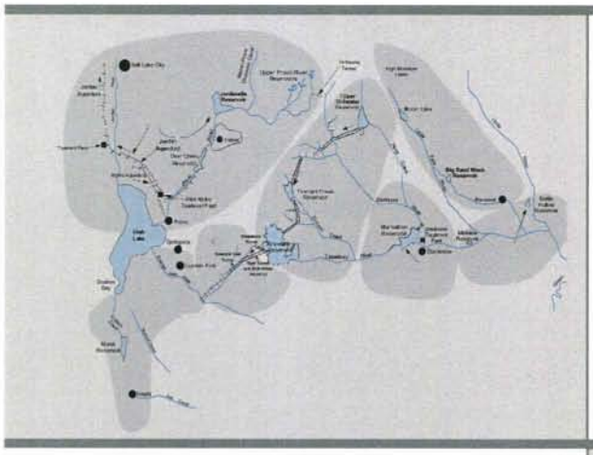
WATER SUPPLY APPENDIX

Volume 3 - Unita Basin Portion of the Bonneville Unit
Volume 4 - Diamond Fork Creek and Spanish Fork River

Central Utah Project Completion Program



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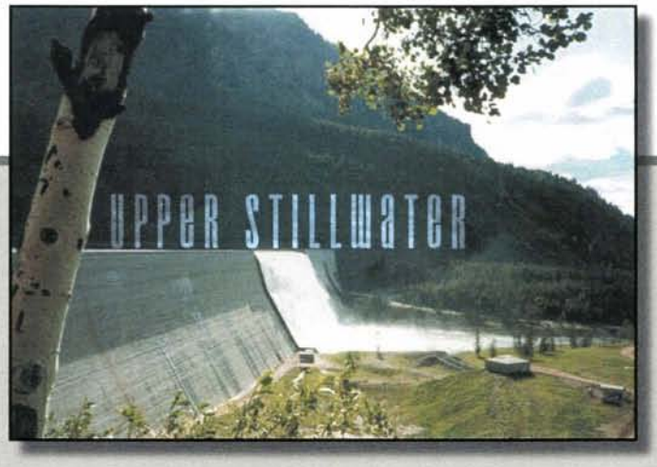

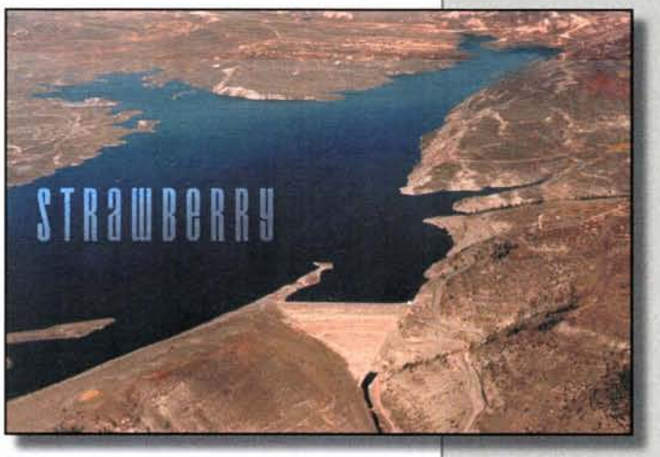

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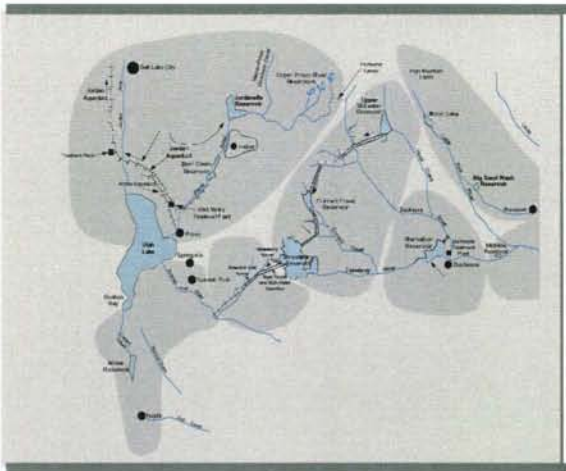
WATER SUPPLY APPENDIX

Volume 3 - Unita Basin Portion of the Bonneville Unit

Central Utah Project Completion Program



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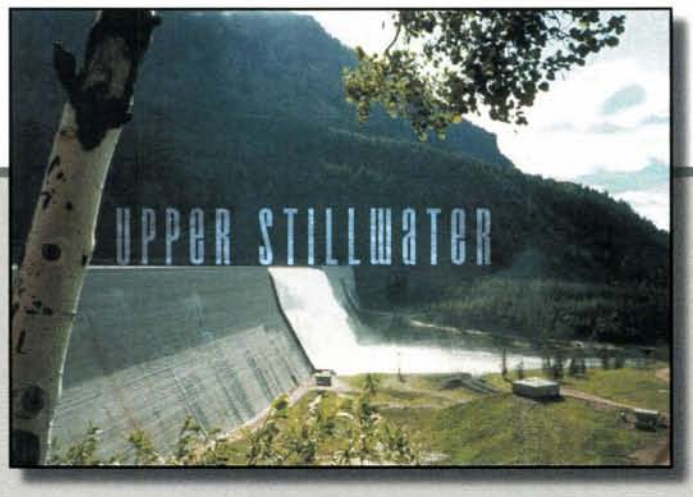

UTAH RECLAMATION MITIGATION AND CONSERVATION COMMISSION

Volume 3 - Unita Basin Portion of the Bonneville Unit

SUPPLEMENT TO THE BONNEVILLE UNIT DEFINITE PLAN REPORT

WATER SUPPLY APPENDIX, VOLUME 3 – UINTA BASIN PORTION OF THE BONNEVILLE UNIT

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Mayya Group International, LLC

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INTRODUCTION

The purpose of this volume is to provide an update of significant water supply changes from the 1988 Bonneville Unit Definite Plan Report for the Uinta Basin components of the Bonneville Unit, which generate much of the Bonneville Unit water supply for use along the Wasatch Front. This volume provides detailed information in support of Volume 1 of the Water Supply Appendix to the 2004 Supplement to the Bonneville Unit DPR, which describes the Bonneville Unit changes since the publication of the 1988 DPR.

Included in this volume is a presentation of the more significant hydrologic aspects of the Strawberry Collection System, the Starvation Collection System, Uintah Basin Replacement Project and the Ute Indian Tribal Development. The central focus is the operation of Strawberry Reservoir as part of the Strawberry Collection System, demonstrating the consistency of the current reservoir operating plan under CUPCA with that in the 1988 DPR. Post-CUPCA changes and refinements in the operation are described, as is the consistency of transbasin diversions for the proposed ULS system with the operation proposed in the 1988 DPR. This volume is organized with the following major headings:

Chapter 1 - Introduction
Chapter 2 - Strawberry Reservoir Operation
Chapter 3 - Starvation Reservoir Hydrology
Chapter 4 - Uinta Basin Replacement Project Hydrology
Chapter 5 - Ute Indian Tribal Development Hydrology
Chapter 6 - Colorado River Depletions by the Bonneville Unit
Chapter 7 – References
Attachment A – Strawberry Reservoir Modeling Results
Attachment B – Print-out of Strawberry Reservoir Spreadsheet Operations Model

Various changes have occurred in the operation of the Bonneville Unit components in the Uinta Basin since the publication the 1988 Draft DPR. This volume addresses the changes, which consist primarily of the following:

- The Irrigation and Drainage System plan has been replaced by the Utah Lake Drainage Basin Water Delivery System (ULS System). Significant changes include the elimination of service to agricultural lands in the Sevier River Basin and in Juab County. Water for irrigation has been deleted from the ULS System plan.

- The 1991 Operating Agreement with the Strawberry Water Users Association quantified Strawberry Valley Project (SVP) water storage in and delivery from Strawberry Reservoir.

- Section 303(a) of CUPCA, requires minimum stream flows established pursuant to the February 27, 1980, Stream Flow Agreement, as amended. This increased the amount of water committed to fishery flows and reduced the project deliveries to Strawberry Reservoir.

- The amount of Bonneville Unit water proposed for transbasin diversion was reduced to compensate for the reduction in Strawberry Reservoir inflow.

- A block notice will be issued for an additional 3,000 acre-feet of irrigation water from Starvation Reservoir, bringing the total irrigation water under contract to 24,400 acre-feet.

- The Daniel Replacement Project was completed as authorized by CUPCA, which increased the inflow from the upper Strawberry watershed to Strawberry Reservoir by 2,900 acre-feet for streamflow augmentation.

- The Uinta Basin Replacement Project was formulated in lieu of facilities previously authorized in section 203 of CUPCA. The enlargement of Big Sand Wash Reservoir will provide an additional 3,000 acre-feet of M&I water and 2,500 acre-feet of irrigation water in the Uinta Basin.

- As mitigation for the Strawberry Aqueduct Collection System, planning and environmental compliance are underway for the proposed Lower Duchesne River Wetlands Restoration Project to mitigate impacts to wildlife to the Ute Indian Tribe.

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The Strawberry Aqueduct and Collection System (SACS) develops project water for storage in Strawberry Reservoir for a transbasin diversion to the Bonneville Basin and provides project water for recreation, fish and wildlife, and M&I uses in the Uinta Basin. The facilities of the system have been constructed and are operational. No additional features are proposed for SACS.

The SACS is located in north central Utah in the northwest (upper) end of the Uinta drainage basin. It is bounded on the east by Rock Creek drainage, on the south by Strawberry River, and on the north and west by the Uinta and Wasatch Mountains, as shown in Figure 2-1. As completed in the late 1980's, the system is designed to divert part of the flow of Rock Creek and eight other tributaries of the Duchesne River and convey diverted flows through the 36.8-mile-long Strawberry Aqueduct to Strawberry Reservoir, and to divert, convey, and re-regulate project water to meet minimum instream flows under the 1980 stream flow agreement. Water for both the Bonneville Unit and the Strawberry Valley Project (SVP) are stored in the enlarged Strawberry Reservoir.

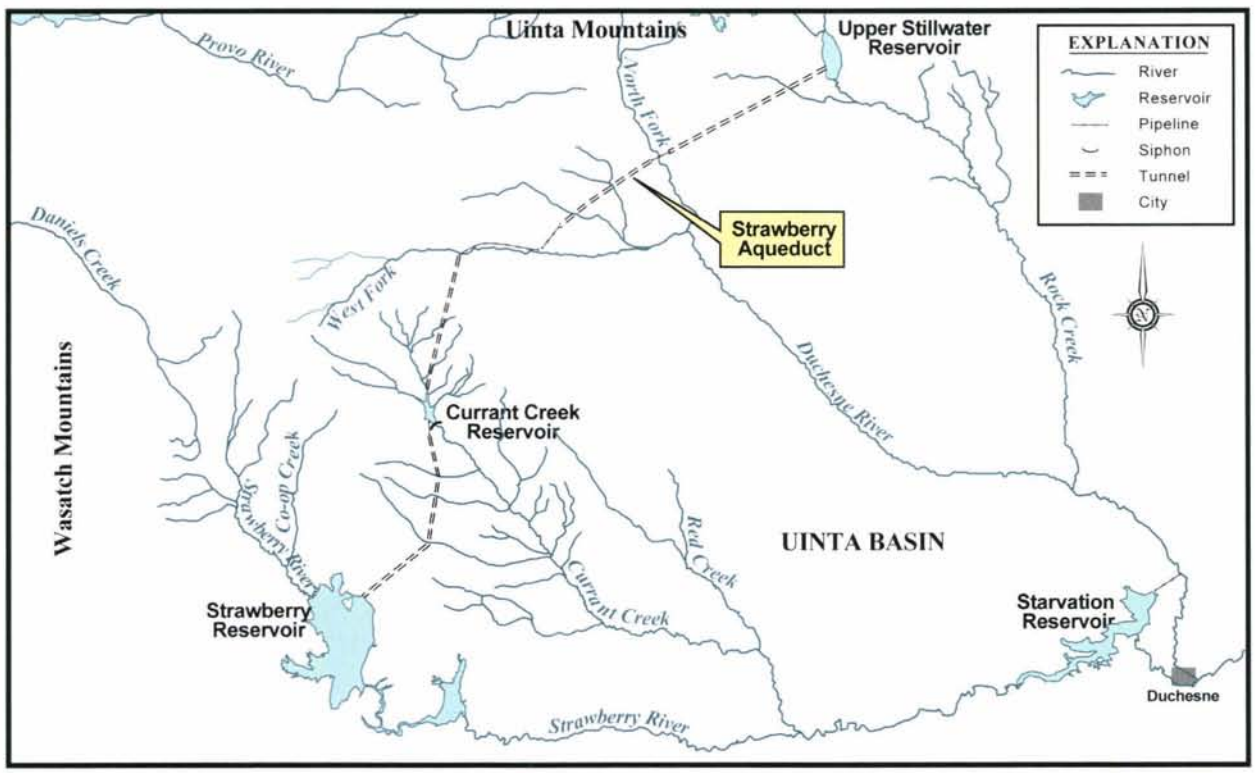


Figure 2-1
Strawberry Aqueduct Collection System

SIGNIFICANT CHANGES FROM 1988 DPR

Changes from the 1988 DPR are addressed in this chapter in terms of the relationship to either the SACS and/or Strawberry Reservoir Operation. Significant changes are presented in Table 2-1. These changes include the following:

- Upper Strawberry River flow restoration water (2,900 acre-feet from Daniels Irrigation Company);
- Instream Flow Agreement committing at least 44,4000 acre-feet of project water has now been fully implemented;
- Change in plan from the 1988 DPR;
- Trans-basin diversion from Colorado River basin to Bonneville Basin has been reduced; and
- 1991 Agreement with Strawberry Water Users Association.

TABLE 2-1
Significant Changes from 1988 Bonneville Unit Definite Plan Report

Strawberry Aqueduct and Collection System	Strawberry Reservoir Operation
1. ***Upper Strawberry River Flow Restoration Water***. Trans-basin diversion of 2,900 acre-feet by Daniel Irrigation Company has been eliminated. Water will now stay in streams in Strawberry Valley, flow into Strawberry Reservoir, and be released downstream. 2. ***Instream Flow Agreement***. The 1988 DPR only committed to 6,500 acre-feet. In 1990 the 1980 Stream Flow Agreement was amended to provide 44,400 acre-feet.	1. ***Change in plan from 1988 DPR***. Irrigation to Sevier, Juab and southern Utah Counties has been eliminated. Monks Hollow Dam and Reservoir has been eliminated 2. ***Trans-basin diversion to Bonneville Basin Reduced***. The trans-basin diversion from the Colorado River Basin to the Bonneville Basin has been reduced from 199,200 (142,500 + 56,700) acre-feet to 162,900 (101,900 + 61,000) acre-feet. 3. ***1991 Operating Agreement***. • The SWUA is guaranteed 61,000 acre-feet of water each year from inflow to the Enlarged Strawberry Reservoir, together with a permanent right to 50,000 acre-feet of holdover storage capacity in the reservoir containing an initial, one-time, allocation of 50,000 acre-feet of water. • If the SWUA does not use the entire 61,000 acre-feet of water in any one year, they may carry over any unused portion and store it in the unused part of the SWUA's 50,000 acre-feet permanent storage capacity.

WATER STORAGE AND CONVEYANCE FACILITIES

The Bonneville Unit's Strawberry Reservoir is the primary storage facility for the Bonneville Unit, providing the necessary carryover storage for years of short supply. This reservoir is an enlargement of the original Strawberry Reservoir (part of the SVP) from 273,000 acre-feet to 1,106,500 acre-feet by the construction of Soldier Creek Dam on the Strawberry River. Transbasin diversions from Strawberry Reservoir to the Bonneville Basin are made primarily through Syar Tunnel, which is part of the Diamond Fork System. Some water is released through the old Strawberry Tunnel for instream flow purposes in Sixth Water Creek, and the higher releases through the old tunnel are permitted under emergency circumstances. The primary facilities of the Strawberry Aqueduct and Collection System are listed on Table 2-2. Figure 2-2 on next page is a basic schematic of the Strawberry Aqueduct and Collection System.

TABLE 2-2
Strawberry Aqueduct and Collection System Facilities

Facility	Description
Strawberry Reservoir	Provides long-term storage for the Bonneville Unit. The reservoir is located on the Strawberry River and receives water from Strawberry Aqueduct, Strawberry River, and other tributaries. *Total capacity: 1,106,500 acre-feet; active capacity: 951,360 acre-feet.*
Upper Stillwater Reservoir	Provides short-term storage on Rock Creek to supply water for Strawberry Aqueduct and fisheries enhancement through reservoir fishers and instream flow below the dam. *Total capacity: 32,009 acre-feet; active capacity: 29,884 acre-feet*
Currant Creek Reservoir	Diverts unregulated flows of Currant Creek and five of its smaller tributary streams to the Strawberry Aqueduct. The reservoir serves as a regulating reservoir for the Strawberry Aqueduct flows that flow through the reservoir. The reservoir has very little active storage capacity as the water level only fluctuates 4 feet. *Total capacity: 15,671 acre-feet; active capacity: 1,118 acre-feet; and 14,553 acre-feet (inactive capacity); diversion capacity to Strawberry Aqueduct: 620 cfs*
Strawberry Aqueduct	Receives water from the West Fork of the Duchesne River, and the following creeks: Rock, South Fork Rock, Hades, Wolf, Currant, Layout, and Water Hollow. Conveys an average of 105,500 acre-feet per year to Strawberry Reservoir. *Length: 36.8 miles; Capacity: 285 to 620 cfs.*

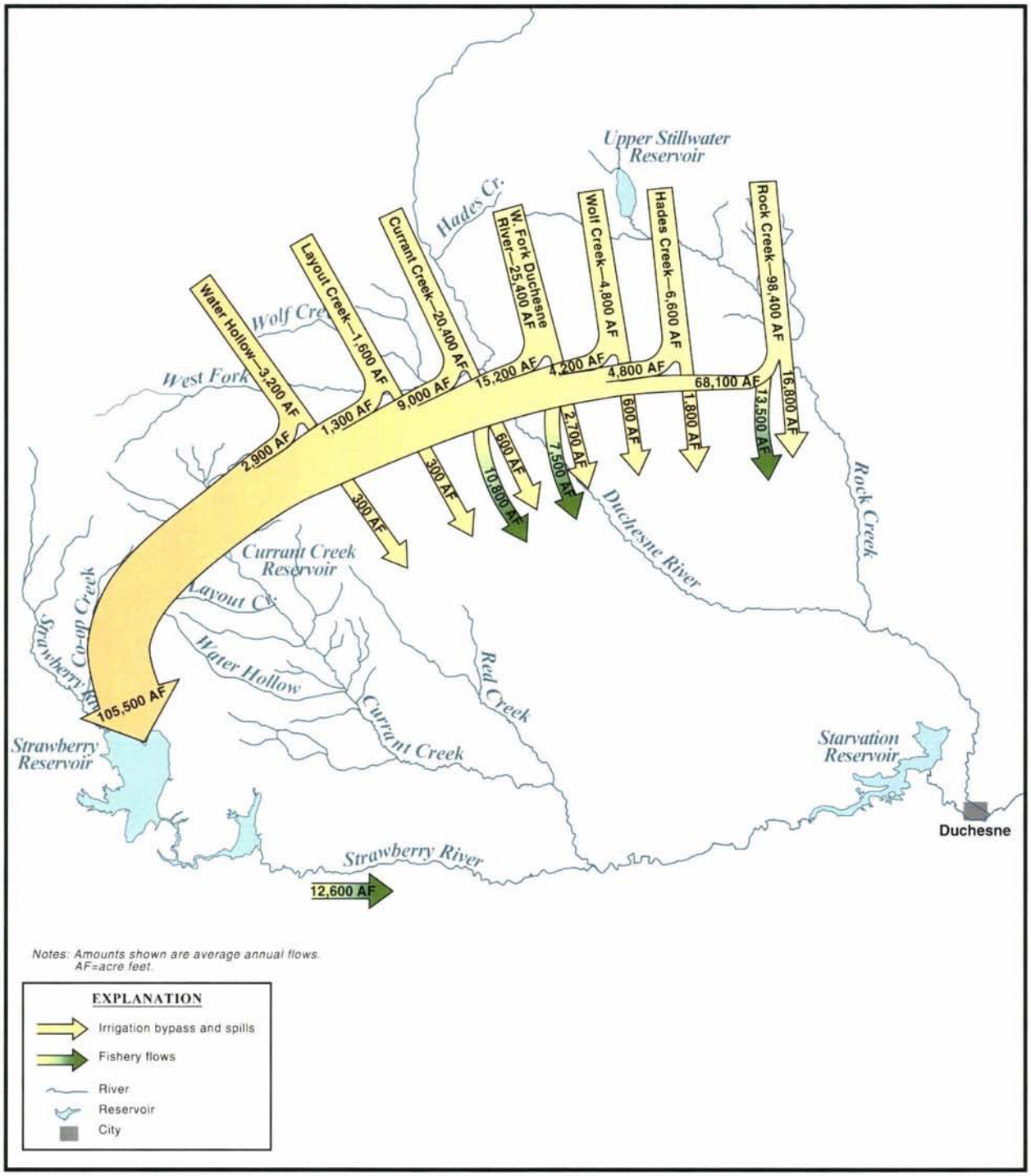


Figure 2-2
Schematic of Strawberry Aqueduct and Collection System

OPERATIONAL RELATIONSHIPS UNDER THE CURRENT BONNEVILLE UNIT COMPLETION PLAN

Since the 1988 DPR, the quantity of transbasin water available from Strawberry Reservoir has been reduced. However, the basic operating pattern of Strawberry Reservoir has remained essentially unchanged. And since the 1991 Operating Agreement with SWUA and the 1992 enactment of CUPCA, various changes have occurred in the uses and distribution of the CUP water from Strawberry Reservoir. The following sections describe the current operating conditions.

1991 Operating Agreement with SWUA

In 1991, the United States, the CUWCD, and the SWUA entered into an operating agreement covering storage in, and delivery from, Strawberry Reservoir (USBR, 1991). Although some of the provisions of this agreement are currently a matter of litigation, it does address the operation of the enlarged Strawberry Reservoir, Syar Tunnel, and the Diamond Fork System.

The enlarged Strawberry Reservoir provides long-term storage of both Bonneville Unit and SVP water in a common pool of active storage. The 1991 Operating Agreement guaranteed the SWUA 61,000 acre-feet each year from storage in Strawberry Reservoir. In addition the 1991 Operating Agreement provides the SWUA with a permanent right to 50,000 acre-feet of holdover storage capacity, with an initial (one-time) allocation of 50,000 acre-feet of stored water. In years when SVP requires more than 61,000 acre-feet, the excess would come from SVP water, which in years when less than 61,000 acre-feet were used, had been stored in the 50,000 acre-foot storage space.

The 44,400 Acre-Foot Fishery Flow Provision

Section 303(a) of CUPCA requires the District to provide, from project water if necessary, the amounts of water sufficient to sustain the minimum stream flows established pursuant to the Stream Flow Agreement. The effect of the CUPCA requirement cited above was to reduce the usable inflow to Strawberry Reservoir by 37,900 acre-feet (44,400 acre-feet minus the 6,500 acre-foot commitment in the 1988 DPR). The distribution pattern for the fishery flow releases remained as originally devised by the Interagency Biological Assessment Team (IBAT). The IBAT will evaluate the release pattern each year and determine the most favorable distribution for the year in the light of natural runoff conditions and other factors. The District will then operate the SACS to provide the recommended distribution, to the extent possible, while meeting water supply objectives. The distribution of releases among streams proposed in the Instream Flow Agreement is listed on Table 2-3.

TABLE 2-3
Proposed Fishery Flow Releases

Release	Volume (acre-feet)
Release from Upper Stillwater Dam to Rock Creek	13,500
Release from Strawberry Aqueduct to	
West Fork Duchesne River	7,500
Currant Creek	10,800
Release from Soldier Creek Dam to Strawberry River	12,600
Total Release	**44,400**

The disposition of the fishery flows after they have served their purpose in the receiving streams is uncertain at this time. Since the costs associated with this block of project water have been allocated to fish and wildlife, existing agreements may require that these fishery flows remain in the Duchesne River until its confluence with the Green River. The Fish and Wildlife Service is preparing an amendment to its July 1998 Final Biological Opinion for the Duchesne River Basin that will address this issue.

Upper Strawberry River Flow Restoration Water (2,900 acre-feet)

The Daniel Irrigation Company, located in the Heber Valley of Wasatch County, has historically diverted water from the Strawberry River and its tributaries upstream of Strawberry Reservoir to Daniels Creek, which flows into the Heber Valley. This transbasin diversion has averaged 2,900 acre-feet per year but the amount fluctuated from year to year depending on natural runoff conditions affecting the streams involved. Section 303 (b)(3) of CUPCA authorized the termination of this transbasin diversion, to restore summer streamflow in the upper Strawberry River. As compensation for the average 2,900 acre-foot reduction of Daniels Creek flow, the Daniel Irrigation Company is being provided with water from the Daniel Replacement Project, described in Volume I of this Water Supply Appendix. This restoration of summer streamflow would, in effect, provide an additional source of water for the Uinta Basin that was not addressed in the 1988 DPR. CUPCA has provided that once the water has entered Strawberry Reservoir it would be released to the lower Strawberry River below Soldier Creek Dam and/or to other Uinta basin streams affected by the SACS. The manner in which this would be done will be determined by the Mitigation Commission in consultation with the Fish and Wildlife Service and the Utah Division of Wildlife Resources.

Bonneville Unit Transbasin Diversion

The water supply for the Wasatch Front, including water for exchange to Jordanelle Reservoir is based on the transbasin diversion from Strawberry Reservoir, proposed together with the yield of Utah Lake water rights to be acquired, plus useable return flows. The distribution of water diverted to the Bonneville Basin with the ULS System is summarized below. All amounts are in acre-feet per year.

	Acre-Feet
SVP Water	61,000
Bonneville Unit M&I Water direct delivery	61,590
Other Bonneville Unit Deliveries to Utah Lake	40,310
Total Transbasin Diversion	162,900
(Uinta Basin fishery flow release commitment is 44,400 acre-feet per year)	

Strawberry Aqueduct and Collection System

The SACS will be operated as described in the 1988 DPR except as modified (in 1990) under the 1980 Stream Flow Agreement as summarized in previous sections.

Strawberry Reservoir Operation under Current Plan

Operational Model Used. The Strawberry Reservoir Spreadsheet Operations Model was used to analyze the operation of Strawberry Reservoir. This is a mass balance spreadsheet accounting model designed to calculate the monthly transbasin diversion demand on Strawberry Reservoir and simulate the operation of Strawberry Reservoir including inflows, transbasin diversion demands, other releases, and evaporation. The model also calculates monthly Strawberry Reservoir storage volumes and water levels. A 50-year period of analysis was used. In the model, Strawberry Reservoir was operated in accordance with specific criteria and constraints that were developed to achieve the following objectives:

- Protect existing water rights on the Spanish Fork River and Diamond Fork Creek;
- Meet minimum CUPCA flow requirements in Sixth Water and Diamond Fork Creeks;
- Meet SVP monthly transbasin diversion requirements;
- Supply M&I water to southern Utah County and Salt Lake County as needed monthly;
- Deliver water to the lower Provo River and Hobble Creek; and
- Deliver the remaining transbasin diversion water to Utah Lake through the Spanish Fork River in the winter

Verification of Model. For the southern Utah County area, the Strawberry Reservoir Spreadsheet Operations Model was verified by comparing its output with output from an older USBR reservoir model that was the basis for much of the water supply information described in the water supply

appendix to the 1988 Bonneville Unit DPR (Reclamation 1988). The Reclamation model was based, when possible, on historical measured data and on available water supplies.

Hydrologic Data Bases. The inflows to Strawberry Reservoir are based on Uinta Basin streamflow records over the 50-year period from 1950 to 1999. For the 1988 DPR, the USBR used hydrologic data for the 44-year period from 1930 to 1973 to derive the inflow to Strawberry Reservoir. For this supplemental DPR, the USBR extended the streamflow records from 1973 to 1999 and estimated the net monthly inflows to Strawberry Reservoir from 1950 to 1999 after the release of fishery flows from the Strawberry Collection System averaging 44,400 acre-feet.

The withdrawals from Strawberry Reservoir are based on hydrologic conditions and streamflow records along the Wasatch Front over the 50-year period from 1950 to 1999. Irrigation water demands of the Strawberry Valley Project (SVP) were based on historical irrigation demands. M&I water demands reflect weather-based variations. Deliveries to Utah Lake were scheduled partially in April, May, and June to augment streamflows for the June sucker Recovery Implementation Program and partially during winter months to provide instream flows in the Diamond Fork Creek.

Results of Current Model Operation. The model operation simulated 50 years of operation under the hydrologic conditions that historically occurred from 1950 to 1999, producing transbasin diversion demands and Strawberry Reservoir inflows and outflows that varied from year to year. In these 50 years the demands on Strawberry Reservoir varied from 75 percent of average to 125 percent of average and the reservoir inflows varied from 25 percent of average to 188 percent of average.

The average transbasin diversion was 162,900 acre-feet (61,000 acre-feet SVP; 101,900 acre-feet Bonneville Unit). The transbasin diversions ranged from a yearly maximum of 203,727 acre-feet to a minimum of 122,211 acre-feet. The SVP annual diversions ranged from a yearly maximum of 79,616 acre-feet to a minimum of 36,225 acre-feet. The Bonneville Unit annual diversions ranged from a yearly maximum of 142,727 acre-feet to a minimum of 71,386 acre-feet. Table 2-4 presents the maximum annual and monthly transbasin diversions from the Strawberry Reservoir simulated by the model.

Table 2-4
Maximum Modeled Transbasin Diversions

Time Period	SVP Diversion	CUP Diversion	Both Diversions
Annual Transbasin Volume			
50-year average	61,000 acre-feet	101,900 acre-feet	162,900 acre-feet
Maximum Year, CUP & Total[1]	61,000 acre-feet[2]	142,727 acre-feet	203,727 acre-feet
Maximum Year, SVP[3]	79,616 acre-feet	105,614 acre-feet	185,230 acre-feet
July Diversion Volume			
July 50-year Average	18,904 acre-feet	12,873 acre-feet	31,776 acre-feet
July with SVP maximum[4]	28,288 acre-feet	13,954 acre-feet	42,242 acre-feet
July with CUP maximum	15,868 acre-feet	15,729 acre-feet	31,597 acre-feet
July Diversion Flow Rate			
50-year Average July Flow	307 cfs	209 cfs	517 cfs
July flow with SVP maximum[4]	460 cfs	227 cfs	687 cfs
July flow with CUP maximum	258 cfs	256 cfs	514 cfs

Notes:
[1] This happens to be the maximum year for both CUP and Total transbasin diversions, resulting from hydrologic conditions in 1979.
[2] The SVP diversion was not high. By coincidence it was equal to the 50-year average.
[3] This is the maximum annual SVP transbasin diversion volume, resulting from hydrologic conditions in 1976.
[4] This is the maximum July SVP transbasin diversion, resulting from hydrologic conditions in 1964. This July also had the maximum combined monthly transbasin diversion for SVP and CUP water (667 cfs).

The maximum monthly diversions to meet the combined SVP and Bonneville Unit demands typically occurred in July or August, although in some years the maximum occurred in June. The month of maximum SVP diversion was generally July and the month of maximum Bonneville Unit diversion was generally August. The result of this interaction was that the 50-year average diversion in July was within 1 percent of the 50-year average in August.

The flow rates for SVP transbasin diversions during the 50-year period of analysis averaged 307 cfs, as shown on Table 2-4. The 50-year maximum SVP transbasin flow rate was 460 cfs, based on July 1964 hydrologic conditions. As previously noted above, the SWUA has reserved the right to a transbasin flow rate of 600 cfs when needed. The peak simulated flow through Syar Tunnel (capacity 660 to 800 cfs) ranges from 617 to 660 cfs, and the summer release through the Strawberry Tunnel is 27 cfs. If the SVP demand for irrigation water were to be exceptionally high for part or all of July, the combined transbasin diversions of SVP and Bonneville Unit could exceed the capacity of Syar Tunnel and the minimum flow release through Strawberry Tunnel. That did not happen in the 50-year operational analysis made for this supplemental DPR. The maximum monthly transbasin diversion flow for the combined SVP and Bonneville Unit releases was 687 cfs.

Other Releases from Strawberry Reservoir. Other releases to be made from Strawberry Reservoir are 260 acre-feet of M&I water for Strawberry Valley and Duchesne County, 12,600 acre-feet of

fishery flows to the lower Strawberry River (part of the 44,400 fishery flow release), and 2,900 acre-feet of restored flow in the upper Strawberry River.

Summary of Releases from Strawberry Reservoir. Under the Bonneville Unit operation, releases would be made from Strawberry Reservoir for the following purposes. They are listed below and average annual volumes are quantified in Table 2-5.

- Transbasin Diversion of SVP water for Irrigation and M&I uses;
- Transbasin Diversion of CUP water for delivery to Utah Lake;
- Transbasin Diversion of CUP water for delivery in the ULS System;
- M&I water for use in Strawberry Valley and Duchesne County;
- Fishery flow release to Strawberry River (part of the 44,400 fishery flow); and
- Release of the 2,900 acre-foot inflow from the upper Strawberry River flow restoration

TABLE 2-5
Summary of Average Annual Releases from Strawberry Reservoir

Category	Average Annual Release in Acre-Feet
SVP Transbasin Diversion	61,000
CUP Water for delivery to Utah Lake	40,310
CUP M&I water for ULS System Delivery	61,590
Subtotal, Transbasin Diversion	*162,900*
M&I Water for Strawberry Valley[1]	260
Fishery Flow Release to Strawberry River[2]	12,600
Upper Strawberry River Flow Restoration[3]	2,900
Total	**178,660**

Notes:
[1] Includes 25 acre-feet for Duchesne County
[2] This release is part of the 44,400 acre-feet of fish flow release under the 1980 Instream Flow Agreement
[3] The point(s) of release from Strawberry Reservoir may include exchange with Strawberry Aqueduct diversions.

Strawberry Reservoir Operating Levels. The capacity of Strawberry Reservoir is 1,106,500 acre-feet. However, of this volume, the bottom 155,140 acre-feet are inactive storage (i.e., the active capacity is depleted when the reservoir volume drops to 155,140 acre-feet. This inactive storage also includes space allocated for sedimentation.

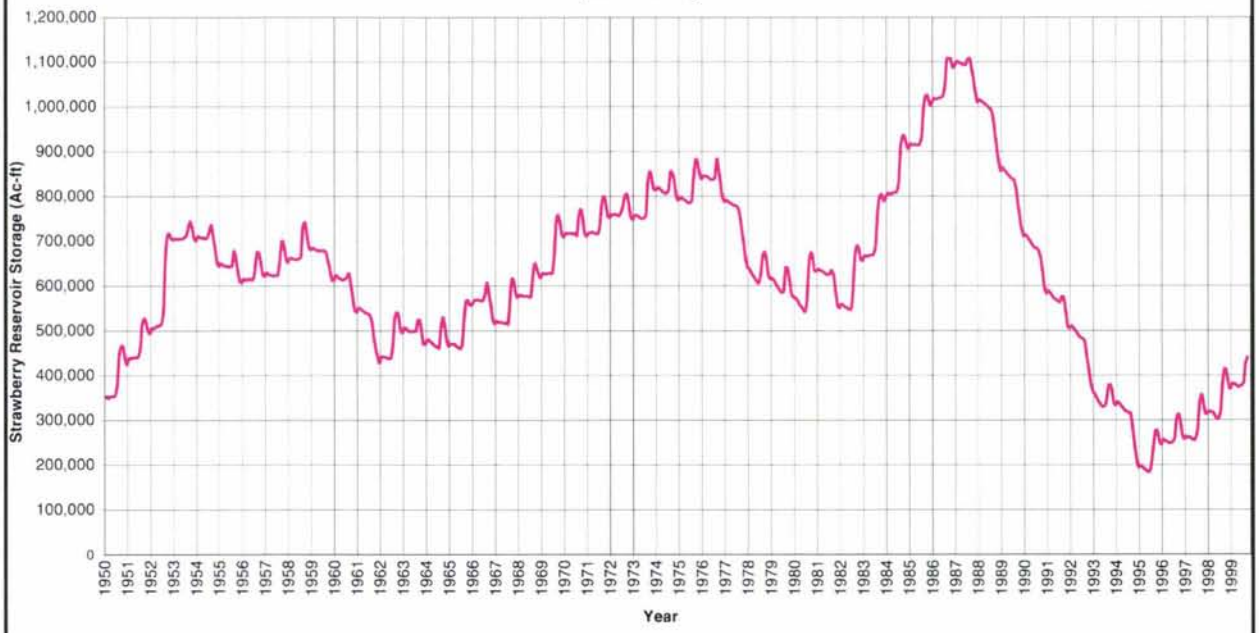
The modeled fluctuations in Strawberry Reservoir's total storage volume under the proposed operation are displayed in Figure 2-4. In the model, the active storage was essentially depleted by

the end of the dry years of the 1990s. Complete Strawberry Reservoir modeled results are included in Attachments A and B.

The result of the current model analysis is similar to results portrayed in the 1988 DPR (USBR, 1988). The model analysis presented in the 1988 DPR was based on the hydrologic sequence of 44 years from 1930 to 1973. Under the operational plan analyzed at that time, the active storage was essentially depleted in the dry year of 1939 and in the dry years of the early 1960s.

General Conclusions. The current model analysis of Strawberry Reservoir shows that the presently proposed operation of Strawberry Reservoir is the same as that portrayed in the 1988 DPR, while changes have occurred in the anticipated reservoir inflow and the proposed transbasin diversions and uses of the CUP water supply from the reservoir.

Figure 2-4
Simulated Strawberry Reservoir Storage for Bonneville Unit Operations
(acre-feet)



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Chapter 3

The Starvation Collection System (see Figure 3-1 below) develops water for irrigation and M&I use and provides flood control, recreation, and fish and wildlife benefits in the Uinta Basin. The facilities of the system have been constructed and are operational, and no significant physical or operational changes are proposed.

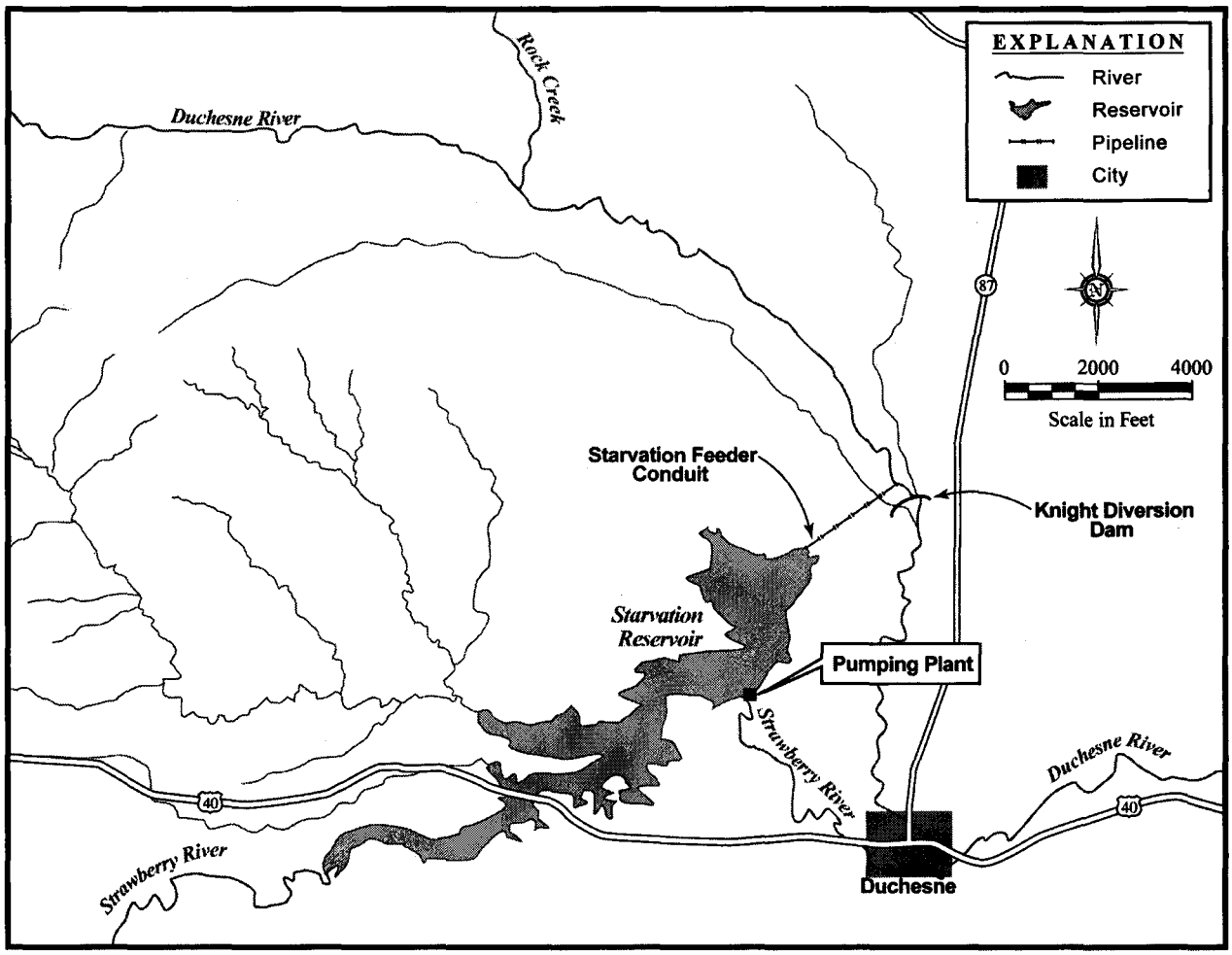

Figure 3-1
Starvation Collection System

The formulation of the Starvation Collection System operating plan was set forth in the 1964 DPR (USBR, 1964). Construction was completed in 1970. The 1988 DPR confirmed the operating plan and potential yield of the Starvation Collection System, and apportioned 500 acre-feet of Starvation Reservoir water for M&I use. The following summarizes the information included in the 1988 DPR.

TABLE 3-1
Starvation Collection System Features

Feature	Purpose – Description
Starvation Reservoir	Develops irrigation and M&I water by capturing winter and springtime surplus flows of the Strawberry and Duchesne Rivers, located on the Strawberry River. *Total capacity: 167,310 acre-feet; Active Capacity: 152,330 acre-feet*
Knight Diversion Dam	Diverts water from the Duchesne River to the Starvation Feeder Conduit. *Diversion capacity: 300 cubic-feet per second (cfs)*
Starvation Feeder Conduit	Conveys water by pipeline and tunnel from Knight Diversion to Starvation Reservoir. *Length: 1.6 miles; Capacity: 300 cfs*
Taylor Canal Area Drains	Drainage system for Myton Bench in the Duchesne area. Part of the system was constructed but the remainder is not needed because sprinkler irrigation has alleviated drainage problems.
Duchesne River Area Canal Rehabilitation Program	Prevents significant water shortages by reducing or eliminating canal seepage losses. The program includes either replacing canals with pipeline or lining canals with clay or concrete. *Length: 40.9 miles. Conserved water: 14,000 acre-feet per year.*

The water supply stored in Starvation Reservoir that exceeds the amount of water needed to compensate for irrigation water shortages resulting from the operation of the Strawberry and Starvation Collection Systems is listed on Table 3-2.

TABLE 3-2
Water Supply Developed by the Starvation Collection System

Water Supply	Amount (acre-feet)
M&I water supply for Duchesne County	500
Irrigation water supply for Duchesne River Valley	24,400
Total	**24,900**

The water supply is based on the analyses contained in the 1988 DPR. As of this time, 21,400 acre-feet had been provided to irrigators under contract. It is anticipated that a block notice will be issued for the remaining 3,000 acre-feet prior to the beginning of the 2005 irrigation season.

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Chapter 4

The Uinta Basin Replacement Project (UBRP), currently under construction, will develop supplemental irrigation and M&I water supplies for use in the Uinta Basin, and will provide enhancements to stream habitat, fish, wildlife, and recreation values. The project is described in the October 2001 Final Feasibility Study and Final Environmental Assessment. Although the following summary of this project is provided, detailed information can be obtained from these documents.

Table 4-1 lists the Uinta Basin facilities and Figure 4-1, on the next page, shows the location of the facilities.

TABLE 4-1
Uinta Basin Replacement Project Facilities

Facility	Description
Big Sand Wash Reservoir	Enlargement of Big Sand Wash Dam and Reservoir. *Reservoir capacity increase: From 12,100 to 24,100 acre-feet.*
Big Sand Wash Feeder Diversion and Pipeline	Diverts and conveys water to from the Lake Fork river to Big Sand Wash. *Pipeline length: 6.4 Miles. Pipe diameter: 48 inches.*
Big Sand Wash- Roosevelt Pipeline	Conveys M&I water from Big Sand Wash Reservoir to Roosevelt City and vicinity. *Pipeline lengths: 16.1 total. Pipe diameters: 30 to 20 inches.*
High mountain lakes stabilization and habitat enhancement	Stabilization of 13 lakes in the High Uintas and improvement of stream habitat for fisheries.
Moon Lake Outlet Works Modification	Modification to facilitate releases to the Lake Fork River during the non-irrigation season.

The 5,500 acre-feet of storage space in the enlarged Big Sand Wash Reservoir for M&I water and new irrigation water is estimated to provide the water supply listed on Table 4-2. The 3,000 acre-feet of M&I water would be a firm annual supply, whereas the 2,500 acre-feet of irrigation water would periodically experience shortages.

TABLE 4-2
Water Supply Produced by UBRP

New Water Supply	Water Produced (acre-feet)
M&I Water	3,000
Irrigation Water	2,500
Total	**5,500**

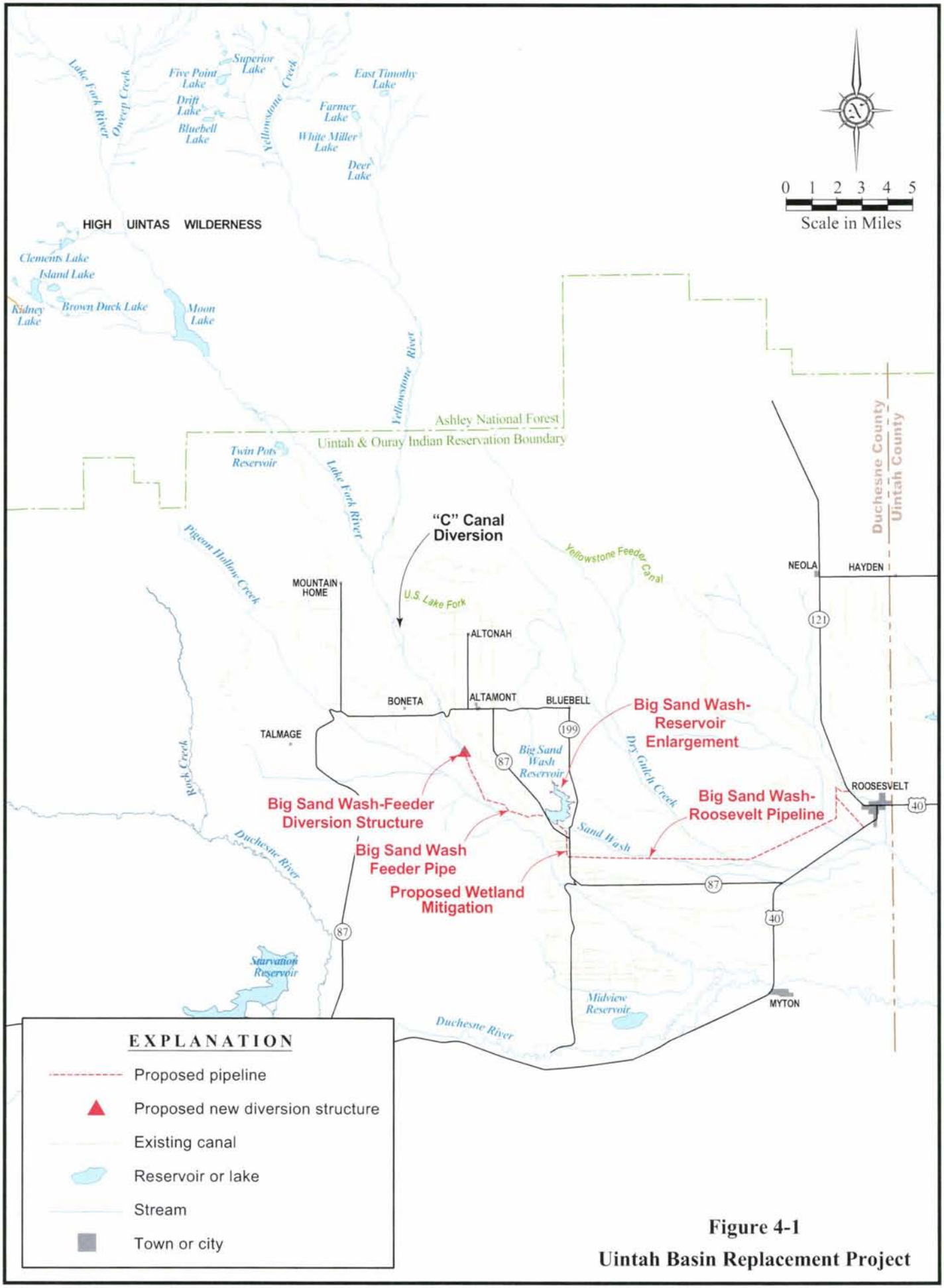

Figure 4-1

Uintah Basin Replacement Project

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This Chapter describes the Ute Indian Tribal Development and its relationship to the Bonneville Unit. The facilities of the Ute Indian Tribal Development consist of Bottle Hollow Reservoir, which was completed in 1970, and the proposed Midview Exchange.

BOTTLE HOLLOW RESERVOIR

Bottle Hollow Reservoir is an offstream reservoir on Tribal lands approximately 1 mile west of Fort Duchesne and approximately 2 miles north of the Duchesne River. The reservoir was formed by constructing two dams in an erosional basin formed by local drainage. With a surface area of 420 acres, the reservoir provides fishing opportunities, wildlife habitat, and a basis for recreation-oriented enterprises to provide additional employment and income for tribal members. Reservoir volume is 11,100 acre-feet, filled with Uinta River water through a 50-cfs inlet channel connected to the Tribe's Bench Canal. The reservoir outlet works and spillway have capacities of 210 cfs and 30 cfs, respectively. The reservoir was constructed in 1970 and is now owned by the Bureau of Indian Affairs.

MIDVIEW EXCHANGE

The Midview Exchange involves Ute Indian farmland in the vicinity of Midview Reservoir near the confluence of the Lake Fork and the Duchesne Rivers. Upon completion of the Moon Lake Project by USBR in 1938, non-Indian lands associated with the project received irrigation water from the Lake Fork River that had previously been used on Tribal lands. In exchange, the Tribal lands were provided with water diverted from the Duchesne River about 5 miles downstream from Duchesne, Utah and conveyed in the Duchesne Feeder Canal. When the Starvation Collection System was formulated, provisions were made to provide water from Starvation Reservoir to increase the supply available for the Tribal lands involved in the Midview Exchange.

UTE INDIAN SETTLEMENT

In 1992 it was noted in Section 501(a) of CUPCA that the major Uinta Basin developments intended to provide water for the Ute Indian Tribe had not been constructed, resulting in Tribal claims against the Federal government in connection with the 1965 agreement. Consequently, the CUPCA legislation provided for a cash settlement to the Ute Tribe in lieu of the projects contemplated by the 1965 Deferral Agreement. The settlement includes a portion of Bonneville Unit M&I revenues, a development fund, establishment of enhanced Tribal Farming operations, and other benefits specifically intended to put the Tribe in the same economic position it would have enjoyed had the features contemplated by the September 1965 Agreement been constructed.

Title V of CUPCA, together with earlier agreements, form the Ute Indian Settlement. Section 507 of CUPCA provides that upon receipt of the various forms of compensation noted above, the Tribe would waive any and all claims relating to its water rights covered under the September 20, 1965 agreement, including claims that the Tribe retains the right to develop lands as set forth in the Ute Indian Compact and deferred in the 1965 agreement.

Table 5-1 summarizes the facilities and other provisions.

TABLE 5-1
Ute Indian Tribal Development Features
Under the Central Utah Project

Feature	Description
Bottle Hollow Reservoir	An offstream reservoir constructed to provide fishing and recreation opportunity in support of tribal tourist development. *Reservoir surface area: 420 acres* *Reservoir capacity: 11,100 acre-feet*
Midview Reservoir Exchange	As part of mitigation for the losses of tribal resources caused by the Bonneville Unit, the operation and maintenance of the recreational, fishery, and wildlife resources of Midview Reservoir were transferred to the Ute Indian Tribe in 1968 along with storage rights in the reservoir sufficient to maintain a 1,500 acre-foot minimum conservation pool for fisheries.
Water Supply for Midview Exchange	Starvation Reservoir irrigation water was made available for Tribal lands involved in the Midview Exchange of Moon Lake Project water for non-Tribal irrigators.
Ute Indian Water Rights Settlement	Under Title V of CUPCA, the Department of Interior has an on-going work effort to reach a settlement with the Tribe on their water right claims.

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The Duchesne River is tributary to the Green River, which is part of the Colorado River System. The operation of the Bonneville Unit will reduce the Duchesne River's discharge into the Green River by an average of 139,760 acre-feet per year. This depletion of the Colorado River system results from the transbasin diversion of water to the Bonneville Basin, consumptive use of irrigation and M&I water from Strawberry and Starvation Reservoirs, and reservoir evaporation. Table 6-1 lists the components of the depletion.

TABLE 6-1
Bonneville Unit Depletion of the Colorado River

Description of Depletion	Average Annual Water Use (acre-feet)	Average Annual Depletion (acre-feet)
Strawberry Collection System Operation		
Bonneville Unit water released to the Bonneville Basin	101,900	-101,900
Strawberry Valley M&I use	260	-260
Strawberry Reservoir evaporation [1]	17,700	-17,700
Upper Stillwater Reservoir evaporation	500	-500
Currant Creek Reservoir evaporation	300	-300
Starvation Collection System Operation		
Duchesne River area Irrigation	24,400	-12,200
Duchesne River area M&I use	500	-250
Starvation Reservoir evaporation	6,800	-6,800
Uinta Basin Replacement Project		
Roosevelt area M&I use	3,000	-1,500
Upalco area irrigation use	2,500	-1,250
Offsetting gain from Daniel Replacement Project (DRP)	-2,900	+2,900
Total Bonneville Unit Depletion		**139,760**

[1] The amount of Strawberry Reservoir evaporation attributable to the Bonneville Unit. The balance of the Strawberry Reservoir total evaporation is attributable to the Strawberry Valley Project.

The Daniel Replacement Project, described in Chapter 1, would increase the flow to the Green River. The termination of the Daniel Irrigation Company transbasin diversion from the Strawberry River and its tributaries upstream of Strawberry Reservoir would restore summer streamflow in the upper Strawberry River, which would then become available for further enhancement of fishery flows in the Duchesne River and its tributaries.

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Attachment A

Central Utah Project Completion Program

Attachment A

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Bonneville Unit Operations Reservoir Contents (1000 acre-feet)
Strawberry Reservoir

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	399.3	350.1	350.8	352.4	352.5	356.1	380.2	444.0	465.9	464.5	436.8	425.1	398.1
1951	437.1	437.5	438.9	439.9	439.8	442.7	460.4	513.0	526.8	518.4	499.3	493.9	470.6
1952	505.2	505.0	507.3	510.5	510.6	515.6	539.0	653.5	709.7	717.0	706.5	702.3	590.2
1953	705.3	704.4	704.1	705.1	704.8	708.1	712.3	729.8	743.7	729.2	707.9	700.8	713.0
1954	710.4	708.4	706.5	706.7	704.9	708.3	719.9	735.6	712.7	685.5	655.6	643.8	699.9
1955	649.3	647.0	644.4	643.3	642.1	643.2	643.8	676.7	662.1	633.5	611.6	606.8	642.0
1956	614.8	612.6	613.6	614.9	612.7	614.9	635.3	674.5	672.9	653.2	626.3	620.6	630.5
1957	629.1	625.3	623.6	623.2	621.7	623.1	624.4	658.1	699.2	691.9	663.7	652.2	644.6
1958	660.1	660.3	659.7	658.5	658.4	660.7	664.9	733.6	741.4	717.4	687.1	680.0	681.8
1959	684.5	681.9	679.4	677.4	678.6	677.7	677.6	673.5	655.0	638.3	614.5	611.3	662.5
1960	622.6	620.2	616.7	614.2	613.4	615.1	620.2	626.6	600.1	571.1	544.9	541.1	600.5
1961	549.9	547.9	544.5	541.4	538.0	537.2	533.8	521.5	487.6	461.5	441.9	427.8	511.1
1962	441.0	441.5	440.2	438.4	437.9	438.7	471.2	527.0	539.9	531.8	500.5	495.6	475.3
1963	506.1	503.6	500.2	497.5	498.2	498.7	498.9	522.6	522.5	497.2	470.0	470.5	498.8
1964	479.4	477.7	473.3	469.6	465.6	464.2	461.5	502.7	528.7	509.6	479.6	465.8	481.5
1965	470.8	469.1	469.8	465.4	461.9	459.7	466.6	520.1	564.3	567.2	557.3	557.3	502.5
1966	565.4	567.6	568.3	567.4	565.8	568.3	582.1	606.5	580.0	555.9	526.1	515.0	564.0
1967	520.6	518.8	518.2	517.6	515.8	516.9	514.3	568.0	615.7	610.5	584.5	574.2	547.9
1968	579.3	577.7	577.3	576.9	576.6	575.8	575.0	618.2	648.8	638.7	625.8	618.1	599.0
1969	627.1	627.3	625.7	628.3	627.0	628.1	657.2	736.2	757.8	745.2	717.9	708.7	673.9
1970	717.5	716.7	717.1	717.7	715.3	717.6	712.1	757.8	770.5	750.5	717.8	711.1	726.8
1971	717.6	718.2	719.4	717.9	716.0	716.8	735.6	783.9	799.4	785.4	755.6	752.3	743.2
1972	758.6	758.6	759.3	757.2	756.7	764.9	779.3	799.9	804.8	782.5	754.0	748.0	768.6
1973	756.5	756.8	755.0	751.6	749.5	752.0	757.8	833.5	855.3	842.5	816.7	813.0	786.7
1974	819.1	818.0	813.4	808.8	807.0	807.3	814.3	855.1	850.9	829.7	798.7	791.0	817.8
1975	797.2	794.9	791.9	789.3	785.4	784.8	790.1	840.7	881.9	877.6	850.3	839.3	818.6
1976	845.4	845.3	844.6	840.3	837.6	837.7	841.3	883.0	863.6	830.5	798.1	787.9	837.9
1977	791.1	787.8	784.5	781.5	779.5	778.5	774.5	759.7	726.5	695.8	661.9	641.4	746.9
1978	638.4	629.3	622.4	616.1	608.4	606.6	624.6	664.5	675.2	657.5	622.5	615.4	631.7
1979	617.1	611.9	604.1	596.6	589.6	584.9	587.8	640.2	638.7	613.3	581.3	573.7	603.3
1980	573.4	567.0	559.1	553.2	547.4	542.0	565.0	644.1	673.4	665.7	634.5	632.5	596.4
1981	636.1	634.7	632.6	629.7	626.7	624.6	627.4	634.6	621.9	588.1	555.2	551.1	613.6
1982	558.9	556.2	552.4	550.1	546.6	548.1	582.8	661.9	688.3	685.1	659.5	655.8	603.8
1983	666.0	665.6	666.0	668.0	668.2	671.7	697.3	771.6	799.4	804.0	789.6	795.1	721.9
1984	805.6	805.3	805.5	807.8	808.2	811.3	836.6	912.4	934.3	932.5	912.9	906.6	856.6
1985	916.5	914.7	914.7	915.1	913.7	917.5	939.6	1,001.5	1,024.2	1,023.6	1,004.1	1,006.7	957.7
1986	1,016.9	1,016.8	1,017.1	1,019.2	1,020.2	1,023.8	1,049.4	1,106.5	1,106.5	1,106.5	1,087.8	1,091.1	1,055.2
1987	1,100.3	1,098.6	1,097.2	1,094.0	1,093.6	1,094.3	1,105.6	1,106.5	1,084.6	1,058.5	1,031.0	1,010.3	1,081.2
1988	1,015.2	1,012.3	1,008.8	1,005.8	1,001.6	997.6	993.2	978.9	945.5	909.2	876.8	857.1	966.8
1989	863.9	859.0	853.4	848.2	842.9	838.8	835.5	820.4	787.0	754.4	727.0	711.3	811.8
1990	713.5	708.4	702.6	695.3	688.4	683.8	683.0	676.0	658.8	629.9	595.4	582.5	668.1
1991	588.5	582.9	576.6	571.3	568.2	565.5	563.1	575.7	572.1	541.3	509.0	505.0	559.9
1992	509.8	505.6	499.5	493.3	487.1	483.6	481.3	474.8	441.9	413.0	383.1	364.3	461.4
1993	358.1	350.5	341.2	334.7	330.0	330.7	338.8	370.2	378.7	367.5	339.4	332.8	347.7
1994	340.1	336.7	331.8	326.3	320.9	318.8	315.3	314.0	280.5	244.8	217.1	194.7	295.1
1995	197.2	194.8	190.4	186.8	183.6	185.0	206.9	244.8	275.2	274.3	251.6	245.3	219.7
1996	255.4	253.4	250.9	248.9	248.7	251.4	262.3	303.2	312.6	295.8	264.2	257.7	267.0
1997	263.0	260.8	261.5	257.7	254.9	259.2	281.9	337.4	355.9	338.5	314.6	314.1	291.6
1998	319.4	317.4	315.7	309.0	302.1	303.8	322.9	383.8	413.7	407.0	378.8	369.1	345.2
1999	380.5	379.9	378.0	373.4	374.8	377.8	383.7	426.4	439.0	424.9	396.9	391.1	393.9
Average	617.9	614.8	612.6	610.3	608.0	608.7	618.5	656.1	661.9	645.4	618.9	611.2	623.7
Maximum	1,100.3	1,098.6	1,097.2	1,094.0	1,093.6	1,094.3	1,105.6	1,106.5	1,106.5	1,106.5	1,087.8	1,091.1	1,081.2
Minimum	197.2	194.8	190.4	186.8	183.6	185.0	206.9	244.8	275.2	244.8	217.1	194.7	219.7

Bonneville Unit Operations Water Surface Elevation (feet)
Strawberry Reservoir

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	7,552.3	7,547.8	7,547.8	7,548.0	7,548.0	7,548.4	7,550.6	7,556.2	7,558.1	7,558.0	7,555.5	7,554.5	7,552.2
1951	7,555.6	7,555.6	7,555.7	7,555.8	7,555.8	7,556.1	7,557.6	7,562.0	7,563.1	7,562.4	7,560.9	7,560.5	7,558.5
1952	7,561.4	7,561.4	7,561.5	7,561.8	7,561.8	7,562.2	7,564.0	7,572.9	7,576.9	7,577.5	7,576.7	7,576.4	7,568.1
1953	7,576.6	7,576.6	7,576.5	7,576.6	7,576.6	7,576.8	7,577.1	7,578.4	7,579.4	7,578.4	7,576.8	7,576.3	7,577.2
1954	7,577.0	7,576.8	7,576.7	7,576.7	7,576.6	7,576.8	7,577.7	7,578.8	7,577.2	7,575.2	7,573.0	7,572.2	7,576.2
1955	7,572.6	7,572.4	7,572.2	7,572.1	7,572.0	7,572.1	7,572.2	7,574.5	7,573.5	7,571.4	7,569.8	7,569.4	7,572.0
1956	7,570.1	7,569.9	7,570.0	7,570.1	7,569.9	7,570.1	7,571.5	7,574.4	7,574.3	7,572.8	7,570.9	7,570.5	7,571.2
1957	7,571.1	7,570.8	7,570.7	7,570.7	7,570.6	7,570.7	7,570.8	7,573.2	7,576.2	7,575.6	7,573.6	7,572.8	7,572.2
1958	7,573.3	7,573.4	7,573.3	7,573.2	7,573.2	7,573.4	7,573.7	7,578.7	7,579.2	7,577.5	7,575.3	7,574.8	7,574.9
1959	7,575.1	7,574.9	7,574.7	7,574.6	7,574.7	7,574.6	7,574.6	7,574.3	7,573.0	7,571.8	7,570.0	7,569.8	7,573.5
1960	7,570.6	7,570.5	7,570.2	7,570.0	7,570.0	7,570.1	7,570.5	7,570.9	7,568.9	7,566.6	7,564.5	7,564.2	7,568.9
1961	7,564.9	7,564.8	7,564.5	7,564.2	7,564.0	7,563.9	7,563.6	7,562.7	7,560.0	7,557.7	7,556.0	7,554.7	7,561.8
1962	7,555.9	7,555.9	7,555.8	7,555.7	7,555.6	7,555.7	7,558.5	7,563.1	7,564.1	7,563.5	7,561.0	7,560.6	7,558.9
1963	7,561.4	7,561.2	7,561.0	7,560.8	7,560.8	7,560.9	7,560.9	7,562.8	7,562.7	7,560.7	7,558.4	7,558.5	7,560.9
1964	7,559.3	7,559.1	7,558.7	7,558.4	7,558.1	7,557.9	7,557.7	7,561.2	7,563.2	7,561.7	7,559.3	7,558.1	7,559.4
1965	7,558.5	7,558.4	7,558.4	7,558.0	7,557.7	7,557.5	7,558.1	7,562.6	7,566.1	7,566.3	7,565.5	7,565.5	7,561.2
1966	7,566.1	7,566.3	7,566.4	7,566.3	7,566.2	7,566.4	7,567.5	7,569.4	7,567.3	7,565.4	7,563.0	7,562.1	7,566.0
1967	7,562.6	7,562.4	7,562.4	7,562.4	7,562.2	7,562.3	7,562.1	7,566.4	7,570.1	7,569.7	7,567.7	7,566.8	7,564.8
1968	7,567.3	7,567.1	7,567.1	7,567.1	7,567.0	7,567.0	7,566.9	7,570.3	7,572.5	7,571.8	7,570.9	7,570.3	7,568.8
1969	7,571.0	7,571.0	7,570.9	7,571.0	7,570.9	7,571.0	7,573.1	7,578.9	7,580.4	7,579.5	7,577.5	7,576.9	7,574.3
1970	7,577.5	7,577.4	7,577.5	7,577.5	7,577.3	7,577.5	7,577.1	7,580.4	7,581.2	7,579.9	7,577.5	7,577.0	7,578.2
1971	7,577.5	7,577.6	7,577.6	7,577.5	7,577.4	7,577.5	7,578.8	7,582.1	7,583.1	7,582.2	7,580.2	7,580.0	7,579.4
1972	7,580.4	7,580.4	7,580.5	7,580.3	7,580.3	7,580.9	7,581.8	7,583.2	7,583.5	7,582.0	7,580.1	7,579.7	7,581.1
1973	7,580.3	7,580.3	7,580.2	7,580.0	7,579.8	7,580.0	7,580.4	7,585.4	7,586.9	7,586.0	7,584.3	7,584.1	7,582.3
1974	7,584.5	7,584.4	7,584.1	7,583.8	7,583.7	7,583.7	7,584.1	7,586.9	7,586.6	7,585.2	7,583.1	7,582.6	7,584.4
1975	7,583.0	7,582.9	7,582.7	7,582.5	7,582.2	7,582.2	7,582.5	7,585.9	7,588.6	7,588.4	7,586.5	7,585.8	7,584.4
1976	7,586.2	7,586.2	7,586.2	7,585.9	7,585.7	7,585.7	7,585.9	7,588.7	7,587.4	7,585.2	7,583.1	7,582.4	7,585.7
1977	7,582.6	7,582.4	7,582.2	7,582.0	7,581.8	7,581.8	7,581.5	7,580.5	7,578.2	7,575.9	7,573.5	7,572.0	7,579.6
1978	7,571.8	7,571.1	7,570.6	7,570.2	7,569.6	7,569.4	7,570.8	7,573.7	7,574.4	7,573.2	7,570.6	7,570.1	7,571.3
1979	7,570.2	7,569.8	7,569.2	7,568.6	7,568.1	7,567.7	7,567.9	7,571.9	7,571.8	7,570.0	7,567.4	7,566.8	7,569.2
1980	7,566.8	7,566.3	7,565.6	7,565.2	7,564.7	7,564.3	7,566.1	7,572.2	7,574.3	7,573.7	7,571.5	7,571.3	7,568.6
1981	7,571.6	7,571.5	7,571.3	7,571.1	7,570.9	7,570.8	7,571.0	7,571.5	7,570.6	7,568.0	7,565.3	7,565.0	7,570.0
1982	7,565.6	7,565.4	7,565.1	7,564.9	7,564.7	7,564.8	7,567.5	7,573.5	7,575.4	7,575.2	7,573.3	7,573.0	7,569.2
1983	7,573.8	7,573.7	7,573.8	7,573.9	7,573.9	7,574.2	7,576.0	7,581.3	7,583.1	7,583.5	7,582.5	7,582.9	7,577.8
1984	7,583.6	7,583.5	7,583.6	7,583.7	7,583.7	7,583.9	7,585.6	7,590.6	7,591.9	7,591.8	7,590.6	7,590.2	7,587.0
1985	7,590.8	7,590.7	7,590.7	7,590.8	7,590.7	7,590.9	7,592.2	7,595.9	7,597.2	7,597.2	7,596.0	7,596.2	7,593.3
1986	7,596.8	7,596.8	7,596.8	7,596.9	7,597.0	7,597.2	7,598.7	7,602.1	7,602.1	7,602.1	7,601.0	7,601.2	7,599.0
1987	7,601.7	7,601.6	7,601.5	7,601.3	7,601.3	7,601.4	7,602.0	7,602.1	7,600.8	7,599.2	7,597.6	7,596.4	7,600.6
1988	7,596.7	7,596.5	7,596.3	7,596.1	7,595.9	7,595.6	7,595.4	7,594.5	7,592.5	7,590.4	7,588.3	7,587.0	7,593.8
1989	7,587.4	7,587.1	7,586.7	7,586.4	7,586.0	7,585.8	7,585.6	7,584.5	7,582.3	7,580.2	7,578.2	7,577.1	7,584.0
1990	7,577.2	7,576.8	7,576.4	7,575.9	7,575.4	7,575.1	7,575.0	7,574.5	7,573.2	7,571.2	7,568.5	7,567.5	7,573.9
1991	7,568.0	7,567.5	7,567.0	7,566.6	7,566.4	7,566.2	7,566.0	7,567.0	7,566.7	7,564.2	7,561.7	7,561.4	7,565.7
1992	7,561.7	7,561.4	7,560.9	7,560.4	7,559.9	7,559.6	7,559.4	7,558.9	7,556.0	7,553.5	7,550.8	7,549.1	7,557.7
1993	7,548.5	7,547.8	7,546.9	7,546.3	7,545.9	7,545.9	7,546.7	7,549.7	7,550.5	7,549.4	7,546.8	7,546.1	7,547.5
1994	7,546.8	7,546.5	7,546.0	7,545.5	7,545.0	7,544.8	7,544.4	7,544.3	7,540.8	7,536.7	7,533.4	7,530.6	7,542.3
1995	7,530.9	7,530.6	7,530.0	7,529.5	7,529.1	7,529.3	7,532.1	7,536.7	7,540.2	7,540.1	7,537.5	7,536.8	7,533.7
1996	7,538.0	7,537.7	7,537.4	7,537.2	7,537.2	7,537.5	7,538.8	7,543.2	7,544.1	7,542.4	7,539.0	7,538.2	7,539.3
1997	7,538.8	7,538.6	7,538.7	7,538.2	7,537.9	7,538.4	7,540.9	7,546.6	7,548.3	7,546.7	7,544.3	7,544.3	7,541.9
1998	7,544.8	7,544.6	7,544.4	7,543.7	7,543.0	7,543.2	7,545.2	7,550.9	7,553.5	7,552.9	7,550.5	7,549.6	7,547.3
1999	7,550.6	7,550.6	7,550.4	7,550.0	7,550.1	7,550.4	7,550.9	7,554.6	7,555.7	7,554.5	7,552.0	7,551.5	7,551.8
Average	7,569.1	7,568.9	7,568.7	7,568.5	7,568.3	7,568.4	7,569.2	7,572.1	7,572.5	7,571.3	7,569.2	7,568.6	7,569.6
Maximum	7,601.7	7,601.6	7,601.5	7,601.3	7,601.3	7,601.4	7,602.0	7,602.1	7,602.1	7,602.1	7,601.0	7,601.2	7,600.6
Minimum	7,530.9	7,530.6	7,530.0	7,529.5	7,529.1	7,529.3	7,532.1	7,536.7	7,540.2	7,536.7	7,533.4	7,530.6	7,533.7

Bonneville Unit Operations Water Surface Area (acre)
Strawberry Reservoir

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1950	11,150	10,509	10,519	10,545	10,547	10,607	10,959	11,599	11,818	11,804	11,527	11,409	11,138
1951	11,530	11,533	11,548	11,557	11,556	11,586	11,764	12,271	12,398	12,320	12,144	12,095	11,866
1952	12,199	12,197	12,218	12,247	12,249	12,295	12,510	13,549	14,046	14,111	14,018	13,981	12,981
1953	14,007	14,000	13,997	14,006	14,003	14,032	14,069	14,224	14,347	14,219	14,031	13,967	14,075
1954	14,053	14,035	14,018	14,020	14,004	14,034	14,137	14,275	14,072	13,833	13,568	13,464	13,959
1955	13,513	13,492	13,469	13,459	13,449	13,459	13,464	13,755	13,625	13,373	13,178	13,134	13,448
1956	13,207	13,188	13,197	13,208	13,188	13,209	13,389	13,735	13,721	13,547	13,309	13,259	13,347
1957	13,334	13,300	13,285	13,282	13,269	13,281	13,293	13,591	13,954	13,889	13,640	13,538	13,471
1958	13,608	13,609	13,604	13,594	13,593	13,613	13,650	14,257	14,327	14,114	13,847	13,784	13,800
1959	13,823	13,801	13,778	13,761	13,772	13,764	13,762	13,726	13,563	13,415	13,205	13,176	13,629
1960	13,276	13,256	13,224	13,202	13,195	13,210	13,255	13,312	13,072	12,806	12,565	12,529	13,076
1961	12,611	12,592	12,561	12,532	12,501	12,493	12,462	12,349	12,036	11,774	11,578	11,436	12,253
1962	11,569	11,574	11,561	11,543	11,537	11,546	11,872	12,399	12,518	12,444	12,156	12,111	11,913
1963	12,208	12,184	12,152	12,128	12,135	12,139	12,141	12,359	12,359	12,125	11,860	11,865	12,140
1964	11,954	11,937	11,893	11,856	11,816	11,801	11,774	12,176	12,416	12,239	11,956	11,818	11,975
1965	11,867	11,851	11,858	11,814	11,778	11,757	11,826	12,336	12,743	12,770	12,678	12,678	12,174
1966	12,753	12,774	12,780	12,771	12,757	12,779	12,907	13,132	12,888	12,665	12,391	12,289	12,740
1967	12,341	12,324	12,319	12,313	12,297	12,306	12,282	12,777	13,216	13,169	12,929	12,834	12,592
1968	12,881	12,866	12,863	12,859	12,856	12,849	12,841	13,238	13,508	13,419	13,305	13,236	13,063
1969	13,316	13,318	13,304	13,327	13,315	13,325	13,583	14,280	14,467	14,360	14,118	14,038	13,730
1970	14,115	14,109	14,111	14,117	14,096	14,116	14,068	14,467	14,571	14,407	14,118	14,058	14,197
1971	14,116	14,122	14,132	14,118	14,102	14,109	14,275	14,681	14,807	14,693	14,449	14,422	14,342
1972	14,474	14,474	14,480	14,462	14,458	14,526	14,643	14,812	14,852	14,670	14,436	14,384	14,556
1973	14,457	14,460	14,445	14,417	14,398	14,420	14,468	15,087	15,265	15,160	14,949	14,919	14,704
1974	14,968	14,960	14,922	14,885	14,869	14,872	14,929	15,263	15,229	15,056	14,802	14,739	14,958
1975	14,789	14,771	14,747	14,725	14,693	14,688	14,732	15,145	15,482	15,447	15,224	15,134	14,965
1976	15,184	15,183	15,178	15,142	15,120	15,120	15,150	15,491	15,332	15,062	14,797	14,714	15,123
1977	14,740	14,713	14,686	14,662	14,645	14,637	14,604	14,483	14,195	13,923	13,623	13,443	14,375
1978	13,416	13,336	13,274	13,219	13,149	13,133	13,294	13,647	13,741	13,585	13,276	13,213	13,357
1979	13,228	13,181	13,109	13,040	12,976	12,932	12,959	13,432	13,419	13,194	12,899	12,829	13,102
1980	12,827	12,768	12,695	12,640	12,587	12,538	12,750	13,467	13,725	13,657	13,382	13,364	13,039
1981	13,396	13,383	13,364	13,339	13,313	13,294	13,319	13,383	13,271	12,962	12,659	12,622	13,197
1982	12,693	12,668	12,634	12,612	12,580	12,594	12,913	13,624	13,857	13,829	13,603	13,570	13,107
1983	13,660	13,657	13,660	13,678	13,680	13,710	13,937	14,580	14,807	14,845	14,728	14,772	14,154
1984	14,858	14,856	14,857	14,877	14,880	14,905	15,112	15,720	15,875	15,862	15,724	15,679	15,275
1985	15,749	15,736	15,737	15,739	15,730	15,757	15,912	16,348	16,508	16,503	16,366	16,385	16,039
1986	16,457	16,456	16,458	16,473	16,480	16,505	16,686	17,088	17,088	17,088	16,956	16,980	16,726
1987	17,044	17,032	17,022	17,000	16,997	17,002	17,081	17,088	16,933	16,750	16,556	16,410	16,910
1988	16,444	16,424	16,400	16,378	16,349	16,321	16,290	16,189	15,953	15,698	15,441	15,280	16,104
1989	15,335	15,295	15,249	15,207	15,164	15,130	15,103	14,979	14,706	14,440	14,199	14,061	14,909
1990	14,080	14,035	13,984	13,919	13,858	13,818	13,811	13,748	13,596	13,341	13,030	12,910	13,679
1991	12,965	12,914	12,856	12,807	12,779	12,755	12,732	12,848	12,815	12,531	12,233	12,197	12,703
1992	12,241	12,202	12,146	12,090	12,032	11,996	11,973	11,908	11,578	11,288	10,988	10,740	11,774
1993	10,640	10,514	10,362	10,255	10,177	10,189	10,322	10,838	10,943	10,793	10,332	10,224	10,469
1994	10,343	10,288	10,208	10,118	10,028	9,990	9,928	9,906	9,304	8,489	7,942	7,616	9,566
1995	7,652	7,617	7,553	7,476	7,404	7,434	7,794	8,489	9,211	9,195	8,654	8,501	7,980
1996	8,745	8,698	8,636	8,589	8,583	8,648	8,911	9,712	9,880	9,579	8,958	8,801	9,027
1997	8,929	8,876	8,892	8,802	8,733	8,838	9,331	10,300	10,604	10,317	9,915	9,906	9,504
1998	10,001	9,966	9,935	9,815	9,691	9,722	10,061	10,994	11,294	11,227	10,945	10,819	10,427
1999	10,961	10,956	10,936	10,890	10,905	10,934	10,993	11,422	11,549	11,407	11,126	11,068	11,096
Average	13,074	13,040	13,016	12,990	12,965	12,974	13,080	13,450	13,510	13,348	13,086	13,008	13,135
Maximum	17,044	17,032	17,022	17,000	16,997	17,002	17,081	17,088	17,088	17,088	16,956	16,980	16,910
Minimum	7,652	7,617	7,553	7,476	7,404	7,434	7,794	8,489	9,211	8,489	7,942	7,616	7,980

Central Utah Project Completion Program

Attachment B

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Attachment B

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-49	1950	10	15,890	13,690	3,000	800	0
Nov-49	1950	11	2,850	2,120	1,500	770	0
Dec-49	1950	12	4,430	1,530	3,700	800	0
Jan-50	1950	1	5,030	1,530	4,300	800	0
Feb-50	1950	2	3,000	1,220	2,500	720	0
Mar-50	1950	3	6,840	3,440	4,200	800	0
Apr-50	1950	4	27,790	12,340	17,000	1,550	0
May-50	1950	5	72,620	38,120	36,100	1,600	1924
Jun-50	1950	6	49,400	34,050	16,900	1,550	16280
Jul-50	1950	7	26,270	22,770	5,100	1,600	14186
Aug-50	1950	8	5,700	3,600	3,700	1,600	18364
Sep-50	1950	9	13,320	12,770	2,100	1,550	11972
Oct-50	1951	10	16,800	13,500	4,100	800	180
Nov-50	1951	11	3,850	2,420	2,200	770	0
Dec-50	1951	12	5,030	1,930	3,900	800	0
Jan-51	1951	1	4,430	1,330	3,900	800	0
Feb-51	1951	2	2,910	1,030	2,600	720	0
Mar-51	1951	3	6,440	3,640	3,600	800	0
Apr-51	1951	4	21,420	6,470	16,500	1,550	286
May-51	1951	5	60,700	32,500	29,800	1,600	1092
Jun-51	1951	6	41,660	30,410	12,800	1,550	16254
Jul-51	1951	7	24,750	20,550	5,800	1,600	21550
Aug-51	1951	8	8,200	8,100	1,700	1,600	15218
Sep-51	1951	9	14,530	13,180	2,900	1,550	10453
Oct-51	1952	10	16,100	14,300	2,600	800	1703
Nov-51	1952	11	3,450	1,920	2,300	770	0
Dec-51	1952	12	6,030	1,630	5,200	800	0
Jan-52	1952	1	6,430	1,130	6,100	800	0
Feb-52	1952	2	3,210	1,260	2,700	750	0
Mar-52	1952	3	8,040	3,540	5,300	800	0
Apr-52	1952	4	27,090	13,640	15,000	1,550	0
May-52	1952	5	122,420	38,120	85,900	1,600	0
Jun-52	1952	6	72,640	36,890	37,300	1,550	6961
Jul-52	1952	7	34,980	25,980	10,600	1,600	15423
Aug-52	1952	8	13,600	11,300	3,900	1,600	11460
Sep-52	1952	9	17,720	16,170	3,100	1,550	11810
Oct-52	1953	10	13,700	14,500	-	800	7884
Nov-52	1953	11	1,850	1,920	700	770	0
Dec-52	1953	12	2,730	1,530	2,000	800	0
Jan-53	1953	1	3,730	1,330	3,200	800	0
Feb-53	1953	2	2,500	720	2,500	720	0
Mar-53	1953	3	6,340	3,440	3,700	800	0
Apr-53	1953	4	10,920	4,570	7,900	1,550	1257
May-53	1953	5	27,640	11,840	17,400	1,600	3826
Jun-53	1953	6	42,360	30,710	13,200	1,550	19038
Jul-53	1953	7	16,970	14,370	4,200	1,600	19958
Aug-53	1953	8	4,800	4,600	1,800	1,600	14178
Sep-53	1953	9	11,810	11,860	1,500	1,550	9640

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporation	Spills	Net Flow Into Strawberry Reservoir	Change in Storage	Shortage
				10,391.5					
Oct-49	1950	7,986	0.17	10,521.2	1,778	-	7904	7904	0
Nov-49	1950	3,623	0.05	10,508.5	526	-	-773	-773	0
Dec-49	1950	3,819	0.01	10,518.6	105	-	611	611	0
Jan-50	1950	3,392	0.01	10,545.4	105	-	1638	1638	0
Feb-50	1950	2,923	0.01	10,546.7	105	-	77	77	0
Mar-50	1950	3,168	0.08	10,607.0	846	-	3672	3672	0
Apr-50	1950	3,719	0.18	10,958.5	1,941	-	24071	24071	0
May-50	1950	6,892	0.36	11,599.1	4,060	-	63804	63804	0
Jun-50	1950	11,270	0.46	11,818.4	5,386	-	21850	21850	0
Jul-50	1950	13,484	0.48	11,804.4	5,669	-	-1400	-1400	0
Aug-50	1950	14,989	0.42	11,526.8	4,900	-	-27653	-27653	0
Sep-50	1950	13,082	0.32	11,408.9	3,670	-	-11734	-11734	0
Oct-50	1951	4,579	0.17	11,529.8	1,950	-	12041	12041	0
Nov-50	1951	3,488	0.05	11,533.5	577	-	362	362	0
Dec-50	1951	3,575	0.01	11,548.1	115	-	1455	1455	0
Jan-51	1951	3,519	0.01	11,557.2	116	-	911	911	0
Feb-51	1951	3,000	0.01	11,556.3	116	-	-90	-90	0
Mar-51	1951	3,452	0.08	11,586.3	926	-	2988	2988	0
Apr-51	1951	3,433	0.18	11,764.0	2,102	-	17701	17701	0
May-51	1951	7,070	0.36	12,270.6	4,326	-	52538	52538	0
Jun-51	1951	11,603	0.46	12,397.7	5,674	-	13803	13803	0
Jul-51	1951	11,622	0.48	12,320.1	5,932	-	-8422	-8422	0
Aug-51	1951	12,084	0.42	12,144.3	5,138	-	-19102	-19102	0
Sep-51	1951	9,464	0.32	12,094.7	3,878	-	-5387	-5387	0
Oct-51	1952	3,071	0.17	12,199.0	2,065	-	11326	11326	0
Nov-51	1952	3,612	0.05	12,197.5	610	-	-162	-162	0
Dec-51	1952	3,748	0.01	12,218.5	122	-	2282	2282	0
Jan-52	1952	3,290	0.01	12,247.4	122	-	3140	3140	0
Feb-52	1952	3,048	0.01	12,248.9	122	-	162	162	0
Mar-52	1952	3,082	0.08	12,294.5	982	-	4958	4958	0
Apr-52	1952	3,719	0.18	12,509.7	2,232	-	23371	23371	0
May-52	1952	7,918	0.36	13,549.2	4,691	-	114502	114502	0
Jun-52	1952	9,444	0.46	14,046.2	6,347	-	56235	56235	0
Jul-52	1952	12,227	0.48	14,111.0	6,758	-	7330	7330	0
Aug-52	1952	12,689	0.42	14,017.8	5,907	-	-10549	-10549	0
Sep-52	1952	10,050	0.32	13,981.2	4,480	-	-4140	-4140	0
Oct-52	1953	2,883	0.17	14,007.1	2,379	-	2933	2933	0
Nov-52	1953	2,668	0.05	13,999.9	700	-	-818	-818	0
Dec-52	1953	3,050	0.01	13,997.0	140	-	-320	-320	0
Jan-53	1953	2,765	0.01	14,005.6	140	-	965	965	0
Feb-53	1953	2,785	0.01	14,003.0	140	-	-285	-285	0
Mar-53	1953	3,029	0.08	14,032.3	1,121	-	3311	3311	0
Apr-53	1953	5,529	0.18	14,068.8	2,529	-	4134	4134	0
May-53	1953	6,258	0.36	14,224.0	5,093	-	17556	17556	0
Jun-53	1953	9,444	0.46	14,346.6	6,571	-	13878	13878	0
Jul-53	1953	11,471	0.48	14,218.8	6,856	-	-14459	-14459	0
Aug-53	1953	11,933	0.42	14,030.5	5,932	-	-21311	-21311	0
Sep-53	1953	9,318	0.32	13,967.3	4,480	-	-7148	-7148	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
		343,016	7,547.1	
Oct-49	1950	350,920	7,547.9	7,986
Nov-49	1950	350,147	7,547.8	3,623
Dec-49	1950	350,758	7,547.8	3,819
Jan-50	1950	352,396	7,548.0	3,392
Feb-50	1950	352,473	7,548.0	2,923
Mar-50	1950	356,145	7,548.4	3,168
Apr-50	1950	380,216	7,550.6	3,719
May-50	1950	444,020	7,556.2	8,816
Jun-50	1950	465,870	7,558.1	27,550
Jul-50	1950	464,469	7,558.0	27,670
Aug-50	1950	436,816	7,555.5	33,353
Sep-50	1950	425,082	7,554.5	25,054
Oct-50	1951	437,123	7,555.6	4,759
Nov-50	1951	437,484	7,555.6	3,488
Dec-50	1951	438,939	7,555.7	3,575
Jan-51	1951	439,850	7,555.8	3,519
Feb-51	1951	439,760	7,555.8	3,000
Mar-51	1951	442,748	7,556.1	3,452
Apr-51	1951	460,449	7,557.6	3,719
May-51	1951	512,987	7,562.0	8,162
Jun-51	1951	526,790	7,563.1	27,857
Jul-51	1951	518,369	7,562.4	33,172
Aug-51	1951	499,267	7,560.9	27,302
Sep-51	1951	493,880	7,560.5	19,917
Oct-51	1952	505,206	7,561.4	4,774
Nov-51	1952	505,044	7,561.4	3,612
Dec-51	1952	507,326	7,561.5	3,748
Jan-52	1952	510,466	7,561.8	3,290
Feb-52	1952	510,627	7,561.8	3,048
Mar-52	1952	515,585	7,562.2	3,082
Apr-52	1952	538,956	7,564.0	3,719
May-52	1952	653,458	7,572.9	7,918
Jun-52	1952	709,693	7,576.9	16,405
Jul-52	1952	717,023	7,577.5	27,650
Aug-52	1952	706,474	7,576.7	24,149
Sep-52	1952	702,334	7,576.4	21,860
Oct-52	1953	705,267	7,576.6	10,767
Nov-52	1953	704,449	7,576.6	2,668
Dec-52	1953	704,129	7,576.5	3,050
Jan-53	1953	705,094	7,576.6	2,765
Feb-53	1953	704,808	7,576.6	2,785
Mar-53	1953	708,119	7,576.8	3,029
Apr-53	1953	712,253	7,577.1	6,786
May-53	1953	729,809	7,578.4	10,084
Jun-53	1953	743,687	7,579.4	28,482
Jul-53	1953	729,228	7,578.4	31,429
Aug-53	1953	707,917	7,576.8	26,111
Sep-53	1953	700,769	7,576.3	18,958

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-53	1954	10	14,090	12,790	2,100	800	2104
Nov-53	1954	11	1,550	1,420	900	770	0
Dec-53	1954	12	1,950	750	2,000	800	0
Jan-54	1954	1	3,450	650	3,600	800	0
Feb-54	1954	2	1,610	730	1,600	720	0
Mar-54	1954	3	6,840	3,140	4,500	800	0
Apr-54	1954	4	18,790	6,840	13,500	1,550	1647
May-54	1954	5	34,130	25,930	9,800	1,600	12187
Jun-54	1954	6	5,940	2,990	4,500	1,550	19442
Jul-54	1954	7	1,550	1,850	1,300	1,600	17217
Aug-54	1954	8	(350)	150	1,100	1,600	17645
Sep-54	1954	9	2,000	150	3,400	1,550	4464
Oct-54	1955	10	10,450	8,950	2,300	800	2160
Nov-54	1955	11	1,530	500	1,800	770	0
Dec-54	1955	12	1,530	530	1,800	800	0
Jan-55	1955	1	2,630	430	3,000	800	0
Feb-55	1955	2	2,280	100	2,900	720	0
Mar-55	1955	3	5,180	2,580	3,400	800	0
Apr-55	1955	4	9,620	2,970	8,200	1,550	0
May-55	1955	5	52,040	32,840	20,800	1,600	1995
Jun-55	1955	6	15,780	10,730	6,600	1,550	18835
Jul-55	1955	7	6,060	4,560	3,100	1,600	23203
Aug-55	1955	8	4,000	2,600	3,000	1,600	13933
Sep-55	1955	9	11,910	11,860	1,600	1,550	7394
Oct-55	1956	10	13,090	12,690	1,200	800	1498
Nov-55	1956	11	2,030	1,100	1,700	770	0
Dec-55	1956	12	5,130	1,530	4,400	800	0
Jan-56	1956	1	4,930	930	4,800	800	0
Feb-56	1956	2	1,610	260	2,100	750	0
Mar-56	1956	3	5,840	3,340	3,300	800	0
Apr-56	1956	4	24,790	7,640	18,700	1,550	177
May-56	1956	5	60,110	35,010	26,700	1,600	4746
Jun-56	1956	6	33,600	26,950	8,200	1,550	20703
Jul-56	1956	7	12,050	9,150	4,500	1,600	17949
Aug-56	1956	8	2,060	2,560	1,100	1,600	17035
Sep-56	1956	9	11,810	10,960	2,400	1,550	8108
Oct-56	1957	10	13,470	12,070	2,200	800	655
Nov-56	1957	11	150	520	400	770	0
Dec-56	1957	12	2,400	200	3,000	800	0
Jan-57	1957	1	3,400	200	4,000	800	0
Feb-57	1957	2	1,780	100	2,400	720	0
Mar-57	1957	3	5,270	2,470	3,600	800	0
Apr-57	1957	4	8,020	2,970	6,600	1,550	0
May-57	1957	5	46,840	16,840	31,600	1,600	0
Jun-57	1957	6	55,460	33,810	23,200	1,550	4961
Jul-57	1957	7	28,550	21,450	8,700	1,600	21700
Aug-57	1957	8	3,100	4,700	-	1,600	16447
Sep-57	1957	9	12,120	12,470	1,200	1,550	10327

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change In Storage	Shortage
Oct-53	1954	2,320	0.17	14,052.8	2,382	-	9666	9666	0
Nov-53	1954	3,566	0.05	14,035.0	702	-	-2016	-2016	0
Dec-53	1954	3,904	0.01	14,017.7	140	-	-1954	-1954	0
Jan-54	1954	3,193	0.01	14,020.0	140	-	257	257	0
Feb-54	1954	3,418	0.01	14,004.0	140	-	-1808	-1808	0
Mar-54	1954	3,445	0.08	14,034.0	1,122	-	3395	3395	0
Apr-54	1954	5,529	0.18	14,136.6	2,535	-	11614	11614	0
May-54	1954	6,258	0.36	14,275.2	5,114	-	15685	15685	0
Jun-54	1954	9,444	0.46	14,072.4	6,520	-	-22946	-22946	0
Jul-54	1954	11,471	0.48	13,832.6	6,697	-	-27138	-27138	0
Aug-54	1954	11,933	0.42	13,568.1	5,754	-	-29928	-29928	0
Sep-54	1954	9,318	0.32	13,464.0	4,325	-	-11782	-11782	0
Oct-54	1955	2,780	0.17	13,512.7	2,293	-	5510	5510	0
Nov-54	1955	3,887	0.05	13,491.9	675	-	-2357	-2357	0
Dec-54	1955	4,104	0.01	13,469.1	135	-	-2574	-2574	0
Jan-55	1955	3,719	0.01	13,459.5	135	-	-1089	-1089	0
Feb-55	1955	3,496	0.01	13,448.8	135	-	-1216	-1216	0
Mar-55	1955	4,066	0.08	13,458.6	1,076	-	1114	1114	0
Apr-55	1955	8,973	0.18	13,464.3	2,423	-	647	647	0
May-55	1955	17,182	0.36	13,754.7	4,899	-	32863	32863	0
Jun-55	1955	11,573	0.46	13,625.5	6,297	-	-14628	-14628	0
Jul-55	1955	11,471	0.48	13,372.6	6,480	-	-28614	-28614	0
Aug-55	1955	11,933	0.42	13,178.5	5,576	-	-21866	-21866	0
Sep-55	1955	9,318	0.32	13,134.3	4,210	-	-4802	-4802	0
Oct-55	1956	3,615	0.17	13,207.4	2,239	-	7977	7977	0
Nov-55	1956	4,187	0.05	13,187.9	660	-	-2157	-2157	0
Dec-55	1956	4,104	0.01	13,197.3	132	-	1026	1026	0
Jan-56	1956	3,719	0.01	13,208.1	132	-	1211	1211	0
Feb-56	1956	3,793	0.01	13,188.4	132	-	-2183	-2183	0
Mar-56	1956	3,566	0.08	13,208.9	1,056	-	2274	2274	0
Apr-56	1956	4,262	0.18	13,388.8	2,394	-	20351	20351	0
May-56	1956	16,154	0.36	13,735.3	4,882	-	39210	39210	0
Jun-56	1956	14,513	0.46	13,721.0	6,315	-	-1616	-1616	0
Jul-56	1956	13,823	0.48	13,546.7	6,544	-	-19722	-19722	0
Aug-56	1956	11,933	0.42	13,308.9	5,640	-	-26908	-26908	0
Sep-56	1956	9,318	0.32	13,259.3	4,251	-	-5616	-5616	0
Oct-56	1957	4,355	0.17	13,334.1	2,260	-	8460	8460	0
Nov-56	1957	3,987	0.05	13,300.1	666	-	-3837	-3837	0
Dec-56	1957	4,104	0.01	13,285.1	133	-	-1704	-1704	0
Jan-57	1957	3,719	0.01	13,282.3	133	-	-319	-319	0
Feb-57	1957	3,286	0.01	13,268.9	133	-	-1506	-1506	0
Mar-57	1957	3,866	0.08	13,281.4	1,062	-	1404	1404	0
Apr-57	1957	6,749	0.18	13,292.6	2,392	-	1271	1271	0
May-57	1957	13,107	0.36	13,590.7	4,839	-	33733	33733	0
Jun-57	1957	9,444	0.46	13,953.5	6,335	-	41055	41055	0
Jul-57	1957	14,133	0.48	13,889.1	6,682	-	-7283	-7283	0
Aug-57	1957	14,884	0.42	13,639.7	5,781	-	-28231	-28231	0
Sep-57	1957	13,332	0.32	13,537.7	4,348	-	-11539	-11539	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-53	1954	710,436	7,577.0	4,424
Nov-53	1954	708,420	7,576.8	3,566
Dec-53	1954	706,466	7,576.7	3,904
Jan-54	1954	706,723	7,576.7	3,193
Feb-54	1954	704,915	7,576.6	3,418
Mar-54	1954	708,310	7,576.8	3,445
Apr-54	1954	719,924	7,577.7	7,176
May-54	1954	735,609	7,578.8	18,445
Jun-54	1954	712,663	7,577.2	28,886
Jul-54	1954	685,525	7,575.2	28,688
Aug-54	1954	655,597	7,573.0	29,578
Sep-54	1954	643,815	7,572.2	13,782
Oct-54	1955	649,325	7,572.6	4,940
Nov-54	1955	646,968	7,572.4	3,887
Dec-54	1955	644,393	7,572.2	4,104
Jan-55	1955	643,304	7,572.1	3,719
Feb-55	1955	642,088	7,572.0	3,496
Mar-55	1955	643,202	7,572.1	4,066
Apr-55	1955	643,849	7,572.2	8,973
May-55	1955	676,712	7,574.5	19,177
Jun-55	1955	662,084	7,573.5	30,408
Jul-55	1955	633,470	7,571.4	34,674
Aug-55	1955	611,604	7,569.8	25,866
Sep-55	1955	606,802	7,569.4	16,712
Oct-55	1956	614,779	7,570.1	5,113
Nov-55	1956	612,622	7,569.9	4,187
Dec-55	1956	613,648	7,570.0	4,104
Jan-56	1956	614,859	7,570.1	3,719
Feb-56	1956	612,676	7,569.9	3,793
Mar-56	1956	614,949	7,570.1	3,566
Apr-56	1956	635,300	7,571.5	4,439
May-56	1956	674,510	7,574.4	20,900
Jun-56	1956	672,895	7,574.3	35,216
Jul-56	1956	653,173	7,572.8	31,772
Aug-56	1956	626,265	7,570.9	28,968
Sep-56	1956	620,649	7,570.5	17,426
Oct-56	1957	629,109	7,571.1	5,010
Nov-56	1957	625,272	7,570.8	3,987
Dec-56	1957	623,567	7,570.7	4,104
Jan-57	1957	623,248	7,570.7	3,719
Feb-57	1957	621,742	7,570.6	3,286
Mar-57	1957	623,146	7,570.7	3,866
Apr-57	1957	624,416	7,570.8	6,749
May-57	1957	658,149	7,573.2	13,107
Jun-57	1957	699,204	7,576.2	14,405
Jul-57	1957	691,921	7,575.6	35,833
Aug-57	1957	663,690	7,573.6	31,331
Sep-57	1957	652,151	7,572.8	23,659

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-57	1958	10	14,200	13,700	1,300	800	2627
Nov-57	1958	11	3,850	1,920	2,700	770	0
Dec-57	1958	12	3,430	1,130	3,100	800	0
Jan-58	1958	1	2,530	830	2,500	800	0
Feb-58	1958	2	3,200	420	3,500	720	0
Mar-58	1958	3	6,140	2,940	4,000	800	0
Apr-58	1958	4	11,020	4,570	8,000	1,550	0
May-58	1958	5	76,620	38,120	40,100	1,600	477
Jun-58	1958	6	36,290	27,240	10,600	1,550	17141
Jul-58	1958	7	10,170	7,770	4,000	1,600	19836
Aug-58	1958	8	2,400	600	3,400	1,600	17593
Sep-58	1958	9	11,710	11,660	1,600	1,550	5307
Oct-58	1959	10	13,870	12,570	2,100	800	1888
Nov-58	1959	11	1,330	1,000	1,100	770	0
Dec-58	1959	12	1,450	450	1,800	800	0
Jan-59	1959	1	1,750	450	2,100	800	0
Feb-59	1959	2	4,680	200	5,200	720	0
Mar-59	1959	3	3,020	2,220	1,600	800	0
Apr-59	1959	4	9,320	3,570	7,300	1,550	224
May-59	1959	5	24,440	18,940	7,100	1,600	11805
Jun-59	1959	6	14,370	11,220	4,700	1,550	21411
Jul-59	1959	7	8,840	8,640	1,800	1,600	14043
Aug-59	1959	8	(800)	800	-	1,600	11078
Sep-59	1959	9	10,910	11,260	1,200	1,550	4738
Oct-59	1960	10	16,370	14,870	2,300	800	1185
Nov-59	1960	11	1,730	2,400	100	770	0
Dec-59	1960	12	730	630	900	800	0
Jan-60	1960	1	1,330	330	1,800	800	0
Feb-60	1960	2	2,750	100	3,400	750	0
Mar-60	1960	3	5,130	3,430	2,500	800	0
Apr-60	1960	4	14,120	6,470	9,200	1,550	666
May-60	1960	5	33,330	24,330	10,600	1,600	10041
Jun-60	1960	6	8,480	5,730	4,300	1,550	23561
Jul-60	1960	7	1,660	3,260	-	1,600	19164
Aug-60	1960	8	1,350	150	2,800	1,600	15584
Sep-60	1960	9	9,870	10,320	1,100	1,550	4108
Oct-60	1961	10	13,870	13,070	1,600	800	586
Nov-60	1961	11	1,930	1,200	1,500	770	0
Dec-60	1961	12	930	730	1,000	800	0
Jan-61	1961	1	750	150	1,400	800	0
Feb-61	1961	2	280	-	1,000	720	0
Mar-61	1961	3	3,990	2,390	2,400	800	0
Apr-61	1961	4	6,620	2,170	6,000	1,550	0
May-61	1961	5	19,440	18,040	3,000	1,600	15760
Jun-61	1961	6	(230)	420	900	1,550	22309
Jul-61	1961	7	(950)	650	-	1,600	13685
Aug-61	1961	8	(950)	150	500	1,600	6659
Sep-61	1961	9	(600)	50	900	1,550	2586

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change In Storage	Shortage
Oct-57	1958	3,619	0.17	13,608.0	2,307	-	7954	7954	0
Nov-57	1958	3,687	0.05	13,609.4	680	-	163	163	0
Dec-57	1958	4,004	0.01	13,604.3	136	-	-574	-574	0
Jan-58	1958	3,719	0.01	13,593.8	136	-	-1189	-1189	0
Feb-58	1958	3,264	0.01	13,593.3	136	-	-64	-64	0
Mar-58	1958	3,866	0.08	13,613.4	1,088	-	2274	2274	0
Apr-58	1958	6,871	0.18	13,650.0	2,454	-	4149	4149	0
May-58	1958	7,441	0.36	14,257.2	5,023	-	68702	68702	0
Jun-58	1958	11,295	0.46	14,326.6	6,574	-	7854	7854	0
Jul-58	1958	14,349	0.48	14,114.4	6,826	-	-24015	-24015	0
Aug-58	1958	15,100	0.42	13,846.6	5,872	-	-30293	-30293	0
Sep-58	1958	13,540	0.32	13,783.6	4,421	-	-7137	-7137	0
Oct-58	1959	7,466	0.17	13,823.5	2,347	-	4516	4516	0
Nov-58	1959	3,887	0.05	13,800.9	691	-	-2557	-2557	0
Dec-58	1959	4,004	0.01	13,778.3	138	-	-2554	-2554	0
Jan-59	1959	3,719	0.01	13,760.9	138	-	-1969	-1969	0
Feb-59	1959	3,464	0.01	13,771.6	138	-	1216	1216	0
Mar-59	1959	3,904	0.08	13,763.8	1,101	-	-884	-884	0
Apr-59	1959	9,253	0.18	13,762.4	2,477	-	-157	-157	0
May-59	1959	16,761	0.36	13,726.0	4,948	-	-4126	-4126	0
Jun-59	1959	11,448	0.46	13,562.6	6,276	-	-18489	-18489	0
Jul-59	1959	11,471	0.48	13,415.2	6,475	-	-16674	-16674	0
Aug-59	1959	11,933	0.42	13,204.8	5,590	-	-23811	-23811	0
Sep-59	1959	9,318	0.32	13,176.0	4,221	-	-3146	-3146	0
Oct-59	1960	3,930	0.17	13,276.5	2,248	-	11255	11255	0
Nov-59	1960	4,087	0.05	13,255.6	663	-	-2357	-2357	0
Dec-59	1960	4,304	0.01	13,224.0	132	-	-3574	-3574	0
Jan-60	1960	3,819	0.01	13,202.0	132	-	-2489	-2489	0
Feb-60	1960	3,473	0.01	13,195.5	132	-	-723	-723	0
Mar-60	1960	3,478	0.08	13,210.3	1,056	-	1652	1652	0
Apr-60	1960	8,376	0.18	13,255.1	2,382	-	5078	5078	0
May-60	1960	16,903	0.36	13,311.6	4,782	-	6386	6386	0
Jun-60	1960	11,411	0.46	13,072.3	6,068	-	-26492	-26492	0
Jul-60	1960	11,471	0.48	12,805.6	6,211	-	-28975	-28975	0
Aug-60	1960	11,933	0.42	12,564.7	5,328	-	-26167	-26167	0
Sep-60	1960	9,604	0.32	12,529.3	4,015	-	-3842	-3842	0
Oct-60	1961	4,460	0.17	12,610.6	2,137	-	8824	8824	0
Nov-60	1961	3,987	0.05	12,591.6	630	-	-2057	-2057	0
Dec-60	1961	4,304	0.01	12,560.5	126	-	-3374	-3374	0
Jan-61	1961	3,819	0.01	12,532.3	125	-	-3069	-3069	0
Feb-61	1961	3,664	0.01	12,501.1	125	-	-3384	-3384	0
Mar-61	1961	4,855	0.08	12,493.2	1,000	-	-865	-865	0
Apr-61	1961	9,972	0.18	12,462.3	2,246	-	-3352	-3352	0
May-61	1961	15,946	0.36	12,349.4	4,466	-	-12266	-12266	0
Jun-61	1961	11,429	0.46	12,036.4	5,609	-	-33968	-33968	0
Jul-61	1961	11,471	0.48	11,774.3	5,715	-	-26106	-26106	0
Aug-61	1961	11,933	0.42	11,578.1	4,904	-	-19542	-19542	0
Sep-61	1961	10,952	0.32	11,436.2	3,682	-	-14138	-14138	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-57	1958	660,106	7,573.3	6,246
Nov-57	1958	660,269	7,573.4	3,687
Dec-57	1958	659,694	7,573.3	4,004
Jan-58	1958	658,505	7,573.2	3,719
Feb-58	1958	658,441	7,573.2	3,264
Mar-58	1958	660,715	7,573.4	3,866
Apr-58	1958	664,863	7,573.7	6,871
May-58	1958	733,565	7,578.7	7,918
Jun-58	1958	741,419	7,579.2	28,436
Jul-58	1958	717,404	7,577.5	34,185
Aug-58	1958	687,111	7,575.3	32,693
Sep-58	1958	679,974	7,574.8	18,847
Oct-58	1959	684,490	7,575.1	9,354
Nov-58	1959	681,933	7,574.9	3,887
Dec-58	1959	679,379	7,574.7	4,004
Jan-59	1959	677,409	7,574.6	3,719
Feb-59	1959	678,625	7,574.7	3,464
Mar-59	1959	677,741	7,574.6	3,904
Apr-59	1959	677,584	7,574.6	9,477
May-59	1959	673,457	7,574.3	28,566
Jun-59	1959	654,969	7,573.0	32,859
Jul-59	1959	638,295	7,571.8	25,514
Aug-59	1959	614,484	7,570.0	23,011
Sep-59	1959	611,338	7,569.8	14,056
Oct-59	1960	622,593	7,570.6	5,115
Nov-59	1960	620,236	7,570.5	4,087
Dec-59	1960	616,661	7,570.2	4,304
Jan-60	1960	614,172	7,570.0	3,819
Feb-60	1960	613,449	7,570.0	3,473
Mar-60	1960	615,101	7,570.1	3,478
Apr-60	1960	620,179	7,570.5	9,042
May-60	1960	626,566	7,570.9	26,944
Jun-60	1960	600,074	7,568.9	34,972
Jul-60	1960	571,099	7,566.6	30,635
Aug-60	1960	544,932	7,564.5	27,517
Sep-60	1960	541,090	7,564.2	13,712
Oct-60	1961	549,914	7,564.9	5,046
Nov-60	1961	547,857	7,564.8	3,987
Dec-60	1961	544,482	7,564.5	4,304
Jan-61	1961	541,413	7,564.2	3,819
Feb-61	1961	538,029	7,564.0	3,664
Mar-61	1961	537,164	7,563.9	4,855
Apr-61	1961	533,812	7,563.6	9,972
May-61	1961	521,546	7,562.7	31,706
Jun-61	1961	487,578	7,560.0	33,738
Jul-61	1961	461,472	7,557.7	25,156
Aug-61	1961	441,930	7,556.0	18,592
Sep-61	1961	427,792	7,554.7	13,538

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-61	1962	10	18,420	13,320	5,900	800	0
Nov-61	1962	11	4,550	3,720	1,600	770	0
Dec-61	1962	12	2,930	2,230	1,500	800	0
Jan-62	1962	1	2,130	1,430	1,500	800	0
Feb-62	1962	2	2,900	1,220	2,400	720	0
Mar-62	1962	3	4,940	3,540	2,200	800	0
Apr-62	1962	4	36,220	15,370	22,400	1,550	0
May-62	1962	5	70,520	38,120	34,000	1,600	0
Jun-62	1962	6	43,060	31,210	13,400	1,550	15541
Jul-62	1962	7	23,850	21,250	4,200	1,600	17814
Aug-62	1962	8	3,700	3,400	1,900	1,600	20160
Sep-62	1962	9	11,610	11,760	1,400	1,550	5989
Oct-62	1963	10	15,290	13,790	2,300	800	1496
Nov-62	1963	11	1,450	1,120	1,100	770	0
Dec-62	1963	12	750	550	1,000	800	0
Jan-63	1963	1	1,050	450	1,400	800	0
Feb-63	1963	2	3,590	410	3,900	720	0
Mar-63	1963	3	4,350	1,850	3,300	800	0
Apr-63	1963	4	10,620	2,670	9,500	1,550	0
May-63	1963	5	45,230	27,530	19,300	1,600	6015
Jun-63	1963	6	22,590	16,440	7,700	1,550	7952
Jul-63	1963	7	10,940	9,740	2,800	1,600	22209
Aug-63	1963	8	4,880	3,180	3,300	1,600	17216
Sep-63	1963	9	14,610	14,160	2,000	1,550	4803
Oct-63	1964	10	15,300	14,500	1,600	800	2805
Nov-63	1964	11	3,650	2,320	2,100	770	0
Dec-63	1964	12	1,230	1,030	1,000	800	0
Jan-64	1964	1	1,830	630	2,000	800	0
Feb-64	1964	2	1,210	460	1,500	750	0
Mar-64	1964	3	4,940	2,840	2,900	800	0
Apr-64	1964	4	9,920	3,470	8,000	1,550	0
May-64	1964	5	54,440	24,540	31,500	1,600	809
Jun-64	1964	6	44,160	30,710	15,000	1,550	3302
Jul-64	1964	7	23,350	20,750	4,200	1,600	28288
Aug-64	1964	8	3,500	3,500	1,600	1,600	17635
Sep-64	1964	9	10,820	11,170	1,200	1,550	9978
Oct-64	1965	10	14,170	11,970	3,000	800	988
Nov-64	1965	11	2,130	700	2,200	770	0
Dec-64	1965	12	4,630	930	4,500	800	0
Jan-65	1965	1	2,030	730	2,100	800	0
Feb-65	1965	2	2,380	400	2,700	720	0
Mar-65	1965	3	4,990	2,790	3,000	800	0
Apr-65	1965	4	14,220	4,870	10,900	1,550	0
May-65	1965	5	66,640	31,240	37,000	1,600	0
Jun-65	1965	6	59,400	35,650	25,300	1,550	5820
Jul-65	1965	7	30,880	24,780	7,700	1,600	14036
Aug-65	1965	8	17,100	14,300	4,400	1,600	11451
Sep-65	1965	9	19,800	18,250	3,100	1,550	5784

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change In Storage	Shortage
Oct-61	1962	5,190	0.17	11,569.0	1,955	-	13230	13230	0
Nov-61	1962	4,087	0.05	11,573.6	579	-	463	463	0
Dec-61	1962	4,204	0.01	11,560.8	116	-	-1274	-1274	0
Jan-62	1962	3,919	0.01	11,542.9	116	-	-1789	-1789	0
Feb-62	1962	3,464	0.01	11,537.2	115	-	-564	-564	0
Mar-62	1962	4,066	0.08	11,546.0	923	-	874	874	0
Apr-62	1962	3,719	0.18	11,872.3	2,108	-	32501	32501	0
May-62	1962	14,765	0.36	12,399.5	4,369	-	55755	55755	0
Jun-62	1962	14,628	0.46	12,518.2	5,731	-	12891	12891	0
Jul-62	1962	14,102	0.48	12,443.9	5,991	-	-8066	-8066	0
Aug-62	1962	14,853	0.42	12,155.6	5,166	-	-31313	-31313	0
Sep-62	1962	10,473	0.32	12,111.0	3,883	-	-4852	-4852	0
Oct-62	1963	3,293	0.17	12,207.6	2,067	-	10501	10501	0
Nov-62	1963	3,987	0.05	12,184.3	610	-	-2537	-2537	0
Dec-62	1963	4,204	0.01	12,152.5	122	-	-3454	-3454	0
Jan-63	1963	3,719	0.01	12,127.9	121	-	-2669	-2669	0
Feb-63	1963	2,864	0.01	12,134.6	121	-	726	726	0
Mar-63	1963	3,866	0.08	12,139.0	971	-	484	484	0
Apr-63	1963	10,447	0.18	12,140.6	2,185	-	173	173	0
May-63	1963	15,473	0.36	12,359.2	4,410	-	23742	23742	0
Jun-63	1963	14,699	0.46	12,358.6	5,685	-	-61	-61	0
Jul-63	1963	14,102	0.48	12,125.1	5,876	-	-25371	-25371	0
Aug-63	1963	14,853	0.42	11,859.8	5,037	-	-27189	-27189	0
Sep-63	1963	9,318	0.32	11,864.7	3,796	-	489	489	0
Oct-63	1964	3,613	0.17	11,953.9	2,025	-	8882	8882	0
Nov-63	1964	5,327	0.05	11,937.0	597	-	-1677	-1677	0
Dec-63	1964	5,592	0.01	11,893.2	119	-	-4362	-4362	0
Jan-64	1964	5,505	0.01	11,856.3	119	-	-3675	-3675	0
Feb-64	1964	5,234	0.01	11,815.9	118	-	-4024	-4024	0
Mar-64	1964	6,381	0.08	11,801.5	945	-	-1441	-1441	0
Apr-64	1964	12,651	0.18	11,774.1	2,122	-	-2731	-2731	0
May-64	1964	12,357	0.36	12,176.1	4,311	-	41274	41274	0
Jun-64	1964	14,844	0.46	12,415.6	5,656	-	26014	26014	0
Jul-64	1964	14,248	0.48	12,239.0	5,917	-	-19186	-19186	0
Aug-64	1964	15,861	0.42	11,955.8	5,081	-	-29996	-29996	0
Sep-64	1964	14,557	0.32	11,818.1	3,804	-	-13715	-13715	0
Oct-64	1965	8,273	0.17	11,867.4	2,013	-	4909	4909	0
Nov-64	1965	3,787	0.05	11,850.8	593	-	-1657	-1657	0
Dec-64	1965	3,890	0.01	11,858.2	119	-	740	740	0
Jan-65	1965	6,418	0.01	11,814.2	118	-	-4388	-4388	0
Feb-65	1965	5,957	0.01	11,778.3	118	-	-3577	-3577	0
Mar-65	1965	7,127	0.08	11,756.8	941	-	-2137	-2137	0
Apr-65	1965	7,342	0.18	11,825.9	2,122	-	6878	6878	0
May-65	1965	13,107	0.36	12,336.5	4,349	-	53533	53533	0
Jun-65	1965	9,444	0.46	12,742.8	5,768	-	44136	44136	0
Jul-65	1965	13,884	0.48	12,770.0	6,123	-	2960	2960	0
Aug-65	1965	15,609	0.42	12,678.3	5,344	-	-9960	-9960	0
Sep-65	1965	14,033	0.32	12,678.2	4,057	-	-17	-17	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-61	1962	441,022	7,555.9	5,190
Nov-61	1962	441,485	7,555.9	4,087
Dec-61	1962	440,211	7,555.8	4,204
Jan-62	1962	438,421	7,555.7	3,919
Feb-62	1962	437,857	7,555.6	3,464
Mar-62	1962	438,731	7,555.7	4,066
Apr-62	1962	471,232	7,558.5	3,719
May-62	1962	526,987	7,563.1	14,765
Jun-62	1962	539,879	7,564.1	30,169
Jul-62	1962	531,812	7,563.5	31,916
Aug-62	1962	500,499	7,561.0	35,013
Sep-62	1962	495,647	7,560.6	16,462
Oct-62	1963	506,148	7,561.4	4,789
Nov-62	1963	503,610	7,561.2	3,987
Dec-62	1963	500,156	7,561.0	4,204
Jan-63	1963	497,487	7,560.8	3,719
Feb-63	1963	498,213	7,560.8	2,864
Mar-63	1963	498,696	7,560.9	3,866
Apr-63	1963	498,870	7,560.9	10,447
May-63	1963	522,611	7,562.8	21,488
Jun-63	1963	522,550	7,562.7	22,651
Jul-63	1963	497,179	7,560.7	36,311
Aug-63	1963	469,989	7,558.4	32,069
Sep-63	1963	470,478	7,558.5	14,121
Oct-63	1964	479,361	7,559.3	6,418
Nov-63	1964	477,684	7,559.1	5,327
Dec-63	1964	473,321	7,558.7	5,592
Jan-64	1964	469,647	7,558.4	5,505
Feb-64	1964	465,622	7,558.1	5,234
Mar-64	1964	464,182	7,557.9	6,381
Apr-64	1964	461,451	7,557.7	12,651
May-64	1964	502,725	7,561.2	13,166
Jun-64	1964	528,739	7,563.2	18,146
Jul-64	1964	509,553	7,561.7	42,536
Aug-64	1964	479,556	7,559.3	33,496
Sep-64	1964	465,841	7,558.1	24,535
Oct-64	1965	470,750	7,558.5	9,261
Nov-64	1965	469,093	7,558.4	3,787
Dec-64	1965	469,833	7,558.4	3,890
Jan-65	1965	465,445	7,558.0	6,418
Feb-65	1965	461,868	7,557.7	5,957
Mar-65	1965	459,731	7,557.5	7,127
Apr-65	1965	466,609	7,558.1	7,342
May-65	1965	520,142	7,562.6	13,107
Jun-65	1965	564,278	7,566.1	15,264
Jul-65	1965	567,238	7,566.3	27,920
Aug-65	1965	557,278	7,565.5	27,060
Sep-65	1965	557,260	7,565.5	19,817

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-65	1966	10	17,600	16,300	2,100	800	1058
Nov-65	1966	11	5,950	3,420	3,300	770	0
Dec-65	1966	12	4,730	2,430	3,100	800	0
Jan-66	1966	1	2,830	1,130	2,500	800	0
Feb-66	1966	2	3,190	710	3,200	720	0
Mar-66	1966	3	6,090	3,990	2,900	800	0
Apr-66	1966	4	25,390	12,240	14,700	1,550	918
May-66	1966	5	45,500	30,100	17,000	1,600	8826
Jun-66	1966	6	9,880	5,430	6,000	1,550	21886
Jul-66	1966	7	5,750	2,650	4,700	1,600	15825
Aug-66	1966	8	650	250	2,000	1,600	15589
Sep-66	1966	9	7,570	6,620	2,500	1,550	5379
Oct-66	1967	10	14,990	13,390	2,400	800	1424
Nov-66	1967	11	2,350	1,720	1,400	770	0
Dec-66	1967	12	3,930	1,230	3,500	800	0
Jan-67	1967	1	3,530	830	3,500	800	0
Feb-67	1967	2	2,100	420	2,400	720	0
Mar-67	1967	3	5,140	3,040	2,900	800	0
Apr-67	1967	4	10,520	3,970	8,100	1,550	0
May-67	1967	5	68,340	33,540	36,400	1,600	0
Jun-67	1967	6	59,700	33,850	27,400	1,550	752
Jul-67	1967	7	31,050	23,250	9,400	1,600	22140
Aug-67	1967	8	8,700	7,000	3,300	1,600	19892
Sep-67	1967	9	15,320	13,270	3,600	1,550	12324
Oct-67	1968	10	14,290	13,690	1,400	800	0
Nov-67	1968	11	2,250	1,520	1,500	770	0
Dec-67	1968	12	3,630	1,230	3,200	800	0
Jan-68	1968	1	3,430	1,030	3,200	800	0
Feb-68	1968	2	3,410	860	3,300	750	0
Mar-68	1968	3	6,340	3,440	3,700	800	0
Apr-68	1968	4	9,420	3,970	7,000	1,550	0
May-68	1968	5	56,440	24,240	33,800	1,600	0
Jun-68	1968	6	51,360	29,610	23,300	1,550	10488
Jul-68	1968	7	24,850	20,550	5,900	1,600	20807
Aug-68	1968	8	12,900	10,000	4,500	1,600	10968
Sep-68	1968	9	15,720	14,670	2,600	1,550	10179
Oct-68	1969	10	17,200	14,500	3,500	800	1985
Nov-68	1969	11	3,650	2,120	2,300	770	0
Dec-68	1969	12	4,130	1,530	3,400	800	0
Jan-69	1969	1	5,830	1,130	5,500	800	0
Feb-69	1969	2	3,900	1,120	3,500	720	0
Mar-69	1969	3	5,840	3,440	3,200	800	0
Apr-69	1969	4	32,890	14,340	20,100	1,550	0
May-69	1969	5	87,020	38,120	50,500	1,600	1843
Jun-69	1969	6	42,360	29,610	14,300	1,550	9642
Jul-69	1969	7	19,470	15,070	6,000	1,600	17568
Aug-69	1969	8	6,700	4,200	4,100	1,600	18893
Sep-69	1969	9	13,730	12,680	2,600	1,550	9205

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change In Storage	Shortage
Oct-65	1966	8,449	0.17	12,752.7	2,162	-	8093	8093	0
Nov-65	1966	3,687	0.05	12,773.5	638	-	2263	2263	0
Dec-65	1966	4,004	0.01	12,780.2	128	-	726	726	0
Jan-66	1966	3,819	0.01	12,771.1	128	-	-989	-989	0
Feb-66	1966	4,711	0.01	12,757.1	128	-	-1521	-1521	0
Mar-66	1966	3,666	0.08	12,779.4	1,021	-	2424	2424	0
Apr-66	1966	10,653	0.18	12,906.6	2,312	-	13819	13819	0
May-66	1966	12,242	0.36	13,131.6	4,687	-	24432	24432	0
Jun-66	1966	14,459	0.46	12,887.9	5,984	-	-26465	-26465	0
Jul-66	1966	14,102	0.48	12,665.3	6,133	-	-24177	-24177	0
Aug-66	1966	14,853	0.42	12,391.0	5,262	-	-29792	-29792	0
Sep-66	1966	13,302	0.32	12,288.8	3,949	-	-11111	-11111	0
Oct-66	1967	7,885	0.17	12,341.1	2,094	-	5681	5681	0
Nov-66	1967	4,222	0.05	12,323.8	617	-	-1872	-1872	0
Dec-66	1967	4,450	0.01	12,319.0	123	-	-520	-520	0
Jan-67	1967	4,165	0.01	12,313.2	123	-	-635	-635	0
Feb-67	1967	3,876	0.01	12,296.8	123	-	-1776	-1776	0
Mar-67	1967	4,112	0.08	12,306.3	984	-	1028	1028	0
Apr-67	1967	13,108	0.18	12,282.5	2,213	-	-2588	-2588	0
May-67	1967	14,578	0.36	12,777.4	4,511	-	53762	53762	0
Jun-67	1967	11,266	0.46	13,215.7	5,978	-	47682	47682	0
Jul-67	1967	14,102	0.48	13,168.6	6,332	-	-5192	-5192	0
Aug-67	1967	14,853	0.42	12,928.8	5,480	-	-26045	-26045	0
Sep-67	1967	13,327	0.32	12,833.7	4,122	-	-10331	-10331	0
Oct-67	1968	9,114	0.17	12,881.4	2,186	-	5176	5176	0
Nov-67	1968	3,887	0.05	12,866.3	644	-	-1637	-1637	0
Dec-67	1968	4,004	0.01	12,862.8	129	-	-374	-374	0
Jan-68	1968	3,819	0.01	12,859.3	129	-	-389	-389	0
Feb-68	1968	3,731	0.01	12,856.3	129	-	-321	-321	0
Mar-68	1968	7,135	0.08	12,849.0	1,028	-	-795	-795	0
Apr-68	1968	10,281	0.18	12,841.1	2,312	-	-861	-861	0
May-68	1968	13,168	0.36	13,237.9	4,694	-	43272	43272	0
Jun-68	1968	10,295	0.46	13,508.1	6,152	-	30577	30577	0
Jul-68	1968	14,102	0.48	13,419.2	6,463	-	-10059	-10059	0
Aug-68	1968	14,853	0.42	13,305.0	5,612	-	-12921	-12921	0
Sep-68	1968	13,302	0.32	13,236.4	4,247	-	-7761	-7761	0
Oct-68	1969	6,182	0.17	13,316.2	2,257	-	9033	9033	0
Nov-68	1969	3,410	0.05	13,318.4	666	-	240	240	0
Dec-68	1969	5,741	0.01	13,304.1	133	-	-1611	-1611	0
Jan-69	1969	3,217	0.01	13,327.2	133	-	2613	2613	0
Feb-69	1969	5,280	0.01	13,315.0	133	-	-1380	-1380	0
Mar-69	1969	4,734	0.08	13,324.8	1,066	-	1106	1106	0
Apr-69	1969	3,719	0.18	13,582.6	2,422	-	29171	29171	0
May-69	1969	6,258	0.36	14,280.0	5,015	-	78919	78919	0
Jun-69	1969	11,076	0.46	14,467.5	6,612	-	21642	21642	0
Jul-69	1969	14,447	0.48	14,360.4	6,919	-	-12545	-12545	0
Aug-69	1969	15,198	0.42	14,118.4	5,981	-	-27391	-27391	0
Sep-69	1969	13,635	0.32	14,037.8	4,505	-	-9110	-9110	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-65	1966	565,353	7,566.1	9,507
Nov-65	1966	567,616	7,566.3	3,687
Dec-65	1966	568,341	7,566.4	4,004
Jan-66	1966	567,352	7,566.3	3,819
Feb-66	1966	565,831	7,566.2	4,711
Mar-66	1966	568,254	7,566.4	3,666
Apr-66	1966	582,074	7,567.5	11,571
May-66	1966	606,505	7,569.4	21,068
Jun-66	1966	580,040	7,567.3	36,345
Jul-66	1966	555,863	7,565.4	29,927
Aug-66	1966	526,071	7,563.0	30,442
Sep-66	1966	514,960	7,562.1	18,681
Oct-66	1967	520,642	7,562.6	9,309
Nov-66	1967	518,770	7,562.4	4,222
Dec-66	1967	518,249	7,562.4	4,450
Jan-67	1967	517,614	7,562.4	4,165
Feb-67	1967	515,838	7,562.2	3,876
Mar-67	1967	516,866	7,562.3	4,112
Apr-67	1967	514,278	7,562.1	13,108
May-67	1967	568,039	7,566.4	14,578
Jun-67	1967	615,721	7,570.1	12,018
Jul-67	1967	610,529	7,569.7	36,242
Aug-67	1967	584,483	7,567.7	34,745
Sep-67	1967	574,153	7,566.8	25,651
Oct-67	1968	579,329	7,567.3	9,114
Nov-67	1968	577,692	7,567.1	3,887
Dec-67	1968	577,317	7,567.1	4,004
Jan-68	1968	576,928	7,567.1	3,819
Feb-68	1968	576,607	7,567.0	3,731
Mar-68	1968	575,812	7,567.0	7,135
Apr-68	1968	574,951	7,566.9	10,281
May-68	1968	618,223	7,570.3	13,168
Jun-68	1968	648,800	7,572.5	20,783
Jul-68	1968	638,741	7,571.8	34,909
Aug-68	1968	625,820	7,570.9	25,821
Sep-68	1968	618,059	7,570.3	23,481
Oct-68	1969	627,093	7,571.0	8,167
Nov-68	1969	627,333	7,571.0	3,410
Dec-68	1969	625,722	7,570.9	5,741
Jan-69	1969	628,335	7,571.0	3,217
Feb-69	1969	626,955	7,570.9	5,280
Mar-69	1969	628,061	7,571.0	4,734
Apr-69	1969	657,232	7,573.1	3,719
May-69	1969	736,151	7,578.9	8,101
Jun-69	1969	757,793	7,580.4	20,718
Jul-69	1969	745,248	7,579.5	32,015
Aug-69	1969	717,857	7,577.5	34,091
Sep-69	1969	708,747	7,576.9	22,840

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-69	1970	10	17,600	14,000	4,400	800	1476
Nov-69	1970	11	2,950	1,920	1,800	770	0
Dec-69	1970	12	3,930	1,030	3,700	800	0
Jan-70	1970	1	3,930	1,030	3,700	800	0
Feb-70	1970	2	2,210	630	2,300	720	0
Mar-70	1970	3	5,740	2,940	3,600	800	0
Apr-70	1970	4	7,820	2,870	6,500	1,550	0
May-70	1970	5	56,440	31,640	26,400	1,600	89
Jun-70	1970	6	33,670	21,820	13,400	1,550	9359
Jul-70	1970	7	14,360	11,060	4,900	1,600	20221
Aug-70	1970	8	3,400	2,000	3,000	1,600	21271
Sep-70	1970	9	13,210	13,360	1,400	1,550	6625
Oct-70	1971	10	14,700	13,100	2,400	800	1192
Nov-70	1971	11	4,050	1,620	3,200	770	0
Dec-70	1971	12	4,930	1,330	4,400	800	0
Jan-71	1971	1	3,730	830	3,700	800	0
Feb-71	1971	2	2,810	530	3,000	720	0
Mar-71	1971	3	6,340	3,540	3,600	800	0
Apr-71	1971	4	26,690	10,440	17,800	1,550	0
May-71	1971	5	58,740	32,840	27,500	1,600	1340
Jun-71	1971	6	40,360	28,110	13,800	1,550	13310
Jul-71	1971	7	22,340	20,340	3,600	1,600	22179
Aug-71	1971	8	5,920	4,320	3,200	1,600	20912
Sep-71	1971	9	13,730	12,280	3,000	1,550	1871
Oct-71	1972	10	15,200	13,900	2,100	800	53
Nov-71	1972	11	3,450	2,320	1,900	770	0
Dec-71	1972	12	4,930	1,930	3,800	800	0
Jan-72	1972	1	4,530	1,530	3,800	800	0
Feb-72	1972	2	2,610	1,060	2,300	750	0
Mar-72	1972	3	11,640	4,340	8,100	800	0
Apr-72	1972	4	20,990	7,440	15,100	1,550	0
May-72	1972	5	45,700	28,600	18,700	1,600	13575
Jun-72	1972	6	32,690	25,840	8,400	1,550	16317
Jul-72	1972	7	12,170	10,770	3,000	1,600	20380
Aug-72	1972	8	2,020	1,520	2,100	1,600	15704
Sep-72	1972	9	11,130	11,680	1,000	1,550	3854
Oct-72	1973	10	17,500	14,700	3,600	800	0
Nov-72	1973	11	4,230	2,600	2,400	770	0
Dec-72	1973	12	5,030	2,130	3,700	800	0
Jan-73	1973	1	3,330	1,130	3,000	800	0
Feb-73	1973	2	3,900	920	3,700	720	0
Mar-73	1973	3	5,840	3,140	3,500	800	0
Apr-73	1973	4	9,520	4,670	6,400	1,550	0
May-73	1973	5	83,610	36,810	48,400	1,600	0
Jun-73	1973	6	41,720	27,670	15,600	1,550	8627
Jul-73	1973	7	21,870	16,770	6,700	1,600	20308
Aug-73	1973	8	7,200	4,800	4,000	1,600	17853
Sep-73	1973	9	14,230	13,580	2,200	1,550	4311

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change in Storage	Shortage
Oct-69	1970	7,399	0.17	14,115.0	2,393	-	8725	8725	0
Nov-69	1970	3,680	0.05	14,108.5	706	-	-730	-730	0
Dec-69	1970	3,619	0.01	14,111.3	141	-	311	311	0
Jan-70	1970	3,249	0.01	14,117.3	141	-	681	681	0
Feb-70	1970	4,601	0.01	14,096.1	141	-	-2391	-2391	0
Mar-70	1970	3,445	0.08	14,116.4	1,129	-	2295	2295	0
Apr-70	1970	13,333	0.18	14,067.7	2,537	-	-5513	-5513	0
May-70	1970	10,693	0.36	14,467.4	5,136	-	45658	45658	0
Jun-70	1970	11,627	0.46	14,571.1	6,679	-	12684	12684	0
Jul-70	1970	14,102	0.48	14,406.9	6,955	-	-19963	-19963	0
Aug-70	1970	14,853	0.42	14,117.7	5,990	-	-32724	-32724	0
Sep-70	1970	13,302	0.32	14,058.3	4,508	-	-6717	-6717	0
Oct-70	1971	6,971	0.17	14,116.1	2,395	-	6537	6537	0
Nov-70	1971	3,413	0.05	14,121.7	706	-	637	637	0
Dec-70	1971	3,720	0.01	14,132.4	141	-	1210	1210	0
Jan-71	1971	5,309	0.01	14,118.5	141	-	-1579	-1579	0
Feb-71	1971	4,650	0.01	14,102.2	141	-	-1840	-1840	0
Mar-71	1971	5,576	0.08	14,108.9	1,128	-	764	764	0
Apr-71	1971	7,897	0.18	14,275.0	2,555	-	18793	18793	0
May-71	1971	9,115	0.36	14,680.7	5,212	-	48285	48285	0
Jun-71	1971	11,551	0.46	14,807.4	6,782	-	15499	15499	0
Jul-71	1971	14,102	0.48	14,693.4	7,080	-	-13941	-13941	0
Aug-71	1971	14,853	0.42	14,449.4	6,120	-	-29845	-29845	0
Sep-71	1971	15,182	0.32	14,422.2	4,619	-	-3323	-3323	0
Oct-71	1972	8,788	0.17	14,474.2	2,456	-	6359	6359	0
Nov-71	1972	3,486	0.05	14,473.9	724	-	-36	-36	0
Dec-71	1972	4,242	0.01	14,479.5	145	-	688	688	0
Jan-72	1972	6,631	0.01	14,462.4	145	-	-2101	-2101	0
Feb-72	1972	3,117	0.01	14,458.2	145	-	-507	-507	0
Mar-72	1972	3,398	0.08	14,525.6	1,159	-	8242	8242	0
Apr-72	1972	6,636	0.18	14,643.0	2,625	-	14354	14354	0
May-72	1972	11,441	0.36	14,812.1	5,302	-	20684	20684	0
Jun-72	1972	11,489	0.46	14,852.0	6,823	-	4884	4884	0
Jul-72	1972	14,102	0.48	14,669.6	7,085	-	-22312	-22312	0
Aug-72	1972	14,853	0.42	14,436.2	6,112	-	-28537	-28537	0
Sep-72	1972	13,302	0.32	14,384.3	4,611	-	-6026	-6026	0
Oct-72	1973	8,922	0.17	14,457.1	2,452	-	8578	8578	0
Nov-72	1973	3,935	0.05	14,459.5	723	-	295	295	0
Dec-72	1973	6,862	0.01	14,444.6	145	-	-1832	-1832	0
Jan-73	1973	6,726	0.01	14,416.5	144	-	-3396	-3396	0
Feb-73	1973	6,032	0.01	14,397.7	144	-	-2132	-2132	0
Mar-73	1973	3,293	0.08	14,420.2	1,153	-	2547	2547	0
Apr-73	1973	3,719	0.18	14,467.6	2,600	-	5801	5801	0
May-73	1973	7,918	0.36	15,086.5	5,320	-	75692	75692	0
Jun-73	1973	11,250	0.46	15,265.1	6,981	-	21843	21843	0
Jul-73	1973	14,403	0.48	15,160.1	7,302	-	-12841	-12841	0
Aug-73	1973	15,154	0.42	14,949.1	6,323	-	-25807	-25807	0
Sep-73	1973	13,593	0.32	14,919.1	4,779	-	-3674	-3674	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-69	1970	717,472	7,577.5	8,875
Nov-69	1970	716,742	7,577.4	3,680
Dec-69	1970	717,053	7,577.5	3,619
Jan-70	1970	717,734	7,577.5	3,249
Feb-70	1970	715,343	7,577.3	4,601
Mar-70	1970	717,638	7,577.5	3,445
Apr-70	1970	712,125	7,577.1	13,333
May-70	1970	757,783	7,580.4	10,782
Jun-70	1970	770,468	7,581.2	20,986
Jul-70	1970	750,504	7,579.9	34,323
Aug-70	1970	717,780	7,577.5	36,124
Sep-70	1970	711,063	7,577.0	19,927
Oct-70	1971	717,600	7,577.5	8,163
Nov-70	1971	718,237	7,577.6	3,413
Dec-70	1971	719,447	7,577.6	3,720
Jan-71	1971	717,868	7,577.5	5,309
Feb-71	1971	716,028	7,577.4	4,650
Mar-71	1971	716,792	7,577.5	5,576
Apr-71	1971	735,586	7,578.8	7,897
May-71	1971	783,871	7,582.1	10,455
Jun-71	1971	799,370	7,583.1	24,861
Jul-71	1971	785,429	7,582.2	36,281
Aug-71	1971	755,583	7,580.2	35,765
Sep-71	1971	752,261	7,580.0	17,053
Oct-71	1972	758,620	7,580.4	8,841
Nov-71	1972	758,584	7,580.4	3,486
Dec-71	1972	759,271	7,580.5	4,242
Jan-72	1972	757,170	7,580.3	6,631
Feb-72	1972	756,663	7,580.3	3,117
Mar-72	1972	764,905	7,580.9	3,398
Apr-72	1972	779,259	7,581.8	6,636
May-72	1972	799,943	7,583.2	25,016
Jun-72	1972	804,827	7,583.5	27,806
Jul-72	1972	782,515	7,582.0	34,482
Aug-72	1972	753,977	7,580.1	30,557
Sep-72	1972	747,951	7,579.7	17,156
Oct-72	1973	756,530	7,580.3	8,922
Nov-72	1973	756,825	7,580.3	3,935
Dec-72	1973	754,993	7,580.2	6,862
Jan-73	1973	751,597	7,580.0	6,726
Feb-73	1973	749,465	7,579.8	6,032
Mar-73	1973	752,013	7,580.0	3,293
Apr-73	1973	757,814	7,580.4	3,719
May-73	1973	833,505	7,585.4	7,918
Jun-73	1973	855,349	7,586.9	19,877
Jul-73	1973	842,508	7,586.0	34,711
Aug-73	1973	816,700	7,584.3	33,007
Sep-73	1973	813,026	7,584.1	17,904

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-73	1974	10	14,790	13,290	2,300	800	499
Nov-73	1974	11	2,230	1,900	1,100	770	0
Dec-73	1974	12	1,830	1,630	1,000	800	0
Jan-74	1974	1	1,930	1,330	1,400	800	0
Feb-74	1974	2	4,110	930	3,900	720	0
Mar-74	1974	3	6,240	3,740	3,300	800	0
Apr-74	1974	4	11,820	3,870	9,500	1,550	0
May-74	1974	5	50,910	33,210	19,300	1,600	3811
Jun-74	1974	6	25,690	19,540	7,700	1,550	18418
Jul-74	1974	7	10,070	8,870	2,800	1,600	17193
Aug-74	1974	8	3,020	1,320	3,300	1,600	19202
Sep-74	1974	9	11,310	10,860	2,000	1,550	5680
Oct-74	1975	10	14,700	12,500	3,000	800	1246
Nov-74	1975	11	1,750	1,020	1,500	770	0
Dec-74	1975	12	3,550	650	3,700	800	0
Jan-75	1975	1	3,950	450	4,300	800	0
Feb-75	1975	2	2,190	410	2,500	720	0
Mar-75	1975	3	6,020	2,620	4,200	800	0
Apr-75	1975	4	17,720	2,270	17,000	1,550	0
May-75	1975	5	58,440	23,940	36,100	1,600	0
Jun-75	1975	6	52,240	36,890	16,900	1,550	826
Jul-75	1975	7	29,780	26,280	5,100	1,600	22554
Aug-75	1975	8	9,800	7,700	3,700	1,600	22260
Sep-75	1975	9	13,320	12,770	2,100	1,550	11054
Oct-75	1976	10	14,800	13,700	1,900	800	2258
Nov-75	1976	11	3,250	1,620	2,400	770	0
Dec-75	1976	12	3,130	1,130	2,800	800	0
Jan-76	1976	1	2,250	850	2,200	800	0
Feb-76	1976	2	2,330	880	2,200	750	0
Mar-76	1976	3	5,550	2,950	3,400	800	0
Apr-76	1976	4	11,220	3,670	9,100	1,550	0
May-76	1976	5	59,110	33,110	27,600	1,600	7245
Jun-76	1976	6	16,280	9,230	8,600	1,550	21136
Jul-76	1976	7	3,450	2,750	2,300	1,600	22424
Aug-76	1976	8	1,930	430	3,100	1,600	19459
Sep-76	1976	9	10,210	11,160	600	1,550	7094
Oct-76	1977	10	12,370	12,170	1,000	800	533
Nov-76	1977	11	690	460	1,000	770	0
Dec-76	1977	12	850	350	1,300	800	0
Jan-77	1977	1	850	350	1,300	800	0
Feb-77	1977	2	1,480	400	1,800	720	0
Mar-77	1977	3	3,050	550	3,300	800	0
Apr-77	1977	4	9,020	3,470	7,100	1,550	2309
May-77	1977	5	10,600	7,600	4,600	1,600	7911
Jun-77	1977	6	2,370	1,020	2,900	1,550	21144
Jul-77	1977	7	1,850	1,250	2,200	1,600	18447
Aug-77	1977	8	(1,250)	150	200	1,600	17826
Sep-77	1977	9	(800)	50	700	1,550	6321

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change In Storage	Shortage
Oct-73	1974	8,257	0.17	14,968.4	2,540	-	6034	6034	0
Nov-73	1974	3,289	0.05	14,959.7	748	-	-1059	-1059	0
Dec-73	1974	6,412	0.01	14,922.3	149	-	-4582	-4582	0
Jan-74	1974	6,512	0.01	14,884.8	149	-	-4582	-4582	0
Feb-74	1974	5,991	0.01	14,869.4	149	-	-1881	-1881	0
Mar-74	1974	5,932	0.08	14,872.0	1,190	-	308	308	0
Apr-74	1974	4,802	0.18	14,929.3	2,682	-	7018	7018	0
May-74	1974	6,258	0.36	15,263.3	5,435	-	40841	40841	0
Jun-74	1974	11,449	0.46	15,229.1	7,013	-	-4177	-4177	0
Jul-74	1974	14,102	0.48	15,055.6	7,268	-	-21225	-21225	0
Aug-74	1974	14,853	0.42	14,801.8	6,270	-	-31035	-31035	0
Sep-74	1974	13,302	0.32	14,739.1	4,727	-	-7672	-7672	0
Oct-74	1975	7,297	0.17	14,789.4	2,510	-	6157	6157	0
Nov-74	1975	4,029	0.05	14,770.8	739	-	-2279	-2279	0
Dec-74	1975	6,495	0.01	14,746.7	148	-	-2945	-2945	0
Jan-75	1975	6,588	0.01	14,725.1	147	-	-2638	-2638	0
Feb-75	1975	6,083	0.01	14,693.3	147	-	-3893	-3893	0
Mar-75	1975	6,633	0.08	14,688.3	1,175	-	-613	-613	0
Apr-75	1975	12,384	0.18	14,731.9	2,648	-	5336	5336	0
May-75	1975	7,918	0.36	15,145.0	5,378	-	50522	50522	0
Jun-75	1975	10,225	0.46	15,481.8	7,044	-	41189	41189	0
Jul-75	1975	11,471	0.48	15,447.1	7,423	-	-4245	-4245	0
Aug-75	1975	14,853	0.42	15,223.8	6,441	-	-27313	-27313	0
Sep-75	1975	13,302	0.32	15,133.5	4,857	-	-11036	-11036	0
Oct-75	1976	6,349	0.17	15,184.2	2,577	-	6193	6193	0
Nov-75	1976	3,382	0.05	15,183.1	759	-	-132	-132	0
Dec-75	1976	3,813	0.01	15,177.5	152	-	-683	-683	0
Jan-76	1976	6,535	0.01	15,142.5	152	-	-4285	-4285	0
Feb-76	1976	5,125	0.01	15,119.6	151	-	-2795	-2795	0
Mar-76	1976	5,447	0.08	15,120.5	1,210	-	103	103	0
Apr-76	1976	7,622	0.18	15,149.9	2,724	-	3598	3598	0
May-76	1976	10,171	0.36	15,490.8	5,515	-	41694	41694	0
Jun-76	1976	14,528	0.46	15,332.3	7,089	-	-19384	-19384	0
Jul-76	1976	14,102	0.48	15,061.9	7,295	-	-33076	-33076	0
Aug-76	1976	14,853	0.42	14,797.1	6,270	-	-32382	-32382	0
Sep-76	1976	13,302	0.32	14,713.8	4,722	-	-10186	-10186	0
Oct-76	1977	8,669	0.17	14,739.7	2,504	-	3168	3168	0
Nov-76	1977	3,974	0.05	14,712.9	736	-	-3284	-3284	0
Dec-76	1977	4,123	0.01	14,686.1	147	-	-3273	-3273	0
Jan-77	1977	3,838	0.01	14,661.7	147	-	-2988	-2988	0
Feb-77	1977	3,522	0.01	14,645.0	147	-	-2042	-2042	0
Mar-77	1977	4,082	0.08	14,636.5	1,171	-	-1032	-1032	0
Apr-77	1977	10,639	0.18	14,604.4	2,632	-	-3928	-3928	0
May-77	1977	17,523	0.36	14,483.1	5,236	-	-14834	-14834	0
Jun-77	1977	14,446	0.46	14,194.6	6,596	-	-33220	-33220	0
Jul-77	1977	14,102	0.48	13,923.3	6,748	-	-30699	-30699	0
Aug-77	1977	14,853	0.42	13,623.5	5,785	-	-33929	-33929	0
Sep-77	1977	13,302	0.32	13,443.0	4,331	-	-20423	-20423	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-73	1974	819,061	7,584.5	8,756
Nov-73	1974	818,001	7,584.4	3,289
Dec-73	1974	813,419	7,584.1	6,412
Jan-74	1974	808,837	7,583.8	6,512
Feb-74	1974	806,956	7,583.7	5,991
Mar-74	1974	807,264	7,583.7	5,932
Apr-74	1974	814,283	7,584.1	4,802
May-74	1974	855,124	7,586.9	10,069
Jun-74	1974	850,947	7,586.6	29,867
Jul-74	1974	829,722	7,585.2	31,295
Aug-74	1974	798,686	7,583.1	34,055
Sep-74	1974	791,015	7,582.6	18,982
Oct-74	1975	797,172	7,583.0	8,543
Nov-74	1975	794,893	7,582.9	4,029
Dec-74	1975	791,947	7,582.7	6,495
Jan-75	1975	789,309	7,582.5	6,588
Feb-75	1975	785,417	7,582.2	6,083
Mar-75	1975	784,803	7,582.2	6,633
Apr-75	1975	790,139	7,582.5	12,384
May-75	1975	840,661	7,585.9	7,918
Jun-75	1975	881,851	7,588.6	11,051
Jul-75	1975	877,606	7,588.4	34,025
Aug-75	1975	850,292	7,586.5	37,113
Sep-75	1975	839,257	7,585.8	24,356
Oct-75	1976	845,449	7,586.2	8,607
Nov-75	1976	845,317	7,586.2	3,382
Dec-75	1976	844,634	7,586.2	3,813
Jan-76	1976	840,350	7,585.9	6,535
Feb-76	1976	837,555	7,585.7	5,125
Mar-76	1976	837,658	7,585.7	5,447
Apr-76	1976	841,256	7,585.9	7,622
May-76	1976	882,950	7,588.7	17,416
Jun-76	1976	863,566	7,587.4	35,664
Jul-76	1976	830,490	7,585.2	36,526
Aug-76	1976	798,107	7,583.1	34,312
Sep-76	1976	787,921	7,582.4	20,396
Oct-76	1977	791,090	7,582.6	9,202
Nov-76	1977	787,806	7,582.4	3,974
Dec-76	1977	784,533	7,582.2	4,123
Jan-77	1977	781,545	7,582.0	3,838
Feb-77	1977	779,504	7,581.8	3,522
Mar-77	1977	778,471	7,581.8	4,082
Apr-77	1977	774,543	7,581.5	12,948
May-77	1977	759,709	7,580.5	25,434
Jun-77	1977	726,489	7,578.2	35,590
Jul-77	1977	695,790	7,575.9	32,549
Aug-77	1977	661,860	7,573.5	32,679
Sep-77	1977	641,438	7,572.0	19,623

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-77	1978	10	9,980	9,580	1,200	800	1106
Nov-77	1978	11	1,130	200	1,700	770	0
Dec-77	1978	12	4,030	430	4,400	800	0
Jan-78	1978	1	4,430	430	4,800	800	0
Feb-78	1978	2	1,680	300	2,100	720	0
Mar-78	1978	3	5,990	3,490	3,300	800	0
Apr-78	1978	4	24,120	6,970	18,700	1,550	0
May-78	1978	5	53,040	27,940	26,700	1,600	0
Jun-78	1978	6	36,760	30,110	8,200	1,550	14198
Jul-78	1978	7	22,370	19,470	4,500	1,600	24151
Aug-78	1978	8	1,620	2,120	1,100	1,600	20080
Sep-78	1978	9	11,910	11,060	2,400	1,550	2614
Oct-78	1979	10	13,870	11,970	2,700	800	0
Nov-78	1979	11	2,030	900	1,900	770	0
Dec-78	1979	12	1,930	1,030	1,700	800	0
Jan-79	1979	1	2,950	750	3,000	800	0
Feb-79	1979	2	2,590	810	2,500	720	0
Mar-79	1979	3	5,090	2,490	3,400	800	0
Apr-79	1979	4	10,220	4,870	6,900	1,550	0
May-79	1979	5	65,940	33,140	34,400	1,600	190
Jun-79	1979	6	32,310	15,460	18,400	1,550	19243
Jul-79	1979	7	12,340	8,940	5,000	1,600	21863
Aug-79	1979	8	1,300	1,500	1,400	1,600	16691
Sep-79	1979	9	10,810	10,760	1,600	1,550	3013
Oct-79	1980	10	14,770	12,070	3,500	800	0
Nov-79	1980	11	1,950	420	2,300	770	0
Dec-79	1980	12	3,050	450	3,400	800	0
Jan-80	1980	1	5,250	550	5,500	800	0
Feb-80	1980	2	3,130	380	3,500	750	0
Mar-80	1980	3	5,010	2,610	3,200	800	0
Apr-80	1980	4	26,720	8,170	20,100	1,550	0
May-80	1980	5	87,020	38,120	50,500	1,600	0
Jun-80	1980	6	49,600	36,850	14,300	1,550	10612
Jul-80	1980	7	26,740	22,340	6,000	1,600	18445
Aug-80	1980	8	5,700	3,200	4,100	1,600	20566
Sep-80	1980	9	14,120	13,070	2,600	1,550	4858
Oct-80	1981	10	15,190	12,990	3,000	800	2780
Nov-80	1981	11	3,630	1,200	3,200	770	0
Dec-80	1981	12	3,130	830	3,100	800	0
Jan-81	1981	1	1,750	650	1,900	800	0
Feb-81	1981	2	1,680	500	1,900	720	0
Mar-81	1981	3	6,190	2,390	4,600	800	0
Apr-81	1981	4	16,420	4,870	13,100	1,550	816
May-81	1981	5	31,030	22,530	10,100	1,600	6414
Jun-81	1981	6	16,780	13,730	4,600	1,550	17956
Jul-81	1981	7	1,350	2,350	600	1,600	21051
Aug-81	1981	8	450	150	1,900	1,600	18502
Sep-81	1981	9	12,490	11,140	2,900	1,550	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change in Storage	Shortage
Oct-77	1978	11,888	0.17	13,416.4	2,283	-	-3014	-3014	0
Nov-77	1978	10,245	0.05	13,335.8	669	-	-9115	-9115	0
Dec-77	1978	10,978	0.01	13,274.4	133	-	-6948	-6948	0
Jan-78	1978	10,726	0.01	13,218.8	132	-	-6296	-6296	0
Feb-78	1978	9,390	0.01	13,148.6	132	-	-7710	-7710	0
Mar-78	1978	7,708	0.08	13,132.8	1,051	-	-1718	-1718	0
Apr-78	1978	6,168	0.18	13,294.1	2,378	-	17952	17952	0
May-78	1978	13,107	0.36	13,647.0	4,849	-	39933	39933	0
Jun-78	1978	11,897	0.46	13,741.2	6,299	-	10665	10665	0
Jul-78	1978	15,890	0.48	13,585.1	6,558	-	-17671	-17671	0
Aug-78	1978	16,514	0.42	13,276.0	5,641	-	-34974	-34974	0
Sep-78	1978	16,437	0.32	13,212.9	4,238	-	-7141	-7141	0
Oct-78	1979	12,203	0.17	13,227.6	2,247	-	1667	1667	0
Nov-78	1979	7,224	0.05	13,181.0	660	-	-5194	-5194	0
Dec-78	1979	9,719	0.01	13,109.3	131	-	-7789	-7789	0
Jan-79	1979	10,465	0.01	13,040.1	131	-	-7515	-7515	0
Feb-79	1979	9,551	0.01	12,976.0	130	-	-6961	-6961	0
Mar-79	1979	9,819	0.08	12,932.5	1,036	-	-4729	-4729	0
Apr-79	1979	7,337	0.18	12,959.0	2,330	-	2883	2883	0
May-79	1979	13,278	0.36	13,432.4	4,750	-	52472	52472	0
Jun-79	1979	14,565	0.46	13,419.1	6,176	-	-1498	-1498	0
Jul-79	1979	15,881	0.48	13,194.4	6,387	-	-25404	-25404	0
Aug-79	1979	16,647	0.42	12,899.4	5,480	-	-32038	-32038	0
Sep-79	1979	15,420	0.32	12,829.3	4,117	-	-7623	-7623	0
Oct-79	1980	14,999	0.17	12,827.2	2,181	-	-229	-229	0
Nov-79	1980	8,344	0.05	12,768.3	640	-	-6394	-6394	0
Dec-79	1980	10,971	0.01	12,695.4	127	-	-7921	-7921	0
Jan-80	1980	11,222	0.01	12,640.4	127	-	-5972	-5972	0
Feb-80	1980	8,888	0.01	12,587.4	126	-	-5758	-5758	0
Mar-80	1980	10,394	0.08	12,537.8	1,005	-	-5384	-5384	0
Apr-80	1980	3,719	0.18	12,749.6	2,276	-	23001	23001	0
May-80	1980	7,918	0.36	13,466.7	4,719	-	79102	79102	0
Jun-80	1980	9,753	0.46	13,725.0	6,254	-	29235	29235	0
Jul-80	1980	15,990	0.48	13,657.0	6,572	-	-7695	-7695	0
Aug-80	1980	16,255	0.42	13,382.0	5,678	-	-31121	-31121	0
Sep-80	1980	11,337	0.32	13,363.7	4,279	-	-2075	-2075	0
Oct-80	1981	8,737	0.17	13,396.1	2,275	-	3673	3673	0
Nov-80	1981	5,106	0.05	13,383.1	669	-	-1476	-1476	0
Dec-80	1981	5,233	0.01	13,364.5	134	-	-2103	-2103	0
Jan-81	1981	4,593	0.01	13,339.4	134	-	-2843	-2843	0
Feb-81	1981	4,702	0.01	13,312.7	133	-	-3022	-3022	0
Mar-81	1981	8,256	0.08	13,294.4	1,064	-	-2066	-2066	0
Apr-81	1981	12,837	0.18	13,318.8	2,395	-	2767	2767	0
May-81	1981	17,377	0.36	13,382.8	4,806	-	7239	7239	0
Jun-81	1981	11,516	0.46	13,270.7	6,130	-	-12692	-12692	0
Jul-81	1981	14,102	0.48	12,962.4	6,296	-	-33803	-33803	0
Aug-81	1981	14,853	0.42	12,659.5	5,381	-	-32905	-32905	0
Sep-81	1981	16,588	0.32	12,621.7	4,045	-	-4098	-4098	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-77	1978	638,423	7,571.8	12,994
Nov-77	1978	629,308	7,571.1	10,245
Dec-77	1978	622,360	7,570.6	10,978
Jan-78	1978	616,064	7,570.2	10,726
Feb-78	1978	608,354	7,569.6	9,390
Mar-78	1978	606,636	7,569.4	7,708
Apr-78	1978	624,588	7,570.8	6,168
May-78	1978	664,521	7,573.7	13,107
Jun-78	1978	675,185	7,574.4	26,095
Jul-78	1978	657,515	7,573.2	40,041
Aug-78	1978	622,541	7,570.6	36,594
Sep-78	1978	615,400	7,570.1	19,051
Oct-78	1979	617,067	7,570.2	12,203
Nov-78	1979	611,873	7,569.8	7,224
Dec-78	1979	604,084	7,569.2	9,719
Jan-79	1979	596,569	7,568.6	10,465
Feb-79	1979	589,608	7,568.1	9,551
Mar-79	1979	584,879	7,567.7	9,819
Apr-79	1979	587,762	7,567.9	7,337
May-79	1979	640,234	7,571.9	13,468
Jun-79	1979	638,736	7,571.8	33,808
Jul-79	1979	613,332	7,570.0	37,744
Aug-79	1979	581,293	7,567.4	33,338
Sep-79	1979	573,671	7,566.8	18,433
Oct-79	1980	573,442	7,566.8	14,999
Nov-79	1980	567,048	7,566.3	8,344
Dec-79	1980	559,127	7,565.6	10,971
Jan-80	1980	553,155	7,565.2	11,222
Feb-80	1980	547,397	7,564.7	8,888
Mar-80	1980	542,013	7,564.3	10,394
Apr-80	1980	565,014	7,566.1	3,719
May-80	1980	644,116	7,572.2	7,918
Jun-80	1980	673,351	7,574.3	20,365
Jul-80	1980	665,655	7,573.7	34,435
Aug-80	1980	634,534	7,571.5	36,821
Sep-80	1980	632,459	7,571.3	16,195
Oct-80	1981	636,132	7,571.6	11,517
Nov-80	1981	634,655	7,571.5	5,106
Dec-80	1981	632,552	7,571.3	5,233
Jan-81	1981	629,709	7,571.1	4,593
Feb-81	1981	626,687	7,570.9	4,702
Mar-81	1981	624,622	7,570.8	8,256
Apr-81	1981	627,388	7,571.0	13,653
May-81	1981	634,627	7,571.5	23,791
Jun-81	1981	621,935	7,570.6	29,472
Jul-81	1981	588,132	7,568.0	35,153
Aug-81	1981	555,226	7,565.3	33,355
Sep-81	1981	551,128	7,565.0	16,588

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-81	1982	10	15,490	12,790	3,500	800	0
Nov-81	1982	11	2,650	1,120	2,300	770	0
Dec-81	1982	12	3,350	750	3,400	800	0
Jan-82	1982	1	5,400	700	5,500	800	0
Feb-82	1982	2	3,490	710	3,500	720	0
Mar-82	1982	3	4,950	2,550	3,200	800	0
Apr-82	1982	4	38,390	19,840	20,100	1,550	0
May-82	1982	5	87,020	38,120	50,500	1,600	272
Jun-82	1982	6	42,800	30,050	14,300	1,550	6533
Jul-82	1982	7	26,050	21,650	6,000	1,600	16985
Aug-82	1982	8	9,800	7,300	4,100	1,600	19760
Sep-82	1982	9	14,130	13,080	2,600	1,550	3775
Oct-82	1983	10	15,500	12,800	3,500	800	0
Nov-82	1983	11	3,250	1,720	2,300	770	0
Dec-82	1983	12	4,130	1,530	3,400	800	0
Jan-83	1983	1	5,630	930	5,500	800	0
Feb-83	1983	2	3,510	730	3,500	720	0
Mar-83	1983	3	6,040	3,640	3,200	800	0
Apr-83	1983	4	29,390	10,840	20,100	1,550	0
May-83	1983	5	87,020	38,120	50,500	1,600	6500
Jun-83	1983	6	49,060	36,310	14,300	1,550	11831
Jul-83	1983	7	28,050	23,650	6,000	1,600	11164
Aug-83	1983	8	11,600	9,100	4,100	1,600	13305
Sep-83	1983	9	17,920	16,870	2,600	1,550	1005
Oct-83	1984	10	15,400	12,700	3,500	800	1376
Nov-83	1984	11	2,930	1,400	2,300	770	0
Dec-83	1984	12	3,350	750	3,400	800	0
Jan-84	1984	1	5,400	700	5,500	800	0
Feb-84	1984	2	3,330	580	3,500	750	0
Mar-84	1984	3	5,610	3,210	3,200	800	0
Apr-84	1984	4	29,020	10,470	20,100	1,550	0
May-84	1984	5	87,020	38,120	50,500	1,600	5000
Jun-84	1984	6	42,800	30,050	14,300	1,550	11408
Jul-84	1984	7	26,180	21,780	6,000	1,600	15780
Aug-84	1984	8	9,700	7,200	4,100	1,600	16592
Sep-84	1984	9	15,920	14,870	2,600	1,550	12220
Oct-84	1985	10	14,700	12,500	3,000	800	0
Nov-84	1985	11	1,650	920	1,500	770	0
Dec-84	1985	12	3,930	1,030	3,700	800	0
Jan-85	1985	1	4,130	630	4,300	800	0
Feb-85	1985	2	2,090	310	2,500	720	0
Mar-85	1985	3	6,290	2,890	4,200	800	0
Apr-85	1985	4	25,790	10,340	17,000	1,550	0
May-85	1985	5	69,810	35,310	36,100	1,600	283
Jun-85	1985	6	46,460	31,110	16,900	1,550	14352
Jul-85	1985	7	24,030	20,530	5,100	1,600	12427
Aug-85	1985	8	14,120	12,020	3,700	1,600	20887
Sep-85	1985	9	17,600	17,050	2,100	1,550	4927

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change In Storage	Shortage
Oct-81	1982	7,754	0.17	12,693.0	2,152	-	7736	7736	0
Nov-81	1982	5,308	0.05	12,668.5	634	-	-2658	-2658	0
Dec-81	1982	7,140	0.01	12,633.6	127	-	-3790	-3790	0
Jan-82	1982	7,756	0.01	12,611.9	126	-	-2356	-2356	0
Feb-82	1982	6,940	0.01	12,580.1	126	-	-3450	-3450	0
Mar-82	1982	3,452	0.08	12,593.9	1,007	-	1498	1498	0
Apr-82	1982	3,719	0.18	12,913.1	2,296	-	34671	34671	0
May-82	1982	7,646	0.36	13,623.7	4,777	-	79102	79102	0
Jun-82	1982	9,895	0.46	13,856.7	6,320	-	26372	26372	0
Jul-82	1982	12,227	0.48	13,828.8	6,645	-	-3162	-3162	0
Aug-82	1982	15,609	0.42	13,602.8	5,761	-	-25569	-25569	0
Sep-82	1982	14,033	0.32	13,570.3	4,348	-	-3678	-3678	0
Oct-82	1983	5,358	0.17	13,659.9	2,315	-	10142	10142	0
Nov-82	1983	3,627	0.05	13,656.6	683	-	-377	-377	0
Dec-82	1983	3,724	0.01	13,660.2	137	-	406	406	0
Jan-83	1983	3,609	0.01	13,678.0	137	-	2021	2021	0
Feb-83	1983	3,306	0.01	13,679.9	137	-	204	204	0
Mar-83	1983	2,626	0.08	13,710.0	1,096	-	3414	3414	0
Apr-83	1983	3,719	0.18	13,936.9	2,488	-	25671	25671	0
May-83	1983	6,258	0.36	14,580.2	5,133	-	74262	74262	0
Jun-83	1983	9,444	0.46	14,807.4	6,759	-	27785	27785	0
Jul-83	1983	12,227	0.48	14,845.5	7,117	-	4659	4659	0
Aug-83	1983	12,689	0.42	14,727.8	6,210	-	-14394	-14394	0
Sep-83	1983	11,474	0.32	14,772.3	4,720	-	5441	5441	0
Oct-83	1984	3,487	0.17	14,858.5	2,519	-	10537	10537	0
Nov-83	1984	3,237	0.05	14,855.9	743	-	-307	-307	0
Dec-83	1984	3,204	0.01	14,857.1	149	-	146	146	0
Jan-84	1984	3,029	0.01	14,876.5	149	-	2371	2371	0
Feb-84	1984	2,943	0.01	14,879.7	149	-	387	387	0
Mar-84	1984	2,506	0.08	14,905.1	1,191	-	3104	3104	0
Apr-84	1984	3,719	0.18	15,111.9	2,702	-	25301	25301	0
May-84	1984	6,258	0.36	15,720.1	5,550	-	75762	75762	0
Jun-84	1984	9,444	0.46	15,874.8	7,267	-	21948	21948	0
Jul-84	1984	12,227	0.48	15,861.9	7,617	-	-1827	-1827	0
Aug-84	1984	12,689	0.42	15,724.0	6,633	-	-19581	-19581	0
Sep-84	1984	10,050	0.32	15,679.2	5,025	-	-6350	-6350	0
Oct-84	1985	4,756	0.17	15,749.3	2,671	-	9944	9944	0
Nov-84	1985	3,497	0.05	15,736.3	787	-	-1847	-1847	0
Dec-84	1985	3,864	0.01	15,736.7	157	-	66	66	0
Jan-85	1985	3,759	0.01	15,739.3	157	-	371	371	0
Feb-85	1985	3,484	0.01	15,729.5	157	-	-1394	-1394	0
Mar-85	1985	2,446	0.08	15,756.6	1,259	-	3844	3844	0
Apr-85	1985	3,719	0.18	15,912.1	2,850	-	22071	22071	0
May-85	1985	7,635	0.36	16,348.2	5,807	-	61892	61892	0
Jun-85	1985	9,444	0.46	16,507.9	7,557	-	22664	22664	0
Jul-85	1985	12,227	0.48	16,503.5	7,923	-	-624	-624	0
Aug-85	1985	12,689	0.42	16,366.4	6,903	-	-19456	-19456	0
Sep-85	1985	10,050	0.32	16,384.9	5,240	-	2623	2623	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-81	1982	558,864	7,565.6	7,754
Nov-81	1982	556,206	7,565.4	5,308
Dec-81	1982	552,416	7,565.1	7,140
Jan-82	1982	550,060	7,564.9	7,756
Feb-82	1982	546,610	7,564.7	6,940
Mar-82	1982	548,108	7,564.8	3,452
Apr-82	1982	582,779	7,567.5	3,719
May-82	1982	661,881	7,573.5	7,918
Jun-82	1982	688,253	7,575.4	16,428
Jul-82	1982	685,091	7,575.2	29,212
Aug-82	1982	659,522	7,573.3	35,369
Sep-82	1982	655,843	7,573.0	17,808
Oct-82	1983	665,985	7,573.8	5,358
Nov-82	1983	665,608	7,573.7	3,627
Dec-82	1983	666,013	7,573.8	3,724
Jan-83	1983	668,034	7,573.9	3,609
Feb-83	1983	668,238	7,573.9	3,306
Mar-83	1983	671,652	7,574.2	2,626
Apr-83	1983	697,323	7,576.0	3,719
May-83	1983	771,585	7,581.3	12,758
Jun-83	1983	799,370	7,583.1	21,275
Jul-83	1983	804,029	7,583.5	23,391
Aug-83	1983	789,635	7,582.5	25,994
Sep-83	1983	795,076	7,582.9	12,479
Oct-83	1984	805,613	7,583.6	4,863
Nov-83	1984	805,306	7,583.5	3,237
Dec-83	1984	805,451	7,583.6	3,204
Jan-84	1984	807,822	7,583.7	3,029
Feb-84	1984	808,209	7,583.7	2,943
Mar-84	1984	811,313	7,583.9	2,506
Apr-84	1984	836,614	7,585.6	3,719
May-84	1984	912,376	7,590.6	11,258
Jun-84	1984	934,324	7,591.9	20,852
Jul-84	1984	932,497	7,591.8	28,007
Aug-84	1984	912,915	7,590.6	29,281
Sep-84	1984	906,566	7,590.2	22,270
Oct-84	1985	916,510	7,590.8	4,756
Nov-84	1985	914,662	7,590.7	3,497
Dec-84	1985	914,728	7,590.7	3,864
Jan-85	1985	915,099	7,590.8	3,759
Feb-85	1985	913,705	7,590.7	3,484
Mar-85	1985	917,549	7,590.9	2,446
Apr-85	1985	939,620	7,592.2	3,719
May-85	1985	1,001,512	7,595.9	7,918
Jun-85	1985	1,024,176	7,597.2	23,796
Jul-85	1985	1,023,552	7,597.2	24,654
Aug-85	1985	1,004,096	7,596.0	33,576
Sep-85	1985	1,006,719	7,596.2	14,977

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-85	1986	10	15,500	12,800	3,500	800	225
Nov-85	1986	11	3,250	1,720	2,300	770	0
Dec-85	1986	12	4,130	1,530	3,400	800	0
Jan-86	1986	1	5,630	930	5,500	800	0
Feb-86	1986	2	3,510	730	3,500	720	0
Mar-86	1986	3	6,040	3,640	3,200	800	0
Apr-86	1986	4	29,390	10,840	20,100	1,550	0
May-86	1986	5	87,020	38,120	50,500	1,600	0
Jun-86	1986	6	49,060	36,310	14,300	1,550	10410
Jul-86	1986	7	28,050	23,650	6,000	1,600	15777
Aug-86	1986	8	11,600	9,100	4,100	1,600	17618
Sep-86	1986	9	17,920	16,870	2,600	1,550	4588
Oct-86	1987	10	13,790	12,590	2,000	800	0
Nov-86	1987	11	1,630	800	1,600	770	0
Dec-86	1987	12	2,150	450	2,500	800	0
Jan-87	1987	1	1,150	550	1,400	800	0
Feb-87	1987	2	2,680	300	3,100	720	0
Mar-87	1987	3	4,140	2,740	2,200	800	0
Apr-87	1987	4	20,120	2,270	19,400	1,550	2096
May-87	1987	5	36,630	19,930	18,300	1,600	8866
Jun-87	1987	6	11,840	8,490	4,900	1,550	20474
Jul-87	1987	7	3,150	2,650	2,100	1,600	16058
Aug-87	1987	8	1,650	150	3,100	1,600	15373
Sep-87	1987	9	200	50	1,700	1,550	9048
Oct-87	1988	10	12,410	11,610	1,600	800	1050
Nov-87	1988	11	990	260	1,500	770	0
Dec-87	1988	12	550	350	1,000	800	0
Jan-88	1988	1	750	150	1,400	800	0
Feb-88	1988	2	250	-	1,000	750	0
Mar-88	1988	3	1,930	330	2,400	800	0
Apr-88	1988	4	7,400	2,950	6,000	1,550	0
May-88	1988	5	9,330	7,930	3,000	1,600	9223
Jun-88	1988	6	240	890	900	1,550	20281
Jul-88	1988	7	(850)	750	-	1,600	22257
Aug-88	1988	8	(950)	150	500	1,600	17701
Sep-88	1988	9	(600)	50	900	1,550	7309
Oct-88	1989	10	10,780	9,980	1,600	800	1420
Nov-88	1989	11	990	260	1,500	770	0
Dec-88	1989	12	550	350	1,000	800	0
Jan-89	1989	1	900	300	1,400	800	0
Feb-89	1989	2	290	10	1,000	720	0
Mar-89	1989	3	1,950	350	2,400	800	0
Apr-89	1989	4	7,820	3,370	6,000	1,550	1621
May-89	1989	5	10,330	8,930	3,000	1,600	12480
Jun-89	1989	6	840	1,490	900	1,550	20799
Jul-89	1989	7	(150)	1,450	-	1,600	20963
Aug-89	1989	8	(950)	150	500	1,600	12774
Sep-89	1989	9	(600)	50	900	1,550	1177

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change In Storage	Shortage
Oct-85	1986	5,058	0.17	16,456.9	2,792	-	10217	10217	0
Nov-85	1986	3,407	0.05	16,455.8	823	-	-157	-157	0
Dec-85	1986	3,774	0.01	16,458.3	165	-	356	356	0
Jan-86	1986	3,609	0.01	16,472.5	165	-	2021	2021	0
Feb-86	1986	2,484	0.01	16,479.7	165	-	1026	1026	0
Mar-86	1986	2,446	0.08	16,505.1	1,319	-	3594	3594	0
Apr-86	1986	3,719	0.18	16,686.0	2,987	-	25671	25671	0
May-86	1986	7,918	0.36	17,088.2	6,079	22,009	57093	57093	0
Jun-86	1986	9,444	0.46	17,088.2	7,861	29,206	0	0	0
Jul-86	1986	12,227	0.48	17,088.2	8,202	46	0	0	0
Aug-86	1986	12,689	0.42	16,956.4	7,149	-	-18707	-18707	0
Sep-86	1986	10,050	0.32	16,979.5	5,430	-	3282	3282	0
Oct-86	1987	4,608	0.17	17,044.2	2,892	-	9182	9182	0
Nov-86	1987	3,297	0.05	17,032.5	852	-	-1667	-1667	0
Dec-86	1987	3,576	0.01	17,022.4	170	-	-1426	-1426	0
Jan-87	1987	4,324	0.01	17,000.1	170	-	-3174	-3174	0
Feb-87	1987	3,109	0.01	16,997.1	170	-	-429	-429	0
Mar-87	1987	3,486	0.08	17,001.7	1,360	-	654	654	0
Apr-87	1987	6,716	0.18	17,081.3	3,067	-	11308	11308	0
May-87	1987	12,250	0.36	17,088.2	6,151	14,537	977	977	0
Jun-87	1987	13,356	0.46	16,933.3	7,825	-	-21990	-21990	0
Jul-87	1987	13,118	0.48	16,749.9	8,084	-	-26026	-26026	0
Aug-87	1987	13,761	0.42	16,556.3	6,994	-	-27484	-27484	0
Sep-87	1987	11,861	0.32	16,410.4	5,275	-	-20709	-20709	0
Oct-87	1988	6,522	0.17	16,444.4	2,793	-	4838	4838	0
Nov-87	1988	3,857	0.05	16,424.2	822	-	-2867	-2867	0
Dec-87	1988	4,041	0.01	16,399.6	164	-	-3491	-3491	0
Jan-88	1988	3,771	0.01	16,378.4	164	-	-3021	-3021	0
Feb-88	1988	4,470	0.01	16,348.6	164	-	-4220	-4220	0
Mar-88	1988	5,911	0.08	16,320.6	1,307	-	-3981	-3981	0
Apr-88	1988	11,759	0.18	16,289.9	2,935	-	-4359	-4359	0
May-88	1988	14,444	0.36	16,188.8	5,846	-	-14337	-14337	0
Jun-88	1988	13,381	0.46	15,953.3	7,393	-	-33422	-33422	0
Jul-88	1988	13,118	0.48	15,698.1	7,596	-	-36225	-36225	0
Aug-88	1988	13,761	0.42	15,440.8	6,539	-	-32412	-32412	0
Sep-88	1988	11,811	0.32	15,279.6	4,915	-	-19720	-19720	0
Oct-88	1989	2,567	0.17	15,335.1	2,602	-	6793	6793	0
Nov-88	1989	5,930	0.05	15,294.7	766	-	-4940	-4940	0
Dec-88	1989	6,126	0.01	15,249.1	153	-	-5576	-5576	0
Jan-89	1989	6,097	0.01	15,206.6	152	-	-5197	-5197	0
Feb-89	1989	5,564	0.01	15,163.5	152	-	-5274	-5274	0
Mar-89	1989	6,074	0.08	15,129.8	1,212	-	-4124	-4124	0
Apr-89	1989	9,496	0.18	15,102.8	2,721	-	-3297	-3297	0
May-89	1989	12,975	0.36	14,979.2	5,415	-	-15125	-15125	0
Jun-89	1989	13,399	0.46	14,706.4	6,828	-	-33358	-33358	0
Jul-89	1989	11,471	0.48	14,440.0	6,995	-	-32584	-32584	0
Aug-89	1989	13,761	0.42	14,198.7	6,014	-	-27485	-27485	0
Sep-89	1989	13,823	0.32	14,060.8	4,522	-	-15600	-15600	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-85	1986	1,016,936	7,596.8	5,283
Nov-85	1986	1,016,779	7,596.8	3,407
Dec-85	1986	1,017,135	7,596.8	3,774
Jan-86	1986	1,019,155	7,596.9	3,609
Feb-86	1986	1,020,182	7,597.0	2,484
Mar-86	1986	1,023,776	7,597.2	2,446
Apr-86	1986	1,049,447	7,598.7	3,719
May-86	1986	1,106,540	7,602.1	29,927
Jun-86	1986	1,106,540	7,602.1	49,060
Jul-86	1986	1,106,540	7,602.1	28,050
Aug-86	1986	1,087,833	7,601.0	30,307
Sep-86	1986	1,091,115	7,601.2	14,638
Oct-86	1987	1,100,297	7,601.7	4,608
Nov-86	1987	1,098,630	7,601.6	3,297
Dec-86	1987	1,097,204	7,601.5	3,576
Jan-87	1987	1,094,030	7,601.3	4,324
Feb-87	1987	1,093,601	7,601.3	3,109
Mar-87	1987	1,094,255	7,601.4	3,486
Apr-87	1987	1,105,563	7,602.0	8,812
May-87	1987	1,106,540	7,602.1	35,653
Jun-87	1987	1,084,550	7,600.8	33,830
Jul-87	1987	1,058,525	7,599.2	29,176
Aug-87	1987	1,031,041	7,597.6	29,134
Sep-87	1987	1,010,332	7,596.4	20,909
Oct-87	1988	1,015,171	7,596.7	7,572
Nov-87	1988	1,012,303	7,596.5	3,857
Dec-87	1988	1,008,812	7,596.3	4,041
Jan-88	1988	1,005,791	7,596.1	3,771
Feb-88	1988	1,001,571	7,595.9	4,470
Mar-88	1988	997,590	7,595.6	5,911
Apr-88	1988	993,230	7,595.4	11,759
May-88	1988	978,894	7,594.5	23,667
Jun-88	1988	945,472	7,592.5	33,662
Jul-88	1988	909,247	7,590.4	35,375
Aug-88	1988	876,835	7,588.3	31,462
Sep-88	1988	857,115	7,587.0	19,120
Oct-88	1989	863,908	7,587.4	3,987
Nov-88	1989	858,968	7,587.1	5,930
Dec-88	1989	853,393	7,586.7	6,126
Jan-89	1989	848,196	7,586.4	6,097
Feb-89	1989	842,922	7,586.0	5,564
Mar-89	1989	838,798	7,585.8	6,074
Apr-89	1989	835,502	7,585.6	11,117
May-89	1989	820,377	7,584.5	25,455
Jun-89	1989	787,019	7,582.3	34,198
Jul-89	1989	754,435	7,580.2	32,434
Aug-89	1989	726,950	7,578.2	26,535
Sep-89	1989	711,350	7,577.1	15,000

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-89	1990	10	11,510	10,710	1,600	800	0
Nov-89	1990	11	1,260	530	1,500	770	0
Dec-89	1990	12	1,100	900	1,000	800	0
Jan-90	1990	1	770	170	1,400	800	0
Feb-90	1990	2	290	10	1,000	720	0
Mar-90	1990	3	3,320	1,720	2,400	800	0
Apr-90	1990	4	8,840	4,390	6,000	1,550	0
May-90	1990	5	15,960	14,560	3,000	1,600	7501
Jun-90	1990	6	8,980	9,630	900	1,550	12631
Jul-90	1990	7	6,350	7,950	-	1,600	20759
Aug-90	1990	8	(950)	150	500	1,600	18393
Sep-90	1990	9	9,220	9,870	900	1,550	8694
Oct-90	1991	10	14,040	12,540	2,300	800	0
Nov-90	1991	11	70	740	100	770	0
Dec-90	1991	12	530	430	900	800	0
Jan-91	1991	1	1,430	430	1,800	800	0
Feb-91	1991	2	3,000	320	3,400	720	0
Mar-91	1991	3	4,130	2,430	2,500	800	0
Apr-91	1991	4	10,140	2,490	9,200	1,550	0
May-91	1991	5	31,350	22,350	10,600	1,600	0
Jun-91	1991	6	14,100	11,350	4,300	1,550	4362
Jul-91	1991	7	6,850	8,450	-	1,600	24624
Aug-91	1991	8	3,910	2,710	2,800	1,600	22451
Sep-91	1991	9	13,550	14,000	1,100	1,550	5321
Oct-91	1992	10	13,810	13,010	1,600	800	0
Nov-91	1992	11	2,310	1,580	1,500	770	0
Dec-91	1992	12	1,130	930	1,000	800	0
Jan-92	1992	1	960	360	1,400	800	0
Feb-92	1992	2	250	-	1,000	750	0
Mar-92	1992	3	3,770	2,170	2,400	800	0
Apr-92	1992	4	9,110	4,660	6,000	1,550	3116
May-92	1992	5	20,420	19,020	3,000	1,600	11842
Jun-92	1992	6	20	670	900	1,550	19568
Jul-92	1992	7	(650)	950	-	1,600	14280
Aug-92	1992	8	(950)	150	500	1,600	16251
Sep-92	1992	9	(600)	50	900	1,550	5238
Oct-92	1993	10	4,740	3,240	2,300	800	0
Nov-92	1993	11	1,740	1,010	1,500	770	0
Dec-92	1993	12	1,410	810	1,400	800	0
Jan-93	1993	1	3,830	830	3,800	800	0
Feb-93	1993	2	3,820	640	3,900	720	0
Mar-93	1993	3	6,450	3,050	4,200	800	0
Apr-93	1993	4	14,480	3,730	12,300	1,550	0
May-93	1993	5	42,600	30,900	13,300	1,600	0
Jun-93	1993	6	26,300	23,550	4,300	1,550	5444
Jul-93	1993	7	19,710	18,110	3,200	1,600	15868
Aug-93	1993	8	7,040	5,640	3,000	1,600	19570
Sep-93	1993	9	15,690	12,540	4,700	1,550	8478

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change In Storage	Shortage
Oct-89	1990	9,358	0.17	14,079.9	2,392	-	2152	2152	0
Nov-89	1990	6,352	0.05	14,034.9	703	-	-5092	-5092	0
Dec-89	1990	6,865	0.01	13,983.9	140	-	-5765	-5765	0
Jan-90	1990	8,097	0.01	13,919.2	140	-	-7327	-7327	0
Feb-90	1990	7,170	0.01	13,858.4	139	-	-6880	-6880	0
Mar-90	1990	7,942	0.08	13,817.5	1,107	-	-4622	-4622	0
Apr-90	1990	9,623	0.18	13,810.6	2,487	-	-783	-783	0
May-90	1990	15,517	0.36	13,748.2	4,961	-	-7058	-7058	0
Jun-90	1990	13,533	0.46	13,596.4	6,289	-	-17184	-17184	0
Jul-90	1990	14,447	0.48	13,341.4	6,465	-	-28856	-28856	0
Aug-90	1990	15,167	0.42	13,029.5	5,538	-	-34510	-34510	0
Sep-90	1990	13,490	0.32	12,910.2	4,150	-	-12964	-12964	0
Oct-90	1991	8,050	0.17	12,965.3	2,199	-	5990	5990	0
Nov-90	1991	5,608	0.05	12,914.3	647	-	-5538	-5538	0
Dec-90	1991	6,848	0.01	12,856.2	129	-	-6318	-6318	0
Jan-91	1991	6,739	0.01	12,807.3	128	-	-5309	-5309	0
Feb-91	1991	6,045	0.01	12,779.3	128	-	-3045	-3045	0
Mar-91	1991	6,821	0.08	12,754.5	1,021	-	-2691	-2691	0
Apr-91	1991	12,632	0.18	12,731.6	2,294	-	-2492	-2492	0
May-91	1991	18,664	0.36	12,848.4	4,604	-	12686	12686	0
Jun-91	1991	13,404	0.46	12,814.6	5,902	-	-3666	-3666	0
Jul-91	1991	13,045	0.48	12,530.9	6,083	-	-30819	-30819	0
Aug-91	1991	13,761	0.42	12,233.5	5,201	-	-32302	-32302	0
Sep-91	1991	12,219	0.32	12,196.8	3,909	-	-3990	-3990	0
Oct-91	1992	8,972	0.17	12,241.3	2,077	-	4838	4838	0
Nov-91	1992	6,557	0.05	12,202.2	611	-	-4247	-4247	0
Dec-91	1992	7,197	0.01	12,146.3	122	-	-6067	-6067	0
Jan-92	1992	7,118	0.01	12,089.7	121	-	-6158	-6158	0
Feb-92	1992	6,476	0.01	12,031.6	121	-	-6226	-6226	0
Mar-92	1992	7,301	0.08	11,996.2	961	-	-3531	-3531	0
Apr-92	1992	8,265	0.18	11,973.4	2,157	-	-2271	-2271	0
May-92	1992	15,069	0.36	11,908.2	4,299	-	-6491	-6491	0
Jun-92	1992	13,394	0.46	11,577.5	5,402	-	-32942	-32942	0
Jul-92	1992	13,900	0.48	11,288.1	5,488	-	-28830	-28830	0
Aug-92	1992	12,727	0.42	10,987.6	4,678	-	-29928	-29928	0
Sep-92	1992	13,002	0.32	10,740.4	3,476	-	-18840	-18840	0
Oct-92	1993	10,880	0.17	10,639.6	1,817	-	-6140	-6140	0
Nov-92	1993	9,401	0.05	10,513.9	529	-	-7661	-7661	0
Dec-92	1993	10,640	0.01	10,362.4	104	-	-9230	-9230	0
Jan-93	1993	10,360	0.01	10,255.2	103	-	-6530	-6530	0
Feb-93	1993	8,579	0.01	10,177.1	102	-	-4759	-4759	0
Mar-93	1993	5,734	0.08	10,188.9	815	-	716	716	0
Apr-93	1993	6,352	0.18	10,322.3	1,846	-	8128	8128	0
May-93	1993	11,165	0.36	10,838.2	3,809	-	31435	31435	0
Jun-93	1993	12,411	0.46	10,943.1	5,010	-	8445	8445	0
Jul-93	1993	15,035	0.48	10,793.1	5,217	-	-11193	-11193	0
Aug-93	1993	15,589	0.42	10,331.6	4,436	-	-28119	-28119	0
Sep-93	1993	13,770	0.32	10,223.9	3,289	-	-6558	-6558	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-89	1990	713,502	7,577.2	9,358
Nov-89	1990	708,410	7,576.8	6,352
Dec-89	1990	702,645	7,576.4	6,865
Jan-90	1990	695,318	7,575.9	8,097
Feb-90	1990	688,438	7,575.4	7,170
Mar-90	1990	683,816	7,575.1	7,942
Apr-90	1990	683,033	7,575.0	9,623
May-90	1990	675,975	7,574.5	23,018
Jun-90	1990	658,791	7,573.2	26,164
Jul-90	1990	629,935	7,571.2	35,206
Aug-90	1990	595,425	7,568.5	33,560
Sep-90	1990	582,461	7,567.5	22,184
Oct-90	1991	588,451	7,568.0	8,050
Nov-90	1991	582,912	7,567.5	5,608
Dec-90	1991	576,594	7,567.0	6,848
Jan-91	1991	571,285	7,566.6	6,739
Feb-91	1991	568,240	7,566.4	6,045
Mar-91	1991	565,550	7,566.2	6,821
Apr-91	1991	563,058	7,566.0	12,632
May-91	1991	575,744	7,567.0	18,664
Jun-91	1991	572,078	7,566.7	17,766
Jul-91	1991	541,259	7,564.2	37,669
Aug-91	1991	508,957	7,561.7	36,212
Sep-91	1991	504,967	7,561.4	17,540
Oct-91	1992	509,805	7,561.7	8,972
Nov-91	1992	505,558	7,561.4	6,557
Dec-91	1992	499,491	7,560.9	7,197
Jan-92	1992	493,333	7,560.4	7,118
Feb-92	1992	487,107	7,559.9	6,476
Mar-92	1992	483,576	7,559.6	7,301
Apr-92	1992	481,306	7,559.4	11,381
May-92	1992	474,814	7,558.9	26,911
Jun-92	1992	441,872	7,556.0	32,962
Jul-92	1992	413,042	7,553.5	28,180
Aug-92	1992	383,115	7,550.8	28,978
Sep-92	1992	364,274	7,549.1	18,240
Oct-92	1993	358,134	7,548.5	10,880
Nov-92	1993	350,473	7,547.8	9,401
Dec-92	1993	341,243	7,546.9	10,640
Jan-93	1993	334,713	7,546.3	10,360
Feb-93	1993	329,953	7,545.9	8,579
Mar-93	1993	330,669	7,545.9	5,734
Apr-93	1993	338,798	7,546.7	6,352
May-93	1993	370,232	7,549.7	11,165
Jun-93	1993	378,677	7,550.5	17,855
Jul-93	1993	367,484	7,549.4	30,903
Aug-93	1993	339,365	7,546.8	35,159
Sep-93	1993	332,807	7,546.1	22,248

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-93	1994	10	14,440	13,640	1,600	800	252
Nov-93	1994	11	1,980	1,250	1,500	770	0
Dec-93	1994	12	990	790	1,000	800	0
Jan-94	1994	1	830	230	1,400	800	0
Feb-94	1994	2	290	10	1,000	720	0
Mar-94	1994	3	4,090	2,490	2,400	800	0
Apr-94	1994	4	8,640	4,190	6,000	1,550	0
May-94	1994	5	20,730	19,330	3,000	1,600	6431
Jun-94	1994	6	990	1,640	900	1,550	21241
Jul-94	1994	7	(650)	950	-	1,600	21875
Aug-94	1994	8	(950)	150	500	1,600	12809
Sep-94	1994	9	(600)	50	900	1,550	9564
Oct-94	1995	10	11,350	10,150	2,000	800	0
Nov-94	1995	11	4,230	2,400	2,600	770	0
Dec-94	1995	12	2,780	1,480	2,100	800	0
Jan-95	1995	1	3,470	1,370	2,900	800	0
Feb-95	1995	2	2,480	900	2,300	720	0
Mar-95	1995	3	6,320	3,420	3,700	800	0
Apr-95	1995	4	28,370	5,020	24,900	1,550	0
May-95	1995	5	48,910	29,710	20,800	1,600	0
Jun-95	1995	6	41,460	30,110	12,900	1,550	1248
Jul-95	1995	7	23,350	20,550	4,400	1,600	10805
Aug-95	1995	8	10,380	8,280	3,700	1,600	17483
Sep-95	1995	9	14,210	14,560	1,200	1,550	6689
Oct-95	1996	10	14,790	13,290	2,300	800	0
Nov-95	1996	11	1,720	1,390	1,100	770	0
Dec-95	1996	12	1,290	1,090	1,000	800	0
Jan-96	1996	1	1,570	970	1,400	800	0
Feb-96	1996	2	3,960	810	3,900	750	0
Mar-96	1996	3	5,470	2,970	3,300	800	0
Apr-96	1996	4	14,750	6,800	9,500	1,550	0
May-96	1996	5	48,900	31,200	19,300	1,600	0
Jun-96	1996	6	30,120	23,970	7,700	1,550	9699
Jul-96	1996	7	13,850	12,650	2,800	1,600	16247
Aug-96	1996	8	3,300	1,600	3,300	1,600	19706
Sep-96	1996	9	12,240	11,790	2,000	1,550	5136
Oct-96	1997	10	14,480	13,280	2,000	800	0
Nov-96	1997	11	3,040	1,910	1,900	770	0
Dec-96	1997	12	4,160	2,060	2,900	800	0
Jan-97	1997	1	3,020	1,420	2,400	800	0
Feb-97	1997	2	3,270	990	3,000	720	0
Mar-97	1997	3	6,780	3,680	3,900	800	0
Apr-97	1997	4	26,430	10,180	17,800	1,550	0
May-97	1997	5	63,410	37,210	27,800	1,600	0
Jun-97	1997	6	35,360	27,510	9,400	1,550	7412
Jul-97	1997	7	15,980	14,080	3,500	1,600	18564
Aug-97	1997	8	7,130	5,830	2,900	1,600	15467
Sep-97	1997	9	18,550	17,600	2,500	1,550	5013

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change In Storage	Shortage
Oct-93	1994	6,922	0.17	10,343.2	1,748	-	7266	7266	0
Nov-93	1994	5,371	0.05	10,287.5	516	-	-3391	-3391	0
Dec-93	1994	5,841	0.01	10,207.9	102	-	-4851	-4851	0
Jan-94	1994	6,328	0.01	10,117.7	102	-	-5498	-5498	0
Feb-94	1994	5,720	0.01	10,028.4	101	-	-5430	-5430	0
Mar-94	1994	6,240	0.08	9,989.9	801	-	-2150	-2150	0
Apr-94	1994	12,103	0.18	9,927.9	1,793	-	-3463	-3463	0
May-94	1994	15,547	0.36	9,905.5	3,570	-	-1248	-1248	0
Jun-94	1994	13,322	0.46	9,304.1	4,418	-	-33573	-33573	0
Jul-94	1994	13,118	0.48	8,489.2	4,270	-	-35643	-35643	0
Aug-94	1994	14,012	0.42	7,941.7	3,450	-	-27771	-27771	0
Sep-94	1994	12,195	0.32	7,615.7	2,489	-	-22359	-22359	0
Oct-94	1995	8,888	0.17	7,651.6	1,298	-	2462	2462	0
Nov-94	1995	6,633	0.05	7,616.6	382	-	-2403	-2403	0
Dec-94	1995	7,151	0.01	7,552.8	76	-	-4371	-4371	0
Jan-95	1995	7,011	0.01	7,475.5	75	-	-3541	-3541	0
Feb-95	1995	5,696	0.01	7,403.9	74	-	-3216	-3216	0
Mar-95	1995	4,990	0.08	7,433.5	593	-	1330	1330	0
Apr-95	1995	6,433	0.18	7,793.5	1,370	-	21937	21937	0
May-95	1995	10,968	0.36	8,489.5	2,931	-	37942	37942	0
Jun-95	1995	9,803	0.46	9,210.6	4,071	-	30409	30409	0
Jul-95	1995	13,443	0.48	9,194.5	4,417	-	-898	-898	0
Aug-95	1995	15,608	0.42	8,653.9	3,748	-	-22711	-22711	0
Sep-95	1995	13,839	0.32	8,501.1	2,745	-	-6318	-6318	0
Oct-95	1996	4,705	0.17	8,745.0	1,466	-	10085	10085	0
Nov-95	1996	3,683	0.05	8,697.5	436	-	-1963	-1963	0
Dec-95	1996	3,851	0.01	8,635.6	87	-	-2561	-2561	0
Jan-96	1996	3,502	0.01	8,588.9	86	-	-1932	-1932	0
Feb-96	1996	4,207	0.01	8,582.9	86	-	-247	-247	0
Mar-96	1996	2,797	0.08	8,647.5	689	-	2673	2673	0
Apr-96	1996	3,871	0.18	8,910.6	1,580	-	10879	10879	0
May-96	1996	7,918	0.36	9,711.9	3,352	-	40982	40982	0
Jun-96	1996	11,051	0.46	9,879.8	4,506	-	9370	9370	0
Jul-96	1996	14,415	0.48	9,578.6	4,670	-	-16812	-16812	0
Aug-96	1996	15,166	0.42	8,958.2	3,893	-	-31572	-31572	0
Sep-96	1996	13,604	0.32	8,801.0	2,841	-	-6500	-6500	0
Oct-96	1997	9,203	0.17	8,928.6	1,507	-	5277	5277	0
Nov-96	1997	5,222	0.05	8,875.8	445	-	-2182	-2182	0
Dec-96	1997	3,497	0.01	8,891.9	89	-	663	663	0
Jan-97	1997	6,755	0.01	8,801.6	88	-	-3735	-3735	0
Feb-97	1997	6,109	0.01	8,732.9	88	-	-2839	-2839	0
Mar-97	1997	2,446	0.08	8,837.7	703	-	4334	4334	0
Apr-97	1997	3,719	0.18	9,330.7	1,635	-	22711	22711	0
May-97	1997	7,918	0.36	10,300.0	3,534	-	55492	55492	0
Jun-97	1997	9,444	0.46	10,603.7	4,808	-	18504	18504	0
Jul-97	1997	14,858	0.48	10,317.4	5,021	-	-17442	-17442	0
Aug-97	1997	15,609	0.42	9,914.8	4,249	-	-23946	-23946	0
Sep-97	1997	14,033	0.32	9,905.9	3,171	-	-496	-496	0

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	Water Year	Strawberry Reservoir Storage for Alternatives Simulation	Strawberry Reservoir Elevation (FT-MSL)	Ouflow (Release+Evap+Spill)
Oct-93	1994	340,073	7,546.8	7,174
Nov-93	1994	336,682	7,546.5	5,371
Dec-93	1994	331,831	7,546.0	5,841
Jan-94	1994	326,333	7,545.5	6,328
Feb-94	1994	320,903	7,545.0	5,720
Mar-94	1994	318,753	7,544.8	6,240
Apr-94	1994	315,290	7,544.4	12,103
May-94	1994	314,041	7,544.3	21,978
Jun-94	1994	280,469	7,540.8	34,563
Jul-94	1994	244,826	7,536.7	34,993
Aug-94	1994	217,056	7,533.4	26,821
Sep-94	1994	194,696	7,530.6	21,759
Oct-94	1995	197,158	7,530.9	8,888
Nov-94	1995	194,755	7,530.6	6,633
Dec-94	1995	190,384	7,530.0	7,151
Jan-95	1995	186,843	7,529.5	7,011
Feb-95	1995	183,626	7,529.1	5,696
Mar-95	1995	184,957	7,529.3	4,990
Apr-95	1995	206,894	7,532.1	6,433
May-95	1995	244,836	7,536.7	10,968
Jun-95	1995	275,245	7,540.2	11,051
Jul-95	1995	274,348	7,540.1	24,248
Aug-95	1995	251,637	7,537.5	33,091
Sep-95	1995	245,319	7,536.8	20,528
Oct-95	1996	255,404	7,538.0	4,705
Nov-95	1996	253,441	7,537.7	3,683
Dec-95	1996	250,880	7,537.4	3,851
Jan-96	1996	248,948	7,537.2	3,502
Feb-96	1996	248,700	7,537.2	4,207
Mar-96	1996	251,373	7,537.5	2,797
Apr-96	1996	262,252	7,538.8	3,871
May-96	1996	303,234	7,543.2	7,918
Jun-96	1996	312,603	7,544.1	20,750
Jul-96	1996	295,792	7,542.4	30,662
Aug-96	1996	264,220	7,539.0	34,872
Sep-96	1996	257,719	7,538.2	18,740
Oct-96	1997	262,997	7,538.8	9,203
Nov-96	1997	260,815	7,538.6	5,222
Dec-96	1997	261,478	7,538.7	3,497
Jan-97	1997	257,743	7,538.2	6,755
Feb-97	1997	254,904	7,537.9	6,109
Mar-97	1997	259,238	7,538.4	2,446
Apr-97	1997	281,949	7,540.9	3,719
May-97	1997	337,441	7,546.6	7,918
Jun-97	1997	355,945	7,548.3	16,856
Jul-97	1997	338,503	7,546.7	33,422
Aug-97	1997	314,556	7,544.3	31,076
Sep-97	1997	314,060	7,544.3	19,046

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Ac-ft

Column:			1	2	3	4	5
Year	Water Year	Month	Strawberry Reservoir Inflow (less River Release and Evap)	SACS Inflow (less Evap, plus Precip)	Strawberry River Inflow	Strawberry River Release	Strawberry Reservoir SVP Release
Oct-97	1998	10	17,710	17,610	900	800	0
Nov-97	1998	11	4,550	3,420	1,900	770	0
Dec-97	1998	12	4,100	2,000	2,900	800	0
Jan-98	1998	1	3,070	1,570	2,300	800	0
Feb-98	1998	2	2,070	1,290	1,500	720	0
Mar-98	1998	3	6,040	4,040	2,800	800	0
Apr-98	1998	4	23,530	6,480	18,600	1,550	0
May-98	1998	5	68,810	36,510	33,900	1,600	0
Jun-98	1998	6	43,060	33,210	11,400	1,550	2356
Jul-98	1998	7	28,620	21,020	9,200	1,600	22150
Aug-98	1998	8	12,120	8,020	5,700	1,600	23530
Sep-98	1998	9	17,720	15,770	3,500	1,550	12190
Oct-98	1999	10	16,670	15,170	2,300	800	773
Nov-98	1999	11	3,170	2,840	1,100	770	0
Dec-98	1999	12	1,970	1,770	1,000	800	0
Jan-99	1999	1	1,960	1,360	1,400	800	0
Feb-99	1999	2	4,570	1,390	3,900	720	0
Mar-99	1999	3	6,280	3,780	3,300	800	0
Apr-99	1999	4	13,900	5,950	9,500	1,550	0
May-99	1999	5	50,600	32,900	19,300	1,600	0
Jun-99	1999	6	33,290	27,140	7,700	1,550	11216
Jul-99	1999	7	20,120	18,920	2,800	1,600	22780
Aug-99	1999	8	6,340	4,640	3,300	1,600	19486
Sep-99	1999	9	15,060	14,610	2,000	1,550	7517
Average			165,178	104,913	74,412	14,147.20	61,000
Maximum			122,420	38,120	85,900	1,600	28,288
Minimum			(1,250)	-	-	720	-
Formula:			Input Data	Input Data	Input Data	Input Data	Input Data

Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		6	7	8	9	10	11	12	13
Year	Water Year	Strawberry Reservoir CUP Release	Evaporation Rate (FT/MO)	Surface Water Area of Reservoir (Acres)	Evaporati on	Spills	Net Flow Into Strawberry Reservoir	Change in Storage	Shortage
Oct-97	1998	12,394	0.17	10,001.1	1,692	-	5316	5316	0
Nov-97	1998	6,508	0.05	9,966.0	499	-	-1958	-1958	0
Dec-97	1998	5,842	0.01	9,934.8	100	-	-1742	-1742	0
Jan-98	1998	9,785	0.01	9,814.5	99	-	-6715	-6715	0
Feb-98	1998	8,953	0.01	9,691.2	98	-	-6883	-6883	0
Mar-98	1998	4,313	0.08	9,722.2	777	-	1727	1727	0
Apr-98	1998	4,469	0.18	10,060.8	1,780	-	19061	19061	0
May-98	1998	7,918	0.36	10,994.1	3,790	-	60892	60892	0
Jun-98	1998	10,807	0.46	11,294.2	5,126	-	29897	29897	0
Jul-98	1998	13,157	0.48	11,227.1	5,405	-	-6687	-6687	0
Aug-98	1998	16,731	0.42	10,944.6	4,656	-	-28141	-28141	0
Sep-98	1998	15,297	0.32	10,818.9	3,482	-	-9767	-9767	0
Oct-98	1999	4,460	0.17	10,961.3	1,851	-	11437	11437	0
Nov-98	1999	3,718	0.05	10,955.8	548	-	-548	-548	0
Dec-98	1999	3,933	0.01	10,936.1	109	-	-1963	-1963	0
Jan-99	1999	6,555	0.01	10,890.0	109	-	-4595	-4595	0
Feb-99	1999	3,123	0.01	10,904.5	109	-	1447	1447	0
Mar-99	1999	3,339	0.08	10,934.1	874	-	2941	2941	0
Apr-99	1999	7,994	0.18	10,993.4	1,973	-	5906	5906	0
May-99	1999	7,918	0.36	11,421.8	4,035	-	42682	42682	0
Jun-99	1999	9,444	0.46	11,548.6	5,283	-	12630	12630	0
Jul-99	1999	11,471	0.48	11,406.8	5,509	-	-14131	-14131	0
Aug-99	1999	14,853	0.42	11,125.7	4,732	-	-27999	-27999	0
Sep-99	1999	13,302	0.32	11,067.9	3,551	-	-5759	-5759	0
Average		101,900	3	157,530	33,788	1,316	962	962	(0)
Maximum		18,664	0	17,088	8,202	29,206	114,502	114,502	0
Minimum		2,320	0	7,404	74	-	(36,225)	(36,225)	(0)
Formula:		Input Data	Input Data	function of (14)	0.5x(14i+1 4i-1)x(7)	IF((1106540-(14)i-1)>(3)-(5)-(6)),0,(4)-(5)-(6)-(1106540-(14i-1)	(1)-((5)+(6)+(10))	IF((14i)=110 6540,(11),(1 4i)-(14i-1))	(12)-(11)

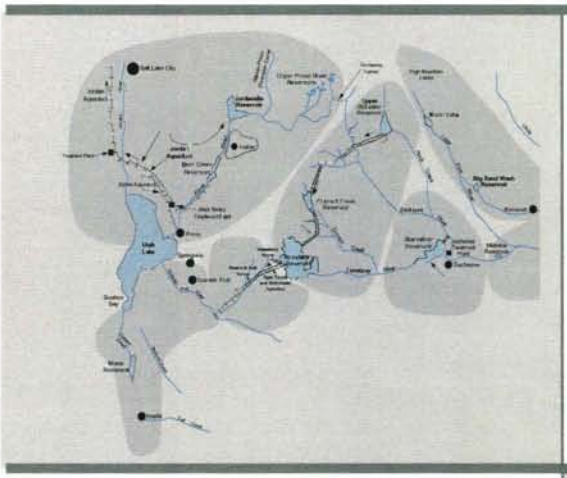
Strawberry Reservoir Operation Model - Bonneville Unit Operations

Column:		350,147 14	15	16
Year	**Water Year**	**Strawberry Reservoir Storage for Alternatives Simulation**	**Strawberry Reservoir Elevation (FT-MSL)**	**Ouflow (Release+Evap+Spill)**
Oct-97	1998	319,376	7,544.8	12,394
Nov-97	1998	317,418	7,544.6	6,508
Dec-97	1998	315,677	7,544.4	5,842
Jan-98	1998	308,962	7,543.7	9,785
Feb-98	1998	302,078	7,543.0	8,953
Mar-98	1998	303,805	7,543.2	4,313
Apr-98	1998	322,866	7,545.2	4,469
May-98	1998	383,758	7,550.9	7,918
Jun-98	1998	413,655	7,553.5	13,163
Jul-98	1998	406,967	7,552.9	35,307
Aug-98	1998	378,826	7,550.5	40,261
Sep-98	1998	369,059	7,549.6	27,487
Oct-98	1999	380,497	7,550.6	5,233
Nov-98	1999	379,948	7,550.6	3,718
Dec-98	1999	377,985	7,550.4	3,933
Jan-99	1999	373,391	7,550.0	6,555
Feb-99	1999	374,837	7,550.1	3,123
Mar-99	1999	377,779	7,550.4	3,339
Apr-99	1999	383,685	7,550.9	7,994
May-99	1999	426,367	7,554.6	7,918
Jun-99	1999	438,997	7,555.7	20,660
Jul-99	1999	424,866	7,554.5	34,251
Aug-99	1999	396,866	7,552.0	34,339
Sep-99	1999	391,107	7,551.5	20,819
Average		7,483,193	90,835	164,216
Maximum		1,106,540	7,602	49,060
Minimum		183,626	7,529	2,446
		48,091		
Formula:		IF((14i-1)+(11))>1106540,1106540,(14i-1)+(11))	function of (14)	(5)+(6)+(10)

WATER SUPPLY APPENDIX

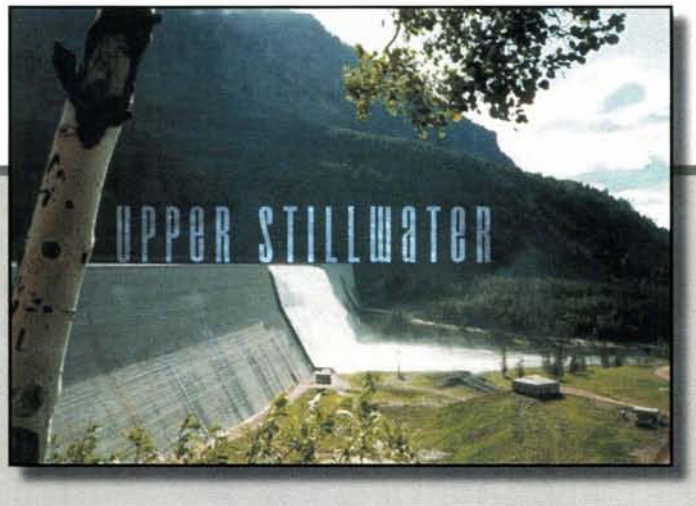
Volume 4 - Diamond Fork Creek and Spanish Fork River

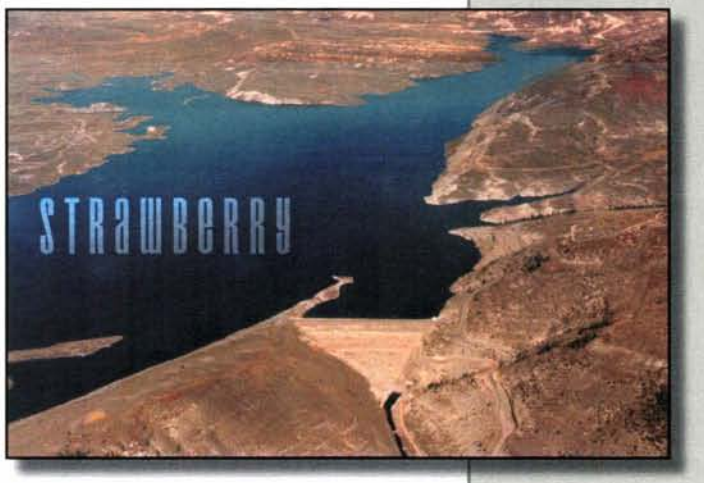
Central Utah Project Completion Program



Supplement to the 1988 Definite Plan Report for the Bonneville Unit

October 2004





UTAH RECLAMATION MITIGATION AND CONSERVATION COMMISSION

Volume 4-Diamond Fork Creek and Spanish Fork River

SUPPLEMENT TO THE BONNEVILLE UNIT DEFINITE PLAN REPORT

WATER SUPPLY APPENDIX, VOLUME 4 – DIAMOND FORK CREEK AND SPANISH FORK RIVER

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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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The purpose of this volume is to document the hydrologic and water supply analyses of the facilities and waterways that transport and distribute Bonneville Unit water released from Strawberry Reservoir for transbasin diversion to the Bonneville Basin. This volume provides detailed information in support of Volume 1 of the Water Supply Appendix to the 2004 Supplement to the 1988 Bonneville Unit DPR (1988 DPR), which describes the Bonneville Unit changes since the publication of the 1988 DPR.

Included in this volume are analyses of the Diamond Fork System and the ULS System in southern Utah County, including the operation of Diamond Fork Creek, Spanish Fork River, and Hobble Creek.

Changes and refinements in the layout and operation of the Diamond Fork System operating plan under CUPCA are described, as are layout and operation of the newly proposed ULS System. This volume is organized with the following major chapters:

Chapter 2 - Diamond Fork System Hydrology
Chapter 3 - Spanish Fork River and Hobble Creek Hydrology
Attachments

The operational analyses of Strawberry Reservoir, the Diamond Fork System, and the Spanish Fork River are linked in the Spanish Fork River Spreadsheet Model, a computational model that tracks Bonneville Unit and Strawberry Valley Project (SVP) water from Strawberry Reservoir to southern Utah County and Utah Lake. The model is described in Chapter 2 and listed in Attachment B.

SIGNIFICANT CHANGES SINCE 1988 SUPPLEMENTAL DEFINITE PLAN REPORT

The following changes have occurred in the Bonneville Unit since the 1988 document:

- Transbasin diversion from Strawberry Reservoir has been reduced
- Minimum flows have been established in Sixth Water Creek
- Minimum flows have been established in Diamond Fork Creek
- 1991 Operating Agreement was signed with Strawberry Water Users Association
- Three changes have occurred in Bonneville Unit Planning
  - Elimination of deliveries to Sevier River Basin
  - Elimination of agricultural water deliveries to Juab County and southern Utah County
  - Inclusion of June sucker flows in Hobble Creek
- The SWUA is entitled to the continued use of Strawberry Tunnel accretion water as long as it is physically available for direct flow diversion.

Central Utah Project Completion Program

Chapter 2

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

This chapter presents details of the operational aspects of the Diamond Fork System, Sixth Water Creek, and Diamond Fork Creek in conveying water from Strawberry Reservoir to the proposed ULS System facilities, Spanish Fork River, and to Hobble Creek.

BACKGROUND INFORMATION

The enlargement of Strawberry Reservoir and the facilities of the Diamond Fork System under the Bonneville Unit were planned to include continued SVP water delivery in a manner equivalent to the historical operation of the SVP. Syar Tunnel and the Strawberry Tunnel now provide the transbasin diversion for both SVP and CUP water, under a 1991 Operating Agreement described later in this chapter. The Strawberry Tunnel, which formerly delivered all the SVP water, now conveys at least enough flow to meet instream flow purposes in Sixth Water Creek, except during emergency circumstances when more water would be released through Strawberry Tunnel.

HYDROLOGIC SETTING OF DIAMOND FORK CREEK

The Diamond Fork System is the link between Strawberry Reservoir and the proposed ULS System. The Diamond Fork System conveys Strawberry Reservoir water through the Wasatch Mountain crest and Diamond Fork Canyon to the Spanish Fork River. Operationally, the facilities of the Diamond Fork System function in parallel with Sixth Water Creek and lower Diamond Fork Creek to convey the transbasin diversion to the Spanish Fork River corridor. By conveyance of a large portion of the transbasin diversion through the conduit system, the creek flows will be reduced to a flow regime desirable for the stream fishery and riparian habitat values. Selective releases from the conduit system will maintain at least specified minimum flows for these purposes. The Diamond Fork System facilities also provide pressurized pipe flow for hydropower generation, and deliver water under pressure to the proposed ULS System's Spanish Fork Canyon Pipeline.

Natural Streamflows

Diamond Fork Creek and its tributary Sixth Water Creek are perennial streams fed by smaller creeks, springs, and seeps. Their natural flows fluctuate seasonally in response to spring snowmelt and occasional periods of heavy precipitation in the watershed. The historical discharge of Diamond Fork Creek to the Spanish Fork River has averaged approximately 107,000 acre-feet per year during the 50 year period from 1950 to 1999. Of that amount, approximately 79,000 acre-feet occurred upstream of Three Forks (the confluence of Sixth Water and Diamond Fork creeks). The total flow includes 45,000 acre-feet per year of natural flow water and 62,000 acre-feet per year of transbasin water from Strawberry Reservoir. The natural flow includes approximately 3,600 acre-feet of water that seeps into Strawberry Tunnel and is discharged to Sixth Water Creek. For modeling purposes only, the tunnel seepage is referred to as intercepted natural flow except when it occurs while the Strawberry Valley Project (SVP) is bringing transbasin water into the Bonneville Basin, in which case it is referred to as SVP water. This discussion of seepage water is not intended to define the

water rights-based ownership of Strawberry Tunnel seepage water or any other part of the natural flow of the Spanish Fork River. The Spanish Fork River Commissioner administers the natural flows of the Spanish Fork River watershed and the conveyance of imported water through the natural river channels.

Rights to Natural Streamflows

The natural flow of Diamond Fork Creek and its tributaries has been used for irrigation in southern Utah County since before the formulation of the Bonneville Unit, and the rights to the use of the natural flows have been acquired by southern Utah County entities. The natural flows will continue to be used in this manner with full operation of the Bonneville Unit, which will not alter the water available under those rights.

Losses on Strawberry Deliveries

The Spanish Fork River Commissioner has historically imposed losses on Strawberry Reservoir water that is conveyed down the natural streams of the Spanish Fork System. These losses vary by reach and only accrue during the irrigation season. The following table delineates the amount of loss (as a percentage of the volume delivered) for Bonneville Unit water and SVP water that is conveyed in Sixth Water Creek, Diamond Fork Creek, or the Spanish Fork River. No losses are charged on water that is conveyed through pipelines.

Spanish Fork River Commissioner Recommended Reach Loss Coefficients

Month	Strawberry Tunnel to Sixth Water Aqueduct	Sixth Water Aqueduct to Monks Hollow	Monks Hollow to Spanish Fork	Spanish Fork Downstream	Total
January	0.0%	0.0%	0.0%	0.0%	0.0%
February	0.0%	0.0%	0.0%	0.0%	0.0%
March	0.0%	0.0%	0.0%	0.0%	0.0%
April	-2.5%	-2.0%	-1.5%	-4.0%	-10.0%
May	-2.5%	-2.0%	-1.5%	-4.0%	-10.0%
June	-2.5%	-2.0%	-1.5%	-4.0%	-10.0%
July	-2.5%	-2.0%	-1.5%	-4.0%	-10.0%
August	-2.5%	-2.0%	-1.5%	-4.0%	-10.0%
September	-2.5%	-2.0%	-1.5%	-4.0%	-10.0%
October	-2.5%	-2.0%	-1.5%	-4.0%	-10.0%
November	0.0%	0.0%	0.0%	0.0%	0.0%
December	0.0%	0.0%	0.0%	0.0%	0.0%

FEATURES OF THE DIAMOND FORK SYSTEM

The Diamond Fork System will allow for the transbasin diversion of Bonneville Unit water from Strawberry Reservoir in the Colorado River Drainage Basin to Spanish Fork Canyon in the Bonneville Basin. The Diamond Fork System will protect the Diamond Fork Creek and Sixth Water Creek riparian areas from historically damaging high flows. The Diamond Fork System has been constructed in three primary phases. The U.S. Bureau of Reclamation (Reclamation) constructed the first phase; the District constructed the second and third phases under the CUPCA. The first phase included the Syar Tunnel Inlet, Syar Tunnel, Sixth Water Aqueduct, and Sixth Water Flow Control Structure, which together form a continuous 7.3-mile conduit from Strawberry Reservoir to Sixth Water Creek and currently discharge water into Sixth Water Creek. The second phase included the Diamond Fork Pipeline from Monks Hollow downstream to the mouth of Diamond Fork Creek. The third phase, recently completed, consists of a tunnel connection to the Sixth Water Shaft and Flow Control Structure, Tanner Ridge Tunnel, Upper Diamond Fork Pipeline, Upper Diamond Fork Flow Control Structure, connection to Upper Diamond Fork Tunnel, Diamond Fork Tunnel, Monks Hollow Overflow Structure and connection to the Diamond Fork Pipeline. Flow control structures are located at Sixth Water Creek, Upper Diamond Fork Creek, and near the confluence of the Spanish Fork River and Diamond Fork Creek. The 19.8-mile-long conduit will convey Bonneville Unit water and Strawberry Valley Project (SVP) water to the mouth of Diamond Fork Canyon. The Diamond Fork System will convey a portion of the SVP flows that were historically delivered down Sixth Water Creek and Diamond Fork Creek. In-stream flows specified in CUPCA will be released into Sixth Water Creek and Diamond Fork Creek. Releases of water to Sixth Water Creek and Diamond Fork Creek will be possible at the following locations:

- Strawberry Tunnel releasing water to the upper reaches of Sixth Water Creek
- Sixth Water Flow Control Structure releasing to Sixth Water Creek at the end of Sixth Water Aqueduct.
- Monks Hollow Overflow Structure and Diamond Fork Creek Outlet to Diamond Fork Creek.
- Spanish Fork River Flow Control Structure releasing to Spanish Fork River at mouth of Diamond Fork Creek.

The physical facilities of the Diamond Fork System are listed in Table 2-1 and shown schematically in Figure 2-1.

TABLE 2-1 Summary of Bonneville Unit Features	
Syar Tunnel and Inlet Portal	Conveys water from Strawberry Reservoir to Sixth Water Aqueduct. The inlet portal extends 2,435 feet into Strawberry Reservoir. Tunnel dimensions are - *Length: 30,100 feet; capacity: 800 to 660 cfs, depending upon Strawberry Reservoir water levels*
Sixth Water Aqueduct (pipeline, shaft and flow control structure)	The aqueduct connects Syar Tunnel to a pipeline leading to the Sixth Water Flow Control Structure. The pipeline is 4,224 feet in length with a diameter of 96 inches and a capacity of 800 cfs. The Sixth Water Shaft is 575 feet in length and has a diameter of 102 inches and a capacity of 800 to 660 cfs, depending upon Strawberry Reservoir's water level.
Sixth Water Connection to Tanner Ridge Tunnel	This connection conveys water by gravity flow from the existing Sixth Water Flow Control structure at the end of Sixth Water Aqueduct to the Tanner Ridge Tunnel. *Length & Diameter: 100 feet box culvert 12 foot wide and a 50 foot shaft of 240 inch diameter: Capacity of connection: 660 cfs*
Tanner Ridge Tunnel	The tunnel conveys water through Tanner Ridge, which lies between Sixth Water Canyon and Diamond Fork Canyon. *Length: 5,234 feet; Diameter: 126 inches; Capacity: 660 cfs*
Upper Diamond Fork Pipeline	This pipeline connects the Tanner Ridge Tunnel with the Upper Diamond Fork Flow Control Structure. *Length: 5,485 feet: Diameter: 96 inches: Capacity:660 cfs*
Upper Diamond Fork Flow Control Structure	This structure consists of 2 sleeve valves and associated piping. *Length: 100 feet: Diameter: Two – 54 inch:; Capacity 660 cfs,*
Diamond Fork Vortex Shafts	The Diamond Fork Shafts consist of three vertical shafts – each 187.5 feet deep and 78 inches in diameter. One shaft is for venting and two for conveying a combined flow of 660 cfs.
Aeration Chamber and Connection to Upper Diamond Fork Tunnel	The chamber extends from the bottom of the Diamond Fork Shafts to the Upper Diamond Fork Tunnel. Length: 148 feet; The initial cross section is 16' x 16' transitioning to 10.5' x 10.5'. It connects to the Upper Diamond Fork Tunnel via a 126 inch diameter tunnel segment with a capacity of 660 cfs.
Upper Diamond Fork Tunnel	This tunnel conveys water from the Upper Diamond Fork Flow Control Structure to the Monks Hollow Overflow Structure, *Length: 13,114 feet; Diameter: 126 inches; Capacity; 660 cfs*
Monks Hollow Overflow Structure	This structure is located at the Upper Diamond Fork Tunnel outlet portal and connects to the Diamond Fork Creek Outlet. *Length: 40 feet; Diameter: 96 inches; Capacity: 660 cfs*
Diamond Fork Creek Outlet	Diamond Fork Creek Outlet consists of a concrete pipeline from the Monks Hollow Overflow Structure to an energy dissipation structure discharging to a 350-foot long open channel tributary to Diamond Fork Creek. *Length: 1,500 feet; Diameter: 84 inches; Capacity: 660 cfs.*
Diamond Fork Pipeline Extension	This pipeline extension connects the Upper Diamond Fork Tunnel to the upstream end of the Diamond Fork Pipeline. *Length: 6,364 feet: Diameter: 96 inches; Capacity: 560 cfs*
Diamond Fork Pipeline	Conveys Bonneville Unit water from the end of the Diamond Fork Pipeline Extension to the Spanish Fork River Flow Control Structure where it will connect to the Spanish Fork Canyon Pipeline of the ULS. *Length: 35,643 feet; diameter: 96 inches; capacity: 560 cfs*

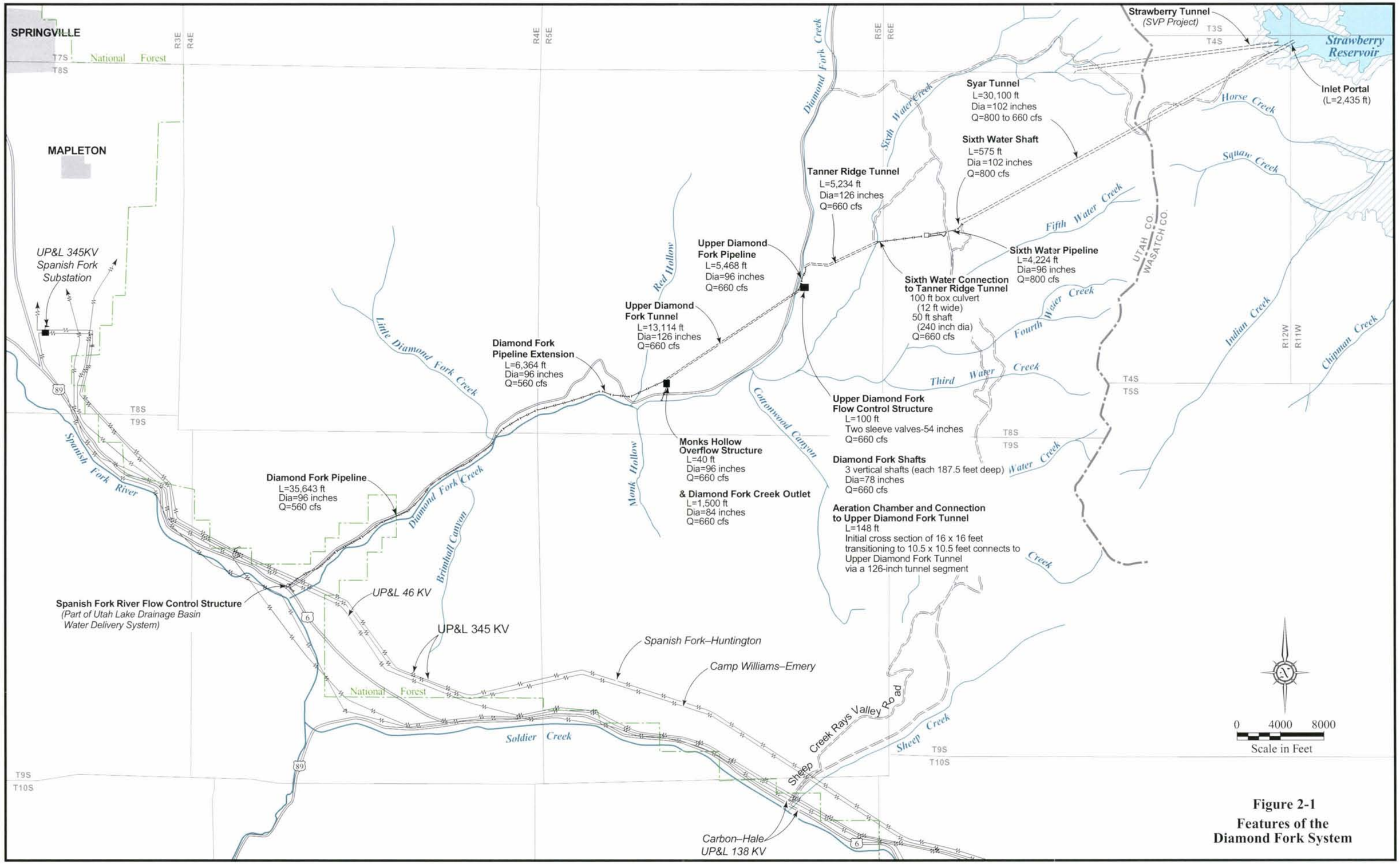


Figure 2-1
Features of the Diamond Fork System

Operational Relationships in the Diamond Fork Creek Drainage

Operational relationships include –

- Streamflow requirements under CUPCA
- Coordination of Streamflows and Tunnel/Pipeline Flows
- Strawberry Valley Project operations
- ULS System Power Plants

Streamflow Requirements Under CUPCA

Sixth Water Creek. In Sixth Water Creek, minimum flows have been set for the reach between the outlet of Strawberry Tunnel and the outlet of the Sixth Water Aqueduct, a creek distance of approximately six miles. The stipulated minimum flows are 32 cfs during May through October, and 25 cfs during November through April. The minimum flows will be achieved by releasing the requisite amount of water through the Strawberry Tunnel.

Diamond Fork Creek. Section 303(c) of CUPCA specifies minimum flows of 80 cfs during May thorough September, and 60 cfs during October through April, in lower Diamond Fork Creek from Monks Hollow to the Spanish Fork River, to be provided by the operation of the Bonneville Unit. Thus, releases to the creek would be made at the upper end of the Diamond Fork Pipeline to achieve these minimum flows when the natural flow plus the Strawberry Tunnel discharge is less than the minimum flow.

The Diamond Fork Creek Outlet may be required to release up to 100 cfs of the water conveyed through the Upper Diamond Fork Pipeline in addition to minimum flow requirements because the Diamond Fork Tunnel has a 660 cfs capacity whereas the capacity of the Upper Diamond Fork Pipeline is only 560 cfs. At the Spanish Fork Flow Control Structure, any flow in the Diamond Fork Pipeline intended for SVP irrigation use (except as conveyed to the cites and the Springville/Mapleton area), and any flow for CUP delivery to Utah Lake through the Spanish Fork River would be released to the Spanish Fork River. The remaining flow in the Diamond Fork Pipeline would flow into the proposed ULS System Spanish Fork Canyon Pipeline.

Coordination of Streamflows and Tunnel/Pipeline Flows

In the Diamond Fork System the transbasin diversion essentially breaks down into four parts--SVP water for the Spanish Fork River, SVP water for the ULS System pipelines, CUP water for the Spanish Fork River, and CUP water for the ULS System pipelines. The general operating concept is to release sufficient flow to Diamond Fork Creek at Monks Hollow to meet minimum flow requirements and to convey the rest in the closed conduit system as far as the confluence of Diamond Fork Creek with the Spanish Fork River. There the final flow adjustment would be made between the Spanish Fork River and the ULS System pipelines. This approach would produce the SVP and CUP flow distributions described above and documented in the tables in Attachment A.

Strawberry Valley Project

Water from Strawberry Reservoir developed by the SVP in the early 1900s has for decades been released through the Strawberry Tunnel into Sixth Water Creek at a point approximately 9.5 miles upstream of its confluence with Diamond Fork Creek. The irrigation water thus flowed through Sixth Water Creek and lower Diamond Fork Creek to the Spanish Fork River, which conveyed the water to developed areas of southern Utah County. The water has been diverted to irrigated areas by various diversion dams below Spanish Fork Canyon.

Operational relationships with the SVP include the following:

- Use of Strawberry Tunnel
- 1991 Operating Agreement
  - Storage in Strawberry Reservoir annually of 61,000 acre-feet with a one-time initial filling and subsequent maximum carry over storage of 50,000 acre-feet.
  - Conveyance of up to 600 cfs of SVP water to the confluence with the Spanish Fork River.

Use of Strawberry Tunnel. Section 303 (f) of CUPCA stipulates that upon completion of the Diamond Fork System, the Strawberry Tunnel shall be used only to release water for instream flow purposes, except at times when the Syar Tunnel or the Sixth Water Aqueduct is unusable or emergency circumstances require the use of the Strawberry Tunnel for the CUP and SVP water deliveries. Thus, under normal operating conditions, Sixth Water Creek will convey the natural flow originating in the creek, water that seeps into Strawberry Tunnel, and any transbasin release from Strawberry Reservoir that is needed for instream flow purposes in Sixth Water Creek. Also, under normal operating conditions, only minimal releases would be made to Sixth Water Creek from the Sixth Water Aqueduct. However, unusual or emergency operating circumstances could result in higher rates of flow in Sixth Water Creek, as described in the following items.

Transbasin diversion release through Strawberry Tunnel to Sixth Water Creek will consist of:

- **Sixth Water Creek Instream Flow Releases.** Releases will be made from Strawberry Reservoir in the amounts necessary to attain at least the minimum flow rates in Sixth Water Creek that are specified in Section 303(c) of CUPCA. CUPCA specifies minimum flows of 32 cfs during May thorough October, and 25 cfs during November through April, in Sixth Water Creek between the outlet of Strawberry Tunnel and the outlet of the Sixth Water Aqueduct, a creek distance of approximately six miles. Following the completion of additional studies and associated NEPA compliance, the stipulated minimum flows are subject to adjustment by the Utah Reclamation Mitigation and Conservation Commission in consultation with other entities to provide greater enhancement of aquatic and riparian habitat along the creek. The minimum flow releases from Strawberry Reservoir would be part of the SVP and/or CUP deliveries to the Spanish Fork River.

- **Infrequent water releases.** Additional releases up to a total of approximately 230 cfs could be made infrequently, when unusually high SVP summer irrigation demand and CUP deliveries

together exceed the capacity of Syar Tunnel and the minimum flow releases through Strawberry Tunnel. The Syar Tunnel capacity varies from 660 cfs to 800 cfs, depending on the water level in Strawberry Reservoir.

- **Emergency Use.** Transbasin release up to the maximum capacity of Strawberry Tunnel may be made if Syar Tunnel or Sixth Water Aqueduct is rendered unusable, or emergency circumstances require the use of Strawberry Tunnel for delivery of contracted SVP and Bonneville Unit water, all as stipulated in Section 303(f) of CUPCA. In this case, up to 230 cfs of SVP and/or CUP water could be released through the Strawberry Tunnel on an emergency basis.

The natural flow of Sixth Water Creek and the seepage into Strawberry Tunnel are not part of the Bonneville Unit water supply. These flows have historically been used for irrigation in southern Utah County and this practice will continue.

1991 Operating Agreement - Storage in Strawberry Reservoir. In 1991, the United States, the CUWCD, and the SWUA entered into an operating agreement covering, in part, storage in, and delivery from, Strawberry Reservoir (USBR, 1991). The Operating Agreement guaranteed the SWUA 61,000 acre-feet of water each year from Strawberry Reservoir, which provides long-term storage of both CUP and SVP water in a common pool. The 1991 Operating Agreement also provided the SWUA with a permanent right to 50,000 acre-feet of holdover storage capacity, with an initial (one-time) allocation of 50,000 acre-feet of stored water. In years when SVP requires more than 61,000 acre-feet, the excess would come from water stored in the 50,000 acre-foot storage space, to the extent that water was available in that space. In years when SVP diversion requirements are less than 61,000 acre-feet, the difference between 61,000 acre-feet and the amount actually released for SVP would be stored in the 50,000 acre-feet storage space to the extent that it contains space to store the water. Pursuant to the 1991 Operating Agreement, all of the facilities of the Diamond Fork System, including the Strawberry Tunnel, Syar Tunnel, and Sixth Water Aqueduct shall be operated to provide a total combined capacity of up to 600 cfs to convey SVP water. The SVP water shall be conveyed through the Strawberry Tunnel, and/or the Syar Tunnel, Sixth Water Aqueduct, Sixth Water Creek, and Diamond Fork Creek and shall be delivered into the Spanish Fork River at or near its confluence with Diamond Fork Creek for downstream SVP uses at such rates of flow as the Strawberry Valley Water Users Association shall demand, but not to exceed 600 cfs of SVP water released from Strawberry Reservoir, plus Tunnel accretion flows, as measured at the Syar Tunnel Intake Structure. This will be in accordance with the 1991 operating agreement, as described herein and in the Emergency Operations section of the July 1999, Diamond Fork Final Supplement to the Final Environmental Impact Statement.

Relation to ULS System Power Plants

The control structures at the end of the Sixth Water Aqueduct and at the end of the Upper Diamond Fork Pipeline have been designed to accommodate the installation of power plants. The plants would be adjacent to and in parallel with the control structures, which would be valved to direct the

flow through the control structure or through the power plants. Table 2-2 contains the monthly flows through the power plants for 1950 – 1999.

BONNEVILLE UNIT WATER SUPPLY

Syar Tunnel and Sixth Water Aqueduct would convey about 145,854 acre-feet of Strawberry Reservoir water per year (see Table 2-3). The maximum flow capacity of these features is 800 cfs when Strawberry Reservoir is full and 660 cfs when the reservoir level is at its operational minimum.

Strawberry Tunnel would release about 17,046 acre-feet of Strawberry Reservoir water and 3,622 acre-feet of tunnel seepage per year.

TABLE 2-3
Distribution of Transbasin Diversion From Strawberry Reservoir

Component	Average Acre-Feet per Year
Distribution of Transbasin Diversion Between the Tunnels	
Syar Tunnel release volume	145,854
Strawberry Tunnel release volume	17,046
Total	**162,900**
Distribution of Transbasin Diversion in Diamond Fork Creek and Diamond Fork Pipeline	
Diamond Fork Creek conveyance volume[1]	29,545
Diamond Fork Pipeline conveyance volume	133,355
Total	**162,900**

[1] In addition to this Strawberry Reservoir water, 26,396 acre-feet of natural flow and about 3,622 acre-feet of seepage from Strawberry Tunnel would be conveyed in Diamond Fork Creek as measured below the Upper Diamond Fork Flow Control Structure.

The District would operate and maintain the Diamond Fork System to provide minimum flows in Sixth Water and Diamond Fork creeks. Delivery of water to maintain minimum stream flows in Sixth Water Creek (from Strawberry Tunnel to Sixth Water Aqueduct) and Diamond Fork Creek below Diamond Fork Creek Outlet would receive priority and would govern release of water to the creek.

Table 2-2
Estimated Flows Available for Generation
Sixth Water and Upper Diamond Fork Power Plants
(cfs)

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ave
1950	89.4	40.9	42.1	53.6	32.6	31.5	42.5	116.4	436.0	427.8	510.2	389.4	184.4
1951	50.4	38.6	38.1	37.2	34.0	36.1	42.5	105.7	441.2	512.5	417.0	307.7	171.8
1952	50.6	40.7	41.0	33.5	33.0	30.1	42.5	101.8	248.7	422.7	365.7	340.4	145.9
1953	148.1	24.8	29.6	25.0	30.2	29.3	94.0	137.0	451.7	484.1	397.7	291.6	178.6
1954	44.9	39.9	43.5	31.9	41.5	36.0	113.6	273.0	458.4	439.6	454.0	204.6	181.8
1955	53.3	45.3	46.8	40.5	42.9	46.1	160.1	258.6	481.9	536.9	393.7	253.9	196.7
1956	56.2	50.4	46.8	40.5	45.9	38.0	64.6	303.5	559.1	487.8	451.2	265.9	200.8
1957	54.5	47.0	46.8	40.5	39.2	42.9	111.9	176.8	260.5	551.0	477.3	326.8	181.3
1958	50.8	42.0	45.1	40.5	38.8	42.9	48.7	176.8	496.3	519.3	499.4	253.7	187.8
1959	54.8	45.3	45.1	40.5	42.4	43.5	161.6	439.9	558.0	402.6	347.2	209.2	199.2
1960	56.2	48.7	50.0	42.1	40.4	36.6	143.2	400.3	560.7	471.2	420.5	203.0	206.1
1961	55.1	47.0	50.0	42.1	46.0	59.0	177.5	459.7	540.0	382.1	274.8	200.5	194.5
1962	57.4	48.7	48.4	43.7	42.4	46.1	45.3	203.7	474.3	487.3	537.2	272.6	192.3
1963	50.9	47.0	48.4	40.5	31.6	42.9	166.8	313.1	333.5	553.8	489.3	244.3	196.8
1964	81.3	69.5	119.5	116.7	75.8	66.7	153.9	177.7	272.3	649.4	512.5	370.7	222.2
1965	128.3	65.4	71.5	72.6	79.8	81.5	53.4	176.8	274.9	433.4	407.8	297.6	178.6
1966	135.5	100.0	46.1	52.4	74.3	39.6	106.0	315.6	570.5	455.0	462.8	279.5	219.8
1967	101.2	59.1	92.9	60.5	49.8	46.9	148.1	200.7	220.4	557.7	532.8	391.8	205.1
1968	125.9	78.9	74.2	71.7	60.5	77.7	97.5	177.8	322.3	528.0	387.7	355.9	196.5
1969	115.6	92.3	113.4	36.9	56.3	22.6	42.5	104.8	321.2	453.5	522.2	345.6	185.6
1970	113.8	41.8	57.9	67.7	67.9	77.0	151.7	163.2	325.7	488.4	555.2	295.5	200.5
1971	87.9	37.4	82.5	66.7	56.6	47.6	58.7	218.0	390.8	558.3	549.4	251.7	200.5
1972	112.3	38.6	73.2	79.4	77.7	35.3	91.5	379.8	440.3	496.5	464.7	251.7	211.7
1973	123.2	98.1	84.5	75.5	70.7	71.1	42.5	101.8	307.0	497.6	504.5	263.0	186.6
1974	123.0	92.5	72.2	77.8	81.8	65.8	60.7	136.8	474.9	477.2	521.6	274.8	204.9
1975	116.6	110.4	80.3	66.5	68.4	66.0	133.7	176.8	158.7	526.4	571.3	366.5	203.5
1976	119.3	40.8	37.4	55.0	56.1	64.6	108.1	331.2	566.7	559.6	525.7	300.2	230.4
1977	107.3	65.1	83.8	77.4	43.4	46.4	162.2	377.3	565.4	497.6	499.2	287.4	234.4
1978	189.0	179.6	179.0	147.2	134.1	76.9	83.7	176.8	456.9	607.5	562.9	277.6	255.9
1979	178.9	176.4	167.3	144.2	137.6	134.7	80.2	182.6	517.3	576.7	509.9	267.1	256.1
1980	221.6	189.5	182.1	136.0	123.2	126.6	42.5	108.5	315.2	495.7	566.6	245.2	229.4
1981	165.6	78.4	65.1	93.6	90.4	102.6	158.2	350.5	489.6	534.6	510.2	237.0	239.7
1982	136.1	73.6	91.8	100.1	90.9	36.1	42.5	101.8	249.1	448.1	542.9	258.9	181.0
1983	60.1	41.0	40.6	38.7	39.5	22.7	42.5	180.5	330.5	353.4	395.8	182.7	144.0
1984	52.1	34.4	32.1	29.3	31.2	20.8	42.5	156.1	323.4	428.5	449.2	347.3	162.2
1985	50.4	38.8	42.8	41.1	42.7	19.8	42.5	101.8	372.9	374.0	519.1	224.7	155.9
1986	58.9	37.3	41.4	38.7	24.7	19.8	42.5	101.8	306.7	428.4	465.9	219.0	148.8
1987	54.1	70.4	38.2	35.7	36.0	36.7	128.1	316.4	513.4	429.8	459.3	331.8	204.1
1988	97.2	44.8	45.7	41.3	42.0	42.0	163.2	380.1	547.7	559.6	497.1	301.7	230.2
1989	37.8	90.4	91.7	60.6	46.2	44.7	138.9	450.4	551.3	500.5	417.0	234.0	222.0
1990	141.3	88.3	93.3	77.6	79.5	80.2	160.6	369.5	413.0	545.7	531.3	363.4	245.3
1991	107.6	80.3	104.0	103.7	55.0	56.7	181.4	298.7	285.0	560.0	574.4	285.4	224.4
1992	134.6	82.1	104.3	88.2	63.1	68.5	157.8	432.9	540.4	442.6	444.3	297.1	238.0
1993	153.6	139.3	121.3	114.4	100.2	65.3	86.7	176.8	318.4	486.8	557.3	357.2	223.1
1994	86.9	74.4	82.1	79.1	65.2	47.4	156.8	352.6	563.0	552.9	421.7	356.3	236.5
1995	91.0	90.7	90.1	84.9	76.7	61.2	88.1	176.8	204.1	367.3	523.7	283.0	178.1
1996	119.5	41.9	42.6	37.0	43.3	25.5	45.1	101.8	321.7	428.9	534.9	274.8	168.1
1997	129.1	112.3	67.8	59.8	64.3	19.8	42.5	101.8	256.3	505.9	473.1	281.5	176.2
1998	183.9	119.9	74.2	124.1	135.0	49.8	55.1	101.8	194.2	547.2	622.5	422.8	219.2
1999	98.4	42.5	43.8	64.9	36.2	34.3	114.3	101.8	320.2	530.0	526.2	308.9	185.1
Ave.	**100.2**	**70.5**	**71.0**	**65.4**	**60.3**	**51.2**	**98.4**	**226.5**	**398.0**	**491.2**	**483.1**	**289.1**	**200.4**
Max.	**221.6**	**189.5**	**182.1**	**147.2**	**137.6**	**134.7**	**181.4**	**459.7**	**570.5**	**649.4**	**622.5**	**422.8**	**256.1**
Min.	**37.8**	**24.8**	**29.6**	**25.0**	**24.7**	**19.8**	**42.5**	**101.8**	**158.7**	**353.4**	**274.8**	**182.7**	**144.0**

RESULTS OF HYDROLOGIC MODELING OF DIAMOND FORK SYSTEM

Model Used for Analysis

The analysis of the ULS System operation was performed with the Spanish Fork River Spreadsheet Model, a mass balance spreadsheet accounting model designed to track water released from Strawberry Reservoir through Syar Tunnel, Strawberry Tunnel, Diamond Fork System conduits, Spanish Fork Canyon Pipeline, Sixth Water Creek, lower Diamond Fork Creek, and Spanish Fork River on a monthly basis. The model tracks both the CUP and SVP releases from Strawberry Reservoir, as well as the natural flows and diversions throughout the stream system. The model was used to distribute the withdrawals from Strawberry Reservoir between the Diamond Fork System conduits and creeks and between the ULS System pipelines and the Spanish Fork River according to the destinations of various flows. Numerous operational constraints and other provisions are included in the computations, such as minimum flow requirements in Sixth Water and Diamond Fork creeks. Natural streamflows, while not a part of the Bonneville Unit water supply, are included in the operation of the model because they influence the flow rate in Diamond Fork Creek, which must be maintained according to criteria specified in CUPCA. The natural flows have historically been used for irrigation in southern Utah County, and this application will continue.

The inputs to the system are SVP calls from Strawberry Reservoir (developed from historical data); CUP calls from Strawberry Reservoir (developed using PROSIM2000 and spreadsheet models); natural inflows; and seepage into the Strawberry Tunnel.

Verification of the Spanish Fork River Spreadsheet Model consisted of a comparison of simulated and historical streamflows and river diversions, checks of the mass balance in the model, and verification that the baseline operation used for the ULS EIS allocated SVP water in the same manner as current operation.

Hydrologic Data Base

The hydrologic database was developed for the 1950-1999 study period using all available historical streamgage and diversion data. The development of Spanish Fork River natural streamflow and diversion data is documented in an August 13, 2001 draft memorandum entitled, "Hydrologic Adjustment to Develop Diamond Fork and Spanish Fork Data for Use in RiverWare Model and ULS." This memorandum is included as an appendix to the draft ULS Final Environmental Impact Statement, Surface Water Hydrology Technical Report.

Modeled Flow through Diamond Fork System Tunnels and Pipelines

Under the modeled operation of the completed Bonneville Unit the monthly average flows through Syar Tunnel and the Tanner Ridge Tunnel would vary between approximately 24 cfs and 552 cfs for the 1950-1999 hydrologic period. Higher and lower conditions would occur in individual months

(see Table 2-4). The streamflows and deliveries are presented as monthly totals (in acre-feet) and/or average values in cfs. The flows in cfs are calculated 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). The average flow listed is the average of the 50 *monthly averages* for each month shown.

As noted above under Relation to ULS System Power Plants, the control structures at the end of the Sixth Water Aqueduct and at the Upper Diamond Fork Control Structure have been designed to accommodate the installation of hydropower generating plants. The flows available to the hydropower sites from the closed conveyance system would be governed by water delivery schedules.

Sixth Water Creek – Modeled Flows

Sixth Water Creek flows would be limited to natural flow (including Strawberry Tunnel Seepage) plus sufficient transbasin release flow to achieve the required minimum flow between Strawberry Tunnel and Sixth Water Aqueduct, except during times of extremely high transbasin diversion requirement or emergency situations as noted above under Sixth Water Creek Instream Flow Releases. The natural flow of Sixth Water Creek approaching the outlet of Strawberry Tunnel varies from zero in the summer to 5 cfs in the winter. Water seeping into Strawberry Tunnel discharges into the creek at a rate of approximately 5 cfs, and is sometimes considered natural flow. Thus, the natural flow of the creek varies from 5 to 10 cfs over a year's time.

The modeled transbasin release flows through Strawberry Tunnel to meet the minimum flow requirements vary from approximately 20 to 27 cfs, as shown on Table 2-4. The transbasin diversion releases needed to meet the modeled combined water demand of the SVP and the CUP did not require the use of Sixth Water Creek to convey higher flows than the required fish flows (i.e., higher releases through Strawberry Tunnel were not required). As noted above under Coordination of Stream Flows and Tunnel/Pipeline Flows under CUPCA, higher flows could occur under certain conditions.

Table 2-4

DIAMOND FORK SYSTEM FLOWS UNDER BONNEVILLE UNIT OPERATIONS

Estimated Average Strawberry Reservoir Release to Bonneville Basin

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	127	90	91	85	80	70	129	252	425	517	508	313	225
Wet Years	87	60	61	57	52	44	70	153	319	427	434	273	171
Dry Years	125	84	99	89	70	72	201	448	579	466	431	285	247

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	7,818	5,351	5,566	5,230	4,472	4,311	7,697	15,489	25,313	31,776	31,229	18,648	162,900
Wet Years	5,360	3,549	3,749	3,503	2,946	2,718	4,149	9,406	19,003	26,261	26,704	16,258	123,607
Dry Years	7,714	5,009	6,076	5,452	3,958	4,428	11,987	27,572	34,456	28,652	26,504	16,947	178,754

Estimated Average Strawberry Reservoir Release to Strawberry Tunnel

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	27	20	20	20	20	20	20	27	27	27	27	27	24
Wet Years	27	20	20	20	20	20	20	27	27	27	27	27	24
Dry Years	27	20	20	20	20	20	20	27	27	27	27	27	24

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	1,660	1,190	1,230	1,230	1,120	1,230	1,190	1,660	1,607	1,660	1,661	1,608	17,046
Wet Years	1,660	1,190	1,230	1,230	1,124	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,047
Dry Years	1,660	1,190	1,230	1,230	1,124	1,230	1,190	1,660	1,607	1,660	1,671	1,608	17,060

Estimated Average Syar Tunnel Release

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	100	70	71	65	60	50	109	225	398	490	481	286	201
Wet Years	60	40	41	37	32	24	50	126	292	400	407	246	147
Dry Years	98	64	79	69	50	52	181	421	552	439	404	258	223

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	6,158	4,161	4,337	4,001	3,351	3,082	6,507	13,829	23,706	30,116	29,568	17,040	145,854
Wet Years	3,700	2,359	2,519	2,273	1,822	1,488	2,959	7,746	17,396	24,601	25,044	14,652	106,560
Dry Years	6,054	3,819	4,846	4,222	2,834	3,198	10,797	25,912	32,850	26,992	24,832	15,339	161,695

Estimated Average Release to Diamond Fork Creek

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	14	22	23	23	21	14	7	6	9	16	22	30	17
Wet Years	13	19	21	22	16	4	0	0	0	0	3	21	10
Dry Years	20	26	27	27	27	25	26	28	24	33	35	43	29

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	845	1,287	1,422	1,404	1,204	882	414	385	526	996	1,328	1,806	12,499
Wet Years	797	1,143	1,303	1,342	891	272	0	0	0	0	203	1,247	7,198
Dry Years	1,237	1,568	1,681	1,671	1,512	1,525	1,569	1,746	1,411	2,040	2,151	2,580	20,691

Table 2-4 (Continued)

DIAMOND FORK SYSTEM FLOWS UNDER BONNEVILLE UNIT OPERATIONS

Estimated Average Diamond Fork Pipeline

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	86	48	47	42	38	36	102	219	390	474	459	256	184
Wet Years	47	20	20	15	17	20	50	126	292	400	404	225	137
Dry Years	78	38	51	41	23	27	155	393	528	406	369	214	195

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	5,313	2,874	2,915	2,597	2,147	2,199	6,093	13,444	23,180	29,120	28,240	15,234	133,355
Wet Years	2,903	1,216	1,216	931	931	1,216	2,959	7,746	17,396	24,601	24,841	13,405	99,362
Dry Years	4,817	2,251	3,165	2,551	1,322	1,673	9,228	24,165	31,439	24,953	22,681	12,759	141,004

Estimated Average Sixth Water Creek below Strawberry Tunnel

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	32	25	25	25	25	25	25	32	32	32	32	32	29
Wet Years	32	25	25	25	25	25	25	32	32	32	32	32	29
Dry Years	32	25	25	25	25	25	25	32	32	32	32	32	29

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	1,968	1,488	1,537	1,537	1,400	1,537	1,488	1,968	1,904	1,968	1,968	1,906	20,668
Wet Years	1,968	1,488	1,537	1,537	1,405	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,670
Dry Years	1,968	1,488	1,537	1,537	1,405	1,537	1,488	1,968	1,904	1,968	1,979	1,905	20,683

Estimated Average Diamond Fork Creek below Monks Hollow Overflow Structure

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	60	60	60	60	60	62	97	175	111	85	81	80	83
Wet Years	60	60	60	60	60	74	218	402	219	94	81	80	123
Dry Years	60	60	60	60	60	60	60	80	80	80	80	80	68

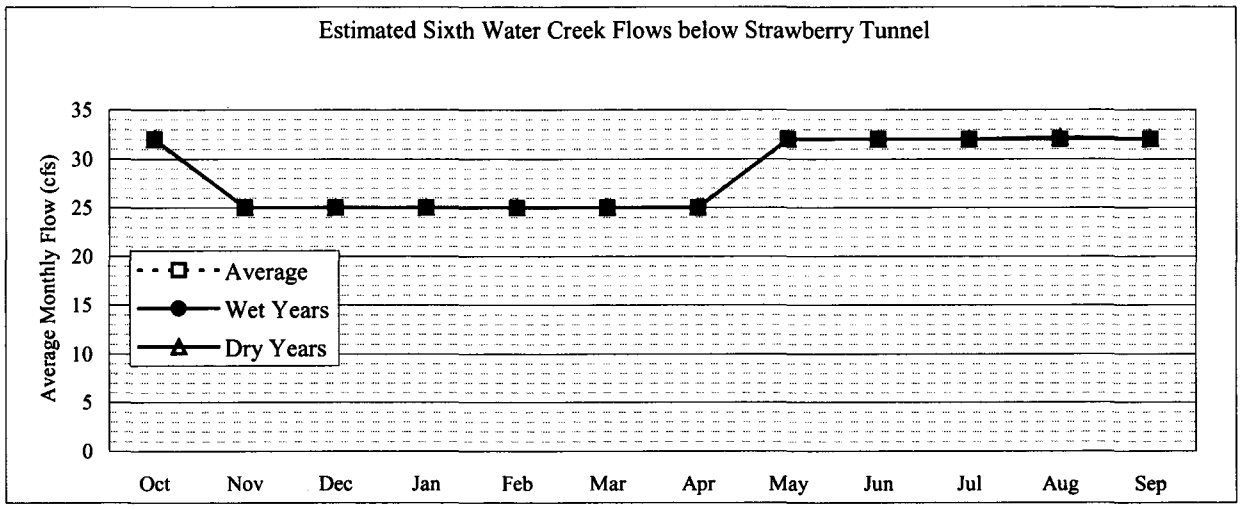
Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	3,696	3,570	3,689	3,689	3,361	3,783	5,783	10,762	6,634	5,254	4,995	4,763	59,980
Wet Years	3,690	3,570	3,689	3,689	3,372	4,569	12,964	24,710	13,037	5,774	5,007	4,761	88,833
Dry Years	3,690	3,570	3,689	3,689	3,372	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,554

Wet Years: Average of flows from 1952, 1983, and 1986

Dry Years: Average of flows from 1961, 1977, and 1992

Figure 2-2
Estimated Sixth Water Creek Flows Below Strawberry Tunnel



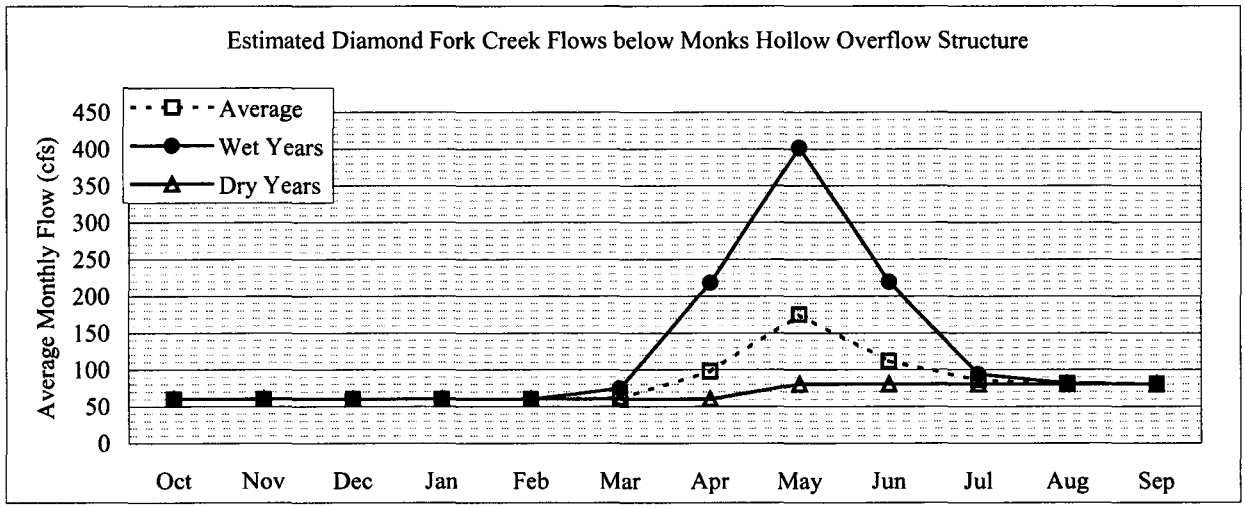
Diamond Fork Creek – Modeled Flows

Lower Diamond Fork Creek flows would consist of its natural flow, the inflow of Sixth Water Creek, and any releases made at the Monks Hollow Overflow Structure to achieve the required minimum flows. The resulting modeled seasonal flows downstream of the Monks Hollow Overflow Structure are summarized on Table 2-4

The higher maximum flows in the spring and summer are the result of spring runoff. Upper Diamond Fork Creek is subject to high inflow from snowmelt, which generally peaks in May and can continue into July. The 50-year operation study showed that in approximately half of the modeled years at the Monks Hollow Overflow Structure flows exceeded 120 cfs, with a modeled peak occurrence of 859 cfs (1984 conditions). As noted above under Diamond Fork System Operating Plan Under CUPCA, peak summer flows could, under certain conditions, be greater than the maximum shown on Table 2-4

Various smaller creeks discharge into lower Diamond Fork Creek between the Monks Hollow Overflow Structure and the Spanish Fork River, and various losses occur along the stream channel. As modeled, the average net gain along that reach would vary from a low of approximately 10 cfs in January to 42 cfs in May by the time the creek reaches the Spanish Fork River.

Figure 2-3
Estimated Diamond Fork Creek Flows Below Monks Hollow Overflow Structure



Central Utah Project Completion Program

Chapter 3

October 2004

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Chapter 3

This chapter presents operational details of the Spanish Fork River and the ULS System pipelines in delivering water from the Spanish Fork System to the ULS System service areas in southern Utah County and to Utah Lake.

HYDROLOGIC SETTING OF THE SPANISH FORK RIVER

The Spanish Fork River begins approximately 2-1/4 miles east of its confluence with Diamond Fork Creek, at the confluence of Soldier Creek and Thistle Creek. The flow of the Spanish Fork River stems primarily from these three creeks. Soldier and Thistle Creeks drain mountain valleys extending east and south within the Wasatch Range. Much of the natural flow continues into Utah Lake, where it forms part of the water supply for the Lake. The Spanish Fork River also conveys SVP water from Diamond Fork Creek to various diversion structures along the River.

Natural Streamflows

The natural streamflow of the Spanish Fork River consists primarily of tributary inflow from Diamond Fork, Soldier, and Thistle creeks, which carry spring runoff from snowmelt and runoff from seasonal precipitation. Summer flows are low. The natural tributary inflow from Diamond Fork Creek has averaged approximately 45,324 acre-feet per year over the period from 1950 to 1999, with approximately 53 percent occurring from April through June and 11 percent occurring November through January. The tributary inflow from Soldier and Thistle Creeks, which is gauged at Thistle, plus other runoff into the river above the Spanish Fork Diversion Dam, averaged 76,320 acre-feet per year during the period from 1950 to 1999, with approximately 54 percent occurring April through June and 13 percent occurring November through January. The natural flow of the Spanish Fork River is not part of the Bonneville Unit water supply. This water has historically been used for irrigation in southern Utah County and, through Utah Lake, northern Utah County and Salt Lake County. The Bonneville Unit will not alter the water available under these historic uses except as related to the proposed acquisition of certain Utah Lake water rights.

Rights to Natural Streamflows

The natural flow of the Spanish Fork River has provided water for irrigation diversions from Utah Lake in Utah and Salt Lake Counties since before the formulation of the Bonneville Unit. The rights to natural flow for such uses have been established to permit such diversions. These rights cover essentially all of the flow of the river. The reach of the River below the Spanish Fork Diversion Dam has historically been dewatered due to diversion for hydroelectric power generation by the Strawberry Water Users Association. The Bonneville Unit operation will not affect the existing rights to natural flows. The natural flows will continue to be used in this manner with the Bonneville Unit, which will not alter the water available under those rights, except as related to the acquisition of the District's secondary Utah Lake water rights.

FEATURES OF THE PROPOSED ULS SYSTEM

The proposed water conveyance facilities of the ULS system begin along the Spanish Fork River at the confluence with Diamond Fork Creek and extend north along the Wasatch Front to beyond the Provo River, and south along the Wasatch Front to Mona Reservoir in Juab Valley. The water conveyance pipeline facilities are listed on Table 3-1 (on next page) and shown on Figure 3-1. The average annual deliveries of the ULS System are shown on Figure 3-2.

Spanish Fork Canyon Pipeline

The Spanish Fork Canyon Pipeline would run through Spanish Fork Canyon from the end of the Diamond Fork Pipeline to below the mouth of the canyon, where it would end with turnouts to release water to the three other proposed pipelines described below.

Spanish Fork – Santaquin Pipeline

The Spanish Fork – Santaquin Pipeline would begin at a turnout on the Spanish Fork Canyon Pipeline, and would deliver ULS water to southern Utah County cities south of the Spanish Fork River, for use in secondary systems. The pipeline would also convey up to 10,200 acre-feet of SVP water for use in southern Utah County communities. The SVP water would be conveyed through the proposed ULS System pipelines on a space-available basis, under contract arrangements with the Southern Utah Valley Municipal Water Authority (SUVMWA). The proposed turnouts from the pipeline and their capacities are listed below in table form.

Turnouts from the Spanish Fork – Santaquin Pipeline

Turnout	Peak Dedicated Capacity (cfs)	Off-Peak Installed Capacity (cfs)
Spanish Fork City	30 to 15	30
Woodland Hills	5	10
Salem City	25	25
Elk Ridge	5	10
Payson City	35 to 25	40
West Payson	10	20
Genola	10	20
Santaquin City	45	50
Santaquin - Mona Reservoir [1]	5	20

[1]The Santaquin – Mona Reservoir Pipeline turnout would release water to a future pipeline to be installed as part of the June sucker Recovery Implementation Program (JSRIP), pending availability of a water supply for that purpose.

TABLE 3-1
Utah Lake Drainage Basin Water Delivery System

System/Feature	Purpose-Description
Sixth Water Power Facility	Will produce commercial power for sale by Western Area Power Administration. The plant will have an installed capacity of 45 megawatts with a 138 KV underground transmission line of 12.9 miles.
Upper Diamond Fork Power Facility	Will produce commercial power for sale by Western Area Power Administration. The plant will have an installed capacity of 5 megawatts with an existing 25 KV transmission line of 1.6 miles in length.
Spanish Fork River Flow Control Structure	Main elements include: (1) an extension of the Diamond Fork Pipeline of approximately 1200 feet of 96-inch diameter steel pipe; (2) a reinforced concrete flow control structure, consisting of the valve operator vault, control building, and sleeve valve vault; (3) associated piping and appurtenances, including two 42-inch sleeve valves, two 48-inch spherical valves, two flow meters, and two stainless steel vault liners; and (4) discharge weir structure to convey 560 cfs maximum flow into Diamond Fork Creek. This structure spans approximately 65 feet.
Spanish Fork Canyon Pipeline	Will convey Bonneville Unit water from the outlet of the Diamond Fork Pipeline (located at the mouth of Diamond Fork Canyon) to the mouth of Spanish Fork Canyon. The pipeline length is 7.0 miles with a capacity of 365 cfs.
Spanish Fork – Santaquin Pipeline	Will convey Bonneville Unit water from the terminus of the Spanish Fork Canyon pipeline at the mouth of Spanish Fork Canyon to the city of Santaquin in southern Utah County. The pipeline will be 17.5 miles in length and have a capacity of 120 to 50 cfs.
Santaquin – Mona Reservoir Pipeline	Will convey water from the terminus of the Spanish Fork – Santquin Pipeline to Mona Reservoir located in Juab County. The pipeline is 7.5 miles in length and diameter of 24 inches with a capacity of 20 cfs.
Mapleton – Springville Lateral Pipeline	Will convey Bonneville Unit water from the terminus of the Spanish Fork Canyon Pipeline (located at the mouth of Spanish Fork Canyon) to Hobble Creek Canyon. The pipeline is 5.7 miles in length and has a capacity of 125 cfs.
Spanish Fork – Provo Reservoir Canal Pipeline	Will convey Bonneville Unit water from a turnout at the terminus of the Spanish Fork Canyon pipeline to the Provo River, the Provo Reservoir Canal and the Jordan Aqueduct. The pipeline will be 19.7 miles in length and will have a capacity of 120 to 90 cfs.
Utah County Section 207 Projects	Features that could potentially be constructed under Section 207 funding include the Provo Reservoir Canal Enclosure, Mapleton-Springville Lateral Piping and numerous other smaller Section 207 projects. The cost for the Mapleton-Springville Lateral Pipeline is presented as part of the ULS System cost estimate. The Provo Reservoir Canal Enclosure is not a part of the ULS System but under a cost sharing arrangement the Federal government could contribute up to 65 percent of the construction of the project with this cost being reflected in the financial and economic analyses along with the other remaining Section 207 projects.

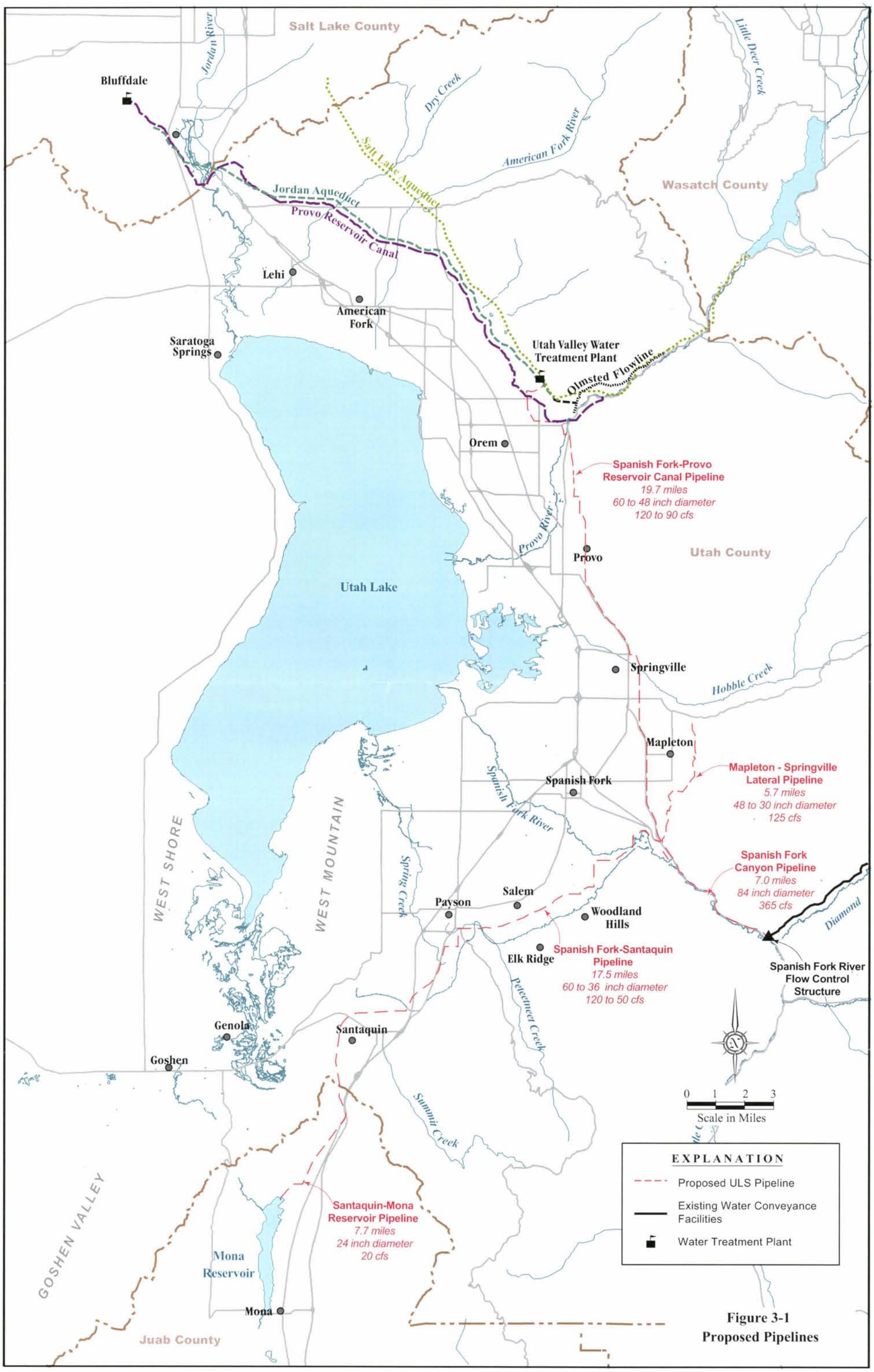


Figure 3-1
Proposed Pipelines

Santaquin – Mona Reservoir Pipeline

The Santaquin – Mona Reservoir Pipeline would extend from the end of the Spanish Fork – Santaquin Pipeline to a natural channel tributary to Mona Reservoir. The pipeline would permit water delivery to Mona Reservoir to maintain a conservation pool in the reservoir for a future refugium as part of the June sucker Recovery Implementation Program (JSRIP). The pipeline would not be constructed until a water supply has been identified for that purpose and a carriage contract has been executed as part of the JSRIP.

Mapleton – Springville Lateral Pipeline

The Mapleton – Springville Lateral Pipeline would be a replacement for most of the existing Mapleton Lateral which is a SVP facility and which provides SVP irrigation water to the Mapleton and Springville areas. The existing Mapleton Lateral diverts an annual average of 8,831 acre-feet of SVP Strawberry storage water and 973 acre-feet of Spanish Fork River natural flow water. The Mapleton-Springville Lateral Pipeline will continue to divert the SVP storage water, but due to the pressurized pipeline, it will not be able to divert the natural flow water. The Mapleton Lateral begins on the Strawberry Power Canal and crosses under the Spanish Fork River through a siphon, but the proposed pipeline would begin at a turnout on the Spanish Fork Canyon Pipeline and receive water under pressure. As part of the conversion from open canal to pipeline, the pipeline would be sized to convey water for delivery to Utah Lake, and be extended northward to Springville to permit release of that water to Hobble Creek.

Spanish Fork – Provo Reservoir Canal Pipeline

The Spanish Fork – Provo Reservoir Canal Pipeline would deliver M&I water to the existing Provo Reservoir Canal (summer months) and the existing Jordan Aqueduct (winter months) for conveyance to water treatment plants and subsequent distribution in Salt Lake County. The pipeline would also convey water for delivery to Utah Lake by releasing it to the lower Provo River, thereby augmenting flow towards the 75 cfs instream flow target. This water is shown on Table 3-4.

ULS System Powerplants

The ULS System powerplants and their operation are described in the Power Appendix to the 2004 Supplement to the Bonneville Unit DPR.

OPERATIONAL RELATIONSHIPS

Operational relationships include –

- General SVP Operation
- Coordination of Streamflows and Pipeline Flows
- Conveyance of SVP and Mapleton-Springville Irrigation Company Water
- Redistribution of Conserved Water Under CUPCA Section 207 Program
- Santaquin – Mona Reservoir Pipeline

General SVP Operation

SVP water deliveries through the Diamond Fork System would continue to operate according to existing operating agreements and procedures, and applicable NEPA compliance documents. Under Bonneville Unit operation, SVP water used for irrigation would continue to be delivered through the Spanish Fork River and diverted at the existing Spanish Fork River diversion facilities, except for SVP water conveyed to the cities through the Spanish Fork Santaquin Pipeline on a space available basis, and the SVP water delivered to the Springville/Mapleton area through the Mapleton-Springille Lateral Pipeline.

Coordination of Streamflows and Pipeline Flows

The SVP and Bonneville Unit water released from the Diamond Fork System would be routed through proposed ULS System facilities, the Spanish Fork River, and Hobble Creek. The SVP and Bonneville Unit water will be commingled in Sixth Water and Diamond Fork creeks, and the ULS System pipelines to provide efficient and economical service to users of SVP and CUP water. The Bonneville Unit water and the SVP water for specific deliveries would be routed to the proposed Spanish Fork Canyon Pipeline and the River, as follows.

The SVP water would be divided between the Spanish Fork River and the Spanish Fork Canyon Pipeline. Most of the SVP water would be routed down the Spanish Fork River to be diverted and delivered as is currently the practice. However, the SVP water to be delivered in the Mapleton-Springville area would be conveyed in the Spanish Fork Canyon Pipeline to the Mapleton-Springville Lateral Pipeline for delivery to the water agencies currently served.

Some SVP water would be distributed through the Spanish Fork Canyon Pipeline and the Spanish Fork-Santaquin Pipeline on a space available basis to the cities in south Utah County.

The Bonneville Unit water would be divided between the Spanish Fork River and the proposed Spanish Fork Canyon Pipeline. Much of the Bonneville Unit water would be delivered for M&I use, and would be conveyed under pressure in the proposed Spanish Fork Canyon Pipeline and the three branching ULS System pipelines extending northward and southward from the end of that pipeline.

A portion of the Bonneville Unit water would be delivered to Utah Lake, and approximately 16,273 acre-feet of the Lake delivery would be made through the Spanish Fork River. (The remainder of the Lake delivery would be made via Hobble Creek and the Provo River.)

The Bonneville Unit water delivered for M&I use consists of three components, each conveyed in and released from the end of the Spanish Fork Canyon Pipeline. The M&I waters for southern Utah County south of the river, for southern Utah County north of the river, and for Salt Lake County would be released to the three proposed ULS System distribution pipelines--respectively the Spanish Fork-Santaquin Pipeline, the Mapleton-Springville Lateral Pipeline, and the Spanish Fork Canyon - Provo Reservoir Canal Pipeline. The Mapleton-Springville Lateral Pipeline and the Spanish Fork Canyon – Provo Reservoir Canal Pipeline would also convey a portion of the Bonneville Unit Utah Lake water for release to Hobble Creek and the Provo River, respectively.

Adding complexity to the distribution pattern of the Bonneville Unit water in the proposed ULS System is the redirection of some of the Bonneville Unit water for fish and wildlife conservation purposes under the ULS System plan. This is Bonneville Unit water that will be conserved by water users in southern Utah County and be made available to the Department of the Interior for discretionary use to improve instream flow conditions in Hobble Creek and other purposes. The quantities of such waters will be presented later in this chapter.

Conveyance of SVP Water to the Cities and the Mapleton-Springville Irrigation Companies

A portion of the SVP water would be used as irrigation water in secondary systems of cities in southern Utah County. This water would be delivered in ULS System pipelines on a space-available basis. The current plan provides for up to 10,200 acre-feet of SVP irrigation water to be delivered through the ULS pipelines in this manner. Otherwise, SVP water for irrigation use would be delivered in the irrigation systems operated by the SWUA and local irrigation companies. The anticipated distribution of the 10,200 acre-feet of SVP water to cities is displayed in the table below.

SVP water for irrigation delivery in the Mapleton - Springville area would also be conveyed through the ULS pipelines.

Estimated SVP Irrigation Water Use Within Southern Utah County Communities (Units: acre-feet)			
Community	**Used By City**	**Used By Individual Shareholders**	**Total SVP Water (Rounded)**
Elk Ridge	0	0	0
Genola	0	0	0
Goshen	0	0	0
Mapleton	31	1,796	1,827
Payson	1,840	1,917	3,758
Salem	125	0	125
Santaquin	0	0	0
Spanish Fork	1,703	1,714	3,417
Springville	1,051	0	1,051
Woodland Hills	0	0	0
Total	**4,750**	**5,427**	**10,177**
		Rounded to	**10,200**

Redistribution of Conserved Water under CUPCA Section 207 Program

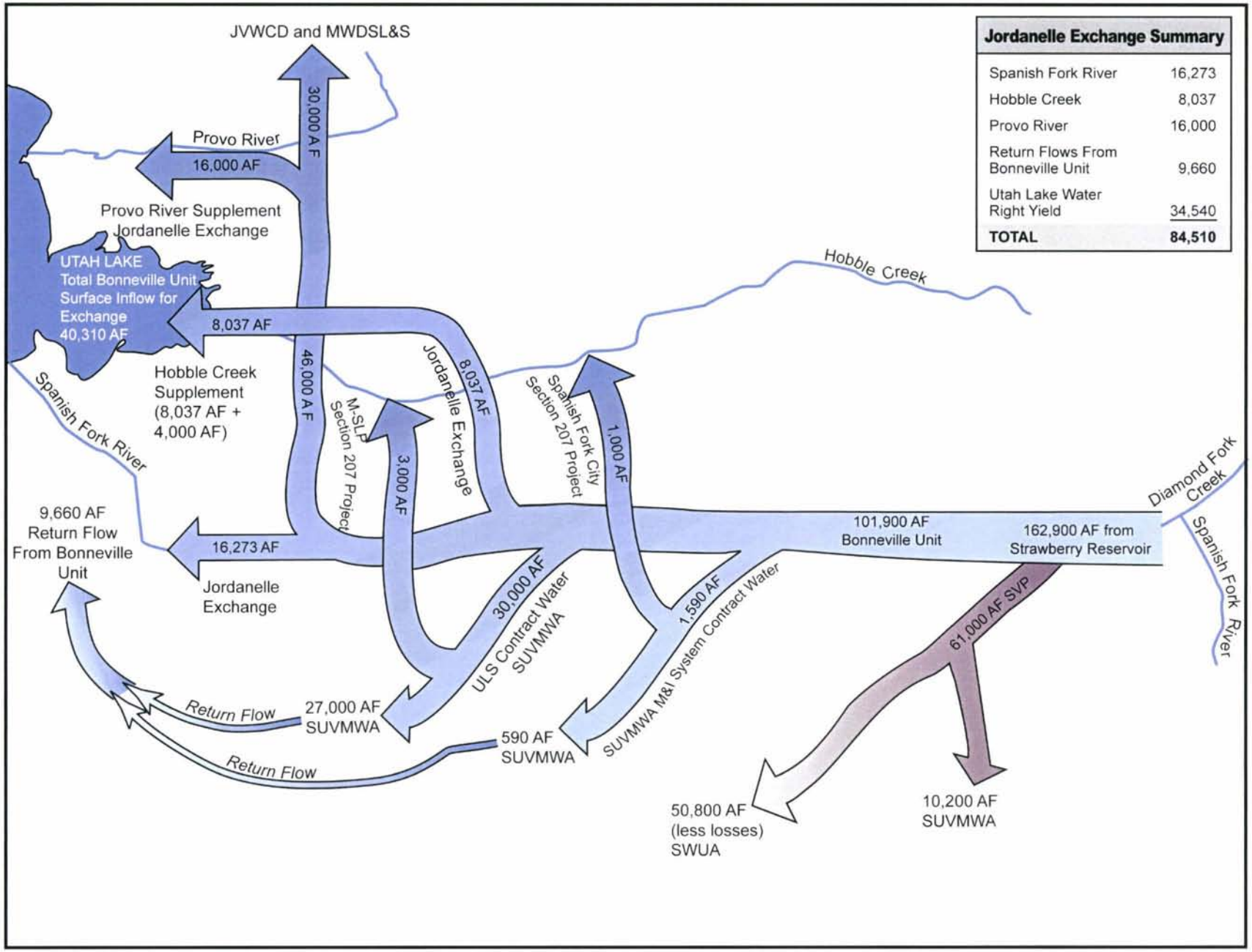
Some of the water that is deliverable under the full operation of the ULS System will be conserved by local entities through their water conservation measures. Under ULS system operation, certain blocks of conserved water would be assigned to the Department of the Interior (Interior) in return for Section 207 financial assistance to the water agencies to construct conservation measures.

Santaquin – Mona Reservoir Pipeline

The Santaquin – Mona Reservoir Pipeline would convey non-project water as part of the June sucker Recovery Implementation Program (JSRIP), pending availability of a water supply for that purpose.

BONNEVILLE UNIT WATER SUPPLY AND DELIVERY

This section addresses the intended manner in which SVP and Bonneville Unit water from Strawberry Reservoir would be delivered under the full operation of the Bonneville Unit, through the Spanish Fork River and ULS System pipelines. Figure 3-2 shows the average annual flows in the ULS System and the Spanish Fork River.



Jordanelle Exchange Summary	
Spanish Fork River	16,273
Hobble Creek	8,037
Provo River	16,000
Return Flows From Bonneville Unit	9,660
Utah Lake Water Right Yield	34,540
TOTAL	**84,510**

Figure 3-2
Utah Lake System Water Deliveries
Under the Bonneville Unit

Bonneville Unit Water Delivery through ULS System Features

The ULS System pipelines are intended to provide the services listed below:

- Deliver CUP M&I water under pressure to communities in southern Utah County
- Deliver some SVP water under pressure to communities in southern Utah County, on a space-available basis.
- Deliver all Strawberry Reservoir SVP water currently conveyed in the Mapleton Lateral in a pipeline to conserve water and deliver water under pressure.
- Convey part of the CUP Utah Lake water to Hobble Creek for instream flow augmentation
- Convey part of the CUP Utah Lake water to the lower Provo River for instream flow augmentation

Redistribution of Conserved Water

Some of the water that is deliverable under the full operation of the ULS System will be conserved by local entities through their water conservation measures. Under ULS system operation, certain blocks of conserved water would be assigned to Interior in return for Section 207 financial assistance to the water agencies to construct conservation measures. Interior has designated these blocks of water for use to improve instream flow conditions in Hobble Creek. Table 3-2 lists the blocks of conserved water to be distributed by the ULS System. The water conservation program is described in Water Supply Appendix Volume 2.

TABLE 3-2
Conserved Bonneville Unit Water Redirected in ULS System

Source of Conserved Water	Acre-Feet Conserved	Proposed Use
Part of the 1,590 acre-feet of Bonneville Unit M&I System water available in southern Utah County under existing contract with SUVMWA.	1,000 AF	Release to Hobble Creek from Mapleton-Springville Lateral Pipeline
Part of the 30,000 acre-feet of Bonneville Unit (ULS) water allocated for M&I use in southern Utah County.	3,000 AF	Release to Hobble Creek from Mapleton-Springville Lateral Pipeline
Total	**4,000 AF**	

The change in delivery for conserved waters cited on Table 3-2 affects the flows in ULS System pipelines. For example, whereas 31,590 acre-feet was allocated for M&I use in the southern Utah County area served by the Spanish Fork-Santaquin Pipeline, only 27,590 acre feet of Bonneville Unit water would actually be delivered through that pipeline and 4,000 acre-feet would be routed through the Mapleton-Springville Lateral Pipeline to Hobble Creek. Such routing accommodations for

conserved water are included in the conveyed quantities listed above, and in the modeled flows summarized on Table 3-3.

Routing Summary of Transbasin Diversion Water

Table 3-3 presents the modeled distribution of deliveries from the transbasin diversion among the various proposed ULS System pipelines and the Spanish Fork River. The quantities presented are the modeled annual average amounts conveyed, under full operation of the Bonneville Unit. The quantities tabulated include the conveyance of SVP water in ULS System pipelines on a space-available basis. Note that both the Bonneville Unit and SVP water deliveries are less than the average annual transbasin diversions by the estimated amounts of conveyance losses in Sixth Water and Diamond Fork creeks and the Spanish Fork River.

TABLE 3-3
Routing of Total Bonneville Unit and SVP Transbasin Diversion with ULS System
(Unit: acre-feet)

Conveyance	Spanish Fork-Santaquin Pipeline	Mapleton-Springville Lateral Pipeline	Spanish Fork - Provo Reservoir Canal Pipeline	Spanish Fork River	Total
Bonneville Unit Water					
Salt Lake County M&I	-	-	30,000	-	30,000
Southern Utah County M&I	27,590	-	-	-	27,590
Utah Lake Delivery	-	12,037	16,000	15,935	43,972
Subtotal – Bonneville Unit	*27,590*	*12,037*	46,000	*15,935*	*101,562*
SVP Irrigation Water					
South Utah County Cities	7,320	2,880	-	-	10,200
Irrigation Water	-	5,951	-	43,343	49,294
Subtotal - SVP	*7,320*	*8,831*	-	*43,343*	*59,494*
Total	**34,910**	**20,868**	**46,000**	**59,278**	**161,056**

Notes:
1. All waters in the first three columns are also conveyed in the Spanish Fork Canyon Pipeline.
2. The Bonneville Unit water delivery to Utah Lake through the Mapleton-Springville Lateral Pipeline includes conserved water released to Hobble Creek for instream flow maintenance.
3. Certain Bonneville Unit water and SVP water deliveries through the Spanish Fork River System have been diminished by conveyance losses in Sixth Water and Diamond Fork creeks, and the Spanish Fork River. These conveyance losses are established by the Spanish Fork River Commissioner. Therefore, the total delivered is less than the 162,900 acre-foot average annual transbasin diversion plus Tunnel seepage.
4. SVP water is conveyed through the Spanish Fork-Santaquin Pipeline on a space available basis.

RESULTS OF HYDROLOGIC MODELING OF ULS SYSTEM AND SPANISH FORK RIVER

This section addresses the monthly distribution of SVP and Bonneville Unit waters to be delivered from ULS System pipelines and the Spanish Fork River to meet the delivery objectives described above. The presentation is based on the model analysis, through which monthly acre-feet and flow rates were calculated. The natural streamflow in the Spanish Fork River is also included in the analysis.

Model Used for Analysis

The operational analysis of the Spanish River and ULS System was performed with the Spanish Fork River Spreadsheet Model. The model is described in Chapter 2 under this same heading.

Hydrologic Data Base

As noted in Chapter 2, the hydrologic data base for estimating the amount and distribution of irrigation water needs consisted of historic runoff and weather conditions over the 50-year period from 1950 to 1999.

ULS System Pipeline Flows

The following discussion presents the modeled operation in terms of the annual acre-feet of SVP and Bonneville Unit water to be conveyed in each of the proposed pipelines, and the resulting flow rates in the pipelines. The year-to-year acre-feet modeled over the 50 years of analysis vary considerably above and below the average annual amount, principally because of variations in local runoff and weather along the Wasatch Front. The pipeline flow rates vary in response to annual deliveries and variations in monthly demand distribution based on weather.

The analysis is complicated in that the operating plan endeavors to maximize the use of the proposed facilities through shared deliveries. For this reason, the modeled deliveries in acre-feet are summarized below in several ways to present the operations from several perspectives. Attachment A contains detailed printouts of the modeled monthly quantities and monthly average flows for each month of the 50 years analyzed.

Spanish Fork Canyon Pipeline. The Spanish Fork Canyon Pipeline would convey Bonneville Unit and SVP water for distribution to three pipelines in the average annual amounts listed below.

- Bonneville Unit water to Spanish Fork - Provo Reservoir Canal Pipeline 46,000 AF
- Bonneville Unit water to Spanish Fork - Santaquin Pipeline 27,590 AF
- Bonneville Unit water to Mapleton-Springville Lateral Pipeline 12,037 AF
- SVP water to Mapleton-Springville Lateral Pipeline 8,831 AF

- SVP water to Spanish Fork - Santaquin Pipeline 7,320 AF

101,778 AF

Table 3-4 summarizes the monthly variations of modeled flows. As can be seen on Table 3-4 the November through March flows in this pipeline are all Bonneville Unit deliveries; no SVP deliveries would be made. However, in April through October, some SVP water would flow in the Spanish Fork Canyon Pipeline. Approximately 84 percent of the total water conveyed in the Spanish Fork Canyon Pipeline would be Bonneville Unit water. SVP water would be conveyed through the Spanish Fork – Santaquin Pipeline on a space available basis up to the 120 cfs capacity of the pipeline. The amounts shown are based on a historical pattern of SVP water deliveries. Amounts greater than 120 cfs would need to be conveyed through the existing canals (Strawberry Highline, Salem, South Fields and East Bench canals) by the cities and used in lower elevation zone secondary systems, or would need to be delivered on a different pattern when capacity was available.

Table 3-4 is intended to present a representative distribution of pipeline flows. The flows are based on the results of the 50-year modeling analysis. The average flow listed is the average of the 50 *monthly averages* for each month shown (the *monthly average* is defined in Chapter 2 under Model Used for Analysis). The wet years and dry years flows listed on the table are the *average* rates that occurred for that month during the three wettest and three driest years of 50-year analysis.

Attachment A presents corresponding data summarizing flows in all months of the year, at all locations. Attachment B also contains the model's basic data printouts from which the summary values were obtained.

Table 3-4
ULS PIPELINE FLOWS UNDER BONNEVILLE UNIT OPERATIONS

Estimated Average Spanish Fork Canyon Pipeline
Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	85	48	47	42	38	36	102	193	261	292	305	223	140
Wet Years	47	20	20	15	17	20	50	109	197	261	267	188	101
Dry Years	78	38	51	41	23	27	155	308	324	283	270	208	151

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	5,221	2,874	2,915	2,597	2,147	2,199	6,093	11,845	15,551	17,952	18,779	13,244	101,417
Wet Years	2,903	1,216	1,216	931	931	1,216	2,959	6,707	11,717	16,024	16,405	11,197	73,423
Dry Years	4,817	2,251	3,165	2,551	1,322	1,673	9,228	18,916	19,280	17,389	16,586	12,369	109,548

Estimated Average Mapleton-Springville Lateral Pipeline
Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	14	10	9	10	9	8	51	44	60	56	51	21	29
Wet Years	13	0	0	0	0	0	8	5	23	53	52	23	15
Dry Years	6	6	6	6	6	6	87	120	95	47	39	10	36

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	839	587	576	604	499	483	3,050	2,724	3,598	3,415	3,112	1,230	20,717
Wet Years	776	0	0	0	0	0	455	309	1,397	3,242	3,198	1,361	10,739
Dry Years	377	365	377	377	340	377	5,173	7,374	5,664	2,873	2,382	619	26,299

Estimated Average Spanish Fork-Santaquin Pipeline*
Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	0	0	0	0	0	0	12	63	107	137	146	105	48
Wet Years	0	0	0	0	0	0	12	60	99	126	137	105	45
Dry Years	0	0	0	0	0	0	13	79	124	129	139	100	49

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	30	0	0	0	0	0	705	3,899	6,395	8,424	9,007	6,240	34,700
Wet Years	0	0	0	0	0	0	689	3,713	5,879	7,743	8,424	6,236	32,685
Dry Years	0	0	0	0	0	0	800	4,887	7,376	7,917	8,556	5,946	35,482

Estimated Average Spanish Fork-Provo Reservoir Canal Pipeline
Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	71	38	38	32	29	28	39	85	93	99	108	97	64
Wet Years	35	20	20	15	17	20	31	44	75	82	78	61	41
Dry Years	87	32	59	47	26	29	50	119	105	120	106	117	75

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	4,352	2,287	2,339	1,993	1,649	1,716	2,338	5,222	5,558	6,113	6,660	5,773	46,000
Wet Years	2,127	1,216	1,216	931	931	1,216	1,815	2,685	4,440	5,040	4,783	3,600	30,000
Dry Years	5,326	1,886	3,648	2,872	1,476	1,780	2,982	7,296	6,240	7,378	6,513	6,975	54,374

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

* SVP water would be conveyed through the Spanish Fork – Santaquin Pipeline on a space available basis up to the 120 cfs capacity of the pipeline. The monthly amounts shown are based on a historical pattern of SVP water deliveries. Amounts greater than 120 cfs would need to be conveyed through the existing canals (Strawberry Highline, Salem, South Fields and East Bench canals) by the cities and used in lower elevation zone secondary systems, or would need to be delivered on a different pattern when capacity was available.

Spanish Fork-Santaquin Pipeline. The Spanish Fork-Santaquin Pipeline would deliver about 34,910 acre-feet to the communities south of the Spanish Fork River, in the average annual amounts listed.

• Bonneville Unit M&I water for delivery to Utah County communities	27,590 AF
• SVP water for delivery to Utah County communities	7,320 AF
	34,910 AF

The water supplies listed above would be delivered during the late spring and summer, starting in April or May and ending in September or October, depending on weather conditions. The peak deliveries would occur in July and August. The monthly flow pattern for the combined Bonneville Unit and SVP water is illustrated on Table 3-4. Capacity restrictions could prohibit conveying more than the design capacity of 120 cfs. SVP water would be conveyed on a space-available basis. The use of available capacity in the Spanish Fork-Santaquin Pipeline for SVP water would also depend on available capacity for the SVP flows in the Spanish Fork Canyon Pipeline.

Santaquin-Mona Reservoir Pipeline. The Santaquin–Mona Reservoir Pipeline would deliver non-project water to Mona Reservoir to maintain a conservation pool in the reservoir as part of the JSRIP. As noted above under ULS System Facilities, the construction and use of the pipeline for this purpose will depend on efforts by DOI, the Mitigation Commission, and the District to secure a suitable water supply for this purpose. No delivery schedule has been projected for this proposed pipeline.

Mapleton-Springville Lateral Pipeline. The Mapleton-Springville Lateral Pipeline would convey and deliver the following categories of water, in the average annual amounts listed.

• SVP water for the Mapleton and Springville areas	5,951 AF
• SVP water for communities north of the Spanish Fork River	2,880 AF
• Bonneville Unit water for delivery to Utah Lake through Hobble Creek	8,037 AF
• Conserved water for delivery to Utah Lake through Hobble Creek	4,000 AF
	20,868 AF

The SVP water would essentially be delivered during the irrigation season, starting in April or May and ending in September or October, depending on weather conditions. The same pattern would apply to most of the Bonneville Unit M&I water. The flow distribution is illustrated on Table 3-4, shown previously.

The 12,037 acre-feet of water releases to Hobble Creek consist of Bonneville Unit water delivered to Utah Lake for exchange to Jordanelle Reservoir, and conserved water rerouted to Utah Lake through Hobble Creek. Of the aggregate amount, 4,000 acre-feet would be provided every year that it is needed to augment Hobble Creek flow. The remaining water would be provided only in years when water is delivered from Strawberry Reservoir to Utah Lake for exchange to Jordanelle

Reservoir. Hobble Creek supplemental water would not be delivered during wet years when Utah Lake is above compromise level (wet year flows in Hobble Creek are sufficient for June sucker recruitment). The operational analysis includes these provisions.

Spanish Fork Canyon - Provo Reservoir Canal Pipeline. 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, as described in Water Supply Appendix Volume 5.

The Spanish Fork Canyon-Provo Reservoir Canal Pipeline would convey the following waters in the average annual amounts listed.

• Bonneville Unit M&I water for delivery to existing pipelines to Salt Lake Co.	30,000 AF
• Bonneville Unit water for delivery to Utah Lake through the lower Provo River	16,000 AF
Total	46,000 AF

The combined monthly delivery of water to Salt Lake County and to Utah Lake varied from approximately 4 percent in January to approximately 14 percent in August. Monthly average pipeline flows for all 12 months are shown on Table 3-4.

Spanish Fork River Modeled Flows

The Spanish Fork River would be one of three main conveyances for Bonneville Unit water delivered to Utah Lake for exchange with Jordanelle Reservoir. And, as in the past, the river would also be the primary conveyance route for SVP water originating in Strawberry Reservoir. The Spanish Fork River would convey the following waters from Diamond Fork Creek to the Spanish Fork Canyon Diversion Structure, in the average annual amounts listed. Below the diversion structure the Bonneville Unit release to Utah Lake would remain constant and the SVP water would diminish as it is diverted at successive points downstream.

• SVP irrigation water for diversion into existing canal distribution systems	43,343 AF
• Bonneville Unit water for delivery to Utah Lake through the Spanish Fork River	15,935 AF
Total	59,278 AF

Table 3-5 summarizes the modeled average Spanish Fork River flows in all 12 months of the year. The flows listed are the combined natural flow, SVP water, and Bonneville Unit water for delivery to Utah Lake. As shown on the table, the modeled average flows reach their maximum during the summer irrigation season, with a spring rise from snowmelt. A breakdown between SVP flows, Bonneville Unit flows, and natural flows is contained in Attachment A. The breakdown shows that in June, July, and August the SVP flow reaching the Spanish Fork Diversion Dam rises to the 200 cfs range but there is no Bonneville Unit flow. Conversely, in the winter there is Bonneville Unit

flow up to the 40 cfs range but there is no SVP flow. The natural flow ranges between 124 cfs in winter and 578 cfs at the height of the snowmelt period in May.

Average flows on the Spanish Fork River are depicted graphically at the following locations:

Figure 3-3	From Diamond Fork Creek to Spanish Fork Diversion Dam (Castilla gage)
Figure 3-4	Spanish Fork Diversion Dam to East Bench Diversion
Figure 3-5	East Bench Diversion to Mill Race Canal
Figure 3-6	Mill Race Canal to Lake Shore Gage
Figure 3-7	Spanish Fork River Flows at Lake Shore Gage
Figure 3-8	Hobble Creek Flows from Mapleton Lateral to Utah Lake

Table 3-5
SPANISH FORK RIVER AND HOBBLE CREEK FLOWS UNDER BONNEVILLE UNIT OPERATIONS

Estimated Average Spanish Fork River Flows from Diamond Fork Creek to Spanish Fork Diversion Dam (Castilla Gage)

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	134	130	124	125	138	171	296	578	452	356	305	180	250
Wet Years	163	152	144	145	203	272	746	1,338	947	460	376	270	435
Dry Years	101	104	100	102	111	111	141	209	315	227	210	119	154

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	8,238	7,726	7,622	7,703	7,734	10,539	17,589	35,538	26,881	21,907	18,733	10,712	180,921
Wet Years	10,014	9,019	8,826	8,922	11,347	16,745	44,377	82,288	56,325	28,260	23,106	16,074	315,302
Dry Years	6,196	6,190	6,164	6,291	6,231	6,834	8,383	12,833	18,754	13,929	12,922	7,103	111,832

Estimated Average Spanish Fork River Flows from Spanish Fork Diversion Dam to East Bench Diversion

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	34	48	53	54	53	46	60	189	99	54	43	29	64
Wet Years	39	44	49	49	52	36	264	765	406	115	66	54	162
Dry Years	40	51	55	54	59	56	72	30	39	24	22	16	43

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	2,098	2,841	3,272	3,290	2,994	2,835	3,594	11,631	5,866	3,316	2,668	1,739	46,142
Wet Years	2,373	2,622	2,992	2,992	2,894	2,235	15,727	47,035	24,182	7,077	4,030	3,192	117,350
Dry Years	2,490	3,056	3,392	3,349	3,307	3,442	4,302	1,818	2,320	1,448	1,325	946	31,194

Estimated Average Spanish Fork River Flows from East Bench Diversion to Mill Race Canal

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	31	48	53	54	53	46	53	147	51	17	14	15	49
Wet Years	37	44	49	49	52	36	264	732	328	55	29	21	142
Dry Years	38	51	55	54	59	55	58	10	10	7	5	11	34

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	1,934	2,841	3,272	3,290	2,994	2,808	3,158	9,046	3,039	1,030	869	914	35,194
Wet Years	2,252	2,622	2,992	2,992	2,894	2,235	15,727	44,994	19,502	3,368	1,755	1,265	102,597
Dry Years	2,337	3,056	3,392	3,349	3,307	3,412	3,438	612	604	429	302	659	24,897

Estimated Average Spanish Fork River Flows at Lake Shore Gage

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	102	134	135	137	150	182	258	301	93	15	13	23	128
Wet Years	147	158	153	154	217	287	758	1,150	459	41	28	50	300
Dry Years	78	106	115	117	125	118	64	12	21	11	8	17	66

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	6,278	7,970	8,276	8,407	8,421	11,169	15,322	18,504	5,537	920	811	1,396	93,012
Wet Years	9,063	9,389	9,401	9,500	12,153	17,658	45,087	70,698	27,284	2,526	1,727	2,974	217,459
Dry Years	4,815	6,322	7,055	7,192	7,034	7,265	3,833	720	1,271	655	465	999	47,628

Estimated Average Hobble Creek Flows from Mapleton Lateral to Utah Lake

Flows in cfs

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Average	20	35	32	32	35	46	111	145	65	13	10	10	46
Wet Years	26	36	33	32	58	78	209	346	183	43	26	25	91
Dry Years	6	20	19	20	22	20	96	92	40	6	6	6	29

Flows in acre-feet

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Average	1,257	2,099	1,978	1,965	1,957	2,815	6,609	8,892	3,841	782	630	590	33,416
Wet Years	1,581	2,139	2,014	1,998	3,217	4,783	12,453	21,262	10,891	2,625	1,582	1,460	66,007
Dry Years	377	1,177	1,196	1,237	1,271	1,241	5,714	5,631	2,380	377	377	365	21,341

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

Figure 3-3
Estimated Spanish Fork River Flows from Diamond Fork Creek to Spanish Fork Diversion Dam (Castilla gage)

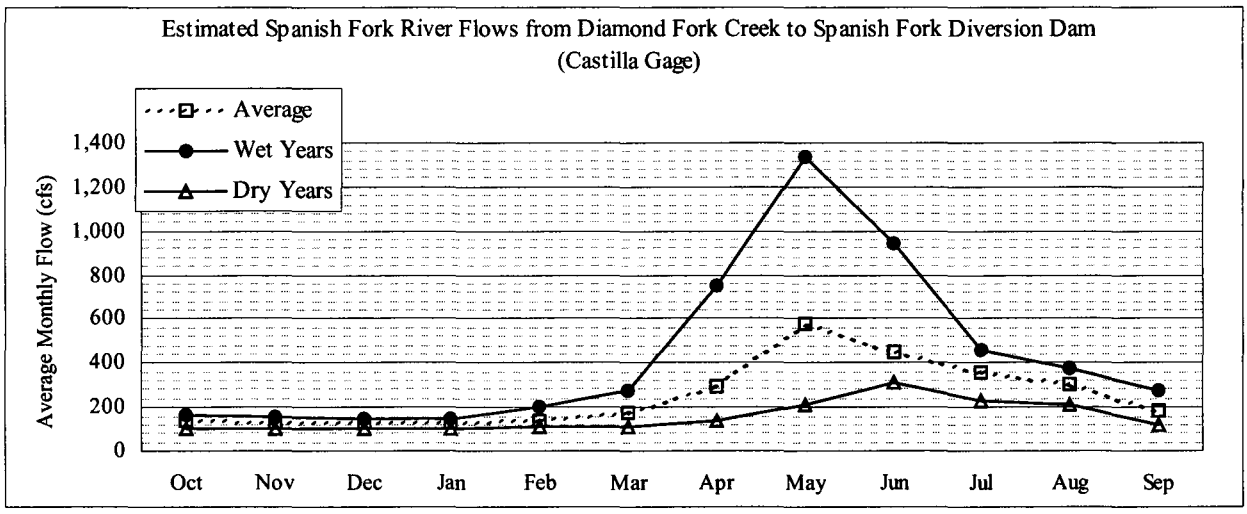


Figure 3-4
Estimated Spanish Fork River Flows from Spanish Fork Diversion Dam to East Bench Diversion

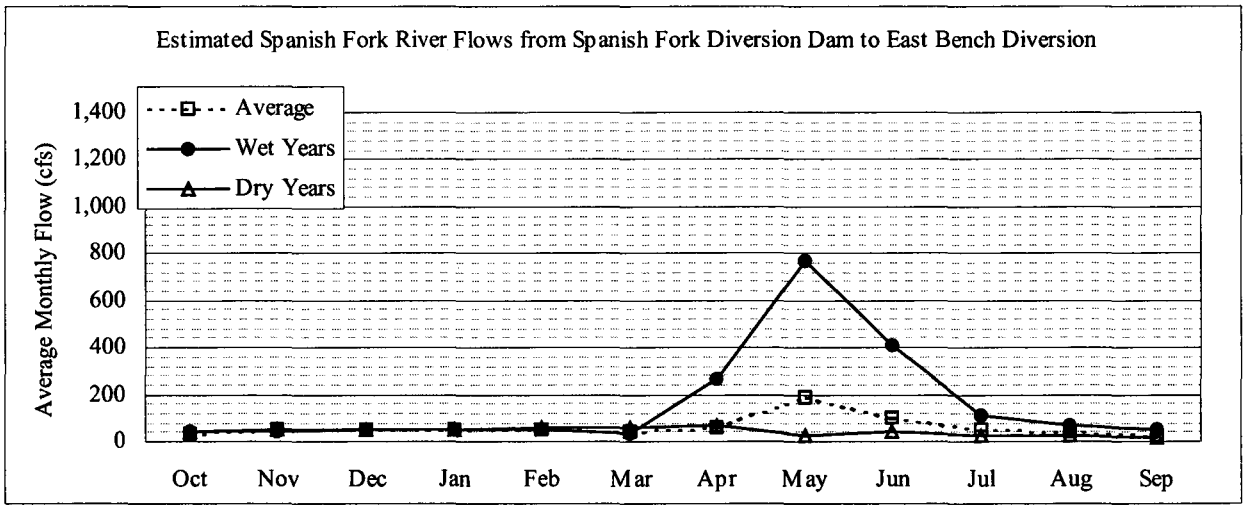


Figure 3-5
Estimated Spanish Fork River Flows from East Bench Diversion to Mill Race Canal

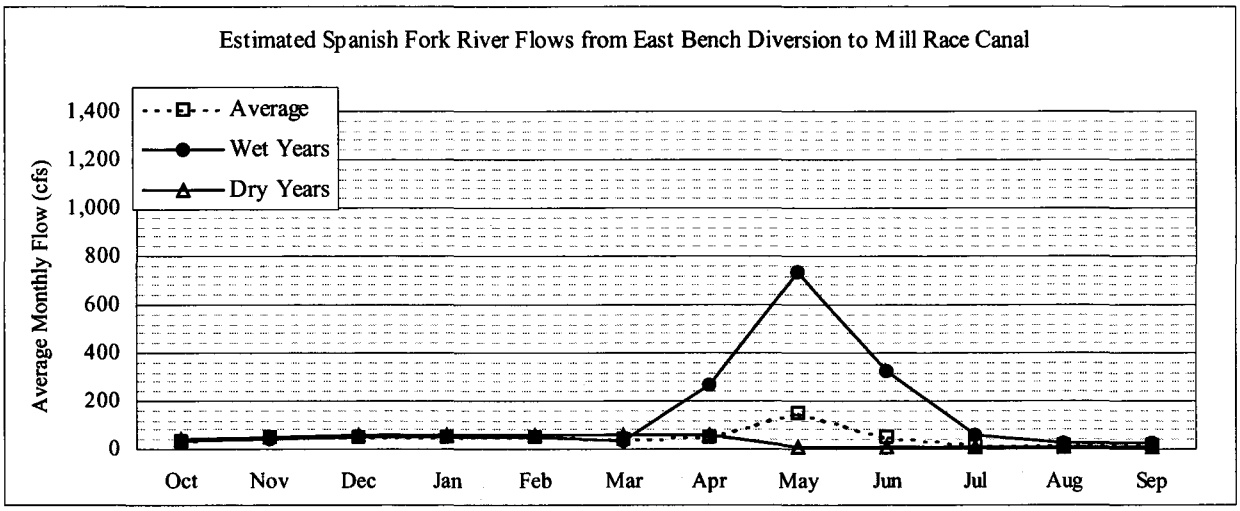


Figure 3-6
Estimated Spanish Fork River Flows from Mill Race Canal to Lake Shore Gage

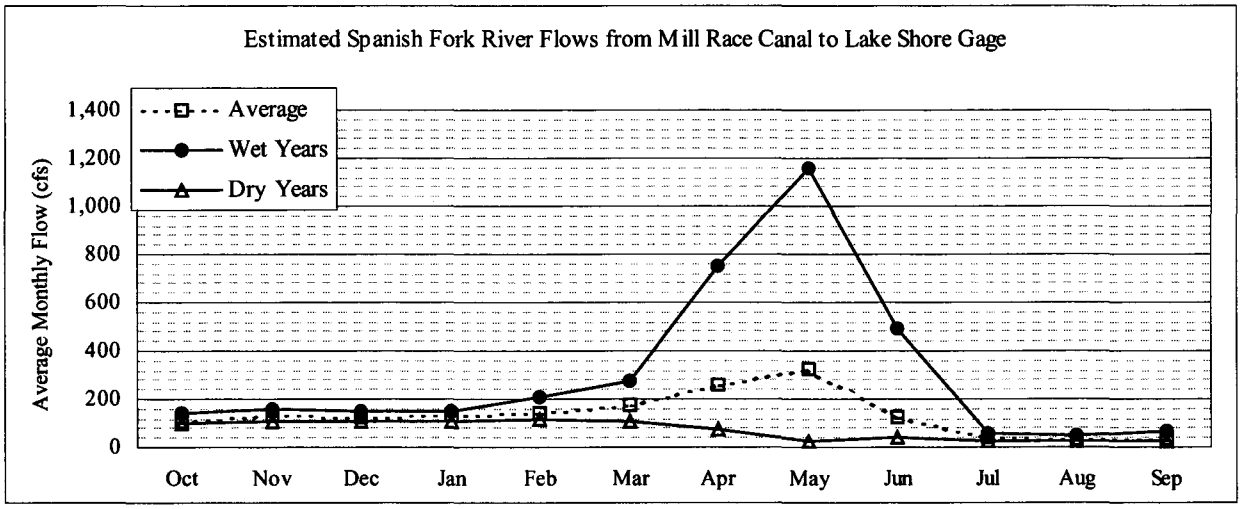
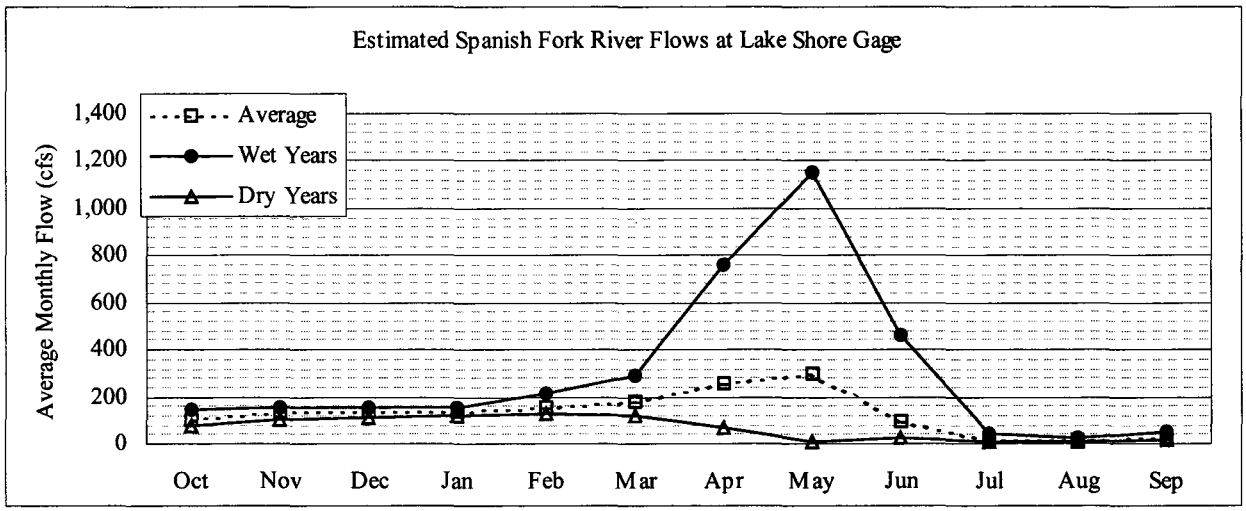


Figure 3-7
Estimated Spanish Fork River Flows at Lake Shore Gage



Hobble Creek Modeled Flows

Hobble Creek flow objectives are based primarily on increasing the creek discharge into Utah Lake to attract June sucker into the creek for spawning. The target flows were preliminarily estimated as 80 cfs in April, 100 cfs in May, and 40 cfs in June based on recommendations from the June Sucker Recovery Implementation Team. Additional fish and wildlife water would be delivered to Hobble Creek outside of the June sucker spawning window to improve aquatic habitat for other species.

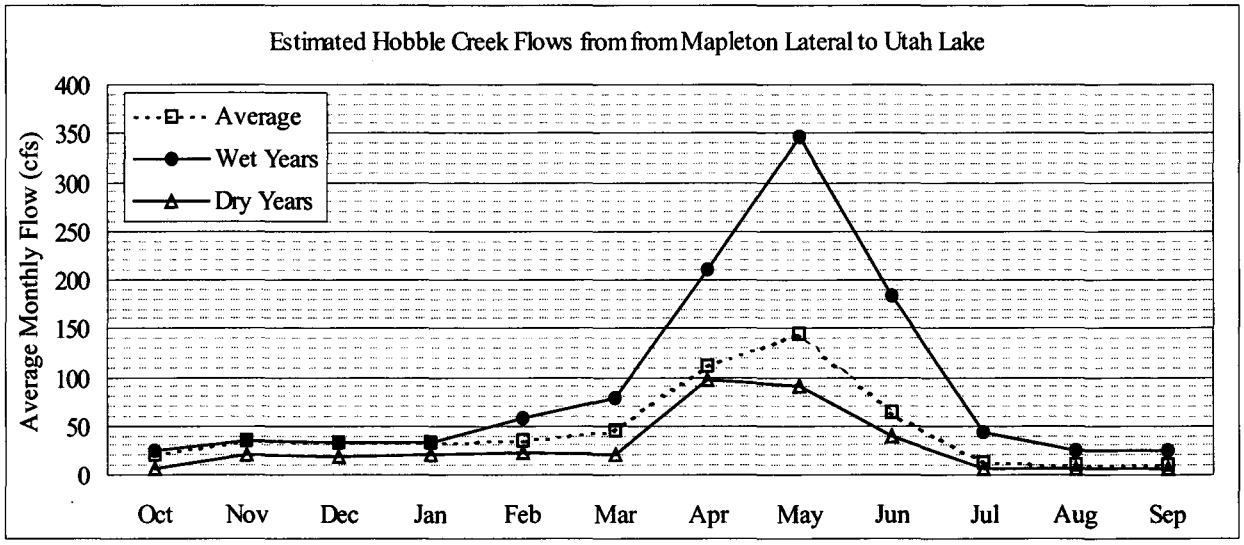
The role of Hobble Creek in the operation of the Bonneville Unit consists of Bonneville Unit water conveyance to Utah Lake on a schedule to augment creek flow for the JSRIP program and other fisheries. To accomplish this an average of 12,037 acre-feet of Bonneville Unit water would be released to Hobble Creek.

The Bonneville Unit water for Utah Lake would be released into Hobble Creek primarily in April through June to help achieve target flows associated with June sucker recovery. Table 3-5 presents monthly average streamflows in Hobble Creek for selected months.

As discussed above under the Mapleton-Springville Lateral Pipeline, 4,000 acre-feet of the 12,037 acre-feet of water releases to Hobble Creek would be released to Hobble Creek every year that it is needed to supplement instream flows. The remainder would be provided only in years when water is delivered from Strawberry Reservoir to Utah Lake for exchange to Jordanelle Reservoir. No water would be released to Hobble Creek when Utah Lake is above compromise level. The assumption is that such years would be wet years, and wet year flows in Hobble Creek are sufficient for June sucker recruitment. Figure 3-8 shows the monthly average flows for average, wet year, and dry year

conditions resulting from this operational plan. The modeled flow for each month of the 50-year period of analysis is contained in Attachment A.

Figure 3-8
Estimated Hobble Creek Flows Below Mapleton Lateral



Return Flow to Utah Lake

Direct return flows to Utah Lake from ULS water delivered to southern Utah County are estimated to be approximately 9,660 acre-feet. These return flows would become part of the Bonneville Unit water supply to be used for conversion or exchanged to Jordanelle Reservoir under the State Engineer's Utah Lake Distribution Plan. Exchanged and converted water would be delivered to the District's petitioners in Wasatch, Utah, and Salt Lake counties. Return flow from water delivered to Salt Lake County through the ULS System is addressed in Water Supply Appendix Volume 6.

Disposition of CUP Water Supply from the ULS System

Table 3-6 summarizes the disposition of the Bonneville Unit water from the transbasin diversion from Strawberry Reservoir and the return flows to Utah Lake from the use of Bonneville Unit M&I water delivered in southern Utah County through the ULS System.

TABLE 3-6
Disposition of Bonneville Unit Water from Transbasin Diversion and Southern Utah County Return Flows To Utah Lake
(Unit: acre-feet)

Source	Average Annual Amount	Proposed Use
Transbasin Diversion		
Direct delivery to Salt Lake County	30,000	M&I use
Direct delivery to southern Utah County	27,590	M&I use
Subtotal - direct delivery	57,590	
Delivery to Utah Lake[1]	39,972	Exchange to Jordanelle Reservoir
Conserved water provided to Interior[2]	4,000	Instream flows in Hobble Creek and exchange to Jordanelle Reservoir
Subtotal - Utah Lake delivery	*43,972*	
Conveyance Losses[3]	338	
Subtotal - transbasin diversion	*101,900*	
Return Flow to Utah Lake		
From use of CUP M&I water delivered through the ULS System to southern Utah County	9,660	Exchange with Jordanelle Reservoir
Total	**111,560**	

[1] Delivery through Spanish Fork River, Hobble Creek, and Provo River.
[2] This water flows to Utah Lake and becomes part of the supply for exchange to Jordanelle Reservoir.
[3] Conveyance losses in Sixth Water and Diamond Fork creeks and in Spanish Fork River.

Attachment A

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 IV Attachment A

March 2004

STREAM FLOWS – SPANISH FORK RIVER

Bonneville Unit Operations - Spanish Fork Flows by Ownership
Summary of Flows (ac-ft)

Node	Location and Description		Average Annual Flow (ac-ft)
S-1	Releases from Strawberry Reservoir		
S-1a	Releases from Strawberry Reservoir	-Total Flow	162,900
S-1b	Releases from Strawberry Reservoir	-CUP Water	101,900
S-1c	Releases from Strawberry Reservoir	-SVP Water	61,000
S-1d	Strawberry Tunnel (without seepage)	-Total Flow	17,046
S-1e	Strawberry Tunnel (without seepage)	-CUP Water	8,773
S-1f	Strawberry Tunnel (without seepage)	-SVP Water	8,273
S-1g	Strawberry Tunnel (with seepage)	-Total Flow	20,668
S-1h	Strawberry Tunnel (with seepage)	-CUP Water	8,773
S-1i	Strawberry Tunnel (with seepage)	-SVP Water	9,875
	Strawberry Tunnel (with seepage)	-SVP Storage Water	8,273
	Strawberry Tunnel (with seepage)	-SVP Tunnel Accretion	1,602
S-1j	Strawberry Tunnel (with seepage)	-Non-SVP Tunnel Accretion	2,020
S-1k	Syar Tunnel (after Strawberry Tunnel release)	-Total Flow	145,854
S-1l	Syar Tunnel (after Strawberry Tunnel release)	-CUP Water	93,127
S-1m	Syar Tunnel (after Strawberry Tunnel release)	-SVP Water	52,727
S-2	Sixth Water Creek at Strawberry Tunnel		
S-2a	Sixth Water Creek at Strawberry Tunnel	-Total Flow	20,668
S-2b	Sixth Water Creek at Strawberry Tunnel	-CUP Water	8,773
S-2c	Sixth Water Creek at Strawberry Tunnel	-SVP Water	9,875
	Sixth Water Creek at Strawberry Tunnel	-SVP Storage Water	8,273
	Sixth Water Creek at Strawberry Tunnel	-SVP Tunnel Accretion	1,602
S-2d	Sixth Water Creek at Strawberry Tunnel	-Non-SVP Tunnel Accretion	2,020
S-3	Sixth Water Creek below Sixth Water Aqueduct		
S-3a	Releases from the Syar / Sixth Water Aqueduct	-Total Flow	0
S-3b	Releases from the Syar / Sixth Water Aqueduct	-CUP Water	0
S-3c	Releases from the Syar / Sixth Water Aqueduct	-SVP Water	0
S-3d	Sixth Water Creek below Sixth Water Aqueduct	-Total Flow	24,685
S-3e	Sixth Water Creek below Sixth Water Aqueduct	-CUP Water	8,703
S-3f	Sixth Water Creek below Sixth Water Aqueduct	-SVP Water	9,628
S-3g	Sixth Water Creek below Sixth Water Aqueduct	-Natural Water	6,354
S-4	Diamond Fork Creek below Diamond Fork Creek Outlet Structure		
S-4a	Tanner Ridge Tunnel	-Total Flow	145,854
S-4b	Tanner Ridge Tunnel	-CUP Water	93,127
S-4c	Tanner Ridge Tunnel	-SVP Water	52,727
S-4d	Releases to Diamond Fork Creek from Diamond Fork Creek Outlet Structure	-Total Flow	12,499
S-4e	Releases to Diamond Fork Creek from Diamond Fork Creek Outlet Structure	-CUP Water	7,500
S-4f	Releases to Diamond Fork Creek from Diamond Fork Creek Outlet Structure	-SVP Water	4,999
S-4g	Diamond Fork Creek below Diamond Fork Creek Outlet Structure	-Total Flow	59,980
S-4h	Diamond Fork Creek below Diamond Fork Creek Outlet Structure	-CUP Water	16,150
S-4i	Diamond Fork Creek below Diamond Fork Creek Outlet Structure	-SVP Water	14,434
S-4j	Diamond Fork Creek below Diamond Fork Creek Outlet Structure	-Natural Water	29,396
S-4k	Diamond Fork Pipeline	-Total Flow	133,355
S-4l	Diamond Fork Pipeline	-CUP Water	85,627
S-4m	Diamond Fork Pipeline	-SVP Water	47,728
S-5	Diamond Fork Creek above Spanish Fork Flow Control Structure		
S-5a	Diamond Fork Creek above Spanish Fork Flow Control Structure	-Total Flow	75,632
S-5b	Diamond Fork Creek above Spanish Fork Flow Control Structure	-CUP Water	16,090
S-5c	Diamond Fork Creek above Spanish Fork Flow Control Structure	-SVP Water	14,218
S-5d	Diamond Fork Creek above Spanish Fork Flow Control Structure	-Natural Water	45,324
S-6	Spanish Fork River at Castilla Gage		
S-6a	Releases from Diamond Fork Pipeline via Spanish Fork Flow Control Structure	-Total Flow	31,938
S-6b	Releases from Diamond Fork Pipeline via Spanish Fork Flow Control Structure	-CUP Water	0
S-6c	Releases from Diamond Fork Pipeline via Spanish Fork Flow Control Structure	-SVP Water	31,938
S-6d	Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)	-Total Flow	180,921
S-6e	Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)	-CUP Water	15,935
	Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)	-So. Utah Co. CUP M&I	0
	Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)	-Jordanelle Exchange	15,935
S-6f	Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)	-SVP Water	43,343
S-6g	Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)	-Natural Water	121,644

Bonneville Unit Operation - Spanish Fork Flows by Ownership
Summary of Flows (ac-ft)

Node	Location and Description		Average Annual Flow (ac-ft)	Change from Baseline
S-7	Spanish Fork River below Spanish Fork Diversion Dam			
S-7a	Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion	-Total Flow	46,142	-70,514
S-7b	Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion	-CUP Water	15,935	-68,114
	Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion	-So. Utah Co. CUP M&I	0	-1,590
	Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion	-Jordanelle Exchange	15,935	-66,524
S-7c	Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion	-SVP Water	3,967	-2,400
S-7d	Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion	-Natural Water	26,240	0
S-8	Spanish Fork River below East Bench Dam			
S-8a	Spanish Fork River from East Bench Diversion to Mill Race Canal	-Total Flow	35,194	-68,114
S-8b	Spanish Fork River from East Bench Diversion to Mill Race Canal	-CUP Water	15,935	-68,114
	Spanish Fork River from East Bench Diversion to Mill Race Canal	-So. Utah Co. CUP M&I	0	-1,590
	Spanish Fork River from East Bench Diversion to Mill Race Canal	-Jordanelle Exchange	15,935	-66,524
S-8c	Spanish Fork River from East Bench Diversion to Mill Race Canal	-SVP Water	0	0
S-8d	Spanish Fork River from East Bench Diversion to Mill Race Canal	-Natural Water	19,259	0
S-9	Spanish Fork River below Mill Race Diversion			
S-9a	Spanish Fork River from Mill Race Canal to Lake Shore Gage	-Total Flow	98,099	-68,114
S-9b	Spanish Fork River from Mill Race Canal to Lake Shore Gage	-CUP Water	15,935	-68,114
	Spanish Fork River from Mill Race Canal to Lake Shore Gage	-So. Utah Co. CUP M&I	0	-1,590
	Spanish Fork River from Mill Race Canal to Lake Shore Gage	-Jordanelle Exchange	15,935	-66,524
S-9c	Spanish Fork River from Mill Race Canal to Lake Shore Gage	-SVP Water	2,442	0
S-9d	Spanish Fork River from Mill Race Canal to Lake Shore Gage	-Natural Water	79,722	0
S-10	Spanish Fork River at Lake Shore Gage			
S-10a	Spanish Fork River at Lake Shore Gage	-Total Flow	93,012	-68,114
S-10b	Spanish Fork River at Lake Shore Gage	-CUP Water	15,935	-68,114
	Spanish Fork River at Lake Shore Gage	-So. Utah Co. CUP M&I	0	-1,590
	Spanish Fork River at Lake Shore Gage	-Jordanelle Exchange	15,935	-66,524
S-10c	Spanish Fork River at Lake Shore Gage	-SVP Water	0	0
S-10d	Spanish Fork River at Lake Shore Gage	-Natural Water	77,077	0
S-11	Spanish Fork Canyon Pipeline			
S-11a	Spanish Fork Canyon Pipeline[1]	-Total Flow	101,778	N/A
S-11b	Spanish Fork Canyon Pipeline	-CUP Water	85,627	N/A
	Spanish Fork Canyon Pipeline	-CUP Water to Mapleton-Springville Lateral Pipeline	12,037	N/A
	Spanish Fork Canyon Pipeline	-CUP Water to Spanish Fork - Santaquin Pipeline	27,590	N/A
	Spanish Fork Canyon Pipeline	-CUP Water to Spanish Fork - Provo Reservoir Canal Pipeline	46,000	N/A
S-11c	Spanish Fork Canyon Pipeline[2]	-SVP Water	16,151	N/A
	Spanish Fork Canyon Pipeline[2]	-SVP Water to Mapleton-Springville Lateral Pipeline	8,982	N/A
	Spanish Fork Canyon Pipeline[2]	-SVP Water to Spanish Fork - Santaquin Pipeline	7,530	N/A
S-12	Mapleton-Springville Lateral Pipeline[3]			
S-12a	Mapleton-Springville Lateral Pipeline[1]	-Total Flow	20,868	N/A
S-12b	Mapleton-Springville Lateral Pipeline	-CUP Water	12,037	N/A
	Mapleton-Springville Lateral Pipeline	-Hobble Creek Exchange	8,037	N/A
	Mapleton-Springville Lateral Pipeline	-Hobble Creek Conservation	4,000	N/A
	Mapleton-Springville Lateral Pipeline	-Conserved ULS	3,000	N/A
	Mapleton-Springville Lateral Pipeline	-So. Utah Co. CUP M&I	1,000	N/A
S-12c	Mapleton-Springville Lateral Pipeline[2]	-SVP Water	8,831	N/A
	Mapleton-Springville Lateral Pipeline[2]	-SVP Storage Ag Delivery	5,951	N/A
	Mapleton-Springville Lateral Pipeline[2]	-SVP Storage M&I Delivery	2,880	N/A
S-13	Spanish Fork - Santaquin Pipeline			
S-13a	Spanish Fork - Santaquin Pipeline[1]	-Total Flow	34,910	N/A
S-13b	Spanish Fork - Santaquin Pipeline	-CUP Water	27,590	N/A
	Spanish Fork - Santaquin Pipeline	-ULS Delivery to So. Utah Co.	27,000	N/A
	Spanish Fork - Santaquin Pipeline	-So. Utah Co. CUP M&I	590	N/A
S-13c	Spanish Fork - Santaquin Pipeline[2]	-SVP Water	7,320	N/A
S-14	Hobble Creek Below Diversion	-Total Flow	33,416	12,037
S-15	Spanish Fork - Provo Reservoir Canal Pipeline	-CUP Water	46,000	N/A

Footnotes:

[1] Modeled total water through pipeline is slightly less than actual deliveries due to a few, minor historical capacity deficiencies. Actual deliveries (rather than modeled deliveries) are shown in this summary.

[2] Modeled SVP water through pipeline is slightly less than actual delivery due to a few, minor historical capacity deficiencies. Actual deliveries (rather than modeled deliveries) are shown in this summary.

[3] Under Baseline conditions, the Mapleton Lateral carries an average of 973 acre-ft/year of Spanish Fork River water. When the Lateral is enclosed, this water would presumably be exchanged and used elsewhere.

S-1a
Bonneville Unit Operation - Total (acre-feet)
Releases from Strawberry Reservoir

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	7,156	3,623	3,819	4,526	2,923	3,168	3,694	8,721	27,631	27,922	32,958	24,753	150,894
1951	4,939	3,488	3,575	3,519	3,000	3,452	3,694	8,037	27,883	33,148	27,253	19,912	141,900
1952	4,975	3,612	3,748	3,290	3,048	3,082	3,694	7,793	16,230	27,677	24,151	21,904	123,206
1953	11,019	2,668	3,050	2,765	2,785	3,029	7,761	9,959	28,307	31,204	25,861	18,758	147,167
1954	4,424	3,566	3,904	3,193	3,418	3,445	8,922	18,320	28,711	28,463	29,328	13,582	149,276
1955	4,940	3,887	4,104	3,719	3,496	4,066	11,052	17,455	30,484	34,449	25,616	16,512	159,782
1956	5,113	4,187	4,104	3,719	3,793	3,566	6,440	20,250	35,052	31,431	29,152	17,226	164,034
1957	5,010	3,987	4,104	3,719	3,286	3,866	9,251	12,405	16,930	35,284	30,725	20,825	149,394
1958	4,754	3,687	4,004	3,719	3,264	3,866	5,490	12,405	31,234	33,188	31,941	16,331	153,884
1959	4,853	3,887	4,004	3,719	3,464	3,904	10,784	28,658	35,013	26,188	22,761	13,856	161,091
1960	5,115	4,087	4,304	3,819	3,473	3,478	9,853	26,275	35,210	30,410	27,267	13,512	166,803
1961	5,046	3,987	4,304	3,819	3,664	4,204	12,618	29,801	33,958	24,931	18,342	13,338	158,012
1962	5,190	4,087	4,204	3,919	3,464	4,066	3,863	14,062	29,843	31,401	34,441	17,630	156,170
1963	4,792	3,987	4,204	3,719	2,864	3,866	11,126	20,815	21,437	35,488	31,494	15,958	159,752
1964	6,498	5,172	8,417	8,050	5,169	4,973	10,325	12,464	17,959	42,242	33,241	23,496	178,006
1965	9,548	5,083	5,624	5,696	5,544	6,239	4,483	12,405	17,833	28,289	26,690	19,312	146,746
1966	10,197	7,142	4,063	4,449	5,237	3,666	8,601	21,068	35,781	29,409	29,867	18,037	177,517
1967	7,768	4,595	6,828	4,836	3,774	3,999	10,755	13,876	14,543	35,957	34,403	24,922	166,257
1968	9,401	5,888	5,795	5,639	4,632	6,009	8,393	12,466	20,828	33,900	25,246	22,585	160,782
1969	8,770	6,682	8,202	3,497	4,240	2,620	3,694	7,976	20,656	29,546	33,739	22,187	151,809
1970	8,883	3,680	4,789	5,392	4,884	5,961	10,189	11,571	21,008	31,467	35,549	18,992	162,364
1971	7,062	3,413	6,301	5,331	4,256	4,159	5,588	14,941	24,959	35,763	35,190	16,381	163,345
1972	8,567	3,486	5,728	6,109	5,618	2,732	8,964	24,892	27,966	31,964	29,982	16,383	172,392
1973	9,238	7,027	6,426	5,870	5,038	5,602	5,114	7,793	19,869	31,881	32,284	16,911	153,053
1974	9,074	6,697	5,671	6,011	5,653	5,278	6,205	9,944	30,067	30,777	33,480	17,760	166,617
1975	8,831	7,757	6,167	5,317	4,909	5,286	9,208	12,405	10,876	33,800	36,538	23,213	164,305
1976	8,996	3,620	3,532	4,611	4,380	5,204	8,535	22,015	35,485	35,844	33,737	19,271	185,230
1977	8,259	5,063	6,381	5,987	3,522	4,082	10,815	24,764	35,493	32,031	32,104	18,512	187,013
1978	13,250	11,847	12,202	10,250	8,804	5,865	6,381	12,405	28,812	39,250	36,268	17,931	203,264
1979	12,641	11,611	11,439	10,019	8,684	9,432	6,865	12,766	32,510	37,312	33,164	17,282	203,727
1980	15,061	12,251	12,204	9,550	8,040	8,815	4,762	8,209	20,310	32,353	36,494	15,827	183,875
1981	12,096	5,857	5,233	6,987	6,129	7,539	10,577	23,181	30,873	34,309	32,780	15,511	191,073
1982	10,007	5,552	6,855	7,364	6,138	3,431	3,694	7,793	16,377	29,239	35,046	17,056	148,553
1983	5,610	3,627	3,724	3,609	3,306	2,626	5,060	12,633	21,100	23,074	25,652	12,189	122,211
1984	4,107	3,237	3,204	3,693	2,943	2,506	3,694	11,133	20,677	28,034	29,283	22,314	134,826
1985	5,008	3,497	3,864	3,759	3,484	2,446	3,852	7,793	23,621	24,642	33,538	14,982	130,487
1986	5,495	3,407	3,774	3,609	2,484	2,446	3,694	7,793	19,679	28,031	30,309	14,682	125,404
1987	5,236	5,235	3,426	3,273	2,974	3,336	9,360	21,108	32,351	28,122	29,913	21,353	165,687
1988	7,640	3,857	4,041	3,771	3,567	3,812	11,490	25,104	34,367	35,841	31,973	19,362	184,825
1989	3,987	6,569	6,865	4,955	3,675	3,978	10,856	29,333	34,564	32,209	27,051	15,330	179,373
1990	10,227	6,326	6,842	5,876	5,416	6,037	11,365	24,354	26,202	35,393	34,405	23,030	195,471
1991	8,113	5,811	7,461	7,445	4,021	4,552	11,960	19,903	18,711	36,328	37,188	18,423	179,915
1992	9,837	5,976	7,542	6,550	4,688	4,997	12,530	28,151	33,917	28,995	29,065	18,990	191,238
1993	11,027	9,403	8,608	8,186	6,606	5,205	7,442	12,405	20,481	31,597	35,993	22,738	179,690
1994	6,904	5,469	6,126	5,940	4,592	3,990	10,496	23,284	35,339	35,904	27,562	22,682	188,289
1995	7,145	6,480	6,658	6,336	5,267	4,877	7,836	12,405	13,576	24,175	33,885	18,262	146,901
1996	9,074	3,656	3,823	3,474	3,613	2,769	5,274	7,793	20,772	27,648	34,139	17,608	139,645
1997	9,440	7,872	5,398	4,905	4,685	2,446	4,136	7,793	16,681	32,683	30,642	18,291	144,971
1998	12,862	8,256	5,751	8,789	8,548	4,253	5,833	7,793	12,970	35,577	39,989	26,672	177,293
1999	7,713	3,714	3,916	5,217	3,119	3,334	8,565	7,793	20,491	34,032	33,770	19,817	151,481
Average	7,818	5,351	5,566	5,230	4,472	4,311	7,697	15,489	25,313	31,776	31,229	18,648	162,900
Maximum	15,061	12,251	12,204	10,250	8,804	9,432	12,618	29,801	35,781	42,242	39,989	26,672	203,727
Minimum	3,987	2,668	3,050	2,765	2,484	2,446	3,694	7,793	10,876	23,074	18,342	12,189	122,211

S-1a
Bonneville Unit Operation - Total (cfs)
Releases from Strawberry Reservoir

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	116	61	62	74	53	52	62	142	464	454	536	416	208
1951	80	59	58	57	54	56	62	131	469	539	443	335	196
1952	81	61	61	54	53	50	62	127	273	450	393	368	170
1953	179	45	50	45	50	49	130	162	476	507	421	315	203
1954	72	60	63	52	62	56	150	298	483	463	477	228	206
1955	80	65	67	60	63	66	186	284	512	560	417	277	221
1956	83	70	67	60	66	58	108	329	589	511	474	289	226
1957	81	67	67	60	59	63	155	202	285	574	500	350	206
1958	77	62	65	60	59	63	92	202	525	540	519	274	213
1959	79	65	65	60	62	63	181	466	588	426	370	233	223
1960	83	69	70	62	60	57	166	427	592	495	443	227	230
1961	82	67	70	62	66	68	212	485	571	405	298	224	218
1962	84	69	68	64	62	66	65	229	502	511	560	296	216
1963	78	67	68	60	52	63	187	339	360	577	512	268	221
1964	106	87	137	131	90	81	174	203	302	687	541	395	245
1965	155	85	91	93	100	101	75	202	300	460	434	325	203
1966	166	120	66	72	94	60	145	343	601	478	486	303	245
1967	126	77	111	79	68	65	181	226	244	585	560	419	230
1968	153	99	94	92	81	98	141	203	350	551	411	380	221
1969	143	112	133	57	76	43	62	130	347	481	549	373	210
1970	144	62	78	88	88	97	171	188	353	512	578	319	224
1971	115	57	102	87	77	68	94	243	419	582	572	275	226
1972	139	59	93	99	98	44	151	405	470	520	488	275	237
1973	150	118	105	95	91	91	86	127	334	518	525	284	211
1974	148	113	92	98	102	86	104	162	505	501	545	298	230
1975	144	130	100	86	88	86	155	202	183	550	594	390	227
1976	146	61	57	75	76	85	143	358	596	583	549	324	255
1977	134	85	104	97	63	66	182	403	596	521	522	311	258
1978	215	199	198	167	159	95	107	202	484	638	590	301	281
1979	206	195	186	163	156	153	115	208	546	607	539	290	281
1980	245	206	198	155	140	143	80	134	341	526	594	266	253
1981	197	98	85	114	110	123	178	377	519	558	533	261	264
1982	163	93	111	120	111	56	62	127	275	476	570	287	205
1983	91	61	61	59	60	43	85	205	355	375	417	205	169
1984	67	54	52	60	51	41	62	181	347	456	476	375	186
1985	81	59	63	61	63	40	65	127	397	401	545	252	180
1986	89	57	61	59	45	40	62	127	331	456	493	247	173
1987	85	88	56	53	54	54	157	343	544	457	486	359	229
1988	124	65	66	61	62	62	193	408	578	583	520	325	255
1989	65	110	112	81	66	65	182	477	581	524	440	258	248
1990	166	106	111	96	98	98	191	396	440	576	560	387	270
1991	132	98	121	121	72	74	201	324	314	591	605	310	249
1992	160	100	123	107	81	81	211	458	570	472	473	319	263
1993	179	158	140	133	119	85	125	202	344	514	585	382	248
1994	112	92	100	97	83	65	176	379	594	584	448	381	260
1995	116	109	108	103	95	79	132	202	228	393	551	307	203
1996	148	61	62	57	63	45	89	127	349	450	555	296	192
1997	154	132	88	80	84	40	70	127	280	532	498	307	200
1998	209	139	94	143	154	69	98	127	218	579	650	448	245
1999	125	62	64	85	56	54	144	127	344	553	549	333	209
Average	127	90	91	85	80	70	129	252	425	517	508	313	225
Maximum	245	206	198	167	159	153	212	485	601	687	650	448	281
Minimum	65	45	50	45	45	40	62	127	183	375	298	205	169

S-1b
Bonneville Unit Operation - CUP Water (acre-feet)
Releases from Strawberry Reservoir

34	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	7,156	3,623	3,819	4,526	2,923	3,168	3,694	6,797	11,351	13,736	14,594	12,781	88,168
1951	4,759	3,488	3,575	3,519	3,000	3,452	3,408	6,945	11,629	11,598	12,035	9,459	76,867
1952	3,272	3,612	3,748	3,290	3,048	3,082	3,694	7,793	9,269	12,254	12,691	10,094	75,849
1953	3,135	2,668	3,050	2,765	2,785	3,029	6,504	6,133	9,269	11,246	11,683	9,118	71,386
1954	2,320	3,566	3,904	3,193	3,418	3,445	7,275	6,133	9,269	11,246	11,683	9,118	74,570
1955	2,780	3,887	4,104	3,719	3,496	4,066	11,052	15,460	11,649	11,246	11,683	9,118	92,262
1956	3,615	4,187	4,104	3,719	3,793	3,566	6,263	15,504	14,349	13,482	12,117	9,118	93,818
1957	4,355	3,987	4,104	3,719	3,286	3,866	9,251	12,405	11,969	13,584	14,278	10,498	95,304
1958	2,127	3,687	4,004	3,719	3,264	3,866	5,490	11,928	14,093	13,352	14,348	11,024	90,903
1959	2,965	3,887	4,004	3,719	3,464	3,904	10,560	16,853	13,602	12,145	11,683	9,118	95,904
1960	3,930	4,087	4,304	3,819	3,473	3,478	9,187	16,234	11,649	11,246	11,683	9,404	92,494
1961	4,460	3,987	4,304	3,819	3,664	4,204	12,618	14,041	11,649	11,246	11,683	10,752	96,427
1962	5,190	4,087	4,204	3,919	3,464	4,066	3,863	14,062	14,302	13,587	14,281	11,641	96,666
1963	3,296	3,987	4,204	3,719	2,864	3,866	11,126	14,800	13,485	13,279	14,278	11,155	100,061
1964	3,693	5,172	8,417	8,050	5,169	4,973	10,325	11,655	14,657	13,954	15,606	13,518	115,189
1965	8,560	5,083	5,624	5,696	5,544	6,239	4,483	12,405	12,013	14,253	15,239	13,528	108,667
1966	9,139	7,142	4,063	4,449	5,237	3,666	7,683	12,242	13,895	13,584	14,278	12,658	108,036
1967	6,344	4,595	6,828	4,836	3,774	3,999	10,755	13,876	13,791	13,817	14,511	12,598	109,725
1968	9,401	5,888	5,795	5,639	4,632	6,009	8,393	12,466	10,340	13,093	14,278	12,406	108,340
1969	6,785	6,682	8,202	3,497	4,240	2,620	3,694	6,133	11,014	11,978	14,846	12,982	92,673
1970	7,407	3,680	4,789	5,392	4,884	5,961	10,189	11,482	11,649	11,246	14,278	12,367	103,323
1971	5,870	3,413	6,301	5,331	4,256	4,159	5,588	13,601	11,649	13,584	14,278	14,510	102,541
1972	8,514	3,486	5,728	6,109	5,618	2,732	8,964	11,317	11,649	11,584	14,278	12,529	102,509
1973	9,238	7,027	6,426	5,870	5,038	5,602	5,114	7,793	11,242	11,573	14,431	12,600	101,954
1974	8,575	6,697	5,671	6,011	5,653	5,278	6,205	6,133	11,649	13,584	14,278	12,080	101,814
1975	7,585	7,757	6,167	5,317	4,909	5,286	9,208	12,405	10,050	11,246	14,278	12,159	106,365
1976	6,738	3,620	3,532	4,611	4,380	5,204	8,535	14,770	14,349	13,420	14,278	12,177	105,614
1977	7,726	5,063	6,381	5,987	3,522	4,082	8,506	16,853	14,349	13,584	14,278	12,191	112,522
1978	12,144	11,847	12,202	10,250	8,804	5,865	6,381	12,405	14,614	15,099	16,188	15,317	141,115
1979	12,641	11,611	11,439	10,019	8,684	9,432	6,865	12,576	13,267	15,449	16,473	14,269	142,727
1980	15,061	12,251	12,204	9,550	8,040	8,815	4,762	8,209	9,698	13,908	15,928	10,969	129,394
1981	9,316	5,857	5,233	6,987	6,129	7,539	9,761	16,767	12,917	13,258	14,278	15,511	123,554
1982	10,007	5,552	6,855	7,364	6,138	3,431	3,694	7,521	9,844	12,254	15,286	13,281	101,228
1983	5,610	3,627	3,724	3,609	3,306	2,626	5,060	6,133	9,269	11,910	12,347	11,184	78,406
1984	2,731	3,237	3,204	3,693	2,943	2,506	3,694	6,133	9,269	12,254	12,691	10,094	72,450
1985	5,008	3,497	3,864	3,759	3,484	2,446	3,852	7,510	9,269	12,215	12,651	10,055	77,611
1986	5,270	3,407	3,774	3,609	2,484	2,446	3,694	7,793	9,269	12,254	12,691	10,094	76,786
1987	5,236	5,235	3,426	3,273	2,974	3,336	7,264	12,242	11,877	12,064	14,540	12,305	93,772
1988	6,590	3,857	4,041	3,771	3,567	3,812	11,490	15,881	14,086	13,584	14,272	12,053	107,004
1989	2,567	6,569	6,865	4,955	3,675	3,978	9,235	16,853	13,765	11,246	14,277	14,153	108,139
1990	10,227	6,326	6,842	5,876	5,416	6,037	11,365	16,853	13,571	14,634	16,012	14,336	127,493
1991	8,113	5,811	7,461	7,445	4,021	4,552	11,960	19,903	14,349	11,704	14,737	13,102	123,157
1992	9,837	5,976	7,542	6,550	4,688	4,997	9,414	16,309	14,349	14,715	12,814	13,752	120,943
1993	11,027	9,403	8,608	8,186	6,606	5,205	7,442	12,405	15,037	15,729	16,423	14,260	130,330
1994	6,652	5,469	6,126	5,940	4,592	3,990	10,496	16,853	14,098	14,029	14,753	13,118	116,117
1995	7,145	6,480	6,658	6,336	5,267	4,877	7,836	12,405	12,328	13,370	16,402	11,573	110,676
1996	9,074	3,656	3,823	3,474	3,613	2,769	5,274	7,793	11,073	11,401	14,433	12,472	88,857
1997	9,440	7,872	5,398	4,905	4,685	2,446	4,136	7,793	9,269	14,119	15,175	13,278	98,515
1998	12,862	8,256	5,751	8,789	8,548	4,253	5,833	7,793	10,614	13,427	16,459	14,482	117,067
1999	6,940	3,714	3,916	5,217	3,119	3,334	8,565	7,793	9,275	11,252	14,284	12,300	89,709
Average	6,849	5,351	5,566	5,230	4,472	4,311	7,394	11,683	12,019	12,873	14,099	12,053	101,900
Maximum	15,061	12,251	12,204	10,250	8,804	9,432	12,618	19,903	15,037	15,729	16,473	15,511	142,727
Minimum	2,127	2,668	3,050	2,765	2,484	2,446	3,408	6,133	9,269	11,246	11,683	9,118	71,386

S-1b
Bonneville Unit Operation - CUP Water (cfs)
Releases from Strawberry Reservoir

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	116	61	62	74	53	52	62	111	191	223	237	215	122
1951	77	59	58	57	54	56	57	113	195	189	196	159	106
1952	53	61	61	54	53	50	62	127	156	199	206	170	104
1953	51	45	50	45	50	49	109	100	156	183	190	153	99
1954	38	60	63	52	62	56	122	100	156	183	190	153	103
1955	45	65	67	60	63	66	186	251	196	183	190	153	127
1956	59	70	67	60	66	58	105	252	241	219	197	153	129
1957	71	67	67	60	59	63	155	202	201	221	232	176	132
1958	35	62	65	60	59	63	92	194	237	217	233	185	126
1959	48	65	65	60	62	63	177	274	229	198	190	153	132
1960	64	69	70	62	60	57	154	264	196	183	190	158	127
1961	73	67	70	62	66	68	212	228	196	183	190	181	133
1962	84	69	68	64	62	66	65	229	240	221	232	196	134
1963	54	67	68	60	52	63	187	241	227	216	232	187	138
1964	60	87	137	131	90	81	174	190	246	227	254	227	159
1965	139	85	91	93	100	101	75	202	202	232	248	227	150
1966	149	120	66	72	94	60	129	199	234	221	232	213	149
1967	103	77	111	79	68	65	181	226	232	225	236	212	152
1968	153	99	94	92	81	98	141	203	174	213	232	208	149
1969	110	112	133	57	76	43	62	100	185	195	241	218	128
1970	120	62	78	88	88	97	171	187	196	183	232	208	143
1971	95	57	102	87	77	68	94	221	196	221	232	244	142
1972	138	59	93	99	98	44	151	184	196	188	232	211	141
1973	150	118	105	95	91	91	86	127	189	188	235	212	141
1974	139	113	92	98	102	86	104	100	196	221	232	203	141
1975	123	130	100	86	88	86	155	202	169	183	232	204	147
1976	110	61	57	75	76	85	143	240	241	218	232	205	145
1977	126	85	104	97	63	66	143	274	241	221	232	205	155
1978	198	199	198	167	159	95	107	202	246	246	263	257	195
1979	206	195	186	163	156	153	115	205	223	251	268	240	197
1980	245	206	198	155	140	143	80	134	163	226	259	184	178
1981	152	98	85	114	110	123	164	273	217	216	232	261	171
1982	163	93	111	120	111	56	62	122	165	199	249	223	140
1983	91	61	61	59	60	43	85	100	156	194	201	188	108
1984	44	54	52	60	51	41	62	100	156	199	206	170	100
1985	81	59	63	61	63	40	65	122	156	199	206	169	107
1986	86	57	61	59	45	40	62	127	156	199	206	170	106
1987	85	88	56	53	54	54	122	199	200	196	236	207	130
1988	107	65	66	61	62	62	193	258	237	221	232	203	147
1989	42	110	112	81	66	65	155	274	231	183	232	238	149
1990	166	106	111	96	98	98	191	274	228	238	260	241	176
1991	132	98	121	121	72	74	201	324	241	190	240	220	170
1992	160	100	123	107	81	81	158	265	241	239	208	231	167
1993	179	158	140	133	119	85	125	202	253	256	267	240	180
1994	108	92	100	97	83	65	176	274	237	228	240	220	160
1995	116	109	108	103	95	79	132	202	207	217	267	194	153
1996	148	61	62	57	63	45	89	127	186	185	235	210	122
1997	154	132	88	80	84	40	70	127	156	230	247	223	136
1998	209	139	94	143	154	69	98	127	178	218	268	243	162
1999	113	62	64	85	56	54	144	127	156	183	232	207	124
Average	111	90	91	85	80	70	124	190	202	209	229	203	141
Maximum	245	206	198	167	159	153	212	324	253	256	268	261	197
Minimum	35	45	50	45	45	40	57	100	156	183	190	153	99

S-1c
Bonneville Unit Operation - SVP Water (acre-feet)
Releases from Strawberry Reservoir

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	1,924	16,280	14,186	18,364	11,972	62,726
1951	180	0	0	0	0	0	286	1,092	16,254	21,550	15,218	10,453	65,033
1952	1,703	0	0	0	0	0	0	0	6,961	15,423	11,460	11,810	47,357
1953	7,884	0	0	0	0	0	1,257	3,826	19,038	19,958	14,178	9,640	75,781
1954	2,104	0	0	0	0	0	1,647	12,187	19,442	17,217	17,645	4,464	74,706
1955	2,160	0	0	0	0	0	0	1,995	18,835	23,203	13,933	7,394	67,520
1956	1,498	0	0	0	0	0	177	4,746	20,703	17,949	17,035	8,108	70,216
1957	655	0	0	0	0	0	0	0	4,961	21,700	16,447	10,327	54,090
1958	2,627	0	0	0	0	0	0	477	17,141	19,836	17,593	5,307	62,981
1959	1,888	0	0	0	0	0	224	11,805	21,411	14,043	11,078	4,738	65,187
1960	1,185	0	0	0	0	0	666	10,041	23,561	19,164	15,584	4,108	74,309
1961	586	0	0	0	0	0	0	15,760	22,309	13,685	6,659	2,586	61,585
1962	0	0	0	0	0	0	0	0	15,541	17,814	20,160	5,989	59,504
1963	1,496	0	0	0	0	0	0	6,015	7,952	22,209	17,216	4,803	59,691
1964	2,805	0	0	0	0	0	0	809	3,302	28,288	17,635	9,978	62,817
1965	988	0	0	0	0	0	0	0	5,820	14,036	11,451	5,784	38,079
1966	1,058	0	0	0	0	0	918	8,826	21,886	15,825	15,589	5,379	69,481
1967	1,424	0	0	0	0	0	0	0	752	22,140	19,892	12,324	56,532
1968	0	0	0	0	0	0	0	0	10,488	20,807	10,968	10,179	52,442
1969	1,985	0	0	0	0	0	0	1,843	9,642	17,568	18,893	9,205	59,136
1970	1,476	0	0	0	0	0	0	89	9,359	20,221	21,271	6,625	59,041
1971	1,192	0	0	0	0	0	0	1,340	13,310	22,179	20,912	1,871	60,804
1972	53	0	0	0	0	0	0	13,575	16,317	20,380	15,704	3,854	69,883
1973	0	0	0	0	0	0	0	0	8,627	20,308	17,853	4,311	51,099
1974	499	0	0	0	0	0	0	3,811	18,418	17,193	19,202	5,680	64,803
1975	1,246	0	0	0	0	0	0	0	826	22,554	22,260	11,054	57,940
1976	2,258	0	0	0	0	0	0	7,245	21,136	22,424	19,459	7,094	79,616
1977	533	0	0	0	0	0	2,309	7,911	21,144	18,447	17,826	6,321	74,491
1978	1,106	0	0	0	0	0	0	0	14,198	24,151	20,080	2,614	62,149
1979	0	0	0	0	0	0	0	190	19,243	21,863	16,691	3,013	61,000
1980	0	0	0	0	0	0	0	0	10,612	18,445	20,566	4,858	54,481
1981	2,780	0	0	0	0	0	816	6,414	17,956	21,051	18,502	0	67,519
1982	0	0	0	0	0	0	0	272	6,533	16,985	19,760	3,775	47,325
1983	0	0	0	0	0	0	0	6,500	11,831	11,164	13,305	1,005	43,805
1984	1,376	0	0	0	0	0	0	5,000	11,408	15,780	16,592	12,220	62,376
1985	0	0	0	0	0	0	0	283	14,352	12,427	20,887	4,927	52,876
1986	225	0	0	0	0	0	0	0	10,410	15,777	17,618	4,588	48,618
1987	0	0	0	0	0	0	2,096	8,866	20,474	16,058	15,373	9,048	71,915
1988	1,050	0	0	0	0	0	0	9,223	20,281	22,257	17,701	7,309	77,821
1989	1,420	0	0	0	0	0	1,621	12,480	20,799	20,963	12,774	1,177	71,234
1990	0	0	0	0	0	0	0	7,501	12,631	20,759	18,393	8,694	67,978
1991	0	0	0	0	0	0	0	0	4,362	24,624	22,451	5,321	56,758
1992	0	0	0	0	0	0	3,116	11,842	19,568	14,280	16,251	5,238	70,295
1993	0	0	0	0	0	0	0	0	5,444	15,868	19,570	8,478	49,360
1994	252	0	0	0	0	0	0	6,431	21,241	21,875	12,809	9,564	72,172
1995	0	0	0	0	0	0	0	0	1,248	10,805	17,483	6,689	36,225
1996	0	0	0	0	0	0	0	0	9,699	16,247	19,706	5,136	50,788
1997	0	0	0	0	0	0	0	0	7,412	18,564	15,467	5,013	46,456
1998	0	0	0	0	0	0	0	0	2,356	22,150	23,530	12,190	60,226
1999	773	0	0	0	0	0	0	0	11,216	22,780	19,486	7,517	61,772
Average	969	0	0	0	0	0	303	3,806	13,294	18,904	17,130	6,595	61,000
Maximum	7,884	0	0	0	0	0	3,116	15,760	23,561	28,288	23,530	12,324	79,616
Minimum	0	0	0	0	0	0	0	0	752	10,805	6,659	0	36,225

S-1c
Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - SVP Water (cfs)
Releases from Strawberry Reservoir

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	31	274	231	299	201	87
1951	3	0	0	0	0	0	5	18	273	350	247	176	90
1952	28	0	0	0	0	0	0	0	117	251	186	198	65
1953	128	0	0	0	0	0	21	62	320	325	231	162	105
1954	34	0	0	0	0	0	28	198	327	280	287	75	103
1955	35	0	0	0	0	0	0	32	317	377	227	124	93
1956	24	0	0	0	0	0	3	77	348	292	277	136	97
1957	11	0	0	0	0	0	0	0	83	353	267	174	75
1958	43	0	0	0	0	0	0	8	288	323	286	89	87
1959	31	0	0	0	0	0	4	192	360	228	180	80	90
1960	19	0	0	0	0	0	11	163	396	312	253	69	102
1961	10	0	0	0	0	0	0	256	375	223	108	43	85
1962	0	0	0	0	0	0	0	0	261	290	328	101	82
1963	24	0	0	0	0	0	0	98	134	361	280	81	82
1964	46	0	0	0	0	0	0	13	55	460	287	168	87
1965	16	0	0	0	0	0	0	0	98	228	186	97	53
1966	17	0	0	0	0	0	15	144	368	257	254	90	96
1967	23	0	0	0	0	0	0	0	13	360	324	207	78
1968	0	0	0	0	0	0	0	0	176	338	178	171	72
1969	32	0	0	0	0	0	0	30	162	286	307	155	82
1970	24	0	0	0	0	0	0	1	157	329	346	111	82
1971	19	0	0	0	0	0	0	22	224	361	340	31	84
1972	1	0	0	0	0	0	0	221	274	331	255	65	96
1973	0	0	0	0	0	0	0	0	145	330	290	72	71
1974	8	0	0	0	0	0	0	62	310	280	312	95	90
1975	20	0	0	0	0	0	0	0	14	367	362	186	80
1976	37	0	0	0	0	0	0	118	355	365	316	119	110
1977	9	0	0	0	0	0	39	129	355	300	290	106	103
1978	18	0	0	0	0	0	0	0	239	393	327	44	86
1979	0	0	0	0	0	0	0	3	323	356	271	51	84
1980	0	0	0	0	0	0	0	0	178	300	334	82	75
1981	45	0	0	0	0	0	14	104	302	342	301	0	93
1982	0	0	0	0	0	0	0	4	110	276	321	63	65
1983	0	0	0	0	0	0	0	106	199	182	216	17	61
1984	22	0	0	0	0	0	0	81	192	257	270	205	86
1985	0	0	0	0	0	0	0	5	241	202	340	83	73
1986	4	0	0	0	0	0	0	0	175	257	287	77	67
1987	0	0	0	0	0	0	35	144	344	261	250	152	99
1988	17	0	0	0	0	0	0	150	341	362	288	123	107
1989	23	0	0	0	0	0	27	203	350	341	208	20	98
1990	0	0	0	0	0	0	0	122	212	338	299	146	94
1991	0	0	0	0	0	0	0	0	73	400	365	89	78
1992	0	0	0	0	0	0	52	193	329	232	264	88	97
1993	0	0	0	0	0	0	0	0	91	258	318	142	68
1994	4	0	0	0	0	0	0	105	357	356	208	161	100
1995	0	0	0	0	0	0	0	0	21	176	284	112	50
1996	0	0	0	0	0	0	0	0	163	264	320	86	70
1997	0	0	0	0	0	0	0	0	125	302	252	84	64
1998	0	0	0	0	0	0	0	0	40	360	383	205	83
1999	13	0	0	0	0	0	0	0	188	370	317	126	85
Average	16	0	0	0	0	0	5	62	223	307	279	111	84
Maximum	128	0	0	0	0	0	52	256	396	460	383	207	110
Minimum	0	0	0	0	0	0	0	0	13	176	108	0	50

S-1d
Bonneville Unit Operation - Total (acre-feet)
Strawberry Tunnel (without seepage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1951	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1952	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1953	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1954	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1955	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1956	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1957	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1958	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1959	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1960	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,632	17,099
1961	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,694	1,607	17,068
1962	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1963	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,624	17,051
1964	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1965	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1966	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1967	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1968	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1969	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1970	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1971	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1972	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1973	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1974	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1975	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1976	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1977	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,610	17,037
1978	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1979	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1980	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1981	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1982	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1983	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1984	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1985	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1986	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1987	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1988	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1989	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1990	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1991	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1992	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1993	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1994	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1995	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1996	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,074
1997	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1998	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034
1999	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,632	17,059
Average	1,660	1,190	1,230	1,230	1,120	1,230	1,190	1,660	1,607	1,660	1,661	1,608	17,046
Maximum	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	1,607	1,660	1,694	1,632	17,099
Minimum	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	1,607	1,660	1,660	1,607	17,034

S-1d
Bonneville Unit Operation - Total (cfs)
Strawberry Tunnel (without seepage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	27	20	20	20	20	20	20	27	27	27	27	27	24
1951	27	20	20	20	20	20	20	27	27	27	27	27	24
1952	27	20	20	20	20	20	20	27	27	27	27	27	24
1953	27	20	20	20	20	20	20	27	27	27	27	27	24
1954	27	20	20	20	20	20	20	27	27	27	27	27	24
1955	27	20	20	20	20	20	20	27	27	27	27	27	24
1956	27	20	20	20	20	20	20	27	27	27	27	27	24
1957	27	20	20	20	20	20	20	27	27	27	27	27	24
1958	27	20	20	20	20	20	20	27	27	27	27	27	24
1959	27	20	20	20	20	20	20	27	27	27	27	27	24
1960	27	20	20	20	20	20	20	27	27	27	27	27	24
1961	27	20	20	20	20	20	20	27	27	27	28	27	24
1962	27	20	20	20	20	20	20	27	27	27	27	27	24
1963	27	20	20	20	20	20	20	27	27	27	27	27	24
1964	27	20	20	20	20	20	20	27	27	27	27	27	24
1965	27	20	20	20	20	20	20	27	27	27	27	27	24
1966	27	20	20	20	20	20	20	27	27	27	27	27	24
1967	27	20	20	20	20	20	20	27	27	27	27	27	24
1968	27	20	20	20	20	20	20	27	27	27	27	27	24
1969	27	20	20	20	20	20	20	27	27	27	27	27	24
1970	27	20	20	20	20	20	20	27	27	27	27	27	24
1971	27	20	20	20	20	20	20	27	27	27	27	27	24
1972	27	20	20	20	20	20	20	27	27	27	27	27	24
1973	27	20	20	20	20	20	20	27	27	27	27	27	24
1974	27	20	20	20	20	20	20	27	27	27	27	27	24
1975	27	20	20	20	20	20	20	27	27	27	27	27	24
1976	27	20	20	20	20	20	20	27	27	27	27	27	24
1977	27	20	20	20	20	20	20	27	27	27	27	27	24
1978	27	20	20	20	20	20	20	27	27	27	27	27	24
1979	27	20	20	20	20	20	20	27	27	27	27	27	24
1980	27	20	20	20	20	20	20	27	27	27	27	27	24
1981	27	20	20	20	20	20	20	27	27	27	27	27	24
1982	27	20	20	20	20	20	20	27	27	27	27	27	24
1983	27	20	20	20	20	20	20	27	27	27	27	27	24
1984	27	20	20	20	20	20	20	27	27	27	27	27	24
1985	27	20	20	20	20	20	20	27	27	27	27	27	24
1986	27	20	20	20	20	20	20	27	27	27	27	27	24
1987	27	20	20	20	20	20	20	27	27	27	27	27	24
1988	27	20	20	20	20	20	20	27	27	27	27	27	24
1989	27	20	20	20	20	20	20	27	27	27	27	27	24
1990	27	20	20	20	20	20	20	27	27	27	27	27	24
1991	27	20	20	20	20	20	20	27	27	27	27	27	24
1992	27	20	20	20	20	20	20	27	27	27	27	27	24
1993	27	20	20	20	20	20	20	27	27	27	27	27	24
1994	27	20	20	20	20	20	20	27	27	27	27	27	24
1995	27	20	20	20	20	20	20	27	27	27	27	27	24
1996	27	20	20	20	20	20	20	27	27	27	27	27	24
1997	27	20	20	20	20	20	20	27	27	27	27	27	24
1998	27	20	20	20	20	20	20	27	27	27	27	27	24
1999	27	20	20	20	20	20	20	27	27	27	27	27	24
Average	27	20	20	20	20	20	20	27	27	27	27	27	24
Maximum	27	20	20	20	20	20	20	27	27	27	28	27	24
Minimum	27	20	20	20	20	20	20	27	27	27	27	27	24

S-1e
Bonneville Unit Operation - CUP Water (acre-feet)
Strawberry Tunnel (without seepage)

17	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,660	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,840
1951	1,480	1,190	1,230	1,230	1,111	1,230	904	568	0	0	0	0	8,942
1952	0	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	8,880
1953	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990
1954	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990
1955	0	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	7,180
1956	162	1,190	1,230	1,230	1,150	1,230	1,013	0	0	0	0	0	7,205
1957	1,005	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,845
1958	0	1,190	1,230	1,230	1,111	1,230	1,190	1,183	0	0	0	0	8,363
1959	0	1,190	1,230	1,230	1,111	1,230	966	0	0	0	0	0	6,956
1960	475	1,190	1,230	1,230	1,150	1,230	524	0	0	0	0	0	7,029
1961	1,074	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,254
1962	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1963	165	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	7,345
1964	0	1,190	1,230	1,230	1,150	1,230	1,190	851	0	0	0	0	8,071
1965	672	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,512
1966	602	1,190	1,230	1,230	1,111	1,230	272	0	0	0	0	0	6,864
1967	236	1,190	1,230	1,230	1,111	1,230	1,190	1,660	855	0	0	0	9,931
1968	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	10,540
1969	0	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	7,180
1970	184	1,190	1,230	1,230	1,111	1,230	1,190	1,571	0	0	0	0	8,935
1971	468	1,190	1,230	1,230	1,111	1,230	1,190	320	0	0	0	0	7,968
1972	1,607	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	8,827
1973	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1974	1,161	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,341
1975	414	1,190	1,230	1,230	1,111	1,230	1,190	1,660	781	0	0	0	10,035
1976	0	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	7,220
1977	1,127	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	7,117
1978	554	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,394
1979	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,470	0	0	0	0	10,310
1980	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	10,540
1981	0	1,190	1,230	1,230	1,111	1,230	374	0	0	0	0	1,607	7,971
1982	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,388	0	0	0	0	10,228
1983	1,660	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	602	9,442
1984	284	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	7,504
1985	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,377	0	0	0	0	10,217
1986	1,435	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,275
1987	1,660	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	7,650
1988	610	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	7,830
1989	240	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	430	6,660
1990	1,660	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,840
1991	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1992	1,660	1,190	1,230	1,230	1,150	1,230	0	0	0	0	0	0	7,690
1993	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1994	1,408	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,588
1995	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	359	0	0	0	10,859
1996	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	10,540
1997	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1998	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1999	887	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,727
Average	923	1,190	1,230	1,230	1,120	1,230	986	772	40	0	0	53	8,773
Maximum	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	855	0	0	1,607	10,859
Minimum	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990

S-1e
Bonneville Unit Operation - CUP Water (cfs)
Strawberry Tunnel (without seepage)

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

S-1f
Bonneville Unit Operation - SVP Water (acre-feet)
Strawberry Tunnel (without seepage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,607	8,194
1951	180	0	0	0	0	0	286	1,092	1,607	1,660	1,660	1,607	8,092
1952	1,660	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	8,194
1953	1,660	0	0	0	0	0	1,190	1,660	1,607	1,660	1,660	1,607	11,044
1954	1,660	0	0	0	0	0	1,190	1,660	1,607	1,660	1,660	1,607	11,044
1955	1,660	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,607	9,854
1956	1,498	0	0	0	0	0	177	1,660	1,607	1,660	1,660	1,607	9,869
1957	655	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	7,189
1958	1,660	0	0	0	0	0	0	477	1,607	1,660	1,660	1,607	8,671
1959	1,660	0	0	0	0	0	224	1,660	1,607	1,660	1,660	1,607	10,078
1960	1,185	0	0	0	0	0	666	1,660	1,607	1,660	1,660	1,632	10,070
1961	586	0	0	0	0	0	0	1,660	1,607	1,660	1,694	1,607	8,814
1962	0	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	6,534
1963	1,495	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,624	9,706
1964	1,660	0	0	0	0	0	0	809	1,607	1,660	1,660	1,607	9,002
1965	988	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	7,522
1966	1,058	0	0	0	0	0	918	1,660	1,607	1,660	1,660	1,607	10,170
1967	1,424	0	0	0	0	0	0	0	752	1,660	1,660	1,607	7,103
1968	0	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	6,534
1969	1,660	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,607	9,854
1970	1,476	0	0	0	0	0	0	89	1,607	1,660	1,660	1,607	8,099
1971	1,192	0	0	0	0	0	0	1,340	1,607	1,660	1,660	1,607	9,066
1972	53	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,607	8,247
1973	0	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	6,534
1974	499	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,607	8,693
1975	1,246	0	0	0	0	0	0	0	826	1,660	1,660	1,607	6,999
1976	1,660	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,607	9,854
1977	533	0	0	0	0	0	1,190	1,660	1,607	1,660	1,660	1,610	9,920
1978	1,106	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	7,640
1979	0	0	0	0	0	0	0	190	1,607	1,660	1,660	1,607	6,724
1980	0	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	6,534
1981	1,660	0	0	0	0	0	816	1,660	1,607	1,660	1,660	0	9,063
1982	0	0	0	0	0	0	0	272	1,607	1,660	1,660	1,607	6,806
1983	0	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,005	7,592
1984	1,376	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,607	9,570
1985	0	0	0	0	0	0	0	283	1,607	1,660	1,660	1,607	6,817
1986	225	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	6,759
1987	0	0	0	0	0	0	1,190	1,660	1,607	1,660	1,660	1,607	9,384
1988	1,050	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,607	9,244
1989	1,420	0	0	0	0	0	1,190	1,660	1,607	1,660	1,660	1,176	10,374
1990	0	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,607	8,194
1991	0	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	6,534
1992	0	0	0	0	0	0	1,190	1,660	1,607	1,660	1,660	1,607	9,384
1993	0	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	6,534
1994	252	0	0	0	0	0	0	1,660	1,607	1,660	1,660	1,607	8,446
1995	0	0	0	0	0	0	0	0	1,248	1,660	1,660	1,607	6,175
1996	0	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	6,534
1997	0	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	6,534
1998	0	0	0	0	0	0	0	0	1,607	1,660	1,660	1,607	6,534
1999	773	0	0	0	0	0	0	0	1,607	1,660	1,660	1,632	7,332
Average	737	0	0	0	0	0	205	888	1,567	1,660	1,661	1,555	8,273
Maximum	1,660	0	0	0	0	0	1,190	1,660	1,607	1,660	1,694	1,632	11,044
Minimum	0	0	0	0	0	0	0	0	752	1,660	1,660	0	6,175

S-1f

Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - SVP Water (cfs)
Strawberry Tunnel (without seepage)

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

S-1g
Bonneville Unit Operation - Total (acre-feet)
Strawberry Tunnel (with seepage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1951	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1952	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1953	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1954	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1955	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1956	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1957	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1958	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1959	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1960	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,929	20,728
1961	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	2,002	1,904	20,688
1962	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1963	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,921	20,671
1964	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1965	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1966	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1967	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1968	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1969	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1970	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1971	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1972	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1973	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1974	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1975	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1976	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1977	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,907	20,657
1978	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1979	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1980	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1981	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1982	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1983	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1984	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1985	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1986	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1987	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1988	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1989	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1990	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1991	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1992	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1993	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1994	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1995	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1996	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1997	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1998	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1999	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,929	20,679
Average	1,968	1,488	1,537	1,537	1,400	1,537	1,488	1,968	1,904	1,968	1,968	1,906	20,668
Maximum	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	2,002	1,929	20,728
Minimum	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654

S-1g
Bonneville Unit Operation - Total (cfs)
Strawberry Tunnel (with seepage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	32	25	25	25	25	25	25	32	32	32	32	32	29
1951	32	25	25	25	25	25	25	32	32	32	32	32	29
1952	32	25	25	25	25	25	25	32	32	32	32	32	29
1953	32	25	25	25	25	25	25	32	32	32	32	32	29
1954	32	25	25	25	25	25	25	32	32	32	32	32	29
1955	32	25	25	25	25	25	25	32	32	32	32	32	29
1956	32	25	25	25	25	25	25	32	32	32	32	32	29
1957	32	25	25	25	25	25	25	32	32	32	32	32	29
1958	32	25	25	25	25	25	25	32	32	32	32	32	29
1959	32	25	25	25	25	25	25	32	32	32	32	32	29
1960	32	25	25	25	25	25	25	32	32	32	32	32	29
1961	32	25	25	25	25	25	25	32	32	32	33	32	29
1962	32	25	25	25	25	25	25	32	32	32	32	32	29
1963	32	25	25	25	25	25	25	32	32	32	32	32	29
1964	32	25	25	25	25	25	25	32	32	32	32	32	29
1965	32	25	25	25	25	25	25	32	32	32	32	32	29
1966	32	25	25	25	25	25	25	32	32	32	32	32	29
1967	32	25	25	25	25	25	25	32	32	32	32	32	29
1968	32	25	25	25	25	25	25	32	32	32	32	32	29
1969	32	25	25	25	25	25	25	32	32	32	32	32	29
1970	32	25	25	25	25	25	25	32	32	32	32	32	29
1971	32	25	25	25	25	25	25	32	32	32	32	32	29
1972	32	25	25	25	25	25	25	32	32	32	32	32	29
1973	32	25	25	25	25	25	25	32	32	32	32	32	29
1974	32	25	25	25	25	25	25	32	32	32	32	32	29
1975	32	25	25	25	25	25	25	32	32	32	32	32	29
1976	32	25	25	25	25	25	25	32	32	32	32	32	29
1977	32	25	25	25	25	25	25	32	32	32	32	32	29
1978	32	25	25	25	25	25	25	32	32	32	32	32	29
1979	32	25	25	25	25	25	25	32	32	32	32	32	29
1980	32	25	25	25	25	25	25	32	32	32	32	32	29
1981	32	25	25	25	25	25	25	32	32	32	32	32	29
1982	32	25	25	25	25	25	25	32	32	32	32	32	29
1983	32	25	25	25	25	25	25	32	32	32	32	32	29
1984	32	25	25	25	25	25	25	32	32	32	32	32	29
1985	32	25	25	25	25	25	25	32	32	32	32	32	29
1986	32	25	25	25	25	25	25	32	32	32	32	32	29
1987	32	25	25	25	25	25	25	32	32	32	32	32	29
1988	32	25	25	25	25	25	25	32	32	32	32	32	29
1989	32	25	25	25	25	25	25	32	32	32	32	32	29
1990	32	25	25	25	25	25	25	32	32	32	32	32	29
1991	32	25	25	25	25	25	25	32	32	32	32	32	29
1992	32	25	25	25	25	25	25	32	32	32	32	32	29
1993	32	25	25	25	25	25	25	32	32	32	32	32	29
1994	32	25	25	25	25	25	25	32	32	32	32	32	29
1995	32	25	25	25	25	25	25	32	32	32	32	32	29
1996	32	25	25	25	25	25	25	32	32	32	32	32	29
1997	32	25	25	25	25	25	25	32	32	32	32	32	29
1998	32	25	25	25	25	25	25	32	32	32	32	32	29
1999	32	25	25	25	25	25	25	32	32	32	32	32	29
Average	32	25	25	25	25	25	25	32	32	32	32	32	29
Maximum	32	25	25	25	25	25	25	32	32	32	33	32	29
Minimum	32	25	25	25	25	25	25	32	32	32	32	32	29

S-1h
Bonneville Unit Operation - CUP Water (acre-feet)
Strawberry Tunnel (with seepage)

17	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	1,660	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,840
1951	1,480	1,190	1,230	1,230	1,111	1,230	904	568	0	0	0	0	8,942
1952	0	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	8,880
1953	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990
1954	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990
1955	0	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	7,180
1956	162	1,190	1,230	1,230	1,150	1,230	1,013	0	0	0	0	0	7,205
1957	1,005	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,845
1958	0	1,190	1,230	1,230	1,111	1,230	1,190	1,183	0	0	0	0	8,363
1959	0	1,190	1,230	1,230	1,111	1,230	966	0	0	0	0	0	6,956
1960	475	1,190	1,230	1,230	1,150	1,230	524	0	0	0	0	0	7,029
1961	1,074	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,254
1962	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1963	165	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	7,345
1964	0	1,190	1,230	1,230	1,150	1,230	1,190	851	0	0	0	0	8,071
1965	672	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,512
1966	602	1,190	1,230	1,230	1,111	1,230	272	0	0	0	0	0	6,864
1967	236	1,190	1,230	1,230	1,111	1,230	1,190	1,660	855	0	0	0	9,931
1968	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	10,540
1969	0	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	7,180
1970	184	1,190	1,230	1,230	1,111	1,230	1,190	1,571	0	0	0	0	8,935
1971	468	1,190	1,230	1,230	1,111	1,230	1,190	320	0	0	0	0	7,968
1972	1,607	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	8,827
1973	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1974	1,161	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,341
1975	414	1,190	1,230	1,230	1,111	1,230	1,190	1,660	781	0	0	0	10,035
1976	0	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	7,220
1977	1,127	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	7,117
1978	554	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,394
1979	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,470	0	0	0	0	10,310
1980	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	10,540
1981	0	1,190	1,230	1,230	1,111	1,230	374	0	0	0	0	1,607	7,971
1982	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,388	0	0	0	0	10,228
1983	1,660	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	602	9,442
1984	284	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	7,504
1985	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,377	0	0	0	0	10,217
1986	1,435	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,275
1987	1,660	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	7,650
1988	610	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	7,830
1989	240	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	430	6,660
1990	1,660	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,840
1991	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1992	1,660	1,190	1,230	1,230	1,150	1,230	0	0	0	0	0	0	7,690
1993	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1994	1,408	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,588
1995	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	359	0	0	0	10,859
1996	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	10,540
1997	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1998	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1999	887	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,727
Average	923	1,190	1,230	1,230	1,120	1,230	986	772	40	0	0	53	8,773
Maximum	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	855	0	0	1,607	10,859
Minimum	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990

S-1h
Bonneville Unit Operation - CUP Water (cfs)
Strawberry Tunnel (with seepage)

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

S-1i
Bonneville Unit Operation - SVP Water (acre-feet)
Strawberry Tunnel (with seepage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	9,711
1951	180	0	0	0	0	0	286	1,399	1,904	1,968	1,968	1,904	9,609
1952	1,968	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	9,711
1953	1,968	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,904	13,166
1954	1,968	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,904	13,166
1955	1,968	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	11,679
1956	1,805	0	0	0	0	0	177	1,968	1,904	1,968	1,968	1,904	11,694
1957	962	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	8,706
1958	1,968	0	0	0	0	0	0	784	1,904	1,968	1,968	1,904	10,496
1959	1,968	0	0	0	0	0	224	1,968	1,904	1,968	1,968	1,904	11,903
1960	1,492	0	0	0	0	0	964	1,968	1,904	1,968	1,968	1,929	12,192
1961	893	0	0	0	0	0	0	1,968	1,904	1,968	2,002	1,904	10,639
1962	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1963	1,803	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,921	11,531
1964	1,968	0	0	0	0	0	0	1,116	1,904	1,968	1,968	1,904	10,827
1965	1,295	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	9,039
1966	1,365	0	0	0	0	0	1,216	1,968	1,904	1,968	1,968	1,904	12,292
1967	1,731	0	0	0	0	0	0	0	1,050	1,968	1,968	1,904	8,620
1968	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1969	1,968	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	11,679
1970	1,783	0	0	0	0	0	0	89	1,904	1,968	1,968	1,904	9,616
1971	1,499	0	0	0	0	0	0	1,647	1,904	1,968	1,968	1,904	10,890
1972	53	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	9,764
1973	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1974	806	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	10,518
1975	1,553	0	0	0	0	0	0	0	1,124	1,968	1,968	1,904	8,516
1976	1,968	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	11,679
1977	840	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,907	12,042
1978	1,413	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	9,157
1979	0	0	0	0	0	0	0	190	1,904	1,968	1,968	1,904	7,933
1980	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1981	1,968	0	0	0	0	0	1,114	1,968	1,904	1,968	1,968	0	10,888
1982	0	0	0	0	0	0	0	272	1,904	1,968	1,968	1,904	8,015
1983	0	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,302	9,109
1984	1,683	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	11,395
1985	0	0	0	0	0	0	0	283	1,904	1,968	1,968	1,904	8,026
1986	225	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,968
1987	0	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,904	11,199
1988	1,357	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	11,068
1989	1,727	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,474	12,496
1990	0	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	9,711
1991	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1992	0	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,904	11,199
1993	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1994	252	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	9,963
1995	0	0	0	0	0	0	0	0	1,546	1,968	1,968	1,904	7,385
1996	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1997	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1998	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1999	1,080	0	0	0	0	0	0	0	1,904	1,968	1,968	1,929	8,849
Average	910	0	0	0	0	0	258	1,060	1,864	1,968	1,968	1,847	9,875
Maximum	1,968	0	0	0	0	0	1,488	1,968	1,904	1,968	2,002	1,929	13,166
Minimum	0	0	0	0	0	0	0	0	1,050	1,968	1,968	0	7,385

S-1i
Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - SVP Water (cfs)
Strawberry Tunnel (with seepage)

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

S-1j

Spanish Fork Canyon - Provo Reservoir Canal Alternative (Alt 2) Flow - Non-SVP Tunnel Accretion (acre-feet
Strawberry Tunnel (with seepage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	307	298	307	307	278	307	298	0	0	0	0	0	2,102
1951	307	298	307	307	278	307	298	0	0	0	0	0	2,102
1952	0	298	307	307	288	307	298	307	0	0	0	0	2,112
1953	0	298	307	307	278	307	0	0	0	0	0	0	1,498
1954	0	298	307	307	278	307	0	0	0	0	0	0	1,498
1955	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1956	0	298	307	307	288	307	298	0	0	0	0	0	1,805
1957	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1958	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1959	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1960	0	298	307	307	288	307	0	0	0	0	0	0	1,507
1961	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1962	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1963	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1964	0	298	307	307	288	307	298	0	0	0	0	0	1,805
1965	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1966	0	298	307	307	278	307	0	0	0	0	0	0	1,498
1967	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1968	307	298	307	307	288	307	298	307	0	0	0	0	2,420
1969	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1970	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1971	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1972	307	298	307	307	288	307	298	0	0	0	0	0	2,112
1973	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1974	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1975	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1976	0	298	307	307	288	307	298	0	0	0	0	0	1,805
1977	0	298	307	307	278	307	0	0	0	0	0	0	1,498
1978	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1979	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1980	307	298	307	307	288	307	298	307	0	0	0	0	2,420
1981	0	298	307	307	278	307	0	0	0	0	0	298	1,795
1982	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1983	307	298	307	307	278	307	298	0	0	0	0	0	2,102
1984	0	298	307	307	288	307	298	0	0	0	0	0	1,805
1985	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1986	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1987	307	298	307	307	278	307	0	0	0	0	0	0	1,805
1988	0	298	307	307	288	307	298	0	0	0	0	0	1,805
1989	0	298	307	307	278	307	0	0	0	0	0	0	1,498
1990	307	298	307	307	278	307	298	0	0	0	0	0	2,102
1991	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1992	307	298	307	307	288	307	0	0	0	0	0	0	1,815
1993	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1994	307	298	307	307	278	307	298	0	0	0	0	0	2,102
1995	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1996	307	298	307	307	288	307	298	307	0	0	0	0	2,420
1997	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1998	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1999	0	298	307	307	278	307	298	307	0	0	0	0	2,102
Average	135	298	307	307	280	307	244	135	0	0	0	6	2,020
Maximum	307	298	307	307	288	307	298	307	0	0	0	298	2,420
Minimum	0	298	307	307	278	307	0	0	0	0	0	0	1,498

S-1j

Spanish Fork Canyon - Provo Reservoir Canal Alternative (Alt 2) Flow - Non-SVP Tunnel Accretion (cfs)

Strawberry Tunnel (with seepage)

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

S-1k
Bonneville Unit Operation - Total (acre-feet)
Syar Tunnel (after Strawberry Tunnel release)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	5,496	2,433	2,589	3,296	1,812	1,938	2,504	7,061	26,025	26,262	31,298	23,146	133,860
1951	3,279	2,298	2,345	2,290	1,889	2,223	2,504	6,377	26,276	31,488	25,593	18,305	124,866
1952	3,315	2,422	2,518	2,061	1,898	1,852	2,504	6,133	14,623	26,017	22,491	20,297	106,132
1953	9,359	1,478	1,820	1,535	1,675	1,799	6,571	8,299	26,700	29,544	24,201	17,151	130,132
1954	2,764	2,376	2,675	1,963	2,307	2,216	7,732	16,660	27,104	26,803	27,668	11,975	132,242
1955	3,280	2,697	2,875	2,490	2,385	2,837	9,862	15,795	28,877	32,789	23,956	14,905	142,747
1956	3,453	2,997	2,875	2,490	2,643	2,337	5,250	18,590	33,446	29,771	27,492	15,619	146,960
1957	3,350	2,797	2,875	2,490	2,175	2,637	8,061	10,744	15,324	33,624	29,065	19,218	132,360
1958	3,094	2,497	2,775	2,490	2,153	2,637	4,299	10,744	29,628	31,528	30,281	14,724	136,849
1959	3,193	2,697	2,775	2,490	2,353	2,675	9,594	26,998	33,406	24,528	21,101	12,249	144,057
1960	3,455	2,897	3,075	2,590	2,323	2,248	8,663	24,615	33,603	28,750	25,607	11,880	149,705
1961	3,386	2,797	3,075	2,590	2,553	2,975	11,428	28,140	32,351	23,271	16,648	11,731	140,944
1962	3,530	2,897	2,975	2,690	2,353	2,837	2,672	12,402	28,236	29,741	32,781	16,023	139,136
1963	3,132	2,797	2,975	2,490	1,753	2,637	9,936	19,155	19,830	33,828	29,834	14,334	142,701
1964	4,838	3,982	7,187	6,821	4,019	3,743	9,135	10,804	16,352	40,582	31,581	21,889	160,932
1965	7,888	3,893	4,394	4,466	4,433	5,010	3,293	10,744	16,226	26,629	25,030	17,705	129,712
1966	8,537	5,952	2,834	3,219	4,126	2,437	7,411	19,407	34,175	27,749	28,207	16,431	160,483
1967	6,108	3,405	5,599	3,607	2,663	2,769	9,565	12,216	12,937	34,297	32,743	23,316	149,223
1968	7,741	4,698	4,565	4,409	3,482	4,780	7,203	10,805	19,221	32,240	23,586	20,978	143,708
1969	7,109	5,492	6,972	2,267	3,129	1,390	2,504	6,316	19,050	27,885	32,079	20,581	134,775
1970	7,223	2,490	3,559	4,162	3,774	4,732	8,999	9,911	19,401	29,807	33,889	17,385	145,330
1971	5,402	2,223	5,072	4,101	3,145	2,929	4,398	13,281	23,352	34,103	33,530	14,775	146,311
1972	6,907	2,296	4,498	4,879	4,468	1,502	7,774	23,232	26,359	30,304	28,322	14,777	155,318
1973	7,578	5,837	5,196	4,640	3,927	4,373	3,924	6,133	18,263	30,220	30,624	15,305	136,019
1974	7,414	5,507	4,441	4,781	4,542	4,048	5,015	8,284	28,460	29,117	31,820	16,153	149,583
1975	7,170	6,567	4,937	4,087	3,798	4,056	8,018	10,744	9,269	32,140	34,878	21,607	147,271
1976	7,336	2,430	2,302	3,382	3,229	3,974	7,345	20,354	33,879	34,183	32,077	17,664	168,156
1977	6,599	3,873	5,151	4,757	2,411	2,853	9,625	23,104	33,887	30,371	30,444	16,902	169,976
1978	11,590	10,656	10,972	9,020	7,693	4,635	5,191	10,744	27,206	37,590	34,608	16,325	186,230
1979	10,981	10,421	10,210	8,790	7,574	8,202	5,675	11,106	30,903	35,652	31,504	15,676	186,693
1980	13,401	11,061	10,974	8,320	6,889	7,585	3,572	6,549	18,703	30,693	34,834	14,221	166,802
1981	10,435	4,667	4,004	5,757	5,018	6,309	9,387	21,521	29,267	32,649	31,120	13,904	174,039
1982	8,347	4,362	5,625	6,134	5,028	2,201	2,504	6,133	14,770	27,579	33,386	15,449	131,519
1983	3,950	2,437	2,495	2,380	2,195	1,397	3,870	10,973	19,493	21,414	23,992	10,583	105,177
1984	2,447	2,047	1,975	2,463	1,793	1,277	2,504	9,473	19,070	26,374	27,623	20,707	117,753
1985	3,348	2,307	2,635	2,530	2,373	1,216	2,662	6,133	22,014	22,981	31,878	13,376	113,453
1986	3,835	2,217	2,545	2,380	1,373	1,216	2,504	6,133	18,072	26,371	28,649	13,075	108,370
1987	3,576	4,045	2,196	2,043	1,863	2,107	8,170	19,447	30,745	26,461	28,253	19,747	148,653
1988	5,980	2,667	2,811	2,541	2,417	2,582	10,300	23,444	32,760	34,181	30,313	17,755	167,752
1989	2,327	5,379	5,636	3,725	2,564	2,749	9,666	27,673	32,958	30,549	25,391	13,724	162,339
1990	8,566	5,136	5,612	4,646	4,305	4,807	10,175	22,694	24,595	33,733	32,745	21,423	178,437
1991	6,453	4,620	6,231	6,215	2,910	3,322	10,769	18,243	17,105	34,668	35,527	16,816	162,881
1992	8,176	4,786	6,312	5,320	3,537	3,768	11,340	26,491	32,311	27,335	27,404	17,384	174,164
1993	9,367	8,213	7,378	6,956	5,495	3,975	6,252	10,744	18,874	29,937	34,333	21,132	162,656
1994	5,244	4,279	4,896	4,710	3,482	2,760	9,306	21,624	33,732	34,244	25,902	21,076	171,255
1995	5,485	5,290	5,428	5,106	4,156	3,647	6,646	10,744	11,969	22,515	32,225	16,655	129,867
1996	7,413	2,466	2,593	2,244	2,463	1,540	4,084	6,133	19,165	25,988	32,479	16,002	122,571
1997	7,780	6,682	4,168	3,676	3,574	1,216	2,946	6,133	15,074	31,023	28,982	16,684	127,937
1998	11,202	7,066	4,521	7,559	7,437	3,023	4,643	6,133	11,363	33,917	38,329	25,066	160,259
1999	6,053	2,524	2,686	3,988	2,008	2,104	7,375	6,133	18,884	32,372	32,110	18,186	134,422
Average	6,158	4,161	4,337	4,001	3,351	3,082	6,507	13,829	23,706	30,116	29,568	17,040	145,854
Maximum	13,401	11,061	10,974	9,020	7,693	8,202	11,428	28,140	34,175	40,582	38,329	25,066	186,693
Minimum	2,327	1,478	1,820	1,535	1,373	1,216	2,504	6,133	9,269	21,414	16,648	10,583	105,177

S-1k
Bonneville Unit Operation - Total (cfs)
Syar Tunnel (after Strawberry Tunnel release)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	89	41	42	54	33	32	42	115	437	427	509	389	185
1951	53	39	38	37	34	36	42	104	442	512	416	308	172
1952	54	41	41	34	33	30	42	100	246	423	366	341	146
1953	152	25	30	25	30	29	110	135	449	480	394	288	180
1954	45	40	43	32	42	36	130	271	456	436	450	201	183
1955	53	45	47	40	43	46	166	257	485	533	390	250	197
1956	56	50	47	40	46	38	88	302	562	484	447	262	202
1957	54	47	47	40	39	43	135	175	258	547	473	323	183
1958	50	42	45	40	39	43	72	175	498	513	492	247	189
1959	52	45	45	40	42	43	161	439	561	399	343	206	199
1960	56	49	50	42	40	37	146	400	565	468	416	200	206
1961	55	47	50	42	46	48	192	458	544	378	271	197	195
1962	57	49	48	44	42	46	45	202	475	484	533	269	192
1963	51	47	48	40	32	43	167	312	333	550	485	241	197
1964	79	67	117	111	70	61	154	176	275	660	514	368	222
1965	128	65	71	73	80	81	55	175	273	433	407	298	179
1966	139	100	46	52	74	40	125	316	574	451	459	276	222
1967	99	57	91	59	48	45	161	199	217	558	533	392	206
1968	126	79	74	72	61	78	121	176	323	524	384	353	198
1969	116	92	113	37	56	23	42	103	320	454	522	346	186
1970	117	42	58	68	68	77	151	161	326	485	551	292	201
1971	88	37	82	67	57	48	74	216	392	555	545	248	202
1972	112	39	73	79	78	24	131	378	443	493	461	248	214
1973	123	98	85	75	71	71	66	100	307	491	498	257	188
1974	121	93	72	78	82	66	84	135	478	474	518	271	207
1975	117	110	80	66	68	66	135	175	156	523	567	363	203
1976	119	41	37	55	56	65	123	331	569	556	522	297	232
1977	107	65	84	77	43	46	162	376	569	494	495	284	235
1978	188	179	178	147	139	75	87	175	457	611	563	274	257
1979	179	175	166	143	136	133	95	181	519	580	512	263	258
1980	218	186	178	135	120	123	60	107	314	499	567	239	230
1981	170	78	65	94	90	103	158	350	492	531	506	234	240
1982	136	73	91	100	91	36	42	100	248	449	543	260	182
1983	64	41	41	39	40	23	65	178	328	348	390	178	145
1984	40	34	32	40	31	21	42	154	320	429	449	348	162
1985	54	39	43	41	43	20	45	100	370	374	518	225	157
1986	62	37	41	39	25	20	42	100	304	429	466	220	150
1987	58	68	36	33	34	34	137	316	517	430	459	332	205
1988	97	45	46	41	42	42	173	381	551	556	493	298	231
1989	38	90	92	61	46	45	162	450	554	497	413	231	224
1990	139	86	91	76	78	78	171	369	413	549	533	360	246
1991	105	78	101	101	52	54	181	297	287	564	578	283	225
1992	133	80	103	87	61	61	191	431	543	445	446	292	240
1993	152	138	120	113	99	65	105	175	317	487	558	355	225
1994	85	72	80	77	63	45	156	352	567	557	421	354	237
1995	89	89	88	83	75	59	112	175	201	366	524	280	179
1996	121	41	42	37	43	25	69	100	322	423	528	269	169
1997	127	112	68	60	64	20	50	100	253	505	471	280	177
1998	182	119	74	123	134	49	78	100	191	552	623	421	221
1999	98	42	44	65	36	34	124	100	317	526	522	306	186
Average	100	70	71	65	60	50	109	225	398	490	481	286	201
Maximum	218	186	178	147	139	133	192	458	574	660	623	421	258
Minimum	38	25	30	25	25	20	42	100	156	348	271	178	145

S-1I
Bonneville Unit Operation - CUP Water (acre-feet)
Syar Tunnel (after Strawberry Tunnel release)

19	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	5,496	2,433	2,589	3,296	1,812	1,938	2,504	6,797	11,351	13,736	14,594	12,781	79,328
1951	3,279	2,298	2,345	2,290	1,889	2,223	2,504	6,377	11,629	11,598	12,035	9,459	67,925
1952	3,272	2,422	2,518	2,061	1,898	1,852	2,504	6,133	9,269	12,254	12,691	10,094	66,969
1953	3,135	1,478	1,820	1,535	1,675	1,799	6,504	6,133	9,269	11,246	11,683	9,118	65,395
1954	2,320	2,376	2,675	1,963	2,307	2,216	7,275	6,133	9,269	11,246	11,683	9,118	68,580
1955	2,780	2,697	2,875	2,490	2,385	2,837	9,862	15,460	11,649	11,246	11,683	9,118	85,081
1956	3,453	2,997	2,875	2,490	2,643	2,337	5,250	15,504	14,349	13,482	12,117	9,118	86,613
1957	3,350	2,797	2,875	2,490	2,175	2,637	8,061	10,744	11,969	13,584	14,278	10,498	85,458
1958	2,127	2,497	2,775	2,490	2,153	2,637	4,299	10,744	14,093	13,352	14,348	11,024	82,539
1959	2,965	2,697	2,775	2,490	2,353	2,675	9,594	16,853	13,602	12,145	11,683	9,118	88,948
1960	3,455	2,897	3,075	2,590	2,323	2,248	8,663	16,234	11,649	11,246	11,683	9,404	85,465
1961	3,386	2,797	3,075	2,590	2,553	2,975	11,428	14,041	11,649	11,246	11,683	10,752	88,173
1962	3,530	2,897	2,975	2,690	2,353	2,837	2,672	12,402	14,302	13,587	14,281	11,641	86,165
1963	3,131	2,797	2,975	2,490	1,753	2,637	9,936	14,800	13,485	13,279	14,278	11,155	92,716
1964	3,693	3,982	7,187	6,821	4,019	3,743	9,135	10,803	14,657	13,954	15,606	13,518	107,118
1965	7,888	3,893	4,394	4,466	4,433	5,010	3,293	10,744	12,013	14,253	15,239	13,528	99,154
1966	8,537	5,952	2,834	3,219	4,126	2,437	7,411	12,242	13,895	13,584	14,278	12,658	101,172
1967	6,108	3,405	5,599	3,607	2,663	2,769	9,565	12,216	12,937	13,817	14,511	12,598	99,794
1968	7,741	4,698	4,565	4,409	3,482	4,780	7,203	10,805	10,340	13,093	14,278	12,406	97,799
1969	6,785	5,492	6,972	2,267	3,129	1,390	2,504	6,133	11,014	11,978	14,846	12,982	85,493
1970	7,223	2,490	3,559	4,162	3,774	4,732	8,999	9,911	11,649	11,246	14,278	12,367	94,388
1971	5,402	2,223	5,072	4,101	3,145	2,929	4,398	13,281	11,649	13,584	14,278	14,510	94,573
1972	6,907	2,296	4,498	4,879	4,468	1,502	7,774	11,317	11,649	11,584	14,278	12,529	93,682
1973	7,578	5,837	5,196	4,640	3,927	4,373	3,924	6,133	11,242	11,573	14,431	12,600	91,454
1974	7,414	5,507	4,441	4,781	4,542	4,048	5,015	6,133	11,649	13,584	14,278	12,080	93,472
1975	7,170	6,567	4,937	4,087	3,798	4,056	8,018	10,744	9,269	11,246	14,278	12,159	96,330
1976	6,738	2,430	2,302	3,382	3,229	3,974	7,345	14,770	14,349	13,420	14,278	12,177	98,394
1977	6,599	3,873	5,151	4,757	2,411	2,853	8,506	16,853	14,349	13,584	14,278	12,191	105,404
1978	11,590	10,656	10,972	9,020	7,693	4,635	5,191	10,744	14,614	15,099	16,188	15,317	131,721
1979	10,981	10,421	10,210	8,790	7,574	8,202	5,675	11,106	13,267	15,449	16,473	14,269	132,416
1980	13,401	11,061	10,974	8,320	6,889	7,585	3,572	6,549	9,698	13,908	15,928	10,969	118,854
1981	9,316	4,667	4,004	5,757	5,018	6,309	9,387	16,767	12,917	13,258	14,278	13,904	115,584
1982	8,347	4,362	5,625	6,134	5,028	2,201	2,504	6,133	9,844	12,254	15,286	13,281	90,999
1983	3,950	2,437	2,495	2,380	2,195	1,397	3,870	6,133	9,269	11,910	12,347	10,582	68,964
1984	2,447	2,047	1,975	2,463	1,793	1,277	2,504	6,133	9,269	12,254	12,691	10,094	64,946
1985	3,348	2,307	2,635	2,530	2,373	1,216	2,662	6,133	9,269	12,215	12,651	10,055	67,393
1986	3,835	2,217	2,545	2,380	1,373	1,216	2,504	6,133	9,269	12,254	12,691	10,094	66,510
1987	3,576	4,045	2,196	2,043	1,863	2,107	7,264	12,242	11,877	12,064	14,540	12,305	86,122
1988	5,980	2,667	2,811	2,541	2,417	2,582	10,300	15,881	14,086	13,584	14,272	12,053	99,174
1989	2,327	5,379	5,636	3,725	2,564	2,749	9,235	16,853	13,765	11,246	14,277	13,723	101,479
1990	8,566	5,136	5,612	4,646	4,305	4,807	10,175	16,853	13,571	14,634	16,012	14,336	118,653
1991	6,453	4,620	6,231	6,215	2,910	3,322	10,769	18,243	14,349	11,704	14,737	13,102	112,657
1992	8,176	4,786	6,312	5,320	3,537	3,768	9,414	16,309	14,349	14,715	12,814	13,752	113,253
1993	9,367	8,213	7,378	6,956	5,495	3,975	6,252	10,744	15,037	15,729	16,423	14,260	119,830
1994	5,244	4,279	4,896	4,710	3,482	2,760	9,306	16,853	14,098	14,029	14,753	13,118	107,528
1995	5,485	5,290	5,428	5,106	4,156	3,647	6,646	10,744	11,969	13,370	16,402	11,573	99,817
1996	7,413	2,466	2,593	2,244	2,463	1,540	4,084	6,133	11,073	11,401	14,433	12,472	78,317
1997	7,780	6,682	4,168	3,676	3,574	1,216	2,946	6,133	9,269	14,119	15,175	13,278	88,015
1998	11,202	7,066	4,521	7,559	7,437	3,023	4,643	6,133	10,614	13,427	16,459	14,482	106,567
1999	6,053	2,524	2,686	3,988	2,008	2,104	7,375	6,133	9,275	11,252	14,284	12,300	79,982
Average	5,926	4,161	4,337	4,001	3,351	3,082	6,408	10,911	11,979	12,873	14,099	12,000	93,127
Maximum	13,401	11,061	10,974	9,020	7,693	8,202	11,428	18,243	15,037	15,729	16,473	15,317	132,416
Minimum	2,127	1,478	1,820	1,535	1,373	1,216	2,504	6,133	9,269	11,246	11,683	9,118	64,946

S-1l
Bonneville Unit Operation - CUP Water (cfs)
Syar Tunnel (after Strawberry Tunnel release)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	89	41	42	54	33	32	42	111	191	223	237	215	110
1951	53	39	38	37	34	36	42	104	195	189	196	159	94
1952	53	41	41	34	33	30	42	100	156	199	206	170	92
1953	51	25	30	25	30	29	109	100	156	183	190	153	90
1954	38	40	43	32	42	36	122	100	156	183	190	153	95
1955	45	45	47	40	43	46	166	251	196	183	190	153	118
1956	56	50	47	40	46	38	88	252	241	219	197	153	119
1957	54	47	47	40	39	43	135	175	201	221	232	176	118
1958	35	42	45	40	39	43	72	175	237	217	233	185	114
1959	48	45	45	40	42	43	161	274	229	198	190	153	123
1960	56	49	50	42	40	37	146	264	196	183	190	158	118
1961	55	47	50	42	46	48	192	228	196	183	190	181	122
1962	57	49	48	44	42	46	45	202	240	221	232	196	119
1963	51	47	48	40	32	43	167	241	227	216	232	187	128
1964	60	67	117	111	70	61	154	176	246	227	254	227	148
1965	128	65	71	73	80	81	55	175	202	232	248	227	137
1966	139	100	46	52	74	40	125	199	234	221	232	213	140
1967	99	57	91	59	48	45	161	199	217	225	236	212	138
1968	126	79	74	72	61	78	121	176	174	213	232	208	135
1969	110	92	113	37	56	23	42	100	185	195	241	218	118
1970	117	42	58	68	68	77	151	161	196	183	232	208	130
1971	88	37	82	67	57	48	74	216	196	221	232	244	131
1972	112	39	73	79	78	24	131	184	196	188	232	211	129
1973	123	98	85	75	71	71	66	100	189	188	235	212	126
1974	121	93	72	78	82	66	84	100	196	221	232	203	129
1975	117	110	80	66	68	66	135	175	156	183	232	204	133
1976	110	41	37	55	56	65	123	240	241	218	232	205	136
1977	107	65	84	77	43	46	143	274	241	221	232	205	146
1978	188	179	178	147	139	75	87	175	246	246	263	257	182
1979	179	175	166	143	136	133	95	181	223	251	268	240	183
1980	218	186	178	135	120	123	60	107	163	226	259	184	164
1981	152	78	65	94	90	103	158	273	217	216	232	234	160
1982	136	73	91	100	91	36	42	100	165	199	249	223	126
1983	64	41	41	39	40	23	65	100	156	194	201	178	95
1984	40	34	32	40	31	21	42	100	156	199	206	170	89
1985	54	39	43	41	43	20	45	100	156	199	206	169	93
1986	62	37	41	39	25	20	42	100	156	199	206	170	92
1987	58	68	36	33	34	34	122	199	200	196	236	207	119
1988	97	45	46	41	42	42	173	258	237	221	232	203	137
1989	38	90	92	61	46	45	155	274	231	183	232	231	140
1990	139	86	91	76	78	78	171	274	228	238	260	241	164
1991	105	78	101	101	52	54	181	297	241	190	240	220	156
1992	133	80	103	87	61	61	158	265	241	239	208	231	156
1993	152	138	120	113	99	65	105	175	253	256	267	240	166
1994	85	72	80	77	63	45	156	274	237	228	240	220	149
1995	89	89	88	83	75	59	112	175	201	217	267	194	138
1996	121	41	42	37	43	25	69	100	186	185	235	210	108
1997	127	112	68	60	64	20	50	100	156	230	247	223	122
1998	182	119	74	123	134	49	78	100	178	218	268	243	147
1999	98	42	44	65	36	34	124	100	156	183	232	207	110
Average	96	70	71	65	60	50	108	177	201	209	229	202	129
Maximum	218	186	178	147	139	133	192	297	253	256	268	257	183
Minimum	35	25	30	25	25	20	42	100	156	183	190	153	89

S-1m
Bonneville Unit Operation - SVP Water (acre-feet)
Syar Tunnel (after Strawberry Tunnel release)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	264	14,673	12,526	16,704	10,365	54,532
1951	0	0	0	0	0	0	0	0	14,647	19,890	13,558	8,846	56,941
1952	43	0	0	0	0	0	0	0	5,354	13,763	9,800	10,203	39,163
1953	6,224	0	0	0	0	0	67	2,166	17,431	18,298	12,518	8,033	64,737
1954	444	0	0	0	0	0	457	10,527	17,835	15,557	15,985	2,857	63,662
1955	500	0	0	0	0	0	0	335	17,228	21,543	12,273	5,787	57,666
1956	0	0	0	0	0	0	0	3,086	19,096	16,289	15,375	6,501	60,347
1957	0	0	0	0	0	0	0	0	3,354	20,040	14,787	8,720	46,901
1958	967	0	0	0	0	0	0	0	15,534	18,176	15,933	3,700	54,310
1959	228	0	0	0	0	0	0	10,145	19,804	12,383	9,418	3,131	55,109
1960	0	0	0	0	0	0	0	8,381	21,954	17,504	13,924	2,476	64,239
1961	0	0	0	0	0	0	0	14,100	20,702	12,025	4,965	979	52,771
1962	0	0	0	0	0	0	0	0	13,934	16,154	18,500	4,382	52,970
1963	1	0	0	0	0	0	0	4,355	6,345	20,549	15,556	3,179	49,985
1964	1,145	0	0	0	0	0	0	0	1,695	26,628	15,975	8,371	53,815
1965	0	0	0	0	0	0	0	0	4,213	12,376	9,791	4,177	30,557
1966	0	0	0	0	0	0	0	7,166	20,279	14,165	13,929	3,772	59,311
1967	0	0	0	0	0	0	0	0	0	20,480	18,232	10,717	49,429
1968	0	0	0	0	0	0	0	0	8,881	19,147	9,308	8,572	45,908
1969	325	0	0	0	0	0	0	183	8,035	15,908	17,233	7,598	49,282
1970	0	0	0	0	0	0	0	0	7,752	18,561	19,611	5,018	50,942
1971	0	0	0	0	0	0	0	0	11,703	20,519	19,252	264	51,738
1972	0	0	0	0	0	0	0	11,915	14,710	18,720	14,044	2,247	61,636
1973	0	0	0	0	0	0	0	0	7,020	18,648	16,193	2,704	44,565
1974	0	0	0	0	0	0	0	2,151	16,811	15,533	17,542	4,073	56,110
1975	0	0	0	0	0	0	0	0	0	20,894	20,600	9,447	50,941
1976	598	0	0	0	0	0	0	5,585	19,529	20,764	17,799	5,487	69,762
1977	0	0	0	0	0	0	1,119	6,251	19,537	16,787	16,166	4,711	64,571
1978	0	0	0	0	0	0	0	0	12,591	22,491	18,420	1,007	54,509
1979	0	0	0	0	0	0	0	0	17,636	20,203	15,031	1,406	54,276
1980	0	0	0	0	0	0	0	0	9,005	16,785	18,906	3,251	47,947
1981	1,120	0	0	0	0	0	0	4,754	16,349	19,391	16,842	0	58,456
1982	0	0	0	0	0	0	0	0	4,926	15,325	18,100	2,168	40,519
1983	0	0	0	0	0	0	0	4,840	10,224	9,504	11,645	0	36,213
1984	0	0	0	0	0	0	0	3,340	9,801	14,120	14,932	10,613	52,806
1985	0	0	0	0	0	0	0	0	12,745	10,767	19,227	3,320	46,059
1986	0	0	0	0	0	0	0	0	8,803	14,117	15,958	2,981	41,859
1987	0	0	0	0	0	0	906	7,206	18,867	14,398	13,713	7,441	62,531
1988	0	0	0	0	0	0	0	7,563	18,674	20,597	16,041	5,702	68,577
1989	0	0	0	0	0	0	431	10,820	19,192	19,303	11,114	1	60,860
1990	0	0	0	0	0	0	0	5,841	11,024	19,099	16,733	7,087	59,784
1991	0	0	0	0	0	0	0	0	2,755	22,964	20,791	3,714	50,224
1992	0	0	0	0	0	0	1,926	10,182	17,961	12,620	14,591	3,631	60,911
1993	0	0	0	0	0	0	0	0	3,837	14,208	17,910	6,871	42,826
1994	0	0	0	0	0	0	0	4,771	19,634	20,215	11,149	7,957	63,726
1995	0	0	0	0	0	0	0	0	0	9,145	15,823	5,082	30,050
1996	0	0	0	0	0	0	0	0	8,092	14,587	18,046	3,529	44,254
1997	0	0	0	0	0	0	0	0	5,805	16,904	13,807	3,406	39,922
1998	0	0	0	0	0	0	0	0	749	20,490	21,870	10,583	53,692
1999	0	0	0	0	0	0	0	0	9,609	21,120	17,826	5,885	54,440
Average	232	0	0	0	0	0	98	2,918	11,727	17,243	15,469	5,039	52,727
Maximum	6,224	0	0	0	0	0	1,926	14,100	21,954	26,628	21,870	10,717	69,762
Minimum	0	0	0	0	0	0	0	0	0	9,145	4,965	0	30,050

S-1m
Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - SVP Water (cfs)
Syar Tunnel (after Strawberry Tunnel release)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	4	247	204	272	174	75
1951	0	0	0	0	0	0	0	0	246	323	220	149	79
1952	1	0	0	0	0	0	0	0	90	224	159	171	54
1953	101	0	0	0	0	0	1	35	293	298	204	135	89
1954	7	0	0	0	0	0	8	171	300	253	260	48	88
1955	8	0	0	0	0	0	0	5	290	350	200	97	80
1956	0	0	0	0	0	0	0	50	321	265	250	109	83
1957	0	0	0	0	0	0	0	0	56	326	240	147	65
1958	16	0	0	0	0	0	0	0	261	296	259	62	75
1959	4	0	0	0	0	0	0	165	333	201	153	53	76
1960	0	0	0	0	0	0	0	136	369	285	226	42	88
1961	0	0	0	0	0	0	0	229	348	196	81	16	73
1962	0	0	0	0	0	0	0	0	234	263	301	74	73
1963	0	0	0	0	0	0	0	71	107	334	253	53	69
1964	19	0	0	0	0	0	0	0	28	433	260	141	74
1965	0	0	0	0	0	0	0	0	71	201	159	70	42
1966	0	0	0	0	0	0	0	117	341	230	227	63	82
1967	0	0	0	0	0	0	0	0	0	333	297	180	68
1968	0	0	0	0	0	0	0	0	149	311	151	144	63
1969	5	0	0	0	0	0	0	3	135	259	280	128	68
1970	0	0	0	0	0	0	0	0	130	302	319	84	70
1971	0	0	0	0	0	0	0	0	197	334	313	4	71
1972	0	0	0	0	0	0	0	194	247	304	228	38	85
1973	0	0	0	0	0	0	0	0	118	303	263	45	62
1974	0	0	0	0	0	0	0	35	283	253	285	68	78
1975	0	0	0	0	0	0	0	0	0	340	335	159	70
1976	10	0	0	0	0	0	0	91	328	338	289	92	96
1977	0	0	0	0	0	0	19	102	328	273	263	79	89
1978	0	0	0	0	0	0	0	0	212	366	300	17	75
1979	0	0	0	0	0	0	0	0	296	329	244	24	75
1980	0	0	0	0	0	0	0	0	151	273	307	55	66
1981	18	0	0	0	0	0	0	77	275	315	274	0	81
1982	0	0	0	0	0	0	0	0	83	249	294	36	56
1983	0	0	0	0	0	0	0	79	172	155	189	0	50
1984	0	0	0	0	0	0	0	54	165	230	243	178	73
1985	0	0	0	0	0	0	0	0	214	175	313	56	64
1986	0	0	0	0	0	0	0	0	148	230	260	50	58
1987	0	0	0	0	0	0	15	117	317	234	223	125	86
1988	0	0	0	0	0	0	0	123	314	335	261	96	94
1989	0	0	0	0	0	0	7	176	323	314	181	0	84
1990	0	0	0	0	0	0	0	95	185	311	272	119	83
1991	0	0	0	0	0	0	0	0	46	373	338	62	69
1992	0	0	0	0	0	0	32	166	302	205	237	61	84
1993	0	0	0	0	0	0	0	0	64	231	291	115	59
1994	0	0	0	0	0	0	0	78	330	329	181	134	88
1995	0	0	0	0	0	0	0	0	0	149	257	85	42
1996	0	0	0	0	0	0	0	0	136	237	293	59	61
1997	0	0	0	0	0	0	0	0	98	275	225	57	55
1998	0	0	0	0	0	0	0	0	13	333	356	178	74
1999	0	0	0	0	0	0	0	0	161	343	290	99	75
Average	4	0	0	0	0	0	2	47	197	280	252	85	73
Maximum	101	0	0	0	0	0	32	229	369	433	356	180	96
Minimum	0	0	0	0	0	0	0	0	0	149	81	0	42

S-2a
Bonneville Unit Operation - Total Water (acre-feet)
Sixth Water Creek at Strawberry Tunnel

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1951	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1952	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1953	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1954	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1955	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1956	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1957	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1958	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1959	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1960	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,929	20,728
1961	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	2,002	1,904	20,688
1962	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1963	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,921	20,671
1964	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1965	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1966	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1967	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1968	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1969	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1970	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1971	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1972	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1973	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1974	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1975	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1976	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1977	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,907	20,657
1978	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1979	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1980	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1981	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1982	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1983	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1984	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1985	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1986	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1987	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1988	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1989	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1990	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1991	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1992	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1993	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1994	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1995	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1996	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,703
1997	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1998	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654
1999	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,929	20,679
Average	1,968	1,488	1,537	1,537	1,400	1,537	1,488	1,968	1,904	1,968	1,968	1,906	20,668
Maximum	1,968	1,488	1,537	1,537	1,438	1,537	1,488	1,968	1,904	1,968	2,002	1,929	20,728
Minimum	1,968	1,488	1,537	1,537	1,388	1,537	1,488	1,968	1,904	1,968	1,968	1,904	20,654

S-2a
Bonneville Unit Operation - Total (cfs)
Sixth Water Creek at Strawberry Tunnel

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	32	25	25	25	25	25	25	32	32	32	32	32	29
1951	32	25	25	25	25	25	25	32	32	32	32	32	29
1952	32	25	25	25	25	25	25	32	32	32	32	32	29
1953	32	25	25	25	25	25	25	32	32	32	32	32	29
1954	32	25	25	25	25	25	25	32	32	32	32	32	29
1955	32	25	25	25	25	25	25	32	32	32	32	32	29
1956	32	25	25	25	25	25	25	32	32	32	32	32	29
1957	32	25	25	25	25	25	25	32	32	32	32	32	29
1958	32	25	25	25	25	25	25	32	32	32	32	32	29
1959	32	25	25	25	25	25	25	32	32	32	32	32	29
1960	32	25	25	25	25	25	25	32	32	32	32	32	29
1961	32	25	25	25	25	25	25	32	32	32	33	32	29
1962	32	25	25	25	25	25	25	32	32	32	32	32	29
1963	32	25	25	25	25	25	25	32	32	32	32	32	29
1964	32	25	25	25	25	25	25	32	32	32	32	32	29
1965	32	25	25	25	25	25	25	32	32	32	32	32	29
1966	32	25	25	25	25	25	25	32	32	32	32	32	29
1967	32	25	25	25	25	25	25	32	32	32	32	32	29
1968	32	25	25	25	25	25	25	32	32	32	32	32	29
1969	32	25	25	25	25	25	25	32	32	32	32	32	29
1970	32	25	25	25	25	25	25	32	32	32	32	32	29
1971	32	25	25	25	25	25	25	32	32	32	32	32	29
1972	32	25	25	25	25	25	25	32	32	32	32	32	29
1973	32	25	25	25	25	25	25	32	32	32	32	32	29
1974	32	25	25	25	25	25	25	32	32	32	32	32	29
1975	32	25	25	25	25	25	25	32	32	32	32	32	29
1976	32	25	25	25	25	25	25	32	32	32	32	32	29
1977	32	25	25	25	25	25	25	32	32	32	32	32	29
1978	32	25	25	25	25	25	25	32	32	32	32	32	29
1979	32	25	25	25	25	25	25	32	32	32	32	32	29
1980	32	25	25	25	25	25	25	32	32	32	32	32	29
1981	32	25	25	25	25	25	25	32	32	32	32	32	29
1982	32	25	25	25	25	25	25	32	32	32	32	32	29
1983	32	25	25	25	25	25	25	32	32	32	32	32	29
1984	32	25	25	25	25	25	25	32	32	32	32	32	29
1985	32	25	25	25	25	25	25	32	32	32	32	32	29
1986	32	25	25	25	25	25	25	32	32	32	32	32	29
1987	32	25	25	25	25	25	25	32	32	32	32	32	29
1988	32	25	25	25	25	25	25	32	32	32	32	32	29
1989	32	25	25	25	25	25	25	32	32	32	32	32	29
1990	32	25	25	25	25	25	25	32	32	32	32	32	29
1991	32	25	25	25	25	25	25	32	32	32	32	32	29
1992	32	25	25	25	25	25	25	32	32	32	32	32	29
1993	32	25	25	25	25	25	25	32	32	32	32	32	29
1994	32	25	25	25	25	25	25	32	32	32	32	32	29
1995	32	25	25	25	25	25	25	32	32	32	32	32	29
1996	32	25	25	25	25	25	25	32	32	32	32	32	29
1997	32	25	25	25	25	25	25	32	32	32	32	32	29
1998	32	25	25	25	25	25	25	32	32	32	32	32	29
1999	32	25	25	25	25	25	25	32	32	32	32	32	29
Average	32	25	25	25	25	25	25	32	32	32	32	32	29
Maximum	32	25	25	25	25	25	25	32	32	32	33	32	29
Minimum	32	25	25	25	25	25	25	32	32	32	32	32	29

S-2b
Bonneville Unit Operation - CUP Water (acre-feet)
Sixth Water Creek at Strawberry Tunnel

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,660	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,840
1951	1,480	1,190	1,230	1,230	1,111	1,230	904	568	0	0	0	0	8,942
1952	0	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	8,880
1953	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990
1954	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990
1955	0	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	7,180
1956	162	1,190	1,230	1,230	1,150	1,230	1,013	0	0	0	0	0	7,205
1957	1,005	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,845
1958	0	1,190	1,230	1,230	1,111	1,230	1,190	1,183	0	0	0	0	8,363
1959	0	1,190	1,230	1,230	1,111	1,230	966	0	0	0	0	0	6,956
1960	475	1,190	1,230	1,230	1,150	1,230	524	0	0	0	0	0	7,029
1961	1,074	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,254
1962	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1963	165	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	7,345
1964	0	1,190	1,230	1,230	1,150	1,230	1,190	851	0	0	0	0	8,071
1965	672	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,512
1966	602	1,190	1,230	1,230	1,111	1,230	272	0	0	0	0	0	6,864
1967	236	1,190	1,230	1,230	1,111	1,230	1,190	1,660	855	0	0	0	9,931
1968	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	10,540
1969	0	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	7,180
1970	184	1,190	1,230	1,230	1,111	1,230	1,190	1,571	0	0	0	0	8,935
1971	468	1,190	1,230	1,230	1,111	1,230	1,190	320	0	0	0	0	7,968
1972	1,607	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	8,827
1973	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1974	1,161	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,341
1975	414	1,190	1,230	1,230	1,111	1,230	1,190	1,660	781	0	0	0	10,035
1976	0	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	7,220
1977	1,127	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	7,117
1978	554	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,394
1979	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,470	0	0	0	0	10,310
1980	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	10,540
1981	0	1,190	1,230	1,230	1,111	1,230	374	0	0	0	0	1,607	7,971
1982	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,388	0	0	0	0	10,228
1983	1,660	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	602	9,442
1984	284	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	7,504
1985	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,377	0	0	0	0	10,217
1986	1,435	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,275
1987	1,660	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	7,650
1988	610	1,190	1,230	1,230	1,150	1,230	1,190	0	0	0	0	0	7,830
1989	240	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	430	6,660
1990	1,660	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,840
1991	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1992	1,660	1,190	1,230	1,230	1,150	1,230	0	0	0	0	0	0	7,690
1993	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1994	1,408	1,190	1,230	1,230	1,111	1,230	1,190	0	0	0	0	0	8,588
1995	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	359	0	0	0	10,859
1996	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	0	0	0	0	10,540
1997	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1998	1,660	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	10,500
1999	887	1,190	1,230	1,230	1,111	1,230	1,190	1,660	0	0	0	0	9,727
Average	923	1,190	1,230	1,230	1,120	1,230	986	772	40	0	0	53	8,773
Maximum	1,660	1,190	1,230	1,230	1,150	1,230	1,190	1,660	855	0	0	1,607	10,859
Minimum	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990

S-2b
Bonneville Unit Operation - CUP Water (cfs)
Sixth Water Creek at Strawberry Tunnel

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

S-2c
Bonneville Unit Operation - SVP Water (acre-feet)
Sixth Water Creek at Strawberry Tunnel

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	9,711
1951	180	0	0	0	0	0	286	1,399	1,904	1,968	1,968	1,904	9,609
1952	1,968	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	9,711
1953	1,968	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,904	13,166
1954	1,968	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,904	13,166
1955	1,968	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	11,679
1956	1,805	0	0	0	0	0	177	1,968	1,904	1,968	1,968	1,904	11,694
1957	962	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	8,706
1958	1,968	0	0	0	0	0	0	784	1,904	1,968	1,968	1,904	10,496
1959	1,968	0	0	0	0	0	224	1,968	1,904	1,968	1,968	1,904	11,903
1960	1,492	0	0	0	0	0	964	1,968	1,904	1,968	1,968	1,929	12,192
1961	893	0	0	0	0	0	0	1,968	1,904	1,968	2,002	1,904	10,639
1962	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1963	1,803	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,921	11,531
1964	1,968	0	0	0	0	0	0	1,116	1,904	1,968	1,968	1,904	10,827
1965	1,296	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	9,039
1966	1,365	0	0	0	0	0	1,216	1,968	1,904	1,968	1,968	1,904	12,292
1967	1,731	0	0	0	0	0	0	0	1,050	1,968	1,968	1,904	8,620
1968	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1969	1,968	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	11,679
1970	1,783	0	0	0	0	0	0	89	1,904	1,968	1,968	1,904	9,616
1971	1,499	0	0	0	0	0	0	1,647	1,904	1,968	1,968	1,904	10,890
1972	53	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	9,764
1973	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1974	806	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	10,518
1975	1,553	0	0	0	0	0	0	0	1,124	1,968	1,968	1,904	8,516
1976	1,968	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	11,679
1977	840	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,907	12,042
1978	1,413	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	9,157
1979	0	0	0	0	0	0	0	190	1,904	1,968	1,968	1,904	7,933
1980	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1981	1,968	0	0	0	0	0	1,114	1,968	1,904	1,968	1,968	0	10,888
1982	0	0	0	0	0	0	0	272	1,904	1,968	1,968	1,904	8,015
1983	0	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,302	9,109
1984	1,684	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	11,395
1985	0	0	0	0	0	0	0	283	1,904	1,968	1,968	1,904	8,026
1986	225	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,968
1987	0	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,904	11,199
1988	1,357	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	11,068
1989	1,728	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,474	12,496
1990	0	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	9,711
1991	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1992	0	0	0	0	0	0	1,488	1,968	1,904	1,968	1,968	1,904	11,199
1993	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1994	252	0	0	0	0	0	0	1,968	1,904	1,968	1,968	1,904	9,963
1995	0	0	0	0	0	0	0	0	1,546	1,968	1,968	1,904	7,385
1996	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1997	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1998	0	0	0	0	0	0	0	0	1,904	1,968	1,968	1,904	7,743
1999	1,081	0	0	0	0	0	0	0	1,904	1,968	1,968	1,929	8,849
Average	910	0	0	0	0	0	258	1,060	1,864	1,968	1,968	1,847	9,875
Maximum	1,968	0	0	0	0	0	1,488	1,968	1,904	1,968	2,002	1,929	13,166
Minimum	0	0	0	0	0	0	0	0	1,050	1,968	1,968	0	7,385

S-2c
Bonneville Unit Operation - SVP Water (cfs)
Sixth Water Creek at Strawberry Tunnel

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

S-2d
Bonneville Unit Operation - Natural Water (acre-feet)
Sixth Water Creek at Strawberry Tunnel

6	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	307	298	307	307	278	307	298	0	0	0	0	0	2,102
1951	307	298	307	307	278	307	298	0	0	0	0	0	2,102
1952	0	298	307	307	288	307	298	307	0	0	0	0	2,112
1953	0	298	307	307	278	307	0	0	0	0	0	0	1,498
1954	0	298	307	307	278	307	0	0	0	0	0	0	1,498
1955	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1956	0	298	307	307	288	307	298	0	0	0	0	0	1,805
1957	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1958	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1959	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1960	0	298	307	307	288	307	0	0	0	0	0	0	1,507
1961	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1962	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1963	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1964	0	298	307	307	288	307	298	0	0	0	0	0	1,805
1965	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1966	0	298	307	307	278	307	0	0	0	0	0	0	1,498
1967	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1968	307	298	307	307	288	307	298	307	0	0	0	0	2,420
1969	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1970	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1971	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1972	307	298	307	307	288	307	298	0	0	0	0	0	2,112
1973	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1974	0	298	307	307	278	307	298	0	0	0	0	0	1,795
1975	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1976	0	298	307	307	288	307	298	0	0	0	0	0	1,805
1977	0	298	307	307	278	307	0	0	0	0	0	0	1,498
1978	0	298	307	307	278	307	298	307	0	0	0	0	2,102
1979	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1980	307	298	307	307	288	307	298	307	0	0	0	0	2,420
1981	0	298	307	307	278	307	0	0	0	0	0	298	1,795
1982	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1983	307	298	307	307	278	307	298	0	0	0	0	0	2,102
1984	0	298	307	307	288	307	298	0	0	0	0	0	1,805
1985	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1986	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1987	307	298	307	307	278	307	0	0	0	0	0	0	1,805
1988	0	298	307	307	288	307	298	0	0	0	0	0	1,805
1989	0	298	307	307	278	307	0	0	0	0	0	0	1,498
1990	307	298	307	307	278	307	298	0	0	0	0	0	2,102
1991	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1992	307	298	307	307	288	307	0	0	0	0	0	0	1,815
1993	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1994	307	298	307	307	278	307	298	0	0	0	0	0	2,102
1995	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1996	307	298	307	307	288	307	298	307	0	0	0	0	2,420
1997	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1998	307	298	307	307	278	307	298	307	0	0	0	0	2,410
1999	0	298	307	307	278	307	298	307	0	0	0	0	2,102
Average	135	298	307	307	280	307	244	135	0	0	0	6	2,020
Maximum	307	298	307	307	288	307	298	307	0	0	0	298	2,420
Minimum	0	298	307	307	278	307	0	0	0	0	0	0	1,498

S-2d
Bonneville Unit Operation - Natural Water (cfs)
Sixth Water Creek at Strawberry Tunnel

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

S-3a
Bonneville Unit Operation - Total (acre-feet)
Releases from the Syar / Sixth Water Aqueduct

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

S-3a
Bonneville Unit Operation - Total (cfs)
Releases from the Syar / Sixth Water Aqueduct

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
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

S-3b
Bonneville Unit Operation - CUP Water (acre-feet)
Releases from the Syar / Sixth Water Aqueduct

24	1	2	3	4	5	6	7	8	9	10	11	12	
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

S-3b
Bonneville Unit Operation - CUP Water (cfs)
Releases from the Syar / Sixth Water Aqueduct

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
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

S-3c
Bonneville Unit Operation - SVP Water (acre-feet)
Releases from the Syar / Sixth Water Aqueduct

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

S-3c

Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - SVP Water (cfs)

Releases from the Syar / Sixth Water Aqueduct

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
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

S-3d
Bonneville Unit Operation - Total Water (acre-feet)
Sixth Water Creek below Sixth Water Aqueduct

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,075	1,639	1,677	1,706	1,568	1,751	2,128	2,718	2,289	2,233	2,159	2,055	24,000
1951	2,100	1,660	1,714	1,679	1,557	1,732	1,875	2,670	2,181	2,171	2,083	1,980	23,402
1952	2,064	1,619	1,664	1,690	1,586	1,764	3,732	6,116	3,053	2,418	2,295	2,144	30,144
1953	2,250	1,913	1,745	1,745	1,547	1,748	1,927	2,358	2,277	2,196	2,166	2,011	23,881
1954	2,098	1,653	1,664	1,733	1,473	1,740	1,727	2,172	2,038	2,006	2,017	1,963	22,284
1955	2,019	1,600	1,635	1,650	1,470	1,616	1,627	2,362	2,121	2,097	2,049	1,909	22,155
1956	2,001	1,555	1,635	1,650	1,496	1,691	2,026	2,610	2,193	2,240	2,252	2,039	23,385
1957	2,027	1,585	1,635	1,650	1,505	1,646	1,732	3,112	2,645	2,120	2,052	1,987	23,695
1958	2,050	1,630	1,650	1,650	1,517	1,646	1,990	3,444	2,022	2,023	1,986	1,962	23,569
1959	2,047	1,600	1,650	1,650	1,487	1,664	1,629	1,989	1,969	2,002	2,041	1,935	21,661
1960	1,998	1,570	1,605	1,635	1,552	1,733	1,663	2,145	2,136	2,136	2,056	1,904	22,134
1961	2,027	1,585	1,605	1,635	1,457	1,620	1,554	2,204	2,013	1,995	1,969	1,906	21,569
1962	2,009	1,570	1,620	1,620	1,487	1,616	2,454	2,977	2,222	2,183	1,990	1,991	23,738
1963	2,042	1,585	1,620	1,650	1,577	1,646	1,644	2,593	2,139	2,224	2,062	1,905	22,686
1964	2,020	1,600	1,635	1,635	1,511	1,710	1,794	3,227	2,265	2,143	2,019	1,995	23,553
1965	2,034	1,615	1,680	1,665	1,502	1,661	2,169	3,652	2,748	2,331	2,173	2,057	25,287
1966	2,064	1,630	1,650	1,635	1,487	1,676	1,768	2,454	2,142	2,128	2,196	2,043	22,873
1967	2,071	1,600	1,635	1,635	1,472	1,661	1,584	2,744	2,539	2,239	2,172	2,042	23,393
1968	2,069	1,600	1,650	1,635	1,552	1,661	1,749	3,269	2,519	2,217	2,245	2,230	24,393
1969	2,134	1,671	1,712	1,757	1,568	1,833	2,867	3,521	2,464	2,369	2,312	2,140	26,348
1970	2,117	1,631	1,707	1,720	1,569	1,709	1,672	2,777	2,345	2,310	2,217	2,071	23,845
1971	2,107	1,671	1,692	1,722	1,591	1,820	2,060	2,857	2,369	2,318	2,213	1,976	24,396
1972	2,099	1,660	1,702	1,702	1,606	1,816	1,750	2,399	2,203	2,348	2,120	2,019	23,423
1973	2,093	1,653	1,694	1,683	1,536	1,732	2,002	3,854	2,479	2,309	2,199	2,044	25,277
1974	2,112	1,689	1,730	1,727	1,563	1,840	1,965	3,006	2,293	2,378	2,308	2,078	24,689
1975	2,137	1,689	1,715	1,719	1,551	1,741	1,710	3,391	3,376	2,298	2,207	2,040	25,574
1976	2,127	1,675	1,720	1,714	1,606	1,737	1,765	2,485	2,455	2,328	2,173	1,978	23,764
1977	2,021	1,587	1,632	1,632	1,478	1,638	1,582	2,107	2,263	2,305	2,058	1,904	22,207
1978	2,001	1,599	1,650	1,650	1,482	1,799	2,004	2,951	2,378	2,310	2,171	1,999	23,993
1979	2,069	1,625	1,666	1,673	1,525	1,709	2,196	4,178	3,962	3,197	2,226	2,187	28,212
1980	2,081	1,634	1,657	1,669	1,515	1,684	2,742	4,360	2,858	2,816	2,474	2,121	27,611
1981	2,142	1,652	1,700	1,664	1,490	1,645	1,640	2,180	2,180	2,285	2,095	2,060	22,733
1982	2,043	1,576	1,627	1,636	1,505	1,801	2,937	5,580	2,945	2,427	2,175	2,060	28,312
1983	2,073	1,639	1,691	1,666	1,502	1,832	2,286	5,015	4,472	2,537	2,363	2,210	29,285
1984	2,183	1,697	1,769	1,753	1,623	1,850	4,087	9,532	4,130	3,063	2,295	2,187	36,170
1985	2,187	1,658	1,670	1,643	1,484	1,978	3,310	3,524	3,048	2,601	2,733	1,994	27,829
1986	2,085	1,672	1,684	1,666	1,634	2,255	3,519	4,835	3,069	2,552	2,570	2,014	29,553
1987	2,209	1,748	1,776	1,756	1,596	1,789	1,744	2,239	2,256	2,235	2,202	2,032	23,582
1988	2,021	1,604	1,644	1,642	1,530	1,679	1,586	2,213	2,253	2,275	2,237	2,001	22,685
1989	2,160	1,559	1,606	1,602	1,456	1,654	1,537	2,173	2,170	2,262	2,232	2,138	22,548
1990	1,976	1,536	1,586	1,586	1,429	1,605	1,530	2,182	2,004	2,548	2,164	2,012	22,159
1991	2,003	1,563	1,593	1,600	1,468	1,636	1,558	2,176	2,400	2,162	2,121	1,957	22,237
1992	2,028	1,589	1,657	1,632	1,546	1,706	1,537	2,143	2,189	2,129	2,190	1,925	22,270
1993	2,040	1,577	1,608	1,629	1,485	1,869	1,954	3,454	2,447	2,458	2,403	2,036	24,959
1994	2,049	1,607	1,655	1,660	1,516	1,723	1,637	2,360	2,283	2,307	2,281	2,057	23,134
1995	2,080	1,610	1,662	1,668	1,546	1,901	1,946	3,698	3,295	2,535	2,458	2,062	26,462
1996	2,126	1,671	1,714	1,724	1,641	1,872	2,087	3,041	2,344	2,434	2,189	2,077	24,920
1997	2,086	1,671	1,726	1,697	1,541	2,006	2,833	4,699	2,718	2,327	2,438	2,167	27,909
1998	2,164	1,706	1,743	1,756	1,594	1,932	2,195	3,577	2,641	2,625	2,553	2,165	26,651
1999	2,130	1,620	1,672	1,681	1,534	1,744	1,777	2,915	2,435	2,167	2,149	1,904	23,728
Average	2,079	1,631	1,668	1,671	1,530	1,750	2,056	3,205	2,525	2,326	2,210	2,033	24,685
Maximum	2,250	1,913	1,776	1,757	1,641	2,255	4,087	9,532	4,472	3,197	2,733	2,230	36,170
Minimum	1,976	1,536	1,586	1,586	1,429	1,605	1,530	1,989	1,969	1,995	1,969	1,904	21,569

S-3d
Bonneville Unit Operation - Total (cfs)
Sixth Water Creek below Sixth Water Aqueduct

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	34	28	27	28	28	28	36	44	38	36	35	35	33
1951	34	28	28	27	28	28	32	43	37	35	34	33	32
1952	34	27	27	27	28	29	63	99	51	39	37	36	42
1953	37	32	28	28	28	28	32	38	38	36	35	34	33
1954	34	28	27	28	27	28	29	35	34	33	33	33	31
1955	33	27	27	27	26	26	27	38	36	34	33	32	31
1956	33	26	27	27	26	28	34	42	37	36	37	34	32
1957	33	27	27	27	27	27	29	51	44	34	33	33	33
1958	33	27	27	27	27	27	33	56	34	33	32	33	33
1959	33	27	27	27	27	27	27	32	33	33	33	33	30
1960	32	26	26	27	27	28	28	35	36	35	33	32	30
1961	33	27	26	27	26	26	26	36	34	32	32	32	30
1962	33	26	26	26	27	26	41	48	37	35	32	33	33
1963	33	27	26	27	28	27	28	42	36	36	34	32	31
1964	33	27	27	27	26	28	30	52	38	35	33	34	32
1965	33	27	27	27	27	27	36	59	46	38	35	35	35
1966	34	27	27	27	27	27	30	40	36	35	36	34	32
1967	34	27	27	27	27	27	27	45	43	36	35	34	32
1968	34	27	27	27	27	27	29	53	42	36	37	37	34
1969	35	28	28	29	28	30	48	57	41	39	38	36	36
1970	34	27	28	28	28	28	28	45	39	38	36	35	33
1971	34	28	28	28	29	30	35	46	40	38	36	33	34
1972	34	28	28	28	28	30	29	39	37	38	34	34	32
1973	34	28	28	27	28	28	34	63	42	38	36	34	35
1974	34	28	28	28	28	30	33	49	39	39	38	35	34
1975	35	28	28	28	28	28	29	55	57	37	36	34	35
1976	35	28	28	28	28	28	30	40	41	38	35	33	33
1977	33	27	27	27	27	27	27	34	38	37	33	32	31
1978	33	27	27	27	27	29	34	48	40	38	35	34	33
1979	34	27	27	27	27	28	37	68	67	52	36	37	39
1980	34	27	27	27	26	27	46	71	48	46	40	36	38
1981	35	28	28	27	27	27	28	35	37	37	34	35	31
1982	33	26	26	27	27	29	49	91	49	39	35	35	39
1983	34	28	28	27	27	30	38	82	75	41	38	37	40
1984	36	29	29	29	28	30	69	155	69	50	37	37	50
1985	36	28	27	27	27	32	56	57	51	42	44	34	38
1986	34	28	27	27	29	37	59	79	52	41	42	34	41
1987	36	29	29	29	29	29	29	36	38	36	36	34	33
1988	33	27	27	27	27	27	27	36	38	37	36	34	31
1989	35	26	26	26	26	27	26	35	36	37	36	36	31
1990	32	26	26	26	26	26	26	35	34	41	35	34	31
1991	33	26	26	26	26	27	26	35	40	35	35	33	31
1992	33	27	27	27	27	28	26	35	37	35	36	32	31
1993	33	27	26	26	27	30	33	56	41	40	39	34	34
1994	33	27	27	27	27	28	28	38	38	38	37	35	32
1995	34	27	27	27	28	31	33	60	55	41	40	35	37
1996	35	28	28	28	29	30	35	49	39	40	36	35	34
1997	34	28	28	28	28	33	48	76	46	38	40	36	39
1998	35	29	28	29	29	31	37	58	44	43	42	36	37
1999	35	27	27	27	28	28	30	47	41	35	35	32	33
Average	34	27	27	27	27	28	35	52	42	38	36	34	34
Maximum	37	32	29	29	29	37	69	155	75	52	44	37	50
Minimum	32	26	26	26	26	26	26	32	33	32	32	32	30

S-3e
Bonneville Unit Operation - CUP Water (acre-feet)
Sixth Water Creek below Sixth Water Aqueduct

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,619	1,190	1,230	1,230	1,111	1,230	1,160	0	0	0	0	0	8,769
1951	1,443	1,190	1,230	1,230	1,111	1,230	881	554	0	0	0	0	8,869
1952	0	1,190	1,230	1,230	1,150	1,230	1,160	1,619	0	0	0	0	8,809
1953	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990
1954	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990
1955	0	1,190	1,230	1,230	1,111	1,230	1,160	0	0	0	0	0	7,150
1956	158	1,190	1,230	1,230	1,150	1,230	988	0	0	0	0	0	7,176
1957	980	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	9,749
1958	0	1,190	1,230	1,230	1,111	1,230	1,160	1,154	0	0	0	0	8,304
1959	0	1,190	1,230	1,230	1,111	1,230	942	0	0	0	0	0	6,932
1960	463	1,190	1,230	1,230	1,150	1,230	511	0	0	0	0	0	7,004
1961	1,047	1,190	1,230	1,230	1,111	1,230	1,160	0	0	0	0	0	8,198
1962	1,619	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	10,388
1963	161	1,190	1,230	1,230	1,111	1,230	1,160	0	0	0	0	0	7,311
1964	0	1,190	1,230	1,230	1,150	1,230	1,160	830	0	0	0	0	8,020
1965	655	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	9,424
1966	587	1,190	1,230	1,230	1,111	1,230	265	0	0	0	0	0	6,842
1967	230	1,190	1,230	1,230	1,111	1,230	1,160	1,619	833	0	0	0	9,833
1968	1,619	1,190	1,230	1,230	1,150	1,230	1,160	1,619	0	0	0	0	10,427
1969	0	1,190	1,230	1,230	1,111	1,230	1,160	0	0	0	0	0	7,150
1970	180	1,190	1,230	1,230	1,111	1,230	1,160	1,532	0	0	0	0	8,862
1971	456	1,190	1,230	1,230	1,111	1,230	1,160	312	0	0	0	0	7,919
1972	1,567	1,190	1,230	1,230	1,150	1,230	1,160	0	0	0	0	0	8,757
1973	1,619	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	10,388
1974	1,132	1,190	1,230	1,230	1,111	1,230	1,160	0	0	0	0	0	8,283
1975	404	1,190	1,230	1,230	1,111	1,230	1,160	1,619	761	0	0	0	9,934
1976	0	1,190	1,230	1,230	1,150	1,230	1,160	0	0	0	0	0	7,190
1977	1,099	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	7,089
1978	540	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	9,309
1979	1,619	1,190	1,230	1,230	1,111	1,230	1,160	1,433	0	0	0	0	10,202
1980	1,619	1,190	1,230	1,230	1,150	1,230	1,160	1,619	0	0	0	0	10,427
1981	0	1,190	1,230	1,230	1,111	1,230	365	0	0	0	0	1,566	7,921
1982	1,619	1,190	1,230	1,230	1,111	1,230	1,160	1,353	0	0	0	0	10,123
1983	1,619	1,190	1,230	1,230	1,111	1,230	1,160	0	0	0	0	587	9,356
1984	277	1,190	1,230	1,230	1,150	1,230	1,160	0	0	0	0	0	7,467
1985	1,619	1,190	1,230	1,230	1,111	1,230	1,160	1,343	0	0	0	0	10,112
1986	1,399	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	10,168
1987	1,619	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	7,609
1988	595	1,190	1,230	1,230	1,150	1,230	1,160	0	0	0	0	0	7,785
1989	234	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	419	6,644
1990	1,619	1,190	1,230	1,230	1,111	1,230	1,160	0	0	0	0	0	8,769
1991	1,619	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	10,388
1992	1,619	1,190	1,230	1,230	1,150	1,230	0	0	0	0	0	0	7,648
1993	1,619	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	10,388
1994	1,373	1,190	1,230	1,230	1,111	1,230	1,160	0	0	0	0	0	8,523
1995	1,619	1,190	1,230	1,230	1,111	1,230	1,160	1,619	350	0	0	0	10,737
1996	1,619	1,190	1,230	1,230	1,150	1,230	1,160	1,619	0	0	0	0	10,427
1997	1,619	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	10,388
1998	1,619	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	10,388
1999	865	1,190	1,230	1,230	1,111	1,230	1,160	1,619	0	0	0	0	9,634
Average	900	1,190	1,230	1,230	1,120	1,230	961	753	39	0	0	51	8,703
Maximum	1,619	1,190	1,230	1,230	1,150	1,230	1,160	1,619	833	0	0	1,566	10,737
Minimum	0	1,190	1,230	1,230	1,111	1,230	0	0	0	0	0	0	5,990

S-3e
Bonneville Unit Operation - CUP Water (cfs)
Sixth Water Creek below Sixth Water Aqueduct

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

S-3f

Bonneville Unit Operation - SVP Water (acre-feet)
Sixth Water Creek below Sixth Water Aqueduct

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,857	9,468
1951	176	0	0	0	0	0	279	1,364	1,857	1,918	1,918	1,857	9,369
1952	1,918	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	9,468
1953	1,918	0	0	0	0	0	1,450	1,918	1,857	1,918	1,918	1,857	12,837
1954	1,918	0	0	0	0	0	1,450	1,918	1,857	1,918	1,918	1,857	12,837
1955	1,918	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,857	11,387
1956	1,760	0	0	0	0	0	173	1,918	1,857	1,918	1,918	1,857	11,401
1957	938	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	8,488
1958	1,918	0	0	0	0	0	0	765	1,857	1,918	1,918	1,857	10,233
1959	1,918	0	0	0	0	0	218	1,918	1,857	1,918	1,918	1,857	11,605
1960	1,455	0	0	0	0	0	939	1,918	1,857	1,918	1,918	1,881	11,887
1961	871	0	0	0	0	0	0	1,918	1,857	1,918	1,952	1,857	10,373
1962	0	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	7,550
1963	1,758	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,873	11,243
1964	1,918	0	0	0	0	0	0	1,088	1,857	1,918	1,918	1,857	10,557
1965	1,263	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	8,813
1966	1,331	0	0	0	0	0	1,185	1,918	1,857	1,918	1,918	1,857	11,985
1967	1,688	0	0	0	0	0	0	0	1,023	1,918	1,918	1,857	8,405
1968	0	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	7,550
1969	1,918	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,857	11,387
1970	1,739	0	0	0	0	0	0	87	1,857	1,918	1,918	1,857	9,376
1971	1,462	0	0	0	0	0	0	1,606	1,857	1,918	1,918	1,857	10,618
1972	52	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,857	9,520
1973	0	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	7,550
1974	786	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,857	10,255
1975	1,515	0	0	0	0	0	0	0	1,095	1,918	1,918	1,857	8,303
1976	1,918	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,857	11,387
1977	819	0	0	0	0	0	1,450	1,918	1,857	1,918	1,918	1,859	11,741
1978	1,378	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	8,928
1979	0	0	0	0	0	0	0	185	1,857	1,918	1,918	1,857	7,735
1980	0	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	7,550
1981	1,918	0	0	0	0	0	1,086	1,918	1,857	1,918	1,918	0	10,616
1982	0	0	0	0	0	0	0	265	1,857	1,918	1,918	1,857	7,815
1983	0	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,270	8,881
1984	1,642	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,857	11,110
1985	0	0	0	0	0	0	0	276	1,857	1,918	1,918	1,857	7,826
1986	219	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	7,769
1987	0	0	0	0	0	0	1,450	1,918	1,857	1,918	1,918	1,857	10,919
1988	1,323	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,857	10,792
1989	1,684	0	0	0	0	0	1,450	1,918	1,857	1,918	1,918	1,437	12,184
1990	0	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,857	9,468
1991	0	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	7,550
1992	0	0	0	0	0	0	1,450	1,918	1,857	1,918	1,918	1,857	10,919
1993	0	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	7,550
1994	246	0	0	0	0	0	0	1,918	1,857	1,918	1,918	1,857	9,714
1995	0	0	0	0	0	0	0	0	1,507	1,918	1,918	1,857	7,200
1996	0	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	7,550
1997	0	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	7,550
1998	0	0	0	0	0	0	0	0	1,857	1,918	1,918	1,857	7,550
1999	1,054	0	0	0	0	0	0	0	1,857	1,918	1,918	1,881	8,628
Average	887	0	0	0	0	0	252	1,034	1,818	1,918	1,919	1,801	9,628
Maximum	1,918	0	0	0	0	0	1,450	1,918	1,857	1,918	1,952	1,881	12,837
Minimum	0	0	0	0	0	0	0	0	1,023	1,918	1,918	0	7,200

S-3f
Bonneville Unit Operation - SVP Water (cfs)
Sixth Water Creek below Sixth Water Aqueduct

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

S-3g
Bonneville Unit Operation - Natural Water (acre-feet)
Sixth Water Creek below Sixth Water Aqueduct

12	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	456	449	447	476	458	521	968	800	432	315	241	199	5,762
1951	481	470	484	450	446	503	714	752	325	253	165	124	5,165
1952	146	428	434	460	435	534	2,572	4,497	1,197	500	376	288	11,867
1953	331	723	515	515	436	518	476	439	420	278	248	155	5,054
1954	179	463	435	503	362	510	277	254	182	88	98	107	3,457
1955	101	410	405	420	360	387	466	444	264	178	131	53	3,618
1956	82	365	405	420	346	462	865	691	336	321	333	182	4,808
1957	108	395	405	420	395	417	571	1,493	788	201	134	131	5,457
1958	131	440	420	420	407	416	829	1,526	166	105	68	105	5,032
1959	129	410	420	420	377	435	468	70	113	83	122	78	3,124
1960	80	380	375	405	401	503	213	227	280	218	138	23	3,242
1961	108	395	375	405	347	390	394	286	157	77	17	49	2,999
1962	390	380	390	390	377	387	1,294	1,358	366	264	72	134	5,800
1963	124	395	390	420	467	417	484	675	282	306	143	32	4,132
1964	102	410	405	405	361	480	634	1,309	408	225	101	138	4,977
1965	116	425	450	435	392	432	1,009	2,033	891	412	255	201	7,049
1966	146	440	420	405	377	446	317	536	285	210	277	187	4,046
1967	153	410	405	405	362	432	424	1,125	682	321	253	185	5,155
1968	450	410	420	405	401	432	589	1,650	662	299	326	373	6,416
1969	216	481	482	528	457	604	1,706	1,602	608	450	393	283	7,811
1970	199	441	477	490	458	480	512	1,159	488	391	298	215	5,608
1971	188	481	462	492	480	590	900	939	512	400	294	120	5,859
1972	480	470	472	472	456	587	589	481	347	429	201	162	5,146
1973	474	463	464	454	425	502	841	2,235	622	391	280	188	7,340
1974	193	499	500	497	452	610	804	1,088	437	460	390	221	6,152
1975	219	499	486	489	440	511	550	1,773	1,520	380	288	183	7,337
1976	208	485	490	484	456	507	605	566	599	410	255	121	5,187
1977	103	397	402	402	368	408	131	189	407	387	139	45	3,377
1978	82	409	420	420	371	569	843	1,332	522	392	253	142	5,755
1979	451	435	436	444	414	479	1,035	2,559	2,105	1,278	308	330	10,275
1980	462	444	427	439	365	454	1,581	2,742	1,001	898	555	265	9,633
1981	224	462	471	435	380	415	189	261	323	367	176	494	4,196
1982	425	386	397	406	394	571	1,776	3,961	1,089	508	257	204	10,374
1983	454	449	462	436	392	602	1,125	3,097	2,615	619	444	353	11,047
1984	265	507	540	523	473	620	2,927	7,613	2,273	1,145	376	331	17,593
1985	568	468	441	414	373	748	2,150	1,905	1,191	682	814	137	9,892
1986	466	482	454	436	523	1,025	2,358	3,217	1,212	633	652	157	11,616
1987	591	558	546	526	485	559	293	321	400	316	283	176	5,055
1988	103	414	414	412	380	449	426	295	396	357	318	145	4,108
1989	242	369	376	372	345	424	86	255	314	344	314	281	3,721
1990	358	346	356	356	319	375	369	263	148	630	246	155	3,922
1991	384	373	363	370	357	406	398	557	543	243	203	100	4,299
1992	410	399	428	402	395	477	86	225	332	211	271	68	3,703
1993	421	387	378	399	375	639	794	1,835	590	539	484	179	7,022
1994	430	417	425	430	405	493	476	441	427	389	362	200	4,896
1995	461	420	433	438	436	672	786	2,080	1,439	616	539	206	8,525
1996	507	481	485	494	491	643	927	1,422	488	515	270	220	6,942
1997	467	481	496	467	430	776	1,672	3,080	862	408	519	310	9,971
1998	545	516	513	526	483	702	1,035	1,959	784	706	635	309	8,713
1999	211	430	443	452	423	514	617	1,297	578	248	231	23	5,467
Average	292	441	439	442	410	521	843	1,418	668	408	291	181	6,354
Maximum	591	723	546	528	523	1,025	2,927	7,613	2,615	1,278	814	494	17,593
Minimum	80	346	356	356	319	375	86	70	113	77	17	23	2,999

S-3g
Bonneville Unit Operation - Natural Water (cfs)
Sixth Water Creek below Sixth Water Aqueduct

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	7	8	7	8	8	8	16	13	7	5	4	3	8
1951	8	8	8	7	8	8	12	12	5	4	3	2	7
1952	2	7	7	7	8	9	43	73	20	8	6	5	16
1953	5	12	8	8	8	8	8	7	7	5	4	3	7
1954	3	8	7	8	7	8	5	4	3	1	2	2	5
1955	2	7	7	7	6	6	8	7	4	3	2	1	5
1956	1	6	7	7	6	8	15	11	6	5	5	3	7
1957	2	7	7	7	7	7	10	24	13	3	2	2	8
1958	2	7	7	7	7	7	14	25	3	2	1	2	7
1959	2	7	7	7	7	7	8	1	2	1	2	1	4
1960	1	6	6	7	7	8	4	4	5	4	2	0	4
1961	2	7	6	7	6	6	7	5	3	1	0	1	4
1962	6	6	6	6	7	6	22	22	6	4	1	2	8
1963	2	7	6	7	8	7	8	11	5	5	2	1	6
1964	2	7	7	7	6	8	11	21	7	4	2	2	7
1965	2	7	7	7	7	7	17	33	15	7	4	3	10
1966	2	7	7	7	7	7	5	9	5	3	5	3	6
1967	2	7	7	7	7	7	7	18	11	5	4	3	7
1968	7	7	7	7	7	7	10	27	11	5	5	6	9
1969	4	8	8	9	8	10	29	26	10	7	6	5	11
1970	3	7	8	8	8	8	9	19	8	6	5	4	8
1971	3	8	8	8	9	10	15	15	9	7	5	2	8
1972	8	8	8	8	8	10	10	8	6	7	3	3	7
1973	8	8	8	7	8	8	14	36	10	6	5	3	10
1974	3	8	8	8	8	10	14	18	7	7	6	4	8
1975	4	8	8	8	8	8	9	29	26	6	5	3	10
1976	3	8	8	8	8	8	10	9	10	7	4	2	7
1977	2	7	7	7	7	7	2	3	7	6	2	1	5
1978	1	7	7	7	7	9	14	22	9	6	4	2	8
1979	7	7	7	7	7	8	17	42	35	21	5	6	14
1980	8	7	7	7	6	7	27	45	17	15	9	4	13
1981	4	8	8	7	7	7	3	4	5	6	3	8	6
1982	7	6	6	7	7	9	30	64	18	8	4	3	14
1983	7	8	8	7	7	10	19	50	44	10	7	6	15
1984	4	9	9	9	8	10	49	124	38	19	6	6	24
1985	9	8	7	7	7	12	36	31	20	11	13	2	14
1986	8	8	7	7	9	17	40	52	20	10	11	3	16
1987	10	9	9	9	9	9	5	5	7	5	5	3	7
1988	2	7	7	7	7	7	7	5	7	6	5	2	6
1989	4	6	6	6	6	7	1	4	5	6	5	5	5
1990	6	6	6	6	6	6	6	4	2	10	4	3	5
1991	6	6	6	6	6	7	7	9	9	4	3	2	6
1992	7	7	7	7	7	8	1	4	6	3	4	1	5
1993	7	7	6	6	7	10	13	30	10	9	8	3	10
1994	7	7	7	7	7	8	8	7	7	6	6	3	7
1995	8	7	7	7	8	11	13	34	24	10	9	3	12
1996	8	8	8	8	9	10	16	23	8	8	4	4	10
1997	8	8	8	8	8	13	28	50	14	7	8	5	14
1998	9	9	8	9	9	11	17	32	13	11	10	5	12
1999	3	7	7	7	8	8	10	21	10	4	4	0	8
Average	5	7	7	7	7	8	14	23	11	7	5	3	9
Maximum	10	12	9	9	9	17	49	124	44	21	13	8	24
Minimum	1	6	6	6	6	6	1	1	2	1	0	0	4

S-4a
Bonneville Unit Operation - Total (acre-feet)
Tanner Ridge Tunnel

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	5,496	2,433	2,589	3,296	1,812	1,938	2,504	7,061	26,025	26,262	31,298	23,146	133,860
1951	3,279	2,298	2,345	2,290	1,889	2,223	2,504	6,377	26,276	31,488	25,593	18,305	124,866
1952	3,315	2,422	2,518	2,061	1,898	1,852	2,504	6,133	14,623	26,017	22,491	20,297	106,132
1953	9,359	1,478	1,820	1,535	1,675	1,799	6,571	8,299	26,700	29,544	24,201	17,151	130,132
1954	2,764	2,376	2,675	1,963	2,307	2,216	7,732	16,660	27,104	26,803	27,668	11,975	132,242
1955	3,280	2,697	2,875	2,490	2,385	2,837	9,862	15,795	28,877	32,789	23,956	14,905	142,747
1956	3,453	2,997	2,875	2,490	2,643	2,337	5,250	18,590	33,446	29,771	27,492	15,619	146,960
1957	3,350	2,797	2,875	2,490	2,175	2,637	8,061	10,744	15,324	33,624	29,065	19,218	132,360
1958	3,094	2,497	2,775	2,490	2,153	2,637	4,299	10,744	29,628	31,528	30,281	14,724	136,849
1959	3,193	2,697	2,775	2,490	2,353	2,675	9,594	26,998	33,406	24,528	21,101	12,249	144,057
1960	3,455	2,897	3,075	2,590	2,323	2,248	8,663	24,615	33,603	28,750	25,607	11,880	149,705
1961	3,386	2,797	3,075	2,590	2,553	2,975	11,428	28,140	32,351	23,271	16,648	11,731	140,944
1962	3,530	2,897	2,975	2,690	2,353	2,837	2,672	12,402	28,236	29,741	32,781	16,023	139,136
1963	3,132	2,797	2,975	2,490	1,753	2,637	9,936	19,155	19,830	33,828	29,834	14,334	142,701
1964	4,838	3,982	7,187	6,821	4,019	3,743	9,135	10,804	16,352	40,582	31,581	21,889	160,932
1965	7,888	3,893	4,394	4,466	4,433	5,010	3,293	10,744	16,226	26,629	25,030	17,705	129,712
1966	8,537	5,952	2,834	3,219	4,126	2,437	7,411	19,407	34,175	27,749	28,207	16,431	160,483
1967	6,108	3,405	5,599	3,607	2,663	2,769	9,565	12,216	12,937	34,297	32,743	23,316	149,223
1968	7,741	4,698	4,565	4,409	3,482	4,780	7,203	10,805	19,221	32,240	23,586	20,978	143,708
1969	7,109	5,492	6,972	2,267	3,129	1,390	2,504	6,316	19,050	27,885	32,079	20,581	134,775
1970	7,223	2,490	3,559	4,162	3,774	4,732	8,999	9,911	19,401	29,807	33,889	17,385	145,330
1971	5,402	2,223	5,072	4,101	3,145	2,929	4,398	13,281	23,352	34,103	33,530	14,775	146,311
1972	6,907	2,296	4,498	4,879	4,468	1,502	7,774	23,232	26,359	30,304	28,322	14,777	155,318
1973	7,578	5,837	5,196	4,640	3,927	4,373	3,924	6,133	18,263	30,220	30,624	15,305	136,019
1974	7,414	5,507	4,441	4,781	4,542	4,048	5,015	8,284	28,460	29,117	31,820	16,153	149,583
1975	7,170	6,567	4,937	4,087	3,798	4,056	8,018	10,744	9,269	32,140	34,878	21,607	147,271
1976	7,336	2,430	2,302	3,382	3,229	3,974	7,345	20,354	33,879	34,183	32,077	17,664	168,156
1977	6,599	3,873	5,151	4,757	2,411	2,853	9,625	23,104	33,887	30,371	30,444	16,902	169,976
1978	11,590	10,656	10,972	9,020	7,693	4,635	5,191	10,744	27,206	37,590	34,608	16,325	186,230
1979	10,981	10,421	10,210	8,790	7,574	8,202	5,675	11,106	30,903	35,652	31,504	15,676	186,693
1980	13,401	11,061	10,974	8,320	6,889	7,585	3,572	6,549	18,703	30,693	34,834	14,221	166,802
1981	10,435	4,667	4,004	5,757	5,018	6,309	9,387	21,521	29,267	32,649	31,120	13,904	174,039
1982	8,347	4,362	5,625	6,134	5,028	2,201	2,504	6,133	14,770	27,579	33,386	15,449	131,519
1983	3,950	2,437	2,495	2,380	2,195	1,397	3,870	10,973	19,493	21,414	23,992	10,583	105,177
1984	2,447	2,047	1,975	2,463	1,793	1,277	2,504	9,473	19,070	26,374	27,623	20,707	117,753
1985	3,348	2,307	2,635	2,530	2,373	1,216	2,662	6,133	22,014	22,981	31,878	13,376	113,453
1986	3,835	2,217	2,545	2,380	1,373	1,216	2,504	6,133	18,072	26,371	28,649	13,075	108,370
1987	3,576	4,045	2,196	2,043	1,863	2,107	8,170	19,447	30,745	26,461	28,253	19,747	148,653
1988	5,980	2,667	2,811	2,541	2,417	2,582	10,300	23,444	32,760	34,181	30,313	17,755	167,752
1989	2,327	5,379	5,636	3,725	2,564	2,749	9,666	27,673	32,958	30,549	25,391	13,724	162,339
1990	8,566	5,136	5,612	4,646	4,305	4,807	10,175	22,694	24,595	33,733	32,745	21,423	178,437
1991	6,453	4,620	6,231	6,215	2,910	3,322	10,769	18,243	17,105	34,668	35,527	16,816	162,881
1992	8,176	4,786	6,312	5,320	3,537	3,768	11,340	26,491	32,311	27,335	27,404	17,384	174,164
1993	9,367	8,213	7,378	6,956	5,495	3,975	6,252	10,744	18,874	29,937	34,333	21,132	162,656
1994	5,244	4,279	4,896	4,710	3,482	2,760	9,306	21,624	33,732	34,244	25,902	21,076	171,255
1995	5,485	5,290	5,428	5,106	4,156	3,647	6,646	10,744	11,969	22,515	32,225	16,655	129,867
1996	7,413	2,466	2,593	2,244	2,463	1,540	4,084	6,133	19,165	25,988	32,479	16,002	122,571
1997	7,780	6,682	4,168	3,676	3,574	1,216	2,946	6,133	15,074	31,023	28,982	16,684	127,937
1998	11,202	7,066	4,521	7,559	7,437	3,023	4,643	6,133	11,363	33,917	38,329	25,066	160,259
1999	6,053	2,524	2,686	3,988	2,008	2,104	7,375	6,133	18,884	32,372	32,110	18,186	134,422
Average	6,158	4,161	4,337	4,001	3,351	3,082	6,507	13,829	23,706	30,116	29,568	17,040	145,854
Maximum	13,401	11,061	10,974	9,020	7,693	8,202	11,428	28,140	34,175	40,582	38,329	25,066	186,693
Minimum	2,327	1,478	1,820	1,535	1,373	1,216	2,504	6,133	9,269	21,414	16,648	10,583	105,177

S-4a
Bonneville Unit Operation - Total (cfs)
Tanner Ridge Tunnel

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	89	41	42	54	33	32	42	115	437	427	509	389	185
1951	53	39	38	37	34	36	42	104	442	512	416	308	172
1952	54	41	41	34	33	30	42	100	246	423	366	341	146
1953	152	25	30	25	30	29	110	135	449	480	394	288	180
1954	45	40	43	32	42	36	130	271	456	436	450	201	183
1955	53	45	47	40	43	46	166	257	485	533	390	250	197
1956	56	50	47	40	46	38	88	302	562	484	447	262	202
1957	54	47	47	40	39	43	135	175	258	547	473	323	183
1958	50	42	45	40	39	43	72	175	498	513	492	247	189
1959	52	45	45	40	42	43	161	439	561	399	343	206	199
1960	56	49	50	42	40	37	146	400	565	468	416	200	206
1961	55	47	50	42	46	48	192	458	544	378	271	197	195
1962	57	49	48	44	42	46	45	202	475	484	533	269	192
1963	51	47	48	40	32	43	167	312	333	550	485	241	197
1964	79	67	117	111	70	61	154	176	275	660	514	368	222
1965	128	65	71	73	80	81	55	175	273	433	407	298	179
1966	139	100	46	52	74	40	125	316	574	451	459	276	222
1967	99	57	91	59	48	45	161	199	217	558	533	392	206
1968	126	79	74	72	61	78	121	176	323	524	384	353	198
1969	116	92	113	37	56	23	42	103	320	454	522	346	186
1970	117	42	58	68	68	77	151	161	326	485	551	292	201
1971	88	37	82	67	57	48	74	216	392	555	545	248	202
1972	112	39	73	79	78	24	131	378	443	493	461	248	214
1973	123	98	85	75	71	71	66	100	307	491	498	257	188
1974	121	93	72	78	82	66	84	135	478	474	518	271	207
1975	117	110	80	66	68	66	135	175	156	523	567	363	203
1976	119	41	37	55	56	65	123	331	569	556	522	297	232
1977	107	65	84	77	43	46	162	376	569	494	495	284	235
1978	188	179	178	147	139	75	87	175	457	611	563	274	257
1979	179	175	166	143	136	133	95	181	519	580	512	263	258
1980	218	186	178	135	120	123	60	107	314	499	567	239	230
1981	170	78	65	94	90	103	158	350	492	531	506	234	240
1982	136	73	91	100	91	36	42	100	248	449	543	260	182
1983	64	41	41	39	40	23	65	178	328	348	390	178	145
1984	40	34	32	40	31	21	42	154	320	429	449	348	162
1985	54	39	43	41	43	20	45	100	370	374	518	225	157
1986	62	37	41	39	25	20	42	100	304	429	466	220	150
1987	58	68	36	33	34	34	137	316	517	430	459	332	205
1988	97	45	46	41	42	42	173	381	551	556	493	298	231
1989	38	90	92	61	46	45	162	450	554	497	413	231	224
1990	139	86	91	76	78	78	171	369	413	549	533	360	246
1991	105	78	101	101	52	54	181	297	287	564	578	283	225
1992	133	80	103	87	61	61	191	431	543	445	446	292	240
1993	152	138	120	113	99	65	105	175	317	487	558	355	225
1994	85	72	80	77	63	45	156	352	567	557	421	354	237
1995	89	89	88	83	75	59	112	175	201	366	524	280	179
1996	121	41	42	37	43	25	69	100	322	423	528	269	169
1997	127	112	68	60	64	20	50	100	253	505	471	280	177
1998	182	119	74	123	134	49	78	100	191	552	623	421	221
1999	98	42	44	65	36	34	124	100	317	526	522	306	186
Average	100	70	71	65	60	50	109	225	398	490	481	286	201
Maximum	218	186	178	147	139	133	192	458	574	660	623	421	258
Minimum	38	25	30	25	25	20	42	100	156	348	271	178	145

S-4b
Bonneville Unit Operation - CUP Water (acre-feet)
Tanner Ridge Tunnel

21	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	5,496	2,433	2,589	3,296	1,812	1,938	2,504	6,797	11,351	13,736	14,594	12,781	79,328
1951	3,279	2,298	2,345	2,290	1,889	2,223	2,504	6,377	11,629	11,598	12,035	9,459	67,925
1952	3,272	2,422	2,518	2,061	1,898	1,852	2,504	6,133	9,269	12,254	12,691	10,094	66,969
1953	3,135	1,478	1,820	1,535	1,675	1,799	6,504	6,133	9,269	11,246	11,683	9,118	65,395
1954	2,320	2,376	2,675	1,963	2,307	2,216	7,275	6,133	9,269	11,246	11,683	9,118	68,580
1955	2,780	2,697	2,875	2,490	2,385	2,837	9,862	15,460	11,649	11,246	11,683	9,118	85,081
1956	3,453	2,997	2,875	2,490	2,643	2,337	5,250	15,504	14,349	13,482	12,117	9,118	86,613
1957	3,350	2,797	2,875	2,490	2,175	2,637	8,061	10,744	11,969	13,584	14,278	10,498	85,458
1958	2,127	2,497	2,775	2,490	2,153	2,637	4,299	10,744	14,093	13,352	14,348	11,024	82,539
1959	2,965	2,697	2,775	2,490	2,353	2,675	9,594	16,853	13,602	12,145	11,683	9,118	88,948
1960	3,455	2,897	3,075	2,590	2,323	2,248	8,663	16,234	11,649	11,246	11,683	9,404	85,465
1961	3,386	2,797	3,075	2,590	2,553	2,975	11,428	14,041	11,649	11,246	11,683	10,752	88,173
1962	3,530	2,897	2,975	2,690	2,353	2,837	2,672	12,402	14,302	13,587	14,281	11,641	86,165
1963	3,131	2,797	2,975	2,490	1,753	2,637	9,936	14,800	13,485	13,279	14,278	11,155	92,716
1964	3,693	3,982	7,187	6,821	4,019	3,743	9,135	10,803	14,657	13,954	15,606	13,518	107,118
1965	7,888	3,893	4,394	4,466	4,433	5,010	3,293	10,744	12,013	14,253	15,239	13,528	99,154
1966	8,537	5,952	2,834	3,219	4,126	2,437	7,411	12,242	13,895	13,584	14,278	12,658	101,172
1967	6,108	3,405	5,599	3,607	2,663	2,769	9,565	12,216	12,937	13,817	14,511	12,598	99,794
1968	7,741	4,698	4,565	4,409	3,482	4,780	7,203	10,805	10,340	13,093	14,278	12,406	97,799
1969	6,785	5,492	6,972	2,267	3,129	1,390	2,504	6,133	11,014	11,978	14,846	12,982	85,493
1970	7,223	2,490	3,559	4,162	3,774	4,732	8,999	9,911	11,649	11,246	14,278	12,367	94,388
1971	5,402	2,223	5,072	4,101	3,145	2,929	4,398	13,281	11,649	13,584	14,278	14,510	94,573
1972	6,907	2,296	4,498	4,879	4,468	1,502	7,774	11,317	11,649	11,584	14,278	12,529	93,682
1973	7,578	5,837	5,196	4,640	3,927	4,373	3,924	6,133	11,242	11,573	14,431	12,600	91,454
1974	7,414	5,507	4,441	4,781	4,542	4,048	5,015	6,133	11,649	13,584	14,278	12,080	93,472
1975	7,170	6,567	4,937	4,087	3,798	4,056	8,018	10,744	9,269	11,246	14,278	12,159	96,330
1976	6,738	2,430	2,302	3,382	3,229	3,974	7,345	14,770	14,349	13,420	14,278	12,177	98,394
1977	6,599	3,873	5,151	4,757	2,411	2,853	8,506	16,853	14,349	13,584	14,278	12,191	105,404
1978	11,590	10,656	10,972	9,020	7,693	4,635	5,191	10,744	14,614	15,099	16,188	15,317	131,721
1979	10,981	10,421	10,210	8,790	7,574	8,202	5,675	11,106	13,267	15,449	16,473	14,269	132,416
1980	13,401	11,061	10,974	8,320	6,889	7,585	3,572	6,549	9,698	13,908	15,928	10,969	118,854
1981	9,316	4,667	4,004	5,757	5,018	6,309	9,387	16,767	12,917	13,258	14,278	13,904	115,584
1982	8,347	4,362	5,625	6,134	5,028	2,201	2,504	6,133	9,844	12,254	15,286	13,281	90,999
1983	3,950	2,437	2,495	2,380	2,195	1,397	3,870	6,133	9,269	11,910	12,347	10,582	68,964
1984	2,447	2,047	1,975	2,463	1,793	1,277	2,504	6,133	9,269	12,254	12,691	10,094	64,946
1985	3,348	2,307	2,635	2,530	2,373	1,216	2,662	6,133	9,269	12,215	12,651	10,055	67,393
1986	3,835	2,217	2,545	2,380	1,373	1,216	2,504	6,133	9,269	12,254	12,691	10,094	66,510
1987	3,576	4,045	2,196	2,043	1,863	2,107	7,264	12,242	11,877	12,064	14,540	12,305	86,122
1988	5,980	2,667	2,811	2,541	2,417	2,582	10,300	15,881	14,086	13,584	14,272	12,053	99,174
1989	2,327	5,379	5,636	3,725	2,564	2,749	9,235	16,853	13,765	11,246	14,277	13,723	101,479
1990	8,566	5,136	5,612	4,646	4,305	4,807	10,175	16,853	13,571	14,634	16,012	14,336	118,653
1991	6,453	4,620	6,231	6,215	2,910	3,322	10,769	18,243	14,349	11,704	14,737	13,102	112,657
1992	8,176	4,786	6,312	5,320	3,537	3,768	9,414	16,309	14,349	14,715	12,814	13,752	113,253
1993	9,367	8,213	7,378	6,956	5,495	3,975	6,252	10,744	15,037	15,729	16,423	14,260	119,830
1994	5,244	4,279	4,896	4,710	3,482	2,760	9,306	16,853	14,098	14,029	14,753	13,118	107,528
1995	5,485	5,290	5,428	5,106	4,156	3,647	6,646	10,744	11,969	13,370	16,402	11,573	99,817
1996	7,413	2,466	2,593	2,244	2,463	1,540	4,084	6,133	11,073	11,401	14,433	12,472	78,317
1997	7,780	6,682	4,168	3,676	3,574	1,216	2,946	6,133	9,269	14,119	15,175	13,278	88,015
1998	11,202	7,066	4,521	7,559	7,437	3,023	4,643	6,133	10,614	13,427	16,459	14,482	106,567
1999	6,053	2,524	2,686	3,988	2,008	2,104	7,375	6,133	9,275	11,252	14,284	12,300	79,982
Average	5,926	4,161	4,337	4,001	3,351	3,082	6,408	10,911	11,979	12,873	14,099	12,000	93,127
Maximum	13,401	11,061	10,974	9,020	7,693	8,202	11,428	18,243	15,037	15,729	16,473	15,317	132,416
Minimum	2,127	1,478	1,820	1,535	1,373	1,216	2,504	6,133	9,269	11,246	11,683	9,118	64,946

S-4b
Bonneville Unit Operation - CUP Water (cfs)
Tanner Ridge Tunnel

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	89	41	42	54	33	32	42	111	191	223	237	215	110
1951	53	39	38	37	34	36	42	104	195	189	196	159	94
1952	53	41	41	34	33	30	42	100	156	199	206	170	92
1953	51	25	30	25	30	29	109	100	156	183	190	153	90
1954	38	40	43	32	42	36	122	100	156	183	190	153	95
1955	45	45	47	40	43	46	166	251	196	183	190	153	118
1956	56	50	47	40	46	38	88	252	241	219	197	153	119
1957	54	47	47	40	39	43	135	175	201	221	232	176	118
1958	35	42	45	40	39	43	72	175	237	217	233	185	114
1959	48	45	45	40	42	43	161	274	229	198	190	153	123
1960	56	49	50	42	40	37	146	264	196	183	190	158	118
1961	55	47	50	42	46	48	192	228	196	183	190	181	122
1962	57	49	48	44	42	46	45	202	240	221	232	196	119
1963	51	47	48	40	32	43	167	241	227	216	232	187	128
1964	60	67	117	111	70	61	154	176	246	227	254	227	148
1965	128	65	71	73	80	81	55	175	202	232	248	227	137
1966	139	100	46	52	74	40	125	199	234	221	232	213	140
1967	99	57	91	59	48	45	161	199	217	225	236	212	138
1968	126	79	74	72	61	78	121	176	174	213	232	208	135
1969	110	92	113	37	56	23	42	100	185	195	241	218	118
1970	117	42	58	68	68	77	151	161	196	183	232	208	130
1971	88	37	82	67	57	48	74	216	196	221	232	244	131
1972	112	39	73	79	78	24	131	184	196	188	232	211	129
1973	123	98	85	75	71	71	66	100	189	188	235	212	126
1974	121	93	72	78	82	66	84	100	196	221	232	203	129
1975	117	110	80	66	68	66	135	175	156	183	232	204	133
1976	110	41	37	55	56	65	123	240	241	218	232	205	136
1977	107	65	84	77	43	46	143	274	241	221	232	205	146
1978	188	179	178	147	139	75	87	175	246	246	263	257	182
1979	179	175	166	143	136	133	95	181	223	251	268	240	183
1980	218	186	178	135	120	123	60	107	163	226	259	184	164
1981	152	78	65	94	90	103	158	273	217	216	232	234	160
1982	136	73	91	100	91	36	42	100	165	199	249	223	126
1983	64	41	41	39	40	23	65	100	156	194	201	178	95
1984	40	34	32	40	31	21	42	100	156	199	206	170	89
1985	54	39	43	41	43	20	45	100	156	199	206	169	93
1986	62	37	41	39	25	20	42	100	156	199	206	170	92
1987	58	68	36	33	34	34	122	199	200	196	236	207	119
1988	97	45	46	41	42	42	173	258	237	221	232	203	137
1989	38	90	92	61	46	45	155	274	231	183	232	231	140
1990	139	86	91	76	78	78	171	274	228	238	260	241	164
1991	105	78	101	101	52	54	181	297	241	190	240	220	156
1992	133	80	103	87	61	61	158	265	241	239	208	231	156
1993	152	138	120	113	99	65	105	175	253	256	267	240	166
1994	85	72	80	77	63	45	156	274	237	228	240	220	149
1995	89	89	88	83	75	59	112	175	201	217	267	194	138
1996	121	41	42	37	43	25	69	100	186	185	235	210	108
1997	127	112	68	60	64	20	50	100	156	230	247	223	122
1998	182	119	74	123	134	49	78	100	178	218	268	243	147
1999	98	42	44	65	36	34	124	100	156	183	232	207	110
Average	96	70	71	65	60	50	108	177	201	209	229	202	129
Maximum	218	186	178	147	139	133	192	297	253	256	268	257	183
Minimum	35	25	30	25	25	20	42	100	156	183	190	153	89

S-4c
Bonneville Unit Operation - SVP Water (acre-feet)
Tanner Ridge Tunnel

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	264	14,673	12,526	16,704	10,365	54,532
1951	0	0	0	0	0	0	0	0	14,647	19,890	13,558	8,846	56,941
1952	43	0	0	0	0	0	0	0	5,354	13,763	9,800	10,203	39,163
1953	6,224	0	0	0	0	0	67	2,166	17,431	18,298	12,518	8,033	64,737
1954	444	0	0	0	0	0	457	10,527	17,835	15,557	15,985	2,857	63,662
1955	500	0	0	0	0	0	0	335	17,228	21,543	12,273	5,787	57,666
1956	0	0	0	0	0	0	0	3,086	19,096	16,289	15,375	6,501	60,347
1957	0	0	0	0	0	0	0	0	3,354	20,040	14,787	8,720	46,901
1958	967	0	0	0	0	0	0	0	15,534	18,176	15,933	3,700	54,310
1959	228	0	0	0	0	0	0	10,145	19,804	12,383	9,418	3,131	55,109
1960	0	0	0	0	0	0	0	8,381	21,954	17,504	13,924	2,476	64,239
1961	0	0	0	0	0	0	0	14,100	20,702	12,025	4,965	979	52,771
1962	0	0	0	0	0	0	0	0	13,934	16,154	18,500	4,382	52,970
1963	1	0	0	0	0	0	0	4,355	6,345	20,549	15,556	3,179	49,985
1964	1,145	0	0	0	0	0	0	0	1,695	26,628	15,975	8,371	53,815
1965	0	0	0	0	0	0	0	0	4,213	12,376	9,791	4,177	30,557
1966	0	0	0	0	0	0	0	7,166	20,279	14,165	13,929	3,772	59,311
1967	0	0	0	0	0	0	0	0	0	20,480	18,232	10,717	49,429
1968	0	0	0	0	0	0	0	0	8,881	19,147	9,308	8,572	45,908
1969	325	0	0	0	0	0	0	183	8,035	15,908	17,233	7,598	49,282
1970	0	0	0	0	0	0	0	0	7,752	18,561	19,611	5,018	50,942
1971	0	0	0	0	0	0	0	0	11,703	20,519	19,252	264	51,738
1972	0	0	0	0	0	0	0	11,915	14,710	18,720	14,044	2,247	61,636
1973	0	0	0	0	0	0	0	0	7,020	18,648	16,193	2,704	44,565
1974	0	0	0	0	0	0	0	2,151	16,811	15,533	17,542	4,073	56,110
1975	0	0	0	0	0	0	0	0	0	20,894	20,600	9,447	50,941
1976	598	0	0	0	0	0	0	5,585	19,529	20,764	17,799	5,487	69,762
1977	0	0	0	0	0	0	1,119	6,251	19,537	16,787	16,166	4,711	64,571
1978	0	0	0	0	0	0	0	0	12,591	22,491	18,420	1,007	54,509
1979	0	0	0	0	0	0	0	0	17,636	20,203	15,031	1,406	54,276
1980	0	0	0	0	0	0	0	0	9,005	16,785	18,906	3,251	47,947
1981	1,120	0	0	0	0	0	0	4,754	16,349	19,391	16,842	0	58,456
1982	0	0	0	0	0	0	0	0	4,926	15,325	18,100	2,168	40,519
1983	0	0	0	0	0	0	0	4,840	10,224	9,504	11,645	0	36,213
1984	0	0	0	0	0	0	0	3,340	9,801	14,120	14,932	10,613	52,806
1985	0	0	0	0	0	0	0	0	12,745	10,767	19,227	3,320	46,059
1986	0	0	0	0	0	0	0	0	8,803	14,117	15,958	2,981	41,859
1987	0	0	0	0	0	0	906	7,206	18,867	14,398	13,713	7,441	62,531
1988	0	0	0	0	0	0	0	7,563	18,674	20,597	16,041	5,702	68,577
1989	0	0	0	0	0	0	431	10,820	19,192	19,303	11,114	1	60,860
1990	0	0	0	0	0	0	0	5,841	11,024	19,099	16,733	7,087	59,784
1991	0	0	0	0	0	0	0	0	2,755	22,964	20,791	3,714	50,224
1992	0	0	0	0	0	0	1,926	10,182	17,961	12,620	14,591	3,631	60,911
1993	0	0	0	0	0	0	0	0	3,837	14,208	17,910	6,871	42,826
1994	0	0	0	0	0	0	0	4,771	19,634	20,215	11,149	7,957	63,726
1995	0	0	0	0	0	0	0	0	0	9,145	15,823	5,082	30,050
1996	0	0	0	0	0	0	0	0	8,092	14,587	18,046	3,529	44,254
1997	0	0	0	0	0	0	0	0	5,805	16,904	13,807	3,406	39,922
1998	0	0	0	0	0	0	0	0	749	20,490	21,870	10,583	53,692
1999	0	0	0	0	0	0	0	0	9,609	21,120	17,826	5,885	54,440
Average	232	0	0	0	0	0	98	2,918	11,727	17,243	15,469	5,039	52,727
Maximum	6,224	0	0	0	0	0	1,926	14,100	21,954	26,628	21,870	10,717	69,762
Minimum	0	0	0	0	0	0	0	0	0	9,145	4,965	0	30,050

S-4c
Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - SVP Water (cfs)
Tanner Ridge Tunnel

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	4	247	204	272	174	75
1951	0	0	0	0	0	0	0	0	246	323	220	149	79
1952	1	0	0	0	0	0	0	0	90	224	159	171	54
1953	101	0	0	0	0	0	1	35	293	298	204	135	89
1954	7	0	0	0	0	0	8	171	300	253	260	48	88
1955	8	0	0	0	0	0	0	5	290	350	200	97	80
1956	0	0	0	0	0	0	0	50	321	265	250	109	83
1957	0	0	0	0	0	0	0	0	56	326	240	147	65
1958	16	0	0	0	0	0	0	0	261	296	259	62	75
1959	4	0	0	0	0	0	0	165	333	201	153	53	76
1960	0	0	0	0	0	0	0	136	369	285	226	42	88
1961	0	0	0	0	0	0	0	229	348	196	81	16	73
1962	0	0	0	0	0	0	0	0	234	263	301	74	73
1963	0	0	0	0	0	0	0	71	107	334	253	53	69
1964	19	0	0	0	0	0	0	0	28	433	260	141	74
1965	0	0	0	0	0	0	0	0	71	201	159	70	42
1966	0	0	0	0	0	0	0	117	341	230	227	63	82
1967	0	0	0	0	0	0	0	0	0	333	297	180	68
1968	0	0	0	0	0	0	0	0	149	311	151	144	63
1969	5	0	0	0	0	0	0	3	135	259	280	128	68
1970	0	0	0	0	0	0	0	0	130	302	319	84	70
1971	0	0	0	0	0	0	0	0	197	334	313	4	71
1972	0	0	0	0	0	0	0	194	247	304	228	38	85
1973	0	0	0	0	0	0	0	0	118	303	263	45	62
1974	0	0	0	0	0	0	0	35	283	253	285	68	78
1975	0	0	0	0	0	0	0	0	0	340	335	159	70
1976	10	0	0	0	0	0	0	91	328	338	289	92	96
1977	0	0	0	0	0	0	19	102	328	273	263	79	89
1978	0	0	0	0	0	0	0	0	212	366	300	17	75
1979	0	0	0	0	0	0	0	0	296	329	244	24	75
1980	0	0	0	0	0	0	0	0	151	273	307	55	66
1981	18	0	0	0	0	0	0	77	275	315	274	0	81
1982	0	0	0	0	0	0	0	0	83	249	294	36	56
1983	0	0	0	0	0	0	0	79	172	155	189	0	50
1984	0	0	0	0	0	0	0	54	165	230	243	178	73
1985	0	0	0	0	0	0	0	0	214	175	313	56	64
1986	0	0	0	0	0	0	0	0	148	230	260	50	58
1987	0	0	0	0	0	0	15	117	317	234	223	125	86
1988	0	0	0	0	0	0	0	123	314	335	261	96	94
1989	0	0	0	0	0	0	7	176	323	314	181	0	84
1990	0	0	0	0	0	0	0	95	185	311	272	119	83
1991	0	0	0	0	0	0	0	0	46	373	338	62	69
1992	0	0	0	0	0	0	32	166	302	205	237	61	84
1993	0	0	0	0	0	0	0	0	64	231	291	115	59
1994	0	0	0	0	0	0	0	78	330	329	181	134	88
1995	0	0	0	0	0	0	0	0	0	149	257	85	42
1996	0	0	0	0	0	0	0	0	136	237	293	59	61
1997	0	0	0	0	0	0	0	0	98	275	225	57	55
1998	0	0	0	0	0	0	0	0	13	333	356	178	74
1999	0	0	0	0	0	0	0	0	161	343	290	99	75
Average	4	0	0	0	0	0	2	47	197	280	252	85	73
Maximum	101	0	0	0	0	0	32	229	369	433	356	180	96
Minimum	0	0	0	0	0	0	0	0	0	149	81	0	42

S-4d
Bonneville Unit Operation - Total (acre-feet)
Releases to Diamond Fork Creek from Diamond Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	805	1,217	1,373	1,231	881	722	0	0	61	942	1,436	1,617	10,286
1951	836	1,082	1,129	1,359	958	1,007	0	0	777	1,356	1,940	2,118	12,562
1952	836	1,206	1,302	1,130	967	636	0	0	0	0	531	1,024	7,633
1953	0	262	604	604	744	583	0	111	139	1,188	1,390	1,910	7,535
1954	637	1,160	1,459	1,032	1,376	1,000	305	1,348	1,729	2,454	2,385	2,231	17,115
1955	1,153	1,481	1,659	1,559	1,454	1,621	853	81	1,557	1,851	2,167	2,590	18,025
1956	1,326	1,781	1,659	1,559	1,712	1,121	0	0	1,557	899	819	1,727	14,159
1957	1,223	1,581	1,659	1,559	1,244	1,421	153	0	0	1,699	2,146	2,044	14,728
1958	936	1,281	1,559	1,559	1,222	1,421	0	0	1,838	2,343	2,586	2,235	16,979
1959	996	1,481	1,559	1,559	1,422	1,459	998	2,572	2,140	2,484	2,226	2,421	21,317
1960	1,328	1,681	1,859	1,659	1,392	1,032	731	1,527	1,648	1,964	2,226	2,762	19,808
1961	1,259	1,581	1,859	1,659	1,622	1,759	1,493	1,264	1,897	2,527	2,895	2,612	22,425
1962	1,403	1,681	1,759	1,759	1,422	1,621	0	0	502	1,279	2,561	2,047	16,032
1963	1,002	1,581	1,759	1,559	822	1,421	893	0	1,107	1,278	2,158	2,778	16,356
1964	1,134	1,481	1,659	1,659	1,612	1,200	85	0	220	1,694	2,368	2,020	15,130
1965	1,150	1,381	1,359	1,459	1,322	1,321	0	0	0	631	1,340	1,618	11,580
1966	837	1,281	1,559	1,659	1,422	1,221	36	0	1,315	1,867	1,190	1,697	14,083
1967	852	1,481	1,659	1,659	1,522	1,321	1,293	0	0	900	1,351	1,708	13,745
1968	1,003	1,481	1,559	1,659	1,392	1,321	193	0	0	1,067	865	455	10,993
1969	371	1,003	1,144	840	883	174	0	0	0	39	417	1,055	5,927
1970	573	1,274	1,173	1,088	875	999	703	0	0	560	1,051	1,512	9,808
1971	617	1,007	1,274	1,077	732	260	0	0	0	627	1,172	2,144	8,911
1972	730	1,080	1,210	1,210	978	286	186	0	706	1,361	1,697	1,985	11,428
1973	839	1,125	1,263	1,332	1,095	847	0	0	0	884	1,395	1,690	10,470
1974	523	883	1,020	1,042	917	127	0	0	32	624	447	1,467	7,081
1975	432	888	1,118	1,096	997	790	449	0	0	508	1,352	1,720	9,350
1976	421	976	1,086	1,127	976	817	81	0	317	1,195	1,340	2,135	10,471
1977	1,180	1,568	1,677	1,677	1,480	1,637	1,638	2,198	1,235	1,763	2,112	2,641	20,806
1978	1,262	1,486	1,556	1,556	1,399	403	0	0	0	1,113	1,641	1,994	12,411
1979	841	1,311	1,449	1,399	1,172	1,001	0	0	0	0	988	837	8,998
1980	853	1,251	1,509	1,429	1,582	1,171	0	0	0	0	0	1,222	9,016
1981	318	1,131	1,219	1,459	1,344	1,431	1,087	1,396	1,070	1,488	1,863	1,680	15,486
1982	1,014	1,641	1,709	1,649	1,302	391	0	0	0	0	1,662	1,584	10,951
1983	815	1,221	1,279	1,449	1,264	181	0	0	0	0	77	822	7,107
1984	320	831	759	869	862	61	0	0	0	0	531	738	4,969
1985	213	1,091	1,419	1,599	1,442	0	0	0	0	0	0	2,026	7,789
1986	739	1,001	1,329	1,449	442	0	0	0	0	0	0	1,895	6,854
1987	65	493	718	850	696	628	485	917	885	1,501	1,398	1,824	10,461
1988	1,170	1,451	1,595	1,610	1,486	1,366	1,277	1,073	1,073	1,255	1,561	2,086	17,004
1989	200	1,750	1,850	1,878	1,633	1,533	1,576	1,485	1,293	1,466	1,652	1,582	17,897
1990	1,617	1,903	1,982	1,981	1,808	1,857	1,787	1,578	1,708	588	1,796	2,277	20,883
1991	1,439	1,728	1,936	1,892	1,552	1,648	1,612	1,517	12	1,417	1,687	2,272	18,711
1992	1,272	1,555	1,508	1,678	1,433	1,181	1,576	1,777	1,101	1,829	1,447	2,486	18,841
1993	1,196	1,631	1,835	1,699	1,434	95	0	0	0	0	384	1,746	10,021
1994	1,031	1,430	1,523	1,491	1,231	1,069	1,090	411	403	869	1,156	1,664	13,369
1995	927	1,413	1,473	1,436	1,029	0	0	0	0	0	0	1,569	7,847
1996	622	1,008	1,127	1,064	796	74	0	0	0	77	1,029	1,475	7,272
1997	886	1,003	1,052	1,242	1,064	0	0	0	0	319	0	872	6,437
1998	368	774	938	850	710	0	0	0	0	0	0	884	4,525
1999	690	1,302	1,361	1,301	1,072	883	111	0	0	1,893	1,975	2,785	13,370
Average	845	1,287	1,422	1,404	1,204	882	414	385	526	996	1,328	1,806	12,499
Maximum	1,617	1,903	1,982	1,981	1,808	1,857	1,787	2,572	2,140	2,527	2,895	2,785	22,425
Minimum	0	262	604	604	442	0	0	0	0	0	0	455	4,525

S-4d
Bonneville Unit Operation - Total (cfs)
Releases to Diamond Fork Creek from Diamond Fork Flow Control Structure

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

S-4e
Bonneville Unit Operation - CUP Water (acre-feet)
Releases to Diamond Fork Creek from Diamond Fork Flow Control Structure

32	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	805	1,217	1,373	1,231	881	722	0	0	0	0	0	0	6,230
1951	836	1,082	1,129	1,359	958	1,007	0	0	0	0	0	0	6,371
1952	793	1,206	1,302	1,130	967	636	0	0	0	0	0	0	6,035
1953	0	262	604	604	744	583	0	0	0	0	0	0	2,797
1954	193	1,160	1,459	1,032	1,376	1,000	0	0	0	0	0	0	6,219
1955	653	1,481	1,659	1,559	1,454	1,621	853	0	0	0	0	0	9,279
1956	1,326	1,781	1,659	1,559	1,712	1,121	0	0	0	0	0	0	9,156
1957	1,223	1,581	1,659	1,559	1,244	1,421	153	0	0	0	0	0	8,838
1958	0	1,281	1,559	1,559	1,222	1,421	0	0	0	0	0	0	7,041
1959	768	1,481	1,559	1,559	1,422	1,459	998	0	0	0	0	0	9,245
1960	1,328	1,681	1,859	1,659	1,392	1,032	731	0	0	0	0	286	9,967
1961	1,259	1,581	1,859	1,659	1,622	1,759	1,493	0	0	0	0	1,634	12,864
1962	1,403	1,681	1,759	1,759	1,422	1,621	0	0	0	0	0	0	9,644
1963	1,002	1,581	1,759	1,559	822	1,421	893	0	0	0	0	0	9,035
1964	0	1,481	1,659	1,659	1,612	1,200	85	0	0	0	0	0	7,695
1965	1,150	1,381	1,359	1,459	1,322	1,321	0	0	0	0	0	0	7,991
1966	837	1,281	1,559	1,659	1,422	1,221	36	0	0	0	0	0	8,014
1967	852	1,481	1,659	1,659	1,522	1,321	1,293	0	0	0	0	0	9,785
1968	1,003	1,481	1,559	1,659	1,392	1,321	193	0	0	0	0	0	8,606
1969	46	1,003	1,144	840	883	174	0	0	0	0	0	0	4,091
1970	573	1,274	1,173	1,088	875	999	703	0	0	0	0	0	6,685
1971	617	1,007	1,274	1,077	732	260	0	0	0	0	0	1,880	6,847
1972	730	1,080	1,210	1,210	978	286	186	0	0	0	0	0	5,680
1973	839	1,125	1,263	1,332	1,095	847	0	0	0	0	0	0	6,502
1974	523	883	1,020	1,042	917	127	0	0	0	0	0	0	4,511
1975	432	888	1,118	1,096	997	790	449	0	0	0	0	0	5,770
1976	0	976	1,086	1,127	976	817	81	0	0	0	0	0	5,063
1977	1,180	1,568	1,677	1,677	1,480	1,637	519	0	0	0	0	0	9,738
1978	1,262	1,486	1,556	1,556	1,399	403	0	0	0	0	0	986	8,648
1979	841	1,311	1,449	1,399	1,172	1,001	0	0	0	0	0	0	7,172
1980	853	1,251	1,509	1,429	1,582	1,171	0	0	0	0	0	0	7,794
1981	0	1,131	1,219	1,459	1,344	1,431	1,087	0	0	0	0	1,680	9,350
1982	1,014	1,641	1,709	1,649	1,302	391	0	0	0	0	0	0	7,705
1983	815	1,221	1,279	1,449	1,264	181	0	0	0	0	0	822	7,030
1984	320	831	759	869	862	61	0	0	0	0	0	0	3,701
1985	213	1,091	1,419	1,599	1,442	0	0	0	0	0	0	0	5,763
1986	739	1,001	1,329	1,449	442	0	0	0	0	0	0	0	4,960
1987	65	493	718	850	696	628	0	0	0	0	0	0	3,451
1988	1,170	1,451	1,595	1,610	1,486	1,366	1,277	0	0	0	0	0	9,956
1989	200	1,750	1,850	1,878	1,633	1,533	1,145	0	0	0	0	1,582	11,570
1990	1,617	1,903	1,982	1,981	1,808	1,857	1,787	0	0	0	0	0	12,937
1991	1,439	1,728	1,936	1,892	1,552	1,648	1,612	1,517	0	0	0	0	13,324
1992	1,272	1,555	1,508	1,678	1,433	1,181	0	0	0	0	0	0	8,625
1993	1,196	1,631	1,835	1,699	1,434	95	0	0	0	0	0	0	7,890
1994	1,031	1,430	1,523	1,491	1,231	1,069	1,090	0	0	0	0	0	8,866
1995	927	1,413	1,473	1,436	1,029	0	0	0	0	0	0	0	6,278
1996	622	1,008	1,127	1,064	796	74	0	0	0	0	0	0	4,691
1997	886	1,003	1,052	1,242	1,064	0	0	0	0	0	0	0	5,246
1998	368	774	938	850	710	0	0	0	0	0	0	0	3,640
1999	690	1,302	1,361	1,301	1,072	883	111	0	0	0	0	0	6,718
Average	758	1,287	1,422	1,404	1,204	882	335	30	0	0	0	177	7,500
Maximum	1,617	1,903	1,982	1,981	1,808	1,857	1,787	1,517	0	0	0	1,880	13,324
Minimum	0	262	604	604	442	0	0	0	0	0	0	0	2,797

S-4e
Bonneville Unit Operation - CUP Water (cfs)
Releases to Diamond Fork Creek from Diamond Fork Flow Control Structure

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

S-4f
Bonneville Unit Operation - SVP Water (acre-feet)
Releases to Diamond Fork Creek from Diamond Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	0	61	942	1,436	1,617	4,056
1951	0	0	0	0	0	0	0	0	777	1,356	1,940	2,118	6,192
1952	43	0	0	0	0	0	0	0	0	0	531	1,024	1,598
1953	0	0	0	0	0	0	0	111	139	1,188	1,390	1,910	4,738
1954	444	0	0	0	0	0	305	1,348	1,729	2,454	2,385	2,231	10,896
1955	500	0	0	0	0	0	0	81	1,557	1,851	2,167	2,590	8,746
1956	0	0	0	0	0	0	0	0	1,557	899	819	1,727	5,002
1957	0	0	0	0	0	0	0	0	0	1,699	2,146	2,044	5,889
1958	936	0	0	0	0	0	0	0	1,838	2,343	2,586	2,235	9,938
1959	228	0	0	0	0	0	0	2,572	2,140	2,484	2,226	2,421	12,071
1960	0	0	0	0	0	0	0	1,527	1,648	1,964	2,226	2,476	9,841
1961	0	0	0	0	0	0	0	1,264	1,897	2,527	2,895	979	9,561
1962	0	0	0	0	0	0	0	0	502	1,279	2,561	2,047	6,388
1963	0	0	0	0	0	0	0	0	1,107	1,278	2,158	2,778	7,321
1964	1,134	0	0	0	0	0	0	0	220	1,694	2,368	2,020	7,436
1965	0	0	0	0	0	0	0	0	0	631	1,340	1,618	3,589
1966	0	0	0	0	0	0	0	0	1,315	1,867	1,190	1,697	6,069
1967	0	0	0	0	0	0	0	0	0	900	1,351	1,708	3,959
1968	0	0	0	0	0	0	0	0	0	1,067	865	455	2,387
1969	325	0	0	0	0	0	0	0	0	39	417	1,055	1,836
1970	0	0	0	0	0	0	0	0	0	560	1,051	1,512	3,123
1971	0	0	0	0	0	0	0	0	0	627	1,172	264	2,063
1972	0	0	0	0	0	0	0	0	706	1,361	1,697	1,985	5,748
1973	0	0	0	0	0	0	0	0	0	884	1,395	1,690	3,969
1974	0	0	0	0	0	0	0	0	32	624	447	1,467	2,569
1975	0	0	0	0	0	0	0	0	0	508	1,352	1,720	3,580
1976	421	0	0	0	0	0	0	0	317	1,195	1,340	2,135	5,408
1977	0	0	0	0	0	0	1,119	2,198	1,235	1,763	2,112	2,641	11,069
1978	0	0	0	0	0	0	0	0	0	1,113	1,641	1,007	3,762
1979	0	0	0	0	0	0	0	0	0	0	988	837	1,825
1980	0	0	0	0	0	0	0	0	0	0	0	1,222	1,222
1981	318	0	0	0	0	0	0	1,396	1,070	1,488	1,863	0	6,136
1982	0	0	0	0	0	0	0	0	0	0	1,662	1,584	3,246
1983	0	0	0	0	0	0	0	0	0	0	77	0	77
1984	0	0	0	0	0	0	0	0	0	0	531	738	1,269
1985	0	0	0	0	0	0	0	0	0	0	0	2,026	2,026
1986	0	0	0	0	0	0	0	0	0	0	0	1,895	1,895
1987	0	0	0	0	0	0	485	917	885	1,501	1,398	1,824	7,010
1988	0	0	0	0	0	0	0	1,073	1,073	1,255	1,561	2,086	7,048
1989	0	0	0	0	0	0	431	1,485	1,293	1,466	1,652	0	6,327
1990	0	0	0	0	0	0	0	1,578	1,708	588	1,796	2,277	7,946
1991	0	0	0	0	0	0	0	0	12	1,417	1,687	2,272	5,387
1992	0	0	0	0	0	0	1,576	1,777	1,101	1,829	1,447	2,486	10,215
1993	0	0	0	0	0	0	0	0	0	0	384	1,746	2,131
1994	0	0	0	0	0	0	0	411	403	869	1,156	1,664	4,503
1995	0	0	0	0	0	0	0	0	0	0	0	1,569	1,569
1996	0	0	0	0	0	0	0	0	0	77	1,029	1,475	2,581
1997	0	0	0	0	0	0	0	0	0	319	0	872	1,191
1998	0	0	0	0	0	0	0	0	0	0	0	884	884
1999	0	0	0	0	0	0	0	0	0	1,893	1,975	2,785	6,652
Average	87	0	0	0	0	0	78	355	526	996	1,328	1,628	4,999
Maximum	1,134	0	0	0	0	0	1,576	2,572	2,140	2,527	2,895	2,785	12,071
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	77

S-4f

Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - SVP Water (cfs)
Releases to Diamond Fork Creek from Diamond Fork Flow Control Structure

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

S-4g
Bonneville Unit Operation - Total Water (acre-feet)
Diamond Fork Creek below Diamond Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	3,690	3,570	3,689	3,689	3,332	3,689	5,711	7,213	4,761	4,920	4,920	4,761	53,946
1951	3,690	3,570	3,689	3,689	3,332	3,689	4,173	6,891	4,761	4,920	4,920	4,761	52,086
1952	3,690	3,570	3,689	3,689	3,451	3,689	16,755	29,988	9,797	5,214	4,920	4,761	93,214
1953	3,967	3,570	3,689	3,689	3,332	3,689	3,894	4,920	4,761	4,920	4,920	4,761	50,114
1954	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1955	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1956	3,690	3,570	3,689	3,689	3,451	3,689	5,220	6,488	4,761	4,920	4,920	4,761	52,850
1957	3,690	3,570	3,689	3,689	3,332	3,689	3,571	9,963	7,074	4,920	4,920	4,761	56,869
1958	3,690	3,570	3,689	3,689	3,332	3,689	4,786	11,996	4,761	4,920	4,920	4,761	57,804
1959	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1960	3,690	3,570	3,689	3,689	3,451	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,633
1961	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1962	3,690	3,570	3,689	3,689	3,332	3,689	8,078	9,063	4,761	4,920	4,920	4,761	58,164
1963	3,690	3,570	3,689	3,689	3,332	3,689	3,571	6,377	4,761	4,920	4,920	4,761	50,971
1964	3,690	3,570	3,689	3,689	3,451	3,689	3,571	10,604	4,761	4,920	4,920	4,761	55,317
1965	3,690	3,570	3,689	3,689	3,332	3,689	6,178	13,563	7,761	4,920	4,920	4,761	63,764
1966	3,690	3,570	3,689	3,689	3,332	3,689	3,571	5,452	4,761	4,920	4,920	4,761	50,046
1967	3,690	3,570	3,689	3,689	3,332	3,689	3,571	7,187	6,282	4,920	4,920	4,761	53,302
1968	3,690	3,570	3,689	3,689	3,451	3,689	3,571	10,687	6,236	4,920	4,920	4,761	56,874
1969	3,690	3,570	3,689	3,689	3,332	3,689	10,830	12,562	5,871	4,920	4,920	4,761	65,524
1970	3,690	3,570	3,689	3,689	3,332	3,689	3,571	7,388	5,074	4,920	4,920	4,761	52,295
1971	3,690	3,570	3,689	3,689	3,332	3,689	5,457	8,140	5,235	4,920	4,920	4,821	55,154
1972	3,690	3,570	3,689	3,689	3,451	3,689	3,571	5,084	4,761	4,920	4,920	4,761	49,797
1973	3,690	3,570	3,689	3,689	3,332	3,689	5,066	14,662	5,967	4,920	4,920	4,761	61,957
1974	3,690	3,570	3,689	3,689	3,332	3,689	4,818	9,130	4,761	4,920	4,920	4,761	54,971
1975	3,690	3,570	3,689	3,689	3,332	3,689	3,571	11,508	11,796	4,920	4,920	4,761	63,136
1976	3,690	3,570	3,689	3,689	3,451	3,689	3,571	5,655	4,761	4,920	4,920	4,761	50,368
1977	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1978	3,690	3,570	3,689	3,689	3,332	3,689	5,079	8,570	5,299	4,920	4,920	4,761	55,210
1979	3,690	3,570	3,689	3,689	3,332	3,689	6,358	16,816	15,718	7,250	4,920	4,761	77,484
1980	3,690	3,570	3,689	3,689	3,451	3,689	9,998	17,967	8,495	7,677	5,092	4,806	75,815
1981	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1982	3,690	3,570	3,689	3,689	3,332	3,689	11,298	25,965	9,078	5,164	4,920	4,761	82,848
1983	3,690	3,570	3,689	3,689	3,332	3,689	6,958	22,689	19,413	6,005	4,920	4,761	86,407
1984	3,690	3,570	3,689	3,689	3,451	3,689	18,968	52,799	16,973	9,513	4,920	4,761	129,715
1985	3,690	3,570	3,689	3,689	3,332	4,479	13,788	12,467	9,759	6,429	6,628	4,761	76,283
1986	3,690	3,570	3,689	3,689	3,332	6,329	15,178	21,453	9,901	6,102	5,181	4,761	86,876
1987	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1988	3,690	3,570	3,689	3,689	3,451	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,633
1989	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1990	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1991	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1992	3,690	3,570	3,689	3,689	3,451	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,633
1993	3,690	3,570	3,689	3,689	3,332	3,689	4,596	11,924	5,755	5,015	4,920	4,761	58,631
1994	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514
1995	3,690	3,570	3,689	3,689	3,332	3,809	4,543	13,553	11,410	5,988	5,254	4,761	67,289
1996	3,690	3,570	3,689	3,689	3,451	3,689	5,484	9,170	5,070	4,920	4,920	4,761	56,105
1997	3,690	3,570	3,689	3,689	3,332	4,508	10,454	20,224	7,564	4,920	5,229	4,761	75,631
1998	3,690	3,570	3,689	3,689	3,332	4,011	6,206	12,745	7,048	6,459	5,880	4,761	65,082
1999	3,690	3,570	3,689	3,689	3,332	3,689	3,571	8,377	5,332	4,920	4,920	4,761	53,542
Average	3,696	3,570	3,689	3,689	3,361	3,783	5,783	10,762	6,634	5,254	4,995	4,763	59,980
Maximum	3,967	3,570	3,689	3,689	3,451	6,329	18,968	52,799	19,413	9,513	6,628	4,821	129,715
Minimum	3,690	3,570	3,689	3,689	3,332	3,689	3,571	4,920	4,761	4,920	4,920	4,761	49,514

S-4g
Bonneville Unit Operation - Total (cfs)
Diamond Fork Creek below Diamond Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	60	60	60	60	60	60	96	117	80	80	80	80	75
1951	60	60	60	60	60	60	70	112	80	80	80	80	72
1952	60	60	60	60	60	60	282	488	165	85	80	80	128
1953	65	60	60	60	60	60	65	80	80	80	80	80	69
1954	60	60	60	60	60	60	60	80	80	80	80	80	68
1955	60	60	60	60	60	60	60	80	80	80	80	80	68
1956	60	60	60	60	60	60	88	106	80	80	80	80	73
1957	60	60	60	60	60	60	60	162	119	80	80	80	79
1958	60	60	60	60	60	60	80	195	80	80	80	80	80
1959	60	60	60	60	60	60	60	80	80	80	80	80	68
1960	60	60	60	60	60	60	60	80	80	80	80	80	68
1961	60	60	60	60	60	60	60	80	80	80	80	80	68
1962	60	60	60	60	60	60	136	147	80	80	80	80	80
1963	60	60	60	60	60	60	60	104	80	80	80	80	70
1964	60	60	60	60	60	60	60	172	80	80	80	80	76
1965	60	60	60	60	60	60	104	221	130	80	80	80	88
1966	60	60	60	60	60	60	60	89	80	80	80	80	69
1967	60	60	60	60	60	60	60	117	106	80	80	80	74
1968	60	60	60	60	60	60	60	174	105	80	80	80	78
1969	60	60	60	60	60	60	182	204	99	80	80	80	91
1970	60	60	60	60	60	60	60	120	85	80	80	80	72
1971	60	60	60	60	60	60	92	132	88	80	80	81	76
1972	60	60	60	60	60	60	60	83	80	80	80	80	69
1973	60	60	60	60	60	60	85	238	100	80	80	80	86
1974	60	60	60	60	60	60	81	148	80	80	80	80	76
1975	60	60	60	60	60	60	60	187	198	80	80	80	87
1976	60	60	60	60	60	60	60	92	80	80	80	80	69
1977	60	60	60	60	60	60	60	80	80	80	80	80	68
1978	60	60	60	60	60	60	85	139	89	80	80	80	76
1979	60	60	60	60	60	60	107	273	264	118	80	80	107
1980	60	60	60	60	60	60	168	292	143	125	83	81	104
1981	60	60	60	60	60	60	60	80	80	80	80	80	68
1982	60	60	60	60	60	60	190	422	153	84	80	80	114
1983	60	60	60	60	60	60	117	369	326	98	80	80	119
1984	60	60	60	60	60	60	319	859	285	155	80	80	179
1985	60	60	60	60	60	73	232	203	164	105	108	80	105
1986	60	60	60	60	60	103	255	349	166	99	84	80	120
1987	60	60	60	60	60	60	60	80	80	80	80	80	68
1988	60	60	60	60	60	60	60	80	80	80	80	80	68
1989	60	60	60	60	60	60	60	80	80	80	80	80	68
1990	60	60	60	60	60	60	60	80	80	80	80	80	68
1991	60	60	60	60	60	60	60	80	80	80	80	80	68
1992	60	60	60	60	60	60	60	80	80	80	80	80	68
1993	60	60	60	60	60	60	77	194	97	82	80	80	81
1994	60	60	60	60	60	60	60	80	80	80	80	80	68
1995	60	60	60	60	60	62	76	220	192	97	85	80	93
1996	60	60	60	60	60	60	92	149	85	80	80	80	77
1997	60	60	60	60	60	73	176	329	127	80	85	80	104
1998	60	60	60	60	60	65	104	207	118	105	96	80	90
1999	60	60	60	60	60	60	60	136	90	80	80	80	74
Average	60	60	60	60	60	62	97	175	111	85	81	80	83
Maximum	65	60	60	60	60	103	319	859	326	155	108	81	179
Minimum	60	60	60	60	60	60	60	80	80	80	80	80	68

S-4h
Bonneville Unit Operation - CUP Water (acre-feet)
Diamond Fork Creek below Diamond Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,391	2,407	2,603	2,461	1,992	1,952	1,137	0	0	0	0	0	14,943
1951	2,250	2,272	2,359	2,588	2,069	2,236	864	543	0	0	0	0	15,182
1952	793	2,396	2,532	2,359	2,117	1,866	1,137	1,586	0	0	0	0	14,788
1953	0	1,452	1,834	1,834	1,854	1,813	0	0	0	0	0	0	8,787
1954	193	2,350	2,688	2,262	2,487	2,229	0	0	0	0	0	0	12,209
1955	653	2,671	2,888	2,788	2,565	2,850	1,990	0	0	0	0	0	16,406
1956	1,481	2,971	2,888	2,788	2,862	2,350	968	0	0	0	0	0	16,309
1957	2,183	2,771	2,888	2,788	2,355	2,650	1,290	1,586	0	0	0	0	18,512
1958	0	2,471	2,788	2,788	2,333	2,650	1,137	1,131	0	0	0	0	15,299
1959	768	2,671	2,788	2,788	2,533	2,688	1,921	0	0	0	0	0	16,158
1960	1,782	2,871	3,088	2,888	2,542	2,262	1,232	0	0	0	0	286	16,951
1961	2,285	2,771	3,088	2,888	2,733	2,988	2,630	0	0	0	0	1,634	21,018
1962	2,989	2,871	2,988	2,988	2,533	2,850	1,137	1,586	0	0	0	0	19,944
1963	1,159	2,771	2,988	2,788	1,933	2,650	2,030	0	0	0	0	0	16,320
1964	0	2,671	2,888	2,888	2,762	2,429	1,222	814	0	0	0	0	15,675
1965	1,792	2,571	2,588	2,688	2,433	2,550	1,137	1,586	0	0	0	0	17,346
1966	1,412	2,471	2,788	2,888	2,533	2,450	296	0	0	0	0	0	14,839
1967	1,077	2,671	2,888	2,888	2,633	2,550	2,430	1,586	817	0	0	0	19,541
1968	2,589	2,671	2,788	2,888	2,542	2,550	1,330	1,586	0	0	0	0	18,946
1969	46	2,194	2,374	2,069	1,994	1,404	1,137	0	0	0	0	0	11,218
1970	749	2,464	2,403	2,318	1,986	2,229	1,840	1,501	0	0	0	0	15,490
1971	1,064	2,197	2,504	2,306	1,843	1,490	1,137	306	0	0	0	1,880	14,728
1972	2,266	2,270	2,439	2,439	2,129	1,516	1,323	0	0	0	0	0	14,382
1973	2,426	2,315	2,493	2,561	2,206	2,077	1,137	1,586	0	0	0	0	16,801
1974	1,632	2,073	2,249	2,271	2,028	1,356	1,137	0	0	0	0	0	12,748
1975	828	2,078	2,348	2,325	2,108	2,020	1,586	1,586	746	0	0	0	15,625
1976	0	2,166	2,316	2,357	2,126	2,047	1,218	0	0	0	0	0	12,230
1977	2,257	2,758	2,907	2,907	2,591	2,866	519	0	0	0	0	0	16,805
1978	1,792	2,676	2,785	2,785	2,510	1,633	1,137	1,586	0	0	0	986	17,891
1979	2,428	2,501	2,678	2,628	2,283	2,230	1,137	1,405	0	0	0	0	17,291
1980	2,440	2,441	2,738	2,658	2,732	2,400	1,137	1,586	0	0	0	0	18,133
1981	0	2,321	2,448	2,688	2,455	2,660	1,445	0	0	0	0	3,215	17,233
1982	2,601	2,831	2,938	2,878	2,413	1,620	1,137	1,326	0	0	0	0	17,745
1983	2,401	2,411	2,508	2,678	2,375	1,410	1,137	0	0	0	0	1,397	16,319
1984	591	2,021	1,988	2,098	2,012	1,290	1,137	0	0	0	0	0	11,139
1985	1,799	2,281	2,648	2,828	2,553	1,230	1,137	1,316	0	0	0	0	15,793
1986	2,111	2,191	2,558	2,678	1,553	1,230	1,137	1,586	0	0	0	0	15,045
1987	1,651	1,683	1,948	2,080	1,806	1,858	0	0	0	0	0	0	11,027
1988	1,753	2,641	2,825	2,840	2,636	2,596	2,415	0	0	0	0	0	17,706
1989	430	2,940	3,079	3,108	2,744	2,762	1,145	0	0	0	0	1,993	18,201
1990	3,204	3,093	3,212	3,211	2,919	3,087	2,924	0	0	0	0	0	21,650
1991	3,025	2,918	3,166	3,122	2,663	2,878	2,749	3,104	0	0	0	0	23,624
1992	2,858	2,745	2,737	2,907	2,583	2,410	0	0	0	0	0	0	16,241
1993	2,782	2,821	3,065	2,928	2,545	1,324	1,137	1,586	0	0	0	0	18,190
1994	2,377	2,620	2,752	2,721	2,342	2,299	2,228	0	0	0	0	0	17,338
1995	2,513	2,603	2,703	2,666	2,139	1,230	1,137	1,586	343	0	0	0	16,921
1996	2,208	2,199	2,357	2,293	1,947	1,304	1,137	1,586	0	0	0	0	15,031
1997	2,472	2,193	2,281	2,471	2,175	1,230	1,137	1,586	0	0	0	0	15,546
1998	1,954	1,964	2,168	2,080	1,821	1,230	1,137	1,586	0	0	0	0	13,940
1999	1,537	2,492	2,590	2,530	2,183	2,112	1,248	1,586	0	0	0	0	16,279
Average	1,640	2,478	2,651	2,634	2,324	2,112	1,277	768	38	0	0	228	16,150
Maximum	3,204	3,093	3,212	3,211	2,919	3,087	2,924	3,104	817	0	0	3,215	23,624
Minimum	0	1,452	1,834	1,834	1,553	1,230	0	0	0	0	0	0	8,787

S-4h
Bonneville Unit Operation - CUP Water (cfs)
Diamond Fork Creek below Diamond Fork Flow Control Structure

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

S-4I
Bonneville Unit Operation - SVP Water (acre-feet)
Diamond Fork Creek below Diamond Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	1,880	1,880	2,822	3,317	3,436	13,335
1951	172	0	0	0	0	0	273	1,337	2,597	3,236	3,820	3,937	15,373
1952	1,923	0	0	0	0	0	0	0	1,819	1,880	2,411	2,844	10,877
1953	1,880	0	0	0	0	0	1,421	1,991	1,959	3,068	3,270	3,729	17,318
1954	2,324	0	0	0	0	0	1,727	3,228	3,548	4,334	4,266	4,050	23,477
1955	2,380	0	0	0	0	0	0	1,961	3,376	3,731	4,047	4,410	19,905
1956	1,725	0	0	0	0	0	169	1,880	3,376	2,779	2,699	3,547	16,176
1957	920	0	0	0	0	0	0	0	1,819	3,579	4,026	3,864	14,208
1958	2,816	0	0	0	0	0	0	750	3,657	4,223	4,466	4,054	19,966
1959	2,108	0	0	0	0	0	214	4,452	3,959	4,364	4,106	4,240	23,444
1960	1,426	0	0	0	0	0	921	3,407	3,467	3,844	4,106	4,320	21,490
1961	854	0	0	0	0	0	0	3,144	3,716	4,407	4,807	2,798	19,726
1962	0	0	0	0	0	0	0	0	2,322	3,159	4,441	3,866	13,787
1963	1,723	0	0	0	0	0	0	1,880	2,926	3,158	4,038	4,614	18,339
1964	3,014	0	0	0	0	0	0	1,066	2,039	3,575	4,248	3,839	17,781
1965	1,238	0	0	0	0	0	0	0	1,819	2,511	3,220	3,437	12,226
1966	1,305	0	0	0	0	0	1,161	1,880	3,134	3,748	3,070	3,516	17,814
1967	1,654	0	0	0	0	0	0	0	1,003	2,780	3,232	3,527	12,196
1968	0	0	0	0	0	0	0	0	1,819	2,947	2,746	2,274	9,786
1969	2,205	0	0	0	0	0	0	1,880	1,819	1,919	2,297	2,875	12,995
1970	1,704	0	0	0	0	0	0	85	1,819	2,440	2,931	3,331	12,311
1971	1,433	0	0	0	0	0	0	1,574	1,819	2,507	3,052	2,084	12,469
1972	51	0	0	0	0	0	0	1,880	2,525	3,241	3,577	3,804	15,077
1973	0	0	0	0	0	0	0	0	1,819	2,764	3,275	3,510	11,368
1974	771	0	0	0	0	0	0	1,880	1,851	2,504	2,327	3,286	12,619
1975	1,484	0	0	0	0	0	0	0	1,074	2,388	3,232	3,539	11,717
1976	2,301	0	0	0	0	0	0	1,880	2,136	3,075	3,220	3,955	16,567
1977	803	0	0	0	0	0	2,540	4,078	3,055	3,643	3,992	4,464	22,575
1978	1,351	0	0	0	0	0	0	0	1,819	2,994	3,521	2,827	12,511
1979	0	0	0	0	0	0	0	182	1,819	1,880	2,868	2,657	9,406
1980	0	0	0	0	0	0	0	0	1,819	1,880	1,880	3,041	8,621
1981	2,198	0	0	0	0	0	1,064	3,276	2,890	3,368	3,743	0	16,540
1982	0	0	0	0	0	0	0	260	1,819	1,880	3,542	3,403	10,905
1983	0	0	0	0	0	0	0	1,880	1,819	1,880	1,957	1,244	8,781
1984	1,609	0	0	0	0	0	0	1,880	1,819	1,880	2,411	2,557	12,157
1985	0	0	0	0	0	0	0	270	1,819	1,880	1,880	3,845	9,695
1986	215	0	0	0	0	0	0	0	1,819	1,880	1,880	3,714	9,508
1987	0	0	0	0	0	0	1,906	2,797	2,704	3,381	3,278	3,644	17,711
1988	1,297	0	0	0	0	0	0	2,953	2,893	3,135	3,441	3,906	17,624
1989	1,651	0	0	0	0	0	1,852	3,365	3,112	3,346	3,532	1,408	18,267
1990	0	0	0	0	0	0	0	3,458	3,527	2,468	3,676	4,096	17,225
1991	0	0	0	0	0	0	0	0	1,831	3,297	3,567	4,091	12,786
1992	0	0	0	0	0	0	2,997	3,657	2,920	3,709	3,327	4,305	20,916
1993	0	0	0	0	0	0	0	0	1,819	1,880	2,264	3,566	9,529
1994	241	0	0	0	0	0	0	2,291	2,222	2,749	3,036	3,484	14,023
1995	0	0	0	0	0	0	0	0	1,477	1,880	1,880	3,388	8,625
1996	0	0	0	0	0	0	0	0	1,819	1,957	2,909	3,295	9,980
1997	0	0	0	0	0	0	0	0	1,819	2,199	1,880	2,691	8,590
1998	0	0	0	0	0	0	0	0	1,819	1,880	1,880	2,704	8,283
1999	1,033	0	0	0	0	0	0	0	1,819	3,773	3,855	4,628	15,107
Average	956	0	0	0	0	0	325	1,368	2,308	2,876	3,209	3,393	14,434
Maximum	3,014	0	0	0	0	0	2,997	4,452	3,959	4,407	4,807	4,628	23,477
Minimum	0	0	0	0	0	0	0	0	1,003	1,880	1,880	0	8,283

S-4l

Bonneville Unit Operation - SVP Water (cfs)

Diamond Fork Creek below Diamond Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	31	32	46	54	58	18
1951	3	0	0	0	0	0	5	22	44	53	62	66	21
1952	31	0	0	0	0	0	0	0	31	31	39	48	15
1953	31	0	0	0	0	0	24	32	33	50	53	63	24
1954	38	0	0	0	0	0	29	53	60	70	69	68	32
1955	39	0	0	0	0	0	0	32	57	61	66	74	27
1956	28	0	0	0	0	0	3	31	57	45	44	60	22
1957	15	0	0	0	0	0	0	0	31	58	65	65	20
1958	46	0	0	0	0	0	0	12	61	69	73	68	28
1959	34	0	0	0	0	0	4	72	67	71	67	71	32
1960	23	0	0	0	0	0	15	55	58	63	67	73	30
1961	14	0	0	0	0	0	0	51	62	72	78	47	27
1962	0	0	0	0	0	0	0	0	39	51	72	65	19
1963	28	0	0	0	0	0	0	31	49	51	66	78	25
1964	49	0	0	0	0	0	0	17	34	58	69	65	24
1965	20	0	0	0	0	0	0	0	31	41	52	58	17
1966	21	0	0	0	0	0	20	31	53	61	50	59	25
1967	27	0	0	0	0	0	0	0	17	45	53	59	17
1968	0	0	0	0	0	0	0	0	31	48	45	38	13
1969	36	0	0	0	0	0	0	31	31	31	37	48	18
1970	28	0	0	0	0	0	0	1	31	40	48	56	17
1971	23	0	0	0	0	0	0	26	31	41	50	35	17
1972	1	0	0	0	0	0	0	31	42	53	58	64	21
1973	0	0	0	0	0	0	0	0	31	45	53	59	16
1974	13	0	0	0	0	0	0	31	31	41	38	55	17
1975	24	0	0	0	0	0	0	0	18	39	53	59	16
1976	37	0	0	0	0	0	0	31	36	50	52	66	23
1977	13	0	0	0	0	0	43	66	51	59	65	75	31
1978	22	0	0	0	0	0	0	0	31	49	57	48	17
1979	0	0	0	0	0	0	0	3	31	31	47	45	13
1980	0	0	0	0	0	0	0	0	31	31	31	51	12
1981	36	0	0	0	0	0	18	53	49	55	61	0	23
1982	0	0	0	0	0	0	0	4	31	31	58	57	15
1983	0	0	0	0	0	0	0	31	31	31	32	21	12
1984	26	0	0	0	0	0	0	31	31	31	39	43	17
1985	0	0	0	0	0	0	0	4	31	31	31	65	13
1986	3	0	0	0	0	0	0	0	31	31	31	62	13
1987	0	0	0	0	0	0	32	45	45	55	53	61	24
1988	21	0	0	0	0	0	0	48	49	51	56	66	24
1989	27	0	0	0	0	0	31	55	52	54	57	24	25
1990	0	0	0	0	0	0	0	56	59	40	60	69	24
1991	0	0	0	0	0	0	0	0	31	54	58	69	18
1992	0	0	0	0	0	0	50	59	49	60	54	72	29
1993	0	0	0	0	0	0	0	0	31	31	37	60	13
1994	4	0	0	0	0	0	0	37	37	45	49	59	19
1995	0	0	0	0	0	0	0	0	25	31	31	57	12
1996	0	0	0	0	0	0	0	0	31	32	47	55	14
1997	0	0	0	0	0	0	0	0	31	36	31	45	12
1998	0	0	0	0	0	0	0	0	31	31	31	45	11
1999	17	0	0	0	0	0	0	0	31	61	63	78	21
Average	16	0	0	0	0	0	5	22	39	47	52	57	20
Maximum	49	0	0	0	0	0	50	72	67	72	78	78	32
Minimum	0	0	0	0	0	0	0	0	17	31	31	0	11

S-4j
Bonneville Unit Operation - Natural Water (acre-feet)
Diamond Fork Creek below Diamond Fork Flow Control Structure

18	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	1,299	1,163	1,086	1,228	1,340	1,737	4,573	5,333	2,881	2,098	1,603	1,325	25,668
1951	1,268	1,298	1,330	1,101	1,263	1,453	3,036	5,010	2,165	1,684	1,100	824	21,532
1952	974	1,174	1,157	1,330	1,334	1,823	15,618	28,401	7,978	3,334	2,509	1,918	67,549
1953	2,087	2,119	1,855	1,855	1,478	1,876	2,472	2,929	2,803	1,852	1,650	1,032	24,008
1954	1,174	1,220	1,001	1,427	845	1,460	1,844	1,692	1,213	586	654	711	13,828
1955	657	899	801	901	767	839	1,581	2,959	1,385	1,189	873	352	13,203
1956	484	599	801	901	589	1,339	4,082	4,608	1,385	2,141	2,221	1,215	20,365
1957	587	799	801	901	977	1,039	2,281	8,377	5,254	1,341	894	898	24,149
1958	874	1,099	901	901	999	1,039	3,648	10,116	1,104	697	454	707	22,539
1959	814	899	901	901	799	1,001	1,435	468	802	556	814	521	9,911
1960	482	699	601	801	909	1,427	1,418	1,513	1,294	1,076	814	156	11,191
1961	551	799	601	801	599	701	941	1,776	1,045	513	113	329	8,770
1962	701	699	701	701	799	839	6,941	7,477	2,440	1,761	479	895	24,433
1963	808	799	701	901	1,399	1,039	1,541	4,497	1,835	1,762	882	147	16,312
1964	676	899	801	801	689	1,260	2,348	8,724	2,722	1,345	672	922	21,861
1965	660	999	1,101	1,001	899	1,139	5,041	11,977	5,942	2,409	1,700	1,324	34,192
1966	973	1,099	901	801	799	1,239	2,114	3,572	1,627	1,172	1,850	1,245	17,393
1967	958	899	801	801	699	1,139	1,141	5,601	4,463	2,140	1,688	1,234	21,565
1968	1,101	899	901	801	909	1,139	2,241	9,101	4,416	1,973	2,174	2,487	28,143
1969	1,439	1,377	1,315	1,620	1,338	2,286	9,693	10,682	4,052	3,001	2,623	1,887	41,311
1970	1,237	1,107	1,286	1,371	1,346	1,460	1,731	5,802	3,254	2,480	1,989	1,430	24,494
1971	1,193	1,373	1,185	1,383	1,489	2,199	4,320	6,260	3,415	2,413	1,868	858	27,957
1972	1,374	1,300	1,250	1,250	1,323	2,173	2,247	3,204	2,236	1,679	1,343	957	20,337
1973	1,265	1,255	1,196	1,128	1,126	1,613	3,929	13,076	4,148	2,156	1,645	1,251	33,788
1974	1,287	1,497	1,440	1,418	1,304	2,333	3,680	7,250	2,910	2,416	2,593	1,475	29,604
1975	1,378	1,492	1,341	1,364	1,225	1,669	1,985	9,922	9,976	2,532	1,688	1,222	35,794
1976	1,389	1,404	1,373	1,332	1,325	1,642	2,353	3,775	2,625	1,845	1,700	807	21,571
1977	630	812	782	782	741	823	511	842	1,706	1,277	928	298	10,135
1978	548	894	904	904	822	2,056	3,942	6,984	3,479	1,926	1,399	948	24,807
1979	1,263	1,069	1,011	1,061	1,049	1,459	5,221	15,230	13,899	5,370	2,052	2,104	50,788
1980	1,251	1,129	951	1,031	719	1,289	8,861	16,381	6,675	5,797	3,212	1,765	49,061
1981	1,492	1,249	1,241	1,001	877	1,029	1,062	1,644	1,871	1,552	1,176	1,546	15,741
1982	1,090	739	751	811	919	2,069	10,161	24,379	7,259	3,284	1,378	1,358	54,198
1983	1,289	1,159	1,181	1,011	957	2,279	5,821	20,809	17,594	4,125	2,963	2,120	61,308
1984	1,490	1,549	1,701	1,591	1,439	2,399	17,831	50,919	15,154	7,633	2,509	2,204	106,420
1985	1,891	1,289	1,041	861	779	3,249	12,651	10,881	7,940	4,549	4,748	916	50,795
1986	1,365	1,379	1,131	1,011	1,779	5,099	14,041	19,867	8,082	4,222	3,301	1,047	62,323
1987	2,039	1,887	1,741	1,609	1,526	1,831	1,665	2,123	2,057	1,539	1,642	1,118	20,776
1988	640	929	864	849	815	1,094	1,156	1,967	1,869	1,785	1,479	855	14,303
1989	1,610	630	610	582	588	927	574	1,555	1,649	1,574	1,388	1,360	13,046
1990	486	477	477	478	414	602	647	1,462	1,234	2,452	1,244	665	10,639
1991	665	652	523	567	669	812	822	1,816	2,930	1,623	1,353	670	13,103
1992	832	825	952	782	868	1,279	574	1,263	1,841	1,211	1,593	456	12,476
1993	908	749	624	761	787	2,365	3,459	10,338	3,935	3,135	2,656	1,195	30,912
1994	1,072	950	937	969	990	1,391	1,343	2,629	2,539	2,171	1,884	1,277	18,153
1995	1,177	967	986	1,023	1,193	2,579	3,406	11,967	9,590	4,108	3,374	1,373	41,743
1996	1,482	1,372	1,332	1,396	1,505	2,386	4,347	7,584	3,250	2,963	2,011	1,467	31,094
1997	1,218	1,377	1,408	1,218	1,157	3,278	9,317	18,638	5,744	2,721	3,349	2,070	51,496
1998	1,736	1,607	1,521	1,609	1,511	2,781	5,069	11,159	5,229	4,579	4,000	2,057	42,859
1999	1,121	1,078	1,099	1,159	1,149	1,577	2,323	6,791	3,512	1,147	1,065	133	22,155
Average	1,100	1,093	1,038	1,056	1,037	1,671	4,181	8,627	4,288	2,378	1,786	1,143	29,396
Maximum	2,087	2,119	1,855	1,855	1,779	5,099	17,831	50,919	17,594	7,633	4,748	2,487	106,420
Minimum	482	477	477	478	414	602	511	468	802	513	113	133	8,770

S-4j
Bonneville Unit Operation - Natural Water (cfs)
Diamond Fork Creek below Diamond Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	21	20	18	20	24	28	77	87	48	34	26	22	35
1951	21	22	22	18	23	24	51	81	36	27	18	14	30
1952	16	20	19	22	23	30	262	462	134	54	41	32	93
1953	34	36	30	30	27	31	42	48	47	30	27	17	33
1954	19	21	16	23	15	24	31	28	20	10	11	12	19
1955	11	15	13	15	14	14	27	48	23	19	14	6	18
1956	8	10	13	15	10	22	69	75	23	35	36	20	28
1957	10	13	13	15	18	17	38	136	88	22	15	15	33
1958	14	18	15	15	18	17	61	165	19	11	7	12	31
1959	13	15	15	15	14	16	24	8	13	9	13	9	14
1960	8	12	10	13	16	23	24	25	22	18	13	3	15
1961	9	13	10	13	11	11	16	29	18	8	2	6	12
1962	11	12	11	11	14	14	117	122	41	29	8	15	34
1963	13	13	11	15	25	17	26	73	31	29	14	2	23
1964	11	15	13	13	12	20	39	142	46	22	11	15	30
1965	11	17	18	16	16	19	85	195	100	39	28	22	47
1966	16	18	15	13	14	20	36	58	27	19	30	21	24
1967	16	15	13	13	13	19	19	91	75	35	27	21	30
1968	18	15	15	13	16	19	38	148	74	32	35	42	39
1969	23	23	21	26	24	37	163	174	68	49	43	32	57
1970	20	19	21	22	24	24	29	94	55	40	32	24	34
1971	19	23	19	22	27	36	73	102	57	39	30	14	39
1972	22	22	20	20	23	35	38	52	38	27	22	16	28
1973	21	21	19	18	20	26	66	213	70	35	27	21	47
1974	21	25	23	23	23	38	62	118	49	39	42	25	41
1975	22	25	22	22	22	27	33	161	168	41	27	21	49
1976	23	24	22	22	23	27	40	61	44	30	28	14	30
1977	10	14	13	13	13	13	9	14	29	21	15	5	14
1978	9	15	15	15	15	33	66	114	58	31	23	16	34
1979	21	18	16	17	19	24	88	248	234	87	33	35	70
1980	20	19	15	17	13	21	149	266	112	94	52	30	68
1981	24	21	20	16	16	17	18	27	31	25	19	26	22
1982	18	12	12	13	17	34	171	396	122	53	22	23	75
1983	21	19	19	16	17	37	98	338	296	67	48	36	85
1984	24	26	28	26	25	39	300	828	255	124	41	37	147
1985	31	22	17	14	14	53	213	177	133	74	77	15	70
1986	22	23	18	16	32	83	236	323	136	69	54	18	86
1987	33	32	28	26	27	30	28	35	35	25	27	19	29
1988	10	16	14	14	14	18	19	32	31	29	24	14	20
1989	26	11	10	9	11	15	10	25	28	26	23	23	18
1990	8	8	8	8	7	10	11	24	21	40	20	11	15
1991	11	11	9	9	12	13	14	30	49	26	22	11	18
1992	14	14	15	13	15	21	10	21	31	20	26	8	17
1993	15	13	10	12	14	38	58	168	66	51	43	20	43
1994	17	16	15	16	18	23	23	43	43	35	31	21	25
1995	19	16	16	17	21	42	57	195	161	67	55	23	58
1996	24	23	22	23	26	39	73	123	55	48	33	25	43
1997	20	23	23	20	21	53	157	303	97	44	54	35	71
1998	28	27	25	26	27	45	85	181	88	74	65	35	59
1999	18	18	18	19	21	26	39	110	59	19	17	2	31
Average	18	18	17	17	19	27	70	140	72	39	29	19	41
Maximum	34	36	30	30	32	83	300	828	296	124	77	42	147
Minimum	8	8	8	8	7	10	9	8	13	8	2	2	12

S-4k
Bonneville Unit Operation - Total (acre-feet)
Diamond Fork Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,691	1,216	1,216	2,065	931	1,216	2,504	7,061	25,964	25,320	29,861	21,530	123,575
1951	2,443	1,216	1,216	931	931	1,216	2,504	6,377	25,499	30,132	23,652	16,187	112,304
1952	2,479	1,216	1,216	931	931	1,216	2,504	6,133	14,623	26,017	21,960	19,273	98,499
1953	9,359	1,216	1,216	931	931	1,216	6,571	8,188	26,561	28,356	22,811	15,242	122,598
1954	2,127	1,216	1,216	931	931	1,216	7,427	15,312	25,376	24,349	25,282	9,745	115,127
1955	2,127	1,216	1,216	931	931	1,216	9,009	15,714	27,320	30,938	21,789	12,315	124,723
1956	2,127	1,216	1,216	931	931	1,216	5,250	18,590	31,889	28,871	26,672	13,892	132,802
1957	2,127	1,216	1,216	931	931	1,216	7,909	10,744	15,324	31,925	26,919	17,174	117,632
1958	2,158	1,216	1,216	931	931	1,216	4,299	10,744	27,790	29,185	27,695	12,489	119,871
1959	2,197	1,216	1,216	931	931	1,216	8,596	24,425	31,266	22,044	18,875	9,828	122,741
1960	2,127	1,216	1,216	931	931	1,216	7,931	23,088	31,956	26,786	23,380	9,118	129,897
1961	2,127	1,216	1,216	931	931	1,216	9,935	26,876	30,455	20,744	13,753	9,119	118,519
1962	2,127	1,216	1,216	931	931	1,216	2,672	12,402	27,734	28,462	30,220	13,976	123,103
1963	2,130	1,216	1,216	931	931	1,216	9,044	19,155	18,723	32,551	27,676	11,556	126,344
1964	3,704	2,501	5,528	5,162	2,408	2,544	9,049	10,804	16,132	38,887	29,213	19,870	145,802
1965	6,738	2,512	3,035	3,007	3,111	3,689	3,293	10,744	16,226	25,998	23,690	16,087	118,132
1966	7,700	4,671	1,275	1,560	2,704	1,216	7,375	19,407	32,859	25,882	27,017	14,734	146,400
1967	5,257	1,923	3,940	1,948	1,141	1,449	8,273	12,216	12,937	33,396	31,391	21,608	135,478
1968	6,738	3,216	3,007	2,751	2,090	3,459	7,010	10,805	19,221	31,173	22,721	20,523	132,714
1969	6,738	4,489	5,827	1,427	2,246	1,216	2,504	6,316	19,050	27,847	31,662	19,525	128,848
1970	6,649	1,216	2,386	3,074	2,898	3,733	8,296	9,911	19,401	29,247	32,838	15,873	135,522
1971	4,785	1,216	3,798	3,025	2,413	2,669	4,398	13,281	23,352	33,476	32,358	12,630	137,401
1972	6,177	1,216	3,289	3,670	3,490	1,216	7,588	23,232	25,654	28,943	26,625	12,792	143,890
1973	6,738	4,712	3,932	3,308	2,832	3,526	3,924	6,133	18,263	29,336	29,229	13,614	125,549
1974	6,891	4,623	3,422	3,739	3,625	3,921	5,015	8,284	28,429	28,493	31,373	14,687	142,502
1975	6,738	5,679	3,819	2,991	2,801	3,266	7,569	10,744	9,269	31,632	33,526	19,887	137,921
1976	6,915	1,454	1,216	2,255	2,254	3,157	7,264	20,354	33,562	32,988	30,737	15,529	157,686
1977	5,419	2,305	3,474	3,080	931	1,216	7,986	20,906	32,651	28,608	28,332	14,261	149,170
1978	10,328	9,171	9,417	7,464	6,294	4,232	5,191	10,744	27,206	36,476	32,967	14,331	173,820
1979	10,140	9,109	8,761	7,391	6,401	7,202	5,675	11,106	30,903	35,652	30,516	14,838	177,695
1980	12,548	9,810	9,465	6,891	5,308	6,414	3,572	6,549	18,703	30,693	34,834	12,999	157,786
1981	10,117	3,536	2,785	4,299	3,674	4,879	8,300	20,125	28,196	31,161	29,257	12,224	158,553
1982	7,333	2,721	3,917	4,486	3,726	1,810	2,504	6,133	14,770	27,579	31,724	13,866	120,568
1983	3,135	1,216	1,216	931	931	1,216	3,870	10,973	19,493	21,414	23,915	9,761	98,071
1984	2,127	1,216	1,216	1,595	931	1,216	2,504	9,473	19,070	26,374	27,092	19,969	112,783
1985	3,135	1,216	1,216	931	931	1,216	2,662	6,133	22,014	22,981	31,878	11,350	105,663
1986	3,095	1,216	1,216	931	931	1,216	2,504	6,133	18,072	26,371	28,649	11,180	101,515
1987	3,511	3,552	1,478	1,193	1,168	1,478	7,686	18,530	29,859	24,960	26,855	17,923	138,192
1988	4,810	1,216	1,216	931	931	1,216	9,023	22,371	31,687	32,926	28,752	15,669	150,747
1989	2,127	3,629	3,786	1,848	931	1,216	8,090	26,188	31,665	29,083	23,738	12,142	144,442
1990	6,949	3,233	3,629	2,665	2,497	2,950	8,388	21,116	22,887	33,145	30,949	19,147	157,555
1991	5,015	2,893	4,295	4,323	1,358	1,674	9,157	16,725	17,093	33,252	33,841	14,544	144,170
1992	6,905	3,231	4,804	3,643	2,105	2,587	9,764	24,715	31,210	25,506	25,957	14,898	155,323
1993	8,171	6,582	5,542	5,257	4,061	3,881	6,252	10,744	18,874	29,937	33,949	19,385	152,636
1994	4,213	2,849	3,373	3,219	2,250	1,691	8,215	21,213	33,330	33,375	24,746	19,411	157,886
1995	4,558	3,876	3,955	3,670	3,127	3,647	6,646	10,744	11,969	22,515	32,225	15,086	122,020
1996	6,792	1,458	1,466	1,181	1,667	1,466	4,084	6,133	19,165	25,911	31,450	14,526	115,299
1997	6,894	5,679	3,117	2,434	2,510	1,216	2,946	6,133	15,074	30,704	28,982	15,812	121,500
1998	10,834	6,292	3,583	6,709	6,727	3,023	4,643	6,133	11,363	33,917	38,329	24,181	155,735
1999	5,363	1,222	1,326	2,687	936	1,222	7,264	6,133	18,884	30,479	30,135	15,401	121,052
Average	5,313	2,874	2,915	2,597	2,147	2,199	6,093	13,444	23,180	29,120	28,240	15,234	133,355
Maximum	12,548	9,810	9,465	7,464	6,727	7,202	9,935	26,876	33,562	38,887	38,329	24,181	177,695
Minimum	2,127	1,216	1,216	931	931	1,216	2,504	6,133	9,269	20,744	13,753	9,118	98,071

S-4k
Bonneville Unit Operation - Total (cfs)
Diamond Fork Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	76	20	20	34	17	20	42	115	436	412	486	362	171
1951	40	20	20	15	17	20	42	104	429	490	385	272	155
1952	40	20	20	15	16	20	42	100	246	423	357	324	136
1953	152	20	20	15	17	20	110	133	446	461	371	256	169
1954	35	20	20	15	17	20	125	249	426	396	411	164	159
1955	35	20	20	15	17	20	151	256	459	503	354	207	172
1956	35	20	20	15	16	20	88	302	536	470	434	233	183
1957	35	20	20	15	17	20	133	175	258	519	438	289	162
1958	35	20	20	15	17	20	72	175	467	475	450	210	166
1959	36	20	20	15	17	20	144	397	525	359	307	165	170
1960	35	20	20	15	16	20	133	375	537	436	380	153	179
1961	35	20	20	15	17	20	167	437	512	337	224	153	164
1962	35	20	20	15	17	20	45	202	466	463	491	235	170
1963	35	20	20	15	17	20	152	312	315	529	450	194	175
1964	60	42	90	84	42	41	152	176	271	632	475	334	201
1965	110	42	49	49	56	60	55	175	273	423	385	270	163
1966	125	78	21	25	49	20	124	316	552	421	439	248	202
1967	85	32	64	32	21	24	139	199	217	543	511	363	187
1968	110	54	49	45	36	56	118	176	323	507	370	345	183
1969	110	75	95	23	40	20	42	103	320	453	515	328	178
1970	108	20	39	50	52	61	139	161	326	476	534	267	187
1971	78	20	62	49	43	43	74	216	392	544	526	212	190
1972	100	20	53	60	61	20	128	378	431	471	433	215	198
1973	110	79	64	54	51	57	66	100	307	477	475	229	173
1974	112	78	56	61	65	64	84	135	478	463	510	247	197
1975	110	95	62	49	50	53	127	175	156	514	545	334	191
1976	112	24	20	37	39	51	122	331	564	537	500	261	217
1977	88	39	56	50	17	20	134	340	549	465	461	240	206
1978	168	154	153	121	113	69	87	175	457	593	536	241	240
1979	165	153	142	120	115	117	95	181	519	580	496	249	245
1980	204	165	154	112	92	104	60	107	314	499	567	218	217
1981	165	59	45	70	66	79	139	327	474	507	476	205	219
1982	119	46	64	73	67	29	42	100	248	449	516	233	167
1983	51	20	20	15	17	20	65	178	328	348	389	164	135
1984	35	20	20	26	16	20	42	154	320	429	441	336	155
1985	51	20	20	15	17	20	45	100	370	374	518	191	146
1986	50	20	20	15	17	20	42	100	304	429	466	188	140
1987	57	60	24	19	21	24	129	301	502	406	437	301	191
1988	78	20	20	15	16	20	152	364	533	535	468	263	208
1989	35	61	62	30	17	20	136	426	532	473	386	204	200
1990	113	54	59	43	45	48	141	343	385	539	503	322	218
1991	82	49	70	70	24	27	154	272	287	541	550	244	199
1992	112	54	78	59	37	42	164	402	525	415	422	250	214
1993	133	111	90	86	73	63	105	175	317	487	552	326	211
1994	69	48	55	52	41	28	138	345	560	543	402	326	218
1995	74	65	64	60	56	59	112	175	201	366	524	254	169
1996	110	24	24	19	29	24	69	100	322	421	511	244	159
1997	112	95	51	40	45	20	50	100	253	499	471	266	168
1998	176	106	58	109	121	49	78	100	191	552	623	406	215
1999	87	21	22	44	17	20	122	100	317	496	490	259	167
Average	86	48	47	42	38	36	102	219	390	474	459	256	184
Maximum	204	165	154	121	121	117	167	437	564	632	623	406	245
Minimum	35	20	20	15	16	20	42	100	156	337	224	153	135

S-4I
Bonneville Unit Operation - CUP Water (acre-feet)
Diamond Fork Pipeline

36	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,691	1,216	1,216	2,065	931	1,216	2,504	6,797	11,351	13,736	14,594	12,781	73,098
1951	2,443	1,216	1,216	931	931	1,216	2,504	6,377	11,629	11,598	12,035	9,459	61,554
1952	2,479	1,216	1,216	931	931	1,216	2,504	6,133	9,269	12,254	12,691	10,094	60,934
1953	3,135	1,216	1,216	931	931	1,216	6,504	6,133	9,269	11,246	11,683	9,118	62,598
1954	2,127	1,216	1,216	931	931	1,216	7,275	6,133	9,269	11,246	11,683	9,118	62,361
1955	2,127	1,216	1,216	931	931	1,216	9,009	15,460	11,649	11,246	11,683	9,118	75,803
1956	2,127	1,216	1,216	931	931	1,216	5,250	15,504	14,349	13,482	12,117	9,118	77,457
1957	2,127	1,216	1,216	931	931	1,216	7,909	10,744	11,969	13,584	14,278	10,498	76,620
1958	2,127	1,216	1,216	931	931	1,216	4,299	10,744	14,093	13,352	14,348	11,024	75,498
1959	2,197	1,216	1,216	931	931	1,216	8,596	16,853	13,602	12,145	11,683	9,118	79,703
1960	2,127	1,216	1,216	931	931	1,216	7,931	16,234	11,649	11,246	11,683	9,118	75,498
1961	2,127	1,216	1,216	931	931	1,216	9,935	14,041	11,649	11,246	11,683	9,118	75,309
1962	2,127	1,216	1,216	931	931	1,216	2,672	12,402	14,302	13,587	14,281	11,641	76,521
1963	2,130	1,216	1,216	931	931	1,216	9,044	14,800	13,485	13,279	14,278	11,155	83,680
1964	3,693	2,501	5,528	5,162	2,408	2,544	9,049	10,803	14,657	13,954	15,606	13,518	99,423
1965	6,738	2,512	3,035	3,007	3,111	3,689	3,293	10,744	12,013	14,253	15,239	13,528	91,163
1966	7,700	4,671	1,275	1,560	2,704	1,216	7,375	12,242	13,895	13,584	14,278	12,658	93,158
1967	5,257	1,923	3,940	1,948	1,141	1,449	8,273	12,216	12,937	13,817	14,511	12,598	90,008
1968	6,738	3,216	3,007	2,751	2,090	3,459	7,010	10,805	10,340	13,093	14,278	12,406	89,193
1969	6,738	4,489	5,827	1,427	2,246	1,216	2,504	6,133	11,014	11,978	14,846	12,982	81,402
1970	6,649	1,216	2,386	3,074	2,898	3,733	8,296	9,911	11,649	11,246	14,278	12,367	87,703
1971	4,785	1,216	3,798	3,025	2,413	2,669	4,398	13,281	11,649	13,584	14,278	12,630	87,726
1972	6,177	1,216	3,289	3,670	3,490	1,216	7,588	11,317	11,649	11,584	14,278	12,529	88,002
1973	6,738	4,712	3,932	3,308	2,832	3,526	3,924	6,133	11,242	11,573	14,431	12,600	84,952
1974	6,891	4,623	3,422	3,739	3,625	3,921	5,015	6,133	11,649	13,584	14,278	12,080	88,961
1975	6,738	5,679	3,819	2,991	2,801	3,266	7,569	10,744	9,269	11,246	14,278	12,159	90,560
1976	6,738	1,454	1,216	2,255	2,254	3,157	7,264	14,770	14,349	13,420	14,278	12,177	93,331
1977	5,419	2,305	3,474	3,080	931	1,216	7,986	16,853	14,349	13,584	14,278	12,191	95,667
1978	10,328	9,171	9,417	7,464	6,294	4,232	5,191	10,744	14,614	15,099	16,188	14,331	123,073
1979	10,140	9,109	8,761	7,391	6,401	7,202	5,675	11,106	13,267	15,449	16,473	14,269	125,244
1980	12,548	9,810	9,465	6,891	5,308	6,414	3,572	6,549	9,698	13,908	15,928	10,969	111,060
1981	9,316	3,536	2,785	4,299	3,674	4,879	8,300	16,767	12,917	13,258	14,278	12,224	106,233
1982	7,333	2,721	3,917	4,486	3,726	1,810	2,504	6,133	9,844	12,254	15,286	13,281	83,294
1983	3,135	1,216	1,216	931	931	1,216	3,870	6,133	9,269	11,910	12,347	9,760	61,934
1984	2,127	1,216	1,216	1,595	931	1,216	2,504	6,133	9,269	12,254	12,691	10,094	61,246
1985	3,135	1,216	1,216	931	931	1,216	2,662	6,133	9,269	12,215	12,651	10,055	61,630
1986	3,095	1,216	1,216	931	931	1,216	2,504	6,133	9,269	12,254	12,691	10,094	61,550
1987	3,511	3,552	1,478	1,193	1,168	1,478	7,264	12,242	11,877	12,064	14,540	12,305	82,671
1988	4,809	1,216	1,216	931	931	1,216	9,023	15,881	14,086	13,584	14,272	12,053	89,218
1989	2,127	3,629	3,786	1,848	931	1,216	8,090	16,853	13,765	11,246	14,277	12,141	89,908
1990	6,949	3,233	3,629	2,665	2,497	2,950	8,388	16,853	13,571	14,634	16,012	14,336	105,716
1991	5,015	2,893	4,295	4,323	1,358	1,674	9,157	16,725	14,349	11,704	14,737	13,102	99,333
1992	6,905	3,231	4,804	3,643	2,105	2,587	9,414	16,309	14,349	14,715	12,814	13,752	104,627
1993	8,171	6,582	5,542	5,257	4,061	3,881	6,252	10,744	15,037	15,729	16,423	14,260	111,940
1994	4,213	2,849	3,373	3,219	2,250	1,691	8,215	16,853	14,098	14,029	14,753	13,118	98,663
1995	4,558	3,876	3,955	3,670	3,127	3,647	6,646	10,744	11,969	13,370	16,402	11,573	93,539
1996	6,792	1,458	1,466	1,181	1,667	1,466	4,084	6,133	11,073	11,401	14,433	12,472	73,625
1997	6,894	5,679	3,117	2,434	2,510	1,216	2,946	6,133	9,269	14,119	15,175	13,278	82,768
1998	10,834	6,292	3,583	6,709	6,727	3,023	4,643	6,133	10,614	13,427	16,459	14,482	102,927
1999	5,363	1,222	1,326	2,687	936	1,222	7,264	6,133	9,275	11,252	14,284	12,300	73,263
Average	5,168	2,874	2,915	2,597	2,147	2,199	6,073	10,880	11,979	12,873	14,099	11,823	85,627
Maximum	12,548	9,810	9,465	7,464	6,727	7,202	9,935	16,853	15,037	15,729	16,473	14,482	125,244
Minimum	2,127	1,216	1,216	931	931	1,216	2,504	6,133	9,269	11,246	11,683	9,118	60,934

S-4I
Bonneville Unit Operation - CUP Water (cfs)
Diamond Fork Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	76	20	20	34	17	20	42	111	191	223	237	215	101
1951	40	20	20	15	17	20	42	104	195	189	196	159	85
1952	40	20	20	15	16	20	42	100	156	199	206	170	84
1953	51	20	20	15	17	20	109	100	156	183	190	153	86
1954	35	20	20	15	17	20	122	100	156	183	190	153	86
1955	35	20	20	15	17	20	151	251	196	183	190	153	105
1956	35	20	20	15	16	20	88	252	241	219	197	153	107
1957	35	20	20	15	17	20	133	175	201	221	232	176	106
1958	35	20	20	15	17	20	72	175	237	217	233	185	104
1959	36	20	20	15	17	20	144	274	229	198	190	153	110
1960	35	20	20	15	16	20	133	264	196	183	190	153	104
1961	35	20	20	15	17	20	167	228	196	183	190	153	104
1962	35	20	20	15	17	20	45	202	240	221	232	196	106
1963	35	20	20	15	17	20	152	241	227	216	232	187	116
1964	60	42	90	84	42	41	152	176	246	227	254	227	137
1965	110	42	49	49	56	60	55	175	202	232	248	227	126
1966	125	78	21	25	49	20	124	199	234	221	232	213	129
1967	85	32	64	32	21	24	139	199	217	225	236	212	124
1968	110	54	49	45	36	56	118	176	174	213	232	208	123
1969	110	75	95	23	40	20	42	100	185	195	241	218	112
1970	108	20	39	50	52	61	139	161	196	183	232	208	121
1971	78	20	62	49	43	43	74	216	196	221	232	212	121
1972	100	20	53	60	61	20	128	184	196	188	232	211	121
1973	110	79	64	54	51	57	66	100	189	188	235	212	117
1974	112	78	56	61	65	64	84	100	196	221	232	203	123
1975	110	95	62	49	50	53	127	175	156	183	232	204	125
1976	110	24	20	37	39	51	122	240	241	218	232	205	129
1977	88	39	56	50	17	20	134	274	241	221	232	205	132
1978	168	154	153	121	113	69	87	175	246	246	263	241	170
1979	165	153	142	120	115	117	95	181	223	251	268	240	173
1980	204	165	154	112	92	104	60	107	163	226	259	184	153
1981	152	59	45	70	66	79	139	273	217	216	232	205	147
1982	119	46	64	73	67	29	42	100	165	199	249	223	115
1983	51	20	20	15	17	20	65	100	156	194	201	164	86
1984	35	20	20	26	16	20	42	100	156	199	206	170	84
1985	51	20	20	15	17	20	45	100	156	199	206	169	85
1986	50	20	20	15	17	20	42	100	156	199	206	170	85
1987	57	60	24	19	21	24	122	199	200	196	236	207	114
1988	78	20	20	15	16	20	152	258	237	221	232	203	123
1989	35	61	62	30	17	20	136	274	231	183	232	204	124
1990	113	54	59	43	45	48	141	274	228	238	260	241	146
1991	82	49	70	70	24	27	154	272	241	190	240	220	137
1992	112	54	78	59	37	42	158	265	241	239	208	231	144
1993	133	111	90	86	73	63	105	175	253	256	267	240	155
1994	69	48	55	52	41	28	138	274	237	228	240	220	136
1995	74	65	64	60	56	59	112	175	201	217	267	194	129
1996	110	24	24	19	29	24	69	100	186	185	235	210	101
1997	112	95	51	40	45	20	50	100	156	230	247	223	114
1998	176	106	58	109	121	49	78	100	178	218	268	243	142
1999	87	21	22	44	17	20	122	100	156	183	232	207	101
Average	84	48	47	42	38	36	102	177	201	209	229	199	118
Maximum	204	165	154	121	121	117	167	274	253	256	268	243	173
Minimum	35	20	20	15	16	20	42	100	156	183	190	153	84

S-4m
Bonneville Unit Operation - SVP Water (acre-feet)
Diamond Fork Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	264	14,613	11,584	15,267	8,749	50,476
1951	0	0	0	0	0	0	0	0	13,870	18,534	11,618	6,728	50,750
1952	0	0	0	0	0	0	0	0	5,354	13,763	9,269	9,179	37,565
1953	6,224	0	0	0	0	0	67	2,055	17,292	17,110	11,128	6,124	59,999
1954	0	0	0	0	0	0	152	9,179	16,107	13,103	13,599	627	52,766
1955	0	0	0	0	0	0	0	254	15,671	19,692	10,106	3,197	48,920
1956	0	0	0	0	0	0	0	3,086	17,540	15,390	14,556	4,774	55,345
1957	0	0	0	0	0	0	0	0	3,354	18,341	12,641	6,676	41,012
1958	31	0	0	0	0	0	0	0	13,697	15,833	13,347	1,466	44,372
1959	0	0	0	0	0	0	0	7,572	17,665	9,899	7,192	710	43,038
1960	0	0	0	0	0	0	0	6,854	20,307	15,540	11,698	0	54,398
1961	0	0	0	0	0	0	0	12,835	18,806	9,498	2,070	1	43,210
1962	0	0	0	0	0	0	0	0	13,432	14,875	15,939	2,336	46,582
1963	1	0	0	0	0	0	0	4,355	5,238	19,271	13,396	401	42,664
1964	11	0	0	0	0	0	0	0	1,475	24,933	13,607	6,352	46,379
1965	0	0	0	0	0	0	0	0	4,213	11,745	8,451	2,559	26,968
1966	0	0	0	0	0	0	0	7,166	18,964	12,297	12,739	2,076	53,242
1967	0	0	0	0	0	0	0	0	0	19,580	16,880	9,010	45,470
1968	0	0	0	0	0	0	0	0	8,881	18,080	8,442	8,117	43,521
1969	0	0	0	0	0	0	0	183	8,035	15,869	16,816	6,543	47,446
1970	0	0	0	0	0	0	0	0	7,752	18,001	18,560	3,507	47,820
1971	0	0	0	0	0	0	0	0	11,703	19,892	18,080	0	49,675
1972	0	0	0	0	0	0	0	11,915	14,004	17,359	12,347	263	55,888
1973	0	0	0	0	0	0	0	0	7,020	17,764	14,798	1,014	40,597
1974	0	0	0	0	0	0	0	2,151	16,780	14,909	17,095	2,607	53,541
1975	0	0	0	0	0	0	0	0	0	20,386	19,248	7,727	47,361
1976	177	0	0	0	0	0	0	5,585	19,213	19,569	16,459	3,352	64,354
1977	0	0	0	0	0	0	0	4,053	18,302	15,024	14,054	2,070	53,503
1978	0	0	0	0	0	0	0	0	12,591	21,377	16,779	0	50,747
1979	0	0	0	0	0	0	0	0	17,636	20,203	14,043	569	52,451
1980	0	0	0	0	0	0	0	0	9,005	16,785	18,906	2,029	46,726
1981	802	0	0	0	0	0	0	3,358	15,279	17,903	14,978	0	52,320
1982	0	0	0	0	0	0	0	0	4,926	15,325	16,438	584	37,274
1983	0	0	0	0	0	0	0	4,840	10,224	9,504	11,568	0	36,136
1984	0	0	0	0	0	0	0	3,340	9,801	14,120	14,401	9,876	51,537
1985	0	0	0	0	0	0	0	0	12,745	10,767	19,227	1,294	44,034
1986	0	0	0	0	0	0	0	0	8,803	14,117	15,958	1,087	39,965
1987	0	0	0	0	0	0	421	6,289	17,982	12,897	12,314	5,617	55,521
1988	0	0	0	0	0	0	0	6,490	17,601	19,342	14,480	3,616	61,529
1989	0	0	0	0	0	0	0	9,335	17,899	17,837	9,462	1	54,534
1990	0	0	0	0	0	0	0	4,263	9,316	18,511	14,937	4,811	51,838
1991	0	0	0	0	0	0	0	0	2,744	21,547	19,104	1,442	44,837
1992	0	0	0	0	0	0	350	8,405	16,861	10,791	13,143	1,146	50,696
1993	0	0	0	0	0	0	0	0	3,837	14,208	17,526	5,125	40,696
1994	0	0	0	0	0	0	0	4,360	19,232	19,346	9,993	6,293	59,223
1995	0	0	0	0	0	0	0	0	0	9,145	15,823	3,514	28,481
1996	0	0	0	0	0	0	0	0	8,092	14,510	17,017	2,054	41,673
1997	0	0	0	0	0	0	0	0	5,805	16,585	13,807	2,534	38,732
1998	0	0	0	0	0	0	0	0	749	20,490	21,870	9,699	52,808
1999	0	0	0	0	0	0	0	0	9,609	19,227	15,851	3,101	47,788
Average	145	0	0	0	0	0	20	2,564	11,201	16,247	14,141	3,411	47,728
Maximum	6,224	0	0	0	0	0	421	12,835	20,307	24,933	21,870	9,876	64,354
Minimum	0	0	0	0	0	0	0	0	0	9,145	2,070	0	26,968

S-4m
Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - SVP Water (cfs)
Diamond Fork Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	4	246	188	248	147	70
1951	0	0	0	0	0	0	0	0	233	301	189	113	70
1952	0	0	0	0	0	0	0	0	90	224	151	154	52
1953	101	0	0	0	0	0	1	33	291	278	181	103	83
1954	0	0	0	0	0	0	3	149	271	213	221	11	73
1955	0	0	0	0	0	0	0	4	263	320	164	54	68
1956	0	0	0	0	0	0	0	50	295	250	237	80	76
1957	0	0	0	0	0	0	0	0	56	298	206	112	57
1958	0	0	0	0	0	0	0	0	230	257	217	25	61
1959	0	0	0	0	0	0	0	123	297	161	117	12	59
1960	0	0	0	0	0	0	0	111	341	253	190	0	75
1961	0	0	0	0	0	0	0	209	316	154	34	0	60
1962	0	0	0	0	0	0	0	0	226	242	259	39	64
1963	0	0	0	0	0	0	0	71	88	313	218	7	59
1964	0	0	0	0	0	0	0	0	25	406	221	107	64
1965	0	0	0	0	0	0	0	0	71	191	137	43	37
1966	0	0	0	0	0	0	0	117	319	200	207	35	74
1967	0	0	0	0	0	0	0	0	0	318	275	151	63
1968	0	0	0	0	0	0	0	0	149	294	137	136	60
1969	0	0	0	0	0	0	0	3	135	258	273	110	66
1970	0	0	0	0	0	0	0	0	130	293	302	59	66
1971	0	0	0	0	0	0	0	0	197	324	294	0	69
1972	0	0	0	0	0	0	0	194	235	282	201	4	77
1973	0	0	0	0	0	0	0	0	118	289	241	17	56
1974	0	0	0	0	0	0	0	35	282	242	278	44	74
1975	0	0	0	0	0	0	0	0	0	332	313	130	65
1976	3	0	0	0	0	0	0	91	323	318	268	56	89
1977	0	0	0	0	0	0	0	66	308	244	229	35	74
1978	0	0	0	0	0	0	0	0	212	348	273	0	70
1979	0	0	0	0	0	0	0	0	296	329	228	10	72
1980	0	0	0	0	0	0	0	0	151	273	307	34	64
1981	13	0	0	0	0	0	0	55	257	291	244	0	72
1982	0	0	0	0	0	0	0	0	83	249	267	10	51
1983	0	0	0	0	0	0	0	79	172	155	188	0	50
1984	0	0	0	0	0	0	0	54	165	230	234	166	71
1985	0	0	0	0	0	0	0	0	214	175	313	22	61
1986	0	0	0	0	0	0	0	0	148	230	260	18	55
1987	0	0	0	0	0	0	7	102	302	210	200	94	77
1988	0	0	0	0	0	0	0	106	296	315	235	61	85
1989	0	0	0	0	0	0	0	152	301	290	154	0	75
1990	0	0	0	0	0	0	0	69	157	301	243	81	72
1991	0	0	0	0	0	0	0	0	46	350	311	24	62
1992	0	0	0	0	0	0	6	137	283	175	214	19	70
1993	0	0	0	0	0	0	0	0	64	231	285	86	56
1994	0	0	0	0	0	0	0	71	323	315	163	106	82
1995	0	0	0	0	0	0	0	0	0	149	257	59	39
1996	0	0	0	0	0	0	0	0	136	236	277	35	57
1997	0	0	0	0	0	0	0	0	98	270	225	43	54
1998	0	0	0	0	0	0	0	0	13	333	356	163	73
1999	0	0	0	0	0	0	0	0	161	313	258	52	66
Average	2	0	0	0	0	0	0	42	188	264	230	57	66
Maximum	101	0	0	0	0	0	7	209	341	406	356	166	89
Minimum	0	0	0	0	0	0	0	0	0	149	34	0	37

S-5a
Bonneville Unit Operation - Total Water (acre-feet)
Diamond Fork Creek above Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,653	4,106	4,304	4,082	3,891	4,491	10,090	11,082	6,314	7,109	6,372	6,066	72,559
1951	4,956	4,471	4,460	3,989	3,768	4,537	9,349	13,729	7,291	6,503	5,357	5,529	73,940
1952	4,400	4,137	4,371	4,298	3,751	4,405	29,701	45,639	12,282	6,752	5,238	5,648	130,622
1953	5,687	5,176	5,811	5,311	4,444	5,090	5,859	6,689	6,426	6,326	5,903	5,032	67,753
1954	4,476	3,990	4,289	4,410	3,932	4,411	4,675	5,108	5,760	5,765	5,394	5,373	57,583
1955	4,470	3,970	4,189	3,789	3,332	4,889	4,741	6,591	6,207	6,149	6,242	5,238	59,808
1956	4,433	4,070	4,589	4,589	4,251	4,389	5,303	6,660	5,893	5,781	5,543	5,128	60,628
1957	4,794	3,970	4,389	3,989	4,032	5,489	5,151	12,039	8,447	6,834	6,408	5,199	70,744
1958	4,857	4,070	4,389	4,389	4,032	5,089	8,190	15,706	5,940	6,956	6,399	5,108	75,125
1959	4,757	4,170	4,089	4,289	4,032	4,389	4,339	5,472	6,075	6,173	5,658	5,554	58,998
1960	4,317	3,770	3,889	3,989	3,751	4,610	4,361	5,569	5,929	5,865	5,654	5,753	57,459
1961	4,289	3,770	3,889	3,889	4,032	4,789	4,031	5,670	5,605	5,414	5,829	5,395	56,604
1962	4,045	3,770	4,089	4,689	5,632	4,989	8,661	9,639	5,179	5,624	6,603	5,770	68,692
1963	4,717	4,170	3,989	4,089	3,832	3,989	4,440	7,849	6,508	7,246	6,763	6,470	64,065
1964	4,455	4,270	4,389	3,989	3,451	4,011	4,974	12,876	7,531	7,381	6,255	5,030	68,613
1965	4,605	3,970	4,389	4,689	4,432	5,289	9,561	17,751	9,462	7,844	6,830	6,115	84,939
1966	4,189	4,070	4,389	4,489	4,432	5,589	4,649	7,146	6,756	6,469	6,021	4,930	63,130
1967	4,440	3,770	3,989	4,389	3,932	5,789	5,534	9,595	7,516	7,171	7,172	5,864	69,161
1968	4,151	3,970	4,089	4,089	4,051	4,689	4,851	11,571	7,417	10,149	5,729	6,590	71,347
1969	4,750	3,993	4,175	4,370	3,793	4,743	20,061	16,045	8,840	7,878	7,595	6,960	93,203
1970	4,411	3,570	3,704	3,689	3,332	3,868	4,153	8,820	5,898	6,599	6,693	6,582	61,319
1971	4,310	3,996	3,705	4,107	4,142	5,029	10,161	11,620	6,049	6,367	5,935	4,762	70,183
1972	4,364	4,169	4,140	3,940	3,818	5,755	6,045	8,389	5,999	6,173	5,884	5,411	64,087
1973	3,990	3,814	3,894	3,689	3,506	4,216	7,161	16,808	6,727	5,959	5,779	5,349	70,891
1974	4,660	4,272	4,250	4,172	3,527	4,695	6,861	12,033	5,563	6,681	8,334	6,300	71,349
1975	4,303	4,095	4,142	4,152	3,748	4,301	4,301	15,711	16,138	6,456	6,245	5,449	79,042
1976	4,482	4,294	4,385	4,358	4,136	4,582	4,915	8,099	6,743	6,483	6,319	5,261	64,057
1977	4,676	4,433	4,482	4,482	4,109	4,550	4,289	5,992	6,662	6,406	5,963	5,062	61,105
1978	3,964	3,916	4,034	4,034	3,654	4,721	7,194	12,421	7,537	6,471	6,103	5,329	69,378
1979	4,121	4,234	4,320	4,170	3,803	4,763	6,983	16,852	16,679	8,352	5,063	5,320	84,658
1980	4,300	4,088	4,361	4,709	5,382	5,593	10,096	19,660	10,489	8,608	6,109	4,761	88,155
1981	4,221	4,273	4,478	4,649	4,241	4,750	4,848	8,297	6,957	6,411	6,612	4,987	64,725
1982	4,295	4,407	4,555	4,757	4,368	5,977	11,624	25,973	10,519	7,067	7,345	6,508	97,394
1983	5,418	5,108	5,116	5,189	4,784	7,217	8,023	22,661	32,335	12,413	7,810	8,094	124,168
1984	6,728	5,720	5,249	4,999	4,061	5,229	19,821	52,771	17,256	9,485	7,014	6,513	144,847
1985	6,473	5,560	5,259	5,169	4,732	7,309	18,191	17,956	13,812	9,044	9,641	6,634	109,780
1986	5,225	4,620	4,669	4,779	4,782	7,299	20,071	21,429	10,844	7,479	6,129	6,596	103,923
1987	5,017	4,532	4,889	4,511	3,626	4,489	3,675	5,396	5,901	5,809	5,759	5,235	58,839
1988	4,506	4,210	3,916	3,711	3,676	4,046	4,099	5,864	6,199	6,826	6,600	5,911	59,566
1989	4,385	4,369	3,990	3,689	3,583	5,233	6,527	8,022	7,308	6,937	6,436	5,391	65,872
1990	4,531	4,222	4,238	4,104	3,344	4,580	5,617	7,583	6,330	7,657	7,362	6,077	65,645
1991	4,510	3,792	3,689	3,689	3,860	4,360	4,718	7,928	7,274	6,612	6,795	7,024	64,252
1992	4,600	4,051	3,689	3,855	3,596	4,209	5,159	5,556	6,373	5,676	7,073	6,648	60,485
1993	3,996	3,832	3,871	3,950	3,630	4,878	6,410	17,710	8,006	6,751	6,709	5,215	74,959
1994	4,364	4,173	4,271	4,299	3,990	4,689	4,505	6,894	6,673	6,585	6,182	5,865	62,492
1995	4,009	3,845	3,968	3,983	3,708	4,739	5,803	18,317	15,319	7,806	7,020	5,274	83,791
1996	4,551	4,388	4,469	4,517	4,378	5,271	8,549	14,685	7,636	6,816	6,062	5,595	76,916
1997	4,581	4,496	4,631	5,212	4,477	6,651	10,437	20,200	8,247	7,367	6,924	4,807	88,030
1998	4,497	4,354	4,415	4,468	4,070	5,491	9,038	19,214	10,175	9,244	8,217	5,671	88,857
1999	5,321	5,281	4,981	4,958	4,546	4,754	4,442	10,434	8,534	9,331	7,989	7,310	77,879
Average	4,605	4,235	4,318	4,316	4,028	4,978	7,845	13,314	8,631	7,105	6,501	5,754	75,632
Maximum	6,728	5,720	5,811	5,311	5,632	7,309	29,701	52,771	32,335	12,413	9,641	8,094	144,847
Minimum	3,964	3,570	3,689	3,689	3,332	3,868	3,675	5,108	5,179	5,414	5,063	4,761	56,604

S-5a
Bonneville Unit Operation - Total (cfs)
Diamond Fork Creek above Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	76	69	70	66	70	73	170	180	106	116	104	102	100
1951	81	75	73	65	68	74	157	223	123	106	87	93	102
1952	72	70	71	70	65	72	499	742	206	110	85	95	180
1953	92	87	95	86	80	83	98	109	108	103	96	85	94
1954	73	67	70	72	71	72	79	83	97	94	88	90	80
1955	73	67	68	62	60	80	80	107	104	100	102	88	83
1956	72	68	75	75	74	71	89	108	99	94	90	86	84
1957	78	67	71	65	73	89	87	196	142	111	104	87	98
1958	79	68	71	71	73	83	138	255	100	113	104	86	104
1959	77	70	67	70	73	71	73	89	102	100	92	93	81
1960	70	63	63	65	65	75	73	91	100	95	92	97	79
1961	70	63	63	63	73	78	68	92	94	88	95	91	78
1962	66	63	67	76	101	81	146	157	87	91	107	97	95
1963	77	70	65	67	69	65	75	128	109	118	110	109	88
1964	72	72	71	65	60	65	84	209	127	120	102	85	95
1965	75	67	71	76	80	86	161	289	159	128	111	103	117
1966	68	68	71	73	80	91	78	116	114	105	98	83	87
1967	72	63	65	71	71	94	93	156	126	117	117	99	96
1968	68	67	67	67	70	76	82	188	125	165	93	111	98
1969	77	67	68	71	68	77	337	261	149	128	124	117	129
1970	72	60	60	60	60	63	70	143	99	107	109	111	85
1971	70	67	60	67	75	82	171	189	102	104	97	80	97
1972	71	70	67	64	66	94	102	136	101	100	96	91	88
1973	65	64	63	60	63	69	120	273	113	97	94	90	98
1974	76	72	69	68	64	76	115	196	93	109	136	106	99
1975	70	69	67	68	67	70	72	256	271	105	102	92	109
1976	73	72	71	71	72	75	83	132	113	105	103	88	83
1977	76	75	73	73	74	74	72	97	112	104	97	85	84
1978	64	66	66	66	66	77	121	202	127	105	99	90	96
1979	67	71	70	68	68	77	117	274	280	136	82	89	117
1980	70	69	71	77	94	91	170	320	176	140	99	80	121
1981	69	72	73	76	76	77	81	135	117	104	108	84	89
1982	70	74	74	77	79	97	195	422	177	115	119	109	135
1983	88	86	83	84	86	117	135	369	543	202	127	136	172
1984	109	96	85	81	71	85	333	858	290	154	114	109	200
1985	105	93	86	84	85	119	306	292	232	147	157	111	152
1986	85	78	76	78	86	119	337	349	182	122	100	111	144
1987	82	76	80	73	65	73	62	88	99	94	94	88	81
1988	73	71	64	60	64	66	69	95	104	111	107	99	82
1989	71	73	65	60	65	85	110	130	123	113	105	91	91
1990	74	71	69	67	60	74	94	123	106	125	120	102	91
1991	73	64	60	60	70	71	79	129	122	108	111	118	89
1992	75	68	60	63	63	68	87	90	107	92	115	112	83
1993	65	64	63	64	65	79	108	288	135	110	109	88	104
1994	71	70	69	70	72	76	76	112	112	107	101	99	86
1995	65	65	65	65	67	77	98	298	257	127	114	89	116
1996	74	74	73	73	76	86	144	239	128	111	99	94	106
1997	75	76	75	85	81	108	175	329	139	120	113	81	122
1998	73	73	72	73	73	89	152	312	171	150	134	95	123
1999	87	89	81	81	82	77	75	170	143	152	130	123	108
Average	75	71	70	70	72	81	132	217	145	116	106	97	104
Maximum	109	96	95	86	101	119	499	858	543	202	157	136	200
Minimum	64	60	60	60	60	63	62	83	87	88	82	80	78

S-5b
Bonneville Unit Operation - CUP Water (acre-feet)
Diamond Fork Creek above Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,355	2,407	2,603	2,461	1,992	1,952	1,120	0	0	0	0	0	14,890
1951	2,217	2,272	2,359	2,588	2,069	2,236	851	535	0	0	0	0	15,127
1952	782	2,396	2,532	2,359	2,117	1,866	1,120	1,562	0	0	0	0	14,735
1953	0	1,452	1,834	1,834	1,854	1,813	0	0	0	0	0	0	8,787
1954	190	2,350	2,688	2,262	2,487	2,229	0	0	0	0	0	0	12,206
1955	643	2,671	2,888	2,788	2,565	2,850	1,960	0	0	0	0	0	16,366
1956	1,458	2,971	2,888	2,788	2,862	2,350	953	0	0	0	0	0	16,272
1957	2,150	2,771	2,888	2,788	2,355	2,650	1,270	1,562	0	0	0	0	18,437
1958	0	2,471	2,788	2,788	2,333	2,650	1,120	1,114	0	0	0	0	15,265
1959	756	2,671	2,788	2,788	2,533	2,688	1,893	0	0	0	0	0	16,118
1960	1,755	2,871	3,088	2,888	2,542	2,262	1,213	0	0	0	0	282	16,902
1961	2,251	2,771	3,088	2,888	2,733	2,988	2,590	0	0	0	0	1,609	20,919
1962	2,944	2,871	2,988	2,988	2,533	2,850	1,120	1,562	0	0	0	0	19,858
1963	1,142	2,771	2,988	2,788	1,933	2,650	1,999	0	0	0	0	0	16,272
1964	0	2,671	2,888	2,888	2,762	2,429	1,204	801	0	0	0	0	15,645
1965	1,765	2,571	2,588	2,688	2,433	2,550	1,120	1,562	0	0	0	0	17,279
1966	1,391	2,471	2,788	2,888	2,533	2,450	291	0	0	0	0	0	14,814
1967	1,061	2,671	2,888	2,888	2,633	2,550	2,393	1,562	804	0	0	0	19,453
1968	2,550	2,671	2,788	2,888	2,542	2,550	1,310	1,562	0	0	0	0	18,863
1969	45	2,194	2,374	2,069	1,994	1,404	1,120	0	0	0	0	0	11,200
1970	738	2,464	2,403	2,318	1,986	2,229	1,812	1,479	0	0	0	0	15,428
1971	1,049	2,197	2,504	2,306	1,843	1,490	1,120	301	0	0	0	1,852	14,662
1972	2,232	2,270	2,439	2,439	2,129	1,516	1,304	0	0	0	0	0	14,329
1973	2,389	2,315	2,493	2,561	2,206	2,077	1,120	1,562	0	0	0	0	16,724
1974	1,608	2,073	2,249	2,271	2,028	1,356	1,120	0	0	0	0	0	12,706
1975	815	2,078	2,348	2,325	2,108	2,020	1,562	1,562	735	0	0	0	15,554
1976	0	2,166	2,316	2,357	2,126	2,047	1,200	0	0	0	0	0	12,212
1977	2,223	2,758	2,907	2,907	2,591	2,866	511	0	0	0	0	0	16,763
1978	1,765	2,676	2,785	2,785	2,510	1,633	1,120	1,562	0	0	0	972	17,809
1979	2,391	2,501	2,678	2,628	2,283	2,230	1,120	1,384	0	0	0	0	17,216
1980	2,403	2,441	2,738	2,658	2,732	2,400	1,120	1,562	0	0	0	0	18,056
1981	0	2,321	2,448	2,688	2,455	2,660	1,423	0	0	0	0	3,167	17,163
1982	2,562	2,831	2,938	2,878	2,413	1,620	1,120	1,306	0	0	0	0	17,669
1983	2,365	2,411	2,508	2,678	2,375	1,410	1,120	0	0	0	0	1,376	16,244
1984	582	2,021	1,988	2,098	2,012	1,290	1,120	0	0	0	0	0	11,113
1985	1,772	2,281	2,648	2,828	2,553	1,230	1,120	1,296	0	0	0	0	15,729
1986	2,079	2,191	2,558	2,678	1,553	1,230	1,120	1,562	0	0	0	0	14,972
1987	1,627	1,683	1,948	2,080	1,806	1,858	0	0	0	0	0	0	11,002
1988	1,727	2,641	2,825	2,840	2,636	2,596	2,378	0	0	0	0	0	17,644
1989	423	2,940	3,079	3,108	2,744	2,762	1,127	0	0	0	0	1,963	18,147
1990	3,156	3,093	3,212	3,211	2,919	3,087	2,880	0	0	0	0	0	21,558
1991	2,980	2,918	3,166	3,122	2,663	2,878	2,708	3,057	0	0	0	0	23,491
1992	2,815	2,745	2,737	2,907	2,583	2,410	0	0	0	0	0	0	16,199
1993	2,740	2,821	3,065	2,928	2,545	1,324	1,120	1,562	0	0	0	0	18,107
1994	2,341	2,620	2,752	2,721	2,342	2,299	2,194	0	0	0	0	0	17,269
1995	2,475	2,603	2,703	2,666	2,139	1,230	1,120	1,562	338	0	0	0	16,837
1996	2,175	2,199	2,357	2,293	1,947	1,304	1,120	1,562	0	0	0	0	14,957
1997	2,435	2,193	2,281	2,471	2,175	1,230	1,120	1,562	0	0	0	0	15,468
1998	1,925	1,964	2,168	2,080	1,821	1,230	1,120	1,562	0	0	0	0	13,870
1999	1,514	2,492	2,590	2,530	2,183	2,112	1,229	1,562	0	0	0	0	16,214
Average	1,615	2,478	2,651	2,634	2,324	2,112	1,258	757	38	0	0	224	16,090
Maximum	3,156	3,093	3,212	3,211	2,919	3,087	2,880	3,057	804	0	0	3,167	23,491
Minimum	0	1,452	1,834	1,834	1,553	1,230	0	0	0	0	0	0	8,787

S-5b
Bonneville Unit Operation - CUP Water (cfs)
Diamond Fork Creek above Spanish Fork Flow Control Structure

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

S-5c
Bonneville Unit Operation - SVP Water (acre-feet)
Diamond Fork Creek above Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	1,852	1,852	2,780	3,267	3,385	13,135
1951	169	0	0	0	0	0	269	1,317	2,558	3,188	3,763	3,878	15,142
1952	1,894	0	0	0	0	0	0	0	1,792	1,852	2,375	2,801	10,714
1953	1,852	0	0	0	0	0	1,400	1,961	1,929	3,022	3,221	3,673	17,058
1954	2,289	0	0	0	0	0	1,701	3,180	3,495	4,269	4,202	3,989	23,125
1955	2,344	0	0	0	0	0	0	1,931	3,326	3,675	3,986	4,344	19,606
1956	1,699	0	0	0	0	0	167	1,852	3,325	2,738	2,659	3,494	15,933
1957	906	0	0	0	0	0	0	0	1,792	3,525	3,966	3,806	13,995
1958	2,774	0	0	0	0	0	0	738	3,602	4,160	4,399	3,993	19,667
1959	2,076	0	0	0	0	0	211	4,386	3,900	4,299	4,044	4,177	23,093
1960	1,405	0	0	0	0	0	907	3,356	3,415	3,786	4,045	4,255	21,168
1961	841	0	0	0	0	0	0	3,097	3,660	4,341	4,735	2,756	19,430
1962	0	0	0	0	0	0	0	0	2,287	3,111	4,374	3,808	13,580
1963	1,697	0	0	0	0	0	0	1,852	2,883	3,110	3,977	4,545	18,064
1964	2,969	0	0	0	0	0	0	1,050	2,009	3,521	4,184	3,782	17,514
1965	1,219	0	0	0	0	0	0	0	1,792	2,473	3,172	3,386	12,042
1966	1,285	0	0	0	0	0	1,144	1,852	3,087	3,691	3,024	3,463	17,547
1967	1,630	0	0	0	0	0	0	0	988	2,739	3,183	3,474	12,013
1968	0	0	0	0	0	0	0	0	1,792	2,903	2,704	2,240	9,639
1969	2,172	0	0	0	0	0	0	1,852	1,792	1,890	2,263	2,832	12,800
1970	1,679	0	0	0	0	0	0	84	1,792	2,403	2,887	3,281	12,126
1971	1,411	0	0	0	0	0	0	1,551	1,792	2,469	3,006	2,053	12,282
1972	50	0	0	0	0	0	0	1,852	2,487	3,192	3,523	3,747	14,851
1973	0	0	0	0	0	0	0	0	1,792	2,723	3,225	3,457	11,197
1974	759	0	0	0	0	0	0	1,852	1,823	2,466	2,292	3,237	12,430
1975	1,462	0	0	0	0	0	0	0	1,057	2,352	3,183	3,486	11,542
1976	2,267	0	0	0	0	0	0	1,852	2,104	3,029	3,172	3,895	16,318
1977	791	0	0	0	0	0	2,502	4,017	3,009	3,588	3,932	4,397	22,236
1978	1,330	0	0	0	0	0	0	0	1,792	2,949	3,468	2,784	12,324
1979	0	0	0	0	0	0	0	179	1,792	1,852	2,825	2,617	9,265
1980	0	0	0	0	0	0	0	0	1,792	1,852	1,852	2,996	8,492
1981	2,165	0	0	0	0	0	1,048	3,227	2,846	3,318	3,687	0	16,292
1982	0	0	0	0	0	0	0	256	1,792	1,852	3,489	3,352	10,741
1983	0	0	0	0	0	0	0	1,852	1,792	1,852	1,928	1,226	8,649
1984	1,585	0	0	0	0	0	0	1,852	1,792	1,852	2,375	2,519	11,974
1985	0	0	0	0	0	0	0	266	1,792	1,852	1,852	3,788	9,550
1986	212	0	0	0	0	0	0	0	1,792	1,852	1,852	3,658	9,366
1987	0	0	0	0	0	0	1,877	2,755	2,664	3,331	3,229	3,589	17,445
1988	1,278	0	0	0	0	0	0	2,909	2,849	3,088	3,389	3,847	17,360
1989	1,626	0	0	0	0	0	1,825	3,315	3,066	3,295	3,479	1,387	17,993
1990	0	0	0	0	0	0	0	3,406	3,474	2,431	3,621	4,035	16,967
1991	0	0	0	0	0	0	0	0	1,804	3,247	3,513	4,030	12,594
1992	0	0	0	0	0	0	2,952	3,602	2,876	3,653	3,278	4,240	20,602
1993	0	0	0	0	0	0	0	0	1,792	1,852	2,230	3,512	9,386
1994	237	0	0	0	0	0	0	2,257	2,189	2,708	2,990	3,432	13,812
1995	0	0	0	0	0	0	0	0	1,455	1,852	1,852	3,337	8,496
1996	0	0	0	0	0	0	0	0	1,792	1,927	2,866	3,245	9,830
1997	0	0	0	0	0	0	0	0	1,792	2,166	1,852	2,651	8,461
1998	0	0	0	0	0	0	0	0	1,792	1,852	1,852	2,663	8,159
1999	1,017	0	0	0	0	0	0	0	1,792	3,716	3,797	4,558	14,881
Average	942	0	0	0	0	0	320	1,347	2,273	2,833	3,161	3,342	14,218
Maximum	2,969	0	0	0	0	0	2,952	4,386	3,900	4,341	4,735	4,558	23,125
Minimum	0	0	0	0	0	0	0	0	988	1,852	1,852	0	8,159

S-5c
Bonneville Unit Operation - SVP Water (cfs)
Diamond Fork Creek above Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	30	31	45	53	57	18
1951	3	0	0	0	0	0	5	21	43	52	61	65	21
1952	31	0	0	0	0	0	0	0	30	30	39	47	15
1953	30	0	0	0	0	0	24	32	32	49	52	62	24
1954	37	0	0	0	0	0	29	52	59	69	68	67	32
1955	38	0	0	0	0	0	0	31	56	60	65	73	27
1956	28	0	0	0	0	0	3	30	56	45	43	59	22
1957	15	0	0	0	0	0	0	0	30	57	64	64	19
1958	45	0	0	0	0	0	0	12	61	68	72	67	27
1959	34	0	0	0	0	0	4	71	66	70	66	70	32
1960	23	0	0	0	0	0	15	55	57	62	66	72	29
1961	14	0	0	0	0	0	0	50	62	71	77	46	27
1962	0	0	0	0	0	0	0	0	38	51	71	64	19
1963	28	0	0	0	0	0	0	30	48	51	65	76	25
1964	48	0	0	0	0	0	0	17	34	57	68	64	24
1965	20	0	0	0	0	0	0	0	30	40	52	57	17
1966	21	0	0	0	0	0	19	30	52	60	49	58	24
1967	27	0	0	0	0	0	0	0	17	45	52	58	17
1968	0	0	0	0	0	0	0	0	30	47	44	38	13
1969	35	0	0	0	0	0	0	30	30	31	37	48	18
1970	27	0	0	0	0	0	0	1	30	39	47	55	17
1971	23	0	0	0	0	0	0	25	30	40	49	34	17
1972	1	0	0	0	0	0	0	30	42	52	57	63	20
1973	0	0	0	0	0	0	0	0	30	44	52	58	15
1974	12	0	0	0	0	0	0	30	31	40	37	54	17
1975	24	0	0	0	0	0	0	0	18	38	52	59	16
1976	37	0	0	0	0	0	0	30	35	49	52	65	22
1977	13	0	0	0	0	0	42	65	51	58	64	74	31
1978	22	0	0	0	0	0	0	0	30	48	56	47	17
1979	0	0	0	0	0	0	0	3	30	30	46	44	13
1980	0	0	0	0	0	0	0	0	30	30	30	50	12
1981	35	0	0	0	0	0	18	52	48	54	60	0	23
1982	0	0	0	0	0	0	0	4	30	30	57	56	15
1983	0	0	0	0	0	0	0	30	30	30	31	21	12
1984	26	0	0	0	0	0	0	30	30	30	39	42	16
1985	0	0	0	0	0	0	0	4	30	30	30	64	13
1986	3	0	0	0	0	0	0	0	30	30	30	61	13
1987	0	0	0	0	0	0	32	45	45	54	53	60	24
1988	21	0	0	0	0	0	0	47	48	50	55	65	24
1989	26	0	0	0	0	0	31	54	52	54	57	23	25
1990	0	0	0	0	0	0	0	55	58	40	59	68	23
1991	0	0	0	0	0	0	0	0	30	53	57	68	17
1992	0	0	0	0	0	0	50	59	48	59	53	71	28
1993	0	0	0	0	0	0	0	0	30	30	36	59	13
1994	4	0	0	0	0	0	0	37	37	44	49	58	19
1995	0	0	0	0	0	0	0	0	24	30	30	56	12
1996	0	0	0	0	0	0	0	0	30	31	47	55	14
1997	0	0	0	0	0	0	0	0	30	35	30	45	12
1998	0	0	0	0	0	0	0	0	30	30	30	45	11
1999	17	0	0	0	0	0	0	0	30	60	62	77	21
Average	15	0	0	0	0	0	5	22	38	46	51	56	20
Maximum	48	0	0	0	0	0	50	71	66	71	77	77	32
Minimum	0	0	0	0	0	0	0	0	17	30	30	0	11

S-5d
Bonneville Unit Operation - Natural Water (acre-feet)
Diamond Fork Creek above Spanish Fork Flow Control Structure

26	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,298	1,699	1,701	1,621	1,899	2,539	8,970	9,230	4,462	4,329	3,105	2,681	44,534
1951	2,570	2,199	2,101	1,401	1,699	2,301	8,229	11,877	4,733	3,316	1,594	1,650	43,671
1952	1,724	1,741	1,839	1,939	1,633	2,539	28,581	44,077	10,490	4,900	2,863	2,847	105,173
1953	3,835	3,724	3,977	3,477	2,589	3,277	4,458	4,728	4,497	3,304	2,683	1,358	41,907
1954	1,997	1,640	1,601	2,148	1,445	2,182	2,974	1,928	2,265	1,495	1,193	1,384	22,252
1955	1,483	1,299	1,301	1,001	767	2,039	2,781	4,659	2,881	2,473	2,256	894	23,835
1956	1,275	1,099	1,701	1,801	1,389	2,039	4,182	4,808	2,567	3,043	2,884	1,634	28,423
1957	1,738	1,199	1,501	1,201	1,677	2,839	3,881	10,477	6,655	3,308	2,442	1,393	38,312
1958	2,083	1,599	1,601	1,601	1,699	2,439	7,070	13,854	2,337	2,797	1,999	1,114	40,193
1959	1,925	1,499	1,301	1,501	1,499	1,701	2,235	1,086	2,175	1,874	1,614	1,377	19,787
1960	1,158	899	801	1,101	1,209	2,348	2,241	2,213	2,514	2,079	1,609	1,216	19,389
1961	1,197	999	801	1,001	1,299	1,801	1,441	2,573	1,945	1,073	1,094	1,029	16,254
1962	1,101	899	1,101	1,701	3,099	2,139	7,541	8,077	2,893	2,512	2,229	1,962	35,253
1963	1,879	1,399	1,001	1,301	1,899	1,339	2,441	5,997	3,626	4,136	2,786	1,926	29,730
1964	1,487	1,599	1,501	1,101	689	1,582	3,770	11,024	5,522	3,860	2,071	1,249	35,454
1965	1,621	1,399	1,801	2,001	1,999	2,739	8,441	16,189	7,670	5,371	3,659	2,729	55,617
1966	1,512	1,599	1,601	1,601	1,899	3,139	3,214	5,295	3,668	2,778	2,997	1,466	30,769
1967	1,749	1,099	1,101	1,501	1,299	3,239	3,141	8,033	5,724	4,432	3,989	2,389	37,695
1968	1,601	1,299	1,301	1,201	1,509	2,139	3,541	10,009	5,624	7,246	3,025	4,350	42,845
1969	2,533	1,799	1,801	2,301	1,799	3,339	18,941	14,193	7,048	5,988	5,333	4,129	69,203
1970	1,994	1,107	1,301	1,371	1,346	1,639	2,341	7,258	4,106	4,196	3,806	3,300	33,765
1971	1,850	1,799	1,201	1,801	2,299	3,539	9,041	9,768	4,256	3,898	2,929	858	43,239
1972	2,083	1,899	1,701	1,501	1,689	4,239	4,741	6,537	3,512	2,981	2,361	1,664	34,907
1973	1,601	1,499	1,401	1,128	1,299	2,139	6,041	15,245	4,935	3,236	2,553	1,892	42,970
1974	2,293	2,199	2,001	1,901	1,499	3,339	5,741	10,181	3,740	4,215	6,041	3,063	46,213
1975	2,025	2,017	1,794	1,827	1,640	2,281	2,739	14,149	14,346	4,103	3,062	1,963	51,946
1976	2,216	2,128	2,069	2,001	2,010	2,535	3,716	6,247	4,639	3,454	3,147	1,366	35,527
1977	1,662	1,675	1,575	1,575	1,518	1,684	1,275	1,975	3,653	2,817	2,031	665	22,106
1978	868	1,240	1,248	1,248	1,144	3,088	6,074	10,859	5,745	3,523	2,634	1,573	39,245
1979	1,730	1,733	1,641	1,541	1,520	2,533	5,863	15,289	14,887	6,500	2,238	2,703	58,177
1980	1,897	1,647	1,623	2,050	2,650	3,192	8,975	18,098	8,697	6,756	4,257	1,765	61,608
1981	2,056	1,952	2,029	1,960	1,786	2,090	2,377	5,071	4,110	3,093	2,925	1,820	31,270
1982	1,733	1,575	1,617	1,878	1,955	4,356	10,504	24,411	8,727	5,215	3,856	3,155	68,983
1983	3,052	2,697	2,608	2,511	2,409	5,806	6,903	20,809	30,542	10,561	5,882	5,493	99,275
1984	4,561	3,699	3,261	2,901	2,049	3,939	18,701	50,919	15,464	7,633	4,639	3,994	121,760
1985	4,701	3,279	2,611	2,341	2,179	6,079	17,071	16,394	12,020	7,192	7,789	2,846	84,502
1986	2,935	2,429	2,111	2,101	3,229	6,069	18,951	19,867	9,052	5,628	4,277	2,937	79,585
1987	3,391	2,849	2,941	2,431	1,819	2,631	1,798	2,641	3,237	2,478	2,530	1,646	30,391
1988	1,502	1,569	1,091	871	1,039	1,451	1,721	2,955	3,350	3,738	3,211	2,064	24,563
1989	2,336	1,429	911	582	839	2,471	3,575	4,708	4,243	3,642	2,957	2,040	29,732
1990	1,375	1,129	1,026	893	425	1,493	2,736	4,177	2,855	5,226	3,742	2,043	27,120
1991	1,531	874	523	567	1,197	1,483	2,010	4,871	5,471	3,364	3,282	2,994	28,167
1992	1,785	1,305	952	947	1,013	1,799	2,207	1,954	3,497	2,022	3,796	2,407	23,684
1993	1,256	1,011	806	1,022	1,085	3,553	5,290	16,147	6,214	4,899	4,479	1,703	47,465
1994	1,785	1,554	1,519	1,579	1,648	2,390	2,311	4,638	4,484	3,877	3,191	2,434	31,410
1995	1,534	1,241	1,265	1,317	1,569	3,510	4,683	16,754	13,527	5,954	5,168	1,937	58,459
1996	2,376	2,190	2,111	2,224	2,431	3,967	7,429	13,122	5,844	4,889	3,196	2,350	52,129
1997	2,146	2,302	2,350	2,740	2,302	5,421	9,317	18,638	6,455	5,201	5,072	2,156	64,101
1998	2,572	2,390	2,247	2,388	2,249	4,261	7,918	17,652	8,383	7,392	6,365	3,008	66,828
1999	2,790	2,788	2,391	2,427	2,363	2,641	3,213	8,871	6,742	5,614	4,192	2,752	46,784
Average	2,048	1,758	1,667	1,682	1,704	2,866	6,267	11,211	6,321	4,272	3,341	2,187	45,324
Maximum	4,701	3,724	3,977	3,477	3,229	6,079	28,581	50,919	30,542	10,561	7,789	5,493	121,760
Minimum	868	874	523	567	425	1,339	1,275	1,086	1,945	1,073	1,094	665	16,254

S-5d
Bonneville Unit Operation - Natural Water (cfs)
Diamond Fork Creek above Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	37	29	28	26	34	41	151	150	75	70	50	45	62
1951	42	37	34	23	31	37	138	193	80	54	26	28	60
1952	28	29	30	32	28	41	480	717	176	80	47	48	145
1953	62	63	65	57	47	53	75	77	76	54	44	23	58
1954	32	28	26	35	26	35	50	31	38	24	19	23	31
1955	24	22	21	16	14	33	47	76	48	40	37	15	33
1956	21	18	28	29	24	33	70	78	43	49	47	27	39
1957	28	20	24	20	30	46	65	170	112	54	40	23	53
1958	34	27	26	26	31	40	119	225	39	45	33	19	56
1959	31	25	21	24	27	28	38	18	37	30	26	23	27
1960	19	15	13	18	21	38	38	36	42	34	26	20	27
1961	19	17	13	16	23	29	24	42	33	17	18	17	22
1962	18	15	18	28	56	35	127	131	49	41	36	33	49
1963	31	24	16	21	34	22	41	98	61	67	45	32	41
1964	24	27	24	18	12	26	63	179	93	63	34	21	49
1965	26	24	29	33	36	45	142	263	129	87	60	46	77
1966	25	27	26	26	34	51	54	86	62	45	49	25	43
1967	28	18	18	24	23	53	53	131	96	72	65	40	52
1968	26	22	21	20	26	35	60	163	95	118	49	73	59
1969	41	30	29	37	32	54	318	231	118	97	87	69	96
1970	32	19	21	22	24	27	39	118	69	68	62	55	47
1971	30	30	20	29	41	58	152	159	72	63	48	14	60
1972	34	32	28	24	29	69	80	106	59	48	38	28	48
1973	26	25	23	18	23	35	102	248	83	53	42	32	59
1974	37	37	33	31	27	54	96	166	63	69	98	51	64
1975	33	34	29	30	30	37	46	230	241	67	50	33	72
1976	36	36	34	33	35	41	62	102	78	56	51	23	49
1977	27	28	26	26	27	27	21	32	61	46	33	11	31
1978	14	21	20	20	21	50	102	177	97	57	43	26	54
1979	28	29	27	25	27	41	99	249	250	106	36	45	80
1980	31	28	26	33	46	52	151	294	146	110	69	30	85
1981	33	33	33	32	32	34	40	82	69	50	48	31	43
1982	28	26	26	31	35	71	177	397	147	85	63	53	95
1983	50	45	42	41	43	94	116	338	513	172	96	92	137
1984	74	62	53	47	36	64	314	828	260	124	75	67	168
1985	76	55	42	38	39	99	287	267	202	117	127	48	117
1986	48	41	34	34	58	99	318	323	152	92	70	49	110
1987	55	48	48	40	33	43	30	43	54	40	41	28	42
1988	24	26	18	14	18	24	29	48	56	61	52	35	34
1989	38	24	15	9	15	40	60	77	71	59	48	34	41
1990	22	19	17	15	8	24	46	68	48	85	61	34	37
1991	25	15	9	9	22	24	34	79	92	55	53	50	39
1992	29	22	15	15	18	29	37	32	59	33	62	40	33
1993	20	17	13	17	20	58	89	263	104	80	73	29	66
1994	29	26	25	26	30	39	39	75	75	63	52	41	43
1995	25	21	21	21	28	57	79	272	227	97	84	33	81
1996	39	37	34	36	42	65	125	213	98	80	52	39	72
1997	35	39	38	45	41	88	157	303	108	85	82	36	89
1998	42	40	37	39	41	69	133	287	141	120	104	51	92
1999	45	47	39	39	43	43	54	144	113	91	68	46	65
Average	33	30	27	27	30	47	105	182	106	69	54	37	63
Maximum	76	63	65	57	58	99	480	828	513	172	127	92	168
Minimum	14	15	9	9	8	22	21	18	33	17	18	11	22

S-6a
Bonneville Unit Operation - Total (acre-feet)
Releases from Diamond Fork Pipeline via Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	0	10,494	7,278	9,541	6,343	33,656
1951	0	0	0	0	0	0	0	0	10,073	12,706	7,024	3,996	33,800
1952	0	0	0	0	0	0	0	0	4,195	10,510	6,676	6,622	28,003
1953	4,552	0	0	0	0	0	0	1,138	12,359	11,456	6,687	3,765	39,957
1954	0	0	0	0	0	0	0	5,867	10,172	8,227	8,867	0	33,132
1955	0	0	0	0	0	0	0	0	10,118	13,186	6,130	1,375	30,809
1956	0	0	0	0	0	0	0	2,164	11,895	10,309	9,278	3,021	36,668
1957	0	0	0	0	0	0	0	0	1,850	12,255	7,858	3,788	25,752
1958	0	0	0	0	0	0	0	0	9,145	10,344	8,565	340	28,395
1959	0	0	0	0	0	0	0	5,052	11,631	5,714	4,029	0	26,426
1960	0	0	0	0	0	0	0	4,433	13,792	10,139	7,574	0	35,938
1961	0	0	0	0	0	0	0	8,399	12,507	5,913	326	0	27,146
1962	0	0	0	0	0	0	0	0	9,727	9,953	9,936	237	29,853
1963	0	0	0	0	0	0	0	3,487	2,853	13,127	8,501	0	27,968
1964	0	0	0	0	0	0	0	0	971	17,061	8,591	4,106	30,729
1965	0	0	0	0	0	0	0	0	3,095	8,072	5,230	1,136	17,533
1966	0	0	0	0	0	0	0	4,826	12,558	8,165	8,604	947	35,100
1967	0	0	0	0	0	0	0	0	0	13,232	11,470	6,039	30,741
1968	0	0	0	0	0	0	0	0	5,653	12,051	5,803	5,752	29,258
1969	0	0	0	0	0	0	0	0	6,012	10,921	11,355	3,850	32,138
1970	0	0	0	0	0	0	0	0	4,998	12,169	12,904	1,991	32,062
1971	0	0	0	0	0	0	0	0	7,793	13,637	11,934	0	33,365
1972	0	0	0	0	0	0	0	7,655	8,896	11,769	8,831	0	37,151
1973	0	0	0	0	0	0	0	0	4,816	11,956	9,520	178	26,470
1974	0	0	0	0	0	0	0	955	11,542	10,193	12,509	1,162	36,361
1975	0	0	0	0	0	0	0	0	0	14,938	13,395	5,352	33,685
1976	0	0	0	0	0	0	0	3,870	13,935	13,859	11,138	1,543	44,345
1977	0	0	0	0	0	0	0	2,329	12,497	10,323	9,300	669	35,118
1978	0	0	0	0	0	0	0	0	9,019	15,459	11,139	0	35,618
1979	0	0	0	0	0	0	0	0	12,867	14,798	9,181	0	36,846
1980	0	0	0	0	0	0	0	0	6,442	12,226	13,008	938	32,614
1981	29	0	0	0	0	0	0	1,621	10,196	12,542	9,664	0	34,052
1982	0	0	0	0	0	0	0	0	3,466	11,192	10,886	0	25,544
1983	0	0	0	0	0	0	0	3,117	7,019	5,716	8,005	0	23,857
1984	0	0	0	0	0	0	0	2,003	6,877	9,211	9,351	6,273	33,716
1985	0	0	0	0	0	0	0	0	8,690	7,642	13,228	86	29,645
1986	0	0	0	0	0	0	0	0	5,825	9,503	10,628	0	25,956
1987	0	0	0	0	0	0	0	3,631	12,114	8,267	8,085	3,267	35,364
1988	0	0	0	0	0	0	0	3,553	12,110	13,354	9,723	1,788	40,529
1989	0	0	0	0	0	0	0	6,218	12,499	12,561	6,193	0	37,470
1990	0	0	0	0	0	0	0	2,005	6,097	13,194	10,085	3,128	34,509
1991	0	0	0	0	0	0	0	0	1,902	14,731	13,108	0	29,741
1992	0	0	0	0	0	0	0	5,019	11,471	6,455	8,658	500	32,103
1993	0	0	0	0	0	0	0	0	1,914	10,292	12,563	3,191	27,960
1994	0	0	0	0	0	0	0	2,581	12,909	13,593	6,727	4,283	40,093
1995	0	0	0	0	0	0	0	0	0	6,669	11,479	2,114	20,262
1996	0	0	0	0	0	0	0	0	5,219	10,516	12,047	1,031	28,813
1997	0	0	0	0	0	0	0	0	3,942	12,413	10,089	1,606	28,051
1998	0	0	0	0	0	0	0	0	293	14,747	16,744	7,619	39,403
1999	0	0	0	0	0	0	0	0	6,987	13,840	10,901	1,466	33,194
Average	92	0	0	0	0	0	0	1,598	7,629	11,168	9,461	1,990	31,938
Maximum	4,552	0	0	0	0	0	0	8,399	13,935	17,061	16,744	7,619	44,345
Minimum	0	0	0	0	0	0	0	0	0	5,714	326	0	17,533

S-6a
Bonneville Unit Operation - Total (cfs)
Releases from Diamond Fork Pipeline via Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	0	176	118	155	107	46
1951	0	0	0	0	0	0	0	0	169	207	114	67	47
1952	0	0	0	0	0	0	0	0	70	171	109	111	39
1953	74	0	0	0	0	0	0	19	208	186	109	63	55
1954	0	0	0	0	0	0	0	95	171	134	144	0	46
1955	0	0	0	0	0	0	0	0	170	214	100	23	43
1956	0	0	0	0	0	0	0	35	200	168	151	51	51
1957	0	0	0	0	0	0	0	0	31	199	128	64	36
1958	0	0	0	0	0	0	0	0	154	168	139	6	39
1959	0	0	0	0	0	0	0	82	195	93	66	0	37
1960	0	0	0	0	0	0	0	72	232	165	123	0	50
1961	0	0	0	0	0	0	0	137	210	96	5	0	37
1962	0	0	0	0	0	0	0	0	163	162	162	4	41
1963	0	0	0	0	0	0	0	57	48	213	138	0	39
1964	0	0	0	0	0	0	0	0	16	277	140	69	42
1965	0	0	0	0	0	0	0	0	52	131	85	19	24
1966	0	0	0	0	0	0	0	78	211	133	140	16	48
1967	0	0	0	0	0	0	0	0	0	215	187	101	42
1968	0	0	0	0	0	0	0	0	95	196	94	97	40
1969	0	0	0	0	0	0	0	0	101	178	185	65	44
1970	0	0	0	0	0	0	0	0	84	198	210	33	44
1971	0	0	0	0	0	0	0	0	131	222	194	0	46
1972	0	0	0	0	0	0	0	124	150	191	144	0	51
1973	0	0	0	0	0	0	0	0	81	194	155	3	37
1974	0	0	0	0	0	0	0	16	194	166	203	20	50
1975	0	0	0	0	0	0	0	0	0	243	218	90	47
1976	0	0	0	0	0	0	0	63	234	225	181	26	61
1977	0	0	0	0	0	0	0	38	210	168	151	11	49
1978	0	0	0	0	0	0	0	0	152	251	181	0	49
1979	0	0	0	0	0	0	0	0	216	241	149	0	51
1980	0	0	0	0	0	0	0	0	108	199	212	16	45
1981	0	0	0	0	0	0	0	26	171	204	157	0	47
1982	0	0	0	0	0	0	0	0	58	182	177	0	35
1983	0	0	0	0	0	0	0	51	118	93	130	0	33
1984	0	0	0	0	0	0	0	33	116	150	152	105	46
1985	0	0	0	0	0	0	0	0	146	124	215	1	41
1986	0	0	0	0	0	0	0	0	98	155	173	0	36
1987	0	0	0	0	0	0	0	59	204	134	131	55	49
1988	0	0	0	0	0	0	0	58	204	217	158	30	56
1989	0	0	0	0	0	0	0	101	210	204	101	0	52
1990	0	0	0	0	0	0	0	33	102	215	164	53	48
1991	0	0	0	0	0	0	0	0	32	240	213	0	41
1992	0	0	0	0	0	0	0	82	193	105	141	8	44
1993	0	0	0	0	0	0	0	0	32	167	204	54	39
1994	0	0	0	0	0	0	0	42	217	221	109	72	55
1995	0	0	0	0	0	0	0	0	0	108	187	36	28
1996	0	0	0	0	0	0	0	0	88	171	196	17	40
1997	0	0	0	0	0	0	0	0	66	202	164	27	39
1998	0	0	0	0	0	0	0	0	5	240	272	128	54
1999	0	0	0	0	0	0	0	0	117	225	177	25	46
Average	1	0	0	0	0	0	0	26	128	182	154	33	44
Maximum	74	0	0	0	0	0	0	137	234	277	272	128	61
Minimum	0	0	0	0	0	0	0	0	0	93	5	0	24

S-6b
Bonneville Unit Operation - CUP Water (acre-feet)
Releases from Diamond Fork Pipeline via Spanish Fork Flow Control Structure

91	1	2	3	4	5	6	7	8	9	10	11	12	
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

S-6b
Bonneville Unit Operation - CUP Water (cfs)
Releases from Diamond Fork Pipeline via Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
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

S-6c
Bonneville Unit Operation - SVP Water (acre-feet)
Releases from Diamond Fork Pipeline via Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	0	10,494	7,278	9,541	6,343	33,656
1951	0	0	0	0	0	0	0	0	10,073	12,706	7,024	3,996	33,800
1952	0	0	0	0	0	0	0	0	4,195	10,510	6,676	6,622	28,003
1953	4,552	0	0	0	0	0	0	1,138	12,359	11,456	6,687	3,765	39,957
1954	0	0	0	0	0	0	0	5,867	10,172	8,227	8,867	0	33,132
1955	0	0	0	0	0	0	0	0	10,118	13,186	6,130	1,375	30,809
1956	0	0	0	0	0	0	0	2,164	11,895	10,309	9,278	3,021	36,668
1957	0	0	0	0	0	0	0	0	1,850	12,255	7,858	3,788	25,752
1958	0	0	0	0	0	0	0	0	9,145	10,344	8,565	340	28,395
1959	0	0	0	0	0	0	0	5,052	11,631	5,714	4,029	0	26,426
1960	0	0	0	0	0	0	0	4,433	13,792	10,139	7,574	0	35,938
1961	0	0	0	0	0	0	0	8,399	12,507	5,913	326	0	27,146
1962	0	0	0	0	0	0	0	0	9,727	9,953	9,936	237	29,853
1963	0	0	0	0	0	0	0	3,487	2,853	13,127	8,501	0	27,968
1964	0	0	0	0	0	0	0	0	971	17,061	8,591	4,106	30,729
1965	0	0	0	0	0	0	0	0	3,095	8,072	5,230	1,136	17,533
1966	0	0	0	0	0	0	0	4,826	12,558	8,165	8,604	947	35,100
1967	0	0	0	0	0	0	0	0	0	13,232	11,470	6,039	30,741
1968	0	0	0	0	0	0	0	0	5,653	12,051	5,803	5,752	29,258
1969	0	0	0	0	0	0	0	0	6,012	10,921	11,355	3,850	32,138
1970	0	0	0	0	0	0	0	0	4,998	12,169	12,904	1,991	32,062
1971	0	0	0	0	0	0	0	0	7,793	13,637	11,934	0	33,365
1972	0	0	0	0	0	0	0	7,655	8,896	11,769	8,831	0	37,151
1973	0	0	0	0	0	0	0	0	4,816	11,956	9,520	178	26,470
1974	0	0	0	0	0	0	0	955	11,542	10,193	12,509	1,162	36,361
1975	0	0	0	0	0	0	0	0	0	14,938	13,395	5,352	33,685
1976	0	0	0	0	0	0	0	3,870	13,935	13,859	11,138	1,543	44,345
1977	0	0	0	0	0	0	0	2,329	12,497	10,323	9,300	669	35,118
1978	0	0	0	0	0	0	0	0	9,019	15,459	11,139	0	35,618
1979	0	0	0	0	0	0	0	0	12,867	14,798	9,181	0	36,846
1980	0	0	0	0	0	0	0	0	6,442	12,226	13,008	938	32,614
1981	29	0	0	0	0	0	0	1,621	10,196	12,542	9,664	0	34,052
1982	0	0	0	0	0	0	0	0	3,466	11,192	10,886	0	25,544
1983	0	0	0	0	0	0	0	3,117	7,019	5,716	8,005	0	23,857
1984	0	0	0	0	0	0	0	2,003	6,877	9,211	9,351	6,273	33,716
1985	0	0	0	0	0	0	0	0	8,690	7,642	13,228	86	29,645
1986	0	0	0	0	0	0	0	0	5,825	9,503	10,628	0	25,956
1987	0	0	0	0	0	0	0	3,631	12,114	8,267	8,085	3,267	35,364
1988	0	0	0	0	0	0	0	3,553	12,110	13,354	9,723	1,788	40,529
1989	0	0	0	0	0	0	0	6,218	12,499	12,561	6,193	0	37,470
1990	0	0	0	0	0	0	0	2,005	6,097	13,194	10,085	3,128	34,509
1991	0	0	0	0	0	0	0	0	1,902	14,731	13,108	0	29,741
1992	0	0	0	0	0	0	0	5,019	11,471	6,455	8,658	500	32,103
1993	0	0	0	0	0	0	0	0	1,914	10,292	12,563	3,191	27,960
1994	0	0	0	0	0	0	0	2,581	12,909	13,593	6,727	4,283	40,093
1995	0	0	0	0	0	0	0	0	0	6,669	11,479	2,114	20,262
1996	0	0	0	0	0	0	0	0	5,219	10,516	12,047	1,031	28,813
1997	0	0	0	0	0	0	0	0	3,942	12,413	10,089	1,606	28,051
1998	0	0	0	0	0	0	0	0	293	14,747	16,744	7,619	39,403
1999	0	0	0	0	0	0	0	0	6,987	13,840	10,901	1,466	33,194
Average	92	0	0	0	0	0	0	1,598	7,629	11,168	9,461	1,990	31,938
Maximum	4,552	0	0	0	0	0	0	8,399	13,935	17,061	16,744	7,619	44,345
Minimum	0	0	0	0	0	0	0	0	0	5,714	326	0	17,533

S-6c

Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - SVP Water (cfs)

Releases from Diamond Fork Pipeline via Spanish Fork Flow Control Structure

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	0	176	118	155	107	46
1951	0	0	0	0	0	0	0	0	169	207	114	67	47
1952	0	0	0	0	0	0	0	0	70	171	109	111	39
1953	74	0	0	0	0	0	0	19	208	186	109	63	55
1954	0	0	0	0	0	0	0	95	171	134	144	0	46
1955	0	0	0	0	0	0	0	0	170	214	100	23	43
1956	0	0	0	0	0	0	0	35	200	168	151	51	51
1957	0	0	0	0	0	0	0	0	31	199	128	64	36
1958	0	0	0	0	0	0	0	0	154	168	139	6	39
1959	0	0	0	0	0	0	0	82	195	93	66	0	37
1960	0	0	0	0	0	0	0	72	232	165	123	0	50
1961	0	0	0	0	0	0	0	137	210	96	5	0	37
1962	0	0	0	0	0	0	0	0	163	162	162	4	41
1963	0	0	0	0	0	0	0	57	48	213	138	0	39
1964	0	0	0	0	0	0	0	0	16	277	140	69	42
1965	0	0	0	0	0	0	0	0	52	131	85	19	24
1966	0	0	0	0	0	0	0	78	211	133	140	16	48
1967	0	0	0	0	0	0	0	0	0	215	187	101	42
1968	0	0	0	0	0	0	0	0	95	196	94	97	40
1969	0	0	0	0	0	0	0	0	101	178	185	65	44
1970	0	0	0	0	0	0	0	0	84	198	210	33	44
1971	0	0	0	0	0	0	0	0	131	222	194	0	46
1972	0	0	0	0	0	0	0	124	150	191	144	0	51
1973	0	0	0	0	0	0	0	0	81	194	155	3	37
1974	0	0	0	0	0	0	0	16	194	166	203	20	50
1975	0	0	0	0	0	0	0	0	0	243	218	90	47
1976	0	0	0	0	0	0	0	63	234	225	181	26	61
1977	0	0	0	0	0	0	0	38	210	168	151	11	49
1978	0	0	0	0	0	0	0	0	152	251	181	0	49
1979	0	0	0	0	0	0	0	0	216	241	149	0	51
1980	0	0	0	0	0	0	0	0	108	199	212	16	45
1981	0	0	0	0	0	0	0	26	171	204	157	0	47
1982	0	0	0	0	0	0	0	0	58	182	177	0	35
1983	0	0	0	0	0	0	0	51	118	93	130	0	33
1984	0	0	0	0	0	0	0	33	116	150	152	105	46
1985	0	0	0	0	0	0	0	0	146	124	215	1	41
1986	0	0	0	0	0	0	0	0	98	155	173	0	36
1987	0	0	0	0	0	0	0	59	204	134	131	55	49
1988	0	0	0	0	0	0	0	58	204	217	158	30	56
1989	0	0	0	0	0	0	0	101	210	204	101	0	52
1990	0	0	0	0	0	0	0	33	102	215	164	53	48
1991	0	0	0	0	0	0	0	0	32	240	213	0	41
1992	0	0	0	0	0	0	0	82	193	105	141	8	44
1993	0	0	0	0	0	0	0	0	32	167	204	54	39
1994	0	0	0	0	0	0	0	42	217	221	109	72	55
1995	0	0	0	0	0	0	0	0	0	108	187	36	28
1996	0	0	0	0	0	0	0	0	88	171	196	17	40
1997	0	0	0	0	0	0	0	0	66	202	164	27	39
1998	0	0	0	0	0	0	0	0	5	240	272	128	54
1999	0	0	0	0	0	0	0	0	117	225	177	25	46
Average	1	0	0	0	0	0	0	26	128	182	154	33	44
Maximum	74	0	0	0	0	0	0	137	234	277	272	128	61
Minimum	0	0	0	0	0	0	0	0	0	93	5	0	24

S-6d
Bonneville Unit Operation - Total Water (acre-feet)
Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	7,179	6,706	6,504	7,030	7,329	8,999	20,117	28,502	24,919	18,105	17,667	14,544	167,601
1951	7,048	7,205	7,560	7,257	7,436	8,245	14,304	25,690	22,919	21,148	15,227	11,053	155,093
1952	6,492	6,337	6,371	6,898	6,751	8,958	64,101	114,562	42,487	25,156	18,466	17,368	323,948
1953	15,143	9,250	10,009	9,711	8,044	9,809	11,481	17,911	25,098	20,666	15,515	11,351	163,987
1954	6,784	7,090	7,089	7,427	7,250	8,649	10,007	16,712	18,405	15,471	15,499	7,418	127,801
1955	6,143	6,170	6,389	5,989	5,632	9,437	10,576	18,516	20,932	21,642	14,466	8,993	134,884
1956	6,102	6,470	7,489	7,887	7,139	9,857	12,469	20,501	22,104	17,525	15,839	9,282	142,664
1957	6,239	5,870	6,527	6,577	8,290	9,189	11,101	31,577	27,938	23,719	17,188	12,222	166,437
1958	7,846	6,770	7,507	7,308	7,910	10,677	17,735	42,032	24,519	20,189	17,142	8,442	178,077
1959	7,334	6,873	7,757	7,607	7,420	8,127	6,986	14,834	19,536	13,283	10,873	6,946	117,576
1960	5,853	5,273	5,789	6,307	5,851	8,310	9,376	18,996	22,262	17,238	14,482	7,483	127,221
1961	5,542	5,570	5,647	5,689	5,532	6,940	6,088	15,535	17,952	11,668	7,341	6,618	100,123
1962	4,943	5,370	5,489	6,089	9,932	9,247	25,357	29,700	22,228	17,491	17,781	7,632	161,260
1963	6,469	6,073	6,089	6,089	6,132	6,489	7,474	18,906	12,496	20,608	15,880	7,988	120,693
1964	5,541	5,870	6,089	5,889	5,151	6,111	9,126	25,102	13,881	25,617	15,646	10,307	134,331
1965	6,056	5,373	6,389	7,083	6,732	8,489	16,173	35,677	25,143	19,318	15,012	9,963	161,408
1966	6,782	6,770	7,227	7,427	7,132	11,389	11,093	20,290	21,838	15,882	15,273	7,500	138,604
1967	6,187	5,970	6,327	6,789	6,333	9,989	9,739	24,801	22,823	25,319	20,697	14,221	159,195
1968	6,764	6,770	6,689	6,481	7,519	8,918	11,599	31,016	27,704	25,464	15,100	15,000	169,025
1969	7,907	7,093	7,333	8,098	7,121	10,720	37,681	49,905	24,515	23,155	21,461	13,485	218,473
1970	7,908	7,150	7,792	8,657	7,883	8,995	9,548	26,457	20,712	22,631	21,669	11,365	160,767
1971	7,568	7,396	7,392	8,195	7,760	10,529	19,816	30,702	25,337	24,080	21,959	9,206	179,942
1972	7,773	7,577	8,008	8,788	8,285	11,255	12,465	23,822	19,220	18,996	16,207	7,758	150,154
1973	6,794	6,814	6,700	6,619	6,206	8,216	17,416	58,965	24,779	24,471	19,564	9,442	195,986
1974	8,065	7,772	8,058	8,500	7,665	11,913	17,857	39,796	25,586	20,590	22,603	10,010	188,416
1975	7,949	7,577	7,149	7,226	6,618	8,393	9,241	40,975	49,648	27,356	23,029	13,317	208,478
1976	8,493	8,063	8,115	8,326	9,083	12,384	11,593	23,994	24,056	21,211	19,208	8,986	163,510
1977	7,316	6,857	6,708	6,708	6,294	7,286	5,933	9,695	20,198	17,128	15,589	6,374	116,085
1978	5,560	5,775	5,886	5,886	5,387	10,826	19,061	32,913	30,218	24,577	18,489	8,534	173,114
1979	6,878	7,100	8,077	9,647	7,830	10,017	17,870	36,428	30,504	24,125	17,307	6,208	181,991
1980	6,970	6,840	7,064	8,259	10,221	11,539	27,570	56,621	35,247	24,740	21,169	9,494	225,735
1981	7,613	8,288	8,697	8,447	7,520	8,437	9,360	17,893	20,370	19,555	17,329	6,722	140,231
1982	7,163	7,030	7,239	7,979	7,812	14,359	33,196	69,482	32,087	24,853	21,500	12,855	245,557
1983	12,207	10,110	10,387	10,137	10,020	19,557	22,564	74,634	95,220	35,367	27,559	19,299	347,059
1984	42,027	30,520	14,889	11,599	11,101	17,229	52,956	128,579	60,702	35,026	28,553	21,962	455,144
1985	16,062	14,968	12,950	11,835	7,752	14,590	35,178	49,366	35,509	22,167	27,179	12,335	259,891
1986	11,344	10,610	9,719	9,729	17,271	21,719	46,466	57,668	31,267	24,257	23,293	11,555	274,898
1987	10,519	9,930	9,416	9,069	8,713	10,557	9,463	14,684	20,217	16,068	16,299	11,185	146,120
1988	7,106	7,548	7,183	7,088	7,193	8,633	10,077	18,967	20,825	21,064	17,216	9,270	142,172
1989	5,730	6,860	6,718	6,886	7,701	10,401	14,192	21,431	21,307	19,857	13,701	7,055	141,839
1990	6,261	6,698	7,196	7,191	7,121	9,398	11,629	15,426	13,624	21,561	17,923	10,429	134,458
1991	5,997	6,268	5,640	6,041	7,598	7,758	7,206	16,102	15,914	22,696	20,759	8,830	130,808
1992	5,729	6,144	6,137	6,477	6,869	6,277	13,129	13,268	18,111	12,992	15,837	8,318	119,288
1993	5,507	5,270	5,416	5,919	6,728	12,338	16,130	47,195	21,154	20,702	21,296	10,779	178,433
1994	6,942	6,538	6,552	6,719	6,829	8,757	7,940	15,344	21,331	20,882	14,396	11,954	134,184
1995	6,418	5,773	5,925	6,048	6,350	11,271	14,725	54,862	49,159	24,043	24,182	11,367	220,123
1996	8,360	8,214	8,176	8,542	9,453	13,192	22,656	41,690	21,184	21,053	21,000	9,936	193,457
1997	7,961	8,600	8,990	10,510	9,272	18,038	26,847	52,940	24,879	24,938	21,198	10,287	224,461
1998	8,698	8,657	13,296	9,268	8,898	15,008	24,344	53,071	27,328	32,500	30,495	18,039	249,604
1999	10,625	10,452	9,338	9,235	8,612	9,535	10,424	33,173	28,657	27,182	23,604	14,931	195,768
Average	8,238	7,726	7,622	7,703	7,734	10,539	17,589	35,538	26,881	21,907	18,733	10,712	180,921
Maximum	42,027	30,520	14,889	11,835	17,271	21,719	64,101	128,579	95,220	35,367	30,495	21,962	455,144
Minimum	4,943	5,270	5,416	5,689	5,151	6,111	5,933	9,695	12,496	11,668	7,341	6,208	100,123

S-6d
Bonneville Unit Operation - Total (cfs)
Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	117	113	106	114	132	146	338	464	419	294	287	244	232
1951	115	121	123	118	134	134	240	418	385	344	248	186	214
1952	106	106	104	112	117	146	1,077	1,863	714	409	300	292	446
1953	246	155	163	158	145	160	193	291	422	336	252	191	227
1954	110	119	115	121	131	141	168	272	309	252	252	125	177
1955	100	104	104	97	101	153	178	301	352	352	235	151	186
1956	99	109	122	128	124	160	210	333	371	285	258	156	197
1957	101	99	106	107	149	149	187	514	470	386	280	205	230
1958	128	114	122	119	142	174	298	684	412	328	279	142	246
1959	119	116	126	124	134	132	117	241	328	216	177	117	162
1960	95	89	94	103	102	135	158	309	374	280	236	126	175
1961	90	94	92	93	100	113	102	253	302	190	119	111	138
1962	80	90	89	99	179	150	426	483	374	284	289	128	223
1963	105	102	99	99	110	106	126	307	210	335	258	134	167
1964	90	99	99	96	90	99	153	408	233	417	254	173	185
1965	98	90	104	115	121	138	272	580	423	314	244	167	223
1966	110	114	118	121	128	185	186	330	367	258	248	126	191
1967	101	100	103	110	114	162	164	403	384	412	337	239	220
1968	110	114	109	105	131	145	195	504	466	414	246	252	233
1969	129	119	119	132	128	174	633	812	412	377	349	227	302
1970	129	120	127	141	142	146	160	430	348	368	352	191	222
1971	123	124	120	133	140	171	333	499	426	392	357	155	249
1972	126	127	130	143	144	183	209	387	323	309	264	130	207
1973	111	115	109	108	112	134	293	959	416	398	318	159	271
1974	131	131	131	138	138	194	300	647	430	335	368	168	260
1975	129	127	116	118	119	137	155	666	834	445	375	224	288
1976	138	135	132	135	158	201	195	390	404	345	312	151	225
1977	119	115	109	109	113	119	100	158	339	279	254	107	160
1978	90	97	96	96	97	176	320	535	508	400	301	143	239
1979	112	119	131	157	141	163	300	592	513	392	281	104	251
1980	113	115	115	134	178	188	463	921	592	402	344	160	311
1981	124	139	141	137	135	137	157	291	342	318	282	113	194
1982	117	118	118	130	141	234	558	1,130	539	404	350	216	339
1983	199	170	169	165	180	318	379	1,214	1,600	575	448	324	479
1984	684	513	242	189	193	280	890	2,091	1,020	570	464	369	627
1985	261	252	211	192	140	237	591	803	597	361	442	207	359
1986	184	178	158	158	311	353	781	938	525	395	379	194	380
1987	171	167	153	147	157	172	159	239	340	261	265	188	202
1988	116	127	117	115	125	140	169	308	350	343	280	156	196
1989	93	115	109	112	139	169	239	349	358	323	223	119	196
1990	102	113	117	117	128	153	195	251	229	351	291	175	186
1991	98	105	92	98	137	126	121	262	267	369	338	148	181
1992	93	103	100	105	119	102	221	216	304	211	258	140	164
1993	90	89	88	96	121	201	271	768	356	337	346	181	246
1994	113	110	107	109	123	142	133	250	358	340	234	201	185
1995	104	97	96	98	114	183	247	892	826	391	393	191	304
1996	136	138	133	139	164	215	381	678	356	342	342	167	266
1997	129	145	146	171	167	293	451	861	418	406	345	173	310
1998	141	145	216	151	160	244	409	863	459	529	496	303	345
1999	173	176	152	150	155	155	175	540	482	442	384	251	270
Average	134	130	124	125	138	171	296	578	452	356	305	180	250
Maximum	684	513	242	192	311	353	1,077	2,091	1,600	575	496	369	627
Minimum	80	89	88	93	90	99	100	158	210	190	119	104	138

S-6e
Bonneville Unit Operation - CUP Water (acre-feet)
Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,261	2,407	2,603	2,461	1,992	1,952	1,075	0	0	0	0	0	14,751
1951	2,128	2,272	2,359	2,588	2,069	2,236	817	513	0	0	0	0	14,983
1952	750	2,396	2,532	2,359	2,117	1,866	1,075	1,500	0	0	0	0	14,597
1953	0	1,452	1,834	1,834	1,854	1,813	0	0	0	0	0	0	8,787
1954	182	2,350	2,688	2,262	2,487	2,229	0	0	0	0	0	0	12,198
1955	617	2,671	2,888	2,788	2,565	2,850	1,882	0	0	0	0	0	16,262
1956	1,400	2,971	2,888	2,788	2,862	2,350	915	0	0	0	0	0	16,176
1957	2,064	2,771	2,888	2,788	2,355	2,650	1,220	1,500	0	0	0	0	18,237
1958	0	2,471	2,788	2,788	2,333	2,650	1,075	1,069	0	0	0	0	15,175
1959	726	2,671	2,788	2,788	2,533	2,688	1,817	0	0	0	0	0	16,012
1960	1,685	2,871	3,088	2,888	2,542	2,262	1,165	0	0	0	0	270	16,772
1961	2,161	2,771	3,088	2,888	2,733	2,988	2,487	0	0	0	0	1,545	20,661
1962	2,827	2,871	2,988	2,988	2,533	2,850	1,075	1,500	0	0	0	0	19,633
1963	1,096	2,771	2,988	2,788	1,933	2,650	1,919	0	0	0	0	0	16,147
1964	0	2,671	2,888	2,888	2,762	2,429	1,156	769	0	0	0	0	15,564
1965	1,694	2,571	2,588	2,688	2,433	2,550	1,075	1,500	0	0	0	0	17,101
1966	1,336	2,471	2,788	2,888	2,533	2,450	280	0	0	0	0	0	14,746
1967	1,019	2,671	2,888	2,888	2,633	2,550	2,298	1,500	772	0	0	0	19,220
1968	2,448	2,671	2,788	2,888	2,542	2,550	1,257	1,500	0	0	0	0	18,646
1969	44	2,194	2,374	2,069	1,994	1,404	1,075	0	0	0	0	0	11,154
1970	708	2,464	2,403	2,318	1,986	2,229	1,740	1,420	0	0	0	0	15,267
1971	1,007	2,197	2,504	2,306	1,843	1,490	1,075	289	0	0	0	1,778	14,489
1972	2,142	2,270	2,439	2,439	2,129	1,516	1,251	0	0	0	0	0	14,187
1973	2,294	2,315	2,493	2,561	2,206	2,077	1,075	1,500	0	0	0	0	16,521
1974	1,543	2,073	2,249	2,271	2,028	1,356	1,075	0	0	0	0	0	12,597
1975	783	2,078	2,348	2,325	2,108	2,020	1,500	1,500	705	0	0	0	15,367
1976	0	2,166	2,316	2,357	2,126	2,047	1,152	0	0	0	0	0	12,164
1977	2,134	2,758	2,907	2,907	2,591	2,866	491	0	0	0	0	0	16,654
1978	1,695	2,676	2,785	2,785	2,510	1,633	1,075	1,500	0	0	0	933	17,592
1979	2,295	2,501	2,678	2,628	2,283	2,230	1,075	1,328	0	0	0	0	17,020
1980	2,307	2,441	2,738	2,658	2,732	2,400	1,075	1,500	0	0	0	0	17,852
1981	0	2,321	2,448	2,688	2,455	2,660	1,366	0	0	0	0	3,040	16,979
1982	2,459	2,831	2,938	2,878	2,413	1,620	1,075	1,254	0	0	0	0	17,470
1983	2,271	2,411	2,508	2,678	2,375	1,410	1,075	0	0	0	0	1,321	16,050
1984	559	2,021	1,988	2,098	2,012	1,290	1,075	0	0	0	0	0	11,045
1985	1,701	2,281	2,648	2,828	2,553	1,230	1,075	1,244	0	0	0	0	15,561
1986	1,996	2,191	2,558	2,678	1,553	1,230	1,075	1,500	0	0	0	0	14,782
1987	1,561	1,683	1,948	2,080	1,806	1,858	0	0	0	0	0	0	10,937
1988	1,658	2,641	2,825	2,840	2,636	2,596	2,283	0	0	0	0	0	17,479
1989	406	2,940	3,079	3,108	2,744	2,762	1,082	0	0	0	0	1,885	18,007
1990	3,029	3,093	3,212	3,211	2,919	3,087	2,765	0	0	0	0	0	21,317
1991	2,860	2,918	3,166	3,122	2,663	2,878	2,600	2,935	0	0	0	0	23,141
1992	2,703	2,745	2,737	2,907	2,583	2,410	0	0	0	0	0	0	16,086
1993	2,631	2,821	3,065	2,928	2,545	1,324	1,075	1,500	0	0	0	0	17,890
1994	2,248	2,620	2,752	2,721	2,342	2,299	2,106	0	0	0	0	0	17,088
1995	2,376	2,603	2,703	2,666	2,139	1,230	1,075	1,500	324	0	0	0	16,617
1996	2,088	2,199	2,357	2,293	1,947	1,304	1,075	1,500	0	0	0	0	14,762
1997	2,338	2,193	2,281	2,471	2,175	1,230	1,075	1,500	0	0	0	0	15,264
1998	1,848	1,964	2,168	2,080	1,821	1,230	1,075	1,500	0	0	0	0	13,685
1999	1,454	2,492	2,590	2,530	2,183	2,112	1,180	1,500	0	0	0	0	16,042
Average	1,551	2,478	2,651	2,634	2,324	2,112	1,208	726	36	0	0	215	15,935
Maximum	3,029	3,093	3,212	3,211	2,919	3,087	2,765	2,935	772	0	0	3,040	23,141
Minimum	0	1,452	1,834	1,834	1,553	1,230	0	0	0	0	0	0	8,787

S-6e
Bonneville Unit Operation - CUP Water (cfs)
Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)

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

S-6f
Bonneville Unit Operation - SVP Water (acre-feet)
Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	1,778	11,527	9,331	11,951	9,273	43,860
1951	163	0	0	0	0	0	258	1,264	11,843	14,880	10,225	7,411	46,045
1952	1,818	0	0	0	0	0	0	0	5,748	11,526	8,280	8,609	35,980
1953	6,148	0	0	0	0	0	1,322	2,956	13,430	13,597	9,320	6,877	53,650
1954	2,060	0	0	0	0	0	1,633	8,460	12,839	11,595	12,407	3,721	52,714
1955	2,205	0	0	0	0	0	0	1,819	12,623	15,965	9,444	5,306	47,361
1956	1,576	0	0	0	0	0	160	3,855	14,350	12,168	11,328	5,969	49,406
1957	762	0	0	0	0	0	0	0	3,471	14,712	10,997	7,120	37,062
1958	2,647	0	0	0	0	0	0	709	12,104	13,492	12,114	4,095	45,161
1959	1,938	0	0	0	0	0	178	8,880	14,583	9,393	7,586	3,891	46,449
1960	1,348	0	0	0	0	0	871	7,369	16,184	13,038	10,966	3,950	53,727
1961	807	0	0	0	0	0	0	10,723	15,182	9,681	4,766	2,618	43,777
1962	0	0	0	0	0	0	0	0	11,311	12,094	13,445	3,837	40,687
1963	1,629	0	0	0	0	0	0	5,074	5,275	15,258	11,696	4,360	43,291
1964	2,793	0	0	0	0	0	0	1,008	2,771	19,385	11,937	7,453	45,347
1965	1,171	0	0	0	0	0	0	0	4,506	9,948	7,798	4,211	27,633
1966	1,234	0	0	0	0	0	1,086	6,277	14,725	11,131	10,936	4,192	49,581
1967	1,564	0	0	0	0	0	0	0	948	15,112	13,656	9,012	40,293
1968	0	0	0	0	0	0	0	0	7,068	14,063	7,837	7,489	36,457
1969	2,083	0	0	0	0	0	0	1,778	7,426	11,995	12,721	6,275	42,278
1970	1,559	0	0	0	0	0	0	79	6,414	13,765	14,738	4,831	41,386
1971	1,349	0	0	0	0	0	0	1,488	9,033	15,137	14,017	1,899	42,923
1972	48	0	0	0	0	0	0	9,069	10,583	13,973	11,604	3,563	48,839
1973	0	0	0	0	0	0	0	0	6,073	13,836	12,171	3,490	35,571
1974	729	0	0	0	0	0	0	2,695	12,499	11,801	13,850	4,139	45,712
1975	1,404	0	0	0	0	0	0	0	1,015	16,312	15,632	8,338	42,701
1976	2,176	0	0	0	0	0	0	5,493	15,318	16,039	13,527	5,143	57,696
1977	759	0	0	0	0	0	2,355	5,897	14,667	13,177	12,531	4,731	54,118
1978	1,277	0	0	0	0	0	0	0	10,210	17,211	13,669	2,632	44,999
1979	0	0	0	0	0	0	0	172	13,815	15,645	11,160	2,482	43,275
1980	0	0	0	0	0	0	0	0	7,813	13,130	13,787	3,761	38,491
1981	2,106	0	0	0	0	0	999	4,611	12,344	14,855	12,571	0	47,487
1982	0	0	0	0	0	0	0	242	5,048	12,273	13,420	3,098	34,080
1983	0	0	0	0	0	0	0	4,681	8,287	7,265	9,535	1,155	30,922
1984	1,507	0	0	0	0	0	0	3,631	8,323	10,463	11,020	7,978	42,921
1985	0	0	0	0	0	0	0	256	9,939	8,838	14,102	3,543	36,678
1986	203	0	0	0	0	0	0	0	7,245	10,596	11,787	3,360	33,191
1987	0	0	0	0	0	0	1,725	5,902	13,864	10,764	10,646	6,462	49,363
1988	1,226	0	0	0	0	0	0	6,007	13,992	15,448	12,330	5,272	54,276
1989	1,561	0	0	0	0	0	1,752	9,113	14,585	14,882	9,094	1,135	52,123
1990	0	0	0	0	0	0	0	5,031	8,866	14,665	13,024	6,811	48,397
1991	0	0	0	0	0	0	0	0	3,449	16,820	15,579	3,755	39,602
1992	0	0	0	0	0	0	2,782	7,990	13,362	9,416	11,288	4,551	49,389
1993	0	0	0	0	0	0	0	0	3,527	11,239	13,816	6,214	34,795
1994	220	0	0	0	0	0	0	4,406	14,100	15,305	9,109	7,222	50,362
1995	0	0	0	0	0	0	0	0	1,396	7,925	12,434	5,017	26,773
1996	0	0	0	0	0	0	0	0	6,458	11,568	13,948	4,000	35,975
1997	0	0	0	0	0	0	0	0	5,428	13,676	11,201	4,054	34,359
1998	0	0	0	0	0	0	0	0	1,987	15,686	17,518	9,707	44,898
1999	976	0	0	0	0	0	0	0	8,263	16,513	13,744	5,604	45,100
Average	981	0	0	0	0	0	302	2,774	9,316	13,132	11,845	4,992	43,343
Maximum	6,148	0	0	0	0	0	2,782	10,723	16,184	19,385	17,518	9,707	57,696
Minimum	0	0	0	0	0	0	0	0	948	7,265	4,766	0	26,773

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Bonneville Unit Operation - SVP Water (cfs)
Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	29	194	152	194	156	61
1951	3	0	0	0	0	0	4	21	199	242	166	125	64
1952	30	0	0	0	0	0	0	0	97	187	135	145	50
1953	100	0	0	0	0	0	22	48	226	221	152	116	74
1954	34	0	0	0	0	0	27	138	216	189	202	63	73
1955	36	0	0	0	0	0	0	30	212	260	154	89	65
1956	26	0	0	0	0	0	3	63	241	198	184	100	68
1957	12	0	0	0	0	0	0	0	58	239	179	120	51
1958	43	0	0	0	0	0	0	12	203	219	197	69	62
1959	32	0	0	0	0	0	3	144	245	153	123	65	64
1960	22	0	0	0	0	0	15	120	272	212	178	66	74
1961	13	0	0	0	0	0	0	174	255	157	78	44	60
1962	0	0	0	0	0	0	0	0	190	197	219	64	56
1963	26	0	0	0	0	0	0	83	89	248	190	73	60
1964	45	0	0	0	0	0	0	16	47	315	194	125	62
1965	19	0	0	0	0	0	0	0	76	162	127	71	38
1966	20	0	0	0	0	0	18	102	247	181	178	70	68
1967	25	0	0	0	0	0	0	0	16	246	222	151	56
1968	0	0	0	0	0	0	0	0	119	229	127	126	50
1969	34	0	0	0	0	0	0	29	125	195	207	105	58
1970	25	0	0	0	0	0	0	1	108	224	240	81	57
1971	22	0	0	0	0	0	0	24	152	246	228	32	59
1972	1	0	0	0	0	0	0	147	178	227	189	60	67
1973	0	0	0	0	0	0	0	0	102	225	198	59	49
1974	12	0	0	0	0	0	0	44	210	192	225	70	63
1975	23	0	0	0	0	0	0	0	17	265	254	140	59
1976	35	0	0	0	0	0	0	89	257	261	220	86	79
1977	12	0	0	0	0	0	40	96	246	214	204	80	75
1978	21	0	0	0	0	0	0	0	172	280	222	44	62
1979	0	0	0	0	0	0	0	3	232	254	182	42	60
1980	0	0	0	0	0	0	0	0	131	214	224	63	53
1981	34	0	0	0	0	0	17	75	207	242	204	0	66
1982	0	0	0	0	0	0	0	4	85	200	218	52	47
1983	0	0	0	0	0	0	0	76	139	118	155	19	43
1984	25	0	0	0	0	0	0	59	140	170	179	134	59
1985	0	0	0	0	0	0	0	4	167	144	229	60	51
1986	3	0	0	0	0	0	0	0	122	172	192	56	46
1987	0	0	0	0	0	0	29	96	233	175	173	109	68
1988	20	0	0	0	0	0	0	98	235	251	201	89	75
1989	25	0	0	0	0	0	29	148	245	242	148	19	72
1990	0	0	0	0	0	0	0	82	149	239	212	114	67
1991	0	0	0	0	0	0	0	0	58	274	253	63	55
1992	0	0	0	0	0	0	47	130	225	153	184	76	68
1993	0	0	0	0	0	0	0	0	59	183	225	104	48
1994	4	0	0	0	0	0	0	72	237	249	148	121	70
1995	0	0	0	0	0	0	0	0	23	129	202	84	37
1996	0	0	0	0	0	0	0	0	109	188	227	67	50
1997	0	0	0	0	0	0	0	0	91	222	182	68	47
1998	0	0	0	0	0	0	0	0	33	255	285	163	62
1999	16	0	0	0	0	0	0	0	139	269	224	94	62
Average	16	0	0	0	0	0	5	45	157	214	193	84	60
Maximum	100	0	0	0	0	0	47	174	272	315	285	163	79
Minimum	0	0	0	0	0	0	0	0	16	118	78	0	37

S-6g
Bonneville Unit Operation - Natural Water (acre-feet)
Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)

34	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,918	4,299	3,901	4,569	5,337	7,047	19,042	26,724	13,392	8,774	5,716	5,271	108,989
1951	4,758	4,933	5,201	4,669	5,367	6,009	13,229	23,913	11,076	6,268	5,002	3,642	94,065
1952	3,924	3,941	3,839	4,539	4,633	7,092	63,026	113,062	36,739	13,630	10,186	8,759	273,371
1953	8,995	7,798	8,175	7,877	6,189	7,996	10,158	14,955	11,669	7,070	6,195	4,474	101,550
1954	4,541	4,740	4,401	5,166	4,763	6,420	8,374	8,253	5,566	3,877	3,092	3,697	62,888
1955	3,320	3,499	3,501	3,201	3,067	6,587	8,694	16,697	8,309	5,677	5,022	3,687	71,261
1956	3,126	3,499	4,601	5,099	4,277	7,507	11,394	16,645	7,754	5,357	4,511	3,313	77,083
1957	3,413	3,099	3,639	3,789	5,935	6,539	9,881	30,077	24,466	9,008	6,191	5,102	111,138
1958	5,199	4,299	4,719	4,520	5,577	8,027	16,659	40,254	12,415	6,697	5,029	4,347	117,741
1959	4,670	4,202	4,969	4,819	4,887	5,439	4,991	5,954	4,953	3,890	3,287	3,055	55,115
1960	2,820	2,402	2,701	3,419	3,309	6,048	7,341	11,626	6,078	4,200	3,516	3,263	56,723
1961	2,574	2,799	2,559	2,801	2,799	3,952	3,601	4,812	2,769	1,988	2,575	2,455	35,685
1962	2,116	2,499	2,501	3,101	7,399	6,397	24,282	28,200	10,917	5,398	4,336	3,795	100,940
1963	3,744	3,302	3,101	3,301	4,199	3,839	5,555	13,832	7,221	5,349	4,184	3,628	61,255
1964	2,748	3,199	3,201	3,001	2,389	3,682	7,970	23,324	11,110	6,232	3,709	2,855	73,420
1965	3,191	2,802	3,801	4,395	4,299	5,939	15,098	34,177	20,637	9,370	7,214	5,753	116,674
1966	4,212	4,299	4,439	4,539	4,599	8,939	9,727	14,014	7,113	4,751	4,337	3,308	74,276
1967	3,604	3,299	3,439	3,901	3,700	7,439	7,441	23,301	21,103	10,206	7,042	5,209	99,683
1968	4,316	4,099	3,901	3,593	4,977	6,368	10,341	29,516	20,636	11,401	7,263	7,511	113,922
1969	5,780	4,899	4,959	6,029	5,127	9,317	36,606	48,127	17,089	11,159	8,740	7,210	165,041
1970	5,640	4,687	5,389	6,339	5,897	6,767	7,808	24,958	14,298	8,866	6,931	6,534	104,113
1971	5,213	5,199	4,889	5,889	5,917	9,039	18,741	28,924	16,304	8,943	7,942	5,530	122,529
1972	5,583	5,307	5,569	6,349	6,157	9,739	11,213	14,754	8,636	5,023	4,604	4,195	87,128
1973	4,501	4,499	4,207	4,058	3,999	6,139	16,341	57,465	18,706	10,635	7,393	5,952	143,894
1974	5,793	5,699	5,809	6,229	5,637	10,557	16,782	37,100	13,087	8,789	8,753	5,871	130,106
1975	5,763	5,499	4,801	4,901	4,510	6,373	7,741	39,475	47,928	11,044	7,396	4,979	150,410
1976	6,317	5,897	5,799	5,969	6,957	10,337	10,441	18,501	8,738	5,173	5,681	3,843	93,651
1977	4,422	4,099	3,801	3,801	3,703	4,420	3,087	3,798	5,530	3,951	3,058	1,643	45,313
1978	2,588	3,099	3,101	3,101	2,877	9,192	17,986	31,413	20,008	7,367	4,821	4,969	110,523
1979	4,583	4,599	5,399	7,019	5,547	7,787	16,795	34,928	16,689	8,480	6,147	3,726	121,696
1980	4,663	4,399	4,325	5,601	7,489	9,139	26,495	55,121	27,434	11,610	7,383	5,733	169,392
1981	5,507	5,967	6,249	5,759	5,065	5,777	6,994	13,282	8,026	4,700	4,758	3,682	75,764
1982	4,704	4,199	4,301	5,101	5,399	12,739	32,121	67,986	27,039	12,580	8,080	9,758	194,007
1983	9,937	7,699	7,879	7,459	7,645	18,147	21,489	69,954	86,933	28,102	18,023	16,823	300,087
1984	39,961	28,499	12,901	9,501	9,089	15,939	51,881	124,948	52,379	24,563	17,533	13,984	401,179
1985	14,360	12,687	10,302	9,007	5,199	13,360	34,102	47,866	25,570	13,329	13,077	8,792	207,652
1986	9,145	8,419	7,161	7,051	15,718	20,489	45,391	56,168	24,022	13,661	11,506	8,195	226,925
1987	8,958	8,247	7,468	6,989	6,907	8,699	7,738	8,782	6,353	5,304	5,653	4,723	85,820
1988	4,222	4,907	4,358	4,248	4,557	6,038	7,793	12,960	6,833	5,616	4,886	3,998	70,417
1989	3,763	3,920	3,639	3,779	4,957	7,639	11,358	12,318	6,723	4,975	4,606	4,035	71,710
1990	3,232	3,605	3,984	3,981	4,203	6,311	8,863	10,396	4,758	6,895	4,900	3,618	64,744
1991	3,137	3,350	2,474	2,920	4,935	4,881	4,606	13,167	12,465	5,876	5,180	5,075	68,064
1992	3,026	3,399	3,400	3,570	4,286	3,867	10,347	5,278	4,750	3,575	4,549	3,767	53,813
1993	2,876	2,449	2,351	2,991	4,183	11,014	15,054	45,695	17,627	9,462	7,480	4,565	125,748
1994	4,474	3,918	3,800	3,999	4,487	6,459	5,834	10,938	7,231	5,577	5,287	4,732	66,734
1995	4,042	3,170	3,222	3,382	4,210	10,042	13,650	53,362	47,438	16,118	11,748	6,350	176,734
1996	6,273	6,016	5,819	6,249	7,507	11,889	21,581	40,190	14,726	9,485	7,052	5,936	142,720
1997	5,624	6,407	6,709	8,039	7,097	16,809	25,772	51,440	19,451	11,262	9,997	6,233	174,839
1998	6,850	6,693	11,129	7,189	7,077	13,779	23,269	51,571	25,342	16,815	12,977	8,332	191,020
1999	8,195	7,959	6,748	6,704	6,429	7,422	9,244	31,673	20,395	10,669	9,860	9,327	134,626
Average	5,706	5,248	4,970	5,070	5,409	8,427	16,079	32,037	17,529	8,775	6,888	5,505	121,644
Maximum	39,961	28,499	12,901	9,501	15,718	20,489	63,026	124,948	86,933	28,102	18,023	16,823	401,179
Minimum	2,116	2,402	2,351	2,801	2,389	3,682	3,087	3,798	2,769	1,988	2,575	1,643	35,685

S-6g
Bonneville Unit Operation - Natural Water (cfs)
Spanish Fork from Diamond Fork to Spanish Fork Diversion (Castilla Gage)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	80	72	63	74	96	115	320	435	225	143	93	89	151
1951	77	83	85	76	97	98	222	389	186	102	81	61	130
1952	64	66	62	74	81	115	1,059	1,839	617	222	166	147	377
1953	146	131	133	128	111	130	171	243	196	115	101	75	140
1954	74	80	72	84	86	104	141	134	94	63	50	62	87
1955	54	59	57	52	55	107	146	272	140	92	82	62	98
1956	51	59	75	83	74	122	191	271	130	87	73	56	106
1957	56	52	59	62	107	106	166	489	411	146	101	86	154
1958	85	72	77	74	100	131	280	655	209	109	82	73	163
1959	76	71	81	78	88	88	84	97	83	63	53	51	76
1960	46	40	44	56	58	98	123	189	102	68	57	55	78
1961	42	47	42	46	50	64	61	78	47	32	42	41	49
1962	34	42	41	50	133	104	408	459	183	88	71	64	139
1963	61	55	50	54	76	62	93	225	121	87	68	61	85
1964	45	54	52	49	42	60	134	379	187	101	60	48	101
1965	52	47	62	71	77	97	254	556	347	152	117	97	161
1966	69	72	72	74	83	145	163	228	120	77	71	56	103
1967	59	55	56	63	67	121	125	379	355	166	115	88	138
1968	70	69	63	58	87	104	174	480	347	185	118	126	157
1969	94	82	81	98	92	152	615	783	287	181	142	121	228
1970	92	79	88	103	106	110	131	406	240	144	113	110	144
1971	85	87	80	96	107	147	315	470	274	145	129	93	169
1972	91	89	91	103	107	158	188	240	145	82	75	70	120
1973	73	76	68	66	72	100	275	935	314	173	120	100	199
1974	94	96	94	101	101	172	282	603	220	143	142	99	180
1975	94	92	78	80	81	104	130	642	805	180	120	84	208
1976	103	99	94	97	121	168	175	301	147	84	92	65	129
1977	72	69	62	62	67	72	52	62	93	64	50	28	63
1978	42	52	50	50	52	150	302	511	336	120	78	84	153
1979	75	77	88	114	100	127	282	568	280	138	100	63	168
1980	76	74	70	91	130	149	445	896	461	189	120	96	233
1981	90	100	102	94	91	94	118	216	135	76	77	62	105
1982	77	71	70	83	97	207	540	1,106	454	205	131	164	268
1983	162	129	128	121	138	295	361	1,138	1,461	457	293	283	415
1984	650	479	210	155	158	259	872	2,032	880	399	285	235	553
1985	234	213	168	146	94	217	573	778	430	217	213	148	287
1986	149	141	116	115	283	333	763	913	404	222	187	138	313
1987	146	139	121	114	124	141	130	143	107	86	92	79	119
1988	69	82	71	69	79	98	131	211	115	91	79	67	97
1989	61	66	59	61	89	124	191	200	113	81	75	68	99
1990	53	61	65	65	76	103	149	169	80	112	80	61	89
1991	51	56	40	47	89	79	77	214	209	96	84	85	94
1992	49	57	55	58	75	63	174	86	80	58	74	63	74
1993	47	41	38	49	75	179	253	743	296	154	122	77	174
1994	73	66	62	65	81	105	98	178	122	91	86	80	92
1995	66	53	52	55	76	163	229	868	797	262	191	107	244
1996	102	101	95	102	131	193	363	654	247	154	115	100	197
1997	91	108	109	131	128	273	433	837	327	183	163	105	242
1998	111	112	181	117	127	224	391	839	426	273	211	140	264
1999	133	134	110	109	116	121	155	515	343	174	160	157	186
Average	93	88	81	82	97	137	270	521	295	143	112	93	168
Maximum	650	479	210	155	283	333	1,059	2,032	1,461	457	293	283	553
Minimum	34	40	38	46	42	60	52	62	47	32	42	28	49

S-7a
Bonneville Unit Operation - Total Water (acre-feet)
Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	3,251	2,706	2,914	2,830	2,407	2,237	2,907	6,715	3,920	1,749	2,054	1,597	35,286
1951	2,981	2,403	2,670	3,467	2,716	2,752	2,148	3,662	2,889	2,365	2,398	1,212	31,663
1952	1,001	2,664	2,811	2,638	2,371	2,698	31,373	80,743	11,357	4,704	3,193	2,709	148,262
1953	2,327	1,910	2,379	2,081	2,074	2,079	508	5,317	3,157	2,826	2,490	2,186	29,334
1954	745	2,790	2,999	3,237	2,860	3,689	884	2,006	2,926	1,706	1,644	582	26,069
1955	950	2,968	3,196	3,096	2,822	3,275	2,306	4,636	3,746	2,034	1,452	1,963	32,445
1956	1,687	3,268	3,196	3,494	3,727	3,995	4,428	5,738	4,111	2,363	1,687	758	38,452
1957	2,437	3,068	3,234	3,484	3,080	2,927	1,431	3,318	4,595	2,459	1,765	1,890	33,688
1958	322	2,768	3,214	3,115	2,788	3,016	1,832	8,084	4,530	2,173	1,656	1,122	34,621
1959	1,027	2,671	3,464	3,314	3,198	3,337	2,772	1,832	2,010	1,172	1,199	481	26,478
1960	1,737	2,871	3,396	3,514	2,831	3,020	2,325	3,267	3,386	3,140	3,020	1,260	33,767
1961	2,508	3,068	3,454	3,196	3,010	3,647	4,126	2,142	2,509	1,183	592	1,812	31,247
1962	2,827	3,168	3,296	3,296	2,810	3,585	2,240	8,294	3,203	2,319	1,761	466	37,266
1963	1,266	2,771	3,296	3,096	2,210	4,179	2,905	3,478	1,658	1,731	1,773	398	28,762
1964	134	2,968	3,196	3,196	3,039	3,251	1,921	2,937	1,892	3,709	1,597	900	28,741
1965	1,744	2,571	2,896	2,990	2,710	2,827	1,075	5,766	4,536	2,138	1,883	1,057	32,194
1966	1,511	2,768	3,434	3,734	2,810	2,729	2,266	2,602	3,150	1,828	1,343	502	28,678
1967	1,152	2,968	3,334	3,196	2,911	2,827	2,817	5,166	2,830	3,263	2,267	1,192	33,924
1968	2,448	2,968	3,096	2,888	2,997	2,856	1,501	3,529	4,825	2,674	1,223	1,234	32,240
1969	189	2,491	3,040	2,505	2,599	2,158	4,954	16,824	3,093	3,058	2,253	1,051	44,214
1970	981	3,350	3,202	3,667	2,863	3,435	2,653	5,209	2,462	3,259	2,515	766	34,362
1971	1,099	2,496	3,402	3,305	2,240	1,769	1,898	4,602	6,520	4,571	5,120	4,821	41,843
1972	2,467	2,577	3,318	4,098	3,075	1,795	2,926	3,967	3,567	2,436	1,774	508	32,507
1973	2,581	2,614	2,810	3,029	2,486	2,356	1,322	25,147	4,634	7,794	4,942	2,526	62,240
1974	1,871	2,372	2,968	3,510	3,045	2,653	2,608	9,629	6,487	2,804	2,014	1,010	40,971
1975	1,122	2,377	2,659	2,636	2,498	2,333	1,746	7,156	16,659	5,768	5,589	1,551	52,095
1976	745	2,663	2,925	3,336	3,973	5,724	1,398	4,760	2,826	2,083	2,414	1,151	33,996
1977	2,258	3,057	3,218	3,218	2,874	3,586	1,112	1,074	1,864	1,127	1,747	609	25,744
1978	1,695	2,975	3,096	3,096	2,777	2,466	1,766	3,178	9,752	5,171	3,795	2,479	42,246
1979	3,029	2,800	4,087	5,957	4,110	3,257	1,075	6,374	3,934	2,812	1,645	449	39,529
1980	2,643	2,740	3,074	2,969	3,011	2,679	1,380	22,802	7,593	3,632	4,906	3,257	60,687
1981	550	3,488	3,707	3,657	3,110	3,177	2,241	1,712	3,210	2,230	2,427	4,131	33,640
1982	3,043	3,130	3,249	3,189	2,692	1,899	1,901	35,436	6,301	4,281	3,695	1,055	69,873
1983	3,622	2,710	3,297	3,347	3,410	2,497	2,069	36,512	54,935	13,205	4,468	4,149	134,221
1984	6,795	2,320	2,299	2,409	2,291	1,569	20,229	91,422	22,012	12,212	7,832	6,956	178,346
1985	4,249	5,268	4,860	5,345	2,832	1,230	2,450	15,930	7,408	5,157	3,265	3,020	61,013
1986	2,496	2,490	2,869	2,989	2,901	1,509	13,739	23,849	6,256	3,322	4,430	2,719	69,568
1987	1,846	1,980	2,256	2,569	2,473	2,947	1,500	1,682	2,440	1,885	1,837	1,952	25,367
1988	1,762	2,938	3,133	3,148	3,273	2,903	4,856	4,011	2,150	1,921	1,441	497	32,034
1989	2,190	3,237	3,434	3,912	4,318	3,637	4,347	4,378	2,117	1,696	544	2,268	36,079
1990	3,029	3,390	4,177	4,093	4,544	4,019	5,994	2,332	1,578	2,707	1,294	473	37,630
1991	2,860	3,215	3,806	3,788	4,165	3,384	3,776	5,465	3,113	2,571	1,517	1,091	38,750
1992	2,703	3,042	3,504	3,634	4,037	3,094	7,668	2,238	2,586	2,035	1,634	417	36,592
1993	2,631	3,118	3,923	3,776	4,286	2,585	1,596	13,377	2,945	2,916	3,264	1,297	45,714
1994	2,555	2,917	3,060	3,057	2,878	2,755	2,990	2,453	2,944	1,767	1,613	427	29,418
1995	2,661	2,901	3,011	2,974	2,417	1,538	1,688	21,043	16,867	3,643	3,678	2,632	65,051
1996	2,088	2,496	2,726	2,752	2,975	2,133	1,413	7,874	3,344	4,083	4,456	1,470	37,808
1997	2,338	2,490	2,769	3,099	3,102	2,458	1,075	19,124	3,534	2,686	4,495	1,621	48,793
1998	1,848	2,261	7,369	2,911	2,872	2,931	1,075	19,248	1,551	4,215	3,671	2,452	52,404
1999	2,894	2,789	2,898	2,685	2,183	2,337	2,474	3,493	7,371	3,192	4,122	4,806	41,245
Average	2,098	2,841	3,272	3,290	2,994	2,835	3,594	11,631	5,866	3,316	2,668	1,739	46,142
Maximum	6,795	5,268	7,369	5,957	4,544	5,724	31,373	91,422	54,935	13,205	7,832	6,956	178,346
Minimum	134	1,910	2,256	2,081	2,074	1,230	508	1,074	1,551	1,127	544	398	25,367

S-7a
Bonneville Unit Operation - Total (cfs)
Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	53	45	47	46	43	36	49	109	66	28	33	27	49
1951	48	40	43	56	49	45	36	60	49	38	39	20	44
1952	16	45	46	43	41	44	527	1,313	191	77	52	46	204
1953	38	32	39	34	37	34	9	86	53	46	40	37	41
1954	12	47	49	53	51	60	15	33	49	28	27	10	36
1955	15	50	52	50	51	53	39	75	63	33	24	33	45
1956	27	55	52	57	65	65	74	93	69	38	27	13	53
1957	40	52	53	57	55	48	24	54	77	40	29	32	47
1958	5	47	52	51	50	49	31	131	76	35	27	19	48
1959	17	45	56	54	58	54	47	30	34	19	20	8	37
1960	28	48	55	57	49	49	39	53	57	51	49	21	47
1961	41	52	56	52	54	59	69	35	42	19	10	30	43
1962	46	53	54	54	51	58	38	135	54	38	29	8	51
1963	21	47	54	50	40	68	49	57	28	28	29	7	40
1964	2	50	52	52	53	53	32	48	32	60	26	15	40
1965	28	43	47	49	49	46	18	94	76	35	31	18	44
1966	25	47	56	61	51	44	38	42	53	30	22	8	40
1967	19	50	54	52	52	46	47	84	48	53	37	20	47
1968	40	50	50	47	52	46	25	57	81	43	20	21	44
1969	3	42	49	41	47	35	83	274	52	50	37	18	61
1970	16	56	52	60	52	56	45	85	41	53	41	13	47
1971	18	42	55	54	40	29	32	75	110	74	83	81	58
1972	40	43	54	67	53	29	49	65	60	40	29	9	45
1973	42	44	46	49	45	38	22	409	78	127	80	42	86
1974	30	40	48	57	55	43	44	157	109	46	33	17	57
1975	18	40	43	43	45	38	29	116	280	94	91	26	72
1976	12	45	48	54	69	93	23	77	47	34	39	19	47
1977	37	51	52	52	52	58	19	17	31	18	28	10	36
1978	28	50	50	50	50	40	30	52	164	84	62	42	58
1979	49	47	66	97	74	53	18	104	66	46	27	8	55
1980	43	46	50	48	52	44	23	371	128	59	80	55	84
1981	9	59	60	59	56	52	38	28	54	36	39	69	46
1982	49	53	53	52	48	31	32	576	106	70	60	18	97
1983	59	46	54	54	61	41	35	594	923	215	73	70	185
1984	111	39	37	39	40	26	340	1,487	370	199	127	117	246
1985	69	89	79	87	51	20	41	259	124	84	53	51	84
1986	41	42	47	49	52	25	231	388	105	54	72	46	96
1987	30	33	37	42	45	48	25	27	41	31	30	33	35
1988	29	49	51	51	57	47	82	65	36	31	23	8	44
1989	36	54	56	64	78	59	73	71	36	28	9	38	50
1990	49	57	68	67	82	65	101	38	27	44	21	8	52
1991	47	54	62	62	75	55	63	89	52	42	25	18	54
1992	44	51	57	59	70	50	129	36	43	33	27	7	50
1993	43	52	64	61	77	42	27	218	49	47	53	22	63
1994	42	49	50	50	52	45	50	40	49	29	26	7	41
1995	43	49	49	48	44	25	28	342	283	59	60	44	90
1996	34	42	44	45	52	35	24	128	56	66	72	25	52
1997	38	42	45	50	56	40	18	311	59	44	73	27	67
1998	30	38	120	47	52	48	18	313	26	69	60	41	72
1999	47	47	47	44	39	38	42	57	124	52	67	81	57
Average	34	48	53	54	53	46	60	189	99	54	43	29	64
Maximum	111	89	120	97	82	93	527	1,487	923	215	127	117	246
Minimum	2	32	37	34	37	20	9	17	26	18	9	7	35

S-7b
Bonneville Unit Operation - CUP Water (acre-feet)
Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,261	2,407	2,603	2,461	1,992	1,952	1,075	0	0	0	0	0	14,751
1951	2,128	2,272	2,359	2,588	2,069	2,236	817	513	0	0	0	0	14,983
1952	750	2,396	2,532	2,359	2,117	1,866	1,075	1,500	0	0	0	0	14,597
1953	0	1,452	1,834	1,834	1,854	1,813	0	0	0	0	0	0	8,787
1954	182	2,350	2,688	2,262	2,487	2,229	0	0	0	0	0	0	12,198
1955	617	2,671	2,888	2,788	2,565	2,850	1,882	0	0	0	0	0	16,262
1956	1,400	2,971	2,888	2,788	2,862	2,350	915	0	0	0	0	0	16,176
1957	2,064	2,771	2,888	2,788	2,355	2,650	1,220	1,500	0	0	0	0	18,237
1958	0	2,471	2,788	2,788	2,333	2,650	1,075	1,069	0	0	0	0	15,175
1959	726	2,671	2,788	2,788	2,533	2,688	1,817	0	0	0	0	0	16,012
1960	1,685	2,871	3,088	2,888	2,542	2,262	1,165	0	0	0	0	270	16,772
1961	2,161	2,771	3,088	2,888	2,733	2,988	2,487	0	0	0	0	1,545	20,661
1962	2,827	2,871	2,988	2,988	2,533	2,850	1,075	1,500	0	0	0	0	19,633
1963	1,096	2,771	2,988	2,788	1,933	2,650	1,919	0	0	0	0	0	16,147
1964	0	2,671	2,888	2,888	2,762	2,429	1,156	769	0	0	0	0	15,564
1965	1,694	2,571	2,588	2,688	2,433	2,550	1,075	1,500	0	0	0	0	17,101
1966	1,336	2,471	2,788	2,888	2,533	2,450	280	0	0	0	0	0	14,746
1967	1,019	2,671	2,888	2,888	2,633	2,550	2,298	1,500	772	0	0	0	19,220
1968	2,448	2,671	2,788	2,888	2,542	2,550	1,257	1,500	0	0	0	0	18,646
1969	44	2,194	2,374	2,069	1,994	1,404	1,075	0	0	0	0	0	11,154
1970	708	2,464	2,403	2,318	1,986	2,229	1,740	1,420	0	0	0	0	15,267
1971	1,007	2,197	2,504	2,306	1,843	1,490	1,075	289	0	0	0	1,778	14,489
1972	2,142	2,270	2,439	2,439	2,129	1,516	1,251	0	0	0	0	0	14,187
1973	2,294	2,315	2,493	2,561	2,206	2,077	1,075	1,500	0	0	0	0	16,521
1974	1,543	2,073	2,249	2,271	2,028	1,356	1,075	0	0	0	0	0	12,597
1975	783	2,078	2,348	2,325	2,108	2,020	1,500	1,500	705	0	0	0	15,367
1976	0	2,166	2,316	2,357	2,126	2,047	1,152	0	0	0	0	0	12,164
1977	2,134	2,758	2,907	2,907	2,591	2,866	491	0	0	0	0	0	16,654
1978	1,695	2,676	2,785	2,785	2,510	1,633	1,075	1,500	0	0	0	933	17,592
1979	2,295	2,501	2,678	2,628	2,283	2,230	1,075	1,328	0	0	0	0	17,020
1980	2,307	2,441	2,738	2,658	2,732	2,400	1,075	1,500	0	0	0	0	17,852
1981	0	2,321	2,448	2,688	2,455	2,660	1,366	0	0	0	0	3,040	16,979
1982	2,459	2,831	2,938	2,878	2,413	1,620	1,075	1,254	0	0	0	0	17,470
1983	2,271	2,411	2,508	2,678	2,375	1,410	1,075	0	0	0	0	1,321	16,050
1984	559	2,021	1,988	2,098	2,012	1,290	1,075	0	0	0	0	0	11,045
1985	1,701	2,281	2,648	2,828	2,553	1,230	1,075	1,244	0	0	0	0	15,561
1986	1,996	2,191	2,558	2,678	1,553	1,230	1,075	1,500	0	0	0	0	14,782
1987	1,561	1,683	1,948	2,080	1,806	1,858	0	0	0	0	0	0	10,937
1988	1,658	2,641	2,825	2,840	2,636	2,596	2,283	0	0	0	0	0	17,479
1989	406	2,940	3,079	3,108	2,744	2,762	1,082	0	0	0	0	1,885	18,007
1990	3,029	3,093	3,212	3,211	2,919	3,087	2,765	0	0	0	0	0	21,317
1991	2,860	2,918	3,166	3,122	2,663	2,878	2,600	2,935	0	0	0	0	23,141
1992	2,703	2,745	2,737	2,907	2,583	2,410	0	0	0	0	0	0	16,086
1993	2,631	2,821	3,065	2,928	2,545	1,324	1,075	1,500	0	0	0	0	17,890
1994	2,248	2,620	2,752	2,721	2,342	2,299	2,106	0	0	0	0	0	17,088
1995	2,376	2,603	2,703	2,666	2,139	1,230	1,075	1,500	324	0	0	0	16,617
1996	2,088	2,199	2,357	2,293	1,947	1,304	1,075	1,500	0	0	0	0	14,762
1997	2,338	2,193	2,281	2,471	2,175	1,230	1,075	1,500	0	0	0	0	15,264
1998	1,848	1,964	2,168	2,080	1,821	1,230	1,075	1,500	0	0	0	0	13,685
1999	1,454	2,492	2,590	2,530	2,183	2,112	1,180	1,500	0	0	0	0	16,042
Average	1,551	2,478	2,651	2,634	2,324	2,112	1,208	726	36	0	0	215	15,935
Maximum	3,029	3,093	3,212	3,211	2,919	3,087	2,765	2,935	772	0	0	3,040	23,141
Minimum	0	1,452	1,834	1,834	1,553	1,230	0	0	0	0	0	0	8,787

S-7b
Bonneville Unit Operation - CUP Water (cfs)
Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion

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

S-7c

Bonneville Unit Operation - SVP Water (acre-feet)

Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	67	713	685	1,165	635	3,265
1951	62	0	0	0	0	0	10	68	1,000	1,610	1,109	687	4,546
1952	48	0	0	0	0	0	0	0	0	853	479	615	1,995
1953	227	0	0	0	0	0	107	0	701	1,382	1,192	872	4,481
1954	220	0	0	0	0	0	72	589	1,657	1,229	1,380	262	5,409
1955	126	0	0	0	0	0	0	0	1,212	1,580	965	816	4,699
1956	0	0	0	0	0	0	0	0	1,530	1,164	1,288	370	4,352
1957	169	0	0	0	0	0	0	0	394	1,509	1,058	782	3,912
1958	99	0	0	0	0	0	0	17	894	1,413	1,213	428	4,064
1959	79	0	0	0	0	0	0	753	1,570	820	785	151	4,158
1960	0	0	0	0	0	0	0	0	1,789	1,269	1,110	187	4,354
1961	286	0	0	0	0	0	0	1,290	1,445	719	436	124	4,299
1962	0	0	0	0	0	0	0	0	1,299	1,403	1,363	184	4,250
1963	57	0	0	0	0	0	0	0	617	1,469	1,561	210	3,915
1964	110	0	0	0	0	0	0	0	0	2,105	1,389	713	4,318
1965	33	0	0	0	0	0	0	0	61	1,011	915	471	2,492
1966	30	0	0	0	0	0	0	292	1,734	993	1,157	269	4,476
1967	25	0	0	0	0	0	0	0	24	1,370	1,315	741	3,476
1968	0	0	0	0	0	0	0	0	758	1,527	690	805	3,779
1969	63	0	0	0	0	0	0	0	205	1,264	1,734	636	3,902
1970	132	0	0	0	0	0	0	5	506	1,488	1,633	373	4,137
1971	56	0	0	0	0	0	0	0	619	1,771	1,917	161	4,524
1972	0	0	0	0	0	0	0	1,076	1,404	1,661	756	13	4,911
1973	0	0	0	0	0	0	0	0	0	1,770	1,520	341	3,631
1974	35	0	0	0	0	0	0	0	732	1,104	1,490	591	3,951
1975	270	0	0	0	0	0	0	0	36	1,592	1,723	708	4,330
1976	397	0	0	0	0	0	0	134	1,335	1,624	1,369	751	5,610
1977	104	0	0	0	0	0	0	745	1,407	873	1,389	62	4,581
1978	0	0	0	0	0	0	0	0	529	1,786	1,566	98	3,979
1979	0	0	0	0	0	0	0	0	879	1,587	1,177	298	3,942
1980	0	0	0	0	0	0	0	0	230	1,370	2,415	153	4,169
1981	325	0	0	0	0	0	150	768	1,783	1,217	1,391	0	5,633
1982	0	0	0	0	0	0	0	14	254	1,300	1,790	413	3,772
1983	0	0	0	0	0	0	0	377	730	125	0	70	1,302
1984	94	0	0	0	0	0	0	293	0	1,184	717	0	2,287
1985	0	0	0	0	0	0	0	0	722	843	2,173	421	4,158
1986	16	0	0	0	0	0	0	0	409	695	1,241	682	3,043
1987	0	0	0	0	0	0	471	1,017	1,701	658	909	621	5,376
1988	71	0	0	0	0	0	0	701	1,505	1,550	1,208	188	5,223
1989	87	0	0	0	0	0	239	1,044	1,627	1,233	12	8	4,250
1990	0	0	0	0	0	0	0	825	806	1,139	1,105	335	4,210
1991	0	0	0	0	0	0	0	0	775	1,849	1,276	237	4,137
1992	0	0	0	0	0	0	234	570	1,589	910	802	208	4,314
1993	0	0	0	0	0	0	0	0	178	1,185	1,491	528	3,382
1994	0	0	0	0	0	0	0	465	1,918	1,037	892	207	4,519
1995	0	0	0	0	0	0	0	0	0	254	996	569	1,819
1996	0	0	0	0	0	0	0	0	581	1,060	1,693	0	3,334
1997	0	0	0	0	0	0	0	0	0	623	1,231	0	1,855
1998	0	0	0	0	0	0	0	0	85	1,289	1,872	565	3,812
1999	608	0	0	0	0	0	0	0	646	1,684	980	117	4,034
Average	77	0	0	0	0	0	26	222	812	1,237	1,221	374	3,967
Maximum	608	0	0	0	0	0	471	1,290	1,918	2,105	2,415	872	5,633
Minimum	0	0	0	0	0	0	0	0	0	125	0	0	1,302

S-7c
Bonneville Unit Operation - SVP Water (cfs)
Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	1	12	11	19	11	5
1951	1	0	0	0	0	0	0	1	17	26	18	12	6
1952	1	0	0	0	0	0	0	0	0	14	8	10	3
1953	4	0	0	0	0	0	2	0	12	22	19	15	6
1954	4	0	0	0	0	0	1	10	28	20	22	4	7
1955	2	0	0	0	0	0	0	0	20	26	16	14	6
1956	0	0	0	0	0	0	0	0	26	19	21	6	6
1957	3	0	0	0	0	0	0	0	7	25	17	13	5
1958	2	0	0	0	0	0	0	0	15	23	20	7	6
1959	1	0	0	0	0	0	0	12	26	13	13	3	6
1960	0	0	0	0	0	0	0	0	30	21	18	3	6
1961	5	0	0	0	0	0	0	21	24	12	7	2	6
1962	0	0	0	0	0	0	0	0	22	23	22	3	6
1963	1	0	0	0	0	0	0	0	10	24	25	4	5
1964	2	0	0	0	0	0	0	0	0	34	23	12	6
1965	1	0	0	0	0	0	0	0	1	16	15	8	3
1966	0	0	0	0	0	0	0	5	29	16	19	5	6
1967	0	0	0	0	0	0	0	0	0	22	21	12	5
1968	0	0	0	0	0	0	0	0	13	25	11	14	5
1969	1	0	0	0	0	0	0	0	3	21	28	11	5
1970	2	0	0	0	0	0	0	0	9	24	27	6	6
1971	1	0	0	0	0	0	0	0	10	29	31	3	6
1972	0	0	0	0	0	0	0	17	24	27	12	0	7
1973	0	0	0	0	0	0	0	0	0	29	25	6	5
1974	1	0	0	0	0	0	0	0	12	18	24	10	5
1975	4	0	0	0	0	0	0	0	1	26	28	12	6
1976	6	0	0	0	0	0	0	2	22	26	22	13	8
1977	2	0	0	0	0	0	0	12	24	14	23	1	6
1978	0	0	0	0	0	0	0	0	9	29	25	2	5
1979	0	0	0	0	0	0	0	0	15	26	19	5	5
1980	0	0	0	0	0	0	0	0	4	22	39	3	6
1981	5	0	0	0	0	0	3	12	30	20	23	0	8
1982	0	0	0	0	0	0	0	0	4	21	29	7	5
1983	0	0	0	0	0	0	0	6	12	2	0	1	2
1984	2	0	0	0	0	0	0	5	0	19	12	0	3
1985	0	0	0	0	0	0	0	0	12	14	35	7	6
1986	0	0	0	0	0	0	0	0	7	11	20	11	4
1987	0	0	0	0	0	0	8	17	29	11	15	10	7
1988	1	0	0	0	0	0	0	11	25	25	20	3	7
1989	1	0	0	0	0	0	4	17	27	20	0	0	6
1990	0	0	0	0	0	0	0	13	14	19	18	6	6
1991	0	0	0	0	0	0	0	0	13	30	21	4	6
1992	0	0	0	0	0	0	4	9	27	15	13	3	6
1993	0	0	0	0	0	0	0	0	3	19	24	9	5
1994	0	0	0	0	0	0	0	8	32	17	15	3	6
1995	0	0	0	0	0	0	0	0	0	4	16	10	3
1996	0	0	0	0	0	0	0	0	10	17	28	0	5
1997	0	0	0	0	0	0	0	0	0	10	20	0	3
1998	0	0	0	0	0	0	0	0	1	21	30	9	5
1999	10	0	0	0	0	0	0	0	11	27	16	2	6
Average	1	0	0	0	0	0	0	4	14	20	20	6	5
Maximum	10	0	0	0	0	0	8	21	32	34	39	15	8
Minimum	0	0	0	0	0	0	0	0	0	2	0	0	2

S-7d
Bonneville Unit Operation - Natural Water (acre-feet)
Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion

47	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	990	299	311	369	415	285	1,832	6,648	3,207	1,064	889	961	17,269
1951	791	131	311	879	647	516	1,322	3,081	1,889	755	1,289	525	12,134
1952	203	268	279	279	253	832	30,298	79,243	11,357	3,850	2,714	2,094	131,671
1953	2,100	458	545	247	219	266	401	5,317	2,457	1,444	1,298	1,314	16,065
1954	343	440	311	976	373	1,460	812	1,417	1,268	478	264	320	8,462
1955	207	297	308	308	257	425	424	4,636	2,534	454	487	1,147	11,483
1956	287	297	308	706	865	1,645	3,513	5,738	2,581	1,199	399	389	17,925
1957	204	297	346	696	725	277	211	1,818	4,202	950	707	1,107	11,538
1958	223	297	426	327	455	366	757	6,997	3,637	760	443	694	15,381
1959	222	0	676	526	665	649	955	1,079	440	353	414	329	6,308
1960	52	0	308	626	289	758	1,160	3,267	1,597	1,871	1,910	803	12,641
1961	61	297	366	308	277	659	1,639	852	1,064	464	156	143	6,286
1962	0	297	308	308	277	735	1,165	6,794	1,904	915	397	283	13,384
1963	113	0	308	308	277	1,529	985	3,478	1,041	261	212	188	8,700
1964	24	297	308	308	277	822	765	2,168	1,892	1,604	207	187	8,859
1965	17	0	308	302	277	277	0	4,266	4,475	1,127	968	586	12,602
1966	145	297	646	846	277	279	1,986	2,310	1,416	835	185	233	9,456
1967	108	297	446	308	278	277	519	3,666	2,034	1,893	952	450	11,228
1968	0	297	308	0	455	306	244	2,029	4,067	1,147	533	429	9,816
1969	83	297	666	436	605	755	3,878	16,824	2,887	1,794	519	415	29,159
1970	141	887	799	1,349	877	1,207	914	3,785	1,955	1,771	882	393	14,958
1971	36	299	899	999	397	279	823	4,312	5,901	2,800	3,203	2,882	22,830
1972	325	307	879	1,659	947	279	1,675	2,891	2,163	775	1,018	494	13,409
1973	288	299	317	468	279	279	246	23,647	4,634	6,024	3,422	2,185	42,087
1974	293	299	719	1,239	1,017	1,297	1,533	9,629	5,755	1,701	524	419	24,423
1975	70	299	311	311	390	313	246	5,656	15,917	4,176	3,866	843	32,398
1976	348	497	609	979	1,847	3,677	246	4,626	1,491	459	1,045	400	16,222
1977	21	299	311	311	283	720	621	329	457	254	358	547	4,509
1978	0	299	311	311	267	832	691	1,678	9,223	3,385	2,229	1,448	20,674
1979	733	299	1,409	3,329	1,827	1,027	0	5,046	3,055	1,225	468	150	18,567
1980	336	299	335	311	279	279	304	21,302	7,364	2,262	2,491	3,104	38,666
1981	225	1,167	1,259	969	655	517	725	945	1,427	1,014	1,036	1,090	11,027
1982	584	299	311	311	279	279	826	34,167	6,048	2,981	1,904	642	48,631
1983	1,351	299	789	669	1,035	1,087	994	36,135	54,205	13,080	4,468	2,758	116,869
1984	6,142	299	311	311	279	279	19,153	91,129	22,012	11,028	7,116	6,956	165,015
1985	2,547	2,987	2,212	2,517	279	0	1,375	14,686	6,686	4,315	1,092	2,599	41,294
1986	484	299	311	311	1,348	279	12,663	22,349	5,847	2,627	3,189	2,037	51,744
1987	285	297	308	489	667	1,089	1,029	664	739	1,227	929	1,331	9,053
1988	34	297	308	308	637	308	2,573	3,310	644	371	233	310	9,332
1989	1,697	297	355	805	1,574	875	3,025	3,334	490	464	532	375	13,822
1990	0	297	965	882	1,625	932	3,229	1,507	772	1,567	189	138	12,103
1991	0	297	640	666	1,502	507	1,176	2,530	2,338	722	241	854	11,473
1992	0	297	767	727	1,454	684	7,434	1,668	997	1,124	832	209	16,192
1993	0	297	858	848	1,741	1,261	521	11,877	2,767	1,731	1,773	769	24,441
1994	308	297	308	336	536	456	884	1,988	1,026	731	721	220	7,811
1995	285	297	308	308	277	308	613	19,543	16,543	3,389	2,682	2,063	46,615
1996	0	297	369	459	1,028	829	338	6,374	2,763	3,023	2,762	1,470	19,712
1997	0	297	488	628	927	1,228	0	17,624	3,534	2,063	3,263	1,621	31,674
1998	0	297	5,201	831	1,051	1,701	0	17,748	1,465	2,926	1,799	1,887	34,907
1999	832	297	308	155	0	224	1,294	1,993	6,726	1,508	3,143	4,690	21,169
Average	471	363	621	657	669	723	2,360	10,682	5,018	2,079	1,447	1,150	26,240
Maximum	6,142	2,987	5,201	3,329	1,847	3,677	30,298	91,129	54,205	13,080	7,116	6,956	165,015
Minimum	0	0	279	0	0	0	0	329	440	254	156	138	4,509

S-7d
Bonneville Unit Operation - Natural Water (cfs)
Spanish Fork River from Spanish Fork Diversion Dam to East Bench Diversion

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	16	5	5	6	7	5	31	108	54	17	14	16	24
1951	13	2	5	14	12	8	22	50	32	12	21	9	17
1952	3	5	5	5	4	14	509	1,289	191	63	44	35	181
1953	34	8	9	4	4	4	7	86	41	23	21	22	22
1954	6	7	5	16	7	24	14	23	21	8	4	5	12
1955	3	5	5	5	5	7	7	75	43	7	8	19	16
1956	5	5	5	11	15	27	59	93	43	19	6	7	25
1957	3	5	6	11	13	5	4	30	71	15	11	19	16
1958	4	5	7	5	8	6	13	114	61	12	7	12	21
1959	4	0	11	9	12	11	16	18	7	6	7	6	9
1960	1	0	5	10	5	12	20	53	27	30	31	13	17
1961	1	5	6	5	5	11	28	14	18	8	3	2	9
1962	0	5	5	5	5	12	20	110	32	15	6	5	18
1963	2	0	5	5	5	25	17	57	17	4	3	3	12
1964	0	5	5	5	5	13	13	35	32	26	3	3	12
1965	0	0	5	5	5	5	0	69	75	18	16	10	17
1966	2	5	10	14	5	5	33	38	24	14	3	4	13
1967	2	5	7	5	5	5	9	60	34	31	15	8	16
1968	0	5	5	0	8	5	4	33	68	19	9	7	14
1969	1	5	11	7	11	12	65	274	49	29	8	7	40
1970	2	15	13	22	16	20	15	62	33	29	14	7	21
1971	1	5	15	16	7	5	14	70	99	46	52	48	32
1972	5	5	14	27	16	5	28	47	36	13	17	8	18
1973	5	5	5	8	5	5	4	385	78	98	56	37	58
1974	5	5	12	20	18	21	26	157	97	28	9	7	34
1975	1	5	5	5	7	5	4	92	267	68	63	14	45
1976	6	8	10	16	32	60	4	75	25	7	17	7	22
1977	0	5	5	5	5	12	10	5	8	4	6	9	6
1978	0	5	5	5	5	14	12	27	155	55	36	24	29
1979	12	5	23	54	33	17	0	82	51	20	8	3	26
1980	5	5	5	5	5	5	5	346	124	37	41	52	53
1981	4	20	20	16	12	8	12	15	24	16	17	18	15
1982	9	5	5	5	5	5	14	556	102	48	31	11	67
1983	22	5	13	11	19	18	17	588	911	213	73	46	161
1984	100	5	5	5	5	5	322	1,482	370	179	116	117	227
1985	41	50	36	41	5	0	23	239	112	70	18	44	57
1986	8	5	5	5	24	5	213	363	98	43	52	34	71
1987	5	5	5	8	12	18	17	11	12	20	15	22	13
1988	1	5	5	5	11	5	43	54	11	6	4	5	13
1989	28	5	6	13	28	14	51	54	8	8	9	6	19
1990	0	5	16	14	29	15	54	25	13	25	3	2	17
1991	0	5	10	11	27	8	20	41	39	12	4	14	16
1992	0	5	12	12	25	11	125	27	17	18	14	4	22
1993	0	5	14	14	31	21	9	193	47	28	29	13	34
1994	5	5	5	5	10	7	15	32	17	12	12	4	11
1995	5	5	5	5	5	5	10	318	278	55	44	35	64
1996	0	5	6	7	18	13	6	104	46	49	45	25	27
1997	0	5	8	10	17	20	0	287	59	34	53	27	44
1998	0	5	85	14	19	28	0	289	25	48	29	32	48
1999	14	5	5	3	0	4	22	32	113	25	51	79	29
Average	8	6	10	11	12	12	40	174	84	34	24	19	36
Maximum	100	50	85	54	33	60	509	1,482	911	213	116	117	227
Minimum	0	0	5	0	0	0	0	5	7	4	3	2	6

S-8a
Bonneville Unit Operation - Total Water (acre-feet)
Spanish Fork River from East Bench Diversion to Mill Race Canal

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	3,251	2,706	2,914	2,830	2,407	2,237	2,515	4,135	310	129	420	547	24,400
1951	2,455	2,403	2,670	3,467	2,716	2,752	1,161	1,185	0	268	891	188	20,155
1952	750	2,664	2,811	2,638	2,371	2,698	31,373	78,440	7,048	1,229	774	1,095	133,893
1953	989	1,910	2,379	2,081	2,074	2,079	401	3,404	84	890	842	951	18,084
1954	308	2,790	2,999	3,237	2,860	3,689	75	42	809	210	116	37	17,172
1955	656	2,968	3,196	3,096	2,822	3,275	2,306	2,490	831	58	128	808	22,635
1956	1,497	3,268	3,196	3,494	3,727	3,995	3,097	3,092	1,396	809	120	196	27,888
1957	2,109	3,068	3,234	3,484	3,080	2,927	1,431	1,718	1,230	61	145	638	23,125
1958	0	2,768	3,214	3,115	2,788	3,016	1,832	3,895	1,179	207	44	263	22,322
1959	737	2,671	3,464	3,314	3,198	3,337	2,481	401	52	91	206	116	20,068
1960	1,699	2,871	3,396	3,514	2,831	3,020	1,321	1,149	1,010	1,514	1,717	903	24,946
1961	2,174	3,068	3,454	3,196	3,010	3,647	2,990	471	882	317	9	1,545	24,763
1962	2,827	3,168	3,296	3,296	2,810	3,585	2,159	3,742	1,022	458	46	20	26,430
1963	1,141	2,771	3,296	3,096	2,210	2,927	2,276	1,122	92	0	0	28	18,961
1964	0	2,968	3,196	3,196	3,039	3,251	1,921	1,258	466	704	54	28	20,082
1965	1,702	2,571	2,896	2,990	2,710	2,827	1,075	1,718	1,175	125	443	293	20,526
1966	1,377	2,768	3,434	3,734	2,810	2,729	528	0	846	450	10	79	18,766
1967	1,094	2,968	3,334	3,196	2,911	2,827	2,541	1,785	1,152	463	433	0	22,705
1968	2,448	2,968	3,096	2,888	2,997	2,856	1,501	1,500	786	54	31	22	21,148
1969	58	2,491	3,040	2,505	2,599	2,158	4,912	11,716	285	660	6	0	30,429
1970	795	3,350	3,202	3,667	2,863	3,435	2,653	2,008	123	784	393	36	23,308
1971	1,007	2,496	3,402	3,305	2,240	1,769	1,322	917	3,349	1,674	2,671	4,234	28,386
1972	2,458	2,577	3,318	4,098	3,075	1,795	2,570	0	956	262	613	134	21,856
1973	2,581	2,614	2,810	3,029	2,486	2,356	1,322	22,185	1,182	4,436	2,791	1,641	49,432
1974	1,733	2,372	2,968	3,510	3,045	2,653	2,462	5,051	2,859	804	0	3	27,461
1975	789	2,377	2,659	2,636	2,498	2,333	1,746	6,765	13,674	2,317	3,273	378	41,446
1976	182	2,663	2,925	3,336	3,973	5,724	1,398	1,045	116	0	668	73	22,102
1977	2,134	3,057	3,218	3,218	2,874	3,496	592	1	118	0	210	366	19,284
1978	1,695	2,975	3,096	3,096	2,777	2,466	1,766	1,500	5,976	2,520	1,809	1,834	31,511
1979	2,944	2,800	4,087	5,957	4,110	3,257	1,075	1,774	119	615	62	2	26,802
1980	2,614	2,740	3,074	2,969	3,011	2,679	1,075	19,620	2,984	882	1,915	2,601	46,166
1981	65	3,488	3,707	3,657	3,110	3,177	1,687	0	463	586	706	3,900	24,545
1982	2,940	3,130	3,249	3,189	2,692	1,899	1,901	32,169	2,129	901	1,172	186	55,559
1983	3,622	2,710	3,297	3,347	3,410	2,497	2,069	35,672	50,076	8,532	2,779	1,325	119,337
1984	6,701	2,320	2,299	2,409	2,291	1,569	20,229	88,987	19,219	7,091	4,496	4,649	162,261
1985	4,249	5,268	4,860	5,345	2,832	1,230	2,450	12,200	3,075	2,396	415	2,044	46,365
1986	2,383	2,490	2,869	2,989	2,901	1,509	13,739	20,869	1,383	342	1,712	1,375	54,560
1987	1,846	1,980	2,256	2,569	2,473	2,947	194	1	210	826	546	978	16,826
1988	1,658	2,938	3,133	3,148	3,273	2,903	3,572	1,021	63	12	0	0	21,722
1989	2,016	3,237	3,434	3,912	4,318	3,637	3,237	2,154	0	80	346	2,098	28,472
1990	3,029	3,390	4,177	4,093	4,544	4,019	4,517	914	305	1,193	1	0	30,182
1991	2,860	3,215	3,806	3,788	4,165	3,384	2,620	2,935	1,406	287	0	670	29,136
1992	2,703	3,042	3,504	3,634	4,037	3,094	6,732	1,365	811	969	686	66	30,643
1993	2,631	3,118	3,923	3,776	4,286	2,585	1,196	9,935	465	904	1,237	339	34,394
1994	2,555	2,917	3,060	3,057	2,878	2,755	2,106	507	526	421	527	62	21,372
1995	2,661	2,901	3,011	2,974	2,417	1,538	1,350	20,625	15,054	507	1,088	1,394	55,519
1996	2,088	2,496	2,726	2,752	2,975	2,133	1,075	4,596	55	1,836	2,144	1,469	26,345
1997	2,338	2,490	2,769	3,099	3,102	2,458	1,075	16,431	204	185	1,903	1,165	37,221
1998	1,848	2,261	7,369	2,911	2,872	2,931	1,075	15,896	2	547	757	1,263	39,733
1999	2,285	2,789	2,898	2,685	2,183	2,337	1,180	1,880	4,393	877	2,074	3,672	29,253
Average	1,934	2,841	3,272	3,290	2,994	2,808	3,158	9,046	3,039	1,030	869	914	35,194
Maximum	6,701	5,268	7,369	5,957	4,544	5,724	31,373	88,987	50,076	8,532	4,496	4,649	162,261
Minimum	0	1,910	2,256	2,081	2,074	1,230	75	0	0	0	0	0	16,826

S-8a
Bonneville Unit Operation - Total (cfs)
Spanish Fork River from East Bench Diversion to Mill Race Canal

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	53	45	47	46	43	36	42	67	5	2	7	9	34
1951	40	40	43	56	49	45	20	19	0	4	14	3	28
1952	12	45	46	43	41	44	527	1,276	118	20	13	18	184
1953	16	32	39	34	37	34	7	55	1	14	14	16	25
1954	5	47	49	53	51	60	1	1	14	3	2	1	24
1955	11	50	52	50	51	53	39	40	14	1	2	14	31
1956	24	55	52	57	65	65	52	50	23	13	2	3	38
1957	34	52	53	57	55	48	24	28	21	1	2	11	32
1958	0	47	52	51	50	49	31	63	20	3	1	4	31
1959	12	45	56	54	58	54	42	7	1	1	3	2	28
1960	28	48	55	57	49	49	22	19	17	25	28	15	34
1961	35	52	56	52	54	59	50	8	15	5	0	26	34
1962	46	53	54	54	51	58	36	61	17	7	1	0	37
1963	19	47	54	50	40	48	38	18	2	0	0	0	26
1964	0	50	52	52	53	53	32	20	8	11	1	0	28
1965	28	43	47	49	49	46	18	28	20	2	7	5	28
1966	22	47	56	61	51	44	9	0	14	7	0	1	26
1967	18	50	54	52	52	46	43	29	19	8	7	0	31
1968	40	50	50	47	52	46	25	24	13	1	1	0	29
1969	1	42	49	41	47	35	83	191	5	11	0	0	42
1970	13	56	52	60	52	56	45	33	2	13	6	1	32
1971	16	42	55	54	40	29	22	15	56	27	43	71	39
1972	40	43	54	67	53	29	43	0	16	4	10	2	30
1973	42	44	46	49	45	38	22	361	20	72	45	28	68
1974	28	40	48	57	55	43	41	82	48	13	0	0	38
1975	13	40	43	43	45	38	29	110	230	38	53	6	57
1976	3	45	48	54	69	93	23	17	2	0	11	1	30
1977	35	51	52	52	52	57	10	0	2	0	3	6	27
1978	28	50	50	50	50	40	30	24	100	41	29	31	44
1979	48	47	66	97	74	53	18	29	2	10	1	0	37
1980	43	46	50	48	52	44	18	319	50	14	31	44	64
1981	1	59	60	59	56	52	28	0	8	10	11	66	34
1982	48	53	53	52	48	31	32	523	36	15	19	3	77
1983	59	46	54	54	61	41	35	580	842	139	45	22	165
1984	109	39	37	39	40	26	340	1,447	323	115	73	78	224
1985	69	89	79	87	51	20	41	198	52	39	7	34	64
1986	39	42	47	49	52	25	231	339	23	6	28	23	75
1987	30	33	37	42	45	48	3	0	4	13	9	16	23
1988	27	49	51	51	57	47	60	17	1	0	0	0	30
1989	33	54	56	64	78	59	54	35	0	1	6	35	39
1990	49	57	68	67	82	65	76	15	5	19	0	0	42
1991	47	54	62	62	75	55	44	48	24	5	0	11	40
1992	44	51	57	59	70	50	113	22	14	16	11	1	42
1993	43	52	64	61	77	42	20	162	8	15	20	6	48
1994	42	49	50	50	52	45	35	8	9	7	9	1	30
1995	43	49	49	48	44	25	23	335	253	8	18	23	77
1996	34	42	44	45	52	35	18	75	1	30	35	25	36
1997	38	42	45	50	56	40	18	267	3	3	31	20	51
1998	30	38	120	47	52	48	18	259	0	9	12	21	55
1999	37	47	47	44	39	38	20	31	74	14	34	62	40
Average	31	48	53	54	53	46	53	147	51	17	14	15	49
Maximum	109	89	120	97	82	93	527	1,447	842	139	73	78	224
Minimum	0	32	37	34	37	20	1	0	0	0	0	0	23

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Bonneville Unit Operation - CUP Water (acre-feet)
Spanish Fork River from East Bench Diversion to Mill Race Canal

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,261	2,407	2,603	2,461	1,992	1,952	1,075	0	0	0	0	0	14,751
1951	2,128	2,272	2,359	2,588	2,069	2,236	817	513	0	0	0	0	14,983
1952	750	2,396	2,532	2,359	2,117	1,866	1,075	1,500	0	0	0	0	14,597
1953	0	1,452	1,834	1,834	1,854	1,813	0	0	0	0	0	0	8,787
1954	182	2,350	2,688	2,262	2,487	2,229	0	0	0	0	0	0	12,198
1955	617	2,671	2,888	2,788	2,565	2,850	1,882	0	0	0	0	0	16,262
1956	1,400	2,971	2,888	2,788	2,862	2,350	915	0	0	0	0	0	16,176
1957	2,064	2,771	2,888	2,788	2,355	2,650	1,220	1,500	0	0	0	0	18,237
1958	0	2,471	2,788	2,788	2,333	2,650	1,075	1,069	0	0	0	0	15,175
1959	726	2,671	2,788	2,788	2,533	2,688	1,817	0	0	0	0	0	16,012
1960	1,685	2,871	3,088	2,888	2,542	2,262	1,165	0	0	0	0	270	16,772
1961	2,161	2,771	3,088	2,888	2,733	2,988	2,487	0	0	0	0	1,545	20,661
1962	2,827	2,871	2,988	2,988	2,533	2,850	1,075	1,500	0	0	0	0	19,633
1963	1,096	2,771	2,988	2,788	1,933	2,650	1,919	0	0	0	0	0	16,147
1964	0	2,671	2,888	2,888	2,762	2,429	1,156	769	0	0	0	0	15,564
1965	1,694	2,571	2,588	2,688	2,433	2,550	1,075	1,500	0	0	0	0	17,101
1966	1,336	2,471	2,788	2,888	2,533	2,450	280	0	0	0	0	0	14,746
1967	1,019	2,671	2,888	2,888	2,633	2,550	2,298	1,500	772	0	0	0	19,220
1968	2,448	2,671	2,788	2,888	2,542	2,550	1,257	1,500	0	0	0	0	18,646
1969	44	2,194	2,374	2,069	1,994	1,404	1,075	0	0	0	0	0	11,154
1970	708	2,464	2,403	2,318	1,986	2,229	1,740	1,420	0	0	0	0	15,267
1971	1,007	2,197	2,504	2,306	1,843	1,490	1,075	289	0	0	0	1,778	14,489
1972	2,142	2,270	2,439	2,439	2,129	1,516	1,251	0	0	0	0	0	14,187
1973	2,294	2,315	2,493	2,561	2,206	2,077	1,075	1,500	0	0	0	0	16,521
1974	1,543	2,073	2,249	2,271	2,028	1,356	1,075	0	0	0	0	0	12,597
1975	783	2,078	2,348	2,325	2,108	2,020	1,500	1,500	705	0	0	0	15,367
1976	0	2,166	2,316	2,357	2,126	2,047	1,152	0	0	0	0	0	12,164
1977	2,134	2,758	2,907	2,907	2,591	2,866	491	0	0	0	0	0	16,654
1978	1,695	2,676	2,785	2,785	2,510	1,633	1,075	1,500	0	0	0	933	17,592
1979	2,295	2,501	2,678	2,628	2,283	2,230	1,075	1,328	0	0	0	0	17,020
1980	2,307	2,441	2,738	2,658	2,732	2,400	1,075	1,500	0	0	0	0	17,852
1981	0	2,321	2,448	2,688	2,455	2,660	1,366	0	0	0	0	3,040	16,979
1982	2,459	2,831	2,938	2,878	2,413	1,620	1,075	1,254	0	0	0	0	17,470
1983	2,271	2,411	2,508	2,678	2,375	1,410	1,075	0	0	0	0	1,321	16,050
1984	559	2,021	1,988	2,098	2,012	1,290	1,075	0	0	0	0	0	11,045
1985	1,701	2,281	2,648	2,828	2,553	1,230	1,075	1,244	0	0	0	0	15,561
1986	1,996	2,191	2,558	2,678	1,553	1,230	1,075	1,500	0	0	0	0	14,782
1987	1,561	1,683	1,948	2,080	1,806	1,858	0	0	0	0	0	0	10,937
1988	1,658	2,641	2,825	2,840	2,636	2,596	2,283	0	0	0	0	0	17,479
1989	406	2,940	3,079	3,108	2,744	2,762	1,082	0	0	0	0	1,885	18,007
1990	3,029	3,093	3,212	3,211	2,919	3,087	2,765	0	0	0	0	0	21,317
1991	2,860	2,918	3,166	3,122	2,663	2,878	2,600	2,935	0	0	0	0	23,141
1992	2,703	2,745	2,737	2,907	2,583	2,410	0	0	0	0	0	0	16,086
1993	2,631	2,821	3,065	2,928	2,545	1,324	1,075	1,500	0	0	0	0	17,890
1994	2,248	2,620	2,752	2,721	2,342	2,299	2,106	0	0	0	0	0	17,088
1995	2,376	2,603	2,703	2,666	2,139	1,230	1,075	1,500	324	0	0	0	16,617
1996	2,088	2,199	2,357	2,293	1,947	1,304	1,075	1,500	0	0	0	0	14,762
1997	2,338	2,193	2,281	2,471	2,175	1,230	1,075	1,500	0	0	0	0	15,264
1998	1,848	1,964	2,168	2,080	1,821	1,230	1,075	1,500	0	0	0	0	13,685
1999	1,454	2,492	2,590	2,530	2,183	2,112	1,180	1,500	0	0	0	0	16,042
Average	1,551	2,478	2,651	2,634	2,324	2,112	1,208	726	36	0	0	215	15,935
Maximum	3,029	3,093	3,212	3,211	2,919	3,087	2,765	2,935	772	0	0	3,040	23,141
Minimum	0	1,452	1,834	1,834	1,553	1,230	0	0	0	0	0	0	8,787

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Bonneville Unit Operation - CUP Water (cfs)
Spanish Fork River from East Bench Diversion to Mill Race Canal

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

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Bonneville Unit Operation - SVP Water (acre-feet)

Spanish Fork River from East Bench Diversion to Mill Race Canal

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

S-8c
Bonneville Unit Operation - SVP Water (cfs)
Spanish Fork River from East Bench Diversion to Mill Race Canal

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
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

S-8d
Bonneville Unit Operation - Natural Water (acre-feet)
Spanish Fork River from East Bench Diversion to Mill Race Canal

54	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	990	299	311	369	415	285	1,439	4,135	310	129	420	547	9,649
1951	327	131	311	879	647	516	344	672	0	268	891	188	5,173
1952	0	268	279	279	253	832	30,298	76,940	7,048	1,229	774	1,095	119,296
1953	989	458	545	247	219	266	401	3,404	84	890	842	951	9,297
1954	126	440	311	976	373	1,460	75	42	809	210	116	37	4,974
1955	39	297	308	308	257	425	424	2,490	831	58	128	808	6,373
1956	97	297	308	706	865	1,645	2,182	3,092	1,396	809	120	196	11,712
1957	44	297	346	696	725	277	211	218	1,230	61	145	638	4,887
1958	0	297	426	327	455	366	757	2,826	1,179	207	44	263	7,146
1959	11	0	676	526	665	649	664	401	52	91	206	116	4,056
1960	14	0	308	626	289	758	156	1,149	1,010	1,514	1,717	633	8,174
1961	13	297	366	308	277	659	504	471	882	317	9	0	4,102
1962	0	297	308	308	277	735	1,084	2,242	1,022	458	46	20	6,797
1963	45	0	308	308	277	277	357	1,122	92	0	0	28	2,815
1964	0	297	308	308	277	822	765	489	466	704	54	28	4,518
1965	7	0	308	302	277	277	0	218	1,175	125	443	293	3,426
1966	41	297	646	846	277	279	249	0	846	450	10	79	4,019
1967	75	297	446	308	278	277	244	285	380	463	433	0	3,485
1968	0	297	308	0	455	306	244	0	786	54	31	22	2,502
1969	14	297	666	436	605	755	3,837	11,716	285	660	6	0	19,276
1970	87	887	799	1,349	877	1,207	914	588	123	784	393	36	8,041
1971	0	299	899	999	397	279	246	628	3,349	1,674	2,671	2,456	13,896
1972	316	307	879	1,659	947	279	1,319	0	956	262	613	134	7,668
1973	288	299	317	468	279	279	246	20,685	1,182	4,436	2,791	1,641	32,911
1974	190	299	719	1,239	1,017	1,297	1,387	5,051	2,859	804	0	3	14,864
1975	6	299	311	311	390	313	246	5,265	12,969	2,317	3,273	378	26,079
1976	182	497	609	979	1,847	3,677	246	1,045	116	0	668	73	9,939
1977	0	299	311	311	283	630	101	1	118	0	210	366	2,631
1978	0	299	311	311	267	832	691	0	5,976	2,520	1,809	901	13,919
1979	648	299	1,409	3,329	1,827	1,027	0	446	119	615	62	2	9,782
1980	307	299	335	311	279	279	0	18,120	2,984	882	1,915	2,601	28,313
1981	65	1,167	1,259	969	655	517	321	0	463	586	706	859	7,566
1982	481	299	311	311	279	279	826	30,915	2,129	901	1,172	186	38,090
1983	1,351	299	789	669	1,035	1,087	994	35,672	50,076	8,532	2,779	4	103,287
1984	6,142	299	311	311	279	279	19,153	88,987	19,219	7,091	4,496	4,649	151,217
1985	2,547	2,987	2,212	2,517	279	0	1,375	10,956	3,075	2,396	415	2,044	30,803
1986	388	299	311	311	1,348	279	12,663	19,369	1,383	342	1,712	1,375	39,778
1987	285	297	308	489	667	1,089	194	1	210	826	546	978	5,889
1988	0	297	308	308	637	308	1,289	1,021	63	12	0	0	4,243
1989	1,610	297	355	805	1,574	875	2,155	2,154	0	80	346	214	10,465
1990	0	297	965	882	1,625	932	1,752	914	305	1,193	1	0	8,865
1991	0	297	640	666	1,502	507	21	0	1,406	287	0	670	5,995
1992	0	297	767	727	1,454	684	6,732	1,365	811	969	686	66	14,557
1993	0	297	858	848	1,741	1,261	121	8,435	465	904	1,237	339	16,504
1994	308	297	308	336	536	456	0	507	526	421	527	62	4,284
1995	285	297	308	308	277	308	275	19,125	14,730	507	1,088	1,394	38,902
1996	0	297	369	459	1,028	829	0	3,096	55	1,836	2,144	1,469	11,582
1997	0	297	488	628	927	1,228	0	14,931	204	185	1,903	1,165	21,957
1998	0	297	5,201	831	1,051	1,701	0	14,396	2	547	757	1,263	26,047
1999	832	297	308	155	0	224	0	380	4,393	877	2,074	3,672	13,212
Average	383	363	621	657	669	696	1,950	8,319	3,003	1,030	869	699	19,259
Maximum	6,142	2,987	5,201	3,329	1,847	3,677	30,298	88,987	50,076	8,532	4,496	4,649	151,217
Minimum	0	0	279	0	0	0	0	0	0	0	0	0	2,502

S-8d
Bonneville Unit Operation - Natural Water (cfs)
Spanish Fork River from East Bench Diversion to Mill Race Canal

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	16	5	5	6	7	5	24	67	5	2	7	9	13
1951	5	2	5	14	12	8	6	11	0	4	14	3	7
1952	0	5	5	5	4	14	509	1,251	118	20	13	18	164
1953	16	8	9	4	4	4	7	55	1	14	14	16	13
1954	2	7	5	16	7	24	1	1	14	3	2	1	7
1955	1	5	5	5	5	7	7	40	14	1	2	14	9
1956	2	5	5	11	15	27	37	50	23	13	2	3	16
1957	1	5	6	11	13	5	4	4	21	1	2	11	7
1958	0	5	7	5	8	6	13	46	20	3	1	4	10
1959	0	0	11	9	12	11	11	7	1	1	3	2	6
1960	0	0	5	10	5	12	3	19	17	25	28	11	11
1961	0	5	6	5	5	11	8	8	15	5	0	0	6
1962	0	5	5	5	5	12	18	36	17	7	1	0	9
1963	1	0	5	5	5	5	6	18	2	0	0	0	4
1964	0	5	5	5	5	13	13	8	8	11	1	0	6
1965	0	0	5	5	5	5	0	4	20	2	7	5	5
1966	1	5	10	14	5	5	4	0	14	7	0	1	6
1967	1	5	7	5	5	5	4	5	6	8	7	0	5
1968	0	5	5	0	8	5	4	0	13	1	1	0	3
1969	0	5	11	7	11	12	64	191	5	11	0	0	27
1970	1	15	13	22	16	20	15	10	2	13	6	1	11
1971	0	5	15	16	7	5	4	10	56	27	43	41	19
1972	5	5	14	27	16	5	22	0	16	4	10	2	11
1973	5	5	5	8	5	5	4	336	20	72	45	28	45
1974	3	5	12	20	18	21	23	82	48	13	0	0	21
1975	0	5	5	5	7	5	4	86	218	38	53	6	36
1976	3	8	10	16	32	60	4	17	2	0	11	1	14
1977	0	5	5	5	5	10	2	0	2	0	3	6	4
1978	0	5	5	5	5	14	12	0	100	41	29	15	19
1979	11	5	23	54	33	17	0	7	2	10	1	0	14
1980	5	5	5	5	5	5	0	295	50	14	31	44	39
1981	1	20	20	16	12	8	5	0	8	10	11	14	10
1982	8	5	5	5	5	5	14	503	36	15	19	3	53
1983	22	5	13	11	19	18	17	580	842	139	45	0	143
1984	100	5	5	5	5	5	322	1,447	323	115	73	78	208
1985	41	50	36	41	5	0	23	178	52	39	7	34	43
1986	6	5	5	5	24	5	213	315	23	6	28	23	55
1987	5	5	5	8	12	18	3	0	4	13	9	16	8
1988	0	5	5	5	11	5	22	17	1	0	0	0	6
1989	26	5	6	13	28	14	36	35	0	1	6	4	14
1990	0	5	16	14	29	15	29	15	5	19	0	0	12
1991	0	5	10	11	27	8	0	0	24	5	0	11	8
1992	0	5	12	12	25	11	113	22	14	16	11	1	20
1993	0	5	14	14	31	21	2	137	8	15	20	6	23
1994	5	5	5	5	10	7	0	8	9	7	9	1	6
1995	5	5	5	5	5	5	5	311	248	8	18	23	54
1996	0	5	6	7	18	13	0	50	1	30	35	25	16
1997	0	5	8	10	17	20	0	243	3	3	31	20	30
1998	0	5	85	14	19	28	0	234	0	9	12	21	36
1999	14	5	5	3	0	4	0	6	74	14	34	62	18
Average	6	6	10	11	12	11	33	135	50	17	14	12	27
Maximum	100	50	85	54	33	60	509	1,447	842	139	73	78	208
Minimum	0	0	5	0	0	0	0	0	0	0	0	0	3

S-9a

Bonneville Unit Operation - Total Water (acre-feet)

Spanish Fork River from Mill Race Canal to Lake Shore Gage

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	5,650	6,887	6,696	7,337	7,606	9,296	13,825	10,630	1,785	1,803	1,624	973	74,111
1951	4,644	7,386	7,741	7,564	7,713	8,552	8,774	5,593	1,904	1,484	978	655	62,989
1952	2,951	6,518	6,552	7,079	6,999	9,266	64,399	97,891	15,295	1,580	941	2,396	221,868
1953	2,578	9,431	10,316	9,919	8,225	10,105	8,414	3,652	1,645	1,267	1,625	897	68,076
1954	2,522	7,271	7,380	7,735	7,527	8,956	6,486	856	1,129	818	1,027	465	52,173
1955	2,349	6,351	6,570	6,170	5,846	9,744	10,210	4,051	1,325	1,755	1,572	422	56,366
1956	2,704	6,651	7,726	8,194	7,416	10,164	6,460	1,641	1,909	1,592	1,543	819	56,823
1957	4,084	6,051	6,834	6,884	8,567	9,370	10,923	21,233	9,624	2,187	992	542	87,292
1958	2,891	7,028	7,814	7,614	8,187	10,984	17,916	18,833	1,733	1,396	1,512	525	86,434
1959	3,263	7,054	8,064	7,914	7,697	8,434	4,301	570	907	703	533	241	49,682
1960	3,836	5,454	5,986	6,614	6,102	8,587	5,783	1,171	2,085	935	1,175	1,013	48,742
1961	3,913	5,751	5,954	5,986	5,780	6,503	3,671	1,600	809	422	348	1,898	42,637
1962	5,124	5,551	5,670	6,270	10,113	9,554	22,600	7,529	2,501	1,144	1,543	794	78,394
1963	4,340	6,254	6,270	6,305	6,313	4,802	2,353	2,512	1,248	2,644	1,492	668	45,202
1964	2,616	6,051	6,277	6,100	5,373	6,359	9,316	14,065	3,040	2,115	1,527	672	63,512
1965	4,981	5,554	6,570	7,264	6,918	8,670	14,078	9,772	3,823	1,795	1,678	1,780	72,883
1966	4,807	6,951	7,534	7,734	7,313	11,570	4,945	3,742	1,933	1,226	1,927	841	60,524
1967	4,319	6,151	6,634	7,074	6,610	10,170	8,365	5,251	7,679	2,179	2,098	953	67,486
1968	6,945	6,951	6,870	6,662	7,796	9,224	11,793	16,695	5,117	3,685	2,502	3,713	87,954
1969	5,463	7,280	7,640	8,405	7,399	11,028	35,882	17,303	5,774	3,139	3,322	2,982	115,616
1970	5,980	7,448	8,099	8,964	8,161	9,303	7,302	8,100	4,494	1,628	2,559	2,876	74,912
1971	6,214	7,577	7,700	8,503	8,037	10,810	14,457	12,865	3,808	1,568	2,215	2,923	86,677
1972	7,817	7,874	8,315	9,095	8,563	11,444	8,392	3,430	1,066	1,413	1,712	333	69,455
1973	6,975	7,060	7,000	6,926	6,445	8,397	17,597	40,691	2,698	1,709	638	263	106,398
1974	6,665	7,953	8,365	8,808	7,943	12,220	17,341	11,648	1,927	1,162	3,588	1,585	89,206
1975	6,211	7,758	7,330	7,490	6,895	8,701	9,501	36,044	29,289	1,403	862	1,237	122,722
1976	5,344	8,360	8,422	8,633	9,360	12,691	11,498	5,076	2,686	2,199	2,271	1,061	77,601
1977	6,610	7,038	6,980	6,992	6,571	7,210	1,061	1,418	4,270	3,516	1,932	130	53,730
1978	4,285	5,956	6,067	6,067	5,638	11,133	18,838	19,489	3,738	1,635	713	2,579	86,139
1979	5,988	7,281	8,384	9,954	8,107	10,324	17,673	12,833	5,140	3,699	2,257	1,414	93,056
1980	6,675	7,051	7,371	8,518	10,467	11,770	24,524	38,661	8,646	2,632	1,617	1,448	129,378
1981	4,210	8,585	9,004	8,754	7,797	8,744	5,607	7,754	1,989	1,745	1,419	3,667	69,276
1982	6,509	7,276	7,478	8,176	8,053	14,573	32,693	50,540	7,011	2,188	1,358	5,920	151,774
1983	12,515	10,324	10,694	10,444	10,297	19,864	22,861	69,294	68,596	6,698	5,844	6,896	254,329
1984	40,812	30,701	15,070	11,780	11,282	17,500	53,254	116,221	37,868	4,912	4,240	3,420	347,061
1985	16,369	15,266	13,257	12,142	7,933	14,771	34,248	30,946	12,196	4,890	5,477	4,748	172,245
1986	10,603	10,791	9,909	9,910	17,548	22,007	46,647	46,878	4,461	2,982	1,980	2,775	186,493
1987	10,760	10,148	9,597	9,376	8,991	10,864	3,927	2,328	1,724	1,395	2,160	1,621	72,891
1988	5,812	7,768	7,364	7,269	7,471	8,838	6,459	4,584	2,145	2,865	2,558	1,133	64,267
1989	3,611	7,041	7,025	7,194	7,978	10,708	9,626	5,440	2,885	2,779	2,443	3,266	69,996
1990	6,442	6,886	7,503	7,499	7,399	9,705	7,063	3,491	526	4,265	2,793	1,754	65,327
1991	6,178	6,449	5,947	6,349	7,876	8,066	5,181	7,052	4,169	1,858	2,793	2,664	64,581
1992	5,910	6,325	6,444	6,784	7,146	6,584	8,131	1,469	1,858	702	2,486	1,981	55,821
1993	5,688	5,451	5,723	6,227	7,006	12,645	15,436	32,289	4,970	2,809	1,725	751	100,720
1994	6,765	6,719	6,825	7,027	7,107	9,065	6,341	3,081	2,405	2,573	2,514	2,990	63,410
1995	6,655	5,954	6,106	6,229	6,531	11,452	14,462	53,566	40,163	4,990	3,527	740	160,375
1996	8,541	8,395	8,483	8,849	9,731	13,500	22,422	22,844	3,161	1,712	1,360	1,531	110,530
1997	8,142	8,781	9,297	10,817	9,549	18,346	26,846	35,867	5,980	2,098	1,576	214	137,513
1998	8,879	8,838	13,604	9,576	9,176	15,316	24,358	38,614	10,727	5,601	5,754	4,141	154,583
1999	8,984	10,633	9,519	9,416	8,793	9,716	8,882	28,058	9,319	4,557	4,047	3,779	115,702
Average	6,643	7,925	7,880	7,972	7,987	10,752	15,462	19,903	7,224	2,361	2,128	1,862	98,099
Maximum	40,812	30,701	15,070	12,142	17,548	22,007	64,399	116,221	68,596	6,698	5,844	6,896	347,061
Minimum	2,349	5,451	5,670	5,986	5,373	4,802	1,061	570	526	422	348	130	42,637

S-9a
Bonneville Unit Operation - Total (cfs)
Spanish Fork River from Mill Race Canal to Lake Shore Gage

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	92	116	109	119	137	151	232	173	30	29	26	16	102
1951	76	124	126	123	139	139	147	91	32	24	16	11	87
1952	48	110	107	115	122	151	1,082	1,592	257	26	15	40	306
1953	42	158	168	161	148	164	141	59	28	21	26	15	94
1954	41	122	120	126	136	146	109	14	19	13	17	8	72
1955	38	107	107	100	105	158	172	66	22	29	26	7	78
1956	44	112	126	133	129	165	109	27	32	26	25	14	78
1957	66	102	111	112	154	152	184	345	162	36	16	9	121
1958	47	118	127	124	147	179	301	306	29	23	25	9	119
1959	53	119	131	129	139	137	72	9	15	11	9	4	69
1960	62	92	97	108	106	140	97	19	35	15	19	17	67
1961	64	97	97	97	104	106	62	26	14	7	6	32	59
1962	83	93	92	102	182	155	380	122	42	19	25	13	108
1963	71	105	102	103	114	78	40	41	21	43	24	11	62
1964	43	102	102	99	93	103	157	229	51	34	25	11	87
1965	81	93	107	118	125	141	237	159	64	29	27	30	101
1966	78	117	123	126	132	188	83	61	32	20	31	14	84
1967	70	103	108	115	119	165	141	85	129	35	34	16	93
1968	113	117	112	108	136	150	198	272	86	60	41	62	121
1969	89	122	124	137	133	179	603	281	97	51	54	50	160
1970	97	125	132	146	147	151	123	132	76	26	42	48	103
1971	101	127	125	138	145	176	243	209	64	26	36	49	120
1972	127	132	135	148	149	186	141	56	18	23	28	6	96
1973	113	119	114	113	116	137	296	662	45	28	10	4	147
1974	108	134	136	143	143	199	291	189	32	19	58	27	123
1975	101	130	119	122	124	142	160	586	492	23	14	21	170
1976	87	140	137	140	163	206	193	83	45	36	37	18	107
1977	108	118	114	114	118	117	18	23	72	57	31	2	74
1978	70	100	99	99	102	181	317	317	63	27	12	43	119
1979	97	122	136	162	146	168	297	209	86	60	37	24	129
1980	109	118	120	139	182	191	412	629	145	43	26	24	178
1981	68	144	146	142	140	142	94	126	33	28	23	62	96
1982	106	122	122	133	145	237	549	822	118	36	22	99	210
1983	204	173	174	170	185	323	384	1,127	1,153	109	95	116	351
1984	664	516	245	192	196	285	895	1,890	636	80	69	57	478
1985	266	257	216	197	143	240	576	503	205	80	89	80	238
1986	172	181	161	161	316	358	784	762	75	48	32	47	258
1987	175	171	156	152	162	177	66	38	29	23	35	27	101
1988	95	131	120	118	130	144	109	75	36	47	42	19	89
1989	59	118	114	117	144	174	162	88	48	45	40	55	97
1990	105	116	122	122	133	158	119	57	9	69	45	29	90
1991	100	108	97	103	142	131	87	115	70	30	45	45	89
1992	96	106	105	110	124	107	137	24	31	11	40	33	77
1993	93	92	93	101	126	206	259	525	84	46	28	13	139
1994	110	113	111	114	128	147	107	50	40	42	41	50	88
1995	108	100	99	101	118	186	243	871	675	81	57	12	222
1996	139	141	138	144	169	220	377	372	53	28	22	26	152
1997	132	148	151	176	172	298	451	583	101	34	26	4	190
1998	144	149	221	156	165	249	409	628	180	91	94	70	214
1999	146	179	155	153	158	158	149	456	157	74	66	64	160
Average	108	133	128	130	143	175	260	324	121	38	35	31	135
Maximum	664	516	245	197	316	358	1,082	1,890	1,153	109	95	116	478
Minimum	38	92	92	97	93	78	18	9	9	7	6	2	59

S-9b
Bonneville Unit Operation - CUP Water (acre-feet)
Spanish Fork River from Mill Race Canal to Lake Shore Gage

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,261	2,407	2,603	2,461	1,992	1,952	1,075	0	0	0	0	0	14,751
1951	2,128	2,272	2,359	2,588	2,069	2,236	817	513	0	0	0	0	14,983
1952	750	2,396	2,532	2,359	2,117	1,866	1,075	1,500	0	0	0	0	14,597
1953	0	1,452	1,834	1,834	1,854	1,813	0	0	0	0	0	0	8,787
1954	182	2,350	2,688	2,262	2,487	2,229	0	0	0	0	0	0	12,198
1955	617	2,671	2,888	2,788	2,565	2,850	1,882	0	0	0	0	0	16,262
1956	1,400	2,971	2,888	2,788	2,862	2,350	915	0	0	0	0	0	16,176
1957	2,064	2,771	2,888	2,788	2,355	2,650	1,220	1,500	0	0	0	0	18,237
1958	0	2,471	2,788	2,788	2,333	2,650	1,075	1,069	0	0	0	0	15,175
1959	726	2,671	2,788	2,788	2,533	2,688	1,817	0	0	0	0	0	16,012
1960	1,685	2,871	3,088	2,888	2,542	2,262	1,165	0	0	0	0	270	16,772
1961	2,161	2,771	3,088	2,888	2,733	2,988	2,487	0	0	0	0	1,545	20,661
1962	2,827	2,871	2,988	2,988	2,533	2,850	1,075	1,500	0	0	0	0	19,633
1963	1,096	2,771	2,988	2,788	1,933	2,650	1,919	0	0	0	0	0	16,147
1964	0	2,671	2,888	2,888	2,762	2,429	1,156	769	0	0	0	0	15,564
1965	1,694	2,571	2,588	2,688	2,433	2,550	1,075	1,500	0	0	0	0	17,101
1966	1,336	2,471	2,788	2,888	2,533	2,450	280	0	0	0	0	0	14,746
1967	1,019	2,671	2,888	2,888	2,633	2,550	2,298	1,500	772	0	0	0	19,220
1968	2,448	2,671	2,788	2,888	2,542	2,550	1,257	1,500	0	0	0	0	18,646
1969	44	2,194	2,374	2,069	1,994	1,404	1,075	0	0	0	0	0	11,154
1970	708	2,464	2,403	2,318	1,986	2,229	1,740	1,420	0	0	0	0	15,267
1971	1,007	2,197	2,504	2,306	1,843	1,490	1,075	289	0	0	0	1,778	14,489
1972	2,142	2,270	2,439	2,439	2,129	1,516	1,251	0	0	0	0	0	14,187
1973	2,294	2,315	2,493	2,561	2,206	2,077	1,075	1,500	0	0	0	0	16,521
1974	1,543	2,073	2,249	2,271	2,028	1,356	1,075	0	0	0	0	0	12,597
1975	783	2,078	2,348	2,325	2,108	2,020	1,500	1,500	705	0	0	0	15,367
1976	0	2,166	2,316	2,357	2,126	2,047	1,152	0	0	0	0	0	12,164
1977	2,134	2,758	2,907	2,907	2,591	2,866	491	0	0	0	0	0	16,654
1978	1,695	2,676	2,785	2,785	2,510	1,633	1,075	1,500	0	0	0	933	17,592
1979	2,295	2,501	2,678	2,628	2,283	2,230	1,075	1,328	0	0	0	0	17,020
1980	2,307	2,441	2,738	2,658	2,732	2,400	1,075	1,500	0	0	0	0	17,852
1981	0	2,321	2,448	2,688	2,455	2,660	1,366	0	0	0	0	3,040	16,979
1982	2,459	2,831	2,938	2,878	2,413	1,620	1,075	1,254	0	0	0	0	17,470
1983	2,271	2,411	2,508	2,678	2,375	1,410	1,075	0	0	0	0	1,321	16,050
1984	559	2,021	1,988	2,098	2,012	1,290	1,075	0	0	0	0	0	11,045
1985	1,701	2,281	2,648	2,828	2,553	1,230	1,075	1,244	0	0	0	0	15,561
1986	1,996	2,191	2,558	2,678	1,553	1,230	1,075	1,500	0	0	0	0	14,782
1987	1,561	1,683	1,948	2,080	1,806	1,858	0	0	0	0	0	0	10,937
1988	1,658	2,641	2,825	2,840	2,636	2,596	2,283	0	0	0	0	0	17,479
1989	406	2,940	3,079	3,108	2,744	2,762	1,082	0	0	0	0	1,885	18,007
1990	3,029	3,093	3,212	3,211	2,919	3,087	2,765	0	0	0	0	0	21,317
1991	2,860	2,918	3,166	3,122	2,663	2,878	2,600	2,935	0	0	0	0	23,141
1992	2,703	2,745	2,737	2,907	2,583	2,410	0	0	0	0	0	0	16,086
1993	2,631	2,821	3,065	2,928	2,545	1,324	1,075	1,500	0	0	0	0	17,890
1994	2,248	2,620	2,752	2,721	2,342	2,299	2,106	0	0	0	0	0	17,088
1995	2,376	2,603	2,703	2,666	2,139	1,230	1,075	1,500	324	0	0	0	16,617
1996	2,088	2,199	2,357	2,293	1,947	1,304	1,075	1,500	0	0	0	0	14,762
1997	2,338	2,193	2,281	2,471	2,175	1,230	1,075	1,500	0	0	0	0	15,264
1998	1,848	1,964	2,168	2,080	1,821	1,230	1,075	1,500	0	0	0	0	13,685
1999	1,454	2,492	2,590	2,530	2,183	2,112	1,180	1,500	0	0	0	0	16,042
Average	1,551	2,478	2,651	2,634	2,324	2,112	1,208	726	36	0	0	215	15,935
Maximum	3,029	3,093	3,212	3,211	2,919	3,087	2,765	2,935	772	0	0	3,040	23,141
Minimum	0	1,452	1,834	1,834	1,553	1,230	0	0	0	0	0	0	8,787

S-9b
Bonneville Unit Operation - CUP Water (cfs)
Spanish Fork River from Mill Race Canal to Lake Shore Gage

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

S-9c
Bonneville Unit Operation - SVP Water (acre-feet)
Spanish Fork River from Mill Race Canal to Lake Shore Gage

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	173	1,536	881	2,591
1951	0	0	0	0	0	0	0	0	0	1,129	880	655	2,664
1952	95	0	0	0	0	0	0	0	0	0	0	791	886
1953	295	0	0	0	0	0	119	0	0	763	1,196	738	3,111
1954	146	0	0	0	0	0	13	96	1,129	745	980	292	3,402
1955	125	0	0	0	0	0	0	0	1,189	1,098	949	331	3,691
1956	98	0	0	0	0	0	0	0	1,909	955	1,137	633	4,731
1957	273	0	0	0	0	0	0	0	141	804	992	542	2,752
1958	87	0	0	0	0	0	0	0	47	1,296	954	525	2,908
1959	78	0	0	0	0	0	0	570	907	401	482	241	2,679
1960	0	0	0	0	0	0	0	0	1,670	935	818	402	3,825
1961	74	0	0	0	0	0	0	965	809	421	271	146	2,686
1962	0	0	0	0	0	0	0	0	655	838	1,134	363	2,992
1963	105	0	0	0	0	0	0	0	0	1,312	847	264	2,528
1964	220	0	0	0	0	0	0	0	0	1,353	872	644	3,089
1965	77	0	0	0	0	0	0	0	0	197	559	285	1,118
1966	91	0	0	0	0	0	0	0	1,319	637	767	286	3,100
1967	266	0	0	0	0	0	0	0	0	17	1,104	594	1,980
1968	0	0	0	0	0	0	0	0	31	655	631	534	1,850
1969	125	0	0	0	0	0	0	0	0	0	751	673	1,550
1970	130	0	0	0	0	0	0	1	0	460	1,264	241	2,096
1971	201	0	0	0	0	0	0	0	0	707	1,380	0	2,288
1972	0	0	0	0	0	0	0	0	0	798	1,440	77	2,315
1973	0	0	0	0	0	0	0	0	0	953	638	194	1,785
1974	21	0	0	0	0	0	0	0	0	133	1,059	510	1,724
1975	246	0	0	0	0	0	0	0	0	0	862	935	2,043
1976	260	0	0	0	0	0	0	0	1,599	1,392	1,570	449	5,270
1977	70	0	0	0	0	0	44	360	953	1,077	901	113	3,518
1978	78	0	0	0	0	0	0	0	0	1,635	713	168	2,594
1979	0	0	0	0	0	0	0	0	0	1,014	798	195	2,007
1980	0	0	0	0	0	0	0	0	0	0	1,617	242	1,858
1981	109	0	0	0	0	0	0	0	971	1,132	717	0	2,928
1982	0	0	0	0	0	0	0	3	0	0	1,358	43	1,404
1983	0	0	0	0	0	0	0	89	357	0	0	74	520
1984	111	0	0	0	0	0	0	69	0	200	0	0	380
1985	0	0	0	0	0	0	0	0	0	0	744	1,054	1,798
1986	21	0	0	0	0	0	0	0	0	0	0	0	21
1987	0	0	0	0	0	0	0	0	1,109	774	713	616	3,212
1988	119	0	0	0	0	0	0	0	995	791	720	258	2,883
1989	81	0	0	0	0	0	0	0	1,281	1,072	509	142	3,084
1990	0	0	0	0	0	0	0	141	526	1,066	799	297	2,830
1991	0	0	0	0	0	0	0	0	894	868	1,082	51	2,895
1992	0	0	0	0	0	0	1,085	387	516	103	1,024	427	3,542
1993	0	0	0	0	0	0	0	0	0	995	1,110	142	2,248
1994	0	0	0	0	0	0	0	171	925	836	313	536	2,781
1995	0	0	0	0	0	0	0	0	0	0	29	611	640
1996	0	0	0	0	0	0	0	0	0	899	1,360	249	2,509
1997	0	0	0	0	0	0	0	0	0	0	209	214	423
1998	0	0	0	0	0	0	0	0	0	40	1,777	1,990	3,807
1999	0	0	0	0	0	0	0	0	0	998	1,168	414	2,580
Average	72	0	0	0	0	0	25	57	399	633	855	401	2,442
Maximum	295	0	0	0	0	0	1,085	965	1,909	1,635	1,777	1,990	5,270
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	21

S-9c
Bonneville Unit Operation - SVP Water (cfs)
Spanish Fork River from Mill Race Canal to Lake Shore Gage

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

S-9d
Bonneville Unit Operation - Natural Water (acre-feet)
Spanish Fork River from Mill Race Canal to Lake Shore Gage

63	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	3,389	4,480	4,093	4,876	5,615	7,344	12,750	10,630	1,785	1,629	88	92	56,770
1951	2,516	5,114	5,382	4,976	5,645	6,316	7,957	5,080	1,904	355	98	0	45,343
1952	2,106	4,122	4,020	4,720	4,881	7,400	63,323	96,391	15,295	1,580	941	1,605	206,385
1953	2,283	7,979	8,482	8,085	6,370	8,292	8,295	3,652	1,645	504	429	159	56,178
1954	2,194	4,921	4,691	5,473	5,041	6,727	6,473	760	0	73	48	173	36,573
1955	1,607	3,680	3,682	3,382	3,281	6,894	8,328	4,051	136	657	623	91	36,413
1956	1,206	3,680	4,838	5,406	4,554	7,814	5,545	1,641	0	638	407	186	35,916
1957	1,746	3,280	3,946	4,096	6,213	6,720	9,703	19,733	9,483	1,383	0	0	66,302
1958	2,804	4,557	5,026	4,826	5,855	8,334	16,840	17,764	1,686	101	558	0	68,350
1959	2,459	4,383	5,276	5,126	5,165	5,746	2,484	0	0	302	51	0	30,991
1960	2,151	2,583	2,897	3,726	3,560	6,326	4,618	1,171	415	0	357	340	28,144
1961	1,679	2,980	2,866	3,098	3,047	3,515	1,185	634	0	2	77	207	19,290
1962	2,297	2,680	2,682	3,282	7,580	6,704	21,524	6,029	1,845	305	409	430	55,769
1963	3,139	3,483	3,282	3,517	4,380	2,151	434	2,512	1,248	1,332	646	404	26,528
1964	2,396	3,380	3,389	3,211	2,611	3,930	8,160	13,296	3,040	762	655	28	44,858
1965	3,209	2,983	3,982	4,576	4,485	6,120	13,003	8,272	3,823	1,598	1,120	1,495	54,664
1966	3,380	4,480	4,746	4,846	4,780	9,120	4,666	3,742	615	589	1,160	554	42,678
1967	3,035	3,480	3,746	4,185	3,978	7,620	6,068	3,751	6,906	2,163	995	360	46,287
1968	4,497	4,280	4,082	3,774	5,254	6,674	10,535	15,195	5,086	3,030	1,871	3,179	67,458
1969	5,294	5,087	5,266	6,336	5,405	9,624	34,806	17,303	5,774	3,139	2,570	2,309	102,912
1970	5,142	4,984	5,696	6,646	6,175	7,074	5,563	6,679	4,494	1,168	1,295	2,635	57,550
1971	5,006	5,380	5,196	6,196	6,195	9,320	13,382	12,576	3,808	861	836	1,145	69,900
1972	5,675	5,604	5,876	6,656	6,434	9,928	7,141	3,430	1,066	615	273	255	52,953
1973	4,682	4,744	4,507	4,365	4,239	6,320	16,522	39,191	2,698	756	0	69	88,092
1974	5,100	5,880	6,116	6,536	5,915	10,864	16,266	11,648	1,927	1,029	2,528	1,075	74,885
1975	5,182	5,680	4,982	5,165	4,788	6,681	8,002	34,544	28,584	1,403	0	302	105,312
1976	5,084	6,194	6,106	6,276	7,234	10,644	10,346	5,076	1,087	807	701	612	60,168
1977	4,406	4,280	4,073	4,085	3,980	4,344	527	1,058	3,318	2,439	1,031	17	33,558
1978	2,513	3,280	3,282	3,282	3,128	9,500	17,763	17,989	3,738	0	0	1,478	65,953
1979	3,693	4,780	5,706	7,326	5,825	8,094	16,597	11,505	5,140	2,685	1,459	1,219	74,029
1980	4,368	4,609	4,633	5,859	7,735	9,369	23,449	37,161	8,646	2,632	0	1,207	109,667
1981	4,101	6,264	6,556	6,066	5,343	6,084	4,241	7,754	1,018	613	702	626	49,369
1982	4,050	4,445	4,540	5,297	5,640	12,953	31,617	49,282	7,011	2,188	0	5,877	132,900
1983	10,244	7,912	8,186	7,766	7,923	18,454	21,786	69,205	68,239	6,698	5,844	5,501	237,759
1984	40,142	28,680	13,082	9,682	9,270	16,210	52,179	116,151	37,868	4,712	4,240	3,420	335,636
1985	14,668	12,985	10,609	9,314	5,380	13,541	33,173	29,701	12,196	4,890	4,733	3,694	154,885
1986	8,587	8,600	7,351	7,232	15,996	20,777	45,572	45,378	4,461	2,982	1,980	2,775	171,690
1987	9,199	8,464	7,649	7,296	7,185	9,006	3,927	2,328	615	621	1,448	1,005	58,742
1988	4,036	5,127	4,539	4,429	4,834	6,243	4,176	4,584	1,150	2,074	1,838	875	43,905
1989	3,124	4,101	3,946	4,086	5,235	7,946	8,544	5,440	1,604	1,707	1,934	1,239	48,905
1990	3,413	3,793	4,291	4,288	4,481	6,618	4,297	3,350	0	3,199	1,994	1,456	41,180
1991	3,318	3,531	2,781	3,227	5,213	5,188	2,581	4,117	3,275	990	1,711	2,613	38,545
1992	3,207	3,580	3,707	3,877	4,563	4,174	7,046	1,083	1,341	599	1,462	1,553	36,193
1993	3,057	2,630	2,658	3,298	4,461	11,321	14,361	30,789	4,970	1,814	615	609	80,582
1994	4,518	4,099	4,072	4,306	4,765	6,766	4,234	2,910	1,480	1,736	2,201	2,454	43,541
1995	4,279	3,351	3,403	3,563	4,391	10,223	13,387	52,066	39,839	4,990	3,498	128	143,117
1996	6,454	6,197	6,126	6,556	7,784	12,196	21,347	21,344	3,161	813	0	1,282	93,259
1997	5,805	6,588	7,016	8,346	7,375	17,116	25,770	34,367	5,980	2,098	1,367	0	121,827
1998	7,031	6,874	11,436	7,496	7,355	14,086	23,282	37,114	10,727	5,561	3,977	2,151	137,091
1999	7,530	8,140	6,929	6,885	6,610	7,603	7,702	26,558	9,319	3,559	2,878	3,366	97,081
Average	5,020	5,448	5,228	5,338	5,663	8,640	14,230	19,120	6,789	1,728	1,273	1,245	79,722
Maximum	40,142	28,680	13,082	9,682	15,996	20,777	63,323	116,151	68,239	6,698	5,844	5,877	335,636
Minimum	1,206	2,583	2,658	3,098	2,611	2,151	434	0	0	0	0	0	19,290

S-9d
Bonneville Unit Operation - Natural Water (cfs)
Spanish Fork River from Mill Race Canal to Lake Shore Gage

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	55	75	67	79	101	119	214	173	30	26	1	2	78
1951	41	86	88	81	102	103	134	83	32	6	2	0	63
1952	34	69	65	77	85	120	1,064	1,568	257	26	15	27	284
1953	37	134	138	131	115	135	139	59	28	8	7	3	78
1954	36	83	76	89	91	109	109	12	0	1	1	3	51
1955	26	62	60	55	59	112	140	66	2	11	10	2	50
1956	20	62	79	88	79	127	93	27	0	10	7	3	49
1957	28	55	64	67	112	109	163	321	159	22	0	0	92
1958	46	77	82	78	105	136	283	289	28	2	9	0	94
1959	40	74	86	83	93	93	42	0	0	5	1	0	43
1960	35	43	47	61	62	103	78	19	7	0	6	6	39
1961	27	50	47	50	55	57	20	10	0	0	1	3	27
1962	37	45	44	53	136	109	362	98	31	5	7	7	77
1963	51	59	53	57	79	35	7	41	21	22	11	7	37
1964	39	57	55	52	45	64	137	216	51	12	11	0	62
1965	52	50	65	74	81	100	219	135	64	26	18	25	76
1966	55	75	77	79	86	148	78	61	10	10	19	9	59
1967	49	58	61	68	72	124	102	61	116	35	16	6	64
1968	73	72	66	61	91	109	177	247	85	49	30	53	93
1969	86	85	86	103	97	157	585	281	97	51	42	39	142
1970	84	84	93	108	111	115	93	109	76	19	21	44	79
1971	81	90	85	101	112	152	225	205	64	14	14	19	97
1972	92	94	96	108	112	161	120	56	18	10	4	4	73
1973	76	80	73	71	76	103	278	637	45	12	0	1	122
1974	83	99	99	106	106	177	273	189	32	17	41	18	103
1975	84	95	81	84	86	109	134	562	480	23	0	5	145
1976	83	104	99	102	126	173	174	83	18	13	11	10	83
1977	72	72	66	66	72	71	9	17	56	40	17	0	46
1978	41	55	53	53	56	155	299	293	63	0	0	25	91
1979	60	80	93	119	105	132	279	187	86	44	24	20	102
1980	71	77	75	95	134	152	394	604	145	43	0	20	151
1981	67	105	107	99	96	99	71	126	17	10	11	11	68
1982	66	75	74	86	102	211	531	801	118	36	0	99	184
1983	167	133	133	126	143	300	366	1,126	1,147	109	95	92	328
1984	653	482	213	157	161	264	877	1,889	636	77	69	57	462
1985	239	218	173	151	97	220	557	483	205	80	77	62	214
1986	140	145	120	118	288	338	766	738	75	48	32	47	237
1987	150	142	124	119	129	146	66	38	10	10	24	17	81
1988	66	86	74	72	84	102	70	75	19	34	30	15	60
1989	51	69	64	66	94	129	144	88	27	28	31	21	68
1990	56	64	70	70	81	108	72	54	0	52	32	24	57
1991	54	59	45	52	94	84	43	67	55	16	28	44	53
1992	52	60	60	63	79	68	118	18	23	10	24	26	50
1993	50	44	43	54	80	184	241	501	84	29	10	10	111
1994	73	69	66	70	86	110	71	47	25	28	36	41	60
1995	70	56	55	58	79	166	225	847	670	81	57	2	198
1996	105	104	100	107	135	198	359	347	53	13	0	22	128
1997	94	111	114	136	133	278	433	559	101	34	22	0	168
1998	114	116	186	122	132	229	391	604	180	90	65	36	189
1999	122	137	113	112	119	124	129	432	157	58	47	57	134
Average	82	92	85	87	101	141	239	311	114	28	21	21	110
Maximum	653	482	213	157	288	338	1,064	1,889	1,147	109	95	99	462
Minimum	20	43	43	50	45	35	7	0	0	0	0	0	27

S-10a
Bonneville Unit Operation - Total Water (acre-feet)
Spanish Fork River at Lake Shore Gage

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	5,613	7,036	7,034	7,952	8,162	9,911	13,325	9,040	80	35	136	404	68,729
1951	4,029	6,791	8,030	8,179	8,269	9,167	8,255	3,983	0	110	713	290	57,816
1952	3,243	6,377	6,654	7,307	7,502	9,881	64,994	95,582	13,607	0	0	1,428	216,574
1953	2,577	8,836	10,931	10,321	8,134	10,720	8,498	2,530	30	180	430	594	63,781
1954	1,761	7,020	7,979	8,350	8,083	9,571	6,130	10	223	215	83	180	49,605
1955	1,610	6,050	6,439	6,169	6,252	10,359	10,563	2,100	0	42	170	605	50,360
1956	2,231	6,310	8,199	8,809	7,972	10,779	5,879	190	0	30	0	70	50,470
1957	3,196	5,960	7,449	7,499	9,123	9,169	10,521	19,037	7,550	133	223	595	80,455
1958	2,532	7,550	8,429	8,229	8,743	11,599	17,320	15,989	110	124	20	391	81,038
1959	2,571	6,459	8,679	8,529	8,253	9,049	3,694	352	138	50	87	447	48,309
1960	3,221	4,859	6,339	7,229	6,601	9,190	5,655	40	0	0	519	1,206	44,860
1961	3,225	5,810	6,569	6,599	6,272	7,069	3,368	20	344	141	133	1,546	41,096
1962	4,509	5,730	5,749	6,389	9,872	10,169	22,566	5,497	1,250	50	40	27	71,849
1963	3,621	5,659	6,409	6,719	6,542	3,479	2,621	540	0	717	31	0	36,338
1964	1,781	5,740	6,599	6,499	5,801	6,891	9,656	12,919	1,177	2	41	111	57,217
1965	4,288	4,959	6,319	6,649	7,232	8,439	13,084	6,907	1,180	62	428	2,018	61,568
1966	4,053	6,720	8,149	8,349	7,412	11,739	3,880	1,633	0	0	545	140	52,621
1967	3,439	6,410	7,249	7,659	7,166	10,239	8,399	3,331	6,783	390	380	457	61,902
1968	6,331	6,700	6,659	6,048	8,352	9,839	12,139	14,483	3,460	1,568	1,256	2,583	79,418
1969	4,723	7,603	8,255	9,020	7,954	11,643	35,206	14,980	3,637	1,560	1,312	1,714	107,606
1970	5,324	8,043	8,714	9,579	8,716	9,918	7,341	5,558	2,720	93	680	2,168	68,853
1971	5,398	7,516	8,315	9,117	8,593	11,399	14,876	11,049	1,890	85	837	3,518	82,594
1972	7,617	8,469	8,930	9,710	9,118	11,775	8,103	844	556	0	148	513	65,784
1973	6,979	7,551	7,615	7,541	6,916	8,663	17,706	39,139	1,299	0	0	664	104,073
1974	6,028	8,162	8,980	9,422	8,498	12,835	17,936	9,500	660	0	1,656	480	84,158
1975	5,350	7,664	7,534	8,030	7,451	9,316	10,031	34,987	27,814	399	184	897	119,657
1976	5,620	8,955	9,037	9,248	9,916	13,306	11,613	3,780	492	192	460	1,207	73,826
1977	5,925	6,727	7,538	7,578	7,127	7,527	491	443	2,723	1,825	416	495	48,813
1978	4,595	5,815	6,169	6,295	6,138	11,748	19,433	18,722	1,812	0	0	2,951	83,678
1979	5,373	7,540	8,999	10,569	8,663	10,939	17,077	11,820	2,653	2,070	844	624	87,173
1980	6,060	7,448	7,986	9,043	10,956	12,232	23,629	37,869	6,561	1,531	0	1,802	125,116
1981	4,690	9,180	9,619	9,369	8,353	9,359	5,676	6,785	20	3	256	4,255	67,565
1982	7,084	7,769	7,955	8,530	8,528	14,988	33,288	48,712	5,190	978	0	5,128	148,150
1983	13,129	10,730	11,309	11,059	10,853	20,479	23,456	69,819	65,423	5,430	4,106	5,225	251,021
1984	40,463	30,903	14,918	11,977	11,451	18,065	53,849	114,047	36,666	3,102	3,840	2,800	342,082
1985	16,984	15,861	13,872	12,757	8,075	14,156	33,492	29,974	10,290	3,855	3,090	4,289	166,696
1986	10,815	11,059	10,240	10,133	18,104	22,613	46,811	46,692	2,822	2,148	1,077	2,268	184,782
1987	11,232	10,562	9,789	9,991	9,546	11,479	3,961	1,426	20	310	833	1,600	70,750
1988	5,696	8,190	7,136	7,391	8,026	9,216	6,454	3,780	555	1,459	1,223	280	59,408
1989	2,916	7,009	7,640	7,809	8,534	11,323	9,543	5,055	1,009	1,092	1,319	2,529	65,778
1990	5,827	7,202	8,118	8,114	7,955	10,320	7,422	2,773	0	2,584	1,379	861	62,555
1991	5,563	6,382	6,562	6,964	8,431	8,680	4,460	5,754	2,680	376	1,096	2,018	58,965
1992	5,295	6,430	7,059	7,399	7,702	7,199	7,641	1,698	746	0	847	958	52,976
1993	5,073	5,579	6,338	6,841	7,561	13,260	14,841	30,431	2,448	1,078	0	490	93,941
1994	6,150	6,709	7,382	7,642	7,662	9,680	5,270	1,082	885	1,122	1,586	1,857	57,026
1995	7,124	5,745	5,757	5,848	6,101	10,964	14,799	54,181	40,115	3,701	2,078	389	156,802
1996	7,927	8,498	9,098	9,464	10,286	14,115	21,827	21,791	270	0	336	591	104,202
1997	7,527	8,912	9,912	11,432	10,105	18,961	26,251	33,951	2,978	417	233	0	130,678
1998	8,264	9,013	14,219	10,191	9,731	15,931	23,763	36,061	8,084	3,227	2,570	1,242	142,294
1999	9,319	10,291	8,937	8,801	8,238	9,101	9,325	28,334	7,899	3,511	2,924	2,899	109,579
Average	6,278	7,970	8,276	8,407	8,421	11,169	15,322	18,504	5,537	920	811	1,396	93,012
Maximum	40,463	30,903	14,918	12,757	18,104	22,613	64,994	114,047	65,423	5,430	4,106	5,225	342,082
Minimum	1,610	4,859	5,749	5,848	5,801	3,479	491	10	0	0	0	0	36,338

S-10a
Bonneville Unit Operation - Total (cfs)
Spanish Fork River at Lake Shore Gage

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	91	118	114	129	147	161	224	147	1	1	2	7	95
1951	66	114	131	133	149	149	139	65	0	2	12	5	80
1952	53	107	108	119	130	161	1,092	1,555	229	0	0	24	298
1953	42	148	178	168	146	174	143	41	1	3	7	10	88
1954	29	118	130	136	146	156	103	0	4	3	1	3	69
1955	26	102	105	100	113	168	178	34	0	1	3	10	70
1956	36	106	133	143	139	175	99	3	0	0	0	1	70
1957	52	100	121	122	164	149	177	310	127	2	4	10	111
1958	41	127	137	134	157	189	291	260	2	2	0	7	112
1959	42	109	141	139	149	147	62	6	2	1	1	8	67
1960	52	82	103	118	115	149	95	1	0	0	8	20	62
1961	52	98	107	107	113	115	57	0	6	2	2	26	57
1962	73	96	94	104	178	165	379	89	21	1	1	0	99
1963	59	95	104	109	118	57	44	9	0	12	1	0	50
1964	29	96	107	106	101	112	162	210	20	0	1	2	79
1965	70	83	103	108	130	137	220	112	20	1	7	34	85
1966	66	113	133	136	133	191	65	27	0	0	9	2	73
1967	56	108	118	125	129	167	141	54	114	6	6	8	86
1968	103	113	108	98	145	160	204	236	58	26	20	43	109
1969	77	128	134	147	143	189	592	244	61	25	21	29	149
1970	87	135	142	156	157	161	123	90	46	2	11	36	95
1971	88	126	135	148	155	185	250	180	32	1	14	59	114
1972	124	142	145	158	159	192	136	14	9	0	2	9	91
1973	113	127	124	123	125	141	298	637	22	0	0	11	144
1974	98	137	146	153	153	209	301	155	11	0	27	8	116
1975	87	129	123	131	134	152	169	569	467	6	3	15	165
1976	91	150	147	150	172	216	195	61	8	3	7	20	102
1977	96	113	123	123	128	122	8	7	46	30	7	8	67
1978	75	98	100	102	111	191	327	304	30	0	0	50	116
1979	87	127	146	172	156	178	287	192	45	34	14	10	120
1980	99	125	130	147	190	199	397	616	110	25	0	30	172
1981	76	154	156	152	150	152	95	110	0	0	4	72	93
1982	115	131	129	139	154	244	559	792	87	16	0	86	205
1983	214	180	184	180	195	333	394	1,136	1,099	88	67	88	347
1984	658	519	243	195	199	294	905	1,855	616	50	62	47	471
1985	276	267	226	207	145	230	563	487	173	63	50	72	230
1986	176	186	167	165	326	368	787	759	47	35	18	38	255
1987	183	178	159	162	172	187	67	23	0	5	14	27	98
1988	93	138	116	120	140	150	108	61	9	24	20	5	82
1989	47	118	124	127	154	184	160	82	17	18	21	42	91
1990	95	121	132	132	143	168	125	45	0	42	22	14	86
1991	90	107	107	113	152	141	75	94	45	6	18	34	81
1992	86	108	115	120	134	117	128	28	13	0	14	16	73
1993	83	94	103	111	136	216	249	495	41	18	0	8	130
1994	100	113	120	124	138	157	89	18	15	18	26	31	79
1995	116	97	94	95	110	178	249	881	674	60	34	7	217
1996	129	143	148	154	179	230	367	354	5	0	5	10	144
1997	122	150	161	186	182	308	441	552	50	7	4	0	181
1998	134	151	231	166	175	259	399	586	136	52	42	21	197
1999	152	173	145	143	148	148	157	461	133	57	48	49	151
Average	102	134	135	137	150	182	258	301	93	15	13	23	128
Maximum	658	519	243	207	326	368	1,092	1,855	1,099	88	67	88	471
Minimum	26	82	94	95	101	57	8	0	0	0	0	0	50

S-10b
Bonneville Unit Operation - CUP Water (acre-feet)
Spanish Fork River at Lake Shore Gage

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	2,261	2,407	2,603	2,461	1,992	1,952	1,075	0	0	0	0	0	14,751
1951	2,128	2,272	2,359	2,588	2,069	2,236	817	513	0	0	0	0	14,983
1952	750	2,396	2,532	2,359	2,117	1,866	1,075	1,500	0	0	0	0	14,597
1953	0	1,452	1,834	1,834	1,854	1,813	0	0	0	0	0	0	8,787
1954	182	2,350	2,688	2,262	2,487	2,229	0	0	0	0	0	0	12,198
1955	617	2,671	2,888	2,788	2,565	2,850	1,882	0	0	0	0	0	16,262
1956	1,400	2,971	2,888	2,788	2,862	2,350	915	0	0	0	0	0	16,176
1957	2,064	2,771	2,888	2,788	2,355	2,650	1,220	1,500	0	0	0	0	18,237
1958	0	2,471	2,788	2,788	2,333	2,650	1,075	1,069	0	0	0	0	15,175
1959	726	2,671	2,788	2,788	2,533	2,688	1,817	0	0	0	0	0	16,012
1960	1,685	2,871	3,088	2,888	2,542	2,262	1,165	0	0	0	0	270	16,772
1961	2,161	2,771	3,088	2,888	2,733	2,988	2,487	0	0	0	0	1,545	20,661
1962	2,827	2,871	2,988	2,988	2,533	2,850	1,075	1,500	0	0	0	0	19,633
1963	1,096	2,771	2,988	2,788	1,933	2,650	1,919	0	0	0	0	0	16,147
1964	0	2,671	2,888	2,888	2,762	2,429	1,156	769	0	0	0	0	15,564
1965	1,694	2,571	2,588	2,688	2,433	2,550	1,075	1,500	0	0	0	0	17,101
1966	1,336	2,471	2,788	2,888	2,533	2,450	280	0	0	0	0	0	14,746
1967	1,019	2,671	2,888	2,888	2,633	2,550	2,298	1,500	772	0	0	0	19,220
1968	2,448	2,671	2,788	2,888	2,542	2,550	1,257	1,500	0	0	0	0	18,646
1969	44	2,194	2,374	2,069	1,994	1,404	1,075	0	0	0	0	0	11,154
1970	708	2,464	2,403	2,318	1,986	2,229	1,740	1,420	0	0	0	0	15,267
1971	1,007	2,197	2,504	2,306	1,843	1,490	1,075	289	0	0	0	1,778	14,489
1972	2,142	2,270	2,439	2,439	2,129	1,516	1,251	0	0	0	0	0	14,187
1973	2,294	2,315	2,493	2,561	2,206	2,077	1,075	1,500	0	0	0	0	16,521
1974	1,543	2,073	2,249	2,271	2,028	1,356	1,075	0	0	0	0	0	12,597
1975	783	2,078	2,348	2,325	2,108	2,020	1,500	1,500	705	0	0	0	15,367
1976	0	2,166	2,316	2,357	2,126	2,047	1,152	0	0	0	0	0	12,164
1977	2,134	2,758	2,907	2,907	2,591	2,866	491	0	0	0	0	0	16,654
1978	1,695	2,676	2,785	2,785	2,510	1,633	1,075	1,500	0	0	0	933	17,592
1979	2,295	2,501	2,678	2,628	2,283	2,230	1,075	1,328	0	0	0	0	17,020
1980	2,307	2,441	2,738	2,658	2,732	2,400	1,075	1,500	0	0	0	0	17,852
1981	0	2,321	2,448	2,688	2,455	2,660	1,366	0	0	0	0	3,040	16,979
1982	2,459	2,831	2,938	2,878	2,413	1,620	1,075	1,254	0	0	0	0	17,470
1983	2,271	2,411	2,508	2,678	2,375	1,410	1,075	0	0	0	0	1,321	16,050
1984	559	2,021	1,988	2,098	2,012	1,290	1,075	0	0	0	0	0	11,045
1985	1,701	2,281	2,648	2,828	2,553	1,230	1,075	1,244	0	0	0	0	15,561
1986	1,996	2,191	2,558	2,678	1,553	1,230	1,075	1,500	0	0	0	0	14,782
1987	1,561	1,683	1,948	2,080	1,806	1,858	0	0	0	0	0	0	10,937
1988	1,658	2,641	2,825	2,840	2,636	2,596	2,283	0	0	0	0	0	17,479
1989	406	2,940	3,079	3,108	2,744	2,762	1,082	0	0	0	0	1,885	18,007
1990	3,029	3,093	3,212	3,211	2,919	3,087	2,765	0	0	0	0	0	21,317
1991	2,860	2,918	3,166	3,122	2,663	2,878	2,600	2,935	0	0	0	0	23,141
1992	2,703	2,745	2,737	2,907	2,583	2,410	0	0	0	0	0	0	16,086
1993	2,631	2,821	3,065	2,928	2,545	1,324	1,075	1,500	0	0	0	0	17,890
1994	2,248	2,620	2,752	2,721	2,342	2,299	2,106	0	0	0	0	0	17,088
1995	2,376	2,603	2,703	2,666	2,139	1,230	1,075	1,500	324	0	0	0	16,617
1996	2,088	2,199	2,357	2,293	1,947	1,304	1,075	1,500	0	0	0	0	14,762
1997	2,338	2,193	2,281	2,471	2,175	1,230	1,075	1,500	0	0	0	0	15,264
1998	1,848	1,964	2,168	2,080	1,821	1,230	1,075	1,500	0	0	0	0	13,685
1999	1,454	2,492	2,590	2,530	2,183	2,112	1,180	1,500	0	0	0	0	16,042
Average	1,551	2,478	2,651	2,634	2,324	2,112	1,208	726	36	0	0	215	15,935
Maximum	3,029	3,093	3,212	3,211	2,919	3,087	2,765	2,935	772	0	0	3,040	23,141
Minimum	0	1,452	1,834	1,834	1,553	1,230	0	0	0	0	0	0	8,787

S-10b
Bonneville Unit Operation - CUP Water (cfs)
Spanish Fork River at Lake Shore Gage

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

S-10c
Bonneville Unit Operation - SVP Water (acre-feet)
Spanish Fork River at Lake Shore Gage

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	2	0	0	2
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	2	0	0	2
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0

S-10c
Bonneville Unit Operation - SVP Water (cfs)
Spanish Fork River at Lake Shore Gage

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
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

S-10d
Bonneville Unit Operation - Natural Water (acre-feet)
Spanish Fork River at Lake Shore Gage

69	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	3,352	4,629	4,431	5,491	6,170	7,959	12,250	9,040	80	35	136	404	53,978
1951	1,901	4,519	5,671	5,591	6,200	6,931	7,438	3,470	0	110	713	290	42,833
1952	2,493	3,981	4,122	4,947	5,384	8,015	63,918	94,082	13,607	0	0	1,428	201,978
1953	2,577	7,384	9,097	8,487	6,279	8,907	8,498	2,530	30	180	430	594	54,994
1954	1,579	4,670	5,291	6,088	5,596	7,342	6,130	10	223	215	83	180	37,407
1955	992	3,379	3,551	3,381	3,687	7,509	8,681	2,100	0	42	170	605	34,098
1956	831	3,339	5,311	6,021	5,110	8,429	4,963	190	0	30	0	70	34,294
1957	1,131	3,189	4,561	4,711	6,768	6,519	9,301	17,537	7,550	133	223	595	62,218
1958	2,532	5,079	5,641	5,441	6,410	8,949	16,245	14,920	110	124	20	391	65,863
1959	1,844	3,788	5,891	5,741	5,720	6,361	1,878	352	138	50	87	447	32,297
1960	1,536	1,988	3,251	4,341	4,059	6,928	4,490	40	0	0	519	935	28,088
1961	1,064	3,039	3,481	3,711	3,539	4,081	881	20	344	141	133	1	20,435
1962	1,682	2,859	2,761	3,401	7,339	7,319	21,491	3,997	1,250	50	40	27	52,216
1963	2,524	2,888	3,421	3,931	4,609	829	701	540	0	717	31	0	20,192
1964	1,781	3,069	3,711	3,611	3,039	4,462	8,500	12,150	1,177	0	41	111	41,651
1965	2,594	2,388	3,731	3,961	4,799	5,889	12,009	5,407	1,180	62	428	2,018	44,467
1966	2,717	4,249	5,361	5,461	4,879	9,289	3,600	1,633	0	0	545	140	37,875
1967	2,420	3,739	4,361	4,771	4,533	7,689	6,101	1,831	6,010	390	380	457	42,682
1968	3,882	4,029	3,871	3,159	5,810	7,289	10,881	12,983	3,460	1,568	1,256	2,583	60,772
1969	4,679	5,409	5,881	6,951	5,960	10,239	34,131	14,980	3,637	1,560	1,312	1,714	96,453
1970	4,616	5,579	6,311	7,261	6,730	7,689	5,601	4,138	2,720	93	680	2,168	53,586
1971	4,391	5,319	5,811	6,811	6,750	9,909	13,801	10,760	1,890	85	837	1,740	68,105
1972	5,475	6,199	6,491	7,271	6,990	10,259	6,851	844	556	0	148	513	51,596
1973	4,685	5,236	5,122	4,980	4,710	6,586	16,631	37,639	1,299	0	0	664	87,551
1974	4,485	6,089	6,731	7,151	6,470	11,479	16,861	9,500	660	0	1,656	480	71,561
1975	4,567	5,585	5,186	5,705	5,343	7,296	8,532	33,487	27,109	399	184	897	104,290
1976	5,620	6,789	6,721	6,891	7,790	11,259	10,461	3,780	492	192	460	1,207	61,662
1977	3,791	3,969	4,631	4,671	4,536	4,661	0	443	2,723	1,825	416	495	32,159
1978	2,900	3,139	3,384	3,509	3,628	10,115	18,358	17,222	1,812	0	0	2,019	66,086
1979	3,078	5,039	6,321	7,941	6,380	8,709	16,002	10,492	2,653	2,070	844	624	70,153
1980	3,753	5,007	5,248	6,385	8,224	9,831	22,553	36,369	6,561	1,531	0	1,802	107,263
1981	4,690	6,859	7,171	6,681	5,898	6,699	4,310	6,785	20	3	256	1,215	50,586
1982	4,625	4,938	5,017	5,652	6,115	13,368	32,212	47,457	5,190	978	0	5,128	130,680
1983	10,859	8,319	8,801	8,381	8,478	19,069	22,381	69,819	65,423	5,430	4,106	3,904	234,971
1984	39,904	28,882	12,929	9,879	9,439	16,775	52,774	114,047	36,666	3,102	3,840	2,800	331,037
1985	15,283	13,580	11,224	9,929	5,522	12,926	32,417	28,730	10,290	3,855	3,090	4,289	151,134
1986	8,820	8,868	7,681	7,454	16,551	21,383	45,736	45,192	2,822	2,148	1,077	2,268	170,000
1987	9,671	8,879	7,841	7,911	7,740	9,621	3,961	1,426	20	310	833	1,600	59,813
1988	4,038	5,549	4,311	4,551	5,390	6,621	4,171	3,780	555	1,459	1,223	280	41,928
1989	2,510	4,069	4,561	4,701	5,790	8,561	8,460	5,055	1,009	1,092	1,319	644	47,771
1990	2,798	4,109	4,906	4,903	5,036	7,233	4,657	2,773	0	2,584	1,379	861	41,238
1991	2,703	3,464	3,396	3,842	5,768	5,803	1,860	2,820	2,680	376	1,096	2,018	35,824
1992	2,592	3,685	4,322	4,492	5,119	4,789	7,641	1,698	746	0	847	958	36,890
1993	2,442	2,758	3,273	3,913	5,016	11,936	13,766	28,931	2,448	1,078	0	490	76,051
1994	3,903	4,089	4,630	4,921	5,320	7,381	3,164	1,082	885	1,122	1,586	1,857	39,939
1995	4,747	3,141	3,054	3,183	3,962	9,734	13,724	52,681	39,791	3,701	2,078	389	140,185
1996	5,839	6,299	6,741	7,171	8,340	12,811	20,752	20,291	270	0	336	591	89,440
1997	5,190	6,719	7,631	8,961	7,930	17,731	25,175	32,451	2,978	417	233	0	115,415
1998	6,416	7,049	12,051	8,111	7,910	14,701	22,687	34,561	8,084	3,227	2,570	1,242	128,609
1999	7,866	7,799	6,347	6,270	6,055	6,988	8,145	26,834	7,899	3,511	2,924	2,899	93,538
Average	4,727	5,492	5,625	5,773	6,096	9,057	14,115	17,778	5,501	920	811	1,181	77,077
Maximum	39,904	28,882	12,929	9,929	16,551	21,383	63,918	114,047	65,423	5,430	4,106	5,128	331,037
Minimum	831	1,988	2,761	3,159	3,039	829	0	10	0	0	0	0	20,192

S-10d
Bonneville Unit Operation - Natural Water (cfs)
Spanish Fork River at Lake Shore Gage

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	55	78	72	89	111	129	206	147	1	1	2	7	75
1951	31	76	92	91	112	113	125	56	0	2	12	5	59
1952	41	67	67	80	94	130	1,074	1,530	229	0	0	24	278
1953	42	124	148	138	113	145	143	41	1	3	7	10	76
1954	26	78	86	99	101	119	103	0	4	3	1	3	52
1955	16	57	58	55	66	122	146	34	0	1	3	10	47
1956	14	56	86	98	89	137	83	3	0	0	0	1	47
1957	18	54	74	77	122	106	156	285	127	2	4	10	86
1958	41	85	92	88	115	146	273	243	2	2	0	7	91
1959	30	64	96	93	103	103	32	6	2	1	1	8	45
1960	25	33	53	71	71	113	75	1	0	0	8	16	39
1961	17	51	57	60	64	66	15	0	6	2	2	0	28
1962	27	48	45	55	132	119	361	65	21	1	1	0	72
1963	41	49	56	64	83	13	12	9	0	12	1	0	28
1964	29	52	60	59	53	73	143	198	20	0	1	2	57
1965	42	40	61	64	86	96	202	88	20	1	7	34	61
1966	44	71	87	89	88	151	61	27	0	0	9	2	52
1967	39	63	71	78	82	125	103	30	101	6	6	8	59
1968	63	68	63	51	101	119	183	211	58	26	20	43	84
1969	76	91	96	113	107	167	574	244	61	25	21	29	133
1970	75	94	103	118	121	125	94	67	46	2	11	36	74
1971	71	89	95	111	122	161	232	175	32	1	14	29	94
1972	89	104	106	118	122	167	115	14	9	0	2	9	71
1973	76	88	83	81	85	107	279	612	22	0	0	11	121
1974	73	102	109	116	116	187	283	155	11	0	27	8	99
1975	74	94	84	93	96	119	143	545	456	6	3	15	144
1976	91	114	109	112	135	183	176	61	8	3	7	20	85
1977	62	67	75	76	82	76	0	7	46	30	7	8	44
1978	47	53	55	57	65	164	309	280	30	0	0	34	91
1979	50	85	103	129	115	142	269	171	45	34	14	10	97
1980	61	84	85	104	143	160	379	591	110	25	0	30	148
1981	76	115	117	109	106	109	72	110	0	0	4	20	70
1982	75	83	82	92	110	217	541	772	87	16	0	86	181
1983	177	140	143	136	153	310	376	1,136	1,099	88	67	66	325
1984	649	485	210	161	164	273	887	1,855	616	50	62	47	456
1985	249	228	183	161	99	210	545	467	173	63	50	72	209
1986	143	149	125	121	298	348	769	735	47	35	18	38	235
1987	157	149	128	129	139	156	67	23	0	5	14	27	83
1988	66	93	70	74	94	108	70	61	9	24	20	5	58
1989	41	68	74	76	104	139	142	82	17	18	21	11	66
1990	46	69	80	80	91	118	78	45	0	42	22	14	57
1991	44	58	55	62	104	94	31	46	45	6	18	34	49
1992	42	62	70	73	89	78	128	28	13	0	14	16	51
1993	40	46	53	64	90	194	231	471	41	18	0	8	105
1994	63	69	75	80	96	120	53	18	15	18	26	31	55
1995	77	53	50	52	71	158	231	857	669	60	34	7	194
1996	95	106	110	117	145	208	349	330	5	0	5	10	123
1997	84	113	124	146	143	288	423	528	50	7	4	0	159
1998	104	118	196	132	142	239	381	562	136	52	42	21	178
1999	128	131	103	102	109	114	137	436	133	57	48	49	129
Average	77	92	91	94	109	147	237	289	92	15	13	20	106
Maximum	649	485	210	161	298	348	1,074	1,855	1,099	88	67	86	456
Minimum	14	33	45	51	53	13	0	0	0	0	0	0	28

S-11a
Bonneville Unit Operation - Total (acre-feet)
Spanish Fork Canyon Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,691	1,216	1,216	2,065	931	1,216	2,504	7,061	15,470	18,042	20,321	15,186	89,918
1951	2,443	1,216	1,216	931	931	1,216	2,504	6,377	15,426	17,425	16,628	12,191	78,504
1952	2,479	1,216	1,216	931	931	1,216	2,504	6,133	10,428	15,508	15,284	12,651	70,496
1953	4,807	1,216	1,216	931	931	1,216	6,571	7,050	14,202	16,900	16,124	11,477	82,641
1954	2,127	1,216	1,216	931	931	1,216	7,427	9,445	15,204	16,122	16,415	9,745	81,994
1955	2,127	1,216	1,216	931	931	1,216	9,009	15,714	17,202	17,752	15,659	10,940	93,914
1956	2,127	1,216	1,216	931	931	1,216	5,250	16,426	19,994	18,562	17,395	10,871	96,134
1957	2,127	1,216	1,216	931	931	1,216	7,909	10,744	13,473	19,670	19,061	13,386	91,880
1958	2,158	1,216	1,216	931	931	1,216	4,299	10,744	18,645	18,841	19,130	12,149	91,476
1959	2,197	1,216	1,216	931	931	1,216	8,596	19,374	19,635	16,329	14,846	9,828	96,315
1960	2,127	1,216	1,216	931	931	1,216	7,931	18,655	18,163	16,647	15,807	9,118	93,959
1961	2,127	1,216	1,216	931	931	1,216	9,935	18,477	17,948	14,831	13,427	9,119	91,373
1962	2,127	1,216	1,216	931	931	1,216	2,672	12,402	18,007	18,509	20,284	13,739	93,251
1963	2,130	1,216	1,216	931	931	1,216	9,044	15,668	15,870	19,423	19,175	11,556	98,376
1964	3,704	2,501	5,528	5,162	2,408	2,544	9,049	10,804	15,161	21,826	20,622	15,764	115,073
1965	6,738	2,512	3,035	3,007	3,111	3,689	3,293	10,744	13,131	17,926	18,460	14,951	100,599
1966	7,700	4,671	1,275	1,560	2,704	1,216	7,375	14,582	20,302	17,717	18,413	13,787	111,300
1967	5,257	1,923	3,940	1,948	1,141	1,449	8,273	12,216	12,937	20,164	19,921	15,569	104,737
1968	6,738	3,216	3,007	2,751	2,090	3,459	7,010	10,805	13,568	19,122	16,918	14,771	103,456
1969	6,738	4,489	5,827	1,427	2,246	1,216	2,504	6,316	13,037	16,925	20,307	15,676	96,710
1970	6,649	1,216	2,386	3,074	2,898	3,733	8,296	9,911	14,403	17,078	19,934	13,882	103,460
1971	4,785	1,216	3,798	3,025	2,413	2,669	4,398	13,281	15,559	19,839	20,423	12,630	104,036
1972	6,177	1,216	3,289	3,670	3,490	1,216	7,588	15,577	16,757	17,174	17,794	12,792	106,739
1973	6,738	4,712	3,932	3,308	2,832	3,526	3,924	6,133	13,447	17,381	19,709	13,436	99,079
1974	6,891	4,623	3,422	3,739	3,625	3,921	5,015	7,328	16,887	18,301	18,864	13,525	106,142
1975	6,738	5,679	3,819	2,991	2,801	3,266	7,569	10,744	9,269	16,694	20,131	14,535	104,236
1976	6,915	1,454	1,216	2,255	2,254	3,157	7,264	16,485	19,627	19,130	19,599	13,985	113,341
1977	5,419	2,305	3,474	3,080	931	1,216	7,986	18,577	20,154	18,286	19,032	13,591	114,052
1978	10,328	9,171	9,417	7,464	6,294	4,232	5,191	10,744	18,186	21,017	21,828	14,331	138,202
1979	10,140	9,109	8,761	7,391	6,401	7,202	5,675	11,106	18,036	20,854	21,335	14,838	140,849
1980	12,548	9,810	9,465	6,891	5,308	6,414	3,572	6,549	12,261	18,467	21,826	12,061	125,172
1981	10,088	3,536	2,785	4,299	3,674	4,879	8,300	18,504	18,001	18,619	19,593	12,224	124,501
1982	7,333	2,721	3,917	4,486	3,726	1,810	2,504	6,133	11,305	16,387	20,839	13,866	95,024
1983	3,135	1,216	1,216	931	931	1,216	3,870	7,856	12,474	15,698	15,909	9,761	74,214
1984	2,127	1,216	1,216	1,595	931	1,216	2,504	7,470	12,193	17,163	17,741	13,696	79,068
1985	3,135	1,216	1,216	931	931	1,216	2,662	6,133	13,325	15,340	18,651	11,264	76,018
1986	3,095	1,216	1,216	931	931	1,216	2,504	6,133	12,248	16,868	18,021	11,180	75,560
1987	3,511	3,552	1,478	1,193	1,168	1,478	7,686	14,900	17,745	16,693	18,769	14,656	102,828
1988	4,810	1,216	1,216	931	931	1,216	9,023	18,818	19,577	19,572	19,029	13,880	110,218
1989	2,127	3,629	3,786	1,848	931	1,216	8,090	19,970	19,166	16,523	17,545	12,142	106,972
1990	6,949	3,233	3,629	2,665	2,497	2,950	8,388	19,111	16,790	19,952	20,864	16,018	123,045
1991	5,015	2,893	4,295	4,323	1,358	1,674	9,157	16,725	15,191	18,521	20,733	14,544	114,429
1992	6,905	3,231	4,804	3,643	2,105	2,587	9,764	19,696	19,739	19,051	17,299	14,398	123,220
1993	8,171	6,582	5,542	5,257	4,061	3,881	6,252	10,744	16,960	19,645	21,385	16,194	124,676
1994	4,213	2,849	3,373	3,219	2,250	1,691	8,215	18,632	20,421	19,783	18,019	15,128	117,793
1995	4,558	3,876	3,955	3,670	3,127	3,647	6,646	10,744	11,969	15,846	20,746	12,972	101,758
1996	6,792	1,458	1,466	1,181	1,667	1,466	4,084	6,133	13,946	15,396	19,403	13,495	86,486
1997	6,894	5,679	3,117	2,434	2,510	1,216	2,946	6,133	11,132	18,291	18,892	14,206	93,450
1998	10,834	6,292	3,583	6,709	6,727	3,023	4,643	6,133	11,070	19,170	21,585	16,562	116,332
1999	5,363	1,222	1,326	2,687	936	1,222	7,264	6,133	11,897	16,639	19,234	13,936	87,858
Average	5,221	2,874	2,915	2,597	2,147	2,199	6,093	11,845	15,551	17,952	18,779	13,244	101,417
Maximum	12,548	9,810	9,465	7,464	6,727	7,202	9,935	19,970	20,421	21,826	21,828	16,562	140,849
Minimum	2,127	1,216	1,216	931	931	1,216	2,504	6,133	9,269	14,831	13,427	9,118	70,496

S-11a
Bonneville Unit Operation - Total (cfs)
Spanish Fork Canyon Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	76	20	20	34	17	20	42	115	260	293	330	255	124
1951	40	20	20	15	17	20	42	104	259	283	270	205	108
1952	40	20	20	15	16	20	42	100	175	252	249	213	97
1953	78	20	20	15	17	20	110	115	239	275	262	193	114
1954	35	20	20	15	17	20	125	154	256	262	267	164	113
1955	35	20	20	15	17	20	151	256	289	289	255	184	130
1956	35	20	20	15	16	20	88	267	336	302	283	183	132
1957	35	20	20	15	17	20	133	175	226	320	310	225	127
1958	35	20	20	15	17	20	72	175	313	306	311	204	126
1959	36	20	20	15	17	20	144	315	330	266	241	165	133
1960	35	20	20	15	16	20	133	303	305	271	257	153	129
1961	35	20	20	15	17	20	167	300	302	241	218	153	126
1962	35	20	20	15	17	20	45	202	303	301	330	231	129
1963	35	20	20	15	17	20	152	255	267	316	312	194	136
1964	60	42	90	84	42	41	152	176	255	355	335	265	159
1965	110	42	49	49	56	60	55	175	221	292	300	251	139
1966	125	78	21	25	49	20	124	237	341	288	299	232	154
1967	85	32	64	32	21	24	139	199	217	328	324	262	145
1968	110	54	49	45	36	56	118	176	228	311	275	248	143
1969	110	75	95	23	40	20	42	103	219	275	330	263	134
1970	108	20	39	50	52	61	139	161	242	278	324	233	143
1971	78	20	62	49	43	43	74	216	261	323	332	212	144
1972	100	20	53	60	61	20	128	253	282	279	289	215	147
1973	110	79	64	54	51	57	66	100	226	283	321	226	137
1974	112	78	56	61	65	64	84	119	284	298	307	227	147
1975	110	95	62	49	50	53	127	175	156	271	327	244	144
1976	112	24	20	37	39	51	122	268	330	311	319	235	156
1977	88	39	56	50	17	20	134	302	339	297	310	228	158
1978	168	154	153	121	113	69	87	175	306	342	355	241	191
1979	165	153	142	120	115	117	95	181	303	339	347	249	195
1980	204	165	154	112	92	104	60	107	206	300	355	203	172
1981	164	59	45	70	66	79	139	301	303	303	319	205	172
1982	119	46	64	73	67	29	42	100	190	267	339	233	131
1983	51	20	20	15	17	20	65	128	210	255	259	164	103
1984	35	20	20	26	16	20	42	121	205	279	289	230	109
1985	51	20	20	15	17	20	45	100	224	249	303	189	105
1986	50	20	20	15	17	20	42	100	206	274	293	188	104
1987	57	60	24	19	21	24	129	242	298	271	305	246	142
1988	78	20	20	15	16	20	152	306	329	318	309	233	152
1989	35	61	62	30	17	20	136	325	322	269	285	204	148
1990	113	54	59	43	45	48	141	311	282	324	339	269	170
1991	82	49	70	70	24	27	154	272	255	301	337	244	158
1992	112	54	78	59	37	42	164	320	332	310	281	242	170
1993	133	111	90	86	73	63	105	175	285	319	348	272	172
1994	69	48	55	52	41	28	138	303	343	322	293	254	163
1995	74	65	64	60	56	59	112	175	201	258	337	218	141
1996	110	24	24	19	29	24	69	100	234	250	316	227	119
1997	112	95	51	40	45	20	50	100	187	297	307	239	129
1998	176	106	58	109	121	49	78	100	186	312	351	278	161
1999	87	21	22	44	17	20	122	100	200	271	313	234	121
Average	85	48	47	42	38	36	102	193	261	292	305	223	140
Maximum	204	165	154	121	121	117	167	325	343	355	355	278	195
Minimum	35	20	20	15	16	20	42	100	156	241	218	153	97

S-11b
Bonneville Unit Operation - CUP Water (acre-feet)
Spanish Fork Canyon Pipeline

85	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,691	1,216	1,216	2,065	931	1,216	2,504	6,797	11,351	13,736	14,594	12,781	73,098
1951	2,443	1,216	1,216	931	931	1,216	2,504	6,377	11,629	11,598	12,035	9,459	61,554
1952	2,479	1,216	1,216	931	931	1,216	2,504	6,133	9,269	12,254	12,691	10,094	60,934
1953	3,135	1,216	1,216	931	931	1,216	6,504	6,133	9,269	11,246	11,683	9,118	62,598
1954	2,127	1,216	1,216	931	931	1,216	7,275	6,133	9,269	11,246	11,683	9,118	62,361
1955	2,127	1,216	1,216	931	931	1,216	9,009	15,460	11,649	11,246	11,683	9,118	75,803
1956	2,127	1,216	1,216	931	931	1,216	5,250	15,504	14,349	13,482	12,117	9,118	77,457
1957	2,127	1,216	1,216	931	931	1,216	7,909	10,744	11,969	13,584	14,278	10,498	76,620
1958	2,127	1,216	1,216	931	931	1,216	4,299	10,744	14,093	13,352	14,348	11,024	75,498
1959	2,197	1,216	1,216	931	931	1,216	8,596	16,853	13,602	12,145	11,683	9,118	79,703
1960	2,127	1,216	1,216	931	931	1,216	7,931	16,234	11,649	11,246	11,683	9,118	75,498
1961	2,127	1,216	1,216	931	931	1,216	9,935	14,041	11,649	11,246	11,683	9,118	75,309
1962	2,127	1,216	1,216	931	931	1,216	2,672	12,402	14,302	13,587	14,281	11,641	76,521
1963	2,130	1,216	1,216	931	931	1,216	9,044	14,800	13,485	13,279	14,278	11,155	83,680
1964	3,693	2,501	5,528	5,162	2,408	2,544	9,049	10,803	14,657	13,954	15,606	13,518	99,423
1965	6,738	2,512	3,035	3,007	3,111	3,689	3,293	10,744	12,013	14,253	15,239	13,528	91,163
1966	7,700	4,671	1,275	1,560	2,704	1,216	7,375	12,242	13,895	13,584	14,278	12,658	93,158
1967	5,257	1,923	3,940	1,948	1,141	1,449	8,273	12,216	12,937	13,817	14,511	12,598	90,008
1968	6,738	3,216	3,007	2,751	2,090	3,459	7,010	10,805	10,340	13,093	14,278	12,406	89,193
1969	6,738	4,489	5,827	1,427	2,246	1,216	2,504	6,133	11,014	11,978	14,846	12,982	81,402
1970	6,649	1,216	2,386	3,074	2,898	3,733	8,296	9,911	11,649	11,246	14,278	12,367	87,703
1971	4,785	1,216	3,798	3,025	2,413	2,669	4,398	13,281	11,649	13,584	14,278	12,630	87,726
1972	6,177	1,216	3,289	3,670	3,490	1,216	7,588	11,317	11,649	11,584	14,278	12,529	88,002
1973	6,738	4,712	3,932	3,308	2,832	3,526	3,924	6,133	11,242	11,573	14,431	12,600	84,952
1974	6,891	4,623	3,422	3,739	3,625	3,921	5,015	6,133	11,649	13,584	14,278	12,080	88,961
1975	6,738	5,679	3,819	2,991	2,801	3,266	7,569	10,744	9,269	11,246	14,278	12,159	90,560
1976	6,738	1,454	1,216	2,255	2,254	3,157	7,264	14,770	14,349	13,420	14,278	12,177	93,331
1977	5,419	2,305	3,474	3,080	931	1,216	7,986	16,853	14,349	13,584	14,278	12,191	95,667
1978	10,328	9,171	9,417	7,464	6,294	4,232	5,191	10,744	14,614	15,099	16,188	14,331	123,073
1979	10,140	9,109	8,761	7,391	6,401	7,202	5,675	11,106	13,267	15,449	16,473	14,269	125,244
1980	12,548	9,810	9,465	6,891	5,308	6,414	3,572	6,549	9,698	13,908	15,928	10,969	111,060
1981	9,316	3,536	2,785	4,299	3,674	4,879	8,300	16,767	12,917	13,258	14,278	12,224	106,233
1982	7,333	2,721	3,917	4,486	3,726	1,810	2,504	6,133	9,844	12,254	15,286	13,281	83,294
1983	3,135	1,216	1,216	931	931	1,216	3,870	6,133	9,269	11,910	12,347	9,760	61,934
1984	2,127	1,216	1,216	1,595	931	1,216	2,504	6,133	9,269	12,254	12,691	10,094	61,246
1985	3,135	1,216	1,216	931	931	1,216	2,662	6,133	9,269	12,215	12,651	10,055	61,630
1986	3,095	1,216	1,216	931	931	1,216	2,504	6,133	9,269	12,254	12,691	10,094	61,550
1987	3,511	3,552	1,478	1,193	1,168	1,478	7,264	12,242	11,877	12,064	14,540	12,305	82,671
1988	4,809	1,216	1,216	931	931	1,216	9,023	15,881	14,086	13,584	14,272	12,053	89,218
1989	2,127	3,629	3,786	1,848	931	1,216	8,090	16,853	13,765	11,246	14,277	12,141	89,908
1990	6,949	3,233	3,629	2,665	2,497	2,950	8,388	16,853	13,571	14,634	16,012	14,336	105,716
1991	5,015	2,893	4,295	4,323	1,358	1,674	9,157	16,725	14,349	11,704	14,737	13,102	99,333
1992	6,905	3,231	4,804	3,643	2,105	2,587	9,414	16,309	14,349	14,715	12,814	13,752	104,627
1993	8,171	6,582	5,542	5,257	4,061	3,881	6,252	10,744	15,037	15,729	16,423	14,260	111,940
1994	4,213	2,849	3,373	3,219	2,250	1,691	8,215	16,853	14,098	14,029	14,753	13,118	98,663
1995	4,558	3,876	3,955	3,670	3,127	3,647	6,646	10,744	11,969	13,370	16,402	11,573	93,539
1996	6,792	1,458	1,466	1,181	1,667	1,466	4,084	6,133	11,073	11,401	14,433	12,472	73,625
1997	6,894	5,679	3,117	2,434	2,510	1,216	2,946	6,133	9,269	14,119	15,175	13,278	82,768
1998	10,834	6,292	3,583	6,709	6,727	3,023	4,643	6,133	10,614	13,427	16,459	14,482	102,927
1999	5,363	1,222	1,326	2,687	936	1,222	7,264	6,133	9,275	11,252	14,284	12,300	73,263
Average	5,168	2,874	2,915	2,597	2,147	2,199	6,073	10,880	11,979	12,873	14,099	11,823	85,627
Maximum	12,548	9,810	9,465	7,464	6,727	7,202	9,935	16,853	15,037	15,729	16,473	14,482	125,244
Minimum	2,127	1,216	1,216	931	931	1,216	2,504	6,133	9,269	11,246	11,683	9,118	60,934

S-11b
Bonneville Unit Operation - CUP Water (cfs)
Spanish Fork Canyon Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	76	20	20	34	17	20	42	111	191	223	237	215	101
1951	40	20	20	15	17	20	42	104	195	189	196	159	85
1952	40	20	20	15	16	20	42	100	156	199	206	170	84
1953	51	20	20	15	17	20	109	100	156	183	190	153	86
1954	35	20	20	15	17	20	122	100	156	183	190	153	86
1955	35	20	20	15	17	20	151	251	196	183	190	153	105
1956	35	20	20	15	16	20	88	252	241	219	197	153	107
1957	35	20	20	15	17	20	133	175	201	221	232	176	106
1958	35	20	20	15	17	20	72	175	237	217	233	185	104
1959	36	20	20	15	17	20	144	274	229	198	190	153	110
1960	35	20	20	15	16	20	133	264	196	183	190	153	104
1961	35	20	20	15	17	20	167	228	196	183	190	153	104
1962	35	20	20	15	17	20	45	202	240	221	232	196	106
1963	35	20	20	15	17	20	152	241	227	216	232	187	116
1964	60	42	90	84	42	41	152	176	246	227	254	227	137
1965	110	42	49	49	56	60	55	175	202	232	248	227	126
1966	125	78	21	25	49	20	124	199	234	221	232	213	129
1967	85	32	64	32	21	24	139	199	217	225	236	212	124
1968	110	54	49	45	36	56	118	176	174	213	232	208	123
1969	110	75	95	23	40	20	42	100	185	195	241	218	112
1970	108	20	39	50	52	61	139	161	196	183	232	208	121
1971	78	20	62	49	43	43	74	216	196	221	232	212	121
1972	100	20	53	60	61	20	128	184	196	188	232	211	121
1973	110	79	64	54	51	57	66	100	189	188	235	212	117
1974	112	78	56	61	65	64	84	100	196	221	232	203	123
1975	110	95	62	49	50	53	127	175	156	183	232	204	125
1976	110	24	20	37	39	51	122	240	241	218	232	205	129
1977	88	39	56	50	17	20	134	274	241	221	232	205	132
1978	168	154	153	121	113	69	87	175	246	246	263	241	170
1979	165	153	142	120	115	117	95	181	223	251	268	240	173
1980	204	165	154	112	92	104	60	107	163	226	259	184	153
1981	152	59	45	70	66	79	139	273	217	216	232	205	147
1982	119	46	64	73	67	29	42	100	165	199	249	223	115
1983	51	20	20	15	17	20	65	100	156	194	201	164	86
1984	35	20	20	26	16	20	42	100	156	199	206	170	84
1985	51	20	20	15	17	20	45	100	156	199	206	169	85
1986	50	20	20	15	17	20	42	100	156	199	206	170	85
1987	57	60	24	19	21	24	122	199	200	196	236	207	114
1988	78	20	20	15	16	20	152	258	237	221	232	203	123
1989	35	61	62	30	17	20	136	274	231	183	232	204	124
1990	113	54	59	43	45	48	141	274	228	238	260	241	146
1991	82	49	70	70	24	27	154	272	241	190	240	220	137
1992	112	54	78	59	37	42	158	265	241	239	208	231	144
1993	133	111	90	86	73	63	105	175	253	256	267	240	155
1994	69	48	55	52	41	28	138	274	237	228	240	220	136
1995	74	65	64	60	56	59	112	175	201	217	267	194	129
1996	110	24	24	19	29	24	69	100	186	185	235	210	101
1997	112	95	51	40	45	20	50	100	156	230	247	223	114
1998	176	106	58	109	121	49	78	100	178	218	268	243	142
1999	87	21	22	44	17	20	122	100	156	183	232	207	101
Average	84	48	47	42	38	36	102	177	201	209	229	199	118
Maximum	204	165	154	121	121	117	167	274	253	256	268	243	173
Minimum	35	20	20	15	16	20	42	100	156	183	190	153	84

S-11c
Bonneville Unit Operation - SVP Water (acre-feet)
Spanish Fork Canyon Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	264	4,119	4,306	5,726	2,405	16,820
1951	0	0	0	0	0	0	0	0	3,797	5,827	4,593	2,732	16,950
1952	0	0	0	0	0	0	0	0	1,159	3,253	2,593	2,557	9,562
1953	1,671	0	0	0	0	0	67	917	4,933	5,654	4,441	2,359	20,043
1954	0	0	0	0	0	0	152	3,312	5,935	4,876	4,732	627	19,633
1955	0	0	0	0	0	0	0	254	5,553	6,506	3,976	1,822	18,111
1956	0	0	0	0	0	0	0	922	5,644	5,081	5,278	1,753	18,677
1957	0	0	0	0	0	0	0	0	1,504	6,086	4,783	2,888	15,260
1958	31	0	0	0	0	0	0	0	4,552	5,489	4,782	1,125	15,978
1959	0	0	0	0	0	0	0	2,521	6,034	4,184	3,163	710	16,612
1960	0	0	0	0	0	0	0	2,421	6,514	5,401	4,124	0	18,460
1961	0	0	0	0	0	0	0	4,436	6,299	3,585	1,744	1	16,064
1962	0	0	0	0	0	0	0	0	3,706	4,922	6,003	2,099	16,729
1963	1	0	0	0	0	0	0	867	2,386	6,144	4,897	401	14,696
1964	11	0	0	0	0	0	0	0	504	7,872	5,016	2,246	15,650
1965	0	0	0	0	0	0	0	0	1,119	3,673	3,221	1,424	9,436
1966	0	0	0	0	0	0	0	2,340	6,407	4,133	4,134	1,128	18,142
1967	0	0	0	0	0	0	0	0	0	6,347	5,411	2,971	14,729
1968	0	0	0	0	0	0	0	0	3,228	6,029	2,640	2,366	14,263
1969	0	0	0	0	0	0	0	183	2,023	4,948	5,461	2,693	15,308
1970	0	0	0	0	0	0	0	0	2,754	5,832	5,656	1,515	15,758
1971	0	0	0	0	0	0	0	0	3,910	6,255	6,145	0	16,311
1972	0	0	0	0	0	0	0	4,260	5,108	5,590	3,516	263	18,737
1973	0	0	0	0	0	0	0	0	2,205	5,808	5,278	836	14,127
1974	0	0	0	0	0	0	0	1,195	5,238	4,716	4,586	1,445	17,180
1975	0	0	0	0	0	0	0	0	0	5,448	5,853	2,376	13,676
1976	177	0	0	0	0	0	0	1,715	5,278	5,710	5,321	1,809	20,009
1977	0	0	0	0	0	0	0	1,724	5,805	4,702	4,754	1,401	18,385
1978	0	0	0	0	0	0	0	0	3,572	5,918	5,639	0	15,130
1979	0	0	0	0	0	0	0	0	4,770	5,404	4,862	569	15,605
1980	0	0	0	0	0	0	0	0	2,564	4,559	5,898	1,091	14,111
1981	773	0	0	0	0	0	0	1,737	5,083	5,360	5,315	0	18,268
1982	0	0	0	0	0	0	0	0	1,461	4,133	5,552	584	11,730
1983	0	0	0	0	0	0	0	1,723	3,205	3,788	3,563	0	12,279
1984	0	0	0	0	0	0	0	1,337	2,924	4,909	5,050	3,602	17,822
1985	0	0	0	0	0	0	0	0	4,056	3,125	5,999	1,209	14,389
1986	0	0	0	0	0	0	0	0	2,979	4,613	5,330	1,087	14,009
1987	0	0	0	0	0	0	421	2,658	5,868	4,629	4,229	2,351	20,156
1988	0	0	0	0	0	0	0	2,936	5,491	5,988	4,757	1,828	21,000
1989	0	0	0	0	0	0	0	3,117	5,401	5,277	3,268	1	17,063
1990	0	0	0	0	0	0	0	2,258	3,219	5,317	4,852	1,682	17,329
1991	0	0	0	0	0	0	0	0	842	6,816	5,996	1,442	15,096
1992	0	0	0	0	0	0	350	3,386	5,389	4,336	4,485	646	18,593
1993	0	0	0	0	0	0	0	0	1,923	3,916	4,962	1,934	12,736
1994	0	0	0	0	0	0	0	1,779	6,323	5,753	3,266	2,010	19,131
1995	0	0	0	0	0	0	0	0	0	2,476	4,344	1,399	8,219
1996	0	0	0	0	0	0	0	0	2,873	3,994	4,970	1,023	12,860
1997	0	0	0	0	0	0	0	0	1,863	4,172	3,717	928	10,681
1998	0	0	0	0	0	0	0	0	457	5,743	5,126	2,080	13,405
1999	0	0	0	0	0	0	0	0	2,622	5,387	4,950	1,635	14,594
Average	53	0	0	0	0	0	20	965	3,572	5,080	4,679	1,421	15,790
Maximum	1,671	0	0	0	0	0	421	4,436	6,514	7,872	6,145	3,602	21,000
Minimum	0	0	0	0	0	0	0	0	0	2,476	1,744	0	8,219

S-11c
Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - SVP Water (cfs)
Spanish Fork Canyon Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	4	69	70	93	40	23
1951	0	0	0	0	0	0	0	0	64	95	75	46	23
1952	0	0	0	0	0	0	0	0	19	53	42	43	13
1953	27	0	0	0	0	0	1	15	83	92	72	40	28
1954	0	0	0	0	0	0	3	54	100	79	77	11	27
1955	0	0	0	0	0	0	0	4	93	106	65	31	25
1956	0	0	0	0	0	0	0	15	95	83	86	29	26
1957	0	0	0	0	0	0	0	0	25	99	78	49	21
1958	0	0	0	0	0	0	0	0	76	89	78	19	22
1959	0	0	0	0	0	0	0	41	101	68	51	12	23
1960	0	0	0	0	0	0	0	39	109	88	67	0	25
1961	0	0	0	0	0	0	0	72	106	58	28	0	22
1962	0	0	0	0	0	0	0	0	62	80	98	35	23
1963	0	0	0	0	0	0	0	14	40	100	80	7	20
1964	0	0	0	0	0	0	0	0	8	128	82	38	22
1965	0	0	0	0	0	0	0	0	19	60	52	24	13
1966	0	0	0	0	0	0	0	38	108	67	67	19	25
1967	0	0	0	0	0	0	0	0	0	103	88	50	20
1968	0	0	0	0	0	0	0	0	54	98	43	40	20
1969	0	0	0	0	0	0	0	3	34	80	89	45	21
1970	0	0	0	0	0	0	0	0	46	95	92	25	22
1971	0	0	0	0	0	0	0	0	66	102	100	0	23
1972	0	0	0	0	0	0	0	69	86	91	57	4	26
1973	0	0	0	0	0	0	0	0	37	94	86	14	20
1974	0	0	0	0	0	0	0	19	88	77	75	24	24
1975	0	0	0	0	0	0	0	0	0	89	95	40	19
1976	3	0	0	0	0	0	0	28	89	93	87	30	28
1977	0	0	0	0	0	0	0	28	98	76	77	24	25
1978	0	0	0	0	0	0	0	0	60	96	92	0	21
1979	0	0	0	0	0	0	0	0	80	88	79	10	22
1980	0	0	0	0	0	0	0	0	43	74	96	18	19
1981	13	0	0	0	0	0	0	28	85	87	86	0	25
1982	0	0	0	0	0	0	0	0	25	67	90	10	16
1983	0	0	0	0	0	0	0	28	54	62	58	0	17
1984	0	0	0	0	0	0	0	22	49	80	82	61	25
1985	0	0	0	0	0	0	0	0	68	51	98	20	20
1986	0	0	0	0	0	0	0	0	50	75	87	18	19
1987	0	0	0	0	0	0	7	43	99	75	69	40	28
1988	0	0	0	0	0	0	0	48	92	97	77	31	29
1989	0	0	0	0	0	0	0	51	91	86	53	0	24
1990	0	0	0	0	0	0	0	37	54	86	79	28	24
1991	0	0	0	0	0	0	0	0	14	111	98	24	21
1992	0	0	0	0	0	0	6	55	91	71	73	11	26
1993	0	0	0	0	0	0	0	0	32	64	81	33	18
1994	0	0	0	0	0	0	0	29	106	94	53	34	26
1995	0	0	0	0	0	0	0	0	0	40	71	24	11
1996	0	0	0	0	0	0	0	0	48	65	81	17	18
1997	0	0	0	0	0	0	0	0	31	68	60	16	15
1998	0	0	0	0	0	0	0	0	8	93	83	35	19
1999	0	0	0	0	0	0	0	0	44	88	81	27	20
Average	1	0	0	0	0	0	0	16	60	83	76	24	22
Maximum	27	0	0	0	0	0	7	72	109	128	100	61	29
Minimum	0	0	0	0	0	0	0	0	0	40	28	0	11

S-12a
Bonneville Unit Operation - Total (acre-feet)
Mapleton-Springville Lateral Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	759	4,343	3,233	3,968	1,330	13,634
1951	316	0	0	0	0	0	0	243	4,136	3,595	3,109	1,841	13,240
1952	352	0	0	0	0	0	0	0	471	2,490	2,288	2,080	7,681
1953	1,742	0	0	0	0	0	4,026	353	2,687	3,333	2,725	1,170	16,037
1954	0	0	0	0	0	0	4,087	1,882	3,419	2,888	2,435	92	14,804
1955	0	0	0	0	0	0	4,760	5,823	5,714	3,736	2,300	743	23,076
1956	0	0	0	0	0	0	2,148	5,225	5,469	3,056	3,239	805	19,941
1957	0	0	0	0	0	0	4,306	0	862	3,384	2,850	1,577	12,978
1958	31	0	0	0	0	0	1,598	0	4,535	3,242	2,720	509	12,636
1959	70	0	0	0	0	0	4,760	7,130	5,703	2,565	1,743	223	22,196
1960	0	0	0	0	0	0	4,760	7,554	6,026	3,259	2,144	0	23,743
1961	0	0	0	0	0	0	5,650	7,686	5,871	2,003	960	1	22,171
1962	0	0	0	0	0	0	0	1,658	3,984	2,698	3,698	1,458	13,496
1963	3	0	0	0	0	0	4,760	4,315	3,821	3,568	2,718	134	19,320
1964	1,339	1,285	1,328	1,328	1,199	1,328	4,760	59	2,854	5,315	4,064	2,353	27,210
1965	0	0	0	0	0	0	142	0	528	2,912	2,757	1,607	7,946
1966	961	0	0	0	0	0	4,760	7,560	5,944	2,371	2,167	504	24,268
1967	233	225	233	233	210	233	4,760	1,471	968	4,028	3,337	1,579	17,508
1968	0	0	0	0	0	0	4,506	61	3,013	3,391	1,300	1,011	13,282
1969	0	0	0	0	0	0	0	77	2,745	3,376	3,494	2,133	11,824
1970	568	0	0	0	0	0	4,760	2,864	4,125	3,413	2,982	648	19,360
1971	0	0	0	0	0	0	930	2,536	4,790	3,535	3,280	0	15,072
1972	0	0	0	0	0	0	5,084	7,686	5,341	3,252	1,715	25	23,103
1973	0	0	0	0	0	0	1,420	0	3,454	3,443	3,034	424	11,774
1974	153	0	0	0	0	0	2,511	865	5,695	2,755	2,017	705	14,701
1975	0	0	0	0	0	0	4,760	0	0	2,580	2,848	977	11,166
1976	26	0	0	0	0	0	4,760	5,015	5,331	3,141	2,901	708	21,883
1977	0	0	0	0	0	0	4,760	6,749	5,814	2,858	2,495	762	23,439
1978	3,589	3,492	3,589	3,589	3,127	3,016	2,687	0	4,678	5,315	5,000	2,153	40,234
1979	3,401	3,431	3,527	3,527	3,238	3,527	3,171	361	5,009	5,226	5,132	2,229	41,780
1980	5,810	4,469	4,618	4,597	3,369	3,413	1,068	0	1,829	4,511	4,845	2,451	40,978
1981	2,956	1,569	1,569	974	974	974	4,760	6,838	5,100	3,176	3,032	0	31,921
1982	594	575	594	594	537	594	0	0	1,277	2,896	4,084	1,261	13,007
1983	1,008	0	0	0	0	0	1,366	927	1,799	3,530	3,089	643	12,362
1984	0	0	0	664	0	0	0	719	1,929	4,079	4,409	3,637	15,437
1985	1,008	0	0	0	0	0	157	0	2,503	2,443	3,860	1,647	11,619
1986	968	0	0	0	0	0	0	0	1,922	3,706	4,215	1,361	12,172
1987	1,008	254	262	262	237	262	4,825	7,487	5,647	3,247	2,773	1,533	27,797
1988	0	0	0	0	0	0	4,760	6,885	5,422	3,301	2,618	1,143	24,129
1989	0	0	0	0	0	0	4,727	7,372	5,264	2,842	2,340	1	22,545
1990	1,734	1,678	1,734	1,734	1,566	1,734	4,760	7,313	4,084	4,892	4,423	2,403	38,054
1991	458	444	458	458	414	458	4,760	5,981	2,596	4,200	3,699	1,330	25,258
1992	1,131	1,094	1,131	1,131	1,021	1,131	5,110	7,686	5,308	3,759	3,691	1,094	33,287
1993	4,326	4,220	4,326	4,326	3,130	2,665	3,748	0	4,484	4,063	4,678	2,975	42,942
1994	475	460	475	475	429	475	4,760	7,046	5,948	3,660	2,283	1,564	28,052
1995	2,431	2,660	2,739	2,739	2,196	2,431	4,142	0	0	3,532	4,304	2,648	29,824
1996	250	242	250	250	226	250	1,580	0	3,539	2,285	2,499	734	12,103
1997	155	0	0	0	0	0	442	0	1,227	3,110	2,546	1,345	8,827
1998	4,096	3,239	1,963	3,327	3,065	1,648	2,139	0	1,524	5,317	4,184	2,997	33,499
1999	759	6	6	6	5	6	4,760	0	1,171	2,262	2,596	963	12,539
Average	839	587	576	604	499	483	3,050	2,724	3,598	3,415	3,112	1,230	20,717
Maximum	5,810	4,469	4,618	4,597	3,369	3,527	5,650	7,686	6,026	5,317	5,132	3,637	42,942
Minimum	0	0	0	0	0	0	0	0	0	2,003	960	0	7,681

S-12a
Bonneville Unit Operation - Total (cfs)
Mapleton-Springville Lateral Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	12	73	53	65	22	19
1951	5	0	0	0	0	0	0	4	70	58	51	31	18
1952	6	0	0	0	0	0	0	0	8	40	37	35	11
1953	28	0	0	0	0	0	68	6	45	54	44	20	22
1954	0	0	0	0	0	0	69	31	57	47	40	2	20
1955	0	0	0	0	0	0	80	95	96	61	37	12	32
1956	0	0	0	0	0	0	36	85	92	50	53	14	27
1957	0	0	0	0	0	0	72	0	14	55	46	26	18
1958	0	0	0	0	0	0	27	0	76	53	44	9	17
1959	1	0	0	0	0	0	80	116	96	42	28	4	31
1960	0	0	0	0	0	0	80	123	101	53	35	0	33
1961	0	0	0	0	0	0	95	125	99	33	16	0	31
1962	0	0	0	0	0	0	0	27	67	44	60	25	19
1963	0	0	0	0	0	0	80	70	64	58	44	2	27
1964	22	22	22	22	21	22	80	1	48	86	66	40	37
1965	0	0	0	0	0	0	2	0	9	47	45	27	11
1966	16	0	0	0	0	0	80	123	100	39	35	8	34
1967	4	4	4	4	4	4	80	24	16	66	54	27	24
1968	0	0	0	0	0	0	76	1	51	55	21	17	18
1969	0	0	0	0	0	0	0	1	46	55	57	36	16
1970	9	0	0	0	0	0	80	47	69	56	48	11	27
1971	0	0	0	0	0	0	16	41	81	57	53	0	21
1972	0	0	0	0	0	0	85	125	90	53	28	0	32
1973	0	0	0	0	0	0	24	0	58	56	49	7	16
1974	2	0	0	0	0	0	42	14	96	45	33	12	20
1975	0	0	0	0	0	0	80	0	0	42	46	16	15
1976	0	0	0	0	0	0	80	82	90	51	47	12	30
1977	0	0	0	0	0	0	80	110	98	46	41	13	32
1978	58	59	58	58	56	49	45	0	79	86	81	36	56
1979	55	58	57	57	58	57	53	6	84	85	83	37	58
1980	94	75	75	75	59	56	18	0	31	73	79	41	56
1981	48	26	26	16	18	16	80	111	86	52	49	0	44
1982	10	10	10	10	10	10	0	0	21	47	66	21	18
1983	16	0	0	0	0	0	23	15	30	57	50	11	17
1984	0	0	0	11	0	0	0	12	32	66	72	61	21
1985	16	0	0	0	0	0	3	0	42	40	63	28	16
1986	16	0	0	0	0	0	0	0	32	60	69	23	17
1987	16	4	4	4	4	4	81	122	95	53	45	26	38
1988	0	0	0	0	0	0	80	112	91	54	43	19	33
1989	0	0	0	0	0	0	79	120	88	46	38	0	31
1990	28	28	28	28	28	28	80	119	69	80	72	40	53
1991	7	7	7	7	7	7	80	97	44	68	60	22	35
1992	18	18	18	18	18	18	86	125	89	61	60	18	46
1993	70	71	70	70	56	43	63	0	75	66	76	50	59
1994	8	8	8	8	8	8	80	115	100	60	37	26	39
1995	40	45	45	45	40	40	70	0	0	57	70	45	41
1996	4	4	4	4	4	4	27	0	59	37	41	12	17
1997	3	0	0	0	0	0	7	0	21	51	41	23	12
1998	67	54	32	54	55	27	36	0	26	86	68	50	46
1999	12	0	0	0	0	0	80	0	20	37	42	16	17
Average	14	10	9	10	9	8	51	44	60	56	51	21	29
Maximum	94	75	75	75	59	57	95	125	101	86	83	61	59
Minimum	0	0	0	0	0	0	0	0	0	33	16	0	11

S-12b
Bonneville Unit Operation - CUP Water (acre-feet)
Mapleton-Springville Lateral Pipeline

45	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	0	0	0	0	0	0	0	664	2,082	316	316	306	3,684
1951	316	0	0	0	0	0	0	243	2,360	352	352	341	3,964
1952	352	0	0	0	0	0	0	0	0	1,008	1,008	976	3,344
1953	1,008	0	0	0	0	0	4,000	0	0	0	0	0	5,008
1954	0	0	0	0	0	0	4,000	0	0	0	0	0	4,000
1955	0	0	0	0	0	0	4,760	5,758	2,380	0	0	0	12,898
1956	0	0	0	0	0	0	2,148	4,760	2,380	0	0	0	9,288
1957	0	0	0	0	0	0	4,306	0	0	0	0	0	4,306
1958	0	0	0	0	0	0	1,598	0	2,124	70	70	68	3,930
1959	70	0	0	0	0	0	4,760	6,109	2,380	0	0	0	13,319
1960	0	0	0	0	0	0	4,760	6,109	2,380	0	0	0	13,249
1961	0	0	0	0	0	0	5,650	5,219	2,380	0	0	0	13,249
1962	0	0	0	0	0	0	0	1,658	2,332	3	3	2	3,997
1963	3	0	0	0	0	0	4,760	4,056	2,380	0	0	0	11,199
1964	1,328	1,285	1,328	1,328	1,199	1,328	4,760	59	2,688	1,020	1,328	1,285	18,934
1965	0	0	0	0	0	0	142	0	43	961	961	930	3,039
1966	961	0	0	0	0	0	4,760	6,109	2,380	0	0	0	14,210
1967	233	225	233	233	210	233	4,760	1,471	968	233	233	225	9,254
1968	0	0	0	0	0	0	4,506	61	1,071	0	0	0	5,638
1969	0	0	0	0	0	0	0	0	1,745	568	568	550	3,432
1970	568	0	0	0	0	0	4,760	2,864	2,380	0	0	0	10,572
1971	0	0	0	0	0	0	930	2,536	2,380	0	0	0	5,846
1972	0	0	0	0	0	0	5,084	5,184	2,380	0	0	0	12,648
1973	0	0	0	0	0	0	1,420	0	1,973	153	153	148	3,847
1974	153	0	0	0	0	0	2,511	0	2,380	0	0	0	5,044
1975	0	0	0	0	0	0	4,760	0	0	0	0	0	4,760
1976	0	0	0	0	0	0	4,760	4,025	2,380	0	0	0	11,165
1977	0	0	0	0	0	0	4,760	6,109	2,380	0	0	0	13,249
1978	3,589	3,492	3,589	3,589	3,127	3,016	2,687	0	2,645	2,247	1,910	2,153	32,045
1979	3,401	3,431	3,527	3,527	3,238	3,527	3,171	361	2,380	2,195	2,195	2,099	33,053
1980	5,810	4,469	4,618	4,597	3,369	3,413	1,068	0	429	2,324	1,650	1,851	33,597
1981	2,577	1,569	1,569	974	974	974	4,760	6,023	2,380	0	0	0	21,799
1982	594	575	594	594	537	594	0	0	575	1,008	1,008	976	7,056
1983	1,008	0	0	0	0	0	1,366	0	0	664	664	642	4,344
1984	0	0	0	664	0	0	0	0	0	1,008	1,008	976	3,656
1985	1,008	0	0	0	0	0	157	0	0	968	968	937	4,040
1986	968	0	0	0	0	0	0	0	0	1,008	1,008	976	3,960
1987	1,008	254	262	262	237	262	4,760	6,109	2,380	262	262	254	16,311
1988	0	0	0	0	0	0	4,760	5,137	2,380	0	0	0	12,277
1989	0	0	0	0	0	0	4,727	6,109	2,380	0	0	0	13,216
1990	1,734	1,678	1,734	1,734	1,566	1,734	4,760	6,109	2,380	1,734	1,734	1,678	28,573
1991	458	444	458	458	414	458	4,760	5,981	2,380	458	458	444	17,173
1992	1,131	1,094	1,131	1,131	1,021	1,131	5,094	5,565	2,380	1,131	1,131	1,094	23,033
1993	4,326	4,220	4,326	4,326	3,130	2,665	3,748	0	3,068	2,145	2,145	2,038	36,136
1994	475	460	475	475	429	475	4,760	6,109	2,380	475	475	460	17,450
1995	2,431	2,660	2,739	2,739	2,196	2,431	4,142	0	0	2,124	2,124	2,046	25,633
1996	250	242	250	250	226	250	1,580	0	1,804	155	155	150	5,311
1997	155	0	0	0	0	0	442	0	0	897	897	868	3,259
1998	4,096	3,239	1,963	3,327	3,065	1,648	2,139	0	1,345	2,181	2,181	2,104	27,287
1999	759	6	6	6	5	6	4,760	0	6	6	6	6	5,570
Average	815	587	576	604	499	483	3,046	2,210	1,592	553	539	532	12,037
Maximum	5,810	4,469	4,618	4,597	3,369	3,527	5,650	6,109	3,068	2,324	2,195	2,153	36,136
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	3,039

S-12b
Bonneville Unit Operation - CUP Water (cfs)
Mapleton-Springville Lateral Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	11	35	5	5	5	5
1951	5	0	0	0	0	0	0	4	40	6	6	6	5
1952	6	0	0	0	0	0	0	0	0	16	16	16	5
1953	16	0	0	0	0	0	67	0	0	0	0	0	7
1954	0	0	0	0	0	0	67	0	0	0	0	0	6
1955	0	0	0	0	0	0	80	94	40	0	0	0	18
1956	0	0	0	0	0	0	36	77	40	0	0	0	13
1957	0	0	0	0	0	0	72	0	0	0	0	0	6
1958	0	0	0	0	0	0	27	0	36	1	1	1	5
1959	1	0	0	0	0	0	80	99	40	0	0	0	18
1960	0	0	0	0	0	0	80	99	40	0	0	0	18
1961	0	0	0	0	0	0	95	85	40	0	0	0	18
1962	0	0	0	0	0	0	0	27	39	0	0	0	6
1963	0	0	0	0	0	0	80	66	40	0	0	0	15
1964	22	22	22	22	21	22	80	1	45	17	22	22	26
1965	0	0	0	0	0	0	2	0	1	16	16	16	4
1966	16	0	0	0	0	0	80	99	40	0	0	0	20
1967	4	4	4	4	4	4	80	24	16	4	4	4	13
1968	0	0	0	0	0	0	76	1	18	0	0	0	8
1969	0	0	0	0	0	0	0	0	29	9	9	9	5
1970	9	0	0	0	0	0	80	47	40	0	0	0	15
1971	0	0	0	0	0	0	16	41	40	0	0	0	8
1972	0	0	0	0	0	0	85	84	40	0	0	0	17
1973	0	0	0	0	0	0	24	0	33	2	2	2	5
1974	2	0	0	0	0	0	42	0	40	0	0	0	7
1975	0	0	0	0	0	0	80	0	0	0	0	0	7
1976	0	0	0	0	0	0	80	65	40	0	0	0	15
1977	0	0	0	0	0	0	80	99	40	0	0	0	18
1978	58	59	58	58	56	49	45	0	44	37	31	36	44
1979	55	58	57	57	58	57	53	6	40	36	36	35	46
1980	94	75	75	75	59	56	18	0	7	38	27	31	46
1981	42	26	26	16	18	16	80	98	40	0	0	0	30
1982	10	10	10	10	10	10	0	0	10	16	16	16	10
1983	16	0	0	0	0	0	23	0	0	11	11	11	6
1984	0	0	0	11	0	0	0	0	0	16	16	16	5
1985	16	0	0	0	0	0	3	0	0	16	16	16	6
1986	16	0	0	0	0	0	0	0	0	16	16	16	5
1987	16	4	4	4	4	4	80	99	40	4	4	4	23
1988	0	0	0	0	0	0	80	84	40	0	0	0	17
1989	0	0	0	0	0	0	79	99	40	0	0	0	18
1990	28	28	28	28	28	28	80	99	40	28	28	28	39
1991	7	7	7	7	7	7	80	97	40	7	7	7	24
1992	18	18	18	18	18	18	86	91	40	18	18	18	32
1993	70	71	70	70	56	43	63	0	52	35	35	34	50
1994	8	8	8	8	8	8	80	99	40	8	8	8	24
1995	40	45	45	45	40	40	70	0	0	35	35	34	35
1996	4	4	4	4	4	4	27	0	30	3	3	3	7
1997	3	0	0	0	0	0	7	0	0	15	15	15	5
1998	67	54	32	54	55	27	36	0	23	35	35	35	38
1999	12	0	0	0	0	0	80	0	0	0	0	0	8
Average	13	10	9	10	9	8	51	36	27	9	9	9	17
Maximum	94	75	75	75	59	57	95	99	52	38	36	36	50
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	4

S-12c
Bonneville Unit Operation - Modeled SVP Water (acre-feet)
Mapleton-Springville Lateral Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	95	2,260	2,917	3,652	1,024	9,950
1951	0	0	0	0	0	0	0	0	1,776	3,243	2,757	1,500	9,276
1952	0	0	0	0	0	0	0	0	471	1,482	1,280	1,104	4,338
1953	734	0	0	0	0	0	26	353	2,687	3,333	2,725	1,170	11,029
1954	0	0	0	0	0	0	87	1,882	3,419	2,888	2,435	92	10,804
1955	0	0	0	0	0	0	0	65	3,334	3,736	2,300	743	10,178
1956	0	0	0	0	0	0	0	465	3,089	3,056	3,239	805	10,653
1957	0	0	0	0	0	0	0	0	862	3,384	2,850	1,577	8,672
1958	31	0	0	0	0	0	0	0	2,411	3,172	2,650	441	8,706
1959	0	0	0	0	0	0	0	1,022	3,323	2,565	1,743	223	8,877
1960	0	0	0	0	0	0	0	1,446	3,646	3,259	2,144	0	10,494
1961	0	0	0	0	0	0	0	2,467	3,491	2,003	960	1	8,922
1962	0	0	0	0	0	0	0	0	1,652	2,696	3,695	1,456	9,499
1963	1	0	0	0	0	0	0	259	1,441	3,568	2,718	134	8,121
1964	11	0	0	0	0	0	0	0	166	4,295	2,736	1,068	8,276
1965	0	0	0	0	0	0	0	0	484	1,951	1,796	677	4,908
1966	0	0	0	0	0	0	0	1,452	3,564	2,371	2,167	504	10,057
1967	0	0	0	0	0	0	0	0	0	3,795	3,104	1,354	8,254
1968	0	0	0	0	0	0	0	0	1,942	3,391	1,300	1,011	7,644
1969	0	0	0	0	0	0	0	77	1,000	2,807	2,925	1,583	8,392
1970	0	0	0	0	0	0	0	0	1,745	3,413	2,982	648	8,787
1971	0	0	0	0	0	0	0	0	2,410	3,535	3,280	0	9,225
1972	0	0	0	0	0	0	0	2,502	2,961	3,252	1,715	25	10,456
1973	0	0	0	0	0	0	0	0	1,481	3,290	2,881	276	7,927
1974	0	0	0	0	0	0	0	865	3,315	2,755	2,017	705	9,658
1975	0	0	0	0	0	0	0	0	0	2,580	2,848	977	6,406
1976	26	0	0	0	0	0	0	990	2,951	3,141	2,901	708	10,717
1977	0	0	0	0	0	0	0	640	3,434	2,858	2,495	762	10,190
1978	0	0	0	0	0	0	0	0	2,033	3,067	3,090	0	8,190
1979	0	0	0	0	0	0	0	0	2,629	3,031	2,937	130	8,727
1980	0	0	0	0	0	0	0	0	1,401	2,187	3,195	599	7,381
1981	378	0	0	0	0	0	0	815	2,720	3,176	3,032	0	10,122
1982	0	0	0	0	0	0	0	0	702	1,888	3,076	286	5,951
1983	0	0	0	0	0	0	0	927	1,799	2,866	2,425	0	8,018
1984	0	0	0	0	0	0	0	719	1,929	3,071	3,401	2,661	11,781
1985	0	0	0	0	0	0	0	0	2,503	1,475	2,891	710	7,579
1986	0	0	0	0	0	0	0	0	1,922	2,697	3,207	386	8,212
1987	0	0	0	0	0	0	65	1,378	3,267	2,985	2,511	1,279	11,486
1988	0	0	0	0	0	0	0	1,749	3,042	3,301	2,618	1,143	11,852
1989	0	0	0	0	0	0	0	1,263	2,884	2,842	2,340	1	9,329
1990	0	0	0	0	0	0	0	1,205	1,704	3,158	2,689	725	9,481
1991	0	0	0	0	0	0	0	0	216	3,741	3,241	887	8,085
1992	0	0	0	0	0	0	16	2,121	2,928	2,629	2,561	0	10,254
1993	0	0	0	0	0	0	0	0	1,417	1,919	2,533	937	6,806
1994	0	0	0	0	0	0	0	938	3,568	3,185	1,808	1,104	10,602
1995	0	0	0	0	0	0	0	0	0	1,408	2,180	603	4,191
1996	0	0	0	0	0	0	0	0	1,735	2,129	2,344	584	6,792
1997	0	0	0	0	0	0	0	0	1,227	2,214	1,650	478	5,568
1998	0	0	0	0	0	0	0	0	179	3,137	2,003	893	6,212
1999	0	0	0	0	0	0	0	0	1,165	2,256	2,590	957	6,969
Average	24	0	0	0	0	0	4	514	2,006	2,862	2,572	699	8,680
Maximum	734	0	0	0	0	0	87	2,502	3,646	4,295	3,695	2,661	11,852
Minimum	0	0	0	0	0	0	0	0	0	1,408	960	0	4,191

S-12c
Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - Modeled SVP Water (cfs)
Mapleton-Springville Lateral Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	2	38	47	59	17	14
1951	0	0	0	0	0	0	0	0	30	53	45	25	13
1952	0	0	0	0	0	0	0	0	8	24	21	19	6
1953	12	0	0	0	0	0	0	6	45	54	44	20	15
1954	0	0	0	0	0	0	1	31	57	47	40	2	15
1955	0	0	0	0	0	0	0	1	56	61	37	12	14
1956	0	0	0	0	0	0	0	8	52	50	53	14	15
1957	0	0	0	0	0	0	0	0	14	55	46	26	12
1958	0	0	0	0	0	0	0	0	41	52	43	7	12
1959	0	0	0	0	0	0	0	17	56	42	28	4	12
1960	0	0	0	0	0	0	0	24	61	53	35	0	14
1961	0	0	0	0	0	0	0	40	59	33	16	0	12
1962	0	0	0	0	0	0	0	0	28	44	60	24	13
1963	0	0	0	0	0	0	0	4	24	58	44	2	11
1964	0	0	0	0	0	0	0	0	3	70	44	18	11
1965	0	0	0	0	0	0	0	0	8	32	29	11	7
1966	0	0	0	0	0	0	0	24	60	39	35	8	14
1967	0	0	0	0	0	0	0	0	0	62	50	23	11
1968	0	0	0	0	0	0	0	0	33	55	21	17	11
1969	0	0	0	0	0	0	0	1	17	46	48	27	12
1970	0	0	0	0	0	0	0	0	29	56	48	11	12
1971	0	0	0	0	0	0	0	0	41	57	53	0	13
1972	0	0	0	0	0	0	0	41	50	53	28	0	14
1973	0	0	0	0	0	0	0	0	25	54	47	5	11
1974	0	0	0	0	0	0	0	14	56	45	33	12	13
1975	0	0	0	0	0	0	0	0	0	42	46	16	9
1976	0	0	0	0	0	0	0	16	50	51	47	12	15
1977	0	0	0	0	0	0	0	10	58	46	41	13	14
1978	0	0	0	0	0	0	0	0	34	50	50	0	11
1979	0	0	0	0	0	0	0	0	44	49	48	2	12
1980	0	0	0	0	0	0	0	0	24	36	52	10	10
1981	6	0	0	0	0	0	0	13	46	52	49	0	14
1982	0	0	0	0	0	0	0	0	12	31	50	5	8
1983	0	0	0	0	0	0	0	15	30	47	39	0	11
1984	0	0	0	0	0	0	0	12	32	50	55	45	16
1985	0	0	0	0	0	0	0	0	42	24	47	12	10
1986	0	0	0	0	0	0	0	0	32	44	52	6	11
1987	0	0	0	0	0	0	1	22	55	49	41	21	16
1988	0	0	0	0	0	0	0	28	51	54	43	19	16
1989	0	0	0	0	0	0	0	21	48	46	38	0	13
1990	0	0	0	0	0	0	0	20	29	51	44	12	13
1991	0	0	0	0	0	0	0	0	4	61	53	15	11
1992	0	0	0	0	0	0	0	34	49	43	42	0	14
1993	0	0	0	0	0	0	0	0	24	31	41	16	9
1994	0	0	0	0	0	0	0	15	60	52	29	19	15
1995	0	0	0	0	0	0	0	0	0	23	35	10	6
1996	0	0	0	0	0	0	0	0	29	35	38	10	9
1997	0	0	0	0	0	0	0	0	21	36	27	8	8
1998	0	0	0	0	0	0	0	0	3	51	33	15	9
1999	0	0	0	0	0	0	0	0	20	37	42	16	10
Average	0	0	0	0	0	0	0	8	34	47	42	12	12
Maximum	12	0	0	0	0	0	1	41	61	70	60	45	16
Minimum	0	0	0	0	0	0	0	0	0	23	16	0	6

S-12c-i
Bonneville Unit Operation - Actual SVP Water (acre-feet)
Mapleton-Springville Lateral Pipeline, SVP Ag Delivery

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	197	1,523	1,966	2,461	690	6,837
1951	0	0	0	0	0	0	0	131	1,197	2,185	1,858	1,011	6,381
1952	34	0	0	0	0	0	0	0	318	999	863	744	2,957
1953	494	0	0	0	0	0	55	238	1,811	2,246	1,837	789	7,469
1954	122	0	0	0	0	0	180	1,268	2,304	1,946	1,641	186	7,648
1955	61	0	0	0	0	0	0	134	2,246	2,518	1,550	500	7,010
1956	41	0	0	0	0	0	0	314	2,081	2,059	2,182	542	7,220
1957	0	0	0	0	0	0	0	0	581	2,280	1,920	1,062	5,844
1958	99	0	0	0	0	0	0	88	1,625	2,138	1,786	297	6,033
1959	25	0	0	0	0	0	0	688	2,239	1,729	1,175	462	6,318
1960	9	0	0	0	0	0	0	974	2,457	2,196	1,445	77	7,157
1961	0	0	0	0	0	0	0	1,663	2,353	1,350	647	100	6,112
1962	0	0	0	0	0	0	0	0	1,113	1,817	2,490	981	6,401
1963	142	0	0	0	0	0	0	175	971	2,404	1,832	277	5,801
1964	145	0	0	0	0	0	0	61	112	2,894	1,844	720	5,776
1965	0	0	0	0	0	0	0	0	326	1,314	1,210	456	3,307
1966	17	0	0	0	0	0	121	978	2,402	1,598	1,460	340	6,916
1967	95	0	0	0	0	0	0	0	134	2,557	2,092	913	5,791
1968	0	0	0	0	0	0	0	0	1,309	2,285	876	682	5,151
1969	30	0	0	0	0	0	0	159	674	1,892	1,971	1,066	5,793
1970	32	0	0	0	0	0	0	8	1,176	2,300	2,009	437	5,961
1971	18	0	0	0	0	0	0	132	1,624	2,382	2,210	114	6,481
1972	9	0	0	0	0	0	0	1,686	1,996	2,191	1,156	52	7,089
1973	0	0	0	0	0	0	0	0	998	2,217	1,941	186	5,342
1974	34	0	0	0	0	0	0	583	2,234	1,857	1,359	475	6,542
1975	27	0	0	0	0	0	0	0	162	1,739	1,919	658	4,505
1976	55	0	0	0	0	0	0	667	1,989	2,116	1,955	477	7,259
1977	4	0	0	0	0	0	140	432	2,314	1,926	1,682	514	7,011
1978	19	0	0	0	0	0	0	0	1,370	2,067	2,082	362	5,900
1979	0	0	0	0	0	0	0	17	1,772	2,042	1,979	237	6,047
1980	0	0	0	0	0	0	0	0	944	1,474	2,153	404	4,974
1981	255	0	0	0	0	0	0	549	1,833	2,140	2,043	0	6,821
1982	0	0	0	0	0	0	0	24	473	1,272	2,073	590	4,432
1983	0	0	0	0	0	0	0	625	1,212	1,931	1,634	92	5,494
1984	55	0	0	0	0	0	0	485	1,300	2,069	2,292	1,793	7,994
1985	0	0	0	0	0	0	0	47	1,687	994	1,948	479	5,154
1986	13	0	0	0	0	0	0	0	1,295	1,818	2,161	412	5,698
1987	0	0	0	0	0	0	135	929	2,201	2,011	1,692	862	7,830
1988	9	0	0	0	0	0	0	1,178	2,050	2,224	1,764	770	7,996
1989	88	0	0	0	0	0	0	851	1,943	1,915	1,577	13	6,388
1990	0	0	0	0	0	0	0	812	1,148	2,128	1,812	488	6,389
1991	0	0	0	0	0	0	0	0	146	2,521	2,184	622	5,472
1992	0	0	0	0	0	0	34	1,429	1,973	1,771	1,726	0	6,933
1993	0	0	0	0	0	0	0	0	955	1,293	1,707	632	4,586
1994	5	0	0	0	0	0	0	632	2,404	2,146	1,218	744	7,149
1995	0	0	0	0	0	0	0	0	120	949	1,469	406	2,944
1996	0	0	0	0	0	0	0	0	1,169	1,435	1,579	393	4,577
1997	0	0	0	0	0	0	0	0	827	1,492	1,112	322	3,752
1998	0	0	0	0	0	0	0	0	121	2,114	1,350	601	4,186
1999	0	0	0	0	0	0	0	0	785	1,521	1,746	645	4,696
Average	39	0	0	0	0	0	13	363	1,360	1,929	1,733	514	5,951
Maximum	494	0	0	0	0	0	180	1,686	2,457	2,894	2,490	1,793	7,996
Minimum	0	0	0	0	0	0	0	0	112	949	647	0	2,944

S-12c-i
Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - Actual SVP Water (cfs)
Mapleton-Springville Lateral Pipeline, SVP Ag Delivery

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

S-12c-ii
Bonneville Unit Operation - Actual SVP Water (acre-feet)
Mapleton-Springville Lateral Pipeline, SVP M&I Delivery

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	95	737	952	1,191	334	3,309
1951	0	0	0	0	0	0	0	63	579	1,058	899	489	3,089
1952	17	0	0	0	0	0	0	0	154	483	418	360	1,431
1953	239	0	0	0	0	0	26	115	876	1,087	889	382	3,615
1954	59	0	0	0	0	0	87	614	1,115	942	794	90	3,701
1955	29	0	0	0	0	0	0	65	1,087	1,219	750	242	3,393
1956	20	0	0	0	0	0	0	152	1,007	997	1,056	263	3,494
1957	0	0	0	0	0	0	0	0	281	1,104	929	514	2,828
1958	48	0	0	0	0	0	0	42	786	1,035	864	144	2,920
1959	12	0	0	0	0	0	0	333	1,084	837	568	223	3,058
1960	4	0	0	0	0	0	0	471	1,189	1,063	699	37	3,464
1961	0	0	0	0	0	0	0	805	1,139	653	313	49	2,958
1962	0	0	0	0	0	0	0	0	539	879	1,205	475	3,098
1963	69	0	0	0	0	0	0	85	470	1,164	887	134	2,808
1964	70	0	0	0	0	0	0	30	54	1,401	892	348	2,796
1965	0	0	0	0	0	0	0	0	158	636	586	221	1,601
1966	8	0	0	0	0	0	59	473	1,162	773	707	164	3,347
1967	46	0	0	0	0	0	0	0	65	1,238	1,012	442	2,803
1968	0	0	0	0	0	0	0	0	633	1,106	424	330	2,493
1969	15	0	0	0	0	0	0	77	326	916	954	516	2,804
1970	15	0	0	0	0	0	0	4	569	1,113	972	211	2,885
1971	9	0	0	0	0	0	0	64	786	1,153	1,070	55	3,137
1972	4	0	0	0	0	0	0	816	966	1,061	559	25	3,431
1973	0	0	0	0	0	0	0	0	483	1,073	940	90	2,585
1974	16	0	0	0	0	0	0	282	1,081	899	658	230	3,166
1975	13	0	0	0	0	0	0	0	78	842	929	319	2,180
1976	26	0	0	0	0	0	0	323	963	1,024	946	231	3,513
1977	2	0	0	0	0	0	68	209	1,120	932	814	249	3,393
1978	9	0	0	0	0	0	0	0	663	1,000	1,008	175	2,856
1979	0	0	0	0	0	0	0	8	857	988	958	115	2,927
1980	0	0	0	0	0	0	0	0	457	713	1,042	195	2,407
1981	123	0	0	0	0	0	0	266	887	1,036	989	0	3,301
1982	0	0	0	0	0	0	0	12	229	616	1,003	286	2,145
1983	0	0	0	0	0	0	0	302	587	935	791	44	2,659
1984	27	0	0	0	0	0	0	235	629	1,002	1,109	868	3,869
1985	0	0	0	0	0	0	0	23	816	481	943	232	2,495
1986	6	0	0	0	0	0	0	0	627	880	1,046	199	2,758
1987	0	0	0	0	0	0	65	450	1,065	973	819	417	3,790
1988	4	0	0	0	0	0	0	570	992	1,077	854	373	3,870
1989	43	0	0	0	0	0	0	412	941	927	763	6	3,092
1990	0	0	0	0	0	0	0	393	556	1,030	877	236	3,092
1991	0	0	0	0	0	0	0	0	71	1,220	1,057	301	2,649
1992	0	0	0	0	0	0	16	692	955	857	835	0	3,355
1993	0	0	0	0	0	0	0	0	462	626	826	306	2,220
1994	3	0	0	0	0	0	0	306	1,164	1,039	590	360	3,460
1995	0	0	0	0	0	0	0	0	58	459	711	197	1,425
1996	0	0	0	0	0	0	0	0	566	695	764	190	2,215
1997	0	0	0	0	0	0	0	0	400	722	538	156	1,816
1998	0	0	0	0	0	0	0	0	58	1,023	653	291	2,026
1999	0	0	0	0	0	0	0	0	380	736	845	312	2,273
Average	19	0	0	0	0	0	6	176	658	933	839	249	2,880
Maximum	239	0	0	0	0	0	87	816	1,189	1,401	1,205	868	3,870
Minimum	0	0	0	0	0	0	0	0	54	459	313	0	1,425

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Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - Actual SVP Water (cfs)
Mapleton-Springville Lateral Pipeline, SVP M&I Delivery

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

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Spanish Fork Canyon - Provo Reservoir Canal Alternative Flow - Total (acre-feet)
Spanish Fork - Santaquin Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	689	3,616	6,688	7,594	8,974	6,899	34,461
1951	0	0	0	0	0	0	689	3,448	6,850	8,790	8,737	6,750	35,264
1952	0	0	0	0	0	0	689	3,448	5,517	7,978	8,212	6,971	32,815
1953	938	0	0	0	0	0	729	4,012	7,075	8,528	8,616	6,707	36,604
1954	0	0	0	0	0	0	754	4,878	7,344	8,194	9,197	6,053	36,420
1955	0	0	0	0	0	0	689	3,637	7,049	8,975	8,576	6,597	35,523
1956	0	0	0	0	0	0	689	3,905	7,385	8,231	8,939	6,466	35,614
1957	0	0	0	0	0	0	689	3,448	5,471	8,908	8,833	6,829	34,179
1958	0	0	0	0	0	0	689	3,448	6,970	8,522	9,031	6,202	34,862
1959	0	0	0	0	0	0	689	4,947	7,539	7,825	8,320	6,005	35,325
1960	0	0	0	0	0	0	689	4,424	7,698	8,348	8,880	5,518	35,556
1961	0	0	0	0	0	0	689	5,417	7,636	7,788	7,684	5,518	34,732
1962	0	0	0	0	0	0	689	3,448	6,882	8,433	9,208	6,161	34,821
1963	0	0	0	0	0	0	689	4,056	5,773	8,782	9,079	5,785	34,164
1964	0	0	0	0	0	0	689	3,448	5,167	9,784	9,180	6,696	34,964
1965	0	0	0	0	0	0	689	3,448	5,463	7,928	8,325	6,265	32,118
1966	0	0	0	0	0	0	689	4,337	7,671	7,968	8,868	6,142	35,675
1967	0	0	0	0	0	0	689	3,448	4,829	8,758	9,206	7,134	34,065
1968	0	0	0	0	0	0	689	3,448	6,115	8,844	8,240	6,872	34,208
1969	0	0	0	0	0	0	689	3,554	5,852	8,346	9,435	6,629	34,506
1970	0	0	0	0	0	0	689	3,448	5,838	8,625	9,575	6,385	34,560
1971	0	0	0	0	0	0	689	3,448	6,329	8,926	9,765	5,518	34,675
1972	0	0	0	0	0	0	689	5,206	6,976	8,544	8,701	5,756	35,871
1973	0	0	0	0	0	0	689	3,448	5,553	8,724	9,297	6,079	33,790
1974	0	0	0	0	0	0	689	3,779	6,752	8,167	9,468	6,258	35,113
1975	0	0	0	0	0	0	689	3,448	4,829	9,073	9,904	6,916	34,860
1976	150	0	0	0	0	0	689	4,173	7,156	8,776	9,320	6,618	36,882
1977	0	0	0	0	0	0	689	4,531	7,200	8,050	9,159	6,156	35,785
1978	0	0	0	0	0	0	689	3,448	6,368	9,057	9,450	5,518	34,530
1979	0	0	0	0	0	0	689	3,448	6,970	8,580	8,825	5,956	34,468
1980	0	0	0	0	0	0	689	3,448	5,992	8,578	9,603	6,010	34,320
1981	394	0	0	0	0	0	689	4,369	7,193	8,390	9,182	5,518	35,735
1982	0	0	0	0	0	0	689	3,448	5,587	8,451	9,377	5,817	33,369
1983	0	0	0	0	0	0	689	4,244	6,235	7,128	8,037	5,518	31,851
1984	0	0	0	0	0	0	689	4,066	5,824	8,044	8,549	6,459	33,631
1985	0	0	0	0	0	0	689	3,448	6,381	7,857	10,008	6,016	34,399
1986	0	0	0	0	0	0	689	3,448	5,886	8,122	9,023	6,219	33,387
1987	0	0	0	0	0	0	1,045	4,728	7,430	7,851	8,618	6,589	36,261
1988	0	0	0	0	0	0	689	4,636	7,278	8,893	9,039	6,202	36,738
1989	0	0	0	0	0	0	689	5,302	7,346	8,641	7,829	5,518	35,324
1990	0	0	0	0	0	0	689	4,502	6,345	8,365	9,062	6,476	35,438
1991	0	0	0	0	0	0	689	3,448	5,454	9,281	9,655	6,074	34,601
1992	0	0	0	0	0	0	1,023	4,714	7,291	7,913	8,824	6,164	35,929
1993	0	0	0	0	0	0	689	3,448	5,335	8,204	9,329	6,515	33,520
1994	0	0	0	0	0	0	689	4,289	7,584	8,774	8,358	6,424	36,119
1995	0	0	0	0	0	0	689	3,448	4,829	7,274	9,064	6,315	31,618
1996	0	0	0	0	0	0	689	3,448	5,967	8,071	9,526	5,957	33,658
1997	0	0	0	0	0	0	689	3,448	5,466	8,164	8,968	5,969	32,703
1998	0	0	0	0	0	0	689	3,448	5,106	8,813	10,023	6,705	34,784
1999	0	0	0	0	0	0	689	3,448	6,286	9,337	9,259	6,196	35,215
Average	30	0	0	0	0	0	705	3,899	6,395	8,424	9,007	6,240	34,700
Maximum	938	0	0	0	0	0	1,045	5,417	7,698	9,784	10,023	7,134	36,882
Minimum	0	0	0	0	0	0	689	3,448	4,829	7,128	7,684	5,518	31,618

SVP water would be conveyed through the Spanish Fork – Santaquin Pipeline on a space available basis up to the 120 cfs capacity of the pipeline. The monthly amounts shown are based on a historical pattern of SVP water deliveries. Amounts greater than 120 cfs would need to be conveyed through the existing canals (Strawberry Highline, Salem, South Fields and East Bench canals) by the cities and used in lower elevation zone secondary systems, or would need to be delivered on a different pattern when capacity was available.

S-13a
Spanish Fork Canyon - Provo Reservoir Canal Alternative Flow - Total (cfs)
Spanish Fork - Santaquin Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	12	59	112	124	146	116	48
1951	0	0	0	0	0	0	12	56	115	143	142	113	49
1952	0	0	0	0	0	0	12	56	93	130	134	117	45
1953	15	0	0	0	0	0	12	65	119	139	140	113	51
1954	0	0	0	0	0	0	13	79	123	133	150	102	50
1955	0	0	0	0	0	0	12	59	118	146	139	111	49
1956	0	0	0	0	0	0	12	64	124	134	145	109	49
1957	0	0	0	0	0	0	12	56	92	145	144	115	47
1958	0	0	0	0	0	0	12	56	117	139	147	104	48
1959	0	0	0	0	0	0	12	80	127	127	135	101	49
1960	0	0	0	0	0	0	12	72	129	136	144	93	49
1961	0	0	0	0	0	0	12	88	128	127	125	93	48
1962	0	0	0	0	0	0	12	56	116	137	150	104	48
1963	0	0	0	0	0	0	12	66	97	143	148	97	47
1964	0	0	0	0	0	0	12	56	87	159	149	113	48
1965	0	0	0	0	0	0	12	56	92	129	135	105	44
1966	0	0	0	0	0	0	12	71	129	130	144	103	49
1967	0	0	0	0	0	0	12	56	81	142	150	120	47
1968	0	0	0	0	0	0	12	56	103	144	134	115	47
1969	0	0	0	0	0	0	12	58	98	136	153	111	48
1970	0	0	0	0	0	0	12	56	98	140	156	107	48
1971	0	0	0	0	0	0	12	56	106	145	159	93	48
1972	0	0	0	0	0	0	12	85	117	139	142	97	49
1973	0	0	0	0	0	0	12	56	93	142	151	102	47
1974	0	0	0	0	0	0	12	61	113	133	154	105	49
1975	0	0	0	0	0	0	12	56	81	148	161	116	48
1976	2	0	0	0	0	0	12	68	120	143	152	111	51
1977	0	0	0	0	0	0	12	74	121	131	149	103	49
1978	0	0	0	0	0	0	12	56	107	147	154	93	48
1979	0	0	0	0	0	0	12	56	117	140	144	100	48
1980	0	0	0	0	0	0	12	56	101	140	156	101	47
1981	6	0	0	0	0	0	12	71	121	136	149	93	49
1982	0	0	0	0	0	0	12	56	94	137	152	98	46
1983	0	0	0	0	0	0	12	69	105	116	131	93	44
1984	0	0	0	0	0	0	12	66	98	131	139	109	46
1985	0	0	0	0	0	0	12	56	107	128	163	101	48
1986	0	0	0	0	0	0	12	56	99	132	147	105	46
1987	0	0	0	0	0	0	18	77	125	128	140	111	50
1988	0	0	0	0	0	0	12	75	122	145	147	104	51
1989	0	0	0	0	0	0	12	86	123	141	127	93	49
1990	0	0	0	0	0	0	12	73	107	136	147	109	49
1991	0	0	0	0	0	0	12	56	92	151	157	102	48
1992	0	0	0	0	0	0	17	77	123	129	144	104	49
1993	0	0	0	0	0	0	12	56	90	133	152	109	46
1994	0	0	0	0	0	0	12	70	127	143	136	108	50
1995	0	0	0	0	0	0	12	56	81	118	147	106	44
1996	0	0	0	0	0	0	12	56	100	131	155	100	46
1997	0	0	0	0	0	0	12	56	92	133	146	100	45
1998	0	0	0	0	0	0	12	56	86	143	163	113	48
1999	0	0	0	0	0	0	12	56	106	152	151	104	49
Average	0	0	0	0	0	0	12	63	107	137	146	105	48
Maximum	15	0	0	0	0	0	18	88	129	159	163	120	51
Minimum	0	0	0	0	0	0	12	56	81	116	125	93	44

SVP water would be conveyed through the Spanish Fork – Santaquin Pipeline on a space available basis up to the 120 cfs capacity of the pipeline. The monthly amounts shown are based on a historical pattern of SVP water deliveries. Amounts greater than 120 cfs would need to be conveyed through the existing canals (Strawberry Highline, Salem, South Fields and East Bench canals) by the cities and used in lower elevation zone secondary systems, or would need to be delivered on a different pattern when capacity was available.

S-13b
Bonneville Unit Operation - CUP Water (acre-feet)
Spanish Fork - Santaquin Pipeline

67	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Total**
1950	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1951	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1952	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1953	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1954	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1955	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1956	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1957	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1958	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1959	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1960	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1961	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1962	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1963	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1964	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1965	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1966	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1967	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1968	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1969	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1970	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1971	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1972	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1973	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1974	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1975	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1976	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1977	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1978	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1979	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1980	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1981	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1982	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1983	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1984	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1985	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1986	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1987	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1988	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1989	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1990	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1991	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1992	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1993	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1994	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1995	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1996	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1997	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1998	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
1999	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
Average	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
Maximum	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590
Minimum	0	0	0	0	0	0	689	3,448	4,829	6,206	6,900	5,518	27,590

S-13b
Bonneville Unit Operation - CUP Water (cfs)
Spanish Fork - Santaquin Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	12	56	81	101	112	93	38
1951	0	0	0	0	0	0	12	56	81	101	112	93	38
1952	0	0	0	0	0	0	12	56	81	101	112	93	38
1953	0	0	0	0	0	0	12	56	81	101	112	93	38
1954	0	0	0	0	0	0	12	56	81	101	112	93	38
1955	0	0	0	0	0	0	12	56	81	101	112	93	38
1956	0	0	0	0	0	0	12	56	81	101	112	93	38
1957	0	0	0	0	0	0	12	56	81	101	112	93	38
1958	0	0	0	0	0	0	12	56	81	101	112	93	38
1959	0	0	0	0	0	0	12	56	81	101	112	93	38
1960	0	0	0	0	0	0	12	56	81	101	112	93	38
1961	0	0	0	0	0	0	12	56	81	101	112	93	38
1962	0	0	0	0	0	0	12	56	81	101	112	93	38
1963	0	0	0	0	0	0	12	56	81	101	112	93	38
1964	0	0	0	0	0	0	12	56	81	101	112	93	38
1965	0	0	0	0	0	0	12	56	81	101	112	93	38
1966	0	0	0	0	0	0	12	56	81	101	112	93	38
1967	0	0	0	0	0	0	12	56	81	101	112	93	38
1968	0	0	0	0	0	0	12	56	81	101	112	93	38
1969	0	0	0	0	0	0	12	56	81	101	112	93	38
1970	0	0	0	0	0	0	12	56	81	101	112	93	38
1971	0	0	0	0	0	0	12	56	81	101	112	93	38
1972	0	0	0	0	0	0	12	56	81	101	112	93	38
1973	0	0	0	0	0	0	12	56	81	101	112	93	38
1974	0	0	0	0	0	0	12	56	81	101	112	93	38
1975	0	0	0	0	0	0	12	56	81	101	112	93	38
1976	0	0	0	0	0	0	12	56	81	101	112	93	38
1977	0	0	0	0	0	0	12	56	81	101	112	93	38
1978	0	0	0	0	0	0	12	56	81	101	112	93	38
1979	0	0	0	0	0	0	12	56	81	101	112	93	38
1980	0	0	0	0	0	0	12	56	81	101	112	93	38
1981	0	0	0	0	0	0	12	56	81	101	112	93	38
1982	0	0	0	0	0	0	12	56	81	101	112	93	38
1983	0	0	0	0	0	0	12	56	81	101	112	93	38
1984	0	0	0	0	0	0	12	56	81	101	112	93	38
1985	0	0	0	0	0	0	12	56	81	101	112	93	38
1986	0	0	0	0	0	0	12	56	81	101	112	93	38
1987	0	0	0	0	0	0	12	56	81	101	112	93	38
1988	0	0	0	0	0	0	12	56	81	101	112	93	38
1989	0	0	0	0	0	0	12	56	81	101	112	93	38
1990	0	0	0	0	0	0	12	56	81	101	112	93	38
1991	0	0	0	0	0	0	12	56	81	101	112	93	38
1992	0	0	0	0	0	0	12	56	81	101	112	93	38
1993	0	0	0	0	0	0	12	56	81	101	112	93	38
1994	0	0	0	0	0	0	12	56	81	101	112	93	38
1995	0	0	0	0	0	0	12	56	81	101	112	93	38
1996	0	0	0	0	0	0	12	56	81	101	112	93	38
1997	0	0	0	0	0	0	12	56	81	101	112	93	38
1998	0	0	0	0	0	0	12	56	81	101	112	93	38
1999	0	0	0	0	0	0	12	56	81	101	112	93	38
Average	0	0	0	0	0	0	12	56	81	101	112	93	38
Maximum	0	0	0	0	0	0	12	56	81	101	112	93	38
Minimum	0	0	0	0	0	0	12	56	81	101	112	93	38

S-13c

Spanish Fork Canyon - Provo Reservoir Canal Alternative Flow - Modeled SVP Water (acre-feet)

Spanish Fork - Santaquin Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	168	1,859	1,388	2,074	1,381	6,871
1951	0	0	0	0	0	0	0	0	2,021	2,584	1,837	1,232	7,674
1952	0	0	0	0	0	0	0	0	688	1,771	1,312	1,453	5,225
1953	938	0	0	0	0	0	40	564	2,246	2,321	1,716	1,189	9,014
1954	0	0	0	0	0	0	65	1,430	2,515	1,988	2,298	535	8,830
1955	0	0	0	0	0	0	0	189	2,220	2,769	1,676	1,079	7,933
1956	0	0	0	0	0	0	0	457	2,556	2,025	2,039	948	8,024
1957	0	0	0	0	0	0	0	0	642	2,702	1,933	1,311	6,589
1958	0	0	0	0	0	0	0	0	2,141	2,316	2,132	684	7,272
1959	0	0	0	0	0	0	0	1,499	2,710	1,619	1,420	487	7,735
1960	0	0	0	0	0	0	0	975	2,869	2,142	1,980	0	7,966
1961	0	0	0	0	0	0	0	1,969	2,807	1,582	784	0	7,142
1962	0	0	0	0	0	0	0	0	2,053	2,226	2,308	643	7,231
1963	0	0	0	0	0	0	0	608	944	2,576	2,179	267	6,574
1964	0	0	0	0	0	0	0	0	338	3,578	2,280	1,178	7,374
1965	0	0	0	0	0	0	0	0	634	1,722	1,425	747	4,528
1966	0	0	0	0	0	0	0	888	2,842	1,762	1,968	624	8,085
1967	0	0	0	0	0	0	0	0	0	2,552	2,306	1,616	6,475
1968	0	0	0	0	0	0	0	0	1,286	2,638	1,340	1,354	6,618
1969	0	0	0	0	0	0	0	106	1,023	2,140	2,535	1,111	6,916
1970	0	0	0	0	0	0	0	0	1,009	2,419	2,675	867	6,970
1971	0	0	0	0	0	0	0	0	1,500	2,720	2,865	0	7,085
1972	0	0	0	0	0	0	0	1,758	2,147	2,338	1,801	238	8,281
1973	0	0	0	0	0	0	0	0	724	2,518	2,397	561	6,200
1974	0	0	0	0	0	0	0	331	1,923	1,961	2,568	740	7,523
1975	0	0	0	0	0	0	0	0	0	2,867	3,004	1,398	7,270
1976	150	0	0	0	0	0	0	725	2,327	2,570	2,420	1,100	9,292
1977	0	0	0	0	0	0	0	1,083	2,371	1,844	2,259	638	8,195
1978	0	0	0	0	0	0	0	0	1,539	2,851	2,550	0	6,940
1979	0	0	0	0	0	0	0	0	2,141	2,374	1,925	438	6,878
1980	0	0	0	0	0	0	0	0	1,163	2,372	2,703	492	6,730
1981	394	0	0	0	0	0	0	921	2,364	2,184	2,282	0	8,145
1982	0	0	0	0	0	0	0	0	758	2,245	2,477	299	5,779
1983	0	0	0	0	0	0	0	796	1,406	922	1,137	0	4,261
1984	0	0	0	0	0	0	0	617	995	1,838	1,649	941	6,041
1985	0	0	0	0	0	0	0	0	1,552	1,651	3,108	498	6,809
1986	0	0	0	0	0	0	0	0	1,057	1,916	2,123	701	5,797
1987	0	0	0	0	0	0	356	1,280	2,601	1,645	1,718	1,071	8,671
1988	0	0	0	0	0	0	0	1,188	2,449	2,687	2,139	684	9,148
1989	0	0	0	0	0	0	0	1,854	2,517	2,435	929	0	7,734
1990	0	0	0	0	0	0	0	1,054	1,516	2,159	2,162	958	7,848
1991	0	0	0	0	0	0	0	0	625	3,075	2,755	556	7,011
1992	0	0	0	0	0	0	334	1,266	2,462	1,707	1,924	646	8,339
1993	0	0	0	0	0	0	0	0	506	1,998	2,430	997	5,930
1994	0	0	0	0	0	0	0	841	2,755	2,568	1,458	906	8,529
1995	0	0	0	0	0	0	0	0	0	1,068	2,164	797	4,028
1996	0	0	0	0	0	0	0	0	1,138	1,865	2,626	439	6,068
1997	0	0	0	0	0	0	0	0	637	1,958	2,068	451	5,113
1998	0	0	0	0	0	0	0	0	277	2,607	3,123	1,187	7,194
1999	0	0	0	0	0	0	0	0	1,457	3,131	2,359	678	7,625
Average	30	0	0	0	0	0	16	451	1,566	2,218	2,107	722	7,110
Maximum	938	0	0	0	0	0	356	1,969	2,869	3,578	3,123	1,616	9,292
Minimum	0	0	0	0	0	0	0	0	0	922	784	0	4,028

SVP water would be conveyed through the Spanish Fork – Santaquin Pipeline on a space available basis up to the 120 cfs capacity of the pipeline. The monthly amounts shown are based on a historical pattern of SVP water deliveries. Amounts greater than 120 cfs would need to be conveyed through the existing canals (Strawberry Highline, Salem, South Fields and East Bench canals) by the cities and used in lower elevation zone secondary systems, or would need to be delivered on a different pattern when capacity was available.

S-13c
Spanish Fork Canyon - Provo Reservoir Canal Alternative Flow - Modeled SVP Water (cfs)
Spanish Fork - Santaquin Pipeline

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

SVP water would be conveyed through the Spanish Fork – Santaquin Pipeline on a space available basis up to the 120 cfs capacity of the pipeline. The monthly amounts shown are based on a historical pattern of SVP water deliveries. Amounts greater than 120 cfs would need to be conveyed through the existing canals (Strawberry Highline, Salem, South Fields and East Bench canals) by the cities and used in lower elevation zone secondary systems, or would need to be delivered on a different pattern when capacity was available.

S-13c-i
Bonneville Unit Operation - Actual SVP Water (acre-feet)
Spanish Fork-Santaquin Pipeline, SVP Water

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	218	1,859	1,388	2,074	1,381	6,920
1951	58	0	0	0	0	0	32	142	2,021	2,584	1,837	1,232	7,906
1952	201	0	0	0	0	0	0	0	688	1,771	1,312	1,453	5,426
1953	938	0	0	0	0	0	186	564	2,246	2,321	1,716	1,189	9,160
1954	309	0	0	0	0	0	195	1,430	2,515	1,988	2,298	535	9,269
1955	264	0	0	0	0	0	0	214	2,220	2,769	1,676	1,079	8,223
1956	153	0	0	0	0	0	17	457	2,556	2,025	2,039	948	8,195
1957	157	0	0	0	0	0	0	0	642	2,702	1,933	1,311	6,746
1958	348	0	0	0	0	0	0	70	2,141	2,316	2,132	684	7,691
1959	238	0	0	0	0	0	19	1,499	2,710	1,619	1,420	495	8,001
1960	155	0	0	0	0	0	90	975	2,869	2,142	1,980	543	8,754
1961	246	0	0	0	0	0	0	1,969	2,807	1,582	784	327	7,716
1962	0	0	0	0	0	0	0	0	2,053	2,226	2,308	643	7,231
1963	246	0	0	0	0	0	0	608	944	2,576	2,179	649	7,202
1964	382	0	0	0	0	0	0	99	338	3,578	2,280	1,178	7,855
1965	174	0	0	0	0	0	0	0	634	1,722	1,425	747	4,702
1966	134	0	0	0	0	0	97	888	2,842	1,762	1,968	624	8,315
1967	133	0	0	0	0	0	0	0	100	2,552	2,306	1,616	6,708
1968	0	0	0	0	0	0	0	0	1,286	2,638	1,340	1,354	6,618
1969	288	0	0	0	0	0	0	186	1,023	2,140	2,535	1,111	7,283
1970	223	0	0	0	0	0	0	10	1,009	2,419	2,675	867	7,204
1971	176	0	0	0	0	0	0	142	1,500	2,720	2,865	256	7,659
1972	4	0	0	0	0	0	0	1,758	2,147	2,338	1,801	480	8,527
1973	0	0	0	0	0	0	0	0	724	2,518	2,397	561	6,200
1974	86	0	0	0	0	0	0	331	1,923	1,961	2,568	740	7,609
1975	244	0	0	0	0	0	0	0	100	2,867	3,004	1,398	7,613
1976	390	0	0	0	0	0	0	725	2,327	2,570	2,420	1,100	9,531
1977	123	0	0	0	0	0	228	1,083	2,371	1,844	2,259	638	8,546
1978	169	0	0	0	0	0	0	0	1,539	2,851	2,550	258	7,367
1979	0	0	0	0	0	0	0	18	2,141	2,374	1,925	438	6,896
1980	0	0	0	0	0	0	0	0	1,163	2,372	2,703	492	6,730
1981	394	0	0	0	0	0	173	921	2,364	2,184	2,282	0	8,318
1982	0	0	0	0	0	0	0	30	758	2,245	2,477	474	5,985
1983	0	0	0	0	0	0	0	796	1,406	922	1,137	141	4,403
1984	199	0	0	0	0	0	0	617	995	1,838	1,649	941	6,239
1985	0	0	0	0	0	0	0	20	1,552	1,651	3,108	498	6,829
1986	29	0	0	0	0	0	0	0	1,057	1,916	2,123	701	5,826
1987	0	0	0	0	0	0	473	1,280	2,601	1,645	1,718	1,071	8,788
1988	160	0	0	0	0	0	0	1,188	2,449	2,687	2,139	684	9,308
1989	199	0	0	0	0	0	281	1,854	2,517	2,435	929	13	8,227
1990	0	0	0	0	0	0	0	1,054	1,516	2,159	2,162	958	7,848
1991	0	0	0	0	0	0	0	0	625	3,075	2,755	556	7,011
1992	0	0	0	0	0	0	400	1,266	2,462	1,707	1,924	646	8,405
1993	0	0	0	0	0	0	0	0	506	1,998	2,430	997	5,930
1994	23	0	0	0	0	0	0	841	2,755	2,568	1,458	906	8,552
1995	0	0	0	0	0	0	0	0	132	1,068	2,164	797	4,160
1996	0	0	0	0	0	0	0	0	1,138	1,865	2,626	439	6,068
1997	0	0	0	0	0	0	0	0	637	1,958	2,068	451	5,113
1998	0	0	0	0	0	0	0	0	277	2,607	3,123	1,187	7,194
1999	368	0	0	0	0	0	0	0	1,457	3,131	2,359	678	7,993
Average	144	0	0	0	0	0	44	465	1,573	2,218	2,107	769	7,320
Maximum	938	0	0	0	0	0	473	1,969	2,869	3,578	3,123	1,616	9,531
Minimum	0	0	0	0	0	0	0	0	100	922	784	0	4,160

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Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - Actual SVP Water (cfs)

Spanish Fork-Santaquin Pipeline, SVP Water

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

S-13c-ii
Bonneville Unit Operation - Actual SVP Water (acre-feet)
Spanish Fork-Santaquin Pipeline, Total SVP M&I Water

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	0	0	0	0	0	0	314	2,596	2,340	3,265	1,715	10,229
1951	58	0	0	0	0	0	32	205	2,600	3,642	2,736	1,721	10,994
1952	218	0	0	0	0	0	0	0	842	2,255	1,730	1,813	6,858
1953	1,177	0	0	0	0	0	213	679	3,122	3,408	2,605	1,570	12,775
1954	368	0	0	0	0	0	282	2,044	3,630	2,930	3,092	625	12,971
1955	293	0	0	0	0	0	0	279	3,307	3,988	2,426	1,322	11,615
1956	173	0	0	0	0	0	17	608	3,563	3,021	3,095	1,210	11,689
1957	157	0	0	0	0	0	0	0	923	3,806	2,862	1,825	9,574
1958	396	0	0	0	0	0	0	112	2,927	3,351	2,996	828	10,610
1959	250	0	0	0	0	0	19	1,832	3,794	2,456	1,989	719	11,059
1960	159	0	0	0	0	0	90	1,447	4,058	3,205	2,679	580	12,218
1961	246	0	0	0	0	0	0	2,774	3,946	2,235	1,097	376	10,674
1962	0	0	0	0	0	0	0	0	2,592	3,106	3,513	1,118	10,329
1963	315	0	0	0	0	0	0	693	1,414	3,740	3,065	783	10,010
1964	453	0	0	0	0	0	0	129	393	4,978	3,172	1,526	10,651
1965	174	0	0	0	0	0	0	0	792	2,358	2,010	968	6,303
1966	142	0	0	0	0	0	156	1,362	4,005	2,535	2,674	789	11,662
1967	179	0	0	0	0	0	0	0	165	3,790	3,319	2,058	9,511
1968	0	0	0	0	0	0	0	0	1,920	3,744	1,764	1,684	9,112
1969	303	0	0	0	0	0	0	263	1,349	3,056	3,490	1,627	10,087
1970	239	0	0	0	0	0	0	14	1,578	3,532	3,647	1,078	10,089
1971	185	0	0	0	0	0	0	206	2,286	3,873	3,935	311	10,796
1972	8	0	0	0	0	0	0	2,574	3,113	3,399	2,360	505	11,958
1973	0	0	0	0	0	0	0	0	1,207	3,591	3,337	651	8,785
1974	102	0	0	0	0	0	0	613	3,004	2,860	3,226	970	10,775
1975	257	0	0	0	0	0	0	0	178	3,709	3,933	1,717	9,794
1976	416	0	0	0	0	0	0	1,048	3,289	3,594	3,366	1,331	13,044
1977	126	0	0	0	0	0	295	1,292	3,491	2,776	3,073	887	11,939
1978	178	0	0	0	0	0	0	0	2,202	3,851	3,557	433	10,223
1979	0	0	0	0	0	0	0	26	2,998	3,362	2,883	553	9,822
1980	0	0	0	0	0	0	0	0	1,620	3,085	3,745	688	9,137
1981	518	0	0	0	0	0	173	1,187	3,251	3,220	3,271	0	11,619
1982	0	0	0	0	0	0	0	42	987	2,861	3,480	760	8,130
1983	0	0	0	0	0	0	0	1,098	1,993	1,857	1,928	186	7,062
1984	226	0	0	0	0	0	0	852	1,624	2,839	2,758	1,809	10,109
1985	0	0	0	0	0	0	0	43	2,369	2,132	4,051	730	9,324
1986	35	0	0	0	0	0	0	0	1,684	2,796	3,169	900	8,584
1987	0	0	0	0	0	0	538	1,729	3,667	2,618	2,537	1,488	12,577
1988	164	0	0	0	0	0	0	1,758	3,441	3,764	2,993	1,057	13,178
1989	242	0	0	0	0	0	281	2,266	3,457	3,362	1,692	19	11,318
1990	0	0	0	0	0	0	0	1,446	2,071	3,189	3,040	1,194	10,940
1991	0	0	0	0	0	0	0	0	696	4,295	3,812	857	9,660
1992	0	0	0	0	0	0	416	1,957	3,417	2,565	2,760	646	11,760
1993	0	0	0	0	0	0	0	0	968	2,623	3,256	1,302	8,150
1994	26	0	0	0	0	0	0	1,147	3,919	3,607	2,047	1,266	12,012
1995	0	0	0	0	0	0	0	0	190	1,527	2,875	993	5,585
1996	0	0	0	0	0	0	0	0	1,704	2,559	3,391	630	8,283
1997	0	0	0	0	0	0	0	0	1,037	2,680	2,606	606	6,929
1998	0	0	0	0	0	0	0	0	336	3,630	3,776	1,478	9,220
1999	368	0	0	0	0	0	0	0	1,837	3,867	3,204	990	10,266
Average	163	0	0	0	0	0	50	641	2,231	3,151	2,946	1,018	10,200
Maximum	1,177	0	0	0	0	0	538	2,774	4,058	4,978	4,051	2,058	13,178
Minimum	0	0	0	0	0	0	0	0	165	1,527	1,097	0	5,585

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Spanish Fork Canyon -Provo Reservoir Canal Alternative Flow - Actual SVP Water (cfs)
Spanish Fork-Santaquin Pipeline, Total SVP M&I Water

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	0	0	0	0	0	0	5	44	38	53	29	14
1951	1	0	0	0	0	0	1	3	44	59	44	29	15
1952	4	0	0	0	0	0	0	0	14	37	28	30	9
1953	19	0	0	0	0	0	4	11	52	55	42	26	18
1954	6	0	0	0	0	0	5	33	61	48	50	11	18
1955	5	0	0	0	0	0	0	5	56	65	39	22	16
1956	3	0	0	0	0	0	0	10	60	49	50	20	16
1957	3	0	0	0	0	0	0	0	16	62	47	31	13
1958	6	0	0	0	0	0	0	2	49	54	49	14	15
1959	4	0	0	0	0	0	0	30	64	40	32	12	15
1960	3	0	0	0	0	0	2	24	68	52	44	10	17
1961	4	0	0	0	0	0	0	45	66	36	18	6	15
1962	0	0	0	0	0	0	0	0	44	51	57	19	14
1963	5	0	0	0	0	0	0	11	24	61	50	13	14
1964	7	0	0	0	0	0	0	2	7	81	52	26	15
1965	3	0	0	0	0	0	0	0	13	38	33	16	9
1966	2	0	0	0	0	0	3	22	67	41	43	13	16
1967	3	0	0	0	0	0	0	0	3	62	54	35	13
1968	0	0	0	0	0	0	0	0	32	61	29	28	13
1969	5	0	0	0	0	0	0	4	23	50	57	27	14
1970	4	0	0	0	0	0	0	0	27	57	59	18	14
1971	3	0	0	0	0	0	0	3	38	63	64	5	15
1972	0	0	0	0	0	0	0	42	52	55	38	8	16
1973	0	0	0	0	0	0	0	0	20	58	54	11	12
1974	2	0	0	0	0	0	0	10	50	47	52	16	15
1975	4	0	0	0	0	0	0	0	3	60	64	29	14
1976	7	0	0	0	0	0	0	17	55	58	55	22	18
1977	2	0	0	0	0	0	5	21	59	45	50	15	16
1978	3	0	0	0	0	0	0	0	37	63	58	7	14
1979	0	0	0	0	0	0	0	0	50	55	47	9	14
1980	0	0	0	0	0	0	0	0	27	50	61	12	13
1981	8	0	0	0	0	0	3	19	55	52	53	0	16
1982	0	0	0	0	0	0	0	1	17	47	57	13	11
1983	0	0	0	0	0	0	0	18	33	30	31	3	10
1984	4	0	0	0	0	0	0	14	27	46	45	30	14
1985	0	0	0	0	0	0	0	1	40	35	66	12	13
1986	1	0	0	0	0	0	0	0	28	45	52	15	12
1987	0	0	0	0	0	0	9	28	62	43	41	25	17
1988	3	0	0	0	0	0	0	29	58	61	49	18	18
1989	4	0	0	0	0	0	5	37	58	55	28	0	16
1990	0	0	0	0	0	0	0	24	35	52	49	20	15
1991	0	0	0	0	0	0	0	0	12	70	62	14	13
1992	0	0	0	0	0	0	7	32	57	42	45	11	16
1993	0	0	0	0	0	0	0	0	16	43	53	22	11
1994	0	0	0	0	0	0	0	19	66	59	33	21	17
1995	0	0	0	0	0	0	0	0	3	25	47	17	8
1996	0	0	0	0	0	0	0	0	29	42	55	11	11
1997	0	0	0	0	0	0	0	0	17	44	42	10	10
1998	0	0	0	0	0	0	0	0	6	59	61	25	13
1999	6	0	0	0	0	0	0	0	31	63	52	17	14
Average	3	0	0	0	0	0	1	10	37	51	48	17	14
Maximum	19	0	0	0	0	0	9	45	68	81	66	35	18
Minimum	0	0	0	0	0	0	0	0	3	25	18	0	8

S-14
Bonneville Unit Operation - Total Water (acre-feet)
Hobble Creek Below Diversion

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	0	1,204	1,355	1,337	1,224	2,059	6,248	6,149	2,380	316	316	306	22,893
1951	316	1,525	1,621	1,384	1,412	2,035	6,700	6,149	2,380	352	352	341	24,567
1952	352	1,472	1,426	1,589	1,379	1,613	20,492	29,431	5,040	1,429	1,008	976	66,206
1953	1,018	1,716	1,831	1,940	1,474	1,755	5,726	998	258	0	0	0	16,715
1954	0	1,361	1,279	1,351	1,271	1,444	4,728	0	0	0	0	0	11,434
1955	0	962	1,029	974	822	1,109	5,119	6,149	2,380	0	0	0	18,544
1956	0	857	1,127	1,186	877	2,093	6,188	6,149	2,380	0	0	0	20,856
1957	0	746	904	922	954	1,256	6,188	6,863	3,202	0	0	0	21,035
1958	0	1,142	1,125	1,010	1,192	1,494	6,188	9,535	2,380	70	70	68	24,273
1959	70	1,154	1,105	1,031	1,045	1,212	4,760	6,109	2,380	0	0	0	18,867
1960	0	736	695	738	652	1,107	4,929	6,109	2,380	0	0	0	17,345
1961	0	688	633	670	579	702	5,650	5,219	2,380	0	0	0	16,521
1962	0	532	582	580	684	851	9,785	6,149	2,380	3	3	2	21,550
1963	3	813	803	758	1,384	952	4,798	6,149	2,380	0	0	0	18,040
1964	1,328	2,102	2,169	2,087	1,828	2,022	4,760	6,149	2,688	1,020	1,328	1,285	28,764
1965	0	887	1,144	1,125	1,170	1,244	6,188	7,996	2,380	961	961	930	24,987
1966	961	1,234	1,240	1,033	1,067	1,545	5,889	6,109	2,380	0	0	0	21,458
1967	233	1,161	1,298	1,163	1,089	1,798	5,540	6,149	2,380	233	233	225	21,499
1968	0	974	1,061	952	1,081	1,400	6,188	6,149	2,380	0	0	0	20,185
1969	0	1,156	1,186	1,273	1,137	1,747	12,819	12,046	2,380	568	568	550	35,432
1970	568	1,434	1,486	1,513	1,351	1,488	4,760	6,149	2,380	0	0	0	21,129
1971	0	1,289	1,248	1,230	1,351	2,370	6,188	6,149	2,380	0	0	0	22,205
1972	0	1,133	1,335	1,103	1,027	4,155	7,113	5,200	2,380	0	0	0	23,446
1973	0	1,018	944	910	897	1,511	6,188	14,551	2,380	153	153	148	28,853
1974	153	1,343	1,277	1,182	1,097	2,348	6,188	7,849	2,380	0	0	0	23,818
1975	0	1,478	1,243	1,276	1,176	1,780	4,847	8,582	12,780	0	0	0	33,163
1976	0	1,620	1,601	1,718	2,202	3,613	5,699	6,149	2,380	0	0	0	24,980
1977	0	955	858	858	837	1,110	4,760	6,109	2,380	0	0	0	17,866
1978	3,589	4,168	4,262	4,262	3,741	5,789	6,188	6,224	5,911	2,247	1,910	2,153	50,447
1979	3,401	4,605	5,141	5,991	4,985	5,881	6,188	6,149	2,380	2,195	2,195	2,099	51,210
1980	5,810	5,587	5,711	6,109	5,517	6,109	7,340	14,361	5,911	2,324	1,650	1,851	68,280
1981	2,577	3,310	3,412	2,608	2,351	2,553	4,760	6,149	2,380	0	0	0	30,100
1982	594	1,629	1,678	1,944	1,996	4,494	8,296	17,599	5,842	1,008	1,008	976	47,064
1983	2,382	2,229	2,362	2,202	2,345	5,855	6,188	20,351	24,050	5,399	2,731	2,428	78,523
1984	15,464	12,011	4,521	3,683	3,236	5,687	14,010	32,646	14,427	5,442	3,448	2,099	116,673
1985	3,754	4,406	3,558	3,051	1,250	3,355	6,188	11,619	2,882	968	968	937	42,937
1986	2,009	2,717	2,253	2,203	5,928	6,883	10,680	14,005	3,584	1,046	1,008	976	53,292
1987	1,731	2,678	2,256	2,272	2,508	3,018	5,311	6,109	2,380	262	262	254	29,041
1988	0	1,407	1,372	1,426	1,496	2,024	5,376	6,149	2,380	0	0	0	21,629
1989	0	988	1,105	1,337	1,792	2,311	6,188	6,109	2,380	0	0	0	22,211
1990	1,734	2,659	2,953	3,017	3,190	3,872	5,403	6,109	2,380	1,734	1,734	1,678	36,462
1991	458	1,425	1,180	1,378	2,018	1,895	4,760	6,149	2,380	458	458	444	23,004
1992	1,131	1,886	2,098	2,184	2,396	1,910	6,732	5,565	2,380	1,131	1,131	1,094	29,637
1993	4,326	4,688	4,847	5,057	4,418	6,109	6,188	10,668	4,894	2,145	2,145	2,038	57,523
1994	475	1,386	1,360	1,429	1,589	2,243	4,760	6,109	2,380	475	475	460	23,142
1995	2,431	3,371	3,464	3,517	3,259	5,417	6,188	14,156	12,943	3,215	2,124	2,046	62,130
1996	250	1,890	1,839	1,996	2,491	3,921	6,188	9,443	2,380	155	155	150	30,859
1997	155	1,785	1,911	2,376	2,127	5,384	6,188	12,276	2,609	897	897	868	37,473
1998	4,182	5,123	6,109	5,456	5,208	6,109	7,340	12,828	5,911	2,905	2,181	2,104	65,455
1999	1,402	2,318	1,916	1,877	1,772	2,126	5,356	7,335	2,939	6	6	6	27,058
Average	1,257	2,099	1,978	1,965	1,957	2,815	6,609	8,892	3,841	782	630	590	33,416
Maximum	15,464	12,011	6,109	6,109	5,928	6,883	20,492	32,646	24,050	5,442	3,448	2,428	116,673
Minimum	0	532	582	580	579	702	4,728	0	0	0	0	0	11,434

S-14
Bonneville Unit Operation - Total (cfs)
Hobble Creek Below Diversion

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	0	20	22	22	22	33	105	100	40	5	5	5	32
1951	5	26	26	23	25	33	113	100	40	6	6	6	34
1952	6	25	23	26	24	26	344	479	85	23	16	16	91
1953	17	29	30	32	27	29	96	16	4	0	0	0	23
1954	0	23	21	22	23	23	79	0	0	0	0	0	16
1955	0	16	17	16	15	18	86	100	40	0	0	0	26
1956	0	14	18	19	15	34	104	100	40	0	0	0	29
1957	0	13	15	15	17	20	104	112	54	0	0	0	29
1958	0	19	18	16	21	24	104	155	40	1	1	1	34
1959	1	19	18	17	19	20	80	99	40	0	0	0	26
1960	0	12	11	12	11	18	83	99	40	0	0	0	24
1961	0	12	10	11	10	11	95	85	40	0	0	0	23
1962	0	9	9	9	12	14	164	100	40	0	0	0	30
1963	0	14	13	12	25	15	81	100	40	0	0	0	25
1964	22	35	35	34	32	33	80	100	45	17	22	22	40
1965	0	15	19	18	21	20	104	130	40	16	16	16	35
1966	16	21	20	17	19	25	99	99	40	0	0	0	30
1967	4	20	21	19	20	29	93	100	40	4	4	4	30
1968	0	16	17	15	19	23	104	100	40	0	0	0	28
1969	0	19	19	21	20	28	215	196	40	9	9	9	49
1970	9	24	24	25	24	24	80	100	40	0	0	0	29
1971	0	22	20	20	24	39	104	100	40	0	0	0	31
1972	0	19	22	18	18	68	120	85	40	0	0	0	32
1973	0	17	15	15	16	25	104	237	40	2	2	2	40
1974	2	23	21	19	20	38	104	128	40	0	0	0	33
1975	0	25	20	21	21	29	81	140	215	0	0	0	46
1976	0	27	26	28	38	59	96	100	40	0	0	0	34
1977	0	16	14	14	15	18	80	99	40	0	0	0	25
1978	58	70	69	69	67	94	104	101	99	37	31	36	70
1979	55	77	84	97	90	96	104	100	40	36	36	35	71
1980	94	94	93	99	96	99	123	234	99	38	27	31	94
1981	42	56	55	42	42	42	80	100	40	0	0	0	42
1982	10	27	27	32	36	73	139	286	98	16	16	16	65
1983	39	37	38	36	42	95	104	331	404	88	44	41	108
1984	251	202	74	60	56	92	235	531	242	89	56	35	161
1985	61	74	58	50	23	55	104	189	48	16	16	16	59
1986	33	46	37	36	107	112	179	228	60	17	16	16	74
1987	28	45	37	37	45	49	89	99	40	4	4	4	40
1988	0	24	22	23	26	33	90	100	40	0	0	0	30
1989	0	17	18	22	32	38	104	99	40	0	0	0	31
1990	28	45	48	49	57	63	91	99	40	28	28	28	50
1991	7	24	19	22	36	31	80	100	40	7	7	7	32
1992	18	32	34	36	42	31	113	91	40	18	18	18	41
1993	70	79	79	82	80	99	104	174	82	35	35	34	79
1994	8	23	22	23	29	36	80	99	40	8	8	8	32
1995	40	57	56	57	59	88	104	230	218	52	35	34	86
1996	4	32	30	32	43	64	104	154	40	3	3	3	43
1997	3	30	31	39	38	88	104	200	44	15	15	15	52
1998	68	86	99	89	94	99	123	209	99	47	35	35	90
1999	23	39	31	31	32	35	90	119	49	0	0	0	37
Average	20	35	32	32	35	46	111	145	65	13	10	10	46
Maximum	251	202	99	99	107	112	344	531	404	89	56	41	161
Minimum	0	9	9	9	10	11	79	0	0	0	0	0	16

S-15
Bonneville Unit Operation - CUP Water (acre-feet)
Spanish Fork - Provo Reservoir Canal Pipeline

63	1	2	3	4	5	6	7	8	9	10	11	12	
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1950	4,691	1,216	1,216	2,065	931	1,216	1,815	2,685	4,440	7,214	7,378	6,957	41,824
1951	2,127	1,216	1,216	931	931	1,216	1,815	2,685	4,440	5,040	4,783	3,600	30,000
1952	2,127	1,216	1,216	931	931	1,216	1,815	2,685	4,440	5,040	4,783	3,600	30,000
1953	2,127	1,216	1,216	931	931	1,216	1,815	2,685	4,440	5,040	4,783	3,600	30,000
1954	2,127	1,216	1,216	931	931	1,216	2,586	2,685	4,440	5,040	4,783	3,600	30,771
1955	2,127	1,216	1,216	931	931	1,216	3,560	6,255	4,440	5,040	4,783	3,600	35,315
1956	2,127	1,216	1,216	931	931	1,216	2,413	7,296	7,140	7,276	5,217	3,600	40,579
1957	2,127	1,216	1,216	931	931	1,216	2,914	7,296	7,140	7,378	7,378	4,980	44,724
1958	2,127	1,216	1,216	931	931	1,216	2,012	7,296	7,140	7,076	7,378	5,438	43,978
1959	2,127	1,216	1,216	931	931	1,216	3,146	7,296	6,392	5,939	4,783	3,600	38,794
1960	2,127	1,216	1,216	931	931	1,216	2,482	6,677	4,440	5,040	4,783	3,600	34,660
1961	2,127	1,216	1,216	931	931	1,216	3,596	5,374	4,440	5,040	4,783	3,600	34,470
1962	2,127	1,216	1,216	931	931	1,216	1,983	7,296	7,140	7,378	7,378	6,120	44,934
1963	2,127	1,216	1,216	931	931	1,216	3,594	7,296	6,276	7,073	7,378	5,637	44,892
1964	2,365	1,216	4,201	3,834	1,208	1,216	3,600	7,296	7,140	6,728	7,378	6,715	52,899
1965	6,738	2,512	3,035	3,007	3,111	3,689	2,462	7,296	7,140	7,086	7,378	7,079	60,535
1966	6,738	4,671	1,275	1,560	2,704	1,216	1,926	2,685	6,686	7,378	7,378	7,140	51,358
1967	5,024	1,698	3,708	1,716	931	1,216	2,823	7,296	7,140	7,378	7,378	6,855	53,164
1968	6,738	3,216	3,007	2,751	2,090	3,459	1,815	7,296	4,440	6,887	7,378	6,888	55,965
1969	6,738	4,489	5,827	1,427	2,246	1,216	1,815	2,685	4,440	5,203	7,378	6,914	50,380
1970	6,081	1,216	2,386	3,074	2,898	3,733	2,847	3,599	4,440	5,040	7,378	6,849	49,540
1971	4,785	1,216	3,798	3,025	2,413	2,669	2,779	7,296	4,440	7,378	7,378	7,112	54,289
1972	6,177	1,216	3,289	3,670	3,490	1,216	1,815	2,685	4,440	5,378	7,378	7,011	47,764
1973	6,738	4,712	3,932	3,308	2,832	3,526	1,815	2,685	4,440	5,214	7,378	6,934	53,515
1974	6,738	4,623	3,422	3,739	3,625	3,921	1,815	2,685	4,440	7,378	7,378	6,562	56,328
1975	6,738	5,679	3,819	2,991	2,801	3,266	2,120	7,296	4,440	5,040	7,378	6,641	58,210
1976	6,738	1,454	1,216	2,255	2,254	3,157	1,815	7,296	7,140	7,214	7,378	6,659	54,576
1977	5,419	2,305	3,474	3,080	931	1,216	2,537	7,296	7,140	7,378	7,378	6,673	54,828
1978	6,738	5,679	5,827	3,875	3,167	1,216	1,815	7,296	7,140	6,646	7,378	6,660	63,438
1979	6,738	5,679	5,234	3,864	3,164	3,674	1,815	7,296	6,058	7,048	7,378	6,653	64,601
1980	6,738	5,340	4,847	2,295	1,939	3,002	1,815	3,101	4,440	5,378	7,378	3,600	49,873
1981	6,738	1,967	1,216	3,325	2,701	3,905	2,851	7,296	5,708	7,052	7,378	6,706	56,844
1982	6,738	2,146	3,323	3,891	3,189	1,216	1,815	2,685	4,440	5,040	7,378	6,787	48,648
1983	2,127	1,216	1,216	931	931	1,216	1,815	2,685	4,440	5,040	4,783	3,600	30,000
1984	2,127	1,216	1,216	931	931	1,216	1,815	2,685	4,440	5,040	4,783	3,600	30,000
1985	2,127	1,216	1,216	931	931	1,216	1,815	2,685	4,440	5,040	4,783	3,600	30,000
1986	2,127	1,216	1,216	931	931	1,216	1,815	2,685	4,440	5,040	4,783	3,600	30,000
1987	2,502	3,298	1,216	931	931	1,216	1,815	2,685	4,668	5,596	7,378	6,534	38,770
1988	4,809	1,216	1,216	931	931	1,216	3,573	7,296	6,877	7,378	7,372	6,535	49,351
1989	2,127	3,629	3,786	1,848	931	1,216	2,674	7,296	6,556	5,040	7,377	6,623	49,103
1990	5,215	1,555	1,896	931	931	1,216	2,939	7,296	6,362	6,695	7,378	7,140	49,553
1991	4,556	2,449	3,837	3,864	944	1,216	3,708	7,296	7,140	5,040	7,378	7,140	54,569
1992	5,774	2,136	3,674	2,512	1,083	1,456	3,631	7,296	7,140	7,378	4,783	7,140	54,004
1993	3,845	2,362	1,216	931	931	1,216	1,815	7,296	7,140	7,378	7,378	6,704	48,214
1994	3,737	2,389	2,898	2,744	1,821	1,216	2,766	7,296	6,889	7,348	7,378	7,140	53,623
1995	2,127	1,216	1,216	931	931	1,216	1,815	7,296	7,140	5,040	7,378	4,009	40,316
1996	6,542	1,216	1,216	931	1,441	1,216	1,815	2,685	4,440	5,040	7,378	6,804	40,724
1997	6,738	5,679	3,117	2,434	2,510	1,216	1,815	2,685	4,440	7,016	7,378	6,892	51,920
1998	6,738	3,053	1,620	3,383	3,662	1,375	1,815	2,685	4,440	5,040	7,378	6,860	48,049
1999	4,604	1,216	1,320	2,681	931	1,216	1,815	2,685	4,440	5,040	7,378	6,777	40,104
Average	4,352	2,287	2,339	1,993	1,649	1,716	2,338	5,222	5,558	6,113	6,660	5,773	46,000
Maximum	6,738	5,679	5,827	3,891	3,662	3,921	3,708	7,296	7,140	7,378	7,378	7,140	64,601
Minimum	2,127	1,216	1,216	931	931	1,216	1,815	2,685	4,440	5,040	4,783	3,600	30,000

S-15
Bonneville Unit Operation - CUP Water (cfs)
Spanish Fork - Provo Reservoir Canal Pipeline

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Aver-age
1950	76	20	20	34	17	20	31	44	75	117	120	117	58
1951	35	20	20	15	17	20	31	44	75	82	78	61	41
1952	35	20	20	15	16	20	31	44	75	82	78	61	41
1953	35	20	20	15	17	20	31	44	75	82	78	61	41
1954	35	20	20	15	17	20	43	44	75	82	78	61	43
1955	35	20	20	15	17	20	60	102	75	82	78	61	49
1956	35	20	20	15	16	20	41	119	120	118	85	61	56
1957	35	20	20	15	17	20	49	119	120	120	120	84	62
1958	35	20	20	15	17	20	34	119	120	115	120	91	61
1959	35	20	20	15	17	20	53	119	107	97	78	61	54
1960	35	20	20	15	16	20	42	109	75	82	78	61	48
1961	35	20	20	15	17	20	60	87	75	82	78	61	48
1962	35	20	20	15	17	20	33	119	120	120	120	103	62
1963	35	20	20	15	17	20	60	119	105	115	120	95	62
1964	38	20	68	62	21	20	60	119	120	109	120	113	73
1965	110	42	49	49	56	60	41	119	120	115	120	119	84
1966	110	78	21	25	49	20	32	44	112	120	120	120	71
1967	82	29	60	28	17	20	47	119	120	120	120	115	73
1968	110	54	49	45	36	56	31	119	75	112	120	116	77
1969	110	75	95	23	40	20	31	44	75	85	120	116	70
1970	99	20	39	50	52	61	48	59	75	82	120	115	68
1971	78	20	62	49	43	43	47	119	75	120	120	120	75
1972	100	20	53	60	61	20	31	44	75	87	120	118	66
1973	110	79	64	54	51	57	31	44	75	85	120	117	74
1974	110	78	56	61	65	64	31	44	75	120	120	110	78
1975	110	95	62	49	50	53	36	119	75	82	120	112	80
1976	110	24	20	37	39	51	31	119	120	117	120	112	75
1977	88	39	56	50	17	20	43	119	120	120	120	112	76
1978	110	95	95	63	57	20	31	119	120	108	120	112	88
1979	110	95	85	63	57	60	31	119	102	115	120	112	89
1980	110	90	79	37	34	49	31	50	75	87	120	61	69
1981	110	33	20	54	49	64	48	119	96	115	120	113	79
1982	110	36	54	63	57	20	31	44	75	82	120	114	67
1983	35	20	20	15	17	20	31	44	75	82	78	61	41
1984	35	20	20	15	16	20	31	44	75	82	78	61	41
1985	35	20	20	15	17	20	31	44	75	82	78	61	41
1986	35	20	20	15	17	20	31	44	75	82	78	61	41
1987	41	55	20	15	17	20	31	44	78	91	120	110	54
1988	78	20	20	15	16	20	60	119	116	120	120	110	68
1989	35	61	62	30	17	20	45	119	110	82	120	111	68
1990	85	26	31	15	17	20	49	119	107	109	120	120	68
1991	74	41	62	63	17	20	62	119	120	82	120	120	75
1992	94	36	60	41	19	24	61	119	120	120	78	120	74
1993	63	40	20	15	17	20	31	119	120	120	120	113	67
1994	61	40	47	45	33	20	46	119	116	120	120	120	74
1995	35	20	20	15	17	20	31	119	120	82	120	67	56
1996	106	20	20	15	25	20	31	44	75	82	120	114	56
1997	110	95	51	40	45	20	31	44	75	114	120	116	72
1998	110	51	26	55	66	22	31	44	75	82	120	115	66
1999	75	20	21	44	17	20	31	44	75	82	120	114	55
Average	71	38	38	32	29	28	39	85	93	99	108	97	64
Maximum	110	95	95	63	66	64	62	119	120	120	120	120	89
Minimum	35	20	20	15	16	20	31	44	75	82	78	61	41