-1,500
Upalco area irrigation use	-1,250
Offsetting gain from Daniel Replacement Project	+2,900
Total	**139,760**

Strawberry Reservoir

Project	Inflow	Outflow to Great Basin
Strawberry Valley Project	70,100 AF	61,000 AF
Central Utah Project	128,400 AF	101,900 AF
Daniel Replacement Project	2,900 AF	0 AF
Total	**201,400 AF**	**162,900 AF**

Project	Outflow to Uinta Basin
Strawberry Valley M&I	260 AF
Instream Flow	12,600 AF
Daniel Replacement Project	2,900 AF
Total	**15,760 AF**

Notes:

BONNEVILLE UNIT

CUP Transbasin diversion 101,900 AF

AF = acre-feet

Water deliveries and spills

Fishery flows

Return flows

June sucker flow

★ Includes 4,000 AF Strawberry Valley Project Water

★ Wasatch County Water Efficiency Project and Daniel Replacement Project

Sum of fishery flow in Uinta Basin = 44,400 AF

Figure 2-1
Distribution of Bonneville Unit Water

MUNICIPAL AND INDUSTRIAL SYSTEM

The M&I System provides M&I water to Salt Lake County and northern Utah County and M&I and supplemental irrigation water to Wasatch County. The system provides flood control, recreation, and fish and wildlife benefits. Jordanelle Dam and Reservoir are the major features of the M&I System. The 300-foot-high dam and reservoir located on the Provo River about 6 miles north of Heber City, were completed in 1994. Total capacity of the reservoir is 363,354 acre-feet with an active capacity of 314,006 acre-feet and a exclusive flood control capacity of 49,348 acre-feet.

Water is developed in the reservoir by storing Provo River flows that are in excess of downstream rights, and out-of-priority diversions that can be replaced from Strawberry Reservoir. The effect of the M&I System on Utah Lake is to reduce the annual inflow to the lake by about 98,500 acre-feet. Of this reduction, about 84,510 acre-feet is replaced in Utah Lake by releases from Strawberry Reservoir to ensure downstream rights are met.

Return flows from the use of Bonneville Unit water delivered from the M&I System to Utah County would flow into Utah Lake. Releases of Bonneville Unit water to meet minimum instream flows on the Provo River flow into Utah Lake. Return flows from the use of Bonneville Unit M&I water in Salt Lake County will be tributary to the Jordan River. Return flows from Bonneville Unit water provided in the Heber and Francis areas return to Provo River reservoirs.

UTAH LAKE DRAINAGE BASIN WATER DELIVERY SYSTEM

The proposed ULS System would begin along the Spanish Fork River at the confluence with Diamond Fork Creek, and extend north along the Wasatch Front to the Provo River and south to Mona Reservoir. The ULS System's Spanish Fork - Provo Reservoir Canal Pipeline would run north from the Spanish Fork Canyon Pipeline and would convey Strawberry Reservoir water to the Provo Reservoir Canal and the Jordan Aqueduct, both of which convey diverted Provo River water to Salt Lake County; and to the lower Provo River to provide supplemental flows. The Spanish Fork - Santaquin Pipeline, running south from the Spanish Fork Canyon Pipeline would deliver Strawberry Reservoir water for M&I use in southern Utah County. The Mapleton/Springville Lateral Pipeline would deliver supplemental water to Hobble Creek. The ULS System's relationship to Utah Lake would consist of 1) the delivery of Strawberry Reservoir water to the lake by releases through the Spanish Fork River, Hobble Creek, and the Provo River, 2) delivery of return flows from the use of Bonneville Unit water in southern Utah County, and 3) the acquisition of water rights in Utah Lake and dedication of the yield from the rights to the Bonneville Unit water supply. Each of these actions compensate for the reduction in Provo River inflows. A schematic diagram of ULS water deliveries is shown in Figure 2-2.

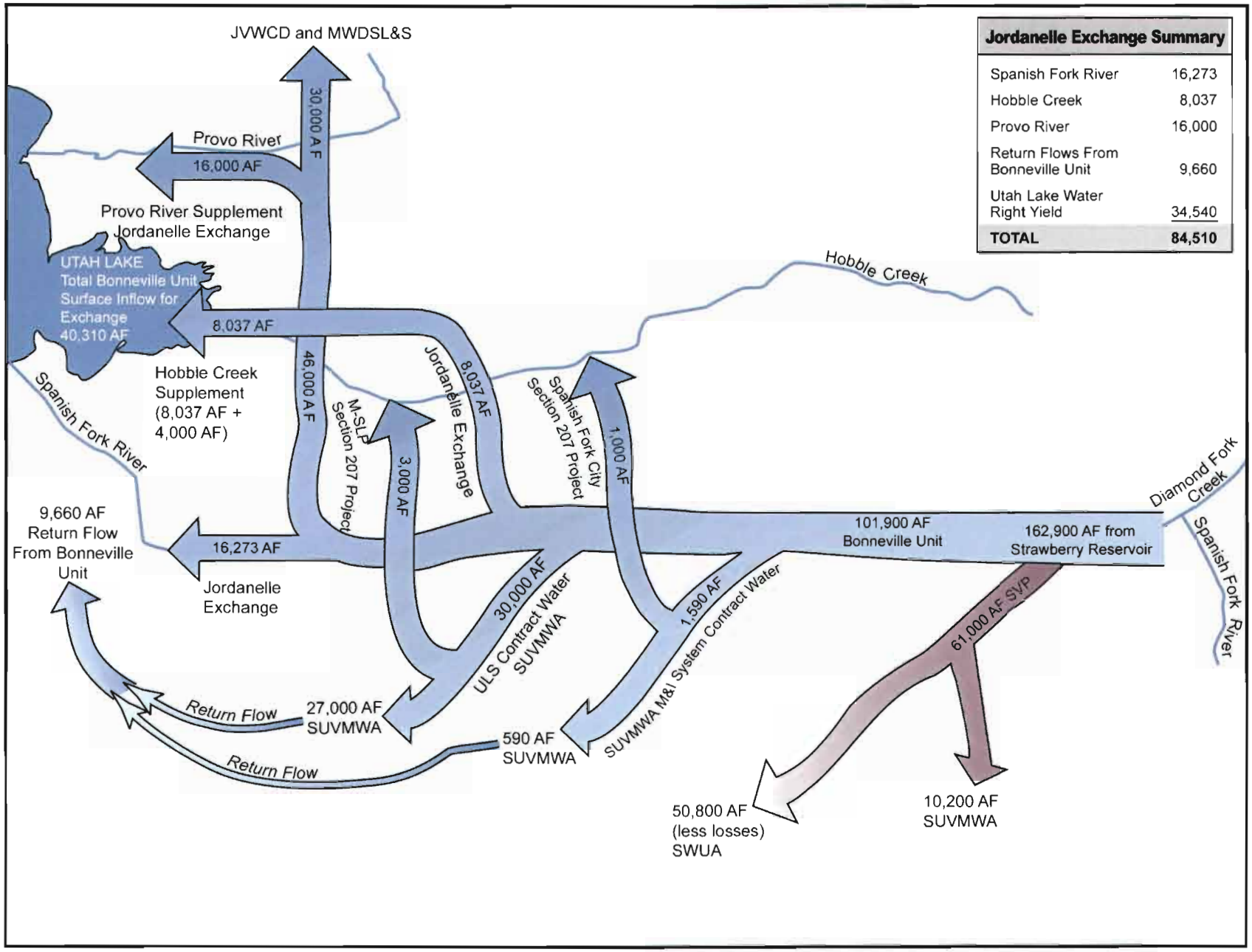


Figure 2-2
Utah Lake System Water Deliveries
Under the Bonneville Unit

Central Utah Project Completion Program

Chapter 3

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Chapter 3

UTAH LAKE SURFACE WATER INFLOWS, OUTFLOWS, AND LAKE LEVELS

The inflow to Utah Lake consists of natural streamflow, reservoir releases, discharge from drains, treated municipal sewage effluent, and precipitation on the lake. These categories include about 80 identified sources. Excluding precipitation, the total historical annual inflow to Utah Lake averaged 617,000 acre-feet annually for the 1950 to 1999 period. This total inflow varied from about 286,000 acre-feet in 1961 to more than 1,300,000 acre-feet in 1984. Gaging records have been maintained on major tributaries, including the Provo and Spanish Fork rivers, and on some of the other tributaries. However, much of the surface and underground inflow and precipitation contribution is ungaged. Based on historical estimates, about 70 percent of the inflow accrues from surface water inflow, 15 percent from groundwater inflow, and 15 percent from precipitation on the lake. Precipitation on the lake surface averages about 110,000 acre-feet per year.

The historical inflow to Utah Lake has been computed from monthly lake content, evaporation, precipitation, and outflow records from the Jordan River and Utah Lake Commissioner's reports (inflow = outflow + evaporation – precipitation + change in content). For making projections, the computed monthly historical inflow is modified to reflect future non-project development and operations in addition to Bonneville Unit operations. The modifications include full development and operation of the Provo River Project and changes in Utah Lake operations consistent with the Distribution Plan.

Utah Lake outflows consist of releases to the Jordan River (to meet demands and as a result of spills), evaporation from the lake surface, and intermittent pumping of irrigation water to adjacent lands. Releases to Jordan River vary as discussed below. Evaporation is a significant loss of water from the lake, having historically averaged approximately 340,000 acre-feet per year. Pumping from the lake has declined and currently averages less than 10,000 acre-feet per year.

Utah Lake and Jordan River water rights encompass decreed rights and application rights. Water rights defined by the Morse Decree to have storage rights in Utah Lake are called *primary rights*. Water rights established by applications to appropriate water which were confirmed by the Booth Decree are referred to as *secondary rights*. Under the Distribution Plan, the primary rights have been identified at 189,307 acre-feet annually and the secondary rights at 112,739 acre-feet, for an annual total of 302,046 acre-feet. For projected conditions, the historical releases from Utah Lake were adopted as a representation of releases consistent with water rights and water supply. Historical data on releases to the Jordan River were limited to a maximum of 302,000 acre-feet in any one year, consistent with the total water rights. The minimum release was about 120,000 acre-feet in 1961, when dry year conditions limited the available water. Average release (including spills) over the period 1950-1999 was about 370,000 acre-feet.

The historical levels of Utah Lake are based on end of month lake elevations from the Utah Lake and Jordan River Commissioner's reports. The river commissioner's measurements are taken at a gage

located at the head of the Jordan River, 125 feet southeast of the pumping station, and about 4 miles southwest of Lehi. The historical conditions reflect the effects of depletions to Utah Lake as projects were developed. The Provo River Project, which came on line in the mid 1940's is the most notable development. The historical conditions also include periods of both extreme drawdown and flooding. In 1961 and 1962 the lake was pumped nearly dry. In 1952, and again in 1983 through 1986, which were high runoff years, lands around the lake were flooded. Since that time, agreements have been made and facilities have been modified which would tend to mitigate these extreme events.

Jordan River Flows

The Jordan River begins with releases from Utah Lake to meet irrigation and industrial demands in northern Utah County and Salt Lake County (up to 302,000 acre-feet annually) consistent with water rights and the Distribution Plan for Utah Lake and the Jordan River. Spills or flood control releases occur when the lake reaches and exceeds the Compromise Level. Most of the water released from the lake for irrigation is diverted from the Jordan River at the Jordan Narrows. As the river flows toward the Great Salt Lake, flows increase as a result of tributary inflow, irrigation and M&I return flows, and other accretions. At about 21st South, just upstream from the gage at 17th South, a portion of the Jordan River flow is diverted into the Surplus Canal and conveyed to the Great Salt Lake. The remainder of the flow continues in the river and enters the South Shore Wetlands of the Great Salt Lake.

The releases to the Jordan River from Utah Lake to meet downstream irrigation diversion rights are declining as irrigated agriculture gives way to urban development. However, a compensating trend is anticipated to develop as the Jordan Valley Water Conservancy District (JVWCD) and other users call for releases under Utah Lake irrigation water rights they have acquired and convert the water to M&I use.

UTAH LAKE GROUNDWATER INFLOWS

The principal groundwater reservoir in Utah Valley consists of a series of confined (or artesian) aquifers in the unconsolidated basin-fill deposits. These basin-fill deposits consist of interbedded and laterally discontinuous layers and lenses of sand, gravel, clay, and silt. The sand and gravel units form the aquifers, while the silt and clay act as confining units. The confined aquifers are laterally connected to an unconfined aquifer in the unconsolidated deposits along the mountains that adjoin the valley. Confined aquifers supply most of the water produced from wells. A shallow unconfined aquifer overlies the confined aquifer but is not a major source of water due to relatively poor well yields.

Sources of recharge to the aquifer system include subsurface inflow from the fractured bedrock beneath the mountains, infiltration from natural channels and irrigation canals that cross the primary

recharge area, and infiltration from irrigation and precipitation. Discharge of groundwater is to springs, evapotranspiration, wells, natural channels and irrigation canals, and Utah Lake.

In the future, when cities in Utah County are pumping their total legal water rights, groundwater levels and groundwater inflows to Utah Lake might be reduced. The Utah Division of Water Rights is currently developing a groundwater management plan for Utah and Goshen Valleys. The main effect of this plan will be to manage surface and groundwater conjunctively in the basin and encourage the efficient use of Utah Lake waters. This could have the result of moving water represented by shares of Utah Lake water to wells in Utah and Goshen Valleys. This plan could affect future Utah Lake operation as well as groundwater levels. Utah Valley is closed to new water right appropriations, but new wells can be drilled by acquiring existing water rights and changing the point of diversion

Because Utah Lake is not a source of groundwater recharge to the confined aquifers, and because the water level in Utah Lake is below that of the groundwater levels in the confined aquifers in Utah Valley (under normal conditions), the water level of Utah Lake has little affect on the discharge of wells and springs in Utah Valley. This basic hydrogeologic relationship is also shown in the USGS's MODFLOW groundwater model of southern Utah Valley. Therefore, any changes in the operation of Utah Lake which might result from operation of the Bonneville Unit will not affect the quantity or quality of discharge from springs adjacent to the lake.

USES OF UTAH LAKE WATER

Historically, Utah Lake has been used as an irrigation water supply for agricultural lands in northern Utah County and in Salt Lake County. Major crops irrigated with Utah Lake water include alfalfa, corn, barley, wheat, and oats. In the early 1980s, several large orchards were planted on the west side of West Mountain at the southern end of Utah Lake, adjacent to Goshen Bay. These orchards were irrigated by pumping water from Utah Lake. However, during the drought cycle that occurred in the late 1980s, the TDS concentrations increased to the point where the lake water was no longer suitable for irrigating orchards. Consequently, a pipeline was constructed around West Mountain, and many of the orchards are now irrigated from other higher quality sources. However, some orchards are still irrigated with Utah Lake water.

Utah Lake water has also been used for industrial purposes such as mining and ore processing. Also, in the mid-1980s, the Salt Lake County Water Conservancy District conducted a pilot operation in which it used a small quantity of Utah Lake water for culinary water supply. In this pilot operation, Utah Lake water was blended with other higher quality supplies and treated for culinary use. The pilot operation was discontinued in the late 1980s.

In recent years, as Salt Lake County has continued to urbanize, communities in the county have planned or developed pressurized irrigation systems for watering lawns and gardens. These

communities have received complaints from residents that the Utah Lake water has damaged or killed many of the ornamental plants and shrubs used in landscaping. Although other communities are considering the installation of pressurized irrigation systems, they are studying the water quality aspect of using Utah Lake water on residential landscaping prior to plan implementation. A discussion on limitations in using Utah Lake water for irrigation is presented in Chapter 8 of this document.

The JVWCD has included future demineralization of Utah Lake water in its water use master plan. The treatment will involve a membrane treatment process such as reverse-osmosis to condition the water for outdoor use in secondary systems, as described in Water Supply Appendix Volume 2.

JORDAN RIVER WATER CONVEYANCE

The Jordan River has historically conveyed Utah Lake releases to the Jordan Narrows where most of the irrigation diversions occur. As noted above, releases to the Jordan River to meet downstream irrigation diversion rights are declining from historical amounts as irrigated agriculture in Salt Lake County gives way to urban development. However, a compensating trend is anticipated to develop as the JVWCD and other users call for releases under irrigation rights they have acquired and convert the water to M&I use. Under appropriate adjustments in points of diversion, the JVWCD would pump the water from the alluvial valley fill along the river and allow the streamflow to infiltrate the bed and banks of the river and recharge the alluvial aquifer. While not a routing strategy for Bonneville Unit water, this practice could facilitate certain water conservation measures promoted by the CUP, which are discussed in Water Supply Appendix Volume 2.

As discussed earlier in this volume, the flows in the Jordan River are affected by natural runoff and its regulation in Utah Lake. During wet years, releases of excess water are required and during dry years the lake level may be too low to meet downstream demand. The dry-year water availability conditions may be an important factor in the development of plans for future use of Utah Lake water for M&I purposes as discussed above.

In the future, 21,000 acre-feet of Bonneville Unit return flows will be tributary to the Jordan River, which would convey unspecified amounts northwestward to the Great Salt Lake. The amounts discharged to the river would depend on the amount and development schedule of wastewater recycling projects. The amount of return flow that would potentially be released to the river is unknown, and depends on the scale of wastewater recycling.

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Chapter 4

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Chapter 4

This chapter addresses Bonneville Unit water rights, return flows, and exchanges relating to Utah Lake and the Jordan River. The retention of Provo River water in Jordanelle Reservoir and its replacement with water from Strawberry Reservoir, return flows to Utah Lake, and acquisition of water rights in Utah Lake involve a complex set of water exchanges under several Bonneville Unit water rights, and place importance on accounting for return flows.

UTAH LAKE WATER RIGHTS

The Bonneville Unit operation depends on rights to the diversion of water from Utah Lake to be exchanged to Jordanelle Reservoir. This section addresses water rights available and those still pending that constitute the yield of the CUWCD's secondary Utah Lake water rights acquired by the United States. A survey of all existing Utah Lake water rights was made to evaluate the coverage of rights. That survey is described in Volume 2 of this appendix. That investigation was made to verify the volume of water covered by the rights, estimate the acre-feet currently in use and their points of diversion (upstream or downstream of Utah Lake), and the ownership of large blocks of water still available for call from the lake.

WATER RIGHTS FILINGS

Federal Water Rights

The United States has filed applications for water rights in Utah Lake for the Bonneville Unit. The applications deal with both previously unappropriated water, and the recovery of Strawberry Reservoir water released to Utah Lake and return flows from use of Bonneville Unit water in the Utah Lake drainage basin. The water rights will be used to facilitate water exchanges to Jordanelle Reservoir and to allow water to be stored in Jordanelle Reservoir in accordance with the Distribution Plan. The federal filings are as follows:

- Application No. 37093, with a priority date of July 13, 1965, seeks to appropriate up to 195,000 acre-feet of return flows from project water used for irrigation, municipal, and industrial purposes under the Bonneville Unit and unappropriated water from Utah Lake. The State Engineer approved this application on September 29, 1999.

  Application No. 40523 with a priority date of March 18, 1971, seeks to appropriate up to 300,000 acre-feet of surplus flows of the Provo River and return flows from project water used in areas tributary to the Provo River above Jordanelle and Deer Creek reservoirs. This water will be stored in these reservoirs and used for domestic, stockwatering, irrigation, Power, fish, wildlife, recreation, and quality control purposes within the District's service areas. The State Engineer approved this application on June 7, 1985.

- Application No. 40528 with a priority date of March 18, 1971, seeks to appropriate 21,000 acre-feet of surplus flows and Bonneville Unit return flows in Currant Creek for storage in Mona Reservoir. This application was in support of the irrigation water supply under the previously proposed Irrigation and Drainage System which has now been replaced by the Utah Lake Drainage Basin Water Delivery System. Approval is pending.

- Exchange application No. 398 seeks to exchange up to 300,000 acre-feet of Bonneville Unit water in Utah Lake for flows of the Provo River which are surplus to water rights above Utah Lake, but covered by existing rights in Utah Lake. Bonneville Unit water in Utah Lake is to be supplied under Application Nos. 36639 (the principal Bonneville Unit water right which appropriates water from the Strawberry and Duchesne Rivers), 40523, and 37093. This application has a priority date of March 18, 1971, and was approved by a memorandum decision.

- Acquired 7,900 acre-feet of Water Right No. 55-9695 which is described below.

The water yields from these rights depend on two factors. The first is the amount of water entering Utah Lake under the operational categories covered by the rights (i.e., releases from Strawberry Reservoir and return flows from M&I water delivery). The second factor is the way that the Distribution Plan permits exchanges from the lake and dictates the status of water in Jordanelle Reservoir, as described below under Utah Lake Exchanges. Because of the Distribution Plan, the second factor is also affected by natural runoff conditions in the Utah Lake drainage basin.

District's Water Rights

The District has acquired two large water rights that provide for diversion of water from Utah Lake and the Jordan River. The District acquired these rights for potential unspecified future use in its service area. The rights are as follows:

- Water Right No. 55-9327 provides for the diversion of 25,000 acre-feet of water. This is a decreed right granted by the Booth Decree of June 5, 1909, and is a primary storage right. Of the 25,000 acre-feet, the U.S. Department of Interior owns 7,900 acre-feet, the community of Elk Ridge in south Utah County was assigned 237 acre-feet by the Central Utah Water Conservancy District, and the Central Utah Water Conservancy District owns the remaining 16,863 acre-feet. This right was segregated from Water Right No. 57-7624 on November 10, 1997. Prior to the segregation, Water Right No. 57-7624 provided for diversion of 39,600 acre-feet of water, including 3,600 acre-feet of carrier water which must remain in the Jordan River. The Central Utah Water Conservancy District owned 25,000 acre-feet of that amount, and Salt Lake City owned 14,600 acre-feet of that amount, including the carrier water. Its portion of Water Right No. 57-7624 was originally acquired by the Central Utah Water Conservancy District on August 16, 1988.

- Water Right Nos. 59-14, 15, and 20 provide for diversion of 57,073 acre-feet and have a priority date of August 6, 1909 and February 28, 1911. The water right certificate was issued on March 27, 1969. This is a secondary water right. The diversion right was acquired from Kennecott Copper Corporation on December 31, 1987.

The District's secondary water right to Utah Lake water would be acquired by the Department of the Interior as part of the implementation of the ULS System. The yield from this water right, discussed below, would contribute to the exchange of Utah Lake water for the Provo River retained water in Jordanelle Reservoir.

JVWCD Water Rights

Certain Utah Lake water rights have historically provided water for irrigation of lands annexed by the JVWCD as urban development replaced agricultural use of the lands. The JVWCD has acquired many of these rights to supply water for future M&I use as discussed above. Those water rights are described in Water Supply Appendix Volume 2.

Jordan River Flow Rights

There are no Jordan River flow rights, per se. However, there is a requirement that carrier water be released to the river along with releases from Utah Lake to meet demands under some rights. The carrier water needs to remain in the river, even if the rest of the right is exchanged upstream.

Jordan River Diversion Rights

Most of the water released from the Lake for irrigation is diverted from the Jordan River at the Jordan Narrows. The rights under which this water is diverted are basically Utah Lake diversion rights.

BONNEVILLE UNIT RETURN FLOWS TO UTAH LAKE AND JORDAN RIVER

Return flows of Bonneville Unit water are an important part of the total project water supply. The project plan includes accounting for availability and reuse of return flows for project purposes. In some instances these return flows are used to facilitate exchanges. The exchanges allow project water to be used more efficiently than would be possible if the water had to be delivered directly from the original source.

The operation of Utah Lake and the Jordan River under Bonneville Unit conditions includes return flows from five county areas. The gross amounts of these return flows are summarized in Table 4-1. Some of these return flows will be subject to Utah Lake evaporation losses and spills and the entire amount may not be useable.

TABLE 4-1
Summary of Bonneville Unit Return Flows
Tributary to Utah Lake and Jordan River
Units: acre-feet

Area and Type of Water Use	Average Annual Return Flow To		Total
	Provo River/ Utah Lake	Jordan River	
Summit County Irrigation	1,200	n.a.	1,200
Wasatch County M&I and Irrigation	5,900	n.a.	5,900
Southern Utah County M&I	9,660	n.a.	9,660
Northern Utah County M&I	7,000[1]	n.a.	7,000
Salt Lake County M&I	n.a.	21,000	21,000
Column Totals	**23,760**	**21,000**	**44,760**
Creditable Return Flow Totals	**16,760**	**21,000**	**37,760**

[1] This return flow is assumed not to qualify as Bonneville Unit water creditable for exchange to Jordanelle Reservoir because the water producing the return flow originated in the Provo River, however there has been no State Engineer ruling.

SUMMIT COUNTY RETURN FLOWS

The Summit County return flows of 1,200 acre-feet stem from the delivery of 3,000 acre-feet of irrigation water from the Bonneville Unit M&I system by exchange for use in the Francis area. The return flows return to Jordanelle Reservoir where they contribute to the water supply of the Bonneville Unit M&I System.

WASATCH COUNTY RETURN FLOWS

Return flows from the application and use of 15,100 acre-feet of Bonneville Unit irrigation water and 2,400 acre-feet of M&I water in Wasatch County produce an estimated 5,900 acre-feet of return flow. These return flows are captured in Deer Creek Reservoir, from which they are subsequently released to meet Bonneville Unit demands downstream of the reservoir.

SOUTHERN UTAH COUNTY RETURN FLOWS

Bonneville Unit return flows in southern Utah County result from the use of 27,590 acre-feet of CUP M&I water delivered in southern Utah County. These return flows are estimated to average approximately 9,660 acre-feet per year. The return flow estimate is based on 35 percent of the applied outdoor water returning to the Lake. Return flow factors are administrately determined by the Utah Division of Water Rights based on best scientific and professional judgement. The State

Engineer's office has preliminarily indicated that a 35 percent return flow factor would be appropriate. This return flow will be captured in Utah Lake, exchanged to Jordanelle Reservoir, and used as part of the M&I System water supply.

NORTHERN UTAH COUNTY M&I RETURN FLOWS

In northern Utah County, the delivery and use of 20,000 acre-feet of Bonneville Unit M&I water for municipal and secondary system use would produce a return flow of 7,000 acre-feet to Utah Lake. In previous Bonneville Unit documents, it was stated that this return flow to Utah Lake would be credited and exchanged to Jordanelle Reservoir. The number has been adjusted to account for the nature and administration of various project water rights, whether they involve trans-basin water, basin water, or a combination of both. The State Engineer has informed the District that return flows from water that is not imported to the Utah Lake basin would accrue to the lake as part of the water rights of those individuals and entities that have Utah Lake water rights. This is the case even if the supplied water is the result of an exchange of imported water delivered to Utah Lake. Consequently, return flows from the 20,000 acre-foot delivery in north Utah County are not available to the project.

SALT LAKE COUNTY M&I RETURN FLOWS

The Bonneville Unit return flows in Salt Lake County are calculated as 15 percent of the 70,000 acre-feet delivered from the Bonneville Unit M&I System, since much of the water originates as natural basin runoff that is exchanged for imported water will be re-used, and 35 percent of the 30,000 acre-feet that would be delivered through the ULS features of the Bonneville Unit. Thus the total of the estimated return flows that may be approved by the Utah State Engineer for re-use is approximately 21,000 acre-feet. The 21,000 acre-feet of return flows includes 15,000 acre-feet from the Jordan Valley service area and 6,000 acre-feet from the Metropolitan Water District of Salt Lake and Sandy service area. Table 4-2 summarizes the combined flows from the various Salt Lake County wastewater treatment plants for 2050. A comparison of the total CUP and non-CUP return flows from M&I use is also presented.

TABLE 4-2
Summary Projection of Salt Lake County Return Flows in 2050
From CUP and Non-CUP M&I Water Use

Wastewater Plant	CUP	Non-CUP	Total
South Valley	9,250	36,000	45,250
Central Valley	8,750	70,000	78,750
Salt Lake	3,000	39,000	42,000
Magna	0	350	350
Total	**21,000**	**139,350**	**166,350**

Note: Not all of the return flows could be recycled because of requirements in the wildlife refuge along the south shore of the Great Salt Lake. Water supply requirements for the refuge have not been defined.

SALT LAKE COUNTY RETURN FLOW RECYCLING POTENTIAL

The combined return flows in Salt Lake County from M&I water delivered by the ULS System and the M&I System amount to 21,000 acre-feet, which is the total return flow credit that may be approved by the Utah State Engineer. Approximately 15,000 acre-feet of the 21,000 acre-feet would return from the JVWCD service area to the South Valley and Central Valley wastewater treatment facilities and is included in future water recycling plans for meeting municipal and industrial needs in the JVWCD area. The remaining 6,000 acre-feet would return to the Salt Lake City Wastewater Treatment Plant located on the south shore of the Great Salt Lake at a point too far below the M&I service area to be economically recycled.

WATER EXCHANGES IN UTAH LAKE

As stated earlier, Bonneville Unit operation includes a complex set of water exchanges to develop the full water supply. The majority of these exchanges are made through Utah Lake. PROSIM2000, which was developed to simulate operation of Provo River and Utah Lake under Bonneville Unit conditions, models these exchanges. In modeling these exchanges, PROSIM assumes a coordinated operation of Jordanelle and Deer Creek Reservoir that is occurring under the 1994 Agreement. Under this agreement, water may be temporarily stored in either reservoir. The water would be stored as high in the system as possible to maximize the operational flexibility.

EXCHANGE MECHANISMS

The four basic mechanisms listed below are used for exchange of Utah Lake water to Jordanelle Reservoir under Bonneville Unit operation. A brief description of each of these mechanisms follows in the following paragraphs.

1. System storage conversion under the Distribution Plan
2. System storage conversion after lowering the Conversion Line
3. Direct exchange of Utah Lake water rights
4. Direct exchange of releases from Strawberry Reservoir to Utah Lake

System Storage Conversion Under Distribution Plan

The Distribution Plan provides for an up to 585,000 acre-feet system storage, which is used to supply the diversion requirements of both primary and secondary Utah Lake water rights. The system storage may be held in Utah Lake or upstream storage, subject to call for Utah Lake uses. The Distribution Plan requires a system storage target of 585,000 acre-feet from November 1 through April 14. The target value gradually decreases thereafter to a minimum of 125,000 acre-feet on October 31. Whenever the total system storage in Utah Lake and upstream reservoirs exceeds the specified target values for system storage, any excess system storage may be converted to priority

storage in upstream reservoirs according to the priority of the upstream rights. Once converted, priority storage is under the full control of the owner and no longer subject to calls by Utah Lake users. Jordanelle Reservoir will be used to store Bonneville Unit system storage under the guidelines of the Distribution Plan and in accordance with Bonneville Unit water rights on the Provo River. When the total volume of system storage crosses the conversion line this stored water will be converted to priority storage in accordance with the Distribution Plan guidelines.

System Storage Conversion After Lowering the Conversion Line

As part of the ULS System, the DOI would acquire the District's secondary water rights in Utah Lake. These rights would amount to approximately 57,000 acre-feet and would yield an average of at least 34,540 acre-feet. The acquired water rights would be used to convert or exchange water to Jordanelle Reservoir under approved water rights used in conjunction with the State Engineer's Utah Lake Distribution Plan. By holding the Utah Lake rights that it has acquired in the Lake (rather than releasing them to a downstream user), the volume of system storage in the lake is raised (or not lowered), and the Bonneville Unit is more likely to be able to convert the system storage previously stored in Jordanelle and Deer Creek reservoirs to priority storage. The District and/or DOI can tell the State Engineer that it intends to hold its water rights in the Lake and request that the State Engineer lower the system storage conversion line accordingly. This will make it possible for the CUP (or the PRP) to convert at a Lake level that is up to 120,000 acre-feet lower than the normal conversion line in the months of April and May.

Direct Exchange of Utah Lake Water Rights

Based on a recent memorandum decision by the State Engineer, under certain circumstances the CUWCD's Utah Lake water rights can be directly exchanged with system storage in Jordanelle Reservoir. This would be instead of using them to lower the conversion line, as described above. The choice of which use of the rights would depend upon the specifics of the situation and authorizations from the State Engineer. Under the direct exchange, a certain amount of the Bonneville Unit system storage in Jordanelle and Deer Creek Reservoirs would become priority storage and an equal amount of the District's rights in the Lake (acquired by DOI under the ULS) would become available to the other Utah Lake water users.

Direct Exchange of Releases From Strawberry Reservoir to Utah Lake

Under Bonneville Unit operation, a special storage account is created in Utah Lake for storing transbasin diversion water developed by the project. This account holds water released directly from Strawberry Reservoir to Utah Lake. The majority of these direct releases are used to provide flows in Sixth Water, Diamond Fork Creek, Hobble Creek, or the lower Provo River for fish and wildlife habitat. The District's account will also hold project return flows from the ULS System that enter

Utah Lake. Because the ULS system water is new water to the Utah Lake drainage, the District has the right to capture and re-divert or exchange this return flow.

Any water stored in the District's Utah Lake account will be held on a space-available basis. When Utah Lake is full and begins to spill, water held in the District's account will be the first water to spill. Water stored in this account will be subject to evaporation losses. The evaporation losses will be equal to the incremental amount of evaporation caused by the increased storage in Utah Lake. There are no seepage losses charged on water stored in Utah Lake.

Water held in the District's Utah Lake account will be used to make exchanges with system storage held in Jordanelle and Deer Creek Reservoirs. It will be used to maximize the amount of priority storage. In some years all of the system storage in Jordanelle and Deer Creek Reservoirs can be converted to priority storage under one of the previously described mechanisms. This generally occurs when there is a relatively large quantity of system storage available. In those years, the water in the District's Utah Lake account will remain in the account for exchange in subsequent years. In other years, system storage is held in Jordanelle Reservoir, but the total system storage throughout the system is below the amount required for conversion to priority storage. In those years, water held in the District's Utah Lake account will be exchanged with the system storage in Jordanelle Reservoir. Under this exchange the system storage in Jordanelle and Deer Creek Reservoir becomes priority storage and water in the District's Utah Lake account becomes system storage.

In extreme drought years there is not enough water in the Utah Lake drainage to provide adequate priority storage in Jordanelle Reservoir under the exchange mechanisms described above. In those years, large quantities of water (60,000 to 70,000 acre-feet) will be released from Strawberry Reservoir to Utah Lake. This water will then be exchanged with Bonneville Unit system storage held in Jordanelle and Deer Creek Reservoirs.

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RELEASES FROM UTAH LAKE

The historical releases to the Jordan River to meet downstream irrigation diversions rights are declining as irrigated agriculture gives way to urban development. However, a compensating trend is anticipated as the JVWCD and others acquire irrigation rights to provide water for M&I use. Under appropriate adjustments in points of diversion, the JVWCD would pump the water from the alluvial valley fill along the river and allow the streamflow to infiltrate the bed and banks of the river and recharge the alluvial aquifer. While not a routing strategy for Bonneville Unit water, this practice would facilitate water conservation measures promoted by the CUP. Operation of the Bonneville Unit will cause an average annual depletion of 98,500 acre-feet to the Provo River, as described in Volume 5 of this appendix. The depletion is made up by credits consisting of releases from Strawberry Reservoir, Bonneville Unit return flows, acquisition of CUWCD's Utah Lake water rights, and changes in Utah Lake evaporation, spills, and storage.

CUWCD WATER RIGHTS PROPOSED FOR ACQUISITION

As noted in Chapter 2, the CUWCD has acquired water rights in Utah Lake, consisting of 25,000 acre-feet of primary rights from Salt Lake City and 57,073 acre-feet of secondary rights. Primary rights are water rights defined by the Morse Decree to have storage rights in Utah Lake; secondary rights are storage rights in Utah Lake established by applications to appropriate water and confirmed by the Booth Decree. The Department of the Interior has acquired 7,900 acre-feet of these primary rights to offset the effect of the loss of the Indian Ford Exchange on the M&I System water supply. As part of the ULS System, the DOI would acquire the District's secondary water rights in Utah Lake. These rights would amount to 57,073 acre-feet and would yield an average of at least 34,540 acre-feet.

WATER SUPPLY FROM CUWCD WATER RIGHTS

Proposed Operation

Simulated operation studies for the Bonneville Unit have shown that in successive dry years the amount of Utah Lake system storage would be depleted and the total amounts would fall below the target levels required for conversion to priority storage. Under these circumstances the Distribution Plan would not provide adequate priority storage in Jordanelle Reservoir to meet Bonneville Unit demands. The studies indicated that in successive dry years there is a need for the water available under the District's secondary Utah Lake water rights to lower the conversion line or for direct exchange to Jordanelle Reservoir.

In order to provide an adequate water supply in Jordanelle Reservoir for the M&I System when Utah Lake's total system storage level fails to allow conversion of all of the CUP system storage in Jordanelle and Deer Creek reservoirs, the CUWCD's Utah Lake water rights would be used to lower the conversion line or would be directly exchanged with system storage in Jordanelle Reservoir. The

choice of which use of the rights would depend upon the specifics of the situation and authorizations from the State Engineer. Under the exchange, the system storage in Jordanelle and Deer Creek Reservoirs would become priority storage and the District's rights in the Lake (acquired by DOI) would become available to the other Utah Lake water users. Under the alternative use, the District and DOI would inform the State Engineer that they intended to hold their rights in the Lake, he would lower the conversion line accordingly, and the CUP and PRP would both have an improved opportunity to convert their system storage in Jordanelle and Deer Creek reservoirs. In either case, the acquired Utah Lake water rights would be used to replace the converted system storage.

Operation studies were performed to verify that the use of the CUWCD/DOI rights in Utah Lake (either to lower the conversion line or to directly exchange to Jordanelle) would not change flows in the Jordan River below the Narrows or adversely impact Utah Lake/Jordan River water users.

As required by Utah water law, these operations would only be made to the extent that they did not interfere with prior water rights. In most years, the secondary Utah Lake water rights acquired from the CUWCD would remain in Utah Lake to increase the total amount of system storage available. Under the Distribution Plan, when Utah Lake system storage is above predetermined levels, system storage held in upstream reservoirs would be converted to priority storage. Once converted to priority storage, the water is no longer subject to call by downstream Utah Lake water users. By increasing the amount of available system storage, or by reducing the secondary water rights calls on Utah Lake, more water stored in Jordanelle and Deer Creek Reservoirs could be converted to priority storage and more water in Strawberry Reservoir is able to be directly delivered to meet ULS water demands.

ANNUAL YIELD OF THE UTAH LAKE WATER RIGHTS

The historical average yield of the CUWCD's 57,073 of secondary water rights was about 45,978 acre-feet. The approach used was to catalogue the historical quantities of water diverted by all of the owners of Utah Lake secondary rights during the period 1950 through 1999. Historical diversions for the period after CUWCD acquired the rights were estimated, since the rights were held in the Lake during this period. It was found that historically, the total yield of the 112,739 acre-feet of Utah Lake secondary rights was 112,739 acre-feet in 29 out of the 50 years. The minimum yield was zero in 1992, and less than 50 percent in seven other years. The average yield over the 50 year period was estimated to be 90,822 acre-feet or 80.6 percent). Given that the CUWCD's rights amount to 50.6 percent of the total, it is reasonable to assume that they would have had a historical yield equal to 50.6 percent of the total. This calculation indicates that the yield of the 57,073 acre-feet of CUWCD secondary rights would be 45,978 acre-feet.

The historical deliveries and the historical yield estimates described above were not based upon operation of Utah Lake under the Utah Lake Distribution Plan. They were based upon historical water demands and historical operation of Utah Lake, operations that will be different in the future. It is not known whether or how the Distribution Plan and future demands and operations may affect

the average yield of the secondary rights in Utah Lake. What is known is that operation studies conducted under the provisions of the Distribution Plan show that Utah Lake can be operated without significantly changing Utah Lake levels, Jordan River water rights deliveries, or flows below the Narrows. These studies indicate that the historical yield of the CUWCD water rights is probably a good indication of the likely future yield.

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OVERVIEW

The operation of Utah Lake under full Bonneville Unit operation would not be significantly different from the operation of the past, or from future operation under the Distribution Plan without the project. The operation of the Bonneville Unit M&I System retains Provo River flow in Jordanelle Reservoir for delivery in Summit, Wasatch, northern Utah, and Salt Lake counties in the aggregate amount of 98,500 acre-feet. However, the Bonneville Unit has been formulated to compensate for the reduction in Provo River inflow by delivering Strawberry Reservoir water to Utah Lake, retaining the water yield of the acquired rights in Utah Lake, and contributing return flows to Utah Lake from use of Bonneville Unit M&I water in Utah County.

METHOD OF ANALYSIS

The Utah Lake water budget analysis focuses on the comparison between the reduction in inflow attributable to the Bonneville Unit and the compensatory provisions in the form of releases to the lake and including the yield of the acquired water rights in the lake. Bonneville Unit operation would reduce the average inflow to Utah Lake from the Provo River by approximately 98,500 acre-feet per year. Of this amount, 84,510 acre-feet must be replaced in Utah Lake to keep the downstream water supply whole. The Bonneville Unit compensatory measures would credit the lake with releases to the lake of about 40,310 acre-feet per year, return flows of about 9,660 acre-feet per year, and water rights yield averaging at least 34,540 acre-feet per year, for a total of 84,510 acre-feet. The key to determining the equivalence between water retention by the Bonneville Unit M&I System and the compensatory water amounts for the lake is the model operation studies that account for the timing of inflows and outflows in the context of the water rights, diversion demands from the lake, and the provisions of the State Engineer's Distribution Plan, all of which have been incorporated in the model analysis presented below.

MODEL DESCRIPTION

The operation of Utah Lake was simulated using both the Provo River Simulation Model (PROSIM2000) and by using a spreadsheet model called the Utah Lake Spreadsheet Model. The former is a prioritized water rights model of the Utah Lake System, developed under the CUPCA. The latter is a mass balance spreadsheet accounting model with a monthly time step developed to perform simplified inflow-outflow studies of Utah Lake. The spreadsheet tracks Utah Lake inflows, outflows, and storage. Inputs to the model include inflows from the major rivers developed using PROSIM2000 and other tools. These inflows include the Provo, American Fork, and Spanish Fork rivers, along with other inflows such as return flows, groundwater inflows, and demands on the lake. The simulation ends at the Jordan Narrows, downstream from the outlet from Utah Lake. The model provides 50 years of monthly output describing the flows, deliveries, and reservoir storage, based on the data, assumptions, and operating rules used in simulating Bonneville Unit operating conditions. The following methodologies and parameters are applied in the Utah Lake Spreadsheet Model:

- Historical releases associated with the 7,900 acre-feet of Indian Ford water acquired as part of the M&I System water supply would remain in the lake and be exchanged to Jordanelle Reservoir. DOI acquired 7,900 acre-feet of CUWCD Utah Lake water rights in 2001. These water rights will be operated to benefit the water supply of the M&I System.

- The water available each year from CUWCD secondary rights of 57,073 acre-feet is assumed to have the same average pattern as the remainder of Utah Lake secondary rights. The acre-feet of yield of the CUWCD secondary rights are held in Utah Lake, and water is converted or exchanged to Jordanelle accordingly. Historical calls on Utah Lake are reduced by the proportion associated with the CUWCD secondary rights. If Utah Lake is above Compromise Level, or significantly above the conditions without the ULS System, the full historical deliveries associated with the CUWCD secondary rights are assumed. When Utah Lake water rights are being exchanged upstream to Jordanelle Reservoir, they cannot also be used to deliver water downstream. However, if the water rights are not needed to convert system storage in Jordanelle Reservoir, the DOI would have the option of delivering this water to a user downstream, instead of exchanging them upstream. Delivering the water to a downstream user during wet years will tend to avoid Utah Lake levels that are higher than historical.

- The analysis makes use of historically based inflow data, except in the case of Provo River, CUP water from Strawberry Reservoir, and return flows from ULS and inter-related actions. These inflows are calculated separately, in the individual operations studies for the Provo and Spanish Fork rivers.

- Because of concern that Bonneville Unit operation might alter Jordan River flows, diversions, and return flows, Jordan River flow changes were represented at the outlet to Utah Lake and at Jordan Narrows.

The Utah Lake Spreadsheet Model was calibrated and checked by comparing results with PROSIM2000 and with independent simulation runs of the LKSIM2000 model described in Chapter 8. LKSIM2000 produces a time series showing the total volume required to balance the cumulative water balance inputs. By using the Utah Lake spreadsheet model outputs as LKSIM2000 model inputs, the two models are exactly compared for errors in water balance.

The effect of changes in Utah Lake water rights on the ability to convert or exchange CUP system storage in Jordanelle and Deer Creek reservoirs were estimated using PROSIM2000 and the Provo River Spreadsheet Model. Results of this analysis are documented in Volume 5 of this appendix covering Provo River Hydrology. Provo River inflows to Utah Lake came from those modeling studies.

HYDROLOGIC DATA BASE

The Utah Lake Spreadsheet Model was developed to simulate Utah Lake operation for the 1950 to 1999 water years. Thus the inflow and outflow data from October 1949 through September 1999 were used. This period of study represents a broad range of historical runoff conditions, including extend dry and wet periods, and is consistent with the period of analysis used to analyze the operation of other Bonneville Unit systems.

Inflow to Utah Lake for Bonneville Unit conditions was developed by modifying the historical monthly inflow to reflect future CUP and PRP on the Provo River, releases from Strawberry Reservoir to Utah Lake, return flow from the Municipal and Industrial (M&I) System, return flow from ULS System deliveries of CUP water, ULS inter-related actions flow increases, reduced return flows associated with the inter-related actions, and retention of the acquired water rights yield in Utah Lake. The Utah Lake Spreadsheet Model is listed in Attachment C, Utah Lake Water Budget Analysis - Bonneville Unit Conditions.

UTAH LAKE STORAGE PROJECTIONS

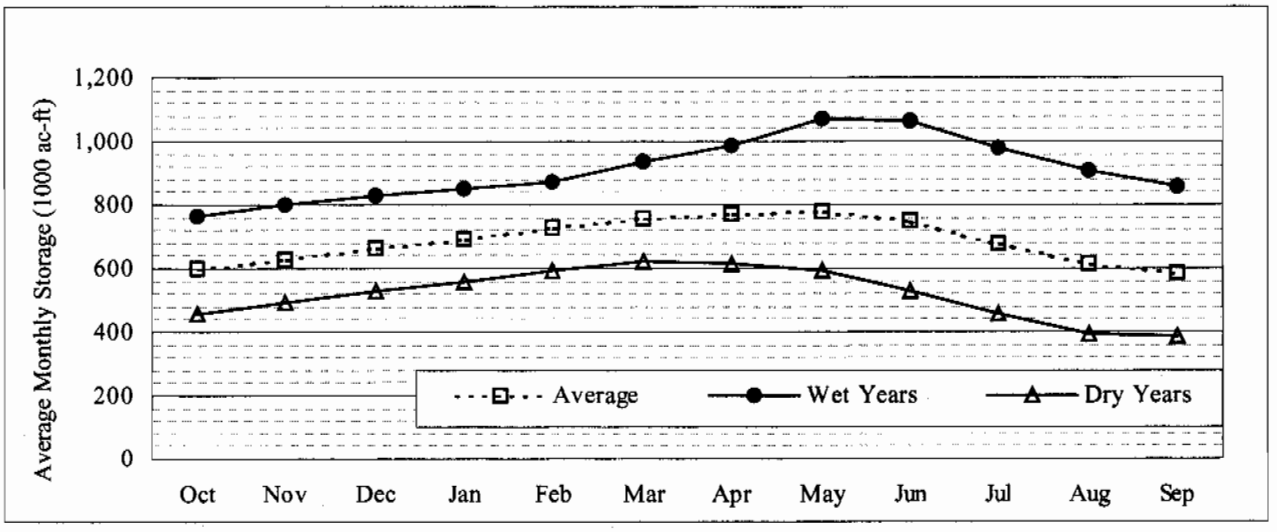
The model simulation for Bonneville Unit conditions produced maximum and minimum Utah Lake storage contents varying from about 219,000 acre-feet in 1963 to about 1,121,000 acre-feet in 1983, with an average of 687,200 acre-feet over the 1950 to 1999 period. Table 6-1 presents the projected end-of-month storage content of the lake in terms of average, wet year, and dry year conditions. Based on inspection of the inflow data, the years 1961, 1977 and 1992 were selected as dry years and 1952, 1983 and 1986 were selected as wet years. The model results of the three-year sets were then averaged to calculate dry- and wet-year monthly average storage volumes. The entire 50-year simulation was averaged to calculate monthly average results. Figure 6-1 shows the monthly values graphically. The complete monthly results of the operational modeling are presented in Attachment C, Utah Lake Water Budget Analysis - Bonneville Unit Conditions. Utah Lake contents, surface area, and elevation are summarized in Attachment B, Utah Lake Modeling Results.

TABLE 6-1
Utah Lake Monthly Content Under Bonneville Unit Operation
(Units: 1,000 acre-feet)

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ave
Average	597.0	628.3	660.9	695.6	728.9	755.1	770.3	781.2	750.8	676.1	615.4	587.5	687.3
Wet Years1	763.9	798.9	827.4	847.9	873.3	938.7	985.6	1,072.8	1,065.0	977.0	909.2	854.7	909.5
Dry Years2	458.2	492.0	528.5	559.4	594.3	620.0	617.2	594.0	530.7	455.3	396.3	387.5	519.5

Notes:
[1] The three wettest years (1952, 1983, and 1986) were averaged to calculate the values shown in the table.
[2] The three driest years (1961, 1977, and 1992) were averaged to calculate the values shown in the table.

Figure 6-1
Utah Lake Monthly Content Under Bonneville Unit Operation



Points of comparison for the contents of Utah Lake are the storage at the Compromise Level (essentially the full storage condition) of about 870,000 acre-feet, of which 710,000 acre-feet is the active storage capacity. The inactive storage pool is about 160,000 acre-feet. The top of the inactive pool is 8.7 feet below the Compromise Level, or approximate elevation 4480.3 feet. This elevation was set by the Utah State Engineer's Distribution Plan, which was described previously in this Volume 6. This 160,000 acre-feet minimum elevation corresponds approximately to the minimum water surface elevation at which the outlet pumps can operate.

The tabulated average values show a range of Utah Lake contents from approximately 587,000 acre-feet to 781,000 acre-feet. The monthly averages for the three wet years ranged from approximately 760,000 acre-feet to 1,073,000 acre-feet. The wet years do not include the 50-year high of approximately 1,121,000 acre-feet that occurred in simulated June 1984. The monthly averages for the three dry years ranged from 387,000 acre-feet to 620,000 acre-feet. The dry years do not include the 50-year low of simulated October 1963 when the contents dropped to approximately 219,000 acre-feet.

With the acquisition of Utah Lake water rights from the CUWCD, the average secondary water right demand on Utah Lake would be reduced to an estimated 55,666 acre-feet under full Bonneville Unit operation. With shortages comparable to the historical condition, the average release for this demand would be about 44,844 acre-feet annually. Simulated annual releases to secondary users vary from 8,500 acre-feet in 1992 to 55,666 acre-feet in most years. Water associated with the

acquired water rights would remain in Utah Lake and be used to offset the decrease in inflow to the lake under Bonneville Unit conditions.

The average reduction in Provo River inflow to Utah Lake is about 98,500 acre-feet. This reduction includes the Indian Ford Exchange (contract dated February 19, 1977, between U.S. Department of the Interior and the CUWCD). The Strawberry Reservoir releases add about 40,310 acre-feet, and the ULS System return flows provide an increase in inflow of about 9,660 acre-feet annually.

Utah Lake Evaporation losses for Bonneville Unit conditions averaged 345,000 acre-feet over the 1950 to 1999 period, ranging from 281,000 acre-feet to 387,000 acre-feet annually. The evaporation loss under Bonneville Unit conditions would be about the same as under historical conditions.

Spills from Utah Lake would average about 118,000 acre-feet per year under Bonneville Unit conditions as compared to an average of 127,000 under historical conditions. This change is largely due to operations under the Utah Lake Distribution Plan. The comparative annual spills are exactly the same under pre-ULS and Bonneville Unit conditions.

UTAH LAKE LEVEL PROJECTIONS

The model simulation for Bonneville Unit conditions produced Utah Lake water levels varying from about 4,481.2 feet in 1963 to about 4,491.6 feet in 1983 for the 1950 to 1999 period. Table 6-2 presents the projected end-of-month water levels of the lake in terms of average, wet year, and dry year conditions. As noted above, years 1961, 1977 and 1992 were selected as dry years and 1952, 1983 and 1986 were selected as wet years. The model results of the three-year sets were then averaged to calculate dry- and wet-year average water levels. The entire 50-year simulation was averaged to calculate the monthly average results. Table 6-2 lists the monthly values, rounded to the nearest foot. The water levels for all months of the study recorded to the nearest tenth of a foot are presented in Attachment B, Utah Lake Modeling Results.

TABLE 6-2
Utah Lake Monthly Water Level Under Bonneville Unit Operation
(Units: feet above mean sea level)

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ave
Average	4,486	4,486	4,487	4,487	4,487	4,488	4,488	4,488	4,488	4,487	4,486	4,486	4,487
Wet Years[1]	4,488	4,488	4,489	4,489	4,489	4,490	4,490	4,491	4,491	4,490	4,489	4,489	4,489
Dry Years[2]	4,484	4,485	4,485	4,486	4,486	4,486	4,486	4,486	4,485	4,484	4,484	4,483	4,485

Notes:
[1] The three wettest years (1952, 1983, and 1986) were averaged to calculate the values shown in the table.
[2] The three driest years (1961, 1977, and 1992) were averaged to calculate the values shown in the table.

A point of comparison for the water levels is the Compromise Level of 4,489.045 feet above mean sea level. As discussed in Chapter 1, a water level rise to that elevation during the natural runoff

period triggers spill releases to the Jordan River until the water surface elevation declines back to that level. Conversely, a historical lake drop of more than 8.7 feet below that level (below elevation 4480.3) has required dredging to provide a flow channel from the lake to the pumps that provide water to the Jordan River. The maximum depth of the lake is about 14 feet below the Compromise Level, or approximately 4,475 feet. Historical water surface elevations have ranged from a low of about 4,477.2 feet in 1935 to a high of 4,494.7 feet in June of 1984.

The tabulated values show that the average monthly Utah Lake water levels are within approximately 3 feet of the Compromise Level. Wet year average values range from 1 foot below to 2 feet above the Compromise Level. The dry year average ranges from 3 feet to 6 feet below compromise level. The minimum water level produced by the model simulation was 4,481.2, or four feet above the historical minimum.

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Chapter 7

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A short chapter on the Jordan River is included since an obvious question would be – What are the affects on the Jordan River? Under the Bonneville Unit there would be no effect on the Jordan River below the many diversions points located at the Jordan Narrows. The material in this chapter is presented to help the reader understand this.

OVERVIEW

The outflow from Utah Lake to the Jordan River under Bonneville Unit conditions reflects the acquisition of water rights in the lake for the Bonneville Unit. Under Bonneville Unit conditions, the water yield of the acquired rights would remain in Utah Lake to compensate for the reduction in inflow from the Provo River resulting from the operation of the Bonneville Unit M&I System. That system retains Provo River flow in Jordanelle Reservoir for delivery in Wasatch, northern Utah, and Salt Lake counties. Except in very wet conditions the water yielded by the acquired water rights would no longer be potentially available for release to the Jordan River for downstream use.

METHODS OF ANALYSIS

Jordan River flows below Utah Lake were estimated under Bonneville Unit conditions using the Utah Lake Spreadsheet Model. The model accumulates inflow to Utah Lake, releases water to meet primary and secondary water rights demands, estimates the inflow from precipitation and the outflow from evaporation, and calculates spill when the Lake is above Compromise As a simplification, the model assumes that all Jordan River diversions associated with Utah Lake are diverted at the Narrows. A schematic diagram of the Jordan River from Utah Lake to the Narrows is presented in Figure 7-1.

JORDAN RIVER FLOWS UNDER BONNEVILLE UNIT CONDITIONS

Figure 7-2 and Table 7-1 present modeled Jordan River Flows from the outlet of Utah Lake to Jordan Narrows. The average plot is the average of all years modeled. The wet year plot is the average of the three wettest years (1952, 1983, and 1986). The dry year plot is the average of the three driest years (1961, 1977, and 1992). The average flows shown and listed are the average of the 50 monthly values for each month shown.

Figure 7-3 presents modeled Jordan River flows immediately downstream of the Jordan Narrows after river diversions at the narrows. Attachment C, Flow of Jordan River - Bonneville Unit Conditions, contains complete monthly flow data for the 1950 through 1999 period under Bonneville Unit conditions.

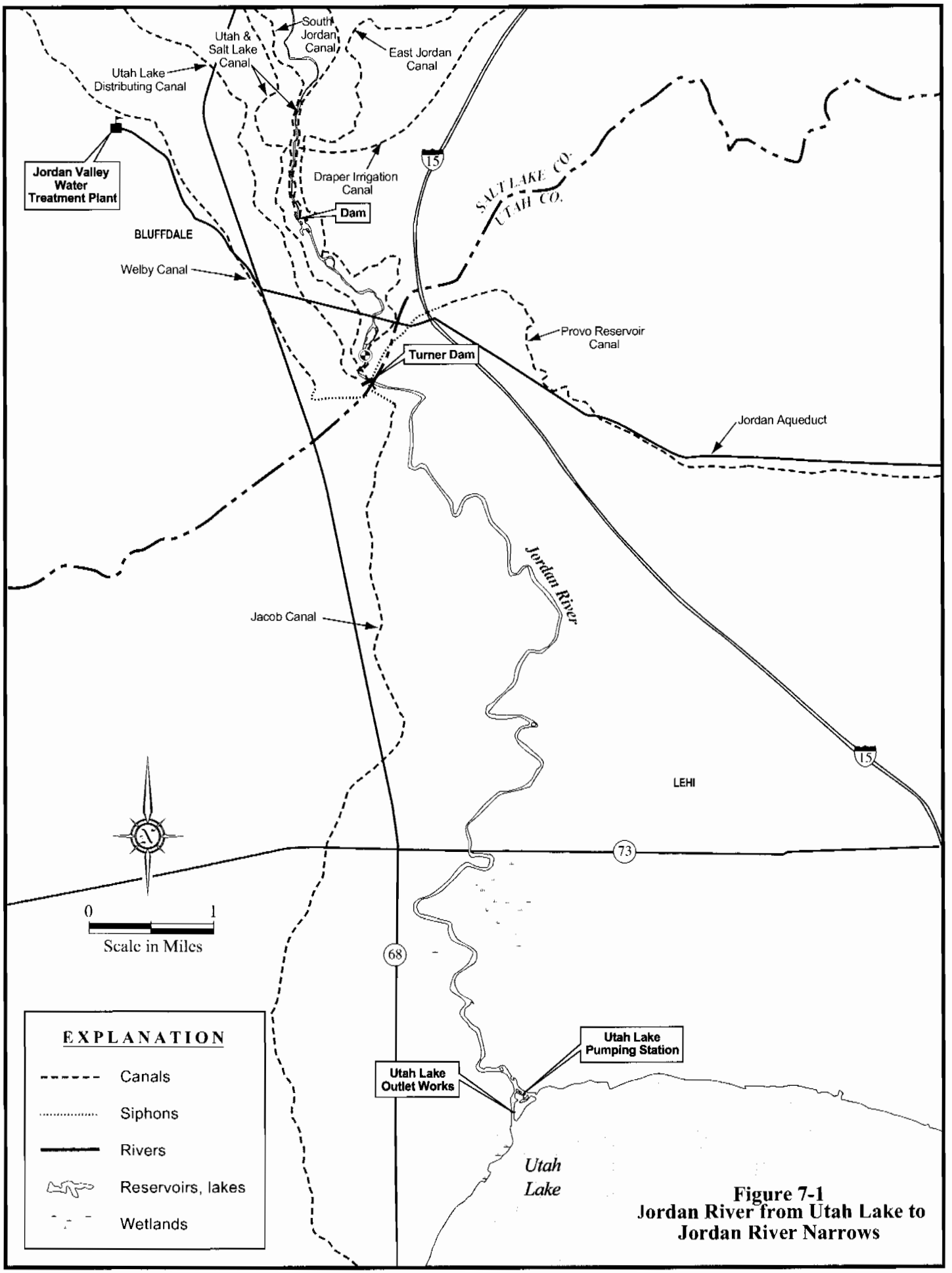


Figure 7-1
Jordan River from Utah Lake to Jordan River Narrows

TABLE 7-1
Jordan River Flows Under Bonneville Unit Operation

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Sum/ Average
Jordan River below Utah Lake Outlet													
Flow in acre-feet													
Average	14,017	9,058	11,792	14,867	17,053	25,324	32,221	49,462	51,601	52,027	43,178	30,227	350,828
Wet Years[1]	12,813	16,243	39,682	44,306	58,316	89,608	99,398	123,511	119,595	101,698	77,751	53,920	836,840
Dry Years[2]	11,112	847	847	239	276	304	7,201	27,518	31,799	35,386	26,424	13,206	155,157
Flow in cfs													
Average	228	152	192	242	305	412	542	804	867	846	702	508	484
Wet Years[1]	208	273	645	721	1,045	1,457	1,671	2,009	2,010	1,654	1,265	906	1,155
Dry Years[2]	181	14	14	4	5	5	121	448	534	576	430	222	214
Jordan River below Jordan Narrows													
Flow in acre-feet													
Average	3,379	5,473	8,534	11,688	13,508	19,756	20,690	15,201	11,103	4,339	2,521	1,895	118,087
Wet Years[1]	0	11,172	34,236	38,860	53,245	81,947	86,625	82,292	72,490	45,808	27,357	15,793	549,825
Dry Years[2]	0	0	0	0	0	0	0	0	0	0	0	0	0
Flow in cfs													
Average	55	92	139	190	241	321	348	247	187	71	41	32	163
Wet Years[1]	0	188	557	632	954	1,333	1,456	1,338	1,218	745	445	265	759
Dry Years[2]	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:
1. The three wettest years (1952, 1983, and 1986) were averaged to calculate the values shown in the table.
2. The three driest years (1961, 1977, and 1992) were averaged to calculate the values shown in the table.

Figure 7-2
Jordan River Flows Above Jordan Narrows Under Bonneville Unit Operation

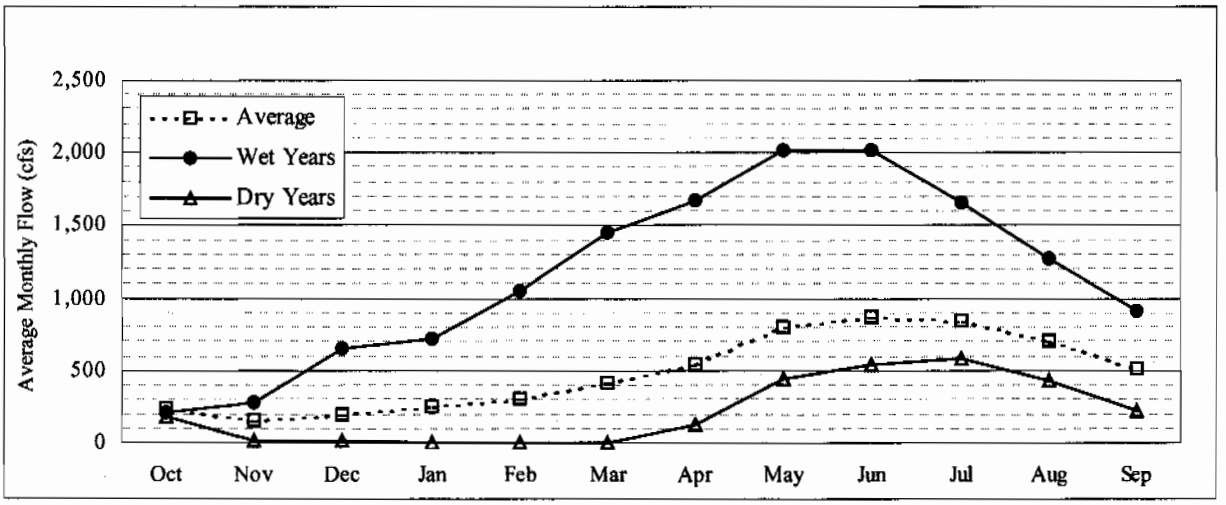
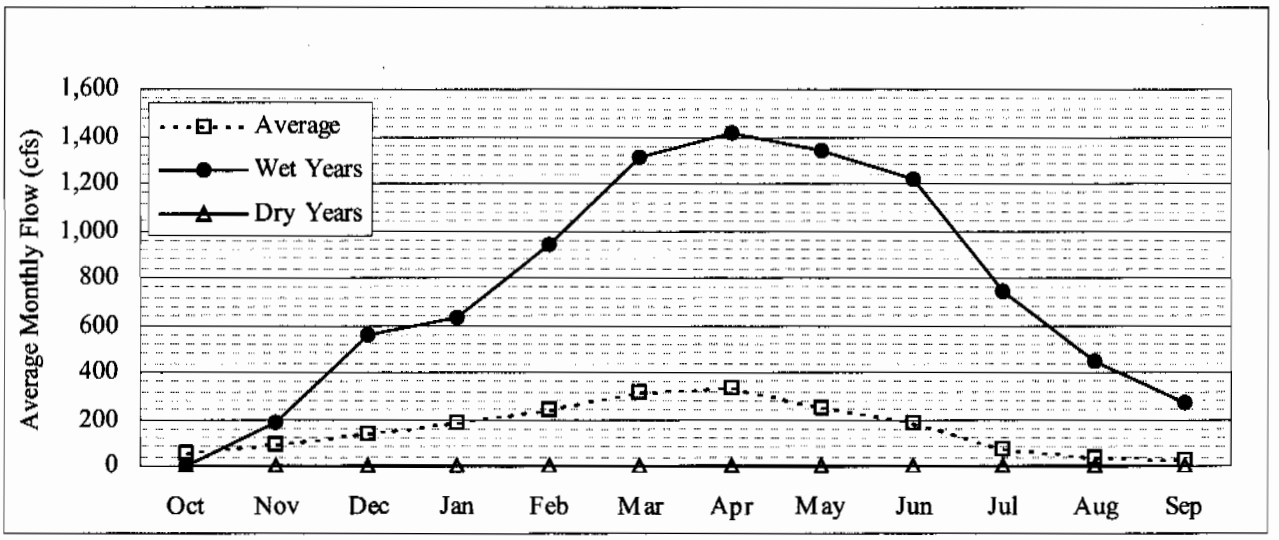


Figure 7-3 presents modeled Jordan River Flows downstream of the Jordan Narrows.

Figure 7-3
Jordan River Flows Below Jordan Narrows Under Bonneville Unit Operation



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Chapter 8

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UTAH RECLAMATION
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Chapter 8

This chapter presents analyses of the salinity of Utah Lake under Bonneville Unit operating conditions. The salinity, expressed in terms of total dissolved solids (TDS) measured in milligrams per liter (mg/L) or parts per million (ppm) is a factor in the use of Utah Lake water, particularly in the conversion of diversion rights from irrigation use to M&I use.

The water quality parameter analyzed in this supplemental DPR is salinity in TDS.

FACTORS AFFECTING UTAH LAKE WATER QUALITY

Utah Lake receives water from about 80 different sources, ranging from high quality water from Wasatch Front streams, to irrigation drainage and treated municipal wastewater of lower quality. Evaporation from the lake has a concentrating effect on the dissolved minerals in the lake and those carried in by inflows. Outflows from the lake consist of releases to the Jordan River and one or more direct irrigation diversions, which are the sole means of discharging dissolved minerals from the lake.

The lake serves as the "salinity balance." This means the lake's salinity increases to the concentration at which the TDS of the water released to the Jordan River is in balance with the weighted average TDS of the inflows. In other words, the Lake salinity stabilizes at the TDS at which the mass of salt released to the Jordan River is equal the mass of salt in all the inflows to the lake. For perspective, an acre-foot of water at a TDS of approximately 735 milligrams per liter (mg/L) contains one ton of salt. The numerous sources of inflow to Utah Lake result in a highly complex system for analyzing water quality. TDS in the tributaries and in the lake vary markedly over time.

Water quality in Utah Lake is strongly affected by the lake's large net evaporation loss, which concentrates the total dissolved solids in the lake. The high levels of TDS are further compounded by mineral springs that occur in the lake bed. This has resulted in typical TDS concentrations of 900 mg/L through much of the lake (Fuhriman et al. 1981). Because of its shallow depth, winds commonly suspend the sediments of the lake, giving the nutrient-rich waters a milky-gray, turbid appearance during most of the year. The lake is used to temporarily store irrigation water and also receives effluent from municipal and industrial wastewater treatment facilities.

METHOD OF ANALYSIS

Utah Lake was modeled as a storage reservoir that has inflows with various salinities and outflows reflecting the Lake's salinity. A computer model (LKSIM2000) was used as the basis for estimating Utah Lake TDS under Bonneville Unit conditions. Relationships between monthly inflow and TDS were established for each of about 80 different sources of inflow. The model was developed and calibrated for historical conditions prior to modeling future Bonneville Unit conditions.

LKSIM2000 TDS MODEL

TDS modeling was performed using the LKSIM model. This model is essentially a mass balance model that calculates water and salt balances for Utah Lake on a monthly time step. Early versions of the model were developed in the 1970's by Drs. LaVere Merritt and Dean Fuhriman, and since about 1985 Dr. Wood Miller, professors of civil and environmental engineering at Brigham Young University. This model includes input for 57 surface sources, 19 fresh and mineral groundwater sources, and precipitation. The current version, LKSIM2000, is used routinely by the CUWCD and their consultants to evaluate lake salt concentrations associated with various water management scenarios for Utah Lake.

DATABASE

Water quality (TDS) and flow data used as input to the model were based on extensive historical monitoring. These inputs were combined in the model to produce Utah Lake TDS concentrations for the corresponding 50-year time period (October 1949 to September 1999) under Bonneville Unit operating conditions. Background on LKSIM2000, the methods used to develop inflows, inflow water quality data, and model calibration are contained in Appendix E to this Volume.

MODELING RESULTS

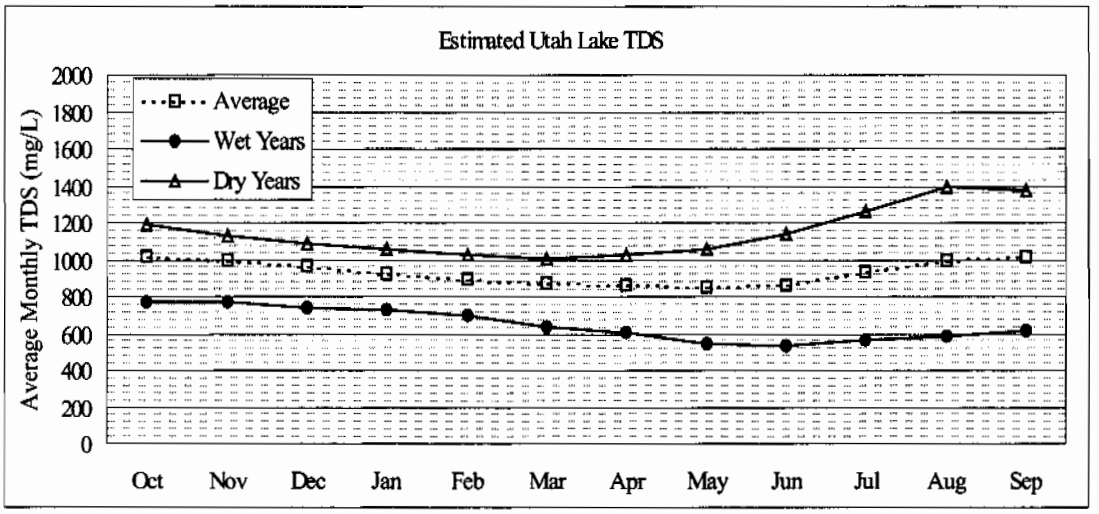
Figure 8-1 and Table 8-1 show the average, wet year, and dry year TDS concentrations in Utah Lake for the 1950 to 1999 period under the simulated Bonneville Unit operating conditions. The wet years (1952, 1983 and 1986) and the dry years (1961, 1977 and 1992) were those selected in the storage analysis described in Chapter 7. Monthly values for the entire 50-year simulation were averaged to calculate average-year results. The 50-year modeled average was 932 mg/L. The highest modeled TDS concentration, 1,700 mg/L, occurred in 1961, the year of lowest historical inflow. During the high Utah Lake level in 1984, the modeled TDS reached a low of about 445 mg/L. Attachment E of this appendix contains the details of the analysis. These TDS concentrations also apply to the Jordan River to the Jordan Narrows. The TDS concentrations for each month of the 50-year period of analysis are in Attachment E, Utah Lake Salinity Analysis (LKSIM2000) - Bonneville Unit Conditions.

TABLE 8-1
Utah Lake Average, Wet, and Dry Year TDS Concentrations (mg/L)

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	1,019	994	961	925	896	874	867	849	863	929	991	1,014	932
Wet Years[1]	774	766	743	724	696	640	604	545	532	564	588	614	649
Dry Years[2]	1,185	1,131	1,086	1,052	1,021	1,008	1,029	1,054	1,135	1,266	1,399	1,374	1,145

Notes:
[1] The three wettest years (1952, 1983, and 1986) were averaged to calculate the values shown in the table.
[2] The three driest years (1961, 1977, and 1992) were averaged to calculate the values shown in the table.

Figure 8-1
Utah Lake TDS Concentrations



AFFECT OF WATER QUALITY ON WATER USES

The quality of Utah Lake water affects present and future water users in two areas--1) suitability for culinary use and 2) suitability for irrigated agriculture and residential/community landscaping. The following subsections describe the suitability of Utah Lake water for these purposes.

CULINARY WATER SUPPLY POTENTIAL

Although Utah Lake water has not historically been used for drinking water, other than under a small-scale trial blending operation, Utah Lake is being considered as a source of future drinking water for the JVWCD. As mentioned in Chapter 3, the JVWCD has plans to treat and use up to 50,000 acre-feet of Utah Lake water for drinking water. Under this plan the water would be treated using a membrane treatment process which includes microfiltration and reverse osmosis. This proposal is discussed further in Volume 2 of the Water Supply Appendices.

CROP AND LANDSCAPE IRRIGATION

The effects of Utah Lake salinity on crops and other vegetation are difficult to quantify because of seasonal and annual variations in the lake's salinity concentrations, soil conditions of the cultivated areas, and methods of irrigation. Additionally, the salinity tolerances among plant species vary widely. An increasing amount of Utah Lake water will be used for landscape irrigation in the future. From past efforts, it has been found that untreated Utah Lake water is detrimental to some ornamental plants used in urban landscaping.

IRRIGATION WATER TECHNICAL STANDARDS AND CLASSIFICATION

Data in the scientific literature report several different units and measurements for salinity. Drinking water standards often report salinity with respect to TDS; parameters for irrigation water and soils are more commonly reported by electrical conductivity (EC) and/or sodium adsorption ratios. Although there is a tight correlation between EC and TDS, the values cannot be converted exactly. Salinity data from Utah Lake have been measured and reported as TDS within the context of this report. These data can be converted to EC to facilitate comparisons with published irrigation water quality parameters. Data for EC are often reported by different units and can be confusing. Equivalent quantities for EC at 25°C are 1 decisiemen per meter (dS/m) = 1 millimho per centimeter (mmho/cm). For an approximation of EC in units of dS/m, one may divide the TDS by 640 (Hershey 1993).

Salinity data from Utah Lake had been measured and reported as TDS within the context of this report. Generally, salinity of irrigation water can be divided into the four classes given below with respect to conductivity (Richards 1954, Kandiah 1987, van der Leeden et al. 1990). These classes, converted from the published EC values are presented in Table 8-2, along with the percentage of time that Utah Lake water falls within each class.

TABLE 8-2
Classification of Utah Lake Water Quality for Bonneville Unit Conditions

Class	Water Salinity Description	TDS (mg/L)	Percentage of Time Within Class
C1	Low	0-160	0
C2	Moderate	160-480	0.5 %
C3	High	480-1,440	96.0%
C4	Very High	1,440+	3.5%

Low salinity or C1 water can be used to irrigate most crops on most soils with little likelihood that soil salinity will develop. Some leaching is required, but this occurs under normal irrigation practices except in soils of extremely low permeability. C2 water can be used if a moderate amount of leaching occurs. Plants with moderate salt tolerances can be grown in most cases without special practices for salinity control. C3 water cannot be used on soils with restricted drainage. Even with adequate drainage, special management for salinity control may be required, and plants with good salt tolerance should be selected. C4 water is not suitable for irrigation under ordinary conditions, but may be used occasionally under very special circumstances. The soils must be permeable, drainage must be adequate, irrigation water must be applied in excess to provide considerable leaching, and very salt-tolerant crops should be selected.

A literature review indicated several documented studies reported on the effects of irrigation and salinity on ornamental, vegetable, field, forage, grass, and fruit crops. Higher salinity levels in irrigation water have been studied with successful results. For example, the salinity tolerance of five ornamental species was studied by Zurayk et al. (1993). Plants were grown in pots and irrigated with

saline water at 5 dS/m and 15 dS/m levels. Begonia plants died at the lower level and therefore were classified as salt-sensitive. Geranium, colerus, and chlorophytum survived at the higher level, but their weight and height were significantly stunted at 15 dS/m. These plants were classified as moderately salt-tolerant. Mesembryanthemum was classified as salt-tolerant because no significant decrease was measured with either of the salt treatments. In their study of flower crops, Sonneveld and Voogt (1983) found carnations and chrysanthemums to be salt-tolerant, gerberas and hippeastrums moderately tolerant, and anthuriums to be most sensitive to salt. Bernstein (1965) found that most fruit crops were sensitive to salinity. Salt tolerance of ornamental plants has been reported by Carpenter (1970) and Zelazny (1968). Salt tolerance of field, vegetable, fruit, and forage crops has been reported by van der Leeden et al. (1990), Richards (1954), Bernstein (1958), and Kandiah (1987).

Table 8-3 summarizes the information above and other cited references. In the table, plants are listed as having high, moderate, or low tolerances to salt. Although the literature is somewhat conflicting, the plants listed under the moderate salt tolerance category in the plant species tables would be expected to grow in the C2 and C3 ranges of salinity, especially if the soils were managed accordingly. The high salt-tolerant species would grow within the C3 and C4 ranges.

UTAH LAKE WATER SUITABILITY FOR IRRIGATION

As shown in Table 8-2, under Bonneville Unit conditions, Utah Lake water quality falls within the C3 class 96 percent of the time and within the C4 class 3.5 percent of the time. The lake water is almost never within the C1 or C2 classes. Therefore, the plants listed in Table 8-3 as having a low salt tolerance cannot be irrigated with raw or unblended Utah Lake water. Plants listed as having a moderate salt tolerance will likely be damaged when the lake's water quality falls within the C4 class. Plants with high salt tolerance could be irrigated with Utah Lake water with no or few adverse effects.

JORDAN RIVER WATER QUALITY

Because a major portion of the water released from Utah Lake is diverted at the Jordan Narrows and because inflows of various qualities occur river downstream of the Jordan Narrows, the water quality of the Jordan River downstream of the Narrows was not included in this analysis.

The water quality in the Jordan River from Utah Lake to the Jordan Narrows is essentially the same as the water quality in Utah Lake. Therefore, the TDS in this reach of the river under the Bonneville Unit would be very similar to that of Utah Lake.

TABLE 8-3
Salt Tolerance of Selected Crops

High Salt Tolerance	Moderate Salt Tolerance	Low Salt Tolerance
Field Crops		
Barley (grain) Beet, sugar	Castorbeans Corn, field Flax Oats (grain) Rye (grain) Sorghum Sunflower Wheat (grain)	Beans, field
Forage and Grass Crops		
Alkaligrass, Nuttall Barley Bermuda grass Fescue, tall Sacaton, alkali Saltgrass Trefoil, bird's-foot Wheatgrass, tall Wheatgrass, western Wildrye, Canada	Alfalfa Brome, smoot Brome, mountain Canarygrass, reed Clover, Huban Clover, strawberry Fescue, meadow Grama, blue Harding grass Milkvetch Oatgrass, tall Oats (hay) Orchardgrass Rye (hay) Ryegrass, perennial Sudan grass Sweet clover, white Sweet clover, yellow Wheat (hay) Wildrye, beardless	Burnet, small Clover, white Clover, Alsike Clover, Red Clover, Ladino Foxtail, meadow

TABLE 8-3
Salt Tolerance of Selected Crops
(continued)

High Salt Tolerance	Moderate Salt Tolerance	Low Salt Tolerance
Vegetable Crops		
Asparagus	Broccoli	Beans, green
Beets, garden	Cabbage	Celery
Kale	Carrot	Radish
Spinach	Cauliflower	
	Corn, sweet	
	Cucumber	
	Lettuce	
	Onion	
	Peas	
	Pepper, bell	
	Potatoes, white rose	
	Squash	
	Tomato	

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Central Utah Project Completion Program

Attachment A

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Utah Lake Drainage Basin Water Delivery System Bonneville Unit, Central Utah Project
2004 Supplement to the 1988 Definite Plan Report

Water Supply Appendix
Volume 6 Attachment A: Utah Lake Salinity Analysis

October 2004

UTAH LAKE INTERIM WATER DISTRIBUTION PLAN

UTAH LAKE INTERIM WATER DISTRIBUTION PLAN

EFFECTIVE NOVEMBER 1, 1992

April 16, 1993
Dear Water Users:

RE: Water Supply Update Under The Water Distribution Plan For the Utah Lake Drainage Basin

On November 1, 1992, the River Commissioners were directed to begin distributing water under the Water Distribution Plan for the Utah Lake Drainage Basin. At this time, no major problems have developed. However, we are just approaching the time that irrigation and increased municipal demands will be placed upon the system.

In order to provide you with timely information about the distribution of water, under the plan, I have developed a water supply update which shows the accounting for both system and priority storage, and other pertinent data. If this proves useful, I propose to issue a monthly update for the remainder of the year. In doing so, I want to keep all water users apprised of the handling of system and priority storage, and any other water distribution issues which arise.

Should you have concerns about the distribution of water under this plan, or questions about the enclosed data, please feel free to contact this office.

Sincerely,

Robert L. Morgan, P.E.
State Engineer

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INTERIM WATER DISTRIBUTION PLAN FOR THE UTAH LAKE DRAINAGE BASIN

I. INTRODUCTION

Utah is experiencing significant growth in those counties located along the Wasatch Front. Associated with this growth we are seeing more demands being placed on out limited water resources, such as the conversion from irrigation to municipal water use.

With the projects currently under construction and those planned for the future, it would appear that Utah Lake and its major tributaries will be facing a number of changes in the manner in which these systems have historically been operated. This is not to imply that such changes will have a negative impact, rather with proper planning these changing water use practices can be handled and existing water rights protected. In addition, there are a number of major transbasin diversions into the Utah Lake drainage which need to be better regulated. Diversions between the basins or subbasins presently total over 300,000 acre-feet annually.

There have been a number of requests made of the State Engineer in recent years to make decisions on matters which significantly affect water distribution in the Utah Lake drainage basin. After reviewing this matter, it appears that some direction is needed to better clarify the relationship between water rights in the basin; particularly between storage rights in Utah Lake and storage rights on the upstream tributaries. The State Engineer believes that in order for the river commissioners to properly administer the numerous diversions, the extent of the rights and their relationship, one with another, needs to be fully understood by everyone involved. In simple terms, we need to begin to manage the water rights on the Provo River, Spanish Fork River, Utah Lake, Jordan River, and other sources in the basin as one system. The objective is not to remove local control or involvement in the management of the waters. Rather, the objective is to ensure the equitable distribution of water, according to the respective water rights, and to address problems from a more regional point of view.

The State Engineer prepares this interim distribution plan under authority of Sections 73-2-1, 73-5-1, -3, and -4, Utah Code Annotated 1953, to distribute the waters in the Utah Lake drainage basin. Some of the issues which are presented in this document are beyond the State Engineers' administrative authority in distribution matters, and it is not his intent to resolve such issues in implementing this plan. Such items will be addressed and ultimately resolved in the court adjudication process as set forth under Chapter 4, Title 73, Utah Code Annotated. This interim distribution plan is NOT part of the adjudication process, nor will it prejudice anyone's claims during such action.

This document is intended to establish a general framework within which the respective rights can be administered. The distribution guidelines follow the priority doctrine of "first in time, first in right"; and where rights are equal in priority, each of those rights receives a proportionate share of the total water available to divert under that priority. The State Engineer realizes that flexibility will be required as the plan is implemented, and many problems that arise will need to be handled on a case-by-case basis. It is also noted that there are many agreements between water users, and such

agreements will be taken into account, when appropriate. Transbasin diversions (imported water) into the Utah Lake drainage will be administered in accordance with their individual water rights.

The issues presented in this document have been divided into five subject areas:

1. Water rights in Utah Lake
2. Relationship between storage rights in Utah Lake and upstream reservoirs
3. Direct flow water rights
4. Other distribution issues
5. Issues to be resolved through the general adjudication procedure

For each subject there is a background section and a distribution guidelines section. The background section is intended to give the reader some general information about the issue and some justification for the distribution guidelines.

II. DEFINITIONS OF TERMS USED IN PROPOSED DISTRIBUTION PLAN

Active Storage (Utah Lake): The storage capacity of Utah Lake between compromise elevation and 8.7 feet below compromise (the maximum active storage is 710,000 acre-feet).

Adjudication: The judicial process by which all water right claims in a given hydrologic area are evaluated, defined and then established by court decree pursuant to Chapter 4, Title 73, Utah Code Annotated.

Booth Decree: A 1909 court case: Salt Lake City Corp., Utah and Salt Lake Canal Co., East Jordan Irrigation Co., North Jordan Irrigation Co. and South Jordan Canal Co. (Plaintiffs) versus J. A. Gardner and A. J. Evans (Defendants). The Booth Decree covered water rights in Utah Lake and the Jordan River.

Compromise Elevation: The maximum legal storage elevation in Utah Lake. Compromise elevation was first established in 1885, and was recently modified in 1985 to be 4489.045 feet above mean sea level. When the lake is at this elevation, the total storage capacity is approximately 870,000 acre-feet, of which 710,000 acre-feet is active storage capacity and 160,000 acre-feet is inactive storage capacity. Whenever the level of Utah Lake is above the compromise level, the control gates are required to be fully opened. The exception to this rule occurs when fully opening the control gates causes the Jordan River to exceed a maximum flow rate that is specified in the 1985 Compromise Agreement (Civil No. 64770)

Delivery Schedule: A schedule listing the allowable diversion rate in cubic feet per second per acre, for specific time periods during the irrigation season.

Direct Flow Right: A water right that diverts water from a surface source according to its respective priority date.

Distribution Plan: Guidelines for the distribution of water within a drainage basin or hydrologic system.

Diversion Requirement: The amount of water needed to satisfy the beneficial uses set forth under a water right.

Inactive Storage (Utah Lake): The portion of Utah Lake that is not accessible to the pumps, and therefore, cannot be diverted. The inactive storage is currently estimated to be 160,000 acre-feet (8.7 feet below compromise)

Irrigation Duty: The annual quantity of water in acre-feet per acre considered to be reasonably necessary to meet the beneficial use requirements of irrigated land. The irrigation duty takes into consideration the consumptive use requirements of crops, irrigation efficiency and conveyance losses.

Morse Decree: A 1901 decree resulting from a series of court cases: Case No. 2861 - Salt Lake City Corp. (Plaintiffs) versus Salt Lake City Water and Electrical Power Co. (Defendant); Case No. 3449 - J. Geoghegan (Plaintiff) versus Salt Lake City Corp.(Defendant); and Case No. 3459- J. Geoghegan (Plaintiff) versus Utah and Salt Lake Canal Co. (Defendant). This decree defined the water rights on the Jordan River with respect to each other.

Priority Storage: Legal storage under a water right. Such water stored is not subject to call by other right(s) and can be diverted and used in accordance with the right.

Primary Storage (Utah Lake): The first 125,000 acre-feet of active storage in Utah Lake which is set aside to satisfy the diversion requirement of the primary rights in Utah Lake in years of successive drought. See figure 1.

Primary Storage Rights (Utah Lake): The water rights defined in the Morse decree to have storage rights in Utah Lake.

Proposed Determination Book: The State Engineer's report and recommendation to the district court in general adjudication proceedings of all the water rights within the adjudication drainage area.

Provo River Decree: A 1921 decree resulting out of the court case: Provo Reservoir Company vs. Provo City (Case No. 2888). The Provo River decree defined certain water rights in the Provo River drainage.

Secondary Storage Rights (Utah Lake): The storage rights in Utah Lake established by applications to appropriate water and as confirmed by the Booth Decree.

Storage Right: The legal right to store water in accordance with a water right's respective priority date.

Subbasin: Individual drainage system within a larger drainage basin. For example, the Provo River system can be considered to be a subbasin within the larger Utah Lake drainage basin.

System Storage: The total active storage water in Utah Lake, excluding the primary storage, plus water stored in upstream reservoirs under junior priority date water rights. The maximum value of system storage is 585,000 acre-feet and varies during the year as shown in Table 3. System storage, whether in Utah Lake or upstream reservoirs, is subject to call to satisfy the diversion requirements of primary and secondary Utah Lake storage rights.

Real-time gages: A measuring device that allows instantaneous access to data.

Transbasin diversions: Imports or exports of water from one drainage basin or distribution system to another.

Welby-Jacob Memorandum Decisions: Seven memorandum decisions issued in 1989 by the State Engineer regarding change applications which provided for the transfer of high quality Provo River water from the Welby and Jacob districts of the Provo River Project for use by the Salt Lake County Water Conservancy District (SLCWCD). The water supply for the Welby and Jacob districts was replaced under both primary and secondary storage rights acquired in Utah Lake.

III. WATER RIGHTS IN UTAH LAKE

A. Background

There is not a clear understanding of how the uses of Utah Lake water relate to the quantity of storage in Utah Lake. The approach set forth in this document looks at the water rights served from Utah Lake in terms of beneficial use, which is referred to as the "annual diversion requirement."

Water in Utah Lake is stored in order for the users to meet their diversion requirement. Thus, the storage capacity of Utah Lake does not define the water rights. Rather, it is the quantity of water necessary to satisfy the beneficial uses that is the limit and measure of the water rights.

The relationship of one water right to another is also not generally understood. The water rights in Utah Lake were set forth in both the Morse (1901) and Booth (1909) decrees. The Morse decree identified two groups of water rights: 1) Direct flow rights on the Jordan River; and 2) Water rights in Utah Lake. The Booth decree (1909) allowed for additional appropriations of water from Utah Lake and set a maximum limit on the diversions under the storage rights that were set forth in the Morse decree. This maximum limit was 185,000 acre-feet annually and in part is based upon a 3.0 acre-feet per acre duty. In this proposed distribution plan, we refer to the rights that were defined in the Morse decree as primary storage rights, and all subsequent rights established under applications to appropriate water as secondary storage rights.

In 1989, the State Engineer approved a number of change applications, in conjunction with the so-called Welby-Jacob exchange, to transfer the use of water under the primary and secondary storage rights in Utah Lake. In evaluating these change applications, the sole supply irrigated acreage for each water right was determined. For the purposes of this document, the same sole supply acreages as set forth in the respective memorandum decisions, are used to calculate the allowable annual diversion requirement.

The acreage amounts used in this plan, and in the Welby-Jacob Exchange Project, are subject to adjudication by the court. This distribution plan does not purport to adjudicate these acreage amounts.

In the "Proposed Determination of Water Rights in Utah Lake and Jordan River Drainage Area, Salt Lake County, West Division" (Proposed Determination), the State Engineer has recommended an irrigation duty of 5.0 acre-feet per acre. This duty also appears reasonable for those lands located east of the Jordan River. The proposed determination book covering the west side of the Jordan River indicates that potential conveyance losses for canals over one mile in length are not included in the irrigation duty. Such losses are to be determined in a supplemental report to the court in conjunction with the general adjudication proceedings

Since the potential conveyance losses have not been finalized, a diversion requirement of 5.0 acre-feet per acre is used to determine the total annual diversion requirement for the irrigation rights.

Before getting into the distribution guidelines, a review of some basic information on Utah Lake may be helpful. The total storage capacity of Utah Lake at compromise elevation (4489.045 feet) is approximately 870,000 acre-feet. Of this, approximately 160,000 acre-feet is inactive storage (verbal communication, Brad Gardner, Utah Lake-Jordan River

Commissioner). The inactive storage elevation is 8.70 feet below compromise elevation. The active storage capacity of Utah Lake is 710,000 acre-feet. The average annual inflow (1951-90) to Utah Lake from all sources is about 726,000 acre-feet. Of this, 346,000 acre-feet is discharged to the Jordan River and about 380,000 acre-feet is lost to evaporation.

B. Distribution Guidelines

In distributing the waters of Utah Lake among the primary and secondary storage rights in the Lake, the following guidelines will be followed:

1. The annual diversion requirement for the primary and secondary storage rights in Utah Lake are as set forth in Table 1.

2. The water users of Utah Lake are responsible to maintain the pumps and channels in Utah Lake to allow water to be withdrawn from the lake down to 8.70 feet below compromise elevation.

3. In order to protect the primary storage rights during consecutive years of drought, the first 125,000 acre-feet of active storage capacity in Utah Lake shall be dedicated solely for the use of the primary storage rights when all other active storage has been used. This 125,000 acre-feet of storage is hereafter referred to as "primary storage".

4.The remaining 585,000 acre-feet of active storage in Utah Lake up to compromise level, which may be stored in Utah Lake or in upstream reservoirs (subject to call by Utah Lake water rights, as set forth under Section 4.2 of this document), shall be referred to as "system storage". System storage is to be used to supply the annual diversion requirements of both primary and secondary storage rights.

Table 1 - Annual diversion requirement for primary and secondary storage rights in Utah Lake. The quantities of water for the irrigation rights are based on the irrigated acreages (sole supply acreage) set forth in the Welby-Jacob memorandum decisions and an irrigation duty of 5.0 acre-feet per acre. For the municipal and industrial rights the allowable annual diversion as set forth under the water right(s) was used.

WR NUMBER	Primary Storage Rights (1870)	Irrigated Acreage	Acre-Feet
59-3499	Utah and Salt Lake Canal Company	7,063.65	35,318
59-5269	SLCWCD(1) - Salt Lake County Water Conservancy District	2,071.01	10,355
59-3500	South Jordan Canal Company	4,850.05	24,250
59-5270	SLCWCD(1)	1,076.92	5,385
57-7637	East Jordan Irrigation Company	8,092.96	40,465
59-5268	SLCWCD(1)	1,587.04	7,935
59-3496	North Jordan Irrigation Company	1,069.99	5,350
57-5272	SLCWCD	2,099.72	10,499
5722	SLCWCD(1)		
57-7624	Salt Lake City	Municipal	11,000
57-7624	CUWCD	Municipal	25,000
59-3517	Kennecott Utah Copper Corporation	Ind	13,750
	Total for Primary Rights		189,307
	Secondary Storage Rights	Acreage	Acre-feet
59-13	Utah Lake Distributing Co. (1908)	7,945.37	39,727
59-5271	SLCWCD(1)	687.81	3,439
57-23	Draper Irr. Co. & Sandy Canal Co. (1908)	2,100	10,500
59-5273	SLCWCD	400	2,000
59-14, 15 & 20	Central Utah Water Conservancy Dist. (Kenn. Storage Rights 1912)(2)	Ind	57,073
	Total for Secondary Rights		112,739
	Overall Total		302,046

(1) Rights/shares held by respective irrigation companies in behalf of Salt Lake County Water Conservancy District by agreement dated Sept. 19, 1988.
(2) Does not include any storage which may be claimed/allowed under 59-23

5. All water stored upstream which is subject to call under the priority of the Utah Lake rights (system storage) shall be delivered to Utah Lake, according to priority, when either the active storage in Utah Lake is at or below 125,000 acre-feet or the diversion requirements of earlier priority water rights in Utah Lake are not satisfied.

6. When all the system storage in Utah Lake and upstream reservoirs has been used, the secondary rights shall cease diversions. At such time, the active storage in Utah Lake shall be at or below 125,000 acre-feet.

7. After all of the system storage in Utah Lake and in upstream

reservoirs has been used, and secondary rights have ceased diversions, the primary storage shall be allocated to the primary rights in the following percentages and will be available on demand within the constraints of the respective water rights:

Table 2 - The percentage of primary storage in Utah Lake allocated to each primary water right.

WATER RIGHT NUMBER(S)	OWNER	
59-3499	Utah and Salt Lake Canal Company	18.7%
59-3500	South Jordan Canal Company	12.8%
57-7637	East Jordan Irrigation Company	21.4%
59-3496	North Jordan Irrigation Company	2.8%
57-7624	Salt Lake City	5.8%
59-5268/5273, 5722	Salt Lake County Water Conservancy District	18.0%
57-7624	Central Utah Water Conservancy District	13.2%
59-3517	Kennecott Utah Copper Corporation	7.3%

IV. RELATIONSHIP OF STORAGE RIGHTS IN UTAH LAKE AND UPSTREAM RESERVOIRS

A. Background

The relationship between upstream storage water rights and storage rights in Utah Lake must be clarified so all of the storage reservoirs within the Utah Lake drainage basin can be regulated in accordance with their respective priority dates. The upstream storage reservoirs have a unique relationship with Utah Lake storage rights. This section addresses only the storage rights. Direct flow rights are addressed independently in Section V.

The upstream storage rights generally have later priority dates than the Utah Lake storage rights, with only a few exceptions. However, in analyzing the storage rights within the basin, it appears that in most years, the existing storage reservoirs can divert and use water without impairing the prior rights in Utah Lake. Although during drought years, this has not always been the case.

The State Engineer has studied the historical practices and water supply conditions in the basin. From these studies, it appears that adequate safeguards can be developed to allow upstream reservoirs to divert and store water during most periods of time without impairing prior water rights. However, these safeguards generally require that predictions of the total water supply be made early in the year. Predicting whether the rights in Utah Lake will receive their full annual diversion requirement is difficult early in the year. As the year progresses, and the water supply conditions become more apparent, these predictions can be made with a higher degree of confidence. In order to allow later priority upstream rights to store water, criteria are needed to determine when the rights in Utah Lake will likely be satisfied. Until the prior storage rights in Utah Lake are satisfied, water stored upstream will be held as system storage, subject to call by water rights in Utah Lake. Also, provisions to replace or exchange water to Utah Lake during drought periods to allow storage upstream will be considered.

Applying the following guidelines will ensure with a high degree of certainty that the rights in Utah Lake will be satisfied. These guidelines dictate when the upstream reservoirs can convert their system storage to what is referred to as priority storage. After the water is converted to priority storage, it is no longer subject to call to Utah Lake and can then be released from the reservoir and used.

Under this proposal, storage waters will be accounted for based on a November through October period. The irrigation season in much of the Utah Lake drainage runs from about April through October, except in the higher elevations. During the non-irrigation season, the water demand is much lower than during the irrigation season and generally the storage season begins in November.

B. Distribution Guidelines

In order to maximize the beneficial use of the water and still protect prior rights, the State Engineer will use the following criteria to govern the distribution of water between storage rights in Utah Lake and reservoirs on upstream tributaries.

1. Upstream storage rights junior to Utah Lake water rights may store water under their respective priority dates relative to each other and

subject to the conditions set forth in this section.

2. System storage is defined as the top 585,000 acre-feet of active storage capacity in Utah Lake and is used to satisfy the diversion requirement of both primary and secondary rights. Any portion of this 585,000 acre-feet stored upstream which is subject to call by Utah Lake, as provided for under paragraph 5., shall also be accounted for as system storage.

3. Priority storage is defined to be the legal storage under a reservoirs' water right and is not subject to call by any other water right.

4. Any water stored by junior appropriators before the total system storage in or available to Utah Lake exceeds the quantities set forth in Table 3, is subject to call by the rights served from Utah Lake.

5. System storage held in upstream reservoirs shall not be diverted for use and must be held in storage and available for release to Utah Lake, until such storage is converted to priority storage according to the criteria in Table 3 or replacement water is provided.

6. Whenever the total system storage exceeds the values set forth in Table 3, any excess system storage shall be converted to priority storage. Water is converted from system to priority storage according to the priority dates of the respective rights, and in accordance with any other restrictions applicable to a particular water right.

7. Once water has been converted to priority storage or is designated as priority storage by the river commissioner at the time it is stored, it can be released from the reservoir and used as provided for under the respective water right.

8. Any time the storage capacity in Utah Lake drops below the primary storage capacity (the first 125,000 acre-feet of active storage capacity), upstream storage rights with later priority dates will not be allowed to divert water to storage.

9. Any time the active storage capacity in Utah Lake drops below the primary storage level (125,000 acre-feet), the Utah Lake rights may call on the system storage water which has been held upstream. The quantity subject to call is limited to the lesser of either the quantity of system storage held upstream or the amount needed to satisfy the diversion requirements and bring Utah Lake up to the primary storage level.

Table 3 - Quantity of total system storage required before upstream storage reservoirs can convert system storage to priority storage.

Date	System storage in Utah Lake and/or Upstream Reservoirs (units: ac-ft)
November 1	585,000
December 15	585,000
January 15	585,000
February 15	585,000
March 15	585,000
April 15	575,000
May 15	475,000
June 15	400,000
July 15	350,000
August 15	250,000
September 15	200,000
October 31	125,000

NOTE:Values can be interpolated from the table to determine system storage on any particular day.

10. System storage in upstream reservoirs can be replaced in Utah Lake with waters from other sources or other rights. Once such replacement is made, a like quantity of system storage can be converted to priority storage and used. Such replacement or exchange of water shall have prior approval of the State Engineer.

V. DIRECT FLOW RIGHTS

A. Background

One of the objectives of this proposed distribution plan is to administer the waters within the basin as one system. In so doing, we need to take into account what the effects of diversion and water use from a source may have on other rights in the basin. The distribution of water between all rights, except those rights specifically denoted in Sections III and IV as among themselves, shall be done based upon priority. This approach distributes the water in accordance with the priority doctrine on a basin wide basis.

B. Distribution Guidelines

In distributing water among the water rights in the basin, except those rights addressed in Sections 3.0 and 4.0 as among themselves, the following guidelines will be used:

1. The direct flow water rights on all tributaries will be administered according to the respective priority dates. The affect that diversions from one source may have on diversions from another source will be taken into account.

2. The primary direct flow rights on the Jordan River as set forth in the Morse decree shall have a call on the water in Utah Lake if the accretionary flows to the Jordan River are insufficient to satisfy their rights.

VI. OTHER DISTRIBUTION ISSUES

A. Background

The State Engineer believes that there are several other issues that should be considered when examining better ways to manage and distribute water in the basin. Most of these issues are directly related to improving the record keeping of imported water and enhancing the communication between the five river commissioners who are affected by this plan.

One issue that deserves special discussion is a proposed 5,000 acre-feet regulation pool in Jordanelle Reservoir (Section B.1) to be used by the Provo River commissioner in distributing water. Based upon past experiences, calculating the natural flow of the Provo River from reservoir stage readings at Deer Creek Reservoir has presented numerous problems for the commissioners. It is important that the river commissioner not waste his time dealing with such problems. Because the direct flow rights on the Provo River are senior to nearly all the storage rights it is necessary for the commissioner to compute natural flow in the river. The precision of reservoir content measurements on Deer Creek, and presumably on Jordanelle, are inadequate for daily calculation of natural flow based on changes in reservoir content. Just .10 foot error in measurement when Deer Creek Reservoir is nearly full represents about 300 acre-feet. Thus, when the wind is blowing it can substantially affect the natural flow calculation. The result is a wide fluctuation in the natural flow available to the class A rights on the Lower Provo River. With Jordanelle Reservoir now being built, the natural flow computation for both Heber Valley rights and the Lower Provo River will be even more complicated. If the commissioner had a regulation pool he could smooth out the natural flow bypasses as they should be.

The administration of exchange applications is another important distribution issue. The basic purpose of exchange applications is to facilitate distribution. Under such an application a water user is required to measure the quantity of water released to a stream and then a like quantity can be diverted at another location. In regulating exchange applications, the State Engineer attempts to have releases and subsequent diversions occur as concurrently as possible to insure that other water rights are not adversely effected. Some exchange applications involve waters from more than one distribution system. In such cases, the State Engineer needs to establish lines of authority and/or coordination between the river commissioners.

The State Engineer has reviewed the water rights covering the transbasin diversion into and out of the basin. Nearly all of these water rights are certificated and the rights are generally well defined. Thus, the major issue regarding transbasin diversions is to implement better accounting procedures.

Although not addressed in the distribution guidelines, the future water quality of Utah Lake is another important issue that must be considered. Currently there are many unknowns over what the future operation of Utah Lake and upstream storage reservoirs will be. This makes it very difficult to predict the future salinity concentrations in the Lake. Under Utah water law, a water user is entitled to have his right protected as to both quantity and quality. We believe that the Central Utah Water Conservancy District and the Bureau of Reclamation could

significantly affect the future salinity levels of Utah Lake by the decisions they will be making in the near future. It appears they are very aware of this problem and are looking at alternatives to control the salinity level of Utah Lake.

B. Distribution Guidelines

The State Engineer is proposing that the following recommendations be implemented to facilitate the distribution of water:

1. All exports of water from a river system shall be regulated by the duly appointed river commissioner for the system from which the export is made. Such diversions shall be regulated in accordance with the individual water right.

2. River commissioners shall report diversions on all systems on a water rights basis.

3. All transbasin diversions shall be equipped with real-time gages. Such data shall be accessible via a computer using a modem or other method as approved by the State Engineer.

4. The State Engineer is recommending that a 5,000 acre-foot regulation pool be established in Jordanelle Reservoir to be used by the commissioner for distribution system regulation. Such a regulation pool would be subject to space availability.

5. In regulating exchange applications, they will be administered as closely to a concurrent release and diversion basis as is feasible. Under no circumstances will deficits or credits be allowed to be carried over from year to year.

VII. ADJUDICATION ISSUES

A. Background

There are a number of issues that are beyond the scope of the distribution plan and will need to be addressed in the general adjudication. However, ultimately any actions taken in the adjudication will affect the distribution of water. Therefore, several adjudication issues are discussed in this document in order to apprise the water users of potential recommendations which may be made by the State Engineer to the court in the adjudication.

On the Provo River system there are no priority dates assigned to the class A rights on the Lower Provo River or class 1 through 17 on the Upper Provo River. The distribution of water has worked well under this system for over 70 years, and if conditions did not change we could continue to operate under the class system. However, we are beginning to see significant changes in the water use practices within the drainage basin, especially on the Provo River. To assess the potential impact as a result of a change in water use, and in order to properly administer the water rights on a basin-wide basis, it is imperative that the respective priority dates between the water rights be established. Therefore, as part of the general adjudication process, the State Engineer is proposing that priority dates for all water rights in the basin be determined.

Another issue that needs to be carefully analyzed and considered is the irrigation diversion requirement (duty) for irrigated lands in the basin. In conjunction with the proposed determination of water rights that the State Engineer must submit to the court for its consideration, an irrigation duty is recommended. In making this recommendation the State Engineer calculates the consumptive use requirements of the crops and considers the on-farm efficiency, canal losses and other related factors. The irrigation duty is expressed in terms of acre-feet per acre.

Related closely to the issue of duty is the issue of whether a delivery schedule should be implemented to specify an allowable diversion rate (Example - 1 cubic foot per second per 60 acres) during any period of the irrigation season. The total volume of water that can be diverted under the delivery schedule is the annual irrigation duty that is established.

B. Recommendations for the Adjudication

The State Engineer will consider making the following recommendations in his report to the court in the general adjudication:

1. All water rights within the basin shall have a priority date determined and assigned to it as part of the adjudication process.

2. An irrigation diversion requirement (duty) and delivery schedule shall be determined and submitted to the court for each subbasin or distribution system.

Central Utah Project Completion Program

Attachment B

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Attachment B

Utah Lake Drainage Basin Water Delivery System Bonneville Unit, Central Utah Project
2004 Supplement to the 1988 Definite Plan Report

Water Supply Appendix
Volume 6 Attachment B: Utah Lake Salinity Analysis

October 2004

UTAH LAKE MODELING RESULTS – BONNEVILLE UNIT CONDITIONS

Table 1: Simulated Reservoir Contents in 1,000 acre-feet

Table 2: Simulated Water Surface Elevation in feet

Table 3: Simulated Water Surface Area in acres

Bonneville Unit Operations Reservoir Contents (1000 acre-feet)
Utah Lake

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	559.0	537.3	582.1	635.5	680.2	702.2	718.5	750.0	731.4	670.9	608.1	568.8	645.3
1951	570.0	602.5	645.1	693.7	730.9	751.5	781.5	826.5	809.7	739.8	686.2	631.7	705.8
1952	643.2	683.7	742.1	803.7	847.4	870.0	937.2	1,062.2	1,023.0	927.6	865.8	818.5	852.0
1953	813.8	863.4	869.2	869.2	870.0	870.0	870.0	847.6	827.7	753.3	687.6	646.0	815.6
1954	642.7	671.3	705.3	745.7	776.1	811.0	807.6	747.6	698.3	621.4	546.2	507.7	690.1
1955	503.3	530.4	560.9	608.7	647.7	693.7	722.5	699.2	667.2	587.3	510.2	465.2	599.7
1956	461.6	493.7	531.1	580.9	623.0	645.1	620.8	602.4	542.4	471.9	410.5	360.4	528.6
1957	350.7	382.8	421.8	457.6	494.7	522.5	580.4	614.3	617.5	542.2	479.0	439.2	491.9
1958	439.4	482.0	521.4	560.1	607.0	650.0	678.9	702.3	647.4	567.6	514.0	472.8	570.2
1959	463.4	495.1	533.8	573.8	621.8	649.7	656.7	628.3	571.8	500.9	446.4	416.3	546.5
1960	417.8	430.2	472.7	515.6	565.0	601.2	604.1	573.1	509.5	406.7	338.8	304.8	478.3
1961	314.7	363.8	395.1	420.9	450.2	468.9	475.8	434.5	361.7	301.2	255.3	247.0	374.1
1962	264.7	284.8	315.8	344.0	396.5	434.4	476.1	482.8	433.0	354.8	290.3	255.6	361.1
1963	266.5	288.5	302.2	335.1	363.3	386.8	418.6	392.8	361.7	289.5	225.9	219.4	320.8
1964	219.0	252.7	285.5	322.8	355.6	401.9	439.3	481.4	498.5	424.7	352.3	313.4	362.3
1965	309.3	341.7	397.6	443.3	463.9	492.8	522.0	520.9	527.7	479.1	439.3	441.4	448.3
1966	452.2	487.2	551.8	589.4	631.4	678.0	665.2	653.8	590.2	508.7	452.0	423.5	557.0
1967	433.3	455.9	506.9	543.3	590.1	626.8	620.3	624.4	655.8	595.0	530.1	497.9	556.6
1968	502.9	536.1	573.9	617.2	668.2	705.7	735.3	742.0	753.8	700.3	666.5	624.0	652.2
1969	635.7	675.4	720.1	767.1	819.5	841.7	870.0	868.0	870.0	803.4	747.7	713.3	777.7
1970	738.6	770.9	803.0	848.5	870.0	870.0	870.0	870.0	843.8	774.1	711.6	692.0	805.2
1971	703.7	766.6	789.6	836.9	864.4	870.0	870.0	868.7	855.7	768.9	707.0	688.0	799.1
1972	745.8	763.3	804.9	839.8	868.3	870.0	866.0	849.4	810.5	721.6	661.7	625.8	785.6
1973	656.7	692.1	729.8	771.0	817.0	856.5	870.0	891.9	870.0	795.3	745.4	716.2	784.3
1974	734.6	784.0	813.2	856.0	870.0	870.0	870.0	859.8	839.1	762.9	692.0	644.1	799.6
1975	667.5	705.6	731.9	778.8	823.9	854.3	870.0	871.8	919.2	857.0	768.9	735.7	798.7
1976	759.6	804.9	854.5	866.5	870.0	870.0	870.0	865.3	794.7	732.5	660.6	631.2	798.3
1977	627.6	647.7	688.7	715.6	750.6	781.9	784.7	796.1	728.4	657.6	599.5	553.8	694.4
1978	579.6	599.9	633.4	688.9	734.9	798.8	867.3	870.0	830.3	746.7	682.2	689.9	726.8
1979	689.0	740.9	780.8	825.3	870.0	870.0	870.0	848.6	773.1	699.4	646.7	602.9	768.1
1980	628.7	667.5	710.4	777.1	860.3	861.0	868.0	903.1	870.0	796.2	812.3	755.9	792.5
1981	776.0	814.3	853.3	865.0	870.0	870.0	870.0	870.0	799.4	729.4	653.7	623.3	799.5
1982	681.8	715.1	763.2	810.4	866.8	864.0	870.0	913.8	890.3	836.0	770.3	805.5	815.6
1983	855.5	870.0	870.0	870.0	885.5	967.4	977.8	1,062.8	1,120.7	1,033.8	970.6	906.3	949.2
1984	889.2	897.3	903.8	902.7	897.3	929.7	1,005.5	1,113.3	1,118.2	1,033.8	966.2	906.5	963.6
1985	884.2	870.0	870.0	870.0	870.0	890.5	942.6	984.4	905.3	854.6	786.6	756.1	873.7
1986	792.9	842.7	870.0	870.0	886.9	978.1	1,040.1	1,091.9	1,050.3	968.8	890.5	838.7	926.7
1987	870.0	870.0	870.0	870.0	870.0	870.0	870.0	864.7	800.7	725.1	678.1	642.6	816.8
1988	665.8	709.1	741.5	789.0	823.5	837.7	856.0	834.8	762.5	677.0	606.4	611.5	742.9
1989	578.9	606.7	636.8	662.0	708.6	767.2	775.6	725.6	665.2	568.3	499.9	561.2	646.3
1990	586.8	612.4	638.8	696.4	746.0	775.9	745.4	722.4	659.8	573.2	493.8	458.4	642.4
1991	479.8	499.8	522.9	549.7	588.3	614.6	628.7	633.5	605.3	498.0	427.8	417.5	538.8
1992	432.3	464.7	501.8	541.5	582.2	609.2	591.2	551.4	502.1	407.1	334.0	361.6	489.9
1993	375.0	412.0	445.3	510.9	569.6	651.7	662.9	726.2	710.8	649.7	593.8	572.4	573.4
1994	592.6	624.2	657.4	694.0	733.6	756.8	765.8	745.9	679.8	587.5	520.0	479.9	653.1
1995	515.3	553.8	587.1	645.9	687.0	725.4	740.4	847.2	839.9	788.3	731.8	689.5	696.0
1996	712.8	739.5	779.3	792.7	850.6	859.0	866.0	870.0	868.0	798.5	737.9	717.0	799.3
1997	724.6	779.9	820.2	870.0	870.0	870.0	885.2	934.9	925.5	834.9	800.8	793.0	842.4
1998	823.1	867.0	866.5	870.0	870.0	870.0	870.0	918.1	929.9	870.0	807.0	805.7	863.9
1999	819.0	862.7	870.0	870.0	870.0	870.0	870.0	898.7	870.0	808.9	758.2	725.7	841.1
Average	597.0	628.3	660.9	695.6	729.0	755.1	770.2	781.2	750.7	676.0	615.3	587.5	687.2
Maximum	889.2	897.3	903.8	902.7	897.3	978.1	1,040.1	1,113.3	1,120.7	1,033.8	970.6	906.5	963.6
Minimum	219.0	252.7	285.5	322.8	355.6	386.8	418.6	392.8	361.7	289.5	225.9	219.4	320.8

Bonneville Unit Operations Water Surface Elevation (feet)
Utah Lake

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	4,485.6	4,485.3	4,485.8	4,486.5	4,487.0	4,487.2	4,487.4	4,487.7	4,487.5	4,486.9	4,486.1	4,485.7	4,486.6
1951	4,485.7	4,486.1	4,486.6	4,487.1	4,487.5	4,487.8	4,488.1	4,488.6	4,488.4	4,487.6	4,487.0	4,486.4	4,487.3
1952	4,486.5	4,487.0	4,487.7	4,488.3	4,488.8	4,489.0	4,489.7	4,491.0	4,490.6	4,489.6	4,489.0	4,488.5	4,488.9
1953	4,488.4	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,488.8	4,488.6	4,487.8	4,487.1	4,486.6	4,488.5
1954	4,486.5	4,486.9	4,487.2	4,487.7	4,488.0	4,488.4	4,488.4	4,487.7	4,487.2	4,486.3	4,485.4	4,485.0	4,487.1
1955	4,484.9	4,485.2	4,485.6	4,486.2	4,486.6	4,487.1	4,487.4	4,487.2	4,486.8	4,485.9	4,485.0	4,484.4	4,486.1
1956	4,484.4	4,484.8	4,485.2	4,485.8	4,486.3	4,486.6	4,486.3	4,486.1	4,485.4	4,484.5	4,483.8	4,483.1	4,485.2
1957	4,483.0	4,483.4	4,483.9	4,484.4	4,484.8	4,485.1	4,485.8	4,486.2	4,486.3	4,485.4	4,484.6	4,484.1	4,484.8
1958	4,484.1	4,484.7	4,485.1	4,485.6	4,486.1	4,486.6	4,487.0	4,487.2	4,486.6	4,485.7	4,485.0	4,484.5	4,485.7
1959	4,484.4	4,484.8	4,485.3	4,485.7	4,486.3	4,486.6	4,486.7	4,486.4	4,485.7	4,484.9	4,484.2	4,483.8	4,485.4
1960	4,483.9	4,484.0	4,484.5	4,485.1	4,485.6	4,486.1	4,486.1	4,485.7	4,485.0	4,483.7	4,482.8	4,482.4	4,484.6
1961	4,482.5	4,483.2	4,483.6	4,483.9	4,484.3	4,484.5	4,484.6	4,484.1	4,483.1	4,482.3	4,481.7	4,481.6	4,483.3
1962	4,481.8	4,482.1	4,482.5	4,482.9	4,483.6	4,484.1	4,484.6	4,484.7	4,484.1	4,483.1	4,482.2	4,481.7	4,483.1
1963	4,481.9	4,482.2	4,482.4	4,482.8	4,483.2	4,483.5	4,483.9	4,483.5	4,483.1	4,482.2	4,481.3	4,481.2	4,482.6
1964	4,481.2	4,481.7	4,482.1	4,482.6	4,483.1	4,483.7	4,484.1	4,484.6	4,484.9	4,483.9	4,483.0	4,482.5	4,483.2
1965	4,482.5	4,482.9	4,483.6	4,484.2	4,484.4	4,484.8	4,485.1	4,485.1	4,485.2	4,484.6	4,484.1	4,484.2	4,484.2
1966	4,484.3	4,484.7	4,485.5	4,485.9	4,486.4	4,486.9	4,486.8	4,486.7	4,485.9	4,485.0	4,484.3	4,483.9	4,485.6
1967	4,484.1	4,484.3	4,485.0	4,485.4	4,485.9	4,486.4	4,486.3	4,486.3	4,486.7	4,486.0	4,485.2	4,484.8	4,485.5
1968	4,484.9	4,485.3	4,485.7	4,486.3	4,486.8	4,487.3	4,487.6	4,487.7	4,487.8	4,487.2	4,486.8	4,486.3	4,486.7
1969	4,486.5	4,486.9	4,487.4	4,487.9	4,488.5	4,488.7	4,489.0	4,489.0	4,489.0	4,488.3	4,487.7	4,487.3	4,488.1
1970	4,487.6	4,488.0	4,488.3	4,488.8	4,489.0	4,489.0	4,489.0	4,489.0	4,488.8	4,488.0	4,487.3	4,487.1	4,488.3
1971	4,487.2	4,487.9	4,488.2	4,488.7	4,489.0	4,489.0	4,489.0	4,489.0	4,488.9	4,488.0	4,487.3	4,487.1	4,488.3
1972	4,487.7	4,487.9	4,488.3	4,488.7	4,489.0	4,489.0	4,489.0	4,488.8	4,488.4	4,487.4	4,486.8	4,486.4	4,488.1
1973	4,486.7	4,487.1	4,487.5	4,488.0	4,488.5	4,488.9	4,489.0	4,489.3	4,489.0	4,488.2	4,487.7	4,487.4	4,488.1
1974	4,487.6	4,488.1	4,488.4	4,488.9	4,489.0	4,489.0	4,489.0	4,488.9	4,488.7	4,487.9	4,487.1	4,486.6	4,488.3
1975	4,486.8	4,487.3	4,487.5	4,488.1	4,488.6	4,488.9	4,489.0	4,489.1	4,489.6	4,488.9	4,488.0	4,487.6	4,488.3
1976	4,487.9	4,488.3	4,488.9	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,488.2	4,487.6	4,486.7	4,486.4	4,488.3
1977	4,486.4	4,486.6	4,487.1	4,487.4	4,487.8	4,488.1	4,488.1	4,488.3	4,487.5	4,486.7	4,486.0	4,485.5	4,487.1
1978	4,485.8	4,486.1	4,486.4	4,487.1	4,487.6	4,488.3	4,489.0	4,489.0	4,488.6	4,487.7	4,487.0	4,487.1	4,487.5
1979	4,487.1	4,487.6	4,488.1	4,488.6	4,489.0	4,489.0	4,489.0	4,488.8	4,488.0	4,487.2	4,486.6	4,486.1	4,487.9
1980	4,486.4	4,486.8	4,487.3	4,488.0	4,488.9	4,488.9	4,489.0	4,489.4	4,489.0	4,488.3	4,488.4	4,487.8	4,488.2
1981	4,488.0	4,488.4	4,488.9	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,488.3	4,487.5	4,486.7	4,486.3	4,488.3
1982	4,487.0	4,487.4	4,487.9	4,488.4	4,489.0	4,489.0	4,489.0	4,489.5	4,489.3	4,488.7	4,488.0	4,488.4	4,488.5
1983	4,488.9	4,489.0	4,489.0	4,489.0	4,489.2	4,490.1	4,490.2	4,491.0	4,491.6	4,490.7	4,490.1	4,489.4	4,489.9
1984	4,489.2	4,489.3	4,489.4	4,489.4	4,489.3	4,489.7	4,490.5	4,491.5	4,491.6	4,490.7	4,490.0	4,489.4	4,490.0
1985	4,489.2	4,489.0	4,489.0	4,489.0	4,489.0	4,489.3	4,489.8	4,490.2	4,489.4	4,488.9	4,488.1	4,487.8	4,489.1
1986	4,488.2	4,488.8	4,489.0	4,489.0	4,489.2	4,490.2	4,490.8	4,491.3	4,490.9	4,490.1	4,489.3	4,488.7	4,489.6
1987	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,488.3	4,487.5	4,486.9	4,486.5	4,488.5
1988	4,486.8	4,487.3	4,487.7	4,488.2	4,488.5	4,488.7	4,488.9	4,488.7	4,487.9	4,486.9	4,486.1	4,486.2	4,487.7
1989	4,485.8	4,486.1	4,486.5	4,486.8	4,487.3	4,487.9	4,488.0	4,487.5	4,486.8	4,485.7	4,484.9	4,485.6	4,486.6
1990	4,485.9	4,486.2	4,486.5	4,487.2	4,487.7	4,488.0	4,487.7	4,487.4	4,486.7	4,485.7	4,484.8	4,484.4	4,486.5
1991	4,484.6	4,484.9	4,485.1	4,485.5	4,485.9	4,486.2	4,486.4	4,486.4	4,486.1	4,484.8	4,484.0	4,483.9	4,485.3
1992	4,484.0	4,484.4	4,484.9	4,485.4	4,485.8	4,486.2	4,486.0	4,485.5	4,484.9	4,483.7	4,482.8	4,483.1	4,484.8
1993	4,483.3	4,483.8	4,484.2	4,485.0	4,485.7	4,486.6	4,486.8	4,487.5	4,487.3	4,486.6	4,486.0	4,485.7	4,485.7
1994	4,486.0	4,486.3	4,486.7	4,487.1	4,487.6	4,487.8	4,487.9	4,487.7	4,487.0	4,485.9	4,485.1	4,484.6	4,486.7
1995	4,485.1	4,485.5	4,485.9	4,486.6	4,487.0	4,487.5	4,487.6	4,488.8	4,488.7	4,488.2	4,487.5	4,487.1	4,487.1
1996	4,487.3	4,487.6	4,488.1	4,488.2	4,488.8	4,488.9	4,489.0	4,489.0	4,489.0	4,488.3	4,487.6	4,487.4	4,488.3
1997	4,487.5	4,488.1	4,488.5	4,489.0	4,489.0	4,489.0	4,489.2	4,489.7	4,489.6	4,488.7	4,488.3	4,488.2	4,488.7
1998	4,488.5	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,489.6	4,489.7	4,489.0	4,488.4	4,488.4	4,489.0
1999	4,488.5	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,489.0	4,489.3	4,489.0	4,488.4	4,487.8	4,487.5	4,488.7
Average	4,485.9	4,486.3	4,486.7	4,487.1	4,487.4	4,487.7	4,487.9	4,488.0	4,487.7	4,486.8	4,486.1	4,485.8	4,487.0
Maximum	4,489.2	4,489.3	4,489.4	4,489.4	4,489.3	4,490.2	4,490.8	4,491.5	4,491.6	4,490.7	4,490.1	4,489.4	4,490.0
Minimum	4,481.2	4,481.7	4,482.1	4,482.6	4,483.1	4,483.5	4,483.9	4,483.5	4,483.1	4,482.2	4,481.3	4,481.2	4,482.6

Bonneville Unit Operations Water Surface Area (acre)
Utah Lake

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	84,994	84,208	85,770	87,461	88,692	89,326	89,709	90,620	90,092	88,445	86,628	85,304	87,704
1951	85,459	86,509	87,704	89,070	90,092	90,753	91,549	92,917	92,367	90,356	88,815	87,342	89,454
1952	87,580	88,815	90,488	92,231	93,619	94,181	96,224	99,480	98,518	95,927	94,041	92,640	93,760
1953	92,503	94,041	94,181	94,181	94,181	94,181	94,181	93,619	92,917	90,753	88,943	87,704	92,640
1954	87,580	88,445	89,326	90,488	91,413	92,503	92,367	90,620	89,198	86,985	84,523	83,101	88,943
1955	82,940	83,892	84,994	86,747	87,827	89,070	89,837	89,198	88,321	86,080	83,101	81,329	86,509
1956	81,329	82,459	83,892	85,770	87,104	87,704	86,985	86,509	84,366	81,656	79,186	76,988	83,892
1957	76,647	78,010	79,686	81,165	82,619	83,577	85,770	86,866	86,985	84,366	81,977	80,347	82,459
1958	80,347	82,138	83,577	84,994	86,628	87,827	88,692	89,326	87,704	85,304	83,261	81,656	85,459
1959	81,329	82,619	84,050	85,459	87,104	87,827	88,074	87,223	85,459	82,780	80,674	79,352	84,523
1960	79,519	80,020	81,656	83,419	85,149	86,509	86,628	85,459	83,101	79,019	75,949	74,367	81,977
1961	74,903	77,158	78,518	79,686	80,838	81,492	81,817	80,184	76,988	74,188	71,983	71,606	77,669
1962	72,361	73,473	74,903	76,298	78,518	80,184	81,817	82,138	80,184	76,817	73,652	71,983	76,988
1963	72,550	73,652	74,367	75,775	77,158	78,181	79,519	78,351	76,988	73,652	70,334	69,887	75,252
1964	69,887	71,794	73,473	75,252	76,817	78,852	80,347	81,977	82,780	79,686	76,647	74,903	77,158
1965	74,724	76,124	78,685	80,511	81,329	82,459	83,577	83,577	83,892	81,977	80,347	80,511	80,674
1966	80,838	82,298	84,681	86,080	87,342	88,568	88,198	87,951	86,080	83,101	80,838	79,686	84,994
1967	80,184	81,002	83,101	84,366	86,080	87,223	86,985	87,104	87,951	86,235	83,892	82,619	84,839
1968	82,940	84,208	85,459	86,985	88,321	89,454	90,224	90,488	90,753	89,198	88,321	87,104	87,951
1969	87,461	88,568	89,837	91,149	92,776	93,338	94,181	94,181	94,181	92,231	90,620	89,581	91,549
1970	90,356	91,281	92,231	93,619	94,181	94,181	94,181	94,181	93,479	91,413	89,581	89,070	92,231
1971	89,326	91,149	91,822	93,198	94,041	94,181	94,181	94,181	93,760	91,281	89,454	88,943	92,095
1972	90,620	91,017	92,231	93,338	94,181	94,181	94,181	93,619	92,503	89,837	88,198	87,223	91,686
1973	88,074	89,070	90,092	91,281	92,640	93,900	94,181	94,905	94,181	91,958	90,488	89,709	91,686
1974	90,224	91,686	92,503	93,760	94,181	94,181	94,181	93,900	93,338	91,017	89,070	87,704	92,095
1975	88,321	89,454	90,092	91,549	92,917	93,760	94,181	94,326	95,778	93,900	91,281	90,224	92,095
1976	91,017	92,231	93,760	94,181	94,181	94,181	94,181	94,041	91,958	90,224	88,074	87,342	92,095
1977	87,223	87,827	88,943	89,709	90,753	91,549	91,686	92,095	90,092	88,074	86,390	84,839	89,070
1978	85,770	86,509	87,342	88,943	90,224	92,095	94,181	94,181	93,057	90,620	88,692	88,943	89,964
1979	88,943	90,356	91,549	92,917	94,181	94,181	94,181	93,619	91,413	89,198	87,704	86,509	91,149
1980	87,223	88,321	89,581	91,413	93,900	93,900	94,181	95,195	94,181	92,095	92,503	90,885	91,958
1981	91,413	92,503	93,760	94,041	94,181	94,181	94,181	94,181	92,095	90,092	87,951	87,104	92,095
1982	88,692	89,709	91,017	92,503	94,181	94,041	94,181	95,629	94,905	93,198	91,281	92,367	92,640
1983	93,760	94,181	94,181	94,181	94,760	97,233	97,465	99,480	100,978	98,759	97,233	95,339	96,671
1984	94,760	95,050	95,339	95,195	95,050	96,075	98,162	100,722	100,850	98,759	97,117	95,339	97,117
1985	94,615	94,181	94,181	94,181	94,181	94,905	96,522	97,581	95,339	93,760	91,686	90,885	94,326
1986	91,958	93,479	94,181	94,181	94,760	97,465	98,999	100,225	99,240	97,233	94,905	93,338	95,927
1987	94,181	94,181	94,181	94,181	94,181	94,181	94,181	94,041	92,231	89,964	88,568	87,580	92,640
1988	88,321	89,454	90,488	91,822	92,776	93,198	93,760	93,198	91,017	88,568	86,628	86,747	90,488
1989	85,770	86,628	87,461	88,198	89,454	91,149	91,413	89,964	88,198	85,304	82,780	85,149	87,704
1990	86,080	86,747	87,461	89,198	90,620	91,413	90,488	89,837	88,074	85,459	82,459	81,165	87,580
1991	81,977	82,780	83,577	84,681	86,080	86,866	87,223	87,342	86,628	82,619	79,853	79,519	84,208
1992	80,020	81,329	82,780	84,366	85,770	86,747	86,235	84,681	82,780	79,019	75,775	76,988	82,459
1993	77,669	79,186	80,674	83,261	85,304	87,827	88,198	89,964	89,581	87,827	86,235	85,459	85,459
1994	86,235	87,104	88,074	89,070	90,224	90,885	91,149	90,620	88,692	86,080	83,577	81,977	87,951
1995	83,419	84,839	86,080	87,704	88,815	89,964	90,356	93,619	93,338	91,822	90,092	88,943	89,070
1996	89,581	90,356	91,549	91,958	93,619	93,900	94,181	94,181	94,181	92,095	90,356	89,709	92,095
1997	89,964	91,549	92,776	94,181	94,181	94,181	94,760	96,224	95,927	93,198	92,231	91,958	93,338
1998	92,776	94,181	94,181	94,181	94,181	94,181	94,181	95,778	96,075	94,181	92,367	92,367	94,041
1999	92,640	94,041	94,181	94,181	94,181	94,181	94,181	95,050	94,181	92,367	90,885	89,964	93,338
Average	85,540	86,596	87,692	88,845	89,910	90,721	91,200	91,487	90,537	88,173	86,143	85,226	88,593
Maximum	94,760	95,050	95,339	95,195	95,050	97,465	98,999	100,722	100,978	98,759	97,233	95,339	97,117
Minimum	69,887	71,794	73,473	75,252	76,817	78,181	79,519	78,351	76,988	73,652	70,334	69,887	75,252

Central Utah Project Completion Program

Attachment C

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Attachment C

Utah Lake Drainage Basin Water Delivery System Bonneville Unit, Central Utah Project
2004 Supplement to the 1988 Definite Plan Report

Water Supply Appendix
Volume 6 Attachment C: Utah Lake Salinity Analysis

October 2004

UTAH LAKE SPREADSHEET MODEL – BONNEVILLE UNIT CONDITIONS

Notes on the Utah Lake Spreadsheet Model

The Utah Lake Spreadsheet Model is a set of linked worksheets tracking the inflow, storage, and release of water from Utah Lake. The following print-out of the model shows the most important columns of the main worksheet of the model. The main functionality of the model, other than the adding of inflows and subtracting of outflows, is in computing spills, in Column 13. Spills are computed based upon the most recent stage-discharge curve for the Utah Lake outlet structure, assuming that the gates are fully raised.

MONTHLY SUMMARY OF UTAH LAKE WATER BALANCE ELEMENTS

Date	Water Year	Month	days	Provo Inflow (acre-ft)	Spanish Fork Inflow (acre-ft)	Local Surface and Sub-surface (acre-ft)	Hobble Creek (includes ULS water) (acre-ft)	Change in Return Flows (acre-ft)	Total Inflow (acre-ft)	Precip Vol (acre-ft)	Total Inflows PROSIM (acre-ft)	Total Inflows plus Precip (acre-ft)
Column No.:				1	2	3	4	5	6	7	8	9
Oct-49	1949	10	31	4,611	5,613	-	-	(192)	10032	16,968	10,032	27,000
Nov-49	1949	11	30	4,580	7,036	(3,043)	1,204	(192)	9585	2,677	9,585	12,262
Dec-49	1949	12	31	6,641	7,034	29,645	1,355	(192)	44483	11,587	44,483	56,069
Jan-50	1950	1	31	4,611	7,952	30,473	1,337	(192)	44181	13,817	44,181	57,998
Feb-50	1950	2	28	3,353	8,162	36,406	1,224	(192)	48952	6,197	48,952	55,150
Mar-50	1950	3	31	2,943	9,911	23,891	2,059	(192)	38612	6,508	38,612	45,119
Apr-50	1950	4	30	10,542	13,325	17,722	6,248	(192)	47645	4,096	47,645	51,741
May-50	1950	5	31	39,571	9,040	31,245	6,119	(192)	85783	9,732	85,783	95,515
Jun-50	1950	6	30	42,536	80	24,222	2,380	(192)	69026	1,286	69,026	70,311
Jul-50	1950	7	31	8,840	35	30,720	472	(192)	39875	3,909	39,875	43,784
Aug-50	1950	8	31	3,254	136	29,220	555	(192)	32973	442	32,973	33,416
Sep-50	1950	9	30	4,112	404	21,740	248	(192)	26311	5,638	26,311	31,949
Oct-50	1950	10		1,149	4,029	33,160	136	(192)	38282	3,915	38,282	42,197
Nov-50	1950	11		2,623	6,791	27,905	1,525	(192)	38651	14,174	38,651	52,825
Dec-50	1950	12		5,631	8,030	34,629	1,621	(192)	49719	9,813	49,719	59,532
Jan-51	1951	1		4,376	8,179	30,846	1,384	(192)	44592	8,483	44,592	53,075
Feb-51	1951	2		4,081	8,269	26,718	1,412	(192)	40288	4,456	40,288	44,744
Mar-51	1951	3		4,950	9,167	16,195	2,035	(192)	32154	5,637	32,154	37,791
Apr-51	1951	4		7,257	8,255	27,300	6,700	(192)	49320	17,174	49,320	66,493
May-51	1951	5		52,617	3,983	37,465	6,149	(192)	100021	11,458	100,021	111,480
Jun-51	1951	6		42,932	(0)	29,080	2,380	(192)	74199	3,410	74,199	77,609
Jul-51	1951	7		7,579	110	32,340	524	(192)	40360	3,931	40,360	44,291
Aug-51	1951	8		620	713	26,960	468	(192)	28569	7,160	28,569	35,730
Sep-51	1951	9		593	290	17,690	316	(192)	18696	445	18,696	19,141
Oct-51	1951	10		2,573	3,243	32,830	151	(192)	38604	12,962	38,604	51,566
Nov-51	1951	11		2,542	6,377	37,798	1,472	(192)	47996	10,378	47,996	58,374
Dec-51	1951	12		4,632	6,654	30,844	1,426	(192)	43364	27,762	43,364	71,126
Jan-52	1952	1		4,148	7,307	47,561	1,589	(192)	60412	8,674	60,412	69,086
Feb-52	1952	2		2,542	7,502	59,361	1,379	(192)	70591	5,231	70,591	75,822
Mar-52	1952	3		17,260	9,881	66,327	1,613	(192)	94888	19,271	94,888	114,159
Apr-52	1952	4		49,347	64,994	35,418	20,492	(192)	170059	8,566	170,059	178,625
May-52	1952	5		86,955	95,582	66,649	29,431	(192)	278425	10,842	278,425	289,267
Jun-52	1952	6		62,418	13,607	39,880	5,094	(192)	120806	6,968	120,806	127,774
Jul-52	1952	7		8,445	(0)	49,539	1,350	(192)	59142	4,190	59,142	63,332
Aug-52	1952	8		614	0	38,360	907	(192)	39688	8,807	39,688	48,495
Sep-52	1952	9		561	1,428	31,770	857	(192)	34424	314	34,424	34,738
Oct-52	1952	10		1,178	2,577	38,450	849	(192)	42862	-	42,862	42,862
Nov-52	1952	11		2,663	8,836	55,534	1,716	(192)	68556	4,477	68,556	73,033
Dec-52	1952	12		5,168	10,931	14,489	1,831	(192)	32227	4,627	32,227	36,853
Jan-53	1953	1		4,370	10,321	36,690	1,940	(192)	53129	12,257	53,129	65,386
Feb-53	1953	2		3,040	8,134	19,716	1,474	(192)	32172	1,886	32,172	34,058
Mar-53	1953	3		6,978	10,720	29,945	1,755	(192)	49206	8,881	49,206	58,087
Apr-53	1953	4		6,455	8,498	23,184	4,726	(192)	42671	9,902	42,671	52,574
May-53	1953	5		17,605	2,530	29,332	1,038	(192)	50312	3,458	50,312	53,770
Jun-53	1953	6		47,871	30	28,602	562	(192)	76873	468	76,873	77,341
Jul-53	1953	7		1,997	180	40,930	383	(192)	43298	3,489	43,298	46,787
Aug-53	1953	8		637	430	20,730	314	(192)	21919	9,311	21,919	31,230
Sep-53	1953	9		596	594	29,260	133	(192)	30391	815	30,391	31,206
Oct-53	1953	10		1,205	1,761	29,360	-	(192)	32134	5,779	32,134	37,913
Nov-53	1953	11		4,838	7,020	31,039	1,361	(192)	44066	6,284	44,066	50,350
Dec-53	1953	12		2,988	7,979	28,651	1,279	(192)	40705	5,383	40,705	46,088
Jan-54	1954	1		2,279	8,350	32,199	1,351	(192)	43986	7,454	43,986	51,441
Feb-54	1954	2		2,249	8,083	27,319	1,271	(192)	38729	2,567	38,729	41,297
Mar-54	1954	3		1,626	9,571	30,866	1,444	(192)	43315	9,760	43,315	53,075
Apr-54	1954	4		5,928	6,130	14,182	3,728	(192)	29776	5,784	29,776	35,559
May-54	1954	5		6,850	10	13,460	213	(192)	20341	3,081	20,341	23,422
Jun-54	1954	6		1,085	223	31,290	387	(192)	32793	6,800	32,793	39,593
Jul-54	1954	7		1,282	215	22,270	333	(192)	23907	5,058	23,907	28,964
Aug-54	1954	8		539	83	16,380	281	(192)	17090	1,234	17,090	18,324
Sep-54	1954	9		482	180	20,390	-	(192)	20860	10,787	20,860	31,646
Oct-54	1954	10		1,160	1,610	26,030	-	(192)	28607	4,435	28,607	33,042
Nov-54	1954	11		2,477	6,050	29,548	962	(192)	38845	5,601	38,845	44,446
Dec-54	1954	12		1,701	6,439	28,521	1,029	(192)	37497	2,940	37,497	40,438
Jan-55	1955	1		1,650	6,169	33,976	974	(192)	42576	7,947	42,576	50,523
Feb-55	1955	2		1,461	6,252	21,398	822	(192)	29740	13,086	29,740	42,826
Mar-55	1955	3		1,594	10,359	44,981	1,109	(192)	57850	805	57,850	58,656
Apr-55	1955	4		4,927	10,563	28,641	4,760	(192)	48698	3,862	48,698	52,560
May-55	1955	5		10,131	2,100	11,689	6,126	(192)	29854	7,645	29,854	37,499
Jun-55	1955	6		3,121	(0)	31,170	2,380	(192)	36479	10,714	36,479	47,192

10	11	12	13	14	15	16	17	18	19	20
			0.95	K factor	45,000	Evap Factor		800000		
				1		0.955	2			
Jordan River Primary Demands (acre-ft)	Jordan River Secondary Demands (acre-ft)	Outflow Adjust-ment (acre-ft)	Jordan River Spill Calcula-tion (cfs)	Jordan River Outflows (acre-ft)	Evap Vol (acre-ft)	Jordan River Outflows pus Evap (acre-ft)	End-of-mont UL Storage (acre-ft)	Monthly Average Storage (acre-ft)	End-of-month UL Surface Area (acre)	Monthly Average Surface Area (acre)
8,744	628	-	-	-	25,657	35,028	544,504	548,518	84,538	84,688
4,860	1,098	-	-	-	13,523	19,480	537,286	540,895	84,267	84,402
2,099	1,098	-	-	-	8,047	11,244	582,111	559,698	85,911	85,089
663	1,098	-	-	-	2,803	4,564	635,545	608,828	87,490	86,700
4,087	1,098	-	-	-	5,292	10,476	680,218	657,882	88,739	88,115
7,622	1,647	-	-	-	13,912	23,181	702,156	691,187	89,364	89,052
10,163	2,776	-	-	-	22,474	35,412	718,485	710,321	89,830	89,597
17,895	7,810	-	-	-	38,319	64,024	749,976	734,230	90,742	90,286
28,058	8,940	-	-	-	51,851	88,849	731,439	740,707	90,202	90,472
31,813	10,586	-	-	-	61,879	104,279	670,944	701,191	88,479	89,341
32,034	9,541	-	-	-	54,712	96,288	608,072	639,508	86,738	87,609
24,081	7,199	-	-	-	39,968	71,247	568,773	588,423	85,427	86,083
10,494	2,776	-	-	-	27,738	41,008	569,963	569,368	85,471	85,449
3,977	1,098	-	-	-	15,237	20,311	602,476	586,219	86,585	86,028
3,756	1,098	-	-	-	12,059	16,912	645,096	623,786	87,755	87,170
663	1,098	-	-	-	2,724	4,484	693,687	669,391	89,122	88,439
1,546	1,098	-	-	-	4,894	7,538	730,893	712,290	90,186	89,654
3,535	1,647	-	-	-	11,986	17,168	751,516	741,205	90,787	90,487
9,721	2,776	-	-	-	23,987	36,484	781,525	766,521	91,665	91,226
19,662	7,810	-	623	-	39,028	66,500	826,504	804,015	92,999	92,332
27,726	18,106	-	332	-	48,552	94,384	809,730	818,117	92,499	92,749
30,930	21,440	-	-	-	61,836	114,206	739,815	774,773	90,446	91,473
24,854	9,541	-	-	-	54,993	89,388	686,157	712,986	88,907	89,677
27,284	7,199	-	-	-	39,128	73,610	631,687	658,922	87,385	88,146
9,168	2,776		-	-	28,096	40,040	643,214	637,451	87,703	87,544
3,598	1,098		-	-	13,192	17,887	683,701	663,458	88,837	88,270
3,598	1,098		-	-	8,060	12,755	742,072	712,886	90,512	89,674
3,598	1,098		-	-	2,809	7,505	803,653	772,862	92,320	91,416
3,598	2,223	21,000	739	21,000	5,290	32,111	847,364	825,508	93,626	92,973
5,451	3,335	-	1,322	70,667	12,071	91,523	870,000	858,682	94,309	93,968
9,049	5,622	-	1,496	74,342	22,366	111,379	937,246	903,623	96,370	95,339
25,401	15,818	-	1,988	81,029	42,028	164,277	1,062,237	999,742	99,542	97,956
28,999	18,106	-	1,827	61,607	58,305	167,018	1,022,993	1,042,615	98,587	99,064
34,450	21,440	-	1,494	35,940	66,847	158,676	927,649	975,321	96,073	97,330
31,070	19,324	-	1,285	-	59,943	110,337	865,806	896,727	94,181	95,127
23,548	14,579	-	498	-	43,922	82,049	818,494	842,150	92,759	93,470
9,049	5,622	390	-	390	32,481	47,542	813,814	816,154	92,620	92,690
3,598	2,223	780	837	780	16,880	23,480	863,367	838,590	94,108	93,364
3,598	2,223	780	1,016	15,817	9,362	31,000	869,220	866,293	94,285	94,196
3,598	2,223	780	1,289	53,937	5,628	65,386	869,220	869,220	94,285	94,285
3,598	2,223	-	1,057	21,679	5,778	33,278	870,000	869,610	94,309	94,297
5,451	3,335	-	1,276	35,040	14,260	58,087	870,000	870,000	94,309	94,309
9,049	5,622	-	1,196	15,011	22,892	52,574	870,000	870,000	94,309	94,309
25,401	15,818	-	858	-	34,975	76,194	847,576	858,788	93,633	93,971
28,999	18,106	-	794	-	50,149	97,254	827,663	837,619	93,034	93,334
34,450	21,440	-	-	-	65,229	121,119	753,330	790,497	90,840	91,937
31,070	9,541	-	-	-	56,389	97,000	687,560	720,445	88,947	89,893
23,548	7,199	-	-	-	41,977	72,723	646,043	666,802	87,782	88,365
9,049	2,776	-	-	-	29,411	41,236	642,720	644,381	87,689	87,735
3,598	1,098	-	-	-	17,098	21,793	671,277	656,998	88,489	88,089
3,598	1,098	-	-	-	7,394	12,090	705,275	688,276	89,453	88,971
3,598	1,098	-	-	-	6,336	11,032	745,684	725,479	90,617	90,035
3,598	1,098	-	-	-	6,202	10,898	776,083	760,884	91,503	91,060
5,451	1,647	-	-	-	11,069	18,167	810,992	793,537	92,537	92,020
9,049	5,622	-	-	-	24,302	38,973	807,578	809,285	92,436	92,486
25,401	15,818	-	-	-	42,225	83,444	747,555	777,566	90,671	91,554
28,999	8,940	-	-	-	50,944	88,884	698,265	722,910	89,253	89,962
34,450	10,586	-	-	-	60,802	105,838	621,391	659,828	87,103	88,178
31,070	9,541	-	-	-	52,891	93,502	546,213	583,802	84,602	85,852
23,548	7,199	-	-	-	39,387	70,134	507,726	526,970	83,153	83,877
7,953	2,776	-	-	-	26,735	37,464	503,304	505,515	82,981	83,067
994	422	-	-	-	15,915	17,332	530,419	516,861	84,009	83,495
994	317	-	-	-	8,625	9,935	560,921	545,670	85,143	84,576
221	106	-	-	-	2,439	2,766	608,678	584,800	86,755	85,949
221	106	-	-	-	3,521	3,848	647,656	628,167	87,827	87,291
331	106	-	-	-	12,162	12,599	693,713	670,685	89,123	88,475
884	317	-	-	-	22,555	23,755	722,518	708,116	89,945	89,534
18,116	6,649	-	-	-	36,006	60,771	699,246	710,882	89,281	89,613
22,424	8,233	-	-	-	48,600	79,257	667,182	683,214	88,374	88,827

MONTHLY SUMMARY OF UTAH LAKE WATER BALANCE ELEMENTS

Date	Water Year	Month	days	Provo Inflow (acre-ft)	Spanish Fork Inflow (acre-ft)	Local Surface and Sub-surface (acre-ft)	Hobble Creek (includes ULS water) (acre-ft)	Change in Return Flows (acre-ft)	Total Inflow (acre-ft)	Precip Vol (acre-ft)	Total Inflows PROSIM (acre-ft)	Total Inflows plus Precip (acre-ft)
Column No.:				1	2	3	4	5	6	7	8	9
Jul-55	1955	7		1,502	42	14,880	429	(192)	16661	1,473	16,661	18,134
Aug-55	1955	8		610	170	23,660	266	(192)	24514	2,368	24,514	26,882
Sep-55	1955	9		549	605	9,940	84	(192)	10986	12,487	10,986	23,473
Oct-55	1955	10		1,746	2,231	26,890	-	(192)	30675	3,531	30,675	34,206
Nov-55	1955	11		3,320	6,310	25,643	857	(192)	35937	10,236	35,937	46,173
Dec-55	1955	12		4,147	8,199	23,553	1,127	(192)	36834	7,916	36,834	44,750
Jan-56	1956	1		1,689	8,809	28,674	1,186	(192)	40166	14,216	40,166	54,381
Feb-56	1956	2		1,535	7,972	28,633	877	(192)	38824	7,871	38,824	46,695
Mar-56	1956	3		1,634	10,779	21,257	2,093	(192)	35571	145	35,571	35,716
Apr-56	1956	4		6,038	5,879	12,650	4,760	(192)	29134	3,437	29,134	32,571
May-56	1956	5		10,529	190	23,991	6,149	(192)	40667	2,250	40,667	42,917
Jun-56	1956	6		5,215	-	11,180	2,380	(192)	18582	-	18,582	18,582
Jul-56	1956	7		3,756	30	19,750	352	(192)	23695	4,082	23,695	27,777
Aug-56	1956	8		1,530	0	25,600	372	(192)	27310	-	27,310	27,310
Sep-56	1956	9		542	70	15,910	91	(192)	16421	198	16,421	16,619
Oct-56	1956	10		991	3,196	14,830	-	(192)	18824	6,745	18,824	25,569
Nov-56	1956	11		3,234	5,960	33,824	746	(192)	43572	447	43,572	44,019
Dec-56	1956	12		2,098	7,449	33,376	904	(192)	43635	3,253	43,635	46,888
Jan-57	1957	1		1,835	7,499	18,448	922	(192)	28512	12,689	28,512	41,201
Feb-57	1957	2		1,854	9,123	26,936	954	(192)	38674	4,465	38,674	43,139
Mar-57	1957	3		1,611	9,169	16,994	1,256	(192)	28838	11,157	28,838	39,995
Apr-57	1957	4		5,592	10,521	42,798	4,760	(192)	63478	12,278	63,478	75,756
May-57	1957	5		9,540	19,037	20,637	6,863	(192)	55884	23,536	55,884	79,421
Jun-57	1957	6		19,901	7,550	38,528	3,299	(192)	69087	8,401	69,087	77,488
Jul-57	1957	7		4,250	133	27,350	420	(192)	31960	1,522	31,960	33,483
Aug-57	1957	8		3,241	223	21,880	359	(192)	25511	4,997	25,511	30,508
Sep-57	1957	9		3,044	595	23,050	208	(192)	26704	1,299	26,704	28,003
Oct-57	1957	10		1,246	2,532	26,620	31	(192)	30236	5,899	30,236	36,135
Nov-57	1957	11		4,974	7,550	37,588	1,142	(192)	51062	6,034	51,062	57,096
Dec-57	1957	12		2,119	8,429	26,245	1,125	(192)	37726	9,858	37,726	47,584
Jan-58	1958	1		1,690	8,229	26,950	1,010	(192)	37687	6,136	37,687	43,823
Feb-58	1958	2		1,702	8,743	35,188	1,192	(192)	46632	10,072	46,632	56,704
Mar-58	1958	3		1,659	11,599	30,316	1,494	(192)	44876	13,512	44,876	58,388
Apr-58	1958	4		6,494	17,320	20,780	4,760	(192)	49162	6,299	49,162	55,461
May-58	1958	5		31,504	15,989	38,995	9,535	(192)	95831	3,252	95,831	99,083
Jun-58	1958	6		13,307	110	21,634	2,380	(192)	37239	2,309	37,239	39,547
Jul-58	1958	7		3,882	124	20,990	612	(192)	25415	439	25,415	25,854
Aug-58	1958	8		3,205	20	43,180	553	(192)	46765	3,700	46,765	50,465
Sep-58	1958	9		2,590	391	21,930	289	(192)	25008	6,949	25,008	31,957
Oct-58	1958	10		931	2,571	28,880	247	(192)	32436	-	32,436	32,436
Nov-58	1958	11		2,954	6,459	35,926	1,154	(192)	46301	7,531	46,301	53,832
Dec-58	1958	12		1,983	8,679	34,195	1,105	(192)	45770	3,720	45,770	49,489
Jan-59	1959	1		1,657	8,529	26,159	1,031	(192)	37184	8,764	37,184	45,948
Feb-59	1959	2		1,463	8,253	30,005	1,045	(192)	40573	14,482	40,573	55,055
Mar-59	1959	3		1,606	9,049	25,778	1,212	(192)	37452	2,831	37,452	40,284
Apr-59	1959	4		5,415	3,694	13,460	4,760	(192)	27137	9,814	27,137	36,951
May-59	1959	5		10,049	352	18,060	6,149	(192)	34417	7,046	34,417	41,464
Jun-59	1959	6		4,768	138	16,550	2,380	(192)	23644	6,401	23,644	30,045
Jul-59	1959	7		2,773	50	21,230	296	(192)	24157	855	24,157	25,012
Aug-59	1959	8		536	87	22,510	203	(192)	23144	10,706	23,144	33,850
Sep-59	1959	9		507	447	20,100	-	(192)	20861	11,908	20,861	32,769
Oct-59	1959	10		1,027	3,221	28,730	-	(192)	32786	1,325	32,786	34,111
Nov-59	1959	11		2,611	4,859	21,744	736	(192)	29758	398	29,758	30,155
Dec-59	1959	12		1,743	6,339	37,605	695	(192)	46190	5,472	46,190	51,662
Jan-60	1960	1		1,671	7,229	30,352	738	(192)	39798	6,748	39,798	46,546
Feb-60	1960	2		1,524	6,601	29,568	652	(192)	38153	16,134	38,153	54,286
Mar-60	1960	3		1,622	9,190	26,623	1,107	(192)	38350	10,377	38,350	48,727
Apr-60	1960	4		5,914	5,655	9,561	4,760	(192)	25698	4,328	25,698	30,026
May-60	1960	5		10,055	40	22,610	6,149	(192)	38661	2,455	38,661	41,115
Jun-60	1960	6		2,325	0	16,760	2,380	(192)	21273	1,284	21,273	22,556
Jul-60	1960	7		25,580	0	(29,060)	375	(192)	-3298	-	(3,298)	(3,298)
Aug-60	1960	8		336	519	8,200	248	(192)	9111	2,702	9,111	11,813
Sep-60	1960	9		413	1,206	16,950	-	(192)	18376	5,328	18,376	23,704
Oct-60	1960	10		1,099	3,225	23,850	-	(192)	27981	10,620	27,981	38,601
Nov-60	1960	11		1,758	5,810	49,792	688	(192)	57856	5,250	57,856	63,106
Dec-60	1960	12		1,690	6,569	24,877	633	(192)	33576	4,312	33,576	37,888
Jan-61	1961	1		1,567	6,599	22,500	670	(192)	31144	-	31,144	31,144
Feb-61	1961	2		1,647	6,272	24,851	579	(192)	33157	3,918	33,157	37,075
Mar-61	1961	3		1,550	7,069	3,538	1,353	(192)	13318	16,447	13,318	29,764

10	11	12	13	14	15	16	17	18	19	20
			0.95	K factor	45,000	Evap Factor		800000		
				1		0.955	2			
Jordan River Primary Demands (acre-ft)	Jordan River Secondary Demands (acre-ft)	Outflow Adjust-ment (acre-ft)	Jordan River Spill Calcula-tion (cfs)	Jordan River Outflows (acre-ft)	Evap Vol (acre-ft)	Jordan River Outflows pus Evap (acre-ft)	End-of-mont UL Storage (acre-ft)	Monthly Average Storage (acre-ft)	End-of-month UL Surface Area (acre)	Monthly Average Surface Area (acre)
31,151	11,399	-	-	-	55,421	97,971	587,345	627,263	86,100	87,237
29,052	21,590	-	-	-	53,378	104,020	510,206	548,776	83,249	84,675
23,860	8,760	-	-	-	35,843	68,463	465,217	487,712	81,492	82,371
7,180	5,344	-	-	-	25,293	37,817	461,606	463,411	81,346	81,419
442	-	-	-	-	13,660	14,102	493,678	477,642	82,606	81,976
331	-	-	-	-	7,034	7,365	531,063	512,370	84,033	83,319
221	-	-	-	-	4,347	4,568	580,876	555,969	85,866	84,949
110	-	-	-	-	4,510	4,620	622,951	601,914	87,145	86,506
110	-	-	-	-	13,455	13,565	645,103	634,027	87,756	87,451
32,255	-	-	-	-	24,583	56,838	620,836	632,969	87,088	87,422
21,319	5,341	-	-	-	34,723	61,383	602,369	611,602	86,582	86,835
26,511	6,471	-	-	-	45,615	78,597	542,354	572,361	84,457	85,520
31,813	8,117	-	-	-	58,341	98,272	471,859	507,106	81,757	83,107
30,709	7,073	-	-	-	50,881	88,662	410,507	441,183	79,247	80,502
25,075	4,730	-	-	-	36,957	66,762	360,364	385,435	77,080	78,163
7,732	2,776	-	-	-	24,721	35,229	350,703	355,533	76,655	76,868
331	106	-	-	-	11,530	11,967	382,755	366,729	78,065	77,360
331	106	-	-	-	7,455	7,892	421,751	402,253	79,721	78,893
-	-	-	-	-	5,393	5,393	457,559	439,655	81,182	80,451
-	-	-	-	-	6,008	6,008	494,690	476,125	82,645	81,914
-	-	-	-	-	12,168	12,168	522,517	508,604	83,712	83,179
-	-	-	-	-	17,921	17,921	580,352	551,435	85,847	84,779
10,604	3,905	-	-	-	30,949	45,458	614,315	597,334	86,909	86,378
20,436	7,494	-	-	-	46,341	74,270	617,532	615,924	86,997	86,953
36,011	13,193	-	-	-	59,612	108,816	542,199	579,866	84,451	85,724
29,383	10,766	-	-	-	53,566	93,714	478,992	510,596	82,034	83,243
23,860	8,760	-	-	-	35,189	67,809	439,186	459,089	80,438	81,236
7,401	2,744	-	-	-	25,734	35,879	439,442	439,314	80,449	80,443
773	1,098	-	-	-	12,677	14,547	481,991	460,716	82,151	81,300
773	1,098	-	-	-	6,276	8,147	521,428	501,709	83,671	82,911
1,105	-	-	-	-	3,995	5,100	560,150	540,789	85,115	84,393
2,762	-	-	-	-	7,112	9,874	606,980	583,565	86,708	85,912
2,541	-	-	-	-	12,835	15,376	649,992	628,486	87,893	87,301
2,209	-	-	-	-	24,342	26,551	678,902	664,447	88,702	88,297
23,308	7,810	-	-	-	44,544	75,662	702,324	690,613	89,369	89,036
28,389	8,940	-	-	-	57,111	94,441	647,430	674,877	87,821	88,595
33,360	10,586	-	-	-	61,714	105,660	567,625	607,528	85,386	86,603
36,342	9,541	-	-	-	58,236	104,119	513,971	540,798	83,391	84,388
26,290	7,199	-	-	-	39,687	73,175	472,753	493,362	81,791	82,591
10,936	2,776	-	-	-	28,055	41,767	463,423	468,088	81,419	81,605
5,744	1,098	-	-	-	15,357	22,198	495,057	479,240	82,660	82,039
1,988	1,098	-	-	-	7,697	10,782	533,764	514,410	84,134	83,397
663	-	-	-	-	5,290	5,953	573,759	553,762	85,608	84,871
663	-	-	-	-	6,336	6,999	621,816	597,788	87,114	86,361
221	-	-	-	-	12,202	12,423	649,676	635,746	87,884	87,499
5,634	-	-	-	-	24,339	29,973	656,653	653,165	88,079	87,981
24,191	7,810	-	-	-	37,852	69,853	628,264	642,459	87,291	87,685
28,058	8,940	-	-	-	49,531	86,529	571,780	600,022	85,536	86,414
31,703	10,586	-	-	-	53,573	95,862	500,929	536,354	82,888	84,212
28,831	9,541	-	-	-	50,002	88,374	446,406	473,667	80,730	81,809
19,994	7,199	-	-	-	35,658	62,850	416,324	431,365	79,492	80,111
5,855	2,776	-	-	-	24,040	32,671	417,765	417,044	79,553	79,522
3,093	1,161	-	-	-	13,485	17,739	430,181	423,973	80,074	79,813
884	317	-	-	-	7,902	9,102	472,740	451,461	81,791	80,932
221	-	-	-	-	3,515	3,736	515,550	494,145	83,450	82,621
110	-	-	-	-	4,715	4,825	565,011	540,281	85,291	84,371
221	-	-	-	-	12,286	12,507	601,231	583,121	86,551	85,921
3,093	-	-	-	-	24,039	27,132	604,124	602,678	86,630	86,591
24,191	7,810	-	-	-	40,125	72,126	573,113	588,619	85,585	86,108
26,953	6,471	-	-	-	52,786	86,210	509,459	541,286	83,220	84,402
31,040	8,117	-	-	-	60,335	99,492	406,669	458,064	79,085	81,153
22,976	7,073	-	-	-	49,595	79,644	338,838	372,754	76,110	77,597
16,017	4,730	-	-	-	36,948	57,695	304,847	321,843	74,528	75,319
3,756	1,372	-	-	-	23,606	28,734	314,714	309,781	74,999	74,763
663	211	-	-	-	13,191	14,065	363,755	339,234	77,229	76,114
663	211	-	-	-	5,716	6,590	395,053	379,404	78,595	77,912
-	-	-	-	-	5,254	5,254	420,942	407,998	79,686	79,141
-	-	-	-	-	7,800	7,800	450,217	435,580	80,885	80,286
-	-	-	-	-	11,072	11,072	468,910	459,563	81,641	81,263

MONTHLY SUMMARY OF UTAH LAKE WATER BALANCE ELEMENTS

Date	Water Year	Month	days	Provo Inflow (acre-ft)	Spanish Fork Inflow (acre-ft)	Local Surface and Sub-surface (acre-ft)	Hobble Creek (includes ULS water) (acre-ft)	Change in Return Flows (acre-ft)	Total Inflow (acre-ft)	Precip Vol (acre-ft)	Total Inflows PROSIM (acre-ft)	Total Inflows plus Precip (acre-ft)
Column No.:				1	2	3	4	5	6	7	8	9
Apr-61	1961	4		5,065	3,368	7,480	4,760	(192)	20480	5,103	20,480	25,583
May-61	1961	5		8,949	20	4,950	5,498	(192)	19224	887	19,224	20,111
Jun-61	1961	6		4,193	344	(5,250)	2,380	(192)	1475	-	1,475	1,475
Jul-61	1961	7		350	141	8,620	233	(192)	9151	5,078	9,151	14,230
Aug-61	1961	8		359	133	7,540	114	(192)	7953	6,506	7,953	14,459
Sep-61	1961	9		426	1,546	9,750	0	(192)	11530	13,450	11,530	24,980
Oct-61	1961	10		1,023	4,509	19,090	-	(192)	24429	12,951	24,429	37,380
Nov-61	1961	11		1,550	5,730	16,448	532	(192)	24068	6,710	24,068	30,778
Dec-61	1961	12		1,550	5,749	17,858	582	(192)	25547	10,912	25,547	36,458
Jan-62	1962	1		1,550	6,389	18,680	580	(192)	27007	2,439	27,007	29,446
Feb-62	1962	2		1,469	9,872	29,436	684	(192)	41269	15,906	41,269	57,174
Mar-62	1962	3		1,550	10,169	22,539	851	(192)	34917	11,012	34,917	45,928
Apr-62	1962	4		4,879	22,566	18,385	9,785	(192)	55423	9,228	55,423	64,651
May-62	1962	5		12,519	5,497	25,079	6,149	(192)	49051	13,654	49,051	62,705
Jun-62	1962	6		5,049	1,250	10,102	2,380	(192)	18589	4,657	18,589	23,246
Jul-62	1962	7		4,029	50	3,490	311	(192)	7688	3,475	7,688	11,162
Aug-62	1962	8		3,219	40	15,440	424	(192)	18930	-	18,930	18,930
Sep-62	1962	9		2,903	27	21,530	165	(192)	24432	3,322	24,432	27,754
Oct-62	1962	10		1,154	3,621	32,620	0	(192)	37202	4,925	37,202	42,127
Nov-62	1962	11		2,358	5,659	28,467	813	(192)	37105	1,998	37,105	39,102
Dec-62	1962	12		1,757	6,409	11,647	803	(192)	20424	61	20,424	20,485
Jan-63	1963	1		1,935	6,719	18,102	758	(192)	27322	8,122	27,322	35,444
Feb-63	1963	2		2,122	6,542	20,356	1,384	(192)	30211	2,468	30,211	32,679
Mar-63	1963	3		1,638	3,479	16,198	952	(192)	22074	13,254	22,074	35,329
Apr-63	1963	4		4,963	2,621	18,302	4,760	(192)	30453	20,213	30,453	50,666
May-63	1963	5		10,534	540	7,007	6,149	(192)	24037	3,781	24,037	27,818
Jun-63	1963	6		4,768	-	19,770	2,380	(192)	26726	7,588	26,726	34,314
Jul-63	1963	7		3,930	717	18,550	410	(192)	23414	64	23,414	23,479
Aug-63	1963	8		3,155	31	15,740	314	(192)	19047	3,935	19,047	22,982
Sep-63	1963	9		3,623	-	35,930	-	(192)	39361	6,977	39,361	46,338
Oct-63	1963	10		4,611	1,781	21,610	1,486	(192)	29296	3,439	29,296	32,734
Nov-63	1963	11		6,441	5,740	23,013	2,257	(192)	37259	8,682	37,259	45,941
Dec-63	1963	12		4,611	6,599	22,409	2,329	(192)	35756	3,236	35,756	38,992
Jan-64	1964	1		4,611	6,499	19,301	2,444	(192)	32664	7,114	32,664	39,777
Feb-64	1964	2		2,117	5,801	26,151	2,170	(192)	36047	440	36,047	36,487
Mar-64	1964	3		1,627	6,891	38,816	2,380	(192)	49521	7,879	49,521	57,400
Apr-64	1964	4		4,901	9,656	20,540	4,760	(192)	39664	18,275	39,664	57,939
May-64	1964	5		9,647	12,919	40,730	6,149	(192)	69253	19,641	69,253	88,894
Jun-64	1964	6		4,981	1,177	48,960	2,380	(192)	57305	17,863	57,305	75,168
Jul-64	1964	7		4,235	0	14,300	638	(192)	18981	1,173	18,981	20,154
Aug-64	1964	8		3,234	41	13,160	1,323	(192)	17565	1,530	17,565	19,096
Sep-64	1964	9		4,115	111	25,530	1,377	(192)	30939	-	30,939	30,939
Oct-64	1964	10		5,957	4,288	22,660	-	(192)	32713	250	32,713	32,962
Nov-64	1964	11		7,120	4,959	26,953	887	(192)	39727	7,474	39,727	47,201
Dec-64	1964	12		4,611	6,319	32,066	1,144	(192)	43948	19,506	43,948	63,454
Jan-65	1965	1		4,611	6,649	32,195	1,125	(192)	44388	7,149	44,388	51,537
Feb-65	1965	2		4,165	7,232	12,730	1,170	(192)	25105	470	25,105	25,575
Mar-65	1965	3		4,611	8,439	27,106	1,244	(192)	41208	1,357	41,208	42,566
Apr-65	1965	4		6,061	13,084	27,084	6,046	(192)	52083	6,743	52,083	58,826
May-65	1965	5		10,978	6,907	28,304	7,996	(192)	53993	4,812	53,993	58,805
Jun-65	1965	6		40,195	1,180	34,263	2,392	(192)	77838	7,598	77,838	85,436
Jul-65	1965	7		7,396	62	34,570	983	(192)	42819	4,475	42,819	47,294
Aug-65	1965	8		3,253	428	38,850	965	(192)	43304	5,879	43,304	49,184
Sep-65	1965	9		4,113	2,018	33,330	808	(192)	40077	12,804	40,077	52,880
Oct-65	1965	10		5,931	4,053	33,970	756	(192)	44518	1,074	44,518	45,592
Nov-65	1965	11		10,638	6,720	26,316	1,234	(192)	44716	8,366	44,716	53,082
Dec-65	1965	12		11,777	8,149	41,040	1,240	(192)	62014	11,873	62,014	73,887
Jan-66	1966	1		9,322	8,349	23,327	1,033	(192)	41838	1,272	41,838	43,111
Feb-66	1966	2		7,215	7,412	33,623	1,067	(192)	49125	7,109	49,125	56,234
Mar-66	1966	3		14,343	11,739	38,175	1,545	(192)	65610	4,078	65,610	69,688
Apr-66	1966	4		6,577	3,880	5,601	4,760	(192)	20626	3,104	20,626	23,729
May-66	1966	5		24,318	1,633	28,940	6,149	(192)	60848	7,507	60,848	68,355
Jun-66	1966	6		4,687	0	22,280	2,380	(192)	29154	220	29,154	29,374
Jul-66	1966	7		3,392	-	18,360	274	(192)	21833	1,006	21,833	22,839
Aug-66	1966	8		3,141	545	28,240	251	(192)	31985	3,258	31,985	35,243
Sep-66	1966	9		4,042	140	31,210	57	(192)	35257	5,802	35,257	41,059
Oct-66	1966	10		4,611	3,439	31,590	346	(192)	39793	6,317	39,793	46,111
Nov-66	1966	11		4,463	6,410	24,764	1,271	(192)	36715	3,475	36,715	40,190
Dec-66	1966	12		4,611	7,249	35,565	1,411	(192)	48644	13,249	48,644	61,893

10	11	12	13	14	15	16	17	18	19	20
			0.95	K factor	45,000	Evap Factor		800000		
				1		0.955	2			
Jordan River Primary Demands (acre-ft)	Jordan River Secondary Demands (acre-ft)	Outflow Adjust-ment (acre-ft)	Jordan River Spill Calcula-tion (cfs)	Jordan River Outflows (acre-ft)	Evap Vol (acre-ft)	Jordan River Outflows pus Evap (acre-ft)	End-of-mont UL Storage (acre-ft)	Monthly Average Storage (acre-ft)	End-of-month UL Surface Area (acre)	Monthly Average Surface Area (acre)
-	-	-	-	-	18,647	18,647	475,845	472,377	81,912	81,776
26,069	4,011	-	-	-	31,355	61,435	434,521	455,183	80,249	81,081
25,738	4,011	-	-	-	44,514	74,263	361,733	398,127	77,141	78,695
20,657	1,372	-	-	-	52,735	74,764	301,199	331,466	74,351	75,746
13,697	422	-	-	-	46,213	60,332	255,326	278,263	72,055	73,203
5,413	-	-	-	-	27,926	33,339	246,967	251,146	71,618	71,836
663	-	-	-	-	18,980	19,643	264,704	255,835	72,545	72,082
331	106	-	-	-	10,219	10,656	284,827	274,765	73,561	73,053
110	-	-	-	-	5,327	5,437	315,848	300,337	75,052	74,306
110	-	-	-	-	1,195	1,305	343,989	329,918	76,347	75,699
331	106	-	-	-	4,253	4,690	396,473	370,231	78,655	77,501
221	106	-	-	-	7,699	8,026	434,376	415,425	80,243	79,449
442	211	-	-	-	22,287	22,941	476,086	455,231	81,921	81,082
16,459	4,011	-	-	-	35,532	56,001	482,790	479,438	82,182	82,052
22,093	6,471	-	-	-	44,474	73,038	432,998	457,894	80,188	81,185
27,616	8,117	-	-	-	53,605	89,339	354,821	393,909	76,837	78,512
28,279	7,073	-	-	-	48,063	83,415	290,336	322,579	73,827	75,332
21,651	4,730	-	-	-	36,075	62,456	255,635	272,986	72,071	72,949
4,087	1,478	-	-	-	25,696	31,261	266,502	261,068	72,639	72,355
2,541	950	-	-	-	13,643	17,134	288,470	277,486	73,737	73,188
773	317	-	-	-	5,633	6,723	302,232	295,351	74,401	74,069
221	106	-	-	-	2,250	2,577	335,099	318,666	75,938	75,169
110	-	-	-	-	4,351	4,461	363,317	349,208	77,210	76,574
-	-	-	-	-	11,859	11,859	386,787	375,052	78,242	77,726
-	-	-	-	-	18,805	18,805	418,648	402,717	79,590	78,916
23,197	3,589	-	-	-	26,920	53,705	392,760	405,704	78,499	79,044
21,872	3,377	-	-	-	40,169	65,419	361,656	377,208	77,137	77,818
41,755	2,850	-	-	-	51,075	95,680	289,454	325,555	73,784	75,461
37,778	1,266	-	-	-	47,504	86,549	225,887	257,671	70,359	72,072
20,104	-	-	-	-	32,757	52,861	219,364	222,626	69,944	70,152
10,715	-	-	-	-	22,377	33,092	219,007	219,186	69,921	69,932
552	211	-	-	-	11,463	12,226	252,721	235,864	71,919	70,920
773	317	-	-	-	5,151	6,241	285,473	269,097	73,592	72,755
773	317	-	-	-	1,347	2,437	322,814	304,143	75,372	74,482
221	106	-	-	-	3,419	3,746	355,555	339,184	76,869	76,121
110	-	-	-	-	10,950	11,060	401,895	378,725	78,884	77,876
-	-	-	-	-	20,528	20,528	439,305	420,600	80,443	79,663
14,139	2,216	-	-	-	30,409	46,765	481,435	460,370	82,129	81,286
16,017	2,428	-	-	-	39,609	58,054	498,549	489,992	82,796	82,462
41,534	2,850	-	-	-	49,616	94,000	424,703	461,626	79,845	81,320
41,092	1,372	-	-	-	49,055	91,520	352,279	388,491	76,725	78,285
32,918	-	-	-	-	36,941	69,859	313,359	332,819	74,937	75,831
10,052	-	-	-	-	27,016	37,068	309,253	311,306	74,740	74,839
331	106	-	-	-	14,275	14,712	341,742	325,498	76,243	75,492
331	106	-	-	-	7,160	7,597	397,599	369,670	78,702	77,473
884	317	-	-	-	4,635	5,835	443,301	420,450	80,605	79,654
773	317	-	-	-	3,849	4,938	463,937	453,619	81,440	81,022
442	211	-	-	-	13,027	13,681	492,822	478,380	82,573	82,006
3,535	1,266	-	-	-	24,840	29,641	522,007	507,415	83,693	83,133
23,308	3,589	-	-	-	32,970	59,866	520,946	521,477	83,653	83,673
29,715	4,539	-	-	-	44,471	78,725	527,657	524,302	83,905	83,779
37,557	2,533	-	-	-	55,757	95,847	479,104	503,381	82,039	82,972
38,331	1,266	-	-	-	49,424	89,021	439,267	459,186	80,441	81,240
16,901	-	-	-	-	33,865	50,766	441,381	440,324	80,527	80,484
9,058	-	-	-	-	25,699	34,757	452,216	446,798	80,966	80,746
773	1,098	-	-	-	16,238	18,108	487,190	469,703	82,353	81,659
773	1,098	-	-	-	7,406	9,277	551,800	519,495	84,812	83,582
2,099	1,098	-	-	-	2,295	5,491	589,419	570,609	86,175	85,493
7,180	1,098	-	-	-	5,967	14,244	631,409	610,414	87,377	86,776
5,413	1,647	-	-	-	15,994	23,053	678,043	654,726	88,678	88,028
5,192	2,776	-	-	-	28,582	36,550	665,223	671,633	88,319	88,499
25,406	7,810	-	-	-	46,600	79,817	653,761	659,492	87,998	88,159
28,499	8,940	-	-	-	55,465	92,904	590,231	621,996	86,205	87,101
29,935	10,586	-	-	-	63,802	104,324	508,746	549,489	83,193	84,699
29,715	9,541	-	-	-	52,767	92,024	451,966	480,356	80,955	82,074
22,314	7,199	-	-	-	40,009	69,522	423,503	437,735	79,794	80,375
8,395	2,776	-	-	-	25,147	36,318	433,296	428,399	80,200	79,997
1,878	739	-	-	-	14,935	17,552	455,934	444,615	81,116	80,658
773	317	-	-	-	9,877	10,966	506,861	481,397	83,119	82,118

MONTHLY SUMMARY OF UTAH LAKE WATER BALANCE ELEMENTS

Date	Water Year	Month	days	Provo Inflow (acre-ft)	Spanish Fork Inflow (acre-ft)	Local Surface and Sub-surface (acre-ft)	Hobble Creek (includes ULS water) (acre-ft)	Change in Return Flows (acre-ft)	Total Inflow (acre-ft)	Precip Vol (acre-ft)	Total Inflows PROSIM (acre-ft)	Total Inflows plus Precip (acre-ft)
		Column No.:		1	2	3	4	5	6	7	8	9
Jan-67	1967	1		3,177	7,659	14,090	1,276	(192)	26010	16,070	26,010	42,080
Feb-67	1967	2		1,771	7,166	42,521	1,191	(192)	52456	422	52,456	52,879
Mar-67	1967	3		2,845	10,239	34,885	1,911	(192)	49687	5,603	49,687	55,290
Apr-67	1967	4		5,692	8,399	(1,340)	4,760	(192)	17318	3,781	17,318	21,099
May-67	1967	5		11,314	3,331	38,583	6,149	(192)	59184	14,222	59,184	73,405
Jun-67	1967	6		24,172	6,783	58,948	2,380	(192)	92090	8,719	92,090	100,808
Jul-67	1967	7		4,288	390	28,040	435	(192)	32961	3,302	32,961	36,263
Aug-67	1967	8		3,247	380	24,960	357	(192)	28752	3,959	28,752	32,711
Sep-67	1967	9		4,113	457	31,790	178	(192)	36346	3,850	36,346	40,195
Oct-67	1967	10		5,830	6,331	24,980	-	(192)	36948	2,966	36,948	39,914
Nov-67	1967	11		5,877	6,700	29,756	974	(192)	43115	6,776	43,115	49,891
Dec-67	1967	12		4,611	6,659	22,279	1,061	(192)	34418	11,721	34,418	46,139
Jan-68	1968	1		4,611	6,048	35,208	952	(192)	46626	2,568	46,626	49,195
Feb-68	1968	2		4,165	8,352	35,559	1,081	(192)	48964	11,526	48,964	60,490
Mar-68	1968	3		4,611	9,839	33,130	1,400	(192)	48788	11,492	48,788	60,281
Apr-68	1968	4		4,887	12,139	24,618	4,760	(192)	46211	25,199	46,211	71,410
May-68	1968	5		15,189	14,483	26,862	6,149	(192)	62491	10,311	62,491	72,802
Jun-68	1968	6		47,667	3,460	27,971	2,380	(192)	81285	11,615	81,285	92,901
Jul-68	1968	7		4,241	1,568	40,680	390	(192)	46686	3,634	46,686	50,321
Aug-68	1968	8		3,250	1,256	33,030	153	(192)	37497	17,565	37,497	55,061
Sep-68	1968	9		4,129	2,583	17,860	115	(192)	24494	1,473	24,494	25,967
Oct-68	1968	10		5,961	4,723	34,120	-	(192)	44611	9,081	44,611	53,692
Nov-68	1968	11		10,820	7,603	36,164	1,156	(192)	55551	9,843	55,551	65,394
Dec-68	1968	12		7,925	8,255	27,904	1,186	(192)	45078	16,096	45,078	61,174
Jan-69	1969	1		4,743	9,020	33,157	1,273	(192)	48000	11,235	48,000	59,235
Feb-69	1969	2		4,165	7,954	35,633	1,137	(192)	48697	12,774	48,697	61,470
Mar-69	1969	3		5,882	11,643	25,263	1,747	(192)	44342	387	44,342	44,729
Apr-69	1969	4		28,401	35,206	31,031	12,819	(192)	107264	12,072	107,264	119,336
May-69	1969	5		66,277	14,980	16,554	12,046	(192)	109665	236	109,665	109,900
Jun-69	1969	6		46,566	3,637	48,845	2,380	(192)	101236	26,232	101,236	127,469
Jul-69	1969	7		7,606	1,560	41,700	668	(192)	51342	4,401	51,342	55,743
Aug-69	1969	8		3,256	1,312	49,430	682	(192)	54487	1,923	54,487	56,410
Sep-69	1969	9		4,114	1,714	34,140	513	(192)	40288	1,511	40,288	41,799
Oct-69	1969	10		5,782	5,324	31,070	345	(192)	42329	24,886	42,329	67,215
Nov-69	1969	11		9,194	8,043	31,936	1,434	(192)	50415	5,952	50,415	56,367
Dec-69	1969	12		4,611	8,714	26,064	1,486	(192)	40683	9,744	40,683	50,427
Jan-70	1970	1		4,611	9,579	32,127	1,513	(192)	47638	13,307	47,638	60,944
Feb-70	1970	2		4,165	8,716	30,869	1,351	(192)	44909	5,229	44,909	50,138
Mar-70	1970	3		4,611	9,918	14,962	1,488	(192)	30787	7,938	30,787	38,724
Apr-70	1970	4		5,666	7,341	18,510	4,760	(192)	36084	17,211	36,084	53,296
May-70	1970	5		32,374	5,558	35,305	6,149	(192)	79193	4,951	79,193	84,144
Jun-70	1970	6		19,015	2,720	34,730	2,380	(192)	58653	13,518	58,653	72,170
Jul-70	1970	7		5,282	93	32,840	392	(192)	38414	6,157	38,414	44,571
Aug-70	1970	8		3,238	680	20,060	343	(192)	24129	8,687	24,129	32,816
Sep-70	1970	9		4,091	2,168	25,360	73	(192)	31500	17,404	31,500	48,904
Oct-70	1970	10		5,546	5,398	32,800	-	(192)	43551	10,169	43,551	53,720
Nov-70	1970	11		5,574	7,516	51,421	1,289	(192)	65608	23,097	65,608	88,705
Dec-70	1970	12		4,611	8,315	12,812	1,248	(192)	26794	11,631	26,794	38,425
Jan-71	1971	1		4,611	9,117	42,870	1,230	(192)	57636	4,519	57,636	62,155
Feb-71	1971	2		4,165	8,593	15,189	1,351	(192)	29105	15,397	29,105	44,502
Mar-71	1971	3		4,611	11,399	44,110	2,370	(192)	62298	706	62,298	63,004
Apr-71	1971	4		5,788	14,876	32,022	5,258	(192)	57752	16,347	57,752	74,099
May-71	1971	5		32,637	11,049	20,618	6,149	(192)	70260	8,488	70,260	78,748
Jun-71	1971	6		56,629	1,890	22,470	2,380	(192)	83177	2,750	83,177	85,927
Jul-71	1971	7		4,128	85	26,930	406	(192)	31357	3,364	31,357	34,721
Aug-71	1971	8		3,261	837	30,590	377	(192)	34873	5,097	34,873	39,970
Sep-71	1971	9		4,092	3,518	34,610	-	(192)	42027	9,099	42,027	51,127
Oct-71	1971	10		5,255	7,617	72,770	-	(192)	85450	14,530	85,450	99,980
Nov-71	1971	11		4,995	8,469	24,197	1,133	(192)	38601	4,229	38,601	42,830
Dec-71	1971	12		4,611	8,930	37,545	1,335	(192)	52229	6,759	52,229	58,988
Jan-72	1972	1		4,611	9,710	34,987	1,103	(192)	50219	1,231	50,219	51,451
Feb-72	1972	2		4,165	9,118	33,023	1,027	(192)	47141	700	47,141	47,842
Mar-72	1972	3		12,060	11,775	23,405	4,821	(192)	51869	4,163	51,869	56,032
Apr-72	1972	4		9,183	8,103	23,821	4,760	(192)	45674	9,117	45,674	54,790
May-72	1972	5		41,382	844	18,674	5,483	(192)	66189	78	66,189	66,268
Jun-72	1972	6		22,448	556	34,580	2,380	(192)	59772	5,309	59,772	65,081
Jul-72	1972	7		7,583	0	19,970	374	(192)	27734	1,465	27,734	29,199
Aug-72	1972	8		3,258	148	29,890	200	(192)	33304	5,395	33,304	38,699
Sep-72	1972	9		4,125	513	27,250	-	(192)	31695	4,411	31,695	36,106

10	11	12	13	14	15	16	17	18	19	20
			0.95	K factor	45,000	Evap Factor		800000		
				1		0.955	2			
Jordan River Primary Demands (acre-ft)	Jordan River Secondary Demands (acre-ft)	Outflow Adjust-ment (acre-ft)	Jordan River Spill Calcula-tion (cfs)	Jordan River Outflows (acre-ft)	Evap Vol (acre-ft)	Jordan River Outflows pus Evap (acre-ft)	End-of-mont UL Storage (acre-ft)	Monthly Average Storage (acre-ft)	End-of-month UL Surface Area (acre)	Monthly Average Surface Area (acre)
884	317	-	-	-	4,432	5,632	543,308	525,084	84,493	83,806
1,326	422	-	-	-	4,371	6,119	590,068	566,688	86,199	85,346
2,983	1,056	-	-	-	14,475	18,513	626,845	608,456	87,252	86,725
2,320	844	-	-	-	24,512	27,676	620,268	623,556	87,072	87,162
23,418	8,549	-	-	-	37,281	69,248	624,425	622,347	87,186	87,129
16,459	6,016	-	-	-	46,974	69,449	655,785	640,105	88,055	87,620
28,941	10,660	-	-	-	57,463	97,064	594,984	625,385	86,377	87,216
31,371	11,610	-	-	-	54,650	97,631	530,064	562,524	83,995	85,186
23,418	8,655	-	-	-	40,241	72,315	497,944	514,004	82,772	83,384
6,407	2,322	-	-	-	26,217	34,946	502,912	500,428	82,965	82,869
663	1,098	-	-	-	14,988	16,749	536,054	519,483	84,220	83,593
663	1,098	-	-	-	6,568	8,329	573,864	554,959	85,612	84,916
773	1,098	-	-	-	3,952	5,822	617,236	595,550	86,989	86,300
884	1,098	-	-	-	7,546	9,528	668,199	642,718	88,402	87,696
5,744	1,647	-	-	-	15,407	22,798	705,681	686,940	89,465	88,934
13,697	2,776	-	-	-	25,347	41,820	735,272	720,477	90,314	89,889
20,878	7,810	-	-	-	37,375	66,063	742,011	738,641	90,510	90,412
23,308	8,940	-	-	-	48,837	81,085	753,826	747,918	90,854	90,682
31,040	10,586	-	-	-	62,182	103,808	700,339	727,083	89,312	90,083
25,738	9,541	-	-	-	53,592	88,872	666,528	683,434	88,356	88,834
23,860	7,199	-	-	-	37,479	68,537	623,958	645,243	87,173	87,764
9,168	2,776	1,671	-	1,671	28,374	41,990	635,660	629,809	87,493	87,333
3,598	2,223	3,343	-	3,343	16,502	25,666	675,387	655,524	88,604	88,049
3,598	2,223	3,343	-	3,343	7,263	16,427	720,135	697,761	89,877	89,241
3,598	1,098	3,343	-	3,343	4,220	12,258	767,112	743,623	91,241	90,559
3,598	1,098	-	-	-	4,357	9,052	819,530	793,321	92,790	92,015
5,451	3,335	-	220	-	13,735	22,521	841,737	830,633	93,457	93,124
9,049	5,622	-	1,314	46,503	29,899	91,073	870,000	855,869	94,309	93,883
25,401	15,818	2,000	1,303	20,770	49,911	111,900	868,000	869,000	94,248	94,278
28,999	18,106	-	1,316	19,334	59,029	125,469	870,000	869,000	94,309	94,278
34,450	21,440	-	688	-	66,423	122,313	803,430	836,715	92,313	93,311
31,070	19,324	-	-	-	61,785	112,179	747,661	775,545	90,674	91,494
23,548	7,199	-	-	-	45,462	76,208	713,252	730,457	89,681	90,178
9,049	2,776	2,413	-	2,413	27,621	41,858	738,609	725,931	90,411	90,046
3,598	1,098	4,826	-	4,826	14,534	24,056	770,920	754,765	91,352	90,881
3,598	1,098	4,826	-	4,826	8,797	18,318	803,029	786,975	92,301	91,826
3,598	2,223	4,826	327	4,826	4,848	15,495	848,479	825,754	93,660	92,981
3,598	2,223	-	995	16,162	6,634	28,617	870,000	859,239	94,309	93,984
5,451	3,335	-	1,090	14,627	15,311	38,724	870,000	870,000	94,309	94,309
9,049	5,622	-	1,206	13,482	25,143	53,296	870,000	870,000	94,309	94,309
25,401	15,818	-	1,263	2,771	40,154	84,144	870,000	870,000	94,309	94,309
28,999	18,106	-	1,025	-	51,262	98,367	843,804	856,902	93,519	93,914
34,450	21,440	-	-	-	58,424	114,314	774,060	808,932	91,444	92,481
31,070	9,541	-	-	-	54,653	95,265	711,612	742,836	89,634	90,539
23,548	7,199	-	-	-	37,807	68,553	691,963	701,787	89,073	89,353
9,049	2,776	2,453	-	2,453	27,717	41,995	703,688	697,826	89,408	89,240
3,598	1,098	4,906	-	4,906	16,152	25,753	766,640	735,164	91,227	90,317
3,598	1,098	4,906	-	4,906	5,881	15,482	789,583	778,112	91,903	91,565
3,598	1,098	4,906	-	4,906	5,193	14,794	836,944	813,264	93,313	92,608
3,598	2,223	4,906	765	4,906	6,312	17,039	864,407	850,676	94,139	93,726
5,451	3,335	-	1,275	33,716	14,909	57,411	870,000	867,204	94,309	94,224
9,049	5,622	-	1,290	33,009	26,419	74,099	870,000	870,000	94,309	94,309
25,401	15,818	-	1,191	-	38,803	80,022	868,726	869,363	94,270	94,289
28,999	18,106	-	1,192	-	51,841	98,946	855,706	862,216	93,877	94,074
34,450	21,440	-	-	-	65,671	121,561	768,867	812,287	91,292	92,585
31,070	9,541	-	-	-	61,247	101,858	706,979	737,923	89,502	90,397
23,548	7,199	-	-	-	39,389	70,136	687,969	697,474	88,959	89,230
9,049	2,776	2,960	-	2,960	27,327	42,112	745,837	716,903	90,621	89,790
3,598	2,223	5,919	-	5,919	13,631	25,371	763,297	754,567	91,130	90,876
3,598	1,098	5,919	-	5,919	6,745	17,359	804,926	784,111	92,357	91,743
3,598	2,223	5,919	22	5,919	4,851	16,591	839,785	822,355	93,399	92,878
3,598	2,223	1,750	848	5,602	7,953	19,377	868,250	854,017	94,255	93,827
5,451	3,335	-	1,271	27,043	18,453	54,282	870,000	869,125	94,309	94,282
9,049	5,622	4,000	1,226	16,574	27,545	58,790	866,000	868,000	94,187	94,248
25,401	15,818	-	971	-	41,676	82,895	849,373	857,686	93,687	93,937
28,999	18,106	-	655	-	56,889	103,994	810,460	829,916	92,521	93,104
34,450	21,440	-	-	-	62,145	118,035	721,624	766,042	89,920	91,220
31,070	9,541	-	-	-	57,965	98,576	661,747	691,685	88,222	89,071
23,548	7,199	-	-	-	41,283	72,030	625,823	643,785	87,224	87,723

MONTHLY SUMMARY OF UTAH LAKE WATER BALANCE ELEMENTS

Date	Water Year	Month	days	Provo Inflow (acre-ft)	Spanish Fork Inflow (acre-ft)	Local Surface and Sub-surface (acre-ft)	Hobble Creek (includes ULS water) (acre-ft)	Change in Return Flows (acre-ft)	Total Inflow (acre-ft)	Precip Vol (acre-ft)	Total Inflows PROSIM (acre-ft)	Total Inflows plus Precip (acre-ft)
Column No.:				1	2	3	4	5	6	7	8	9
Oct-72	1972	10		5,701	6,979	34,900	-	(192)	47387	26,894	47,387	74,282
Nov-72	1972	11		7,856	7,551	33,322	1,018	(192)	49555	10,863	49,555	60,419
Dec-72	1972	12		4,611	7,615	33,126	944	(192)	46104	5,864	46,104	51,968
Jan-73	1973	1		4,611	7,541	30,340	910	(192)	43210	9,767	43,210	52,977
Feb-73	1973	2		4,165	6,916	45,033	897	(192)	56819	3,197	56,819	60,016
Mar-73	1973	3		4,611	8,663	47,209	1,511	(192)	61802	4,945	61,802	66,747
Apr-73	1973	4		18,533	17,706	38,932	4,768	(192)	79746	4,852	79,746	84,598
May-73	1973	5		38,180	39,139	45,729	14,551	(192)	137406	8,959	137,406	146,366
Jun-73	1973	6		49,511	1,299	45,733	2,380	(192)	98731	3,245	98,731	101,976
Jul-73	1973	7		7,623	-	32,200	679	(192)	40309	6,130	40,309	46,439
Aug-73	1973	8		3,176	(0)	37,150	633	(192)	40766	7,903	40,766	48,669
Sep-73	1973	9		4,156	664	25,790	323	(192)	30740	11,477	30,740	42,217
Oct-73	1973	10		5,657	6,028	48,170	301	(192)	59964	2,469	59,964	62,433
Nov-73	1973	11		9,450	8,162	51,097	1,343	(192)	69860	6,772	69,860	76,632
Dec-73	1973	12		4,736	8,980	20,143	1,277	(192)	34944	13,761	34,944	48,705
Jan-74	1974	1		4,611	9,422	35,808	1,182	(192)	50831	9,260	50,831	60,092
Feb-74	1974	2		4,165	8,498	38,623	1,097	(192)	52191	4,538	52,191	56,728
Mar-74	1974	3		4,611	12,835	38,492	2,348	(192)	58094	550	58,094	58,644
Apr-74	1974	4		10,210	17,936	50,422	4,760	(192)	83137	14,382	83,137	97,519
May-74	1974	5		43,418	9,500	11,721	7,947	(192)	72393	864	72,393	73,258
Jun-74	1974	6		51,429	660	30,740	2,380	(192)	85017	1,488	85,017	86,505
Jul-74	1974	7		7,727	0	38,880	318	(192)	46733	1,945	46,733	48,678
Aug-74	1974	8		3,238	1,656	23,290	234	(192)	28225	-	28,225	28,225
Sep-74	1974	9		4,129	480	23,160	80	(192)	27656	-	27,656	27,656
Oct-74	1974	10		5,658	5,350	45,010	-	(192)	55825	10,747	55,825	66,572
Nov-74	1974	11		8,935	7,664	35,612	1,478	(192)	53496	4,567	53,496	58,062
Dec-74	1974	12		4,611	7,534	16,667	1,243	(192)	29863	9,543	29,863	39,406
Jan-75	1975	1		4,611	8,030	33,494	1,276	(192)	47219	9,247	47,219	56,466
Feb-75	1975	2		4,165	7,451	42,104	1,176	(192)	54703	2,671	54,703	57,375
Mar-75	1975	3		4,611	9,316	28,830	1,780	(192)	44345	8,905	44,345	53,250
Apr-75	1975	4		4,879	10,031	42,053	4,760	(192)	61531	13,059	61,531	74,590
May-75	1975	5		17,506	34,987	42,888	8,582	(192)	103770	15,482	103,770	119,253
Jun-75	1975	6		75,650	27,814	60,060	12,780	(192)	176111	8,571	176,111	184,682
Jul-75	1975	7		17,146	399	47,440	298	(192)	65091	9,022	65,091	74,113
Aug-75	1975	8		3,261	184	12,290	328	(192)	15871	3,131	15,871	19,002
Sep-75	1975	9		4,167	897	35,010	111	(192)	39992	837	39,992	40,828
Oct-75	1975	10		5,195	5,620	46,040	-	(192)	56663	9,560	56,663	66,222
Nov-75	1975	11		7,763	8,955	31,050	1,620	(192)	49195	15,246	49,195	64,441
Dec-75	1975	12		4,613	9,037	41,279	1,601	(192)	56337	6,465	56,337	62,802
Jan-76	1976	1		4,611	9,248	42,002	1,718	(192)	57387	4,848	57,387	62,235
Feb-76	1976	2		4,165	9,916	49,178	2,202	(192)	65268	11,304	65,268	76,573
Mar-76	1976	3		4,611	13,306	25,037	3,613	(192)	46375	6,680	46,375	53,055
Apr-76	1976	4		12,211	11,613	13,761	4,760	(192)	42153	9,117	42,153	51,269
May-76	1976	5		24,568	3,780	44,197	6,149	(192)	78500	1,808	78,500	80,308
Jun-76	1976	6		8,335	492	15,660	2,380	(192)	26674	4,237	26,674	30,912
Jul-76	1976	7		3,457	192	42,500	361	(192)	46318	2,455	46,318	48,773
Aug-76	1976	8		3,158	460	19,490	334	(192)	23249	2,256	23,249	25,505
Sep-76	1976	9		4,049	1,207	36,950	80	(192)	42095	2,131	42,095	44,226
Oct-76	1976	10		4,611	5,925	23,810	-	(192)	34154	2,111	34,154	36,266
Nov-76	1976	11		4,463	6,727	24,055	955	(192)	36007	1,455	36,007	37,462
Dec-76	1976	12		4,611	7,538	37,452	858	(192)	50267	439	50,267	50,706
Jan-77	1977	1		4,246	7,578	16,902	858	(192)	29391	5,339	29,391	34,730
Feb-77	1977	2		1,850	7,127	31,953	837	(192)	41575	2,992	41,575	44,566
Mar-77	1977	3		1,608	7,527	29,480	1,110	(192)	39533	8,698	39,533	48,231
Apr-77	1977	4		5,861	491	26,010	4,760	(192)	36930	611	36,930	37,541
May-77	1977	5		8,716	443	27,860	6,149	(192)	42975	28,139	42,975	71,114
Jun-77	1977	6		3,471	2,723	3,370	2,353	(192)	11724	-	11,724	11,724
Jul-77	1977	7		2,846	1,825	10,380	329	(192)	15187	10,814	15,187	26,001
Aug-77	1977	8		3,038	416	20,270	288	(192)	23820	8,370	23,820	32,190
Sep-77	1977	9		4,006	495	11,460	86	(192)	15855	5,046	15,855	20,901
Oct-77	1977	10		5,658	4,595	33,910	3,621	(192)	47592	6,296	47,592	53,887
Nov-77	1977	11		6,411	5,815	20,094	4,199	(192)	36326	143	36,326	36,469
Dec-77	1977	12		5,199	6,169	23,987	4,294	(192)	39457	2,884	39,457	42,341
Jan-78	1978	1		4,611	6,295	27,357	4,294	(192)	42365	17,778	42,365	60,143
Feb-78	1978	2		4,165	6,138	24,736	3,495	(192)	38342	13,793	38,342	52,135
Mar-78	1978	3		5,730	11,748	32,326	5,884	(192)	55495	24,005	55,495	79,501
Apr-78	1978	4		8,782	19,433	52,509	5,950	(192)	86481	10,754	86,481	97,235
May-78	1978	5		15,045	18,722	27,456	6,224	(192)	67255	5,418	67,255	72,673
Jun-78	1978	6		5,052	1,812	19,863	5,950	(192)	32485	1,022	32,485	33,507

10	11	12	13	14	15	16	17	18	19	20
			0.95	K factor	45,000	Evap Factor		800000		
				1		0.955	2			
Jordan River Primary Demands (acre-ft)	Jordan River Secondary Demands (acre-ft)	Outflow Adjust-ment (acre-ft)	Jordan River Spill Calcula-tion (cfs)	Jordan River Outflows (acre-ft)	Evap Vol (acre-ft)	Jordan River Outflows pus Evap (acre-ft)	End-of-mont UL Storage (acre-ft)	Monthly Average Storage (acre-ft)	End-of-month UL Surface Area (acre)	Monthly Average Surface Area (acre)
9,049	2,776	2,807	-	2,807	28,738	43,370	656,735	641,279	88,081	87,653
3,598	1,098	5,615	-	5,615	14,721	25,031	692,122	674,428	89,078	88,579
3,598	1,098	5,615	-	5,615	3,970	14,280	729,810	710,966	90,155	89,616
3,598	1,098	5,615	-	5,615	1,435	11,745	771,041	750,426	91,355	90,755
3,598	1,098	5,200	-	5,200	4,144	14,040	817,018	794,030	92,715	92,035
5,451	3,335	5,615	757	5,615	12,839	27,239	856,525	836,772	93,902	93,309
9,049	5,622	-	1,286	34,332	22,120	71,123	870,000	863,263	94,309	94,105
25,401	15,818	-	1,376	43,358	39,929	124,506	891,860	880,930	94,976	94,642
28,999	18,106	-	1,314	20,420	56,311	123,836	870,000	880,930	94,309	94,642
34,450	21,440	-	423	-	65,297	121,187	795,252	832,626	92,071	93,190
31,070	9,541	-	-	-	57,886	98,497	745,424	770,338	90,609	91,340
23,548	7,199	-	-	-	40,670	71,417	716,225	730,825	89,766	90,188
9,049	2,776	3,600	-	3,600	28,647	44,072	734,586	725,405	90,294	90,030
3,598	1,098	7,200	-	7,200	15,306	27,202	784,016	759,301	91,738	91,016
3,598	1,098	7,200	-	7,200	7,593	19,488	813,233	798,624	92,603	92,171
3,598	2,223	7,200	657	7,200	4,274	17,295	856,029	834,631	93,887	93,245
3,598	2,223		1,184	30,959	5,977	42,757	870,000	863,014	94,309	94,098
5,451	3,335		1,277	31,845	18,013	58,644	870,000	870,000	94,309	94,309
9,049	5,622		1,322	56,429	26,419	97,519	870,000	870,000	94,309	94,309
25,401	15,818		1,118	-	42,255	83,474	859,783	864,892	94,000	94,154
28,999	18,106		1,080	-	60,071	107,176	839,113	849,448	93,378	93,689
34,450	21,440		-	-	69,037	124,927	762,863	800,988	91,117	92,248
31,070	9,541		-	-	58,519	99,130	691,958	727,411	89,073	90,095
23,548	7,199		-	-	44,730	75,476	644,138	668,048	87,729	88,401
9,049	2,776		-	-	31,348	43,173	667,537	655,837	88,384	88,056
3,598	1,098		-	-	15,334	20,030	705,570	686,553	89,461	88,923
3,598	1,098		-	-	8,330	13,026	731,950	718,760	90,217	89,839
3,598	1,098		-	-	4,882	9,578	778,838	755,394	91,585	90,901
3,598	1,098		-	-	7,580	12,276	823,937	801,388	92,922	92,254
5,451	3,335		669	-	14,125	22,911	854,276	839,107	93,834	93,378
9,049	5,622		1,269	21,493	22,702	58,866	870,000	862,138	94,309	94,072
25,401	15,818		1,316	39,684	36,551	117,454	871,799	870,899	94,364	94,336
28,999	18,106		1,463	39,973	50,240	137,319	919,163	895,481	95,811	95,087
34,450	21,440	13,000	1,301	14,354	66,032	136,276	857,000	888,081	93,916	94,864
31,070	19,324		-	-	56,729	107,123	768,879	812,939	91,292	92,604
23,548	7,199		-	-	43,229	73,975	735,732	752,306	90,327	90,810
9,049	2,776		-	-	30,551	42,376	759,578	747,655	91,021	90,674
3,598	1,098		-	-	14,415	19,111	804,909	782,243	92,357	91,689
3,598	2,223		477	-	7,424	13,245	854,466	829,688	93,840	93,098
3,598	2,223	3,500	1,236	39,227	5,153	50,201	866,500	860,483	94,202	94,021
3,598	2,223		1,301	59,680	7,572	73,073	870,000	868,250	94,309	94,255
5,451	3,335		1,269	29,333	14,936	53,055	870,000	870,000	94,309	94,309
9,049	5,622		1,179	9,804	26,794	51,269	870,000	870,000	94,309	94,309
25,401	15,818		1,212	-	43,757	84,976	865,332	867,666	94,167	94,238
28,999	18,106		-	-	54,482	101,587	794,657	829,995	92,053	93,110
34,450	10,586		-	-	65,860	110,896	732,534	763,595	90,234	91,144
31,070	9,541		-	-	56,875	97,486	660,553	696,543	88,188	89,211
23,548	7,199		-	-	42,812	73,558	631,220	645,886	87,372	87,780
9,049	2,776		-	-	28,022	39,847	627,639	629,430	87,274	87,323
663	165		-	-	16,600	17,428	647,673	637,656	87,828	87,551
663	165		-	-	8,877	9,705	688,674	668,173	88,979	88,403
552	165		-	-	7,081	7,798	715,606	702,140	89,748	89,364
663	165		-	-	8,785	9,613	750,559	733,082	90,759	90,253
663	248		-	-	15,963	16,873	781,916	766,237	91,676	91,217
6,186	418		-	-	28,162	34,766	784,691	783,304	91,758	91,717
18,337	1,175		-	-	40,163	59,676	796,130	790,411	92,097	91,928
26,732	1,345		-	-	51,379	79,456	728,398	762,264	90,114	91,105
33,802	1,593		-	-	61,388	96,783	657,615	693,006	88,106	89,110
33,249	1,435		-	-	55,603	90,288	599,518	628,566	86,504	87,305
27,063	1,083		-	-	38,483	66,629	553,789	576,653	84,885	85,694
663	418		-	-	27,022	28,102	579,574	566,682	85,819	85,352
331	165		-	-	15,640	16,136	599,907	589,740	86,515	86,167
331	165		-	-	8,331	8,827	633,421	616,664	87,432	86,973
442	165		-	-	4,105	4,712	688,851	661,136	88,984	88,208
552	165		-	-	5,382	6,099	734,887	711,869	90,303	89,643
1,215	248		-	-	14,158	15,620	798,768	766,828	92,175	91,239
4,750	418		968	-	23,547	28,715	867,288	833,028	94,226	93,201
16,901	2,380		1,278	13,636	37,044	69,961	870,000	868,644	94,309	94,267
16,569	2,724		880	-	53,964	73,257	830,250	850,125	93,112	93,710

MONTHLY SUMMARY OF UTAH LAKE WATER BALANCE ELEMENTS

Date	Water Year	Month	days	Provo Inflow (acre-ft)	Spanish Fork Inflow (acre-ft)	Local Surface and Sub-surface (acre-ft)	Hobble Creek (includes ULS water) (acre-ft)	Change in Return Flows (acre-ft)	Total Inflow (acre-ft)	Precip Vol (acre-ft)	Total Inflows PROSIM (acre-ft)	Total Inflows plus Precip (acre-ft)
Column No.:				1	2	3	4	5	6	7	8	9
Jul-78	1978	7		4,121	-	15,530	2,141	(192)	21599	155	21,599	21,754
Aug-78	1978	8		3,243	0	20,550	2,016	(192)	25616	6,874	25,616	32,490
Sep-78	1978	9		4,089	2,951	48,100	2,149	(192)	57097	16,723	57,097	73,821
Oct-78	1978	10		5,639	5,373	28,340	3,423	(192)	42582	148	42,582	42,730
Nov-78	1978	11		6,306	7,540	36,576	4,680	(192)	54910	18,613	54,910	73,523
Dec-78	1978	12		4,611	8,999	28,876	5,220	(192)	47514	3,921	47,514	51,435
Jan-79	1979	1		4,611	10,569	20,706	6,070	(192)	41764	9,393	41,764	51,157
Feb-79	1979	2		4,165	8,663	37,353	5,056	(192)	55044	10,226	55,044	65,270
Mar-79	1979	3		4,611	10,939	42,597	5,959	(192)	63914	11,553	63,914	75,467
Apr-79	1979	4		14,863	17,077	52,773	5,263	(192)	89784	2,908	89,784	92,692
May-79	1979	5		16,930	11,820	21,695	6,149	(192)	56401	4,637	56,401	61,038
Jun-79	1979	6		4,768	2,653	15,858	2,380	(192)	25466	78	25,466	25,544
Jul-79	1979	7		3,667	2,070	26,782	2,128	(192)	34455	1,676	34,455	36,131
Aug-79	1979	8		3,162	844	34,976	2,132	(192)	40922	5,580	40,922	46,503
Sep-79	1979	9		4,066	624	22,476	2,118	(192)	29092	-	29,092	29,092
Oct-79	1979	10		5,670	6,060	34,354	6,034	(192)	51925	14,649	51,925	66,575
Nov-79	1979	11		9,969	7,448	24,083	5,804	(192)	47111	6,475	47,111	53,586
Dec-79	1979	12		5,218	7,986	30,863	5,936	(192)	49810	1,326	49,810	51,136
Jan-80	1980	1		4,611	9,043	27,606	6,149	(192)	47217	24,267	47,217	71,484
Feb-80	1980	2		4,165	10,956	55,227	5,712	(192)	75868	23,951	75,868	99,819
Mar-80	1980	3		4,611	12,232	37,714	6,307	(192)	60672	8,461	60,672	69,133
Apr-80	1980	4		5,193	23,629	34,356	6,272	(192)	69257	2,586	69,257	71,843
May-80	1980	5		34,843	37,869	62,889	14,361	(192)	149769	15,944	149,769	165,712
Jun-80	1980	6		29,426	6,561	33,359	5,950	(192)	75103	556	75,103	75,659
Jul-80	1980	7		4,611	1,531	20,920	2,142	(192)	29012	1,493	29,012	30,505
Aug-80	1980	8		3,252	-	94,792	1,769	(192)	99621	4,758	99,621	104,379
Sep-80	1980	9		16,902	1,802	(19,452)	2,087	(192)	1146	8,100	1,146	9,247
Oct-80	1980	10		5,597	4,690	29,118	2,368	(192)	41581	17,955	41,581	59,536
Nov-80	1980	11		7,372	9,180	29,281	3,310	(192)	48952	9,913	48,952	58,864
Dec-80	1980	12		4,890	9,619	31,760	3,412	(192)	49488	5,635	49,488	55,123
Jan-81	1981	1		4,611	9,369	32,182	2,608	(192)	48578	8,599	48,578	57,177
Feb-81	1981	2		4,165	8,353	18,614	2,351	(192)	33291	4,629	33,291	37,920
Mar-81	1981	3		4,611	9,359	20,011	2,553	(192)	36342	25,542	36,342	61,884
Apr-81	1981	4		5,651	5,676	22,820	4,760	(192)	38715	7,859	38,715	46,574
May-81	1981	5		12,002	6,785	37,486	6,149	(192)	62229	30,022	62,229	92,251
Jun-81	1981	6		4,768	20	11,294	2,380	(192)	18270	3,537	18,270	21,806
Jul-81	1981	7		3,699	3	24,954	365	(192)	28829	4,225	28,829	33,054
Aug-81	1981	8		3,177	256	13,938	349	(192)	17528	3,831	17,528	21,359
Sep-81	1981	9		4,044	4,255	20,496	-	(192)	28603	12,100	28,603	40,702
Oct-81	1981	10		7,221	7,084	47,040	615	(192)	61768	33,337	61,768	95,105
Nov-81	1981	11		4,667	7,769	32,060	1,650	(192)	45954	5,549	45,954	51,503
Dec-81	1981	12		4,611	7,955	30,054	1,699	(192)	44128	16,750	44,128	60,878
Jan-82	1982	1		4,611	8,530	25,122	1,965	(192)	40036	15,492	40,036	55,528
Feb-82	1982	2		4,165	8,528	41,884	2,015	(192)	56401	9,792	56,401	66,192
Mar-82	1982	3		5,045	14,988	34,867	4,515	(192)	59222	21,433	59,222	80,655
Apr-82	1982	4		11,701	33,288	28,148	8,296	(192)	81240	8,550	81,240	89,789
May-82	1982	5		51,043	48,712	42,927	17,599	(192)	160088	13,753	160,088	173,842
Jun-82	1982	6		42,519	5,190	55,863	5,797	(192)	109177	4,543	109,177	113,720
Jul-82	1982	7		16,028	978	40,136	976	(192)	57925	5,300	57,925	63,225
Aug-82	1982	8		3,245	-	35,472	1,110	(192)	39635	1,632	39,635	41,267
Sep-82	1982	9		4,030	5,128	49,652	732	(192)	59349	45,514	59,349	104,863
Oct-82	1982	10		6,353	13,129	46,078	2,130	(192)	67498	19,706	67,498	87,205
Nov-82	1982	11		5,329	10,730	34,897	2,229	(192)	52992	12,907	52,992	65,899
Dec-82	1982	12		5,670	11,309	37,580	2,362	(192)	56729	16,425	56,729	73,155
Jan-83	1983	1		4,880	11,059	34,902	2,202	(192)	52851	15,797	52,851	68,648
Feb-83	1983	2		17,526	10,853	36,461	2,345	(192)	66992	28,135	66,992	95,127
Mar-83	1983	3		85,541	20,479	51,269	5,855	(192)	162952	24,406	162,952	187,358
Apr-83	1983	4		24,358	23,456	57,366	4,822	(192)	109810	14,427	109,810	124,237
May-83	1983	5		53,132	69,819	71,505	20,456	(192)	214720	29,658	214,720	244,378
Jun-83	1983	6		86,953	65,423	61,757	24,254	(192)	238194	7,384	238,194	245,578
Jul-83	1983	7		19,564	5,430	53,674	5,822	(192)	84297	16,160	84,297	100,456
Aug-83	1983	8		617	4,106	56,822	3,104	(192)	64456	32,703	64,456	97,159
Sep-83	1983	9		554	5,225	39,416	2,518	(192)	47521	17,439	47,521	64,960
Oct-83	1983	10		3,065	40,463	31,350	16,220	(192)	90906	10,019	90,906	100,924
Nov-83	1983	11		8,411	30,903	29,455	12,011	(192)	80587	30,129	80,587	110,716
Dec-83	1983	12		6,554	14,918	32,955	4,521	(192)	58755	43,290	58,755	102,045
Jan-84	1984	1		12,962	11,977	51,467	3,019	(192)	79232	7,548	79,232	86,780
Feb-84	1984	2		19,490	11,451	27,148	3,236	(192)	61132	11,040	61,132	72,172
Mar-84	1984	3		37,237	18,065	56,735	5,687	(192)	117532	14,113	117,532	131,645

10	11	12	13	14	15	16	17	18	19	20
			0.95	K factor	45,000	Evap Factor		800000		
				1		0.955	2			
Jordan River Primary Demands (acre-ft)	Jordan River Secondary Demands (acre-ft)	Outflow Adjust-ment (acre-ft)	Jordan River Spill Calcula-tion (cfs)	Jordan River Outflows (acre-ft)	Evap Vol (acre-ft)	Jordan River Outflows pus Evap (acre-ft)	End-of-mont UL Storage (acre-ft)	Monthly Average Storage (acre-ft)	End-of-month UL Surface Area (acre)	Monthly Average Surface Area (acre)
36,674	3,226		-	-	65,432	105,332	746,673	788,461	90,646	91,879
37,999	1,435		-	-	57,495	96,929	682,234	714,453	88,796	89,721
24,081	1,083		-	-	40,987	66,150	689,904	686,069	89,014	88,905
14,139	418		-	-	29,115	43,672	688,962	689,433	88,987	89,001
3,645	1,098		-	-	16,855	21,598	740,888	714,925	90,477	89,732
3,645	1,098		-	-	6,768	11,511	780,811	760,849	91,643	91,060
3,645	1,098		-	-	1,969	6,712	825,257	803,034	92,962	92,303
3,645	2,223		886	10,737	3,921	20,527	870,000	847,628	94,309	93,635
5,413	3,335		1,300	55,686	11,033	75,467	870,000	870,000	94,309	94,309
9,058	5,622		1,316	53,244	24,768	92,692	870,000	870,000	94,309	94,309
25,296	15,818		956	-	41,280	82,394	848,644	859,322	93,665	93,987
29,052	18,106		-	-	53,894	101,052	773,137	810,890	91,416	92,541
34,464	10,586		-	-	64,822	109,872	699,395	736,266	89,285	90,351
31,151	9,541		-	-	58,479	99,172	646,726	673,061	87,801	88,543
23,529	7,199		-	-	42,205	72,932	602,886	624,806	86,596	87,199
8,727	2,776		-	-	29,221	40,723	628,738	615,812	87,304	86,950
552	106		-	-	14,174	14,831	667,492	648,115	88,383	87,843
442	106		-	-	7,667	8,214	710,414	688,953	89,600	88,991
773	211		-	-	3,851	4,835	777,063	743,738	91,532	90,566
8,064	2,428		642	-	6,046	16,538	860,344	818,703	94,017	92,775
15,907	9,619	9,000	1,144	28,510	14,441	68,477	861,000	860,672	94,036	94,027
17,232	10,261	2,000	1,162	9,361	27,989	64,843	868,000	864,500	94,248	94,142
25,186	15,177		1,428	47,444	42,828	130,635	903,077	885,538	95,318	94,783
25,738	15,605		1,301	15,279	52,114	108,736	870,000	886,538	94,309	94,814
23,197	14,108		530	-	67,023	104,328	796,177	833,088	92,098	93,204
23,087	6,861		698	-	58,269	88,217	812,339	804,258	92,577	92,337
14,802	8,978		-	-	41,921	65,701	755,884	784,112	90,914	91,745
8,948	2,639		-	-	27,856	39,442	775,978	765,931	91,500	91,207
3,598	1,098		-	-	15,802	20,497	814,345	795,162	92,636	92,068
3,598	2,223		548	-	10,321	16,142	853,326	833,835	93,806	93,221
3,598	2,223	5,000	1,153	33,859	5,823	45,503	865,000	859,163	94,157	93,981
3,598	2,223		1,052	23,203	3,897	32,920	870,000	867,500	94,309	94,233
5,451	3,335		1,282	38,687	14,410	61,884	870,000	870,000	94,309	94,309
9,049	5,622		1,116	5,409	26,494	46,574	870,000	870,000	94,309	94,309
25,401	15,818		1,279	12,304	38,728	92,251	870,000	870,000	94,309	94,309
28,999	18,106		-	-	45,333	92,438	799,368	834,684	92,193	93,251
34,450	10,586		-	-	58,036	103,072	729,351	764,360	90,141	91,167
31,070	9,541		-	-	56,386	96,997	653,712	691,532	87,997	89,069
23,548	7,199		-	-	40,338	71,084	623,330	638,521	87,156	87,576
9,049	2,776		-	-	24,762	36,587	681,849	652,589	88,785	87,970
3,598	1,098		-	-	13,566	18,262	715,089	698,469	89,733	89,259
3,598	1,098		-	-	8,070	12,765	763,202	739,146	91,127	90,430
3,598	1,098		-	-	3,626	8,322	810,408	786,805	92,520	91,823
3,598	1,098		716	-	5,080	9,776	866,824	838,616	94,212	93,366
5,451	1,647	6,000	1,305	61,611	14,770	83,479	864,000	865,412	94,127	94,169
9,049	2,776		1,307	48,518	23,447	83,789	870,000	867,000	94,309	94,218
25,401	15,818		1,449	47,846	40,980	130,044	913,797	891,899	95,646	94,977
28,999	18,106		1,392	35,711	54,424	137,240	890,278	902,037	94,928	95,287
34,450	21,440		1,059	-	61,646	117,536	835,967	863,122	93,284	94,106
31,070	19,324		-	-	56,570	106,964	770,270	803,118	91,333	92,308
23,548	7,199		-	-	38,887	69,633	805,500	787,885	92,374	91,853
9,049	5,622		797	-	22,569	37,240	855,465	830,482	93,870	93,122
3,598	2,223		1,271	33,515	12,027	51,364	870,000	862,732	94,309	94,089
3,598	2,223		1,301	60,203	7,130	73,155	870,000	870,000	94,309	94,309
3,598	2,223		1,295	57,723	5,104	68,648	870,000	870,000	94,309	94,309
3,598	1,098		1,333	69,324	5,629	79,649	885,479	877,739	94,781	94,545
5,451	1,647		1,518	86,238	12,144	105,480	967,356	926,417	97,257	96,019
9,049	2,776		1,562	81,107	20,898	113,830	977,763	972,560	97,505	97,381
25,401	15,818		1,979	80,435	37,712	159,366	1,062,775	1,020,269	99,556	98,530
28,999	18,106		2,226	85,361	55,223	187,689	1,120,664	1,091,720	100,997	100,276
34,450	21,440		1,936	63,172	68,240	187,302	1,033,818	1,077,241	98,850	99,924
31,070	19,324		1,565	45,823	64,193	160,410	970,567	1,002,192	97,334	98,092
23,548	14,579		1,437	47,379	43,766	129,272	906,254	938,410	95,415	96,374
9,049	5,622		1,426	73,022	30,298	117,991	889,187	897,721	94,894	95,155
3,598	2,223		1,430	79,250	17,521	102,592	897,312	893,250	95,142	95,018
3,598	2,223		1,429	82,012	7,723	95,556	903,801	900,556	95,340	95,241
3,598	2,223		1,405	80,580	1,442	87,843	902,739	903,270	95,308	95,324
3,598	1,098		1,360	70,852	2,048	77,595	897,316	900,027	95,142	95,225
5,451	1,647		1,488	84,366	7,799	99,263	929,698	913,507	96,137	95,639

MONTHLY SUMMARY OF UTAH LAKE WATER BALANCE ELEMENTS

Date	Water Year	Month	days	Provo Inflow (acre-ft)	Spanish Fork Inflow (acre-ft)	Local Surface and Sub-surface (acre-ft)	Hobble Creek (includes ULS water) (acre-ft)	Change in Return Flows (acre-ft)	Total Inflow (acre-ft)	Precip Vol (acre-ft)	Total Inflows PROSIM (acre-ft)	Total Inflows plus Precip (acre-ft)
Column No.:				1	2	3	4	5	6	7	8	9
Apr-84	1984	4		60,510	53,849	42,519	14,010	(192)	170696	27,239	170,696	197,934
May-84	1984	5		76,040	114,047	52,881	32,727	(192)	275503	6,790	275,503	282,293
Jun-84	1984	6		59,995	36,666	52,040	14,646	(192)	163154	30,663	163,154	193,817
Jul-84	1984	7		20,398	3,102	55,201	5,543	(192)	84053	21,280	84,053	105,333
Aug-84	1984	8		610	3,840	62,220	3,587	(192)	70065	19,028	70,065	89,093
Sep-84	1984	9		549	2,800	51,198	2,157	(192)	56511	12,640	56,511	69,151
Oct-84	1984	10		1,077	16,984	47,063	3,501	(192)	68433	23,458	68,433	91,890
Nov-84	1984	11		8,548	15,861	37,324	4,406	(192)	65946	13,580	65,946	79,526
Dec-84	1984	12		5,252	13,872	51,424	3,558	(192)	73914	10,453	73,914	84,366
Jan-85	1985	1		5,125	12,757	37,787	3,051	(192)	58527	14,775	58,527	73,302
Feb-85	1985	2		8,572	8,075	37,924	1,250	(192)	55629	11,317	55,629	66,946
Mar-85	1985	3		19,964	14,156	57,095	3,355	(192)	94378	21,298	94,378	115,676
Apr-85	1985	4		50,783	33,492	73,383	6,031	(192)	163496	3,164	163,496	166,661
May-85	1985	5		66,626	29,974	58,699	11,619	(192)	166726	18,824	166,726	185,550
Jun-85	1985	6		15,726	10,290	22,200	3,166	(192)	51189	14,487	51,189	65,675
Jul-85	1985	7		1,838	3,855	55,628	929	(192)	62057	11,446	62,057	73,504
Aug-85	1985	8		569	3,090	35,898	1,089	(192)	40454	469	40,454	40,923
Sep-85	1985	9		466	4,289	25,110	812	(192)	30485	12,854	30,485	43,339
Oct-85	1985	10		6,012	10,815	43,065	1,797	(192)	61497	16,517	61,497	78,014
Nov-85	1985	11		7,356	11,059	25,065	2,717	(192)	46004	24,380	46,004	70,385
Dec-85	1985	12		7,215	10,240	46,043	2,253	(192)	65558	17,139	65,558	82,697
Jan-86	1986	1		5,842	10,133	39,117	2,203	(192)	57102	9,902	57,102	67,005
Feb-86	1986	2		15,376	18,104	33,478	5,928	(192)	72694	23,577	72,694	96,271
Mar-86	1986	3		96,870	22,613	49,703	6,883	(192)	175876	24,101	175,876	199,977
Apr-86	1986	4		54,215	46,811	61,501	10,680	(192)	173014	30,391	173,014	203,406
May-86	1986	5		70,115	46,692	72,348	14,005	(192)	202968	15,675	202,968	218,643
Jun-86	1986	6		76,919	2,822	49,449	3,802	(192)	132799	2,423	132,799	135,223
Jul-86	1986	7		19,875	2,148	39,135	1,105	(192)	62071	15,384	62,071	77,455
Aug-86	1986	8		608	1,077	52,418	1,125	(192)	55035	12,567	55,035	67,602
Sep-86	1986	9		551	2,268	1,498	732	(192)	4857	20,490	4,857	25,347
Oct-86	1986	10		11,867	11,232	45,451	1,479	(192)	69837	7,080	69,837	76,917
Nov-86	1986	11		7,201	10,562	38,521	2,823	(192)	58915	11,317	58,915	70,232
Dec-86	1986	12		4,658	9,789	37,276	2,406	(192)	53936	2,829	53,936	56,765
Jan-87	1987	1		5,331	9,991	32,148	2,421	(192)	49699	12,889	49,699	62,588
Feb-87	1987	2		18,226	9,546	23,375	2,643	(192)	53597	15,797	53,597	69,394
Mar-87	1987	3		15,180	11,479	37,566	3,167	(192)	67200	12,496	67,200	79,696
Apr-87	1987	4		20,782	3,961	23,166	4,738	(192)	52454	3,144	52,454	55,598
May-87	1987	5		31,760	1,426	25,058	6,149	(192)	64200	14,775	64,200	78,975
Jun-87	1987	6		5,434	20	24,496	2,380	(192)	32137	1,726	32,137	33,863
Jul-87	1987	7		5,078	310	19,564	344	(192)	25104	11,913	25,104	37,017
Aug-87	1987	8		3,246	833	25,832	290	(192)	30009	12,078	30,009	42,086
Sep-87	1987	9		4,111	1,600	26,518	195	(192)	32231	739	32,231	32,970
Oct-87	1987	10		4,611	5,696	45,380	0	(192)	55495	9,719	55,495	65,213
Nov-87	1987	11		4,260	8,190	36,145	1,407	(192)	49810	12,882	49,810	62,692
Dec-87	1987	12		2,167	7,136	20,868	1,372	(192)	31351	12,315	31,351	43,665
Jan-88	1988	1		1,692	7,391	35,234	1,426	(192)	45550	10,181	45,550	55,731
Feb-88	1988	2		1,546	8,026	32,326	1,496	(192)	43202	1,378	43,202	44,580
Mar-88	1988	3		1,629	9,216	18,274	2,024	(192)	30951	5,807	30,951	36,758
Apr-88	1988	4		5,008	6,454	52,572	4,760	(192)	68602	12,056	68,602	80,658
May-88	1988	5		10,153	3,780	18,492	6,149	(192)	38381	9,780	38,381	48,161
Jun-88	1988	6		4,410	555	10,390	2,380	(192)	17543	2,409	17,543	19,952
Jul-88	1988	7		3,292	1,459	4,122	379	(192)	9060	2,961	9,060	12,021
Aug-88	1988	8		3,239	1,223	8,260	302	(192)	12832	4,285	12,832	17,117
Sep-88	1988	9		4,116	280	59,508	129	(192)	63841	4,551	63,841	68,392
Oct-88	1988	10		11,139	2,916	(11,776)	-	(192)	2087	4,559	2,087	6,645
Nov-88	1988	11		4,463	7,009	18,246	988	(192)	30514	17,374	30,514	47,887
Dec-88	1988	12		4,611	7,640	17,169	1,105	(192)	30333	10,043	30,333	40,376
Jan-89	1989	1		2,401	7,809	13,591	1,337	(192)	24946	5,397	24,946	30,343
Feb-89	1989	2		1,495	8,534	25,166	1,792	(192)	36795	17,352	36,795	54,146
Mar-89	1989	3		1,641	11,323	48,221	2,311	(192)	63304	14,402	63,304	77,706
Apr-89	1989	4		5,903	9,543	14,623	4,760	(192)	34636	10,113	34,636	44,749
May-89	1989	5		14,053	5,055	(9,209)	6,149	(192)	15855	5,108	15,855	20,964
Jun-89	1989	6		4,768	1,009	9,630	2,380	(192)	17595	7,278	17,595	24,873
Jul-89	1989	7		11,674	1,092	(13,070)	328	(192)	-169	3,606	(169)	3,437
Aug-89	1989	8		3,245	1,319	4,270	271	(192)	8912	10,605	8,912	19,517
Sep-89	1989	9		4,043	2,529	101,532	0	(192)	107911	11,944	107,911	119,855
Oct-89	1989	10		3,905	5,827	38,512	1,858	(192)	49910	7,735	49,910	57,645
Nov-89	1989	11		4,123	7,202	20,433	2,779	(192)	34345	8,106	34,345	42,451
Dec-89	1989	12		3,791	8,118	20,019	3,077	(192)	34813	1,013	34,813	35,826

10	11	12	13	14	15	16	17	18	19	20
			0.95	K factor	45,000	Evap Factor		800000		
				1		0.955	2			
Jordan River Primary Demands (acre-ft)	Jordan River Secondary Demands (acre-ft)	Outflow Adjust-ment (acre-ft)	Jordan River Spill Calcula-tion (cfs)	Jordan River Outflows (acre-ft)	Evap Vol (acre-ft)	Jordan River Outflows pus Evap (acre-ft)	End-of-mont UL Storage (acre-ft)	Monthly Average Storage (acre-ft)	End-of-month UL Surface Area (acre)	Monthly Average Surface Area (acre)
9,049	2,776		1,697	89,137	21,193	122,155	1,005,477	967,587	98,164	97,150
25,401	15,818		2,169	92,130	41,170	174,519	1,113,250	1,059,364	100,810	99,487
28,999	18,106		2,221	85,062	56,721	188,888	1,118,179	1,115,715	100,934	100,872
34,450	21,440		1,948	63,893	69,965	189,748	1,033,765	1,075,972	98,849	99,892
31,070	19,324		1,534	43,954	62,304	156,652	966,206	999,986	97,230	98,039
23,548	14,579		1,437	47,357	43,410	128,894	906,464	936,335	95,422	96,326
9,049	5,622		1,402	71,526	27,946	114,142	884,212	895,338	94,743	95,082
3,598	2,223		1,329	72,686	15,231	93,738	870,000	877,106	94,309	94,526
3,598	2,223		1,317	72,391	6,154	84,366	870,000	870,000	94,309	94,309
3,598	2,223		1,301	65,080	2,402	73,302	870,000	870,000	94,309	94,309
3,598	1,098		1,294	58,423	3,828	66,946	870,000	870,000	94,309	94,309
5,451	1,647		1,386	78,130	9,982	95,210	890,465	880,233	94,933	94,621
9,049	2,776		1,504	77,656	25,083	114,564	942,562	916,514	96,534	95,734
25,401	15,818		1,589	56,451	46,018	143,688	984,424	963,493	97,663	97,098
28,999	18,106		1,449	39,136	58,604	144,844	905,255	944,839	95,385	96,524
34,450	21,440		1,281	-	68,243	124,133	854,625	879,940	93,845	94,615
31,070	19,324		-	-	58,553	108,947	786,602	820,613	91,815	92,830
23,548	7,199		-	-	43,111	73,857	756,083	771,343	90,920	91,367
9,049	2,776		-	-	29,377	41,202	792,896	774,490	92,001	91,460
3,598	1,098		344	-	15,888	20,584	842,697	817,796	93,486	92,744
3,598	2,223		1,277	42,505	7,068	55,394	870,000	856,348	94,309	93,897
3,598	2,223		1,293	58,857	2,327	67,005	870,000	870,000	94,309	94,309
3,598	1,098		1,334	69,411	5,254	79,361	886,910	878,455	94,825	94,567
5,451	1,647		1,562	88,937	12,754	108,788	978,100	932,505	97,513	96,169
9,049	2,776		1,954	104,425	25,144	141,394	1,040,112	1,009,106	99,003	98,258
25,401	15,818		2,060	85,413	40,262	166,894	1,091,861	1,065,987	100,277	99,640
28,999	18,106		1,976	70,500	59,215	176,820	1,050,264	1,071,063	99,250	99,764
34,450	21,440		1,532	38,311	64,690	158,891	968,828	1,009,546	97,292	98,271
31,070	19,324		1,409	36,249	59,310	145,953	890,476	929,652	94,934	96,113
23,548	14,579		793	-	38,985	77,112	838,711	864,594	93,366	94,150
9,049	5,622		1,104	4,505	26,452	45,628	870,000	854,356	94,309	93,838
3,598	2,223		1,297	48,424	15,987	70,232	870,000	870,000	94,309	94,309
3,598	2,223		1,279	41,937	9,006	56,765	870,000	870,000	94,309	94,309
3,598	2,223		1,287	53,315	3,452	62,588	870,000	870,000	94,309	94,309
3,598	1,098		1,297	59,144	5,554	69,394	870,000	870,000	94,309	94,309
5,451	1,647		1,308	59,614	12,984	79,696	870,000	870,000	94,309	94,309
9,049	2,776		1,269	17,429	26,344	55,598	870,000	870,000	94,309	94,309
25,401	15,818		1,194	-	43,081	84,300	864,675	867,337	94,147	94,228
28,999	18,106		57	-	50,724	97,829	800,708	832,691	92,232	93,190
34,450	21,440		-	-	56,739	112,629	725,096	762,902	90,019	91,126
31,070	9,541		-	-	48,500	89,112	678,070	701,583	88,679	89,349
23,548	7,199		-	-	37,686	68,433	642,608	660,339	87,686	88,182
9,049	2,776		-	-	30,216	42,041	665,780	654,194	88,335	88,010
3,598	428		-	-	15,396	19,422	709,051	687,415	89,561	88,948
3,598	211		-	-	7,413	11,222	741,494	725,272	90,495	90,028
3,598	211		-	-	4,465	8,275	788,950	765,222	91,884	91,190
3,598	211		-	-	6,216	10,025	823,506	806,228	92,909	92,397
5,451	428		176	-	16,711	22,590	837,674	830,590	93,335	93,122
5,634	2,565	14,000	1,226	24,792	29,340	62,332	856,000	846,837	93,886	93,611
18,668	8,551		783	-	42,141	69,360	834,801	845,401	93,249	93,567
23,970	11,116		-	-	57,216	92,302	762,451	798,626	91,105	92,177
26,180	6,016		-	-	65,254	97,450	677,022	719,736	88,650	89,877
25,075	5,699		-	-	57,005	87,779	606,359	641,690	86,691	87,671
19,331	4,433		-	-	39,463	63,227	611,524	608,942	86,833	86,762
7,291	1,689		-	-	30,268	39,247	578,922	595,223	85,795	86,314
3,598	211		-	-	16,319	20,128	606,681	592,802	86,700	86,248
3,598	106		-	-	6,555	10,259	636,799	621,740	87,524	87,112
3,598	106		-	-	1,463	5,166	661,975	649,387	88,228	87,876
3,598	106		-	-	3,862	7,565	708,556	685,265	89,547	88,887
5,451	211		-	-	13,398	19,060	767,202	737,879	91,243	90,395
7,843	1,794		-	-	26,722	36,359	775,591	771,396	91,489	91,366
22,314	5,277		-	-	43,395	70,986	725,569	750,580	90,032	90,761
24,081	5,699		-	-	55,458	85,238	665,203	695,386	88,319	89,176
29,273	6,861		-	-	64,242	100,376	568,264	616,734	85,409	86,864
27,174	6,439		-	-	54,309	87,922	499,860	534,062	82,847	84,128
15,796	3,694		-	-	39,032	58,522	561,193	530,526	85,153	84,000
3,203	739		-	-	28,056	31,997	586,840	574,016	86,082	85,617
1,176	514		-	-	15,209	16,899	612,392	599,616	86,857	86,469
1,176	386		-	-	7,880	9,442	638,777	625,585	87,579	87,218

MONTHLY SUMMARY OF UTAH LAKE WATER BALANCE ELEMENTS

Date	Water Year	Month	days	Provo Inflow (acre-ft)	Spanish Fork Inflow (acre-ft)	Local Surface and Sub-surface (acre-ft)	Hobble Creek (includes ULS water) (acre-ft)	Change in Return Flows (acre-ft)	Total Inflow (acre-ft)	Precip Vol (acre-ft)	Total Inflows PROSIM (acre-ft)	Total Inflows plus Precip (acre-ft)
Column No.:				1	2	3	4	5	6	7	8	9
Jan-90	1990	1		3,648	8,114	36,951	3,141	(192)	51661	10,145	51,661	61,806
Feb-90	1990	2		1,892	7,955	29,702	3,302	(192)	42659	13,082	42,659	55,741
Mar-90	1990	3		3,260	10,320	20,304	3,996	(192)	37688	13,367	37,688	51,055
Apr-90	1990	4		4,879	7,422	(13,834)	4,760	(192)	3035	10,598	3,035	13,633
May-90	1990	5		15,321	2,773	29,243	6,149	(192)	53292	9,287	53,292	62,580
Jun-90	1990	6		4,768	-	19,752	2,380	(192)	26708	14,016	26,708	40,724
Jul-90	1990	7		4,090	2,584	9,398	1,693	(192)	17573	2,865	17,573	20,438
Aug-90	1990	8		3,237	1,379	7,146	1,717	(192)	13286	3,851	13,286	17,138
Sep-90	1990	9		4,115	861	23,755	1,761	(192)	30300	5,920	30,300	36,220
Oct-90	1990	10		4,611	5,563	27,385	621	(192)	37988	11,032	37,988	49,020
Nov-90	1990	11		4,463	6,382	16,795	1,582	(192)	29029	8,891	29,029	37,919
Dec-90	1990	12		4,611	6,562	10,533	1,342	(192)	22855	10,010	22,855	32,866
Jan-91	1991	1		4,611	6,964	13,304	1,540	(192)	26227	8,512	26,227	34,739
Feb-91	1991	2		2,404	8,431	32,578	2,165	(192)	45385	5,861	45,385	51,245
Mar-91	1991	3		1,620	8,680	25,008	2,057	(192)	37172	11,987	37,172	49,159
Apr-91	1991	4		5,002	4,460	9,388	4,760	(192)	23417	16,152	23,417	39,569
May-91	1991	5		9,221	5,754	27,995	6,149	(192)	48927	16,297	48,927	65,223
Jun-91	1991	6		5,009	2,680	27,371	2,083	(192)	36951	7,140	36,951	44,091
Jul-91	1991	7		4,611	376	(3,136)	429	(192)	2088	2,022	2,088	4,110
Aug-91	1991	8		3,033	1,096	13,669	373	(192)	17979	12,554	17,979	30,533
Sep-91	1991	9		4,018	2,018	28,593	477	(192)	34913	14,929	34,913	49,841
Oct-91	1991	10		4,611	5,295	31,513	1,231	(192)	42458	11,136	42,458	53,594
Nov-91	1991	11		4,463	6,430	17,152	1,983	(192)	29836	16,165	29,836	46,001
Dec-91	1991	12		4,611	7,059	25,347	2,198	(192)	39023	4,277	39,023	43,300
Jan-92	1992	1		4,611	7,399	21,847	2,284	(192)	35949	5,528	35,949	41,477
Feb-92	1992	2		4,165	7,702	16,667	2,486	(192)	30828	15,197	30,828	46,025
Mar-92	1992	3		4,029	7,199	19,157	2,354	(192)	32547	9,164	32,547	41,711
Apr-92	1992	4		5,043	7,641	4,792	4,754	(192)	22038	2,603	22,038	24,641
May-92	1992	5		8,839	1,698	11,834	5,805	(192)	27983	10,708	27,983	38,691
Jun-92	1992	6		4,063	746	29,180	2,380	(192)	36177	5,795	36,177	41,972
Jul-92	1992	7		3,952	0	(1,894)	1,086	(192)	2951	7,188	2,951	10,139
Aug-92	1992	8		9,476	847	(11,729)	1,090	(192)	-508	7,778	(508)	7,270
Sep-92	1992	9		3,884	958	57,567	1,191	(192)	63408	5,186	63,408	68,594
Oct-92	1992	10		4,611	5,073	7,646	4,405	(192)	21543	17,998	21,543	39,541
Nov-92	1992	11		3,949	5,579	23,372	4,764	(192)	37472	12,306	37,472	49,778
Dec-92	1992	12		2,155	6,338	14,205	4,926	(192)	27432	11,963	27,432	39,394
Jan-93	1993	1		3,138	6,841	24,912	5,136	(192)	39834	28,375	39,834	68,209
Feb-93	1993	2		2,364	7,561	28,890	4,489	(192)	43111	20,472	43,111	63,583
Mar-93	1993	3		5,706	13,260	48,542	6,149	(192)	73465	18,800	73,465	92,265
Apr-93	1993	4		9,741	14,841	13,908	5,072	(192)	43370	5,789	43,370	49,159
May-93	1993	5		16,391	30,431	46,728	10,668	(192)	104026	21,108	104,026	125,133
Jun-93	1993	6		4,954	2,448	41,669	4,954	(192)	53833	11,631	53,833	65,465
Jul-93	1993	7		4,152	1,078	22,006	2,141	(192)	29185	7,393	29,185	36,578
Aug-93	1993	8		3,251	0	29,178	2,121	(192)	34358	6,884	34,358	41,242
Sep-93	1993	9		4,066	490	33,370	2,065	(192)	39799	6,259	39,799	46,058
Oct-93	1993	10		4,611	6,150	32,113	572	(192)	43254	16,613	43,254	59,867
Nov-93	1993	11		4,463	6,709	31,906	1,535	(192)	44420	4,458	44,420	48,879
Dec-93	1993	12		4,611	7,382	21,087	1,514	(192)	34403	7,991	34,403	42,394
Jan-94	1994	1		4,611	7,642	22,827	1,583	(192)	36470	6,167	36,470	42,637
Feb-94	1994	2		3,838	7,662	21,620	1,729	(192)	34656	14,187	34,656	48,842
Mar-94	1994	3		2,710	9,680	19,034	2,397	(192)	33628	8,349	33,628	41,978
Apr-94	1994	4		5,755	5,270	21,540	4,760	(192)	37134	17,885	37,134	55,019
May-94	1994	5		10,059	1,082	25,311	6,149	(192)	42408	8,360	42,408	50,768
Jun-94	1994	6		4,491	885	17,812	2,380	(192)	25375	529	25,375	25,904
Jul-94	1994	7		3,369	1,122	20,246	366	(192)	24910	592	24,910	25,502
Aug-94	1994	8		3,051	1,586	29,344	462	(192)	34250	8,395	34,250	42,645
Sep-94	1994	9		3,913	1,857	18,121	509	(192)	24208	4,738	24,208	28,947
Oct-94	1994	10		5,179	7,124	27,514	2,544	(192)	42168	24,348	42,168	66,516
Nov-94	1994	11		4,406	5,745	22,259	3,480	(192)	35698	17,106	35,698	52,804
Dec-94	1994	12		4,071	5,757	16,925	3,576	(192)	30137	10,328	30,137	40,465
Jan-95	1995	1		3,812	5,848	34,966	3,629	(192)	48063	19,370	48,063	67,434
Feb-95	1995	2		3,699	6,101	30,435	3,361	(192)	43404	6,657	43,404	50,060
Mar-95	1995	3		5,058	10,964	17,881	5,529	(192)	39239	17,119	39,239	56,359
Apr-95	1995	4		4,904	14,799	32,302	4,760	(192)	56573	12,829	56,573	69,402
May-95	1995	5		14,563	54,181	54,021	14,156	(192)	136728	35,356	136,728	172,085
Jun-95	1995	6		4,697	40,115	40,382	12,943	(192)	97945	17,476	97,945	115,421
Jul-95	1995	7		8,075	3,701	61,601	3,227	(192)	76413	7,083	76,413	83,496
Aug-95	1995	8		3,215	2,078	31,799	2,100	(192)	38999	4,134	38,999	43,133
Sep-95	1995	9		934	389	23,799	2,096	(192)	27026	3,909	27,026	30,935

10	11	12	13	14	15	16	17	18	19	20
			0.95	K factor	45,000	Evap Factor		800000		
				1		0.955	2			
Jordan River Primary Demands (acre-ft)	Jordan River Secondary Demands (acre-ft)	Outflow Adjust-ment (acre-ft)	Jordan River Spill Calcula-tion (cfs)	Jordan River Outflows (acre-ft)	Evap Vol (acre-ft)	Jordan River Outflows pus Evap (acre-ft)	End-of-mont UL Storage (acre-ft)	Monthly Average Storage (acre-ft)	End-of-month UL Surface Area (acre)	Monthly Average Surface Area (acre)
261	128		-	-	3,833	4,223	696,360	667,569	89,199	88,389
261	128		-	-	5,679	6,068	746,033	721,197	90,627	89,913
392	128	6,000	-	6,000	14,713	21,234	775,855	760,944	91,497	91,062
9,589	4,917		-	-	29,563	44,069	745,419	760,637	90,609	91,053
30,759	13,044		-	-	41,824	85,626	722,372	733,895	89,941	90,275
35,059	14,550		-	-	53,684	103,292	659,803	691,088	88,167	89,054
36,851	9,074		-	-	61,115	107,040	573,201	616,502	85,588	86,878
34,368	8,828		-	-	53,333	96,529	493,810	533,506	82,611	84,099
28,226	3,969		-	-	39,447	71,642	458,389	476,099	81,215	81,913
3,288	-		-	-	24,302	27,590	479,818	469,104	82,066	81,641
860	3,245		-	-	13,846	17,951	499,786	489,802	82,844	82,455
860	3,245		-	-	5,670	9,775	522,876	511,331	83,725	83,285
1,229	3,245		-	-	3,465	7,939	549,676	536,276	84,732	84,229
3,073	3,245		-	-	6,339	12,657	588,264	568,970	86,134	85,433
2,827	4,868		-	-	15,081	22,776	614,648	601,456	86,918	86,526
1,493	-		-	-	24,003	25,496	628,721	621,685	87,303	87,111
24,202	-		-	-	36,268	60,470	633,474	631,098	87,433	87,368
28,253	-		-	-	43,976	72,229	605,337	619,406	86,664	87,048
37,116	17,499		-	-	56,831	111,446	498,000	551,668	82,774	84,719
40,434	9,598		-	-	50,723	100,756	427,777	462,889	79,975	81,374
28,893	-		-	-	31,187	60,080	417,539	422,658	79,543	79,759
12,167	4,216		-	-	22,473	38,855	432,277	424,908	80,159	79,851
838	-		-	-	12,759	13,597	464,682	448,479	81,470	80,814
838	-		-	-	5,317	6,155	501,827	483,254	82,923	82,197
-	-		-	-	1,782	1,782	541,523	521,675	84,426	83,674
-	-		-	-	5,375	5,375	582,172	561,848	85,913	85,169
-	-		-	-	14,700	14,700	609,183	595,678	86,769	86,341
14,998	-		-	-	27,621	42,619	591,205	600,194	86,240	86,504
32,962	-		-	-	45,504	78,466	551,430	571,318	84,798	85,519
37,571	-		-	-	53,718	91,289	502,113	526,772	82,934	83,866
48,734	-		-	-	56,432	105,166	407,086	454,600	79,102	81,018
30,467	-		-	-	49,858	80,325	334,031	370,559	75,888	77,495
6,058	-		-	-	34,968	41,026	361,599	347,815	77,135	76,512
1,939	-		-	-	24,248	26,187	374,953	368,276	77,722	77,428
437	157		-	-	12,123	12,717	412,014	393,484	79,310	78,516
146	-		-	-	5,933	6,079	445,329	428,672	80,687	79,998
146	-		-	-	2,504	2,650	510,888	478,109	83,275	81,981
437	157		-	-	4,308	4,902	569,570	540,229	85,456	84,366
291	157		-	-	9,725	10,173	651,662	610,616	87,939	86,698
18,068	314		-	-	19,526	37,908	662,913	657,287	88,254	88,097
21,711	1,045		-	-	39,121	61,878	726,169	694,541	90,050	89,152
29,142	621		-	-	51,025	80,788	710,846	718,507	89,612	89,831
36,428	2,923		-	-	58,408	97,759	649,664	680,255	87,883	88,748
37,302	5,572		-	-	54,204	97,077	593,828	621,746	86,335	87,109
28,441	-		-	-	39,026	67,467	572,419	583,124	85,560	85,947
8,858	4,210		-	-	26,624	39,691	592,594	582,507	86,290	85,925
2,813	2,510		-	-	11,949	17,272	624,201	608,398	87,180	86,735
856	837		-	-	7,493	9,186	657,409	640,805	88,100	87,640
245	279		-	-	5,539	6,063	693,983	675,696	89,131	88,615
122	2,900		-	-	6,242	9,264	733,561	713,772	90,264	89,697
-	4,352		-	-	14,367	18,719	756,820	745,191	90,941	90,603
9,949	-	9,000	-	9,000	27,068	46,017	765,822	761,321	91,203	91,072
25,680	643		-	-	44,348	70,671	745,920	755,871	90,624	90,914
28,812	5,219		-	-	57,986	92,017	679,807	712,863	88,728	89,676
46,225	5,750		-	-	65,811	117,786	587,522	633,665	86,107	87,417
41,161	8,872		-	-	60,166	110,200	519,968	553,745	83,616	84,862
22,256	5,871		-	-	40,858	68,986	479,929	499,948	82,071	82,843
3,289	2,610		-	-	25,211	31,110	515,335	497,632	83,442	82,756
366	227		-	-	13,746	14,339	553,800	534,567	84,885	84,164
366	227		-	-	6,620	7,213	587,052	570,426	86,090	85,487
975	679		-	-	6,920	8,574	645,911	616,481	87,778	86,934
853	679		-	-	7,405	8,937	687,034	666,472	88,932	88,355
487	453		-	-	17,057	17,997	725,396	706,215	90,028	89,480
13,143	11,983		-	-	29,232	54,358	740,440	732,918	90,464	90,246
21,139	-	2,000	976	2,000	42,189	65,328	847,197	793,818	93,621	92,043
32,774	38,848		971	-	51,112	122,734	839,884	843,540	93,402	93,512
46,054	25,804		61	-	63,257	135,115	788,265	814,074	91,864	92,633
37,521	-		-	-	62,069	99,590	731,808	760,036	90,213	91,038
18,641	9,495		-	-	45,087	73,223	689,520	710,664	89,003	89,608

MONTHLY SUMMARY OF UTAH LAKE WATER BALANCE ELEMENTS

Date	Water Year	Month	days	Provo Inflow (acre-ft)	Spanish Fork Inflow (acre-ft)	Local Surface and Sub-surface (acre-ft)	Hobble Creek (includes ULS water) (acre-ft)	Change in Return Flows (acre-ft)	Total Inflow (acre-ft)	Precip Vol (acre-ft)	Total Inflows PROSIM (acre-ft)	Total Inflows plus Precip (acre-ft)
Column No.:				1	2	3	4	5	6	7	8	9
Oct-95	1995	10		8,713	7,927	41,031	186	(192)	57664	4,005	57,664	61,669
Nov-95	1995	11		7,143	8,498	24,682	1,917	(192)	42047	5,081	42,047	47,128
Dec-95	1995	12		5,855	9,098	18,001	1,867	(192)	34628	17,108	34,628	51,736
Jan-96	1996	1		9,806	9,464	(17,366)	2,024	(192)	3736	21,449	3,736	25,185
Feb-96	1996	2		4,165	10,286	32,241	2,516	(192)	49016	18,093	49,016	67,108
Mar-96	1996	3		8,818	14,115	24,242	3,949	(192)	50932	18,354	50,932	69,286
Apr-96	1996	4		16,338	21,827	26,642	4,760	(192)	69374	13,392	69,374	82,766
May-96	1996	5		35,174	21,791	35,885	9,443	(192)	102101	12,166	102,101	114,266
Jun-96	1996	6		53,405	270	57,087	2,380	(192)	112950	3,930	112,950	116,879
Jul-96	1996	7		10,005	-	19,380	560	(192)	29752	3,927	29,752	33,679
Aug-96	1996	8		3,160	336	31,273	584	(192)	35160	461	35,160	35,621
Sep-96	1996	9		3,996	591	28,855	369	(192)	33619	11,826	33,619	45,445
Oct-96	1996	10		5,587	7,527	20,485	313	(192)	33720	16,012	33,720	49,732
Nov-96	1996	11		7,587	8,912	47,777	1,785	(192)	65869	17,401	65,869	83,270
Dec-96	1996	12		8,801	9,912	27,005	1,911	(192)	47437	14,659	47,437	62,095
Jan-97	1997	1		4,611	11,432	31,620	2,376	(192)	49847	30,318	49,847	80,165
Feb-97	1997	2		4,165	10,105	25,481	2,127	(192)	41685	11,867	41,685	53,553
Mar-97	1997	3		15,181	18,961	25,030	5,384	(192)	64363	3,772	64,363	68,135
Apr-97	1997	4		52,596	26,251	29,197	5,746	(192)	113597	13,125	113,597	126,722
May-97	1997	5		70,456	33,951	55,325	12,276	(192)	171816	14,769	171,816	186,584
Jun-97	1997	6		49,555	2,978	71,093	2,748	(192)	126181	6,179	126,181	132,361
Jul-97	1997	7		8,599	417	24,015	1,013	(192)	33851	3,920	33,851	37,771
Aug-97	1997	8		3,117	233	45,716	949	(192)	49821	5,751	49,821	55,572
Sep-97	1997	9		3,954	-	32,767	786	(192)	37315	18,293	37,315	55,608
Oct-97	1997	10		5,717	8,264	43,506	4,287	(192)	61582	11,884	61,582	73,466
Nov-97	1997	11		6,320	9,013	32,658	5,190	(192)	52989	11,999	52,989	64,988
Dec-97	1997	12		4,611	14,219	21,455	6,149	(192)	46241	11,228	46,241	57,469
Jan-98	1998	1		4,611	10,191	23,271	5,526	(192)	43406	21,745	43,406	65,151
Feb-98	1998	2		4,165	9,731	27,943	5,270	(192)	46917	22,634	46,917	69,551
Mar-98	1998	3		4,611	15,931	21,456	6,149	(192)	47954	14,225	47,954	62,179
Apr-98	1998	4		13,105	23,763	28,644	5,950	(192)	71269	16,268	71,269	87,537
May-98	1998	5		64,278	36,061	50,293	12,828	(192)	163267	13,832	163,267	177,099
Jun-98	1998	6		50,697	8,084	53,157	5,950	(192)	117696	29,931	117,696	147,627
Jul-98	1998	7		11,175	3,227	45,626	2,771	(192)	62607	4,567	62,607	67,174
Aug-98	1998	8		3,171	2,570	40,302	2,110	(192)	47960	5,973	47,960	53,933
Sep-98	1998	9		3,977	1,242	56,082	2,096	(192)	63205	8,318	63,205	71,523
Oct-98	1998	10		7,714	9,319	25,041	1,399	(192)	43281	10,316	43,281	53,597
Nov-98	1998	11		6,205	10,291	37,311	2,323	(192)	55937	9,587	55,937	65,524
Dec-98	1998	12		4,611	8,937	26,620	1,921	(192)	41897	5,488	41,897	47,385
Jan-99	1999	1		4,611	8,801	21,594	1,881	(192)	36695	17,683	36,695	54,378
Feb-99	1999	2		8,720	8,238	32,240	1,776	(192)	50782	9,431	50,782	60,213
Mar-99	1999	3		16,660	9,101	20,176	2,130	(192)	47875	4,165	47,875	52,040
Apr-99	1999	4		31,282	9,325	17,459	4,760	(192)	62634	33,008	62,634	95,642
May-99	1999	5		54,137	28,334	23,762	7,335	(192)	113375	26,485	113,375	139,860
Jun-99	1999	6		37,156	7,899	26,011	3,065	(192)	73939	12,136	73,939	86,075
Jul-99	1999	7		14,064	3,511	30,421	261	(192)	48065	5,737	48,065	53,803
Aug-99	1999	8		3,147	2,924	29,939	299	(192)	36117	8,091	36,117	44,209
Sep-99	1999	9		4,030	2,899	22,148	108	(192)	28993	1,213	28,993	30,206
Annual Average				**113,705**	**93,012**	**352,115**	**33,405**	**(2,309)**	**589,928**	**109,197**	**589,928**	**699,125**
Monthly Max				96,870	114,047				278,425	45,514	278,425	289,267
Monthly Min				336	(0)				(3,298)	-	(3,298)	(3,298)
				31,469	(68,114)	-	12,027	(2,866)	(27,485)	(722)	(27,485)	(28,207)

10	11	12	13	14	15	16	17	18	19	20
			0.95	K factor	45,000	Evap Factor		800000		
				1		0.955	2			
Jordan River Primary Demands (acre-ft)	Jordan River Secondary Demands (acre-ft)	Outflow Adjust-ment (acre-ft)	Jordan River Spill Calcula-tion (cfs)	Jordan River Outflows (acre-ft)	Evap Vol (acre-ft)	Jordan River Outflows pus Evap (acre-ft)	End-of-mont UL Storage (acre-ft)	Monthly Average Storage (acre-ft)	End-of-month UL Surface Area (acre)	Monthly Average Surface Area (acre)
9,090	-		-	-	29,324	38,414	712,775	701,147	89,667	89,335
704	2,037		-	-	17,626	20,367	739,536	726,155	90,438	90,053
704	2,037		-	-	9,213	11,953	779,318	759,427	91,599	91,019
3,819	2,037		-	-	5,905	11,760	792,743	786,031	91,997	91,798
3,819	2,037		160	-	3,368	9,224	850,628	821,685	93,725	92,861
6,098	3,055	11,000	1,235	37,216	14,545	60,914	859,000	854,814	93,976	93,850
14,542	5,151	4,000	1,280	27,054	29,018	75,766	866,000	862,500	94,187	94,082
27,677	29,353		1,282	10,886	42,351	110,266	870,000	868,000	94,309	94,248
31,547	33,597		1,280	-	53,739	118,883	867,997	868,998	94,248	94,278
32,954	2,242		643	-	67,955	103,151	798,525	833,261	92,168	93,208
27,325	7,093		-	-	61,834	96,252	737,894	768,210	90,390	91,279
22,484	-		-	-	43,881	66,365	716,974	727,434	89,787	90,089
9,734	30	3,600	-	3,600	28,725	42,089	724,617	720,796	90,005	89,896
3,643	1,449	7,200	-	7,200	15,687	27,979	779,909	752,263	91,617	90,811
3,643	1,449	7,200	-	7,200	9,479	21,771	820,233	800,071	92,811	92,214
3,643	2,935		1,008	19,463	4,358	30,399	870,000	845,117	94,309	93,560
3,643	1,449		1,275	44,032	4,428	53,553	870,000	870,000	94,309	94,309
5,816	2,174		1,291	45,960	14,185	68,135	870,000	870,000	94,309	94,309
13,870	3,665		1,388	65,055	28,971	111,561	885,160	877,580	94,771	94,540
26,397	20,887		1,489	44,291	45,253	136,828	934,917	910,038	96,298	95,535
30,088	23,907		1,472	33,596	54,182	141,773	925,504	930,210	96,007	96,152
35,960	29,775		1,058	-	62,653	128,388	834,887	880,196	93,251	94,629
24,258	4,225		481	-	61,225	89,708	800,751	817,819	92,234	92,743
19,406	396		-	-	43,528	63,330	793,029	796,890	92,005	92,119
11,040	4,927	-	21	-	27,458	43,425	823,069	808,049	92,896	92,451
3,262	2,311	-	857	-	15,451	21,024	867,033	845,051	94,218	93,557
3,262	2,311	3,500	1,276	46,281	6,149	58,002	866,500	866,767	94,202	94,210
3,262	2,311		1,286	49,556	6,522	61,651	870,000	868,250	94,309	94,255
3,262	1,141		1,298	58,544	6,605	69,551	870,000	870,000	94,309	94,309
5,209	1,712		1,284	43,850	11,408	62,179	870,000	870,000	94,309	94,309
12,421	2,886		1,308	48,138	24,092	87,537	870,000	870,000	94,309	94,309
23,641	16,446		1,458	49,573	39,328	128,988	918,110	894,055	95,779	95,044
26,947	18,824		1,486	42,664	47,411	135,846	929,891	924,001	96,143	95,961
37,865	22,290		1,301	1,261	65,649	127,065	870,000	899,945	94,309	95,226
31,002	23,472		683	-	62,445	116,919	807,014	838,507	92,419	93,364
21,354	7,305		-	-	44,130	72,789	805,748	806,381	92,382	92,400
9,917	5,845		-	-	24,556	40,318	819,027	812,388	92,775	92,578
3,476	3,731		788	-	14,619	21,826	862,725	840,876	94,088	93,431
3,476	3,731		1,130	26,539	6,365	40,110	870,000	866,363	94,309	94,199
3,476	3,731		1,273	41,017	6,154	54,378	870,000	870,000	94,309	94,309
3,476	1,842		1,284	46,563	8,331	60,213	870,000	870,000	94,309	94,309
5,551	2,763		1,269	25,113	18,613	52,040	870,000	870,000	94,309	94,309
13,236	4,658		1,315	53,205	24,543	95,642	870,000	870,000	94,309	94,309
25,191	26,544		1,330	30,021	29,421	111,177	898,683	884,342	95,184	94,746
28,713	30,382		1,285	6,501	49,162	114,758	870,000	884,342	94,309	94,746
33,289	17,703		728	-	63,946	114,938	808,864	839,432	92,474	93,391
30,023	6,002		-	-	58,875	94,900	758,173	783,519	90,981	91,727
22,755	436		-	-	39,461	62,652	725,726	741,950	90,037	90,509
168,065	**64,676**		**4,269**	**118,087**	**344,833**	**695,661**	**687,205**		**88,583**	
48,734	38,848		2,226	104,425	69,965	189,748	1,120,664		100,997	
-	-		-	-	1,195	1,305	219,007		69,921	
									173,194	
-	(26,146)			(60)	(2,299)		-2.2%		3,463.89	

Central Utah Project Completion Program

Attachment D

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Attachment D

Utah Lake Drainage Basin Water Delivery System Bonneville Unit, Central Utah Project
2004 Supplement to the 1988 Definite Plan Report

Water Supply Appendix
Volume 6 Attachment D: Utah Lake Salinity Analysis

October 2004

FLOW OF JORDAN RIVER – BONNEVILLE UNIT CONDITIONS

Table J-1: Jordan River from Outlet of Utah Lake to Jordan Narrows(in acre-feet and cfs)

Table J-2: Jordan River below Jordan Narrows(in acre-feet and cfs)

Table J-3: Total Utah Lake Deliveries (in cfs and acre-feet)

Table J-4: Primary Utah Lake Deliveries (in cfs and acre-feet)

Table J-5: Secondary Utah Lake Deliveries (in cfs and acre-feet)

J-1
Bonneville Unit Operations (acre-feet)
Jordan River from Outlet of Utah Lake to Jordan Narrows

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	9,372	5,958	3,197	1,761	5,185	9,269	12,939	25,705	36,998	42,399	41,575	31,280	225,636
1951	13,270	5,075	4,854	1,761	2,644	5,182	12,497	27,472	45,832	52,370	34,395	34,483	239,833
1952	11,944	4,696	4,696	4,696	26,821	79,453	89,013	122,248	108,712	91,830	50,394	38,127	632,628
1953	15,061	6,601	21,638	59,758	27,500	43,826	29,682	41,219	47,105	55,890	40,611	30,747	419,638
1954	11,825	4,696	4,696	4,696	4,696	7,098	14,671	41,219	37,939	45,036	40,611	30,747	247,928
1955	10,729	1,416	1,311	327	327	437	1,201	24,765	30,657	42,550	50,642	32,620	196,981
1956	12,524	442	331	221	110	110	32,255	26,660	32,982	39,930	37,782	29,805	213,152
1957	10,508	437	437	0	0	0	0	14,509	27,930	49,204	40,149	32,620	175,794
1958	10,145	1,871	1,871	1,105	2,762	2,541	2,209	31,118	37,329	43,946	45,883	33,489	214,269
1959	13,712	6,842	3,086	663	663	221	5,634	32,001	36,998	42,289	38,372	27,193	207,674
1960	8,631	4,254	1,201	221	110	221	3,093	32,001	33,424	39,157	30,049	20,747	173,109
1961	5,128	874	874	0	0	0	0	30,080	29,749	22,029	14,119	5,413	108,267
1962	663	437	110	110	437	327	653	20,470	28,564	35,733	35,352	26,381	149,236
1963	5,565	3,491	1,090	327	110	0	0	26,786	25,249	44,605	39,044	20,104	166,370
1964	10,715	763	1,090	1,090	327	110	0	16,355	18,445	44,384	42,464	32,918	168,660
1965	10,052	437	437	1,201	1,090	653	4,801	26,897	34,254	40,090	39,597	16,901	176,409
1966	9,058	1,871	1,871	3,197	8,278	7,060	7,968	33,216	37,439	40,521	39,256	29,513	219,247
1967	11,171	2,617	1,090	1,201	1,748	4,039	3,164	31,967	22,475	39,601	42,981	32,073	194,127
1968	8,729	1,761	1,761	1,871	1,982	7,391	16,473	28,688	32,248	41,626	35,279	31,059	208,867
1969	13,615	9,164	9,164	8,038	4,696	8,786	61,174	61,989	66,439	55,890	50,394	30,747	380,095
1970	14,238	9,521	9,521	10,647	21,983	23,413	28,153	43,990	47,105	55,890	40,611	30,747	335,819
1971	14,278	9,601	9,601	9,601	10,727	42,502	47,680	41,219	47,105	55,890	40,611	30,747	359,563
1972	14,784	11,740	10,615	11,740	11,423	35,829	31,245	41,219	47,105	55,890	40,611	30,747	342,948
1973	14,632	10,310	10,310	10,310	9,896	14,401	49,003	84,577	67,525	55,890	40,611	30,747	398,213
1974	15,425	11,896	11,896	13,021	36,780	40,631	71,100	41,219	47,105	55,890	40,611	30,747	416,320
1975	11,825	4,696	4,696	4,696	4,696	8,786	36,164	80,903	87,078	70,244	50,394	30,747	394,922
1976	11,825	4,696	5,821	45,048	65,501	38,119	24,475	41,219	47,105	45,036	40,611	30,747	400,203
1977	11,825	828	828	717	828	911	6,604	19,512	28,077	35,395	34,684	28,146	168,354
1978	1,081	496	496	607	717	1,463	5,168	32,917	19,293	39,900	39,434	25,164	166,735
1979	14,557	4,743	4,743	4,743	16,605	64,434	67,924	41,114	47,158	45,050	40,692	30,728	382,490
1980	11,503	658	548	984	10,492	54,036	36,854	87,807	56,622	37,305	29,948	23,780	350,537
1981	11,587	4,696	5,821	39,680	29,024	47,473	20,080	53,523	47,105	45,036	40,611	30,747	375,382
1982	11,825	4,696	4,696	4,696	4,696	68,709	60,343	89,065	82,816	55,890	50,394	30,747	468,570
1983	14,671	39,336	66,024	63,544	74,020	93,336	92,932	121,654	132,466	119,062	96,217	85,506	998,768
1984	87,693	85,071	87,833	86,401	75,547	91,464	100,962	133,349	132,167	119,783	94,348	85,484	1,180,101
1985	86,197	78,507	78,212	70,901	63,118	85,228	89,481	97,670	86,241	55,890	50,394	30,747	872,585
1986	11,825	4,696	48,326	64,678	74,107	96,034	116,250	126,632	117,605	94,201	86,643	38,127	879,125
1987	19,176	54,245	47,758	59,136	63,840	66,712	29,254	41,219	47,105	55,890	40,611	30,747	555,693
1988	11,825	4,026	3,809	3,809	3,809	5,879	32,991	27,219	35,086	32,196	30,774	23,764	215,189
1989	8,980	3,809	3,704	3,704	3,704	5,662	9,637	27,591	29,780	36,134	33,613	19,490	185,808
1990	3,942	1,690	1,562	389	389	6,520	14,506	43,803	49,609	45,925	43,196	32,195	243,726
1991	3,288	4,105	4,105	4,474	6,318	7,695	1,493	24,202	28,253	54,615	50,032	28,893	217,475
1992	16,383	838	838	0	0	0	14,998	32,962	37,571	48,734	30,467	6,058	188,849
1993	1,939	594	146	146	594	448	18,382	22,756	29,763	39,351	42,874	28,441	185,434
1994	13,068	5,323	1,693	524	3,022	4,352	18,949	26,323	34,031	51,975	50,033	28,127	237,421
1995	5,899	593	593	1,654	1,532	940	25,126	23,139	71,622	71,858	37,521	28,136	268,613
1996	9,090	2,741	2,741	5,856	5,856	46,369	46,747	67,916	65,144	35,196	34,418	22,484	344,557
1997	13,364	12,292	12,292	26,041	49,124	53,950	82,591	91,575	87,591	65,735	28,483	19,802	542,840
1998	15,967	5,573	51,854	55,129	62,947	50,771	63,445	89,660	88,435	61,416	54,474	28,659	628,329
1999	15,762	7,207	33,746	48,224	51,882	33,427	71,099	81,756	65,596	50,992	36,025	23,191	518,905
Average	14,017	9,058	11,792	14,867	17,053	25,324	32,221	49,462	51,601	52,027	43,178	30,227	350,828
Maximum	87,693	85,071	87,833	86,401	75,547	96,034	116,250	133,349	132,466	119,783	96,217	85,506	1,180,101
Minimum	663	437	110	0	0	0	0	14,509	18,445	22,029	14,119	5,413	108,267

J-1
Bonneville Unit Operations (cfs)
Jordan River from Outlet of Utah Lake to Jordan Narrows

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	152	100	52	29	93	151	217	418	622	690	676	526	312
1951	216	85	79	29	48	84	210	447	770	852	559	580	331
1952	194	79	76	76	466	1,292	1,496	1,988	1,827	1,494	820	641	871
1953	245	111	352	972	495	713	499	670	792	909	661	517	580
1954	192	79	76	76	85	115	247	670	638	732	661	517	342
1955	174	24	21	5	6	7	20	403	515	692	824	548	272
1956	204	7	5	4	2	2	542	434	554	649	614	501	294
1957	171	7	7	0	0	0	0	236	469	800	653	548	243
1958	165	31	30	18	50	41	37	506	627	715	746	563	296
1959	223	115	50	11	12	4	95	520	622	688	624	457	287
1960	140	71	20	4	2	4	52	520	562	637	489	349	238
1961	83	15	14	0	0	0	0	489	500	358	230	91	150
1962	11	7	2	2	8	5	11	333	480	581	575	443	206
1963	91	59	18	5	2	0	0	436	424	725	635	338	230
1964	174	13	18	18	6	2	0	266	310	722	691	553	232
1965	163	7	7	20	20	11	81	437	576	652	644	284	244
1966	147	31	30	52	149	115	134	540	629	659	638	496	303
1967	182	44	18	20	31	66	53	520	378	644	699	539	268
1968	142	30	29	30	34	120	277	467	542	677	574	522	288
1969	221	154	149	131	85	143	1,028	1,008	1,117	909	820	517	525
1970	232	160	155	173	396	381	473	715	792	909	661	517	464
1971	232	161	156	156	193	691	801	670	792	909	661	517	497
1972	240	197	173	191	199	583	525	670	792	909	661	517	472
1973	238	173	168	168	178	234	824	1,376	1,135	909	661	517	550
1974	251	200	193	212	662	661	1,195	670	792	909	661	517	575
1975	192	79	76	76	85	143	608	1,316	1,463	1,142	820	517	546
1976	192	79	95	733	1,139	620	411	670	792	732	661	517	551
1977	192	14	13	12	15	15	111	317	472	576	564	473	233
1978	18	8	8	10	13	24	87	535	324	649	641	423	230
1979	237	80	77	77	299	1,048	1,142	669	793	733	662	516	528
1980	187	11	9	16	182	879	619	1,428	952	607	487	400	483
1981	188	79	95	645	523	772	337	871	792	732	661	517	519
1982	192	79	76	76	85	1,117	1,014	1,449	1,392	909	820	517	647
1983	239	661	1,074	1,033	1,333	1,518	1,562	1,979	2,226	1,936	1,565	1,437	1,380
1984	1,426	1,430	1,429	1,405	1,313	1,488	1,697	2,169	2,221	1,948	1,534	1,437	1,626
1985	1,402	1,319	1,272	1,153	1,137	1,386	1,504	1,589	1,449	909	820	517	1,205
1986	192	79	786	1,052	1,334	1,562	1,954	2,060	1,976	1,532	1,409	641	1,214
1987	312	912	777	962	1,150	1,085	492	670	792	909	661	517	768
1988	192	68	62	62	66	96	554	443	590	524	501	399	296
1989	146	64	60	60	67	92	162	449	500	588	547	328	257
1990	64	28	25	6	7	106	244	712	834	747	703	541	337
1991	53	69	67	73	114	125	25	394	475	888	814	486	300
1992	266	14	14	0	0	0	252	536	631	793	496	102	260
1993	32	10	2	2	11	7	309	370	500	640	697	478	256
1994	213	89	28	9	54	71	318	428	572	845	814	473	328
1995	96	10	10	27	28	15	422	376	1,204	1,169	610	473	371
1996	148	46	45	95	102	754	786	1,105	1,095	572	560	378	475
1997	217	207	200	424	885	877	1,388	1,489	1,472	1,069	463	333	750
1998	260	94	843	897	1,133	826	1,066	1,458	1,486	999	886	482	868
1999	256	121	549	784	934	544	1,195	1,330	1,102	829	586	390	717
Average	228	152	192	242	305	412	542	804	867	846	702	508	484
Maximum	1,426	1,430	1,429	1,405	1,334	1,562	1,954	2,169	2,226	1,948	1,565	1,437	1,626
Minimum	11	7	2	0	0	0	0	236	310	358	230	91	150

J-3

Bonneville Unit Operations (acre-feet)

Total Utah Lake Deliveries

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	9,372	5,958	3,197	1,761	5,185	9,269	12,939	25,705	36,998	42,399	41,575	31,280	225,636
1951	13,270	5,075	4,854	1,761	2,644	5,182	12,497	27,472	45,832	52,370	34,395	34,483	239,833
1952	11,944	4,696	4,696	4,696	5,821	8,786	14,671	41,219	47,105	55,890	50,394	38,127	288,044
1953	14,671	5,821	5,821	5,821	5,821	8,786	14,671	41,219	47,105	55,890	40,611	30,747	276,984
1954	11,825	4,696	4,696	4,696	4,696	7,098	14,671	41,219	37,939	45,036	40,611	30,747	247,928
1955	10,729	1,416	1,311	327	327	437	1,201	24,765	30,657	42,550	50,642	32,620	196,981
1956	12,524	442	331	221	110	110	32,255	26,660	32,982	39,930	37,782	29,805	213,152
1957	10,508	437	437	0	0	0	0	14,509	27,930	49,204	40,149	32,620	175,794
1958	10,145	1,871	1,871	1,105	2,762	2,541	2,209	31,118	37,329	43,946	45,883	33,489	214,269
1959	13,712	6,842	3,086	663	663	221	5,634	32,001	36,998	42,289	38,372	27,193	207,674
1960	8,631	4,254	1,201	221	110	221	3,093	32,001	33,424	39,157	30,049	20,747	173,109
1961	5,128	874	874	0	0	0	0	30,080	29,749	22,029	14,119	5,413	108,267
1962	663	437	110	110	437	327	653	20,470	28,564	35,733	35,352	26,381	149,236
1963	5,565	3,491	1,090	327	110	0	0	26,786	25,249	44,605	39,044	20,104	166,370
1964	10,715	763	1,090	1,090	327	110	0	16,355	18,445	44,384	42,464	32,918	168,660
1965	10,052	437	437	1,201	1,090	653	4,801	26,897	34,254	40,090	39,597	16,901	176,409
1966	9,058	1,871	1,871	3,197	8,278	7,060	7,968	33,216	37,439	40,521	39,256	29,513	219,247
1967	11,171	2,617	1,090	1,201	1,748	4,039	3,164	31,967	22,475	39,601	42,981	32,073	194,127
1968	8,729	1,761	1,761	1,871	1,982	7,391	16,473	28,688	32,248	41,626	35,279	31,059	208,867
1969	11,944	5,821	5,821	4,696	4,696	8,786	14,671	41,219	47,105	55,890	50,394	30,747	281,789
1970	11,825	4,696	4,696	5,821	5,821	8,786	14,671	41,219	47,105	55,890	40,611	30,747	271,887
1971	11,825	4,696	4,696	4,696	5,821	8,786	14,671	41,219	47,105	55,890	40,611	30,747	270,762
1972	11,825	5,821	4,696	5,821	5,821	8,786	14,671	41,219	47,105	55,890	40,611	30,747	273,012
1973	11,825	4,696	4,696	4,696	4,696	8,786	14,671	41,219	47,105	55,890	40,611	30,747	269,636
1974	11,825	4,696	4,696	5,821	5,821	8,786	14,671	41,219	47,105	55,890	40,611	30,747	271,887
1975	11,825	4,696	4,696	4,696	4,696	8,786	14,671	41,219	47,105	55,890	50,394	30,747	279,419
1976	11,825	4,696	5,821	5,821	5,821	8,786	14,671	41,219	47,105	45,036	40,611	30,747	262,159
1977	11,825	828	828	717	828	911	6,604	19,512	28,077	35,395	34,684	28,146	168,354
1978	1,081	496	496	607	717	1,463	5,168	19,281	19,293	39,900	39,434	25,164	153,099
1979	14,557	4,743	4,743	4,743	5,868	8,748	14,680	41,114	47,158	45,050	40,692	30,728	262,823
1980	11,503	658	548	984	10,492	25,526	27,493	40,363	41,343	37,305	29,948	23,780	249,942
1981	11,587	4,696	5,821	5,821	5,821	8,786	14,671	41,219	47,105	45,036	40,611	30,747	261,920
1982	11,825	4,696	4,696	4,696	4,696	7,098	11,825	41,219	47,105	55,890	50,394	30,747	274,885
1983	14,671	5,821	5,821	5,821	4,696	7,098	11,825	41,219	47,105	55,890	50,394	38,127	288,487
1984	14,671	5,821	5,821	5,821	4,696	7,098	11,825	41,219	47,105	55,890	50,394	38,127	288,487
1985	14,671	5,821	5,821	5,821	4,696	7,098	11,825	41,219	47,105	55,890	50,394	30,747	281,107
1986	11,825	4,696	5,821	5,821	4,696	7,098	11,825	41,219	47,105	55,890	50,394	38,127	284,516
1987	14,671	5,821	5,821	5,821	4,696	7,098	11,825	41,219	47,105	55,890	40,611	30,747	271,324
1988	11,825	4,026	3,809	3,809	3,809	5,879	8,199	27,219	35,086	32,196	30,774	23,764	190,396
1989	8,980	3,809	3,704	3,704	3,704	5,662	9,637	27,591	29,780	36,134	33,613	19,490	185,808
1990	3,942	1,690	1,562	389	389	520	14,506	43,803	49,609	45,925	43,196	32,195	237,726
1991	3,288	4,105	4,105	4,474	6,318	7,695	1,493	24,202	28,253	54,615	50,032	28,893	217,475
1992	16,383	838	838	0	0	0	14,998	32,962	37,571	48,734	30,467	6,058	188,849
1993	1,939	594	146	146	594	448	18,382	22,756	29,763	39,351	42,874	28,441	185,434
1994	13,068	5,323	1,693	524	3,022	4,352	9,949	26,323	34,031	51,975	50,033	28,127	228,421
1995	5,899	593	593	1,654	1,532	940	25,126	21,139	71,622	71,858	37,521	28,136	266,613
1996	9,090	2,741	2,741	5,856	5,856	9,153	19,693	57,030	65,144	35,196	34,418	22,484	269,401
1997	9,764	5,092	5,092	6,578	5,092	7,990	17,535	47,284	53,995	65,735	28,483	19,802	272,442
1998	15,967	5,573	5,573	5,573	4,403	6,921	15,307	40,087	45,771	60,155	54,474	28,659	288,463
1999	15,762	7,207	7,207	7,207	5,318	8,314	17,894	51,735	59,095	50,992	36,025	23,191	289,948
Average	10,638	3,585	3,259	3,178	3,545	5,568	11,531	34,261	40,498	47,688	40,658	28,332	232,741
Maximum	16,383	7,207	7,207	7,207	10,492	25,526	32,255	57,030	71,622	71,858	54,474	38,127	289,948
Minimum	663	437	110	0	0	0	0	14,509	18,445	22,029	14,119	5,413	108,267

J-4

Bonneville Unit Operations (acre-feet)

Primary Utah Lake Deliveries

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	8,744	4,860	2,099	663	4,087	7,622	10,163	17,895	28,058	31,813	32,034	24,081	172,119
1951	10,494	3,977	3,756	663	1,546	3,535	9,721	19,662	27,726	30,930	24,854	27,284	164,148
1952	9,168	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,528
1953	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1954	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1955	7,953	994	994	221	221	331	884	18,116	22,424	31,151	29,052	23,860	136,201
1956	7,180	442	331	221	110	110	32,255	21,319	26,511	31,813	30,709	25,075	176,076
1957	7,732	331	331	0	0	0	0	10,604	20,436	36,011	29,383	23,860	128,688
1958	7,401	773	773	1,105	2,762	2,541	2,209	23,308	28,389	33,360	36,342	26,290	165,253
1959	10,936	5,744	1,988	663	663	221	5,634	24,191	28,058	31,703	28,831	19,994	158,626
1960	5,855	3,093	884	221	110	221	3,093	24,191	26,953	31,040	22,976	16,017	134,654
1961	3,756	663	663	0	0	0	0	26,069	25,738	20,657	13,697	5,413	96,656
1962	663	331	110	110	331	221	442	16,459	22,093	27,616	28,279	21,651	118,306
1963	4,087	2,541	773	221	110	0	0	23,197	21,872	41,755	37,778	20,104	152,438
1964	10,715	552	773	773	221	110	0	14,139	16,017	41,534	41,092	32,918	158,844
1965	10,052	331	331	884	773	442	3,535	23,308	29,715	37,557	38,331	16,901	162,160
1966	9,058	773	773	2,099	7,180	5,413	5,192	25,406	28,499	29,935	29,715	22,314	166,357
1967	8,395	1,878	773	884	1,326	2,983	2,320	23,418	16,459	28,941	31,371	23,418	142,166
1968	6,407	663	663	773	884	5,744	13,697	20,878	23,308	31,040	25,738	23,860	153,655
1969	9,168	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,528
1970	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1971	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1972	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1973	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1974	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1975	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1976	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1977	9,049	663	663	552	663	663	6,186	18,337	26,732	33,802	33,249	27,063	157,622
1978	663	331	331	442	552	1,215	4,750	16,901	16,569	36,674	37,999	24,081	140,508
1979	14,139	3,645	3,645	3,645	3,645	5,413	9,058	25,296	29,052	34,464	31,151	23,529	186,682
1980	8,727	552	442	773	8,064	15,907	17,232	25,186	25,738	23,197	23,087	14,802	163,707
1981	8,948	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,308
1982	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1983	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1984	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1985	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1986	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1987	9,049	3,598	3,598	3,598	3,598	5,451	9,049	25,401	28,999	34,450	31,070	23,548	181,409
1988	9,049	3,598	3,598	3,598	3,598	5,451	5,634	18,668	23,970	26,180	25,075	19,331	147,750
1989	7,291	3,598	3,598	3,598	3,598	5,451	7,843	22,314	24,081	29,273	27,174	15,796	153,615
1990	3,203	1,176	1,176	261	261	392	9,589	30,759	35,059	36,851	34,368	28,226	181,321
1991	3,288	860	860	1,229	3,073	2,827	1,493	24,202	28,253	37,116	40,434	28,893	172,528
1992	12,167	838	838	0	0	0	14,998	32,962	37,571	48,734	30,467	6,058	184,633
1993	1,939	437	146	146	437	291	18,068	21,711	29,142	36,428	37,302	28,441	174,488
1994	8,858	2,813	856	245	122	0	9,949	25,680	28,812	46,225	41,161	22,256	186,977
1995	3,289	366	366	975	853	487	13,143	21,139	32,774	46,054	37,521	18,641	175,608
1996	9,090	704	704	3,819	3,819	6,098	14,542	27,677	31,547	32,954	27,325	22,484	180,763
1997	9,734	3,643	3,643	3,643	3,643	5,816	13,870	26,397	30,088	35,960	24,258	19,406	180,101
1998	11,040	3,262	3,262	3,262	3,262	5,209	12,421	23,641	26,947	37,865	31,002	21,354	182,527
1999	9,917	3,476	3,476	3,476	3,476	5,551	13,236	25,191	28,713	33,289	30,023	22,755	182,579
Average	8,078	2,453	2,168	2,079	2,483	3,768	8,481	23,509	27,386	34,240	31,021	22,400	168,065
Maximum	14,139	5,744	3,756	3,819	8,064	15,907	32,255	32,962	37,571	48,734	41,161	32,918	186,977
Minimum	663	331	110	0	0	0	0	10,604	16,017	20,657	13,697	5,413	96,656

J-5
Bonneville Unit Operations (acre-feet)
Secondary Utah Lake Deliveries

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	628	1,098	1,098	1,098	1,098	1,647	2,776	7,810	8,940	10,586	9,541	7,199	53,517
1951	2,776	1,098	1,098	1,098	1,098	1,647	2,776	7,810	18,106	21,440	9,541	7,199	75,685
1952	2,776	1,098	1,098	1,098	2,223	3,335	5,622	15,818	18,106	21,440	19,324	14,579	106,516
1953	5,622	2,223	2,223	2,223	2,223	3,335	5,622	15,818	18,106	21,440	9,541	7,199	95,575
1954	2,776	1,098	1,098	1,098	1,098	1,647	5,622	15,818	8,940	10,586	9,541	7,199	66,519
1955	2,776	422	317	106	106	106	317	6,649	8,233	11,399	21,590	8,760	60,780
1956	5,344	0	0	0	0	0	0	5,341	6,471	8,117	7,073	4,730	37,076
1957	2,776	106	106	0	0	0	0	3,905	7,494	13,193	10,766	8,760	47,106
1958	2,744	1,098	1,098	0	0	0	0	7,810	8,940	10,586	9,541	7,199	49,016
1959	2,776	1,098	1,098	0	0	0	0	7,810	8,940	10,586	9,541	7,199	49,048
1960	2,776	1,161	317	0	0	0	0	7,810	6,471	8,117	7,073	4,730	38,455
1961	1,372	211	211	0	0	0	0	4,011	4,011	1,372	422	0	11,611
1962	0	106	0	0	106	106	211	4,011	6,471	8,117	7,073	4,730	30,930
1963	1,478	950	317	106	0	0	0	3,589	3,377	2,850	1,266	0	13,932
1964	0	211	317	317	106	0	0	2,216	2,428	2,850	1,372	0	9,816
1965	0	106	106	317	317	211	1,266	3,589	4,539	2,533	1,266	0	14,249
1966	0	1,098	1,098	1,098	1,098	1,647	2,776	7,810	8,940	10,586	9,541	7,199	52,890
1967	2,776	739	317	317	422	1,056	844	8,549	6,016	10,660	11,610	8,655	51,961
1968	2,322	1,098	1,098	1,098	1,098	1,647	2,776	7,810	8,940	10,586	9,541	7,199	55,212
1969	2,776	2,223	2,223	1,098	1,098	3,335	5,622	15,818	18,106	21,440	19,324	7,199	100,261
1970	2,776	1,098	1,098	2,223	2,223	3,335	5,622	15,818	18,106	21,440	9,541	7,199	90,478
1971	2,776	1,098	1,098	1,098	2,223	3,335	5,622	15,818	18,106	21,440	9,541	7,199	89,353
1972	2,776	2,223	1,098	2,223	2,223	3,335	5,622	15,818	18,106	21,440	9,541	7,199	91,603
1973	2,776	1,098	1,098	1,098	1,098	3,335	5,622	15,818	18,106	21,440	9,541	7,199	88,227
1974	2,776	1,098	1,098	2,223	2,223	3,335	5,622	15,818	18,106	21,440	9,541	7,199	90,478
1975	2,776	1,098	1,098	1,098	1,098	3,335	5,622	15,818	18,106	21,440	19,324	7,199	98,010
1976	2,776	1,098	2,223	2,223	2,223	3,335	5,622	15,818	18,106	10,586	9,541	7,199	80,750
1977	2,776	165	165	165	165	248	418	1,175	1,345	1,593	1,435	1,083	10,732
1978	418	165	165	165	165	248	418	2,380	2,724	3,226	1,435	1,083	12,591
1979	418	1,098	1,098	1,098	2,223	3,335	5,622	15,818	18,106	10,586	9,541	7,199	76,141
1980	2,776	106	106	211	2,428	9,619	10,261	15,177	15,605	14,108	6,861	8,978	86,235
1981	2,639	1,098	2,223	2,223	2,223	3,335	5,622	15,818	18,106	10,586	9,541	7,199	80,612
1982	2,776	1,098	1,098	1,098	1,098	1,647	2,776	15,818	18,106	21,440	19,324	7,199	93,476
1983	5,622	2,223	2,223	2,223	1,098	1,647	2,776	15,818	18,106	21,440	19,324	14,579	107,078
1984	5,622	2,223	2,223	2,223	1,098	1,647	2,776	15,818	18,106	21,440	19,324	14,579	107,078
1985	5,622	2,223	2,223	2,223	1,098	1,647	2,776	15,818	18,106	21,440	19,324	7,199	99,698
1986	2,776	1,098	2,223	2,223	1,098	1,647	2,776	15,818	18,106	21,440	19,324	14,579	103,107
1987	5,622	2,223	2,223	2,223	1,098	1,647	2,776	15,818	18,106	21,440	9,541	7,199	89,915
1988	2,776	428	211	211	211	428	2,565	8,551	11,116	6,016	5,699	4,433	42,646
1989	1,689	211	106	106	106	211	1,794	5,277	5,699	6,861	6,439	3,694	32,193
1990	739	514	386	128	128	128	4,917	13,044	14,550	9,074	8,828	3,969	56,405
1991	0	3,245	3,245	3,245	3,245	4,868	0	0	0	17,499	9,598	0	44,947
1992	4,216	0	0	0	0	0	0	0	0	0	0	0	4,216
1993	0	157	0	0	157	157	314	1,045	621	2,923	5,572	0	10,946
1994	4,210	2,510	837	279	2,900	4,352	0	643	5,219	5,750	8,872	5,871	41,444
1995	2,610	227	227	679	679	453	11,983	0	38,848	25,804	0	9,495	91,005
1996	0	2,037	2,037	2,037	2,037	3,055	5,151	29,353	33,597	2,242	7,093	0	88,638
1997	30	1,449	1,449	2,935	1,449	2,174	3,665	20,887	23,907	29,775	4,225	396	92,341
1998	4,927	2,311	2,311	2,311	1,141	1,712	2,886	16,446	18,824	22,290	23,472	7,305	105,936
1999	5,845	3,731	3,731	3,731	1,842	2,763	4,658	26,544	30,382	17,703	6,002	436	107,369
Average	2,561	1,132	1,091	1,100	1,062	1,801	3,050	10,752	13,112	13,448	9,637	5,932	64,676
Maximum	5,845	3,731	3,731	3,731	3,245	9,619	11,983	29,353	38,848	29,775	23,472	14,579	107,369
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	4,216

J-5
Bonneville Unit Operations (cfs)
Secondary Utah Lake Deliveries

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	10	18	18	18	20	27	47	127	150	172	155	121	74
1951	45	18	18	18	20	27	47	127	304	349	155	121	105
1952	45	18	18	18	39	54	94	257	304	349	314	245	147
1953	91	37	36	36	40	54	94	257	304	349	155	121	132
1954	45	18	18	18	20	27	94	257	150	172	155	121	92
1955	45	7	5	2	2	2	5	108	138	185	351	147	84
1956	87	0	0	0	0	0	0	87	109	132	115	79	51
1957	45	2	2	0	0	0	0	64	126	215	175	147	65
1958	45	18	18	0	0	0	0	127	150	172	155	121	68
1959	45	18	18	0	0	0	0	127	150	172	155	121	68
1960	45	20	5	0	0	0	0	127	109	132	115	79	53
1961	22	4	3	0	0	0	0	65	67	22	7	0	16
1962	0	2	0	0	2	2	4	65	109	132	115	79	43
1963	24	16	5	2	0	0	0	58	57	46	21	0	19
1964	0	4	5	5	2	0	0	36	41	46	22	0	14
1965	0	2	2	5	6	3	21	58	76	41	21	0	20
1966	0	18	18	18	20	27	47	127	150	172	155	121	73
1967	45	12	5	5	8	17	14	139	101	173	189	145	72
1968	38	18	18	18	19	27	47	127	150	172	155	121	76
1969	45	37	36	18	20	54	94	257	304	349	314	121	138
1970	45	18	18	36	40	54	94	257	304	349	155	121	125
1971	45	18	18	18	40	54	94	257	304	349	155	121	123
1972	45	37	18	36	39	54	94	257	304	349	155	121	126
1973	45	18	18	18	20	54	94	257	304	349	155	121	122
1974	45	18	18	36	40	54	94	257	304	349	155	121	125
1975	45	18	18	18	20	54	94	257	304	349	314	121	135
1976	45	18	36	36	39	54	94	257	304	172	155	121	111
1977	45	3	3	3	3	4	7	19	23	26	23	18	15
1978	7	3	3	3	3	4	7	39	46	52	23	18	17
1979	7	18	18	18	40	54	94	257	304	172	155	121	105
1980	45	2	2	3	42	156	172	247	262	229	112	151	119
1981	43	18	36	36	40	54	94	257	304	172	155	121	111
1982	45	18	18	18	20	27	47	257	304	349	314	121	129
1983	91	37	36	36	20	27	47	257	304	349	314	245	148
1984	91	37	36	36	19	27	47	257	304	349	314	245	148
1985	91	37	36	36	20	27	47	257	304	349	314	121	138
1986	45	18	36	36	20	27	47	257	304	349	314	245	142
1987	91	37	36	36	20	27	47	257	304	349	155	121	124
1988	45	7	3	3	4	7	43	139	187	98	93	75	59
1989	27	4	2	2	2	3	30	86	96	112	105	62	44
1990	12	9	6	2	2	2	83	212	245	148	144	67	78
1991	0	55	53	53	58	79	0	0	0	285	156	0	62
1992	69	0	0	0	0	0	0	0	0	0	0	0	6
1993	0	3	0	0	3	3	5	17	10	48	91	0	15
1994	68	42	14	5	52	71	0	10	88	94	144	99	57
1995	42	4	4	11	12	7	201	0	653	420	0	160	126
1996	0	34	33	33	35	50	87	477	565	36	115	0	122
1997	0	24	24	48	26	35	62	340	402	484	69	7	128
1998	80	39	38	38	21	28	49	267	316	363	382	123	146
1999	95	63	61	61	33	45	78	432	511	288	98	7	148
Average	42	19	18	18	19	29	51	175	220	219	157	100	89
Maximum	95	63	61	61	58	156	201	477	653	484	382	245	148
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	6

J-3
Bonneville Unit Operations (cfs)
Total Utah Lake Deliveries

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	152	100	52	29	93	151	217	418	622	690	676	526	312
1951	216	85	79	29	48	84	210	447	770	852	559	580	331
1952	194	79	76	76	101	143	247	670	792	909	820	641	397
1953	239	98	95	95	105	143	247	670	792	909	661	517	383
1954	192	79	76	76	85	115	247	670	638	732	661	517	342
1955	174	24	21	5	6	7	20	403	515	692	824	548	272
1956	204	7	5	4	2	2	542	434	554	649	614	501	294
1957	171	7	7	0	0	0	0	236	469	800	653	548	243
1958	165	31	30	18	50	41	37	506	627	715	746	563	296
1959	223	115	50	11	12	4	95	520	622	688	624	457	287
1960	140	71	20	4	2	4	52	520	562	637	489	349	238
1961	83	15	14	0	0	0	0	489	500	358	230	91	150
1962	11	7	2	2	8	5	11	333	480	581	575	443	206
1963	91	59	18	5	2	0	0	436	424	725	635	338	230
1964	174	13	18	18	6	2	0	266	310	722	691	553	232
1965	163	7	7	20	20	11	81	437	576	652	644	284	244
1966	147	31	30	52	149	115	134	540	629	659	638	496	303
1967	182	44	18	20	31	66	53	520	378	644	699	539	268
1968	142	30	29	30	34	120	277	467	542	677	574	522	288
1969	194	98	95	76	85	143	247	670	792	909	820	517	389
1970	192	79	76	95	105	143	247	670	792	909	661	517	376
1971	192	79	76	76	105	143	247	670	792	909	661	517	374
1972	192	98	76	95	101	143	247	670	792	909	661	517	376
1973	192	79	76	76	85	143	247	670	792	909	661	517	372
1974	192	79	76	95	105	143	247	670	792	909	661	517	376
1975	192	79	76	76	85	143	247	670	792	909	820	517	386
1976	192	79	95	95	101	143	247	670	792	732	661	517	361
1977	192	14	13	12	15	15	111	317	472	576	564	473	233
1978	18	8	8	10	13	24	87	314	324	649	641	423	211
1979	237	80	77	77	106	142	247	669	793	733	662	516	363
1980	187	11	9	16	182	415	462	656	695	607	487	400	344
1981	188	79	95	95	105	143	247	670	792	732	661	517	362
1982	192	79	76	76	85	115	199	670	792	909	820	517	380
1983	239	98	95	95	85	115	199	670	792	909	820	641	398
1984	239	98	95	95	82	115	199	670	792	909	820	641	397
1985	239	98	95	95	85	115	199	670	792	909	820	517	388
1986	192	79	95	95	85	115	199	670	792	909	820	641	393
1987	239	98	95	95	85	115	199	670	792	909	661	517	375
1988	192	68	62	62	66	96	138	443	590	524	501	399	262
1989	146	64	60	60	67	92	162	449	500	588	547	328	257
1990	64	28	25	6	7	8	244	712	834	747	703	541	328
1991	53	69	67	73	114	125	25	394	475	888	814	486	300
1992	266	14	14	0	0	0	252	536	631	793	496	102	260
1993	32	10	2	2	11	7	309	370	500	640	697	478	256
1994	213	89	28	9	54	71	167	428	572	845	814	473	316
1995	96	10	10	27	28	15	422	344	1,204	1,169	610	473	368
1996	148	46	45	95	102	149	331	928	1,095	572	560	378	371
1997	159	86	83	107	92	130	295	769	907	1,069	463	333	376
1998	260	94	91	91	79	113	257	652	769	978	886	482	398
1999	256	121	117	117	96	135	301	841	993	829	586	390	401
Average	173	60	53	52	63	91	194	557	681	776	661	476	321
Maximum	266	121	117	117	182	415	542	928	1,204	1,169	886	641	401
Minimum	11	7	2	0	0	0	0	236	310	358	230	91	150

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Bonneville Unit Operations (cfs)

Primary Utah Lake Deliveries

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	142	82	34	11	74	124	171	291	472	517	521	405	238
1951	171	67	61	11	28	57	163	320	466	503	404	459	227
1952	149	60	59	59	63	89	152	413	487	560	505	396	250
1953	147	60	59	59	65	89	152	413	487	560	505	396	251
1954	147	60	59	59	65	89	152	413	487	560	505	396	251
1955	129	17	16	4	4	5	15	295	377	507	473	401	188
1956	117	7	5	4	2	2	542	347	446	517	499	421	243
1957	126	6	5	0	0	0	0	172	343	586	478	401	178
1958	120	13	13	18	50	41	37	379	477	543	591	442	228
1959	178	97	32	11	12	4	95	393	472	516	469	336	219
1960	95	52	14	4	2	4	52	393	453	505	374	269	185
1961	61	11	11	0	0	0	0	424	433	336	223	91	134
1962	11	6	2	2	6	4	7	268	371	449	460	364	163
1963	66	43	13	4	2	0	0	377	368	679	614	338	211
1964	174	9	13	13	4	2	0	230	269	676	668	553	219
1965	163	6	5	14	14	7	59	379	499	611	623	284	224
1966	147	13	13	34	129	88	87	413	479	487	483	375	230
1967	137	32	13	14	24	49	39	381	277	471	510	394	196
1968	104	11	11	13	15	93	230	340	392	505	419	401	212
1969	149	60	59	59	65	89	152	413	487	560	505	396	251
1970	147	60	59	59	65	89	152	413	487	560	505	396	251
1971	147	60	59	59	65	89	152	413	487	560	505	396	251
1972	147	60	59	59	63	89	152	413	487	560	505	396	250
1973	147	60	59	59	65	89	152	413	487	560	505	396	251
1974	147	60	59	59	65	89	152	413	487	560	505	396	251
1975	147	60	59	59	65	89	152	413	487	560	505	396	251
1976	147	60	59	59	63	89	152	413	487	560	505	396	250
1977	147	11	11	9	12	11	104	298	449	550	541	455	218
1978	11	6	5	7	10	20	80	275	278	596	618	405	194
1979	230	61	59	59	66	88	152	411	488	561	507	395	258
1980	142	9	7	13	140	259	290	410	433	377	375	249	226
1981	146	60	59	59	65	89	152	413	487	560	505	396	250
1982	147	60	59	59	65	89	152	413	487	560	505	396	251
1983	147	60	59	59	65	89	152	413	487	560	505	396	251
1984	147	60	59	59	63	89	152	413	487	560	505	396	250
1985	147	60	59	59	65	89	152	413	487	560	505	396	251
1986	147	60	59	59	65	89	152	413	487	560	505	396	251
1987	147	60	59	59	65	89	152	413	487	560	505	396	251
1988	147	60	59	59	63	89	95	304	403	426	408	325	204
1989	119	60	59	59	65	89	132	363	405	476	442	265	212
1990	52	20	19	4	5	6	161	500	589	599	559	474	250
1991	53	14	14	20	55	46	25	394	475	604	658	486	238
1992	198	14	14	0	0	0	252	536	631	793	496	102	254
1993	32	7	2	2	8	5	304	353	490	592	607	478	241
1994	144	47	14	4	2	0	167	418	484	752	669	374	258
1995	53	6	6	16	15	8	221	344	551	749	610	313	243
1996	148	12	11	62	66	99	244	450	530	536	444	378	249
1997	158	61	59	59	66	95	233	429	506	585	395	326	249
1998	180	55	53	53	59	85	209	384	453	616	504	359	252
1999	161	58	57	57	63	90	222	410	483	541	488	382	252
Average	131	41	35	34	44	61	143	382	460	557	505	376	232
Maximum	230	97	61	62	140	259	542	536	631	793	669	553	258
Minimum	11	6	2	0	0	0	0	172	269	336	223	91	134

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Bonneville Unit Operations (acre-feet)
Jordan River below Jordan Narrows*

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	21,000	70,667	74,342	81,029	61,607	35,940	0	0	344,584
1953	390	780	15,817	53,937	21,679	35,040	15,011	0	0	0	0	0	142,654
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	1,671	3,343	3,343	3,343	0	0	46,503	20,770	19,334	0	0	0	98,306
1970	2,413	4,826	4,826	4,826	16,162	14,627	13,482	2,771	0	0	0	0	63,931
1971	2,453	4,906	4,906	4,906	4,906	33,716	33,009	0	0	0	0	0	88,801
1972	2,960	5,919	5,919	5,919	5,602	27,043	16,574	0	0	0	0	0	69,936
1973	2,807	5,615	5,615	5,615	5,200	5,615	34,332	43,358	20,420	0	0	0	128,576
1974	3,600	7,200	7,200	7,200	30,959	31,845	56,429	0	0	0	0	0	144,433
1975	0	0	0	0	0	0	21,493	39,684	39,973	14,354	0	0	115,503
1976	0	0	0	39,227	59,680	29,333	9,804	0	0	0	0	0	138,044
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	13,636	0	0	0	0	13,636
1979	0	0	0	0	10,737	55,686	53,244	0	0	0	0	0	119,667
1980	0	0	0	0	0	28,510	9,361	47,444	15,279	0	0	0	100,595
1981	0	0	0	33,859	23,203	38,687	5,409	12,304	0	0	0	0	113,462
1982	0	0	0	0	0	61,611	48,518	47,846	35,711	0	0	0	193,686
1983	0	33,515	60,203	57,723	69,324	86,238	81,107	80,435	85,361	63,172	45,823	47,379	710,280
1984	73,022	79,250	82,012	80,580	70,852	84,366	89,137	92,130	85,062	63,893	43,954	47,357	891,614
1985	71,526	72,686	72,391	65,080	58,423	78,130	77,656	56,451	39,136	0	0	0	591,478
1986	0	0	42,505	58,857	69,411	88,937	104,425	85,413	70,500	38,311	36,249	0	594,609
1987	4,505	48,424	41,937	53,315	59,144	59,614	17,429	0	0	0	0	0	284,368
1988	0	0	0	0	0	0	24,792	0	0	0	0	0	24,792
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	6,000	0	0	0	0	0	0	6,000
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	9,000	0	0	0	0	0	9,000
1995	0	0	0	0	0	0	0	2,000	0	0	0	0	2,000
1996	0	0	0	0	0	37,216	27,054	10,886	0	0	0	0	75,156
1997	3,600	7,200	7,200	19,463	44,032	45,960	65,055	44,291	33,596	0	0	0	270,397
1998	0	0	46,281	49,556	58,544	43,850	48,138	49,573	42,664	1,261	0	0	339,866
1999	0	0	26,539	41,017	46,563	25,113	53,205	30,021	6,501	0	0	0	228,957
Average	3,379	5,473	8,534	11,688	13,508	19,756	20,690	15,201	11,103	4,339	2,521	1,895	118,087
Maximum	73,022	79,250	82,012	80,580	70,852	88,937	104,425	92,130	85,361	63,893	45,823	47,379	891,614
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

* Reported flows at this location assume that all Primary and Secondary Utah Lake water deliveries are diverted at the Jordan Narrows, and that no flow is contributed by runoff and groundwater accretion between the Utah Lak outlet and this location. Actual Jordan River streamflow below Jordan Narrows will be higher than indicated.

J-2
Bonneville Unit Operations (cfs)
Jordan River below Jordan Narrows*

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	365	1,149	1,249	1,318	1,035	585	0	0	475
1953	6	13	257	877	390	570	252	0	0	0	0	0	197
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	27	56	54	54	0	0	782	338	325	0	0	0	136
1970	39	81	78	78	291	238	227	45	0	0	0	0	88
1971	40	82	80	80	88	548	555	0	0	0	0	0	123
1972	48	99	96	96	97	440	279	0	0	0	0	0	96
1973	46	94	91	91	94	91	577	705	343	0	0	0	178
1974	59	121	117	117	557	518	948	0	0	0	0	0	200
1975	0	0	0	0	0	0	361	645	672	233	0	0	160
1976	0	0	0	638	1,038	477	165	0	0	0	0	0	190
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	222	0	0	0	0	19
1979	0	0	0	0	193	906	895	0	0	0	0	0	165
1980	0	0	0	0	0	464	157	772	257	0	0	0	139
1981	0	0	0	551	418	629	91	200	0	0	0	0	157
1982	0	0	0	0	0	1,002	815	778	600	0	0	0	268
1983	0	563	979	939	1,248	1,403	1,363	1,308	1,435	1,027	745	796	981
1984	1,188	1,332	1,334	1,311	1,232	1,372	1,498	1,498	1,430	1,039	715	796	1,228
1985	1,163	1,222	1,177	1,058	1,052	1,271	1,305	918	658	0	0	0	817
1986	0	0	691	957	1,250	1,446	1,755	1,389	1,185	623	590	0	821
1987	73	814	682	867	1,065	970	293	0	0	0	0	0	393
1988	0	0	0	0	0	0	417	0	0	0	0	0	34
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	98	0	0	0	0	0	0	8
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	151	0	0	0	0	0	12
1995	0	0	0	0	0	0	0	33	0	0	0	0	3
1996	0	0	0	0	0	605	455	177	0	0	0	0	104
1997	59	121	117	317	793	747	1,093	720	565	0	0	0	374
1998	0	0	753	806	1,054	713	809	806	717	21	0	0	469
1999	0	0	432	667	838	408	894	488	109	0	0	0	316
Average	55	92	139	190	241	321	348	247	187	71	41	32	163
Maximum	1,188	1,332	1,334	1,311	1,250	1,446	1,755	1,498	1,435	1,039	745	796	1,228
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

* Reported flows at this location assume that all Primary and Secondary Utah Lake water deliveries are diverted at the Jordan Narrows, and that no flow is contributed by runoff and groundwater accretion between the Utah Lak outlet and this location. Actual Jordan River streamflow below Jordan Narrows will be higher than indicated.

Central Utah Project Completion Program

Attachment E

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Attachment E

Utah Lake Drainage Basin Water Delivery System Bonneville Unit, Central Utah Project
2004 Supplement to the 1988 Definite Plan Report

Water Supply Appendix
Volume 6 Attachment E: Utah Lake Salinity Analysis (LKSIM 2000)

October 2004

UTAH LAKE SALINITY ANALYSIS – BONNEVILLE UNIT CONDITIONS

Attachment E1: Summary Table of LKSIM TDS Results

Attachment E2: TABL.025: LKSIM print-out of monthly results

Attachment E3: QUAL.025: LKSIM print-out of monthly TDS results

Attachment E4: FLOW.025: LKSIM Tributary Inflows

Attachment E5: LKSIM Documentation

Bonneville Unit Operations
Simulated Utah Lake TDS (mg/L)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	999	986	947	905	875	864	869	841	843	892	942	977	**912**
1951	993	974	936	904	884	875	868	831	824	865	907	947	**901**
1952	952	934	893	858	822	766	695	595	597	633	662	690	**758**
1953	711	704	708	692	694	690	696	706	708	748	791	828	**723**
1954	845	839	826	809	800	792	803	832	861	917	987	1,025	**861**
1955	1,036	1,021	992	954	922	895	890	903	926	993	1,053	1,098	**974**
1956	1,112	1,077	1,034	984	949	941	958	963	1,021	1,100	1,180	1,262	**1048**
1957	1,291	1,238	1,167	1,106	1,061	1,036	989	952	935	1,002	1,065	1,103	**1079**
1958	1,122	1,077	1,029	993	952	923	919	886	923	1,002	1,052	1,092	**998**
1959	1,114	1,077	1,034	994	953	943	955	968	1,011	1,089	1,146	1,181	**1039**
1960	1,200	1,187	1,126	1,072	1,022	995	1,013	1,036	1,108	1,266	1,405	1,485	**1160**
1961	1,461	1,329	1,259	1,211	1,171	1,145	1,160	1,204	1,348	1,525	1,700	1,700	**1351**
1962	1,647	1,576	1,468	1,385	1,252	1,191	1,141	1,120	1,198	1,359	1,521	1,591	**1371**
1963	1,571	1,506	1,468	1,369	1,318	1,282	1,244	1,275	1,332	1,497	1,693	1,659	**1435**
1964	1,651	1,515	1,406	1,285	1,227	1,152	1,123	1,058	1,038	1,138	1,260	1,329	**1265**
1965	1,359	1,298	1,187	1,120	1,106	1,087	1,071	1,072	1,037	1,102	1,158	1,158	**1146**
1966	1,158	1,128	1,046	1,008	968	937	975	970	1,032	1,134	1,211	1,245	**1068**
1967	1,237	1,213	1,142	1,096	1,045	1,014	1,047	1,025	985	1,042	1,097	1,126	**1089**
1968	1,131	1,105	1,059	1,016	974	945	928	915	890	935	960	990	**987**
1969	990	967	929	896	868	863	818	794	769	809	845	871	**868**
1970	869	864	851	830	819	822	825	817	822	863	907	923	**851**
1971	929	892	893	870	860	848	841	831	823	879	926	945	**878**
1972	910	915	892	877	868	860	866	864	880	940	992	1,028	**908**
1973	1,004	981	956	926	898	878	859	803	791	837	872	897	**892**
1974	893	868	850	823	804	795	772	771	768	810	860	897	**826**
1975	892	876	861	833	814	800	789	749	688	711	752	774	**795**
1976	777	766	749	729	704	700	707	707	736	775	819	845	**751**
1977	861	864	843	832	820	814	826	818	863	917	963	1,004	**869**
1978	996	987	962	917	887	851	823	820	847	904	949	939	**907**
1979	948	919	894	868	838	809	787	795	831	879	919	953	**870**
1980	943	925	901	857	801	786	785	727	733	782	781	831	**821**
1981	833	824	812	796	789	778	788	773	808	851	907	933	**824**
1982	895	887	863	838	815	789	770	711	704	736	774	761	**795**
1983	752	745	726	710	679	615	607	551	503	537	554	572	**629**
1984	579	574	556	552	547	530	505	454	445	474	495	516	**519**
1985	526	532	532	532	533	523	505	491	515	545	581	610	**535**
1986	619	619	609	604	588	539	509	488	496	522	549	579	**560**
1987	588	592	595	593	585	583	594	600	630	667	699	732	**622**
1988	741	737	736	727	725	735	730	747	796	872	941	945	**786**
1989	1,009	995	979	975	944	906	918	962	1,018	1,135	1,230	1,121	**1016**
1990	1,108	1,092	1,073	1,024	993	975	1,007	1,004	1,040	1,124	1,215	1,245	**1075**
1991	1,225	1,214	1,177	1,142	1,095	1,071	1,079	1,059	1,081	1,205	1,283	1,265	**1158**
1992	1,233	1,201	1,155	1,114	1,072	1,066	1,100	1,140	1,193	1,355	1,535	1,417	**1215**
1993	1,411	1,340	1,287	1,166	1,093	1,014	1,016	950	962	1,020	1,074	1,096	**1119**
1994	1,082	1,067	1,047	1,025	1,003	1,000	1,000	1,016	1,077	1,167	1,231	1,289	**1084**
1995	1,239	1,203	1,174	1,109	1,081	1,060	1,045	924	868	888	930	973	**1041**
1996	974	975	956	958	928	903	882	849	825	885	940	965	**920**
1997	975	945	920	877	860	839	797	732	714	763	799	815	**836**
1998	814	808	794	772	753	742	730	678	646	680	711	724	**738**
1999	737	732	731	723	717	719	704	658	659	693	729	762	**714**
Average	**1,019**	**994**	**961**	**925**	**896**	**874**	**867**	**849**	**863**	**929**	**991**	**1,014**	**932**
Maximum	**1,651**	**1,576**	**1,468**	**1,385**	**1,318**	**1,282**	**1,244**	**1,275**	**1,348**	**1,525**	**1,700**	**1,700**	**1,435**
Minimum	**526**	**532**	**532**	**532**	**533**	**523**	**505**	**454**	**445**	**474**	**495**	**516**	**519**

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
1	Oct	1949	4485.40	15888	24696	51791	-9372	999	465	1111	188	52	215	23	8	26	263	53	302	279	138	318
2	Nov	1949	4485.30	2640	13136	8040	-5958	986	463	1083	185	54	209	22	8	25	258	54	292	276	136	308
3	Dec	1949	4485.80	10633	7910	42970	-3197	947	442	1065	176	49	205	21	7	24	245	50	287	263	125	300
4	Jan	1950	4486.45	13641	2760	47178	-1761	905	428	1037	166	46	199	20	7	23	230	47	279	248	117	290
5	Feb	1950	4486.95	5871	5210	48560	-5185	875	428	1028	159	47	198	19	7	23	220	48	278	238	117	284
6	Mar	1950	4487.20	6014	13637	39191	-9269	864	429	1026	157	48	198	19	7	23	217	48	278	235	118	282
7	Apr	1950	4487.35	4050	21962	44259	-12939	869	430	1001	159	47	192	19	7	22	219	48	268	236	120	275
8	May	1950	4487.70	9470	37466	85277	-25705	841	444	980	152	49	187	18	7	22	208	51	260	227	130	269
9	Jun	1950	4487.50	1205	50258	67883	-36998	843	479	991	152	55	189	18	8	22	209	59	263	229	149	275
10	Jul	1950	4486.85	4365	59754	39843	-42399	892	526	999	165	64	191	19	10	22	225	72	264	247	170	280
11	Aug	1950	4486.10	419	52931	28426	-41575	942	552	1030	177	69	198	21	11	23	241	78	273	265	184	292
12	Sep	1950	4485.65	5487	38667	25778	-31280	977	544	1061	185	66	205	22	10	24	252	74	282	277	180	303
Water yr tot						Year average:		912	469	1034	168	54	199	20	8	23	232	57	277	252	140	290
Tot. Sys. Av.Stage				79689	328393	529203	-225638															
Main Lake			4486.52	56094	220003	402822	-225637															
Provo Bay			4486.52	4522	18235	89602	0															
Goshen Bay			4486.52	19073	90155	36778	0															
13	Oct	1950	4485.70	3738	27027	40864	-13270	993	519	1063	189	63	205	22	10	24	256	68	281	283	166	304
14	Nov	1950	4486.05	13333	14965	36707	-5075	974	484	1038	184	57	199	21	9	23	249	59	272	275	146	295
15	Dec	1950	4486.55	9022	11861	51243	-4854	936	463	1023	175	53	196	20	8	23	236	55	267	262	135	288
16	Jan	1951	4487.10	8295	2681	44805	-1761	904	447	1011	167	50	194	19	7	22	225	51	264	251	127	283
17	Feb	1951	4487.50	4159	4797	39053	-2644	884	444	1014	162	50	196	19	7	22	219	51	267	244	125	282
18	Mar	1951	4487.75	5865	11698	33702	-5182	875	442	1011	160	50	196	19	7	22	216	51	268	241	124	280
19	Apr	1951	4488.05	15926	23443	47288	-12497	868	435	979	159	48	188	19	7	21	214	49	256	238	121	270
20	May	1951	4488.55	11399	38226	100412	-27472	831	448	952	149	50	181	17	7	21	200	52	245	225	130	262
21	Jun	1951	4488.35	3610	47080	70842	-45832	824	476	955	148	55	181	17	8	21	198	59	246	224	145	265
22	Jul	1951	4487.60	4555	59452	38736	-52370	865	520	957	158	64	181	18	10	21	212	71	245	239	165	268
23	Aug	1951	4487.00	7204	53151	26533	-34395	907	542	980	169	67	187	20	10	22	225	76	252	255	176	277
24	Sep	1951	4486.40	422	37911	19169	-34483	947	552	1012	178	69	194	21	11	22	238	77	261	269	182	289
Water yr tot						Year average:		901	481	1000	166	56	191	19	8	22	224	60	260	250	145	280
Tot. Sys. Av.Stage				87534	332298	549358	-239836															
Main Lake			4487.22	60159	220213	423881	-239835															
Provo Bay			4487.22	5825	20393	86711	0															
Goshen Bay			4487.22	21550	91692	38766	0															
25	Oct	1951	4486.50	12431	27498	35717	-11944	952	502	1008	179	59	193	21	9	22	239	64	259	270	155	288
26	Nov	1951	4487.00	10734	12975	51033	-4696	934	458	984	175	52	187	20	8	21	233	54	250	264	132	278
27	Dec	1951	4487.65	28162	7936	42798	-4696	893	414	952	165	43	181	19	6	21	219	44	242	249	110	268
28	Jan	1952	4488.30	8548	2760	58287	-4696	858	397	936	157	39	177	18	6	20	208	41	238	236	102	261
29	Feb	1952	4488.80	5274	5183	73190	-26821	822	391	915	148	39	174	17	6	20	197	40	234	224	100	253
30	Mar	1952	4489.00	17860	11784	92090	-79453	766	380	882	136	36	168	16	5	19	179	38	226	205	94	242
31	Apr	1952	4489.70	8523	21978	169211	-89013	695	372	825	117	34	152	14	5	17	155	36	204	181	91	222
32	May	1952	4491.00	10016	41541	280949	-122248	595	384	747	93	36	133	11	5	15	124	39	178	148	99	197
33	Jun	1952	4490.60	6738	56446	118880	-108712	597	405	744	93	40	130	11	6	15	122	44	174	148	110	195
34	Jul	1952	4489.60	4292	64170	54425	-91830	633	439	722	101	47	124	12	7	14	134	53	165	161	126	189
35	Aug	1952	4488.95	8783	57689	37547	-50394	662	465	724	109	52	125	13	8	14	144	59	166	172	139	191
36	Sep	1952	4488.45	267	42373	33564	-38127	690	486	739	116	56	128	13	9	15	153	62	170	183	149	198
Water yr tot						Year average:		758	425	848	132	45	156	15	7	18	176	48	209	203	117	232
Tot. Sys. Av.Stage				121635	352338	1047697	-632631															
Main Lake			4488.80	81628	227872	838586	-632630															
Provo Bay			4488.80	9065	25476	128381	0															
Goshen Bay			4488.80	30941	98991	80730	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Year	Water EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
37	Oct	1952	4488.40	0	31554	41983	-15061	711	502	745	121	59	130	14	9	15	160	65	172	189	157	200
38	Nov	1952	4488.95	4576	16546	69871	-6601	704	498	728	120	59	126	14	9	14	158	63	167	186	154	193
39	Dec	1952	4489.00	4477	9113	30929	-21638	708	487	738	121	56	128	14	8	15	159	60	170	187	147	195
40	Jan	1953	4489.00	10690	5472	54539	-59758	692	469	740	117	53	129	13	8	15	154	56	172	181	138	194
41	Feb	1953	4489.00	1608	5618	31509	-27500	694	462	754	117	52	134	14	7	15	155	55	179	181	134	197
42	Mar	1953	4489.00	8086	13862	49602	-43826	690	453	763	117	51	136	13	7	15	154	53	183	179	130	199
43	Apr	1953	4489.00	9573	22253	42361	-29682	696	446	757	118	49	135	14	7	15	156	51	180	181	127	198
44	May	1953	4488.80	3967	33898	52436	-41219	706	455	766	121	50	137	14	7	15	160	53	183	184	134	201
45	Jun	1953	4488.55	531	48626	71831	-47105	708	481	781	121	55	140	14	8	16	160	60	187	185	149	208
46	Jul	1953	4487.75	4482	62677	40696	-55890	748	522	795	131	63	143	15	9	16	174	71	191	200	168	214
47	Aug	1953	4487.05	9132	54409	22931	-40611	791	540	825	142	66	151	16	10	17	188	74	200	216	178	226
48	Sep	1953	4486.55	796	40758	26549	-30747	828	552	859	151	67	158	17	10	18	199	76	210	229	184	238
Water yr tot						Year average:		723	489	771	125	57	137	14	8	15	164	61	183	191	150	205
Tot. Sys. Av.Stage				57923	344791	535243	-419639															
Main Lake			4488.42	38700	226006	400841	-419638															
Provo Bay			4488.42	4481	23026	92139	0															
Goshen Bay			4488.42	14742	95759	42264	0															
49	Oct	1953	4486.50	5561	28716	30587	-11825	845	537	874	155	66	162	17	10	18	204	72	214	234	174	243
50	Nov	1953	4486.85	5699	16783	46656	-4696	839	514	873	153	63	162	17	9	18	201	67	214	231	161	241
51	Dec	1953	4487.20	5370	7258	37711	-4696	826	488	874	150	59	162	17	8	18	197	61	214	226	147	240
52	Jan	1954	4487.65	7748	6207	43576	-4696	809	470	874	146	55	162	16	8	18	191	57	215	220	137	239
53	Feb	1954	4488.00	2569	6059	39957	-4696	800	462	883	144	54	165	16	8	18	188	56	220	216	133	240
54	Mar	1954	4488.40	10350	10828	44402	-7098	792	453	880	142	53	165	16	7	18	186	54	220	213	128	237
55	Apr	1954	4488.35	5383	23630	28332	-14671	803	452	876	145	52	164	16	7	18	191	54	218	216	128	237
56	May	1954	4487.70	3105	40684	19350	-41219	832	468	898	152	55	169	17	8	19	201	58	225	226	139	245
57	Jun	1954	4487.15	6437	49257	31275	-37939	861	494	924	160	60	176	18	9	19	211	64	233	237	152	255
58	Jul	1954	4486.25	4933	58645	19497	-45036	917	537	965	174	69	186	20	10	21	229	77	246	257	172	271
59	Aug	1954	4485.40	1223	50801	17221	-40611	987	552	1025	191	71	200	21	11	22	251	80	265	281	180	293
60	Sep	1954	4484.95	10562	37983	20448	-30747	1025	525	1066	200	64	209	22	10	23	263	71	277	294	167	306
Water yr tot						Year average:		861	496	918	159	60	173	18	9	19	209	64	230	238	151	254
Tot. Sys. Av.Stage				68948	336857	379016	-247931															
Main Lake			4487.03	46639	225378	268801	-247930															
Provo Bay			4487.03	4387	18891	81482	0															
Goshen Bay			4487.03	17922	92588	28732	0															
61	Oct	1954	4484.90	4856	25983	27708	-10729	1036	498	1081	202	60	213	22	9	24	265	64	281	298	153	311
62	Nov	1954	4485.20	5740	15573	36329	-1416	1021	476	1073	198	57	211	22	8	23	259	59	278	292	141	308
63	Dec	1954	4485.55	2754	8440	36460	-1311	992	458	1070	191	53	210	21	8	23	249	55	277	282	132	306
64	Jan	1955	4486.15	8142	2400	46168	-327	954	441	1051	181	49	206	20	7	23	236	51	272	269	123	298
65	Feb	1955	4486.60	13182	3464	29888	-327	922	431	1038	174	47	204	20	7	22	226	49	270	258	117	291
66	Mar	1955	4487.10	1385	11973	55248	-437	895	437	1022	167	49	200	19	7	22	217	50	265	248	121	285
67	Apr	1955	4487.40	3532	22090	46576	-1201	890	440	1000	166	49	195	19	7	21	216	51	257	247	124	279
68	May	1955	4487.15	7601	34958	29759	-24765	903	455	1009	170	51	197	19	7	22	221	54	259	251	134	283
69	Jun	1955	4486.80	10356	47225	36461	-30657	926	481	1027	176	56	201	20	8	22	228	61	264	260	147	291
70	Jul	1955	4485.90	2662	53449	14836	-42550	993	530	1062	192	66	209	21	10	23	250	75	274	284	169	305
71	Aug	1955	4484.95	3573	51136	17833	-50642	1053	542	1113	206	68	221	23	10	25	268	77	290	306	176	324
72	Sep	1955	4484.40	11929	34456	9932	-32620	1098	505	1150	217	59	230	24	9	26	282	66	300	321	158	337
Water yr tot						Year average:		974	474	1058	187	55	208	21	8	23	243	59	274	276	141	301
Tot. Sys. Av.Stage				75719	311154	387203	-196982															
Main Lake			4486.01	49824	210979	274684	-196981															
Provo Bay			4486.01	3777	14972	80765	0															
Goshen Bay			4486.01	22118	85203	31754	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
73	Oct	1955	4484.40	3494	24571	33601	-12524	1112	483	1170	220	56	234	24	8	26	285	60	306	326	148	344
74	Nov	1955	4484.75	10382	13386	32153	-442	1077	461	1139	211	52	226	23	8	25	273	55	295	313	135	332
75	Dec	1955	4485.20	8048	6894	36618	-331	1034	443	1123	201	48	223	22	7	25	259	51	290	298	126	325
76	Jan	1956	4485.80	14572	4277	40793	-221	984	428	1090	188	45	216	21	6	24	243	48	282	281	118	313
77	Feb	1956	4486.30	7273	4434	40488	-110	949	427	1081	180	45	214	20	6	23	232	48	281	268	117	307
78	Mar	1956	4486.55	206	13195	34904	-110	941	434	1088	178	47	216	20	7	23	230	50	284	266	122	309
79	Apr	1956	4486.25	4309	23925	25734	-32255	958	438	1077	183	48	214	20	7	23	236	51	280	271	125	306
80	May	1956	4486.05	2657	33813	40403	-26660	963	459	1087	184	50	216	21	7	24	237	55	282	273	138	311
81	Jun	1956	4485.35	0	43909	17151	-32982	1021	493	1135	198	57	227	22	9	25	256	63	297	294	157	329
82	Jul	1956	4484.50	3454	55819	21638	-39930	1100	532	1199	218	65	243	24	10	27	281	76	316	323	172	354
83	Aug	1956	4483.75	419	48719	25864	-37782	1180	512	1277	237	60	261	26	9	29	306	70	339	352	164	383
84	Sep	1956	4483.10	300	35448	14163	-29805	1262	481	1367	257	53	282	28	8	31	331	60	366	381	149	415
Water yr tot						Year average:		1048	466	1153	205	52	231	23	8	25	264	57	301	304	139	335
Tot. Sys.		Av.Stage		55118	308397	363516	-213152															
Main Lake			4485.17	37223	213375	261737	-213151															
Provo Bay			4485.17	2302	10910	76429	0															
Goshen Bay			4485.17	15593	84113	25350	0															
85	Oct	1956	4483.00	6501	23982	20231	-10508	1291	448	1395	263	50	289	29	8	32	339	54	374	391	127	424
86	Nov	1956	4483.40	572	11322	42179	-437	1238	440	1341	250	50	275	27	7	30	321	51	356	371	122	404
87	Dec	1956	4483.90	3590	7329	43601	-437	1167	423	1300	232	46	265	26	7	29	298	48	343	346	114	388
88	Jan	1957	4484.35	12475	5295	29049	0	1106	413	1273	218	44	260	24	6	28	279	45	337	325	109	376
89	Feb	1957	4484.80	4197	5900	38543	0	1061	416	1266	207	45	259	23	6	28	265	46	337	309	110	371
90	Mar	1957	4485.10	11474	11909	25356	0	1036	409	1244	201	43	254	22	6	27	257	45	332	299	107	362
91	Apr	1957	4485.80	13362	17667	63586	0	989	398	1144	190	40	229	21	6	25	243	42	298	283	103	329
92	May	1957	4486.20	22658	30396	56800	-14509	952	407	1106	181	40	220	20	6	24	232	44	285	270	109	318
93	Jun	1957	4486.25	8136	45316	69441	-27930	935	446	1086	177	49	215	20	8	23	226	54	278	265	130	313
94	Jul	1957	4485.35	1313	57274	28011	-49204	1002	505	1116	194	61	222	21	10	24	248	71	287	290	156	326
95	Aug	1957	4484.60	5559	51352	23540	-40149	1065	512	1165	209	62	234	23	10	26	267	72	301	313	160	345
96	Sep	1957	4484.10	1103	33890	24823	-32620	1103	490	1209	218	57	244	24	9	27	278	65	313	327	150	361
Water yr tot						Year average:		1079	442	1220	212	49	247	23	7	27	271	53	320	316	125	360
Tot. Sys.		Av.Stage		90946	301637	465165	-175794															
Main Lake			4484.74	63048	208296	341846	-175793															
Provo Bay			4484.74	3626	11092	84742	0															
Goshen Bay			4484.74	24272	82249	38577	0															
97	Oct	1957	4484.10	5992	25022	29174	-10145	1122	465	1215	223	54	245	24	8	27	284	57	315	333	136	363
98	Nov	1957	4484.65	6455	12461	52566	-1871	1077	450	1160	211	52	232	23	8	25	269	53	297	316	128	342
99	Dec	1957	4485.10	9210	6162	36104	-1871	1029	430	1140	199	47	227	22	7	25	254	49	292	299	118	334
100	Jan	1958	4485.55	6394	3918	36505	-1105	993	423	1130	191	46	225	21	7	24	243	47	290	286	114	328
101	Feb	1958	4486.10	9960	6996	47049	-2762	952	420	1112	181	46	222	20	6	24	230	47	287	271	112	319
102	Mar	1958	4486.60	13830	12625	44947	-2541	923	415	1090	174	45	217	19	6	23	222	46	281	261	110	311
103	Apr	1958	4486.95	6103	23908	50889	-2209	919	415	1058	174	44	209	19	6	22	221	46	271	259	112	301
104	May	1958	4487.20	3047	43680	94050	-31118	886	440	1036	165	48	204	18	7	22	210	52	263	248	128	295
105	Jun	1958	4486.55	2226	55271	32762	-37329	923	479	1070	175	55	212	19	8	23	223	61	273	262	148	309
106	Jul	1958	4485.65	377	59349	25060	-43946	1002	529	1112	194	66	222	21	10	24	248	75	285	291	170	326
107	Aug	1958	4485.00	6494	55991	40520	-45883	1052	534	1135	206	66	227	23	10	25	263	76	291	309	173	335
108	Sep	1958	4484.50	5892	38200	24566	-33489	1092	505	1187	216	59	239	24	9	26	275	67	307	323	158	354
Water yr tot						Year average:		997	459	1120	192	52	223	21	8	24	245	56	288	288	134	326
Tot. Sys.		Av.Stage		75986	343588	514200	-214269															
Main Lake			4485.66	51213	233829	383250	-214268															
Provo Bay			4485.66	3416	15761	94864	0															
Goshen Bay			4485.66	21357	93998	36085	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Tot. Dis. Solids Main	PB	GB	Quality - all in mg/l Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
109	Oct	1958	4484.40	0	27209	32829	-13712	1114	485	1202	221	57	242	24	9	26	281	62	310	331	147	359
110	Nov	1958	4484.80	7450	15050	47256	-6842	1077	465	1158	211	55	231	23	8	25	269	57	296	317	135	342
111	Dec	1958	4485.25	3437	7553	44722	-3086	1034	451	1141	200	52	227	22	8	25	255	53	291	301	128	335
112	Jan	1959	4485.70	7859	5191	36148	-663	994	440	1133	191	49	226	21	7	24	242	51	290	287	122	330
113	Feb	1959	4486.30	13891	6235	44752	-663	953	432	1112	181	48	222	20	7	24	230	49	287	272	117	320
114	Mar	1959	4486.60	3626	11979	34815	-221	943	438	1107	179	50	221	20	7	24	227	51	286	268	121	317
115	Apr	1959	4486.70	9128	23822	29156	-5634	955	438	1085	182	49	215	20	7	23	232	51	278	272	123	311
116	May	1959	4486.35	6953	36835	31188	-32001	968	456	1099	185	51	219	21	8	24	237	55	283	276	134	317
117	Jun	1959	4485.70	6121	47839	22596	-36998	1011	485	1137	196	56	228	22	9	25	251	62	294	292	150	331
118	Jul	1959	4484.85	959	51330	21132	-42289	1089	522	1188	216	64	240	24	10	26	275	74	309	320	164	351
119	Aug	1959	4484.20	10690	47991	22567	-38372	1146	499	1239	229	58	252	25	10	28	293	67	324	340	154	370
120	Sep	1959	4483.80	11800	34402	17757	-27193	1181	473	1277	238	53	261	26	9	29	303	59	335	353	142	383
Water yr tot						Year average:		1039	465	1156	202	54	232	22	8	25	258	58	299	302	137	339
Tot. Sys.		Av.Stage		81917	315442	384925	-207674															
Main Lake			4485.39	57696	216864	272260	-207673															
Provo Bay			4485.39	3728	12406	85550	0															
Goshen Bay			4485.39	20493	86172	27115	0															
121	Oct	1959	4483.85	1379	23384	34618	-8631	1200	470	1290	242	53	264	26	8	29	309	57	339	359	141	388
122	Nov	1959	4484.00	344	13162	28942	-4254	1187	463	1279	239	52	261	26	8	28	305	55	335	353	137	383
123	Dec	1959	4484.50	6194	7765	43193	-1201	1126	446	1232	224	48	250	24	7	27	285	52	321	331	128	365
124	Jan	1960	4485.05	6318	3452	42771	-221	1072	437	1208	210	47	244	23	7	26	269	50	315	312	123	354
125	Feb	1960	4485.60	15543	4637	35614	-110	1022	427	1178	198	45	239	22	6	26	254	48	309	294	117	342
126	Mar	1960	4486.05	9960	12065	40897	-221	995	429	1162	192	46	235	21	7	25	246	48	304	284	119	334
127	Apr	1960	4486.10	4047	23504	26925	-3093	1013	437	1147	197	47	231	22	7	25	252	51	299	289	125	330
128	May	1960	4485.70	2670	38910	33866	-32001	1036	465	1177	203	51	239	22	8	26	261	56	309	297	142	342
129	Jun	1960	4484.95	1308	50644	19486	-33424	1108	501	1243	221	58	255	24	9	28	284	65	330	323	161	366
130	Jul	1960	4483.70	367	57207	-5288	-39157	1266	535	1347	260	66	280	28	10	30	334	77	362	377	172	403
131	Aug	1960	4482.80	2753	47300	4821	-30049	1405	486	1480	295	54	313	32	9	34	379	64	404	425	149	450
132	Sep	1960	4482.35	4797	35516	17653	-20747	1485	461	1604	314	49	342	34	8	37	404	55	442	452	138	492
Water yr tot						Year average:		1159	463	1279	233	51	263	25	8	28	298	57	339	341	138	379
Tot. Sys.		Av.Stage		55686	317554	323501	-173109															
Main Lake			4484.55	39335	222269	219733	-173108															
Provo Bay			4484.55	2146	9110	76962	0															
Goshen Bay			4484.55	14205	86174	26806	0															
133	Oct	1960	4482.50	10602	23012	28632	-5128	1461	455	1588	307	51	338	33	8	37	395	54	436	443	132	485
134	Nov	1960	4483.15	6370	13016	57027	-874	1329	455	1409	275	52	296	30	8	32	353	54	382	397	131	424
135	Dec	1960	4483.55	3597	5607	33961	-874	1259	443	1392	257	49	291	28	7	31	330	52	376	372	125	415
136	Jan	1961	4483.90	0	5147	32870	0	1211	443	1396	245	49	292	27	7	31	315	51	378	356	125	413
137	Feb	1961	4484.25	3842	7647	31942	0	1171	442	1396	236	50	293	26	7	31	303	52	382	342	124	410
138	Mar	1961	4484.45	15260	10815	11738	0	1145	432	1372	230	47	288	25	7	31	295	49	375	331	118	400
139	Apr	1961	4484.55	5149	18154	21138	0	1160	431	1339	234	46	280	26	7	30	301	49	364	335	120	390
140	May	1961	4484.05	1467	30182	18293	-30080	1204	450	1375	246	48	289	27	7	31	316	53	376	350	134	403
141	Jun	1961	4483.10	212	42432	-2643	-29749	1348	469	1481	282	52	315	31	8	34	364	58	410	399	142	441
142	Jul	1961	4482.30	4810	50300	7055	-22029	1525	489	1642	327	57	355	35	9	38	422	68	461	459	142	497
143	Aug	1961	4481.70	7384	44219	7119	-14119	1700	456	1819	370	49	399	40	8	43	479	57	517	519	131	558
144	Sep	1961	4481.60	12654	27086	12618	-5413	1700	453	1899	371	49	417	40	8	45	479	54	541	518	132	584
Water yr tot						Year average:		1351	451	1509	282	50	321	31	8	34	363	54	417	402	130	452
Tot. Sys.		Av.Stage		71352	277624	259754	-108266															
Main Lake			4483.26	51647	200659	161847	-108265															
Provo Bay			4483.26	936	3172	73308	0															
Goshen Bay			4483.26	18769	73793	24599	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Year	Water EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
145	Oct	1961	4481.80	12768	18569	20882	-663	1647	445	1838	357	48	403	38	8	43	460	52	522	498	126	561
146	Nov	1961	4482.10	6695	9998	25601	-437	1576	439	1758	339	48	383	36	8	41	437	50	497	473	123	532
147	Dec	1961	4482.50	9964	5230	24974	-110	1468	424	1702	312	44	369	34	7	39	402	47	480	436	116	510
148	Jan	1962	4482.90	2691	1171	28893	-110	1385	420	1660	292	44	360	31	7	38	376	47	468	408	114	494
149	Feb	1962	4483.55	15911	4197	39002	-437	1252	416	1546	259	43	334	28	6	35	333	46	436	363	111	454
150	Mar	1962	4484.05	10297	7561	37266	-327	1191	411	1489	244	42	320	26	6	34	314	45	418	341	109	433
151	Apr	1962	4484.55	9552	21899	53501	-653	1141	404	1390	232	40	295	25	6	31	299	43	385	325	108	402
152	May	1962	4484.65	13728	34610	49606	-20470	1120	424	1359	227	42	287	25	7	31	292	47	374	319	120	393
153	Jun	1962	4484.05	4496	42754	18065	-28564	1198	458	1414	247	49	301	27	8	32	318	56	392	346	137	414
154	Jul	1962	4483.05	3704	51082	4599	-35733	1359	493	1506	288	58	324	31	10	35	371	69	421	401	146	447
155	Aug	1962	4482.15	49	45810	13451	-35352	1521	460	1673	328	50	366	35	8	39	423	58	474	457	133	505
156	Sep	1962	4481.70	2978	34636	25299	-26381	1591	449	1811	345	47	399	37	8	43	444	54	517	481	130	552
Water yr tot						Year average:		1371	437	1595	289	46	345	31	7	37	372	51	448	404	123	475
Tot. Sys.		Av.Stage		92840	277523	341147	-149237															
Main Lake			4483.09	68183	199398	237398	-149236															
Provo Bay			4483.09	1372	3996	85707	0															
Goshen Bay			4483.09	23286	74129	18041	0															
157	Oct	1962	4481.85	4674	25081	36793	-5565	1571	457	1780	339	49	391	36	8	42	437	54	506	474	135	541
158	Nov	1962	4482.15	2025	13364	36747	-3491	1506	456	1699	323	50	370	34	8	39	415	53	480	451	133	512
159	Dec	1962	4482.35	401	5504	21010	-1090	1468	446	1693	313	48	369	33	7	39	404	52	479	436	129	507
160	Jan	1963	4482.75	7881	2209	24695	-327	1369	441	1638	288	47	356	31	7	38	372	50	464	402	126	486
161	Feb	1963	4483.15	3286	4265	31650	-110	1318	442	1608	276	48	350	30	7	36	357	51	457	384	126	471
162	Mar	1963	4483.45	12262	11612	22623	0	1282	436	1573	267	47	342	29	7	36	346	50	448	370	123	458
163	Apr	1963	4483.85	19199	18447	30831	0	1244	426	1474	258	43	317	28	6	33	335	47	415	356	119	426
164	May	1963	4483.50	3397	25988	21654	-26786	1275	446	1500	267	45	324	29	7	34	347	51	424	366	133	436
165	Jun	1963	4483.10	9169	38689	23775	-25249	1332	462	1542	281	49	335	30	8	35	367	56	438	386	139	451
166	Jul	1963	4482.15	179	48546	21413	-44605	1497	490	1685	323	57	371	34	9	39	421	68	485	442	144	502
167	Aug	1963	4481.30	3792	45119	19135	-39044	1693	459	1895	373	48	423	39	8	45	486	57	553	509	134	573
168	Sep	1963	4481.20	7753	31773	37136	-20104	1659	457	1877	363	48	417	38	8	44	473	54	545	498	135	567
Water yr tot						Year average:		1434	452	1664	306	48	364	33	7	38	397	54	474	423	131	494
Tot. Sys.		Av.Stage		74022	270603	327470	-166371															
Main Lake			4482.57	53254	198000	226323	-166370															
Provo Bay			4482.57	813	1834	77250	0															
Goshen Bay			4482.57	19956	70769	23897	0															
169	Oct	1963	4481.20	3805	21764	28674	-10715	1651	449	1893	361	50	421	38	8	44	470	54	550	494	128	572
170	Nov	1963	4481.65	9630	11305	34289	-763	1515	444	1737	326	50	382	35	8	40	425	52	499	447	125	517
171	Dec	1963	4482.10	3298	5064	35539	-1090	1406	432	1681	299	46	368	32	7	39	390	50	483	410	119	496
172	Jan	1964	4482.60	6780	1324	32818	-1090	1285	427	1608	269	45	351	29	7	37	351	48	461	368	117	469
173	Feb	1964	4483.05	511	3357	37336	-327	1227	428	1578	255	46	345	28	7	36	333	49	455	349	117	455
174	Mar	1964	4483.65	7564	10793	50099	-110	1152	421	1487	236	45	322	26	7	34	309	47	426	323	114	425
175	Apr	1964	4484.10	17563	20164	38416	0	1123	408	1378	229	41	295	25	6	31	300	44	389	312	108	390
176	May	1964	4484.60	19373	29865	67430	-16355	1058	423	1281	213	42	270	23	7	29	279	47	356	291	119	360
177	Jun	1964	4484.85	16851	38673	60882	-18445	1038	447	1222	208	47	255	23	7	27	273	54	337	285	130	342
178	Jul	1964	4483.90	912	47386	13641	-44384	1138	492	1271	234	58	268	25	9	29	308	69	353	320	147	361
179	Aug	1964	4483.00	1798	46748	16995	-42464	1260	475	1371	265	54	293	29	9	31	349	63	386	362	141	396
180	Sep	1964	4482.50	453	35514	30090	-32918	1329	457	1474	282	50	318	30	8	34	371	56	419	385	134	430
Water yr tot						Year average:		1265	442	1498	265	48	324	28	7	34	346	53	426	362	125	434
Tot. Sys.		Av.Stage		88544	271964	446216	-168661															
Main Lake			4483.10	64229	194443	332382	-168660															
Provo Bay			4483.10	1753	4724	81540	0															
Goshen Bay			4483.10	22562	72797	32294	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
181	Oct	1964	4482.45	315	26254	32305	-10052	1359	454	1518	290	52	329	31	8	35	380	55	434	394	129	445
182	Nov	1964	4482.85	7226	14023	37449	-437	1298	450	1454	273	53	313	29	8	33	359	54	412	372	126	421
183	Dec	1964	4483.60	19729	7075	45820	-437	1187	432	1352	245	48	288	27	7	31	322	50	381	334	118	387
184	Jan	1965	4484.15	7006	4563	42543	-1201	1120	431	1324	228	48	281	25	7	30	300	50	372	312	117	374
185	Feb	1965	4484.40	638	3761	24422	-1090	1106	435	1328	226	50	283	25	7	30	297	51	376	306	119	372
186	Mar	1965	4484.75	1685	12751	40426	-653	1087	433	1320	221	49	282	24	7	30	292	51	375	299	119	368
187	Apr	1965	4485.10	7003	24310	51135	-4801	1071	426	1265	218	46	268	24	7	28	287	49	356	293	117	351
188	May	1965	4485.10	4971	32049	53975	-26897	1072	442	1263	218	47	267	24	7	28	288	52	356	294	128	352
189	Jun	1965	4485.20	7205	43332	78794	-34254	1037	467	1255	208	53	265	23	8	28	275	59	352	283	140	351
190	Jul	1965	4484.60	6004	53647	37930	-40090	1102	504	1260	225	61	265	25	10	29	298	72	352	306	153	355
191	Aug	1965	4484.10	6896	47596	39714	-39597	1158	489	1291	239	57	273	26	9	30	316	67	362	325	148	367
192	Sep	1965	4484.15	12347	32960	41540	-16901	1158	468	1291	239	53	272	26	9	30	316	59	361	325	138	367
Water yr tot						Year average:		1146	452	1327	236	51	282	26	8	30	311	56	374	320	129	376
Tot. Sys. Av.Stage				81031	302328	526060	-176410															
Main Lake			4484.20	55724	211896	400429	-176409															
Provo Bay			4484.20	1902	8173	90898	0															
Goshen Bay			4484.20	23404	82259	34733	0															
193	Oct	1965	4484.25	1003	25061	41208	-9058	1158	472	1277	239	56	268	26	8	29	315	59	356	326	140	363
194	Nov	1965	4484.70	7759	15923	46754	-1871	1128	463	1240	231	55	259	25	8	28	304	57	343	315	133	350
195	Dec	1965	4485.45	11955	7308	59786	-1871	1046	443	1176	209	50	243	23	7	26	276	52	323	288	123	328
196	Jan	1966	4485.90	1327	2252	42546	-3197	1008	441	1170	200	50	242	22	7	26	264	52	322	276	122	324
197	Feb	1966	4486.40	7192	5867	50306	-8278	968	438	1155	190	50	239	21	7	25	251	51	318	263	120	317
198	Mar	1966	4486.90	3700	15745	63080	-7060	937	442	1139	182	51	235	20	7	25	240	53	314	252	123	312
199	Apr	1966	4486.75	3043	27863	19568	-7968	975	448	1126	192	52	232	21	7	25	254	54	309	264	127	308
200	May	1966	4486.65	7253	45451	62585	-33216	970	468	1133	191	54	233	21	8	25	252	59	311	263	140	312
201	Jun	1966	4485.90	377	53604	25385	-37439	1032	506	1182	207	62	246	23	9	27	274	68	327	285	160	330
202	Jul	1966	4484.95	952	61048	20245	-40521	1134	550	1248	233	71	262	25	11	28	308	83	348	319	177	354
203	Aug	1966	4484.25	3832	50610	28699	-39256	1211	524	1321	252	64	280	27	10	30	333	75	371	345	165	379
204	Sep	1966	4483.90	5960	38612	34028	-29513	1245	490	1367	260	57	290	28	9	32	343	65	385	357	150	395
Water yr tot						Year average:		1068	474	1211	215	56	252	23	8	27	284	61	336	296	140	339
Tot. Sys. Av.Stage				54358	349350	494195	-219248															
Main Lake			4485.50	37685	239536	373127	-219247															
Provo Bay			4485.50	2415	14385	87047	0															
Goshen Bay			4485.50	14259	95428	34021	0															
205	Oct	1966	4484.05	7024	24522	40621	-11171	1237	466	1346	257	55	284	28	8	31	339	59	377	354	135	388
206	Nov	1966	4484.30	3590	14609	33846	-2617	1213	458	1321	251	55	278	27	8	30	330	56	368	346	130	379
207	Dec	1966	4484.95	15074	9725	49048	-1090	1142	436	1259	232	49	263	25	7	28	306	51	348	322	119	358
208	Jan	1967	4485.35	16252	4346	22827	-1201	1096	424	1226	221	47	256	24	7	28	290	48	339	306	113	346
209	Feb	1967	4485.90	660	4298	52225	-1748	1045	431	1201	208	49	250	23	7	27	274	50	332	290	116	335
210	Mar	1967	4486.35	6232	14219	51048	-4039	1014	432	1187	201	49	246	22	7	26	263	51	327	279	117	329
211	Apr	1967	4486.25	4262	23926	14120	-3164	1047	434	1176	210	49	243	23	7	26	276	51	323	289	119	327
212	May	1967	4486.30	15890	36439	56847	-31967	1025	445	1150	204	50	236	22	7	25	268	54	314	282	127	319
213	Jun	1967	4486.65	10910	46115	88313	-22475	985	476	1108	194	56	225	21	8	24	254	62	299	269	143	306
214	Jul	1967	4485.95	5423	55560	28763	-39601	1042	527	1130	209	67	231	23	10	25	274	78	305	290	164	316
215	Aug	1967	4485.20	3512	52489	28214	-42981	1097	539	1182	222	69	244	24	11	27	291	80	322	310	170	336
216	Sep	1967	4484.80	4623	38827	32941	-32073	1126	521	1215	229	65	252	25	10	27	300	73	331	320	163	347
Water yr tot						Year average:		1089	466	1209	220	55	251	24	8	27	289	59	332	305	135	340
Tot. Sys. Av.Stage				93458	325079	498819	-194127															
Main Lake			4485.50	57141	221817	366865	-194126															
Provo Bay			4485.50	3712	14466	85559	0															
Goshen Bay			4485.50	32605	88797	46395	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
217	Oct	1967	4484.90	3087	25522	39418	-8729	1131	486	1222	230	59	253	25	9	28	300	63	332	322	145	350
218	Nov	1967	4485.30	6997	14696	42913	-1761	1105	463	1190	223	55	245	24	8	27	291	57	321	313	133	339
219	Dec	1967	4485.70	11604	6446	30569	-1761	1059	439	1170	211	49	240	23	7	26	275	51	315	298	120	331
220	Jan	1968	4486.25	2820	3886	50350	-1871	1016	432	1153	200	48	236	22	7	25	260	50	310	284	118	324
221	Feb	1968	4486.80	12861	7435	44742	-1982	974	427	1128	190	47	230	21	7	25	246	49	304	269	114	314
222	Mar	1968	4487.25	11266	15134	51277	-7391	945	424	1113	183	47	227	20	7	24	237	48	299	260	114	308
223	Apr	1968	4487.55	24365	24806	43796	-16473	928	415	1065	179	44	215	20	6	23	232	46	282	253	109	294
224	May	1968	4487.65	11283	36398	62887	-28688	915	430	1050	176	46	211	19	7	23	228	50	277	250	120	290
225	Jun	1968	4487.75	11479	47597	77450	-32248	890	457	1041	169	52	208	19	8	23	219	57	273	243	133	289
226	Jul	1968	4487.15	4739	60046	42929	-41626	935	506	1040	180	63	207	20	10	23	234	71	271	259	155	291
227	Aug	1968	4486.80	17628	52058	38645	-35279	960	515	1046	187	64	208	20	10	23	241	73	271	268	158	294
228	Sep	1968	4486.30	1436	36384	22153	-31059	990	523	1074	194	65	215	21	10	24	250	73	280	280	163	305
Water yr tot						Year average:		987	460	1108	193	53	224	21	8	24	251	57	295	275	132	311
Tot. Sys. Av.Stage				119570	330415	547134	-208868															
Main Lake			4486.62	78493	220807	417737	-208867															
Provo Bay			4486.62	7162	18798	97638	0															
Goshen Bay			4486.62	33915	90811	31759	0															
229	Oct	1968	4486.45	9192	27780	45283	-13615	990	501	1061	194	61	211	21	9	23	250	67	274	279	152	301
230	Nov	1968	4486.90	9248	16235	55751	-9164	967	477	1035	187	57	205	20	9	22	242	60	266	271	139	292
231	Dec	1968	4487.40	14202	7138	46699	-9164	929	446	1022	178	50	202	20	8	22	229	53	262	258	124	286
232	Jan	1969	4487.90	13041	4138	44379	-8038	896	430	1001	170	47	197	19	7	21	219	49	257	246	116	278
233	Feb	1969	4488.50	14031	4274	50067	-4696	868	420	982	163	45	194	18	7	21	210	47	254	237	111	271
234	Mar	1969	4488.70	1144	13408	39764	-8786	863	420	989	162	46	195	18	7	21	209	48	255	235	112	271
235	Apr	1969	4489.00	10998	29199	107399	-61174	818	417	949	150	45	185	17	6	20	194	47	241	219	112	259
236	May	1969	4489.00	433	48519	110075	-61989	794	437	946	144	48	184	16	7	20	185	52	239	212	124	259
237	Jun	1969	4489.00	25003	57420	98856	-66439	769	454	926	137	51	178	15	8	19	177	56	232	205	132	254
238	Jul	1969	4488.30	5458	63901	49159	-55890	809	495	915	148	60	175	16	9	19	190	68	227	220	150	253
239	Aug	1969	4487.70	3708	59565	51434	-50394	845	526	923	157	66	177	17	10	19	202	75	229	233	165	257
240	Sep	1969	4487.30	2216	44016	36472	-30747	871	540	940	163	68	181	18	11	20	210	77	234	242	172	264
Water yr tot						Year average:		868	464	974	163	53	190	18	8	21	210	58	247	238	134	270
Tot. Sys. Av.Stage				108679	375598	735344	-380097															
Main Lake			4488.01	69860	246135	579778	-380096															
Provo Bay			4488.01	7500	25087	108897	0															
Goshen Bay			4488.01	31318	104376	46669	0															
241	Oct	1969	4487.60	23813	26999	44415	-14238	869	508	922	163	62	176	18	10	19	209	68	227	240	154	257
242	Nov	1969	4487.95	6219	14212	49284	-9521	864	493	912	161	60	173	18	9	19	208	65	224	238	146	253
243	Dec	1969	4488.30	9881	8600	40368	-9521	851	473	909	158	56	173	17	9	19	204	60	224	232	136	250
244	Jan	1970	4488.80	12198	4751	49660	-10647	830	456	905	153	53	172	17	8	19	198	56	224	225	127	248
245	Feb	1970	4489.00	5624	6474	41546	-21983	819	450	912	151	52	175	17	8	19	195	55	229	220	124	248
246	Mar	1970	4489.00	8787	14884	29509	-23413	822	446	915	152	52	176	17	8	19	197	54	231	220	123	248
247	Apr	1970	4489.00	16694	24441	35900	-28153	825	438	902	153	50	173	17	7	19	199	52	227	220	119	243
248	May	1970	4489.00	5498	39034	77526	-43990	817	451	904	151	52	174	17	8	19	196	55	228	217	128	244
249	Jun	1970	4488.75	12520	49646	60861	-47105	822	469	912	153	55	176	17	8	19	199	60	230	219	137	248
250	Jul	1970	4488.00	7063	56219	35632	-55890	863	503	924	163	63	179	18	10	19	213	71	233	234	151	253
251	Aug	1970	4487.30	7504	52701	22525	-40611	907	519	958	175	65	187	19	10	20	227	75	244	249	158	265
252	Sep	1970	4487.10	17560	36783	32106	-30747	923	510	969	178	63	189	19	10	21	232	71	247	254	154	269
Water yr tot						Year average:		851	476	920	159	57	177	17	9	19	206	62	231	231	138	252
Tot. Sys. Av.Stage				133366	334748	519338	-335820															
Main Lake			4488.32	88459	219232	384572	-335819															
Provo Bay			4488.32	9788	22488	104846	0															
Goshen Bay			4488.32	35120	93029	29920	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Tot. Dis. Solids Main	PB	GB	Quality - all in mg/l Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
253	Oct	1970	4487.20	11106	27111	39236	-14278	929	499	969	180	61	189	19	10	21	234	67	247	255	149	268
254	Nov	1970	4487.90	22612	15891	65988	-9601	892	473	925	171	56	179	18	9	19	223	60	235	242	136	253
255	Dec	1970	4488.15	12929	5740	25300	-9601	893	455	917	171	52	178	19	8	19	223	55	233	241	127	249
256	Jan	1971	4488.65	5323	5088	55618	-9601	870	446	913	165	50	177	18	8	19	216	53	233	233	123	246
257	Feb	1971	4488.95	14488	6164	30473	-10727	860	435	916	163	48	179	18	7	19	214	51	236	229	118	245
258	Mar	1971	4489.00	1742	14508	59923	-42502	848	436	926	160	49	181	17	7	19	210	51	239	225	119	247
259	Apr	1971	4489.00	17364	25682	55998	-47680	841	430	911	159	47	177	17	7	19	208	50	234	222	117	242
260	May	1971	4489.00	7930	37720	71009	-41219	831	441	916	156	49	178	17	7	19	205	53	236	218	124	244
261	Jun	1971	4488.85	2931	50303	80464	-47105	823	468	927	154	54	181	17	8	19	202	60	239	216	139	249
262	Jul	1971	4487.95	3335	63002	32266	-55890	879	511	950	169	64	187	18	10	20	222	73	247	235	157	258
263	Aug	1971	4487.25	6138	59087	30341	-40611	926	537	984	181	68	195	20	11	21	238	78	257	252	169	270
264	Sep	1971	4487.05	9902	38343	41281	-30747	945	533	999	185	66	198	20	10	21	243	76	262	258	168	275
Water yr tot						Year average:		878	472	938	168	55	183	18	8	20	220	61	241	235	137	254
Tot. Sys. Av.Stage				115805	348645	587903	-359563															
Main Lake			4488.25	72762	228555	441831	-359562															
Provo Bay			4488.25	7999	23272	107196	0															
Goshen Bay			4488.25	35044	96817	38877	0															
265	Oct	1971	4487.70	16419	26906	83708	-14784	910	513	940	176	63	185	19	10	20	232	70	244	245	157	256
266	Nov	1971	4487.85	5118	13297	33522	-11740	915	500	945	177	61	185	19	9	20	234	67	244	246	150	255
267	Dec	1971	4488.30	8230	6601	50198	-10615	892	479	930	171	57	181	18	8	19	226	62	240	238	140	249
268	Jan	1972	4488.70	2533	4744	51099	-11740	877	467	932	168	55	182	18	8	19	222	59	242	233	134	248
269	Feb	1972	4489.00	1057	7771	46161	-11423	868	462	943	166	54	186	18	8	20	219	58	247	229	132	250
270	Mar	1972	4489.00	3988	17948	49789	-35829	860	458	955	164	53	189	18	8	20	217	57	252	226	130	253
271	Apr	1972	4489.00	9706	26776	48315	-31245	866	454	945	166	52	187	18	8	20	220	56	249	228	128	250
272	May	1972	4488.80	187	40445	62763	-41219	864	469	959	165	55	190	18	8	20	219	60	253	226	138	255
273	Jun	1972	4488.40	6146	55007	58723	-47105	880	495	978	169	60	195	18	9	21	225	67	259	233	151	263
274	Jul	1972	4487.40	1474	59638	22898	-55890	940	538	1008	185	69	202	20	10	22	245	80	269	253	168	274
275	Aug	1972	4486.75	6217	56017	32591	-40611	992	556	1048	198	72	212	21	11	23	263	84	282	271	177	288
276	Sep	1972	4486.35	4845	40138	30953	-30747	1028	552	1084	207	71	220	22	11	24	275	82	294	282	176	299
Water yr tot						Year average:		908	495	972	176	60	193	19	9	21	233	67	256	242	148	262
Tot. Sys. Av.Stage				65926	355293	570725	-342949															
Main Lake			4488.10	37812	233699	430033	-342948															
Provo Bay			4488.10	4066	23143	98355	0															
Goshen Bay			4488.10	24048	98452	42337	0															
277	Oct	1972	4486.70	26826	28240	46740	-14632	1004	497	1057	200	60	213	21	9	23	265	68	284	274	147	290
278	Nov	1972	4487.10	11590	14471	48585	-10310	981	470	1033	194	56	207	21	9	22	257	61	275	266	133	281
279	Dec	1972	4487.50	6802	3893	43172	-10310	956	446	1023	188	51	205	20	8	22	249	55	273	258	122	277
280	Jan	1973	4487.95	9623	1405	42947	-10310	926	427	1014	180	48	203	19	7	22	239	50	271	248	113	273
281	Feb	1973	4488.45	3961	4060	55973	-9896	898	422	1003	173	47	201	19	7	21	229	49	269	238	110	268
282	Mar	1973	4488.90	7325	12572	61616	-14401	878	417	987	168	46	197	18	7	21	222	48	264	231	109	262
283	Apr	1973	4489.00	8876	21564	71048	-49003	859	413	957	163	45	189	18	7	20	216	47	253	225	108	253
284	May	1973	4489.25	9432	38964	137834	-84577	803	423	927	149	46	182	16	7	19	197	50	243	207	114	244
285	Jun	1973	4489.00	4246	54564	94118	-67525	791	451	923	146	52	180	16	8	19	192	58	241	205	128	245
286	Jul	1973	4488.20	6538	62727	37731	-55890	837	492	928	158	61	181	17	9	20	209	70	242	221	144	249
287	Aug	1973	4487.65	8461	55829	37771	-40611	872	513	942	166	65	184	18	10	20	220	75	245	233	154	254
288	Sep	1973	4487.35	10897	39394	32232	-30747	897	514	960	172	65	188	19	10	21	228	74	250	241	154	260
Water yr tot						Year average:		892	457	980	171	53	194	19	8	21	227	59	259	237	128	263
Tot. Sys. Av.Stage				114581	337690	709773	-398213															
Main Lake			4488.09	68997	221184	550575	-398212															
Provo Bay			4488.09	7126	22623	111301	0															
Goshen Bay			4488.09	38458	93882	47897	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
289	Oct	1973	4487.55	3088	27968	58233	-15425	893	513	943	171	64	184	19	10	20	226	72	244	240	155	255
290	Nov	1973	4488.10	9164	15008	67812	-11896	868	497	906	164	60	175	18	9	19	217	67	232	231	147	243
291	Dec	1973	4488.40	13145	7419	33779	-11896	850	472	902	160	55	174	17	8	19	211	60	231	226	135	241
292	Jan	1974	4488.85	9320	4184	49829	-13021	823	454	893	153	51	172	17	8	19	201	56	229	217	127	237
293	Feb	1974	4489.00	4283	5823	52332	-36780	804	446	898	148	50	174	16	7	19	195	54	232	211	123	237
294	Mar	1974	4489.00	1983	17510	56158	-40631	795	444	904	146	50	175	16	7	19	192	54	234	209	124	238
295	Apr	1974	4489.00	15391	25682	81390	-71100	772	435	862	140	48	165	16	7	18	184	52	219	200	120	225
296	May	1974	4488.90	735	41015	72142	-41219	771	450	870	140	50	166	16	7	18	183	55	221	201	130	229
297	Jun	1974	4488.70	1645	58238	85030	-47105	768	482	881	138	56	169	15	8	18	182	63	224	201	146	235
298	Jul	1974	4487.85	2228	66339	41638	-55890	810	526	891	149	66	171	17	10	19	196	76	226	217	165	241
299	Aug	1974	4487.10	331	56402	29139	-40611	860	552	926	162	70	179	18	11	20	212	82	236	235	178	254
300	Sep	1974	4486.55	0	43391	25480	-30747	897	560	962	170	71	187	19	11	21	223	83	247	248	182	267
Water yr tot						Year average:		826	486	903	153	58	174	17	9	19	202	64	231	220	144	242
Tot. Sys.		Av.Stage		61318	368985	652968	-416322															
Main Lake			4488.25	36623	242024	498997	-416321															
Provo Bay			4488.25	4201	24524	101923	0															
Goshen Bay			4488.25	20494	102438	52049	0															
301	Oct	1974	4486.80	10136	30758	54495	-11825	892	523	949	169	65	183	19	10	20	220	73	241	246	162	263
302	Nov	1974	4487.25	5484	15065	54295	-4696	876	492	927	164	60	177	18	9	20	214	65	233	240	146	255
303	Dec	1974	4487.50	8768	8146	26436	-4696	861	459	928	160	53	178	18	8	20	209	57	234	235	129	254
304	Jan	1975	4488.05	9359	4784	50082	-4696	833	435	919	153	48	176	17	7	19	199	52	232	226	117	250
305	Feb	1975	4488.55	2875	7430	55365	-4696	814	427	919	149	47	177	17	7	19	193	50	233	220	114	249
306	Mar	1975	4488.85	10124	13810	40542	-8786	800	417	914	145	45	175	16	7	19	189	48	232	215	109	246
307	Apr	1975	4489.00	12755	22130	59550	-36164	789	407	886	143	43	168	16	6	18	185	46	222	211	105	238
308	May	1975	4489.05	17872	35559	103316	-80903	749	413	853	133	43	160	15	7	17	172	47	210	197	109	228
309	Jun	1975	4489.55	10313	49261	173550	-87078	688	435	813	117	48	149	13	7	16	151	54	196	177	121	215
310	Jul	1975	4488.90	8340	63625	63921	-70244	711	470	797	123	56	145	14	9	16	158	64	189	186	136	212
311	Aug	1975	4487.95	2698	54442	14192	-50394	752	497	815	133	61	149	15	10	17	172	70	195	202	148	220
312	Sep	1975	4487.55	1066	41831	35176	-30747	774	514	830	139	64	153	16	10	17	179	74	199	210	156	227
Water yr tot						Year average:		795	457	879	144	53	166	16	8	18	187	58	218	214	129	238
Tot. Sys.		Av.Stage		99797	346848	730926	-394926															
Main Lake			4488.25	62811	226556	562956	-394925															
Provo Bay			4488.25	7024	23644	106941	0															
Goshen Bay			4488.25	29962	96648	61029	0															
313	Oct	1975	4487.85	10391	29836	58521	-11825	777	508	819	139	63	150	16	10	17	179	71	194	211	153	223
314	Nov	1975	4488.30	15109	14125	44924	-4696	766	488	804	136	59	146	15	9	16	175	65	189	206	142	217
315	Dec	1975	4488.85	6523	7276	57736	-5821	749	472	797	132	56	144	15	8	16	170	61	187	200	134	214
316	Jan	1976	4489.00	4683	5023	59399	-45048	729	460	794	127	53	144	14	8	16	163	58	188	193	129	212
317	Feb	1976	4489.00	10683	7369	62186	-65501	704	449	785	121	52	144	14	8	16	156	55	188	185	124	208
318	Mar	1976	4489.00	7432	14519	45205	-38119	700	444	793	120	51	145	14	7	16	154	54	190	183	122	208
319	Apr	1976	4489.00	8739	26047	41783	-24475	707	439	784	122	50	143	14	7	16	157	53	187	185	120	207
320	May	1976	4488.95	2011	42504	77056	-41219	707	453	787	122	52	143	14	8	16	157	56	187	186	130	209
321	Jun	1976	4488.20	3756	52377	26034	-47105	736	477	808	129	56	148	15	8	16	166	63	193	197	142	218
322	Jul	1976	4487.55	2926	63440	46258	-45036	775	516	827	139	65	153	16	10	17	179	74	198	211	159	226
323	Aug	1976	4486.70	2062	54825	17688	-40611	819	536	864	150	68	161	17	11	18	193	79	209	227	169	240
324	Sep	1976	4486.40	2096	41639	43927	-30747	845	538	893	156	68	168	18	11	19	200	78	217	236	170	251
Water yr tot						Year average:		751	482	813	133	58	149	15	9	17	171	64	194	202	141	219
Tot. Sys.		Av.Stage		76416	358984	580723	-400204															
Main Lake			4488.23	49740	235940	424973	-400203															
Provo Bay			4488.23	5634	23500	103591	0															
Goshen Bay			4488.23	21043	99543	52159	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
								Quality - all in mg/l														
325	Oct	1976	4486.35	1766	27372	33098	-11825	861	529	907	159	66	171	18	10	19	204	74	221	242	166	256
326	Nov	1976	4486.60	1812	16279	37161	-828	864	513	908	160	63	171	18	10	19	205	70	221	242	157	255
327	Dec	1976	4487.05	528	8735	48758	-828	843	493	903	154	59	169	17	9	19	198	65	219	234	148	252
328	Jan	1977	4487.35	5133	6940	29384	-717	832	475	909	151	55	171	17	8	19	194	60	222	230	139	253
329	Feb	1977	4487.75	3749	8604	41778	-828	820	467	914	148	54	173	17	8	19	190	59	226	226	135	252
330	Mar	1977	4488.05	8613	15605	35177	-911	814	459	916	147	53	174	17	8	19	189	57	227	223	131	252
331	Apr	1977	4488.10	1229	27396	37402	-6604	826	464	911	151	54	173	17	8	19	193	59	225	227	135	252
332	May	1977	4488.25	27567	39152	44901	-19512	818	463	900	148	52	170	17	8	19	191	58	221	224	134	249
333	Jun	1977	4487.50	231	49468	8917	-28077	863	493	931	160	58	177	18	9	20	206	66	230	240	151	261
334	Jul	1977	4486.70	9967	59212	13474	-35395	917	532	967	173	67	186	19	10	21	223	78	241	260	167	275
335	Aug	1977	4486.00	8877	53828	18488	-34684	963	548	1010	184	69	196	21	11	22	237	82	253	276	175	291
336	Sep	1977	4485.50	5139	37153	17351	-28146	1004	539	1050	194	67	205	22	11	23	249	78	265	291	172	305
Water yr tot						Year average:		869	498	935	161	60	178	18	9	20	207	67	231	243	151	263
Tot. Sys.		Av.Stage		74618	349751	365896	-168355															
Main Lake			4487.10	49015	232938	256802	-168354															
Provo Bay			4487.10	4935	20606	82906	0															
Goshen Bay			4487.10	20668	96206	26188	0															
337	Oct	1977	4485.80	5637	26467	47579	-1081	996	500	1050	192	60	205	21	10	23	246	68	264	287	152	305
338	Nov	1977	4486.05	655	15333	36646	-496	987	477	1046	189	56	204	21	9	23	243	62	263	284	140	303
339	Dec	1977	4486.40	4095	8183	35035	-496	962	449	1042	183	50	203	21	8	23	235	56	262	275	126	300
340	Jan	1978	4487.05	17780	4046	44132	-607	917	421	1017	172	44	198	19	7	22	221	49	256	259	111	291
341	Feb	1978	4487.55	13736	5285	37056	-717	887	410	1006	165	42	196	19	7	21	212	46	254	248	106	285
342	Mar	1978	4488.25	24845	13912	54406	-1463	851	399	973	156	40	189	18	6	21	200	44	245	235	101	273
343	Apr	1978	4489.00	12333	23161	85756	-5168	823	399	916	150	40	175	17	6	19	192	44	226	225	102	254
344	May	1978	4489.00	6106	36042	62853	-32917	820	414	919	149	43	174	17	7	19	191	48	225	224	111	255
345	Jun	1978	4488.60	888	52146	33169	-19293	847	448	940	156	50	180	18	8	20	200	57	232	235	128	264
346	Jul	1978	4487.70	259	62822	19854	-39900	904	502	971	170	62	187	19	10	21	218	73	241	255	151	277
347	Aug	1978	4486.95	7673	55490	19966	-39434	949	529	1006	181	67	195	20	11	22	232	79	251	272	163	289
348	Sep	1978	4487.05	16193	40093	57911	-25164	939	523	997	178	65	192	20	11	22	228	77	247	267	159	286
Water yr tot						Year average:		907	456	990	170	51	191	19	8	21	218	59	247	255	129	282
Tot. Sys.		Av.Stage		110205	342985	534368	-166736															
Main Lake			4487.45	70680	226460	408081	-166735															
Provo Bay			4487.45	7085	21629	93471	0															
Goshen Bay			4487.45	32439	94896	32816	0															
349	Oct	1978	4487.05	169	28444	42832	-14557	948	520	1004	180	64	194	20	10	22	230	75	249	271	158	288
350	Nov	1978	4487.60	18906	16565	51755	-4743	919	490	970	173	58	185	19	9	21	221	66	238	260	143	276
351	Dec	1978	4488.05	4693	6623	47550	-4743	894	471	961	167	55	183	19	9	20	213	62	236	250	134	271
352	Jan	1979	4488.55	9720	1929	43065	-4743	868	452	950	161	51	182	18	8	20	205	57	234	241	125	267
353	Feb	1979	4489.00	9998	3840	52530	-16605	838	441	940	153	49	180	17	7	20	196	54	233	230	120	262
354	Mar	1979	4489.00	12264	10725	62894	-64434	809	433	922	147	47	176	17	7	19	187	53	228	220	116	255
355	Apr	1979	4489.00	4018	24077	87982	-67924	787	434	885	141	48	167	16	7	18	181	53	216	212	118	242
356	May	1979	4488.80	5846	40008	56563	-41114	795	448	889	144	50	168	16	8	19	184	57	217	215	127	244
357	Jun	1979	4488.00	77	51818	24829	-47158	831	478	915	153	56	174	17	9	19	196	65	225	229	141	255
358	Jul	1979	4487.15	1729	62438	29068	-45050	879	524	945	165	66	181	18	10	20	211	78	234	246	161	267
359	Aug	1979	4486.55	6890	56620	37309	-40692	919	543	976	174	70	189	20	11	21	224	83	243	260	170	278
360	Sep	1979	4486.05	99	40939	28017	-30728	953	545	1017	183	70	198	20	11	22	234	82	255	272	172	293
Water yr tot						Year average:		870	482	948	162	57	181	18	9	20	207	65	234	242	140	266
Tot. Sys.		Av.Stage		74414	344031	564399	-382492															
Main Lake			4487.90	45242	227222	422586	-382491															
Provo Bay			4487.90	4960	21752	97878	0															
Goshen Bay			4487.90	24212	95058	43935	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l: Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
361	Oct	1979	4486.35	14900	28657	51379	-11503	943	501	1004	180	61	194	20	10	22	230	70	250	268	149	288
362	Nov	1979	4486.80	6891	13935	47182	-658	925	471	985	175	56	190	20	9	21	224	62	244	261	134	280
363	Dec	1979	4487.30	2060	7536	50497	-548	901	447	980	169	51	189	19	8	21	217	56	243	252	123	277
364	Jan	1980	4488.00	24907	3789	43148	-984	857	417	949	159	44	183	18	7	20	204	49	236	237	108	266
365	Feb	1980	4488.90	21820	5957	78055	-10492	801	402	908	147	41	175	17	6	19	188	45	227	218	100	252
366	Mar	1980	4488.90	11167	14039	56907	-54036	786	400	898	142	41	173	16	6	19	182	45	224	211	100	248
367	Apr	1980	4489.00	3106	27246	70351	-36854	785	400	887	141	41	168	16	6	18	182	45	218	210	102	242
368	May	1980	4489.35	16978	41885	145939	-87807	727	410	841	127	43	157	14	7	17	163	48	203	190	108	227
369	Jun	1980	4489.00	513	50394	73277	-56622	733	438	848	128	49	158	15	8	18	165	55	204	194	122	230
370	Jul	1980	4488.25	1441	64432	30535	-37305	782	484	862	141	59	161	16	9	18	181	69	209	212	141	237
371	Aug	1980	4488.40	4536	56844	96061	-29948	781	512	837	141	64	154	16	10	17	181	76	199	210	154	228
372	Sep	1980	4487.80	7938	40418	1265	-23780	831	521	858	153	65	160	17	10	18	197	77	206	229	157	236
Water yr tot						Year average:		821	450	905	150	51	172	17	8	19	193	58	222	224	125	251
Tot. Sys. Av.Stage				116263	355138	744600	-350538															
Main Lake			4488.17	74474	232273	569798	-350537															
Provo Bay			4488.17	8014	24000	109324	0															
Goshen Bay			4488.17	33774	98864	65478	0															
373	Oct	1980	4488.00	18813	27185	38126	-11587	833	505	858	154	62	159	17	10	18	197	71	206	229	149	236
374	Nov	1980	4488.40	10759	15458	46222	-4696	824	492	851	151	60	158	17	9	18	195	67	204	224	143	232
375	Dec	1980	4488.85	6150	10100	51715	-5821	812	479	851	148	57	158	17	9	18	191	63	205	220	137	232
376	Jan	1981	4488.95	7652	5674	47057	-39680	796	465	856	144	54	160	16	8	18	186	60	207	214	130	232
377	Feb	1981	4489.00	4192	3791	33278	-29024	789	455	865	143	53	163	16	8	18	185	57	212	211	126	233
378	Mar	1981	4489.00	24489	14008	36992	-47473	778	440	858	141	50	162	16	7	18	182	54	212	206	118	230
379	Apr	1981	4489.00	8445	25755	37390	-20080	788	439	854	144	50	161	16	7	17	186	54	210	208	119	228
380	May	1981	4489.00	29824	37647	61346	-53523	773	438	840	140	49	157	16	7	17	182	54	205	203	119	223
381	Jun	1981	4488.25	3512	43580	17412	-47105	808	460	860	149	53	162	17	8	18	194	60	212	215	131	231
382	Jul	1981	4487.50	4912	55820	27546	-45036	851	499	888	160	62	169	18	10	19	209	72	221	230	147	242
383	Aug	1981	4486.65	3930	54331	15410	-40611	907	522	933	175	66	181	19	10	20	227	78	236	249	159	258
384	Sep	1981	4486.30	11800	39235	27548	-30747	933	516	963	181	64	188	20	10	21	235	75	245	257	156	267
Water yr tot						Year average:		824	476	873	153	57	165	17	9	18	198	64	214	222	136	237
Tot. Sys. Av.Stage				134484	332590	440047	-375384															
Main Lake			4488.24	87354	218608	313267	-375383															
Provo Bay			4488.24	9896	21753	98641	0															
Goshen Bay			4488.24	37235	92228	28139	0															
385	Oct	1981	4486.95	36703	24423	56662	-11825	895	465	915	171	54	176	19	9	19	222	61	230	243	130	251
386	Nov	1981	4487.35	5821	13309	47892	-4696	887	450	918	169	51	176	18	8	19	220	57	230	240	124	250
387	Dec	1981	4487.85	16635	7916	41156	-4696	863	424	908	163	46	174	18	7	19	213	50	228	232	112	246
388	Jan	1982	4488.40	15663	3554	43017	-4696	838	407	896	157	42	173	17	7	19	205	46	227	223	103	241
389	Feb	1982	4488.95	9363	4985	52743	-5821	815	399	894	151	41	173	17	6	19	198	44	227	215	100	238
390	Mar	1982	4488.95	20949	14351	60983	-67581	789	391	887	145	39	171	16	6	18	189	42	226	205	96	235
391	Apr	1982	4489.00	9232	22819	78586	-60343	770	386	868	140	38	166	16	6	18	184	42	219	199	95	228
392	May	1982	4489.50	14609	40142	162049	-89065	711	396	832	125	39	156	14	6	17	163	44	206	180	102	217
393	Jun	1982	4489.25	4418	52768	107441	-82816	704	424	826	123	45	155	14	7	17	160	52	204	179	116	217
394	Jul	1982	4488.65	7169	59454	51723	-55890	736	462	819	131	54	153	15	9	17	172	63	201	191	131	216
395	Aug	1982	4487.95	2136	54450	38130	-50394	774	491	836	141	60	157	16	10	17	185	70	206	204	145	223
396	Sep	1982	4488.35	50082	38057	55481	-30747	761	471	794	137	54	147	15	9	16	179	64	193	199	133	210
Water yr tot						Year average:		795	431	866	146	47	165	16	7	18	191	53	216	209	116	231
Tot. Sys. Av.Stage				192786	336234	795869	-468571															
Main Lake			4488.43	119897	219295	627386	-468570															
Provo Bay			4488.43	13071	23149	119743	0															
Goshen Bay			4488.43	59818	93790	48740	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
397	Oct	1982	4488.85	20396	22133	62938	-14671	752	455	782	135	52	143	15	8	16	177	59	188	195	125	205
398	Nov	1982	4489.00	12358	11720	52710	-39336	745	440	777	134	50	141	15	8	16	175	55	186	192	118	202
399	Dec	1982	4489.00	14278	6931	58677	-66024	726	419	776	129	45	142	14	7	16	169	49	187	186	108	201
400	Jan	1983	4489.00	15496	4961	53009	-63544	710	402	774	125	42	142	14	6	15	164	45	188	180	101	199
401	Feb	1983	4489.20	27509	5488	70912	-73934	679	388	766	118	39	142	13	6	15	155	42	188	170	94	195
402	Mar	1983	4490.05	24463	11973	162280	-93267	615	377	742	101	37	136	11	6	15	132	39	181	148	89	187
403	Apr	1983	4490.15	14181	20362	108291	-92332	607	370	713	99	35	128	11	5	14	129	38	170	145	87	177
404	May	1983	4491.00	27558	37074	214913	-121757	551	372	662	85	35	115	10	5	13	112	38	153	128	89	162
405	Jun	1983	4491.60	7675	54119	239256	-132617	503	392	617	74	39	104	9	6	12	96	44	138	114	100	149
406	Jul	1983	4490.70	14288	65685	80768	-119210	537	416	608	81	44	100	9	7	11	106	51	132	124	110	145
407	Aug	1983	4490.05	28987	61947	65480	-96295	554	429	599	86	47	97	10	8	11	112	54	129	129	115	143
408	Sep	1983	4489.40	17131	42144	48003	-85540	572	440	603	91	49	98	10	8	11	119	56	130	136	120	145
Water yr tot							Year average:	629	408	701	105	43	124	12	7	14	137	47	164	154	104	176
Tot. Sys. Av.Stage				224324	3445421	217241	-998529															
Main Lake			4489.83	151224	220259	967168	-998528															
Provo Bay			4489.83	19156	26653	157157	0															
Goshen Bay			4489.83	53945	97631	92917	0															
409	Oct	1983	4489.20	9304	29380	88845	-87723	579	441	605	91	49	99	10	8	11	121	55	131	138	120	146
410	Nov	1983	4489.30	29776	17057	81829	-85096	574	422	598	90	45	97	10	7	11	119	50	129	136	111	143
411	Dec	1983	4489.40	39931	7522	64945	-87855	556	393	588	86	39	96	10	6	11	114	42	128	131	97	140
412	Jan	1984	4489.35	6915	1402	76188	-86428	552	382	596	85	37	98	10	6	11	112	40	131	129	92	141
413	Feb	1984	4489.30	10503	1989	62087	-75374	547	374	606	84	35	102	10	5	11	111	38	137	126	89	143
414	Mar	1984	4489.65	13269	7625	119204	-91404	530	365	609	79	33	102	9	5	11	105	36	138	120	85	142
415	Apr	1984	4490.45	25971	20840	172996	-100407	505	352	582	73	30	94	8	5	10	96	33	127	112	80	134
416	May	1984	4491.50	6615	40598	271901	-133567	454	361	544	60	32	85	7	5	9	80	35	115	97	87	123
417	Jun	1984	4491.55	28451	55201	164123	-132326	445	375	524	59	34	80	7	5	9	78	39	108	95	93	118
418	Jul	1984	4490.70	18178	67343	84341	-119916	474	397	521	65	39	77	7	6	9	86	45	104	103	103	116
419	Aug	1984	4490.05	18148	60125	72637	-94435	495	416	522	71	43	78	8	7	9	94	50	104	111	112	118
420	Sep	1984	4489.40	11960	41845	52857	-85522	516	431	531	77	46	80	9	8	9	101	53	107	118	119	122
Water yr tot							Year average:	519	392	569	76	38	91	9	6	10	101	43	122	118	99	132
Tot. Sys. Av.Stage				219028	3509321	311959	-1180056															
Main Lake			4489.99	149760	2240481	033709	-1180055															
Provo Bay			4489.99	19300	27369	184940	0															
Goshen Bay			4489.99	49968	99514	93310	0															
421	Oct	1984	4489.15	23778	27076	65817	-86244	526	433	536	79	47	81	9	8	9	104	53	109	121	118	123
422	Nov	1984	4489.00	11779	14772	67472	-78706	532	431	544	80	47	84	9	7	9	106	52	112	123	116	125
423	Dec	1984	4489.00	9886	5982	74308	-78212	532	420	552	80	45	85	9	7	10	107	49	115	122	111	127
424	Jan	1985	4489.00	14355	2334	58880	-70901	532	408	558	80	42	88	9	6	10	107	46	119	122	105	128
425	Feb	1985	4489.00	10925	3721	55914	-63118	533	401	571	81	41	92	9	6	10	108	44	125	121	101	130
426	Mar	1985	4489.25	19644	9741	98730	-84908	523	391	576	78	39	94	9	6	10	104	42	128	117	97	130
427	Apr	1985	4489.80	3476	24617	163135	-89377	505	387	558	73	38	89	8	6	10	97	41	121	111	97	125
428	May	1985	4490.20	17595	45035	164059	-97768	491	394	552	70	39	87	8	6	10	92	43	117	106	101	123
429	Jun	1985	4489.40	13074	56344	52310	-86283	515	413	561	77	43	89	9	7	10	101	48	120	116	111	128
430	Jul	1985	4488.85	11945	65848	57829	-55890	545	442	572	85	49	92	10	8	10	112	56	123	127	124	133
431	Aug	1985	4488.15	705	56357	41079	-50394	581	469	597	94	54	98	11	9	11	125	63	131	139	137	143
432	Sep	1985	4487.80	11130	41754	29398	-30747	610	477	619	102	55	103	11	9	12	134	64	138	148	140	150
Water yr tot							Year average:	535	422	566	82	45	90	9	7	10	108	50	121	123	113	130
Tot. Sys. Av.Stage				148298	353586	928935	-872550															
Main Lake			4489.05	100696	228863	709246	-872549															
Provo Bay			4489.05	12241	25449	142596	0															
Goshen Bay			4489.05	35361	99274	77092	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
433	Oct	1985	4488.20	15852	28754	61330	-11825	619	467	631	103	54	106	11	9	12	137	61	141	150	134	153
434	Nov	1985	4488.75	23999	15586	47261	-4696	619	446	632	103	50	106	11	8	12	137	55	142	149	122	152
435	Dec	1985	4489.00	15923	6905	62940	-48589	609	426	634	101	46	107	11	7	12	133	50	143	145	113	152
436	Jan	1986	4489.00	8606	2261	58333	-64678	604	413	642	99	44	109	11	7	12	132	47	147	143	107	153
437	Feb	1986	4489.20	21217	5123	76925	-74021	588	400	649	95	41	112	11	6	12	126	44	152	138	100	154
438	Mar	1986	4490.15	22747	12583	176783	-95666	539	390	638	82	39	109	9	6	12	108	42	148	121	96	149
439	Apr	1986	4490.80	30000	24656	174324	-115823	509	380	595	75	37	99	9	6	11	99	40	133	112	92	137
440	May	1986	4491.30	15140	39432	200849	-126753	488	387	574	70	38	93	8	6	10	92	42	125	106	97	131
441	Jun	1986	4490.90	3320	57327	131806	-117705	496	408	578	70	42	93	8	7	10	93	47	125	109	108	132
442	Jul	1986	4490.05	13159	62327	59997	-94351	522	430	574	78	47	92	9	8	10	102	54	123	118	117	133
443	Aug	1986	4489.25	10587	57008	56380	-86736	549	449	583	85	50	94	10	8	11	112	58	126	128	126	138
444	Sep	1986	4488.70	20171	37624	3829	-38127	579	454	592	93	51	96	11	8	11	123	59	128	138	127	141
Water yr tot						Year average:		560	421	610	88	45	101	10	7	11	116	50	136	130	111	144
Tot. Sys. Av.			Stage	200727	349592	1110763	-878972															
Main Lake			4489.61	137411	224398	907250	-878971															
Provo Bay			4489.61	17007	26443	136887	0															
Goshen Bay			4489.61	46309	98751	66626	0															
445	Oct	1986	4489.00	7479	25857	65965	-19562	588	463	600	95	53	98	11	9	11	126	60	131	140	132	143
446	Nov	1986	4489.00	10557	15540	59228	-54245	592	461	607	96	52	100	11	8	11	127	59	133	141	131	145
447	Dec	1986	4489.00	2577	8755	53936	-47758	595	456	617	97	51	102	11	8	11	129	57	137	142	129	147
448	Jan	1987	4489.00	11274	3356	51217	-59136	593	444	625	96	49	105	11	8	12	128	54	141	140	122	148
449	Feb	1987	4489.00	14457	5399	54781	-63840	585	433	636	94	47	108	11	7	12	126	51	146	137	117	150
450	Mar	1987	4489.00	12420	12622	66913	-66712	583	428	643	94	46	110	11	7	12	125	50	150	136	115	151
451	Apr	1987	4489.00	2984	25609	51878	-29254	594	429	645	97	46	111	11	7	12	129	51	150	139	117	152
452	May	1987	4488.95	15157	41848	63255	-41219	600	437	651	99	47	112	11	7	12	132	53	152	140	123	155
453	Jun	1987	4488.30	1869	48846	33563	-47105	630	461	670	107	52	117	12	8	13	143	59	159	150	136	162
454	Jul	1987	4487.45	11198	54565	21818	-55890	667	485	691	117	57	123	13	9	13	157	67	165	162	145	169
455	Aug	1987	4486.90	12496	46941	25958	-40611	699	495	713	125	58	128	14	9	14	167	69	173	173	149	177
456	Sep	1987	4486.50	741	36607	31344	-30747	732	505	743	133	60	135	14	10	15	178	70	183	183	155	187
Water yr tot						Year average:		621	458	653	104	52	112	12	8	12	139	58	152	149	131	157
Tot. Sys. Av.			Stage	103214	325950	579861	-556080															
Main Lake			4488.42	69350	213645	427294	-556079															
Provo Bay			4488.42	8020	21751	107306	0															
Goshen Bay			4488.42	25844	90555	45262	0															
457	Oct	1987	4486.80	10020	29641	57886	-11825	741	498	755	136	60	138	15	9	15	181	68	186	186	151	190
458	Nov	1987	4487.25	12866	15134	46313	-4026	737	480	755	134	57	138	15	9	15	180	63	186	184	140	189
459	Dec	1987	4487.65	11639	7257	35392	-3809	736	460	759	134	53	139	14	8	15	179	58	188	182	130	189
460	Jan	1988	4488.15	10899	4378	42863	-3809	727	446	758	132	50	140	14	8	15	177	55	189	179	123	187
461	Feb	1988	4488.50	1544	6077	40583	-3809	725	444	771	132	50	143	14	7	15	177	55	194	178	122	190
462	Mar	1988	4488.65	6408	16280	29763	-5879	735	443	782	135	51	147	14	7	16	181	55	199	180	122	193
463	Apr	1988	4488.85	11749	28604	68560	-32991	730	442	773	133	50	144	14	7	15	179	54	196	178	122	190
464	May	1988	4488.65	9228	40843	40120	-27219	747	454	789	138	52	149	15	8	16	186	57	202	184	129	196
465	Jun	1988	4487.85	2074	55014	14365	-35086	796	483	826	151	58	158	16	9	17	204	66	215	200	143	208
466	Jul	1988	4486.90	3329	62755	6296	-32196	872	528	879	171	69	172	18	10	18	230	80	233	225	161	226
467	Aug	1988	4486.10	3870	55082	11933	-30774	941	546	942	188	72	188	20	11	20	253	84	254	248	170	247
468	Sep	1988	4486.15	4805	38578	61869	-23764	945	539	953	188	69	190	20	11	20	253	81	256	248	167	250
Water yr tot						Year average:		786	480	812	148	57	154	16	9	16	198	65	208	198	140	204
Tot. Sys. Av.			Stage	88435	359648	455949	-215187															
Main Lake			4487.63	58496	238162	313029	-215186															
Provo Bay			4487.63	6075	22255	90146	0															
Goshen Bay			4487.63	23864	99231	52774	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
469	Oct	1988	4485.80	4465	29368	3705	-8980	1009	514	998	205	63	201	22	10	21	275	74	272	269	156	264
470	Nov	1988	4486.10	16637	16014	29032	-3809	995	467	1005	200	53	203	21	9	22	270	61	273	263	133	265
471	Dec	1988	4486.45	9672	6434	30917	-3704	979	436	1005	196	47	202	21	8	21	264	53	274	257	118	264
472	Jan	1989	4486.75	5122	1435	26397	-3704	975	419	1007	196	43	203	21	7	21	264	49	275	255	111	263
473	Feb	1989	4487.25	17428	3798	34484	-3704	944	404	994	188	40	201	20	6	21	253	45	273	244	103	258
474	Mar	1989	4487.90	13203	13167	64280	-5662	906	399	969	178	39	195	19	6	20	240	45	265	231	101	250
475	Apr	1989	4488.00	8740	26022	36003	-9637	918	399	977	182	39	197	19	6	21	245	45	267	235	103	252
476	May	1989	4487.45	4736	41882	14906	-27591	962	421	1009	193	44	205	21	7	22	261	51	278	250	115	263
477	Jun	1989	4486.75	5781	53553	15233	-29780	1018	459	1063	208	52	219	22	8	23	281	62	297	268	132	281
478	Jul	1989	4485.65	3744	61612	-1511	-36134	1135	521	1146	238	67	240	25	11	25	322	82	326	306	156	308
479	Aug	1989	4484.85	9591	52053	8854	-33613	1230	521	1233	262	66	262	28	11	28	354	81	355	336	156	336
480	Sep	1989	4485.60	11302	38524	109668	-19490	1121	495	1124	234	59	235	25	10	25	316	72	319	301	146	303
Water yr tot						Year average:		1016	455	1044	207	51	214	22	8	23	279	60	289	268	127	275
Tot. Sys.			Av.Stage	110426	343868	371974	-185808															
Main Lake			4486.55	79419	231604	229016	-185807															
Provo Bay			4486.55	6877	17904	90373	0															
Goshen Bay			4486.55	24130	94360	52585	0															
481	Oct	1989	4485.90	7412	27516	49714	-3942	1108	484	1137	229	56	236	24	9	25	309	66	320	296	142	305
482	Nov	1989	4486.15	8063	14918	30153	-1690	1092	464	1133	225	52	235	24	8	25	303	60	318	290	133	303
483	Dec	1989	4486.45	1143	7726	34264	-1562	1073	446	1138	220	48	237	23	8	25	297	55	320	284	125	304
484	Jan	1990	4487.15	9651	3778	56353	-389	1024	426	1110	208	44	230	22	7	24	280	50	311	269	115	294
485	Feb	1990	4487.70	13314	5581	42139	-389	993	415	1096	200	42	227	21	7	24	270	47	308	259	109	289
486	Mar	1990	4488.00	13346	14384	34764	-6520	975	409	1089	196	41	225	21	6	23	264	46	306	252	107	286
487	Apr	1990	4487.65	9939	28606	1400	-14506	1007	410	1089	205	41	226	22	6	24	276	47	306	261	109	286
488	May	1990	4487.40	8734	40531	53042	-43803	1004	429	1105	204	45	230	21	7	24	275	52	312	261	119	292
489	Jun	1990	4486.70	13191	51831	26036	-49609	1040	461	1137	214	52	238	22	8	25	288	61	323	273	134	302
490	Jul	1990	4485.70	3195	58736	14650	-45925	1124	523	1194	236	66	253	25	10	26	318	81	342	300	158	321
491	Aug	1990	4484.75	2816	50972	11570	-43196	1215	531	1277	259	67	274	27	11	29	349	82	371	329	163	348
492	Sep	1990	4484.35	5669	38027	31819	-32195	1245	502	1332	266	60	288	28	10	30	358	72	388	339	151	366
Water yr tot						Year average:		1075	458	1153	222	51	242	23	8	25	299	60	327	284	130	308
Tot. Sys.			Av.Stage	96481	342611	385912	-243727															
Main Lake			4486.49	66877	231208	267435	-243726															
Provo Bay			4486.49	6128	17419	91261	0															
Goshen Bay			4486.49	23476	93984	27216	0															
493	Oct	1990	4484.60	11509	23760	35910	-3288	1225	470	1309	260	54	281	27	9	29	350	62	380	333	136	358
494	Nov	1990	4484.85	9507	13529	28742	-4105	1214	458	1284	257	53	275	27	9	29	346	58	371	328	129	349
495	Dec	1990	4485.10	9394	5541	21026	-4105	1177	444	1271	248	49	271	26	8	28	333	55	366	316	122	344
496	Jan	1991	4485.45	8464	3389	28825	-4474	1142	437	1256	239	48	268	25	8	28	322	53	362	304	119	338
497	Feb	1991	4485.90	5526	6228	45444	-6318	1095	438	1240	227	49	264	24	8	27	305	53	358	289	119	331
498	Mar	1991	4486.20	10768	14794	37704	-7695	1071	438	1234	221	49	263	23	8	27	297	54	357	281	120	329
499	Apr	1991	4486.35	16353	23502	21680	-1493	1079	439	1201	224	48	255	23	8	26	301	54	345	283	120	319
500	May	1991	4486.40	16298	35455	47691	-24202	1059	452	1189	219	50	252	23	8	26	294	58	341	277	128	316
501	Jun	1991	4486.10	6368	42775	38583	-28253	1081	481	1212	225	57	258	24	9	27	302	66	349	285	142	325
502	Jul	1991	4484.80	1617	54137	-2914	-54615	1205	527	1280	257	68	276	27	11	29	346	83	372	325	158	347
503	Aug	1991	4483.95	10867	48458	18536	-50032	1283	498	1361	277	61	296	29	10	31	373	74	400	349	145	373
504	Sep	1991	4483.85	14893	30248	36321	-28893	1265	463	1363	272	53	296	28	9	31	365	62	399	344	131	374
Water yr tot						Year average:		1158	462	1267	244	53	271	25	9	28	328	61	367	310	131	342
Tot. Sys.			Av.Stage	121569	301822	357553	-217473															
Main Lake			4485.30	86285	207523	249983	-217472															
Provo Bay			4485.30	5359	11911	81384	0															
Goshen Bay			4485.30	29926	82388	26186	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
505	Oct	1991	4484.00	11129	21937	39062	-16383	1233	464	1333	263	54	288	27	8	30	353	60	388	334	132	364
506	Nov	1991	4484.40	15874	12499	29791	-838	1201	458	1286	255	54	276	27	8	29	343	57	372	322	128	347
507	Dec	1991	4484.85	4148	5212	38863	-838	1155	454	1272	243	53	273	25	8	28	327	56	369	307	127	342
508	Jan	1992	4485.35	4900	1748	38634	0	1114	448	1260	233	52	270	24	8	28	313	55	366	294	124	337
509	Feb	1992	4485.80	14024	5278	29522	0	1072	440	1244	222	50	267	23	7	27	300	53	363	280	119	329
510	Mar	1992	4486.15	8598	14416	35996	0	1066	446	1238	221	52	266	23	7	27	298	55	362	277	123	326
511	Apr	1992	4485.95	2200	26910	22405	-14998	1100	459	1241	231	54	268	24	8	27	312	59	363	287	131	328
512	May	1992	4485.45	10571	43976	23636	-32962	1140	476	1275	242	56	277	25	9	28	327	62	376	299	141	339
513	Jun	1992	4484.85	5508	51632	33494	-37571	1193	497	1339	256	60	293	27	9	30	346	69	398	316	151	360
514	Jul	1992	4483.70	6840	53584	2447	-48734	1355	517	1431	298	66	317	31	10	33	404	80	430	366	152	389
515	Aug	1992	4482.75	6004	47487	-1598	-30467	1535	474	1586	345	55	357	35	9	37	469	67	485	419	135	437
516	Sep	1992	4483.10	5187	34260	61833	-6058	1417	459	1476	313	52	328	32	8	34	425	60	445	383	131	402
Water yr tot						Year average:		1215	466	1332	260	55	290	27	8	30	351	61	393	324	133	358
Tot. Sys.		Av.Stage		94988	318946	354090	-188849															
Main Lake			4484.70	70023	222865	227498	-188848															
Provo Bay			4484.70	3478	9396	88922	0															
Goshen Bay			4484.70	21487	86684	37670	0															
517	Oct	1992	4483.30	17066	23662	24012	-1939	1411	439	1480	312	49	328	32	8	34	422	54	446	382	120	402
518	Nov	1992	4483.75	11934	11908	35880	-594	1340	434	1433	293	49	317	30	8	33	396	52	430	360	117	387
519	Dec	1992	4484.20	11874	5820	30073	-146	1287	420	1399	280	45	308	29	7	32	378	49	418	343	111	375
520	Jan	1993	4485.00	26350	2476	41738	-146	1166	405	1325	249	41	291	26	7	30	336	45	396	307	103	353
521	Feb	1993	4485.65	18758	4246	40942	-594	1093	403	1286	230	42	282	24	6	29	310	45	384	284	102	339
522	Mar	1993	4486.60	18702	9618	73656	-448	1014	401	1205	209	41	262	22	6	27	282	45	356	260	101	315
523	Apr	1993	4486.75	6210	19112	44504	-18382	1016	405	1171	210	42	251	22	6	26	282	46	341	259	104	303
524	May	1993	4487.45	22157	38538	101455	-22756	950	418	1101	192	44	232	20	7	24	259	49	315	240	112	283
525	Jun	1993	4487.30	11690	49577	54197	-29763	962	448	1103	196	50	233	20	8	24	263	58	315	245	126	285
526	Jul	1993	4486.60	6524	56466	27206	-39351	1020	494	1125	211	62	239	22	10	25	284	74	323	265	143	294
527	Aug	1993	4485.95	6038	52473	32726	-42874	1074	509	1170	225	64	250	23	11	26	303	77	338	282	151	310
528	Sep	1993	4485.70	6775	37878	38139	-28441	1096	502	1192	230	62	255	24	10	26	309	73	344	290	149	317
Water yr tot						Year average:		1119	440	1249	236	49	271	24	8	28	319	56	367	293	120	330
Tot. Sys.		Av.Stage		164084	311781	544535	-185434															
Main Lake			4485.69	117171	210945	402567	-185433															
Provo Bay			4485.69	7259	15573	105251	0															
Goshen Bay			4485.69	39655	85263	36717	0															
529	Oct	1993	4485.95	15933	26074	44614	-13068	1082	486	1164	226	59	247	23	9	26	303	66	333	285	141	309
530	Nov	1993	4486.30	4532	11730	42862	-5323	1067	480	1140	222	59	241	23	9	25	298	63	325	280	138	301
531	Dec	1993	4486.70	7121	7361	37002	-1693	1047	465	1136	217	56	240	22	8	25	291	59	324	273	132	298
532	Jan	1994	4487.10	5503	5444	35859	-524	1025	457	1136	211	54	240	22	8	25	284	57	325	266	128	297
533	Feb	1994	4487.55	14615	6123	34820	-3022	1003	448	1123	206	52	238	21	7	24	276	55	322	258	123	292
534	Mar	1994	4487.80	7753	14030	33315	-4352	1000	449	1126	205	53	239	21	7	24	276	55	324	257	123	291
535	Apr	1994	4487.90	18704	26370	35698	-18949	1000	447	1100	205	52	232	21	7	24	276	55	315	256	123	284
536	May	1994	4487.70	8628	43018	42590	-26323	1016	466	1117	210	55	237	22	8	24	283	60	321	261	135	290
537	Jun	1994	4486.95	405	55977	22318	-34031	1077	504	1170	226	63	251	23	9	26	305	71	339	281	154	307
538	Jul	1994	4485.90	728	63354	22836	-51975	1167	556	1238	250	75	268	26	11	27	337	88	363	310	174	330
539	Aug	1994	4485.10	8776	57796	31202	-50033	1231	548	1308	266	71	286	27	11	29	358	85	386	331	171	352
540	Sep	1994	4484.60	5192	39373	20918	-28127	1289	516	1366	281	64	300	29	10	31	378	74	405	349	158	371
Water yr tot						Year average:		1084	485	1177	227	59	251	23	9	26	305	66	340	284	142	310
Tot. Sys.		Av.Stage		97897	356658	404039	-237421															
Main Lake			4486.63	65896	239889	276968	-237420															
Provo Bay			4486.63	5985	18877	97511	0															
Goshen Bay			4486.63	26016	97892	29561	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
541	Oct	1994	4485.05	24536	24729	43254	-5899	1239	457	1321	267	52	288	27	8	30	359	58	388	332	128	356
542	Nov	1994	4485.50	16279	13490	35644	-593	1203	438	1281	257	49	277	26	8	28	346	53	374	320	119	342
543	Dec	1994	4485.90	9789	6499	31541	-593	1174	426	1267	250	46	274	26	7	28	337	50	370	310	113	337
544	Jan	1995	4486.55	18064	6825	46868	-1654	1109	413	1236	233	43	266	24	7	27	313	47	360	290	107	327
545	Feb	1995	4487.00	6574	7282	41944	-1532	1081	415	1232	226	44	266	23	7	27	304	48	360	281	108	324
546	Mar	1995	4487.45	16352	16733	41591	-940	1060	412	1216	221	43	262	23	7	26	297	47	356	273	107	318
547	Apr	1995	4487.60	14139	28504	53029	-25126	1045	414	1180	218	44	253	22	7	26	293	48	343	269	109	308
548	May	1995	4488.80	37510	41759	137748	-23139	924	417	1052	187	43	222	19	7	23	251	49	300	233	111	271
549	Jun	1995	4488.70	16023	49677	95965	-71622	868	439	992	172	49	206	18	8	21	231	56	278	217	121	254
550	Jul	1995	4488.15	6544	61034	75393	-71858	888	482	977	176	59	199	18	9	21	236	70	269	223	138	248
551	Aug	1995	4487.50	3591	59823	34573	-37521	930	512	1006	188	65	207	19	10	21	252	77	279	237	152	259
552	Sep	1995	4487.05	4360	43646	27151	-28136	973	523	1036	199	66	215	20	11	22	267	79	290	251	158	269
Water yr tot						Year average:		1041	446	1150	216	50	244	22	8	25	290	57	330	270	123	301
Tot. Sys.		Av.Stage	173768	360007	664706	-268614																
Main Lake			4487.10	118410	238227	489473	-268613															
Provo Bay			4487.10	10657	22192	100963	0															
Goshen Bay			4487.10	44700	99589	74270	0															
553	Oct	1995	4487.30	3497	28719	56674	-9090	974	520	1033	199	66	214	20	10	22	266	76	288	252	156	269
554	Nov	1995	4487.60	5129	17232	41835	-2741	975	509	1027	199	64	212	20	10	22	266	72	285	252	151	266
555	Dec	1995	4488.05	15157	9018	37479	-2741	956	484	1022	193	59	211	20	9	22	259	65	284	245	138	264
556	Jan	1996	4488.20	21451	5757	4011	-5856	958	462	1008	194	54	208	20	8	21	261	59	281	245	128	259
557	Feb	1996	4488.80	19623	3306	45172	-5856	928	449	988	187	52	204	19	8	21	251	56	277	235	121	252
558	Mar	1996	4488.90	19141	14163	50748	-46369	903	444	981	180	51	203	19	8	21	242	55	275	227	119	249
559	Apr	1996	4489.00	12974	28266	71395	-46747	882	447	972	175	52	199	18	8	20	234	56	269	221	122	245
560	May	1996	4489.00	11793	41223	97345	-67916	849	460	963	166	54	196	17	8	20	222	60	265	211	130	243
561	Jun	1996	4489.00	3175	52240	114208	-65144	825	486	951	159	59	193	17	9	20	213	67	261	205	143	241
562	Jul	1996	4488.25	3229	65370	27576	-35196	885	527	970	175	69	198	18	10	20	235	80	267	225	159	249
563	Aug	1996	4487.60	503	59576	34177	-34418	940	554	1010	189	74	208	20	11	22	254	87	280	244	172	263
564	Sep	1996	4487.35	11828	42576	30740	-22484	965	549	1030	195	72	212	20	11	22	262	84	286	251	169	270
Water yr tot						Year average:		920	491	996	184	60	205	19	9	21	247	68	276	234	142	256
Tot. Sys.		Av.Stage	127506	367451	611366	-344559																
Main Lake			4488.25	85034	240461	466477	-344558															
Provo Bay			4488.25	9569	24804	100259	0															
Goshen Bay			4488.25	32903	102186	44630	0															
565	Oct	1996	4487.45	15808	28004	34513	-13364	975	518	1025	198	65	210	21	10	22	265	75	283	254	154	268
566	Nov	1996	4488.05	16971	15401	65138	-12292	945	487	992	189	59	201	20	9	21	254	67	271	244	139	257
567	Dec	1996	4488.50	13911	9281	49121	-12292	920	463	984	183	54	199	19	8	21	245	61	268	236	128	254
568	Jan	1997	4489.00	29100	4272	47951	-26041	877	437	959	172	49	194	18	8	20	230	54	262	223	115	246
569	Feb	1997	4489.00	12051	4304	41377	-49124	860	428	955	167	47	194	18	7	20	224	52	262	217	112	244
570	Mar	1997	4489.00	3502	13789	64237	-53950	839	427	964	162	47	195	17	7	20	217	52	264	210	112	245
571	Apr	1997	4489.20	14463	28249	114686	-81901	797	425	926	150	47	185	16	7	19	201	52	250	197	112	234
572	May	1997	4489.70	14766	44386	168968	-91604	732	435	879	133	48	172	14	8	18	178	54	233	177	118	220
573	Jun	1997	4489.60	6181	52621	124470	-87677	714	457	848	128	53	164	14	8	17	171	61	221	172	129	212
574	Jul	1997	4488.65	4811	60070	31170	-65735	763	490	846	142	61	164	15	9	17	190	71	221	190	141	214
575	Aug	1997	4488.30	5918	59255	49370	-28483	799	513	862	151	65	168	16	10	18	202	77	225	202	152	220
576	Sep	1997	4488.20	17194	42307	35741	-19802	815	511	870	155	64	169	16	10	18	207	76	227	207	150	223
Water yr tot						Year average:		836	466	926	161	55	185	17	9	19	215	63	249	211	130	236
Tot. Sys.		Av.Stage	154682	361945	826749	-542266																
Main Lake			4488.72	102048	235277	657357	-542265															
Provo Bay			4488.72	11721	25424	110300	0															
Goshen Bay			4488.72	40912	101243	59092	0															

LKSIM2000 Output Results TABL.025

TABLE UTAH LAKE SIMULATION-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De (CONT.)

No	Mon	Water Year	EOM Stage Ft	Total Lake Precip af	Evap af	Inflow af	Outflow af	Quality - all in mg/l Tot. Dis. Solids Main	PB	GB	Sodium Main	PB	GB	Potassium Main	PB	GB	Chloride Main	PB	GB	Sulfate Main	PB	GB
577	Oct	1997	4488.50	12079	26833	58329	-15967	814	500	859	155	62	166	16	10	18	207	72	223	207	145	220
578	Nov	1997	4489.00	11950	15135	55495	-5573	808	485	847	153	59	163	16	9	17	204	67	219	204	137	215
579	Dec	1997	4489.00	10429	5982	47937	-52384	794	467	847	149	55	163	16	9	17	200	62	219	199	129	214
580	Jan	1998	4489.00	21118	6347	40357	-55129	772	448	840	144	51	162	15	8	17	192	57	218	192	120	212
581	Feb	1998	4489.00	22712	6420	46654	-62947	753	433	833	140	49	162	15	7	17	186	54	219	185	113	208
582	Mar	1998	4489.00	15212	11090	46648	-50771	742	427	828	137	47	161	15	7	17	183	52	218	181	111	206
583	Apr	1998	4489.00	15351	23420	71513	-63445	730	422	816	134	46	157	14	7	16	179	51	212	177	110	201
584	May	1998	4489.55	13410	38555	167056	-89660	678	431	786	119	48	149	13	7	16	159	54	200	161	115	192
585	Jun	1998	4489.65	28671	46222	115632	-88435	646	438	753	112	49	140	12	8	15	149	56	188	152	118	183
586	Jul	1998	4489.00	5749	63230	56999	-61416	680	469	750	121	56	139	13	9	15	160	66	187	164	131	184
587	Aug	1998	4488.35	5205	60119	48845	-54474	711	491	765	129	61	143	14	10	15	171	72	192	175	142	191
588	Sep	1998	4488.35	7372	42933	64220	-28659	724	500	769	132	62	143	14	10	15	175	73	192	179	146	192
Water yr tot						Year average:		738	459	808	135	54	154	14	8	16	180	61	207	181	126	201
Tot. Sys.			Av.Stage	169265	346291	819692	-628861															
Main Lake			4488.95	111860	224596	640410	-628860															
Provo Bay			4488.95	13433	24679	115445	0															
Goshen Bay			4488.95	43972	97016	63837	0															
589	Oct	1998	4488.45	10774	23935	38140	-15762	737	493	768	135	61	143	14	10	15	180	70	191	183	142	192
590	Nov	1998	4488.95	9744	14317	58448	-7207	732	483	759	134	59	141	14	9	15	178	67	188	181	137	189
591	Dec	1998	4489.00	6311	6197	38287	-33746	731	471	762	133	56	141	14	9	15	177	63	189	180	131	189
592	Jan	1999	4489.00	16533	5982	37673	-48224	723	454	764	132	53	143	14	8	15	175	59	191	178	123	188
593	Feb	1999	4489.00	9668	8098	50312	-51882	717	447	775	130	52	146	14	8	15	173	57	196	175	120	190
594	Mar	1999	4489.00	4076	18094	47445	-33427	719	447	788	131	52	150	14	8	16	174	57	202	176	121	193
595	Apr	1999	4489.00	33393	23858	61563	-71099	704	432	765	127	49	144	14	7	15	169	53	194	170	114	186
596	May	1999	4489.30	25553	28732	113387	-81756	658	429	743	114	47	137	12	7	14	152	53	185	156	113	180
597	Jun	1999	4489.00	12221	47570	72492	-65596	659	445	743	115	51	137	12	8	15	152	58	185	157	122	181
598	Jul	1999	4488.35	6875	61564	45138	-50992	693	477	751	124	58	139	13	9	15	165	68	187	169	135	186
599	Aug	1999	4487.80	6958	56785	35443	-36025	729	496	775	133	62	145	14	10	16	177	73	195	182	144	195
600	Sep	1999	4487.45	1418	38186	28297	-23191	762	505	798	142	63	151	15	10	16	189	74	202	192	149	203
Water yr tot						Year average:		714	465	766	129	55	143	14	9	15	172	63	192	175	129	189
Tot. Sys.			Av.Stage	143529	333323	626631	-518908															
Main Lake			4488.69	92924	217239	473643	-518907															
Provo Bay			4488.69	11036	23096	113818	0															
Goshen Bay			4488.69	39570	92988	39170	0															
50 Yr Avg (1950-1999)								932	460	1027	180	53	205	20	8	22	237	58	271	253	132	282

(Avgs. based on reducing max monthly TDS to 1700 mg/l in the Main lake, and 2500 mg/l in Goshen bay -- all ions reduced proportionately

Tot. Sys.		108863	334276	580493	-350825
Main Lake	4486.96	72891	223419	436294	-350825
Provo Bay	4486.96	6839	18644	100322	0
Goshen Bay	4486.96	29134	92213	43877	0

Sum water check:

Total lake: 108863 334276 580493 -350825

LKSIM2000 Output Results TABL.025

***Months when TDS > 1200 mg/l in the simulation

no.	month	year	TDS
1	Sep	1956	1262.
2	Oct	1956	1291.
3	Nov	1956	1238.
4	Jul	1960	1266.
5	Aug	1960	1405.
6	Sep	1960	1485.
7	Oct	1960	1461.
8	Nov	1960	1329.
9	Dec	1960	1259.
10	Jan	1961	1211.
11	May	1961	1204.
12	Jun	1961	1348.
13	Jul	1961	1525.
14	Aug	1961	1700.
15	Sep	1961	1700.
16	Oct	1961	1647.
17	Nov	1961	1576.
18	Dec	1961	1468.
19	Jan	1962	1385.
20	Feb	1962	1252.
21	Jul	1962	1359.
22	Aug	1962	1521.
23	Sep	1962	1591.
24	Oct	1962	1571.
25	Nov	1962	1506.
26	Dec	1962	1468.
27	Jan	1963	1369.
28	Feb	1963	1318.
29	Mar	1963	1282.
30	Apr	1963	1244.
31	May	1963	1275.
32	Jun	1963	1332.
33	Jul	1963	1497.
34	Aug	1963	1693.
35	Sep	1963	1659.
36	Oct	1963	1651.
37	Nov	1963	1515.
38	Dec	1963	1406.
39	Jan	1964	1285.
40	Feb	1964	1227.
41	Aug	1964	1260.
42	Sep	1964	1329.
43	Oct	1964	1359.
44	Nov	1964	1298.
45	Aug	1966	1211.
46	Sep	1966	1245.
47	Oct	1966	1237.
48	Nov	1966	1213.
49	Aug	1989	1230.

LKSIM2000 Output Results TABL.025

50	Aug	1990	1215.
51	Sep	1990	1245.
52	Oct	1990	1225.
53	Nov	1990	1214.
54	Jul	1991	1205.
55	Aug	1991	1283.
56	Sep	1991	1265.
57	Oct	1991	1233.
58	Nov	1991	1201.
59	Jul	1992	1355.
60	Aug	1992	1535.
61	Sep	1992	1417.
62	Oct	1992	1411.
63	Nov	1992	1340.
64	Dec	1992	1287.
65	Aug	1994	1231.
66	Sep	1994	1289.
67	Oct	1994	1239.
68	Nov	1994	1203.

LKSIM2000 Quality Results – QUAL.025

Main Lake quality results, Run.025

Mon	stage	TDS	Na	Ca	Mg	K	HCO3	Cl	SO4	Mon
241	4485.40	999.	188.	58.	66.	23.	263.	244.	279.	241
242	4485.30	986.	185.	58.	65.	22.	258.	244.	276.	242
243	4485.80	947.	176.	58.	62.	21.	245.	244.	263.	243
244	4486.45	905.	166.	58.	59.	20.	230.	244.	248.	244
245	4486.95	875.	159.	58.	57.	19.	220.	244.	238.	245
246	4487.20	864.	157.	58.	57.	19.	217.	244.	235.	246
247	4487.35	869.	159.	58.	57.	19.	219.	244.	236.	247
248	4487.70	841.	152.	58.	55.	18.	208.	244.	227.	248
249	4487.50	843.	152.	58.	56.	18.	209.	244.	229.	249
250	4486.85	892.	165.	58.	60.	19.	225.	244.	247.	250
251	4486.10	942.	177.	58.	65.	21.	241.	244.	265.	251
252	4485.65	977.	185.	58.	67.	22.	252.	244.	277.	252
253	4485.70	993.	189.	58.	69.	22.	256.	244.	283.	253
254	4486.05	974.	184.	58.	67.	21.	249.	244.	275.	254
255	4486.55	936.	175.	58.	64.	20.	236.	244.	262.	255
256	4487.10	904.	167.	58.	62.	19.	225.	244.	251.	256
257	4487.50	884.	162.	58.	60.	19.	219.	244.	244.	257
258	4487.75	875.	160.	58.	59.	19.	216.	244.	241.	258
259	4488.05	868.	159.	58.	59.	19.	214.	244.	238.	259
260	4488.55	831.	149.	58.	56.	17.	200.	244.	225.	260
261	4488.35	824.	148.	58.	56.	17.	198.	244.	224.	261
262	4487.60	865.	158.	58.	60.	18.	212.	244.	239.	262
263	4487.00	907.	169.	58.	64.	20.	225.	244.	255.	263
264	4486.40	947.	178.	58.	67.	21.	238.	244.	269.	264
265	4486.50	952.	179.	58.	67.	21.	239.	244.	270.	265
266	4487.00	934.	175.	58.	65.	20.	233.	244.	264.	266
267	4487.65	893.	165.	58.	62.	19.	219.	242.	249.	267
268	4488.30	858.	157.	58.	59.	18.	208.	243.	236.	268
269	4488.80	822.	148.	58.	56.	17.	197.	241.	224.	269
270	4489.00	766.	136.	58.	52.	16.	179.	237.	205.	270
271	4489.70	695.	117.	58.	47.	14.	155.	238.	181.	271
272	4491.00	595.	93.	58.	40.	11.	124.	228.	148.	272
273	4490.60	597.	93.	58.	41.	11.	122.	237.	148.	273
274	4489.60	633.	101.	58.	43.	12.	134.	244.	161.	274
275	4488.95	662.	109.	58.	46.	13.	144.	244.	172.	275
276	4488.45	690.	116.	58.	48.	13.	153.	244.	183.	276
277	4488.40	711.	121.	58.	50.	14.	160.	244.	189.	277
278	4488.95	704.	120.	58.	49.	14.	158.	244.	186.	278
279	4489.00	708.	121.	58.	49.	14.	159.	244.	187.	279
280	4489.00	692.	117.	58.	47.	13.	154.	244.	181.	280
281	4489.00	694.	117.	58.	47.	14.	155.	244.	181.	281
282	4489.00	690.	117.	58.	47.	13.	154.	244.	179.	282
283	4489.00	696.	118.	58.	47.	14.	156.	244.	181.	283
284	4488.80	706.	121.	58.	48.	14.	160.	244.	184.	284
285	4488.55	708.	121.	58.	48.	14.	160.	244.	185.	285
286	4487.75	748.	131.	58.	52.	15.	174.	244.	200.	286
287	4487.05	791.	142.	58.	55.	16.	188.	244.	216.	287
288	4486.55	828.	151.	58.	58.	17.	199.	244.	229.	288
289	4486.50	845.	155.	58.	60.	17.	204.	244.	234.	289
290	4486.85	839.	153.	58.	59.	17.	201.	244.	231.	290
291	4487.20	826.	150.	58.	58.	17.	197.	244.	226.	291
292	4487.65	809.	146.	58.	56.	16.	191.	244.	220.	292
293	4488.00	800.	144.	58.	55.	16.	188.	244.	216.	293
294	4488.40	792.	142.	58.	55.	16.	186.	244.	213.	294
295	4488.35	803.	145.	58.	55.	16.	191.	244.	216.	295

296	4487.70	832.	152.	58.	58.	17.	201.	244.	226.	296
297	4487.15	861.	160.	58.	60.	18.	211.	244.	237.	297
298	4486.25	917.	174.	58.	65.	20.	229.	244.	257.	298
299	4485.40	987.	191.	58.	71.	21.	251.	244.	281.	299
300	4484.95	1025.	200.	58.	73.	22.	263.	244.	294.	300
301	4484.90	1036.	202.	58.	75.	22.	265.	244.	298.	301
302	4485.20	1021.	198.	58.	73.	22.	259.	244.	292.	302
303	4485.55	992.	191.	58.	71.	21.	249.	244.	282.	303
304	4486.15	954.	181.	58.	68.	20.	236.	244.	269.	304
305	4486.60	922.	174.	58.	65.	20.	226.	244.	258.	305
306	4487.10	895.	167.	58.	63.	19.	217.	244.	248.	306
307	4487.40	890.	166.	58.	63.	19.	216.	244.	247.	307
308	4487.15	903.	170.	58.	64.	19.	221.	244.	251.	308
309	4486.80	926.	176.	58.	66.	20.	228.	244.	260.	309
310	4485.90	993.	192.	58.	72.	21.	250.	244.	284.	310
311	4484.95	1053.	206.	58.	77.	23.	268.	244.	306.	311
312	4484.40	1098.	217.	58.	81.	24.	282.	244.	321.	312
313	4484.40	1112.	220.	58.	82.	24.	285.	244.	326.	313
314	4484.75	1077.	211.	58.	79.	23.	273.	244.	313.	314
315	4485.20	1034.	201.	58.	75.	22.	259.	244.	298.	315
316	4485.80	984.	188.	58.	71.	21.	243.	244.	281.	316
317	4486.30	949.	180.	58.	68.	20.	232.	244.	268.	317
318	4486.55	941.	178.	58.	68.	20.	230.	244.	266.	318
319	4486.25	958.	183.	58.	69.	20.	236.	244.	271.	319
320	4486.05	963.	184.	58.	70.	21.	237.	244.	273.	320
321	4485.35	1021.	198.	58.	75.	22.	256.	244.	294.	321
322	4484.50	1100.	218.	58.	82.	24.	281.	244.	323.	322
323	4483.75	1180.	237.	58.	89.	26.	306.	244.	352.	323
324	4483.10	1262.	257.	58.	96.	28.	331.	244.	381.	324
325	4483.00	1291.	263.	58.	98.	29.	339.	244.	391.	325
326	4483.40	1238.	250.	58.	93.	27.	321.	244.	371.	326
327	4483.90	1167.	232.	58.	87.	26.	298.	244.	346.	327
328	4484.35	1106.	218.	58.	82.	24.	279.	244.	325.	328
329	4484.80	1061.	207.	58.	78.	23.	265.	244.	309.	329
330	4485.10	1036.	201.	58.	76.	22.	257.	244.	299.	330
331	4485.80	989.	190.	58.	72.	21.	243.	244.	283.	331
332	4486.20	952.	181.	58.	69.	20.	232.	244.	270.	332
333	4486.25	935.	177.	58.	68.	20.	226.	244.	265.	333
334	4485.35	1002.	194.	58.	74.	21.	248.	244.	290.	334
335	4484.60	1065.	209.	58.	80.	23.	267.	244.	313.	335
336	4484.10	1103.	218.	58.	83.	24.	278.	244.	327.	336
337	4484.10	1122.	223.	58.	85.	24.	284.	244.	333.	337
338	4484.65	1077.	211.	58.	80.	23.	269.	244.	316.	338
339	4485.10	1029.	199.	58.	76.	22.	254.	244.	299.	339
340	4485.55	993.	191.	58.	73.	21.	243.	244.	286.	340
341	4486.10	952.	181.	58.	69.	20.	230.	244.	271.	341
342	4486.60	923.	174.	58.	67.	19.	222.	244.	261.	342
343	4486.95	919.	174.	58.	66.	19.	221.	244.	259.	343
344	4487.20	886.	165.	58.	64.	18.	210.	244.	248.	344
345	4486.55	923.	175.	58.	68.	19.	223.	244.	262.	345
346	4485.65	1002.	194.	58.	75.	21.	248.	244.	291.	346
347	4485.00	1052.	206.	58.	79.	23.	263.	244.	309.	347
348	4484.50	1092.	216.	58.	82.	24.	275.	244.	323.	348
349	4484.40	1114.	221.	58.	84.	24.	281.	244.	331.	349
350	4484.80	1077.	211.	58.	81.	23.	269.	244.	317.	350
351	4485.25	1034.	200.	58.	77.	22.	255.	244.	301.	351
352	4485.70	994.	191.	58.	73.	21.	242.	244.	287.	352

353	4486.30	953.	181.	58.	70.	20.	230.	244.	272.	353
354	4486.60	943.	179.	58.	69.	20.	227.	244.	268.	354
355	4486.70	955.	182.	58.	69.	20.	232.	244.	272.	355
356	4486.35	968.	185.	58.	71.	21.	237.	244.	276.	356
357	4485.70	1011.	196.	58.	75.	22.	251.	244.	292.	357
358	4484.85	1089.	216.	58.	81.	24.	275.	244.	320.	358
359	4484.20	1146.	229.	58.	86.	25.	293.	244.	340.	359
360	4483.80	1181.	238.	58.	89.	26.	303.	244.	353.	360
361	4483.85	1200.	242.	58.	90.	26.	309.	244.	359.	361
362	4484.00	1187.	239.	58.	89.	26.	305.	244.	353.	362
363	4484.50	1126.	224.	58.	83.	24.	285.	244.	331.	363
364	4485.05	1072.	210.	58.	79.	23.	269.	244.	312.	364
365	4485.60	1022.	198.	58.	74.	22.	254.	244.	294.	365
366	4486.05	995.	192.	58.	72.	21.	246.	244.	284.	366
367	4486.10	1013.	197.	58.	73.	22.	252.	244.	289.	367
368	4485.70	1036.	203.	58.	75.	22.	261.	244.	297.	368
369	4484.95	1108.	221.	58.	81.	24.	284.	244.	323.	369
370	4483.70	1266.	260.	58.	94.	28.	334.	244.	377.	370
371	4482.80	1405.	295.	58.	105.	32.	379.	244.	425.	371
372	4482.35	1485.	314.	58.	112.	34.	404.	244.	452.	372
373	4482.50	1461.	307.	58.	110.	33.	395.	244.	443.	373
374	4483.15	1329.	275.	58.	99.	30.	353.	241.	397.	374
375	4483.55	1259.	257.	58.	93.	28.	330.	244.	372.	375
376	4483.90	1211.	245.	58.	89.	27.	315.	244.	356.	376
377	4484.25	1171.	236.	58.	86.	26.	303.	244.	342.	377
378	4484.45	1145.	230.	58.	83.	25.	295.	243.	331.	378
379	4484.55	1160.	234.	58.	84.	26.	301.	244.	335.	379
380	4484.05	1204.	246.	58.	87.	27.	316.	244.	350.	380
381	4483.10	1348.	282.	58.	98.	31.	364.	244.	399.	381
382	4482.30	1525.	327.	58.	113.	35.	422.	244.	459.	382
383	4481.70	1700.	370.	58.	127.	40.	479.	244.	519.	383
384	4481.60	1700.	371.	58.	126.	40.	479.	244.	518.	384
385	4481.80	1647.	357.	58.	121.	38.	460.	244.	498.	385
386	4482.10	1576.	339.	58.	115.	36.	437.	244.	473.	386
387	4482.50	1468.	312.	58.	106.	34.	402.	244.	436.	387
388	4482.90	1385.	292.	58.	100.	31.	376.	244.	408.	388
389	4483.55	1252.	259.	58.	89.	28.	333.	244.	363.	389
390	4484.05	1191.	244.	58.	84.	26.	314.	244.	341.	390
391	4484.55	1141.	232.	58.	80.	25.	299.	244.	325.	391
392	4484.65	1120.	227.	58.	79.	25.	292.	244.	319.	392
393	4484.05	1198.	247.	58.	86.	27.	318.	244.	346.	393
394	4483.05	1359.	288.	58.	98.	31.	371.	244.	401.	394
395	4482.15	1521.	328.	58.	111.	35.	423.	244.	457.	395
396	4481.70	1591.	345.	58.	117.	37.	444.	244.	481.	396
397	4481.85	1571.	339.	58.	115.	36.	437.	244.	474.	397
398	4482.15	1506.	323.	58.	110.	34.	415.	244.	451.	398
399	4482.35	1468.	313.	58.	106.	33.	404.	244.	436.	399
400	4482.75	1369.	288.	58.	98.	31.	372.	244.	402.	400
401	4483.15	1318.	276.	58.	93.	30.	357.	244.	384.	401
402	4483.45	1282.	267.	58.	90.	29.	346.	244.	370.	402
403	4483.85	1244.	258.	58.	86.	28.	335.	244.	356.	403
404	4483.50	1275.	267.	58.	89.	29.	347.	244.	366.	404
405	4483.10	1332.	281.	58.	93.	30.	367.	244.	386.	405
406	4482.15	1497.	323.	58.	106.	34.	421.	244.	442.	406
407	4481.30	1693.	373.	58.	122.	39.	486.	244.	509.	407
408	4481.20	1659.	363.	58.	119.	38.	473.	244.	498.	408
409	4481.20	1651.	361.	58.	118.	38.	470.	244.	494.	409

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410	4481.65	1515.	326.	58.	107.	35.	425.	244.	447.	410
411	4482.10	1406.	299.	58.	98.	32.	390.	244.	410.	411
412	4482.60	1285.	269.	58.	88.	29.	351.	244.	368.	412
413	4483.05	1227.	255.	58.	84.	28.	333.	244.	349.	413
414	4483.65	1152.	236.	58.	78.	26.	309.	244.	323.	414
415	4484.10	1123.	229.	58.	75.	25.	300.	244.	312.	415
416	4484.60	1058.	213.	58.	71.	23.	279.	244.	291.	416
417	4484.85	1038.	208.	58.	69.	23.	273.	244.	285.	417
418	4483.90	1138.	234.	58.	77.	25.	308.	244.	320.	418
419	4483.00	1260.	265.	58.	87.	29.	349.	244.	362.	419
420	4482.50	1329.	282.	58.	92.	30.	371.	244.	385.	420
421	4482.45	1359.	290.	58.	94.	31.	380.	244.	394.	421
422	4482.85	1298.	273.	58.	89.	29.	359.	244.	372.	422
423	4483.60	1187.	245.	58.	80.	27.	322.	244.	334.	423
424	4484.15	1120.	228.	58.	75.	25.	300.	244.	312.	424
425	4484.40	1106.	226.	58.	73.	25.	297.	244.	306.	425
426	4484.75	1087.	221.	58.	71.	24.	292.	244.	299.	426
427	4485.10	1071.	218.	58.	70.	24.	287.	244.	293.	427
428	4485.10	1072.	218.	58.	70.	24.	288.	244.	294.	428
429	4485.20	1037.	208.	58.	68.	23.	275.	244.	283.	429
430	4484.60	1102.	225.	58.	74.	25.	298.	244.	306.	430
431	4484.10	1158.	239.	58.	78.	26.	316.	244.	325.	431
432	4484.15	1158.	239.	58.	78.	26.	316.	244.	325.	432
433	4484.25	1158.	239.	58.	78.	26.	315.	244.	326.	433
434	4484.70	1128.	231.	58.	76.	25.	304.	244.	315.	434
435	4485.45	1046.	209.	58.	69.	23.	276.	244.	288.	435
436	4485.90	1008.	200.	58.	67.	22.	264.	244.	276.	436
437	4486.40	968.	190.	58.	64.	21.	251.	244.	263.	437
438	4486.90	937.	182.	58.	62.	20.	240.	244.	252.	438
439	4486.75	975.	192.	58.	64.	21.	254.	244.	264.	439
440	4486.65	970.	191.	58.	64.	21.	252.	244.	263.	440
441	4485.90	1032.	207.	58.	69.	23.	274.	244.	285.	441
442	4484.95	1134.	233.	58.	77.	25.	308.	244.	319.	442
443	4484.25	1211.	252.	58.	83.	27.	333.	244.	345.	443
444	4483.90	1245.	260.	58.	86.	28.	343.	244.	357.	444
445	4484.05	1237.	257.	58.	85.	28.	339.	244.	354.	445
446	4484.30	1213.	251.	58.	84.	27.	330.	244.	346.	446
447	4484.95	1142.	232.	58.	78.	25.	306.	244.	322.	447
448	4485.35	1096.	221.	58.	74.	24.	290.	244.	306.	448
449	4485.90	1045.	208.	58.	71.	23.	274.	244.	290.	449
450	4486.35	1014.	201.	58.	68.	22.	263.	244.	279.	450
451	4486.25	1047.	210.	58.	71.	23.	276.	244.	289.	451
452	4486.30	1025.	204.	58.	69.	22.	268.	244.	282.	452
453	4486.65	985.	194.	58.	66.	21.	254.	244.	269.	453
454	4485.95	1042.	209.	58.	71.	23.	274.	244.	290.	454
455	4485.20	1097.	222.	58.	76.	24.	291.	244.	310.	455
456	4484.80	1126.	229.	58.	79.	25.	300.	244.	320.	456
457	4484.90	1131.	230.	58.	79.	25.	300.	244.	322.	457
458	4485.30	1105.	223.	58.	77.	24.	291.	244.	313.	458
459	4485.70	1059.	211.	58.	73.	23.	275.	244.	298.	459
460	4486.25	1016.	200.	58.	70.	22.	260.	244.	284.	460
461	4486.80	974.	190.	58.	67.	21.	246.	244.	269.	461
462	4487.25	945.	183.	58.	65.	20.	237.	244.	260.	462
463	4487.55	928.	179.	58.	63.	20.	232.	244.	253.	463
464	4487.65	915.	176.	58.	63.	19.	228.	244.	250.	464
465	4487.75	890.	169.	58.	61.	19.	219.	244.	243.	465
466	4487.15	935.	180.	58.	65.	20.	234.	244.	259.	466

467	4486.80	960.	187.	58.	68.	20.	241.	244.	268.	467
468	4486.30	990.	194.	58.	70.	21.	250.	244.	280.	468
469	4486.45	990.	194.	58.	70.	21.	250.	244.	279.	469
470	4486.90	967.	187.	58.	68.	20.	242.	244.	271.	470
471	4487.40	929.	178.	58.	65.	20.	229.	244.	258.	471
472	4487.90	896.	170.	58.	62.	19.	219.	244.	246.	472
473	4488.50	868.	163.	58.	60.	18.	210.	244.	237.	473
474	4488.70	863.	162.	58.	59.	18.	209.	244.	235.	474
475	4489.00	818.	150.	58.	56.	17.	194.	244.	219.	475
476	4489.00	794.	144.	58.	55.	16.	185.	244.	212.	476
477	4489.00	769.	137.	58.	53.	15.	177.	244.	205.	477
478	4488.30	809.	148.	58.	57.	16.	190.	244.	220.	478
479	4487.70	845.	157.	58.	60.	17.	202.	244.	233.	479
480	4487.30	871.	163.	58.	62.	18.	210.	244.	242.	480
481	4487.60	869.	163.	58.	62.	18.	209.	244.	240.	481
482	4487.95	864.	161.	58.	61.	18.	208.	244.	238.	482
483	4488.30	851.	158.	58.	59.	17.	204.	244.	232.	483
484	4488.80	830.	153.	58.	57.	17.	198.	244.	225.	484
485	4489.00	819.	151.	58.	56.	17.	195.	244.	220.	485
486	4489.00	822.	152.	58.	56.	17.	197.	244.	220.	486
487	4489.00	825.	153.	58.	56.	17.	199.	244.	220.	487
488	4489.00	817.	151.	58.	55.	17.	196.	244.	217.	488
489	4488.75	822.	153.	58.	56.	17.	199.	244.	219.	489
490	4488.00	863.	163.	58.	59.	18.	213.	244.	234.	490
491	4487.30	907.	175.	58.	63.	19.	227.	244.	249.	491
492	4487.10	923.	178.	58.	64.	19.	232.	244.	254.	492
493	4487.20	929.	180.	58.	64.	19.	234.	244.	255.	493
494	4487.90	892.	171.	58.	60.	18.	223.	241.	242.	494
495	4488.15	893.	171.	58.	60.	19.	223.	244.	241.	495
496	4488.65	870.	165.	58.	58.	18.	216.	244.	233.	496
497	4488.95	860.	163.	58.	57.	18.	214.	244.	229.	497
498	4489.00	848.	160.	58.	56.	17.	210.	244.	225.	498
499	4489.00	841.	159.	58.	55.	17.	208.	244.	222.	499
500	4489.00	831.	156.	58.	55.	17.	205.	244.	218.	500
501	4488.85	823.	154.	58.	54.	17.	202.	244.	216.	501
502	4487.95	879.	169.	58.	59.	18.	222.	244.	235.	502
503	4487.25	926.	181.	58.	62.	20.	238.	244.	252.	503
504	4487.05	945.	185.	58.	64.	20.	243.	244.	258.	504
505	4487.70	910.	176.	58.	61.	19.	232.	242.	245.	505
506	4487.85	915.	177.	58.	61.	19.	234.	244.	246.	506
507	4488.30	892.	171.	58.	59.	18.	226.	244.	238.	507
508	4488.70	877.	168.	58.	57.	18.	222.	244.	233.	508
509	4489.00	868.	166.	58.	57.	18.	219.	244.	229.	509
510	4489.00	860.	164.	58.	56.	18.	217.	244.	226.	510
511	4489.00	866.	166.	58.	56.	18.	220.	244.	228.	511
512	4488.80	864.	165.	58.	56.	18.	219.	244.	226.	512
513	4488.40	880.	169.	58.	57.	18.	225.	244.	233.	513
514	4487.40	940.	185.	58.	62.	20.	245.	244.	253.	514
515	4486.75	992.	198.	58.	66.	21.	263.	244.	271.	515
516	4486.35	1028.	207.	58.	69.	22.	275.	244.	282.	516
517	4486.70	1004.	200.	58.	67.	21.	265.	244.	274.	517
518	4487.10	981.	194.	58.	65.	21.	257.	244.	266.	518
519	4487.50	956.	188.	58.	63.	20.	249.	244.	258.	519
520	4487.95	926.	180.	58.	61.	19.	239.	244.	248.	520
521	4488.45	898.	173.	58.	58.	19.	229.	244.	238.	521
522	4488.90	878.	168.	58.	57.	18.	222.	244.	231.	522
523	4489.00	859.	163.	58.	56.	18.	216.	244.	225.	523

524	4489.25	803.	149.	58.	52.	16.	197.	244.	207.	524
525	4489.00	791.	146.	58.	52.	16.	192.	244.	205.	525
526	4488.20	837.	158.	58.	56.	17.	209.	244.	221.	526
527	4487.65	872.	166.	58.	58.	18.	220.	244.	233.	527
528	4487.35	897.	172.	58.	60.	19.	228.	244.	241.	528
529	4487.55	893.	171.	58.	60.	19.	226.	244.	240.	529
530	4488.10	868.	164.	58.	58.	18.	217.	244.	231.	530
531	4488.40	850.	160.	58.	56.	17.	211.	244.	226.	531
532	4488.85	823.	153.	58.	54.	17.	201.	244.	217.	532
533	4489.00	804.	148.	58.	53.	16.	195.	244.	211.	533
534	4489.00	795.	146.	58.	53.	16.	192.	244.	209.	534
535	4489.00	772.	140.	58.	51.	16.	184.	244.	200.	535
536	4488.90	771.	140.	58.	51.	16.	183.	244.	201.	536
537	4488.70	768.	138.	58.	52.	15.	182.	244.	201.	537
538	4487.85	810.	149.	58.	55.	17.	196.	244.	217.	538
539	4487.10	860.	162.	58.	60.	18.	212.	244.	235.	539
540	4486.55	897.	170.	58.	63.	19.	223.	244.	248.	540
541	4486.80	892.	169.	58.	62.	19.	220.	244.	246.	541
542	4487.25	876.	164.	58.	61.	18.	214.	244.	240.	542
543	4487.50	861.	160.	58.	60.	18.	209.	244.	235.	543
544	4488.05	833.	153.	58.	58.	17.	199.	244.	226.	544
545	4488.55	814.	149.	58.	56.	17.	193.	244.	220.	545
546	4488.85	800.	145.	58.	55.	16.	189.	244.	215.	546
547	4489.00	789.	143.	58.	54.	16.	185.	244.	211.	547
548	4489.05	749.	133.	58.	52.	15.	172.	244.	197.	548
549	4489.55	688.	117.	58.	47.	13.	151.	241.	177.	549
550	4488.90	711.	123.	58.	49.	14.	158.	244.	186.	550
551	4487.95	752.	133.	58.	53.	15.	172.	244.	202.	551
552	4487.55	774.	139.	58.	55.	16.	179.	244.	210.	552
553	4487.85	777.	139.	58.	55.	16.	179.	244.	211.	553
554	4488.30	766.	136.	58.	54.	15.	175.	244.	206.	554
555	4488.85	749.	132.	58.	53.	15.	170.	244.	200.	555
556	4489.00	729.	127.	58.	51.	14.	163.	244.	193.	556
557	4489.00	704.	121.	58.	49.	14.	156.	242.	185.	557
558	4489.00	700.	120.	58.	48.	14.	154.	244.	183.	558
559	4489.00	707.	122.	58.	49.	14.	157.	244.	185.	559
560	4488.95	707.	122.	58.	49.	14.	157.	244.	186.	560
561	4488.20	736.	129.	58.	52.	15.	166.	244.	197.	561
562	4487.55	775.	139.	58.	55.	16.	179.	244.	211.	562
563	4486.70	819.	150.	58.	59.	17.	193.	244.	227.	563
564	4486.40	845.	156.	58.	62.	18.	200.	244.	236.	564
565	4486.35	861.	159.	58.	63.	18.	204.	244.	242.	565
566	4486.60	864.	160.	58.	63.	18.	205.	244.	242.	566
567	4487.05	843.	154.	58.	61.	17.	198.	244.	234.	567
568	4487.35	832.	151.	58.	60.	17.	194.	244.	230.	568
569	4487.75	820.	148.	58.	59.	17.	190.	244.	226.	569
570	4488.05	814.	147.	58.	58.	17.	189.	244.	223.	570
571	4488.10	826.	151.	58.	59.	17.	193.	244.	227.	571
572	4488.25	818.	148.	58.	59.	17.	191.	244.	224.	572
573	4487.50	863.	160.	58.	63.	18.	206.	244.	240.	573
574	4486.70	917.	173.	58.	67.	19.	223.	244.	260.	574
575	4486.00	963.	184.	58.	71.	21.	237.	244.	276.	575
576	4485.50	1004.	194.	58.	75.	22.	249.	244.	291.	576
577	4485.80	996.	192.	58.	74.	21.	246.	244.	287.	577
578	4486.05	987.	189.	58.	73.	21.	243.	244.	284.	578
579	4486.40	962.	183.	58.	71.	21.	235.	244.	275.	579
580	4487.05	917.	172.	58.	67.	19.	221.	242.	259.	580

581	4487.55	887.	165.	58.	64.	19.	212.	242.	248.	581
582	4488.25	851.	156.	58.	61.	18.	200.	242.	235.	582
583	4489.00	823.	150.	58.	59.	17.	192.	243.	225.	583
584	4489.00	820.	149.	58.	59.	17.	191.	244.	224.	584
585	4488.60	847.	156.	58.	61.	18.	200.	244.	235.	585
586	4487.70	904.	170.	58.	67.	19.	218.	244.	255.	586
587	4486.95	949.	181.	58.	71.	20.	232.	244.	272.	587
588	4487.05	939.	178.	58.	69.	20.	228.	244.	267.	588
589	4487.05	948.	180.	58.	70.	20.	230.	244.	271.	589
590	4487.60	919.	173.	58.	67.	19.	221.	244.	260.	590
591	4488.05	894.	167.	58.	65.	19.	213.	244.	250.	591
592	4488.55	868.	161.	58.	63.	18.	205.	244.	241.	592
593	4489.00	838.	153.	58.	60.	17.	196.	244.	230.	593
594	4489.00	809.	147.	58.	58.	17.	187.	244.	220.	594
595	4489.00	787.	141.	58.	56.	16.	181.	244.	212.	595
596	4488.80	795.	144.	58.	57.	16.	184.	244.	215.	596
597	4488.00	831.	153.	58.	60.	17.	196.	244.	229.	597
598	4487.15	879.	165.	58.	64.	18.	211.	244.	246.	598
599	4486.55	919.	174.	58.	68.	20.	224.	244.	260.	599
600	4486.05	953.	183.	58.	71.	20.	234.	244.	272.	600
601	4486.35	943.	180.	58.	69.	20.	230.	244.	268.	601
602	4486.80	925.	175.	58.	68.	20.	224.	244.	261.	602
603	4487.30	901.	169.	58.	65.	19.	217.	244.	252.	603
604	4488.00	857.	159.	58.	61.	18.	204.	241.	237.	604
605	4488.90	801.	147.	56.	57.	17.	188.	234.	218.	605
606	4488.90	786.	142.	58.	55.	16.	182.	239.	211.	606
607	4489.00	785.	141.	58.	55.	16.	182.	244.	210.	607
608	4489.35	727.	127.	58.	51.	14.	163.	243.	190.	608
609	4489.00	733.	128.	58.	52.	15.	165.	244.	194.	609
610	4488.25	782.	141.	58.	56.	16.	181.	244.	212.	610
611	4488.40	781.	141.	58.	55.	16.	181.	244.	210.	611
612	4487.80	831.	153.	58.	60.	17.	197.	244.	229.	612
613	4488.00	833.	154.	58.	60.	17.	197.	244.	229.	613
614	4488.40	824.	151.	58.	59.	17.	195.	244.	224.	614
615	4488.85	812.	148.	58.	57.	17.	191.	244.	220.	615
616	4488.95	796.	144.	58.	56.	16.	186.	244.	214.	616
617	4489.00	789.	143.	58.	55.	16.	185.	244.	211.	617
618	4489.00	778.	141.	58.	53.	16.	182.	244.	206.	618
619	4489.00	788.	144.	58.	54.	16.	186.	244.	208.	619
620	4489.00	773.	140.	58.	53.	16.	182.	244.	203.	620
621	4488.25	808.	149.	58.	55.	17.	194.	244.	215.	621
622	4487.50	851.	160.	58.	59.	18.	209.	244.	230.	622
623	4486.65	907.	175.	58.	63.	19.	227.	244.	249.	623
624	4486.30	933.	181.	58.	65.	20.	235.	244.	257.	624
625	4486.95	895.	171.	58.	62.	19.	222.	244.	243.	625
626	4487.35	887.	169.	58.	61.	18.	220.	244.	240.	626
627	4487.85	863.	163.	58.	59.	18.	213.	244.	232.	627
628	4488.40	838.	157.	58.	56.	17.	205.	244.	223.	628
629	4488.95	815.	151.	58.	54.	17.	198.	244.	215.	629
630	4488.95	789.	145.	58.	52.	16.	189.	244.	205.	630
631	4489.00	770.	140.	58.	51.	16.	184.	244.	199.	631
632	4489.50	711.	125.	58.	47.	14.	163.	244.	180.	632
633	4489.25	704.	123.	58.	47.	14.	160.	244.	179.	633
634	4488.65	736.	131.	58.	50.	15.	172.	244.	191.	634
635	4487.95	774.	141.	58.	53.	16.	185.	244.	204.	635
636	4488.35	761.	137.	58.	51.	15.	179.	244.	199.	636
637	4488.85	752.	135.	58.	50.	15.	177.	244.	195.	637

638	4489.00	745.	134.	58.	50.	15.	175.	244.	192.	638
639	4489.00	726.	129.	58.	48.	14.	169.	244.	186.	639
640	4489.00	710.	125.	58.	46.	14.	164.	244.	180.	640
641	4489.20	679.	118.	58.	44.	13.	155.	242.	170.	641
642	4490.05	615.	101.	58.	39.	11.	132.	236.	148.	642
643	4490.15	607.	99.	58.	38.	11.	129.	241.	145.	643
644	4491.00	551.	85.	58.	35.	10.	112.	235.	128.	644
645	4491.60	503.	74.	58.	32.	9.	96.	229.	114.	645
646	4490.70	537.	81.	58.	34.	9.	106.	242.	124.	646
647	4490.05	554.	86.	58.	35.	10.	112.	244.	129.	647
648	4489.40	572.	91.	58.	37.	10.	119.	244.	136.	648
649	4489.20	579.	91.	58.	37.	10.	121.	244.	138.	649
650	4489.30	574.	90.	58.	37.	10.	119.	244.	136.	650
651	4489.40	556.	86.	58.	35.	10.	114.	240.	131.	651
652	4489.35	552.	85.	58.	34.	10.	112.	243.	129.	652
653	4489.30	547.	84.	58.	34.	10.	111.	244.	126.	653
654	4489.65	530.	79.	58.	32.	9.	105.	244.	120.	654
655	4490.45	505.	73.	58.	31.	8.	96.	243.	112.	655
656	4491.50	454.	60.	58.	29.	7.	80.	232.	97.	656
657	4491.55	445.	59.	58.	28.	7.	78.	231.	95.	657
658	4490.70	474.	65.	58.	30.	7.	86.	241.	103.	658
659	4490.05	495.	71.	58.	31.	8.	94.	244.	111.	659
660	4489.40	516.	77.	58.	33.	9.	101.	244.	118.	660
661	4489.15	526.	79.	58.	34.	9.	104.	244.	121.	661
662	4489.00	532.	80.	58.	34.	9.	106.	244.	123.	662
663	4489.00	532.	80.	58.	34.	9.	107.	244.	122.	663
664	4489.00	532.	80.	58.	33.	9.	107.	244.	122.	664
665	4489.00	533.	81.	58.	33.	9.	108.	244.	121.	665
666	4489.25	523.	78.	58.	32.	9.	104.	244.	117.	666
667	4489.80	505.	73.	58.	31.	8.	97.	243.	111.	667
668	4490.20	491.	70.	58.	30.	8.	92.	242.	106.	668
669	4489.40	515.	77.	58.	33.	9.	101.	244.	116.	669
670	4488.85	545.	85.	58.	35.	10.	112.	244.	127.	670
671	4488.15	581.	94.	58.	38.	11.	125.	244.	139.	671
672	4487.80	610.	102.	58.	40.	11.	134.	244.	148.	672
673	4488.20	619.	103.	58.	40.	11.	137.	244.	150.	673
674	4488.75	619.	103.	58.	40.	11.	137.	244.	149.	674
675	4489.00	609.	101.	58.	39.	11.	133.	244.	145.	675
676	4489.00	604.	99.	58.	38.	11.	132.	244.	143.	676
677	4489.20	588.	95.	58.	37.	11.	126.	243.	138.	677
678	4490.15	539.	82.	58.	33.	9.	108.	237.	121.	678
679	4490.80	509.	75.	58.	32.	9.	99.	234.	112.	679
680	4491.30	488.	70.	58.	31.	8.	92.	234.	106.	680
681	4490.90	496.	70.	58.	31.	8.	93.	242.	109.	681
682	4490.05	522.	78.	58.	34.	9.	102.	244.	118.	682
683	4489.25	549.	85.	58.	36.	10.	112.	244.	128.	683
684	4488.70	579.	93.	58.	38.	11.	123.	244.	138.	684
685	4489.00	588.	95.	58.	38.	11.	126.	244.	140.	685
686	4489.00	592.	96.	58.	38.	11.	127.	244.	141.	686
687	4489.00	595.	97.	58.	38.	11.	129.	244.	142.	687
688	4489.00	593.	96.	58.	38.	11.	128.	244.	140.	688
689	4489.00	585.	94.	58.	37.	11.	126.	244.	137.	689
690	4489.00	583.	94.	58.	36.	11.	125.	244.	136.	690
691	4489.00	594.	97.	58.	37.	11.	129.	244.	139.	691
692	4488.95	600.	99.	58.	37.	11.	132.	244.	140.	692
693	4488.30	630.	107.	58.	40.	12.	143.	244.	150.	693
694	4487.45	667.	117.	58.	43.	13.	157.	244.	162.	694

695	4486.90	699.	125.	58.	45.	14.	167.	244.	173.	695
696	4486.50	732.	133.	58.	47.	14.	178.	244.	183.	696
697	4486.80	741.	136.	58.	48.	15.	181.	244.	186.	697
698	4487.25	737.	134.	58.	47.	15.	180.	244.	184.	698
699	4487.65	736.	134.	58.	47.	14.	179.	244.	182.	699
700	4488.15	727.	132.	58.	46.	14.	177.	244.	179.	700
701	4488.50	725.	132.	58.	45.	14.	177.	244.	178.	701
702	4488.65	735.	135.	58.	46.	14.	181.	244.	180.	702
703	4488.85	730.	133.	58.	45.	14.	179.	244.	178.	703
704	4488.65	747.	138.	58.	47.	15.	186.	244.	184.	704
705	4487.85	796.	151.	58.	51.	16.	204.	244.	200.	705
706	4486.90	872.	171.	58.	57.	18.	230.	244.	225.	706
707	4486.10	941.	188.	58.	62.	20.	253.	244.	248.	707
708	4486.15	945.	188.	58.	62.	20.	253.	244.	248.	708
709	4485.80	1009.	205.	58.	67.	22.	275.	244.	269.	709
710	4486.10	995.	200.	58.	65.	21.	270.	244.	263.	710
711	4486.45	979.	196.	58.	63.	21.	264.	244.	257.	711
712	4486.75	975.	196.	58.	63.	21.	264.	244.	255.	712
713	4487.25	944.	188.	58.	60.	20.	253.	244.	244.	713
714	4487.90	906.	178.	58.	57.	19.	240.	243.	231.	714
715	4488.00	918.	182.	58.	58.	19.	245.	244.	235.	715
716	4487.45	962.	193.	58.	62.	21.	261.	244.	250.	716
717	4486.75	1018.	208.	58.	66.	22.	281.	244.	268.	717
718	4485.65	1135.	238.	58.	75.	25.	322.	244.	306.	718
719	4484.85	1230.	262.	58.	82.	28.	354.	244.	336.	719
720	4485.60	1121.	234.	57.	73.	25.	316.	236.	301.	720
721	4485.90	1108.	229.	58.	72.	24.	309.	244.	296.	721
722	4486.15	1092.	225.	58.	71.	24.	303.	244.	290.	722
723	4486.45	1073.	220.	58.	69.	23.	297.	244.	284.	723
724	4487.15	1024.	208.	58.	66.	22.	280.	244.	269.	724
725	4487.70	993.	200.	58.	63.	21.	270.	244.	259.	725
726	4488.00	975.	196.	58.	62.	21.	264.	244.	252.	726
727	4487.65	1007.	205.	58.	63.	22.	276.	244.	261.	727
728	4487.40	1004.	204.	58.	64.	21.	275.	244.	261.	728
729	4486.70	1040.	214.	58.	66.	22.	288.	244.	273.	729
730	4485.70	1124.	236.	58.	73.	25.	318.	244.	300.	730
731	4484.75	1215.	259.	58.	79.	27.	349.	244.	329.	731
732	4484.35	1245.	266.	58.	81.	28.	358.	244.	339.	732
733	4484.60	1225.	260.	58.	80.	27.	350.	244.	333.	733
734	4484.85	1214.	257.	58.	79.	27.	346.	244.	328.	734
735	4485.10	1177.	248.	58.	76.	26.	333.	244.	316.	735
736	4485.45	1142.	239.	58.	73.	25.	322.	244.	304.	736
737	4485.90	1095.	227.	58.	70.	24.	305.	244.	289.	737
738	4486.20	1071.	221.	58.	68.	23.	297.	244.	281.	738
739	4486.35	1079.	224.	58.	68.	23.	301.	244.	283.	739
740	4486.40	1059.	219.	58.	67.	23.	294.	244.	277.	740
741	4486.10	1081.	225.	58.	69.	24.	302.	244.	285.	741
742	4484.80	1205.	257.	58.	78.	27.	346.	244.	325.	742
743	4483.95	1283.	277.	58.	84.	29.	373.	244.	349.	743
744	4483.85	1265.	272.	58.	82.	28.	365.	244.	344.	744
745	4484.00	1233.	263.	58.	80.	27.	353.	244.	334.	745
746	4484.40	1201.	255.	58.	77.	27.	343.	244.	322.	746
747	4484.85	1155.	243.	58.	73.	25.	327.	244.	307.	747
748	4485.35	1114.	233.	58.	70.	24.	313.	244.	294.	748
749	4485.80	1072.	222.	58.	67.	23.	300.	244.	280.	749
750	4486.15	1066.	221.	58.	66.	23.	298.	244.	277.	750
751	4485.95	1100.	231.	58.	68.	24.	312.	244.	287.	751

752	4485.45	1140.	242.	58.	71.	25.	327.	244.	299.	752
753	4484.85	1193.	256.	58.	75.	27.	346.	244.	316.	753
754	4483.70	1355.	298.	58.	85.	31.	404.	244.	366.	754
755	4482.75	1535.	345.	58.	97.	35.	469.	244.	419.	755
756	4483.10	1417.	313.	58.	89.	32.	425.	244.	383.	756
757	4483.30	1411.	312.	58.	89.	32.	422.	244.	382.	757
758	4483.75	1340.	293.	58.	84.	30.	396.	244.	360.	758
759	4484.20	1287.	280.	58.	80.	29.	378.	244.	343.	759
760	4485.00	1166.	249.	58.	72.	26.	336.	239.	307.	760
761	4485.65	1093.	230.	58.	67.	24.	310.	238.	284.	761
762	4486.60	1014.	209.	58.	62.	22.	282.	238.	260.	762
763	4486.75	1016.	210.	58.	62.	22.	282.	244.	259.	763
764	4487.45	950.	192.	58.	58.	20.	259.	244.	240.	764
765	4487.30	962.	196.	58.	59.	20.	263.	244.	245.	765
766	4486.60	1020.	211.	58.	63.	22.	284.	244.	265.	766
767	4485.95	1074.	225.	58.	67.	23.	303.	244.	282.	767
768	4485.70	1096.	230.	58.	69.	24.	309.	244.	290.	768
769	4485.95	1082.	226.	58.	68.	23.	303.	244.	285.	769
770	4486.30	1067.	222.	58.	67.	23.	298.	244.	280.	770
771	4486.70	1047.	217.	58.	65.	22.	291.	244.	273.	771
772	4487.10	1025.	211.	58.	64.	22.	284.	244.	266.	772
773	4487.55	1003.	206.	58.	62.	21.	276.	244.	258.	773
774	4487.80	1000.	205.	58.	61.	21.	276.	244.	257.	774
775	4487.90	1000.	205.	58.	61.	21.	276.	244.	256.	775
776	4487.70	1016.	210.	58.	62.	22.	283.	244.	261.	776
777	4486.95	1077.	226.	58.	67.	23.	305.	244.	281.	777
778	4485.90	1167.	250.	58.	73.	26.	337.	244.	310.	778
779	4485.10	1231.	266.	58.	78.	27.	358.	244.	331.	779
780	4484.60	1289.	281.	58.	82.	29.	378.	244.	349.	780
781	4485.05	1239.	267.	58.	78.	27.	359.	244.	332.	781
782	4485.50	1203.	257.	58.	75.	26.	346.	244.	320.	782
783	4485.90	1174.	250.	58.	73.	26.	337.	244.	310.	783
784	4486.55	1109.	233.	58.	68.	24.	313.	244.	290.	784
785	4487.00	1081.	226.	58.	66.	23.	304.	244.	281.	785
786	4487.45	1060.	221.	58.	65.	23.	297.	244.	273.	786
787	4487.60	1045.	218.	58.	64.	22.	293.	244.	269.	787
788	4488.80	924.	187.	58.	57.	19.	251.	238.	233.	788
789	4488.70	868.	172.	58.	53.	18.	231.	239.	217.	789
790	4488.15	888.	176.	58.	54.	18.	236.	244.	223.	790
791	4487.50	930.	188.	58.	58.	19.	252.	244.	237.	791
792	4487.05	973.	199.	58.	61.	20.	267.	244.	251.	792
793	4487.30	974.	199.	58.	61.	20.	266.	244.	252.	793
794	4487.60	975.	199.	58.	61.	20.	266.	244.	252.	794
795	4488.05	956.	193.	58.	59.	20.	259.	244.	245.	795
796	4488.20	958.	194.	58.	59.	20.	261.	244.	245.	796
797	4488.80	928.	187.	58.	57.	19.	251.	244.	235.	797
798	4488.90	903.	180.	58.	55.	19.	242.	244.	227.	798
799	4489.00	882.	175.	58.	54.	18.	234.	244.	221.	799
800	4489.00	849.	166.	58.	52.	17.	222.	244.	211.	800
801	4489.00	825.	159.	58.	51.	17.	213.	244.	205.	801
802	4488.25	885.	175.	58.	56.	18.	235.	244.	225.	802
803	4487.60	940.	189.	58.	60.	20.	254.	244.	244.	803
804	4487.35	965.	195.	58.	62.	20.	262.	244.	251.	804
805	4487.45	975.	198.	58.	62.	21.	265.	244.	254.	805
806	4488.05	945.	189.	58.	60.	20.	254.	244.	244.	806
807	4488.50	920.	183.	58.	58.	19.	245.	244.	236.	807
808	4489.00	877.	172.	58.	55.	18.	230.	242.	223.	808

809	4489.00	860.	167.	58.	53.	18.	224.	244.	217.	809
810	4489.00	839.	162.	58.	52.	17.	217.	244.	210.	810
811	4489.20	797.	150.	58.	49.	16.	201.	244.	197.	811
812	4489.70	732.	133.	58.	45.	14.	178.	243.	177.	812
813	4489.60	714.	128.	58.	44.	14.	171.	244.	172.	813
814	4488.65	763.	142.	58.	48.	15.	190.	244.	190.	814
815	4488.30	799.	151.	58.	51.	16.	202.	244.	202.	815
816	4488.20	815.	155.	58.	52.	16.	207.	244.	207.	816
817	4488.50	814.	155.	58.	52.	16.	207.	244.	207.	817
818	4489.00	808.	153.	58.	52.	16.	204.	244.	204.	818
819	4489.00	794.	149.	58.	50.	16.	200.	244.	199.	819
820	4489.00	772.	144.	58.	48.	15.	192.	244.	192.	820
821	4489.00	753.	140.	58.	47.	15.	186.	243.	185.	821
822	4489.00	742.	137.	58.	46.	15.	183.	244.	181.	822
823	4489.00	730.	134.	58.	45.	14.	179.	244.	177.	823
824	4489.55	678.	119.	58.	42.	13.	159.	244.	161.	824
825	4489.65	646.	112.	58.	40.	12.	149.	240.	152.	825
826	4489.00	680.	121.	58.	43.	13.	160.	244.	164.	826
827	4488.35	711.	129.	58.	45.	14.	171.	244.	175.	827
828	4488.35	724.	132.	58.	46.	14.	175.	244.	179.	828
829	4488.45	737.	135.	58.	47.	14.	180.	244.	183.	829
830	4488.95	732.	134.	58.	46.	14.	178.	244.	181.	830
831	4489.00	731.	133.	58.	46.	14.	177.	244.	180.	831
832	4489.00	723.	132.	58.	45.	14.	175.	244.	178.	832
833	4489.00	717.	130.	58.	45.	14.	173.	244.	175.	833
834	4489.00	719.	131.	58.	45.	14.	174.	244.	176.	834
835	4489.00	704.	127.	58.	43.	14.	169.	244.	170.	835
836	4489.30	658.	114.	58.	41.	12.	152.	243.	156.	836
837	4489.00	659.	115.	58.	41.	12.	152.	244.	157.	837
838	4488.35	693.	124.	58.	44.	13.	165.	244.	169.	838
839	4487.80	729.	133.	58.	47.	14.	177.	244.	182.	839
840	4487.45	762.	142.	58.	49.	15.	189.	244.	192.	840

LKSIM2000 Tributary Inflow Results FLOW.025

TABLE TRIB: 30 FLOWRATES-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De

MONTHLY FLOW IN ACRE FEET TRIB: 30 DESC: T30 CUP Inflow from Strawberry Lake--to supply demands from Utah Lake.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1950	2261.0	2407.0	2603.0	2461.0	1992.0	1952.0	1075.0	634.0	2082.0	472.0	555.0	248.0	18742.
1951	2264.0	2272.0	2359.0	2588.0	2069.0	2236.0	817.0	757.0	2360.0	524.0	468.0	316.0	19030.
1952	901.0	2396.0	2532.0	2359.0	2117.0	1866.0	1075.0	1500.0	53.0	930.0	907.0	857.0	17493.
1953	839.0	1452.0	1834.0	1834.0	1854.0	1813.0	3000.0	40.0	304.0	383.0	314.0	133.0	13800.
1954	182.0	2350.0	2688.0	2262.0	2487.0	2229.0	3000.0	213.0	387.0	333.0	281.0	0.0	16412.
1955	617.0	2671.0	2888.0	2788.0	2565.0	2850.0	6283.0	5735.0	2380.0	429.0	266.0	84.0	29556.
1956	1400.0	2971.0	2888.0	2788.0	2862.0	2350.0	1635.0	4760.0	2380.0	352.0	372.0	91.0	24849.
1957	2064.0	2771.0	2888.0	2788.0	2355.0	2650.0	4097.0	1500.0	98.0	420.0	359.0	208.0	22198.
1958	31.0	2471.0	2788.0	2788.0	2333.0	2650.0	1245.0	1069.0	2124.0	612.0	553.0	289.0	18953.
1959	973.0	2671.0	2788.0	2788.0	2533.0	2688.0	6577.0	6149.0	2380.0	296.0	203.0	0.0	30046.
1960	1685.0	2871.0	3088.0	2888.0	2542.0	2262.0	5756.0	6149.0	2380.0	375.0	248.0	270.0	30514.
1961	2161.0	2771.0	3088.0	2888.0	2733.0	3639.0	7247.0	5498.0	2380.0	233.0	114.0	1545.0	34297.
1962	2827.0	2871.0	2988.0	2988.0	2533.0	2850.0	1075.0	3158.0	2332.0	311.0	424.0	165.0	24522.
1963	1096.0	2771.0	2988.0	2788.0	1933.0	2650.0	6642.0	4056.0	2380.0	410.0	314.0	0.0	28028.
1964	1486.0	4111.0	4376.0	4574.0	4303.0	4115.0	5916.0	828.0	2380.0	638.0	1323.0	1377.0	35427.
1965	1694.0	2571.0	2588.0	2688.0	2433.0	2550.0	1075.0	1500.0	55.0	983.0	965.0	808.0	19910.
1966	2092.0	2471.0	2788.0	2888.0	2533.0	2450.0	3911.0	6149.0	2380.0	274.0	251.0	57.0	28244.
1967	1365.0	3006.0	3234.0	3234.0	2945.0	2896.0	6278.0	2971.0	1740.0	435.0	357.0	178.0	28639.
1968	2448.0	2671.0	2788.0	2888.0	2542.0	2550.0	4335.0	1561.0	1071.0	390.0	153.0	115.0	23512.
1969	44.0	2194.0	2374.0	2069.0	1994.0	1404.0	1075.0	0.0	1745.0	668.0	682.0	513.0	14762.
1970	1053.0	2464.0	2403.0	2318.0	1986.0	2229.0	6500.0	4283.0	2380.0	392.0	343.0	73.0	26424.
1971	1007.0	2197.0	2504.0	2306.0	1843.0	1490.0	1075.0	2826.0	2380.0	406.0	377.0	1778.0	20189.
1972	2142.0	2270.0	2439.0	2439.0	2129.0	2182.0	3982.0	5466.0	2380.0	374.0	200.0	0.0	26003.
1973	2294.0	2315.0	2493.0	2561.0	2206.0	2077.0	1075.0	1500.0	1973.0	679.0	633.0	323.0	20129.
1974	1844.0	2073.0	2249.0	2271.0	2028.0	1356.0	2158.0	0.0	2380.0	318.0	234.0	80.0	16991.
1975	783.0	2078.0	2348.0	2325.0	2108.0	2020.0	6173.0	1500.0	705.0	298.0	328.0	111.0	20777.
1976	0.0	2166.0	2316.0	2357.0	2126.0	2047.0	4973.0	4025.0	2380.0	361.0	334.0	80.0	23165.
1977	2134.0	2758.0	2907.0	2907.0	2591.0	2866.0	5251.0	6149.0	2353.0	329.0	288.0	86.0	30619.
1978	5316.0	6199.0	6407.0	6407.0	5391.0	4743.0	3524.0	1500.0	2684.0	2141.0	2016.0	3082.0	49410.
1979	5718.0	6008.0	6284.0	6234.0	5591.0	5836.0	3321.0	1689.0	2380.0	2128.0	2132.0	2118.0	49439.

LKSIM2000 Tributary Inflow Results FLOW.025

1980	8341.0	7128.0	7581.0	7295.0	6295.0	6012.0	1075.0	1500.0	467.0	2142.0	1769.0	2087.0	51692.
1981	2368.0	3890.0	4017.0	3662.0	3428.0	3634.0	6126.0	6023.0	2380.0	365.0	349.0	3040.0	39282.
1982	3074.0	3427.0	3554.0	3494.0	2969.0	2236.0	1075.0	1254.0	531.0	976.0	1110.0	732.0	24432.
1983	3027.0	2411.0	2508.0	2678.0	2375.0	1410.0	1075.0	0.0	0.0	1086.0	1036.0	2053.0	19659.
1984	559.0	2021.0	1988.0	2098.0	2012.0	1290.0	1075.0	0.0	0.0	1110.0	1147.0	1033.0	14333.
1985	2457.0	2281.0	2648.0	2828.0	2553.0	1230.0	1075.0	1244.0	283.0	929.0	1089.0	812.0	19429.
1986	2752.0	2191.0	2558.0	2678.0	1553.0	1230.0	1075.0	1500.0	218.0	1067.0	1125.0	732.0	18679.
1987	2318.0	2081.0	2360.0	2491.0	2178.0	2270.0	4187.0	6149.0	2380.0	344.0	290.0	195.0	27243.
1988	1658.0	2641.0	2825.0	2840.0	2636.0	2596.0	6427.0	5137.0	2380.0	379.0	302.0	129.0	29950.
1989	406.0	2940.0	3079.0	3108.0	2744.0	2762.0	4381.0	6149.0	2380.0	328.0	271.0	1885.0	30433.
1990	4888.0	4892.0	5070.0	5069.0	4597.0	4945.0	6882.0	6149.0	2380.0	1693.0	1717.0	1761.0	50043.
1991	3481.0	3519.0	3787.0	3742.0	3224.0	3498.0	7360.0	8916.0	2083.0	429.0	373.0	477.0	40889.
1992	3934.0	3936.0	3968.0	4138.0	3695.0	3985.0	3117.0	5805.0	2380.0	1086.0	1090.0	1191.0	38325.
1993	7036.0	7117.0	7471.0	7334.0	5746.0	4029.0	3708.0	1500.0	3127.0	2141.0	2121.0	2065.0	53395.
1994	2819.0	3229.0	3382.0	3350.0	2911.0	2928.0	6867.0	6149.0	2380.0	366.0	462.0	509.0	35352.
1995	4920.0	5373.0	5555.0	5517.0	4437.0	3774.0	3789.0	1500.0	324.0	2137.0	2100.0	2096.0	41522.
1996	2274.0	2467.0	2635.0	2571.0	2197.0	1581.0	1227.0	1500.0	1804.0	560.0	584.0	369.0	19769.
1997	2650.0	2193.0	2281.0	2471.0	2175.0	1230.0	1075.0	1500.0	139.0	1013.0	949.0	786.0	18462.
1998	6048.0	5270.0	4171.0	5476.0	4949.0	2918.0	1825.0	1500.0	1383.0	2047.0	2110.0	2096.0	39793.
1999	2210.0	2502.0	2601.0	2541.0	2192.0	2123.0	5344.0	1500.0	132.0	261.0	299.0	108.0	21813.

LKSIM2000 Tributary Inflow Results FLOW.025

TABLE TRIB: 29 FLOWRATES-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De

MONTHLY FLOW IN ACRE FEET TRIB: 29 DESC: T29 Provo River

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1950	4611.0	4580.0	6641.0	4611.0	3353.0	2943.0	10542.0	39571.1	42536.1	8840.0	3254.0	4112.0	135594.
1951	1149.0	2623.0	5631.0	4376.0	4081.0	4950.0	7257.0	52617.1	42932.1	7579.0	620.0	593.0	134408.
1952	2573.0	2542.0	4632.0	4148.0	2542.0	17260.0	49347.1	86955.2	62418.1	8445.0	614.0	561.0	242037.
1953	1178.0	2663.0	5168.0	4370.0	3040.0	6978.0	6455.0	17605.0	47871.1	1997.0	637.0	596.0	98558.
1954	1205.0	4838.0	2988.0	2279.0	2249.0	1626.0	5928.0	6850.0	1085.0	1282.0	539.0	482.0	31351.
1955	1160.0	2477.0	1701.0	1650.0	1461.0	1594.0	4927.0	10131.0	3121.0	1502.0	610.0	549.0	30883.
1956	1746.0	3320.0	4147.0	1689.0	1535.0	1634.0	6038.0	10529.0	5215.0	3756.0	1530.0	542.0	41681.
1957	991.0	3234.0	2098.0	1835.0	1854.0	1611.0	5592.0	9540.0	19901.0	4250.0	3241.0	3044.0	57191.
1958	1246.0	4974.0	2119.0	1690.0	1702.0	1659.0	6494.0	31504.1	13307.0	3882.0	3205.0	2590.0	74372.
1959	931.0	2954.0	1983.0	1657.0	1463.0	1606.0	5415.0	10049.0	4768.0	2773.0	536.0	507.0	34642.
1960	1027.0	2611.0	1743.0	1671.0	1524.0	1622.0	5914.0	10055.0	2325.0	25580.1	336.0	413.0	54821.
1961	1099.0	1758.0	1690.0	1567.0	1647.0	1550.0	5065.0	8949.0	4193.0	350.0	359.0	426.0	28653.
1962	1023.0	1550.0	1550.0	1550.0	1469.0	1550.0	4879.0	12519.0	5049.0	4029.0	3219.0	2903.0	41290.
1963	1154.0	2358.0	1757.0	1935.0	2122.0	1638.0	4963.0	10534.0	4768.0	3930.0	3155.0	3623.0	41937.
1964	4611.0	6441.0	4611.0	4611.0	2117.0	1627.0	4901.0	9647.0	4981.0	4235.0	3234.0	4115.0	55131.
1965	5957.0	7120.0	4611.0	4611.0	4165.0	4611.0	6061.0	10978.0	40195.1	7396.0	3253.0	4113.0	103071.
1966	5931.0	10638.0	11777.0	9322.0	7215.0	14343.0	6577.0	24318.1	4687.0	3392.0	3141.0	4042.0	105383.
1967	4611.0	4463.0	4611.0	3177.0	1771.0	2845.0	5692.0	11314.0	24172.1	4288.0	3247.0	4113.0	74304.
1968	5830.0	5877.0	4611.0	4611.0	4165.0	4611.0	4887.0	15189.0	47667.1	4241.0	3250.0	4129.0	109068.
1969	5961.0	10820.0	7925.0	4743.0	4165.0	5882.0	28401.1	66277.1	46566.1	7606.0	3256.0	4114.0	195716.
1970	5782.0	9194.0	4611.0	4611.0	4165.0	4611.0	5666.0	32374.1	19015.0	5282.0	3238.0	4091.0	102640.
1971	5546.0	5574.0	4611.0	4611.0	4165.0	4611.0	5788.0	32637.1	56629.1	4128.0	3261.0	4092.0	135653.
1972	5255.0	4995.0	4611.0	4611.0	4165.0	12060.0	9183.0	41382.1	22448.0	7583.0	3258.0	4125.0	123676.
1973	5701.0	7856.0	4611.0	4611.0	4165.0	4611.0	18533.0	38180.1	49511.1	7623.0	3176.0	4156.0	152734.
1974	5657.0	9450.0	4736.0	4611.0	4165.0	4611.0	10210.0	43418.1	51429.1	7727.0	3238.0	4129.0	153381.
1975	5658.0	8935.0	4611.0	4611.0	4165.0	4611.0	4879.0	17506.0	75650.2	17146.0	3261.0	4167.0	155200.
1976	5195.0	7763.0	4613.0	4611.0	4165.0	4611.0	12211.0	24568.1	8335.0	3457.0	3158.0	4049.0	86736.
1977	4611.0	4463.0	4611.0	4246.0	1850.0	1608.0	5861.0	8716.0	3471.0	2846.0	3038.0	4006.0	49327.
1978	5658.0	6411.0	5199.0	4611.0	4165.0	5730.0	8782.0	15045.0	5052.0	4121.0	3243.0	4089.0	72106.
1979	5639.0	6306.0	4611.0	4611.0	4165.0	4611.0	14863.0	16930.0	4768.0	3667.0	3162.0	4066.0	77399.

LKSIM2000 Tributary Inflow Results FLOW.025

1980	5670.0	9969.0	5218.0	4611.0	4165.0	4611.0	5193.0	34843.1	29426.1	4611.0	3252.0	16902.0	128471.
1981	5597.0	7372.0	4890.0	4611.0	4165.0	4611.0	5651.0	12002.0	4768.0	3699.0	3177.0	4044.0	64587.
1982	7221.0	4667.0	4611.0	4611.0	4165.0	5045.0	11701.0	51043.1	42519.1	16028.0	3245.0	4030.0	158886.
1983	6353.0	5329.0	5670.0	4880.0	17526.0	85541.2	24358.1	53132.1	86953.2	19564.0	617.0	554.0	310478.
1984	3065.0	8411.0	6554.0	12962.0	19490.0	37237.1	60510.1	76040.2	59995.1	20398.0	610.0	549.0	305822.
1985	1077.0	8548.0	5252.0	5125.0	8572.0	19964.0	50783.1	66626.1	15726.0	1838.0	569.0	466.0	184546.
1986	6012.0	7356.0	7215.0	5842.0	15376.0	96870.2	54215.1	70115.1	76919.2	19875.0	608.0	551.0	360955.
1987	11867.0	7201.0	4658.0	5331.0	18226.0	15180.0	20782.0	31760.1	5434.0	5078.0	3246.0	4111.0	132874.
1988	4611.0	4260.0	2167.0	1692.0	1546.0	1629.0	5008.0	10153.0	4410.0	3292.0	3239.0	4116.0	46123.
1989	11139.0	4463.0	4611.0	2401.0	1495.0	1641.0	5903.0	14053.0	4768.0	11674.0	3245.0	4043.0	69436.
1990	3905.0	4123.0	3791.0	3648.0	1892.0	3260.0	4879.0	15321.0	4768.0	4090.0	3237.0	4115.0	57029.
1991	4611.0	4463.0	4611.0	4611.0	2404.0	1620.0	5002.0	9221.0	5009.0	4611.0	3033.0	4018.0	53214.
1992	4611.0	4463.0	4611.0	4611.0	4165.0	4029.0	5043.0	8839.0	4063.0	3952.0	9476.0	3884.0	61747.
1993	4611.0	3949.0	2155.0	3138.0	2364.0	5706.0	9741.0	16391.0	4954.0	4152.0	3251.0	4066.0	64478.
1994	4611.0	4463.0	4611.0	4611.0	3838.0	2710.0	5755.0	10059.0	4491.0	3369.0	3051.0	3913.0	55482.
1995	5179.0	4406.0	4071.0	3812.0	3699.0	5058.0	4904.0	14563.0	4697.0	8075.0	3215.0	934.0	62613.
1996	8713.0	7143.0	5855.0	9806.0	4165.0	8818.0	16338.0	35174.1	53405.1	10005.0	3160.0	3996.0	166578.
1997	5587.0	7587.0	8801.0	4611.0	4165.0	15181.0	52596.1	70456.2	49555.1	8599.0	3117.0	3954.0	234210.
1998	5717.0	6320.0	4611.0	4611.0	4165.0	4611.0	13105.0	64278.1	50697.1	11175.0	3171.0	3977.0	176438.
1999	7714.0	6205.0	4611.0	4611.0	8720.0	16660.0	31282.1	54137.1	37156.1	14064.0	3147.0	4030.0	192337.

LKSIM2000 Tributary Inflow Results FLOW.025

TABLE TRIB: 53 FLOWRATES-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De

MONTHLY FLOW IN ACRE FEET TRIB: 53 DESC: T53 Jordan River

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1950	9372.0	5958.0	3197.0	1761.0	5185.0	9269.0	12939.0	25705.1	36998.1	42399.1	41575.1	31280.1	225638.
1951	13270.0	5075.0	4854.0	1761.0	2644.0	5182.0	12497.0	27472.1	45832.1	52370.1	34395.1	34483.1	239836.
1952	11944.0	4696.0	4696.0	4696.0	26821.1	79453.2	89013.2	122248.3	108712.2	91830.2	50394.1	38127.1	632631.
1953	15061.0	6601.0	21638.0	59758.1	27500.1	43826.1	29682.1	41219.1	47105.1	55890.1	40611.1	30747.1	419639.
1954	11825.0	4696.0	4696.0	4696.0	4696.0	7098.0	14671.0	41219.1	37939.1	45036.1	40611.1	30747.1	247931.
1955	10729.0	1416.0	1311.0	327.0	327.0	437.0	1201.0	24765.1	30657.1	42550.1	50642.1	32620.1	196982.
1956	12524.0	442.0	331.0	221.0	110.0	110.0	32255.1	26660.1	32982.1	39930.1	37782.1	29805.1	213152.
1957	10508.0	437.0	437.0	0.0	0.0	0.0	0.0	14509.0	27930.1	49204.1	40149.1	32620.1	175794.
1958	10145.0	1871.0	1871.0	1105.0	2762.0	2541.0	2209.0	31118.1	37329.1	43946.1	45883.1	33489.1	214269.
1959	13712.0	6842.0	3086.0	663.0	663.0	221.0	5634.0	32001.1	36998.1	42289.1	38372.1	27193.1	207674.
1960	8631.0	4254.0	1201.0	221.0	110.0	221.0	3093.0	32001.1	33424.1	39157.1	30049.1	20747.0	173109.
1961	5128.0	874.0	874.0	0.0	0.0	0.0	0.0	30080.1	29749.1	22029.0	14119.0	5413.0	108266.
1962	663.0	437.0	110.0	110.0	437.0	327.0	653.0	20470.0	28564.1	35733.1	35352.1	26381.1	149237.
1963	5565.0	3491.0	1090.0	327.0	110.0	0.0	0.0	26786.1	25249.1	44605.1	39044.1	20104.0	166371.
1964	10715.0	763.0	1090.0	1090.0	327.0	110.0	0.0	16355.0	18445.0	44384.1	42464.1	32918.1	168661.
1965	10052.0	437.0	437.0	1201.0	1090.0	653.0	4801.0	26897.1	34254.1	40090.1	39597.1	16901.0	176410.
1966	9058.0	1871.0	1871.0	3197.0	8278.0	7060.0	7968.0	33216.1	37439.1	40521.1	39256.1	29513.1	219248.
1967	11171.0	2617.0	1090.0	1201.0	1748.0	4039.0	3164.0	31967.1	22475.0	39601.1	42981.1	32073.1	194127.
1968	8729.0	1761.0	1761.0	1871.0	1982.0	7391.0	16473.0	28688.1	32248.1	41626.1	35279.1	31059.1	208868.
1969	13615.0	9164.0	9164.0	8038.0	4696.0	8786.0	61174.1	61989.1	66439.1	55890.1	50394.1	30747.1	380097.
1970	14238.0	9521.0	9521.0	10647.0	21983.0	23413.0	28153.1	43990.1	47105.1	55890.1	40611.1	30747.1	335820.
1971	14278.0	9601.0	9601.0	9601.0	10727.0	42502.1	47680.1	41219.1	47105.1	55890.1	40611.1	30747.1	359563.
1972	14784.0	11740.0	10615.0	11740.0	11423.0	35829.1	31245.1	41219.1	47105.1	55890.1	40611.1	30747.1	342949.
1973	14632.0	10310.0	10310.0	10310.0	9896.0	14401.0	49003.1	84577.2	67525.1	55890.1	40611.1	30747.1	398213.
1974	15425.0	11896.0	11896.0	13021.0	36780.1	40631.1	71100.1	41219.1	47105.1	55890.1	40611.1	30747.1	416322.
1975	11825.0	4696.0	4696.0	4696.0	4696.0	8786.0	36164.1	80903.2	87078.2	70244.1	50394.1	30747.1	394926.
1976	11825.0	4696.0	5821.0	45048.1	65501.1	38119.1	24475.1	41219.1	47105.1	45036.1	40611.1	30747.1	400204.
1977	11825.0	828.0	828.0	717.0	828.0	911.0	6604.0	19512.0	28077.1	35395.1	34684.1	28146.1	168355.
1978	1081.0	496.0	496.0	607.0	717.0	1463.0	5168.0	32917.1	19293.0	39900.1	39434.1	25164.1	166736.
1979	14557.0	4743.0	4743.0	4743.0	16605.0	64434.1	67924.1	41114.1	47158.1	45050.1	40692.1	30728.1	382492.

LKSIM2000 Tributary Inflow Results FLOW.025

1980	11503.0	658.0	548.0	984.0	10492.0	54036.1	36854.1	87807.2	56622.1	37305.1	29948.1	23780.1	350538.
1981	11587.0	4696.0	5821.0	39680.1	29024.1	47473.1	20080.0	53523.1	47105.1	45036.1	40611.1	30747.1	375384.
1982	11825.0	4696.0	4696.0	4696.0	5821.0	67581.1	60343.1	89065.2	82816.2	55890.1	50394.1	30747.1	468571.
1983	14671.0	39336.1	66024.1	63544.1	73934.2	93267.2	92332.2	121757.3	132617.3	119210.3	96295.2	85540.2	998529.
1984	87723.2	85096.2	87855.2	86428.2	75374.2	91404.2	100407.2	133567.3	132326.3	119916.3	94435.2	85522.2	1180056.
1985	86244.2	78706.2	78212.2	70901.1	63118.1	84908.2	89377.2	97768.2	86283.2	55890.1	50394.1	30747.1	872550.
1986	11825.0	4696.0	48589.1	64678.1	74021.2	95666.2	115823.3	126753.3	117705.3	94351.2	86736.2	38127.1	878972.
1987	19562.0	54245.1	47758.1	59136.1	63840.1	66712.1	29254.1	41219.1	47105.1	55890.1	40611.1	30747.1	556080.
1988	11825.0	4026.0	3809.0	3809.0	3809.0	5879.0	32991.1	27219.1	35086.1	32196.1	30774.1	23764.1	215187.
1989	8980.0	3809.0	3704.0	3704.0	3704.0	5662.0	9637.0	27591.1	29780.1	36134.1	33613.1	19490.0	185808.
1990	3942.0	1690.0	1562.0	389.0	389.0	6520.0	14506.0	43803.1	49609.1	45925.1	43196.1	32195.1	243727.
1991	3288.0	4105.0	4105.0	4474.0	6318.0	7695.0	1493.0	24202.1	28253.1	54615.1	50032.1	28893.1	217473.
1992	16383.0	838.0	838.0	0.0	0.0	0.0	14998.0	32962.1	37571.1	48734.1	30467.1	6058.0	188849.
1993	1939.0	594.0	146.0	146.0	594.0	448.0	18382.0	22756.0	29763.1	39351.1	42874.1	28441.1	185434.
1994	13068.0	5323.0	1693.0	524.0	3022.0	4352.0	18949.0	26323.1	34031.1	51975.1	50033.1	28127.1	237421.
1995	5899.0	593.0	593.0	1654.0	1532.0	940.0	25126.1	23139.0	71622.2	71858.2	37521.1	28136.1	268614.
1996	9090.0	2741.0	2741.0	5856.0	5856.0	46369.1	46747.1	67916.1	65144.1	35196.1	34418.1	22484.0	344559.
1997	13364.0	12292.0	12292.0	26041.1	49124.1	53950.1	81901.2	91604.2	87677.2	65735.1	28483.1	19802.0	542266.
1998	15967.0	5573.0	52384.1	55129.1	62947.1	50771.1	63445.1	89660.2	88435.2	61416.1	54474.1	28659.1	628861.
1999	15762.0	7207.0	33746.1	48224.1	51882.1	33427.1	71099.1	81756.2	65596.1	50992.1	36025.1	23191.0	518908.

LKSIM2000 Tributary Inflow Results FLOW.025

TABLE TRIB: 78 FLOWRATES-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De

MONTHLY FLOW IN ACRE FEET TRIB: 78 DESC: T78 Irrig. Return flow---N and NW side of Utah Lake -- from Provo River proj.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1930	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1931	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1932	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1933	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1934	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1000.0	1000.0	500.0	6800.
1935	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1936	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1937	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1938	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1939	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1940	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1100.0	900.0	7800.
1941	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1100.0	900.0	7800.
1942	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1943	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1944	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1945	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1946	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1947	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1948	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1949	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1950	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1951	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1952	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1953	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1954	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1955	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1200.0	1100.0	1100.0	7700.
1956	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1957	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1958	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1959	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1960	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1200.0	1300.0	1000.0	7800.
1961	600.0	400.0	200.0	200.0	0.0	0.0	0.0	100.0	200.0	600.0	600.0	600.0	3500.
1962	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1963	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1964	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1965	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1966	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1967	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1968	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1969	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1970	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1971	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1972	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1973	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1974	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1000.0	1000.0	7800.
1975	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1976	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1000.0	1000.0	7800.
1977	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1000.0	1000.0	7800.
1978	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1979	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1000.0	1000.0	7800.

LKSIM2000 Tributary Inflow Results FLOW.025

1980	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1981	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1982	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1983	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1984	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1985	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1986	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1987	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1988	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1989	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1990	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1991	1000.0	800.0	200.0	200.0	0.0	0.0	0.0	100.0	200.0	1000.0	1000.0	1000.0	5500.
1992	1000.0	800.0	200.0	200.0	0.0	0.0	0.0	100.0	200.0	1000.0	1000.0	1000.0	5500.
1993	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1994	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1995	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1996	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1997	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1998	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.
1999	1600.0	1000.0	500.0	500.0	0.0	0.0	0.0	200.0	500.0	1500.0	1600.0	1600.0	9000.

LKSIM2000 Tributary Inflow Results FLOW.025

TABLE TRIB: 80 FLOWRATES-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De

MONTHLY FLOW IN ACRE FEET TRIB: 80 DESC: T80 Return flow from Irrig & M&I Spanish Fork / Peteetneet Area

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1950	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1951	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1952	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1953	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1954	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1955	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1956	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1957	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1958	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1959	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1960	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1961	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1962	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1963	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1964	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1965	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1966	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1967	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1968	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1969	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1970	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1971	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1972	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1973	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1974	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1975	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1976	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1977	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1978	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1979	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.

LKSIM2000 Tributary Inflow Results FLOW.025

1980	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1981	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1982	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1983	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1984	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1985	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1986	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1987	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1988	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1989	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1990	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1991	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1992	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1993	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1994	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1995	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1996	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1997	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1998	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.
1999	-411.0	-257.0	-128.0	-128.0	0.0	0.0	0.0	-51.0	-128.0	-383.0	-411.0	-411.0	-2308.

LKSIM2000 Tributary Inflow Results FLOW.025

TABLE TRIB: 81 FLOWRATES-- RUN.025: ULS Alt1 based on DF FS FEIS Interim Op ULS BL--9Dec2003 (Thurin)--13De

MONTHLY FLOW IN ACRE FEET TRIB: 81 DESC: T81 Total Lake: Unmeas. Inflow (to get balance during misc. simulation runs.

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1937	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1938	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1941	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1950	11529.7	-35647.8	-22.1	3062.7	-1506.0	-932.8	1246.1	-136.3	2594.9	2709.1	-5537.4	454.6	-22185.
1951	6296.1	-2678.7	-1666.8	1286.4	500.5	-1212.6	1213.7	2787.2	203.1	364.9	-46.5	-1304.6	5743.
1952	-2822.3	4139.8	182.6	-1879.2	2461.1	-1777.2	-3199.3	8019.8	2398.2	-2563.2	-385.1	2651.3	7226.
1953	-2114.6	1140.8	-1330.5	-2374.3	-1695.3	3434.8	-3096.4	5722.8	-504.7	1217.3	2117.6	-861.8	1656.
1954	-2990.3	531.8	-3125.9	937.3	585.8	6335.6	-343.3	-1428.0	756.4	-2409.0	3231.6	1382.3	3464.
1955	-3240.3	-560.4	-2904.2	6623.8	-2452.0	-2221.3	-203.2	942.3	5569.8	260.9	-6024.3	714.4	-3494.
1956	5534.1	-6002.8	-265.8	2085.7	851.8	1066.7	-116.8	-1511.7	2320.9	-880.1	209.1	-1609.7	1681.
1957	1287.2	-1286.1	257.7	-1722.2	1428.4	-3401.7	2231.8	3518.4	925.1	-411.8	-1291.5	-2112.9	-578.
1958	1131.1	1958.4	-3371.2	394.8	549.3	1906.4	2728.3	-1030.3	-2548.8	3326.3	-637.9	485.9	4892.
1959	-702.7	209.9	-493.4	-2228.2	3659.6	-223.7	3936.1	-2242.1	-749.6	301.2	-1284.9	-2115.4	-1933.
1960	5280.3	-4007.5	-2362.9	2135.1	-493.1	1390.5	1480.2	788.3	305.4	-1324.7	-4697.5	-641.9	-2148.
1961	1485.7	14.5	-193.5	1762.8	2117.2	-5273.2	1741.6	695.4	-776.9	288.5	762.4	592.9	3217.
1962	-2038.9	-738.8	-407.8	1551.9	-4199.3	4149.0	-1657.8	2085.0	2441.7	-2321.5	-2357.8	-1022.7	-4517.
1963	1969.9	478.3	-1365.0	-4189.9	4561.5	-672.1	1149.1	-1363.6	20.9	696.4	748.2	-2824.3	-791.
1964	612.1	-2962.0	1815.3	-3803.9	4039.5	377.0	-423.5	524.6	6047.1	-5986.7	-672.3	1983.6	1551.
1965	771.0	-4767.1	3104.4	-706.9	-1191.8	1294.8	-2326.4	5656.2	2384.6	-4021.2	1919.0	541.2	2658.
1966	-3596.0	3411.5	-3213.6	-543.9	1445.9	899.3	766.5	1629.6	-73.9	-413.3	1603.9	-589.2	1327.
1967	2739.3	-3348.2	3906.2	-4242.1	-747.9	2911.6	670.3	769.3	2330.3	279.4	-2667.6	-1363.3	1237.
1968	4039.1	1052.8	-5938.9	3655.1	-2358.1	3142.5	154.1	3863.0	-2054.5	1840.9	3566.7	-3166.1	7797.
1969	527.1	2421.3	316.6	-4903.2	2570.2	-146.9	-2636.6	3671.6	1044.6	832.3	5005.3	-4200.1	4502.
1970	1402.3	1118.9	-2924.6	1480.5	-2700.4	504.1	1012.7	3482.9	2327.7	2106.1	-786.5	1948.2	8972.
1971	-3900.3	-212.8	1443.7	-2329.5	-1206.8	1494.0	2043.4	1683.8	-1689.3	4809.3	-3188.1	380.6	-672.
1972	1677.3	-1450.2	-4378.5	3770.2	334.9	-165.8	6022.2	-1952.6	2867.5	-2764.3	2958.0	622.9	7542.
1973	-1069.3	-2916.8	1219.3	-955.0	-1817.9	980.9	-333.3	4955.9	-4116.9	3422.7	-2757.3	2409.8	-978.
1974	-255.4	2348.9	-1898.3	-3186.0	1063.9	1604.8	-787.1	5150.0	659.9	-3180.4	5577.1	-2108.9	4989.
1975	2178.1	100.2	-5099.9	1663.7	4946.6	-5520.0	2045.4	1632.6	5367.7	2441.0	-2369.8	-3971.4	3414.
1976	5448.0	-5319.5	3310.5	-259.8	-1805.8	-413.1	-881.1	4396.3	-1474.2	5895.1	-5900.8	6398.7	9394.
1977	-991.3	1775.8	-2194.3	-2090.5	2311.0	-683.4	1298.2	642.6	459.9	1310.8	-2322.3	2373.5	1890.
1978	1624.2	-2341.6	-2381.4	2082.4	-444.6	268.8	1449.5	-495.1	733.7	187.3	-3333.3	4316.9	1667.
1979	340.5	-2005.6	-2059.6	875.1	-2071.0	-586.2	2002.0	6802.2	-900.0	-3119.9	2418.0	-1200.3	495.

LKSIM2000 Tributary Inflow Results FLOW.025

1980	3061.5	-2089.8	1380.6	-4191.7	3766.0	-2042.9	3637.6	399.7	-857.9	3935.6	2194.8	428.7	9622.
1981	-971.6	-5350.5	2904.8	-756.1	-1268.8	2329.9	1544.5	1390.5	1091.4	-380.3	-1888.1	153.4	-1201.
1982	-1441.5	4024.4	-1428.6	-988.8	-2211.6	2152.6	690.4	2901.1	4495.1	-1538.6	324.3	2247.4	9226.
1983	-2606.3	-927.4	-387.8	-1339.3	2367.6	-1274.8	2714.5	213.3	-42706.6	1039.6	-2399.3	4813.2	-40493.
1984	-5309.2	5454.9	-1789.4	-45.0	-3053.3	4264.2	1.0	-33476.1	-22415.3	-2767.5	4694.9	1618.1	-52823.
1985	-2294.6	-3129.5	3742.9	-1498.3	21.2	4107.7	-226.8	-2733.0	3236.9	1853.6	4066.2	-3074.8	4072.
1986	2162.6	-1976.1	-4038.9	2444.9	-1186.5	1749.6	-792.1	3186.0	133.5	-1401.9	-38.0	153.9	397.
1987	-1006.6	-161.2	-143.6	576.8	-2787.5	2324.8	-1558.4	3958.7	3617.2	-1850.3	-5022.3	-24.9	-2077.
1988	6644.9	-4295.9	2361.7	-1428.9	-3864.8	425.7	1680.0	2816.4	-852.8	2260.9	-2556.0	2754.6	5946.
1989	338.2	-3827.1	-1861.6	-2715.0	-8297.6	-5890.8	-3329.9	-2017.3	-1360.1	12.2	130.0	2152.9	-26666.
1990	159.4	-11102.4	-6937.3	-3127.1	-2996.8	-9778.9	-3401.8	2631.8	449.7	425.1	-1135.8	-980.6	-35795.
1991	-113.6	2238.3	-10908.1	-3163.3	-4930.9	-1306.3	-2214.0	29.6	3324.7	-3535.5	1940.7	2015.0	-16623.
1992	-1169.2	-3092.7	-5783.5	-2068.9	-10823.9	-49.8	-7633.8	-2415.2	-456.9	2417.6	-1616.6	-14345.0	-47038.
1993	3270.3	-6092.8	-5853.9	-9497.4	-9295.8	-5299.4	-5428.4	-1744.7	3526.5	-950.1	2322.4	-710.3	-35754.
1994	-1414.8	-2341.0	673.9	-2455.9	-180.2	859.2	-646.2	2556.9	-488.4	-0.5	-807.7	-1648.2	-5893.
1995	3204.6	-1867.3	585.9	-4732.2	-328.8	689.3	668.2	3696.4	-34.8	1572.9	-4563.6	2296.4	1187.
1996	1176.6	321.5	795.7	-1833.3	811.5	1520.4	523.4	-2326.0	3559.9	1578.4	3085.2	-4775.6	4438.
1997	1293.4	1557.3	963.8	-4814.0	-1009.0	489.6	6393.4	-737.6	1534.7	1653.6	3117.4	-7151.4	3291.
1998	440.9	1410.4	1739.9	-7593.4	1902.5	-4052.9	1758.6	6042.1	-3468.3	346.2	-1451.2	1895.7	-1029.
1999	-3294.9	-6732.6	-4227.4	-3613.6	1002.2	-3483.5	-39.5	-2081.1	1.6	-600.3	-1780.1	1115.4	-23734.

Update and Calibration of the Utah Lake Water Quality Salinity Model (LKSIM2000)

Dr. LaVere Merritt &
Dr. Woodruff Miller

May 2004

Executive Summary

The water in Utah Lake is used for many in-lake purposes as well as being the source of the Jordan River. The quality of the water needs to be maintained to support in-lake and downstream uses. High concentrations of salts in Utah Lake are of major concern. High salt concentrations occur naturally, but are increased by human activity in the basin. As water in the basin surrounding Utah Lake is developed, according to the Central Utah Project Completion Act (CUPCA), concentrations of total dissolved solids (TDS) and other pollutants will change. In order to understand how development of the watershed and various water management strategies will affect the quality of the water in Utah Lake, the Utah Lake Water Quality Salinity Model (LKSIM2000) was developed. The goal of the model is to simulate conservative salt concentrations to within 50 mg/l of actual values. The calibrated model is then used to project future salinity for various water use scenarios, thus allowing project managers to consider the issue of salinity in their planning.

This report covers work done in 1998 and again in 2001 to update the hydrologic database and recalibrate the LKSIM2000 model for the 50-year period from 1950-1999. The hydrologic data used as inputs for the model were updated according to the pattern that was established in the 1992 update of the model (Van Blankenstein, 1992). These inputs were reviewed and improved. The model was then calibrated to produce the best simulation.

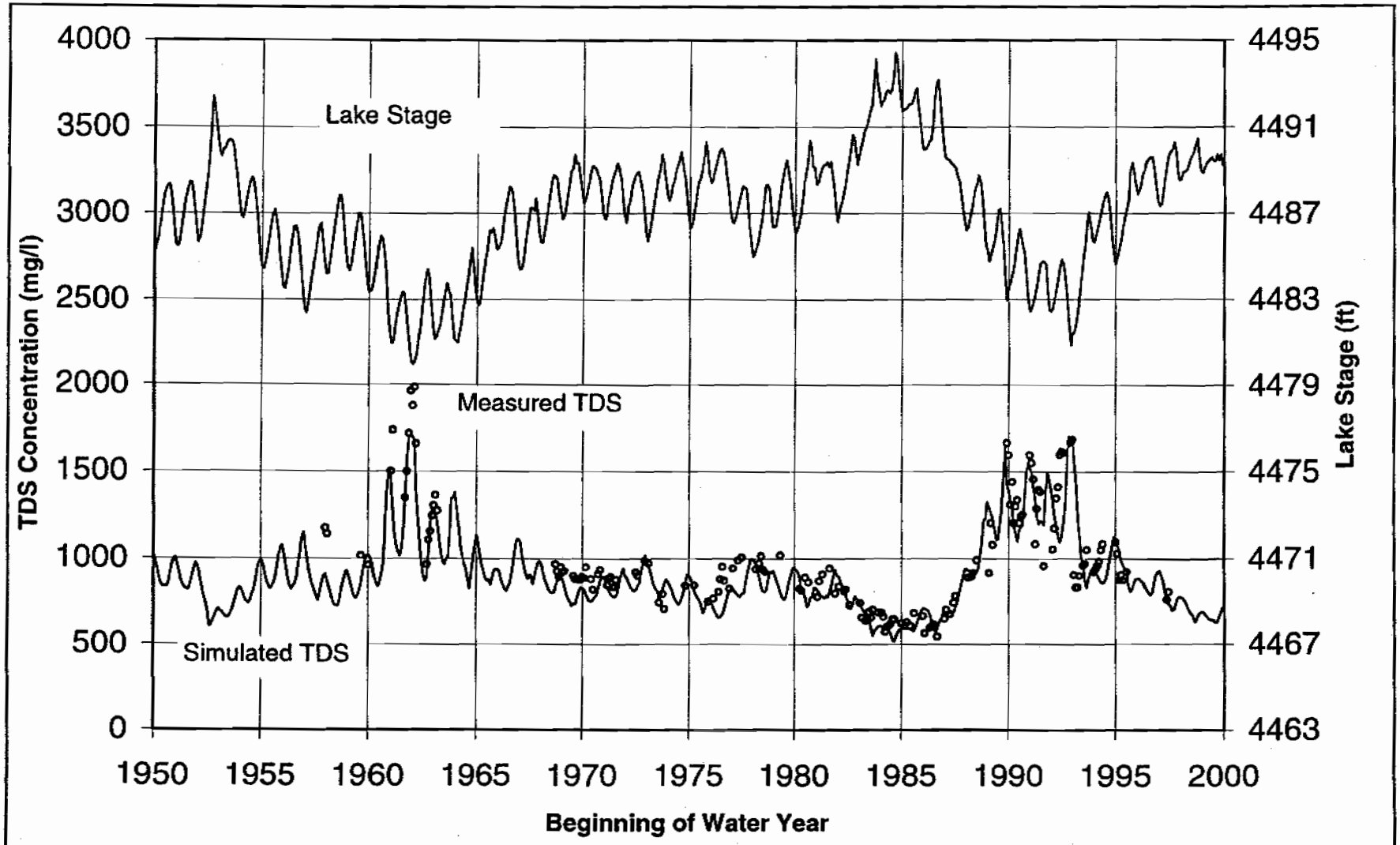
The hydrologic data were updated through the water year 2000. Several changes had to be made to update these inputs. First, indices were updated so that correlation equations based on those indices could be used to determine surface inflows. The Groundwater Index could not be updated, and the Average Valley Precipitation Index was updated with precipitation values from

Santaquin rather than Elberta. The correlation equations that were based on these two indices were changed. The correlation equation for each tributary with its corresponding index was used to update flows through 2000. These changes and updated surface inflows are presented here.

Precipitation was updated using the Theissen Polygon methods. Since the station at Elberta was discontinued, polygons had to be redrawn on Goshen Bay in order to find weighted areas based on the Santaquin, Payson and Orem stations. These weighted areas, and the weighted areas calculated previously for the Main Lake and Provo Bay, were used to update the precipitation inflow through 2000. Evaporation was updated using the CRLE version of Morton's Model. Corrected Salt Lake City air temperature and dew point temperature were used , along with the percent total sunshine in Salt Lake City, to simulate and update evaporation through 2000. These results are presented here as well.

The LKSIM2000 model was used to successfully simulate salt concentrations for the water years 1950 through 1999. Plots of simulated TDS were used to help calibrate the model. The plotted results were interpreted and the model adjusted until simulated results matched measured salinity as well as possible. Plots representing the calibrated simulation are presented in APPENDIX F (the TDS plot is also given on the following page). Calibration work resulted in what is felt to be an improved simulated match to the historical measured quality. The 50 year average TDS concentration was found to be 900 mg/l, which is lower than the 1034 mg/l result when the model was last updated in 1992.

It is hoped that this report will provide a background for those who will continue to use the LKSIM2000 model to improve simulations of Utah Lake TDS.. As water quality is better understood through improved modeling and research, steps are taken to ensure that lake quality is maintained, and that valuable water resources will continue to be developed in Central Utah.



Total Dissolved Solids and Water Levels in Utah Lake

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Introduction

Utah Lake sits in Utah Valley at the base of the Wasatch Range in central Utah. The lake is a remnant of Lake Bonneville, a massive body of water that once covered the Northeast corner of the Great Basin to a depth of nearly 300 feet during long periods of wetness. The long term climatological cycle has now produced a period of relative dryness. Utah Lake now fills the valley floor as a reminder of the forces that shaped the surrounding landscape. The drainage area of the lake is about 2,700 square miles. The lake has a surface area of about 95,000 acres. This surface area is larger than any other freshwater lake west of the Great Lakes. It is a very shallow lake, with an average depth of 9 feet and a maximum depth of 14 feet when at the compromise stage (4489.34 ft) (Merritt et.al., 1995, p1). Water flows north from Utah Lake, through the Salt Lake Valley via the Jordan River and into the Great Salt Lake, some 45 miles to the north.

The Issue of Water Quality

Utah lake is the natural recipient of many "pollutants" that originate in its drainage basin. The lake shares Utah Valley with a rapidly growing metropolitan area. The public commonly views the lake as polluted and blames the problem on industry, development and wastewater discharges. However, studies have shown that the quality of the water in the lake is largely determined by nature.

Utah Lake dominates the landscape of Utah County and provides many valuable resources. Besides storing large volumes of water, the lake also provides a home for wildlife and

a place for recreation. It is a major factor affecting development in the valley. Many people have a stake in the way that Utah Lake's waters are managed. Of primary concern is the salinity of the water in Utah Lake. The water quality parameter of primary focus herein is the total dissolved solids (TDS), also referred to as salinity. The water has historically been used downstream in the Salt Lake Valley for irrigation. The downstream water's potential as a possible source of drinking water is becoming more important as well. The salinity of Utah Lake is occasionally too high for sensitive-crop irrigation and always too high for drinking water without blending with low TDS waters.

The LKSIM2000 model, developed at Brigham Young University, simulates the concentration of conservative (soluble) ions in Utah Lake. The main goal of the model is to simulate TDS concentrations to within 50 mg/l of historical and future salt concentrations (Van Blankenstein, 1992, p1). A main use of the model is to simulate various future management/ development alternatives, including those of the Central Utah Project Completion Act (CUPCA). Those who are managing the development of water in the Utah Lake watershed use LKSIM2000 to project the effects of various future development scenarios on the water quality of the lake.

Project Purpose

This project involved updating the hydrologic data base and recalibrating the LKSIM2000 model for the period of 1950 - 1999. The LKSIM2000 model uses a water balance and salt balance approach to generate monthly, yearly and total simulation results. The model has calibrated well for the 1950 through 1999 period. This project report documents the updating of the LKSIM2000 model. The following objectives were considered as part of this project:

1. Update surface inflows, precipitation and evaporation data to be used as input for the model through the water year 1999.
2. Review input data and make any necessary improvements.
3. Provide graphical representation of the output in order to more easily calibrate the model.

This report summarizes what was done to accomplish these three goals.

Surface Tributary Inflows

Water enters Utah Lake through more than 70 tributaries. Most of those tributaries are surface flows. Table 1 lists these inflows, and Figure 1 shows their respective locations. Gaging stations on the Provo River at Provo and at Deer Creek, on the American Fork River above the power plant site, and on the Spanish Fork River at Castilla continually measure flow. Discharges from the wastewater treatment plants in Utah Valley and Geneva Steel are also continually measured. Surface flows into Utah Lake through other tributaries have only been measured periodically for other studies. Unmeasured flows were estimated by correlating the measured flows in each tributary to an index based on continually measured meteorologic and hydrologic data, such as precipitation or surface flow at another point in the watershed. In order to update inflows through 1999, it was necessary first to review and update the indices that were used the last time the lake water quality was modeled in 1991. These indices were then used to update surface inflows using correlation equations.

Correlation Indices

In order to be consistent with what was done before, it was our intention to use the same indices that were used the last time the model was updated. The following indices were used before to estimate surface inflows (Van Blankenstein, 1992, p6):

- Lehi Precipitation Index
- Provo Precipitation Index
- Average Valley Precipitation Index
  (Average of Lehi, Provo and Elberta Stations)
- Lehi Groundwater Well Index
- Santaquin Precipitation Index
- American Fork River above power plant Apr-Jul Runoff
- Spanish Fork River at Lakeshore Water Year Runoff

Table 1 - Descriptions and Code Numbers For Utah Lake Surface Tributary Inflows.

TRIBUTARY	ID #
Drain 6900 N. and Saratoga Rd.	UT 1
Dry Creek (Lehi)	UT 3
Drain, .7 mi. E. of 9950 W. 7350 N.	UT 4
Drain, near 8730 W. and 7350 N.	UT 5
Drain, near 8350 W. and 7350 N.	UT 6
Drain, near 8000 W. and 7350 N.	UT 7
Minnie Creek	UT 8
Mill Pond (Spring Creek)	UT 9
Drain, 1.25 mi S. of 6500 W. and 7750 N.	UT 10
American Fork WWTP	UT 11
Drain, on 6150 W. and 1.1 mi. S. of 7750 N.	UT 12
American Fork River (Apr.-Jul.)	UT 13-1
American Fork River (Oct.-Mar., Aug.-Sep.)	UT 13-2
Drain, 0.1 mi. W. of 6400 N. and 5750 W.	UT 14
Drain, 0.1 mi. E. of 6400 N. and 5750 W.	UT 15
Drain, near 6400 N. and 5750 W.	UT 16
Drain, near 6400 N. and 4850 W.	UT 17
Geneva Cannery Drain, 4250 W. and 5600 N.	UT 18
Drain 0.15 mi. N. of Geneva Channel on U-114	UT 19
Geneva Steel effluent	UT 20
Drain, .2 mi. S. of Geneva Channel on W. Geneva Rd.	UT 21
Drain, .5 mi. S. of Geneva Channel on W. Geneva Rd.	UT 22
Drain, .9 mi. S. of Geneva Channel on W. Geneva Rd.	UT 23
Drain, 1.3 mi. S. of Geneva Channel on W. Geneva Rd.	UT 24
Drain, 4000 N. and W. Geneva Rd.	UT 25
Orem City WWTP	UT 26
Powell Slough	UT 27
Drain, on N. Boat Harbor Dr.	UT 28
Provo River at USGS Gaging Station	UT 29
Little Dry Creek	UT 31
Drain, near 1150 S. and 1600 W.	UT 32
Flowing well near 1150 S. and 1600 W.	UT 33
Big Dry Creek	UT 34
11th West Ditch, near 1560 S. and 1100 W.	UT 35
5th West Ditch, near 1560 S. and 500 W.	UT 36
University Ditch, near 1420 S. and University Ave.	UT 37
Mill Race	UT 38
Provo WWTP	UT 39
Drain, 0.4 mi SE of Provo WWTP	UT 40
Rat Farm Drain, 0.5 mi SE of Provo WWTP	UT 41
Steel Mill Drain, near Kuhni plant	UT 42
Spring Creek	UT 43
Hobble Creek	UT 44
Packard Drain	UT 45
Drain, .35 mi W. of I-15 on 3900 S.	UT 46
Dry Creek, 0.85 mi W. of I-15 on 4000 S.	UT 47
Spanish Fork River, near Lakeshore, USGS Gaging Station	UT 48
Drain, 0.8 mi. N. of 5200 S. and 3200 W.	UT 49
Drain, 5200 S. and 4000 W.	UT 50
Benjamin Slough	UT 51
White Lake overflow to Goshen Bay	UT 52
Jordan River and canals outflow from lake	UT 53
Lehi WWTP	UT 70
Timpanogos WWTP	UT 71
Pleasant Grove WWTP	UT 72
Springville WWTP	UT 73
Spanish Fork WWTP	UT 74
Salem WWTP	UT 75
Payson WWTP	UT 76

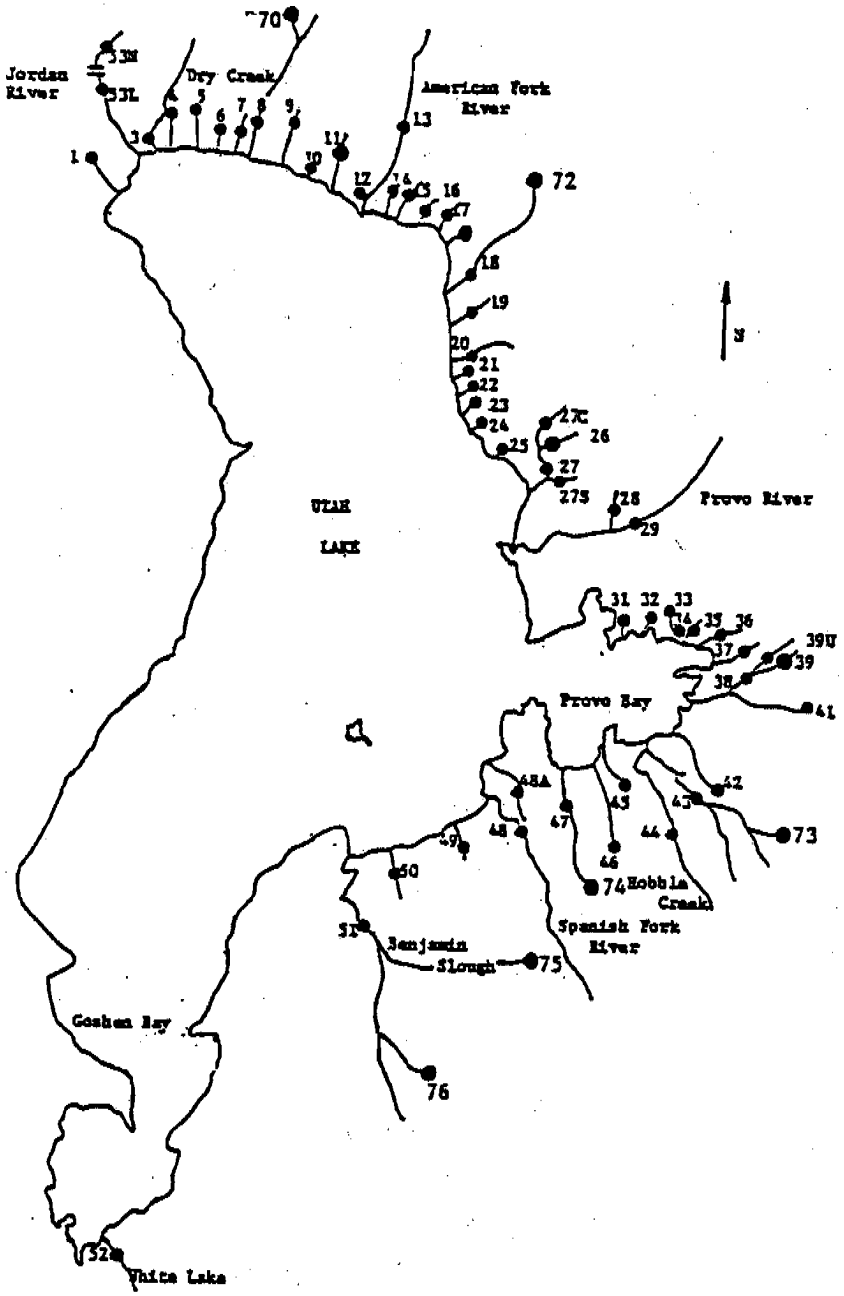

Figure 1 - Sampling Sites and Numbers for Utah Lake Surface Tributaries

As data were collected to update the indices it was found that the Elberta Station had been closed since 1991. The precipitation measured at this station had been used to determine the Average Valley Precipitation Index. For this reason, the Average Valley Precipitation Index was changed to estimate the flows after 1991. Instead of using the precipitation at the Elberta Station to update the index, the precipitation at Santaquin was used. The precipitation at the Santaquin Station is slightly greater, on average, than the precipitation at the Elberta Station. However, after reviewing the different correlations and indices, it was decided that the change to the overall water budget would not be significant.

The readings from the Lehi Groundwater Well, which were the basis for the Groundwater Index, were much lower during the 1990's than in previous years. Apparently, additional well drilling and pumping in the Lehi area had lowered the water table significantly and so well readings from recent years could not be used for correlations of the Lehi Groundwater Well Index. For this reason the Lehi Groundwater Index was not used for updating surface inflows after 1991.

Previously, the flow in the Spanish Fork River at Lakeshore was used as an index for one of the correlations. The gaging station at Lakeshore was discontinued recently as well. For this reason, the flow in the Spanish Fork River was not used as an index for estimating flows after 1991.

These changes were made and the following indices were used in the correlation equations to estimate surface inflows after 1991:

- Lehi Precipitation Index
- Provo Precipitation Index

- Average Valley Precipitation Index
  (Average of Lehi, Provo and Santaquin Stations)
- Santaquin Precipitation Index
- American Fork River above power plant Apr-Jul Runoff

The first four indices listed are based on monthly precipitation data. The Lehi, Provo and Santaquin Precipitation Indices were calculated as the sum of monthly precipitation totals at each station during the given water year. A maximum monthly precipitation total of two inches was used to calculate the indices. Any monthly total in excess of two inches was reduced to two inches before summing the totals to find the index. The Average Valley Index was calculated as the average of the Lehi, Provo and Santaquin Indices.

When the model was last updated, it was noted that the Provo Weather Station had changed locations three times since 1950. A double mass analysis was done to find correction factors which account for the effects of changing the location of the station. The factor determined for the period of 1977 to 1990 was 0.722 (Van Blankenstein, 1992, p8). Each monthly precipitation total recorded at the station during this period was reduced by multiplying by this factor to account for the moving of the station to its present location at B.Y.U. The monthly precipitation totals recorded at the Provo station from 1991-1999 were also multiplied by this correction factor to get a corrected total for each month. These corrected values were then summed, as discussed before, to find the Provo Precipitation Index.

The total flow in the American Fork River at the gaging station above the power plant in American Fork Canyon from April through July was used as the final index. These indices were each updated as data became available and then were ready to be used to estimate surface inflows using the correlation equations. (See Appendix A)

Analysis of Surface Tributary Inflows

With the indices calculated, the next step in determining surface tributary inflows was to update equations correlating measured flows recorded for each tributary to one of the indices. When the model was updated last in 2000, a linear regression analysis was done to determine which index correlated most closely with the measured flows for each tributary. An equation was determined for the best fit line. The variables in each equation were the yearly discharge of the tributary into Utah Lake and the yearly value for the index used in that correlation. The indices were then used in each equation to determine runoff values for each tributary through 1999.

Because these correlations were carefully determined previously, it was our intention to use the same correlation equations to update surface inflows. However, because we were not able to update the Lehi Groundwater Index and because we changed the Average Valley Precipitation Index, we had to do the regression analyses again for the runoffs which would have been estimated based on these indices. The new indices were used to develop new correlations, and in many cases the new correlations seem to be better. These new correlation equations and those which were not changed were used with the updated indices to update surface inflows through 1999. These changes and the correlations for each surface tributary are discussed below.

<u>UT 1 - Drain</u>. Flows were measured from 1954-1959 and 1964-1965 by the Bureau of Reclamation. Flows were also measured by researchers from BYU in 1971, 1978, and 1979. This drain flows into Utah Lake southwest of Lehi. The correlation for this drain, based on the Lehi Precipitation Index, was not changed. (Van Blankenstein, 1992, p14, and Appendix B)

UT 3 - Dry Creek (Lehi). Dry Creek is a stream that runs into Utah Lake southwest of Lehi. As the name of the creek indicates, the flow is usually diverted for irrigation before it reaches the lake. During spring snow - melt runoff , however, some of the flow does reach the lake. The flow in this stream was again correlated with the April - July flow in the American Fork River. (Van Blankenstein, 1992, p15, and Appendix B)

UT 4 - Drain. This drain is also located southwest of Lehi. The correlation for this drain, based on Lehi Precipitation Index, was not changed. (Van Blankenstein, 1992, p15, and Appendix B)

UT 5 - Drain. This drain also flows into the lake southwest of Lehi. The correlation, based on the Lehi Precipitation Index, was not changed. (Van Blankenstein, 1992, p15, and Appendix B)

UT 6 - Drain. The flow in this drain enters the lake south of Lehi. The measured flows in this drain are more uniform, ranging from 1000 to 1500 acre-ft per year. The correlation for this drain, based on the Lehi Precipitation Index, was not changed. (Van Blankenstein, 1992, p15, and Appendix B)

UT 7 - Drain. This drain is also located south of Lehi. The correlation for this drain, based on the Lehi Precipitation Index from the previous year, was not changed. (Van Blankenstein, 1992, p16, and Appendix B)

UT 8 - Minnie Creek. This stream drains the area around the old Lehi Sugar Factory and west of

the Lehi Mill Pond. The Lehi WWTP discharged into this creek from 1956, until August 1979, when the sewage was diverted to the Timpanogos WWTP. The effluent from the treatment plant was not included in the reported flow. The correlation for this flow, based on the Lehi Precipitation Index, was not changed. (Van Blankenstein, 1992, p16, and Appendix B)

UT 9 - Mill Pond (Spring Creek). The outflow from Mill Pond, also known as Spring Creek, enters Utah Lake south of Lehi. It drains a large area between Lehi and American Fork with measured flows varying between 5,000 and 15,000 acre-ft per year. The flow was correlated with the previous year's Lehi Groundwater Well Index through the 1991 water year. Because this index could not be used for more recent years, flows after the 1991 water year were correlated with the previous year's Provo Precipitation Index. (See Appendix B, Figure B:9)

UT 10 - Drain. This flow drains the area around the old American Fork WWTP. The flow was measured during four years when the effluents from this treatment plant were discharged into this drain. However, the effluent was not included when the flow from this tributary was reported. The correlation, based on the Lehi Precipitation Index, was not changed. (Van Blankenstein, 1992, p17, and Appendix B)

UT 11 - American Fork Wastewater Treatment Plant. This plant discharged effluent from 1953 until 1979 when the sewage was diverted to the Timpanogas WWTP. The measured flow data were taken from the Utah Board of Health records and from American Fork City records. Data were missing for some years, but flow was estimated based on population increase and

additional sewer connections. (See Appendix C, Table C:11)

UT 12 - Drain. The flow in this drain, located south of American Fork City, was correlated with the Lehi Groundwater Well Index through the water year 1991. However, because the groundwater index could not be used to update surface inflows, the flow after water year 1991 was correlated with the Average Valley Precipitation Index from the previous year. (See Appendix B, Figure B:12)

UT 13 - American Fork River. The American Fork River flows into Utah lake near the American Fork boat harbor. A large part of the flow in this river is diverted upstream, before it reaches the lake. Larger flows enter the lake during the runoff season. In order to best estimate the flow in this channel the flow is divided into two parts: UT 13-1 represents the flow during the April-July high runoff season, and UT 13-2 represents the flow from October-March and August -September. The April-July runoff was correlated with the April- July flow in the American Fork River in the canyon above the power plant. A linear correlation would have produced zero or negative flows for years of less than average runoff. Consequently an exponential correlation was used. The flow during the remainder of the water year was correlated with the Lehi Precipitation Index of the previous year. Neither of these correlations were changed for this project. (Van Blankenstein, 1992, p18, and Appendix B)

UT 14 - Drain. This drain enters Utah Lake south of American Fork. The flow in the drain had previously been correlated with the Average Valley Precipitation Index. Because that index was

changed, the correlation changed. Flows after 1991 were correlated with the updated Average Valley Precipitation Index. (See Appendix B, Figure B:14)

UT 15 - Drain. This drain enters Utah Lake southeast of American Fork. The correlation, based on the Lehi Precipitation Index for the previous year, was not changed. (Van Blankenstein, 1992, p19, and Appendix B)

UT 16 - Drain. This drain is located southeast of American Fork as well. Before 1992 the flow was correlated with the Average Valley Precipitation Index from the previous year. Because that index was changed, flows from 1992 through 1999 were correlated with the Lehi Precipitation Index from the previous year. (See Appendix B, Figure B:16)

UT 17 - Olefson's Slough. This drain is also located southeast of American Fork. The correlation, based on the Lehi Precipitation Index, was not changed. (Van Blankenstein, 1992, p19, and Appendix B)

UT 18 - Geneva Cannery Drain. This channel drains a large area south and east of Pleasant Grove. The flows measured in this drain ranged from 8000 to 22,000 acre-feet. This drain also carried effluent from the Pleasant Grove WWTP from 1956, until 1979, when sewage was diverted to the Timpanogos wastewater facility. The effluent was deducted from flows measured during this period. The correlation, based on the previous year's Provo precipitation index, was not changed. (Van Blankenstein, 1992, p19, and Appendix B)

UT 19 - Drain. This is a very small drain located north of the Geneva Steel plant. Flow in this drain, which is typically less than 5 acre-feet per year, was previously correlated with the previous year groundwater index. Because this index could not be updated, flows after 1991 were correlated with the Provo Precipitation Index. (See Appendix B, Figure B:19)

UT 20 - Geneva Steel Effluent. Flow in this tributary accounts for discharge from the Geneva Steel plant. Since 1947, flows have been reported by the Geneva Works office and we have obtained those records. (See Appendix C, Table C:20)

UT 21 - Drain. This drain is located just south of the Geneva Steel plant. It is one of many very small drains in that area. The correlation, based on the Provo Precipitation Index was not changed. (Van Blankenstein, 1992, p21, and Appendix B)

UT 22 - Drain. This drain is also located just south of the Geneva Steel plant. Flows are very small in this drain. The correlation was based on the previous years groundwater index. For estimating flows after 1991, the Provo Precipitation Index was used. (See Appendix B, Figure B:22)

UT 23 - Drain. This drain is located near the previous two drains, just south of the Geneva Steel plant. Flows were estimated to be fairly constant, as before, at 80 acre-ft per year. (Van Blankenstein, 1992, p21, and Appendix B)

UT 24 - Drain. This is another of several small drains just south of Geneva Steel. Flows, which have been very small, were correlated with the groundwater index up through 1991. For estimating flows after 1991, the Provo Precipitation Index was used. (See Appendix B, Figure B:24)

UT 25 - Drain. This drain is also located south of Geneva Steel. Measured flows have ranged from 400 to 1000 acre-ft per year. These flows were correlated with the groundwater index through 1991. For estimating flows after 1991, the previous year's Provo Precipitation Index was used. (See Appendix B, Figure B:25)

UT 26 - Orem Wastewater Treatment Plant. The Orem WWTP was finished in 1958. Sewage flows were recorded beginning in 1956. Flows before that were estimated based on lengths of sewage pipe, and population served by the system. Records of wastewater discharge since 1958 were obtained from Orem City files. (See Appendix C, Table C:26)

UT 27 - Powell Slough. The drainage into Utah Lake through the Powell Slough area is not well defined and is now very difficult to measure. The effluent from the Orem WWTP and the drainage from the treatment plant site both run into Powell Slough. Three other major drains and several smaller drains also empty into Powell Slough. Because Powell Slough is not defined into a single channel, it is difficult to define a single point where it empties into Utah Lake. Measured flows range from 13,000 to 17,000 acre-ft per year. The flows were previously correlated with the Average Valley Precipitation Index. Because that index was changed, measured flows were

correlated with the new Average Valley Precipitation Index, which was updated to account for the closing of the Elberta Station as discussed before. (See Appendix B, Figure B:27)

UT 28 - Drain. This drain is located north of the Provo Boat Harbor. Measured flows have ranged from 400 to 1200 acre-ft per year. The measured flows are correlated with the previous year's Lehi Precipitation Index. (Van Blankenstein, 1992, p22, and Appendix B)

UT 29 - Provo River. A gaging station on the river, located on the west side of Provo, measures flow before it reaches Utah Lake. Flows have been recorded continuously by the USGS since 1937. We have those records. (Van Blankenstein, 1992, p23, and Appendix B).

UT 31 - Little Dry Creek. This tributary is located southwest of Provo. Flows were measured from 1954-1959 and 1964-1965 by the Bureau of Reclamation. Flows were also measured by researchers from BYU in 1971, 1978, and 1979. These flows range from 600 to 3200 acre-ft per year. These measured flows were correlated with the previous year's Average Valley Precipitation Index through 1991. However, because that correlation was changed, flows after 1991 were correlated with the updated Average Valley Precipitation Index from the previous year. (See Appendix B, Figure B:31)

UT 32 - Drain. This drain is located southwest of Provo. The correlation for this drain, which was based on the Provo Precipitation Index, was not changed. The original correlation was very flat and so a new one was developed which gives a better representation of flow from this drain.

(Van Blankenstein, 1992, p24, and Appendix B)

UT 33 - Flowing Well. The well is located southwest of Provo. Flows ranging from 75 - 400 acre-ft per year have been measure from this well. The correlation, which was based on the previous year's Lehi Precipitation Index, was not changed. (Van Blankenstein, 1992, p25, and Appendix B)

UT 34 - Big Dry Creek. Big Dry Creek is located southwest of Provo as well. Measured flows were recorded by the Bureau of Reclamation for the water years 1954-1964 and 1964-1965. Flows were also measured by BYU and the Eyring Research Institute for 1971, 1972, 1978 and 1979. These measured flows were previously correlated with the goundwater index. Because this index could not be updated, flows after 1991 were determined using a correlation based on the Santaquin Precipitation Index. (See Appendix B, Figure B:34)

UT 35 - 11th West Ditch. This drain is located south of Provo near 1100 West Street. Measured flows varied between zero and 2200 acre-feet annually. Flows were correlated with the groundwater index through 1991. Because the index could not be updated, flows after 1991 were estimated using a correlation based on the Average Valley Precipitation Index.(See Appendix B, Figure B:35)

UT 36 - 5th West Ditch. This ditch is used as a drainage channel and is located at the south end of 500 West Street in Provo. Measured flows were correlated with the previous year's average

valley precipitation index through 1991. Because that index was changed, the correlation was updated. Flows after 1991 were determined using a correlation based on the previous year's Lehi precipitation index. (See Appendix B, Figure B:36)

UT 37 - University Ditch. This ditch is also used for drainage and is located at the south end of University Ave. in Provo. Measured flows, which vary from 700-1500 acre-ft annually, were also correlated with the previous year's Average Valley Precipitation Index through 1991. Flows after 1991 were determined using a correlation based on the previous year's Lehi Precipitation Index. (See Appendix B, Figure B:37)

UT 38 - Mill Race. Mill Race drains the area adjacent to the Provo Wastewater Treatment Plant. Measured flows have ranged from 4000-17,000 acre-ft per year. The correlation for this tributary, based on the previous year's Provo Precipitation Index, has not been changed. (Van Blankenstein, 1992, p26, and Appendix B)

UT 39 - Provo Wastewater Treatment Plant. The Provo Wastewater Treatment Plant was constructed in 1956. However, components of the Provo sewer system have been in place since before 1950. Sewer flows were estimated according to trends in development for the seven years when data were missing. Wastewater discharge flows since 1956 were obtained from Provo City files. (See Appendix C, Table C:39)

UT 40 - Drain. This drain is located south of the Provo WWTP. It was rerouted in 1977, and the

flows after 1977 are included with the flow in UT 41. Measured flows ranged from 900-3000 acre-ft annually. The correlation, based on the Provo Precipitation Index, was not changed. (Van Blankenstein, 1992, p27, and Appendix B)

UT 41 - Rat Farm Drain. This large drain is located southeast of the Provo Wastewater Treatment Plant. Measured flows have ranged from 12,000 to 22,000 acre-ft per year. The Bureau of Reclamation provided flow measurements for the water years 1938-1940, 1955-1961, and 1964-1965. The correlation, based on the Provo Precipitation Index, was not changed. (Van Blankenstein, 1992, p27, and Appendix B)

UT 42 - Steel Mill Drain. This tributary drains part of the old Ironton property and the Pacific Cast Iron Pipe property. Flows were recorded by the Bureau of Reclamation for the water years 1938-1940, 1954-1961, and 1964-1965. Flow was also recorded by BYU and the Eyring Research Institute for 1971, 1972, 1978 and 1979. The correlation, based on the Provo Precipitation Index from the previous year, was not changed. (Van Blankenstein, 1992, p27, and Appendix B)

UT 43 - Spring Creek. This tributary is located on the west side of Springville and carries effluent from the Springville Wastewater Treatment Plant to Utah Lake. The effluent was subtracted from the flow before the correlation was developed. Flows in this stream were measured by the Bureau of Reclamation for the water years 1938-1940, 1954-1961, and 1964-1965. Flow was recorded by BYU and the Eyring Research Institute for the water years 1971,

1972, 1978 and 1979. Flows ranged form 4500 to 10,000 acre-ft per year. The correlation developed previously was based on two indices, the groundwater index and the Provo Precipitation Index. Because the groundwater index could not be updated, flows after 1991 were estimated using a correlation based only on the Provo Precipitation Index. (See Appendix B, Figure B:43)

UT 44 - Hobble Creek. Hobble Creek originates in Hobble Creek Canyon, in the mountains above Springville. Flow is heavily influenced by spring snow - melt runoff and varies greatly from year to year. A USGS gaging station once measured flow continuously in Hobble Creek Canyon. Flows measured closer to the lake have ranged from 2600 to 50,000 acre-ft per year. Previously, flows were correlated with the water year runoff in the Spanish Fork River at Lakeshore. However, because the gaging station at Lakeshore was closed, this index could not be used to update flows in Hobble Creek. An updated correlation, based on the Santaquin Precipitation Index was used to determine flows after 1991. (See Appendix B, Figure B:44)

UT 45 - Packard Drain. This is a large drain located west of Springville. Measured flows were supplied by the Bureau of Reclamation, and by BYU and the Eyring Research Institute. The correlation for this drain, based on the Santaquin Precipitation Index, was not changed. (Van Blankenstein, 1992, p29, and Appendix B)

UT 46 - Drain. This drain is also located west of Springville. Measured flow is fairly constant ranging form 2200 to 2300 acre-ft per year. The correlation for this drain, also based on the

Santaquin Precipitation Index, was not changed. (Van Blankenstein, 1992, p29, and Appendix B)

UT 47 - Dry Creek. This stream carries effluent to Utah Lake from the Spanish Fork WWTP. Sewage flows were deducted before developing any correlation. Flows were recorded during the water years 1930, 1961, 1965, and 1966, by the Bureau of Reclamation. Other measured flows were recorded by BYU and the Eyring Research Institute. The correlation for this drain was also based on two different indices, the groundwater index and the Santaquin Precipitation Index. Because the groundwater index could not be used to update the flow more recently, an updated correlation was developed based on the previous year's Provo Precipitation Index. (See Appendix B, Figure B:47)

UT 48 - Spanish Fork River at Lakeshore. The Spanish Fork River is a major tributary to Utah Lake and originates in Spanish Fork Canyon, in the Wasatch Range. A USGS Gaging Station recorded flow data at Lakeshore where the river runs into Utah Lake beginning in 1904. Between 1925 and 1938 the measurement was discontinued. From 1939 through 1988 flow was measured continually, but in 1988 the station was again discontinued.

When the model was updated through 1991 and again through 2000, a method was developed to find the flow at Lakeshore for each month after the station was discontinued in 1988. For the months of January - May and October - December, when irrigation diversions have little effect on the flow, a correlation equation was developed relating the flow at Lakeshore to the flow at Castilla for each month of the year. The flows in Castilla were continually measured and could be used in these equations to estimate missing flow data.

For the months of June - September, when irrigation diversions draw most of the flow away from the river, a more complex relationship was developed to estimate the missing flows. The historical ratio of the flow in the Provo River below Deer Creek Dam to the flow in the Provo River at Provo, or ratio A, was determined for each month of record since 1950. The historical ratio of the flow in the Spanish Fork River at Castilla to the flow in the Spanish Fork River at Lakeshore, or ratio B, was also determined for each month. Linear equations were then developed to correlate the historical ratio of flows in the Provo River (ratio A) with the historical ratio of flows in the Spanish Fork River (ratio B) for each month in the form B=f(A). These correlations were used to determine the ratio of flows in the Spanish Fork River, or B, during each of the summer months after the station was discontinued. Continuously measured monthly flows at Castilla were then divided by B to find the flow at Lakeshore.

Previously this method was used to determine only three years of data. The determined flows were mostly small, and so this method was carefully reviewed while updating the flows through 1999. Another method was developed for comparison, which returned larger flows. However, after talking to several people who are familiar with the water flows in the lower Spanish Fork River and considering the amount of flow diverted for irrigation, we decided that the method discussed above would give better results. This method was then used to update flows at Lakeshore for each month from 1991 through 1999. (See Appendix C, Table C:48)

UT 49 - Drain. This tributary drains a small area west of the Spanish Fork River. Measured flows have ranged from 300 to 650 acre-ft annually. The flows were previously correlated with the groundwater index. However, because this index could not be updated, flows after 1991 were

determined using a correlation based on the previous year's Average Valley Precipitation Index. (See Appendix B, Figure B:49)

UT 50 - Drain. This drain is slightly larger than UT 49 and is located between the Spanish Fork River and Benjamin Slough. The flows measured in this drain were correlated with the previous year's Average Valley Precipitation Index. This index was updated and changed, and flows after 1991 were determined using the Average Valley Precipitation Index for the same year. (See Appendix B, Figure B:50)

UT 51 - Benjamin Slough. - Benjamin Slough is a large tributary which drains the eastern slope of West Mountain and the areas of Payson, Salem and Benjamin. It also carries effluent from the Salem and Payson wastewater facilities to Utah Lake. Flows for this tributary range from 18,000 to 41,000 acre-ft per year. Wastewater discharges were subtracted from measured flows before establishing a correlation. The correlation, based on the Santaquin Precipitation Index, was not changed. (Van Blankenstein, 1992, p31, and Appendix B)

UT 52 - White Lake. - The inflow from the flat area at the southeast end of the lake is called the White Lake overflow to Goshen Bay. Water accumulating at the south end of the lake over the years has mostly evaporated, leaving behind soil that is high in soluble salts. Measured flows were correlated with the groundwater index. However, because this index was not updated, flows after 1991 were correlated with the previous year's Santaquin Precipitation Index. (See Appendix B, Figure B:52)

UT 53 - Outflows - This flow is the surface outflow from the lake through the Jordan River, Utah and Salt Lake Canal, and East Jordan Canal. A USGS gaging station in the Jordan River Narrows continuously records flow. In addition to this combined flow, water bypasses this station through the Utah Lake Distributing Canal. Monthly flows are recorded and are included in the Jordan River Commissioners' annual reports. These flows are used to calibrate the outflows produced by the model. (See Appendix C, Table C:53)

UT 70 - Lehi Wastewater Treatment Plant. The Lehi Wastewater Treatment facility discharged into Utah Lake through Minnie Creek continuously from 1956 to 1979. Sewage was diverted to the newly completed Timpanogos Wastewater Treatment Plant in 1979. Flow was recorded continuously while the treatment plant was in service. (See Appendix C, Table C:70)

UT 71 - Timpanogos Wastewater Treatment Plant. - The Timpanogos Wastewater Treatment Plant was put into service in August of 1979 and includes sewage previously treated at Lehi, American Fork, and Pleasant Grove. Flows have been continuously recorded at the plant since it opened. (See Appendix C, Table C:71)

UT 72 - Pleasant Grove Wastewater Treatment Plant. - Sewers were first constructed in Pleasant Grove in 1956, and wastewater from the treatment plant was discharged into Utah Lake through the Geneva Cannery Drain until 1979. After 1979, sewage was diverted to the Timpanogos Wastewater Treatment Plant. Flows were recorded continuously until that time. (See Appendix C, Table C:72)

UT 73 - Springville Wastewater Treatment Plant. This plant was completed in 1956 and started discharging wastewater into Utah Lake through Spring Creek. Flows from sewer lines constructed before 1956 were estimated with city personnel based on the population served by the system. (See Appendix C, Table C:73)

UT 74 - Spanish Fork Wastewater Treatment Plant. This plant was built around 1960. Water is discharged into the lake through Dry Creek. Flow records have been kept at the plant since its completion. Sewer lines were first constructed in 1936. Discharge from the system previous to 1960 was estimated based on the population served by the system after consultation with city personnel. (See Appendix C, Table C:74)

UT 75 - Salem Wastewater Treatment Plant. A sewer system was finished in Salem in 1964. The treatment plant discharges effluent into Beer Creek, which flows into Benjamin Slough and then into Utah Lake. Recorded flows from the treatment plant were used when available. Other flows were estimated based on the population served by the system. (See Appendix C, Table C:75)

UT 76 - Payson Wastewater Treatment Plant. Sewers and a settling tank were first put in place in Payson in 1941. The treatment plant was completed in 1968. Effluent is discharged into Benjamin Slough through local drainage channels. Measured flows were obtained when available. Other flows were estimated based on the population served by the system. (See Appendix C, Table C:76)

Precipitation Inflow

The next step in the project was to update the inflow to Utah Lake due to precipitation over the lake. Because the lake is large and precipitation is variable over the surface of the lake, the Thiessen Polygon method was used to determine precipitation inflow. This method involves dividing the surface area of the lake into smaller areas, or polygons, according to the location of selected precipitation stations.

The Thiessen Polygon method assumes that precipitation varies over the surface of the lake. Precipitation gage readings from around the lake are selected. The location of each gage, or station, is determined on a map and a line segment is drawn from each station to all adjacent stations. The area of influence of each gage is determined by drawing perpendicular bisectors through each connecting line and then forming polygons with these bisectors as they intersect one another. The lake surface area bounded by each polygon is determined as a percentage of the total surface area of the lake. Each of these percentages is multiplied by the precipitation gage reading closest to that area to get the weighted precipitation for each gage. The sum of the weighted precipitation values is equal to the average depth of precipitation over the lake. This can be multiplied by the total surface area of the lake to find the volume of water coming into the lake through precipitation.

The LKSIM2000 model divides the lake into three sections. The Thiessen Polygon method was used to analyze precipitation inflow over each section separately. Goshen Bay is the southern section of the lake on the west side of West Mountain. Provo Bay is the shallow section of the lake lying between the south side of Provo and Lakeshore. The Main Lake includes the rest

of the lake. Each of these sections was drawn on a 1:2000 scale contour map of Utah Lake. Gages were then selected around each section so that the Thiessen Polygon method could be used. Polygons were drawn accordingly and areas were measured with a planimeter for lake stages from 4484 feet to 4490 feet. Percentages were then calculated based on planimeter units because of the difficulty in calibrating the planimeter to find the area in sq. inches or sq. feet.

The lake level at the end of each month, and the surface area of each section of the lake corresponding to that stage were recorded from the Utah Lake stage records. The measured precipitation for each month at each station was then multiplied by the percentage corresponding to that station and lake stage to find the weighted precipitation (see Appendix D).

In the analysis of precipitation inflow for the years previous to 1992, precipitation gage readings at the Elberta, Payson and Orem Treatment Plant stations were used to determined the precipitation over Goshen Bay (Van Blankenstein, 1992, p36). The Provo and Orem Treatment Plant stations were used for Provo Bay, and the Lehi, Orem Treatment Plant, and Payson stations were used for the main lake.

Because the Elberta Station was closed in 1992, that station could not be used to find the precipitation over Goshen Bay during the succeeding years. The Santaquin Station was used as a replacement because it is the closest existing station to the Elberta Station. We were concerned about this however, because the Elberta Station was our only station representative of the west side of Utah Lake. The Santaquin Station has historically recorded higher precipitation than the Elberta Station. New areas were drawn on Goshen Bay according to the location change and the precipitation was calculated. We used the Santaquin Station to analyze and compare the results back to 1988 and found the difference in the resulting precipitation over Goshen Bay to be small.

The precipitation was not consistently greater using the Santaquin Station in place of the Elberta Station. The precipitation inflow is also a relatively small fraction of the total inflow in the water budget, so the change was not significant. Santaquin, Payson, and Orem Treatment Plant stations were then used to find the precipitation inflow over Goshen Bay since 1991 (see Figure 2 and Tables 2-7). The areas and percentages for the other sections of the lake were used as calculated for the previous report. (Van Blankenstein, 1992)

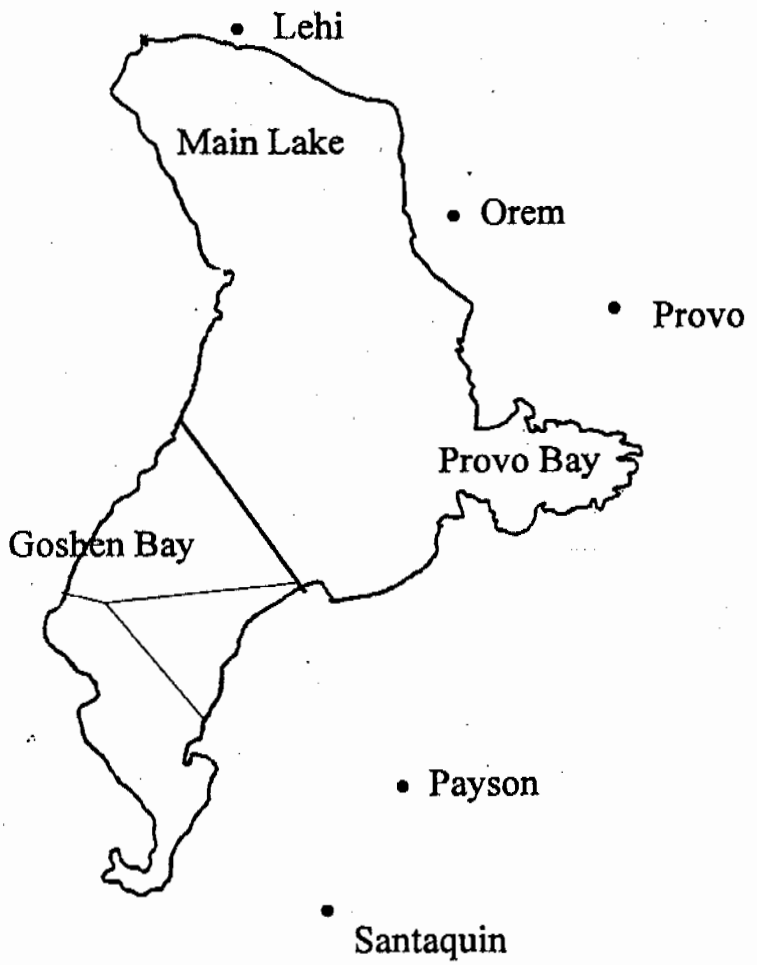

Figure 2 - Polygons for precipitation inflow calculation of Goshen Bay

Table 2 - Weighted Areas for Main Lake Polygons

Main Lake Area Percentages					
	Lake Elevation (ft)				
STATION	4492	4490	4488	4486	4484
Orem T.P.	71.4	72.7	73.8	73.8	74.3
Payson	7.4	6.0	4.9	4.7	4.3
Lehi	21.2	21.3	21.3	21.5	21.4
Total	100	100	100	100	100

Table 3 - Weighted Areas for Provo Bay Polygons

Provo Bay Area Percentages					
	Lake Elevation (ft)				
STATION	4492	4490	4488	4486	4484
Orem T.P.	3.1	3.8	4.5	3.6	0.3
Provo BYU	96.9	96.2	95.5	96.4	99.7
Total	100	100	100	100	100

Table 4 - Weighted Areas for Goshen Bay Polygons

Goshen Bay Area Percentages					
	Lake Elevation (ft)				
STATION	4492	4490	4488	4486	4484
Orem T.P.	39.1	40.5	43.8	46.3	49.6
Payson	14.6	15.0	16.6	16.9	18.1
Santaquin	46.3	44.5	39.6	36.8	32.3
Total	100	100	100	100	100

Table 5 - Main Lake Precipitation

Precipitation Inflows - Main Lake (Acre-ft)													
WATER YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1991	10740	8043	4975	6391	4374	5919	12200	14268	4528	1076	6377	13429	92319
1992	5807	7879	1780	1917	7313	2572	1250	5603	3084	3527	1599	4738	47069
1993	10533	6226	6814	9437	6634	11089	2517	12641	6031	3429	2816	5473	83641
1994	10229	1597	1116	2101	6158	4065	13385	4933	10	868	5226	4103	53791
1995	13105	4283	5130	6461	1233	6741	7044	22946	5678	4279	2491	2105	81494
1996	2008	2565	5871	12648	10170	7984	4517	5142	999	1631	140	7885	61560
1997	8050	9871	5577	12693	5482	926	7193	7644	4401	2847	3714	8180	76578
1998	6128	6521	5348	9836	13363	7960	6648	8114	14780	4955	2575	2544	88773
1999	5369	3864	4047	8709	5457	1854	22510	11354	7399	5748	2355	1035	79701

Table 6 - Provo Bay Precipitation

Precipitation Inflows - Provo Bay (Acre-ft)													
WATER YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1991	55	61	101	128	115	339	502	522	240	42	121	80	2306
1992	55	127	54	103	387	288	83	267	88	34	2	1	1491
1993	5	3	19	220	341	529	226	1139	715	452	377	307	4333
1994	842	249	482	390	956	584	1274	590	35	36	378	167	5984
1995	837	692	482	1075	404	1104	871	2668	1390	563	317	290	10693
1996	299	383	1339	1708	1477	1496	1102	997	312	292	34	799	10237
1997	1080	1231	1093	2374	966	317	1112	1263	522	313	437	1391	12099
1998	923	944	867	1709	1820	1169	1359	1176	2582	385	482	654	14071
1999	818	776	442	1439	770	341	2672	2175	983	445	608	89	11558

Table 7 - Goshen Bay Precipitation

Precipitation Inflows - Goshen Bay (Acre-ft)													
WATER YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1991	3065	2693	1871	2040	1122	1828	4219	4074	1100	169	1747	3725	27653
1992	2803	3803	959	797	2687	1763	276	2641	1231	1561	367	1141	20028
1993	3299	6521	2729	4829	3367	4464	1854	6346	3156	1148	1028	2214	40954
1994	3722	1248	1224	963	4170	1646	5685	2565	30	301	2725	1790	26070
1995	6648	3695	2177	3689	1644	3732	4756	11403	3423	1487	634	1576	44865
1996	565	1452	2710	6005	6540	5964	3342	3048	342	406	163	3225	33761
1997	4104	4183	3192	6971	3531	804	5122	4110	1748	2048	1787	3957	41556
1998	3463	3207	2281	5366	6410	5030	3691	3422	7169	2553	934	1340	44867
1999	3351	2797	2364	3803	2915	1068	9669	6405	3536	2801	1135	547	40391

Evaporation

As was mentioned before, Utah Lake is a large, shallow lake in a semi-arid setting. These conditions are favorable for large evaporations. Evaporation is a very large part of the water budget in Utah Lake. There is considerable interest in finding a way to reduce the loss of water through evaporation from the surface of Utah Lake. Because some of the other components in the water budget are hard to measure or estimate, like groundwater inflow, it is important to accurately determine evaporation in order to model the quality of the lake accurately.

Several different methods have been examined for estimating evaporation. A model was developed by F.I. Morton, a scientist with the National Hydrology Research Institute in Canada, which has been used to estimate the evaporation (Morton, 1986). This model is particularly useful for estimating evaporation of shallow lakes in semi-arid regions. A study of evaporation models in 1980 concluded that Morton's model would best simulate evaporation from Utah Lake.

Morton developed several different versions of this evaporation model. The model uses monthly values of air temperature, humidity (or dew point temperature), and percent possible sunshine (or solar radiation) to simulate evaporation. Different versions of this model have been developed to simulate different conditions. The CRAE (complimentary relationship areal evapotransporation) version permits areal evapotranspiration to be estimated from its effects on air temperature and humidity. The CRWE (complimentary relationship wet-surface evaporation) version provides estimates of wet-surface evaporation corresponding to a shallow lake with little change is seasonal subsurface heat storage. The CRLE (complimentary relationship lake

evaporation) version takes into account the seasonal change in heat storage caused by the change in energy consumed by evaporation. The model routes the solar and waterborne heat input (rather than lake-size wet surface evaporation) through a hypothetical heat reservoir (Marsh, 1995, p4).

Morton's model has also proven useful because the input variables needed in the model are readily available. A study completed in 1995 examined the use of variables from different sources in Morton's model (Marsh, 1995). Air temperature, percent sunshine and dew point temperature are continually measured at the Salt Lake City Airport. These variables were also measured at the Palmyra station near the south shore of Utah Lake, and at Santaquin. Using these data, a study was also done to find correction factors which would adjust the Salt Lake City recorded air temperature, percent sunshine and dew point temperature to more closely represent conditions at Utah Lake (Mingfeng Gu, 1993). The study concluded that using the Palmyra air and dew point temperatures with uncorrected percent sunshine data at the Salt Lake City Airport with the CRLE version of the model produced the best simulations of evaporation.

We used the CRLE version of Morton's model with corrected air and dew point temperatures and uncorrected percent sunshine from the Salt Lake City Airport, to simulate and update monthly evaporation values. The CRLE version was used because it takes into account the effects of heat storage on monthly evaporation. Heat storage is an important factor, particularly in deep lakes, but also in shallow lakes, like Utah Lake. The corrected air and dew point temperatures from Salt Lake City were used instead of the actual and dew point temperatures at Palmyra because they were more readily available. Data suggests that the correction factors listed in Table 1 of Mingfeng Gu's report adequately adjust Salt Lake City Airport data to represent conditions at Utah Lake (Mingfeng Gu, 1993, p60). This method

produced simulated monthly evaporation values which fit well into the water budget used as input for the LKSIM2000 model. Plots of simulated monthly evaporation and air and dew point temperature are given in Appendix E.

Calibration and Results

Having established surface flow, evaporation, precipitation and change in lake stage, the water budget was complete to the point that the LKSIM2000 model could be used. The model uses these input parameters, as well as water quality inputs to balance the salts going into and out of the lake. The process of calibrating the model involves adjusting some of the less measurable inputs, until the results reflect the water quality that has been measured. Then the water quality can be modeled into the future based on flows resulting from planned projects and growth.

Calibration was done by Dr. Lavere B. Merritt, developer of the LKSIM2000 model. In order to more easily calibrate the model, results from trial simulations are organized into files that can easily be transferred to a spreadsheet for plotting and analysis. Files include simulated concentrations of Ca, HCO_3, Cl, Mg, K, SO_4, Na, and TDS. The model simulates the quality in each of the three sections of the lake (Goshen Bay, Provo Bay, Main Lake) separately. The quality of water in the main lake is of primary interest, because surface water discharges from this section of the lake through the Jordan River.

A spreadsheet file was created with measured water quality values. Water quality data for Utah Lake and the Jordan River were obtained from the Utah State Division of Water Quality. Water quality data from the State were reviewed and analyzed to include only representative data points. Those data points included mostly measurements taken in the main section of the lake, or near the outlet in the Jordan River. Extreme data, such as those taken in the winter when mixing was low, were omitted. These measured concentrations were then plotted as points against time. The simulated monthly values from the model output were opened in spreadsheet format and

pasted into the spreadsheet file next to the measured values. Major ion concentrations and TDS concentrations were added to each respective plot of measured concentrations. Lake levels were also added to each plot.

Periodically, simulations were plotted and reviewed as Dr. Merritt refined the calibration. The goal was to match the simulated concentrations with the measured values, as seen on each plot. Some inputs were then modified slightly and a new simulation was run on the model. This process was repeated until it was felt that the simulation matched as closely as possible with the measured values. The overall arithmetic monthly average TDS concentration of the final simulation for the water years 1950-1999 is 900 mg/l. This result compares to an average TDS concentration of 1034 mg/l for the earlier update of the model from 1950 through 1991. The change represents an improvement in the calibration of the LKSIM2000 model. The plots of the major ion and TDS concentrations can be seen in Appendix F.

Concluding Remarks

The hydrologic database needed to model the salinity of Utah Lake was updated and the LKISM2000 model was successfully calibrated. This work resulted in an improved simulation of TDS concentrations in Utah Lake for the water years 1950-1999. It is hoped that this report will be used by those who will continue to use the LKSIM2000 model to study the water quality of Utah Lake. By using these tools, those who manage the water in the Utah Lake Drainage Basin will be able to reduce the concentrations of TDS in the lake and preserve the valuable resources it provides.

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APPENDIX A - Correlation Indices

Table A:1 - Lehi, Provo, Average Valley, and Santaquin Precipitation Indices.

PRECIPITATION INDICES (inches)				
WATER YEAR	LEHI	PROVO	AVERAGE VALLEY	SANTAQUIN
1950	7.8	11.8	11.7	15.4
1951	12.7	12.6	13.4	14.8
1952	12.6	15.7	15.5	18.1
1953	7.8	8.3	9.6	12.8
1954	6.6	10.3	11.1	16.4
1955	9.2	11.1	12.5	17.1
1956	6.4	7.0	8.9	13.2
1957	10.0	12.3	12.6	15.6
1958	8.5	11.5	12.1	16.2
1959	8.9	12.8	12.7	16.4
1960	6.7	8.5	9.2	12.5
1961	9.2	11.2	12.0	15.5
1962	12.3	14.7	14.8	17.5
1963	10.3	10.4	11.5	13.7
1964	13.3	12.0	13.7	15.7
1965	13.2	12.1	14.8	19.0
1966	8.5	8.5	10.5	14.4
1967	13.7	12.2	14.8	18.6
1968	12.9	15.1	15.5	18.4
1969	10.3	12.6	13.3	16.9
1970	10.1	16.6	14.8	17.8
1971	11.3	14.8	14.3	16.9
1972	7.7	9.5	9.8	12.2
1973	14.0	16.9	16.3	18.1
1974	5.4	8.2	8.3	11.3

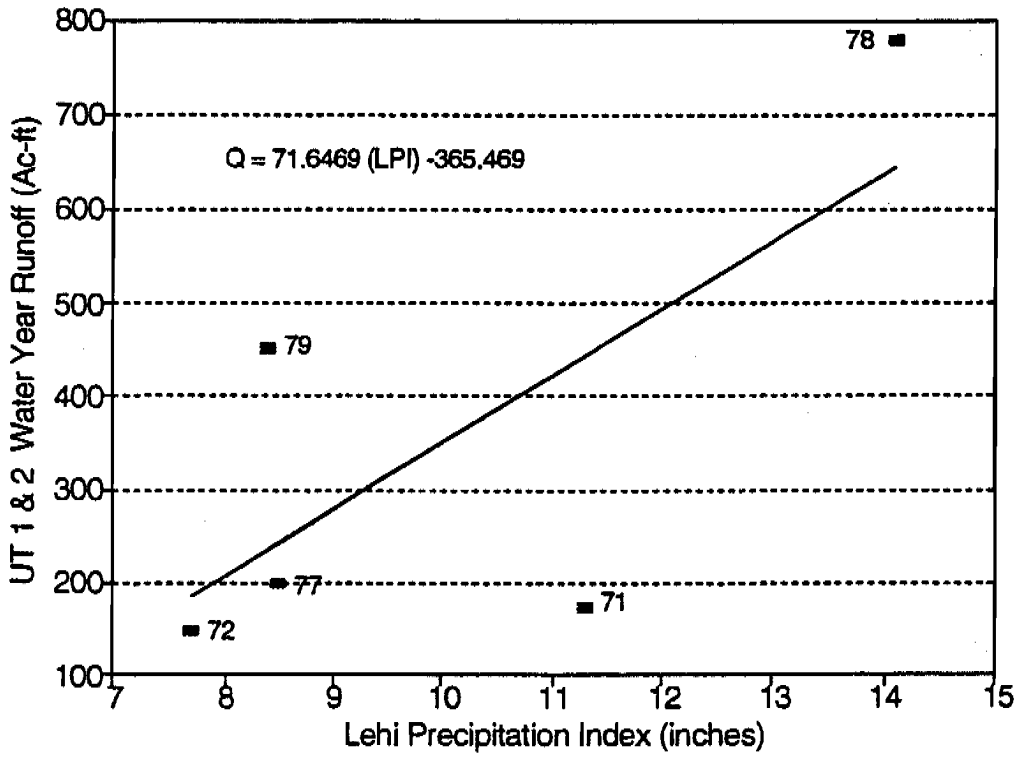
PRECIPITATION INDICES (inches)				
WATER YEAR	LEHI	PROVO	AVERAGE VALLEY	SANTAQUIN
1975	13.0	13.8	13.5	13.8
1976	10.2	11.6	11.6	13.0
1977	8.5	9.4	9.0	9.1
1978	14.1	13.6	13.3	12.1
1979	8.4	10.5	9.7	10.3
1980	10.7	12.5	12.8	15.1
1981	9.9	12.0	12.2	14.8
1982	12.6	14.4	13.9	14.8
1983	16.9	19.9	19.3	21.1
1984	15.3	18.0	17.1	18.1
1985	12.7	15.2	15.2	17.8
1986	13.6	19.0	16.3	16.4
1987	9.2	10.9	10.5	11.3
1988	10.1	9.3	11.4	14.9
1989	8.9	12.8	11.2	11.8
1990	7.6	10.7	10.8	14.2
1991	13.7	14.0	14.8	16.6
1992	10.7	11.5	11.4	11.9
1993	15.6	17.3	17.4	19.3
1994	11.1	10.6	11.8	13.8
1995	16.1	16.5	17.0	18.5
1996	9.4	13.2	12.0	13.4
1997	15.1	15.0	16.6	19.8
1998	17.1	16.0	17.2	18.6
1999	13.2	15.3	15.2	17.2

Table A:2 - Index-American Fork River Above Power Plant (Apr - Jul runoff)

American Fork River Above Power Plant (Apr-Jul Runoff)			
Water Year	Volume 1000 Ac-ft	Water Year	Volume 1000 Ac-ft
1950	37.7	1975	47.0
1951	35.1	1976	21.6
1952	51.0	1977	8.1
1953	27.9	1978	47.7
1954	19.5	1979	27.5
1955	23.8	1980	48.9
1956	28.7	1981	18.7
1957	29.1	1982	51.8
1958	38.4	1983	58.7
1959	16.6	1984	52.7
1960	21.5	1985	33.8
1961	7.5	1986	59.3
1962	34.1	1987	14.6
1963	22.0	1988	11.9
1964	29.3	1989	13.8
1965	36.6	1990	14.5
1966	24.2	1991	18.6
1967	39.6	1992	11.2
1968	33.0	1993	50.6
1969	56.3	1994	19.1
1970	24.3	1995	33.3
1971	29.0	1996	34.3
1972	26.5	1997	44.1
1973	37.5	1998	46.0
1974	26.3	1999	30.0

APPENDIX B - Updated Surface Tributary Correlations

UT 1 & 2 -- Drain 6900 N. and Saratoga Road



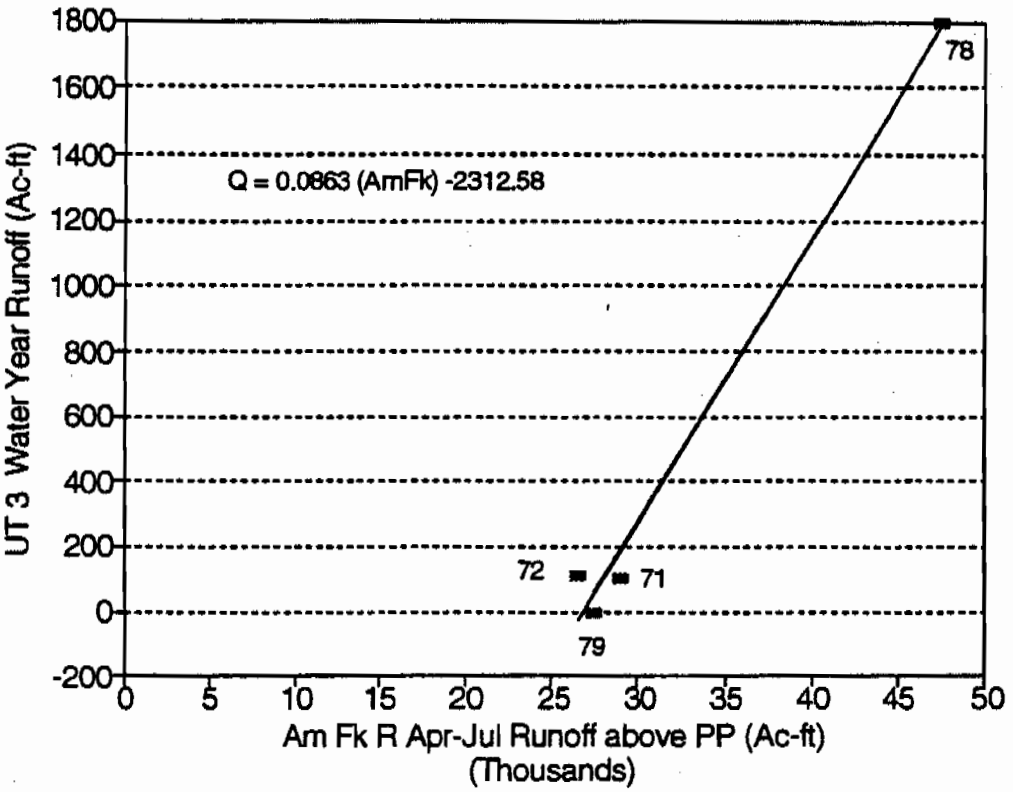
Year	Flow	LPI
1971	175	11.3
1972	150	7.7
1977	200	8.5
1978	778	14.1
1979	452	8.4

Regression Output:

Constant	-365.469
Std Err of Y Est	215.9448
R Squared	0.51206
No. of Observations	5
Degrees of Freedom	3
X Coefficient(s)	71.64685
Std Err of Coef.	40.37938

Figure B:1 -- Correlation for Drains UT 1 & 2

UT 3 -- Dry Creek (Lehi)



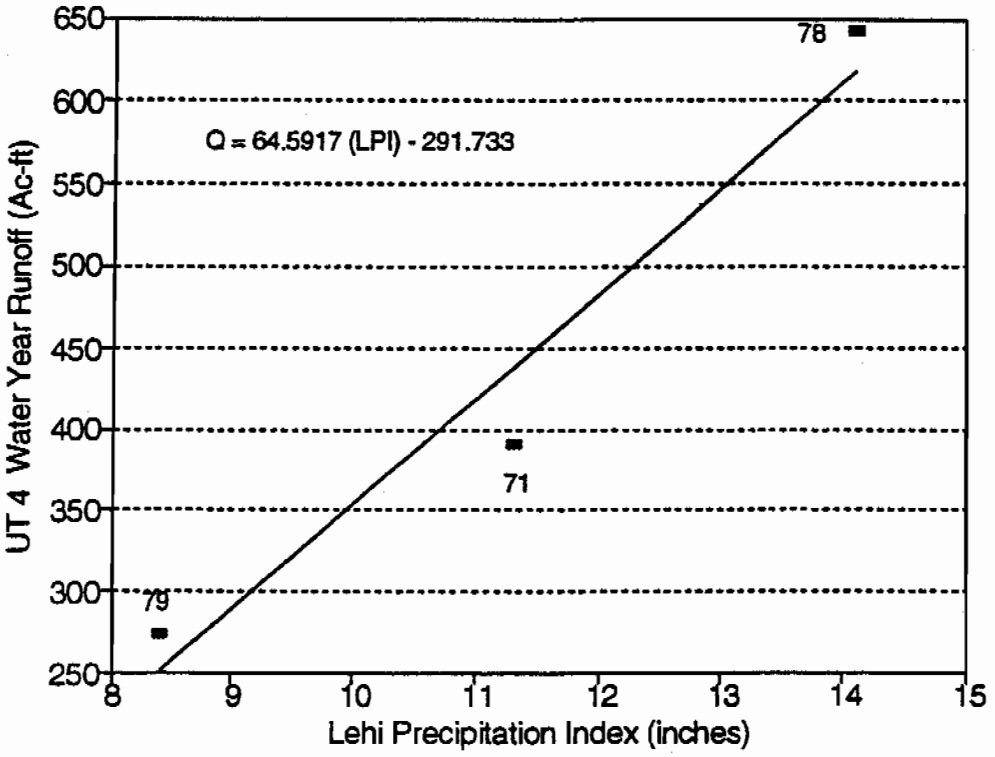
Year	Flow	AF Riv
1971	103	29000
1972	109	26500
1978	1800	47500
1979	0	27500

Regression Output:

Constant	-2312.58
Std Err of Y Est	121.6011
R Squared	0.986859
No. of Observations	4
Degrees of Freedom	2
X Coefficient(s)	0.086301
Std Err of Coef.	0.007042

Figure B:3 – Correlation for UT 3, Dry Creek (Lehi)

UT 4 -- Drain, 0.7 mi. E. of 9550 W. and 7350 N.



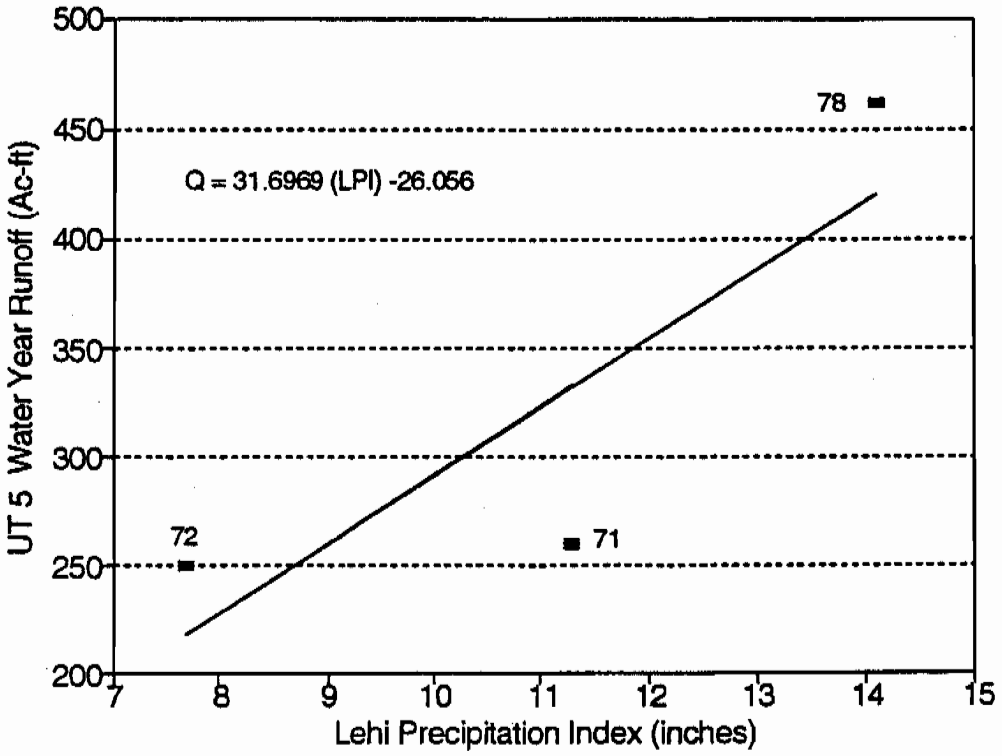
Year	Flow	LPI
1971	391	11.3
1978	643	14.1
1979	274	8.4

Regression Output:

Constant	-291.733
Std Err of Y Est	57.75343
R Squared	0.9531
No. of Observations	3
Degrees of Freedom	1
X Coefficient(s)	64.59171
Std Err of Coef.	14.32833

Figure B:4 -- Correlation for Drain UT 4

UT 5 -- Drain, near 8730 W. and 7350 N.



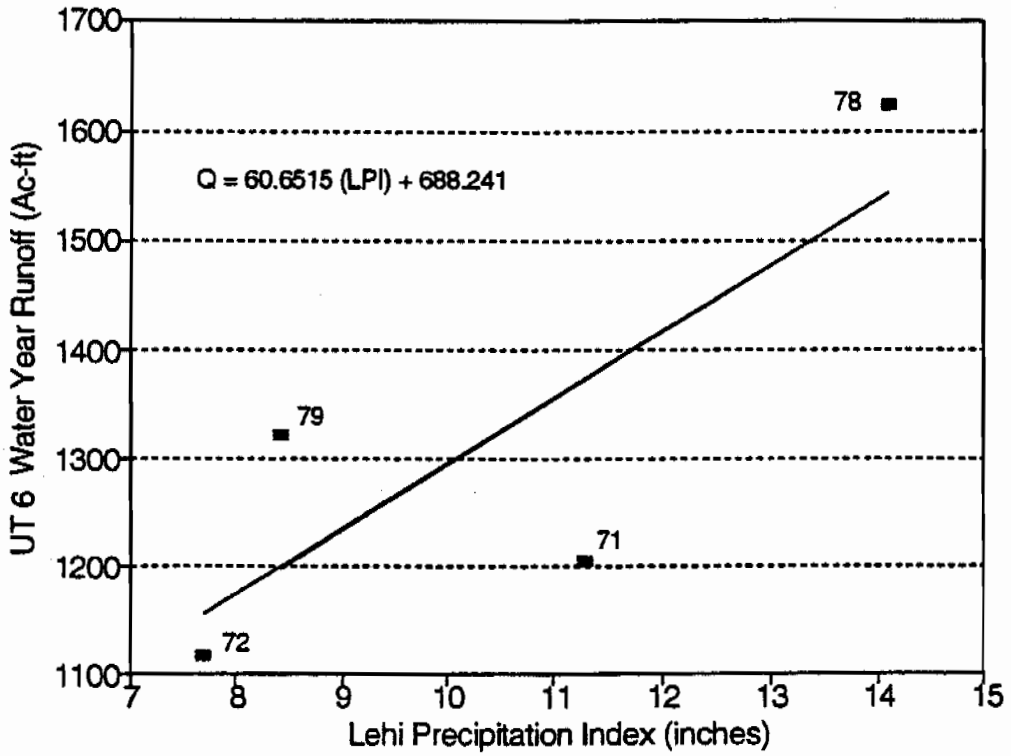
Year	Flow	LPI
1971	259	11.3
1972	250	7.7
1978	462	14.1

Regression Output:

Constant	-26.0557
Std Err of Y Est	89.78524
R Squared	0.719552
No. of Observations	3
Degrees of Freedom	1
X Coefficient(s)	31.69689
Std Err of Coef.	19.78846

Figure B-5 -- Correlation for Drain UT 5

UT 6 -- Drain, near 8350 W. and 7350 N.



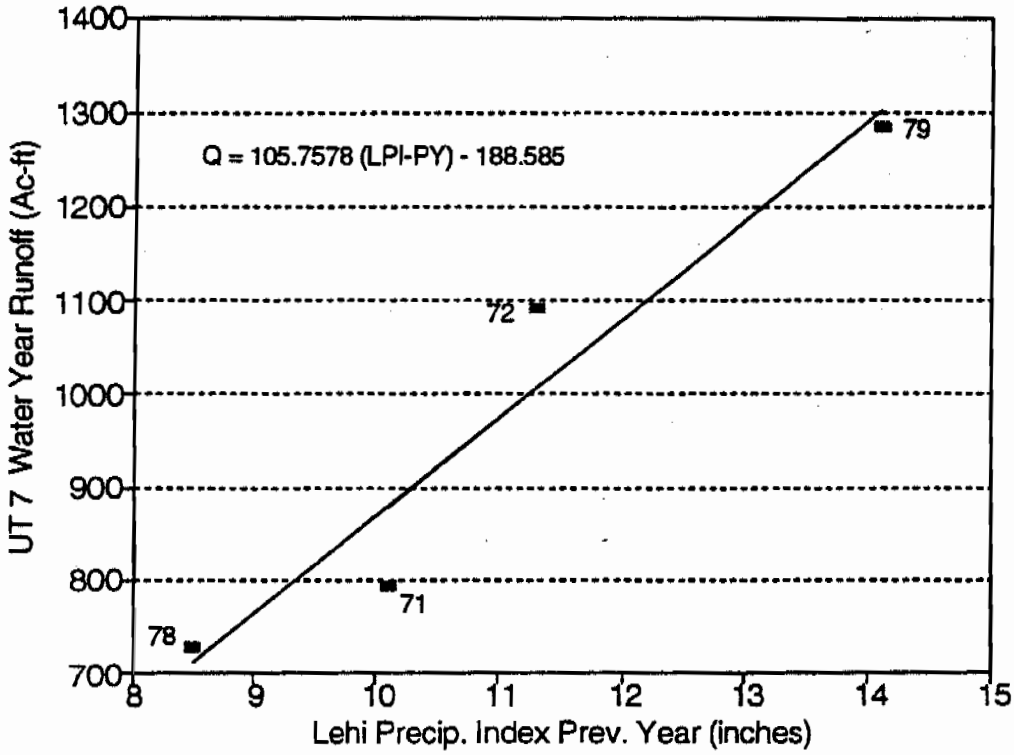
Year	Flow	LPI
1971	1206	11.3
1972	1117	7.7
1978	1624	14.1
1979	1323	8.4

Regression Output:

Constant	688.2409
Std Err of Y Est	160.8463
R Squared	0.647058
No. of Observations	4
Degrees of Freedom	2
X Coefficient(s)	60.65148
Std Err of Coef.	31.67426

Figure B:6 -- Correlation for Drain UT 6

UT 7 -- Drain, near 8000 W. and 7350 N.



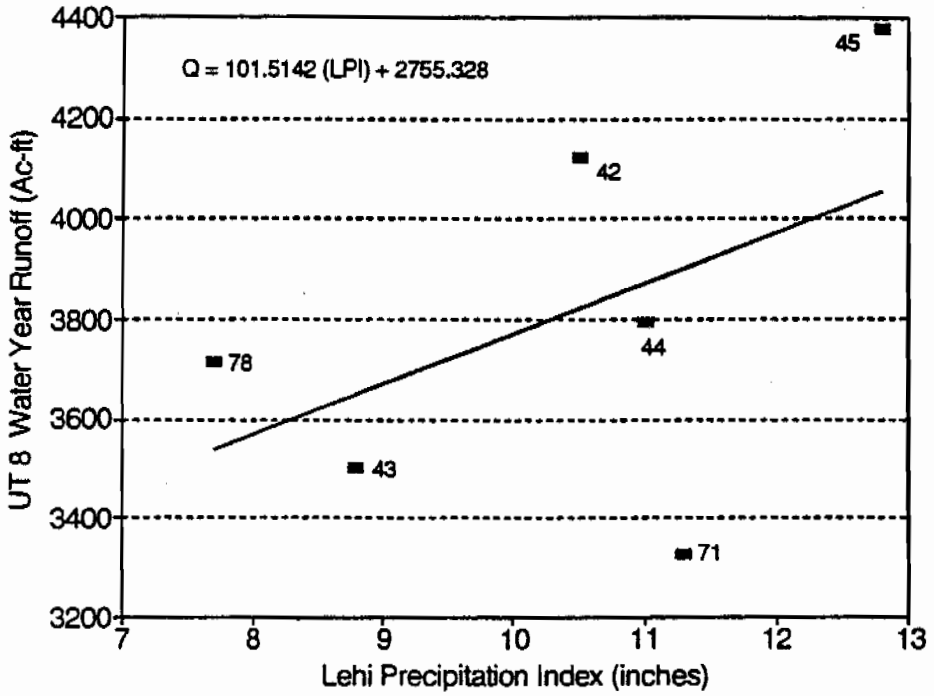
Year	Flow	LPI Prev Yr
1971	795	10.1
1972	1092	11.3
1978	728	8.5
1979	1284	14.1

Regression Output:

Constant	-188.585
Std Err of Y Est	86.95725
R Squared	0.925347
No. of Observations	4
Degrees of Freedom	2
X Coefficient(s)	105.7578
Std Err of Coef.	21.2407

Figure B:7 -- Correlation for Drain UT 7

UT 8 -- Minnie Creek



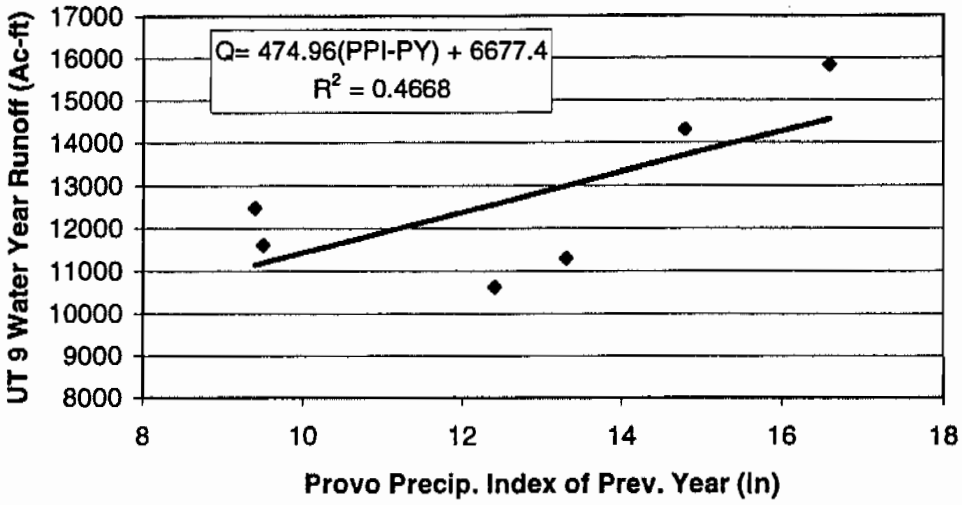
Year	Flow	LPI
1942	4122	10.5
1943	3500	8.8
1944	3792	11.0
1945	4381	12.8
1971	3325	11.3
1978	3716	7.7

Regression Output:

Constant	2755.328
Std Err of Y Est	384.3519
R Squared	0.226335
No. of Observations	6
Degrees of Freedom	4
X Coefficient(s)	101.5142
Std Err of Coef.	93.84211

Figure B:8 -- Correlation for UT 8, Minnie Creek

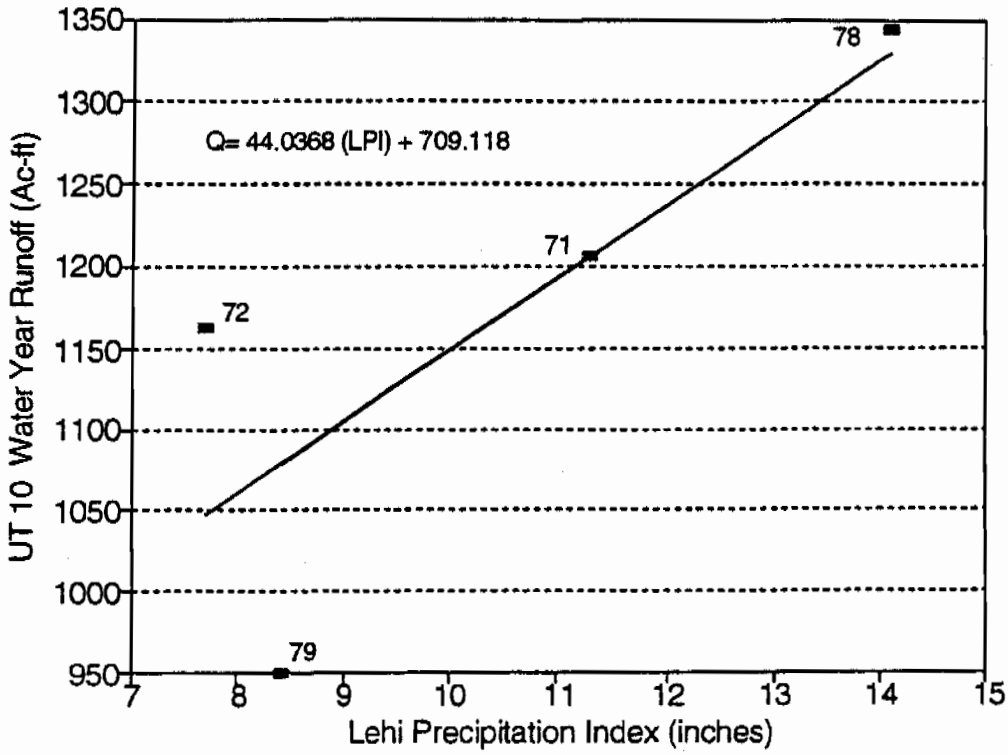
UT 9 - Mill Pond



Year	Flow	PPI-PY
1943	10632	12.4
1944	11606	9.5
1945	11291	13.3
1971	15833	16.6
1972	14309	14.8
1978	12490	9.4

Figure B:9 - Correlation for UT 9

UT 10 -- Drain, 1.25 mi S. of 6500 W. and 7750 N.



Year	Flow	LPI
1971	1207	11.3
1972	1163	7.7
1978	1344	14.1
1979	950	8.4

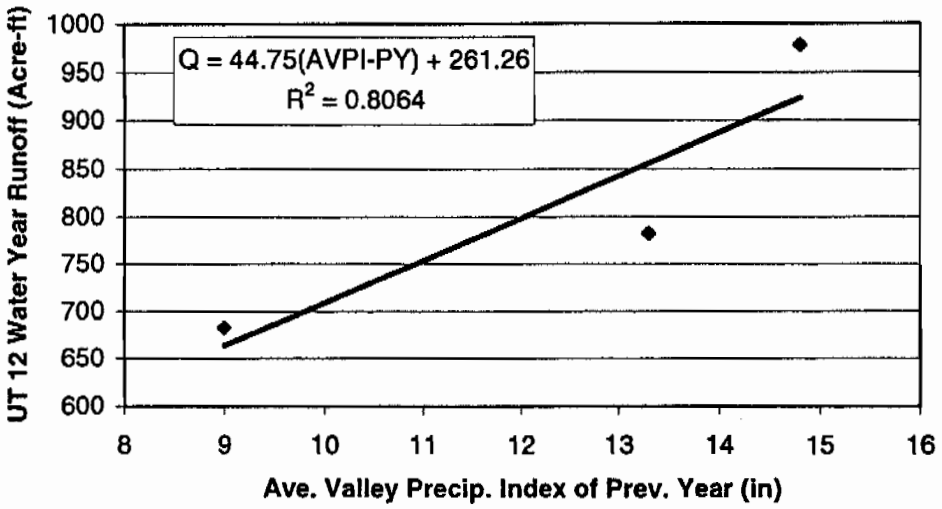
Regression Output:

Constant	709.1178
Std Err of Y Est	122.5189
R Squared	0.624869
No. of Observations	4
Degrees of Freedom	2
X Coefficient(s)	44.03684
Std Err of Coef.	24.12673

Figure B:10-- Correlation for Drain UT 10

UT11 American Fork WWTP in Measured Flow Section C, page 88

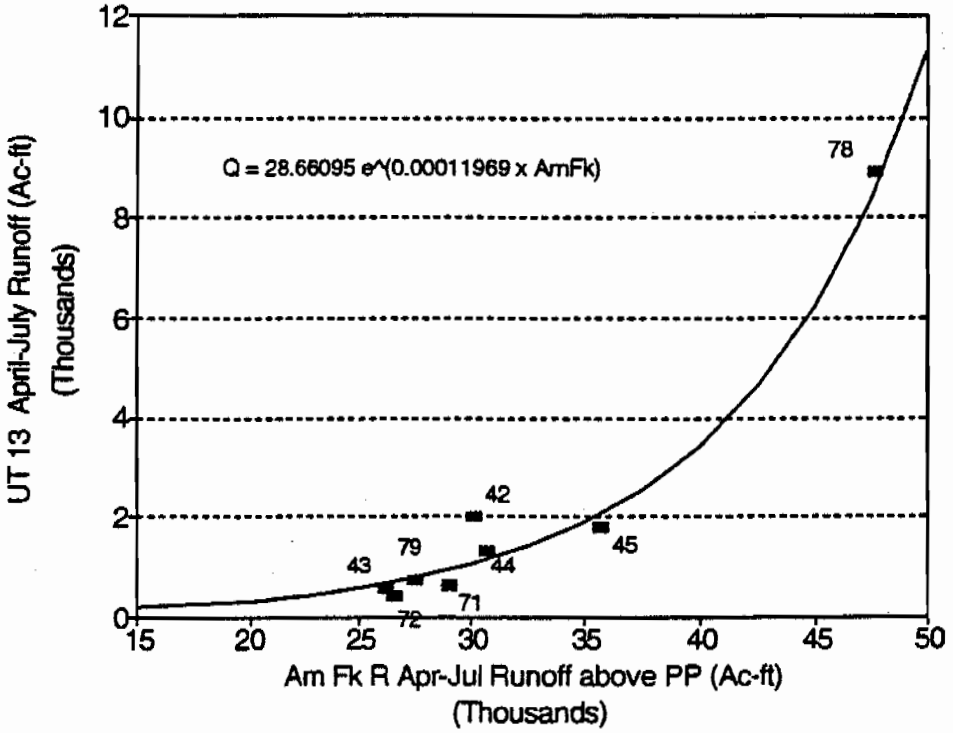
UT 12 - Drain, on 6150 W and 1.1 mi. S of 7750 N



Year	Flow	AVPI-PY
1971	978	14.8
1978	683	9
1979	783	13.3

Figure B:12 - Correlation for UT 12

UT 13-1 -- American Fork River (Apr-Jul)

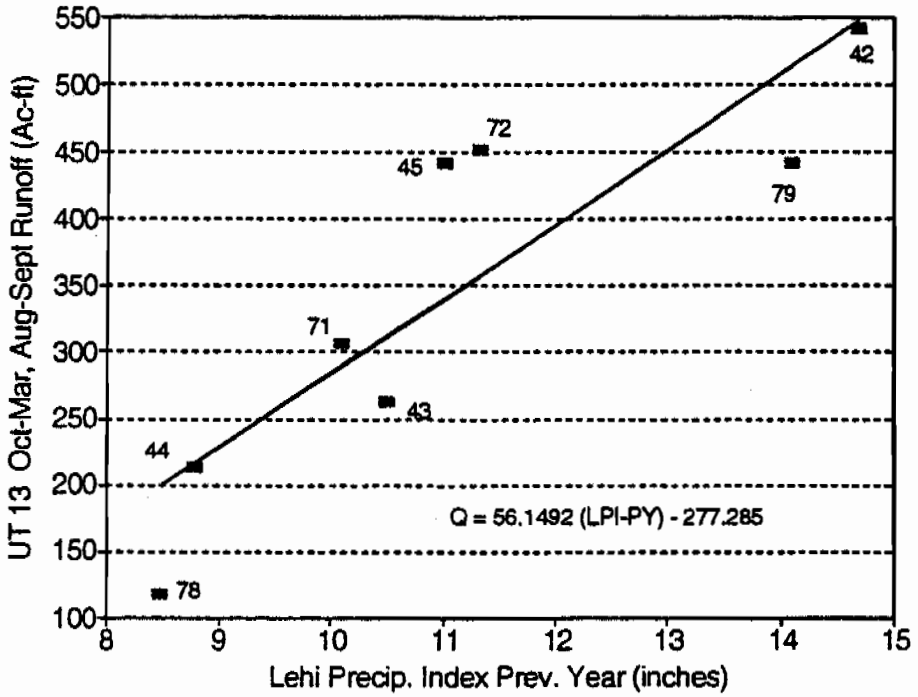


Year	Flow	AFRiv
1942	2035	30100
1943	602	26200
1944	1345	30700
1945	1806	35700
1971	638	29000
1972	421	26500
1978	8887	47700
1979	748	27500

The best fit line was found to be an exponential curve for the given data. The equation was found using a calculator program for fitting data points to a curve.

Figure B:13-1-Correlation for UT 13, American Fork River (Apr-Jul)

UT 13-2 -- American Fork River (Oct-Mar, Aug-Sept)



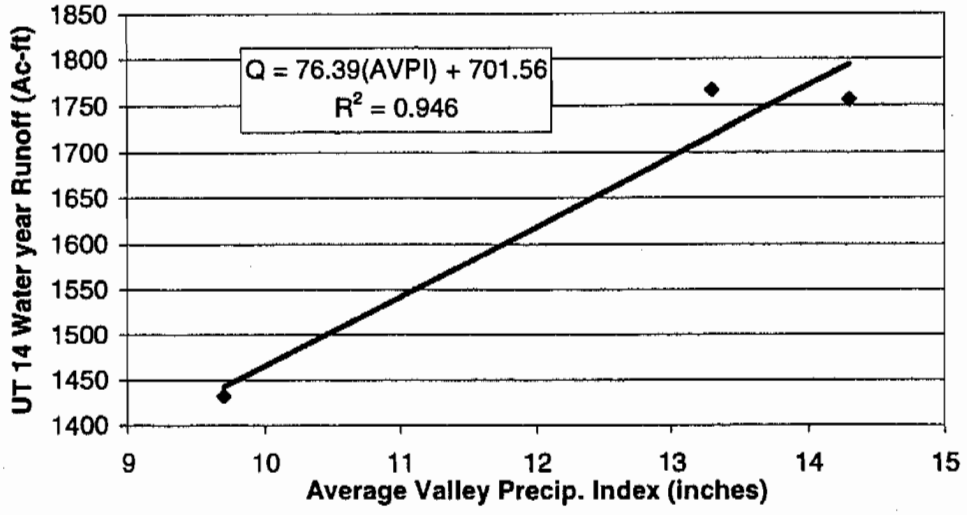
Year	Flow	LPI Prev Yr
1942	541	14.7
1943	264	10.5
1944	214	8.8
1945	442	11
1971	307	10.1
1972	452	11.3
1978	117	8.5
1979	442	14.1

Regression Output:

Constant		-277.285
Std Err of Y Est		75.42516
R Squared		0.765867
No. of Observations		8
Degrees of Freedom		6
X Coefficient(s)	56.14923	
Std Err of Coef.	12.67426	

Figure B:13-2 - Correlation for UT 13, American Fork River (Oct-Mar, Aug-Sep)

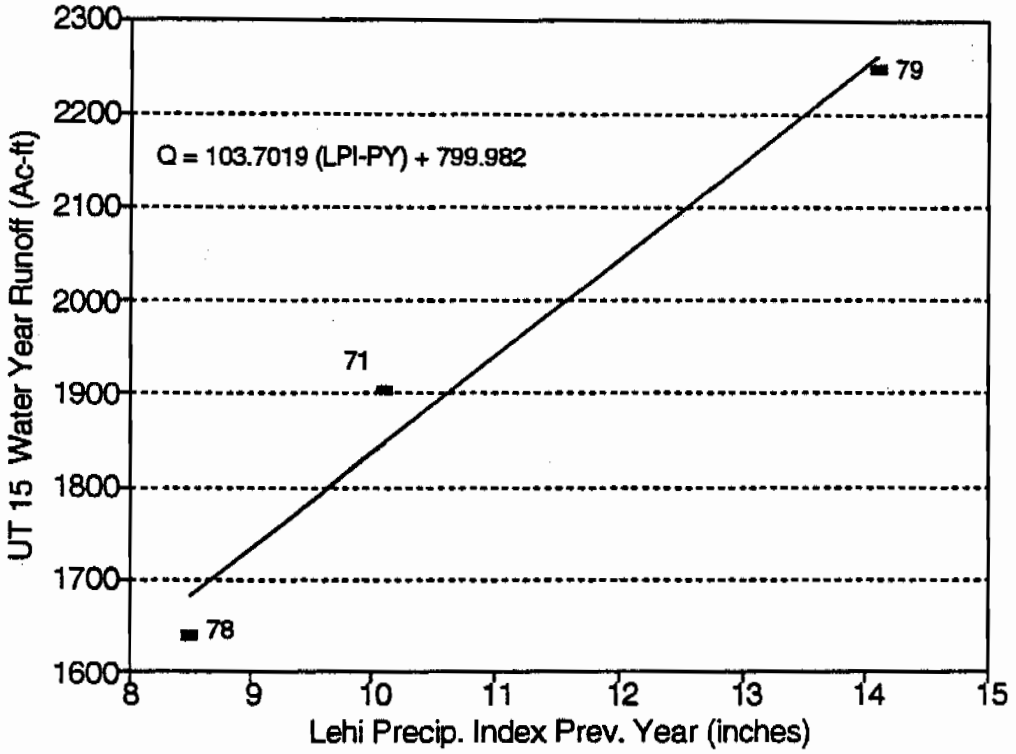
UT 14 - Drain, 0.1 mi W. of 6400 N. and 5750 W.



Year	Flow	AVPI
1971	1756	14.3
1978	1766	13.3
1979	1432	9.7

Figure B:14 - Correlation for UT 14

UT 15 -- Drain, 0.1 mi E. of 6400 N. and 5750 W.



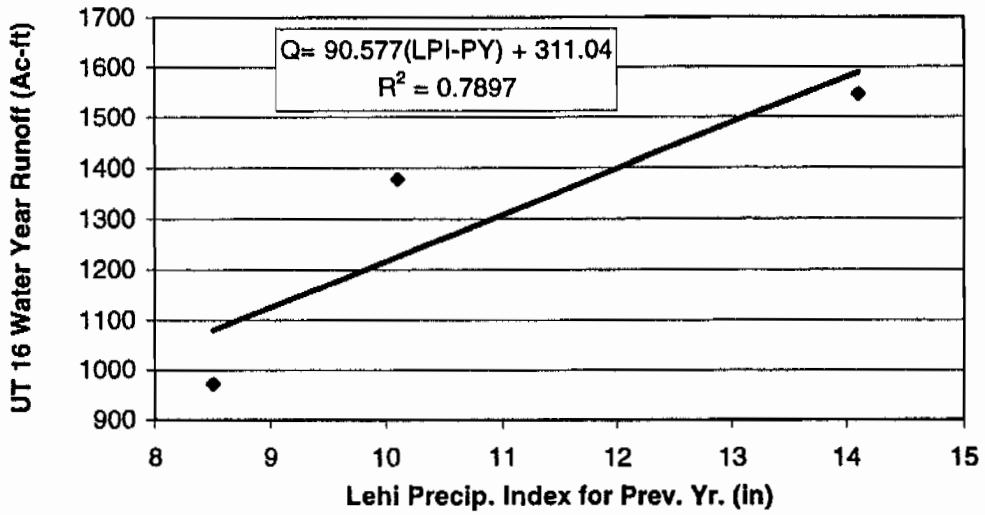
Year	Flow	LPI Prev Yr
1971	1904	10.1
1978	1641	8.5
1979	2246	14.1

Regression Output:

Constant	799.9824
Std Err of Y Est	71.44668
R Squared	0.972265
No. of Observations	3
Degrees of Freedom	1
X Coefficient(s)	103.7019
Std Err of Coef.	17.51481

Figure B:15 – Correlation for Drain UT 15

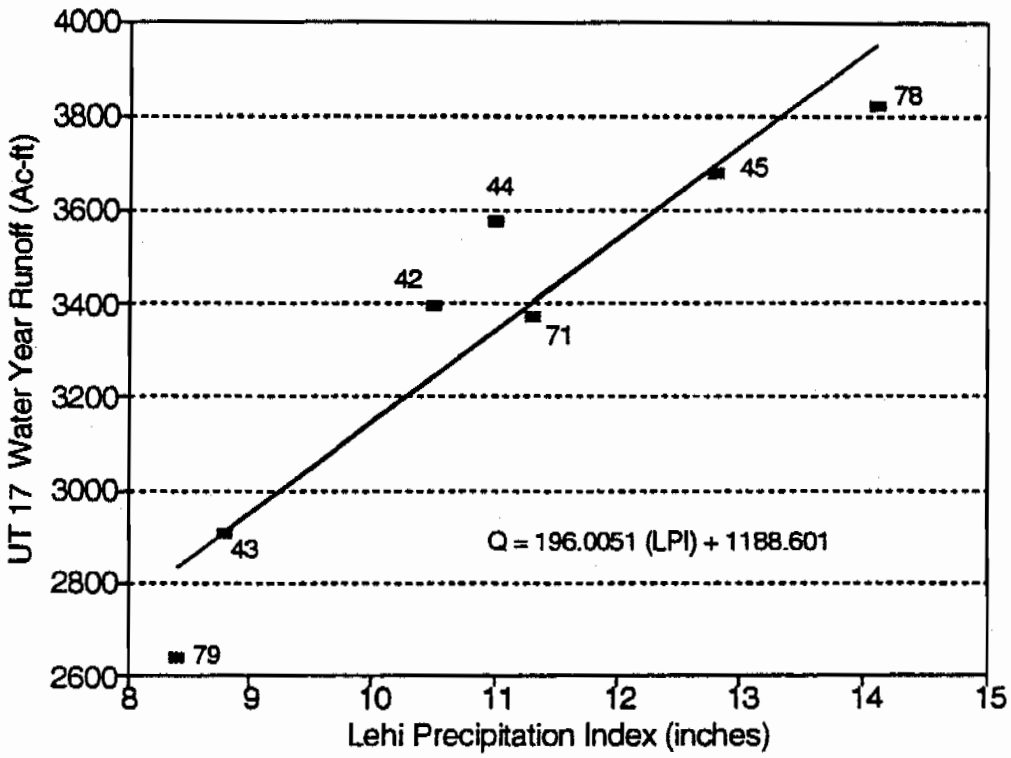
UT 16 - Drain, near 6400 N. and 5300 W.



Year	Flow	LPI - PY
1971	1377	10.1
1978	973	8.5
1979	1545	14.1

Figure B:16 - Correlation for UT 16

UT 17 -- Olefson's Slough, 6400 N. and 4850 W.



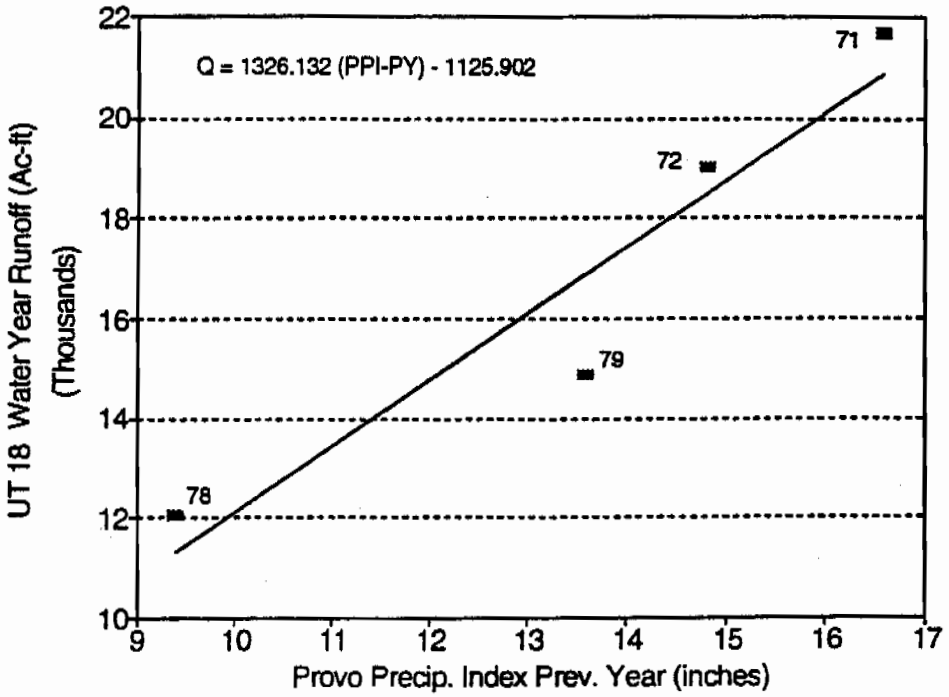
Year	Flow	LPI
1942	3395	10.5
1943	2906	8.8
1944	3579	11.0
1945	3679	12.8
1971	3373	11.3
1978	3821	14.1
1979	2640	8.4

Regression Output:

Constant		1188.601
Std Err of Y Est		163.4147
R Squared		0.877035
No. of Observations		7
Degrees of Freedom		5
X Coefficient(s)	196.0051	
Std Err of Coef.	32.82202	

Figure B:17 -- Correlation for UT 17, Olefson's Slough

UT 18 -- Geneva Cannery Drain

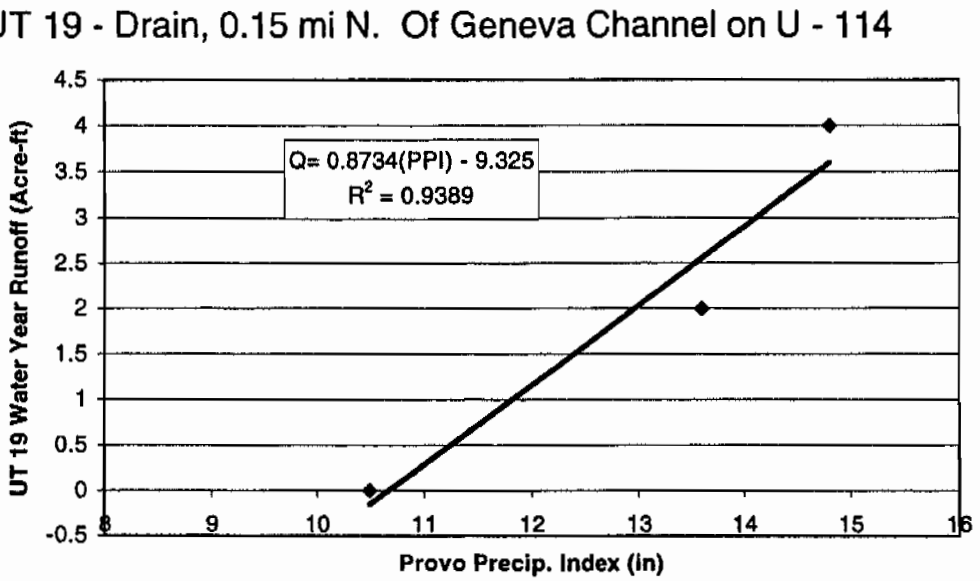


Year	Flow	PPI Prev Yr
1971	21705	16.6
1972	19000	14.8
1978	12066	9.4
1979	14867	13.6

Regression Output:

Constant	-1125.9
Std Err of Y Est	1675.717
R Squared	0.897887
No. of Observations	4
Degrees of Freedom	2
X Coefficient(s)	1326.132
Std Err of Coef.	316.2293

Figure B:18-- Correlation for UT 18, Geneva Cannery Drain

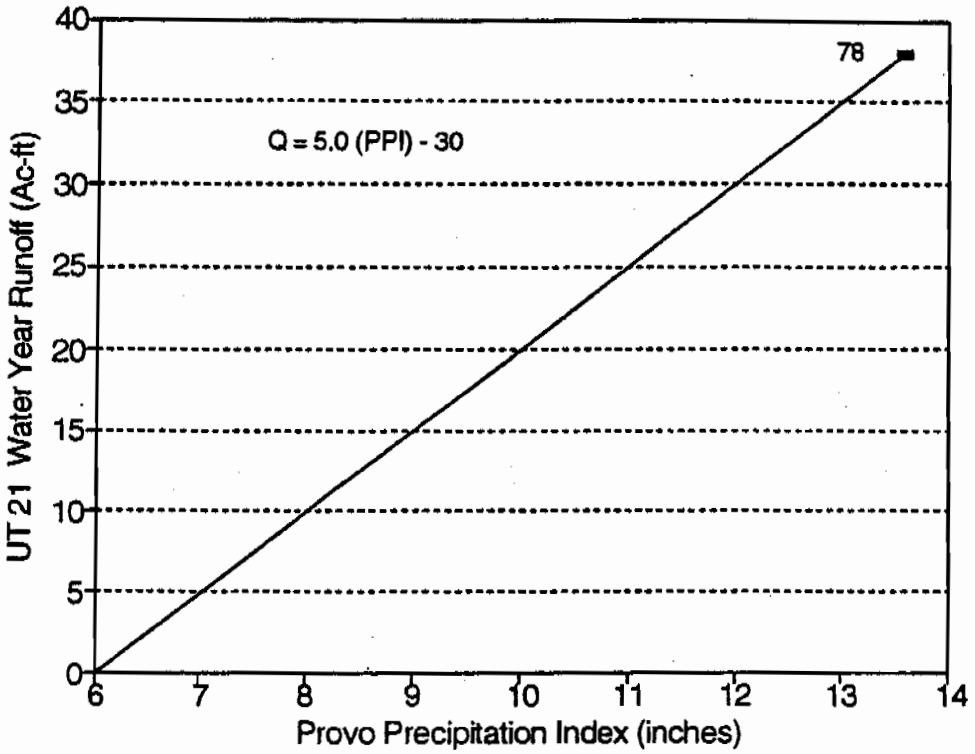


Year	Flow	PPI
1971	4	14.8
1978	2	13.6
1979	0	10.5

Figure B:19 - Correlation for UT 19

UT20 Geneva Outfall in Measured Flow Section C, page 89

UT 21 -- Drain, 0.2 mi S of Geneva Channel, W Gen Rd



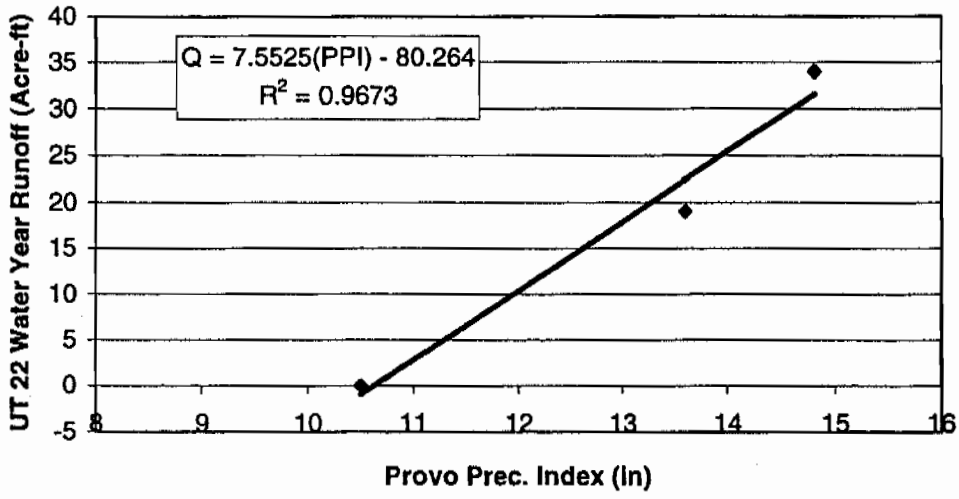
Year	Flow	PPI
1978	38	13.6
	0	6.0

Regression Output:

Constant	-30
Std Err of Y Est	5.52E-14
R Squared	1
No. of Observations	3
Degrees of Freedom	1
X Coefficient(s)	5
Std Err of Coef.	8.89E-15

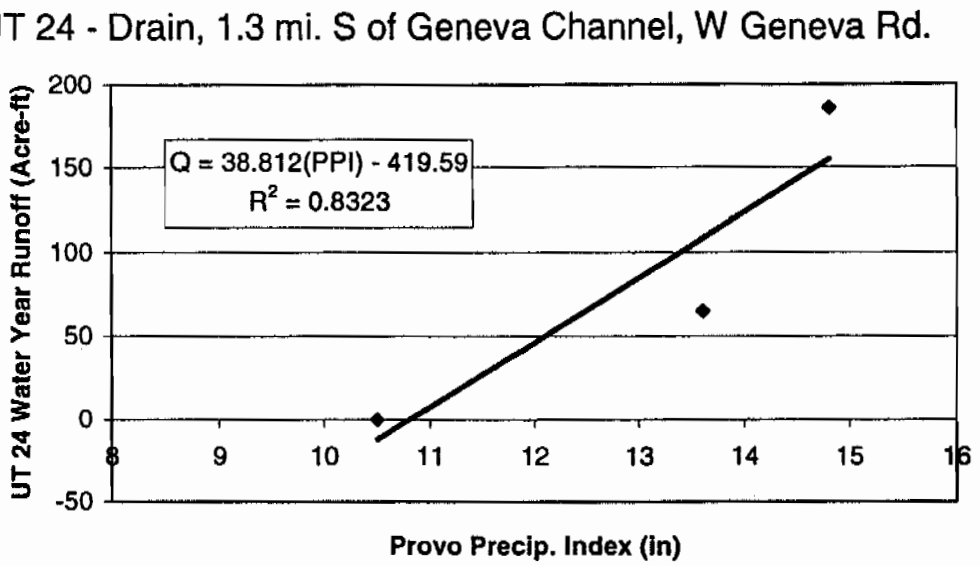
Figure B:21 -- Correlation for Drain UT 21

UT 22 - Drain, 0.5 mi. S of Geneva Channel, W Gen. Rd.



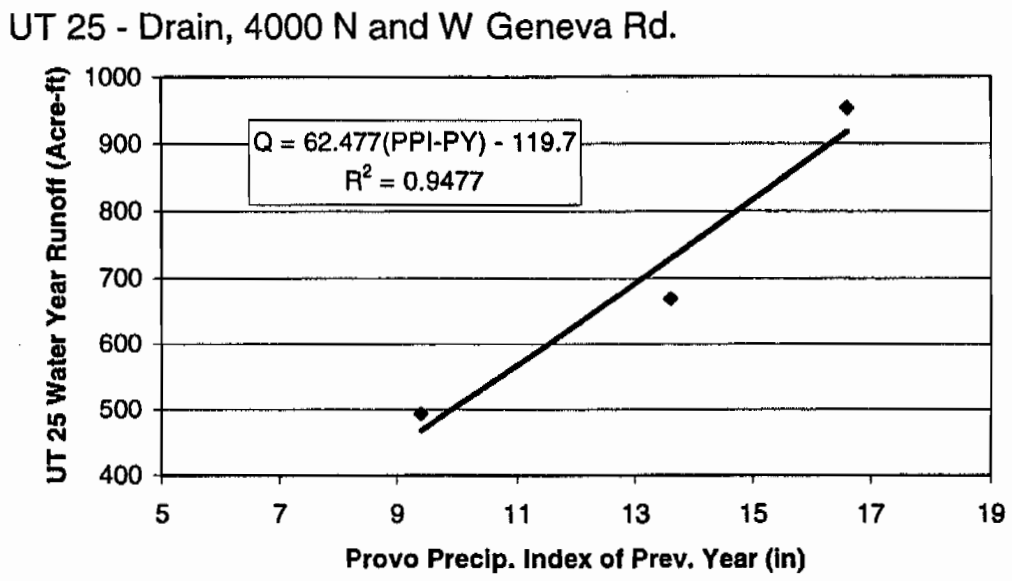
Year	Flow	PPI
1971	34	14.8
1978	19	13.6
1979	0	10.5

Figure B:22 - Correlation for UT 22



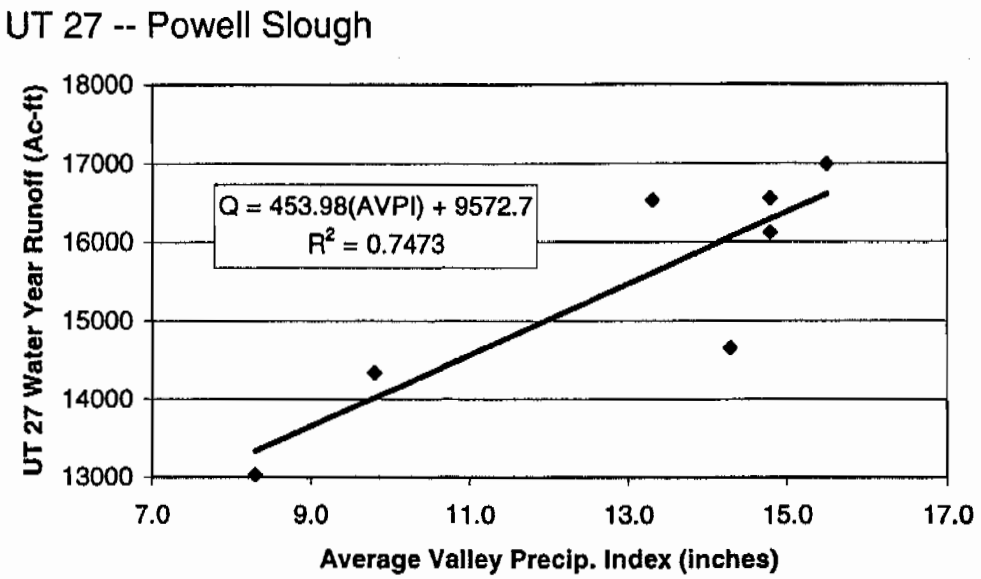
Year	Flow	PPI
1971	186	14.8
1978	65	13.6
1979	0	10.5

Figure B:24 - Correlation for UT 24



Year	Flow	PPI-PY
1971	953	16.6
1978	493	9.4
1979	669	13.6

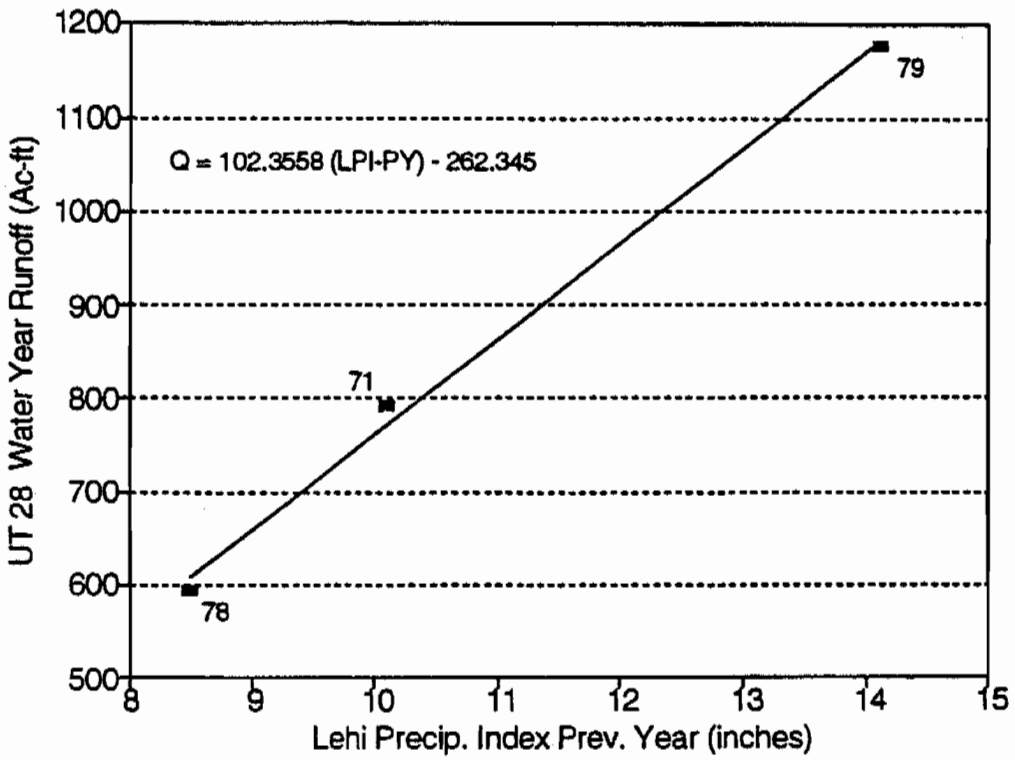
Figure B:25 - Correlation for UT 25



Year	Flow	AVPI
1967	16119	14.8
1968	16992	15.5
1969	16530	13.3
1970	16557	14.8
1971	14659	14.3
1972	14340	9.8
1974	13033	8.3

Figure B:27 - Correlation for UT 27

UT 28 -- Drain, on N. Boat Harbor Drive

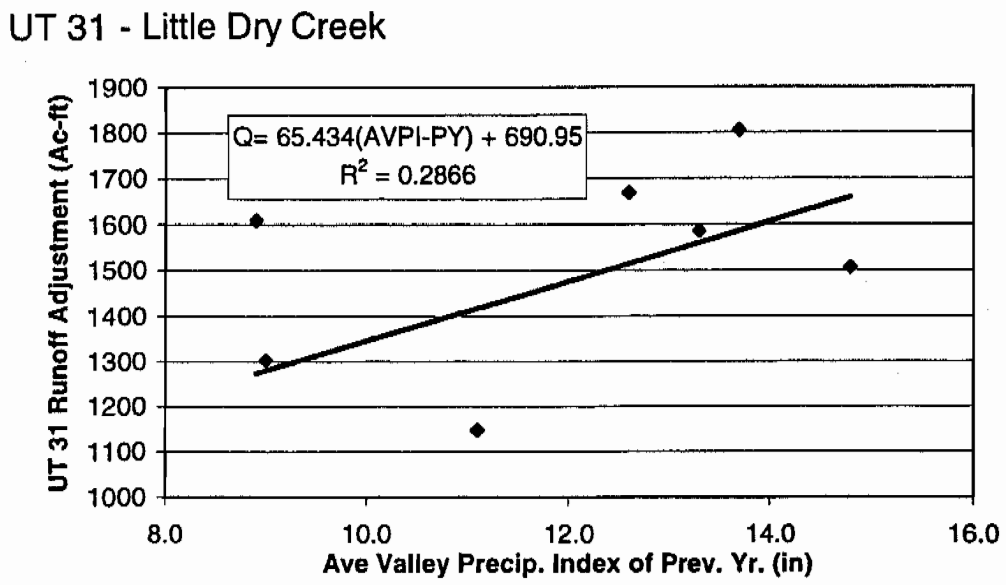


Year	Flow	LPI Prev Yr
1971	792	10.1
1978	593	8.5
1979	1175	14.1

Regression Output:

Constant	-262.345
Std Err of Y Est	25.92914
R Squared	0.996158
No. of Observations	3
Degrees of Freedom	1
X Coefficient(s)	102.3558
Std Err of Coef.	6.356404

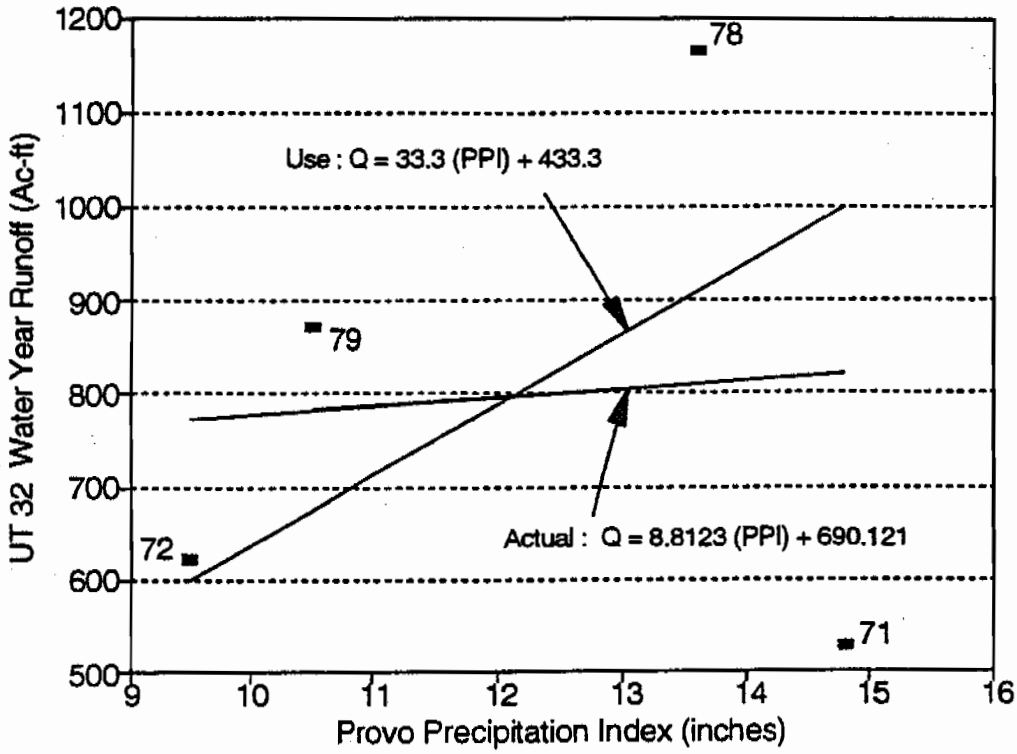
Figure B-28- Correlation for Drain UT 28



Year	Flow	AVPI - PY
1954	987	9.6
1955	1146	11.1
1957	1610	8.9
1958	1669	12.6
1965	1805	13.7
1971	1507	14.8
1978	1302	9.0
1979	1587	13.3

Figure B:31 - Correlation for UT 31

UT 32 -- Drain, near 1150 S. and 1600 W. (Provo)



Year	Flow	PPI
1971	530	14.8
1972	622	9.5
1978	1164	13.6
1979	871	10.5
	1000	17
	600	5

Actual Regression Output

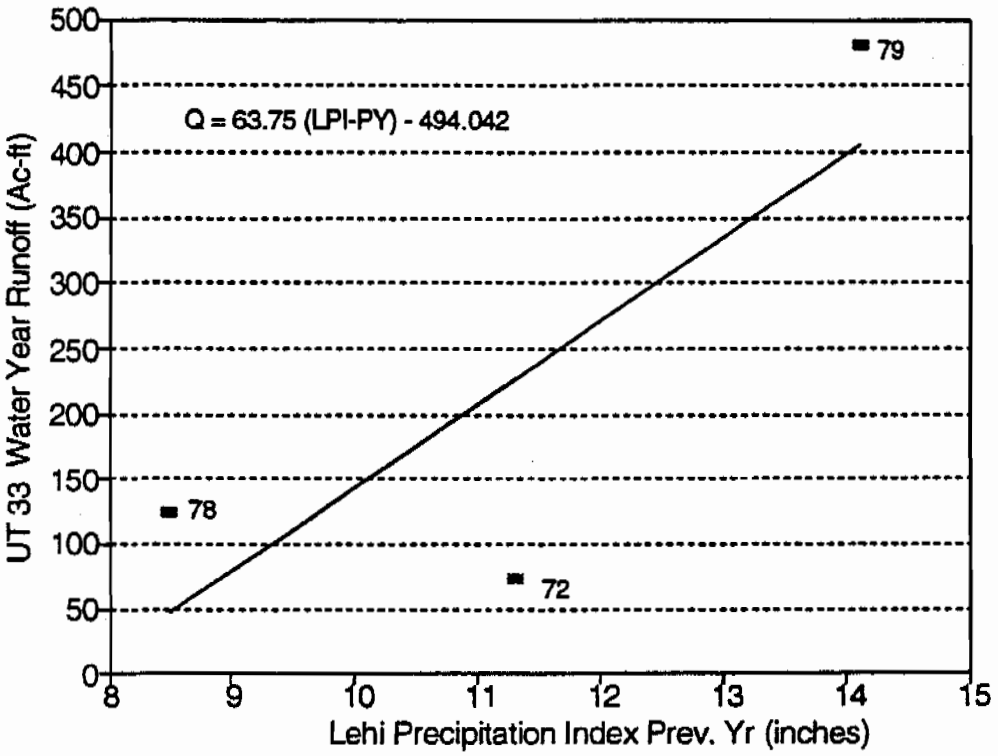
Constant	690.1212
Std Err of Y Est	346.8531
R Squared	0.00605
No. of Observations	4
Degrees of Freedom	2
X Coefficient(s)	8.812301
Std Err of Coef.	79.86835

Regression Output used for Correlatio

Constant	433.3333
Std Err of Y Est	3.73E-13
R Squared	1
No. of Observations	3
Degrees of Freedom	1
X Coefficient(s)	33.33333

Figure B: 32 -- Correlation for Drain UT 32

UT 33 -- Flowing Well near 1150 S. and 1600 W. (Provo)

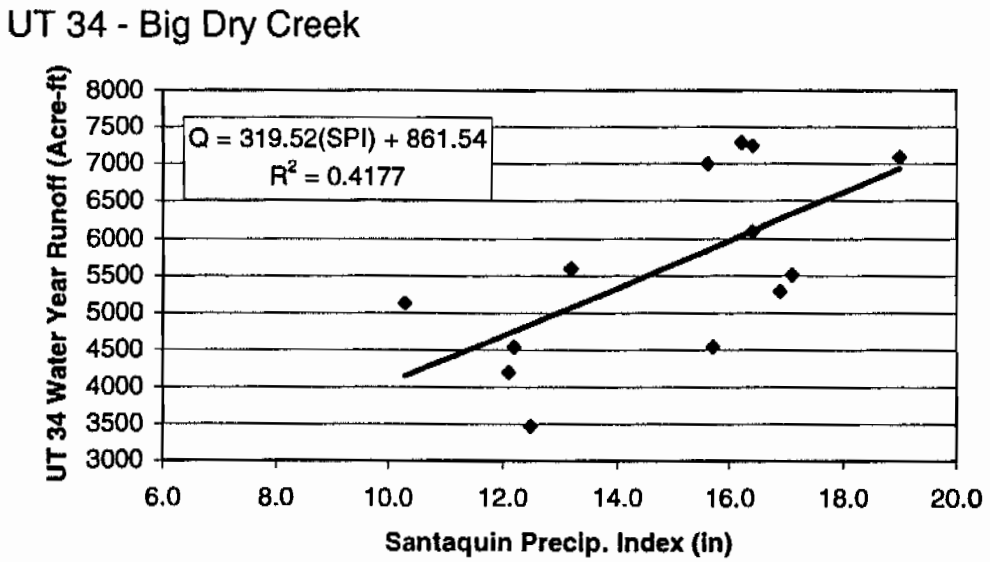


Year	Flow	LPI Prev Yr
1972	74	11.3
1978	124	8.5
1979	481	14.1

Regression Output:

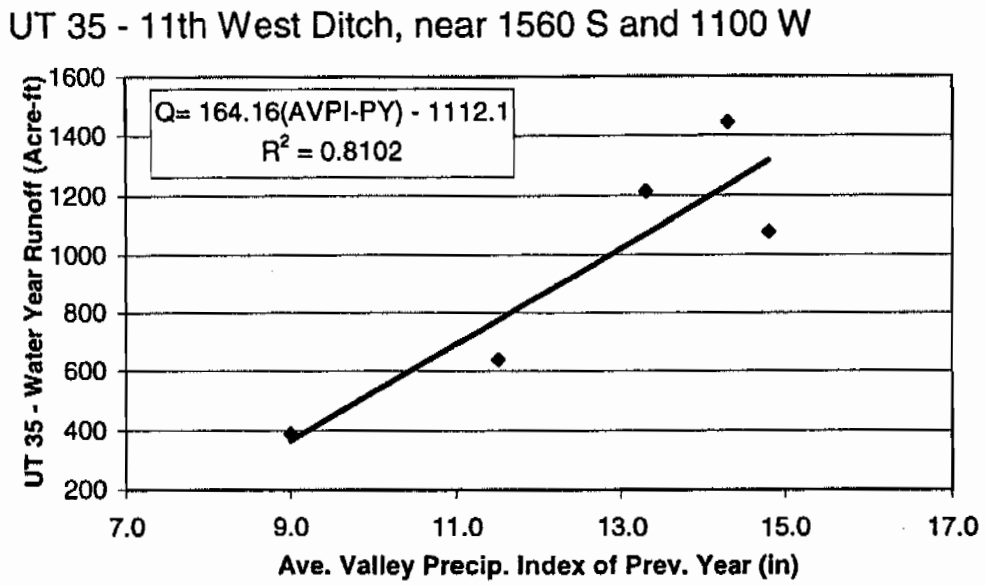
Constant	-494.042
Std Err of Y Est	186.5695
R Squared	0.646735
No. of Observations	3
Degrees of Freedom	1
X Coefficient(s)	63.75
Std Err of Coef.	47.11591

Figure B:33 -- Correlation for UT 33, Flowing Well



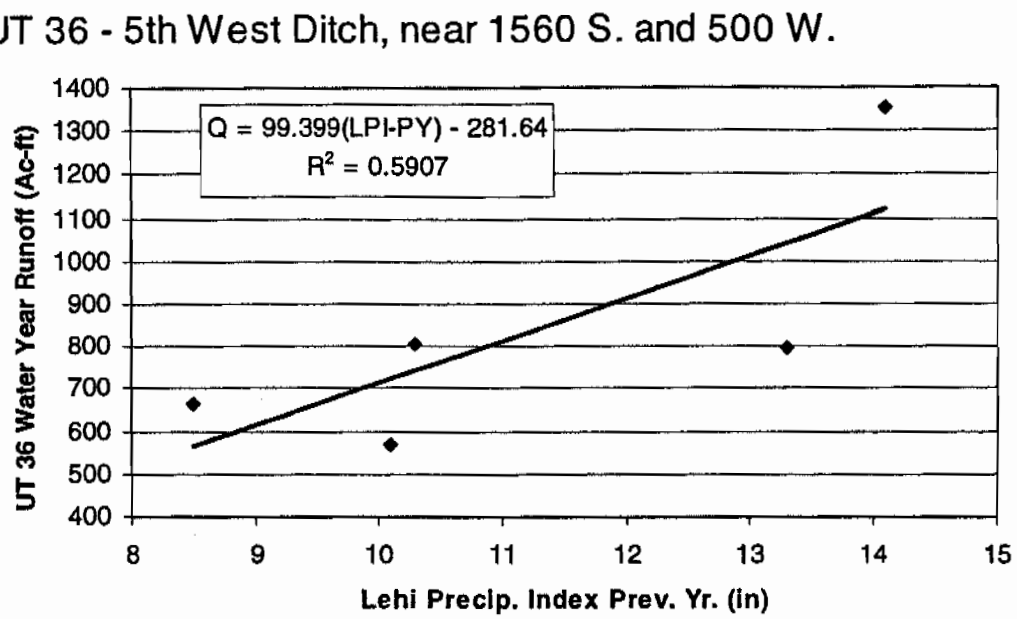
Year	Flow	SPI
1954	7251	16.4
1955	5520	17.1
1956	5598	13.2
1957	7002	15.6
1958	7292	16.2
1959	6093	16.4
1960	3472	12.5
1964	4547	15.7
1965	7097	19.0
1971	5298	16.9
1972	4548	12.2
1978	4201	12.1
1979	5141	10.3

Figure B:34 - Correlation for UT 34



Year	Flow	AVPI-PY
1964	639	11.5
1971	1078	14.8
1972	1446	14.3
1978	388	9.0
1979	1214	13.3

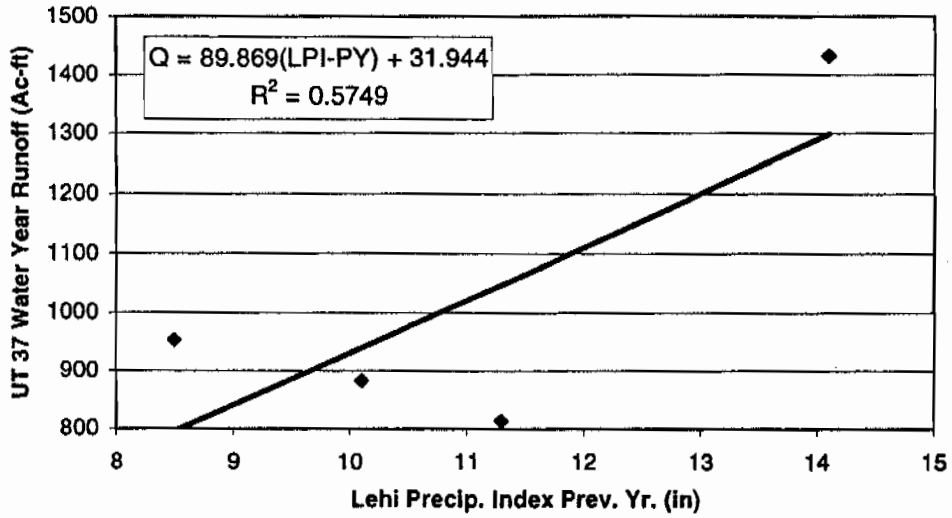
Figure B:35 - Correlation for UT 35



Year	Flow	LPI - PY
1964	808	10.3
1965	796	13.3
1971	569	10.1
1978	663	8.5
1979	1352	14.1

Figure B:36 - Correlation for UT 36

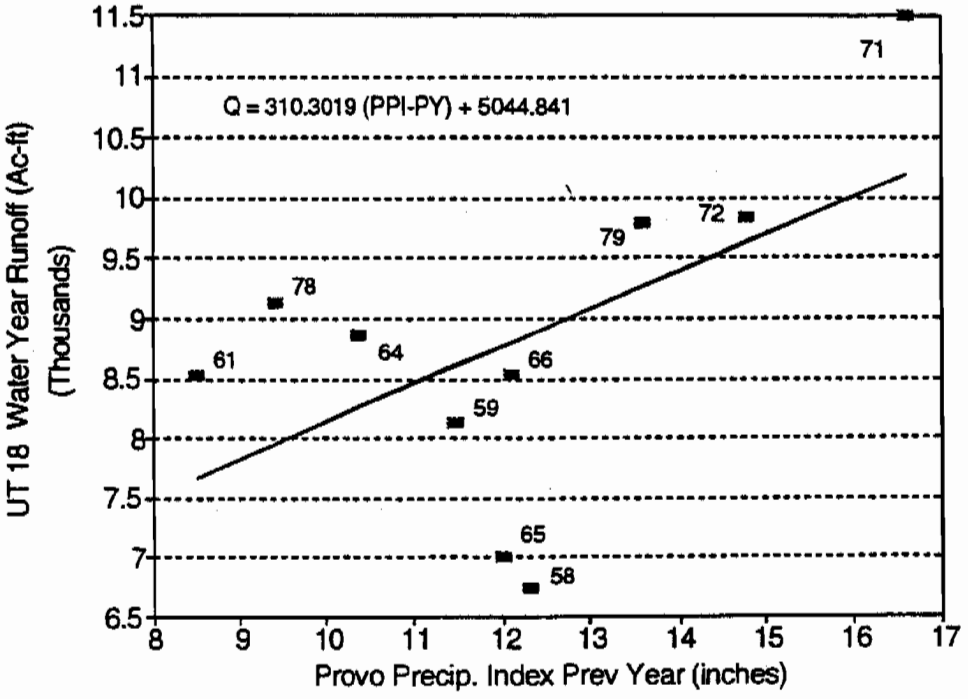
UT 37 - University Ditch, near 1420 S. and Univ. Ave.



Year	Flow	LPI - PY
1971	883	10.1
1972	814	11.3
1978	953	8.5
1979	1432	14.1

Figure B:37 - Correlation for UT 37

UT 38 -- Mill Race



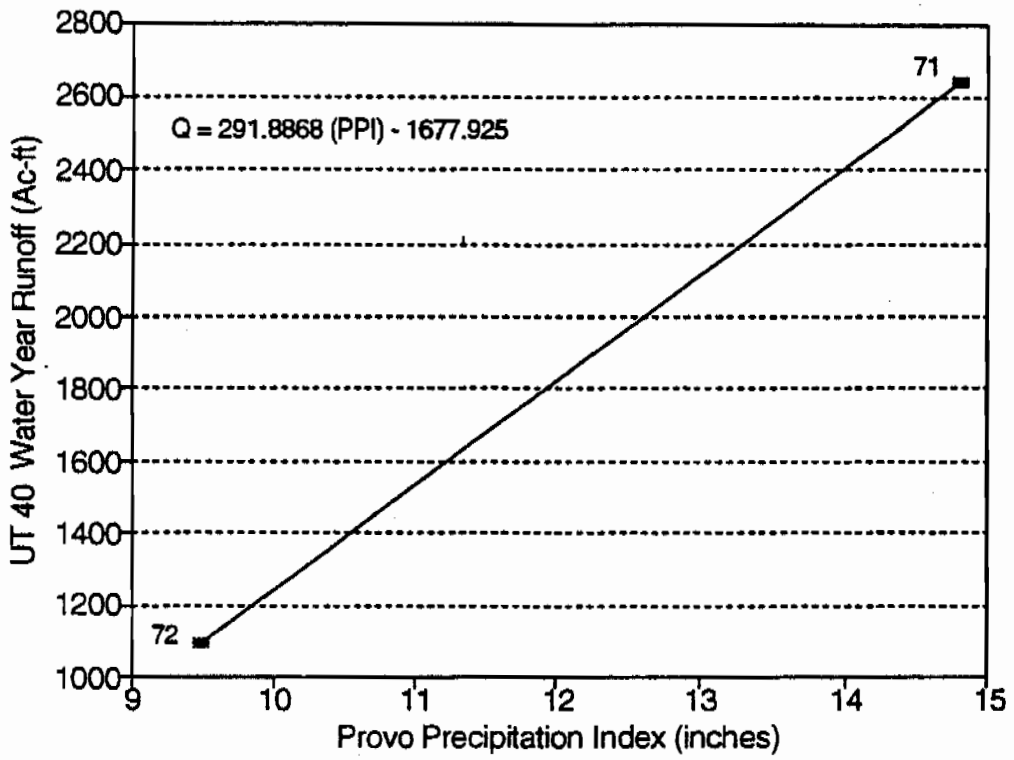
Year	Flow	PPI Prev Yr
1958	6749	12.3
1959	8143	11.5
1961	8519	8.5
1964	8870	10.4
1965	7011	12.0
1966	8528	12.1
1971	11483	16.6
1972	9833	14.8
1978	9121	9.4
1979	9800	13.6

Regression Output:

Constant		5044.841
Std Err of Y Est		1236.393
R Squared		0.295744
No. of Observations		10
Degrees of Freedom		8
X Coefficient(s)	310.3019	
Std Err of Coef.	169.2958	

Figure B:38 -- Correlation for UT 38, Mill Race

UT 40 -- Drain, 0.4 mi SE of Provo WWTP



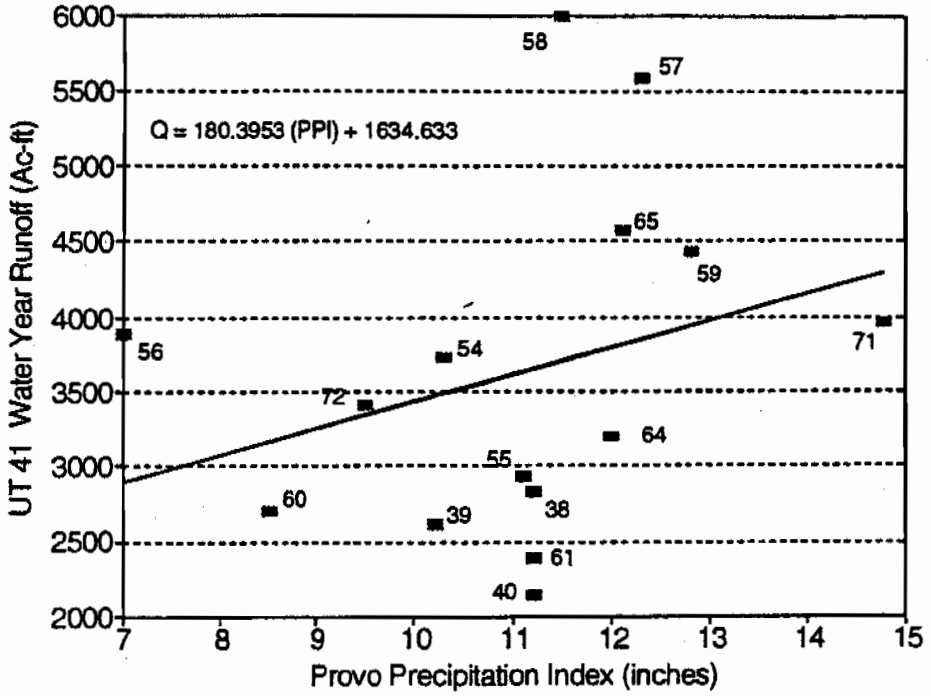
Year	Flow	PPI
1971	2642	14.8
1972	1095	9.5

Regression Output:

Constant	-1677.92
Std Err of Y Est	7.28E-12
R Squared	1
No. of Observations	3
Degrees of Freedom	1
X Coefficient(s)	291.8868
Std Err of Coef.	1.68E-12

Figure B:40 – Correlation for Drain UT 40

UT 41 -- Rat Farm Drain, 0.5 mi SE of Provo WWTP



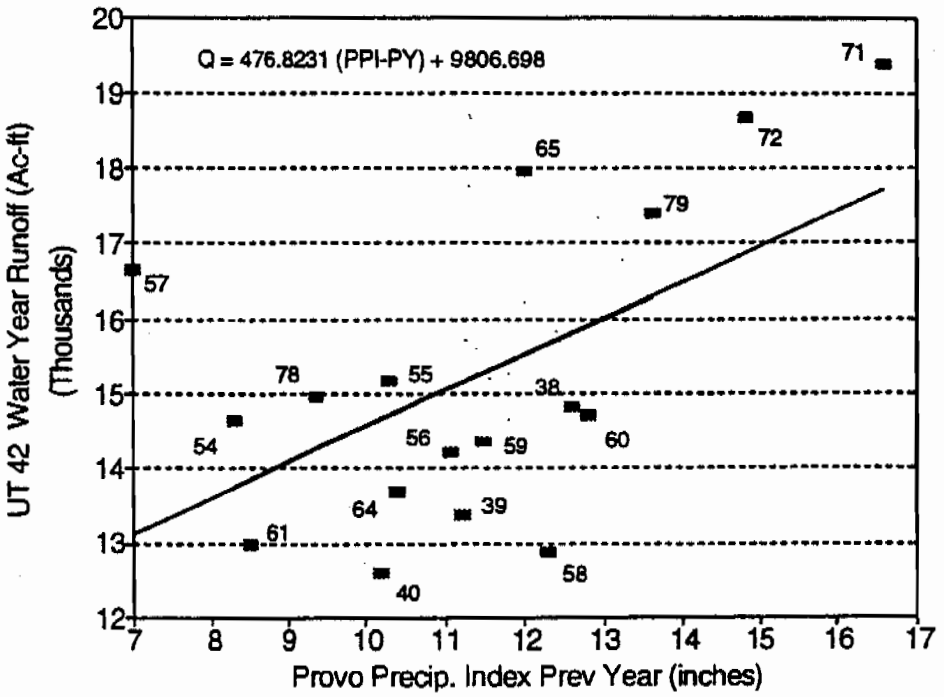
Year	Flow	PPI
1938	2830	11.2
1939	2617	10.2
1940	2135	11.2
1954	3728	10.3
1955	2943	11.1
1956	3897	7.0
1957	5583	12.3
1958	5988	11.5
1959	4435	12.8
1960	2701	8.5
1961	2389	11.2
1964	3197	12.0
1965	4584	12.1
1971	3962	14.8
1972	3422	9.5

Regression Output:

Constant	1634.633
Std Err of Y Est	1129.429
R Squared	0.08536
No. of Observations	15
Degrees of Freedom	13
X Coefficient(s)	180.3953
Std Err of Coef.	163.776

Figure B:41 -- Correlation for UT 41, Rat Farm Drain

UT 42 -- Steel Mill Drain, near Kuhni plant



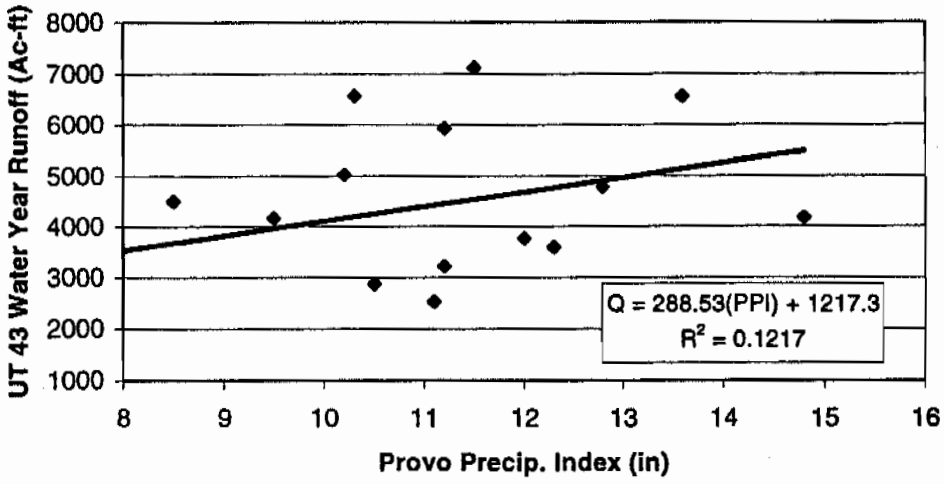
Year	Flow	PPI Prev Yr
1938	14835	12.6
1939	13368	11.2
1940	12597	10.2
1954	14639	8.3
1955	15168	10.3
1956	14216	11.1
1957	16677	7.0
1958	12867	12.3
1959	14354	11.5
1960	14710	12.8
1961	12970	8.5
1964	13704	10.4
1965	17971	12.0
1971	19409	16.6
1972	18687	14.8
1978	14984	9.4
1979	17394	13.6

Regression Output:

Constant		9806.698
Std Err of Y Est		1799.746
R Squared		0.303447
No. of Observations		17
Degrees of Freedom		15
X Coefficient(s)	476.8231	
Std Err of Coef.	186.5294	

Figure B-42 -- Correlation for UT 42, Steel Mill Drain near Kuhni Plant

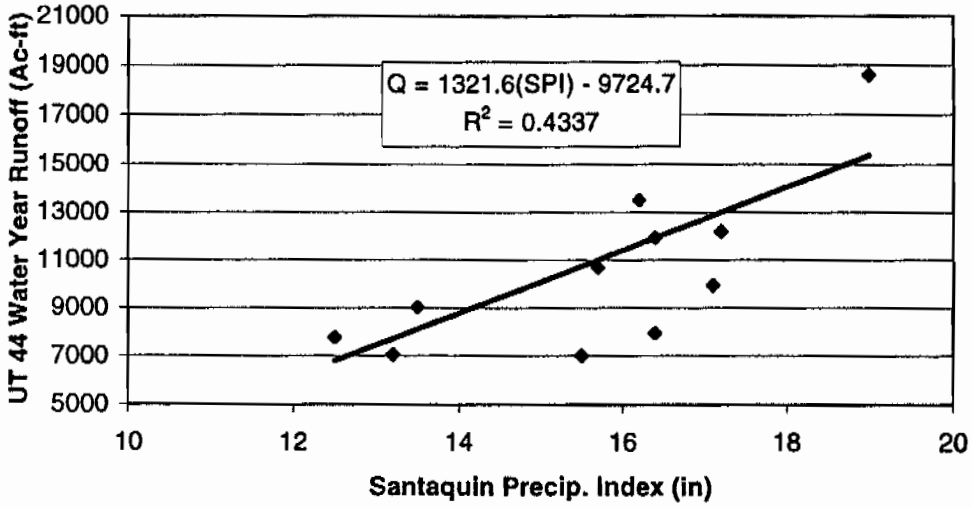
UT 43 - Spring Creek



Year	Flow	PPI
1939	5028	10.2
1940	5930	11.2
1954	6564	10.3
1955	2534	11.1
1956	1504	7
1957	3597	12.3
1958	7123	11.5
1959	4785	12.8
1960	4505	8.5
1961	3214	11.2
1964	3760	12
1971	4166	14.8
1972	4162	9.5
1978	6551	13.6
1979	2876	10.5

Figure B:43 - Correlation for UT 43

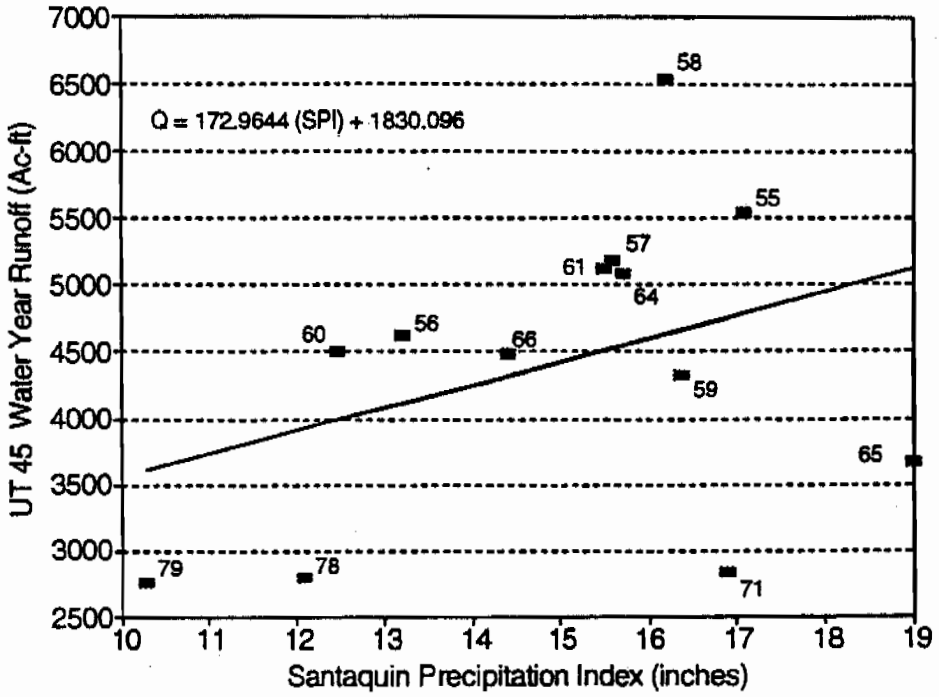
UT 44 - Hobble Creek



Year	Flow	SPI
1939	12192	17.2
1940	9040	13.5
1954	11930	16.4
1955	9958	17.1
1956	7061	13.2
1957	16426	15.6
1958	13509	16.2
1959	7949	16.4
1960	7800	12.5
1961	7000	15.5
1964	10700	15.7
1965	18600	19

Figure B:44 - Correlation for UT 44

UT 45 -- Packard Drain



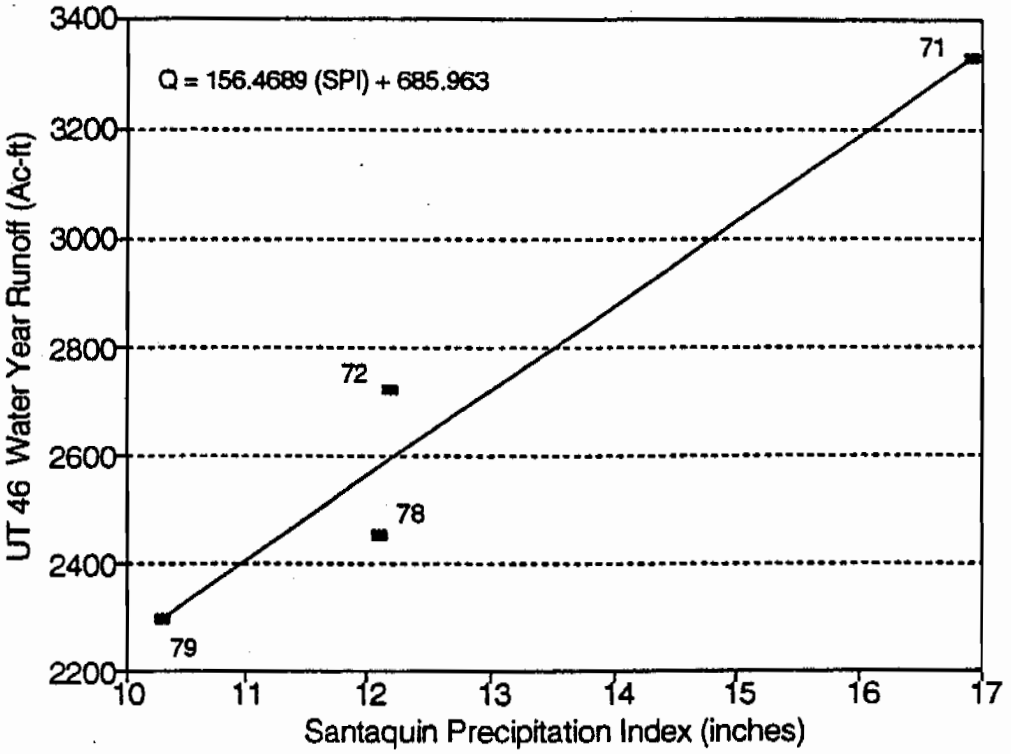
Year	Flow	SPI
1955	5549	17.1
1956	4629	13.2
1957	5178	15.6
1958	6536	16.2
1959	4336	16.4
1960	4520	12.5
1961	5120	15.5
1964	5074	15.7
1965	3684	19.0
1966	4487	14.4
1971	2828	16.9
1978	2798	12.1
1979	2763	10.3

Regression Output:

Constant	1830.096
Std Err of Y Est	1116.074
R Squared	0.130714
No. of Observations	13
Degrees of Freedom	11
X Coefficient(s)	172.9644
Std Err of Coef.	134.487

Figure B:45 -- Correlation for UT 45, Packard Drain

UT 46 -- Drain, 0.35 mi W. of I-15 on 3900 S.



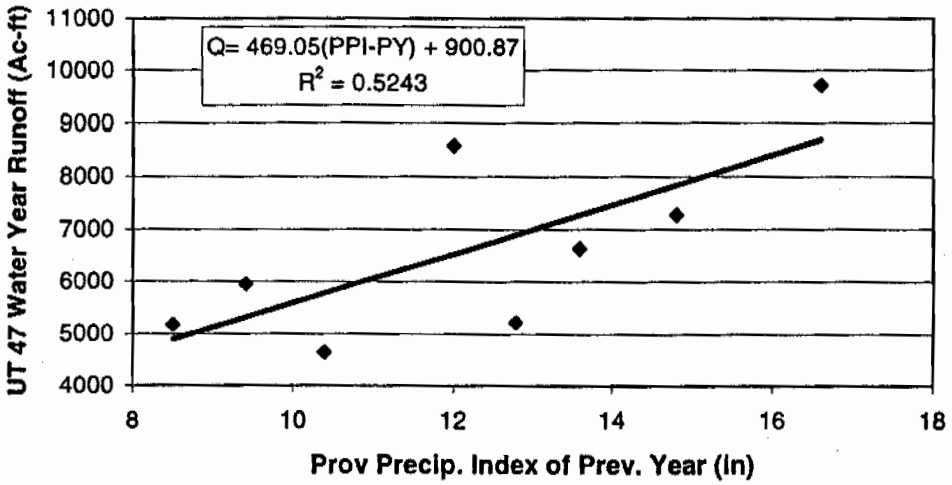
Year	Flow	SPI
1971	3327	16.9
1972	2724	12.2
1978	2455	12.1
1979	2296	10.3

Regression Output:

Constant	685.9634
Std Err of Y Est	126.7264
R Squared	0.947938
No. of Observations	4
Degrees of Freedom	2
X Coefficient(s)	156.4689
Std Err of Coef.	25.92876

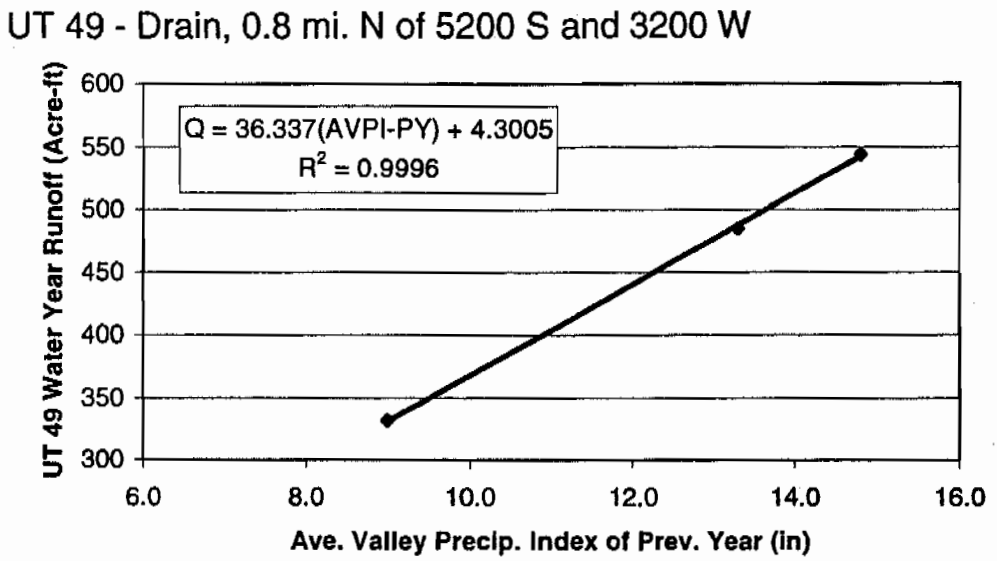
Figure B-46 -- Correlation for Drain UT 46

UT 47 - Dry Creek, 0.85 mi W of I-15 on 400 S



Year	Flow	PPI-PY
1960	5225	12.8
1961	5171	8.5
1964	4640	10.4
1965	8584	12
1971	9723	16.6
1972	7286	14.8
1978	5952	9.4
1979	6640	13.6

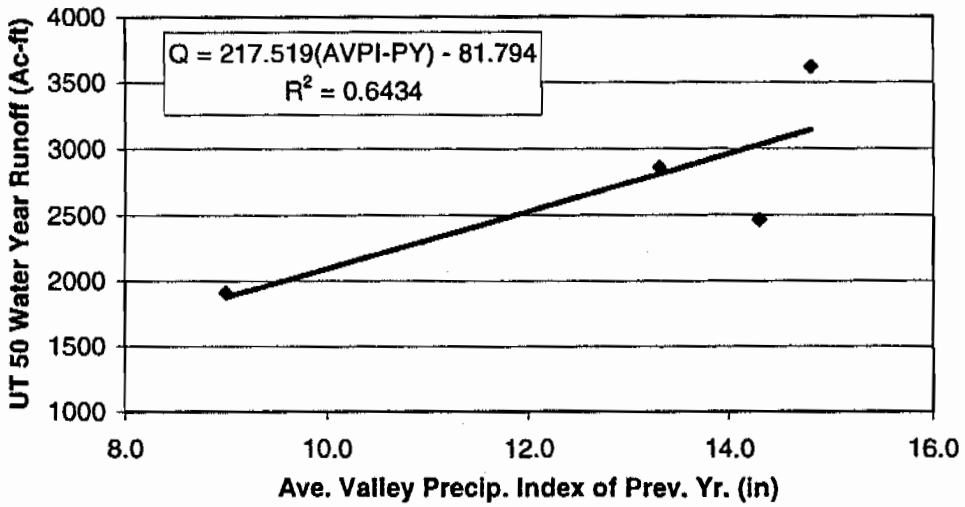
Figure B:47 - Correlation of UT 47



Year	Flow	AVPI-PY
1971	544	14.8
1978	332	9.0
1979	485	13.3

Figure B:49 - Correlation of UT 49

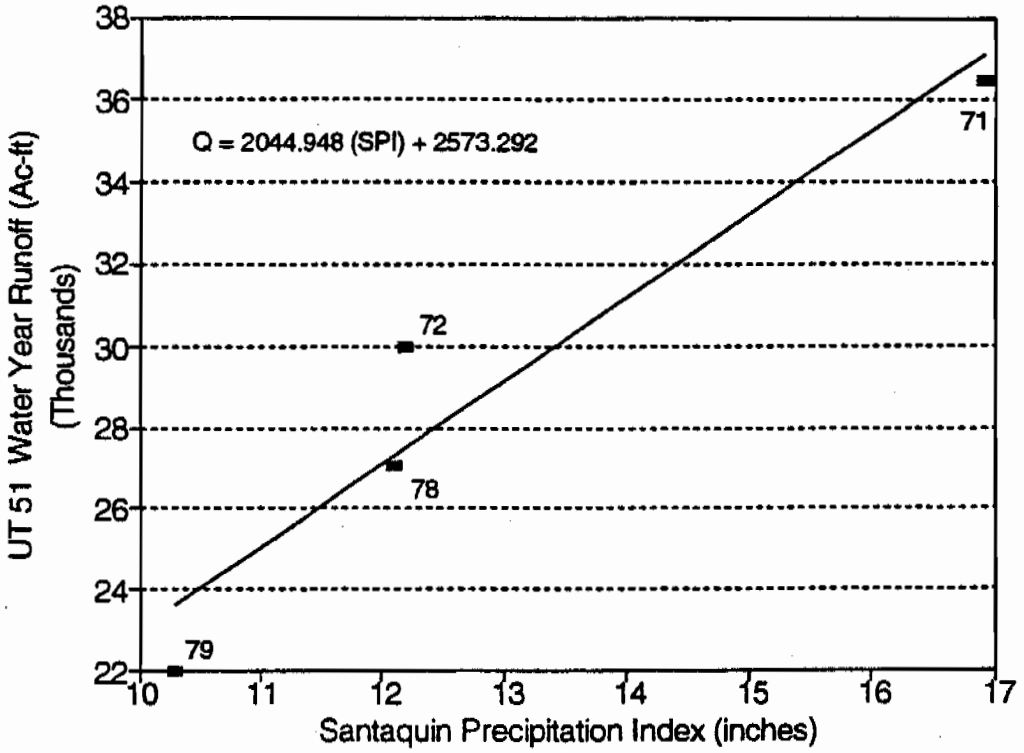
UT 50 - Drain, 5200 S. and 4000 W.



Year	Flow	AVPI - PY
1971	3614	14.8
1972	2465	14.3
1978	1911	9.0
1979	2863	13.3

Figure B:50 - Correlation for UT 50

UT 51 -- Benjamin Slough

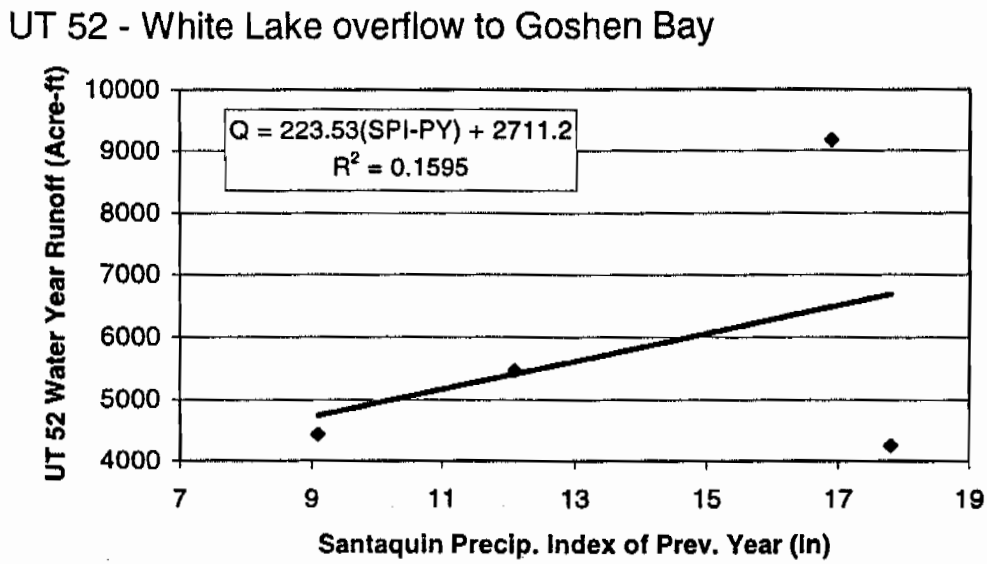


Year	Flow	SPI
1971	36469	16.9
1972	30027	12.2
1978	27107	12.1
1979	22005	10.3

Regression Output:

Constant	2573.292
Std Err of Y Est	2170.563
R Squared	0.913803
No. of Observations	4
Degrees of Freedom	2
X Coefficient(s)	2044.948
Std Err of Coef.	444.1064

Figure B:51 -- Correlation for UT 51, Benjamin Slough



Year	Flow	SPI-PY
1971	4256	17.8
1972	9184	16.9
1978	4433	9.1
1979	5467	12.1

Figure B:52 - Correlation for UT 52

APPENDIX C - Measured and Estimated Surface Inflow

Table C:11 - Measured Flows UT11 American Fork WWTP

UT11 Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	40.8	34.2	31.5	29.8	29.3	31.5	34.8	53.0	73.4	77.8	64.0	51.9	552.0
1954	61.3	51.3	47.2	44.7	43.9	47.2	52.2	79.5	110.1	116.7	96.0	77.8	828.0
1955	71.5	59.9	55.1	52.2	51.2	55.1	60.9	92.7	128.5	136.2	112.1	90.8	966.0
1956	73.4	61.5	56.5	53.6	52.6	56.5	62.5	95.2	131.9	139.9	115.1	93.2	992.0
1957	75.3	63.1	58.0	55.0	54.0	58.0	64.1	97.7	135.4	143.5	118.1	95.7	1018.0
1958	77.3	64.7	59.5	56.4	55.3	59.5	65.8	100.2	138.9	147.2	121.1	98.1	1044.0
1959	79.2	66.3	61.0	57.8	56.7	61.0	67.4	102.7	142.3	150.9	124.1	100.6	1070.0
1960	81.0	67.9	62.4	59.1	58.0	62.4	69.0	105.1	145.6	154.4	127.0	102.9	1095.0
1961	83.0	69.5	63.9	60.5	59.4	63.9	70.6	107.6	149.1	158.1	130.0	105.4	1121.0
1962	84.9	71.1	65.4	61.9	60.8	65.4	72.3	110.1	152.6	161.7	133.1	107.8	1147.0
1963	86.8	72.7	66.9	63.3	62.2	66.9	73.9	112.6	156.0	165.4	136.1	110.3	1173.0
1964	88.7	74.3	68.3	64.7	63.5	68.3	75.5	115.1	159.5	169.1	139.1	112.7	1199.0
1965	90.7	76.0	69.8	66.2	64.9	69.8	77.2	117.6	162.9	172.7	142.1	115.2	1225.0
1966	92.6	77.6	71.3	67.6	66.3	71.3	78.8	120.1	166.4	176.4	145.1	117.6	1251.0
1967	94.5	79.2	72.8	69.0	67.7	72.8	80.5	122.6	169.8	180.1	148.1	120.0	1277.0
1968	96.3	80.7	74.2	70.3	69.0	74.2	82.0	125.0	173.2	183.6	151.0	122.4	1302.0
1969	98.3	82.3	75.7	71.7	70.4	75.7	83.7	127.5	176.6	187.2	154.0	124.8	1328.0
1970	93.6	78.4	72.1	68.3	67.0	72.1	79.7	121.4	168.2	178.4	146.7	118.9	1265.0
1971	102.1	85.6	78.7	74.5	73.1	78.7	86.9	132.5	183.5	194.6	160.1	129.7	1380.0
1972	87.6	73.4	67.5	63.9	62.8	67.5	74.6	113.7	157.5	166.9	137.3	111.3	1184.0
1973	135.1	113.2	104.1	98.6	96.8	104.1	115.0	175.3	242.9	257.5	211.8	171.6	1826.0
1974	131.0	109.7	100.9	95.6	93.8	100.9	111.5	169.9	235.4	249.6	205.3	166.4	1770.0
1975	140.7	117.9	108.4	102.7	100.8	108.4	119.8	182.6	253.0	268.2	220.6	178.8	1902.0
1976	150.6	126.2	116.0	109.9	107.9	116.0	128.2	195.4	270.7	286.9	236.1	191.3	2035.0
1977	137.0	114.8	105.5	100.0	98.1	105.5	116.6	177.7	246.2	261.0	214.7	174.0	1851.0
1978	170.1	142.5	131.0	124.1	121.8	131.0	144.8	220.7	305.8	324.2	266.7	216.1	2299.0
1979	150.0	125.7	115.5	109.5	107.4	115.5	127.7	194.6	269.6	285.8	235.1	190.5	2027.0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0
Averages:	39.30	32.90	30.30	28.70	28.20	30.30	33.50	51.00	70.70	74.90	61.60	49.90	524.00
Distribution of annual total flow by month													
	0.074	0.062	0.057	0.054	0.053	0.057	0.063	0.096	0.133	0.141	0.116	0.094	

Table C:20 - Measured Flows UT20 Geneva Steel Effluent

UT 20 Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	1997	2154.6	2364.8	2732.7	3021.7	2522.5	2180.9	1891.9	1760.5	1813	1891.9	1944.4	26276
1951	2204.8	2378.9	2611	3017.2	3336.3	2785.1	2407.9	2088.8	1943.7	2001.8	2088.8	2146.8	29011
1952	2563.2	2765.5	3035.3	3507.5	3878.5	3237.7	2799.3	2428.3	2259.6	2327.1	2428.3	2495.7	33726
1953	2655.3	2864.9	3144.4	3633.6	4017.9	3354.1	2899.9	2515.5	2340.9	2410.7	2515.5	2585.4	34938
1954	2581.6	2785.5	3057.2	3532.8	3906.4	3261	2819.4	2445.8	2275.9	2343.9	2445.8	2513.7	33969
1955	2174.8	2346.5	2575.4	2976.1	3290.8	2747.1	2375.1	2060.4	1917.3	1974.5	2060.4	2117.6	28616
1956	1821.6	1965.5	2157.2	2492.8	2756.4	2301	1989.4	1725.8	1605.9	1653.9	1725.8	1773.7	23969
1957	1970.2	2125.7	2333.1	2696	2981.2	2488.6	2151.6	1866.5	1736.8	1788.7	1866.5	1918.3	25923
1958	1929.2	2081.5	2284.6	2639.9	2919.2	2436.9	2106.9	1827.7	1700.7	1751.5	1827.7	1878.4	25384
1959	2429.6	2621.4	2877.1	3324.7	3676.3	3068.9	2653.3	2301.7	2141.9	2205.8	2301.7	2365.6	31968
1960	1830.7	1975.2	2167.9	2505.2	2770.1	2312.5	1999.3	1734.3	1613.9	1662.1	1734.3	1782.5	24088
1961	1378.7	1487.6	1632.7	1886.7	2086.2	1741.5	1505.7	1306.2	1215.4	1251.7	1306.2	1342.4	18141
1962	1425.2	1537.7	1687.7	1950.2	2156.5	1800.2	1556.4	1350.1	1256.4	1293.9	1350.1	1387.7	18752
1963	1604.8	1731.5	1900.4	2196.1	2428.3	2027.1	1752.6	1520.4	1414.8	1457	1520.4	1562.6	21116
1964	2952.2	3185.3	3496.1	4039.9	4467.2	3729.1	3224.1	2796.8	2602.6	2680.3	2796.8	2874.5	38845
1965	2744.1	2960.8	3249.6	3755.1	4152.3	3466.3	2996.9	2599.7	2419.2	2491.4	2599.7	2671.9	36107
1966	2616.1	2822.6	3098	3579.9	3958.5	3304.5	2857	2478.4	2306.3	2375.1	2478.4	2547.2	34422
1967	1718.4	1854	2034.9	2351.4	2600.2	2170.6	1876.6	1627.9	1514.9	1560.1	1627.9	1673.1	22610
1968	1901.9	2052.1	2252.3	2602.6	2877.9	2402.4	2077.1	1801.8	1676.7	1726.7	1801.8	1851.9	25025
1969	1867.2	2014.6	2211.1	2555.1	2825.3	2358.5	2039.1	1768.9	1646.1	1695.2	1768.9	1818	24568
1970	1747.7	1885.7	2069.6	2391.6	2644.5	2207.6	1908.7	1655.7	1540.7	1586.7	1655.7	1701.7	22996
1971	1847.6	1993.4	2187.9	2528.2	2795.7	2333.8	2017.7	1750.3	1628.8	1677.4	1750.3	1798.9	24310
1972	1903.1	2053.4	2253.7	2604.3	2879.7	2403.9	2078.4	1803	1677.8	1727.8	1803	1853	25041
1973	2253.4	2431.3	2668.5	3083.6	3409.8	2846.4	2461	2134.8	1986.6	2045.9	2134.8	2194.1	29650
1974	2355.2	2541.2	2789.1	3223	3563.9	2975	2572.2	2231.3	2076.3	2138.3	2231.3	2293.3	30990
1975	2171.6	2343	2571.6	2971.6	3285.9	2743	2371.6	2057.3	1914.4	1971.5	2057.3	2114.4	28573
1976	2307.5	2307.5	2592.3	2649.3	2250.5	2506.9	2335.9	2392.9	2279	2136.5	2250.5	2478.4	28487
1977	1864.1	1864.1	2094.2	2140.2	1818	2025.1	1887.1	1933.1	1841	1726	1818	2002.1	23013
1978	1996.5	1996.5	2243	2292.3	1947.2	2169	2021.1	2070.4	1971.8	1848.6	1947.2	2144.4	24648
1979	2127.6	2127.6	2390.2	2442.7	2075	2311.4	2153.8	2206.3	2101.3	1970	2075	2285.1	26266
1980	2236.2	2236.2	2512.2	2567.5	2181	2429.4	2263.8	2319	2208.6	2070.5	2181	2401.8	27607
1981	1881.7	1881.7	2114	2160.5	1835.3	2044.3	1904.9	1951.4	1858.5	1742.3	1835.3	2021.1	23231
1982	2169.3	2169.3	2437.2	2490.7	2115.8	2356.8	2196.1	2249.7	2142.6	2008.7	2115.8	2330	26782
1983	1968.5	1968.5	2211.6	2260.2	1919.9	2138.7	1992.9	2041.5	1944.2	1822.7	1919.9	2114.4	24303
1984	1538.9	1538.9	1728.9	1766.9	1500.9	1671.9	1557.9	1595.9	1519.9	1424.9	1500.9	1652.9	18999
1985	1427.2	1427.2	1603.4	1638.7	1392	1550.6	1444.8	1480.1	1409.6	1321.5	1392	1532.9	17620
1986	1156.3	1156.3	1299	1327.6	1127.7	1256.2	1170.6	1199.1	1142	1070.6	1127.7	1241.9	14275
1987	940.1	940.1	1056.1	1079.4	916.9	1021.3	951.7	974.9	928.5	870.5	916.9	1009.7	11606
1988	788.6	788.6	886	905.4	769.1	856.8	798.4	817.8	778.9	730.2	769.1	847	9736
1989	1092	1092	1226.9	1253.8	1065.1	1186.4	1105.5	1132.5	1078.6	1011.2	1065.1	1172.9	13482
1990	833.3	833.3	936.2	956.8	812.8	905.3	843.6	864.2	823	771.6	812.8	895.1	10288
1991	599.2	599.2	673.2	688	584.4	651	606.6	621.4	591.8	554.9	584.4	643.6	7398
1992	689.5	689.5	774.6	791.6	672.4	749.1	698	715	681	638.4	672.4	740.5	8512
1993	670.4	670.4	753.2	769.8	653.9	728.4	678.7	695.3	662.2	620.8	653.9	720.1	8277
1994	798.3	798.3	896.9	916.6	778.6	867.3	808.2	827.9	788.5	739.2	778.6	857.5	9856
1995	737.5	737.5	828.6	846.8	719.3	801.2	746.6	764.8	728.4	682.9	719.3	792.1	9105
1996	875.8	875.8	983.9	1005.5	854.1	951.5	886.6	908.2	865	810.9	854.1	940.6	10812
1997	789.4	789.4	886.9	906.4	769.9	857.6	799.2	818.7	779.7	731	769.9	847.9	9746
1998	793.8	793.8	891.8	911.4	774.2	862.4	803.6	823.2	784	735	774.2	852.6	9800
1999	759.2	890.3	1060.8	1016.1	1004.6	1004.7	1129.7	1181.7	948.9	787.8	956.2	1232.9	11972.4
Averages:	1474.1	1555.8	1719	1920.5	1994.5	1784.5	1574.9	1435.9	1346.1	1346.2	1408.8	1479.4	19040
Distribution of annual total flow by month													
	0.076	0.082	0.09	0.104	0.115	0.096	0.083	0.072	0.067	0.069	0.072	0.074	

Table C:26 - Measured Flows UT 26 Orem WWTP

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	49.7	43.2	43.7	40.5	38.3	41	40	45.9	47	47	51.8	51.8	540
1951	55.2	48	48.6	45	42.6	45.6	44.4	51	52.2	52.2	57.6	57.6	600
1952	60.7	52.8	53.5	49.5	46.9	50.2	48.8	56.1	57.4	57.4	63.4	63.4	660
1953	66.2	57.6	58.3	54	51.1	54.7	53.3	61.2	62.6	62.6	69.1	69.1	720
1954	71.8	62.4	63.2	58.5	55.4	59.3	57.7	66.3	67.9	67.9	74.9	74.9	780
1955	77.3	67.2	68	63	59.6	63.8	62.2	71.4	73.1	73.1	80.6	80.6	840
1956	82.8	72	72.9	67.5	63.9	68.4	66.6	76.5	78.3	78.3	86.4	86.4	900
1957	101.2	88	89.1	82.5	78.1	83.6	81.4	93.5	95.7	95.7	105.6	105.6	1100
1958	128.8	112	113.4	105	99.4	106.4	103.6	119	121.8	121.8	134.4	134.4	1400
1959	165.6	144	145.8	135	127.8	136.8	133.2	153	156.6	156.6	172.8	172.8	1800
1960	174.8	152	153.9	142.5	134.9	144.4	140.6	161.5	165.3	165.3	182.4	182.4	1900
1961	184	160	162	150	142	152	148	170	174	174	192	192	2000
1962	193.2	168	170.1	157.5	149.1	159.6	155.4	178.5	182.7	182.7	201.6	201.6	2100
1963	202.4	176	178.2	165	156.2	167.2	162.8	187	191.4	191.4	211.2	211.2	2200
1964	211.6	184	186.3	172.5	163.3	174.8	170.2	195.5	200.1	200.1	220.8	220.8	2300
1965	220.8	192	194.4	180	170.4	182.4	177.6	204	208.8	208.8	230.4	230.4	2400
1966	239.2	208	210.6	195	184.6	197.6	192.4	221	226.2	226.2	249.6	249.6	2600
1967	260.8	226.8	229.6	212.6	201.3	215.5	209.8	241	246.6	246.6	272.2	272.2	2835
1968	224.5	195.2	197.6	183	173.2	185.4	180.6	207.4	212.3	212.3	234.2	234.2	2440
1969	260	226.1	228.9	212	200.6	214.8	209.1	240.2	245.9	245.9	271.3	271.3	2826
1970	280.4	243.8	246.9	228.6	216.4	231.6	225.6	259.1	265.2	265.2	292.6	292.6	3048
1971	299.1	260.1	263.3	243.8	230.8	247.1	240.6	276.3	282.8	282.8	312.1	312.1	3251
1972	320.4	278.6	282.1	261.2	247.3	264.7	257.7	296.1	303	303	334.4	334.4	3483
1973	380.7	331	335.2	310.4	293.8	314.5	306.2	351.7	360	360	397.2	397.2	4138
1974	392.7	341.4	345.7	320.1	303	324.4	315.8	362.8	371.3	371.3	409.7	409.7	4268
1975	356.4	309.9	313.8	290.6	275.1	294.4	286.7	329.3	337	337	371.9	371.9	3874
1976	397.3	345.5	349.8	323.9	306.6	328.2	319.6	367.1	375.8	375.8	414.6	414.6	4319
1977	527.8	459	464.7	430.3	407.3	436	424.5	487.6	499.1	499.1	550.8	550.8	5737
1978	481.6	418.8	424	392.6	371.7	397.9	387.4	445	455.4	455.4	502.6	502.6	5235
1979	567.1	493.1	499.3	462.3	437.6	468.5	456.1	523.9	536.3	536.3	591.7	591.7	6164
1980	595.2	517.6	524.1	485.3	459.4	491.7	478.8	550	562.9	562.9	621.1	621.1	6470
1981	561.2	488	494.1	457.5	433.1	463.6	451.4	518.5	530.7	530.7	585.6	585.6	6100
1982	587.7	511	517.4	479.1	453.5	485.5	472.7	543	555.8	555.8	613.2	613.2	6388
1983	664.2	577.6	584.8	541.5	512.6	548.7	534.3	613.7	628.1	628.1	693.1	693.1	7220
1984	895.4	778.6	788.4	730	691	739.7	720.2	827.3	846.8	846.8	934.4	934.4	9733
1985	732.4	636.9	644.8	597.1	565.2	605	589.1	676.7	692.6	692.6	764.3	764.3	7961
1986	754.9	656.4	664.6	615.4	582.6	623.6	607.2	697.4	713.8	713.8	787.7	787.7	8205
1987	780.5	678.7	687.2	636.3	602.4	644.8	627.8	721.1	738.1	738.1	814.5	814.5	8484
1988	842	732.2	741.3	686.4	649.8	695.6	677.2	777.9	796.2	796.2	878.6	878.6	9152
1989	830.5	722.2	731.2	677	640.9	686.1	668	767.3	785.4	785.4	866.6	866.6	9027
1990	856.2	744.5	753.8	698	660.7	707.3	688.6	791	809.6	809.6	893.4	893.4	9306
1991	864.9	752.1	761.5	705.1	667.5	714.5	695.7	799.1	817.9	817.9	902.5	902.5	9401
1992	880.3	765.4	775	717.6	679.3	727.2	708	813.3	832.4	832.4	918.5	918.5	9568
1993	824.5	717	725.9	672.2	636.3	681.1	663.2	761.8	779.7	779.7	860.4	860.4	8962
1994	873.7	759.8	769.3	712.3	674.3	721.8	702.8	807.2	826.2	826.2	911.7	911.7	9497
1995	867.1	754	763.4	706.9	669.2	716.3	697.5	801.1	820	820	904.8	904.8	9425
1996	903.3	785.4	795.3	736.4	697.1	746.2	726.5	834.5	854.2	854.2	942.5	942.5	9818
1997	954.5	830	840.4	778.1	736.6	788.5	767.8	881.9	902.6	902.6	996	996	10375
1998	1012	880	891	825	781	836	814	935	957	957	1056	1056	11000
1999	1032	898	909	842	797	853	830	954	976	976	1077	1077	11222
Averages:	325.7	283.3	286.8	265.6	251.4	269.1	262	301	308	308	339.9	339.9	3541
Distribution of annual total flow by month													
	0.092	0.08	0.081	0.075	0.071	0.076	0.074	0.085	0.087	0.087	0.096	0.096	

Table C:29 - Measured Flows UT 29 Provo River

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	13850	16810	16640	18800	16360	19000	14700	19460	28700.1	350	80	1340	166090
1951	7050	12800	19070	19450	19470	19550	15060	15150	12210	240	120	960	141130
1952	14460	19150	21130	21820	19470	20350	52570.1	85820.2	31960.1	1180	890	2700	291501
1953	7030	15890	19900	19670	23430.1	18900	14820	2420	2100	230	320	360	125070
1954	4780	13590	23520.1	21260	12160	9110	4210	710	390	230	150	180	90290
1955	920	7490	11960	11800	8330	7260	5830	680	900	150	90	380	55790
1956	2070	10600	14470	17110	18220	21280	10710	8440	19080	300	190	360	122830
1957	3870	15800	16540	12520	11890	18300	16370	20460	37580.1	7790	510	1430	163060
1958	8180	13910	19120	17830	15790	21030	27400.1	14520	14390	330	400	1040	153940
1959	4160	9930	16490	15950	12680	16800	9940	740	290	150	260	1440	88830
1960	10400	9730	10520	10780	9100	6970	2910	220	210	120	70	90	61120
1961	670	5330	17570	8360	5620	2520	1440	140	6240	3220	240	130	51480
1962	1920	6980	18350	11680	14060	27930.1	28470.1	37050.1	33310.1	2130	420	360	182660
1963	3430	1520	9100	12120	17160	19650	11810	12670	26620.1	270	190	910	115450
1964	3850	8800	12450	16080	8180	6650	18350	20460	53120.1	4120	180	380	152620
1965	1890	8440	9840	14150	23390.1	34100.1	28200.1	14710	58310.1	24000.1	2500	9980	229510
1966	16790	17160	19190	19240	16470	14350	16720	12540	2060	390	230	460	135600
1967	4010	10730	19730	21120	15270	19510	20680	5250	56390.1	13600	780	2100	189170
1968	6840	14220	21190	16860	9700	22990	23960.1	13520	27320.1	1210	1580	3030	162420
1969	9030	13840	22420	26460.1	20750	22270	34270.1	13160	22350	3650	1420	1730	191350
1970	11270	18290	22920	19450	20710	13540	9590	5290	18060	1250	630	1220	142220
1971	9500	20700	23350.1	19280	17170	13310	18800	11690	19500	850	880	1120	156150
1972	15420	20230	20210	16520	16310	20580	16850	16720	29440.1	1840	730	2020	176870
1973	11400	13850	14090	16290	16000	17130	20680	41880.1	19470	900	1360	5770	178820
1974	15640	14670	12540	14180	20840	21200	22120	20620	18270	620	720	260	161680
1975	5000	11500	22010	19910	13680	10200	23510.1	20980	62440.1	14340	1310	2230	207110
1976	10350	22160	23250	20280	17110	24340.1	15640	7340	2340	480	420	910	144620
1977	7110	10280	7190	7590	6360	6280	3540	510	140	90	240	470	49800
1978	2320	9440	8070	7650	7780	14540	16000	8890	27960.1	2490	2400	5680	113220
1979	10340	14730	16940	17250	15430	17320	17700	6160	2360	960	2570	2530	124290
1980	5610	9600	5630	8050	8350	15990	40090.1	55570.1	18730	3890	1090	3520	176120
1981	12790	20070	19140	8890	4840	10250	5480	15210	8720	685	1010	1370	108455
1982	7330	6130	10690	9970	14800	21720	34830.1	44130.1	30810.1	6610	2370	9570	198960
1983	24210.1	34800.1	35280.1	21110	17420	25710.1	32170.1	52600.1	93500.2	10360	12940	12390	372491
1984	31500.1	16440	34610.1	31550.1	20740	31380.1	37680.1	71350.2	57030.1	5170	3940	11250	352641
1985	27200.1	25820.1	25580.1	26610.1	21400	18920	38370.1	42780.1	12410	4290	2250	5320	250951
1986	11040	11500	12830	15180	45450.1	77300.2	80010.2	67240.1	46130.1	10440	6930	16520	400571
1987	24760.1	25730.1	23470	10670	10550	11490	7690	18940	2750	1740	2880	3300	143970
1988	3750	5890	6000	4430	4280	4450	3690	15260	4150	640	730	1130	54400
1989	1980	2630	2580	1520	1970	3590	7740	1800	1580	1090	843	2730	30053
1990	2740	5470	3600	3410	2470	4960	2930	1950	23590.1	1030	586	867	53603
1991	1850	2980	3580	3650	4750	5750	5660	8090	24570.1	1340	1390	5770	69380
1992	7440	4470	4760	3850	3510	4510	1500	1230	1320	376	626	682	34274
1993	1810	3250	2420	3030	2870	5350	19110	47030.1	59610.1	8870	3980	5800	163130
1994	10640	6770	6490	5340	3580	4970	4830	3660	2320	930	1100	2070	52700
1995	4760	3800	4670	5110	5320	10190	7200	19260	32170.1	10910	1780	5180	110350
1996	12110	8830	7870	6750	12350	15250	16900	24040.1	7040	1510	1770	3460	117880
1997	7020	7600	16650	38690.1	42000.1	37710.1	24520.1	30290.1	8830	3810	2690	11500	231310
1998	13260	6440	6680	16310	20190	22010	26060.1	30410.1	42860.1	7110	4410	9780	205520
1999	22900	19090	22210	18060	16000	18320	13340	31350	32180	2720	2410	7250	205830
Averages:	7763.3	11347.6	14866.6	14773.2	14219.2	17170.5	17622.5	18446.3	18698.4	2532.5	1132.4	2528.4	141101

Table C:39 - Measured Flows UT 39 Provo WWTP

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	656	544	528	536	504	552	552	720	816	896	896	800	8000
1951	680.6	564.4	547.8	556.1	522.9	572.7	572.7	747	846.6	929.6	929.6	830	8300
1952	713.4	591.6	574.2	582.9	548.1	600.3	600.3	783	887.4	974.4	974.4	870	8700
1953	738	612	594	603	567	621	621	810	918	1008	1008	900	9000
1954	762.6	632.4	613.8	623.1	585.9	641.7	641.7	837	948.6	1041.6	1041.6	930	9300
1955	795.4	659.6	640.2	649.9	611.1	669.3	669.3	873	989.4	1086.4	1086.4	970	9700
1956	820	680	660	670	630	690	690	900	1020	1120	1120	1000	10000
1957	894.6	741.9	720.1	731	687.3	752.8	752.8	981.9	1112.8	1221.9	1221.9	1091	10910
1958	942.3	781.5	758.5	770	724	792.9	792.9	1034.3	1172.2	1287.1	1287.1	1149.2	11492
1959	897.2	744	722.1	733	689.3	754.9	754.9	984.7	1116	1225.4	1225.4	1094.1	10941
1960	841.4	697.7	677.2	687.5	646.4	708	708	923.5	1046.6	1149.2	1149.2	1026.1	10261
1961	717.7	595.1	577.6	586.4	551.4	603.9	603.9	787.7	892.7	980.2	980.2	875.2	8752
1962	855.2	709.2	688.3	698.7	657	719.6	719.6	938.6	1063.8	1168.1	1168.1	1042.9	10429
1963	806.6	668.9	649.2	659.1	619.7	678.8	678.8	885.3	1003.4	1101.7	1101.7	983.7	9837
1964	892.8	740.4	718.6	729.5	685.9	751.3	751.3	979.9	1110.6	1219.5	1219.5	1088.8	10888
1965	974	807.7	783.9	795.8	748.3	819.6	819.6	1069	1211.6	1330.3	1330.3	1187.8	11878
1966	971	805.3	781.6	793.4	746	817.1	817.1	1065.8	1207.9	1326.3	1326.3	1184.2	11842
1967	941.9	781.1	758.1	769.6	723.7	792.6	792.6	1033.8	1171.7	1286.5	1286.5	1148.7	11487
1968	967.9	802.7	779.1	790.9	743.7	814.5	814.5	1062.4	1204	1322.1	1322.1	1180.4	11804
1969	1093.1	906.4	879.8	893.1	839.8	919.8	919.8	1199.7	1359.7	1493	1493	1333	13330
1970	1118.6	927.7	900.4	914	859.4	941.3	941.3	1227.8	1391.5	1527.9	1527.9	1364.2	13642
1971	1091.1	904.8	878.2	891.5	838.3	918.1	918.1	1197.5	1357.2	1490.3	1490.3	1330.6	13306
1972	1202.9	997.6	968.2	982.9	924.2	1012.2	1012.2	1320.3	1496.3	1643	1643	1467	14670
1973	1233.4	1022.9	992.8	1007.8	947.6	1037.9	1037.9	1353.8	1534.3	1684.7	1684.7	1504.2	15042
1974	1209	1002.6	973.1	987.9	928.9	1017.3	1017.3	1327	1503.9	1651.3	1651.3	1474.4	14744
1975	1177.6	976.6	947.8	962.2	904.7	990.9	990.9	1292.5	1464.8	1608.4	1608.4	1436.1	14361
1976	1234.2	1023.5	993.4	1008.4	948.2	1038.5	1038.5	1354.6	1535.2	1685.7	1685.7	1505.1	15051
1977	1018.5	844.6	819.8	832.2	782.5	857.1	857.1	1117.9	1266.9	1391.2	1391.2	1242.1	12421
1978	1211.6	1004.8	975.2	990	930.9	1019.5	1019.5	1329.8	1507.2	1654.9	1654.9	1477.6	1477[illegible]
1979	1415	1173.4	1138.9	1156.2	1087.1	1190.7	1190.7	1553	1760.1	1932.7	1932.7	1725.6	172[illegible]
1980	1500.1	1244	1207.4	1225.7	1152.5	1262.3	1262.3	1646.5	1866	2048.9	2048.9	1829.4	18294
1981	1373.7	1139.1	1105.6	1122.4	1055.4	1155.9	1155.9	1507.7	1708.7	1876.2	1876.2	1675.2	16752
1982	1456.3	1207.7	1172.2	1189.9	1118.9	1225.4	1225.4	1598.4	1811.5	1989.1	1989.1	1776	17760
1983	1576	1307	1268.5	1287.7	1210.9	1326.2	1326.2	1729.8	1960.4	2152.6	2152.6	1922	19220
1984	1501	1244.7	1208.1	1226.4	1153.2	1263	1263	1647.5	1867.1	2050.2	2050.2	1830.5	18305
1985	1458.5	1209.5	1173.9	1191.7	1120.5	1227.2	1227.2	1600.7	1814.2	1992	1992	1778.6	17786
1986	1527.2	1266.4	1229.2	1247.8	1173.3	1285.1	1285.1	1676.2	1899.7	2085.9	2085.9	1862.4	18624
1987	1387.8	1150.8	1117	1133.9	1066.2	1167.8	1167.8	1523.2	1726.3	1895.5	1895.5	1692.4	16924
1988	1342.6	1113.4	1080.6	1097	1031.5	1129.7	1129.7	1473.6	1670	1833.8	1833.8	1637.3	16373
1989	1398	1159.3	1125.2	1142.3	1074.1	1176.4	1176.4	1534.4	1739	1909.5	1909.5	1704.9	17049
1990	1303.5	1080.9	1049.1	1065	1001.5	1096.8	1096.8	1430.6	1621.4	1780.4	1780.4	1589.6	15896
1991	1368.3	1134.7	1101.3	1118	1051.3	1151.4	1151.4	1501.8	1702.1	1868.9	1868.9	1668.7	16687
1992	1335.6	1107.6	1075	1091.3	1026.1	1123.9	1123.9	1465.9	1661.4	1824.3	1824.3	1628.8	16288
1993	1461.7	1212.2	1176.5	1194.3	1123	1230	1230	1604.3	1818.3	1996.5	1996.5	1782.6	17826
1994	1337.2	1108.9	1076.3	1092.6	1027.3	1125.2	1125.2	1467.6	1663.3	1826.4	1826.4	1630.7	16307
1995	1314.9	1090.4	1058.3	1074.3	1010.2	1106.4	1106.4	1443.2	1635.6	1795.9	1795.9	1603.5	16035
1996	1406.5	1166.4	1132.1	1149.3	1080.6	1183.6	1183.6	1543.8	1749.6	1921.1	1921.1	1715.3	17153
1997	1637.9	1358.2	1318.3	1338.3	1258.4	1378.2	1378.2	1797.7	2037.4	2237.1	2237.1	1997.4	19974
1998	1748.2	1449.8	1407.1	1428.4	1343.2	1471.1	1471.1	1918.8	2174.6	2387.8	2387.8	2132	21320
1999	1660	1377	1336	1356	1275	1397	1397	1822	2065	2268	2268	2025	20246
Averages:	937.9	777.8	754.9	766.3	720.6	789.2	789.2	1029.4	1166.6	1281	1281	1143.8	11438
Distribution of annual total flow by month													
	0.082	0.068	0.066	0.067	0.063	0.069	0.069	0.09	0.102	0.112	0.112	0.1	

Table C:48 - Measured and Calculated Flows UT 48 Spanish Fork River at Lakeshore

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	3080	4630	4430	5470	6230	8020	11900	9040	80	60	0	20	52960
1951	610	4500	5670	5590	6260	6930	7220	3470	100	110	80	30	40570
1952	2820	4060	4330	5220	5840	8840	64760	93300	16610	100	260	2380	208520
1953	2820	7140	9220	8610	6390	9030	9540	2530	30	180	430	150	56070
1954	1620	4630	5290	5740	5710	6960	6130	10	0	20	0	180	36290
1955	920	3380	3550	3380	3720	7570	8820	2100	0	20	170	60	33690
1956	960	3340	5310	6020	5180	8490	4920	190	30	30	30	20	34520
1957	840	3190	4560	4710	6850	6580	9420	17660	7570	50	20	50	61500
1958	2560	5080	5640	5440	6470	9010	15520	15030	130	20	20	70	64990
1959	580	3210	5890	5740	5780	6360	1580	20	20	50	10	370	29610
1960	890	980	3250	4340	4050	6580	4490	40	80	50	100	960	25810
1961	1270	3040	3480	3710	3540	4080	960	280	70	20	110	30	20590
1962	580	2860	2760	3400	7340	7380	21570	4120	1270	50	40	30	51400
1963	560	1490	3420	3930	4610	890	780	540	100	10	150	170	16650
1964	70	3070	3710	3610	3050	4080	8130	12150	20	150	90	40	38170
1965	180	2160	3730	3960	4800	5950	11690	5530	1180	500	480	2050	42210
1966	2270	4250	5360	5460	4880	9350	3600	280	90	50	70	140	35800
1967	2200	3740	4360	4770	4540	7750	6160	1830	6200	390	380	480	42800
1968	2880	4030	3870	3030	5860	7350	10940	12810	3480	1020	860	690	56820
1969	3320	5410	5880	6950	6020	10300	34170	14980	2850	1560	370	250	92060
1970	4800	5600	6310	7260	6790	7750	5680	3880	2720	350	680	2170	53990
1971	4130	5320	5810	6810	6810	9970	13860	10760	1910	590	540	1700	68210
1972	5340	6220	6490	7270	7060	10320	6930	800	730	110	150	760	52180
1973	4950	6320	6450	6550	5730	7300	17090	40150	3480	290	620	2030	100960
1974	3770	6090	6730	7150	6530	11540	16940	9500	680	1180	410	200	70720
1975	3930	5630	5380	6110	5910	7840	8990	31890	30410	1860	340	1560	109850
1976	5260	6810	6720	6890	7860	11320	10520	3780	300	210	460	1220	61350
1977	3500	3970	4630	4670	4550	4660	700	470	250	270	420	170	28260
1978	2410	2720	3130	4200	4370	11090	20530	24530	910	60	290	1700	75940
1979	2300	5040	6320	7940	6440	8770	15340	10360	790	180	334	561	64375
1980	3140	5260	5640	6710	8540	10180	21880	37050	8150	2070	1290	3020	112930
1981	4690	6880	7170	6680	5980	6760	4730	3060	345	186	258	1060	47799
1982	5410	5810	5860	6300	6960	14170	34050	50770	7240	2450	1060	4710	144790
1983	10920	8320	8800	8380	8560	19130	22460	70250	65820	5430	3980	1550	233601
1984	40080	29310	12960	10300	9840	17770	55480	111400	38370	6130	7090	6570	345301
1985	17420	16020	13120	12030	5740	10990	26830	29750	12220	6040	3820	5680	159660
1986	9450	9800	8760	8290	20680	23300	46510	50280	3490	4220	7360	4860	197000
1987	9670	8880	7840	7910	7800	9620	4550	1110	598	1440	1340	1740	62498
1988	4260	5550	4310	4550	5460	6620	4250	1110	598	1440	1340	1740	41228
1989	2280	4070	6430	10590	10830	13050	16260	5340	180	310	410	380	70130
1990	1940	9400	11370	11660	11200	13990	4960	3360	190	330	440	220	69060
1991	1000	4030	9930	9390	10650	8880	3060	300	240	380	580	470	48910
1992	230	3940	8840	10040	10360	11050	14370	2170	190	160	400	570	62320
1993	110	6460	9870	11290	11740	18110	20960	28930	250	500	660	490	109370
1994	300	6720	10600	5850	6220	8310	3100	1710	220	320	450	450	44250
1995	1770	4810	5520	5200	6160	12360	10820	31260	420	500	650	590	80060
1996	870	4190	4900	7170	8390	12810	19370	20290	250	320	570	430	79560
1997	3480	6300	6740	8960	7990	17730	23510	32450	250	430	580	730	109150
1998	2810	6720	7630	8110	7970	14700	22210	34560	330	700	750	840	107330
1999	6064	9754	9056	9590	10037	10089	8316	9824	285	422	619	739	74795
Averages:	3287	5124	5680	5976	6389	9165	13234	13907	3445	661	636	867	68369

Table C:48 - Measured and Calculated Flows UT 48 Spanish Fork River at Lakeshore

1958	2560	5080	5640	5440	6470	9010	15520	15030	130	20	20	70	64990
1959	580	3210	5890	5740	5780	6360	1580	20	20	50	10	370	29610
1960	890	980	3250	4340	4050	6580	4490	40	80	50	100	960	25810
1961	1270	3040	3480	3710	3540	4080	960	280	70	20	110	30	20590
1962	580	2860	2760	3400	7340	7380	21570	4120	1270	50	40	30	51400
1963	560	1490	3420	3930	4610	890	780	540	100	10	150	170	16650
1964	70	3070	3710	3610	3050	4080	8130	12150	20	150	90	40	38170
1965	180	2160	3730	3960	4800	5950	11690	5530	1180	500	480	2050	42210
1966	2270	4250	5360	5460	4880	9350	3600	280	90	50	70	140	35800
1967	2200	3740	4360	4770	4540	7750	6160	1830	6200	390	380	480	42800
1968	2880	4030	3870	3030	5860	7350	10940	12810	3480	1020	860	690	56820
1969	3320	5410	5880	6950	6020	10300	34170.1	14980	2850	1560	370	250	92060
1970	4800	5600	6310	7260	6790	7750	5680	3880	2720	350	680	2170	53990
1971	4130	5320	5810	6810	6810	9970	13860	10760	1910	590	540	1700	68210
1972	5340	6220	6490	7270	7060	10320	6930	800	730	110	150	760	52180
1973	4950	6320	6450	6550	5730	7300	17090	40150.1	3480	290	620	2030	100960
1974	3770	6090	6730	7150	6530	11540	16940	9500	680	1180	410	200	70720
1975	3930	5630	5380	6110	5910	7840	8990	31890.1	30410.1	1860	340	1560	109850
1976	5260	6810	6720	6890	7860	11320	10520	3780	300	210	460	1220	61350
1977	3500	3970	4630	4670	4550	4660	700	470	250	270	420	170	28260
1978	2410	2720	3130	4200	4370	11090	20530	24530.1	910	60	290	1700	75940
1979	2300	5040	6320	7940	6440	8770	15340	10360	790	180	334	561	64375
1980	3140	5260	5640	6710	8540	10180	21880	37050.1	8150	2070	1290	3020	112930
1981	4690	6880	7170	6680	5980	6760	4730	3060	345	186	258	1060	47799
1982	5410	5810	5860	6300	6960	14170	34050.1	50770.1	7240	2450	1060	4710	144790
1983	10920	8320	8800	8380	8560	19130	22460	70250.1	65820.1	5430	3980	1550	233601
1984	40080.1	29310.1	12960	10300	9840	17770	55480.1	111400.2	38370.1	6130	7090	6570	345301
1985	17420	16020	13120	12030	5740	10990	26830.1	29750.1	12220	6040	3820	5680	15[illegible]
1986	9450	9800	8760	8290	20680	23300.1	46510.1	50280.1	3490	4220	7360	4860	19[illegible]
1987	9670	8880	7840	7910	7800	9620	4550	1110	598	1440	1340	1740	62498
1988	4260	5550	4310	4550	5460	6620	4250	1110	598	1440	1340	1740	41228
1989	2280	4070	6430	10590	10830	13050	16260	5340	180	310	410	380	70130
1990	1940	9400	11370	11660	11200	13990	4960	3360	190	330	440	220	69060
1991	1000	4030	9930	9390	10650	8880	3060	300	240	380	580	470	48910
1992	230	3940	8840	10040	10360	11050	14370	2170	190	160	400	570	62320
1993	110	6460	9870	11290	11740	18110	20960	28930.1	250	500	660	490	109370
1994	300	6720	10600	5850	6220	8310	3100	1710	220	320	450	450	44250
1995	1770	4810	5520	5200	6160	12360	10820	31260.1	420	500	650	590	80060
1996	870	4190	4900	7170	8390	12810	19370	20290	250	320	570	430	79560
1997	3480	6300	6740	8960	7990	17730	23510.1	32450.1	250	430	580	730	109150
1998	2810	6720	7630	8110	7970	14700	22210	34560.1	330	700	750	840	107330
1999	6064	9754	9056	9590	10037	10089	8316	9824	285	422	619	739	74795
erages:	3287	5123.5	5679.7	5975.8	6388.7	9164.8	13234.4	13906.6	3444.8	660.8	636.4	866.7	68369

Table C:53 - Measured Outflows UT 53 Jordan River

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	14500	7900	3400	1100	6800	12600	16700	29400.1	46000.1	52200.1	52700.1	39500.1	282801
1951	17300	6500	6100	1000	2600	5800	16000	32300.1	45500.1	50800.1	40800.1	44800.1	269501
1952	12200	7000	6200	14000	19900	27600.1	35100.1	74000.2	81300.2	65200.1	53500.1	42600.1	438601
1953	37200.1	34600.1	40000.1	44100.1	41700.1	48300.1	44500.1	45100.1	45400.1	51800.1	49800.1	45300.1	527801
1954	19500	7800	11500	11300	14700	23230.1	24300.1	42600.1	44700.1	53700.1	49800.1	41000.1	344131
1955	13000	1700	1600	400	400	500	1500	29800.1	36800.1	51100.1	47700.1	39100.1	223600
1956	11800	800	600	400	100	100	5800	35000.1	43500.1	52200.1	50500.1	41100.1	241901
1957	12700	600	500	0	0	0	0	17500	33500.1	49100.1	48200.1	39100.1	201200
1958	12200	1300	1200	1900	4500	4100	3600	38200.1	46700.1	54800.1	59700.1	43200.1	271401
1959	18000	9500	3300	1100	1000	300	9200	39700.1	46100.1	52000.1	47400.1	32800.1	260401
1960	9600	5000	1400	300	100	300	5100	39800.1	44300.1	51000.1	37700.1	26300.1	220900
1961	6100	1100	1100	0	0	0	0	33500.1	33100.1	23600.1	14900	5600	119000
1962	700	500	200	100	500	400	800	27100.1	36300.1	45400.1	46400.1	35600.1	194000
1963	6700	4100	1200	400	100	0	0	29900.1	28100.1	47800.1	40900.1	20700	179900
1964	11000	900	1300	1300	400	100	0	18200	20600	47500.1	44500.1	33900.1	179700
1965	10400	500	600	1500	1300	800	5800	30000.1	38200.1	42900.1	41500.1	17400	190900
1966	9300	1200	1300	3400	11800	8800	8500	41800.1	46900.1	49200.1	48800.1	36600.1	267601
1967	13700	3100	1200	1400	2100	4900	3800	38400.1	27000.1	47600.1	51600.1	38500.1	233301
1968	10500	1100	1100	1300	1500	9500	22500	34300.1	38300.1	50900.1	42300.1	39100.1	252401
1969	18100	9000	12000	19800	25300.1	31100.1	35200.1	42600.1	34900.1	48500.1	50100.1	41700.1	368301
1970	20400	16000	20500	26700.1	29600.1	34300.1	29300.1	39100.1	39400.1	45300.1	50700.1	33400.1	384701
1971	14900	8900	16900	23100.1	25900.1	31300.1	30000.1	38200.1	40000.1	47900.1	51400.1	36800.1	365301
1972	12900	10300	15200	23800.1	25800.1	29300.1	25200.1	44800.1	44000.1	51000.1	52000.1	35500.1	369801
1973	13400	5300	1800	6800	19700	26800.1	29800.1	39300.1	44600.1	47100.1	50800.1	33000.1	318401
1974	17700	18000	23500.1	30500.1	32200.1	40800.1	41100.1	44200.1	45200.1	50600.1	51500.1	44000.1	439301
1975	19700	3100	1400	1200	15500	28200.1	30700.1	30500.1	44400.1	45300.1	48500.1	39700.1	308201
1976	25100.1	29100.1	38400.1	41800.1	45400.1	45400.1	40700.1	41700.1	42000.1	42100.1	49500.1	36300.1	477501
1977	11900	1100	1100	1000	1100	1200	10500	24600.1	35800.1	40300.1	37500.1	29000.1	195100
1978	700	600	600	800	1000	2000	8000	22500	22100	43500.1	42700.1	25700.1	170200
1979	7300	1300	1300	1150	20960	33350.1	33000.1	38641.1	40224.1	46206.1	45623.1	39108.1	308163
1980	14542	870	818	1244	13698	26860.1	29004.1	42545.1	43436.1	39235.1	38891.1	24928.1	276072
1981	21334	23111	31186.1	32953.1	31271.1	34885.1	32005.1	30146.1	33542.1	48527.1	46389.1	32553.1	397903
1982	13160	8577	14519	17226	22342	32698.1	34332.1	48363.1	53255.1	46008.1	41601.1	26426.1	358508
1983	39701.1	46413.1	53976.1	62787.1	58328.1	74087.2	78534.2	95368.2	125204.3	122960.3	102390.2	84611.2	944361
1984	79837.2	79023.2	87293.2	97293.2	90317.2	96246.2	100225.2	137244.3	171494.4	141493.3	112625.2	83136.2	1276229
1985	75959.2	78595.2	80906.2	80479.2	73987.2	83570.2	88937.2	94514.2	86491.2	71454.2	58284.1	44535.1	917713
1986	43678.1	46586.1	59478.1	61940.1	66198.1	35548.1	129846.3	149667.3	129292.3	115622.3	96714.2	67628.1	1002199
1987	69147.1	70028.1	73420.2	71544.1	63473.1	69826.1	44588.1	38979.1	37833.1	39882.1	40971.1	32924.1	652616
1988	14190	1831	1500	1565	1636	1324	9769	32672.1	41960.1	45886.1	43850.1	33834.1	230018
1989	12784	1402	972	1019	1004	1466	13597	38901.1	42005.1	51100.1	47485.1	27571.1	239307
1990	5566	1002	1089	1152	893	561	10141	40742.1	33794.1	47775.1	45162.1	31488.1	219365
1991	3608	543	617	682	916	827	1369	22772	26624.1	46821.1	44474.1	27254.1	176507
1992	14814	1242	962	710	561	623	18030	41692.1	44352.1	42966.1	25956.1	5042	196950
1993	1583	1045	18	161	1154	2358	1379	18722	24652.1	32813.1	37053.1	22655	143593
1994	9669	1636	3531	0	0	121	5411	24702.1	34014.1	43645.1	38761.1	30426.1	191916
1995	1962	0	0	1142	1014	988	1424	6384	55436.1	55586.1	35483.1	26920.1	186339
1996	8644	0	0	0	31918.1	49692.1	46915.1	56922.1	55297.1	34747.1	34603.1	21544	340283
1997	9667	1365	15537	42198.1	46709.1	55212.1	57302.1	67479.1	68713.1	58485.1	28229.1	20323	471220
1998	8658	44029.1	44458.1	46758.1	45733.1	53018.1	54309.1	66674.1	67169.1	70413.1	55045.1	38000.1	594265
1999	17700	42900	47600	51000	48300	52500	48900	59800	62800	46500	36000	25100	539100
Averages:	15097.2	9108.7	10236	11576.9	13311.8	15905.7	20214.8	40368.6	44689.8	50299	45368	33868.3	310045

Table C:70 - Measured Flows UT 70 Lehi WWTP

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	16.8	15.4	15.8	14.4	14	16.2	17.2	18.8	21.2	18.6	16.4	15.2	200
1957	35.3	32.3	33.2	30.2	29.4	34	36.1	39.5	44.5	39.1	34.4	31.9	420
1958	37.8	34.7	35.6	32.4	31.5	36.5	38.7	42.3	47.7	41.9	36.9	34.2	450
1959	40.3	37	37.9	34.6	33.6	38.9	41.3	45.1	50.9	44.6	39.4	36.5	480
1960	42.8	39.3	40.3	36.7	35.7	41.3	43.9	47.9	54.1	47.4	41.8	38.8	510
1961	43.1	39.5	40.5	36.9	35.9	41.6	44.1	48.2	54.4	47.7	42.1	39	513
1962	43.3	39.7	40.8	37.2	36.1	41.8	44.4	48.5	54.7	48	42.3	39.2	516
1963	43.6	40	41	37.4	36.3	42	44.6	48.8	55	48.3	42.6	39.4	519
1964	43.8	40.1	41.2	37.5	36.5	42.2	44.8	49	55.2	48.5	42.7	39.6	521
1965	44	40.3	41.4	37.7	36.7	42.4	45.1	49.3	55.5	48.7	43	39.8	524
1966	44.3	40.6	41.6	37.9	36.9	42.7	45.3	49.5	55.9	49	43.2	40.1	527
1967	44.5	40.8	41.9	38.2	37.1	42.9	45.6	49.8	56.2	49.3	43.5	40.3	530
1968	44.8	41	42.1	38.4	37.3	43.2	45.8	50.1	56.5	49.6	43.7	40.5	533
1969	45	41.3	42.3	38.6	37.5	43.4	46.1	50.4	56.8	49.8	44	40.7	536
1970	45.4	41.6	42.7	38.9	37.8	43.7	46.4	50.8	57.2	50.2	44.3	41	540
1971	47.4	43.4	44.6	40.6	39.5	45.7	48.5	53	59.8	52.5	46.2	42.9	564
1972	49.4	45.3	46.5	42.3	41.2	47.6	50.6	55.3	62.3	54.7	48.2	44.7	588
1973	51.4	47.1	48.3	44.1	42.8	49.6	52.6	57.5	64.9	56.9	50.2	46.5	612
1974	53.4	49	50.2	45.8	44.5	51.5	54.7	59.8	67.4	59.1	52.2	48.3	636
1975	55.4	50.8	52.1	47.5	46.2	53.5	56.8	62	70	61.4	54.1	50.2	660
1976	56.3	51.6	52.9	48.2	46.9	54.3	57.6	63	71	62.3	54.9	50.9	670
1977	48.7	44.7	45.8	41.8	40.6	47	49.9	54.5	61.5	53.9	47.6	44.1	580
1978	57.1	52.4	53.7	49	47.6	55.1	58.5	63.9	72.1	63.2	55.8	51.7	680
1979	58.8	53.9	55.3	50.4	49	56.7	60.2	65.8	74.2	65.1	57.4	53.2	700
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0
Averages:	16.1	14.7	15.1	13.8	13.4	15.5	16.5	18	20.3	17.8	15.7	14.5	189
Distribution of annual total flow by month													
	0.084	0.077	0.079	0.072	0.07	0.081	0.086	0.094	0.106	0.093	0.082	0.076	

Table C:71 - Measured Flows UT 71 Timpanogos WWTP

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	672.5	600.3	528	461.3	294.6	316.8	294.6	277.9	222.3	839.3	528	522.5	5558
1981	568	507	445.9	389.6	248.8	267.6	248.8	234.7	187.8	708.8	445.9	441.2	4694
1982	715.2	638.4	561.5	490.6	313.3	336.9	313.3	295.6	236.4	892.6	561.5	555.6	5911
1983	776	692.6	609.2	532.3	339.9	365.5	339.9	320.7	256.5	968.4	609.2	602.8	6413
1984	808	721.2	634.4	554.3	353.9	380.6	353.9	333.9	267.1	1008.4	634.4	627.7	6678
1985	728.5	650.3	572	499.7	319.1	343.2	319.1	301.1	240.8	909.2	572	566	6021
1986	765.1	682.9	600.7	524.8	335.1	360.4	335.1	316.2	252.9	954.8	600.7	594.4	6323
1987	627.7	560.3	492.9	430.6	275	295.7	275	259.4	207.5	783.4	492.9	487.7	5188
1988	572	510.5	449.1	392.3	250.5	269.4	250.5	236.4	189.1	713.8	449.1	444.3	4727
1989	502.8	448.7	394.7	344.9	220.2	236.8	220.2	207.8	166.2	627.4	394.7	390.6	4155
1990	499.4	445.7	392.1	342.5	218.7	235.2	218.7	206.4	165.1	623.2	392.1	387.9	4127
1991	595.1	531.1	467.2	408.2	260.7	280.3	260.7	245.9	196.7	742.6	467.2	462.3	4918
1992	621.3	554.6	487.8	426.2	272.2	292.7	272.2	256.8	205.4	775.4	487.8	482.7	5135
1993	791.9	706.9	621.8	543.2	346.9	373.1	346.9	327.3	261.8	988.3	621.8	615.2	6545
1994	755.9	674.7	593.5	518.5	331.1	356.1	331.1	312.4	249.9	943.3	593.5	587.2	6247
1995	862.5	769.8	677.2	591.6	377.8	406.3	377.8	356.4	285.1	1076.3	677.2	670	7128
1996	961	857.7	754.5	659.2	420.9	452.7	420.9	397.1	317.7	1199.2	754.5	746.5	7942
1997	1005.6	897.6	789.5	689.8	440.5	473.7	440.5	415.6	332.4	1255	789.5	781.2	8311
1998	1113.2	993.6	874	763.6	487.6	524.4	487.6	460	368	1389.2	874	864.8	9200
1999	1157	1033	908	794	507	545	507	478	382	1444	908	899	9562
Averages:	202.1	180.3	158.6	138.6	88.5	95.2	88.5	83.5	66.8	252.2	158.6	157	1670
Distribution of annual total flow by month													
	0.121	0.108	0.095	0.083	0.053	0.057	0.053	0.05	0.04	0.151	0.095	0.094	

Table C:72 - Measured Flows UT 72 Pleasant Grove WWTP

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	17.6	17	17.4	14.4	13	16	15.2	16.8	17.6	18.4	18.4	18.2	200
1957	35.2	34	34.8	28.8	26	32	30.4	33.6	35.2	36.8	36.8	36.4	400
1958	44	42.5	43.5	36	32.5	40	38	42	44	46	46	45.5	500
1959	61.6	59.5	60.9	50.4	45.5	56	53.2	58.8	61.6	64.4	64.4	63.7	700
1960	71.3	68.9	70.5	58.3	52.7	64.8	61.6	68	71.3	74.5	74.5	73.7	810
1961	74.6	72.1	73.8	61.1	55.1	67.8	64.4	71.2	74.6	78	78	77.2	848
1962	78	75.3	77.1	63.8	57.6	70.9	67.3	74.4	78	81.5	81.5	80.6	886
1963	81.3	78.5	80.4	66.5	60.1	73.9	70.2	77.6	81.3	85	85	84.1	924
1964	84.7	81.8	83.7	69.3	62.5	77	73.1	80.8	84.7	88.5	88.5	87.5	962
1965	88	85	87	72	65	80	76	84	88	92	92	91	1000
1966	91.3	88.2	90.3	74.7	67.5	83	78.9	87.2	91.3	95.5	95.5	94.5	1038
1967	94.7	91.5	93.6	77.5	69.9	86.1	81.8	90.4	94.7	99	99	97.9	1076
1968	98	94.7	96.9	80.2	72.4	89.1	84.7	93.6	98	102.5	102.5	101.4	1114
1969	101.4	97.9	100.2	82.9	74.9	92.2	87.6	96.8	101.4	106	106	104.8	1152
1970	104.7	101.2	103.5	85.7	77.4	95.2	90.4	100	104.7	109.5	109.5	108.3	1190
1971	110.4	106.6	109.1	90.3	81.5	100.3	95.3	105.3	110.4	115.4	115.4	114.1	1254
1972	116	112	114.7	94.9	85.7	105.4	100.2	110.7	116	121.3	121.3	119.9	1318
1973	121.5	117.4	120.1	99.4	89.8	110.5	105	116	121.5	127.1	127.1	125.7	1381
1974	127.2	122.8	125.7	104	93.9	115.6	109.8	121.4	127.2	132.9	132.9	131.5	1445
1975	132.8	128.3	131.3	108.6	98.1	120.7	114.7	126.8	132.8	138.8	138.8	137.3	1509
1976	138.4	133.7	136.9	113.3	102.2	125.8	119.5	132.1	138.4	144.7	144.7	143.1	1573
1977	144	139.1	142.3	117.8	106.3	130.9	124.3	137.4	144	150.5	150.5	148.9	1636
1978	149.6	144.5	147.9	122.4	110.5	136	129.2	142.8	149.6	156.4	156.4	154.7	1700
1979	155.8	150.5	154	127.4	115.1	141.6	134.5	148.7	155.8	162.8	162.8	161.1	1770
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0
Averages:	34.1	33	33.8	27.9	25.2	31	29.5	32.6	34.1	35.7	35.7	35.3	382
Distribution of annual total flow by month													
	0.088	0.085	0.087	0.072	0.065	0.08	0.076	0.084	0.088	0.092	0.092	0.091	

Table C:73 - Measured Flows UT 73 Springville WWTP

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	142.4	112	97.6	84.8	112	139.2	131.2	137.6	155.2	171.2	164.8	152	1600
1951	146.9	115.5	100.7	87.5	115.5	143.6	135.3	141.9	160.1	176.6	170	156.8	1650
1952	151.3	119	103.7	90.1	119	147.9	139.4	146.2	164.9	181.9	175.1	161.5	1700
1953	155.8	122.5	106.8	92.8	122.5	152.3	143.5	150.5	169.8	187.3	180.3	166.3	1750
1954	160.2	126	109.8	95.4	126	156.6	147.6	154.8	174.6	192.6	185.4	171	1800
1955	164.7	129.5	112.9	98.1	129.5	161	151.7	159.1	179.5	198	190.6	175.8	1850
1956	169.1	133	115.9	100.7	133	165.3	155.8	163.4	184.3	203.3	195.7	180.5	1900
1957	180.2	141.8	123.5	107.3	141.8	176.2	166.1	174.2	196.4	216.7	208.6	192.4	2025
1958	200.3	157.5	137.3	119.3	157.5	195.8	184.5	193.5	218.3	240.8	231.8	213.8	2250
1959	211.4	166.3	144.9	125.9	166.3	206.6	194.8	204.3	230.4	254.1	244.6	225.6	2375
1960	213.6	168	146.4	127.2	168	208.8	196.8	206.4	232.8	256.8	247.2	228	2400
1961	216	169.9	148	128.6	169.9	211.1	199	208.7	235.4	259.7	250	230.6	2427
1962	218.4	171.8	149.7	130.1	171.8	213.5	201.2	211	238	262.6	252.8	233.1	2454
1963	220.8	173.7	151.3	131.5	173.7	215.8	203.4	213.4	240.7	265.5	255.5	235.7	2481
1964	223.2	175.6	153	132.9	175.6	218.2	205.7	215.7	243.3	268.4	258.3	238.3	2508
1965	225.6	177.5	154.6	134.4	177.5	220.5	207.9	218	245.9	271.2	261.1	240.8	2535
1966	228	179.3	156.3	135.8	179.3	222.9	210.1	220.3	248.5	274.1	263.9	243.4	2562
1967	230.4	181.2	157.9	137.2	181.2	225.2	212.3	222.7	251.1	277	266.7	246	2589
1968	232.8	183.1	159.6	138.6	183.1	227.6	214.5	225	253.8	279.9	269.4	248.5	2616
1969	235.2	185	161.2	140.1	185	229.9	216.7	227.3	256.4	282.8	272.2	251.1	2643
1970	237.6	186.9	162.9	141.5	186.9	232.3	218.9	229.6	259	285.7	275	253.7	2670
1971	250	196.6	171.3	148.9	196.6	244.4	230.3	241.6	272.5	300.6	289.3	266.9	2809
1972	262.4	206.4	179.8	156.2	206.4	256.5	241.7	253.5	286	315.4	303.6	280.1	2948
1973	274.7	216	188.2	163.6	216	268.5	253.1	265.4	299.3	330.2	317.9	293.2	3086
1974	287	225.8	196.7	170.9	225.8	280.6	264.5	277.4	312.8	345.1	332.2	306.4	3225
1975	299.4	235.5	205.2	178.3	235.5	292.7	275.8	289.3	326.3	359.9	346.5	319.6	3364
1976	311.8	245.2	213.7	185.7	245.2	304.8	287.2	301.3	339.8	374.8	360.8	332.8	3503
1977	324	254.9	222.1	193	254.9	316.8	298.6	313.1	353.2	389.6	375	345.9	3641
1978	336.4	264.6	230.6	200.3	264.6	328.9	310	325.1	366.7	404.5	389.3	359.1	3780
1979	349.8	275.1	239.7	208.3	275.1	341.9	322.3	338	381.2	420.5	404.8	373.4	3930
1980	264.1	207.7	181	157.3	207.7	258.1	243.3	255.2	287.8	317.5	305.6	281.9	2967
1981	302.2	237.7	207.2	180	237.7	295.5	278.5	292.1	329.4	363.4	349.8	322.6	3396
1982	300.2	236.1	205.8	178.8	236.1	293.5	276.6	290.1	327.2	360.9	347.4	320.4	3373
1983	363.4	285.8	249.1	216.4	285.8	355.2	334.8	351.1	396.1	436.9	420.5	387.9	4083
1984	402.3	316.4	275.7	239.6	316.4	393.2	370.6	388.7	438.4	483.6	465.6	429.4	4520
1985	434.1	341.5	297.6	258.5	341.5	424.4	400	419.5	473.2	521.9	502.4	463.4	4878
1986	358.2	281.8	245.5	213.3	281.8	350.2	330.1	346.2	390.4	430.7	414.6	382.4	4025
1987	315.7	248.3	216.4	188	248.3	308.6	290.9	305	344.1	379.5	365.3	337	3547
1988	300.9	236.7	206.2	179.2	236.7	294.1	277.2	290.8	328	361.8	348.2	321.2	3381
1989	290.9	228.8	199.4	173.3	228.8	284.4	268.1	281.1	317.1	349.8	336.7	310.6	3269
1990	289.5	227.7	198.4	172.4	227.7	283	266.7	279.8	315.5	348.1	335.1	309	3253
1991	291.5	229.3	199.8	173.6	229.3	284.9	268.6	281.7	317.7	350.4	337.3	311.1	3275
1992	268.3	211.1	183.9	159.8	211.1	262.3	247.2	259.3	292.5	322.6	310.5	286.4	3015
1993	276.3	217.4	189.4	164.6	217.4	270.1	254.6	267	301.2	332.2	319.8	295	3105
1994	302.9	238.2	207.6	180.4	238.2	296.1	279	292.7	330.1	364.1	350.5	323.3	3403
1995	344.4	270.9	236.1	205.1	270.9	336.7	317.3	332.8	375.4	414.1	398.6	367.7	3870
1996	383	301.2	262.5	228.1	301.2	374.4	352.8	370.1	417.4	460.4	443.2	408.8	4303
1997	384.2	302.2	263.3	228.8	302.2	375.6	354	371.3	418.7	461.9	444.7	410.1	4317
1998	436.1	343	298.9	259.7	343	426.3	401.8	421.4	475.3	524.3	504.7	465.5	4900
1999	462	363	317	275	363	451	425	446	503	555	534	493	5189
Averages:	209.5	164.8	143.6	124.8	164.8	204.8	193.1	202.5	228.4	251.9	242.5	223.7	2354
Distribution of annual total flow by month													
	0.089	0.07	0.061	0.053	0.07	0.087	0.082	0.086	0.097	0.107	0.103	0.095	

Table C:74 - Measured Flows UT 74 Spanish Fork WWTP

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	116.5	112.6	117.8	93.4	83.2	110.1	97.3	105	105	111.4	113.9	113.9	1280
1951	119.2	115.3	120.5	95.6	85.2	112.7	99.6	107.4	107.4	114	116.6	116.6	1310
1952	121.9	117.9	123.3	97.8	87.1	115.2	101.8	109.9	109.9	116.6	119.3	119.3	1340
1953	124.7	120.6	126	100	89.1	117.8	104.1	112.3	112.3	119.2	121.9	121.9	1370
1954	127.4	123.2	128.8	102.2	91	120.4	106.4	114.8	114.8	121.8	124.6	124.6	1400
1955	130.1	125.8	131.6	104.4	93	123	108.7	117.3	117.3	124.4	127.3	127.3	1430
1956	132.9	128.5	134.3	106.6	94.9	125.6	111	119.7	119.7	127	129.9	129.9	1460
1957	135.6	131.1	137.1	108.8	96.9	128.1	113.2	122.2	122.2	129.6	132.6	132.6	1490
1958	138.3	133.8	139.8	111	98.8	130.7	115.5	124.6	124.6	132.2	135.3	135.3	1520
1959	141.1	136.4	142.6	113.2	100.8	133.3	117.8	127.1	127.1	134.9	138	138	1550
1960	143.8	139	145.4	115.3	102.7	135.9	120.1	129.6	129.6	137.5	140.6	140.6	1580
1961	149.8	144.8	151.4	120.2	107	141.6	125.1	135	135	143.2	146.5	146.5	1646
1962	155.9	150.7	157.6	125	111.3	147.3	130.2	140.5	140.5	149	152.5	152.5	1713
1963	162.1	156.7	163.9	130	115.8	153.2	135.4	146	146	154.9	158.5	158.5	1781
1964	168.2	162.6	170	134.9	120.1	158.9	140.4	151.5	151.5	160.8	164.5	164.5	1848
1965	174.3	168.5	176.2	139.8	124.5	164.7	145.5	157	157	166.6	170.4	170.4	1915
1966	180.5	174.5	182.4	144.8	128.9	170.5	150.7	162.6	162.6	172.5	176.5	176.5	1983
1967	186.6	180.4	188.6	149.7	133.3	176.3	155.8	168.1	168.1	178.4	182.5	182.5	2050
1968	192.6	186.3	194.8	154.5	137.6	182.1	160.9	173.6	173.6	184.2	188.4	188.4	2117
1969	198.8	192.3	201	159.5	142	187.9	166.1	179.2	179.2	190.1	194.5	194.5	2185
1970	204.9	198.2	207.2	164.4	146.4	193.7	171.2	184.7	184.7	195.9	200.4	200.4	2252
1971	211.1	204.2	213.4	169.4	150.8	199.5	176.3	190.2	190.2	201.8	206.5	206.5	2320
1972	217.2	210.1	219.6	174.3	155.2	205.3	181.4	195.7	195.7	207.7	212.4	212.4	2387
1973	223.3	216	225.8	179.1	159.5	211	186.5	201.2	201.2	213.5	218.4	218.4	2454
1974	229.5	221.9	232	184.1	163.9	216.9	191.7	206.8	206.8	219.4	224.5	224.5	2522
1975	235.6	227.8	238.2	189	168.3	222.7	196.8	212.3	212.3	225.2	230.4	230.4	2589
1976	241.7	233.7	244.4	193.9	172.6	228.4	201.9	217.8	217.8	231.1	236.4	236.4	2656
1977	247.9	239.7	250.6	198.9	177.1	234.3	207	223.4	223.4	237	242.4	242.4	2724
1978	254	245.6	256.8	203.7	181.4	240	212.1	228.9	228.9	242.8	248.4	248.4	2791
1979	303.7	293.7	307	243.6	216.9	287	253.6	273.6	273.6	290.3	297	297	3337
1980	273.4	264.4	276.4	219.3	195.3	258.3	228.3	246.3	246.3	261.3	267.4	267.4	3004
1981	250.3	242.1	253.1	200.8	178.8	236.6	209.1	225.6	225.6	239.3	244.8	244.8	2751
1982	265.4	256.6	268.3	212.9	189.5	250.8	221.6	239.1	239.1	253.7	259.5	259.5	2916
1983	287.2	277.7	290.4	230.4	205.1	271.4	239.9	258.8	258.8	274.6	280.9	280.9	3156
1984	273.5	264.5	276.6	219.4	195.4	258.5	228.5	246.5	246.5	261.5	267.5	267.5	3006
1985	265.7	257	268.6	213.2	189.8	251.1	221.9	239.4	239.4	254	259.9	259.9	2920
1986	278.3	269.1	281.3	223.2	198.8	263	232.4	250.8	250.8	266	272.2	272.2	3058
1987	252.9	244.6	255.7	202.9	180.6	239	211.2	227.9	227.9	241.8	247.3	247.3	2779
1988	211.9	205	214.3	170	151.4	200.3	177	191	191	202.6	207.3	207.3	2329
1989	216.6	209.4	219	173.7	154.7	204.7	180.9	195.2	195.2	207.1	211.8	211.8	2380
1990	229	221.5	231.6	183.7	163.6	216.5	191.3	206.4	206.4	219	224	224	2517
1991	222.7	215.3	225.1	178.6	159.1	210.4	186	200.7	200.7	212.9	217.8	217.8	2447
1992	251.2	242.9	253.9	201.5	179.4	237.4	209.8	226.3	226.3	240.1	245.6	245.6	2760
1993	268.9	260	271.9	215.7	192.1	254.1	224.6	242.3	242.3	257.1	263	263	2955
1994	244.6	236.5	247.3	196.2	174.7	231.2	204.3	220.4	220.4	233.9	239.2	239.2	2688
1995	258.3	249.8	261.2	207.2	184.5	244.2	215.8	232.8	232.8	247	252.7	252.7	2839
1996	308	297.9	311.4	247.1	220	291.1	257.3	277.6	277.6	294.5	301.3	301.3	3385
1997	322	311.3	325.5	258.3	230	304.3	268.9	290.1	290.1	307.8	314.9	314.9	3538
1998	348.5	337	352.4	279.6	249	329.4	291.1	314.1	314.1	333.2	340.9	340.9	3830
1999	377	364	381	302	269	356	314	339	339	360	368	368	4138
Averages:	169.5	163.9	171.3	136	121.1	160.2	141.5	152.7	152.7	162	165.8	165.8	1862
Distribution of annual total flow by month													
	0.091	0.088	0.092	0.073	0.065	0.086	0.076	0.082	0.082	0.087	0.089	0.089	

Table C:75 - Measured Flows UT 75 Salem WWTP

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	45.2	41.3	43	41.3	39.7	47.3	49	41.3	49	43.5	50.6	52.8	544
1965	45.4	41.6	43.2	41.6	39.9	47.6	49.2	41.6	49.2	43.8	50.9	53.1	547
1966	45.6	41.7	43.4	41.7	40.1	47.8	49.4	41.7	49.4	43.9	51.1	53.3	549
1967	45.8	42	43.6	42	40.3	48	49.7	42	49.7	44.2	51.3	53.5	552
1968	46.1	42.2	43.8	42.2	40.5	48.3	50	42.2	50	44.4	51.6	53.8	555
1969	46.2	42.3	44	42.3	40.7	48.5	50.1	42.3	50.1	44.6	51.8	54	557
1970	46.5	42.6	44.2	42.6	40.9	48.7	50.4	42.6	50.4	44.8	52.1	54.3	560
1971	47.6	43.6	45.3	43.6	41.9	49.9	51.7	43.6	51.7	45.9	53.4	55.7	574
1972	48.9	44.8	46.5	44.8	43	51.2	53	44.8	53	47.1	54.8	57.1	589
1973	41.7	38.2	39.7	38.2	36.7	43.8	45.3	38.2	45.3	40.2	46.8	48.8	503
1974	42.9	39.3	40.8	39.3	37.7	45	46.5	39.3	46.5	41.4	48.1	50.1	517
1975	44.2	40.4	42	40.4	38.8	46.3	47.9	40.4	47.9	42.6	49.5	51.6	532
1976	45.3	41.5	43.1	41.5	39.9	47.5	49.1	41.5	49.1	43.7	50.8	53	546
1977	46.5	42.6	44.2	42.6	40.9	48.7	50.4	42.6	50.4	44.8	52.1	54.3	560
1978	47.7	43.7	45.4	43.7	42	50	51.8	43.7	51.8	46	53.5	55.8	575
1979	48.9	44.8	46.5	44.8	43	51.2	53	44.8	53	47.1	54.8	57.1	589
1980	53.1	48.6	50.6	48.6	46.7	55.7	57.6	48.6	57.6	51.2	59.5	62.1	640
1981	74.4	68.1	70.8	68.1	65.4	78	80.6	68.1	80.6	71.7	83.3	86.9	896
1982	92	84.3	87.6	84.3	81	96.5	99.8	84.3	99.8	88.7	103.1	107.6	1109
1983	148.3	135.8	141.2	135.8	130.5	155.5	160.8	135.8	160.8	143	166.2	173.3	1787
1984	66.3	60.7	63.1	60.7	58.3	69.5	71.9	60.7	71.9	63.9	74.3	77.5	799
1985	67.2	61.6	64	61.6	59.1	70.5	72.9	61.6	72.9	64.8	75.3	78.6	810
1986	76.4	70	72.8	70	67.2	80.1	82.9	70	82.9	73.7	85.7	89.3	921
1987	62	56.8	59	56.8	54.5	65	67.2	56.8	67.2	59.8	69.5	72.5	747
1988	57.7	52.8	54.9	52.8	50.7	60.5	62.6	52.8	62.6	55.6	64.6	67.4	695
1989	57.7	52.8	54.9	52.8	50.7	60.5	62.6	52.8	62.6	55.6	64.6	67.4	695
1990	57.7	52.8	54.9	52.8	50.7	60.5	62.6	52.8	62.6	55.6	64.6	67.4	695
1991	57.7	52.8	54.9	52.8	50.7	60.5	62.6	52.8	62.6	55.6	64.6	67.4	695
1992	60.6	55.5	57.7	55.5	53.3	63.5	65.7	55.5	65.7	58.4	67.9	70.8	730
1993	60.6	55.5	57.7	55.5	53.3	63.5	65.7	55.5	65.7	58.4	67.9	70.8	730
1994	57.3	52.4	54.5	52.4	50.4	60	62.1	52.4	62.1	55.2	64.2	66.9	690
1995	64.7	59.3	61.6	59.3	56.9	67.9	70.2	59.3	70.2	62.4	72.5	75.7	780
1996	69.7	63.8	66.4	63.8	61.3	73.1	75.6	63.8	75.6	67.2	78.1	81.5	840
1997	73.9	67.6	70.3	67.6	65	77.4	80.1	67.6	80.1	71.2	82.8	86.3	890
1998	78.9	72.2	75.1	72.2	69.4	82.7	85.5	72.2	85.5	76	88.4	92.2	950
1999	75	68	71	68	66	78	81	68	81	72	84	87	900
Averages:	30	27.5	28.6	27.5	26.4	31.5	32.5	27.5	32.5	28.9	33.6	35.1	362
Distribution of annual total flow by month													
	0.083	0.076	0.079	0.076	0.073	0.087	0.09	0.076	0.09	0.08	0.093	0.097	

Table C:76 - Measured Flows UT 76 Payson WWTP

Water Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Total
1950	50.2	43.4	40.5	36	32	34.8	38.3	43.4	53.1	67.9	71.4	60	571
1951	50.5	43.6	40.8	36.2	32.1	35	38.5	43.6	53.4	68.3	71.8	60.3	574
1952	50.9	43.9	41	36.4	32.4	35.3	38.7	43.9	53.8	68.8	72.3	60.7	578
1953	51.1	44.2	41.3	36.6	32.5	35.4	38.9	44.2	54	69.1	72.6	61	581
1954	51.5	44.5	41.5	36.9	32.8	35.7	39.2	44.5	54.4	69.6	73.1	61.4	585
1955	51.7	44.7	41.7	37	32.9	35.9	39.4	44.7	54.7	70	73.5	61.7	588
1956	52	44.9	42	37.2	33.1	36.1	39.6	44.9	55	70.3	73.9	62.1	591
1957	52.4	45.2	42.2	37.5	33.3	36.3	39.9	45.2	55.3	70.8	74.4	62.5	595
1958	52.6	45.4	42.5	37.7	33.5	36.5	40.1	45.4	55.6	71.2	74.8	62.8	598
1959	53	45.8	42.7	37.9	33.7	36.7	40.3	45.8	56	71.6	75.3	63.2	602
1960	53.2	46	43	38.1	33.9	36.9	40.5	46	56.3	72	75.6	63.5	605
1961	53.5	46.2	43.2	38.3	34	37.1	40.7	46.2	56.5	72.4	76	63.8	608
1962	53.9	46.5	43.5	38.6	34.3	37.3	41	46.5	56.9	72.8	76.5	64.3	612
1963	54.1	46.7	43.7	38.7	34.4	37.5	41.2	46.7	57.2	73.2	76.9	64.6	615
1964	54.5	47	43.9	39	34.7	37.8	41.5	47	57.6	73.7	77.4	65	619
1965	54.7	47.3	44.2	39.2	34.8	37.9	41.7	47.3	57.8	74	77.8	65.3	622
1966	55	47.5	44.4	39.4	35	38.1	41.9	47.5	58.1	74.4	78.1	65.6	625
1967	55.4	47.8	44.7	39.6	35.2	38.4	42.1	47.8	58.5	74.9	78.6	66	629
1968	55.6	48	44.9	39.8	35.4	38.6	42.3	48	58.8	75.2	79	66.4	632
1969	56	48.3	45.2	40.1	35.6	38.8	42.6	48.3	59.1	75.7	79.5	66.8	636
1970	56.2	48.6	45.4	40.3	35.8	39	42.8	48.6	59.4	76	79.9	67.1	639
1971	59.9	51.8	48.4	42.9	38.1	41.5	45.6	51.8	63.3	81	85.1	71.5	681
1972	63.6	54.9	51.3	45.5	40.5	44.1	48.4	54.9	67.2	86	90.4	75.9	723
1973	67.2	58.1	54.2	48.1	42.8	46.6	51.2	58.1	71.1	90.9	95.5	80.2	764
1974	70.9	61.3	57.2	50.8	45.1	49.2	54	61.3	75	95.9	100.8	84.6	806
1975	74.6	64.4	60.2	53.4	47.5	51.7	56.8	64.4	78.9	100.9	106	89	848
1976	78.3	67.6	63.2	56.1	49.8	54.3	59.6	67.6	82.8	105.9	111.3	93.5	890
1977	81.9	70.8	66.1	58.7	52.1	56.8	62.4	70.8	86.6	110.8	116.4	97.8	931
1978	85.6	73.9	69.1	61.3	54.5	59.4	65.2	73.9	90.5	115.8	121.6	102.2	973
1979	89.3	77.1	72.1	63.9	56.8	61.9	68	77.1	94.4	120.8	126.9	106.6	1015
1980	92.8	80.1	74.8	66.4	59	64.3	70.6	80.1	98	125.4	131.8	110.7	1054
1981	85	73.4	68.6	60.9	54.1	58.9	64.7	73.4	89.8	115	120.8	101.4	966
1982	90.1	77.8	72.7	64.5	57.3	62.5	68.6	77.8	95.2	121.9	128	107.5	1024
1983	97.5	84.2	78.7	69.8	62	67.6	74.2	84.2	103	131.9	138.5	116.3	1108
1984	92.8	80.2	74.9	66.5	59.1	64.4	70.7	80.2	98.1	125.5	131.9	110.8	1055
1985	90.2	77.9	72.8	64.6	57.4	62.5	68.7	77.9	95.3	122	128.1	107.6	1025
1986	94.4	81.5	76.2	67.6	60.1	65.5	71.9	81.5	99.8	127.7	134.1	112.7	1073
1987	85.8	74.1	69.2	61.4	54.6	59.5	65.3	74.1	90.7	116	121.9	102.4	975
1988	83.1	71.7	67	59.5	52.9	57.6	63.2	71.7	87.8	112.3	118	99.1	944
1989	83.5	72.1	67.4	59.8	53.1	57.9	63.6	72.1	88.3	112.9	118.6	99.6	949
1990	79.4	68.6	64	56.8	50.5	55	60.4	68.6	83.9	107.3	112.8	94.7	902
1991	119.4	103.1	96.3	85.5	76	82.8	90.9	103.1	126.2	161.5	169.6	142.5	1357
1992	92.4	79.8	74.6	66.2	58.8	64.1	70.4	79.8	97.7	125	131.3	110.3	1050
1993	92.4	79.8	74.6	66.2	58.8	64.1	70.4	79.8	97.7	125	131.3	110.3	1050
1994	88	76	71	63	56	61	67	76	93	119	125	105	1000
1995	93.3	80.6	75.3	66.8	59.4	64.7	71	80.6	98.6	126.1	132.5	111.3	1060
1996	98.6	85.1	79.5	70.6	62.7	68.3	75	85.1	104.2	133.3	140	117.6	1120
1997	93.3	80.6	75.3	66.8	59.4	64.7	71	80.6	98.6	126.1	132.5	111.3	1060
1998	105.6	91.2	85.2	75.6	67.2	73.2	80.4	91.2	111.6	142.8	150	126	1200
1999	117	101	95	84	75	51	59	101	124	159	167	140	1334
Averages:	57.6	49.7	46.5	41.2	36.6	39.9	43.8	49.7	60.9	77.9	81.8	68.7	654
Distribution of annual total flow by month													
	0.088	0.076	0.071	0.063	0.056	0.061	0.067	0.076	0.093	0.119	0.125	0.105	

APPENDIX D - Precipitation Inflow Calculations

Table D:1 - Provo Bay Precipitation

PROVO BAY
UTAH LAKE PRECIPITATION DATA (Inches)

1980 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
GENEVA ACTUAL	2.21	0.97	0.20	3.53	3.41	1.17	0.36	2.21	0.08	0.21	0.67	1.14
GENEVA WEIGHTED	2.21	0.97	0.20	3.53	3.41	1.17	0.36	2.21	0.08	0.21	0.67	1.14
PROVO BYU ACTUAL	-	-	-	-	-	-	-	-	-	-	-	-
PROVO BYU WEIGHTED	-	-	-	-	-	-	-	-	-	-	-	-
LAKE ELEVATION (ft)	4486.14	4486.37	4486.74	4487.29	4488.04	4488.63	4489.13	4489.91	4490.78	4489.66	4488.91	4488.41
AREA (Acres))	4510	4699	5055	5973	6063	6486	6824	7320	7853	7165	6678	6331
WEIGHTED PRECIP (in)	2.21	0.97	0.20	3.53	3.41	1.17	0.36	2.21	0.08	0.21	0.67	1.14
VOLUME (Ac-ft)	831	380	84	1757	1723	632	205	1348	52	125	373	601

PROVO BAY
UTAH LAKE PRECIPITATION DATA (Inches)

1981 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
GENEVA ACTUAL	6.38	1.35	1.37	0.80	0.29	1.85	0.49	3.76	0.36	0.10	0.17	0.89
GENEVA WEIGHTED	0.28	0.06	0.06	0.03	0.01	0.07	0.02	0.15	0.01	0.00	0.01	0.04
PROVO BYU ACTUAL	2.41	1.41	0.76	1.22	0.66	3.61	1.12	4.17	0.50	0.63	0.56	1.82
PROVO BYU WEIGHTED	2.30	1.35	0.73	1.17	0.63	3.46	1.07	4.00	0.48	0.60	0.54	1.75
LAKE ELEVATION (ft)	4488.36	4488.65	4488.97	4489.21	4489.28	4489.30	4489.32	4489.25	4489.14	4488.36	4487.44	4486.81
AREA (Acres))	6295	6500	6718	6877	6923	6936	6949	6903	6831	6295	5602	50[illegible]
WEIGHTED PRECIP (in)	2.58	1.41	0.79	1.20	0.64	3.53	1.09	4.15	0.49	0.60	0.55	1.[illegible]
VOLUME (Ac-ft)	1353	764	442	688	369	2040	631	2387	279	315	257	75[illegible]

PROVO BAY
UTAH LAKE PRECIPITATION DATA (inches)

1982 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
*GENEVA ACTUAL	3.49	0.24	1.65	1.34	0.79	2.00	0.52	1.50	0.48	1.56	0.39	5.75
*GENEVA WEIGHTED	0.14	0.01	0.07	0.06	0.03	0.08	0.02	0.06	0.02	0.06	0.02	0.23
PROVO BYU ACTUAL	5.05	0.84	2.48	2.26	1.41	3.01	1.21	1.91	0.62	0.70	0.22	6.53
PROVO BYU WEIGHTED	4.85	0.80	2.37	2.16	1.35	2.89	1.16	1.84	0.60	0.67	0.21	6.27
LAKE ELEVATION (ft)	4486.94	4487.29	4487.60	4488.17	4488.56	4489.09	4489.47	4490.28	4490.66	4490.18	4489.63	4489.32
AREA (Acres))	5193	5482	5728	6158	6437	6796	7045	7548	7780	7486	7146	6949
WEIGHTED PRECIP (in)	4.99	0.81	2.44	2.22	1.38	2.97	1.18	1.90	0.62	0.73	0.23	6.50
VOLUME (Ac-ft)	2159	370	1165	1139	740	1683	693	1195	402	455	137	3764

*Changed to Orem Treatment Plant in August 1982

PROVO BAY
UTAH LAKE PRECIPITATION DATA (inches)

1983 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	1.94	1.57	1.02	1.38	2.63	1.74	1.38	1.84	0.88	1.12	2.28	1.33
OREM TP WEIGHTED	0.07	0.06	0.04	0.05	0.09	0.06	0.04	0.05	0.02	0.03	0.06	0.04
PROVO BYU ACTUAL	2.82	1.80	2.31	2.22	3.93	3.41	1.95	4.04	0.97	2.11	4.38	2.37
PROVO BYU WEIGHTED	2.71	1.73	2.23	2.14	3.80	3.30	1.89	3.92	0.95	2.06	4.26	2.30
LAKE ELEVATION (ft)	4489.84	4490.29	4490.70	4490.93	4491.16	4491.58	4491.79	4492.40	4493.93	4493.59	4492.77	4492.19
AREA (Acres))	7277	7554	7805	7944	8083	8335	8460	8821	9707	9512	9038	8697
WEIGHTED PRECIP (in)	2.78	1.79	2.27	2.19	3.89	3.36	1.93	3.97	0.97	2.09	4.32	2.34
VOLUME (Ac-ft)	1686	1127	1476	1450	2620	2334	1361	2918	785	1657	3254	1696

PROVO BAY
UTAH LAKE PRECIPITATION DATA (inches)

1984 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	0.59	2.24	3.35	0.46	0.56	0.38	1.66	0.33	2.43	0.90	1.77	1.39
OREM TP WEIGHTED	0.02	0.07	0.10	0.01	0.02	0.01	0.03	0.01	0.05	0.02	0.03	0.04
PROVO BYU ACTUAL	1.39	4.20	6.00	1.05	1.53	1.98	3.77	0.91	4.01	2.80	2.55	1.71
PROVO BYU WEIGHTED	1.35	4.07	5.83	1.02	1.49	1.92	3.67	0.89	3.92	2.73	2.48	1.66
LAKE ELEVATION (ft)	4492.06	4492.17	4492.48	4492.79	4492.60	4492.60	4492.89	4493.85	4494.54	4493.65	4492.64	4491.86
AREA (Acres))	8620	8685	8868	9049	8938	8938	9107	9661	10059	9547	8962	8502
WEIGHTED PRECIP (in)	1.37	4.14	5.93	1.03	1.51	1.93	3.70	0.90	3.97	2.75	2.51	1.70
VOLUME (Ac-ft)	984	2996	4382	777	1125	1438	2808	725	3328	2188	1875	1204

PROVO BAY
UTAH LAKE PRECIPITATION DATA (inches)

1985 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	1.49	1.04	0.74	0.84	0.79	1.60	0.27	1.89	1.76	1.20	0.08	0.80
OREM TP WEIGHTED	0.05	0.03	0.02	0.03	0.02	0.05	0.01	0.05	0.05	0.04	0.00	0.03
PROVO BYU ACTUAL	3.26	1.90	1.48	2.07	1.59	2.99	0.43	2.56	1.94	1.58	0.07	1.87
PROVO BYU WEIGHTED	3.16	1.84	1.43	2.01	1.54	2.90	0.42	2.49	1.88	1.53	0.07	1.80
LAKE ELEVATION (ft)	4491.75	4491.85	4491.89	4492.00	4492.06	4492.15	4492.40	4492.73	4492.29	4491.50	4490.77	4490.15
AREA (Acres))	8437	8496	8520	8585	8620	8674	8821	9014	8756	8287	7847	7468
WEIGHTED PRECIP (in)	3.21	1.87	1.45	2.04	1.56	2.95	0.43	2.54	1.93	1.57	0.07	1.83
VOLUME (Ac-ft)	2257	1324	1030	1459	1121	2132	316	1908	1408	1084	46	1139

PROVO BAY
UTAH LAKE PRECIPITATION DATA (inches)

1986 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	1.76	1.97	0.90	0.87	2.79	2.53	2.82	1.29	0.68	0.76	1.02	1.89
OREM TP WEIGHTED	0.07	0.07	0.03	0.03	0.10	0.08	0.08	0.03	0.02	0.02	0.04	0.07
PROVO BYU ACTUAL	2.39	3.52	2.45	1.39	3.28	3.35	4.10	2.09	0.30	2.07	1.71	2.86
PROVO BYU WEIGHTED	2.30	3.39	2.36	1.34	3.16	3.24	3.99	2.03	0.29	2.00	1.65	2.75
LAKE ELEVATION (ft)	4489.97	4490.08	4490.26	4490.35	4490.63	4491.76	4492.73	4493.13	4492.84	4491.72	4490.71	4489.84
AREA (Acres))	7357	7424	7535	7591	7762	8443	9014	9247	9078	8419	7811	7277
WEIGHTED PRECIP (in)	2.37	3.46	2.39	1.37	3.26	3.32	4.07	2.06	0.31	2.02	1.69	2.82
VOLUME (Ac-ft)	1453	2141	1501	867	2109	2336	3057	1587	235	1417	1100	1710

PROVO BAY
UTAH LAKE PRECIPITATION DATA (inches)

1987 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	0.62	0.69	0.15	0.70	1.02	0.88	0.05	1.63	0.15	1.08	1.87	0.20
OREM TP WEIGHTED	0.02	0.03	0.01	0.03	0.04	0.04	0.00	0.07	0.01	0.05	0.07	0.01
PROVO BYU ACTUAL	1.01	1.60	0.40	1.82	2.23	1.76	0.46	2.06	0.24	1.70	1.75	0.10
PROVO BYU WEIGHTED	0.97	1.54	0.38	1.75	2.14	1.69	0.44	1.97	0.23	1.63	1.68	0.1[illegible]
LAKE ELEVATION (ft)	4489.61	4489.53	4489.45	4489.39	4489.27	4489.18	4488.95	4488.62	4488.23	4487.45	4486.83	4486.3[illegible]
AREA (Acres))	7134	7083	7032	6994	6916	6857	6704	6479	6202	5610	5099	4711
WEIGHTED PRECIP (in)	0.99	1.57	0.39	1.78	2.18	1.73	0.44	2.04	0.24	1.68	1.75	0.11
VOLUME (Ac-ft)	589	927	229	1037	1256	989	246	1101	124	785	744	43

PROVO BAY
UTAH LAKE PRECIPITATION DATA (inches)

1988 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	1.53	1.25	0.62	1.02	0.00	0.35	1.19	0.99	0.04	0.82	0.66	0.69
OREM TP WEIGHTED	0.06	0.05	0.03	0.04	0.00	0.02	0.05	0.04	0.00	0.03	0.02	0.02
PROVO BYU ACTUAL	1.44	1.92	1.83	1.49	0.21	0.84	1.70	1.38	0.36	0.41	0.63	0.68
PROVO BYU WEIGHTED	1.39	1.85	1.76	1.43	0.20	0.80	1.63	1.32	0.34	0.39	0.61	0.66
LAKE ELEVATION (ft)	4486.16	4486.64	4487.06	4487.59	4488.01	4488.47	4488.76	4488.66	4488.13	4486.99	4485.93	4485.32
AREA (Acres))	4498	4934	5293	5721	6040	6374	6575	6507	6129	5235	4235	3323
WEIGHTED PRECIP (in)	1.45	1.90	1.79	1.47	0.20	0.82	1.68	1.36	0.34	0.42	0.63	0.68
VOLUME (Ac-ft)	544	781	790	702	101	436	921	737	174	183	222	188

PROVO BAY
UTAH LAKE PRECIPITATION DATA (inches)

1989 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	0.64	0.98	0.77	0.25	1.17	1.15	1.44	0.48	0.26	0.54	0.90	1.55
OREM TP WEIGHTED	0.01	0.02	0.02	0.01	0.04	0.05	0.06	0.04	0.01	0.01	0.00	0.00
PROVO BYU ACTUAL	0.69	2.67	1.53	0.81	2.62	2.14	1.45	0.72	1.08	0.53	1.62	1.88
ROVO BYU WEIGHTED	0.68	2.62	1.49	0.79	2.52	2.05	1.39	0.69	1.04	0.52	1.62	1.88
LAKE ELEVATION (ft)	4484.75	4484.93	4485.27	4485.55	4486.20	4486.90	4487.25	4486.80	4486.05	4484.80	4483.60	4483.55
AREA (Acres))	2558	2790	3252	3655	4536	5159	5450	5073	4394	2021	1267	1219
VEIGHTED PRECIP (in)	0.69	2.64	1.51	0.80	2.56	2.10	1.45	0.73	1.05	0.53	1.62	1.88
VOLUME (Ac-ft)	147	614	409	244	968	903	659	309	384	89	171	191

PROVO BAY
UTAH LAKE PRECIPITATION DATA (inches)

1990 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	0.80	0.96	0.08	0.89	0.79	1.01	0.64	0.90	1.11	0.31	0.73	0.64
OREM TP WEIGHTED	0.00	0.00	0.00	0.02	0.02	0.04	0.02	0.03	0.03	0.00	0.00	0.00
PROVO BYU ACTUAL	1.19	1.23	0.15	1.52	1.94	1.95	1.55	1.35	2.05	0.42	0.59	0.93
PROVO BYU WEIGHTED	1.19	1.23	0.15	1.49	1.89	1.88	1.49	1.31	2.00	0.42	0.59	0.93
LAKE ELEVATION (ft)	4483.60	4484.05	4484.45	4485.02	4485.48	4486.06	4486.25	4485.72	4485.31	4484.45	4483.40	4482.61
AREA (Acres))	1267	1732	2189	2909	3553	4403	4582	3910	3308	2189	1077	424
GHTED PRECIP (in)	1.19	1.23	0.15	1.51	1.91	1.92	1.51	1.34	2.03	0.42	0.59	0.93
VOLUME (Ac-ft)	126	178	27	366	566	704	577	437	560	77	53	33

PROVO BAY
UTAH LAKE PRECIPITATION DATA (inches)

1991 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	1.74	1.07	0.60	0.95	0.40	0.70	1.21	1.73	0.66	1.17	2.54	1.21
OREM TP WEIGHTED	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.01	0.00	0.00	0.00
PROVO BYU ACTUAL	1.77	1.41	1.58	1.33	0.90	1.82	2.42	2.44	1.06	0.30	1.98	2.43
PROVO BYU WEIGHTED	1.77	1.41	1.58	1.33	0.90	1.80	2.39	2.40	1.04	0.30	1.98	2.43
LAKE ELEVATION (ft)	4482.52	4482.72	4483.05	4483.48	4483.87	4484.49	4484.70	4484.76	4484.88	4483.99	4483.01	4482.57
AREA (Acres))	359	505	769	1152	1540	2236	2494	2570	2726	1667	735	395
WEIGHTED PRECIP (in)	1.77	1.41	1.58	1.33	0.90	1.81	2.41	2.43	1.05	0.30	1.98	2.43
VOLUME (Ac-ft)	53	59	101	128	116	337	501	520	236	42	121	80

Table D:1 - Provo Bay Precipitation

PROVO BAY MONTHLY PRECIPITATION DATA (inches) 1992 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	1.21	1.64	0.34	0.37	1.44	0.45	0.14	1.20	0.75	0.98	0.30	1.06
Orem Weighted	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provo Actual	1.83	2.63	0.68	0.87	2.35	1.39	0.39	1.62	0.89	1.13	1.28	0.89
Provo Weighted	1.83	2.62	0.68	0.87	2.34	1.39	0.39	1.62	0.89	1.13	1.28	0.89
Lake Elevation	4482.52	4482.82	4483.27	483.76	4484.27	4484.70	4484.75	4484.27	4483.52	4482.53	4481.40	4481.16
Area (acres)	359	582	959	1427	1978	2494	2558	1978	1190	366	18	16
Weighted Precip. (in)	1.83	2.63	0.68	0.87	2.35	1.39	0.39	1.62	0.89	1.13	1.28	0.89
Volume (Ac-ft)	55	127	54	103	387	288	83	267	88	34	2	1

PROVO BAY MONTHLY PRECIPITATION DATA (inches) 1993 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	2.36	1.15	1.60	1.84	1.45	2.54	0.48	2.45	1.31	0.79	0.62	1.09
Orem Weighted	0.01	0.00	0.00	0.00	0.00	0.01	0.02	0.09	0.05	0.03	0.02	0.04
Provo Actual	3.04	2.06	1.97	4.60	3.21	2.87	0.87	3.15	1.70	1.09	1.03	0.94
Provo Weighted	3.03	2.05	1.96	4.59	3.20	2.86	0.84	3.04	1.64	1.05	0.99	0.91
Lake Elevation	4481.46	4481.70	4482.15	4482.81	4483.61	4484.47	4485.21	4486.03	4486.82	4486.74	4486.12	4485.71
Area (acres)	18	20	113	575	1277	2212	3168	4375	5091	5021	4460	3895
Weighted Precip. (in)	3.04	2.06	1.97	4.59	3.21	2.87	0.86	3.12	1.69	1.08	1.02	0.95
Volume (Ac-ft)	5	3	19	220	341	529	226	1139	715	452	377	307

PROVO BAY MONTHLY PRECIPITATION DATA (inches) 1994 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	2.14	0.34	0.10	0.40	1.11	0.79	2.83	0.98	0.00	0.18	1.02	0.73
Orem Weighted	0.08	0.01	0.00	0.01	0.05	0.04	0.13	0.04	0.00	0.01	0.04	0.00
Provo Actual	2.54	0.68	1.24	0.93	2.13	1.23	2.55	1.21	0.08	0.09	1.28	0.74
Provo Weighted	2.45	0.66	1.19	0.90	2.03	1.17	2.44	1.16	0.08	0.09	1.23	0.74
Lake Elevation	4485.78	4486.14	4486.52	4486.89	4487.32	4487.68	4487.91	4487.82	4487.24	4486.34	4485.49	4484.87
Area (acres)	4002	4479	4828	5142	5506	5790	5966	5898	5442	4665	3567	2712
Weighted Precip. (in)	2.53	0.67	1.20	0.91	2.08	1.21	2.56	1.20	0.08	0.09	1.27	0.74
Volume (Ac-ft)	842	249	482	390	956	584	1274	590	35	36	378	167

PROVO BAY MONTHLY PRECIPITATION DATA (inches) 1995 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	2.97	0.78	1.02	1.16	0.25	1.13	1.25	4.81	1.08	0.65	0.48	0.33
Orem Weighted	0.01	0.03	0.04	0.04	0.01	0.05	0.06	0.22	0.04	0.02	0.02	0.01
Provo Actual	3.87	2.74	1.61	3.01	1.02	2.57	1.89	5.11	2.48	1.00	0.59	0.58
Provo Weighted	3.86	2.64	1.55	2.90	0.98	2.45	1.80	4.88	2.39	0.96	0.56	0.55
Lake Elevation	4484.78	4485.17	4485.54	4486.04	4486.59	4487.03	4487.46	4488.34	4489.20	4489.17	4488.66	4488.12
Area (acres)	2596	3113	3641	4384	4890	5286	5618	6281	6870	6851	6507	6122
Weighted Precip. (in)	3.87	2.67	1.59	2.94	0.99	2.51	1.86	5.10	2.43	0.99	0.59	0.57
Volume (Ac-ft)	837	692	482	1075	404	1104	871	2668	1390	563	317	290

Table D:1 Cont.

PROVO BAY MONTHLY PRECIPITATION DATA (inches)
1996 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	0.45	0.48	1.03	2.93	2.11	1.53	0.66	0.94	0.19	0.25	0.02	1.90
Orem Weighted	0.02	0.02	0.05	0.13	0.08	0.06	0.02	0.04	0.01	0.01	0.00	0.09
Provo Actual	0.60	0.75	2.54	3.06	2.59	2.59	1.91	1.71	0.55	0.55	0.07	1.70
Provo Weighted	0.57	0.72	2.43	2.92	2.49	2.49	1.84	1.65	0.53	0.53	0.07	1.62
Lake Elevation	4488.01	4488.27	4488.65	4488.96	4489.23	4489.46	4489.55	4489.59	4489.37	4488.71	4487.91	4487.45
Area (acres)	6040	6231	6500	6711	6890	7039	7096	7121	6981	6541	5966	5610
Weighted Precip. (in)	0.59	0.74	2.47	3.05	2.57	2.55	1.86	1.68	0.54	0.54	0.07	1.71
Volume (Ac-ft)	299	383	1339	1708	1477	1496	1102	997	312	292	34	799

PROVO BAY MONTHLY PRECIPITATION DATA (inches)
1997 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	1.70	1.83	0.98	2.94	1.18	0.14	1.31	1.35	0.62	0.37	0.72	1.49
Orem Weighted	0.08	0.08	0.04	0.13	0.04	0.01	0.05	0.05	0.02	0.01	0.03	0.07
Provo Actual	2.36	2.55	2.14	4.32	1.66	0.54	1.84	2.06	0.85	0.54	0.80	2.64
Provo Weighted	2.25	2.44	2.04	4.13	1.60	0.52	1.77	1.98	0.82	0.52	0.76	2.52
Lake Elevation	4487.39	4487.78	4488.34	4488.93	4489.49	4489.79	4489.93	4490.13	4490.11	4489.45	4488.77	4488.58
Area (acres)	5563	5867	6281	6691	7058	7246	7332	7455	7443	7032	6582	6451
Weighted Precip. (in)	2.33	2.52	2.09	4.26	1.64	0.52	1.82	2.03	0.84	0.53	0.80	2.59
Volume (Ac-ft)	1080	1231	1093	2374	966	317	1112	1263	522	313	437	1391

PROVO BAY MONTHLY PRECIPITATION DATA (inches)
1998 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	1.05	1.41	0.83	1.89	2.51	1.62	1.26	1.27	2.85	0.98	0.37	0.37
Orem Weighted	0.05	0.06	0.04	0.07	0.09	0.06	0.05	0.05	0.11	0.04	0.01	0.02
Provo Actual	1.71	1.70	1.58	3.05	3.15	1.98	2.29	1.93	4.13	0.61	0.85	1.21
Provo Weighted	1.63	1.62	1.51	2.93	3.03	1.91	2.20	1.86	3.97	0.59	0.82	1.16
Lake Elevation	4488.78	4488.97	4488.99	4489.13	4489.38	4489.61	4489.79	4490.05	4490.35	4490.06	4489.32	4488.94
Area (acres)	6589	6718	6731	6824	6987	7134	7246	7406	7591	7412	6949	6698
Weighted Precip. (in)	1.68	1.69	1.55	3.01	3.13	1.97	2.25	1.91	4.08	0.62	0.83	1.17
Volume (Ac-ft)	923	944	867	1709	1820	1169	1359	1176	2582	385	482	654

PROVO BAY MONTHLY PRECIPITATION DATA (inches)
1999 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	0.87	0.72	0.78	1.74	1.07	0.29	4.66	2.33	1.58	0.92	0.52	0.27
Orem Weighted	0.04	0.03	0.03	0.07	0.04	0.01	0.19	0.09	0.06	0.04	0.02	0.01
Provo Actual	1.48	1.38	0.76	2.48	1.31	0.59	4.56	3.72	1.66	0.78	1.17	0.17
Provo Weighted	1.42	1.32	0.73	2.38	1.26	0.57	4.38	3.57	1.59	0.75	1.12	0.16
Lake Elevation	4489.01	4489.22	4489.36	4489.47	4489.57	4489.53	4489.44	4489.59	4489.59	4489.09	4488.49	4488.1
Area (acres)	6745	6883	6974	7045	7109	7083	7026	7121	7121	6798	6388	6107
Weighted Precip. (in)	1.46	1.35	0.76	2.45	1.30	0.58	4.56	3.66	1.66	0.79	1.14	0.17
Volume (Ac-ft)	818	776	442	1439	770	341	2672	2175	983	445	608	89

Table D:2 - Main Lake Precipitation

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (Inches)

1980 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
GENEVA ACTUAL	2.21	0.97	0.20	3.53	3.41	1.17	0.36	2.21	0.08	0.21	0.67	1.14
GENEVA WEIGHTED	1.63	0.72	0.15	2.61	2.51	0.86	0.26	1.61	0.06	0.15	0.49	0.84
PAYSON ACTUAL	2.20	1.33	0.91	3.94	2.12	3.35	0.78	2.90	0.04	0.08	0.56	1.11
PAYSON WEIGHTED	0.12	0.07	0.05	0.22	0.12	0.20	0.05	0.19	0.00	0.01	0.03	0.07
LEHI ACTUAL	1.55	0.95	0.12	2.23	0.60	0.78	0.45	2.23	0.01	0.69	0.75	0.83
LEHI WEIGHTED	0.32	0.20	0.02	0.46	0.12	0.16	0.09	0.46	0.00	0.14	0.15	0.17
LAKE ELEVATION (ft)	4486.14	4486.37	4486.74	4487.29	4488.04	4488.63	4489.13	4489.91	4490.78	4489.66	4488.91	4488.41
AREA (Acres))	58476	58643	58927	59391	60087	60676	61199	62052	62972	61777	60966	60452
WEIGHTED PRECIP (in)	2.07	0.99	0.22	3.29	2.75	1.22	0.40	2.26	0.06	0.30	0.67	1.08
VOLUME (Ac-ft)	10087	4838	1080	16283	13770	6169	2040	11686	315	1544	3404	5441

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (Inches)

1981 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
GENEVA ACTUAL	6.38	1.35	1.37	0.80	0.29	1.85	0.49	3.76	0.36	0.10	0.17	0.89
GENEVA WEIGHTED	4.69	0.99	1.00	0.58	0.21	1.35	0.36	2.75	0.26	0.07	0.13	0.66
PAYSON ACTUAL	1.92	1.95	0.97	0.72	0.45	3.34	1.58	3.95	0.31	1.23	0.62	1.79
PAYSON WEIGHTED	0.10	0.10	0.05	0.04	0.03	0.19	0.09	0.22	0.02	0.06	0.03	0.09
LEHI ACTUAL	1.01	1.41	0.43	0.85	0.68	1.28	0.49	3.77	0.27	0.41	0.13	0.95
LEHI WEIGHTED	0.22	0.30	0.09	0.18	0.14	0.27	0.10	0.80	0.06	0.09	0.03	0.2[illegible]
LAKE ELEVATION (ft)	4488.36	4488.65	4488.97	4489.21	4489.28	4489.3	4489.32	4489.25	4489.14	4488.36	4487.44	448[illegible]
AREA (Acres))	60402	60696	61029	61284	61359	61381	61403	61327	61210	60402	59524	58983
WEIGHTED PRECIP (in)	5.01	1.39	1.14	0.80	0.38	1.81	0.55	3.77	0.34	0.22	0.19	0.95
VOLUME (Ac-ft)	25218	7031	5798	4086	1943	9258	2814	19267	1734	1107	942	4669

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (Inches)

1982 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
*GENEVA ACTUAL	3.49	0.24	1.65	1.34	0.79	2.00	0.52	1.50	0.48	1.56	0.39	5.75
*GENEVA WEIGHTED	2.57	0.18	1.22	0.99	0.58	1.46	0.38	1.09	0.35	1.13	0.28	4.20
PAYSON ACTUAL	7.30	1.09	2.41	2.45	1.24	3.00	1.94	2.37	0.51	0.75	0.49	9.33
PAYSON WEIGHTED	0.35	0.05	0.12	0.12	0.06	0.16	0.11	0.15	0.03	0.05	0.03	0.52
LEHI ACTUAL	3.45	0.80	1.91	0.85	0.37	1.57	0.41	1.04	0.36	1.00	0.25	5.63
LEHI WEIGHTED	0.74	0.17	0.41	0.18	0.08	0.33	0.09	0.22	0.08	0.21	0.05	1.20
LAKE ELEVATION (ft)	4486.94	4487.29	4487.6	4488.17	4488.56	4489.09	4489.47	4490.28	4490.66	4490.18	4489.63	4489.32
AREA (Acres))	59091	59391	59670	60214	60604	61156	61565	62445	62843	62340	61744	61403
WEIGHTED PRECIP (in)	3.66	0.40	1.75	1.29	0.72	1.95	0.58	1.46	0.46	1.39	0.36	5.92
VOLUME (Ac-ft)	18023	1980	8702	6473	3636	9938	2976	7597	2409	7221	1852	30292

Changed to Orem Treatment Plant in August 1982

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (inches)

1983 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	1.94	1.57	1.02	1.38	2.63	1.74	1.38	1.84	0.88	1.12	2.28	1.33
OREM TP WEIGHTED	1.41	1.14	0.74	1.00	1.89	1.25	0.99	1.31	0.62	0.79	1.62	0.95
PAYSON ACTUAL	3.45	1.54	1.25	2.22	3.90	3.55	1.85	3.20	1.05	1.39	2.60	2.40
PAYSON WEIGHTED	0.20	0.09	0.08	0.14	0.26	0.24	0.13	0.23	0.09	0.11	0.20	0.17
LEHI ACTUAL	1.88	1.24	0.81	1.18	2.25	2.55	0.94	1.54	0.93	1.00	2.96	1.42
LEHI WEIGHTED	0.40	0.26	0.17	0.25	0.48	0.54	0.20	0.33	0.20	0.21	0.63	0.30
LAKE ELEVATION (ft)	4489.84	4490.29	4490.70	4490.93	4491.16	4491.58	4491.79	4492.40	4493.93	4493.59	4492.77	4492.19
AREA (Acres))	61976	62455	62886	63136	63390	63864	64105	64821	66711	66393	65267	64572
WEIGHTED PRECIP (in)	2.01	1.49	0.99	1.39	2.63	2.03	1.32	1.87	0.91	1.11	2.45	1.42
VOLUME (Ac-ft)	10381	7755	5188	7313	13893	10804	7052	10101	5059	6141	13325	7641

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (inches)

1984 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	0.59	2.24	3.35	0.46	0.56	0.38	1.66	0.33	2.43	0.90	1.77	1.39
OREM TP WEIGHTED	0.42	1.60	2.39	0.33	0.40	0.27	1.18	0.23	1.71	0.64	1.26	1.00
PAYSON ACTUAL	1.20	4.42	4.96	0.73	1.58	1.86	3.43	0.97	3.09	1.41	2.38	1.30
PAYSON WEIGHTED	0.09	0.32	0.36	0.05	0.12	0.14	0.26	0.08	0.26	0.11	0.18	0.09
LEHI ACTUAL	1.19	3.79	3.14	0.64	0.52	1.05	2.53	0.50	2.10	0.58	1.76	1.10
LEHI WEIGHTED	0.25	0.81	0.67	0.14	0.11	0.22	0.54	0.11	0.45	0.12	0.37	0.23
LAKE ELEVATION (ft)	4492.06	4492.17	4492.48	4492.79	4492.60	4492.60	4492.89	4493.85	4494.54	4493.65	4492.64	4491.86
AREA (Acres))	64419	64549	64917	65292	65061	65061	65413	66609	67400	66320	65100	64186
WEIGHTED PRECIP (in)	0.76	2.73	3.42	0.52	0.63	0.63	1.98	0.42	2.42	0.87	1.81	1.32
VOLUME (Ac-ft)	4080	14685	18501	2829	3416	3416	10793	2331	13592	4806	9819	7060

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (inches)

1985 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	1.49	1.04	0.74	0.84	0.79	1.60	0.27	1.89	1.76	1.20	0.08	0.80
OREM TP WEIGHTED	1.07	0.75	0.53	0.60	0.57	1.14	0.19	1.34	1.26	0.86	0.06	0.58
PAYSON ACTUAL	3.93	1.10	1.29	2.19	1.68	2.31	0.63	1.80	1.36	1.82	0.21	0.93
PAYSON WEIGHTED	0.27	0.08	0.09	0.16	0.07	0.17	0.05	0.13	0.10	0.12	0.01	0.06
LEHI ACTUAL	1.79	1.34	0.69	0.95	0.58	1.05	0.42	2.82	1.20	1.40	0.15	1.16
LEHI WEIGHTED	0.38	0.28	0.15	0.20	0.12	0.22	0.09	0.60	0.25	0.30	0.03	0.25
LAKE ELEVATION (ft)	4491.75	4491.85	4491.89	4492.00	4492.06	4492.15	4492.40	4492.73	4492.29	4491.50	4490.77	4490.15
AREA (Acres))	64059	64175	64221	64349	64419	64525	64821	65219	64690	63773	62962	62308
WEIGHTED PRECIP (in)	1.72	1.11	0.77	0.96	0.76	1.53	0.33	2.07	1.61	1.28	0.10	0.89
VOLUME (Ac-ft)	9182	5936	4121	5148	4080	8227	1783	11250	8679	6802	525	4621

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (inches)

1986 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	1.76	1.97	0.90	0.87	2.79	2.53	2.82	1.29	0.68	0.76	1.02	1.89
OREM TP WEIGHTED	1.28	1.43	0.65	0.63	2.02	1.81	2.01	0.92	0.48	0.54	0.74	1.37
PAYSON ACTUAL	2.39	3.44	2.16	0.77	1.90	2.55	3.93	2.24	0.65	1.03	0.44	2.77
PAYSON WEIGHTED	0.11	0.21	0.13	0.05	0.12	0.18	0.29	0.17	0.05	0.07	0.03	0.16
LEHI ACTUAL	1.35	1.19	0.50	1.58	3.12	1.78	3.01	1.08	0.00	0.55	0.90	1.73
LEHI WEIGHTED	0.29	0.25	0.11	0.34	0.66	0.38	0.64	0.23	0.00	0.12	0.19	0.37
LAKE ELEVATION (ft)	4489.97	4490.08	4490.26	4490.35	4490.63	4491.76	4492.73	4493.13	4492.84	4491.72	4490.71	4489.84
AREA (Acres))	62117	62234	62424	62517	62810	64071	65219	65708	65353	64025	62896	61976
WEIGHTED PRECIP (in)	1.68	1.89	0.89	1.02	2.80	2.37	2.94	1.32	0.53	0.73	0.96	1.90
VOLUME (Ac-ft)	8696	9802	4630	5314	14656	12654	15979	7228	2886	3895	5032	9813

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (inches)

1987 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	0.62	0.69	0.15	0.70	1.02	0.88	0.05	1.63	0.15	1.08	1.87	0.20
OREM TP WEIGHTED	0.45	0.50	0.11	0.51	0.75	0.64	0.04	1.20	0.11	0.80	1.38	0.15
PAYSON ACTUAL	1.19	1.41	0.32	1.00	1.58	1.85	0.43	2.40	0.22	1.20	1.76	0.07
PAYSON WEIGHTED	0.07	0.08	0.02	0.06	0.09	0.10	0.02	0.13	0.01	0.06	0.08	0.00
LEHI ACTUAL	0.61	0.30	0.33	1.11	0.92	0.88	0.09	1.70	0.56	1.01	1.58	0.11
LEHI WEIGHTED	0.13	0.06	0.07	0.24	0.20	0.19	0.02	0.36	0.12	0.22	0.34	0.02
LAKE ELEVATION (ft)	4489.61	4489.53	4489.45	4489.39	4489.27	4489.18	4488.95	4488.62	4488.23	4487.45	4486.83	448[illegible]
AREA (Acres))	61722	61632	61544	61478	61349	61252	61008	60666	60273	59533	59000	58[illegible]
WEIGHTED PRECIP (in)	0.65	0.64	0.20	0.81	1.04	0.93	0.08	1.69	0.24	1.08	1.80	0.17
VOLUME (Ac-ft)	3343	3287	1026	4150	5317	4747	407	8544	1205	5358	8850	831

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (inches)

1988 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	1.53	1.25	0.62	1.02	0.00	0.35	1.19	0.99	0.04	0.82	0.66	0.69
OREM TP WEIGHTED	1.13	0.92	0.46	0.75	0.00	0.26	0.87	0.73	0.03	0.60	0.49	0.51
PAYSON ACTUAL	1.36	1.96	1.55	1.81	0.35	1.15	1.52	1.10	0.22	0.60	0.31	0.78
PAYSON WEIGHTED	0.06	0.09	0.07	0.09	0.02	0.06	0.08	0.06	0.01	0.03	0.01	0.04
LEHI ACTUAL	1.57	2.25	0.71	1.14	0.12	0.57	1.16	1.12	0.06	0.35	0.66	0.60
LEHI WEIGHTED	0.34	0.48	0.15	0.24	0.03	0.12	0.25	0.24	0.01	0.08	0.14	0.13
LAKE ELEVATION (ft)	4486.16	4486.64	4487.06	4487.59	4488.01	4488.47	4488.76	4488.66	4488.13	4486.99	4485.93	4485.32
AREA (Acres))	58491	58846	59192	59661	60058	60513	60810	60707	60174	59133	58323	57856
WEIGHTED PRECIP (in)	1.53	1.49	0.68	1.08	0.05	0.44	1.20	1.03	0.05	0.71	0.64	0.68
VOLUME (Ac-ft)	7458	7307	3354	5369	250	2219	6081	5211	251	3499	3111	3279

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (inches)

1989 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	0.64	0.98	0.77	0.25	1.17	1.15	1.44	0.48	0.26	0.54	0.90	1.55
OREM TP WEIGHTED	0.47	0.73	0.57	0.18	0.86	0.85	1.06	0.35	0.19	0.40	0.67	1.15
PAYSON ACTUAL	0.55	2.33	1.34	0.70	2.68	1.32	0.43	0.49	0.25	0.59	1.08	1.23
PAYSON WEIGHTED	0.03	0.10	0.06	0.03	0.13	0.06	0.02	0.02	0.01	0.03	0.05	0.05
LEHI ACTUAL	0.49	1.35	0.43	0.07	0.49	1.24	1.08	0.59	0.42	0.80	1.06	0.85
LEHI WEIGHTED	0.11	0.29	0.09	0.02	0.11	0.27	0.23	0.13	0.09	0.17	0.23	0.18
LAKE ELEVATION (ft)	4484.75	4484.93	4485.27	4485.55	4486.20	4486.90	4487.25	4486.80	4486.05	4484.80	4483.60	4483.55
AREA (Acres))	57344	57513	57813	58041	58520	59057	59356	58975	58411	57392	56113	56054
WEIGHTED PRECIP (in)	0.61	1.12	0.72	0.23	1.10	1.18	1.31	0.50	0.29	0.60	0.95	1.38
VOLUME (Ac-ft)	2915	5368	3469	1112	5364	5807	6480	2457	1412	2870	4442	6446

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (inches)

1990 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	0.80	0.96	0.08	0.89	0.79	1.01	0.64	0.90	1.11	0.31	0.73	0.64
OREM TP WEIGHTED	0.60	0.71	0.06	0.66	0.58	0.74	0.47	0.66	0.82	0.23	0.54	0.48
PAYSON ACTUAL	0.92	1.11	0.24	1.16	2.04	2.02	1.27	1.05	1.68	0.63	0.18	0.77
PAYSON WEIGHTED	0.04	0.05	0.01	0.05	0.09	0.09	0.06	0.05	0.08	0.03	0.01	0.03
EHI ACTUAL	0.00	0.50	0.10	0.37	0.28	0.83	1.18	0.65	0.74	0.35	1.23	1.34
LEHI WEIGHTED	0.00	0.11	0.02	0.08	0.06	0.18	0.25	0.14	0.16	0.08	0.26	0.29
KE ELEVATION (ft)	4483.60	4484.05	4484.45	4485.02	4485.48	4486.06	4486.25	4485.72	4485.31	4484.45	4483.40	4482.61
AREA (Acres))	56113	56623	57047	57595	57988	58418	58556	58168	57847	57047	55875	54893
GHTED PRECIP (in)	0.64	0.87	0.09	0.79	0.73	1.01	0.78	0.85	1.08	0.34	0.81	0.80
VOLUME (Ac-ft)	2993	4105	428	3792	3528	4917	3806	4120	5110	1616	3772	3660

MAIN LAKE
UTAH LAKE PRECIPITATION DATA (inches)

1991 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
OREM TP ACTUAL	1.74	1.07	0.60	0.95	0.40	0.70	1.21	1.73	0.66	0.09	1.17	2.54
OREM TP WEIGHTED	1.30	0.80	0.45	0.71	0.30	0.52	0.90	1.28	0.49	0.07	0.87	1.90
PAYSON ACTUAL	1.82	1.37	1.38	1.29	1.04	1.25	2.90	2.73	0.64	0.16	0.54	1.30
PAYSON WEIGHTED	0.07	0.06	0.06	0.05	0.04	0.06	0.13	0.12	0.03	0.01	0.02	0.05
EHI ACTUAL	1.26	1.70	0.15	0.49	0.85	0.85	1.86	2.41	0.83	0.43	1.30	2.28
EHI WEIGHTED	0.27	0.36	0.03	0.10	0.18	0.18	0.40	0.52	0.18	0.09	0.28	0.49
LAKE ELEVATION (ft)	4482.52	4482.72	4483.05	4483.48	4483.87	4484.49	4484.70	4484.76	4484.88	4483.99	4483.01	4482.57
AREA (Acres))	54777	55034	55449	55971	56423	57088	57296	57354	57467	56557	55399	54842
WEIGHTED PRECIP (in)	1.64	1.22	0.54	0.86	0.52	0.76	1.43	1.92	0.70	0.17	1.17	2.44
VOLUME (Ac-ft)	7486	5595	2495	4011	2445	3616	6828	9177	3352	801	5401	11151

Table D:2 - Main Lake Precipitation

MAIN LAKE MONTHLY PRECIPITATION DATA (inches) 1992 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	1.21	1.64	0.34	0.37	1.44	0.45	0.14	1.20	0.75	0.98	0.30	1.06
Orem Weighted	0.90	1.22	0.25	0.27	1.07	0.33	0.10	0.89	0.56	0.73	0.22	0.79
Payson Actual	1.90	2.36	0.75	0.62	1.77	1.21	0.23	1.63	0.81	1.03	0.22	0.70
Payson Weighted	0.08	0.10	0.03	0.03	0.08	0.05	0.01	0.07	0.04	0.04	0.01	0.03
Lehi Actual	1.36	1.84	0.46	0.50	1.92	0.71	0.69	1.08	0.32	0.00	0.60	1.22
Lehi Weighted	0.29	0.39	0.10	0.11	0.41	0.15	0.15	0.23	0.07	0.00	0.13	0.26
Lake Elevation	4482.52	4482.82	4483.27	483.76	4484.27	4484.70	4484.75	4484.27	4483.52	4482.53	4481.40	4481.16
Area (acres)	54777	55161	55718	56298	56359	57296	57344	56359	56019	54790	53191	52715
Weighted Precip. (in)	1.27	1.71	0.38	0.41	1.56	0.54	0.26	1.19	0.66	0.77	0.36	1.08
Volume (Ac-ft)	5807	7879	1780	1917	7313	2572	1250	5603	3084	3527	1599	4738

MAIN LAKE MONTHLY PRECIPITATION DATA (inches) 1993 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	2.36	1.15	1.60	1.84	1.45	2.54	0.48	2.45	1.31	0.79	0.62	1.09
Orem Weighted	1.75	0.85	1.19	1.37	1.08	1.89	0.35	1.81	0.97	0.58	0.46	0.80
Payson Actual	1.84	1.80	1.50	3.85	2.32	2.13	1.21	4.36	1.37	0.44	0.46	1.24
Payson Weighted	0.08	0.08	0.07	0.17	0.10	0.09	0.06	0.20	0.06	0.02	0.02	0.06
Lehi Actual	2.52	2.15	1.18	2.43	1.19	1.65	0.52	2.72	0.91	0.44	0.46	1.24
Lehi Weighted	0.54	0.46	0.25	0.52	0.25	0.35	0.11	0.59	0.20	0.09	0.10	0.27
Lake Elevation	4481.46	4481.70	4482.15	4482.81	4483.61	4484.47	4485.21	4486.03	4486.82	4486.74	4486.12	4485.71
Area (acres)	53296	53672	54304	55149	55584	57067	57762	58396	58992	58927	58462	58160
Weighted Precip. (in)	2.37	1.39	1.51	2.05	1.43	2.33	0.52	2.60	1.23	0.70	0.58	1.13
Volume (Ac-ft)	10533	6226	6814	9437	6634	11089	2517	12641	6031	3429	2816	5473

MAIN LAKE MONTHLY PRECIPITATION DATA (inches) 1994 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	2.14	0.34	0.10	0.40	1.11	0.79	2.83	0.98	0.00	0.18	1.02	0.73
Orem Weighted	1.58	0.25	0.07	0.30	0.82	0.58	2.09	0.72	0.00	0.13	0.75	0.54
Payson Actual	1.47	0.86	0.90	0.56	2.45	0.81	2.92	1.42	0.04	0.27	1.50	0.91
Payson Weighted	0.07	0.04	0.04	0.03	0.12	0.04	0.14	0.07	0.00	0.01	0.07	0.04
Lehi Actual	2.14	0.17	0.52	0.49	1.43	0.91	2.10	0.92	0.00	0.15	1.20	1.28
Lehi Weighted	0.46	0.04	0.11	0.11	0.31	0.19	0.45	0.20	0.00	0.03	0.26	0.27
Lake Elevation	4485.78	4486.14	4486.52	4486.89	4487.32	4487.68	4487.91	4487.82	4487.24	4486.34	4485.49	4484.87
Area (acres)	58212	58476	58752	59049	59417	59744	59962	59876	59347	58621	57996	57550
Weighted Precip. (in)	2.11	0.33	0.23	0.43	1.24	0.82	2.68	0.99	0.00	0.18	1.08	0.86
Volume (Ac-ft)	10229	1597	1116	2101	6158	4065	13385	4933	10	868	5226	4103

MAIN LAKE MONTHLY PRECIPITATION DATA (inches) 1995 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	2.97	0.78	1.02	1.16	0.25	1.13	1.25	4.81	1.08	0.65	0.48	0.33
Orem Weighted	2.21	0.58	0.75	0.86	0.18	0.83	0.92	3.55	0.79	0.47	0.35	0.24
Payson Actual	3.36	3.04	0.97	2.30	1.11	2.23	2.32	4.89	1.47	1.09	0.21	0.99
Payson Weighted	0.15	0.14	0.05	0.11	0.05	0.11	0.11	0.24	0.09	0.07	0.01	0.05
Lehi Actual	1.82	0.80	1.22	1.69	0.07	1.99	1.80	3.62	1.12	1.41	0.60	0.60
Lehi Weighted	0.39	0.17	0.26	0.36	0.02	0.42	0.38	0.77	0.24	0.30	0.13	0.13
Lake Elevation	4484.78	4485.17	4485.54	4486.04	4486.59	4487.03	4487.46	4488.34	4489.20	4489.17	4488.66	4488.12
Area (acres)	57373	57727	58034	58403	58807	59166	59542	60382	61274	61242	60707	60165
Weighted Precip. (in)	2.74	0.89	1.06	1.33	0.25	1.37	1.42	4.56	1.11	0.84	0.49	0.42
Volume (Ac-ft)	13105	4283	5130	6461	1233	6741	7044	22946	5678	4279	2491	2105

Table D:2 Continued

MAIN LAKE MONTHLY PRECIPITATION DATA (Inches)
1996 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	0.45	0.48	1.03	2.93	2.11	1.53	0.66	0.94	0.19	0.25	0.02	1.90
Orem Weighted	0.33	0.35	0.76	2.16	1.53	1.11	0.48	0.68	0.14	0.18	0.01	1.40
Payson Actual	0.28	0.71	1.74	3.43	3.14	2.29	1.97	1.87	0.24	0.11	0.27	1.35
Payson Weighted	0.01	0.03	0.09	0.17	0.19	0.14	0.12	0.11	0.01	0.01	0.01	0.07
Lehi Actual	0.26	0.57	1.48	0.74	1.26	1.44	1.32	0.96	0.20	0.62	0.00	0.57
Lehi Weighted	0.06	0.12	0.32	0.16	0.27	0.31	0.28	0.20	0.04	0.13	0.00	0.12
Lake Elevation	4488.01	4488.27	4488.65	4488.96	4489.23	4489.46	4489.55	4489.59	4489.37	4488.71	4487.91	4487.45
Area (acres)	60058	60312	60696	61019	61306	61554	61654	61699	61457	60758	59962	59533
Weighted Precip. (in)	0.40	0.51	1.16	2.49	1.99	1.56	0.88	1.00	0.20	0.32	0.03	1.59
Volume (Ac-ft)	2008	2565	5871	12648	10170	7984	4517	5142	999	1631	140	7885

MAIN LAKE MONTHLY PRECIPITATION DATA (Inches)
1997 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	1.70	1.83	0.98	2.94	1.18	0.14	1.31	1.35	0.62	0.37	0.72	1.49
Orem Weighted	1.25	1.35	0.72	2.17	0.86	0.10	0.95	0.98	0.45	0.27	0.53	1.10
Payson Actual	2.46	2.27	1.25	3.05	1.27	0.62	2.58	1.62	0.80	0.58	0.85	1.95
Payson Weighted	0.12	0.11	0.06	0.15	0.08	0.04	0.15	0.10	0.05	0.03	0.04	0.10
Lehi Actual	1.17	2.43	1.52	0.84	0.63	0.19	1.33	1.85	1.64	1.18	0.75	1.99
Lehi Weighted	0.25	0.52	0.32	0.18	0.13	0.04	0.28	0.39	0.35	0.25	0.16	0.42
Lake Elevation	4487.39	4487.78	4488.34	4488.93	4489.49	4489.79	4489.93	4490.13	4490.11	4489.45	4488.77	4488.58
Area (acres)	59479	59838	60382	60987	61587	61921	62074	62287	62266	61544	60820	60625
Weighted Precip. (in)	1.62	1.98	1.11	2.50	1.07	0.18	1.39	1.47	0.85	0.56	0.73	1.62
Volume (Ac-ft)	8050	9871	5577	12693	5482	926	7193	7644	4401	2847	3714	8180

MAIN LAKE MONTHLY PRECIPITATION DATA (Inches)
1998 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	1.05	1.41	0.83	1.89	2.51	1.62	1.26	1.27	2.85	0.98	0.37	0.37
Orem Weighted	0.77	1.04	0.61	1.37	1.82	1.18	0.92	0.92	2.07	0.71	0.27	0.27
Payson Actual	2.25	1.50	1.08	2.89	2.7	1.87	1.59	2.18	2.03	0.86	0.46	0.99
Payson Weighted	0.11	0.07	0.05	0.17	0.16	0.11	0.10	0.13	0.12	0.05	0.03	0.05
Lehi Actual	1.52	0.79	1.81	1.79	2.92	1.21	1.30	2.40	3.02	0.90	0.97	0.84
Lehi Weighted	0.32	0.17	0.39	0.38	0.62	0.26	0.28	0.51	0.64	0.19	0.21	0.18
Lake Elevation	4488.78	4488.97	4488.99	4489.13	4489.38	4489.61	4489.79	4490.05	4490.35	4490.06	4489.32	4488.94
Area (acres)	60831	61029	61050	61199	61467	61722	61921	62202	62517	62213	61403	60998
Weighted Precip. (in)	1.21	1.28	1.05	1.93	2.61	1.55	1.29	1.57	2.84	0.96	0.50	0.50
Volume (Ac-ft)	6128	6521	5348	9836	13363	7960	6648	8114	14780	4955	2575	2544

MAIN LAKE MONTHLY PRECIPITATION DATA (Inches)
1999 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	0.87	0.72	0.78	1.74	1.07	0.29	4.66	2.33	1.58	0.92	0.52	0.27
Orem Weighted	0.64	0.53	0.57	1.27	0.78	0.21	3.40	1.70	1.15	0.67	0.38	0.20
Payson Actual	1.44	1.37	0.89	1.22	1.11	0.56	4.63	2.73	1.61	1.29	0.44	0.15
Payson Weighted	0.08	0.08	0.05	0.07	0.06	0.03	0.26	0.16	0.09	0.07	0.02	0.01
Lehi Actual	1.59	0.72	0.80	1.68	1.02	0.55	3.40	1.65	0.91	1.80	0.29	0.00
Lehi Weighted	0.34	0.15	0.17	0.36	0.22	0.12	0.72	0.35	0.19	0.04	0.06	0.00
Lake Elevation	4489.01	4489.22	4489.36	4489.47	4489.57	4489.53	4489.44	4489.59	4489.59	4489.09	4488.49	4488.1
Area (acres)	61072	61295	61446	61565	61677	61632	61533	61699	61699	61156	60533	60145
Weighted Precip. (in)	1.05	0.76	0.79	1.70	1.06	0.36	4.39	2.21	1.44	1.13	0.47	0.21
Volume (Ac-ft)	5369	3864	4047	8709	5457	1854	22510	11354	7399	5748	2355	1035

Table D:3 - Goshen Bay Precipitation

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1980 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	1.77	0.67	0.15	2.47	0.87	1.59	0.37	1.98	0.05	0.26	0.33	0.84
ELBERTA WEIGHTED	0.54	0.21	0.05	0.80	0.30	0.56	0.14	0.77	0.02	0.10	0.12	0.29
GENEVA ACTUAL	2.21	0.97	0.20	3.53	3.41	1.17	0.36	2.21	0.08	0.21	0.67	1.14
GENEVA WEIGHTED	0.46	0.20	0.04	0.71	0.67	0.22	0.07	0.40	0.01	0.04	0.13	0.22
PAYSON ACTUAL	2.20	1.33	0.91	3.94	2.12	3.35	0.78	2.90	0.04	0.08	0.56	1.11
PAYSON WEIGHTED	1.07	0.64	0.44	1.86	0.98	1.52	0.35	1.25	0.02	0.03	0.25	0.48
LAKE ELEVATION (ft)	4486.14	4486.37	4486.74	4487.29	4488.04	4488.63	4489.13	4489.91	4490.78	4489.66	4488.91	4488.41
AREA (Acres))	23769	23936	24221	24678	25371	25976	26531	27477	28120	27163	26281	25744
WEIGHTED PRECIP (in)	2.07	1.05	0.53	3.37	1.95	2.30	0.56	2.42	0.05	0.17	0.50	0.99
VOLUME (Ac-ft)	4100	2094	1070	6930	4123	4979	1238	5541	117	385	1095	2124

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1981 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	1.48	0.85	0.39	0.21	0.26	1.57	0.92	2.64	1.00	0.42	0.96	0.78
ELBERTA WEIGHTED	0.24	0.14	0.07	0.04	0.05	0.30	0.18	0.50	0.19	0.07	0.13	0.09
GENEVA ACTUAL	6.38	1.35	1.37	0.80	0.29	1.85	0.49	3.76	0.36	0.10	0.17	0.89
GENEVA WEIGHTED	1.23	0.26	0.26	0.15	0.05	0.34	0.09	0.70	0.07	0.02	0.03	0.18
PAYSON ACTUAL	1.92	1.95	0.97	0.72	0.45	3.34	1.58	3.95	0.31	1.23	0.62	1.79
PAYSON WEIGHTED	1.24	1.25	0.61	0.45	0.28	2.08	0.98	2.47	0.19	0.80	0.41	1.2[illegible]
LAKE ELEVATION (ft)	4488.36	4488.65	4488.97	4489.21	4489.28	4489.30	4489.32	4489.25	4489.14	4488.36	4487.44	4486.[illegible]
AREA (Acres))	25693	25997	26349	26623	26705	26728	26752	26670	26542	25693	24810	24276
WEIGHTED PRECIP (in)	2.71	1.65	0.94	0.64	0.38	2.72	1.25	3.67	0.45	0.89	0.57	1.48
VOLUME (Ac-ft)	5802	3575	2064	1420	846	6058	2787	8157	995	1906	1178	2994

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1982 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	2.83	0.54	1.09	1.12	0.33	1.12	0.41	1.66	0.57	3.67	0.38	5.30
ELBERTA WEIGHTED	0.35	0.07	0.15	0.17	0.06	0.21	0.08	0.37	0.13	0.80	0.08	1.02
*GENEVA ACTUAL	3.79	0.24	1.65	1.34	0.79	2.00	0.52	1.50	0.48	1.56	0.39	5.75
*GENEVA WEIGHTED	0.70	0.05	0.33	0.26	0.15	0.37	0.10	0.27	0.08	0.28	0.07	1.07
PAYSON ACTUAL	7.30	1.09	2.41	2.45	1.24	3.00	1.94	2.37	0.51	0.75	0.49	9.33
PAYSON WEIGHTED	4.92	0.73	1.60	1.60	0.80	1.89	1.20	1.42	0.30	0.45	0.30	5.81
LAKE ELEVATION (ft)	4486.74	4487.29	4487.60	4488.17	4488.56	4489.09	4489.47	4490.28	4490.86	4490.18	4489.63	4489.32
AREA (Acres))	24382	24678	24954	25500	25901	26485	26931	27775	28035	27709	27126	26752
WEIGHTED PRECIP (in)	5.97	0.85	2.08	2.03	1.01	2.47	1.38	2.06	0.51	1.53	0.45	7.90
VOLUME (Ac-ft)	12130	1748	4325	4314	2180	5451	3097	4768	1191	3533	1017	17612

* Changed to Orem Treatment Plant in August 1982

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1983 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	1.46	0.73	0.67	1.24	2.00	2.30	1.32	1.67	0.89	0.82	2.11	1.76
ELBERTA WEIGHTED	0.30	0.16	0.16	0.30	0.50	0.61	0.36	0.49	0.30	0.27	0.64	0.50
OREM TP ACTUAL	1.94	1.57	1.02	1.38	2.63	1.74	1.38	1.84	0.88	1.12	2.28	1.33
OREM TP WEIGHTED	0.35	0.28	0.18	0.24	0.45	0.29	0.23	0.30	0.13	0.17	0.36	0.22
PAYSON ACTUAL	3.45	1.54	1.25	2.22	3.90	3.55	1.85	3.20	1.05	1.39	2.60	2.40
PAYSON WEIGHTED	2.11	0.92	0.74	1.30	2.25	2.01	1.04	1.75	0.54	0.72	1.40	1.33
LAKE ELEVATION (ft)	4489.84	4490.29	4490.70	4490.93	4491.16	4491.58	4491.79	4492.40	4493.93	4493.59	4492.77	4492.19
AREA (Acres))	27338	27782	28063	28229	28399	28725	28895	29417	30916	30558	29754	29232
WEIGHTED PRECIP (in)	2.76	1.36	1.08	1.84	3.20	2.91	1.63	2.54	0.97	1.16	2.40	2.05
VOLUME (Ac-ft)	6288	3149	2526	4328	7573	6966	3925	6227	2499	2954	5951	4994

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1984 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	0.57	2.69	1.97	0.61	0.61	0.91	1.80	0.45	2.12	1.19	1.26	1.17
ELBERTA WEIGHTED	0.16	0.76	0.58	0.19	0.18	0.27	0.55	0.15	0.76	0.39	0.38	0.32
OREM TP ACTUAL	0.59	2.24	3.35	0.46	0.56	0.38	1.66	0.33	2.43	0.90	1.77	1.39
OREM TP WEIGHTED	0.10	0.37	0.54	0.07	0.09	0.06	0.26	0.05	0.35	0.14	0.28	0.23
PAYSON ACTUAL	1.20	4.42	4.96	0.73	1.58	1.86	3.43	0.97	3.09	1.41	2.38	1.30
PAYSON WEIGHTED	0.67	2.44	2.71	0.39	0.86	1.01	1.84	0.50	1.53	0.73	1.29	0.73
LAKE ELEVATION (ft)	4492.06	4492.17	4492.48	4492.79	4492.60	4492.60	4492.89	4493.85	4494.54	4493.65	4492.64	4491.86
AREA (Acres))	29121	29215	29488	29772	29597	29597	29866	30830	31506	30620	29634	28953
WEIGHTED PRECIP (in)	0.93	3.57	3.83	0.65	1.13	1.34	2.65	0.70	2.64	1.26	1.95	1.26
VOLUME (Ac-ft)	2257	8691	9412	1613	2787	3305	6595	1798	6931	3215	4816	3088

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1985 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	2.28	0.38	0.75	1.07	0.64	1.20	0.48	1.46	0.57	1.67	0.17	0.75
ELBERTA WEIGHTED	0.62	0.10	0.21	0.30	0.18	0.34	0.14	0.44	0.16	0.44	0.04	0.16
OREM TP ACTUAL	1.49	1.04	0.74	0.84	0.79	1.60	0.27	1.89	1.76	1.20	0.08	0.80
OREM TP WEIGHTED	0.25	0.17	0.12	0.14	0.13	0.26	0.04	0.30	0.29	0.20	0.01	0.14
PAYSON ACTUAL	3.93	1.10	1.29	2.19	1.68	2.31	0.63	1.80	1.36	1.82	0.21	0.93
PAYSON WEIGHTED	2.21	0.62	0.72	1.22	0.93	1.28	0.34	0.97	0.75	1.04	0.12	0.56
LAKE ELEVATION (ft)	4491.75	4491.85	4491.89	4492.00	4492.06	4492.15	4492.40	4492.73	4492.29	4491.50	4490.77	4490.15
AREA (Acres))	28862	28945	28978	29070	29121	29198	29417	29717	29320	28662	28113	27690
WEIGHTED PRECIP (in)	3.08	0.89	1.05	1.66	1.24	1.88	0.52	1.71	1.20	1.68	0.17	0.86
VOLUME (Ac-ft)	7408	2147	2536	4021	3009	4574	1275	4235	2932	4013	398	1984

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1986 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	1.35	1.95	0.51	0.19	1.03	1.39	2.72	0.65	0.68	0.83	1.14	2.11
ELBERTA WEIGHTED	0.29	0.42	0.11	0.04	0.24	0.38	0.82	0.20	0.21	0.22	0.27	0.44
OREM TP ACTUAL	1.76	1.97	0.90	0.87	2.79	2.53	2.82	1.29	0.68	0.76	1.02	1.89
OREM TP WEIGHTED	0.32	0.35	0.16	0.15	0.49	0.42	0.45	0.20	0.11	0.13	0.18	0.34
PAYSON ACTUAL	1.92	3.44	2.16	0.77	1.90	2.55	3.93	2.24	0.65	1.03	0.44	2.77
PAYSON WEIGHTED	1.17	2.08	1.30	0.46	1.12	1.44	2.12	1.19	0.35	0.58	0.26	1.69
LAKE ELEVATION (ft)	4489.97	4490.08	4490.26	4490.35	4490.63	4491.76	4492.73	4493.13	4492.84	4491.72	4490.71	4489.84
AREA (Acres))	27554	27644	27762	27822	28014	28871	29717	30097	29819	28838	28070	27338
WEIGHTED PRECIP (in)	1.78	2.85	1.57	0.65	1.85	2.24	3.39	1.59	0.67	0.93	0.71	2.47
VOLUME (Ac-ft)	4087	6565	3632	1507	4319	5389	8395	3988	1665	2235	1661	5627

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1987 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	1.09	0.37	0.07	0.68	1.02	1.13	0.22	1.06	0.75	1.73	2.05	0.11
ELBERTA WEIGHTED	0.22	0.07	0.01	0.13	0.19	0.21	0.04	0.18	0.12	0.24	0.25	0.01
OREM TP ACTUAL	0.62	0.69	0.15	0.70	1.02	0.88	0.05	1.63	0.15	1.08	1.87	0.20
OREM TP WEIGHTED	0.11	0.13	0.03	0.13	0.19	0.16	0.01	0.31	0.03	0.21	0.38	0.04
PAYSON ACTUAL	1.19	1.41	0.32	1.00	1.58	1.85	0.43	2.40	0.22	1.20	1.76	0.07
PAYSON WEIGHTED	0.73	0.87	0.20	0.62	0.99	1.16	0.27	1.54	0.14	0.80	1.19	0.05
LAKE ELEVATION (ft)	4489.61	4489.53	4489.45	4489.39	4489.27	4489.18	4488.95	4488.62	4488.23	4487.45	4486.83	448[illegible]
AREA (Acres))	27101	27004	26907	26835	26693	26588	26326	25965	26651	24819	24293	239[illegible]
WEIGHTED PRECIP (in)	1.06	1.07	0.24	0.88	1.37	1.53	0.32	2.03	0.29	1.25	1.82	0.10
VOLUME (Ac-ft)	2394	2408	538	1968	3047	3390	702	4397	644	2585	3684	200

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1988 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	1.52	0.63	0.82	1.65	0.16	1.19	1.29	0.58	0.09	0.08	0.32	0.47
ELBERTA WEIGHTED	0.16	0.07	0.10	0.23	0.02	0.20	0.17	0.10	0.01	0.01	0.03	0.04
OREM TP ACTUAL	1.53	1.25	0.62	1.02	0.00	0.35	1.19	0.99	0.04	0.82	0.66	0.69
OREM TP WEIGHTED	0.32	0.25	0.12	0.20	0.00	0.07	0.23	0.19	0.01	0.17	0.14	0.15
PAYSON ACTUAL	1.36	1.96	1.55	1.81	0.35	1.15	1.52	1.10	0.22	0.60	0.31	0.78
PAYSON WEIGHTED	0.94	1.33	1.04	1.20	0.23	0.74	0.97	0.70	0.14	0.40	0.21	0.55
LAKE ELEVATION (ft)	4486.16	4486.64	4487.06	4487.59	4488.01	4488.47	4488.76	4488.66	4488.13	4486.99	4485.93	4485.32
AREA (Acres))	23783	24142	24482	24945	25342	25807	26116	26008	25480	24423	23613	23094
WEIGHTED PRECIP (in)	1.42	1.65	1.26	1.63	0.25	1.01	1.37	0.99	0.16	0.58	0.38	0.74
VOLUME (Ac-ft)	2814	3320	2571	3388	528	2172	2982	2146	340	1180	748	1424

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1989 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	0.69	1.15	0.46	0.28	1.79	1.06	0.51	0.55	0.26	0.47	0.91	0.93
ELBERTA WEIGHTED	0.05	0.09	0.04	0.03	0.19	0.13	0.07	0.07	0.03	0.04	0.05	0.05
OREM TP ACTUAL	0.64	0.98	0.77	0.25	1.17	1.15	1.44	0.48	0.26	0.54	0.90	1.55
OREM TP WEIGHTED	0.14	0.21	0.16	0.05	0.24	0.23	0.29	0.10	0.05	0.12	0.20	0.35
PAYSON ACTUAL	0.55	2.33	1.34	0.70	2.68	1.32	0.43	0.49	0.25	0.59	1.08	1.23
PAYSON WEIGHTED	0.39	1.65	0.94	0.49	1.84	0.89	0.29	0.33	0.17	0.42	0.78	0.89
LAKE ELEVATION (ft)	4484.75	4484.93	4485.27	4485.55	4486.20	4486.90	4487.25	4486.80	4486.05	4484.80	4483.60	4483.55
AREA (Acres))	22561	22735	23050	23296	23812	24349	24643	24268	23720	22610	21307	21246
WEIGHTED PRECIP (in)	0.58	1.95	1.14	0.57	2.27	1.25	0.65	0.50	0.25	0.58	1.03	1.29
VOLUME (Ac-ft)	1090	3694	2190	1107	4504	2536	1335	1011	494	1093	1829	2284

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1990 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	0.51	0.77	0.17	0.61	2.09	0.98	0.72	0.46	0.79	0.74	0.18	1.05
ELBERTA WEIGHTED	0.03	0.05	0.01	0.05	0.19	0.10	0.06	0.04	0.07	0.05	0.01	0.03
OREM TP ACTUAL	0.80	0.96	0.08	0.89	0.79	1.01	0.64	0.90	1.11	0.31	0.73	0.64
OREM TP WEIGHTED	0.18	0.21	0.02	0.19	0.17	0.21	0.13	0.19	0.24	0.07	0.16	0.15
PAYSON ACTUAL	0.92	1.11	0.24	1.16	2.04	2.02	1.27	1.05	1.68	0.63	0.18	0.77
PAYSON WEIGHTED	0.67	0.80	0.17	0.82	1.42	1.39	0.87	0.73	1.18	0.45	0.13	0.57
LAKE ELEVATION (ft)	4483.60	4484.05	4484.45	4485.02	4485.48	4486.06	4486.25	4485.72	4485.31	4484.45	4483.40	4482.61
AREA (Acres))	21307	21630	22259	22820	23235	23712	23848	23440	23086	22259	21060	19974
WEIGHTED PRECIP (in)	0.88	1.06	0.20	1.06	1.78	1.70	1.08	0.96	1.49	0.57	0.30	0.75
VOLUME (Ac-ft)	1563	1928	371	2016	3447	3359	2146	1875	2867	1057	527	1248

GOSHEN BAY
UTAH LAKE PRECIPITATION DATA (inches)

1991 WATER YEAR

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELBERTA ACTUAL	1.22	0.66	0.57	0.49	0.33	0.84	1.35	3.01	0.41	0.42	0.78	1.14
ELBERTA WEIGHTED	0.04	0.02	0.02	0.02	0.02	0.06	0.10	0.23	0.03	0.03	0.03	0.03
OREM TP ACTUAL	1.74	1.07	0.60	0.95	0.40	0.70	1.21	1.73	0.66	0.09	1.17	2.54
OREM TP WEIGHTED	0.40	0.24	0.14	0.21	0.09	0.15	0.26	0.37	0.14	0.02	0.26	0.58
PAYSON ACTUAL	1.82	1.37	1.38	1.29	1.04	1.25	2.90	2.73	0.64	0.16	0.54	1.30
PAYSON WEIGHTED	1.35	1.01	1.01	0.94	0.75	0.89	2.06	1.93	0.45	0.12	0.40	0.96
LAKE ELEVATION (ft)	4482.52	4482.72	4483.05	4483.48	4483.87	4484.49	4484.70	4484.76	4484.88	4483.99	4483.01	4482.57
AREA (Acres))	19837	20136	20601	21160	21626	22300	22512	22571	22687	21763	20546	19913
WEIGHTED PRECIP (in)	1.79	1.27	1.17	1.17	0.86	1.10	2.42	2.53	0.62	0.17	0.69	1.57
VOLUME (Ac-ft)	2959	2131	2009	2063	1550	2044	4540	4759	1172	308	1181	2605

Table D:3 - Goshen Bay Precipitation

GOSHEN BAY MONTHLY PRECIPITATION DATA (inches) 1992 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	1.21	1.64	0.34	0.37	1.44	0.45	0.14	1.20	0.75	0.98	0.30	1.06
Orem Weighted	0.60	0.81	0.17	0.18	0.71	0.22	0.07	0.60	0.37	0.49	0.15	0.53
Payson Actual	1.90	2.36	0.75	0.62	1.77	1.21	0.23	1.63	0.81	1.03	0.22	0.70
Payson Weighted	0.34	0.43	0.14	0.11	0.32	0.22	0.04	0.30	0.15	0.19	0.04	0.13
Santaquin Actual	2.18	2.93	0.73	0.45	1.32	1.54	0.11	1.69	0.55	0.84	0.19	0.47
Santaquin Weighted	0.70	0.95	0.24	0.15	0.43	0.50	0.04	0.55	0.18	0.27	0.06	0.15
Lake Elevation	4482.52	4482.82	4483.27	483.76	4484.27	4484.70	4484.75	4484.27	4483.52	4482.53	4481.40	4481.16
Area (acres)	20408	20867	21295	21695	22070	22512	22561	22070	21209	19853	17604	17021
Weighted Precip. (in)	1.65	2.19	0.54	0.44	1.46	0.94	0.15	1.44	0.70	0.94	0.25	0.80
Volume (Ac-ft)	2803	3803	959	797	2687	1763	276	2641	1231	1561	367	1141

GOSHEN BAY MONTHLY PRECIPITATION DATA (inches) 1993 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	2.36	1.15	1.60	1.84	1.45	2.54	0.48	2.45	1.31	0.79	0.62	1.09
Orem Weighted	1.17	0.57	0.79	0.91	0.72	1.26	0.22	1.13	0.61	0.37	0.29	0.50
Payson Actual	1.84	1.80	1.50	3.85	2.32	2.13	1.21	4.36	1.37	0.44	0.46	1.24
Payson Weighted	0.33	0.33	0.27	0.70	0.42	0.39	0.20	0.74	0.23	0.07	0.08	0.21
Santaquin Actual	2.25	2.24	1.97	3.87	2.34	2.35	1.47	3.65	1.96	0.35	0.42	1.14
Santaquin Weighted	0.73	0.72	0.64	1.25	0.76	0.76	0.54	1.34	0.72	0.13	0.15	0.42
Lake Elevation	4481.46	4481.70	4482.15	4482.81	4483.61	4484.47	4485.21	4486.03	4486.82	4486.74	4486.12	4485.71
Area (acres)	17747	48310	19246	20266	21319	22279	22995	23691	24285	24221	23754	23432
Weighted Precip. (in)	2.23	1.62	1.70	2.86	1.89	2.40	0.97	3.21	1.56	0.57	0.52	1.13
Volume (Ac-ft)	3299	6521	2729	4829	3367	4464	1854	6346	3156	1148	1028	2214

GOSHEN BAY MONTHLY PRECIPITATION DATA (inches) 1994 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	2.14	0.34	0.10	0.40	1.11	0.79	2.83	0.98	0.00	0.18	1.02	0.73
Orem Weighted	0.99	0.16	0.05	0.19	0.49	0.35	1.24	0.43	0.00	0.08	0.47	0.36
Payson Actual	1.47	0.86	0.90	0.56	2.45	0.81	2.92	1.42	0.04	0.27	1.50	0.91
Payson Weighted	0.25	0.15	0.15	0.09	0.41	0.13	0.48	0.24	0.01	0.05	0.25	0.16
Santaquin Actual	1.80	0.89	1.12	0.53	2.86	0.78	2.47	1.41	0.02	0.06	1.85	1.29
Santaquin Weighted	0.66	0.33	0.41	0.20	1.13	0.31	0.98	0.56	0.01	0.02	0.68	0.42
Lake Elevation	4485.78	4486.14	4486.52	4486.89	4487.32	4487.68	4487.91	4487.82	4487.24	4486.34	4485.49	4484.87
Area (acres)	23490	23769	24049	24341	24704	25028	25245	25159	24635	23914	23244	22773
Weighted Precip. (in)	1.90	0.63	0.61	0.47	2.03	0.79	2.70	1.22	0.01	0.15	1.41	0.94
Volume (Ac-ft)	3722	1248	1224	963	4170	1646	5685	2565	30	301	2725	1790

GOSHEN BAY MONTHLY PRECIPITATION DATA (inches) 1995 Water Year												
STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Orem Actual	2.97	0.78	1.02	1.16	0.25	1.13	1.25	4.81	1.08	0.65	0.48	0.33
Orem Weighted	1.47	0.36	0.47	0.54	0.12	0.49	0.55	2.11	0.44	0.26	0.21	0.14
Payson Actual	3.36	3.04	0.97	2.30	1.11	2.23	2.32	4.89	1.47	1.09	0.21	0.99
Payson Weighted	0.61	0.51	0.16	0.39	0.19	0.37	0.39	0.81	0.22	0.16	0.03	0.16
Santaquin Actual	4.49	2.87	1.32	2.56	1.40	2.44	3.45	6.09	1.99	0.55	0.12	1.10
Santaquin Weighted	1.45	1.06	0.49	0.94	0.52	0.97	1.37	2.41	0.89	0.24	0.05	0.44
Lake Elevation	4484.78	4485.17	4485.54	4486.04	4486.59	4487.03	4487.46	4488.34	4489.20	4489.17	4488.66	4488.12
Area (acres)	22590	22959	23287	23698	24103	24457	24828	25672	26611	26577	26008	25405
Weighted Precip. (in)	3.53	1.93	1.12	1.87	0.82	1.83	2.30	5.33	1.54	0.67	0.29	0.74
Volume (Ac-ft)	6648	3695	2177	3689	1644	3732	4756	11403	3423	1487	634	1576

Table D:3 Continued

GOSHEN BAY MONTHLY PRECIPITATION DATA (Inches)
1996 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Gem Actual	0.45	0.48	1.03	2.93	2.11	1.53	0.66	0.94	0.19	0.25	0.02	1.90
Gem Weighted	0.20	0.21	0.45	1.28	0.85	0.62	0.27	0.38	0.08	0.11	0.01	0.83
Payson Actual	0.28	0.71	1.74	3.43	3.14	2.29	1.97	1.87	0.24	0.11	0.27	1.35
Payson Weighted	0.05	0.12	0.29	0.57	0.47	0.34	0.30	0.28	0.04	0.02	0.04	0.22
Santaquin Actual	0.06	0.89	1.29	2.23	3.64	3.81	2.07	1.55	0.09	0.15	0.06	1.27
Santaquin Weighted	0.02	0.35	0.51	0.88	1.62	1.70	0.92	0.69	0.04	0.06	0.02	0.50
Lake Elevation	4488.01	4488.27	4488.65	4488.96	4489.23	4489.46	4489.55	4489.59	4489.37	4488.71	4487.91	4487.45
Area (acres)	25342	25601	25997	26338	26646	26919	27028	27077	26811	26062	25245	24819
Weighted Precip. (in)	0.27	0.68	1.25	2.74	2.95	2.66	1.48	1.35	0.15	0.19	0.08	1.56
Volume (Ac-ft)	565	1452	2710	6005	6540	5964	3342	3048	342	406	163	3225

GOSHEN BAY MONTHLY PRECIPITATION DATA (Inches)
1997 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Gem Actual	1.70	1.83	0.98	2.94	1.18	0.14	1.31	1.35	0.62	0.37	0.72	1.49
Gem Weighted	0.74	0.80	0.43	1.29	0.48	0.06	0.53	0.55	0.25	0.15	0.32	0.65
Payson Actual	2.46	2.27	1.25	3.05	1.27	0.62	2.58	1.62	0.80	0.58	0.85	1.95
Payson Weighted	0.41	0.38	0.21	0.51	0.19	0.09	0.39	0.24	0.12	0.09	0.14	0.32
Santaquin Actual	2.11	2.07	2.16	3.50	2.03	0.46	2.96	2.23	0.87	1.52	0.92	2.16
Santaquin Weighted	0.84	0.82	0.86	1.39	0.90	0.20	1.32	0.99	0.39	0.68	0.36	0.86
Lake Elevation	4487.39	4487.78	4488.34	4488.93	4489.49	4489.79	4489.93	4490.13	4490.11	4489.45	4488.77	4488.58
Area (acres)	24766	25122	25672	26304	26955	27235	27503	27677	27664	26907	26127	25922
Weighted Precip. (in)	1.99	2.00	1.49	3.18	1.57	0.35	2.23	1.78	0.76	0.91	0.82	1.83
Volume (Ac-ft)	4104	4183	3192	6971	3531	804	5122	4110	1748	2048	1787	3957

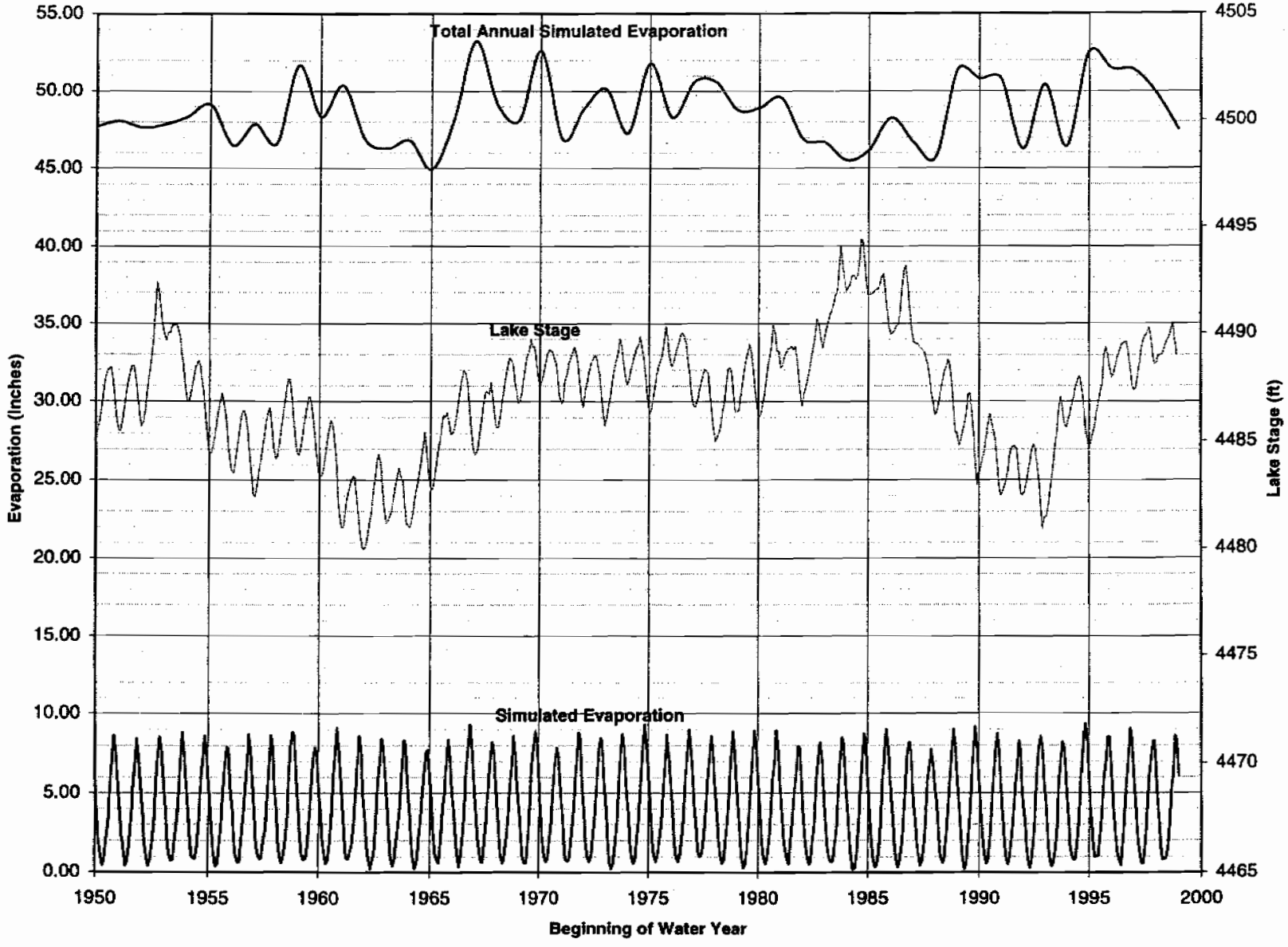
GOSHEN BAY MONTHLY PRECIPITATION DATA (Inches)
1998 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Gem Actual	1.05	1.41	0.83	1.89	2.51	1.62	1.26	1.27	2.85	0.98	0.37	0.37
Gem Weighted	0.46	0.62	0.36	0.77	1.02	0.66	0.51	0.51	1.15	0.40	0.15	0.16
Payson Actual	2.25	1.50	1.08	2.89	2.7	1.87	1.59	2.18	2.03	0.86	0.46	0.99
Payson Weighted	0.37	0.25	0.18	0.43	0.41	0.28	0.24	0.33	0.30	0.13	0.07	0.16
Santaquin Actual	1.91	1.50	1.25	2.76	3.25	2.90	1.96	1.45	3.67	1.31	0.45	0.73
Santaquin Weighted	0.76	0.59	0.50	1.23	1.45	1.29	0.87	0.65	1.63	0.58	0.20	0.29
Lake Elevation	4488.78	4488.97	4488.99	4489.13	4489.38	4489.61	4489.79	4490.05	4490.35	4490.06	4489.32	4488.94
Area (acres)	26138	26349	26371	26531	26823	27101	27325	27625	27822	27632	26752	26135
Weighted Precip. (in)	1.59	1.46	1.04	2.43	2.87	2.23	1.62	1.49	3.09	1.11	0.42	0.62
Volume (Ac-ft)	3463	3207	2281	5366	6410	5030	3691	3422	7169	2553	934	1340

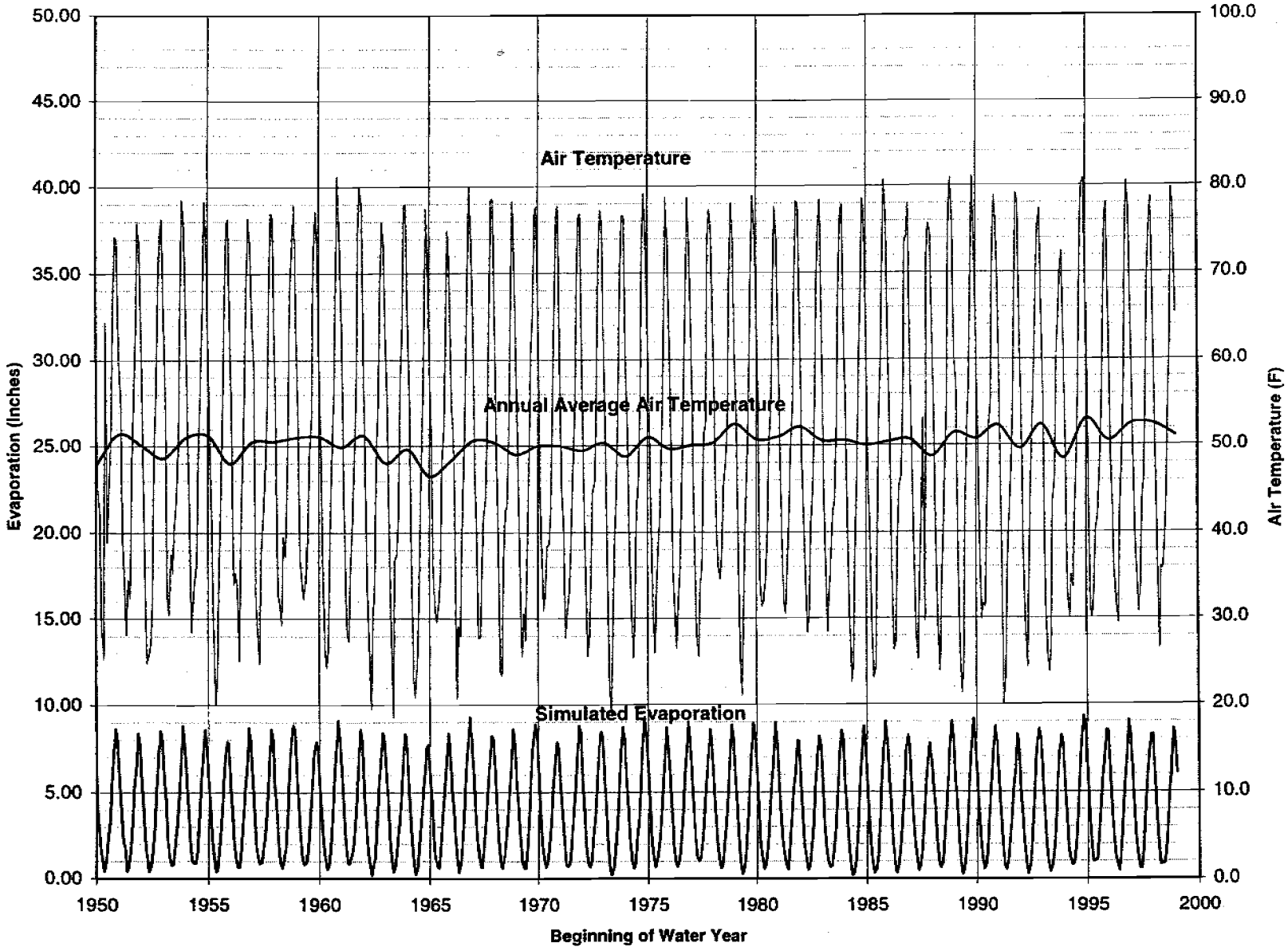
GOSHEN BAY MONTHLY PRECIPITATION DATA (Inches)
1999 Water Year

STATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Gem Actual	0.87	0.72	0.78	1.74	1.07	0.29	4.66	2.33	1.58	0.92	0.52	0.27
Gem Weighted	0.37	0.30	0.32	0.72	0.44	0.12	1.93	0.96	0.65	0.39	0.22	0.12
Payson Actual	1.44	1.37	0.89	1.22	1.11	0.56	4.63	2.73	1.61	1.29	0.44	0.15
Payson Weighted	0.23	0.21	0.14	0.19	0.17	0.09	0.71	0.42	0.25	0.20	0.07	0.03
Santaquin Actual	2.21	1.75	1.39	1.82	1.57	0.62	3.87	3.36	1.54	1.61	0.57	0.29
Santaquin Weighted	0.93	0.75	0.60	0.79	0.68	0.27	1.67	1.46	0.67	0.68	0.23	0.12
Lake Elevation	4489.01	4489.22	4489.36	4489.47	4489.57	4489.53	4489.44	4489.59	4489.59	4489.09	4488.49	4488.1
Area (acres)	26394	26635	26799	26931	27052	27004	26895	27077	27077	26485	25827	25430
Weighted Precip. (in)	1.52	1.26	1.06	1.69	1.29	0.48	4.31	2.84	1.57	1.27	0.53	0.26
Volume (Ac-ft)	3351	2797	2364	3803	2915	1068	9669	6405	3536	2801	1135	547

APPENDIX E - Temperature and Evaporation Plots

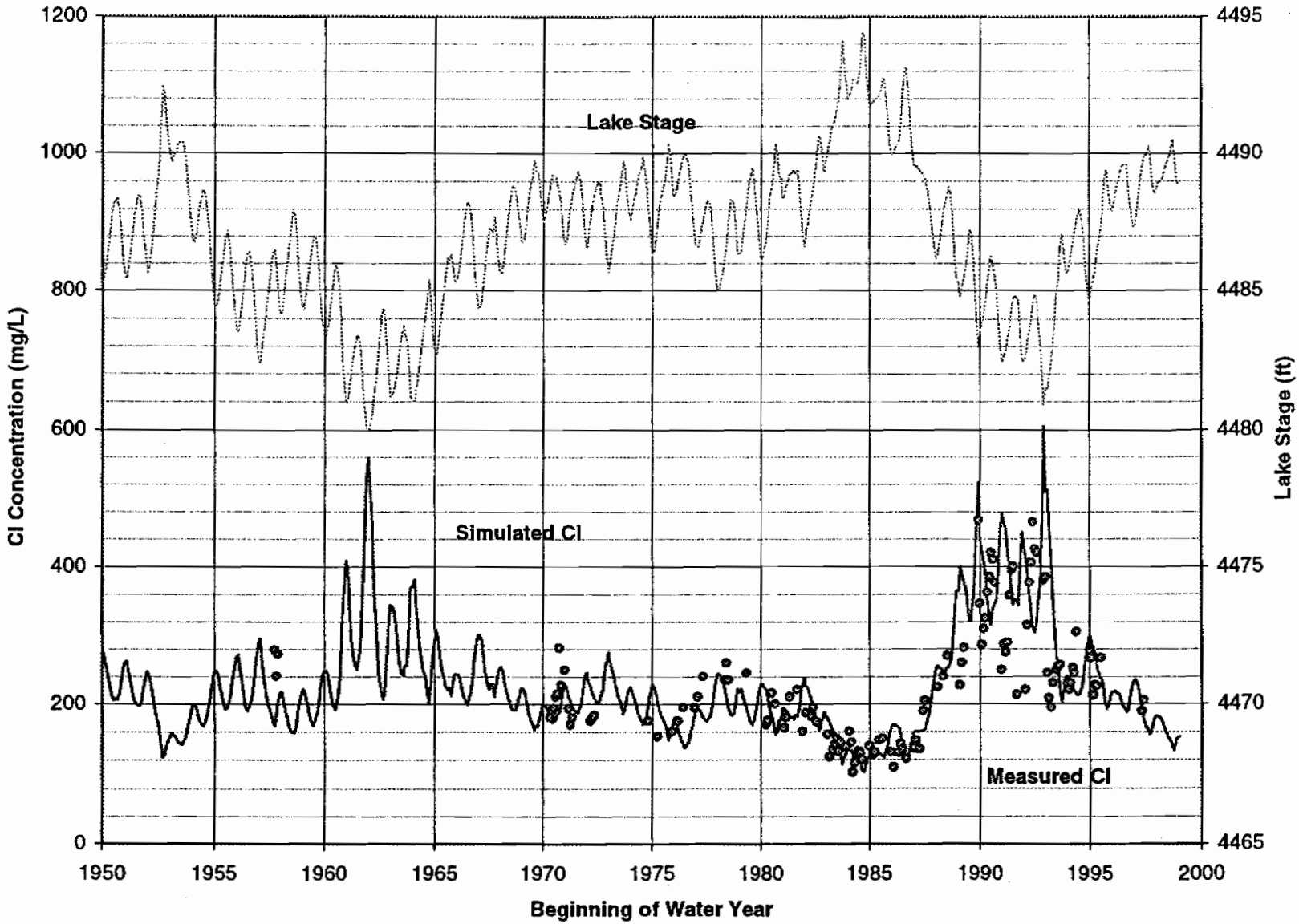


Evaporation and Water Levels in Utah Lake

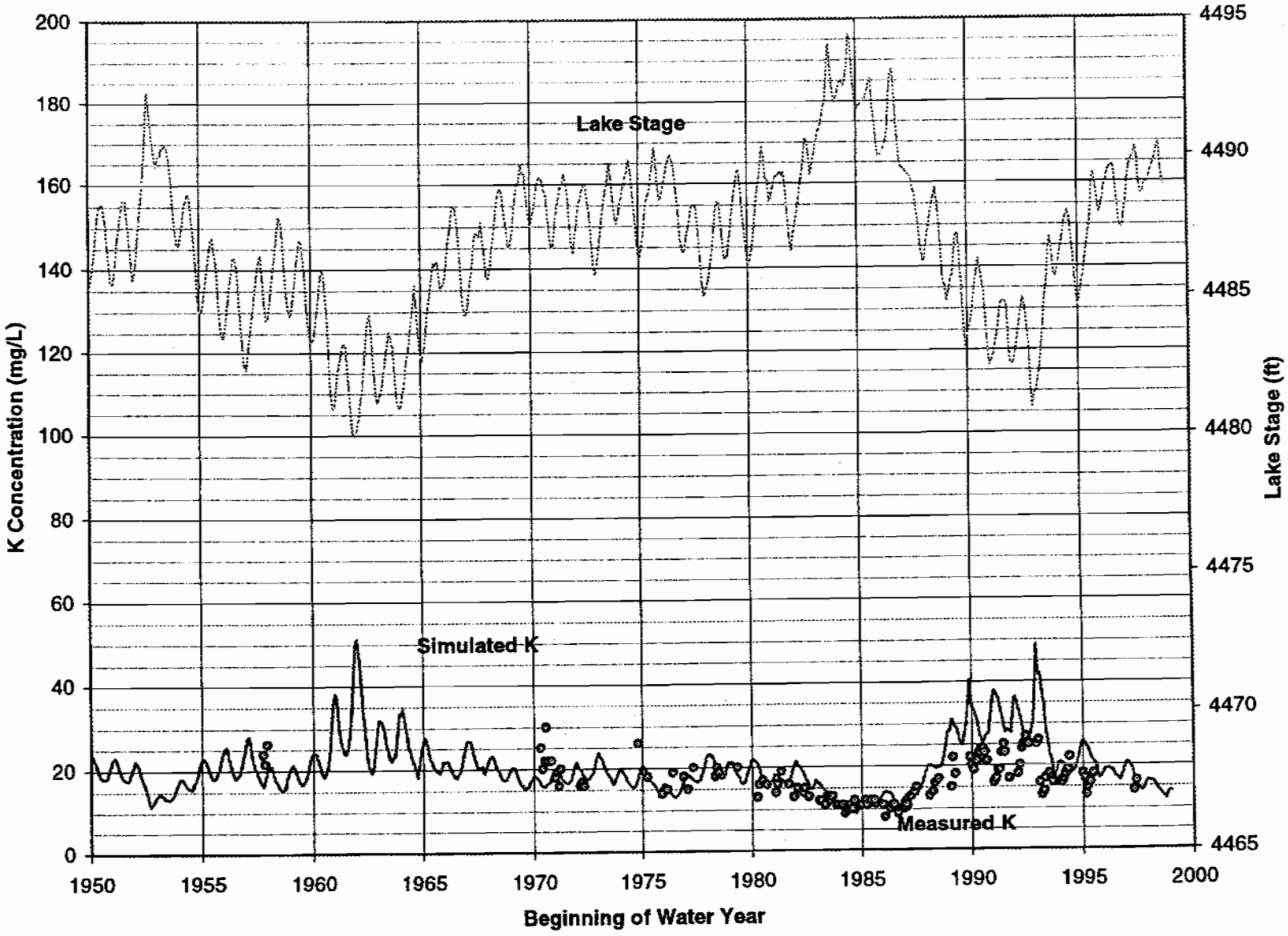


Evaporation and Air Temperature - Utah Lake

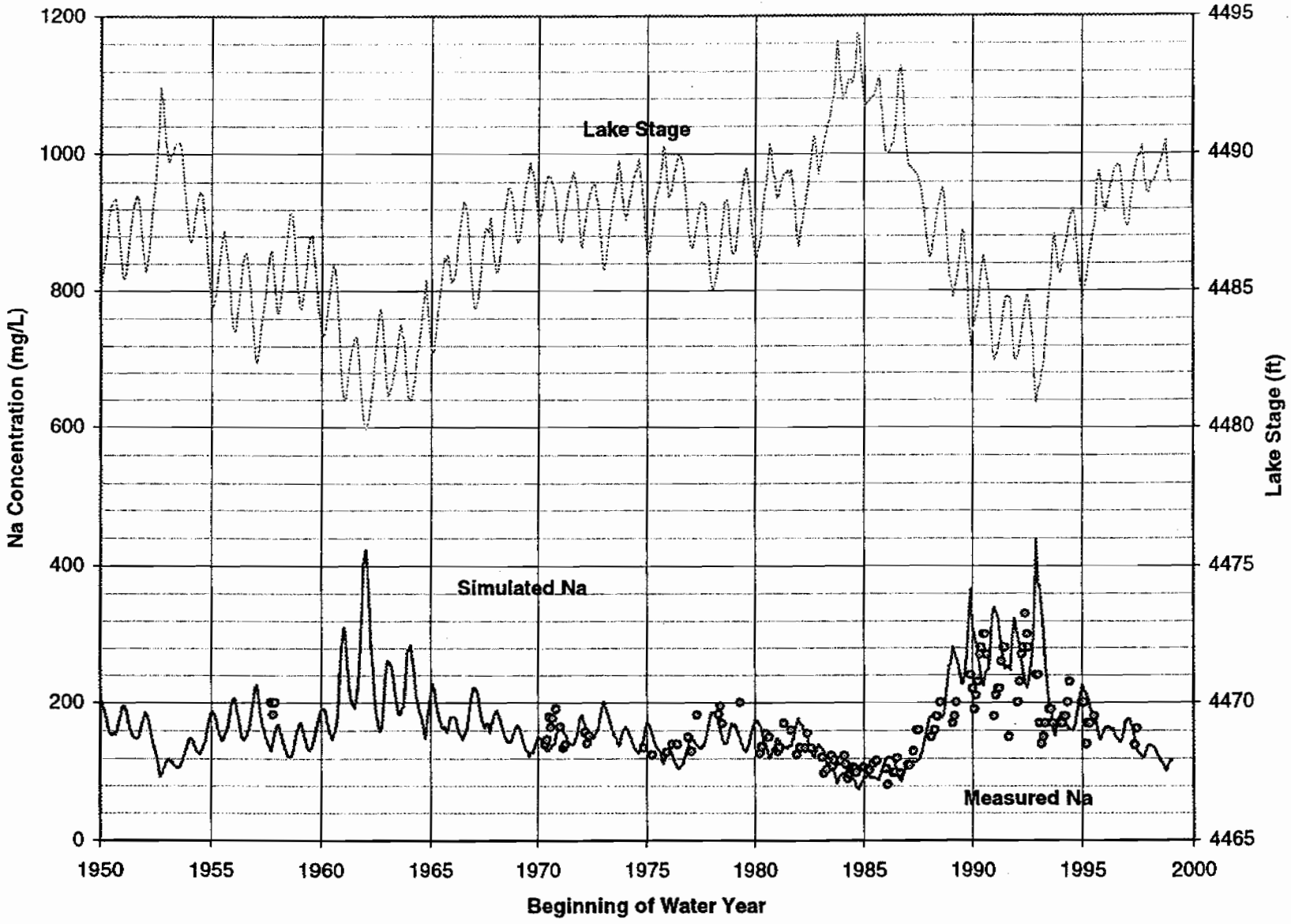
APPENDIX F - Plots of Calibrated LKSIM Results



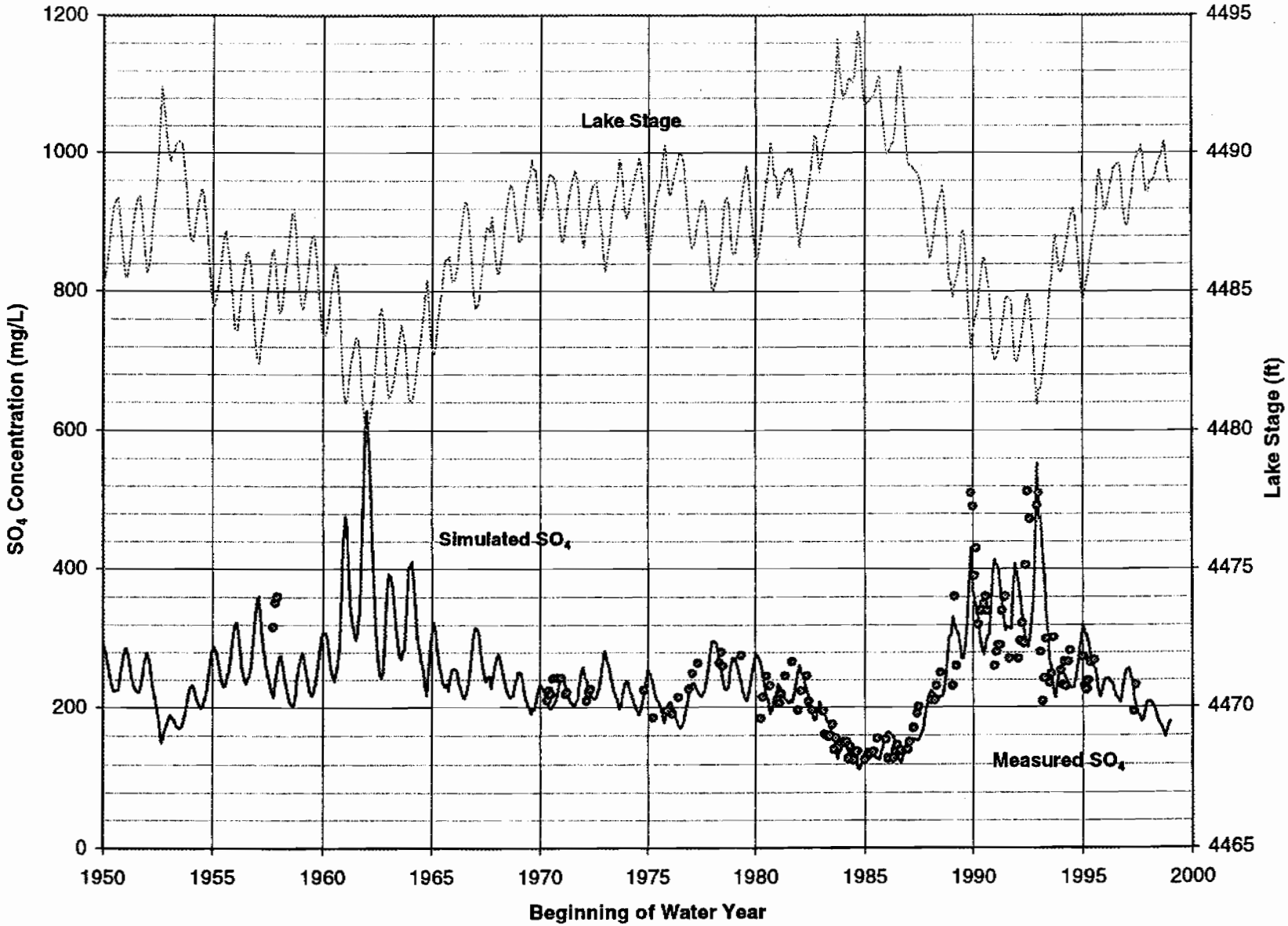
Chloride Concentrations and Water Levels in Utah Lake



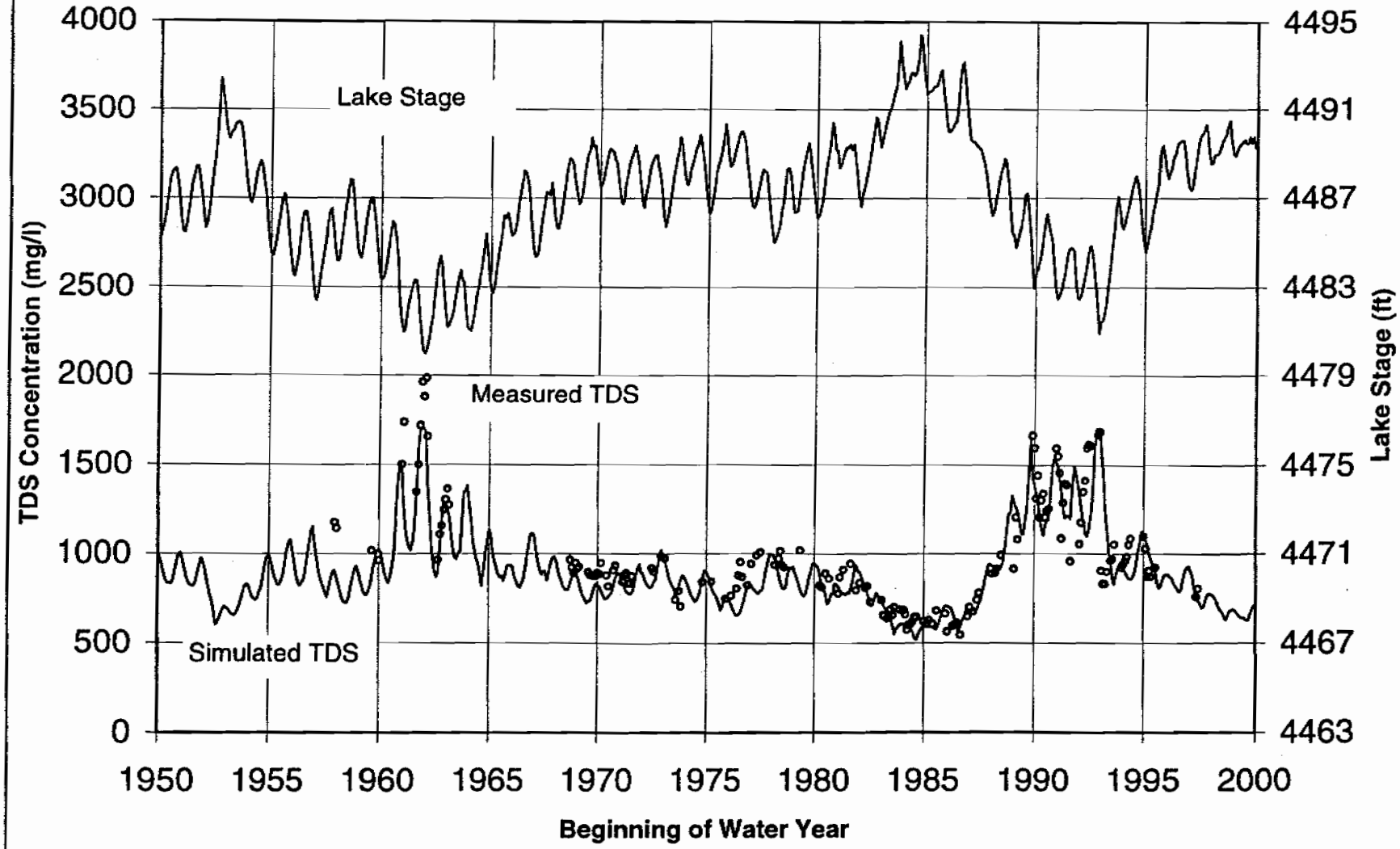
Potassium Concentrations and Water Levels in Utah Lake



Sodium Concentrations and Water Levels in Utah Lake



Sulfate Concentrations and Water Levels in Utah Lake



Total Dissolved Solids and Water Levels in Utah Lake