CENTRAL UTAH
WATER CONSERVANCY DISTRICT

CUP
COMPLETION ACT

CENTRAL UTAH PROJECT COMPLETION PROGRAM

DIAMOND FORK SYSTEM
BONNEVILLE UNIT

FINAL SUPPLEMENT TO THE
FINAL ENVIRONMENTAL IMPACT STATEMENT

HYDROLOGY AND WATER RESOURCES TECHNICAL MEMORANDUM

Volume II

June 1999

CENTRAL UTAH WATER CONSERVANCY DISTRICT

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

U.S. DEPARTMENT OF THE INTERIOR
MARCH 3, 1849

DIAMOND FORK SYSTEM
FINAL SUPPLEMENT TO THE
FINAL ENVIRONMENTAL IMPACT STATEMENT

Hydrology and Water Resources Technical Memorandum Volume II

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HEC-RAS MODEL RESULTS

1999 Diamond Fork System FS-FEIS
Hydrology and Water Resources Technical Memorandum

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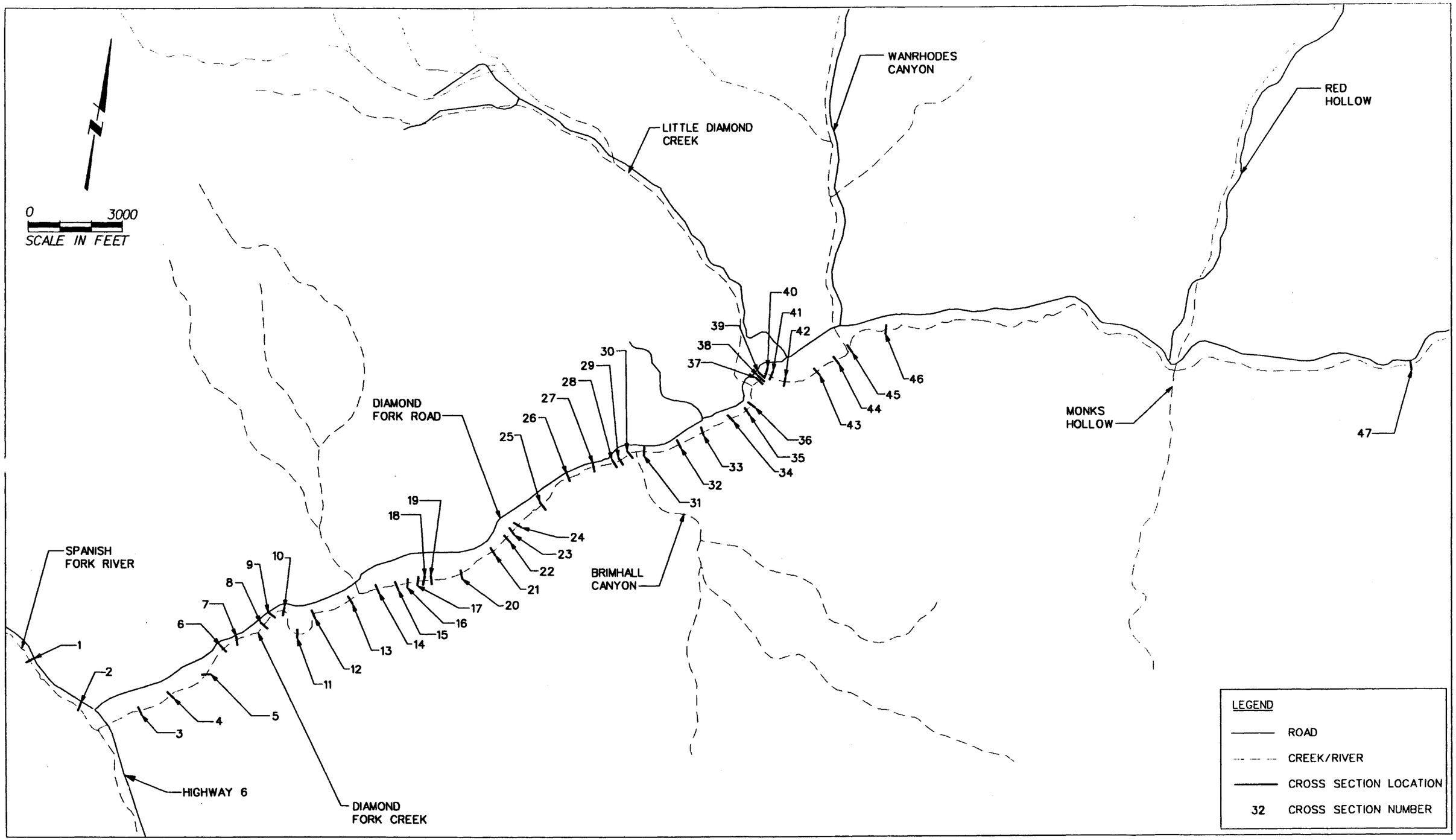


Map 1

Diamond Fork System 1999 FS-FEIS HEC-RAS Cross Section Locations

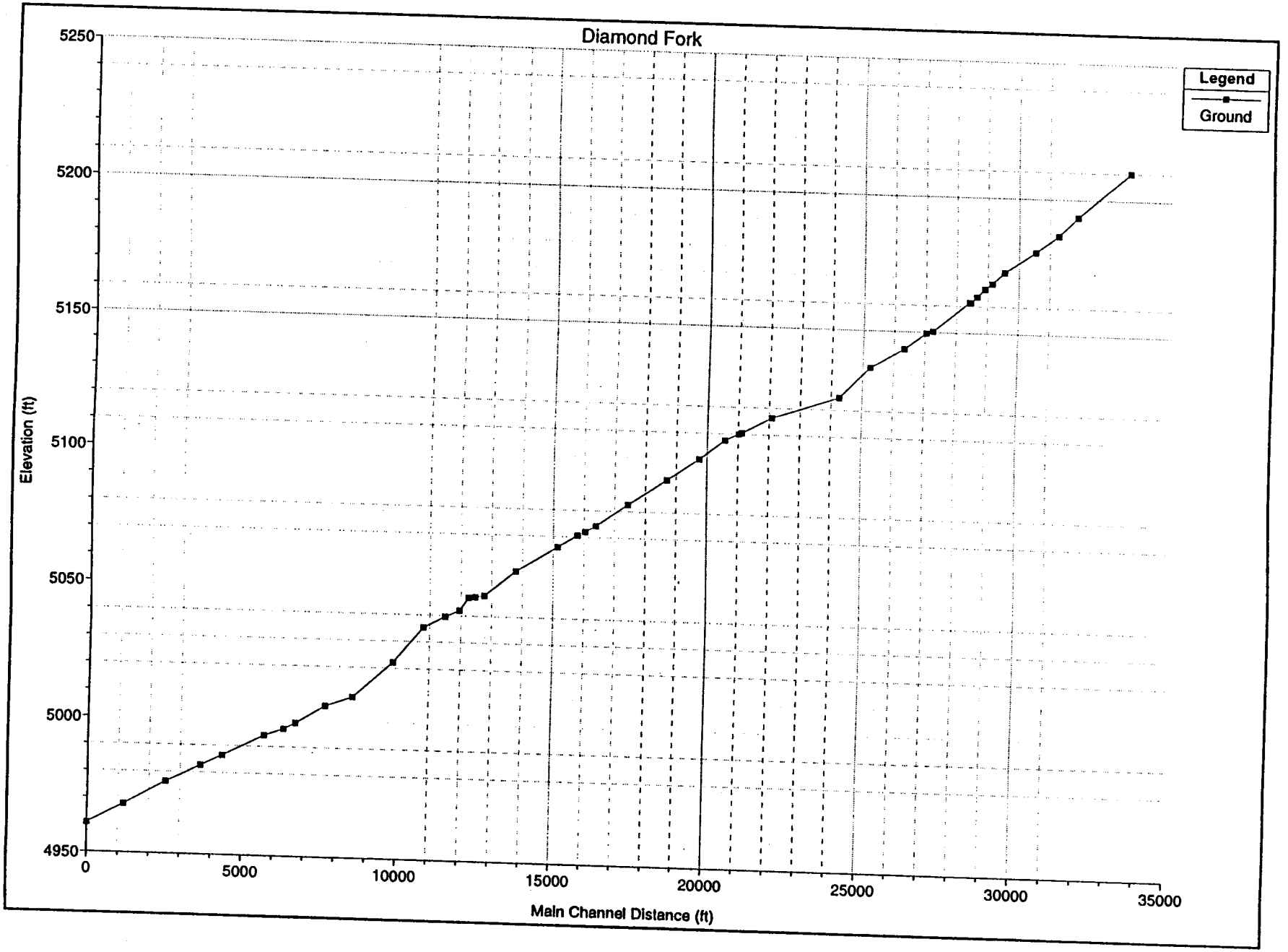
HEC-RAS MODEL
BACKGROUND DATA,
INPUT FILES,
SAMPLE OUTPUT FILE

FLOWS FOR HEC-RAS ANALYSIS OF DIAMOND FORK CREEK
TO SUPPORT EVALUATION OF HABITAT IMPACTS

Alternative/Condition/Location	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Proposed Action												
Average Year												
Below Red Hollow	60	60	60	60	60	60	84	140	89	82	80	80
Above Spanish Fork River	73	70	70	71	72	80	119	176	122	99	89	92
Corresponding Modeled Flows												
Below Red Hollow	*60*	*60*	*60*	*60*	*60*	*60*	*80*	*140*	*80*	*80*	*80*	*80*
Above Spanish Fork River	*80*	*80*	*80*	*80*	*80*	*80*	*120*	*180*	*120*	*100*	*80*	*100*
Dry Year												
Below Red Hollow	60	60	60	60	60	60	60	80	80	80	80	80
Above Spanish Fork River	68	64	62	62	71	74	68	81	86	81	93	90
Corresponding Modeled Flows												
Below Red Hollow	*60*	*60*	*60*	*60*	*60*	*60*	*60*	*80*	*80*	*80*	*80*	*80*
Above Spanish Fork River	*60*	*60*	*60*	*60*	*80*	*80*	*60*	*80*	*80*	*80*	*100*	*100*
No Action												
Average Year												
Below Red Hollow	60	60	60	60	60	60	88	144	99	80	80	80
Above Spanish Fork River	73	70	70	71	73	79	122	179	132	97	89	92
Corresponding Modeled Flows												
Below Red Hollow	*60*	*60*	*60*	*60*	*60*	*60*	*80*	*140*	*100*	*80*	*80*	*80*
Above Spanish Fork River	*80*	*80*	*80*	*80*	*80*	*80*	*120*	*180*	*140*	*100*	*80*	*100*
Dry Year												
Below Red Hollow	60	60	60	60	60	60	60	80	80	80	80	80
Above Spanish Fork River	68	64	62	62	71	74	68	81	86	81	93	90
Corresponding Modeled Flows												
Below Red Hollow	*60*	*60*	*60*	*60*	*60*	*60*	*60*	*80*	*80*	*80*	*80*	*80*
Above Spanish Fork River	*60*	*60*	*60*	*60*	*80*	*80*	*60*	*80*	*80*	*80*	*100*	*100*
Baseline Conditions												
Average Year												
Below Red Hollow	39	16	14	12	14	18	67	179	271	293	207	120
Above Spanish Fork River	52	26	24	23	27	37	101	214	304	310	216	132
Corresponding Modeled Flows												
Below Red Hollow	*40*	*20*	*20*	*20*	*20*	*20*	*60*	*180*	*300*	*300*	*200*	*120*
Above Spanish Fork River	*60*	*20*	*20*	*20*	*20*	*40*	*100*	*200*	*300*	*300*	*200*	*140*
Dry Year												
Below Red Hollow	23	13	10	13	11	11	17	236	308	181	96	47
Above Spanish Fork River	31	17	11	14	22	25	25	237	314	181	109	57
Corresponding Modeled Flows												
Below Red Hollow	*20*	*20*	*20*	*20*	*20*	*20*	*20*	*240*	*300*	*180*	*100*	*40*
Above Spanish Fork River	*40*	*20*	*20*	*20*	*20*	*20*	*20*	*240*	*300*	*180*	*100*	*60*

Summary of Modeled Flows	20	40	60	80	100	120	140	180	200	240	300

Notes:
1. "Baseline Conditions" flows from Draft EIS, Spanish Fork Canyon - Nephi Irrigation System, CUWCD, March 1998, Table 3.2-1.
2. "No Action" flows from Diamond Fork System FS-FEIS, Draft Chapter 1, December 1998, Table 1-12.
3. "Proposed Action" flows from Diamond Fork System FS-FEIS, Draft Chapter 1, December 1998, Table 1-4.
4. Red Hollow location also known as Monk's Hollow.
5. "Above Spanish Fork River" flows computed by adding estimated baseflow gains between Red Hollow and Spanish Fork Confluence.
6. "Average Year" flows are monthly averages for 44 years of analysis.
7. "Dry Year" flows are projected flows for 1961 hydrologic conditions.
8. "Below Red Hollow" flows apply to HEC-RAS sections 31 and higher; "Above Spanish Fork River" flows apply to sections 1-30.


Diamond Fork
Legend
Ground
Elevation (ft)
5250
5200
5150
5100
5050
5000
4950
0
5000
10000
15000
20000
25000
30000
35000
Main Channel Distance (ft)

Filename: dfork.prj

```
Proj Title=Diamond Fork
Current Plan=p35
Default Exp/Contr=.3,.1
English Units
Geom File=g01
Flow File=f21
Flow File=f12
Flow File=f07
Flow File=f19
Flow File=f03
Flow File=f02
Flow File=f01
Flow File=f04
Flow File=f05
Flow File=f06
Flow File=f08
Flow File=f09
Flow File=f10
Flow File=f11
Flow File=f13
Flow File=f14
Flow File=f15
Flow File=f16
Flow File=f17
Flow File=f18
Flow File=f20
Plan File=p35
Plan File=p33
Plan File=p32
Plan File=p31
Plan File=p03
Plan File=p02
Plan File=p01
Plan File=p04
Plan File=p05
Plan File=p06
Plan File=p07
?lan File=p08
Plan File=p09
Plan File=p10
Plan File=p11
Plan File=p12
Plan File=p13
Plan File=p14
Plan File=p15
Plan File=p16
Plan File=p17
Plan File=p18
Plan File=p19
Plan File=p20
Plan File=p21
Plan File=p22
Plan File=p23
Plan File=p24
Plan File=p25
Plan File=p26
Plan File=p27
Plan File=p28
Plan File=p29
Plan File=p30
Plan File=p34
Y Axis Title=Elevation
X Axis Title(PF)=Main Channel Distance
X Axis Title(XS)=Station
BEGIN DESCRIPTION:

END DESCRIPTION:
```

```
Filename: dfork.g01

Geom Title=prelimLayout
Version=September 1998 Version 2.2
Viewing Rectangle= 139292.436175314 , 164515.492230002 , 20059.9133510282 ,-5163.14270365929

River Reach=DIamond Fork     ,Main Channel
Junct Up Dn=                 ,
Reach XY= 62
      164257.477        8000.2394      163243.1529        7892.8846
     162639.8823        7741.0978      162164.6893        7540.1472
     161543.2835        7357.4652      161040.7239        7348.5603
     160715.3297        7316.0337      160314.0106        7381.0863
     159598.1445        7597.9269      159153.4391        7847.2935
      158925.664        8020.7658      158654.5017        8280.9741
     158166.4115        8573.7089      157449.3139        8709.3132
     156992.3976        8691.0445      156517.2046        8581.4357
     156279.6082        8508.3626      156005.4582         8380.485
      155877.522        8252.6075      155731.3091        8015.1211
     155511.9894        7814.1704      155310.9463       7789.26654
     154927.1361        7777.6341      154196.0699         7704.561
     153647.7709        7777.6341      152971.5349        7777.6341
     152679.1083        7814.1704      152130.8084        7905.5117
     151655.6163        7960.3161      150997.6561        8088.1936
     150266.5908         7942.048      149827.9512         7759.366
     149480.6945        7375.7333      149261.3747        7193.0514
     148932.3955        7229.5876      148603.4154        7339.1971
     148237.8827        7394.0015      147948.4587        7390.0806
     147436.7131        7298.7394       147034.627        7134.3255
     146687.3702         6951.643      146212.1772         6768.961
     145590.7714        6586.2791      144914.5353        6275.7195
     144530.7259        6074.7689      144238.2993         5910.355
     143799.6598        5855.5506      143470.6797        5873.8188
     143013.7634        5983.4282      142830.9971        6111.3052
     142520.2938        6257.4509      142355.8041        6421.8652
     142173.0378        6604.5472      141971.9947        6805.4973
     141533.3552        7152.5937      141350.5889        7390.0806
     141058.1622        7591.0307      140765.7356        7846.7858
     140290.5426        8175.6135       140126.053        8285.2229
     139961.5634         8303.491      139541.1997        8248.6866
Rch Text X Y=149802.0428648,6994.7332364
Reverse River Text= 0

Type RM Length L Ch R = 1 ,46       ,1675,1725,1650
BEGIN DESCRIPTION:
Cross Section 46       Station 336+22
END DESCRIPTION:
#Sta/Elev= 22
       0     5216      215 5212.85    221.7 5212.91    223.2 5211.61    232.1 5211.84
     2335211.713       237 5211.15    243.4 5210.25      254 5210.06      2605210.748
   262.9 5211.08    263.9 5212.24    280.2 5212.83      306 5212.46    308.4  5211.8
   319.1 5212.06      337  5211.7      3385212.303    341.2 5214.23      351 5214.78
   361.9 5214.48      378 5214.73
#Mann= 3 , 0 , 0
       0       .1        0    221.7     .045        0    280.2      .08        0
Levee=-1,221.7,5212.91,-1,263.9,5212
Bank Sta=221.7,280.2
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,45       ,575,625,600
BEGIN DESCRIPTION:
Cross Section 45       Station 318+97
END DESCRIPTION:
#Sta/Elev= 16
       0 5202.06     21.6 5201.04     41.7  5198.1     57.6 5198.59     61.3 5197.15
      91 5196.65       925194.903     92.7 5193.68    109.9 5193.76      1185194.867
   121.9  5195.4    147.8 5194.25    155.8 5198.58    169.1  5198.9    172.9 5201.57
   184.4 5201.26
#Mann= 3 , 0 , 0
       0       .1        0       91     .045        0    121.9       .1        0
Levee=-1,91,5196.65,-1,121.9,5195.4
Bank Sta=91,121.9
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,44       ,755,740,710
BEGIN DESCRIPTION:
Cross Section 44       Station 312+72
END DESCRIPTION:
```

```
"Sta/Elev= 16
       05194.859    10.5  5188.7      17 5188.69    19.4 5189.43    42.1  5189.7
    45.9  5187.5    64.2 5186.79    70.9  5188.4    81.7 5188.32    82.7 5189.88
   101.6 5190.74   112.8 5195.33   123.7 5195.75   133.7    5188   145.7    5190
     300 5194.38
#Mann= 3 , 0 , 0
       0      .1       0    42.1    .045       0    82.7      .1       0
Levee=0,,,-1,123.7,5195.75
Bank Sta=42.1,82.7
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,43      ,1100,1000,925
BEGIN DESCRIPTION:
Cross Section 43      Station 305+32
END DESCRIPTION:
#Sta/Elev= 14
       0 5200.38    31.7  5187.3    37.8 5183.15    60.6 5180.68    77.2 5181.57
      81 5183.55    84.8 5185.53   119.1 5184.38     128 5183.63   138.2 5183.63
   147.1 5185.93   262.1    5186   387.1    5188   422.1    5190
#Mann= 3 , 0 , 0
       0      .1       0    31.7    .045       0    84.8      .1       0
Levee=-1,31.7,5187.3,-1,84.8,5185.53
Bank Sta=31.7,84.8
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,42      ,425,400,455
BEGIN DESCRIPTION:
Cross Section 42      Station 295+32
END DESCRIPTION:
#Sta/Elev= 18
       0    5181       85177.822    18.1 5173.81    19.4 5174.62    51.9 5175.18
    52.9 5173.76    64.7 5173.61    86.4 5172.74    98.9 5174.23     125 5173.76
   128.7 5176.59   219.7 5176.38   302.3 5175.41   408.9 5174.89   484.4 5174.35
   554.4    5176   563.4    5178   568.4    5180
#Mann= 3 , 0 , 0
       0      .1       0    51.9    .045       0   128.7      .1       0
Levee=0,,,-1,128.7,5176.59
Bank Sta=51.9,128.7
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,41      ,250,225,275
BEGIN DESCRIPTION:
Cross Section 41      Station 291+32
END DESCRIPTION:
#Sta/Elev= 13
       0 5173.14     7.9 5173.89    15.9 5171.68    59.6 5170.94    79.1 5169.14
    84.5 5170.43   111.1 5168.49   118.1 5169.13   119.5 5172.25   140.5 5172.12
   148.5 5172.55   152.7 5173.76   159.5 5173.86
#Mann= 3 , 0 , 0
       0     .08       0    59.6    .045       0   119.5     .08       0
Levee=0,,,-1,119.5,5172.25
Bank Sta=59.6,119.5
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,40      ,25,245,300
BEGIN DESCRIPTION:
Cross Section 40      Station 289+07
END DESCRIPTION:
#Sta/Elev= 20
       0 5171.93     7.9 5171.98    10.5 5170.68      20 5171.18    27.1 5173.35
    41.4  5173.1      455171.603    50.9 5169.15   130.6 5169.06   131.4 5168.23
   140.3 5168.69   157.7 5169.33   178.8 5166.49   188.4 5166.94   193.2 5166.45
   208.2 5166.77     209 5170.55   231.7 5171.22   271.7    5172   321.7    5174
#Mann= 3 , 0 , 0
       0     .08       0   157.7    .045       0     209     .08       0
Levee=0,,,-1,209,5170.55
Bank Sta=157.7,209
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,39      ,150,200,50
BEGIN DESCRIPTION:
Cross Section 39      Station 286+62
END DESCRIPTION:
#Sta/Elev= 13
       0  5170.8      20 5169.83     120 5167.07   130.9 5166.27   134.3  5163.5
   149.7 5164.46   151.1 5165.66   156.1  5165.9   165.3 5165.11   200.1 5165.51
   206.8 5167.04   217.1 5166.92   220.1 5177.75
 Mann= 3 , 0 , 0
```

```
                                                    Dfork
       0       .1       0      120     .045       0   156.1       .1       0
Levee=-1,120,5167.07,-1,156.1,5165.9
Bank Sta=120,156.1
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,38       ,50,42,25
BEGIN DESCRIPTION:
Cross Section 38       Station 284+62
END DESCRIPTION:
#Sta/Elev= 13
       0 5174.61    16.4 5165.21    19.3 5162.99    23.9 5163.77    28.9 5163.26
    40.1 5164.06    60.9 5163.31    67.2 5161.33    77.8  5161.7    79.3 5165.21
     116 5165.49   161.6 5166.11     163 5172.54
#Mann= 3 , 0 , 0
       0       .1       0    40.1     .045       0    79.3       .1       0
Levee=-1,40.1,5164.06,-1,79.3,5165.21
Bank Sta=40.1,79.3
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,37       ,1150,1175,1175
BEGIN DESCRIPTION:
Cross Section 37       Station 284+20
END DESCRIPTION:
#Sta/Elev= 13
       0  5173.1      10 5167.42    10.4 5165.12    10.8 5162.82    20.4  5162.7
    27.6  5161.4    34.9 5162.55    40.4 5162.83      55 5162.71    56.4 5163.93
    94.7 5164.88   125.1 5165.89   142.5 5176.44
#Mann= 3 , 0 , 0
       0       .1       0    10.8     .045       0    56.4       .1       0
Levee=-1,10.8,5162.82,-1,56.4,5163.93
Bank Sta=10.8,56.4
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,36       ,300,210,180
BEGIN DESCRIPTION:
Cross Section 36       Station 272+45
END DESCRIPTION:
#Sta/Elev= 25
       0    5180      10    5170      29    5160     100 5154.91   160.9 5155.83
   202.8 5156.19   215.9 5155.73   216.8 5151.92   220.85150.917   222.9 5150.39
   231.5 5152.76   254.9 5152.93   258.9 5151.96     265 5152.02   270.8 5152.68
   271.8 5153.88   281.4 5153.72   282.1 5151.96   298.1 5152.28     302 5153.13
   311.2 5153.22   320.4 5152.68   324.5 5156.22   364.7 5154.94   382.8 5163.22
#Mann= 3 , 0 , 0
       0       .1       0   215.9     .045       0   271.8      .08       0
Levee=-1,215.9,5155.73,-1,271.8,5153
Bank Sta=215.9,271.8
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,35       ,720,700,680
BEGIN DESCRIPTION:
Cross Section 35       Station 270+35
END DESCRIPTION:
#Sta/Elev= 18
       0 5156.65     8.9 5153.34    36.6 5152.92    67.5 5153.83    72.2 5152.54
      785152.288    78.4 5152.27    81.6 5150.66      91 5151.56    99.7  5151.1
   107.1 5149.56   127.8 5149.86   136.2 5150.84   137.5 5152.01   198.8 5152.86
   257.3 5153.33   262.3    5154   304.3    5160
#Mann= 3 , 0 , 0
       0       .1       0      78      .05       0   137.5       .1       0
Levee=-1,78,5152.288,-1,137.5,5152.01
Bank Sta=78,137.5
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,34       ,1110,1090,1090
BEGIN DESCRIPTION:
Cross Section 34       Station 263+35
END DESCRIPTION:
#Sta/Elev= 9
       0    5150      95 5148.29     110 5146.27   122.7  5143.5   136.2 5143.62
   162.6 5146.53   174.6 5151.13     183 5148.44     199 5148.19
#Mann= 3 , 0 , 0
       0       .1       0      95     .045       0   162.6       .1       0
Levee=-1,95,5148.29,-1,174.6,5151.13
Bank Sta=95,162.6
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,33       ,900,980,950
```

```
 EGIN DESCRIPTION:
 ross Section 33        Station 252+45
END DESCRIPTION:
#Sta/Elev= 12
       0 5140.03     12.1 5139.57     15.1     5136     32.7 5136.26     47.9 5138.59
    79.65138.295     81.2 5138.28    142.6 5139.04    189.7 5139.28    193.2 5138.68
   227.4 5138.47      239 5142.33
#Mann= 3 , 0 , 0
       0      .1        0     12.1      .05        0     47.9      .1        0
Levee=-1,12.1,5139.57,-1,47.9,5138.59
Bank Sta=12.1,47.9
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,32       ,1280,2175,1150
BEGIN DESCRIPTION:
Cross Section 32        Station 242+65
END DESCRIPTION:
#Sta/Elev= 20
       0     5132      162 5132.37    170.8 5132.84    172.7 5127.44    180.8 5128.62
   186.1 5124.55    194.8 5125.42    202.5 5127.83    230.8 5127.75    236.9 5129.28
     274 5128.55    276.9 5127.87    291.8 5127.71    294.6 5128.69    332.1 5128.61
   333.4 5127.44    347.9 5127.13    350.6 5128.13    399.9 5127.45    415.6  5136.5
#Mann= 3 , 0 , 0
       0      .1        0    170.8     .045        0    236.9      .1        0
Levee=-1,170.8,5132.84,-1,236.9,5129.28
Bank Sta=170.8,236.9
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,31       ,700,975,1015
BEGIN DESCRIPTION:
Cross Section 31        Station 220+90
END DESCRIPTION:
#Sta/Elev= 13
       0     5130       43     5128      107     5126      152     5124      287  5123.3
   297.5 5122.12    300.8 5118.76    311.1 5118.81    314.1 5117.73    344.8 5116.43
     355 5122.15    371.6 5131.46    381.8 5132.22
#Mann= 3 , 0 , 0
       0      .1        0    311.1     .045        0      355      .1        0
`evee=-1,311.1,5118.81,-1,355,5122.15
 ank Sta=311.1,355
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,30       ,150,100,100
BEGIN DESCRIPTION:
Cross Section 30       Station 211+15
END DESCRIPTION:
#Sta/Elev= 12
       0     5120       30 5118.16     48.2 5118.94     53.2 5113.18    109.1 5114.77
   112.4 5112.62    117.5 5113.02    140.9 5110.93    155.1 5110.47    166.5 5120.08
   175.7 5119.44    285.7     5120
#Mann= 3 , 0 , 0
       0     .08        0    109.1     .045        0    166.5      .1        0
Levee=0,,,-1,166.5,5120.08
Bank Sta=109.1,166.5
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,29       ,500,450,400
BEGIN DESCRIPTION:
Cross Section 29        Station 210+15
END DESCRIPTION:
#Sta/Elev= 7
       0 5123.08       22 5121.71     28.6  5110.2     35.5 5109.97     44.5 5110.47
    50.5 5121.88     66.4 5121.49
#Mann= 3 , 0 , 0
       0     .08        0       22     .04        0     50.5     .08        0
Levee=-1,22,5121.71,-1,50.5,5121.88
Bank Sta=22,50.5
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,28       ,900,815,675
BEGIN DESCRIPTION:
Cross Section 28        Station 205+65
END DESCRIPTION:
#Sta/Elev= 13
       0     5114       10 5112.38     25.5 5112.57     66.7 5110.63     70.1 5110.79
    74.4 5111.85    125.7 5110.47    164.3 5107.49    177.4 5107.57    196.6 5109.12
     204 5111.56    205.3 5112.51    228.5     5118
 Mann= 3 , 0 , 0
```

```
       0       .1        0    74.4     .045        0     204       .1        0
Levee=-1,74.4,5111.85,-1,204,5111.56
Bank Sta=74.4,204
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,27       ,945,1050,1160
BEGIN DESCRIPTION:
Cross Section 27         Station 197+50
END DESCRIPTION:
#Sta/Elev= 21
       0    5110      223    5108      263    5106      300 5104.97    307.6 5104.64
   309.9  5101.2    314.6 5100.22    333.7 5100.54    341.8 5101.85    362.3 5102.91
   374.8 5103.09    398.1 5103.15    408.2 5102.12    410.8 5104.18    435.4 5103.97
   437.1 5103.01    441.8 5103.03    443.8  5104.3    463.5 5104.59    509.6 5119.23
   530.4 5122.32
#Mann= 3 , 0 , 0
       0       .1        0   307.6     .045        0   362.3      .08        0
Levee=-1,307.6,5104.64,0,,
Bank Sta=307.6,362.3
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,26       ,1325,1275,1200
BEGIN DESCRIPTION:
Cross Section 26        Station 187+00
END DESCRIPTION:
#Sta/Elev= 16
       0  5103.5      9.4 5102.91     17.2 5100.07     23.2  5093.6     30.6 5093.52
    60.7 5095.21     67.2 5093.66     80.5 5092.76     84.7 5092.92     94.6 5093.01
    99.6 5092.17    118.1 5093.33      120  5095.3    175.9 5095.78    199.1 5109.99
   223.6 5113.65
#Mann= 3 , 0 , 0
       0      .08        0    60.7     .043        0     120       .1        0
Levee=0,,,-1,120,5095.3
Bank Sta=60.7,120
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,25       ,970,1045,1200
BEGIN DESCRIPTION:
Cross Section 25        Station 174+25
END DESCRIPTION:
#Sta/Elev= 28
       0  5090.4      6.6 5085.91       15 5084.47     16.7 5085.44       33  5085.6
    39.3 5083.72     50.2 5082.53     55.3 5083.14     73.4 5085.04     94.9 5085.07
    97.8 5084.36     99.7 5085.68    121.8 5085.35      123 5084.78    131.7 5084.93
   137.7 5086.29      181 5086.24    183.3 5085.39    204.6 5084.95    224.5 5086.44
   269.1  5085.4      272 5086.67    330.4 5086.49    383.4 5086.02    386.4 5084.76
   411.5 5085.01    434.8 5085.81    462.1 5088.18
#Mann= 3 , 0 , 0
       0      .08        0       33     .043        0    73.4      .08        0
Levee=-1,33,5085.6,-1,272,5086.67
Bank Sta=33,73.4
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,24       ,400,340,300
BEGIN DESCRIPTION:
Cross Section 24        Station 163+80
END DESCRIPTION:
#Sta/Elev= 17
       05082.609      4.4 5077.17     11.4 5076.79     27.1 5077.53     28.1 5076.03
    32.4 5077.14     68.1 5077.53     74.8 5076.67     86.6 5077.06     95.9 5075.99
   105.4 5074.23    111.2 5078.77    131.75078.775      189 5078.79    269.6 5079.54
   273.3 5081.68    290.8 5081.53
#Mann= 3 , 0 , 0
       0      .08        0    86.6      .05        0   111.2       .1        0
Levee=-1,68.1,5077,-1,111.2,5078.77
Bank Sta=86.6,111.2
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,23       ,260,250,290
BEGIN DESCRIPTION:
Cross Section 23        Station 160+40
END DESCRIPTION:
#Sta/Elev= 16
       05081.067     4.24 5074.17     7.44  5074.7    30.84  5075.2    36.04 5072.17
   43.24 5073.37    65.14 5073.38    76.44 5071.95    86.04 5073.67   102.54 5074.04
  103.44 5074.75   149.14 5073.26   150.44 5075.82   162.54 5076.54   170.04 5078.75
  196.54 5079.17
#Mann= 3 , 0 , 0
```

```
                                                        Dfork
       0       .1        0   30.84     .045        0  103.44       .1        0
Levee=-1,30.84,5075.2,-1,103.44,5074
Bank Sta=30.84,103.44
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,22       ,670,650,600
BEGIN DESCRIPTION:
Cross Section 22         Station 157+90
END DESCRIPTION:
#Sta/Elev= 19
       0 5078.53        6 5072.63    16.3 5073.69    33.8 5074.09    84.8 5072.89
    91.4 5073.58    111.1 5073.82   112.5 5072.07   129.8 5072.07   140.2 5072.07
   152.8 5071.91      168 5072.71   188.9    5072   192.9 5070.56   194.5  5073.9
   251.9 5074.07      329 5073.82   334.4 5077.42   361.3 5077.29
#Mann= 3 , 0 , 0
       0      .08        0   111.1     .045        0   194.5      .08        0
Levee=-1,111.1,5073,-1,194.5,5073.9
Bank Sta=111.1,194.5
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,21       ,1375,1350,1225
BEGIN DESCRIPTION:
Cross Section 21         Station 151+40
END DESCRIPTION:
#Sta/Elev= 19
       0     5076     10.3 5069.16    46.9 5069.33    49.7 5067.25    65.2 5067.98
    66.7 5068.36     84.3 5069.13   109.6 5069.13   116.8 5067.39   131.9 5068.08
   148.7 5066.09    152.8 5066.28     154 5069.12   238.2 5068.94   318.6 5068.37
   329.3 5066.88    362.1 5068.04   371.9 5073.06   387.6    5073
#Mann= 3 , 0 , 0
       0      .08        0   109.6     .045        0     154      .08        0
Levee=-1,109.6,5068.5,-1,154,5069.12
Bank Sta=109.6,154
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,20       ,1020,1025,1140
BEGIN DESCRIPTION:
Cross Section 20        Station 137+90
END DESCRIPTION:
 Sta/Elev= 12
       0 5068.67     12.4 5062.39    14.2 5059.47      18 5057.82    29.6  5056.8
    52.3 5057.91     55.4 5059.47   137.8 5060.26   363.6 5060.25   422.1 5061.95
   436.1 5071.26    467.8 5071.37
#Mann= 3 , 0 , 0
       0       .1        0    14.2     .045        0    55.4       .1        0
Levee=-1,14.2,5059.47,-1,55.4,5059.47
Bank Sta=14.2,55.4
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,19       ,355,300,260
BEGIN DESCRIPTION:
Cross Section 19         Station 127+65
END DESCRIPTION:
#Sta/Elev= 19
       0     5060        85054.254    13.4 5049.19    23.5 5050.59    35.7     5050
    76.7 5051.41    110.5  5051.4   120.1 5050.54   126.9 5048.31   139.9 5047.43
   143.7 5051.74    178.2 5051.48   238.3 5052.87   245.8 5054.42   264.5 5055.86
   449.5     5054   494.5     5056   532.5    5058   679.5    5060
#Mann= 3 , 0 , 0
       0      .08        0   110.5     .045        0   143.7       .1        0
Levee=-1,110.5,5050.4,-1,143.7,5051.74
Bank Sta=110.5,143.7
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,18       ,200,210,200
BEGIN DESCRIPTION:
Cross Section 18          Station 124+65
END DESCRIPTION:
#Sta/Elev= 17
       0 5052.42       485051.306    92.2 5050.28   155.2 5049.35   157.1 5046.93
   162.8 5048.75    194.2 5047.37   221.8 5049.01   241.2 5046.92   243.1 5049.54
   286.6 5049.23    340.1 5049.55   343.2 5047.83   387.5 5047.94   392.4 5051.07
   467.6 5050.98    532.6     5052
#Mann= 3 , 0 , 0
       0      .08        0   155.2     .043        0   243.1      .08        0
Levee=-1,155.2,5049.35,-1,243.1,5049
Bank Sta=155.2,243.1
Exp/Cntr=.3,.1
```

```
Type RM Length L Ch R = 1 ,17       ,225,300,350
BEGIN DESCRIPTION:
Cross Section  17          Station 122+55
END DESCRIPTION:
#Sta/Elev= 17
       05053.922      7.7 5047.64     90.7 5048.63    173.5     5049    177.2 5047.63
   230.7 5048.17    232.3 5046.59    256.1 5047.16    261.2 5046.57    274.2 5047.86
   305.7     5047      330 5048.21    344.1 5047.37    375.4 5047.82    389.9 5050.27
   504.4 5050.48    647.4     5052
#Mann= 3 , 0 , 0
       0      .08        0   173.5     .043        0   389.9      .08        0
Levee=-1,173.5,5049,-1,389.9,5050.27
Bank Sta=173.5,389.9
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,16       ,300,450,400
BEGIN DESCRIPTION:
Cross Section 16          Station 119+55
END DESCRIPTION:
#Sta/Elev= 24
       0 5056.19     25.3 5055.93     32.3 5050.73     39.3 5045.53     80.3 5046.22
   174.6 5046.41    217.2 5045.89    219.1 5044.56    258.4 5045.54    274.5 5041.85
   282.4 5044.46    299.4 5044.85    311.9 5043.63    321.2 5045.77    331.1  5045.8
   361.7 5044.75    367.8 5045.52      375 5044.62    377.7 5046.29      398 5045.78
   408.7 5051.25    427.3 5050.89    453.3     5052    562.3     5054
#Mann= 3 , 0 , 0
       0      .08        0   217.2     .043        0   331.1      .08        0
Levee=-1,258.4,5045,-1,331.1,5045
Bank Sta=217.2,331.1
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,15       ,615,700,660
BEGIN DESCRIPTION:
Cross Section 15          Station 115+05
END DESCRIPTION:
#Sta/Elev= 26
       05046.146      2.7 5045.32      7.1 5041.68     12.4 5042.52       21 5041.37
      26 5042.41     49.4 5042.89     55.5 5042.08     59.1 5042.57     89.2 5042.71
    96.1 5041.47    105.2 5042.58    128.2 5042.84    165.3 5042.69    174.8 5041.61
   178.3 5041.95      202 5041.59    209.8 5039.57    219.1 5039.51    221.1 5042.76
   244.1 5043.07    288.7  5042.8    292.6 5045.07    338.1 5045.19    349.3  5047.8
   370.8 5047.89
#Mann= 3 , 0 , 0
       0      .07        0   165.3     .043        0   244.1      .08        0
Levee=-1,165.3,5042.2,-1,244.1,5043.07
Bank Sta=165.3,244.1
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,14       ,950,975,930
BEGIN DESCRIPTION:
Cross Section 14           Station 108+05
END DESCRIPTION:
#Sta/Elev= 22
       0 5045.18     10.3 5039.17     34.3 5038.47     56.4 5038.42     58.3 5035.62
    61.4 5035.44     71.3 5035.34     76.8 5036.78     80.7 5037.28     93.8 5037.86
    98.2 5037.86    100.6 5037.25    102.2 5037.85      107  5037.9    110.6 5038.47
   131.5 5038.62    132.6 5037.72    135.5 5037.62    139.7 5036.84    156.1 5036.93
   158.8 5037.47    170.6 5048.87
#Mann= 3 , 0 , 0
       0       .1        0    56.4     .045        0    93.8       .1        0
Levee=-1,56.4,5038.42,-1,93.8,5037.86
Bank Sta=56.4,93.8
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,13       ,1280,1300,1250
BEGIN DESCRIPTION:
Cross Section 13           Station 98+30
Site 13
END DESCRIPTION:
#Sta/Elev= 20
       0     5036     29.5     5034       80     5034      160 5033.57    175.1 5033.49
   188.3 5025.58    200.5 5025.72    206.3 5022.93    212.9 5022.86    218.6 5023.91
   224.3 5024.22      234 5022.62    242.8 5022.22    247.2 5022.78    268.9 5033.97
   284.3 5034.35    296.3     5034    324.3     5036    349.3     5038    379.3     5040
#Mann= 3 , 0 , 0
       0       .1        0   200.5     .043        0   268.9       .1        0
Bank Sta=200.5,268.9
```

```
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,12       ,850,875,900
BEGIN DESCRIPTION:
Cross Section 12          Station 85+30
END DESCRIPTION:
#Sta/Elev= 18
       0    5016      15    5014      90    5014     155 5013.49   165.1 5013.09
   166.4 5009.41   171.3 5009.46   174.6 5008.99   184.6 5009.13   213.7 5010.54
   215.5 5012.28   226.5 5012.19   279.4 5011.37   291.1 5010.69   297.2 5014.23
   321.8 5013.76   466.8    5016   551.8    5016
#Mann= 3 , 0 , 0
       0      .1       0   165.1    .045       0   215.5      .1       0
Levee=-1,165.1,5013.09,-1,215.5,5012.28
Bank Sta=165.1,215.5
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,11       ,890,950,575
BEGIN DESCRIPTION:
Cross Section 11          Station 76+55
END DESCRIPTION:
#Sta/Elev= 21
       0 5015.92      10    5010    24.8 5007.73    43.5 5007.99    45.2    5006
    61.4 5005.96    69.8  5007.7    69.95007.701   121.4 5007.93   125.9 5006.89
   133.1 5006.62   140.1 5007.53   198.5 5007.53   201.5 5005.54   212.4 5006.25
   266.9 5007.12   332.8 5006.44   347.3 5006.89     380    5010     390    5014
     430    5014
#Mann= 3 , 0 , 0
       0     .08       0   198.5    .045       0   266.9     .08       0
Levee=-1,198.5,5007.53,-1,266.9,5007.12
Bank Sta=198.5,266.9
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,10       ,300,380,450
BEGIN DESCRIPTION:
Cross Section 10          Station 67+05
END DESCRIPTION:
#Sta/Elev= 15
       0 5007.87     5.4 5004.51    29.4 5004.46    53.6 5003.75    56.7 4998.98
    83.2 5000.36    95.6 5000.71     103 4999.13   117.6  5005.7   138.6 5005.71
   145.1 5004.78     158 5001.29   169.4 5001.53   193.9 5005.69   203.9    5010
#Mann= 3 , 0 , 0
       0      .1       0    53.6    .045       0   117.6      .1       0
Levee=-1,53.6,5003.75,-1,117.6,5005.7
Bank Sta=53.6,117.6
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,9        ,600,625,480
BEGIN DESCRIPTION:
Cross Section 9         Station 63+25
END DESCRIPTION:
#Sta/Elev= 14
       0    5010     315 5000.36   328.6 4999.34     331 4998.62   352.6 4997.47
   363.4 4996.73   376.9 4996.97   377.8 4999.03   388.2 4998.95   393.7 5000.03
   399.2  5000.1   407.9 5001.46   421.6 5001.54   439.8  5010.2
#Mann= 3 , 0 , 0
       0      .1       0   328.6    .045       0   377.8      .1       0
Bank Sta=328.6,377.8
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,8        ,1400,1350,1100
BEGIN DESCRIPTION:
Cross Section 8          Station 57+00
END DESCRIPTION:
#Sta/Elev= 24
       0 5007.78    14.4 4995.81    20.9 4994.09      74 4994.44    78.2 4995.89
   119.7 4996.31   143.5 4995.19   195.6  4996.3   197.9 4995.19   200.6 4996.25
   233.1 4996.32     234 4995.03     239 4994.69   241.6 4995.65   258.5 4996.09
     263 4995.03     271 4995.61   288.7 4995.14   298.6 4993.45   300.94993.637
   315.6 4994.83   318.4  4996.3   327.4 5000.94   339.2 5000.96
#Mann= 3 , 0 , 0
       0      .1       0   233.1    .043       0   318.4     .07       0
Levee=-1,233.1,4996.32,-1,327.4,5000.94
Bank Sta=233.1,318.4
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,7        ,565,700,650
BEGIN DESCRIPTION:
```

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Cross Section 7          Station 43+50
END DESCRIPTION:
#Sta/Elev= 25
       0 4995.74     13.1 4995.96     19.2 4987.35       26 4987.52     39.1 4987.31
      49 4988.43       62 4987.81     67.5 4988.52     75.8 4988.55     79.6 4987.97
    83.4 4988.61    115.4 4988.85    121.1 4986.42    129.5 4986.41    137.6 4987.23
   149.2 4986.82    154.3  4987.6    155.7 4988.95    173.4 4988.63    174.7 4986.82
   178.9 4987.98    184.4 4988.01    192.7 4986.33    201.3 4991.24    211.3 4992.22
#Mann= 3 , 0 , 0
       0      .07        0   115.4     .043        0    155.7      .07        0
Levee=-1,115.4,4988,-1,155.7,4988
Bank Sta=115.4,155.7
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,6        ,975,1120,1275
BEGIN DESCRIPTION:
Cross Section 6          Station 36+50
END DESCRIPTION:
#Sta/Elev= 13
       0    4987       60  4985.2     67.1 4984.91     68.9 4982.59     73.1 4983.81
    84.6 4982.62    100.1 4983.66      101 4985.02    108.2 4984.94    118.5 4983.84
   130.3 4983.19    132.6 4986.95    145.6 4986.14
#Mann= 3 , 0 , 0
       0       .1        0     67.1     .045        0      101       .1        0
Levee=-1,67.1,4984.91,0,,
Bank Sta=67.1,101
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,5        ,1625,1360,1225
BEGIN DESCRIPTION:
Cross Section 5          Station 25+30
END DESCRIPTION:
#Sta/Elev= 18
       0 4986.16     10.3 4985.98     25.2 4979.27     84.8 4978.45      158 4978.87
   158.1 4978.87    160.6 4977.07    179.6 4978.28    192.9 4977.22    196.4  4976.3
   211.3 4978.27    217.3  4977.2    218.1 4979.28    229.7 4978.89    324.7    4978
   419.7    4980    694.7    4982    754.7    4990
#Mann= 3 , 0 , 0
       0      .08        0      158     .045        0    218.1      .08        0
Bank Sta=158,218.1
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,4        ,1190,1170,1170
BEGIN DESCRIPTION:
Cross Section 4          Station 11+70
END DESCRIPTION:
#Sta/Elev= 17
       0    4980       40    4974      190    4972      340 4971.34    350.1 4970.68
   351.7 4968.94    360.3 4970.22    373.3 4969.94    377.9 4967.96    387.3 4967.94
     398 4967.68    403.9 4972.06      408 4973.62    418.5 4972.75    828.5    4970
   868.5    4972    893.5    4980
#Mann= 3 , 0 , 0
       0      .08        0      340     .045        0      408      .08        0
Levee=-1,340,4971.34,-1,408,4973.62
Bank Sta=340,408
Exp/Cntr=.3,.1

Type RM Length L Ch R = 1 ,3        ,2775,2700,2650
BEGIN DESCRIPTION:
Cross Section 3          Station 00+00
END DESCRIPTION:
#Sta/Elev= 8
       0 4974.79     30.1 4973.46     30.5 4961.43     43.2  4961.1     58.9 4960.72
      72 4961.19     72.8 4973.53     87.4 4974.32
#Mann= 3 , 0 , 0
       0      .05        0     30.1     .038        0     72.8      .05        0
Levee=-1,30.1,4973.46,-1,72.8,4973.53
Bank Sta=30.1,72.8
Exp/Cntr=.3,.1

Chan Stop Cuts=-1
```

```
Filename: dfork.f06 (sample steady flow data file)

Flow Title=mouth 64-109
Version=September 1998 Version 2.2
Number of Profiles= 45
Profile Names=PF 1,PF 2,PF 3,PF 4,PF 5,PF 6,PF 7,PF 8,PF 9,PF 10,PF 11,PF 12,PF 13,PF 14,PF 15,PF 16,PF 1
7,PF 18,PF 19,PF 20,PF 21,PF 22,PF 23,PF 24,PF 25,PF 26,PF 27,PF 28,PF 29,PF 30,PF 31,PF 32,PF 33,PF 34,P
F 35,PF 36,PF 37,PF 38,PF 39,PF 40,PF 41,PF 42,PF 43,PF 44,PF 45
River Rch & RM=DIamond Fork,Main Channel    ,46
      65      66      67      68      69      70      71      72      73      74
      75      76      77      78      79      80      81      82      83      84
      85      86      87      88      89      90      91      92      93      94
      95      96      97      98      99     100     101     102     103     104
     105     106     107     108     109
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 1
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 2
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 3
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 4
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 5
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
 oundary for River Rch & Prof#=DIamond Fork,Main Channel    , 6
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 7
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 8
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 9
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 10
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 11
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 12
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 13
Up Type= 3
 n Slope=.009
   Type= 3
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Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 14
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 15
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Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 16
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Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 17
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Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 18
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 19
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Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 20
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Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 21
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Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 22
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Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 23
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Dn Type= 3
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Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 24
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Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 25
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Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 26
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 27
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 28
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 29
Up Type= 3
```

```
'p Slope=.009
 n Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 30
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 31
Up Type= 3
Up Slope=.009
Dn Type= 3
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Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 32
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 33
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 34
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 35
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 36
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
'oundary for River Rch & Prof#=DIamond Fork,Main Channel    , 37
'p Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 38
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 39
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 40
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 41
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 42
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 43
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
Boundary for River Rch & Prof#=DIamond Fork,Main Channel    , 44
Up Type= 3
Up Slope=.009
'n Type= 3
 n Slope=.01856
```

```
                                                        Dfork
Boundary for River Rch & Prof#=DIamond Fork,Main Channel     , 45
Up Type= 3
Up Slope=.009
Dn Type= 3
Dn Slope=.01856
DSS Import StartDate=
DSS Import StartTime=
DSS Import EndDate=
DSS Import EndTime=
DSS Import GetInterval= 0
DSS Import Interval=
DSS Import GetPeak= 0
DSS Import FillOption= 0
```

```
'ilename: dfork.r06 (sample output file)

exceedance              3       1       1       0       1       0     132     752
      44      44        0       0       0       0       0       0
       0       0        0       F       F
       3       1        1       0       F       T       F       0      44
       0     .01        F     .01      20      .3     .01       F       5       T
      .1      .3        1
       1       1
       1        10 yr
     100       1
       1        50 yr
     500       1
       1        100 yr
    1000       1
       T       T        1      44        DIamond Fork
       3       0   .0004
       3       0   .0004
       3       0   .0004
       3       0   .0004
       3       0   .0004
       3       0   .0004
NODE   1Main Channel    46          1675    1725    1650       0
       1
      22
       0    5216     215 5212.85   221.7 5212.91   223.2 5211.61   232.1 5211.84
     2335211.713     237 5211.15   243.4 5210.25     254 5210.06     2605210.748
   262.9 5211.08   263.9 5212.24   280.2 5212.83     306 5212.46   308.4  5211.8
   319.1 5212.06     337  5211.7     3385212.303   341.2 5214.23     351 5214.78
   361.9 5214.48     378 5214.73
       3       F
       0      .1   221.7    .045   280.2     .08
   221.7 5212.91   263.9    5212       T       T   221.7   280.2       F       F
       0
       0
NODE   1Main Channel    45           575     625     600       0
       1
      16
       0 5202.06    21.6 5201.04    41.7  5198.1    57.6 5198.59    61.3 5197.15
      91 5196.65      925194.903    92.7 5193.68   109.9 5193.76     1185194.867
   121.9  5195.4   147.8 5194.25   155.8 5198.58   169.1  5198.9   172.9 5201.57
   184.4 5201.26
       3       F
       0      .1      91    .045   121.9      .1
      91 5196.65   121.9  5195.4       T       T      91   121.9       F       F
       0
       0
NODE   1Main Channel    44           755     740     710       0
       1
      16
       05194.859    10.5  5188.7      17 5188.69    19.4 5189.43    42.1  5189.7
    45.9  5187.5    64.2 5186.79    70.9  5188.4    81.7 5188.32    82.7 5189.88
   101.6 5190.74   112.8 5195.33   123.7 5195.75   133.7    5188   145.7    5190
     300 5194.38
       3       F
       0      .1    42.1    .045    82.7      .1
                   123.7 5195.75       F       T    42.1    82.7       F       F
       0
       0
NODE   1Main Channel    43          1100    1000     925       0
       1
      14
       0 5200.38    31.7  5187.3    37.8 5183.15    60.6 5180.68    77.2 5181.57
      81 5183.55    84.8 5185.53   119.1 5184.38     128 5183.63   138.2 5183.63
   147.1 5185.93   262.1    5186   387.1    5188   422.1    5190
       3       F
       0      .1    31.7    .045    84.8      .1
    31.7  5187.3    84.8 5185.53       T       T    31.7    84.8       F       F
       0
       0
NODE   1Main Channel    42           425     400     455       0
       1
      18
       0    5181       85177.822    18.1 5173.81    19.4 5174.62    51.9 5175.18
    52.9 5173.76    64.7 5173.61    86.4 5172.74    98.9 5174.23     125 5173.76
   128.7 5176.59   219.7 5176.38   302.3 5175.41   408.9 5174.89   484.4 5174.35
   554.4    5176   563.4    5178   568.4    5180
       3       F
```

```
                                                                Dfork
        0       .1     51.9     .045    128.7       .1
                     128.7 5176.59        F        T    51.9    128.7        F        F
        0
        0
 NODE   1Main Channel     41            250      225      275        0
        1
       13
        0 5173.14      7.9 5173.89     15.9 5171.68     59.6 5170.94     79.1 5169.14
     84.5 5170.43    111.1 5168.49    118.1 5169.13    119.5 5172.25    140.5 5172.12
    148.5 5172.55    152.7 5173.76    159.5 5173.86
        3        F
        0      .08     59.6     .045    119.5      .08
                     119.5 5172.25        F        T    59.6    119.5        F        F
        0
        0
 NODE   1Main Channel     40             25      245      300        0
        1
       20
        0 5171.93      7.9 5171.98     10.5 5170.68       20 5171.18     27.1 5173.35
     41.4  5173.1      455171.603     50.9 5169.15    130.6 5169.06    131.4 5168.23
    140.3 5168.69    157.7 5169.33    178.8 5166.49    188.4 5166.94    193.2 5166.45
    208.2 5166.77      209 5170.55    231.7 5171.22    271.7     5172    321.7     5174
        3        F
        0      .08    157.7     .045      209      .08
                       209 5170.55        F        T   157.7      209        F        F
        0
        0
 NODE   1Main Channel     39            150      200       50        0
        1
       13
        0  5170.8       20 5169.83      120 5167.07    130.9 5166.27    134.3  5163.5
    149.7 5164.46    151.1 5165.66    156.1  5165.9    165.3 5165.11    200.1 5165.51
    206.8 5167.04    217.1 5166.92    220.1 5177.75
        3        F
        0       .1      120     .045    156.1       .1
      120 5167.07    156.1  5165.9        T        T     120    156.1        F        F
        0
        0
 NODE   1Main Channel     38             50       42       25        0
        1
       13
        0 5174.61     16.4 5165.21     19.3 5162.99     23.9 5163.77     28.9 5163.26
     40.1 5164.06     60.9 5163.31     67.2 5161.33     77.8  5161.7     79.3 5165.21
      116 5165.49    161.6 5166.11      163 5172.54
        3        F
        0       .1     40.1     .045     79.3       .1
     40.1 5164.06     79.3 5165.21        T        T    40.1     79.3        F        F
        0
        0
 NODE   1Main Channel     37           1150     1175     1175        0
        1
       13
        0  5173.1       10 5167.42     10.4 5165.12     10.8 5162.82     20.4  5162.7
     27.6  5161.4     34.9 5162.55     40.4 5162.83       55 5162.71     56.4 5163.93
     94.7 5164.88    125.1 5165.89    142.5 5176.44
        3        F
        0       .1     10.8     .045     56.4       .1
     10.8 5162.82     56.4 5163.93        T        T    10.8     56.4        F        F
        0
        0
 NODE   1Main Channel     36            300      210      180        0
        1
       25
        0    5180       10     5170       29     5160      100 5154.91    160.9 5155.83
    202.8 5156.19    215.9 5155.73    216.8 5151.92    220.85150.917    222.9 5150.39
    231.5 5152.76    254.9 5152.93    258.9 5151.96      265 5152.02    270.8 5152.68
    271.8 5153.88    281.4 5153.72    282.1 5151.96    298.1 5152.28      302 5153.13
    311.2 5153.22    320.4 5152.68    324.5 5156.22    364.7 5154.94    382.8 5163.22
        3        F
        0       .1    215.9     .045    271.8      .08
    215.9 5155.73    271.8     5153        T        T   215.9    271.8        F        F
        0
        0
 NODE   1Main Channel     35            720      700      680        0
        1
       18
        0 5156.65      8.9 5153.34     36.6 5152.92     67.5 5153.83     72.2 5152.54
      785152.288     78.4 5152.27     81.6 5150.66       91 5151.56     99.7  5151.1
```

```
   107.1 5149.56   127.8 5149.86   136.2 5150.84   137.5 5152.01   198.8 5152.86
   257.3 5153.33   262.3    5154   304.3    5160
       3       F
       0      .1      78     .05   137.5      .1
      785152.288   137.5 5152.01       T       T      78   137.5       F       F
       0
       0
NODE   1Main Channel    34          1110    1090    1090       0
       1
       9
       0    5150      95 5148.29     110 5146.27   122.7  5143.5   136.2 5143.62
   162.6 5146.53   174.6 5151.13     183 5148.44     199 5148.19
       3       F
       0      .1      95    .045   162.6      .1
      95 5148.29   174.6 5151.13       T       T      95   162.6       F       F
       0
       0
NODE   1Main Channel    33           900     980     950       0
       1
      12
       0 5140.03    12.1 5139.57    15.1    5136    32.7 5136.26    47.9 5138.59
    79.65138.295    81.2 5138.28   142.6 5139.04   189.7 5139.28   193.2 5138.68
   227.4 5138.47     239 5142.33
       3       F
       0      .1    12.1     .05    47.9      .1
    12.1 5139.57    47.9 5138.59       T       T    12.1    47.9       F       F
       0
       0
NODE   1Main Channel    32          1280    2175    1150       0
       1
      20
       0    5132     162 5132.37   170.8 5132.84   172.7 5127.44   180.8 5128.62
   186.1 5124.55   194.8 5125.42   202.5 5127.83   230.8 5127.75   236.9 5129.28
     274 5128.55   276.9 5127.87   291.8 5127.71   294.6 5128.69   332.1 5128.61
   333.4 5127.44   347.9 5127.13   350.6 5128.13   399.9 5127.45   415.6  5136.5
       3       F
       0      .1   170.8    .045   236.9      .1
   170.8 5132.84   236.9 5129.28       T       T   170.8   236.9       F       F
       0
       0
NODE   1Main Channel    31           700     975    1015       0
       1
      13
       0    5130      43    5128     107    5126     152    5124     287  5123.3
   297.5 5122.12   300.8 5118.76   311.1 5118.81   314.1 5117.73   344.8 5116.43
     355 5122.15   371.6 5131.46   381.8 5132.22
       3       F
       0      .1   311.1    .045     355      .1
   311.1 5118.81     355 5122.15       T       T   311.1     355       F       F
       0
       0
NODE   1Main Channel    30           150     100     100       0
       1
      12
       0    5120      30 5118.16    48.2 5118.94    53.2 5113.18   109.1 5114.77
   112.4 5112.62   117.5 5113.02   140.9 5110.93   155.1 5110.47   166.5 5120.08
   175.7 5119.44   285.7    5120
       3       F
       0     .08   109.1    .045   166.5      .1
                   166.5 5120.08       F       T   109.1   166.5       F       F
       0
       0
NODE   1Main Channel    29           500     450     400       0
       1
       7
       0 5123.08      22 5121.71    28.6  5110.2    35.5 5109.97    44.5 5110.47
    50.5 5121.88    66.4 5121.49
       3       F
       0     .08      22     .04    50.5     .08
      22 5121.71    50.5 5121.88       T       T      22    50.5       F       F
       0
       0
NODE   1Main Channel    28           900     815     675       0
       1
      13
       0    5114      10 5112.38    25.5 5112.57    66.7 5110.63    70.1 5110.79
    74.4 5111.85   125.7 5110.47   164.3 5107.49   177.4 5107.57   196.6 5109.12
     204 5111.56   205.3 5112.51   228.5    5118
```

```
        3        F
        0       .1     74.4     .045      204       .1
     74.4 5111.85      204 5111.56        T        T     74.4      204        F        F
        0
        0
 NODE   1Main Channel     27            945     1050     1160        0
        1
       21
        0     5110      223     5108      263     5106      300 5104.97    307.6 5104.64
    309.9   5101.2    314.6 5100.22    333.7 5100.54    341.8 5101.85    362.3 5102.91
    374.8 5103.09    398.1 5103.15    408.2 5102.12    410.8 5104.18    435.4 5103.97
    437.1 5103.01    441.8 5103.03    443.8   5104.3    463.5 5104.59    509.6 5119.23
    530.4 5122.32
        3        F
        0       .1    307.6     .045    362.3      .08
    307.6 5104.64                          T        F    307.6    362.3        F        F
        0
        0
 NODE   1Main Channel     26           1325     1275     1200        0
        1
       16
        0   5103.5      9.4 5102.91     17.2 5100.07     23.2  5093.6     30.6 5093.52
     60.7 5095.21     67.2 5093.66     80.5 5092.76     84.7 5092.92     94.6 5093.01
     99.6 5092.17    118.1 5093.33      120  5095.3    175.9 5095.78    199.1 5109.99
    223.6 5113.65
        3        F
        0      .08     60.7     .043      120       .1
                        120   5095.3        F        T     60.7      120        F        F
        0
        0
 NODE   1Main Channel     25            970     1045     1200        0
        1
       28
        0   5090.4      6.6 5085.91       15 5084.47     16.7 5085.44       33  5085.6
     39.3 5083.72     50.2 5082.53     55.3 5083.14     73.4 5085.04     94.9 5085.07
     97.8 5084.36     99.7 5085.68    121.8 5085.35      123 5084.78    131.7 5084.93
    137.7 5086.29      181 5086.24    183.3 5085.39    204.6 5084.95    224.5 5086.44
    269.1   5085.4     272 5086.67    330.4 5086.49    383.4 5086.02    386.4 5084.76
    411.5 5085.01    434.8 5085.81    462.1 5088.18
        3        F
        0      .08      33     .043     73.4      .08
       33   5085.6     272 5086.67        T        T       33     73.4        F        F
        0
        0
 NODE   1Main Channel     24            400      340      300        0
        1
       17
        05082.609      4.4 5077.17     11.4 5076.79     27.1 5077.53     28.1 5076.03
     32.4 5077.14     68.1 5077.53     74.8 5076.67     86.6 5077.06     95.9 5075.99
    105.4 5074.23    111.2 5078.77    131.75078.775      189 5078.79    269.6 5079.54
    273.3 5081.68    290.8 5081.53
        3        F
        0      .08     86.6      .05    111.2       .1
     68.1     5077    111.2 5078.77        T        T     86.6    111.2        F        F
        0
        0
 NODE   1Main Channel     23            260      250      290        0
        1
       16
        05081.067     4.24 5074.17     7.44   5074.7    30.84   5075.2    36.04 5072.17
    43.24 5073.37    65.14 5073.38    76.44 5071.95    86.04 5073.67   102.54 5074.04
   103.44 5074.75   149.14 5073.26   150.44 5075.82   162.54 5076.54   170.04 5078.75
   196.54 5079.17
        3        F
        0       .1    30.84     .045   103.44       .1
    30.84   5075.2   103.44     5074        T        T    30.84   103.44        F        F
        0
        0
 NODE   1Main Channel     22            670      650      600        0
        1
       19
        0 5078.53        6 5072.63     16.3 5073.69     33.8 5074.09     84.8 5072.89
     91.4 5073.58    111.1 5073.82    112.5 5072.07    129.8 5072.07    140.2 5072.07
    152.8 5071.91      168 5072.71    188.9     5072    192.9 5070.56    194.5  5073.9
    251.9 5074.07      329 5073.82    334.4 5077.42    361.3 5077.29
        3        F
        0      .08    111.1     .045    194.5      .08
    111.1     5073    194.5   5073.9        T        T    111.1    194.5        F        F
```

```
       0
       0
NODE   1Main Channel    21          1375    1350    1225       0
       1
      19
       0    5076    10.3 5069.16    46.9 5069.33    49.7 5067.25    65.2 5067.98
    66.7 5068.36    84.3 5069.13   109.6 5069.13   116.8 5067.39   131.9 5068.08
   148.7 5066.09   152.8 5066.28     154 5069.12   238.2 5068.94   318.6 5068.37
   329.3 5066.88   362.1 5068.04   371.9 5073.06   387.6    5073
       3       F
       0     .08   109.6    .045     154     .08
   109.6  5068.5     154 5069.12       T       T   109.6     154       F       F
       0
       0
NODE   1Main Channel    20          1020    1025    1140       0
       1
      12
       0 5068.67    12.4 5062.39    14.2 5059.47      18 5057.82    29.6  5056.8
    52.3 5057.91    55.4 5059.47   137.8 5060.26   363.6 5060.25   422.1 5061.95
   436.1 5071.26   467.8 5071.37
       3       F
       0      .1    14.2    .045    55.4      .1
    14.2 5059.47    55.4 5059.47       T       T    14.2    55.4       F       F
       0
       0
NODE   1Main Channel    19           355     300     260       0
       1
      19
       0    5060       85054.254    13.4 5049.19    23.5 5050.59    35.7    5050
    76.7 5051.41   110.5  5051.4   120.1 5050.54   126.9 5048.31   139.9 5047.43
   143.7 5051.74   178.2 5051.48   238.3 5052.87   245.8 5054.42   264.5 5055.86
   449.5    5054   494.5    5056   532.5    5058   679.5    5060
       3       F
       0     .08   110.5    .045   143.7      .1
   110.5  5050.4   143.7 5051.74       T       T   110.5   143.7       F       F
       0
       0
NODE   1Main Channel    18           200     210     200       0
       1
      17
       0 5052.42      485051.306    92.2 5050.28   155.2 5049.35   157.1 5046.93
   162.8 5048.75   194.2 5047.37   221.8 5049.01   241.2 5046.92   243.1 5049.54
   286.6 5049.23   340.1 5049.55   343.2 5047.83   387.5 5047.94   392.4 5051.07
   467.6 5050.98   532.6    5052
       3       F
       0     .08   155.2    .043   243.1     .08
   155.2 5049.35   243.1    5049       T       T   155.2   243.1       F       F
       0
       0
NODE   1Main Channel    17           225     300     350       0
       1
      17
       05053.922     7.7 5047.64    90.7 5048.63   173.5    5049   177.2 5047.63
   230.7 5048.17   232.3 5046.59   256.1 5047.16   261.2 5046.57   274.2 5047.86
   305.7    5047     330 5048.21   344.1 5047.37   375.4 5047.82   389.9 5050.27
   504.4 5050.48   647.4    5052
       3       F
       0     .08   173.5    .043   389.9     .08
   173.5    5049   389.9 5050.27       T       T   173.5   389.9       F       F
       0
       0
NODE   1Main Channel    16           300     450     400       0
       1
      24
       0 5056.19    25.3 5055.93    32.3 5050.73    39.3 5045.53    80.3 5046.22
   174.6 5046.41   217.2 5045.89   219.1 5044.56   258.4 5045.54   274.5 5041.85
   282.4 5044.46   299.4 5044.85   311.9 5043.63   321.2 5045.77   331.1  5045.8
   361.7 5044.75   367.8 5045.52     375 5044.62   377.7 5046.29     398 5045.78
   408.7 5051.25   427.3 5050.89   453.3    5052   562.3    5054
       3       F
       0     .08   217.2    .043   331.1     .08
   258.4    5045   331.1    5045       T       T   217.2   331.1       F       F
       0
       0
NODE   1Main Channel    15           615     700     660       0
       1
      26
       05046.146     2.7 5045.32     7.1 5041.68    12.4 5042.52      21 5041.37
```

```
                                                                  Dfork
        26 5042.41     49.4 5042.89     55.5 5042.08     59.1 5042.57     89.2 5042.71
      96.1 5041.47    105.2 5042.58    128.2 5042.84    165.3 5042.69    174.8 5041.61
     178.3 5041.95      202 5041.59    209.8 5039.57    219.1 5039.51    221.1 5042.76
     244.1 5043.07    288.7  5042.8    292.6 5045.07    338.1 5045.19    349.3  5047.8
     370.8 5047.89
         3       F
         0     .07    165.3     .043    244.1      .08
     165.3  5042.2    244.1 5043.07        T        T    165.3    244.1        F        F
         0
         0
 NODE    1Main Channel     14            950      975      930        0
         1
        22
         0 5045.18     10.3 5039.17     34.3 5038.47     56.4 5038.42     58.3 5035.62
      61.4 5035.44     71.3 5035.34     76.8 5036.78     80.7 5037.28     93.8 5037.86
      98.2 5037.86    100.6 5037.25    102.2 5037.85      107  5037.9    110.6 5038.47
     131.5 5038.62    132.6 5037.72    135.5 5037.62    139.7 5036.84    156.1 5036.93
     158.8 5037.47    170.6 5048.87
         3       F
         0      .1     56.4     .045     93.8       .1
      56.4 5038.42     93.8 5037.86        T        T     56.4     93.8        F        F
         0
         0
 NODE    1Main Channel     13           1280     1300     1250        0
         1
        20
         0    5036     29.5     5034       80     5034      160 5033.57    175.1 5033.49
     188.3 5025.58    200.5 5025.72    206.3 5022.93    212.9 5022.86    218.6 5023.91
     224.3 5024.22      234 5022.62    242.8 5022.22    247.2 5022.78    268.9 5033.97
     284.3 5034.35    296.3     5034    324.3     5036    349.3     5038    379.3     5040
         3       F
         0      .1    200.5     .043    268.9       .1
                                            F        F    200.5    268.9        F        F
         0
         0
 NODE    1Main Channel     12            850      875      900        0
         1
        18
         0    5016       15     5014       90     5014      155 5013.49    165.1 5013.09
     166.4 5009.41    171.3 5009.46    174.6 5008.99    184.6 5009.13    213.7 5010.54
     215.5 5012.28    226.5 5012.19    279.4 5011.37    291.1 5010.69    297.2 5014.23
     321.8 5013.76    466.8     5016    551.8     5016
         3       F
         0      .1    165.1     .045    215.5       .1
     165.1 5013.09    215.5 5012.28        T        T    165.1    215.5        F        F
         0
         0
 NODE    1Main Channel     11            890      950      575        0
         1
        21
         0 5015.92       10     5010     24.8 5007.73     43.5 5007.99     45.2     5006
      61.4 5005.96     69.8  5007.7     69.95007.701    121.4 5007.93    125.9 5006.89
     133.1 5006.62    140.1 5007.53    198.5 5007.53    201.5 5005.54    212.4 5006.25
     266.9 5007.12    332.8 5006.44    347.3 5006.89      380     5010      390     5014
       430    5014
         3       F
         0     .08    198.5     .045    266.9      .08
     198.5 5007.53    266.9 5007.12        T        T    198.5    266.9        F        F
         0
         0
 NODE    1Main Channel     10            300      380      450        0
         1
        15
         0 5007.87      5.4 5004.51     29.4 5004.46     53.6 5003.75     56.7 4998.98
      83.2 5000.36     95.6 5000.71      103 4999.13    117.6  5005.7    138.6 5005.71
     145.1 5004.78      158 5001.29    169.4 5001.53    193.9 5005.69    203.9     5010
         3       F
         0      .1     53.6     .045    117.6       .1
      53.6 5003.75    117.6  5005.7        T        T     53.6    117.6        F        F
         0
         0
 NODE    1Main Channel      9            600      625      480        0
         1
        14
         0    5010      315 5000.36    328.6 4999.34      331 4998.62    352.6 4997.47
     363.4 4996.73    376.9 4996.97    377.8 4999.03    388.2 4998.95    393.7 5000.03
     399.2  5000.1    407.9 5001.46    421.6 5001.54    439.8  5010.2
         3       F
```

```
       0      .1   328.6    .045   377.8      .1
                                       F       F   328.6   377.8       F       F
       0
       0
NODE   1Main Channel    8            1400    1350    1100       0
       1
      23
       0 5007.78    14.4 4995.81    20.9 4994.09      74 4994.44    78.2 4995.89
   119.7 4996.31   143.5 4995.19   195.6  4996.3   197.9 4995.19   200.6 4996.25
   233.1 4996.32     234 4995.03     239 4994.69   241.6 4995.65   258.5 4996.09
     263 4995.03     271 4995.61   288.7 4995.14   298.6 4993.45   300.94993.637
   315.6 4994.83   327.4 5000.94   339.2 5000.96
       3       F
       0      .1    14.4    .043    78.2     .07
    14.4 4995.81    78.2  4995.5       T       T    14.4    78.2       F       F
       0
       0
NODE   1Main Channel    7             565     700     650       0
       1
      25
       0 4995.74    13.1 4995.96    19.2 4987.35      26 4987.52    39.1 4987.31
      49 4988.43      62 4987.81    67.5 4988.52    75.8 4988.55    79.6 4987.97
    83.4 4988.61   115.4 4988.85   121.1 4986.42   129.5 4986.41   137.6 4987.23
   149.2 4986.82   154.3  4987.6   155.7 4988.95   173.4 4988.63   174.7 4986.82
   178.9 4987.98   184.4 4988.01   192.7 4986.33   201.3 4991.24   211.3 4992.22
       3       F
       0     .07   115.4    .043   155.7     .07
   115.4    4988   155.7    4988       T       T   115.4   155.7       F       F
       0
       0
NODE   1Main Channel    6             975    1120    1275       0
       1
      13
       0    4987      60  4985.2    67.1 4984.91    68.9 4982.59    73.1 4983.81
    84.6 4982.62   100.1 4983.66     101 4985.02   108.2 4984.94   118.5 4983.84
   130.3 4983.19   132.6 4986.95   145.6 4986.14
       3       F
       0      .1    67.1    .045     101      .1
    67.1 4984.91                       T       F    67.1     101       F       F
       0
       0
NODE   1Main Channel    5            1625    1360    1225       0
       1
      18
       0 4986.16    10.3 4985.98    25.2 4979.27    84.8 4978.45     158 4978.87
   158.1 4978.87   160.6 4977.07   179.6 4978.28   192.9 4977.22   196.4  4976.3
   211.3 4978.27   217.3  4977.2   218.1 4979.28   229.7 4978.89   324.7    4978
   419.7    4980   694.7    4982   754.7    4990
       3       F
       0     .08     158    .045   218.1     .08
                                       F       F     158   218.1       F       F
       0
       0
NODE   1Main Channel    4            1190    1170    1170       0
       1
      17
       0    4980      40    4974     190    4972     340 4971.34   350.1 4970.68
   351.7 4968.94   360.3 4970.22   373.3 4969.94   377.9 4967.96   387.3 4967.94
     398 4967.68   403.9 4972.06     408 4973.62   418.5 4972.75   828.5    4970
   868.5    4972   893.5    4980
       3       F
       0     .08     340    .045     408     .08
     340 4971.34     408 4973.62       T       T     340     408       F       F
       0
       0
NODE   1Main Channel    3            2775    2700    2650       0
       1
       8
       0 4974.79    30.1 4973.46    30.5 4961.43    43.2  4961.1    58.9 4960.72
      72 4961.19    72.8 4973.53    87.4 4974.32
       3       F
       0     .05    30.1    .038    72.8     .05
    30.1 4973.46    72.8 4973.53       T       T    30.1    72.8       F       F
       0
       0
```

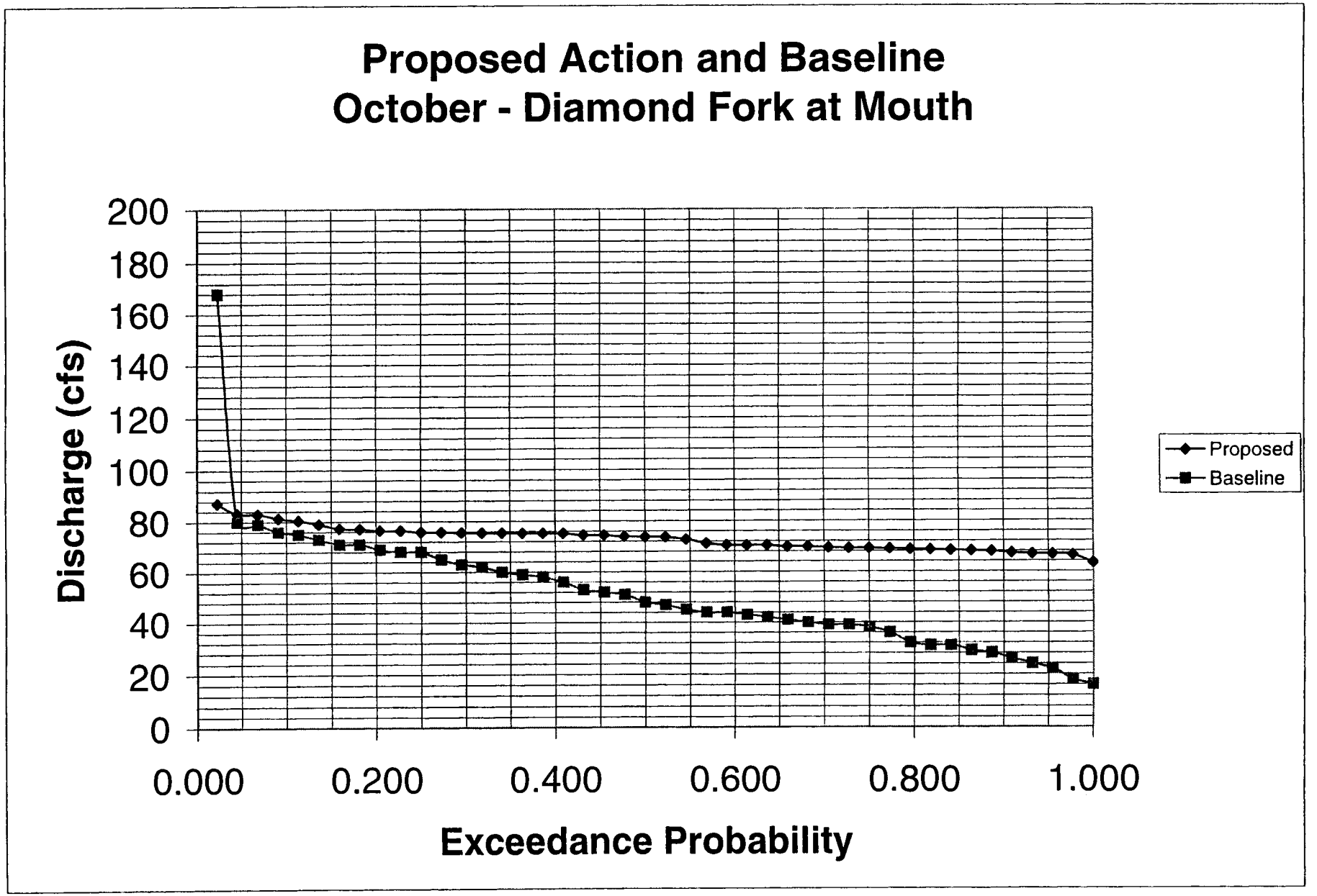
HEC-RAS MONTHLY AVERAGE FLOW EXCEEDANCE CURVES CROSS SECTIONS 3 THROUGH 30

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

October

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
70	38	0.023	87	168
70	28	0.045	83	80
76	32	0.068	83	79
63	36	0.091	81	76
77	53	0.114	80	75
69	16	0.136	79	73
67	22	0.159	77	71
66	69	0.182	77	71
74	63	0.205	76	69
68	75	0.227	76	68
68	29	0.250	76	68
75	44	0.273	76	65
76	47	0.295	76	63
76	68	0.318	75	62
69	68	0.341	75	60
74	71	0.364	75	59
74	71	0.386	75	58
81	60	0.409	75	56
73	80	0.432	75	53
75	51	0.455	74	52
77	79	0.477	74	51
79	42	0.500	74	48
75	59	0.523	74	47
87	168	0.545	73	45
70	65	0.568	71	44
69	58	0.591	70	44
69	45	0.614	70	43
75	39	0.636	70	42
76	76	0.659	70	41
75	62	0.682	70	40
69	40	0.705	69	39
68	31	0.727	69	39
67	18	0.750	69	38
75	48	0.773	69	36
70	56	0.795	69	32
74	43	0.818	68	31
67	44	0.841	68	31
70	52	0.864	68	29
68	26	0.886	68	28
76	73	0.909	67	26
83	41	0.932	67	24
83	39	0.955	67	22
80	31	0.977	66	18
71	24	1.000	63	16

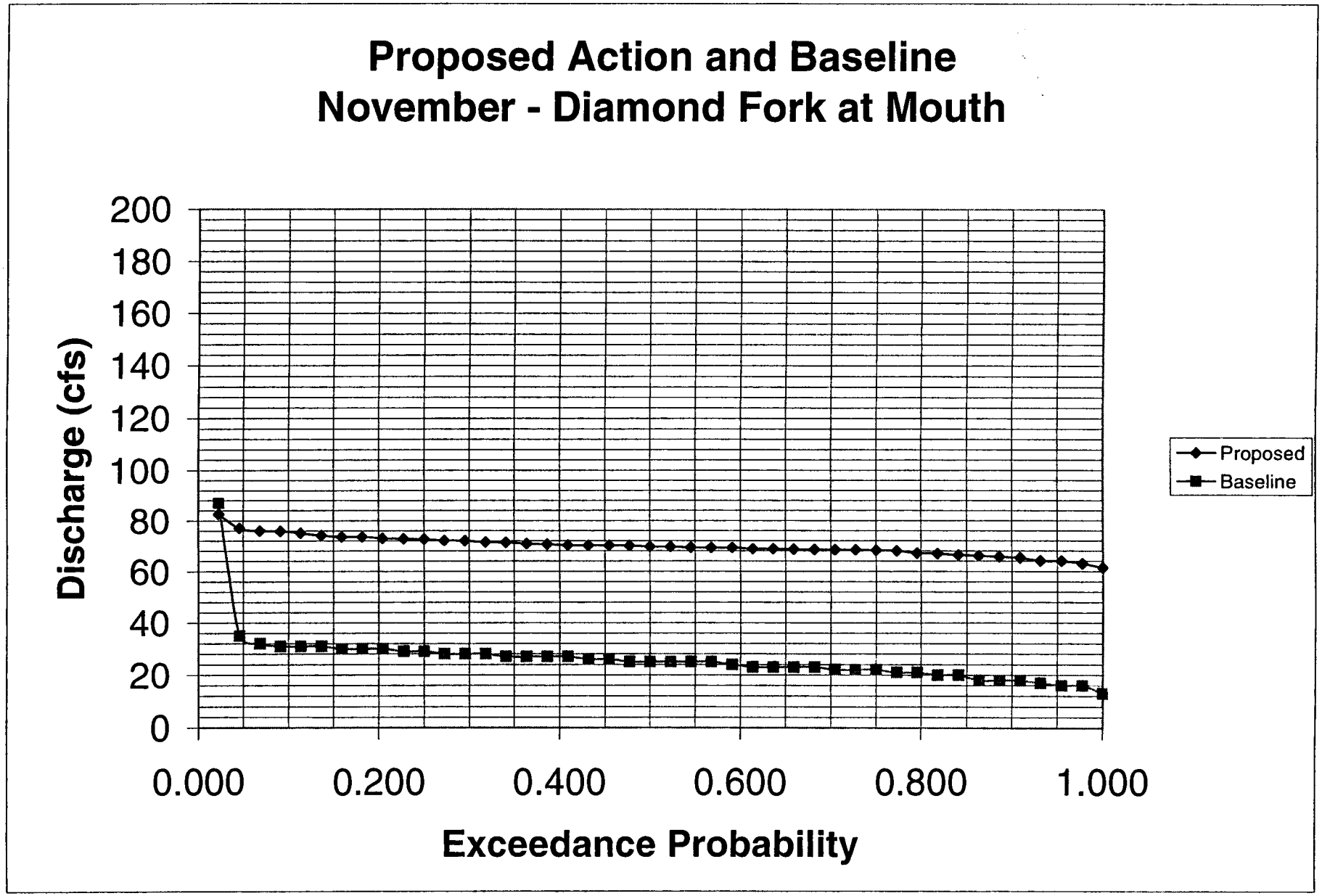

Proposed Action and Baseline
October - Diamond Fork at Mouth
Discharge (cfs)
200
180
160
140
120
100
80
60
40
20
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

November

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
70	30	0.023	83	87
70	30	0.045	77	35
74	23	0.068	76	32
77	32	0.091	76	31
74	22	0.114	75	31
71	23	0.136	74	31
69	16	0.159	74	30
70	23	0.182	74	30
76	31	0.205	73	30
73	25	0.227	73	29
69	18	0.250	73	29
73	25	0.273	72	28
71	28	0.295	72	28
72	29	0.318	71	28
70	22	0.341	71	27
76	31	0.364	71	27
71	28	0.386	71	27
74	31	0.409	70	27
68	21	0.432	70	26
71	26	0.455	70	26
69	27	0.477	70	25
73	35	0.500	70	25
68	28	0.523	70	25
83	87	0.545	69	25
67	27	0.568	69	25
65	20	0.591	69	24
68	18	0.614	69	23
67	20	0.636	69	23
69	27	0.659	69	23
70	25	0.682	69	23
61	13	0.705	68	22
64	17	0.727	68	22
64	16	0.750	68	22
69	22	0.773	68	21
70	25	0.795	67	21
66	23	0.818	67	20
66	24	0.841	66	20
63	18	0.864	66	18
66	21	0.886	66	18
72	29	0.909	65	18
69	26	0.932	64	17
69	27	0.955	64	16
75	30	0.977	63	16
68	25	1.000	61	13

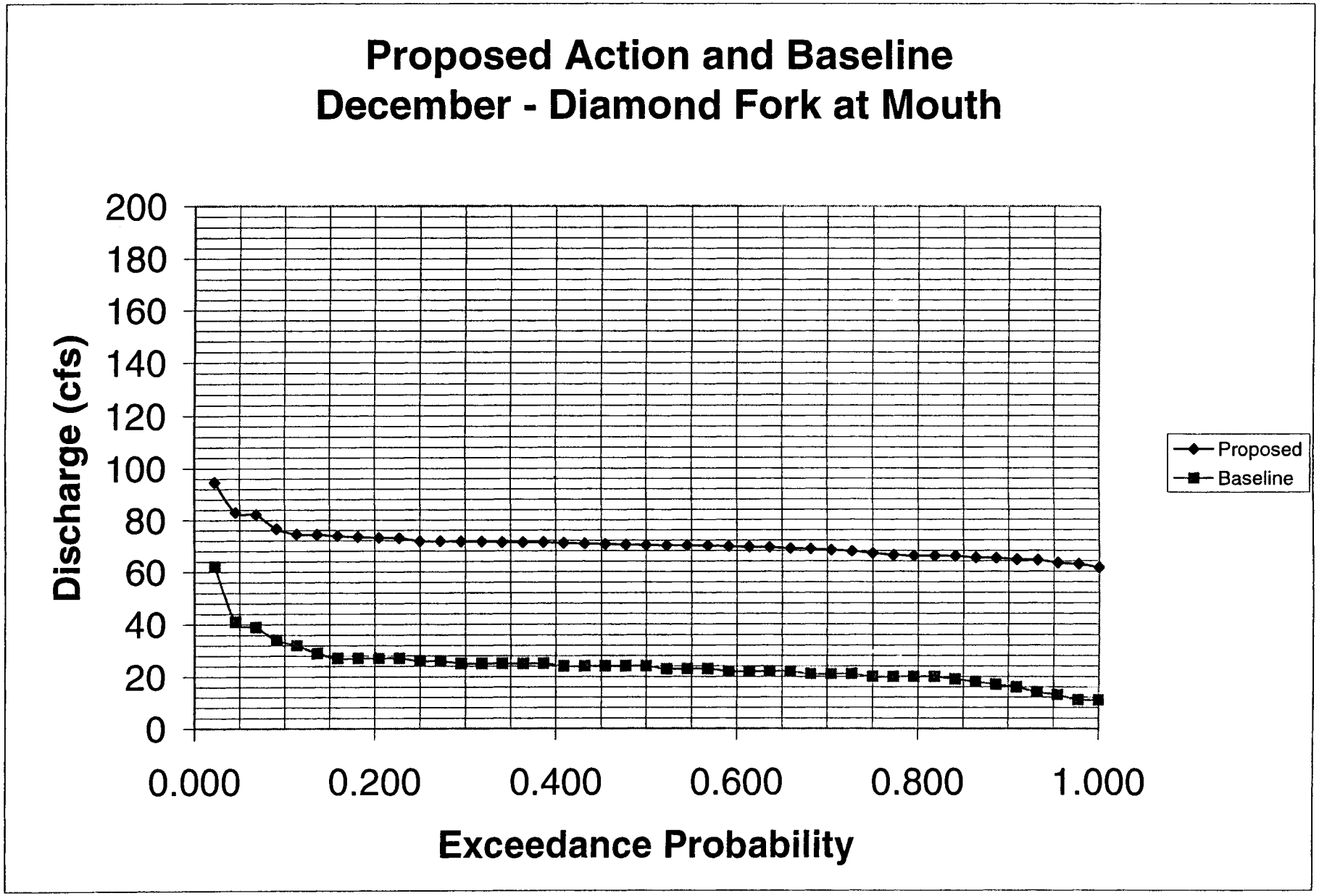

Proposed Action and Baseline
November - Diamond Fork at Mouth
Discharge (cfs)
200
180
160
140
120
100
80
60
40
20
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

December

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
73	34	0.023	95	62
70	39	0.045	83	41
68	24	0.068	82	39
83	41	0.091	77	34
72	22	0.114	74	32
82	25	0.136	74	29
66	11	0.159	74	27
70	20	0.182	73	27
71	24	0.205	73	27
70	24	0.227	73	27
70	20	0.250	72	26
72	22	0.273	72	26
71	23	0.295	72	25
74	27	0.318	72	25
71	21	0.341	71	25
74	24	0.364	71	25
71	22	0.386	71	25
74	25	0.409	71	24
67	18	0.432	71	24
72	25	0.455	71	24
73	26	0.477	70	24
77	32	0.500	70	24
73	29	0.523	70	23
95	62	0.545	70	23
69	25	0.568	70	23
66	19	0.591	70	22
72	24	0.614	69	22
69	22	0.636	69	22
71	26	0.659	69	22
66	21	0.682	69	21
63	13	0.705	68	21
62	11	0.727	68	21
65	16	0.750	67	20
63	14	0.773	66	20
70	23	0.795	66	20
69	27	0.818	66	20
70	25	0.841	66	19
65	17	0.864	65	18
65	20	0.886	65	17
71	27	0.909	65	16
64	20	0.932	64	14
66	21	0.955	63	13
69	27	0.977	63	11
68	2[illegible]	1.000	62	11

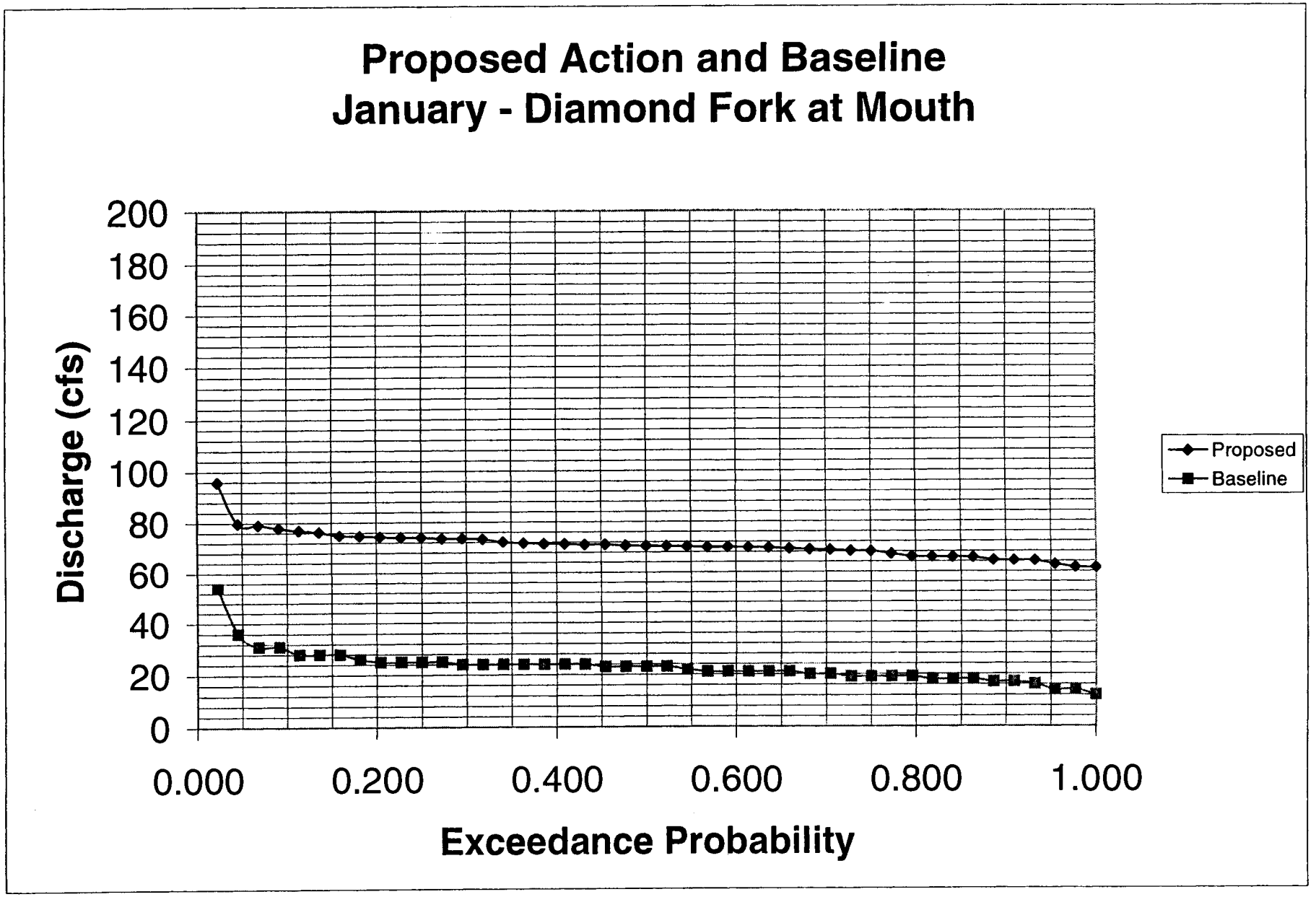

Proposed Action and Baseline
December - Diamond Fork at Mouth
Discharge (cfs)
200
180
160
140
120
100
80
60
40
20
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

January

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
75	25	0.023	96	54
73	24	0.045	80	36
68	18	0.068	79	31
70	21	0.091	78	31
64	14	0.114	77	28
78	23	0.136	76	28
67	12	0.159	75	28
77	22	0.182	75	26
70	23	0.205	74	25
71	24	0.227	74	25
69	19	0.250	74	25
70	20	0.273	73	25
71	21	0.295	73	24
72	23	0.318	73	24
74	17	0.341	72	24
71	21	0.364	72	24
74	25	0.386	71	24
68	21	0.409	71	24
66	19	0.432	71	24
79	24	0.455	71	23
73	24	0.477	71	23
70	21	0.500	70	23
76	31	0.523	70	23
96	54	0.545	70	22
70	28	0.568	70	21
61	16	0.591	70	21
73	28	0.614	70	21
66	20	0.636	70	21
70	25	0.659	69	21
69	24	0.682	69	20
64	17	0.705	69	20
62	14	0.727	68	19
74	25	0.750	68	19
64	19	0.773	67	19
66	18	0.795	66	19
75	31	0.818	66	18
71	24	0.841	66	18
70	23	0.864	66	18
66	19	0.886	64	17
80	36	0.909	64	17
71	26	0.932	64	16
72	28	0.955	63	14
69	24	0.977	62	14
63	1[illegible]	1.000	61	12

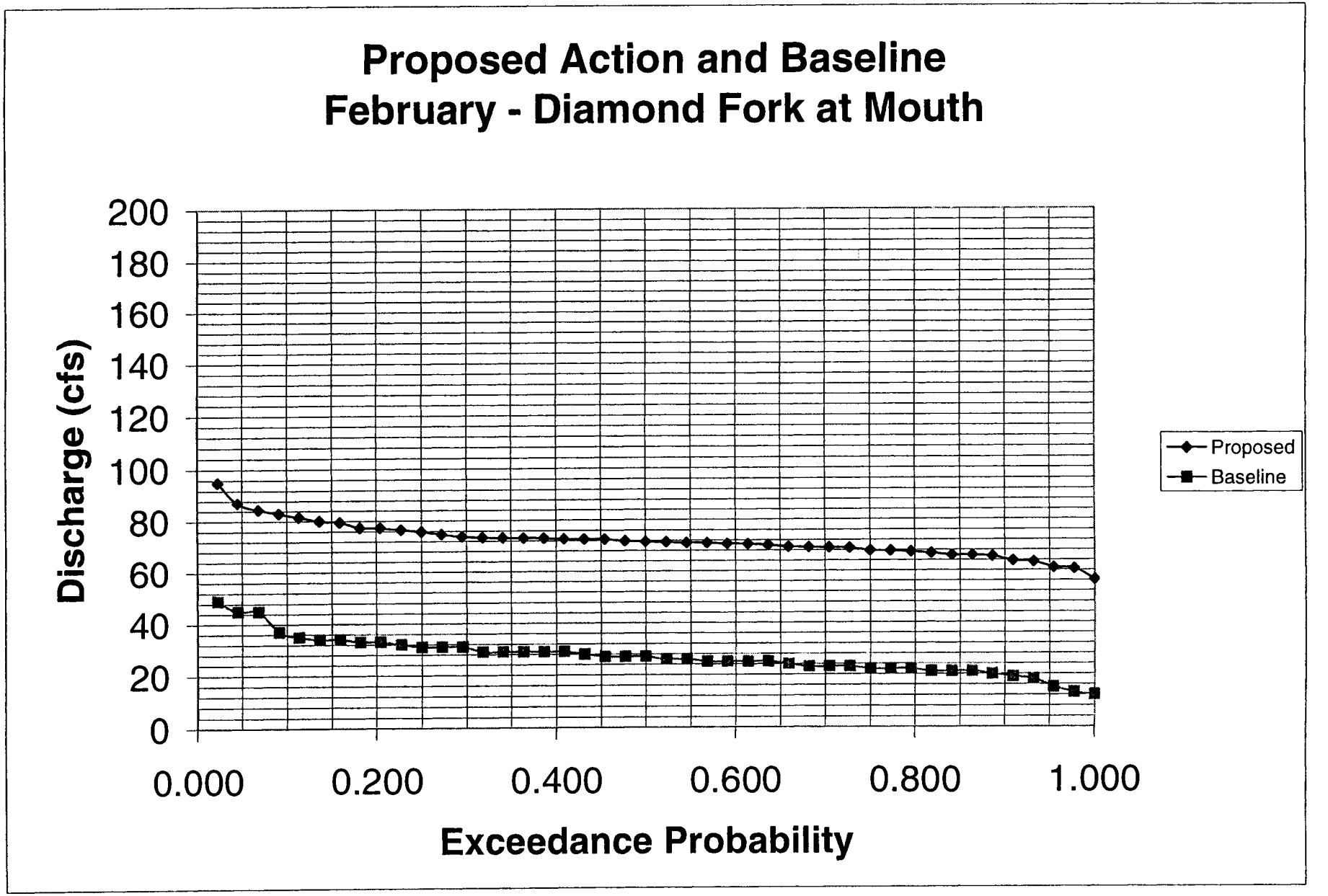

Proposed Action and Baseline
January - Diamond Fork at Mouth
Discharge (cfs)
200
180
160
140
120
100
80
60
40
20
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

February

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
87	45	0.023	95	49
80	34	0.045	87	45
74	33	0.068	85	45
75	20	0.091	83	37
69	18	0.114	82	35
83	27	0.136	80	34
63	13	0.159	80	34
80	35	0.182	77	33
77	29	0.205	77	33
73	22	0.227	77	32
69	26	0.250	76	31
72	25	0.273	75	31
71	23	0.295	74	31
71	29	0.318	73	29
66	23	0.341	73	29
68	21	0.364	73	29
73	27	0.386	73	29
73	26	0.409	73	29
72	29	0.432	73	28
73	25	0.455	73	27
76	32	0.477	72	27
73	29	0.500	72	27
68	27	0.523	71	26
85	45	0.545	71	26
69	25	0.568	71	25
61	15	0.591	71	25
66	22	0.614	70	25
71	29	0.636	70	25
73	31	0.659	69	24
70	24	0.682	69	23
60	21	0.705	69	23
71	22	0.727	69	23
95	49	0.750	68	22
69	34	0.773	68	22
56	12	0.795	67	22
77	33	0.818	67	21
77	31	0.841	66	21
70	23	0.864	66	21
65	25	0.886	65	20
73	31	0.909	64	19
64	19	0.932	63	18
82	37	0.955	61	15
67	28	0.977	60	13
67	2[illegible]	1.000	56	12

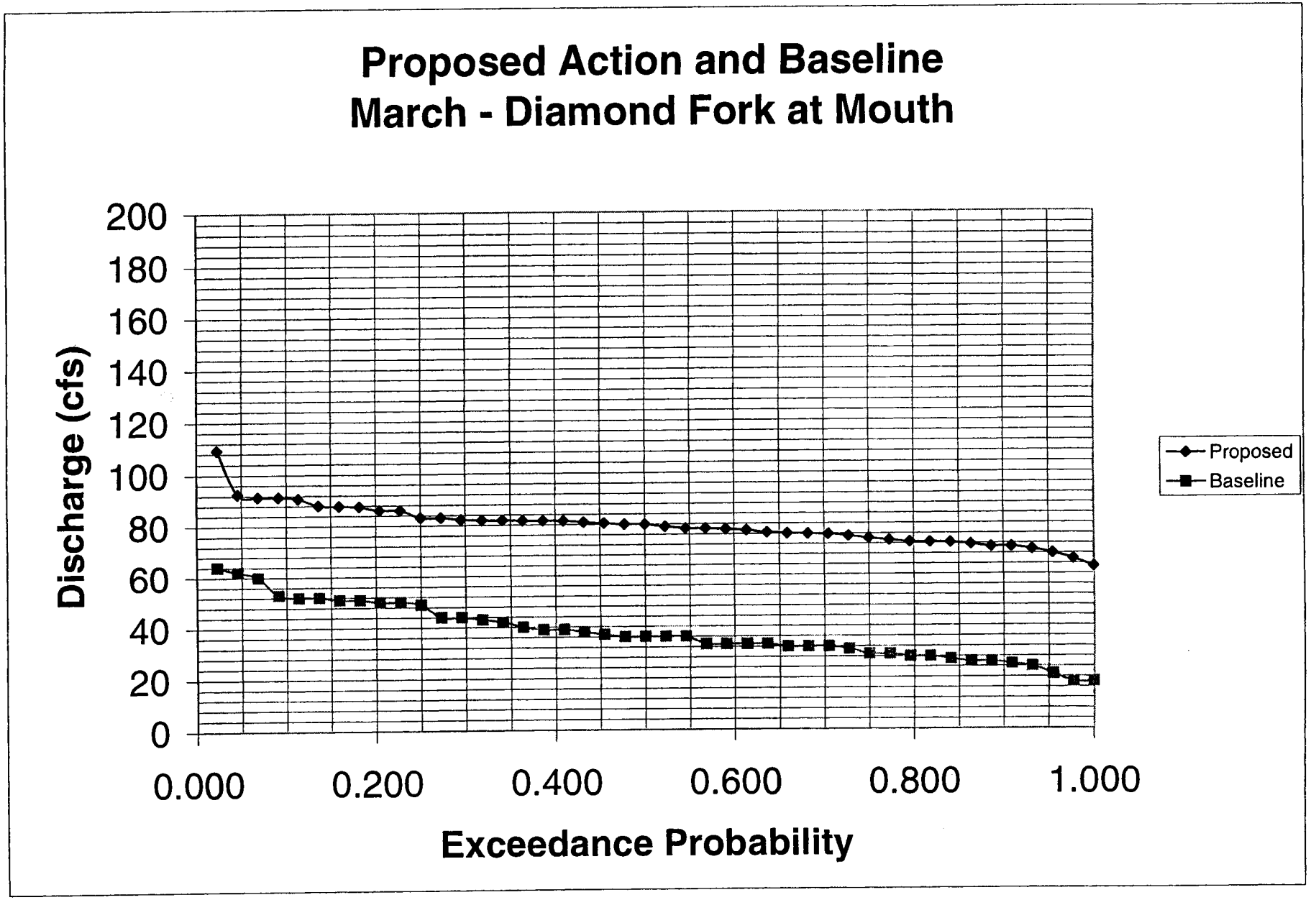

Proposed Action and Baseline
February - Diamond Fork at Mouth
Discharge (cfs)
200
180
160
140
120
100
80
60
40
20
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

March

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
86	62	0.023	109	64
83	44	0.045	93	62
81	29	0.068	91	60
82	32	0.091	91	53
78	21	0.114	91	52
73	18	0.136	88	52
77	33	0.159	88	51
91	60	0.182	88	51
82	50	0.205	86	50
79	52	0.227	86	50
76	36	0.250	83	49
72	28	0.273	83	44
82	37	0.295	82	44
82	39	0.318	82	43
76	32	0.341	82	42
73	28	0.364	82	40
83	43	0.386	82	39
91	52	0.409	81	39
81	36	0.432	81	38
78	36	0.455	81	37
80	40	0.477	80	36
77	36	0.500	80	36
81	39	0.523	79	36
88	51	0.545	78	36
70	27	0.568	78	33
76	31	0.591	78	33
71	33	0.614	77	33
86	44	0.636	77	33
80	38	0.659	76	32
71	26	0.682	76	32
72	29	0.705	76	32
74	25	0.727	75	31
78	33	0.750	74	29
66	24	0.773	73	29
63	18	0.795	73	28
82	42	0.818	73	28
88	49	0.841	72	27
91	51	0.864	72	26
73	32	0.886	71	26
88	50	0.909	71	25
68	26	0.932	70	24
93	53	0.955	68	21
109	64	0.977	66	18
75	33	1.000	63	18

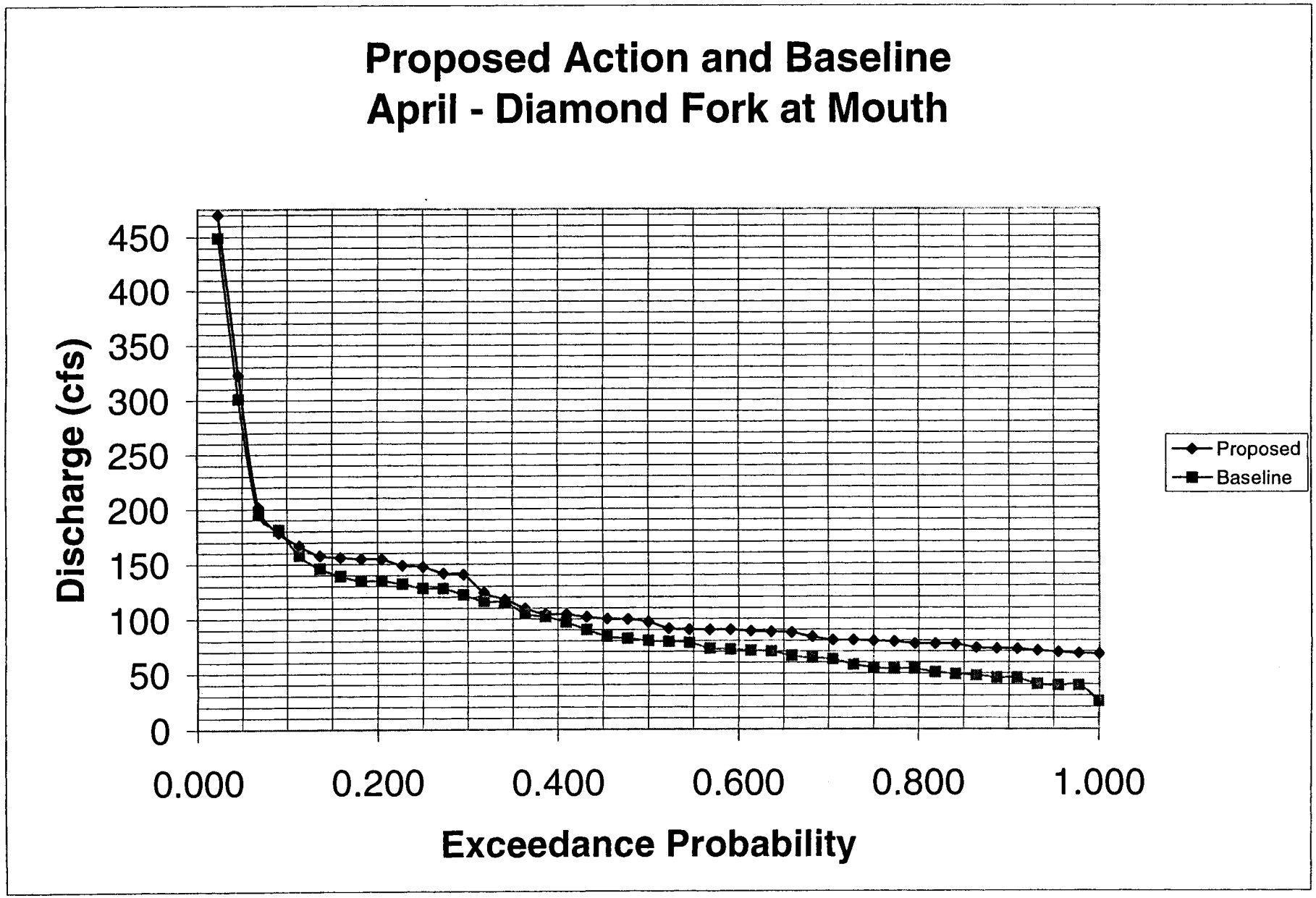

Proposed Action and Baseline
March - Diamond Fork at Mouth
Discharge (cfs)
200
180
160
140
120
100
80
60
40
20
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

April

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
156	195	0.023	470	449
91	116	0.045	322	301
100	79	0.068	202	195
90	55	0.091	179	181
79	64	0.114	167	158
80	54	0.136	158	146
202	181	0.159	156	139
158	139	0.182	155	135
104	84	0.205	154	135
97	115	0.227	149	132
90	70	0.250	148	128
69	46	0.273	142	128
142	122	0.295	140	122
104	102	0.318	124	116
87	66	0.341	118	115
71	49	0.364	110	105
179	158	0.386	104	102
102	82	0.409	104	97
100	80	0.432	102	90
140	128	0.455	100	84
154	135	0.477	100	82
148	132	0.500	97	80
470	449	0.523	91	79
89	90	0.545	90	78
76	78	0.568	90	73
77	46	0.591	90	72
90	73	0.614	89	71
83	63	0.636	88	70
124	105	0.659	87	66
72	39	0.682	83	64
72	51	0.705	80	63
68	25	0.727	80	58
149	128	0.750	80	55
73	40	0.773	79	54
80	54	0.795	77	54
155	135	0.818	77	51
77	72	0.841	76	49
88	48	0.864	73	48
80	58	0.886	72	46
322	301	0.909	72	46
67	39	0.932	71	40
167	146	0.955	69	39
110	71	0.977	68	39
118	97	1.000	67	25

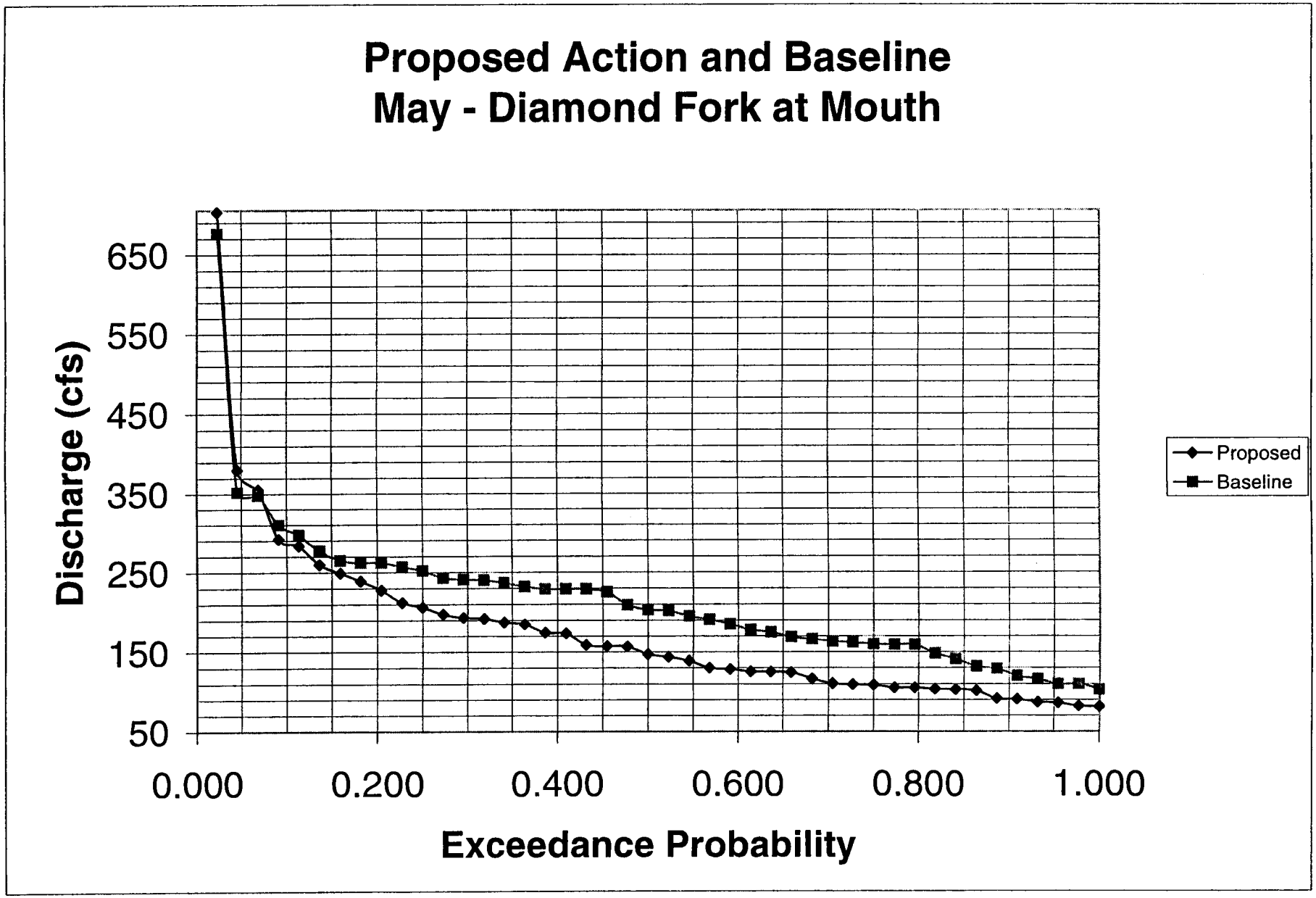

Proposed Action and Baseline
April - Diamond Fork at Mouth
Discharge (cfs)
450
400
350
300
250
200
150
100
50
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

May

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
109	229	0.023	703	676
102	297	0.045	381	352
104	262	0.068	355	348
130	103	0.091	292	310
103	148	0.114	283	297
139	110	0.136	260	277
228	277	0.159	249	265
239	243	0.182	239	262
185	163	0.205	228	262
86	252	0.227	212	257
116	241	0.250	206	252
125	120	0.273	197	243
144	116	0.295	193	241
91	195	0.318	192	240
197	169	0.341	187	237
174	162	0.364	185	232
147	240	0.386	175	229
124	185	0.409	174	229
157	232	0.432	159	229
192	175	0.455	157	225
175	178	0.477	157	209
212	203	0.500	147	203
703	676	0.523	144	202
105	141	0.545	139	195
82	229	0.568	130	191
105	110	0.591	128	185
109	160	0.614	125	178
193	166	0.636	125	175
249	229	0.659	124	169
87	209	0.682	116	166
90	202	0.705	110	163
81	237	0.727	109	162
159	132	0.750	109	160
125	159	0.773	105	159
206	191	0.795	105	159
283	257	0.818	104	148
110	225	0.841	103	141
157	129	0.864	102	132
187	159	0.886	91	129
260	262	0.909	90	120
292	265	0.932	87	116
355	348	0.955	86	110
128	310	0.977	82	110
381	352	1.000	81	103

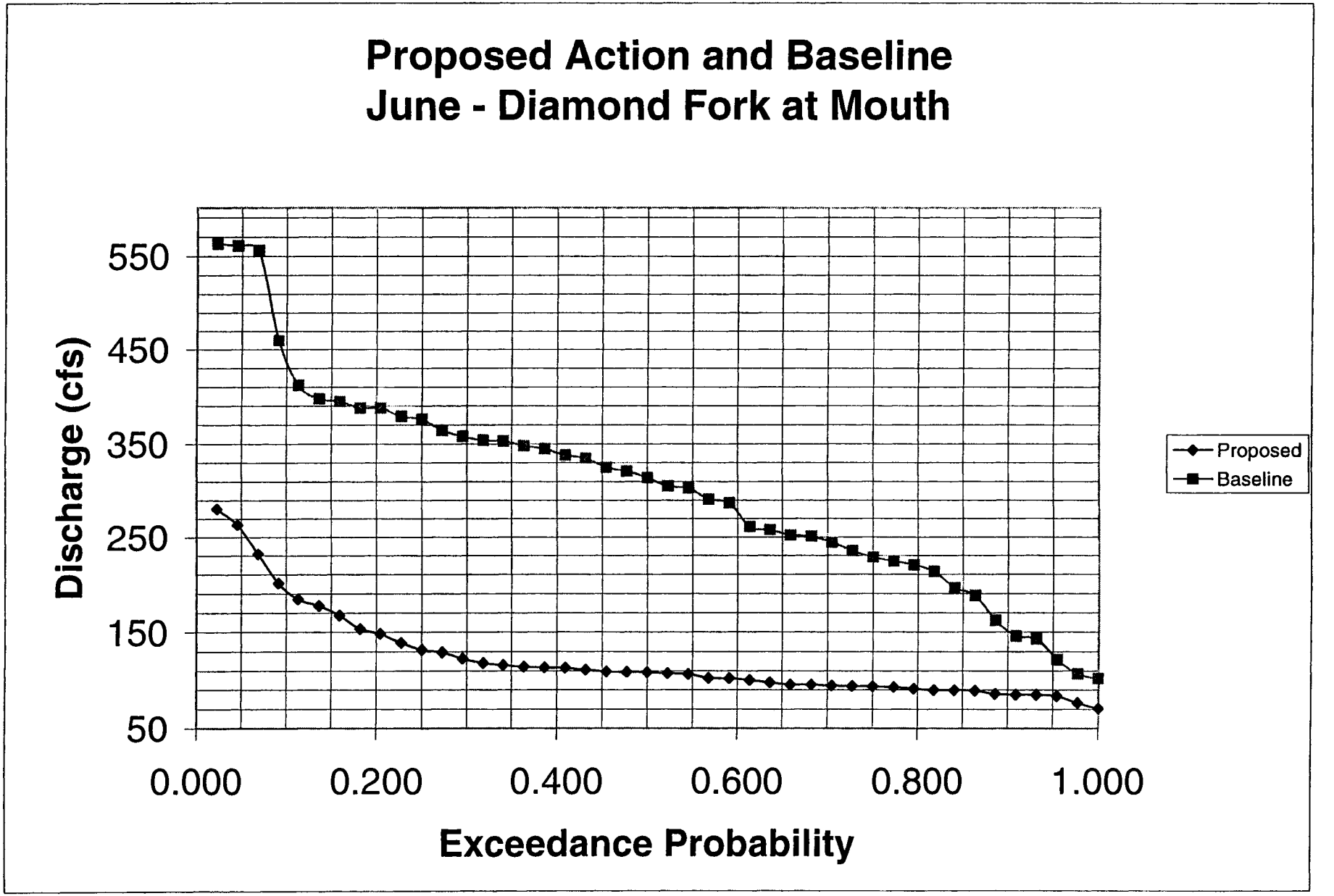

Proposed Action and Baseline
May - Diamond Fork at Mouth
Discharge (cfs)
650
550
450
350
250
150
50
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

June

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
94	412	0.023	281	563
96	388	0.045	264	561
177	252	0.068	232	556
148	354	0.091	201	460
94	102	0.114	184	412
116	261	0.136	177	398
100	287	0.159	167	395
107	244	0.182	154	388
118	388	0.205	148	388
93	235	0.227	139	379
89	353	0.250	132	376
90	213	0.273	129	364
85	291	0.295	123	358
109	162	0.318	118	354
109	196	0.341	116	353
114	220	0.364	114	348
109	398	0.386	114	345
108	122	0.409	113	338
113	303	0.432	111	335
96	325	0.455	109	325
123	348	0.477	109	321
111	345	0.500	109	314
201	251	0.523	108	305
102	379	0.545	107	303
85	338	0.568	103	291
90	335	0.591	102	287
77	358	0.614	100	261
132	188	0.636	98	258
98	321	0.659	96	252
94	376	0.682	96	251
71	364	0.705	94	244
86	314	0.727	94	235
84	224	0.750	94	228
103	146	0.773	93	224
184	143	0.795	91	220
154	228	0.818	90	213
91	395	0.841	90	196
129	107	0.864	89	188
114	258	0.886	86	162
139	305	0.909	85	146
264	556	0.932	85	143
232	561	0.955	84	122
167	460	0.977	77	107
281	5[illegible]	1.000	71	102

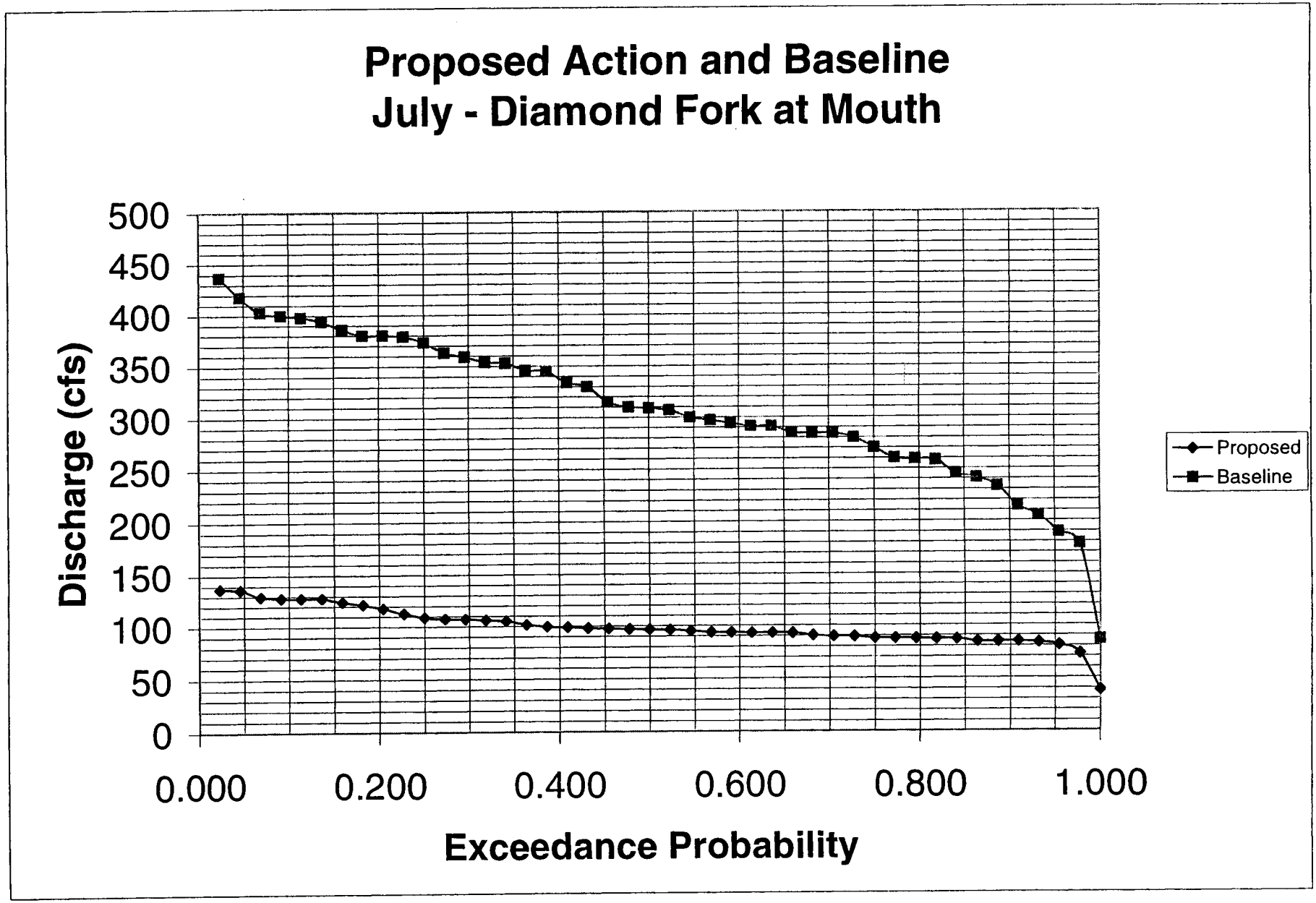

Proposed Action and Baseline
June - Diamond Fork at Mouth
Discharge (cfs)
550
450
350
250
150
50
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

July

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
87	260	0.023	137	437
89	297	0.045	136	418
94	330	0.068	130	403
128	346	0.091	128	400
94	86	0.114	128	398
96	245	0.136	128	394
136	205	0.159	124	386
99	214	0.182	122	380
102	259	0.205	118	380
83	310	0.227	113	379
88	189	0.250	109	373
97	241	0.273	107	363
95	300	0.295	107	359
84	294	0.318	106	354
96	380	0.341	105	353
93	359	0.364	102	346
107	315	0.386	100	345
98	386	0.409	99	334
93	354	0.432	98	330
88	307	0.455	97	315
107	285	0.477	97	310
109	380	0.500	96	309
128	309	0.523	96	307
87	353	0.545	95	300
90	284	0.568	94	297
87	398	0.591	94	294
97	334	0.614	93	291
128	400	0.636	93	291
106	345	0.659	93	285
100	258	0.682	90	284
72	284	0.705	90	284
81	178	0.727	89	280
84	233	0.750	88	270
105	291	0.773	88	260
130	437	0.795	87	259
113	291	0.818	87	258
90	280	0.841	87	245
122	403	0.864	84	241
137	418	0.886	84	233
124	373	0.909	84	214
93	379	0.932	83	205
84	363	0.955	81	189
118	394	0.977	72	178
38	27[illegible]	1.000	38	86

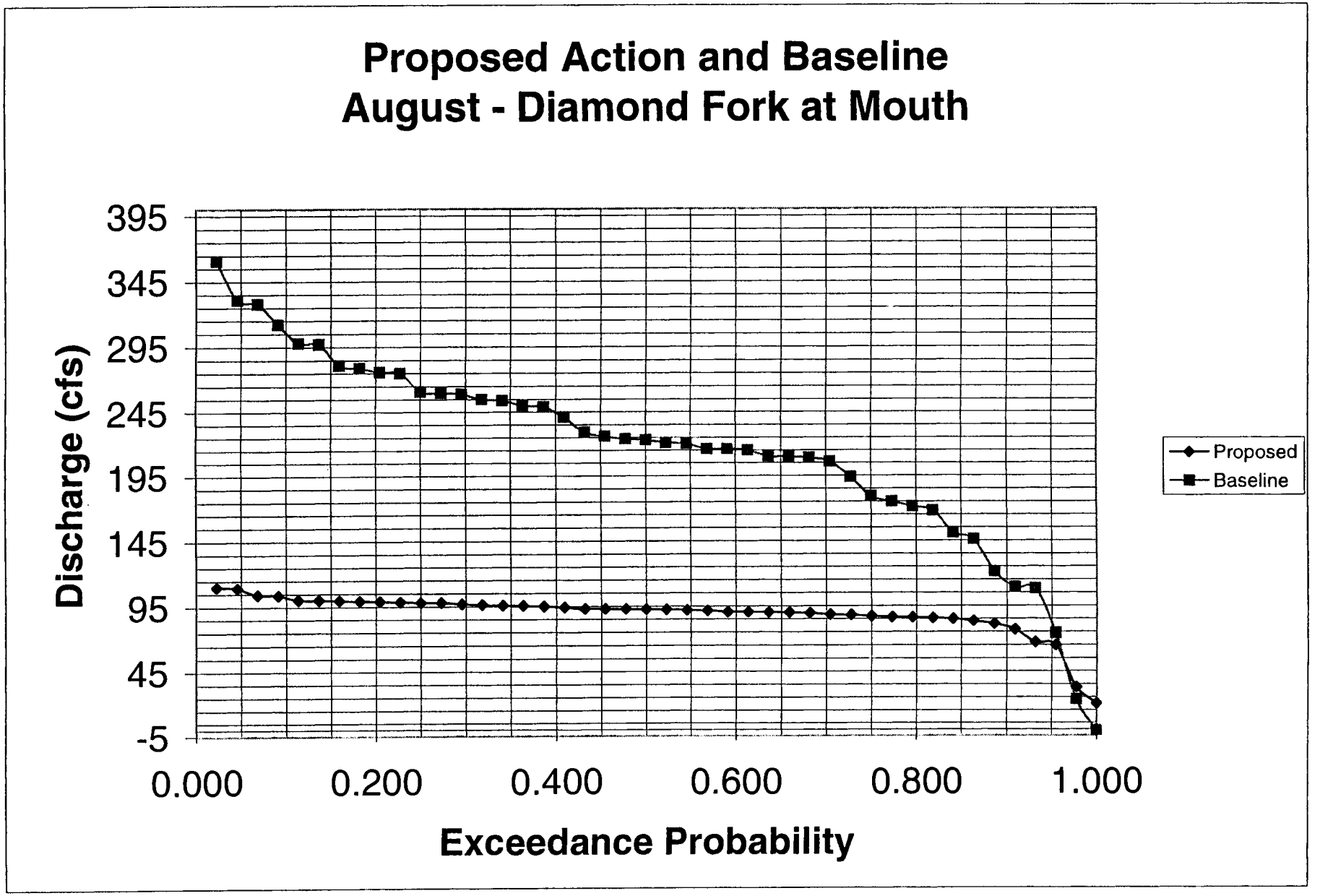

Proposed Action and Baseline
July - Diamond Fork at Mouth
Discharge (cfs)
500
450
400
350
300
250
200
150
100
50
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

August

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
88	216	0.023	110	361
86	151	0.045	109	331
90	249	0.068	104	328
109	216	0.091	104	312
99	74	0.114	100	298
91	171	0.136	100	297
86	146	0.159	100	281
81	224	0.182	99	279
93	210	0.205	99	276
90	210	0.227	99	275
95	168	0.250	98	261
110	175	0.273	98	260
98	215	0.295	97	259
97	206	0.318	96	255
87	261	0.341	96	254
94	121	0.364	96	250
98	194	0.386	95	249
89	250	0.409	94	241
96	241	0.432	93	229
92	298	0.455	93	226
93	328	0.477	93	224
85	260	0.500	93	223
104	220	0.523	92	221
88	255	0.545	92	220
77	279	0.568	91	216
96	254	0.591	91	216
104	331	0.614	90	215
96	297	0.636	90	210
99	312	0.659	90	210
91	209	0.682	89	209
67	223	0.705	88	206
93	109	0.727	88	194
100	259	0.750	87	179
99	221	0.773	86	175
92	276	0.795	86	171
100	229	0.818	86	168
86	281	0.841	85	151
100	361	0.864	83	146
90	226	0.886	81	121
93	179	0.909	77	109
65	108	0.932	67	108
33	-1	0.955	65	74
83	275	0.977	33	23
20	23	1.000	20	-1

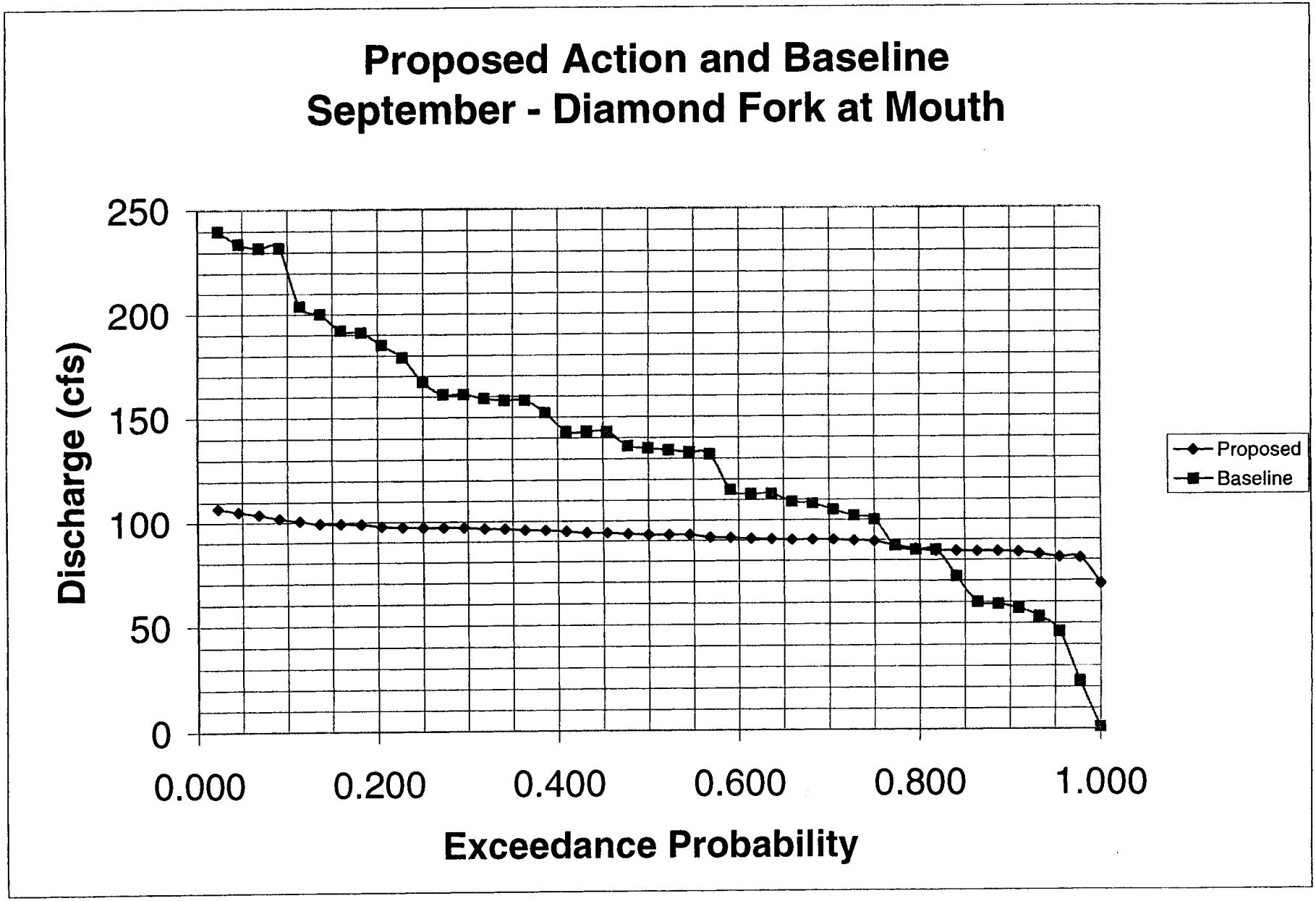

Proposed Action and Baseline
August - Diamond Fork at Mouth
Discharge (cfs)
395
345
295
245
195
145
95
45
-5
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW
EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT MOUTH

September

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
90	143	0.023	107	240
90	72	0.045	105	234
90	109	0.068	104	232
105	133	0.091	102	232
94	46	0.114	101	204
96	143	0.136	99	200
99	113	0.159	99	192
85	134	0.182	99	191
84	108	0.205	98	185
94	115	0.227	97	179
97	59	0.250	97	167
101	161	0.273	97	161
97	143	0.295	97	161
92	152	0.318	97	159
91	161	0.341	96	158
91	158	0.364	96	158
84	159	0.386	96	152
97	191	0.409	95	143
97	200	0.432	94	143
98	167	0.455	94	143
95	232	0.477	94	136
91	204	0.500	93	135
107	232	0.523	93	134
81	179	0.545	93	133
89	100	0.568	92	132
84	135	0.591	91	115
83	158	0.614	91	113
85	192	0.636	91	113
87	113	0.659	90	109
93	105	0.682	90	108
94	87	0.705	90	105
90	57	0.727	90	102
93	102	0.750	89	100
104	85	0.773	87	87
99	185	0.795	85	85
97	136	0.818	85	85
99	132	0.841	84	72
93	240	0.864	84	60
102	234	0.886	84	59
96	60	0.909	84	57
96	53	0.932	83	53
69	1	0.955	81	46
84	85	0.977	81	23
81	2[illegible]	1.000	69	1


Proposed Action and Baseline
September - Diamond Fork at Mouth
Discharge (cfs)
250
200
150
100
50
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

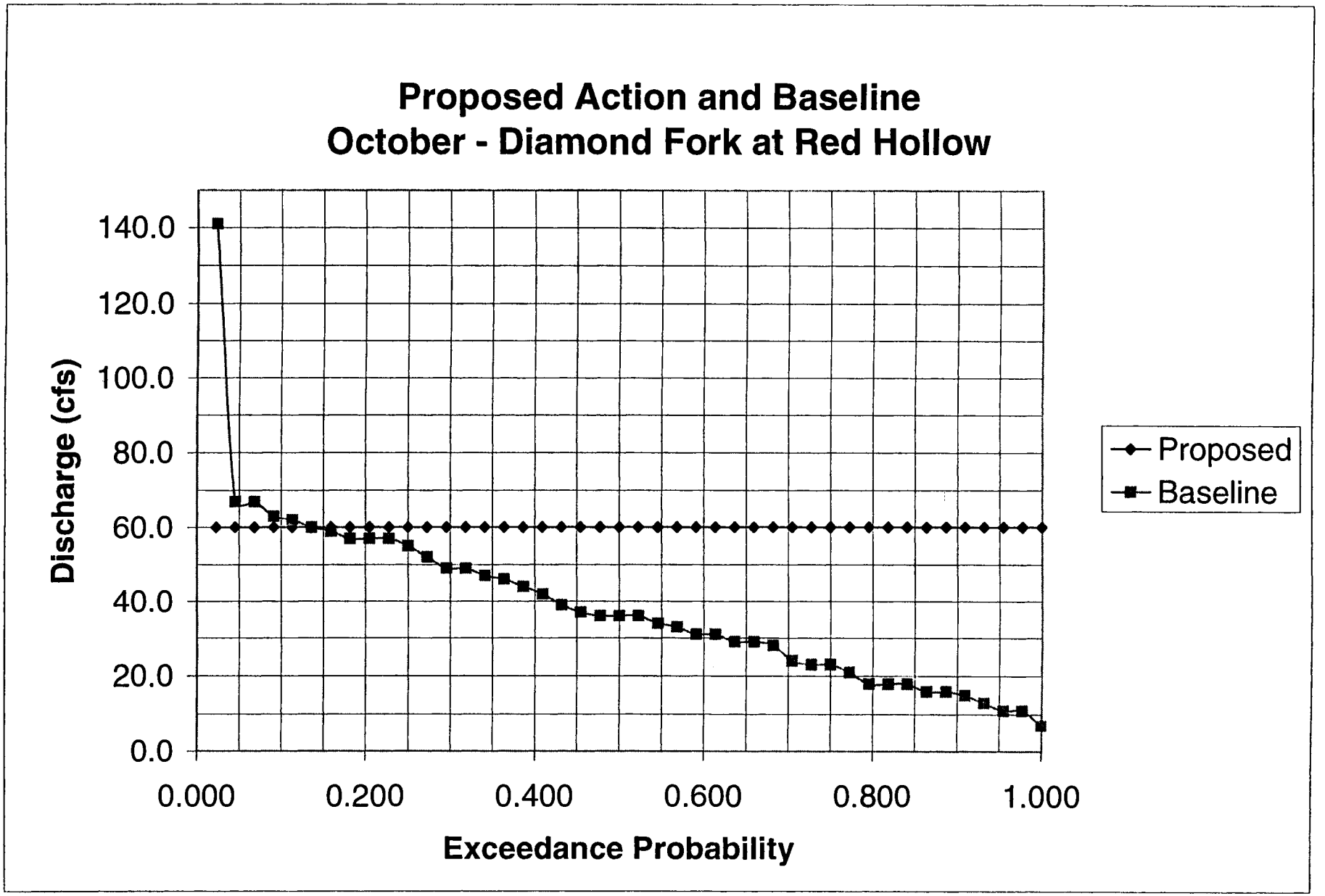
HEC-RAS MONTHLY AVERAGE FLOW EXCEEDANCE CURVES CROSS SECTIONS 31 THROUGH 46

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

October

1930-1973 Proposed	1930-1973 Baseline	Exceed Prob	Sorted Data Proposed	Sorted Data Baseline
60	28	0.023	60	141
60	18	0.045	60	67
60	16	0.068	60	67
60	33	0.091	60	63
60	36	0.114	60	62
60	7	0.136	60	60
60	15	0.159	60	59
60	63	0.182	60	57
60	49	0.205	60	57
60	67	0.227	60	57
60	21	0.250	60	55
60	29	0.273	60	52
60	31	0.295	60	49
60	52	0.318	60	49
60	59	0.341	60	47
60	57	0.364	60	46
60	57	0.386	60	44
60	39	0.409	60	42
60	67	0.432	60	39
60	36	0.455	60	37
60	62	0.477	60	36
60	23	0.500	60	36
60	44	0.523	60	36
60	141	0.545	60	34
60	55	0.568	60	33
60	49	0.591	60	31
60	36	0.614	60	31
60	24	0.636	60	29
60	60	0.659	60	29
60	47	0.682	60	28
60	31	0.705	60	24
60	23	0.727	60	23
60	11	0.750	60	23
60	34	0.773	60	21
60	46	0.795	60	18
60	29	0.818	60	18
60	37	0.841	60	18
60	42	0.864	60	16
60	18	0.886	60	16
60	57	0.909	60	15
60	18	0.932	60	13
60	16	0.955	60	11
60	11	0.977	60	11
60	13	1.000	60	7

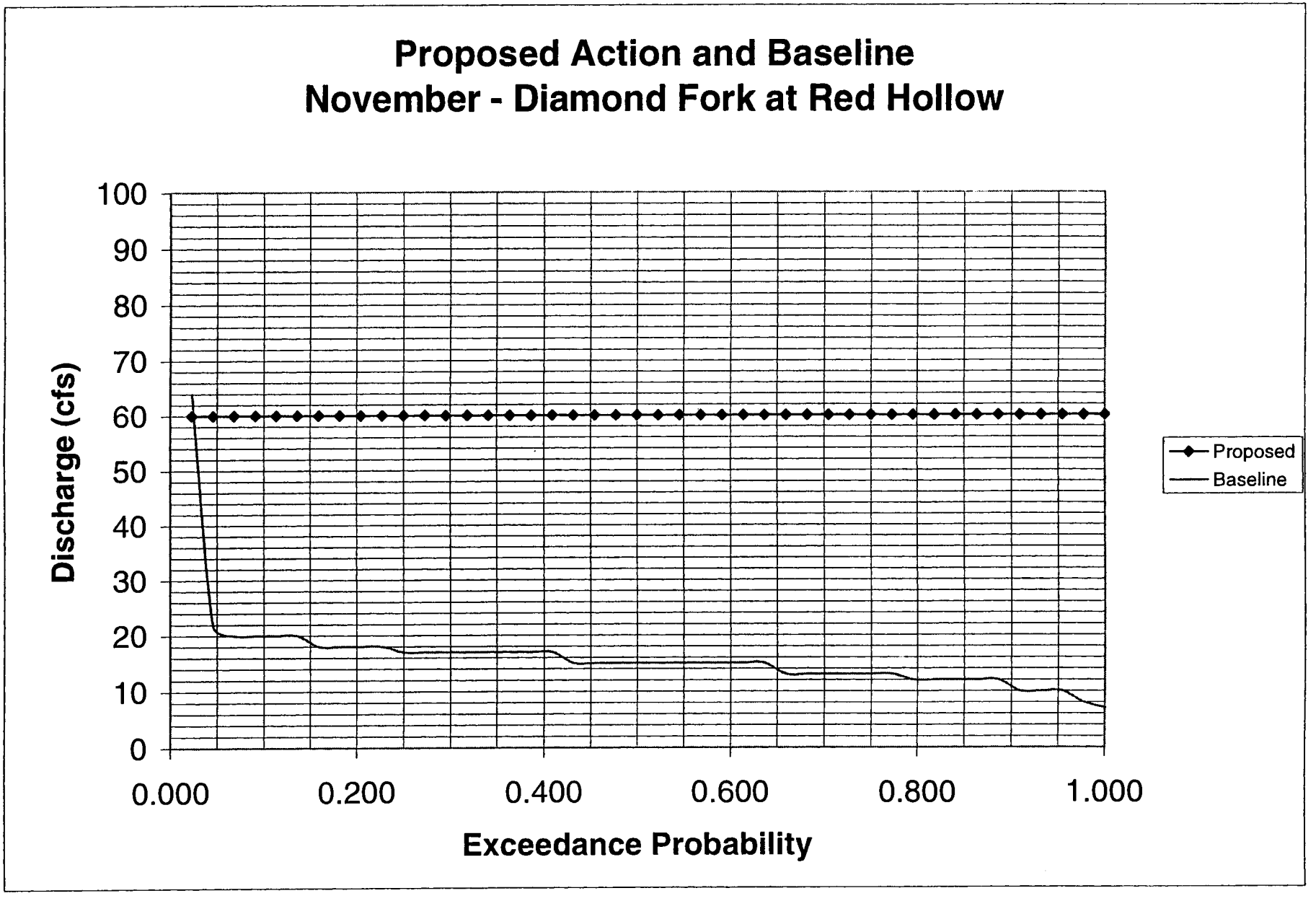

Proposed Action and Baseline
October - Diamond Fork at Red Hollow
Discharge (cfs)
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

November

1930-1973 Proposed	1930-1973 Baseline	Exceed Prob	Sorted Data Proposed	Sorted Data Baseline
60	20	0.023	60	64
60	20	0.045	60	22
60	10	0.068	60	20
60	15	0.091	60	20
60	8	0.114	60	20
60	12	0.136	60	20
60	7	0.159	60	18
60	13	0.182	60	18
60	15	0.205	60	18
60	13	0.227	60	18
60	10	0.250	60	17
60	12	0.273	60	17
60	17	0.295	60	17
60	17	0.318	60	17
60	12	0.341	60	17
60	15	0.364	60	17
60	17	0.386	60	17
60	17	0.409	60	17
60	13	0.432	60	15
60	15	0.455	60	15
60	18	0.477	60	15
60	22	0.500	60	15
60	20	0.523	60	15
60	64	0.545	60	15
60	20	0.568	60	15
60	15	0.591	60	15
60	10	0.614	60	15
60	13	0.636	60	15
60	18	0.659	60	13
60	15	0.682	60	13
60	12	0.705	60	13
60	13	0.727	60	13
60	12	0.750	60	13
60	13	0.773	60	13
60	15	0.795	60	12
60	17	0.818	60	12
60	18	0.841	60	12
60	15	0.864	60	12
60	15	0.886	60	12
60	17	0.909	60	10
60	17	0.932	60	10
60	18	0.955	60	10
60	15	0.977	60	8
60	17	1.000	60	7

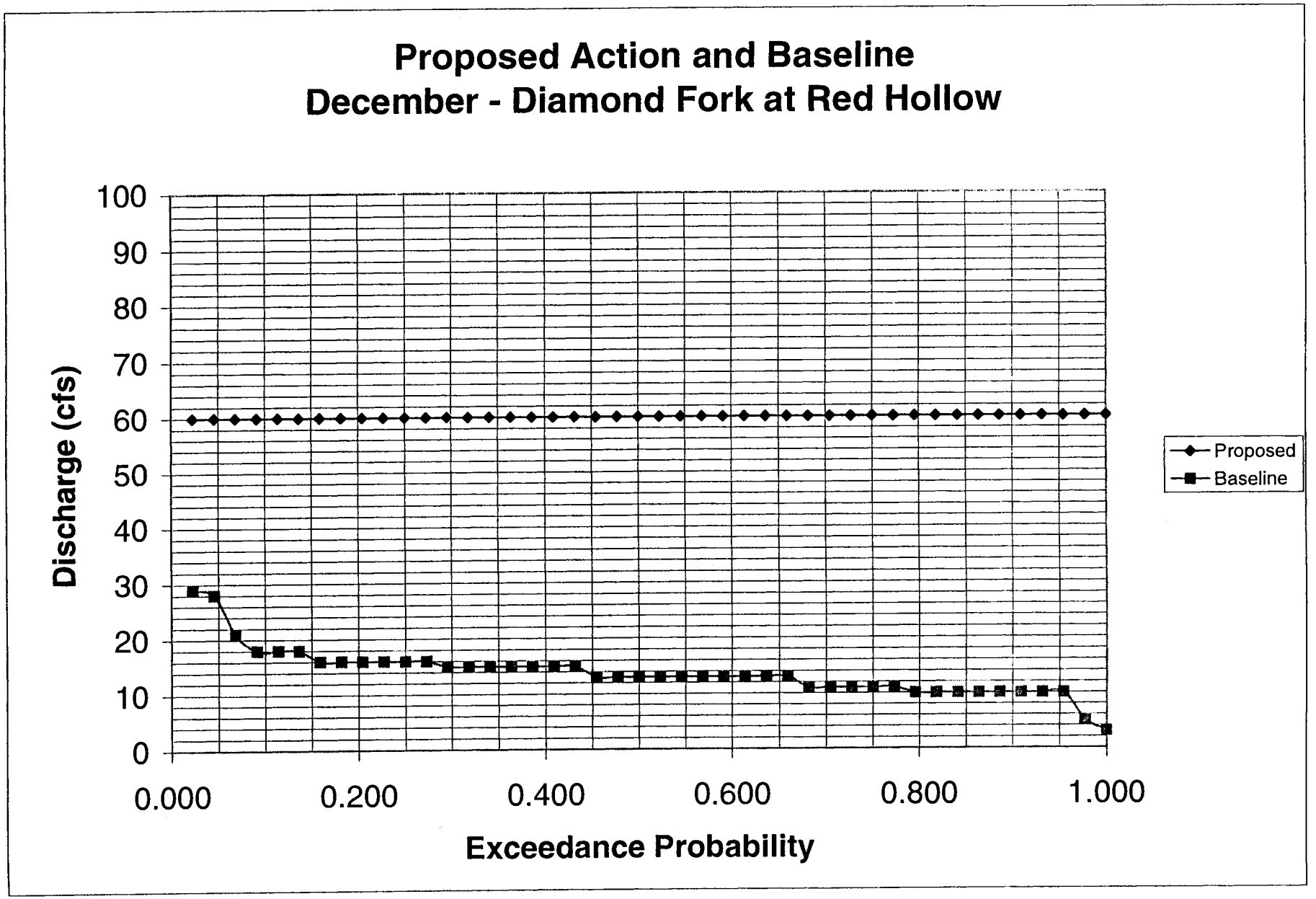

Proposed Action and Baseline
November - Diamond Fork at Red Hollow
Discharge (cfs)
100
90
80
70
60
50
40
30
20
10
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

December

1930-1973 Proposed	1930-1973 Baseline	Exceed Prob	Sorted Data Proposed	Sorted Data Baseline
60	21	0.023	60	29
60	29	0.045	60	28
60	16	0.068	60	21
60	18	0.091	60	18
60	10	0.114	60	18
60	3	0.136	60	18
60	5	0.159	60	16
60	10	0.182	60	16
60	13	0.205	60	16
60	15	0.227	60	16
60	10	0.250	60	16
60	10	0.273	60	16
60	13	0.295	60	15
60	13	0.318	60	15
60	10	0.341	60	15
60	10	0.364	60	15
60	11	0.386	60	15
60	11	0.409	60	15
60	11	0.432	60	15
60	13	0.455	60	13
60	13	0.477	60	13
60	16	0.500	60	13
60	16	0.523	60	13
60	28	0.545	60	13
60	16	0.568	60	13
60	13	0.591	60	13
60	13	0.614	60	13
60	13	0.636	60	13
60	15	0.659	60	13
60	15	0.682	60	11
60	10	0.705	60	11
60	10	0.727	60	11
60	11	0.750	60	11
60	11	0.773	60	11
60	13	0.795	60	10
60	18	0.818	60	10
60	15	0.841	60	10
60	13	0.864	60	10
60	15	0.886	60	10
60	16	0.909	60	10
60	16	0.932	60	10
60	15	0.955	60	10
60	18	0.977	60	5
60	15	1.000	60	3

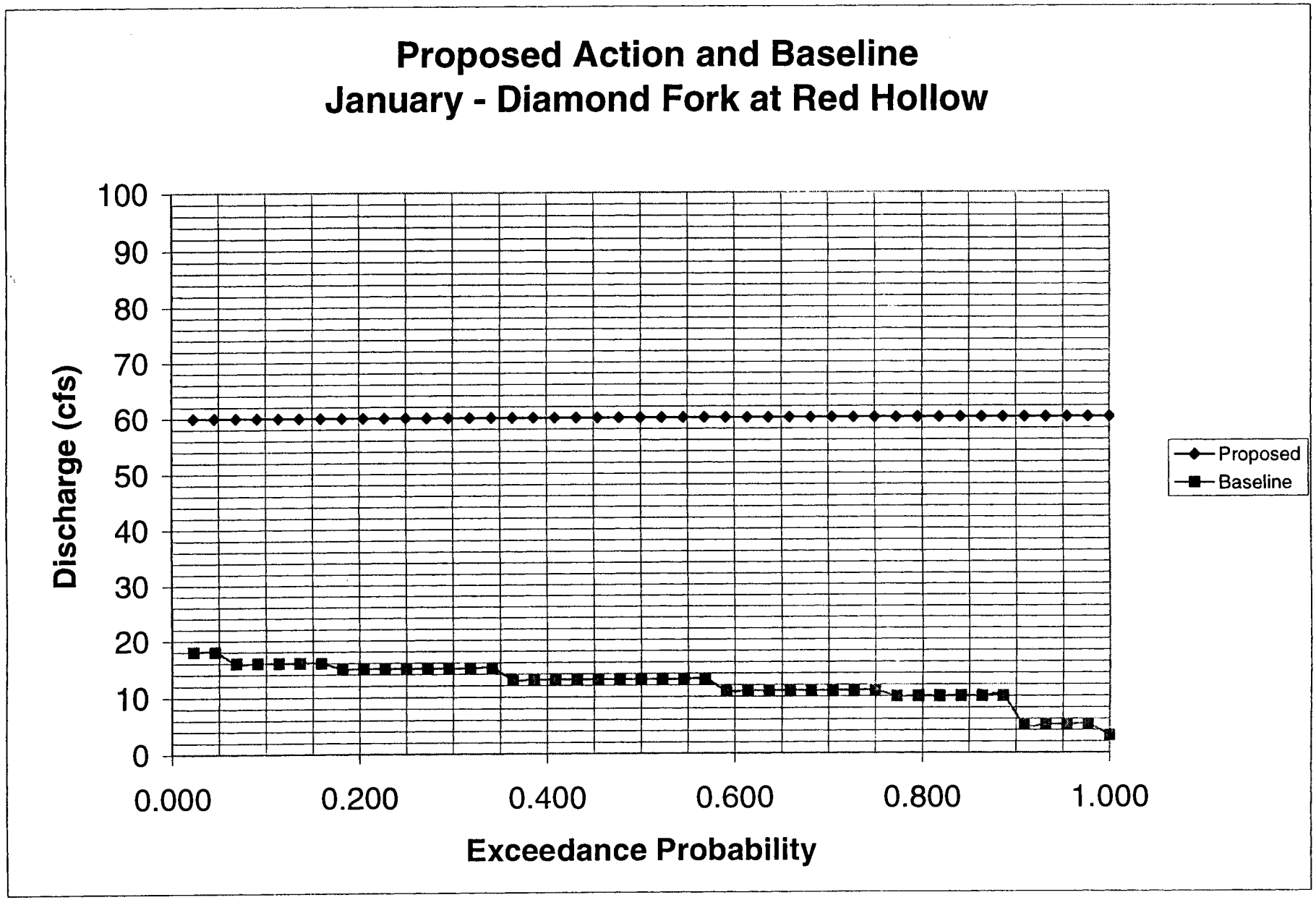

Proposed Action and Baseline
December - Diamond Fork at Red Hollow
Discharge (cfs)
100
90
80
70
60
50
40
30
20
10
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

January

1930-1973 Proposed	1930-1973 Baseline	Exceed Prob	Sorted Data Proposed	Sorted Data Baseline
60	10	0.023	60	18
60	11	0.045	60	18
60	10	0.068	60	16
60	11	0.091	60	16
60	10	0.114	60	16
60	5	0.136	60	16
60	5	0.159	60	16
60	5	0.182	60	15
60	13	0.205	60	15
60	13	0.227	60	15
60	10	0.250	60	15
60	11	0.273	60	15
60	10	0.295	60	15
60	11	0.318	60	15
60	3	0.341	60	15
60	10	0.364	60	13
60	11	0.386	60	13
60	13	0.409	60	13
60	13	0.432	60	13
60	5	0.455	60	13
60	11	0.477	60	13
60	11	0.500	60	13
60	15	0.523	60	13
60	18	0.545	60	13
60	18	0.568	60	13
60	15	0.591	60	11
60	15	0.614	60	11
60	15	0.636	60	11
60	15	0.659	60	11
60	15	0.682	60	11
60	13	0.705	60	11
60	13	0.727	60	11
60	11	0.750	60	11
60	15	0.773	60	10
60	13	0.795	60	10
60	16	0.818	60	10
60	13	0.841	60	10
60	13	0.864	60	10
60	13	0.886	60	10
60	16	0.909	60	5
60	16	0.932	60	5
60	16	0.955	60	5
60	16	0.977	60	5
60	15	1.000	60	3

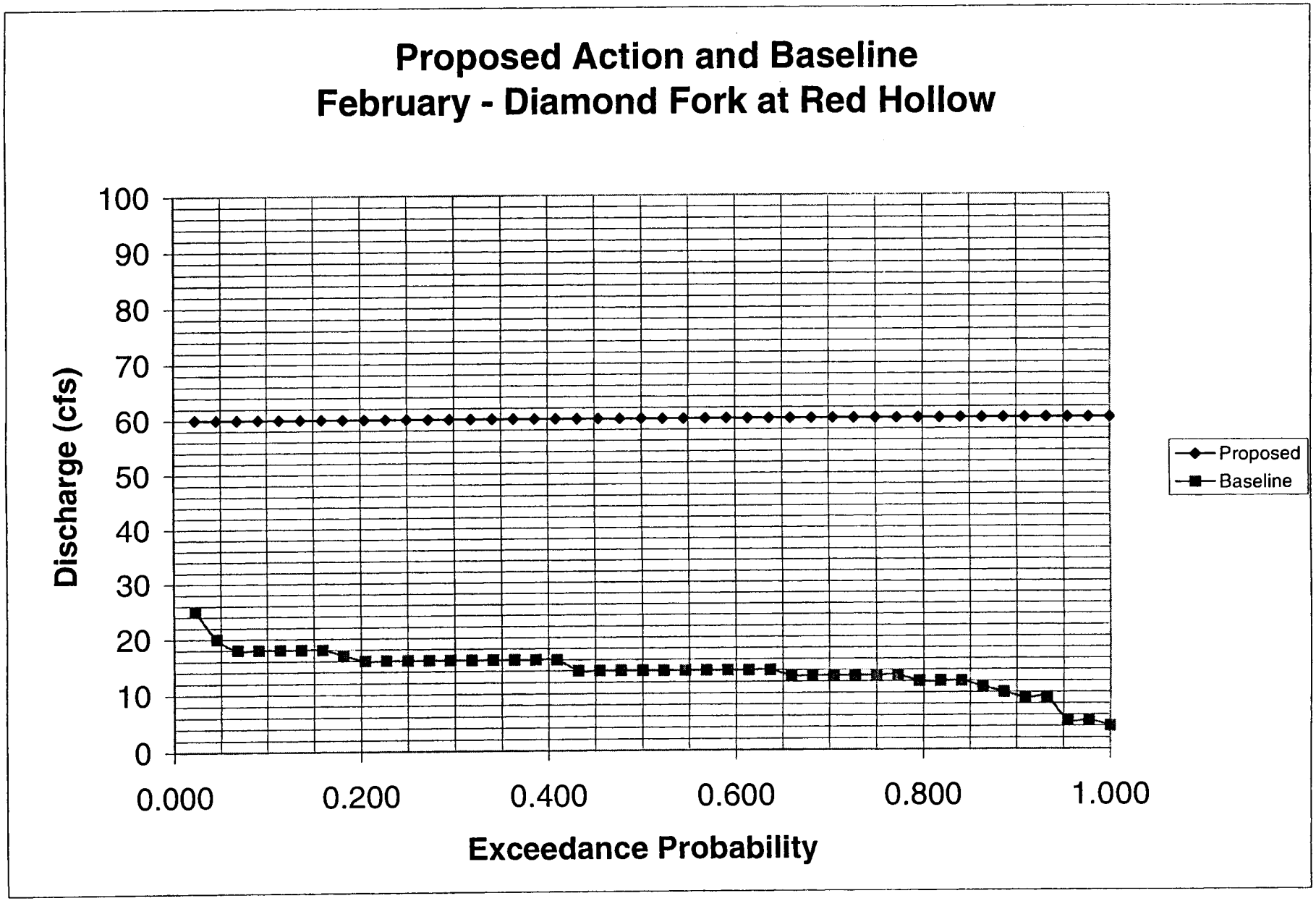

Proposed Action and Baseline
January - Diamond Fork at Red Hollow
Discharge (cfs)
100
90
80
70
60
50
40
30
20
10
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

February

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
60	18	0.023	60	25
60	14	0.045	60	20
60	14	0.068	60	18
60	5	0.091	60	18
60	9	0.114	60	18
60	4	0.136	60	18
60	5	0.159	60	18
60	16	0.182	60	17
60	13	0.205	60	16
60	9	0.227	60	16
60	12	0.250	60	16
60	13	0.273	60	16
60	13	0.295	60	16
60	18	0.318	60	16
60	12	0.341	60	16
60	13	0.364	60	16
60	14	0.386	60	16
60	14	0.409	60	16
60	14	0.432	60	14
60	13	0.455	60	14
60	16	0.477	60	14
60	16	0.500	60	14
60	16	0.523	60	14
60	20	0.545	60	14
60	16	0.568	60	14
60	14	0.591	60	14
60	10	0.614	60	14
60	18	0.636	60	14
60	18	0.659	60	13
60	14	0.682	60	13
60	16	0.705	60	13
60	11	0.727	60	13
60	14	0.750	60	13
60	25	0.773	60	13
60	12	0.795	60	12
60	16	0.818	60	12
60	14	0.841	60	12
60	13	0.864	60	11
60	16	0.886	60	10
60	18	0.909	60	9
60	16	0.932	60	9
60	16	0.955	60	5
60	17	0.977	60	5
60	14	1.000	60	4

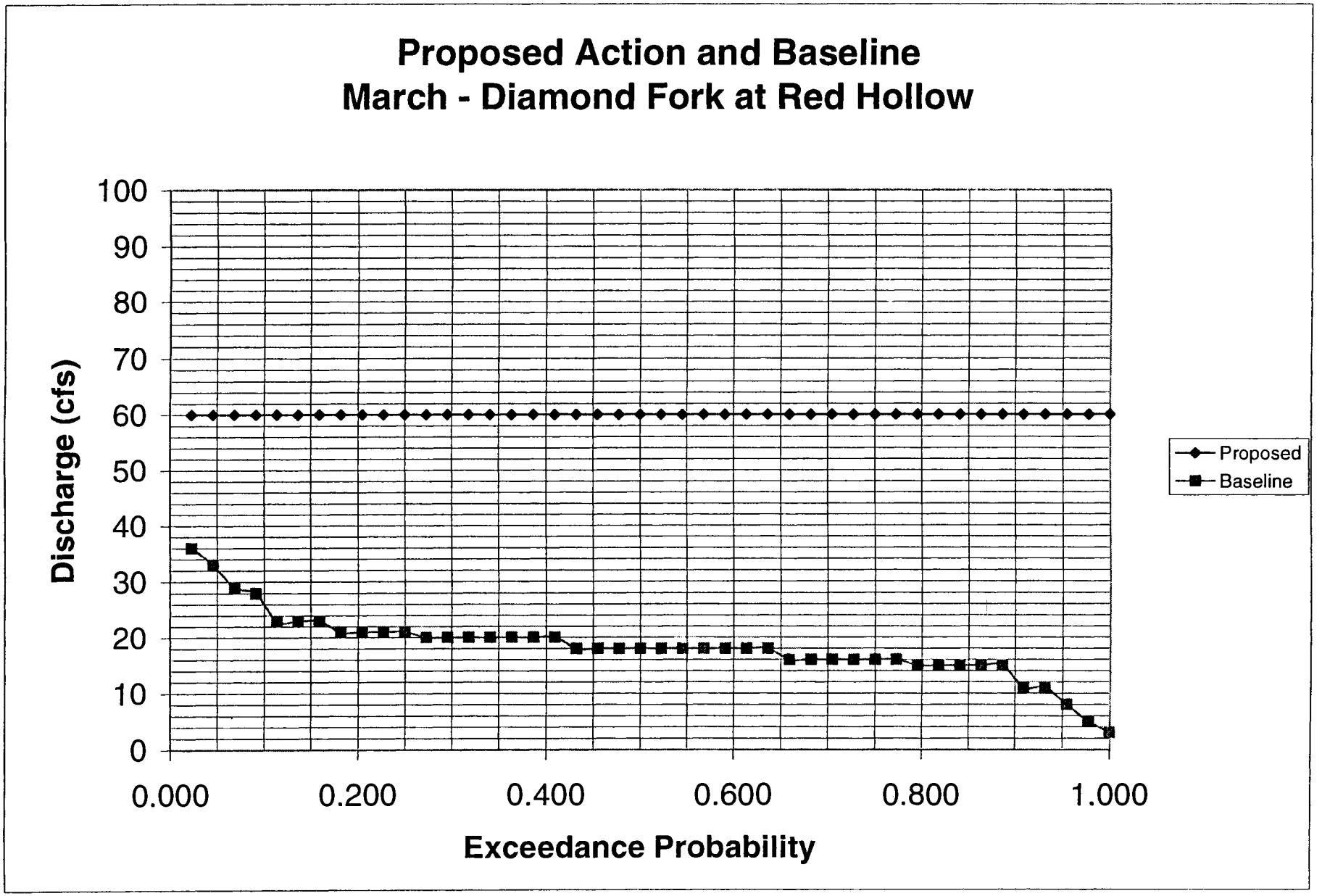

Proposed Action and Baseline
February - Diamond Fork at Red Hollow
Discharge (cfs)
100
90
80
70
60
50
40
30
20
10
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

March

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
60	36	0.023	60	36
60	21	0.045	60	33
60	8	0.068	60	29
60	11	0.091	60	28
60	3	0.114	60	23
60	5	0.136	60	23
60	16	0.159	60	23
60	29	0.182	60	21
60	28	0.205	60	21
60	33	0.227	60	21
60	20	0.250	60	21
60	16	0.273	60	20
60	15	0.295	60	20
60	18	0.318	60	20
60	16	0.341	60	20
60	16	0.364	60	20
60	20	0.386	60	20
60	21	0.409	60	20
60	16	0.432	60	18
60	18	0.455	60	18
60	20	0.477	60	18
60	20	0.500	60	18
60	18	0.523	60	18
60	23	0.545	60	18
60	18	0.568	60	18
60	15	0.591	60	18
60	23	0.614	60	18
60	18	0.636	60	18
60	18	0.659	60	16
60	16	0.682	60	16
60	18	0.705	60	16
60	11	0.727	60	16
60	15	0.750	60	16
60	18	0.773	60	16
60	15	0.795	60	15
60	20	0.818	60	15
60	21	0.841	60	15
60	20	0.864	60	15
60	20	0.886	60	15
60	23	0.909	60	11
60	18	0.932	60	11
60	21	0.955	60	8
60	15	0.977	60	5
60	18	1.000	60	3

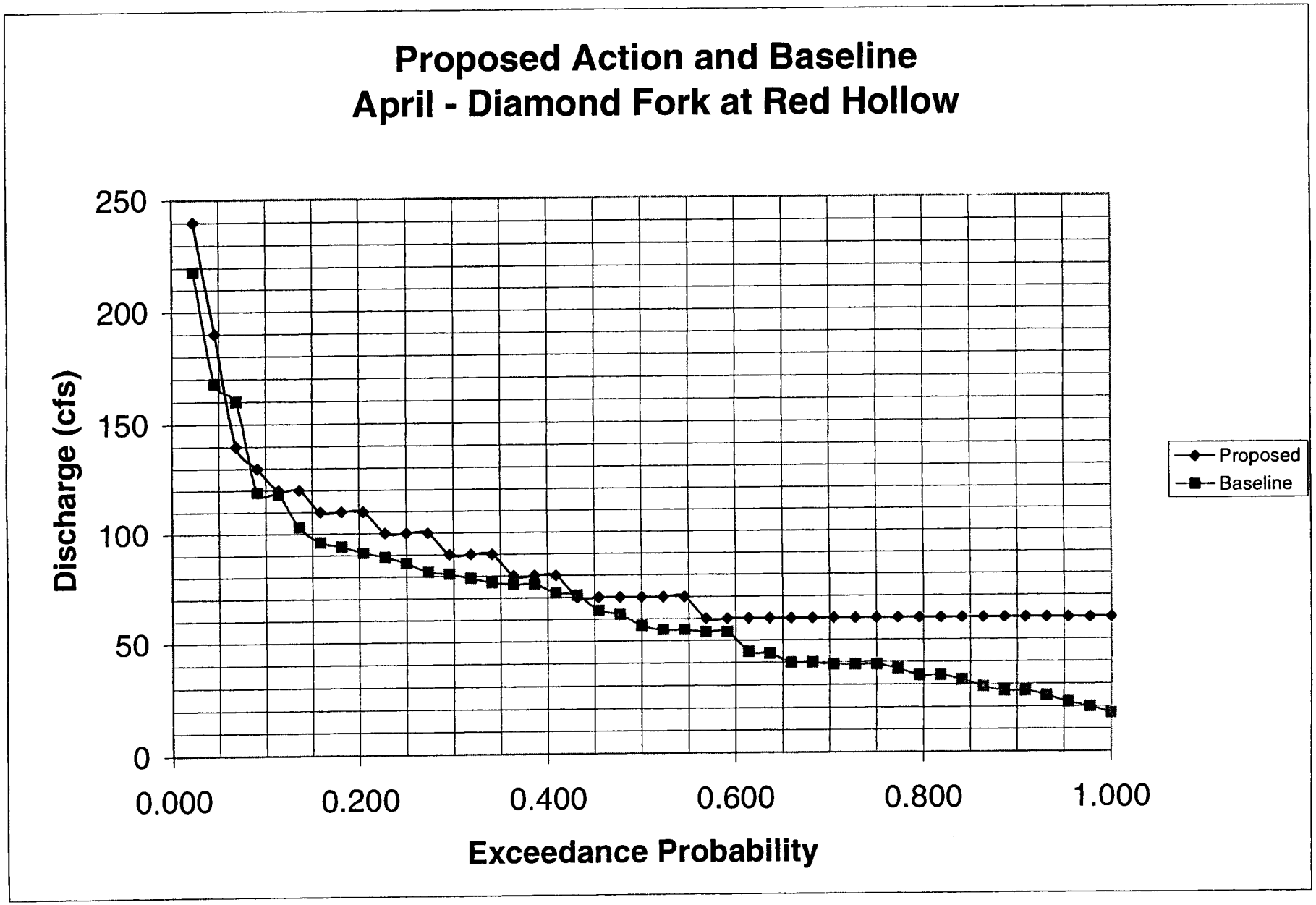

Proposed Action and Baseline
March - Diamond Fork at Red Hollow
Discharge (cfs)
100
90
80
70
60
50
40
30
20
10
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

April

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
120	160	0.023	240	218
70	96	0.045	190	168
80	57	0.068	140	160
60	25	0.091	130	119
60	45	0.114	120	118
60	34	0.136	120	103
140	119	0.159	110	96
110	89	0.182	110	94
100	76	0.205	110	91
70	91	0.227	100	89
60	44	0.250	100	86
60	37	0.273	100	82
100	76	0.295	90	81
80	82	0.318	90	79
60	40	0.341	90	77
60	39	0.364	80	76
120	103	0.386	80	76
70	54	0.409	80	72
70	54	0.432	70	71
90	81	0.455	70	64
100	77	0.477	70	62
90	79	0.500	70	57
240	218	0.523	70	55
70	72	0.545	70	55
60	62	0.568	60	54
60	29	0.591	60	54
90	71	0.614	60	45
60	40	0.636	60	44
70	55	0.659	60	40
60	27	0.682	60	40
60	39	0.705	60	39
60	17	0.727	60	39
130	118	0.750	60	39
60	27	0.773	60	37
60	34	0.795	60	34
110	86	0.818	60	34
60	55	0.841	60	32
60	20	0.864	60	29
60	39	0.886	60	27
190	168	0.909	60	27
60	32	0.932	60	25
110	94	0.955	60	22
60	22	0.977	60	20
80	64	1.000	60	17

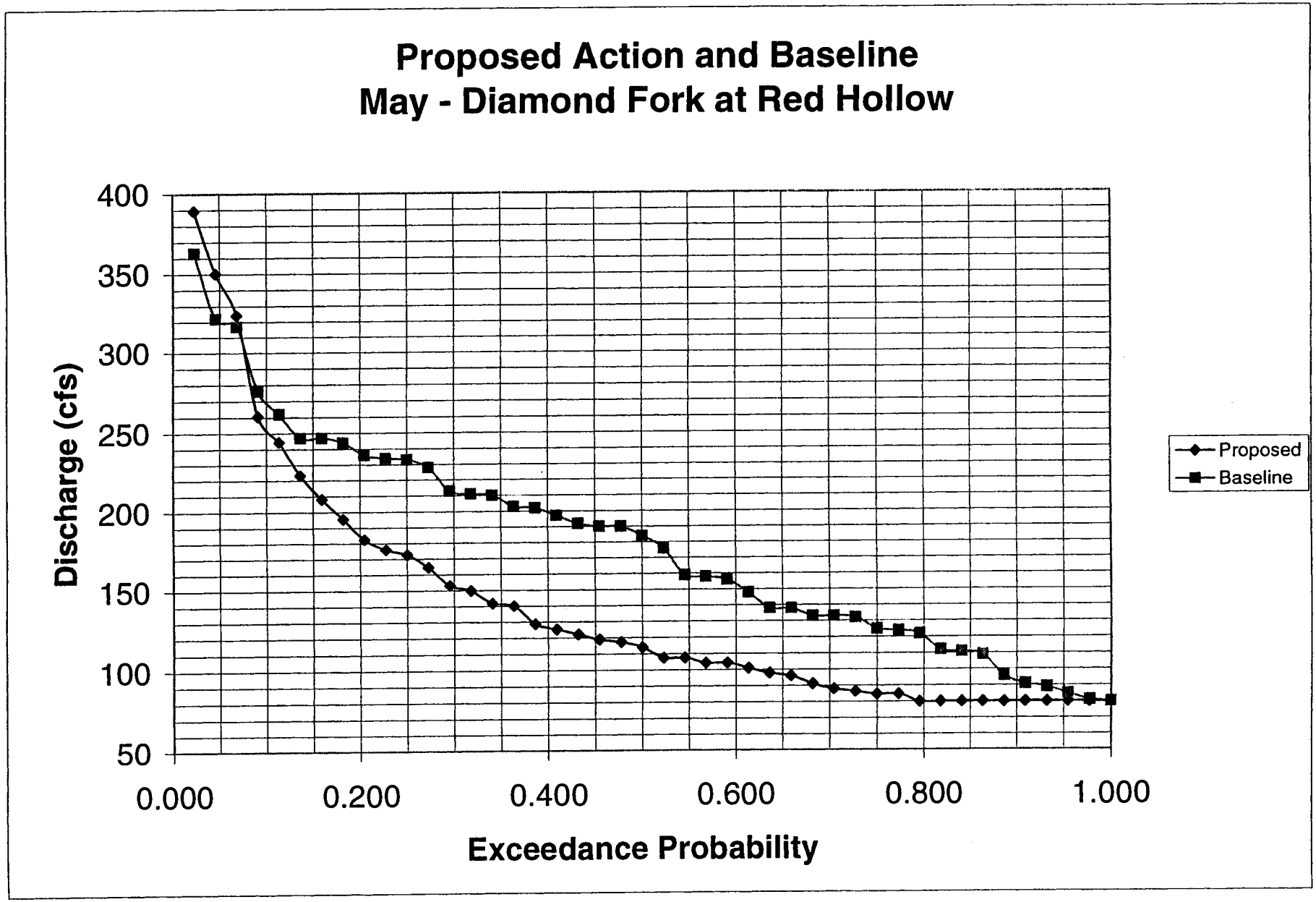

Proposed Action and Baseline
April - Diamond Fork at Red Hollow
Discharge (cfs)
250
200
150
100
50
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

May

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
91	211	0.023	389	363
80	276	0.045	350	322
85	244	0.068	324	317
108	81	0.091	261	276
80	125	0.114	244	262
117	89	0.136	223	247
182	233	0.159	208	247
208	213	0.182	196	244
153	132	0.205	182	236
80	247	0.227	176	234
85	210	0.250	173	233
101	96	0.273	165	228
108	80	0.295	153	213
80	184	0.318	150	211
140	112	0.341	142	210
122	111	0.364	140	203
96	190	0.386	129	202
98	159	0.409	125	197
114	190	0.432	122	192
125	109	0.455	119	190
129	133	0.477	117	190
142	133	0.500	114	184
389	363	0.523	108	176
86	122	0.545	108	159
80	228	0.568	104	158
80	85	0.591	104	156
104	156	0.614	101	148
165	138	0.636	98	138
196	176	0.659	96	138
80	202	0.682	91	133
80	192	0.705	88	133
80	236	0.727	86	132
150	124	0.750	85	125
104	138	0.773	85	124
173	158	0.795	80	122
223	197	0.818	80	112
88	203	0.841	80	111
119	91	0.864	80	109
176	148	0.886	80	96
244	247	0.909	80	91
261	234	0.932	80	89
324	317	0.955	80	85
80	262	0.977	80	81
350	322	1.000	80	80

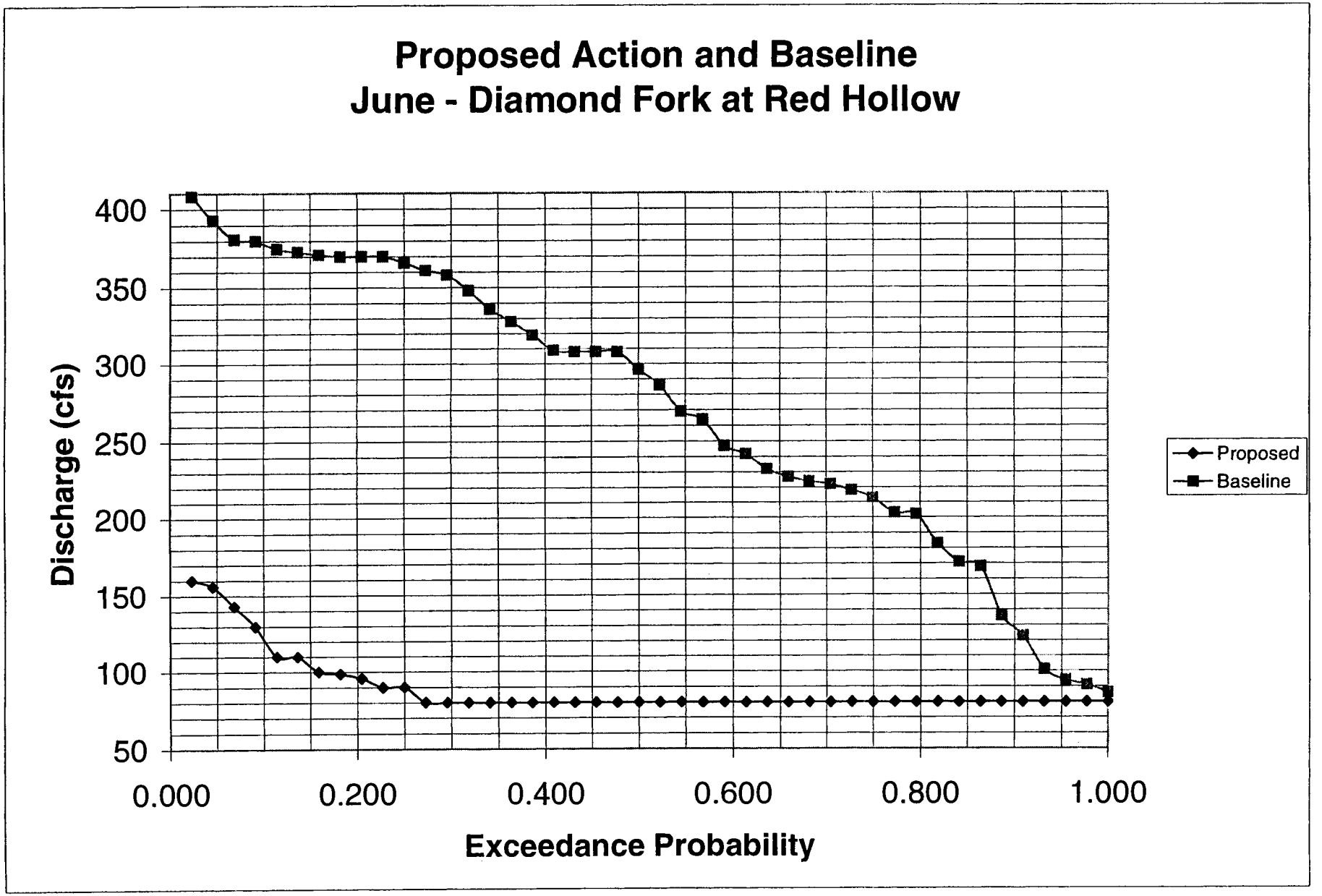

Proposed Action and Baseline
May - Diamond Fork at Red Hollow
Discharge (cfs)
400
350
300
250
200
150
100
50
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

June

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
80	393	0.023	160	408
80	373	0.045	156	393
156	232	0.068	143	381
90	296	0.091	130	380
80	86	0.114	110	375
80	227	0.136	110	373
80	264	0.159	100	371
80	222	0.182	99	370
99	370	0.205	96	370
80	218	0.227	90	370
80	348	0.250	90	366
80	203	0.273	80	361
80	286	0.295	80	358
80	136	0.318	80	348
80	168	0.341	80	336
80	183	0.364	80	328
80	370	0.386	80	319
80	94	0.409	80	309
80	269	0.432	80	308
80	308	0.455	80	308
90	319	0.477	80	308
80	309	0.500	80	296
160	213	0.523	80	286
80	361	0.545	80	269
80	336	0.568	80	264
80	328	0.591	80	247
80	358	0.614	80	242
110	171	0.636	80	232
80	308	0.659	80	227
80	366	0.682	80	224
80	371	0.705	80	222
80	308	0.727	80	218
80	224	0.750	80	213
80	123	0.773	80	203
143	101	0.795	80	202
130	202	0.818	80	183
80	381	0.841	80	171
110	91	0.864	80	168
100	247	0.886	80	136
80	242	0.909	80	123
80	375	0.932	80	101
80	408	0.955	80	94
80	370	0.977	80	91
96	380	1.000	80	86

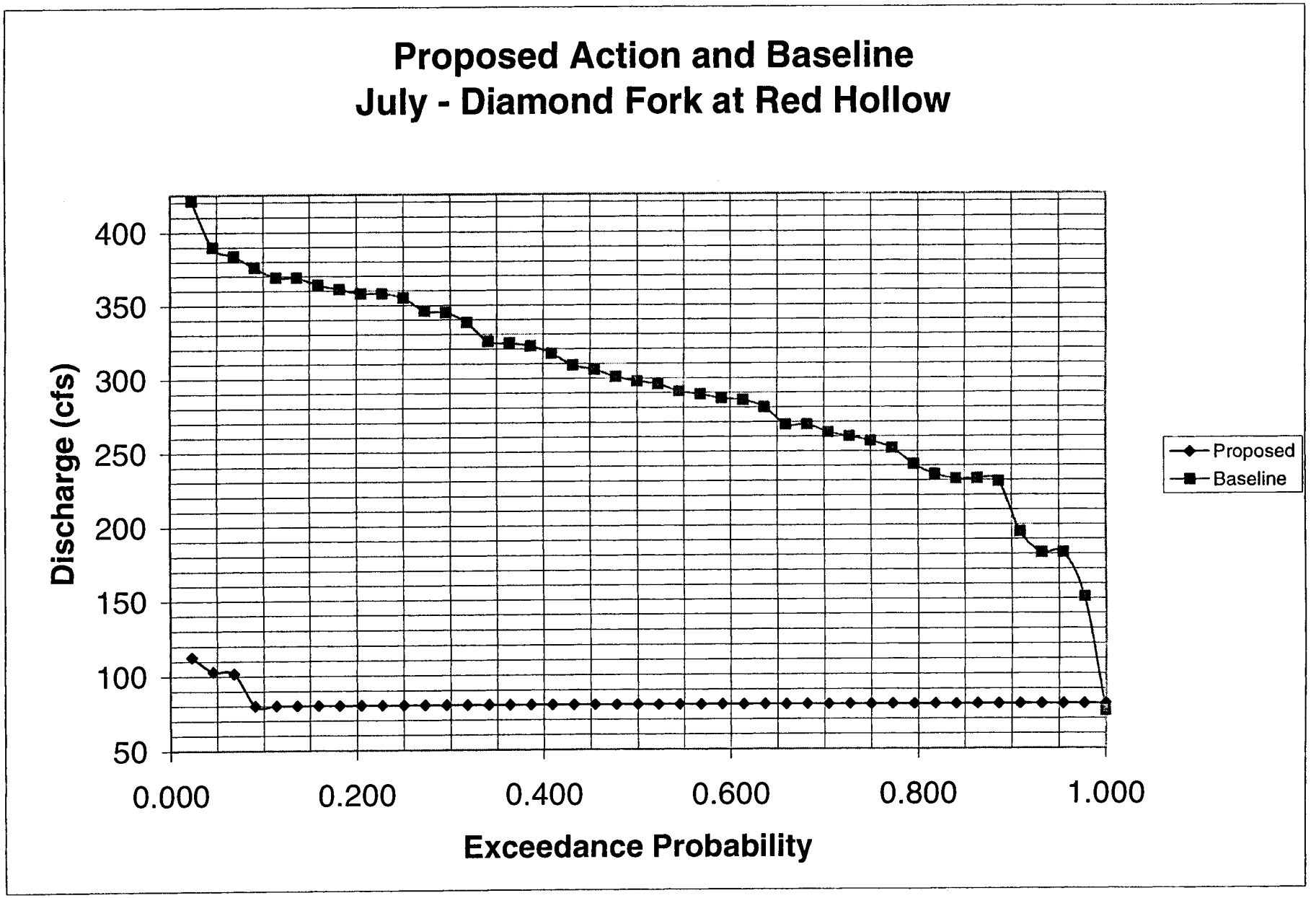

Proposed Action and Baseline
June - Diamond Fork at Red Hollow
Discharge (cfs)
400
350
300
250
200
150
100
50
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

July

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
80	252	0.023	113	421
80	289	0.045	103	390
80	322	0.068	102	384
80	298	0.091	80	376
80	75	0.114	80	369
80	231	0.136	80	369
80	151	0.159	80	364
80	195	0.182	80	361
80	234	0.205	80	358
80	306	0.227	80	358
80	181	0.250	80	355
80	229	0.273	80	346
80	285	0.295	80	345
80	286	0.318	80	338
80	369	0.341	80	325
80	346	0.364	80	324
80	291	0.386	80	322
80	369	0.409	80	317
80	338	0.432	80	309
80	301	0.455	80	306
80	257	0.477	80	301
80	355	0.500	80	298
80	263	0.523	80	296
80	345	0.545	80	291
80	280	0.568	80	289
80	390	0.591	80	286
80	317	0.614	80	285
103	376	0.636	80	280
80	324	0.659	80	268
80	241	0.682	80	268
80	296	0.705	80	263
80	181	0.727	80	260
80	231	0.750	80	257
80	268	0.773	80	252
113	421	0.795	80	241
80	260	0.818	80	234
80	268	0.841	80	231
102	384	0.864	80	231
80	358	0.886	80	229
80	325	0.909	80	195
80	364	0.932	80	181
80	358	0.955	80	181
80	361	0.977	80	151
80	309	1.000	80	75

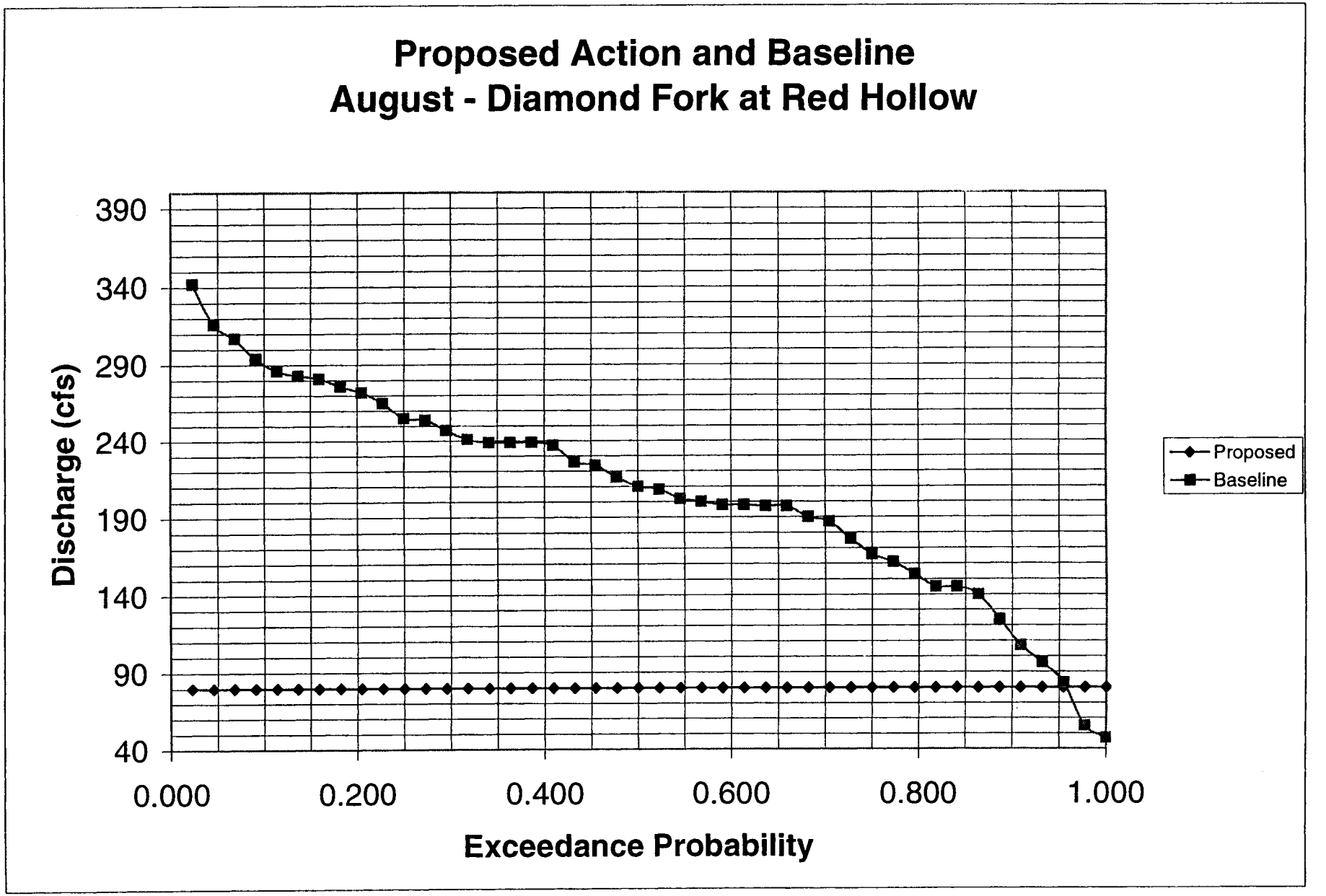

Proposed Action and Baseline
July - Diamond Fork at Red Hollow
Discharge (cfs)
400
350
300
250
200
150
100
50
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

August

1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
80	208	0.023	80	342
80	145	0.045	80	316
80	239	0.068	80	307
80	187	0.091	80	294
80	55	0.114	80	286
80	161	0.136	80	283
80	140	0.159	80	281
80	224	0.182	80	276
80	198	0.205	80	272
80	200	0.227	80	265
80	153	0.250	80	255
80	145	0.273	80	254
80	197	0.295	80	247
80	190	0.318	80	241
80	254	0.341	80	239
80	107	0.364	80	239
80	176	0.386	80	239
80	241	0.409	80	237
80	226	0.432	80	226
80	286	0.455	80	224
80	316	0.477	80	216
80	255	0.500	80	210
80	197	0.523	80	208
80	247	0.545	80	202
80	283	0.568	80	200
80	239	0.591	80	198
80	307	0.614	80	198
80	281	0.636	80	197
80	294	0.659	80	197
80	198	0.682	80	190
80	237	0.705	80	187
80	96	0.727	80	176
80	239	0.750	80	166
80	202	0.773	80	161
80	265	0.795	80	153
80	210	0.818	80	145
80	276	0.841	80	145
80	342	0.864	80	140
80	216	0.886	80	124
80	166	0.909	80	107
80	124	0.932	80	96
80	47	0.955	80	83
80	272	0.977	80	55
80	83	1.000	80	47

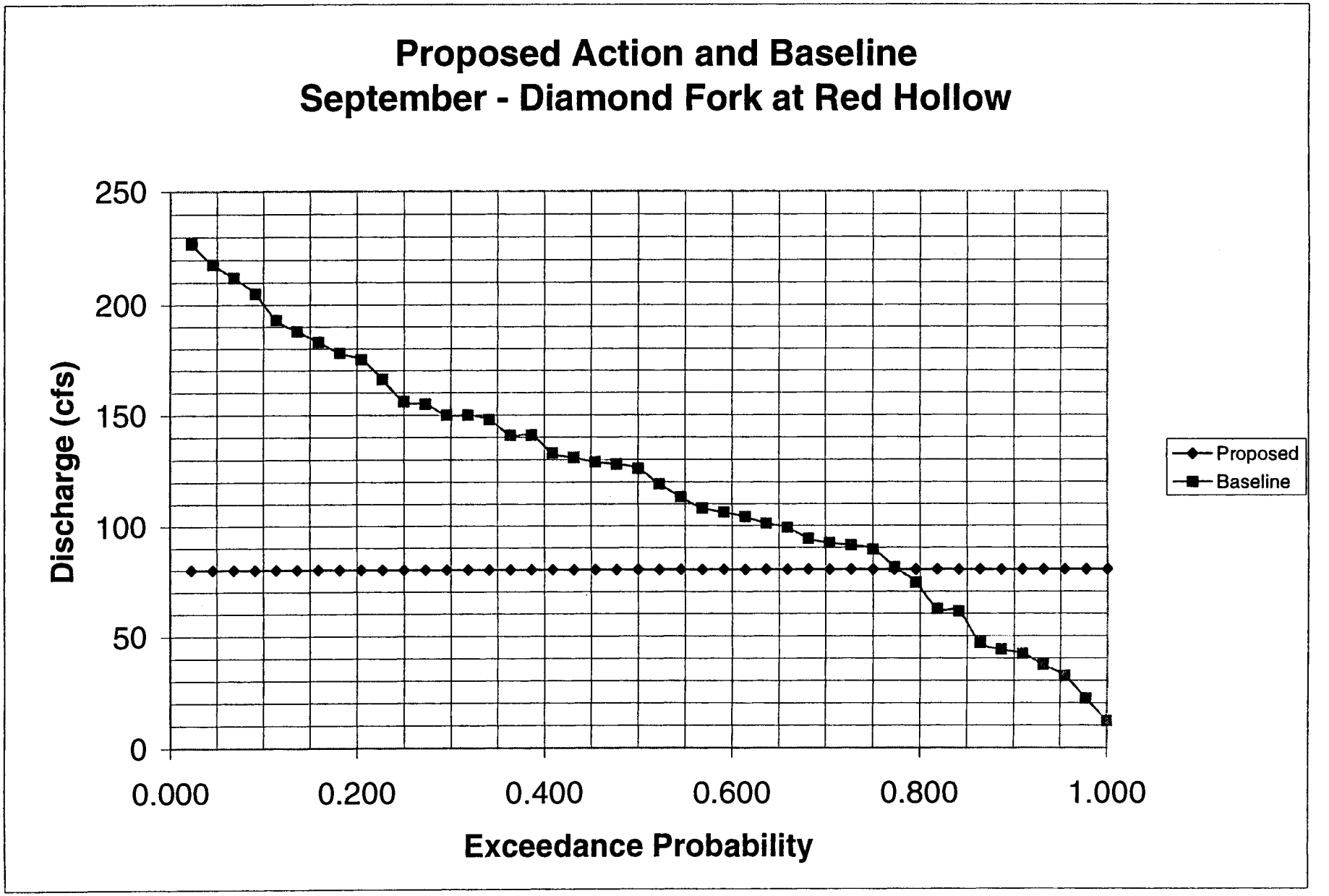

Proposed Action and Baseline
August - Diamond Fork at Red Hollow
390
340
290
240
190
140
90
40
Discharge (cfs)
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

CALCULATION OF MONTHLY AVERAGE FLOW EXCEEDANCE CURVES

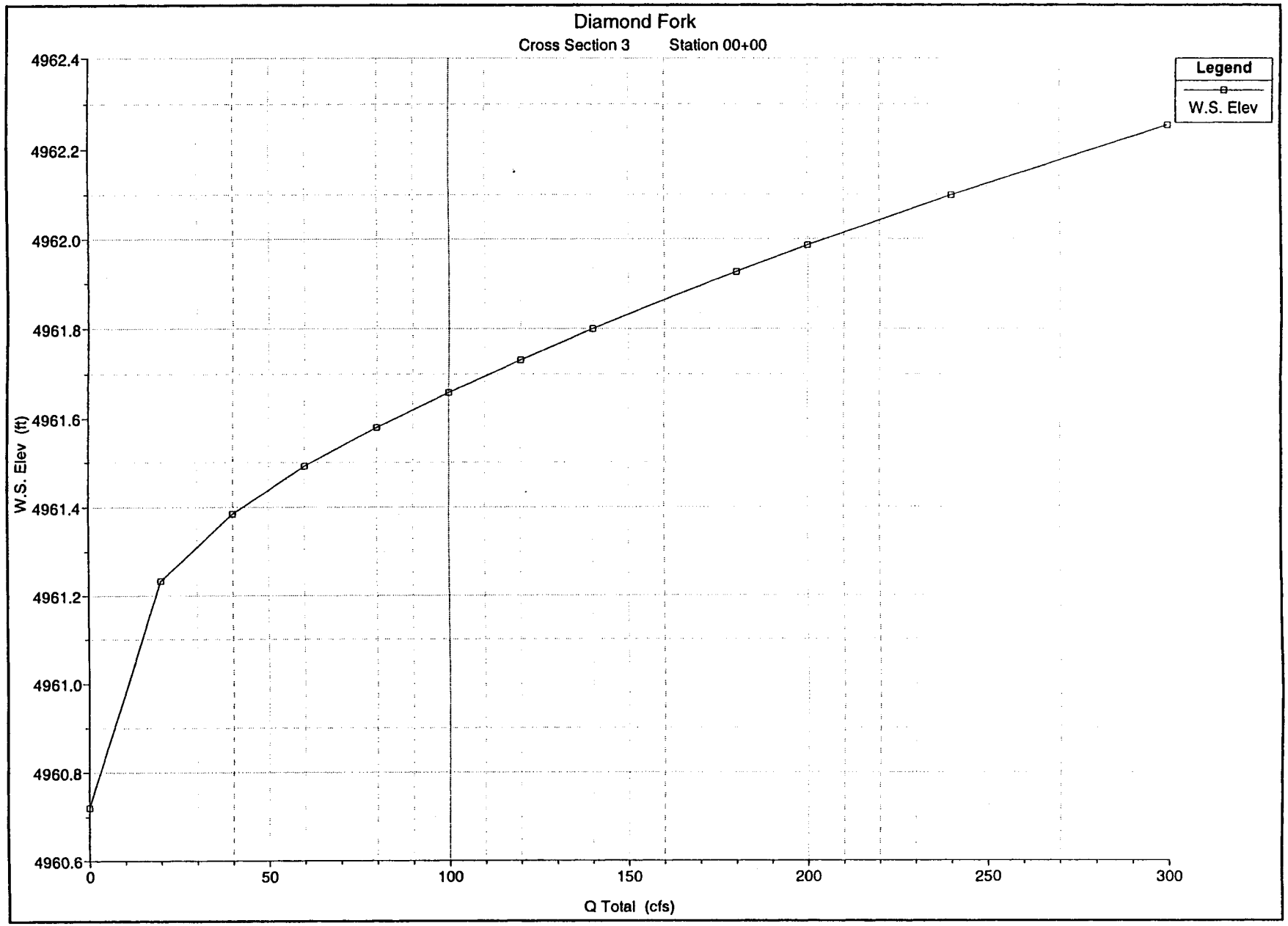
PROPOSED ACTION - DIAMOND FORK AT RED HOLLOW

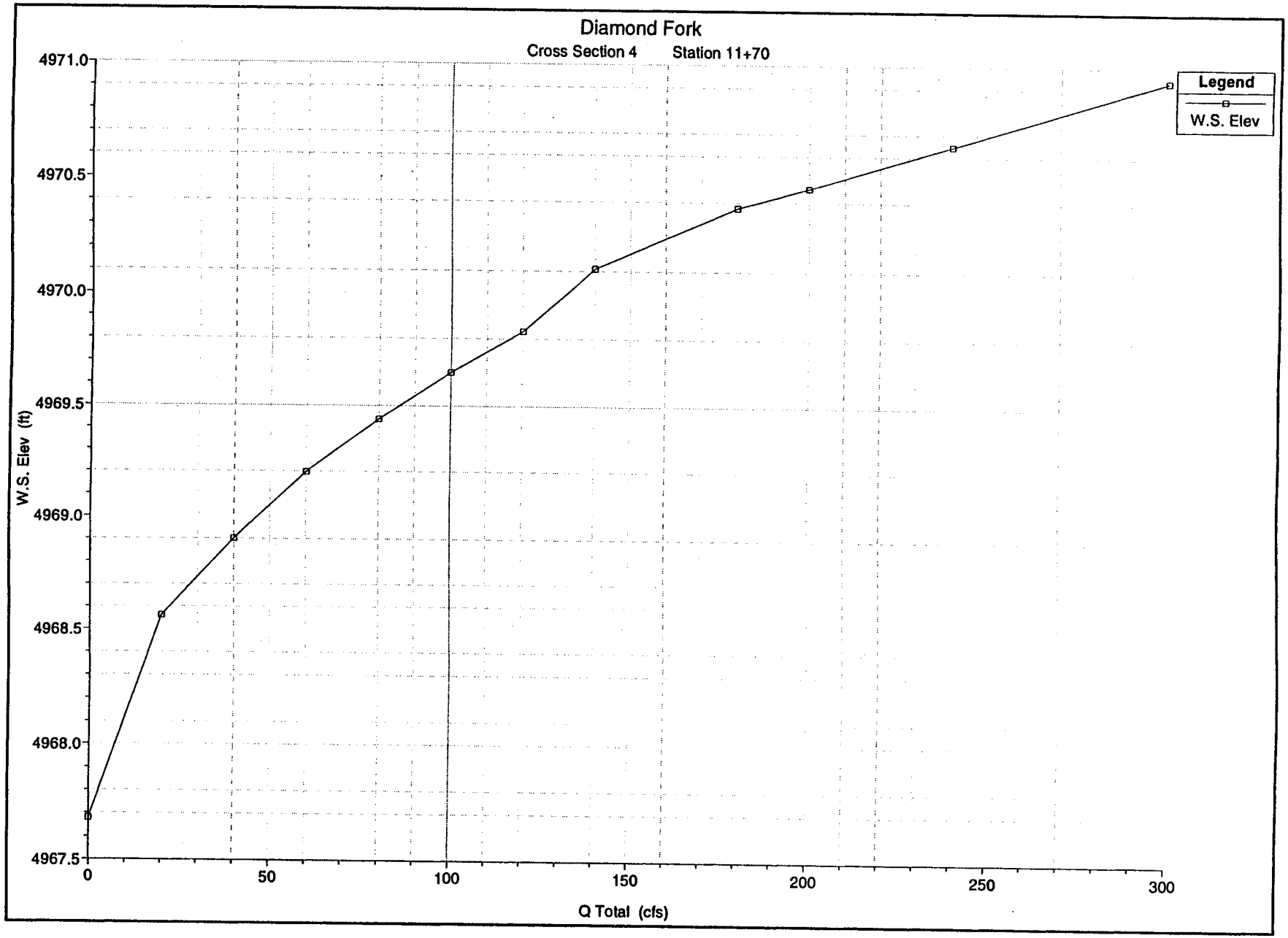
September

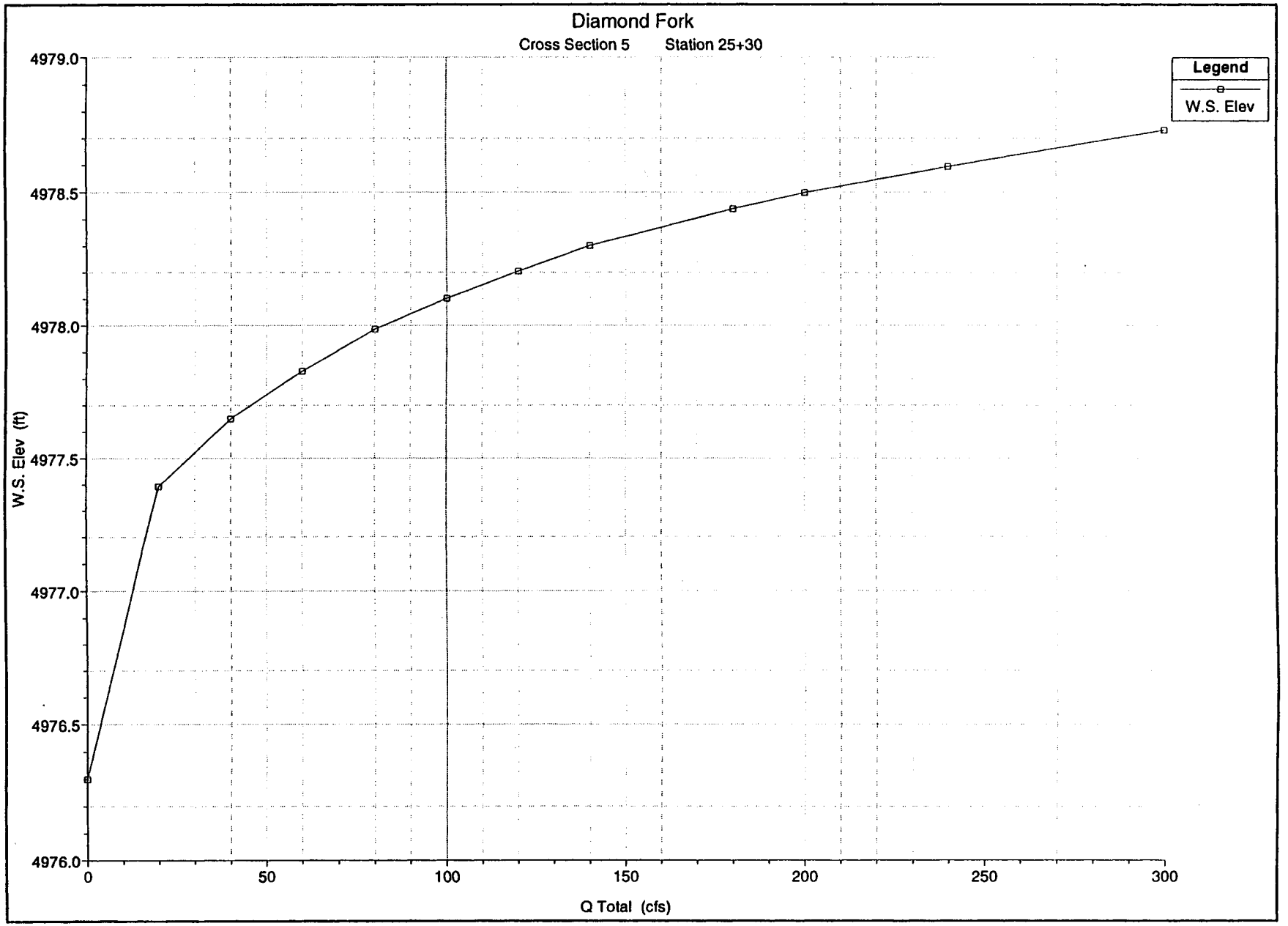
1930-1973		Exceed Prob	Sorted Data	Sorted Data
Proposed	Baseline		Proposed	Baseline
80	133	0.023	80	227
80	62	0.045	80	218
80	99	0.068	80	212
80	108	0.091	80	205
80	32	0.114	80	193
80	128	0.136	80	188
80	94	0.159	80	183
80	129	0.182	80	178
80	104	0.205	80	175
80	101	0.227	80	166
80	42	0.250	80	156
80	141	0.273	80	155
80	126	0.295	80	150
80	141	0.318	80	150
80	150	0.341	80	148
80	148	0.364	80	141
80	155	0.386	80	141
80	175	0.409	80	133
80	183	0.432	80	131
80	150	0.455	80	129
80	218	0.477	80	128
80	193	0.500	80	126
80	205	0.523	80	119
80	178	0.545	80	113
80	91	0.568	80	108
80	131	0.591	80	106
80	156	0.614	80	104
80	188	0.636	80	101
80	106	0.659	80	99
80	92	0.682	80	94
80	74	0.705	80	92
80	47	0.727	80	91
80	89	0.750	80	89
80	61	0.773	80	81
80	166	0.795	80	74
80	119	0.818	80	62
80	113	0.841	80	61
80	227	0.864	80	47
80	212	0.886	80	44
80	44	0.909	80	42
80	37	0.932	80	37
80	12	0.955	80	32
80	81	0.977	80	22
80	22	1.000	80	12

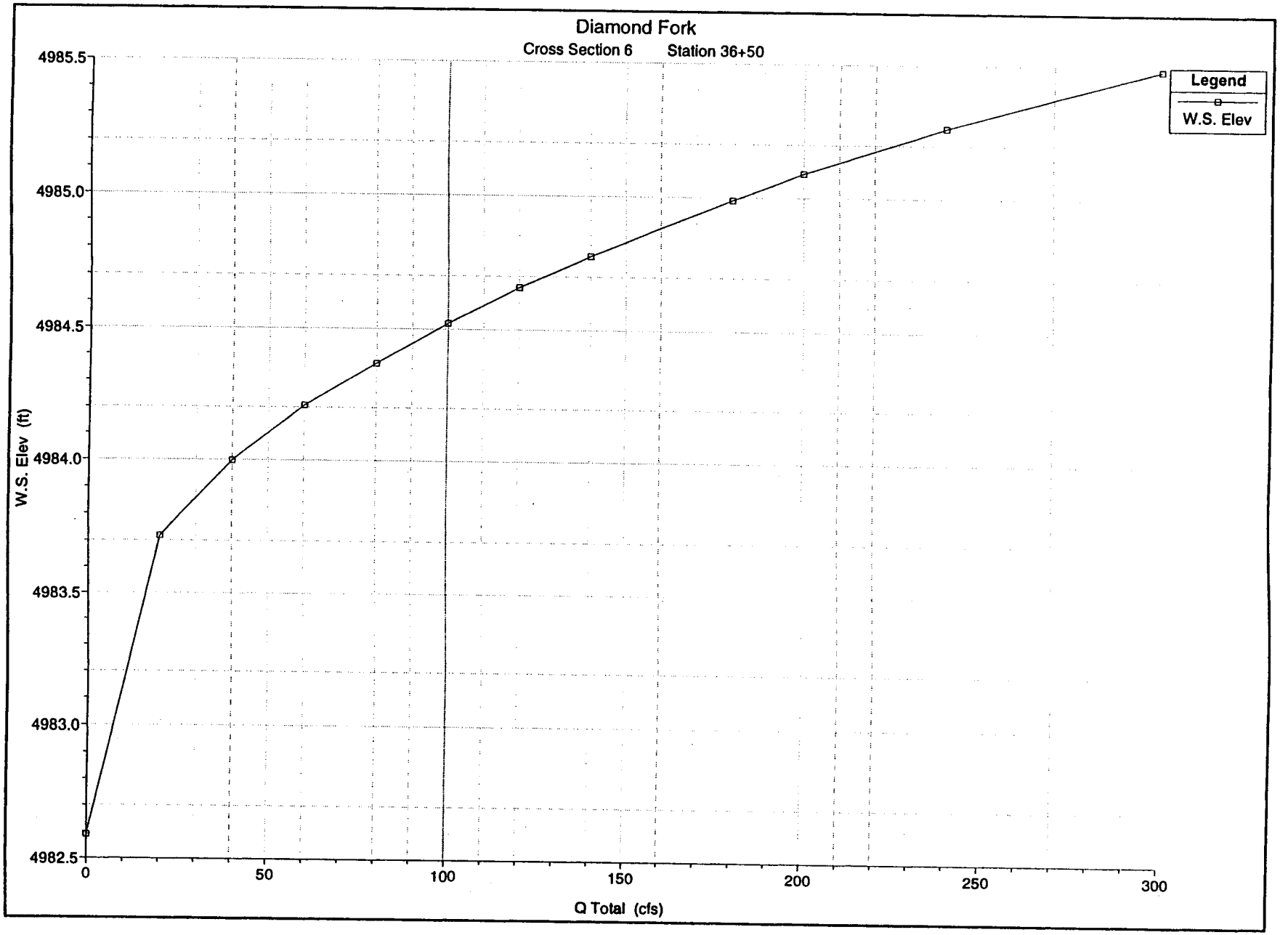

Proposed Action and Baseline
September - Diamond Fork at Red Hollow
Discharge (cfs)
250
200
150
100
50
0
0.000
0.200
0.400
0.600
0.800
1.000
Exceedance Probability
Proposed
Baseline

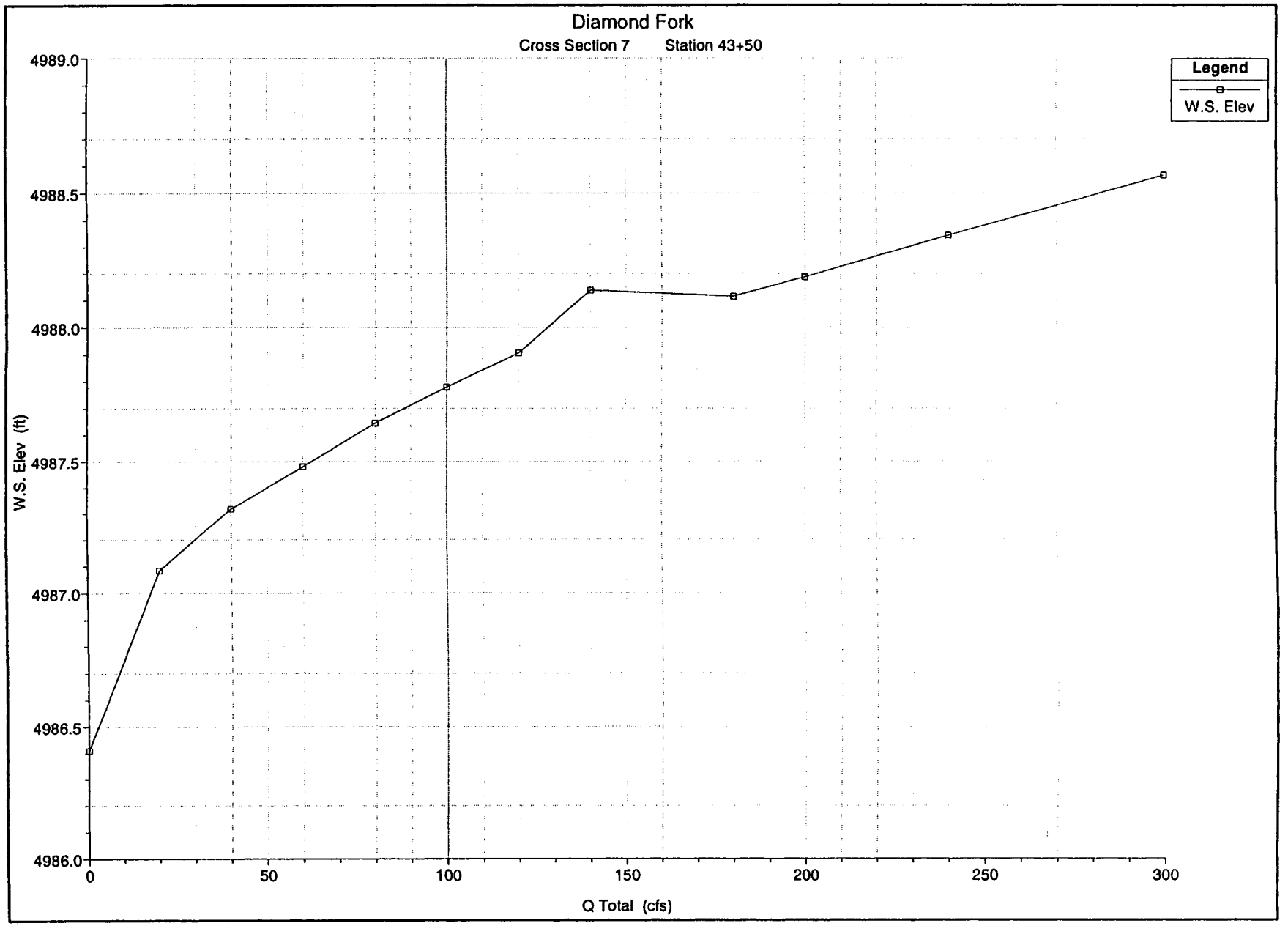
HEC-RAS DISCHARGE VS. WATER SURFACE ELEVATIONS

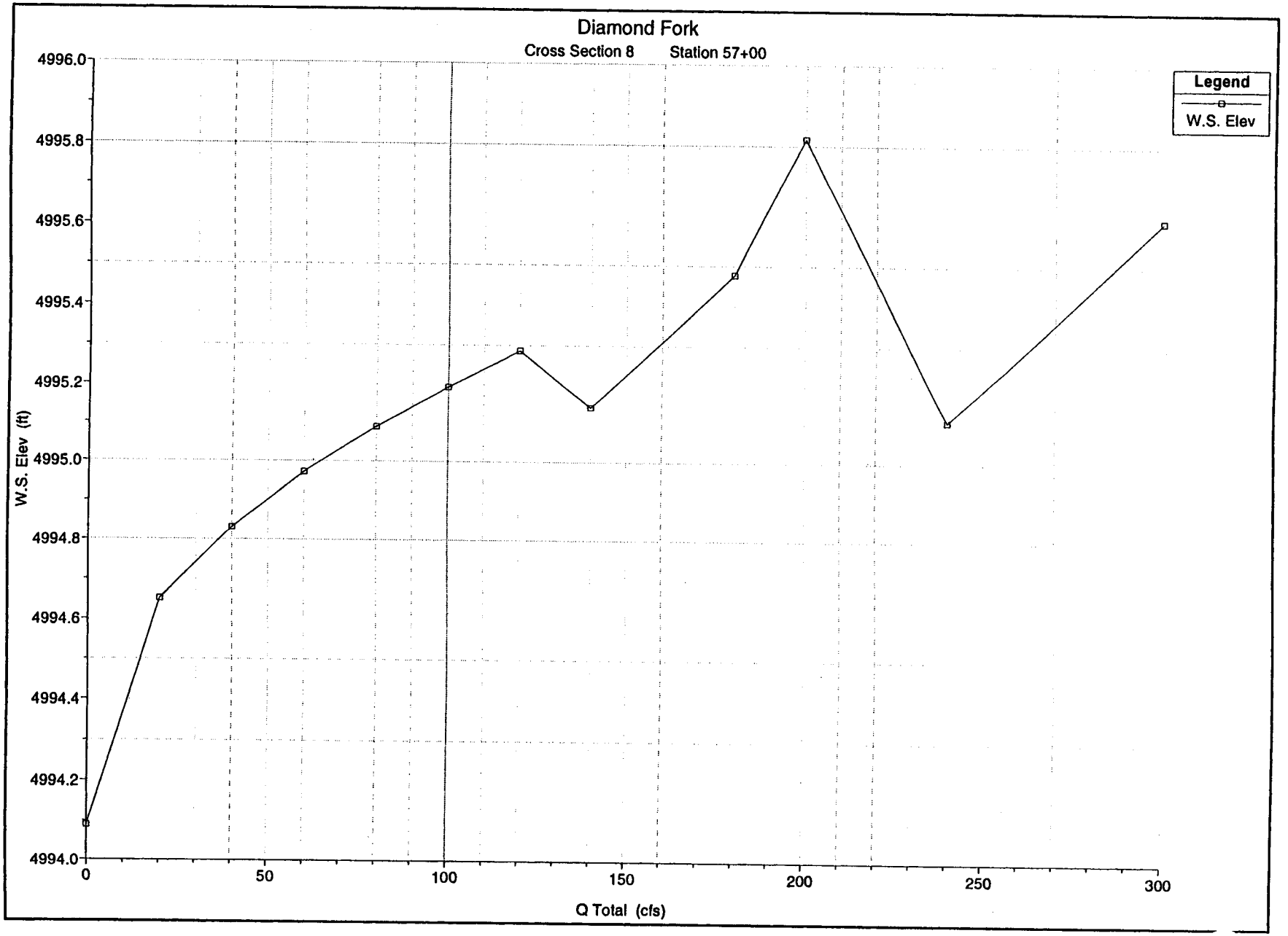

Diamond Fork
Cross Section 3 Station 00+00
Legend
W.S. Elev
W.S. Elev (ft)
4962.4
4962.2
4962.0
4961.8
4961.6
4961.4
4961.2
4961.0
4960.8
4960.6
0
50
100
150
200
250
300
Q Total (cfs)

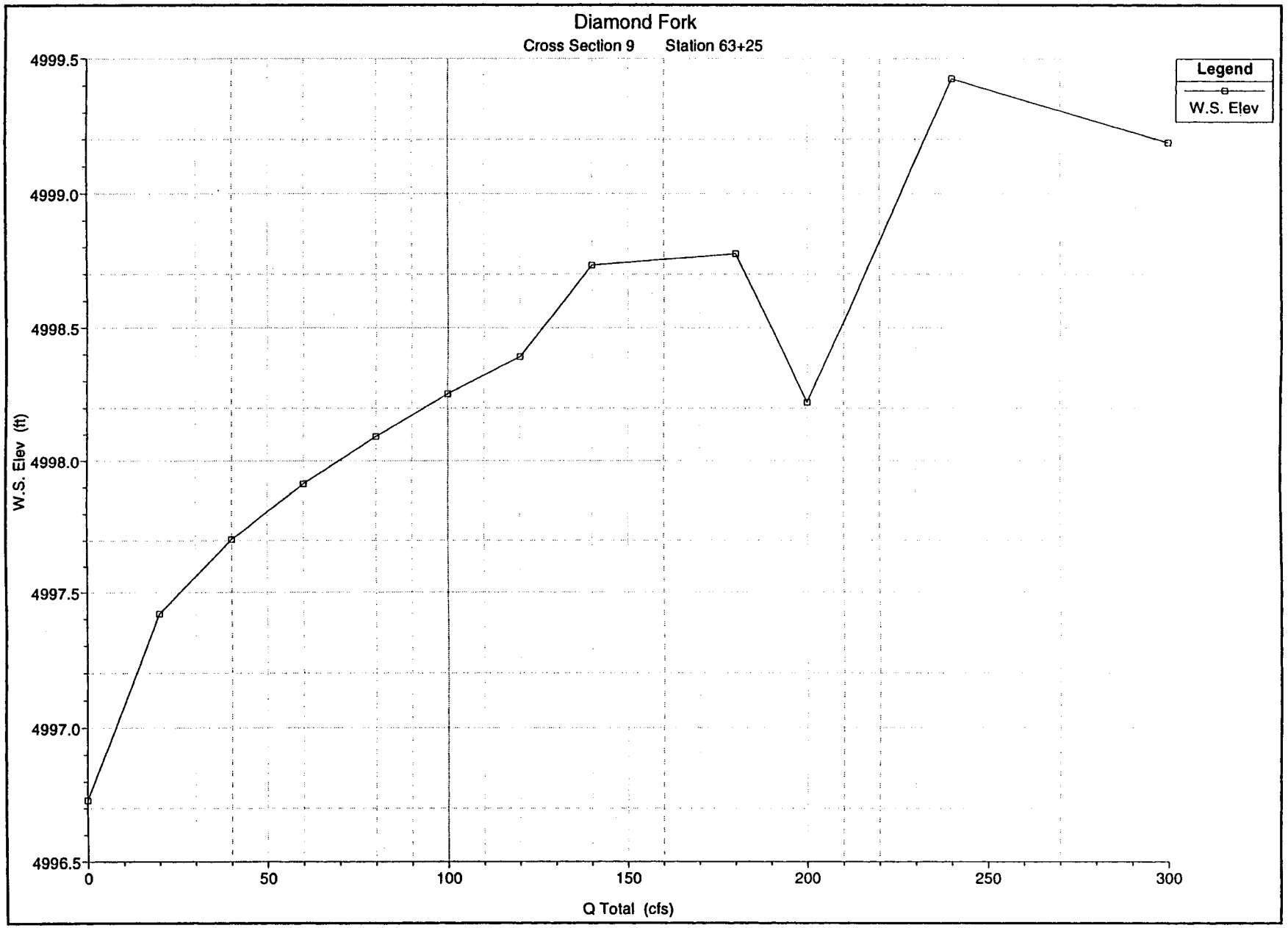

Diamond Fork
Cross Section 4 Station 11+70
Legend
W.S. Elev
W.S. Elev (ft)
4971.0
4970.5
4970.0
4969.5
4969.0
4968.5
4968.0
4967.5
0
50
100
150
200
250
300
Q Total (cfs)

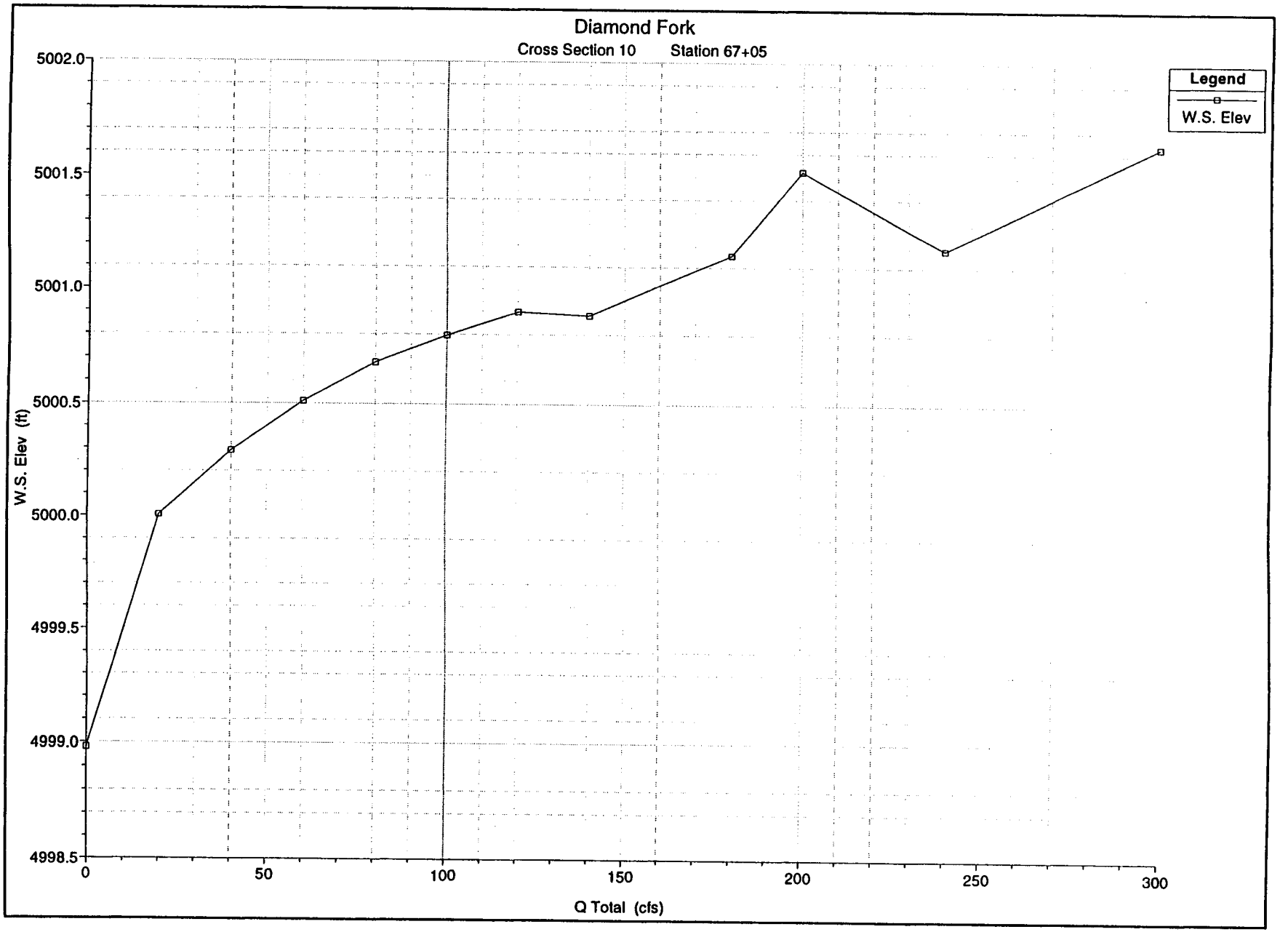

Diamond Fork
Cross Section 5 Station 25+30
Legend
W.S. Elev
W.S. Elev (ft)
4979.0
4978.5
4978.0
4977.5
4977.0
4976.5
4976.0
0
50
100
150
200
250
300
Q Total (cfs)

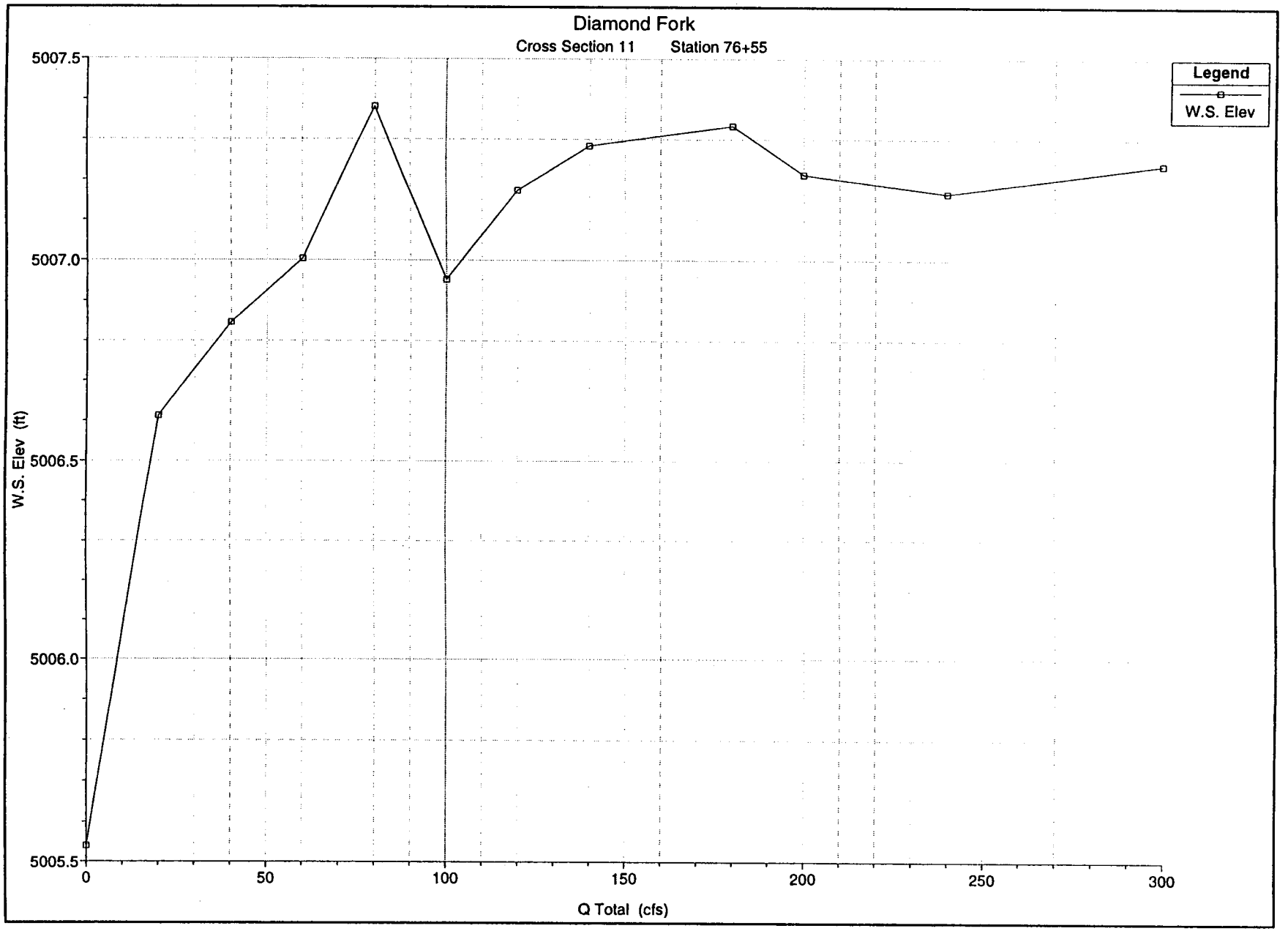

Diamond Fork
Cross Section 6 Station 36+50
Legend
W.S. Elev
W.S. Elev (ft)
4985.5
4985.0
4984.5
4984.0
4983.5
4983.0
4982.5
0
50
100
150
200
250
300
Q Total (cfs)

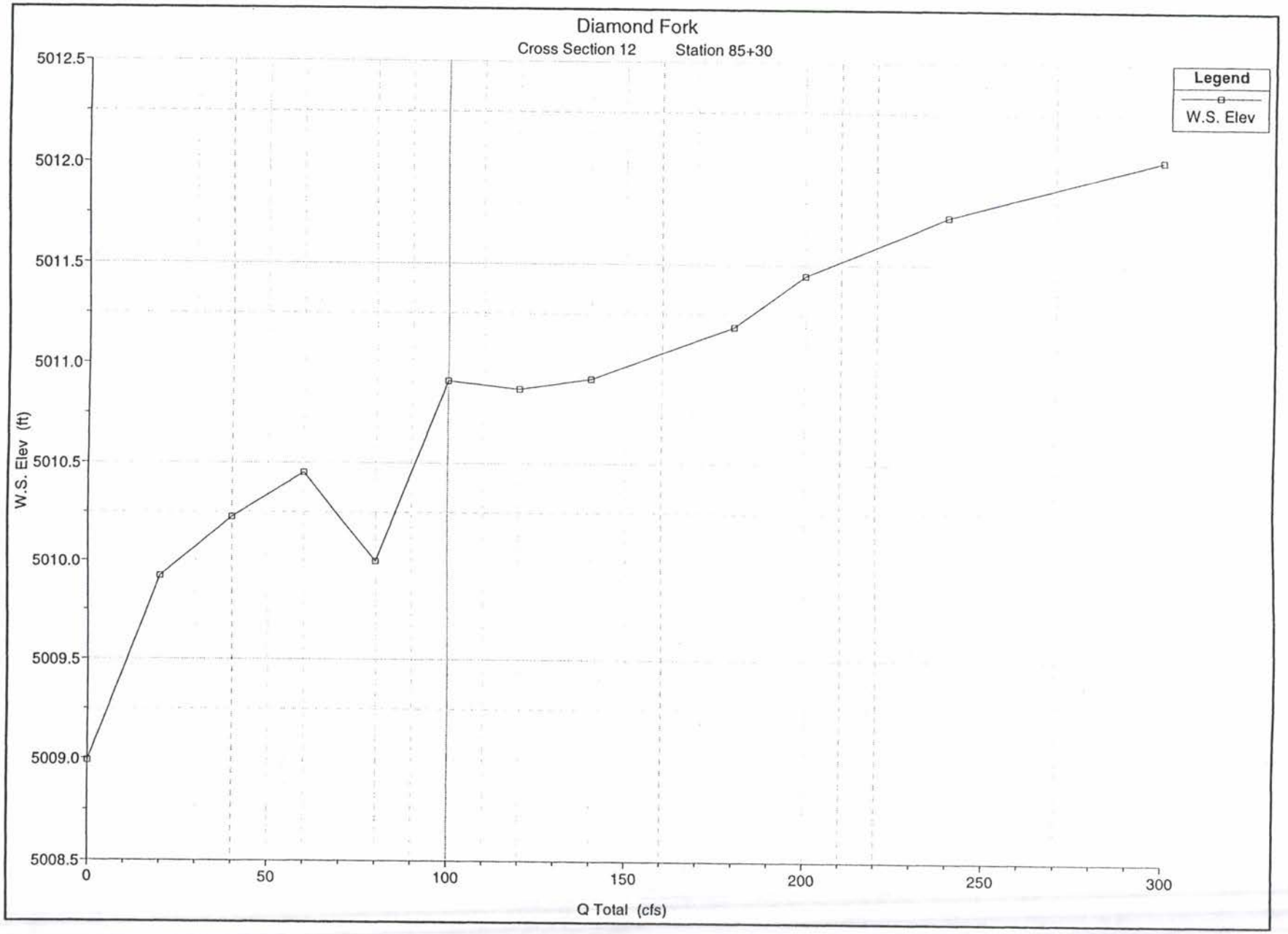

Diamond Fork
Cross Section 7 Station 43+50
Legend
W.S. Elev
W.S. Elev (ft)
4989.0
4988.5
4988.0
4987.5
4987.0
4986.5
4986.0
0
50
100
150
200
250
300
Q Total (cfs)

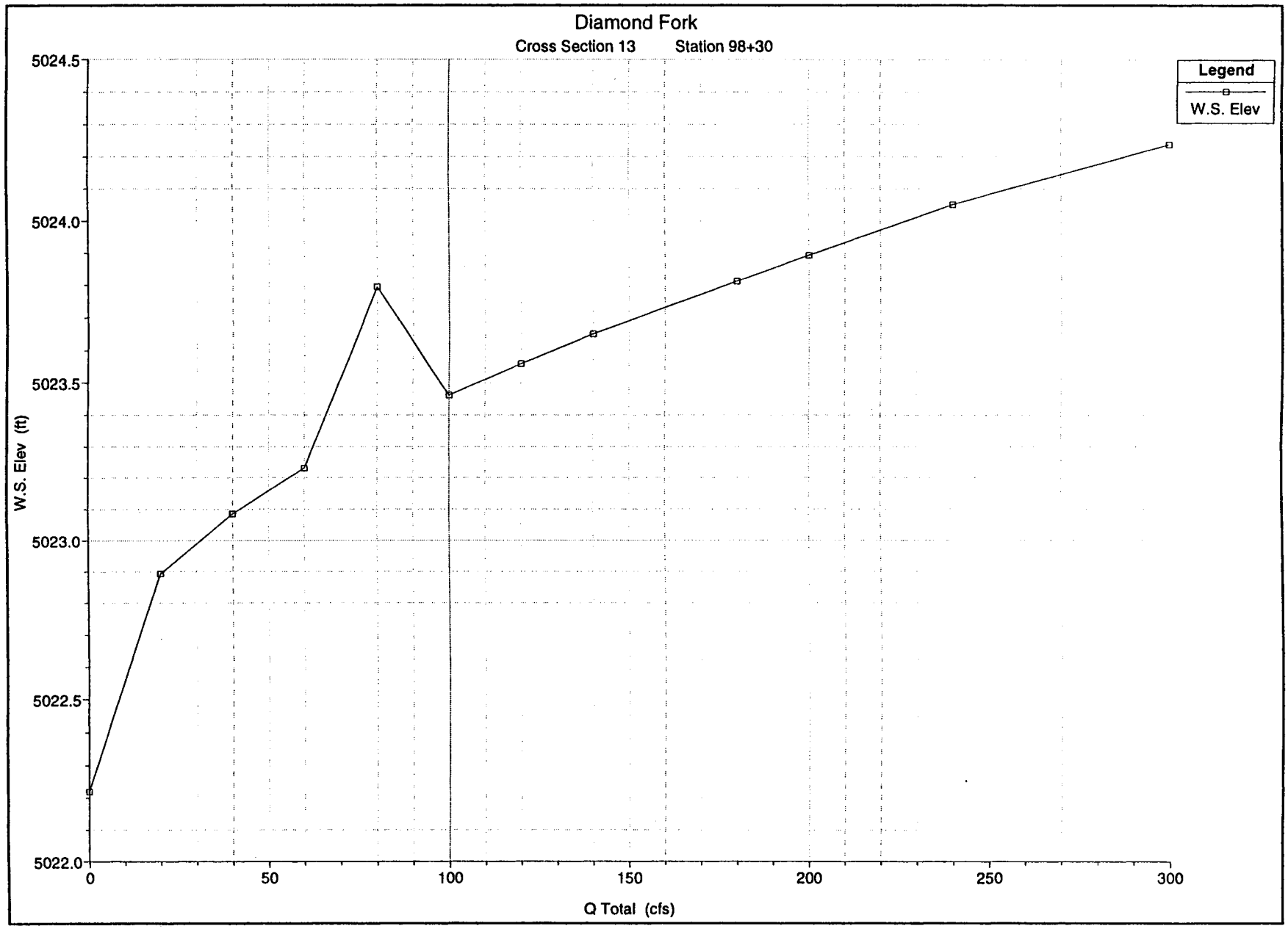

Diamond Fork
Cross Section 8 Station 57+00
Legend
W.S. Elev
W.S. Elev (ft)
4996.0
4995.8
4995.6
4995.4
4995.2
4995.0
4994.8
4994.6
4994.4
4994.2
4994.0
0
50
100
150
200
250
300
Q Total (cfs)

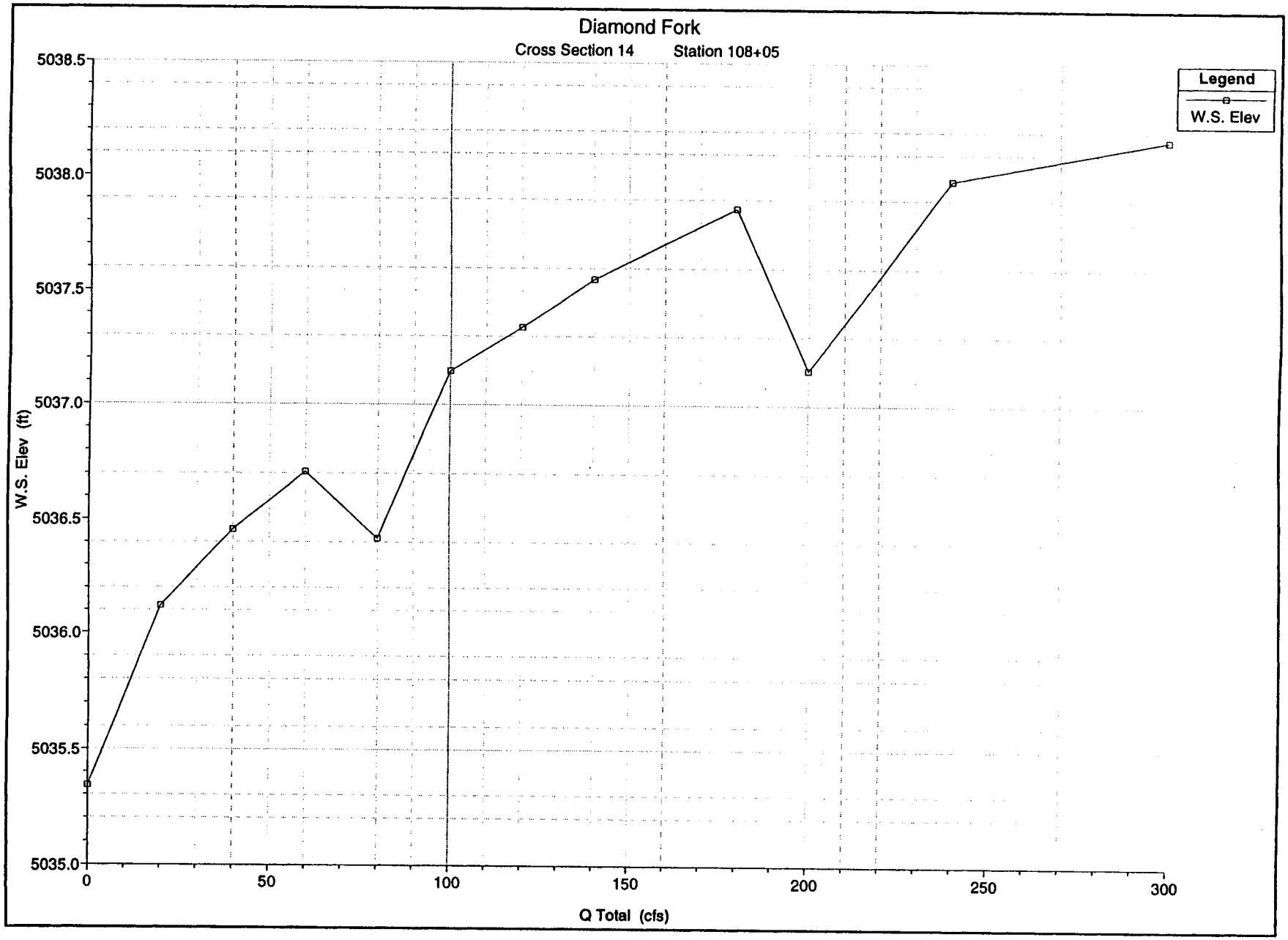

Diamond Fork
Cross Section 9 Station 63+25
Legend
W.S. Elev
W.S. Elev (ft)
4999.5
4999.0
4998.5
4998.0
4997.5
4997.0
4996.5
0
50
100
150
200
250
300
Q Total (cfs)

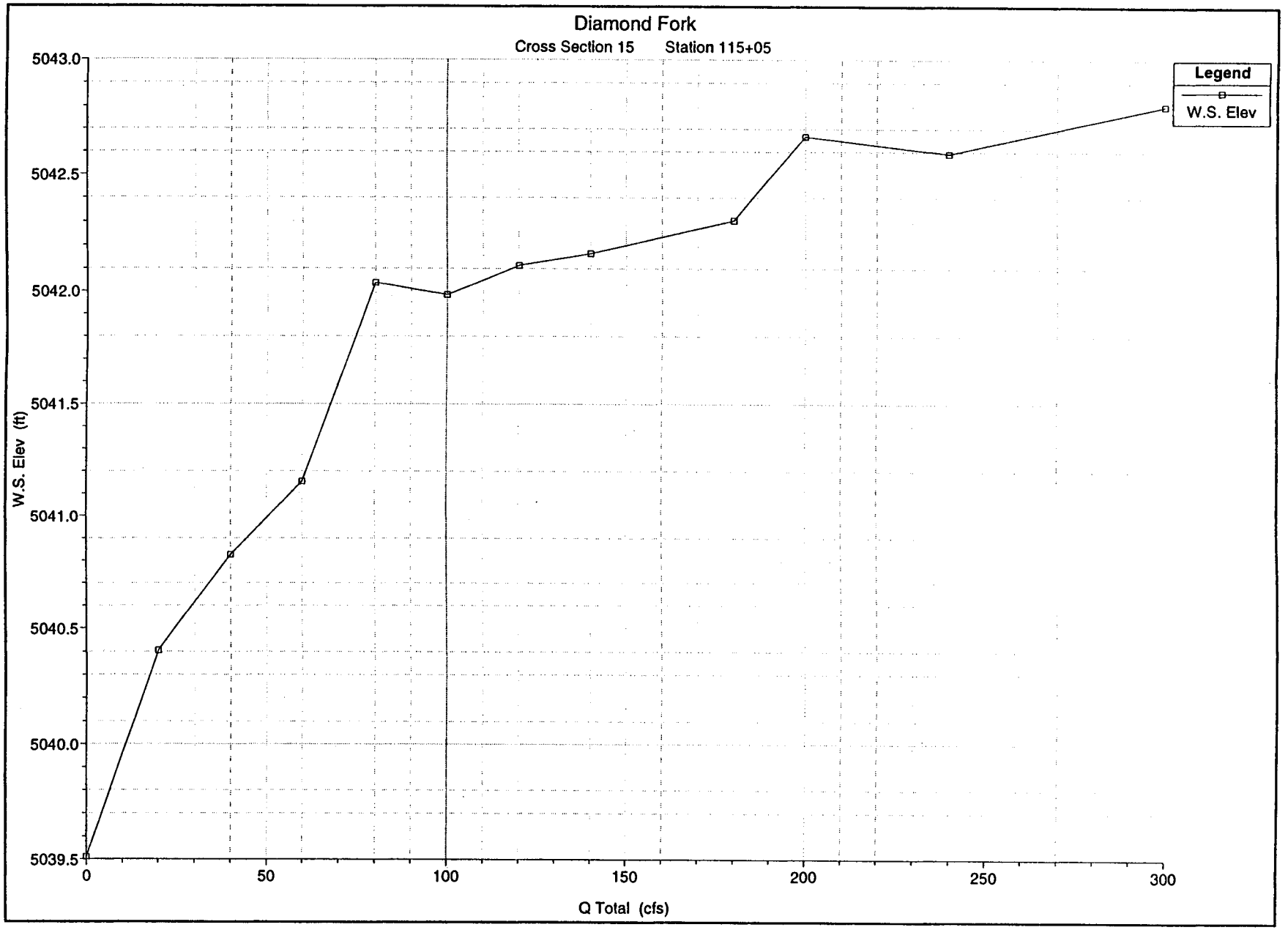

Diamond Fork
Cross Section 10 Station 67+05
Legend
W.S. Elev
W.S. Elev (ft)
5002.0
5001.5
5001.0
5000.5
5000.0
4999.5
4999.0
4998.5
0
50
100
150
200
250
300
Q Total (cfs)

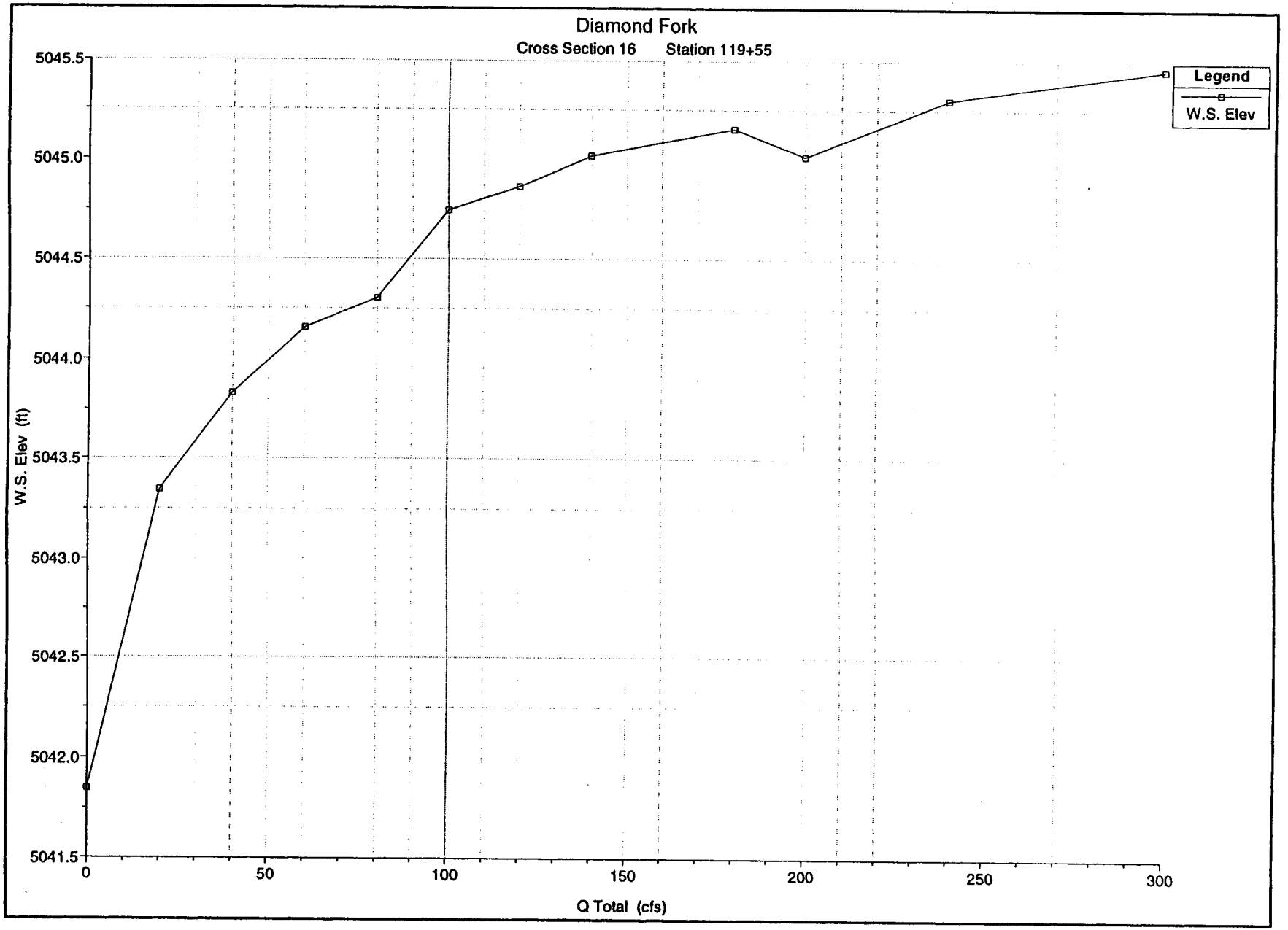

Diamond Fork
Cross Section 11 Station 76+55
Legend
W.S. Elev
W.S. Elev (ft)
5007.5
5007.0
5006.5
5006.0
5005.5
0
50
100
150
200
250
300
Q Total (cfs)

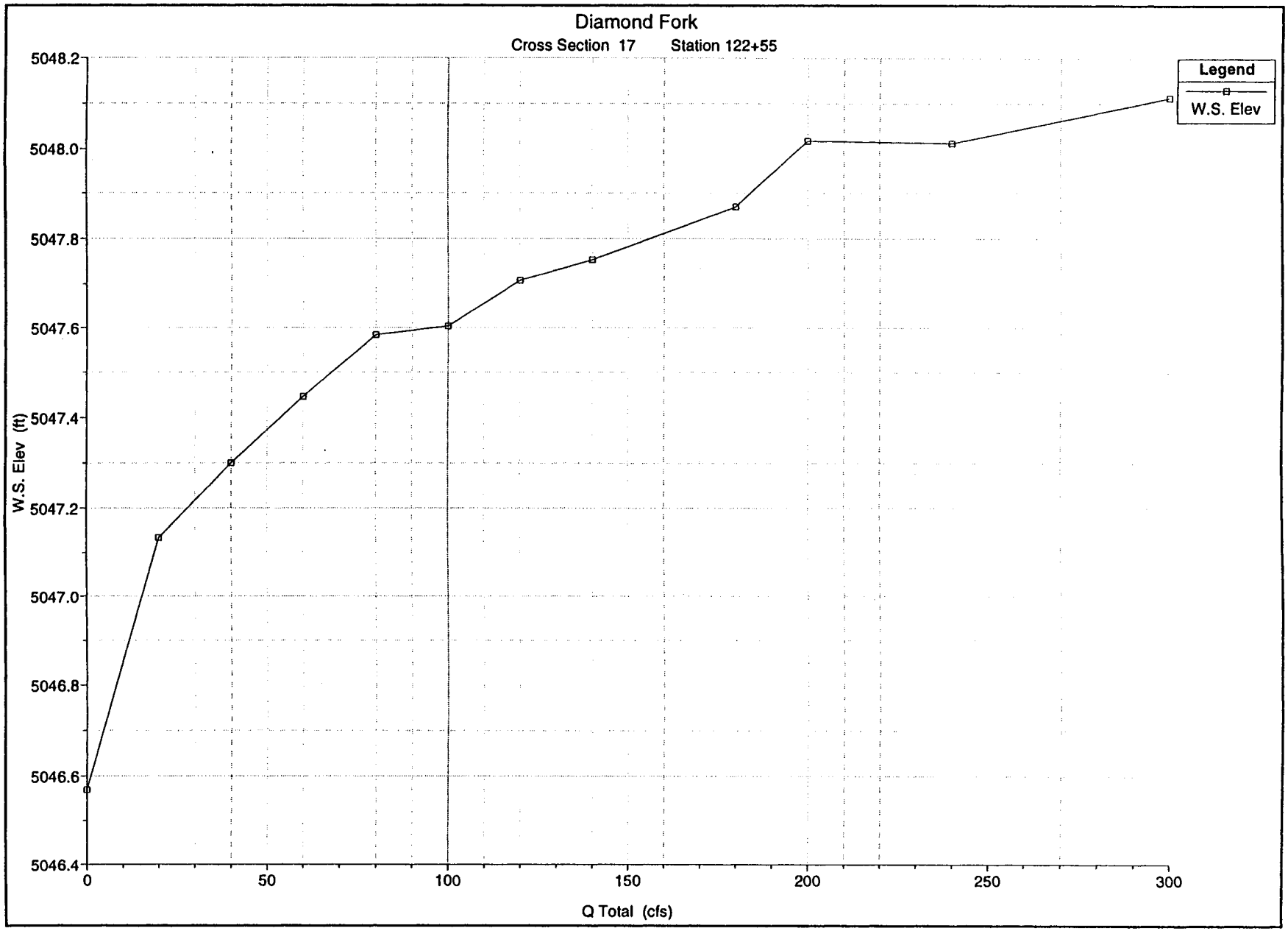

Diamond Fork
Cross Section 12 Station 85+30
Legend
W.S. Elev
W.S. Elev (ft)
5012.5
5012.0
5011.5
5011.0
5010.5
5010.0
5009.5
5009.0
5008.5
0
50
100
150
200
250
300
Q Total (cfs)

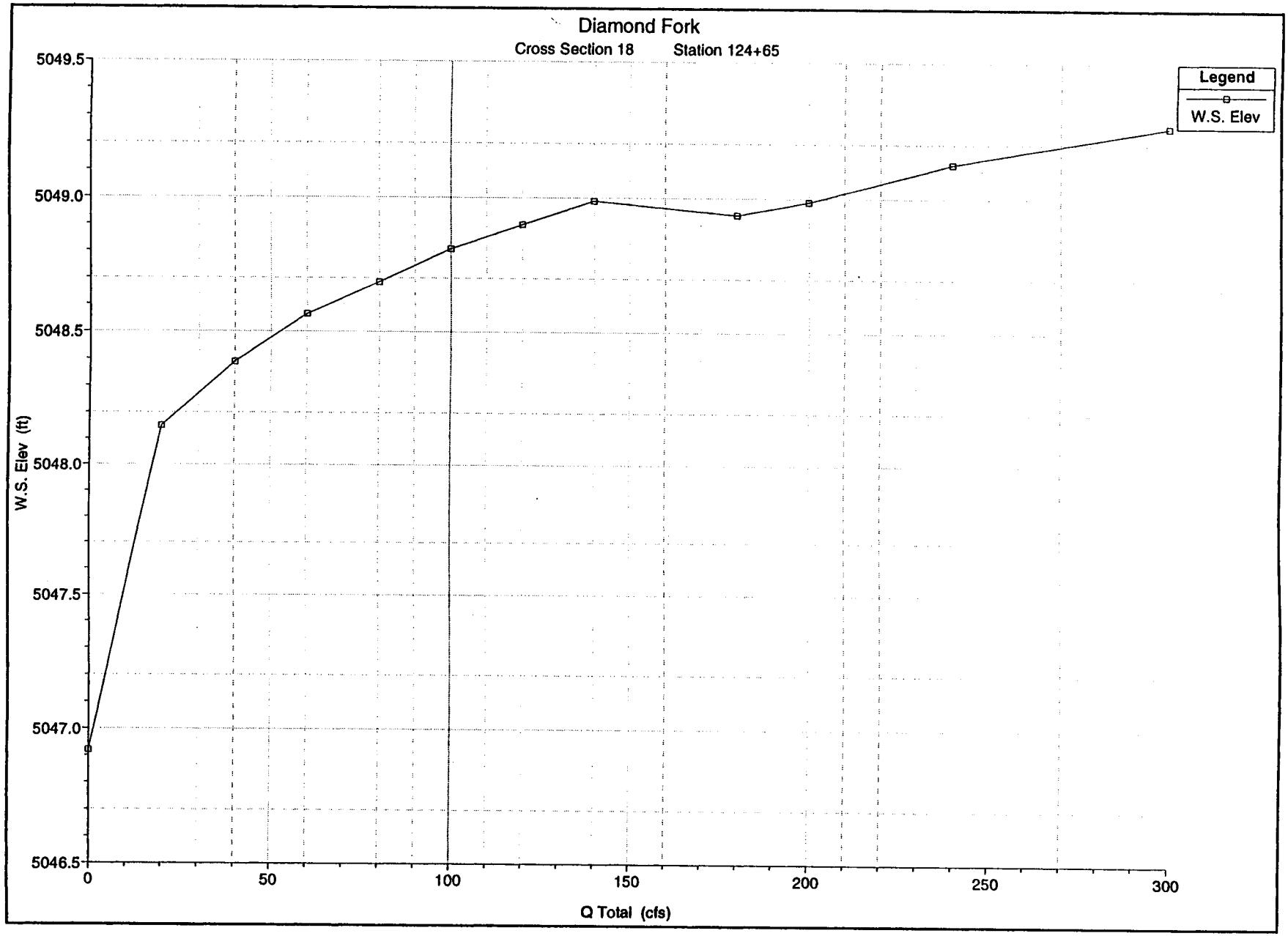

Diamond Fork
Cross Section 13 Station 98+30
Legend
W.S. Elev
W.S. Elev (ft)
5024.5
5024.0
5023.5
5023.0
5022.5
5022.0
0
50
100
150
200
250
300
Q Total (cfs)

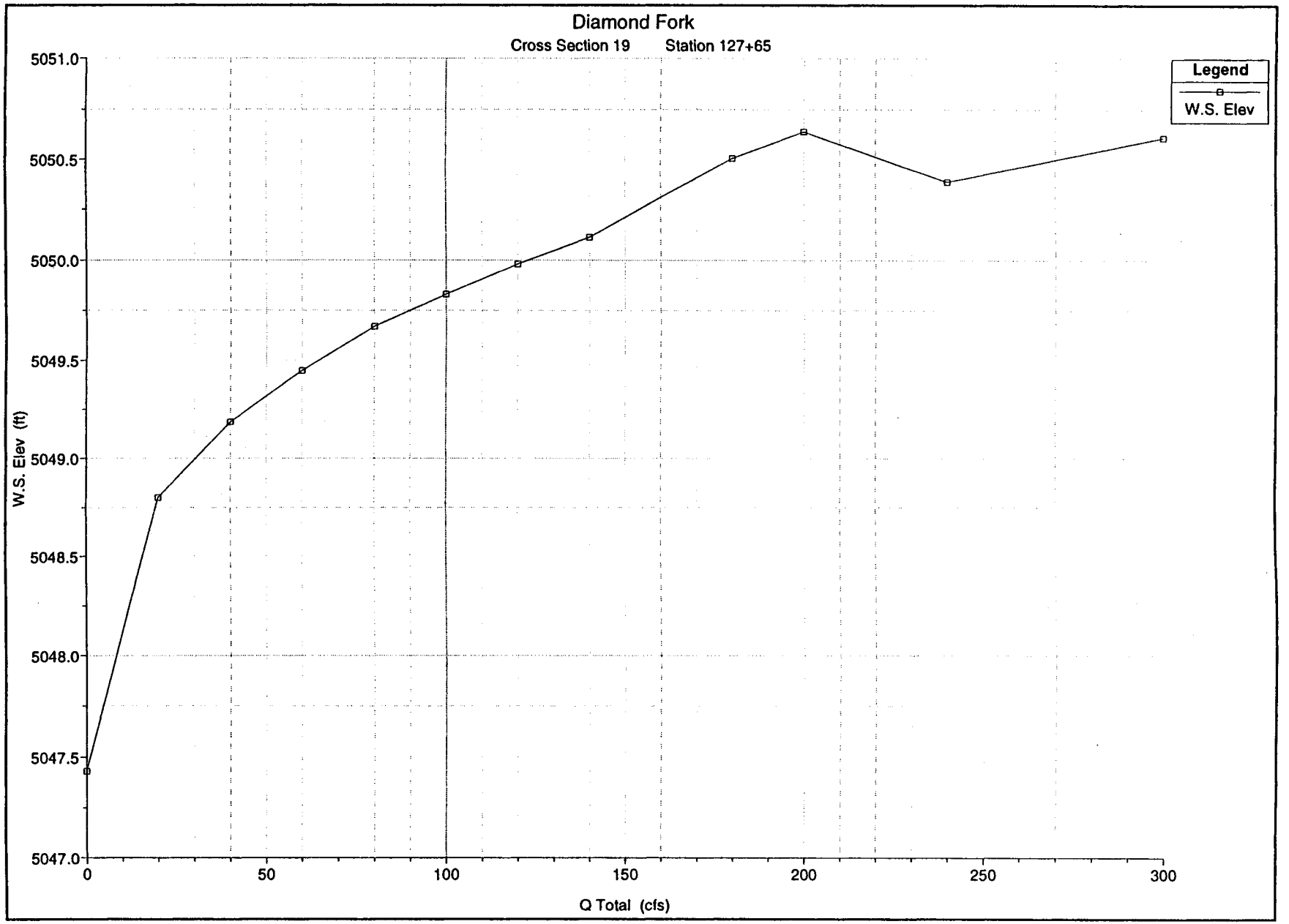

Diamond Fork
Cross Section 14
Station 108+05
Legend
W.S. Elev
W.S. Elev (ft)
5038.5
5038.0
5037.5
5037.0
5036.5
5036.0
5035.5
5035.0
0
50
100
150
200
250
300
Q Total (cfs)

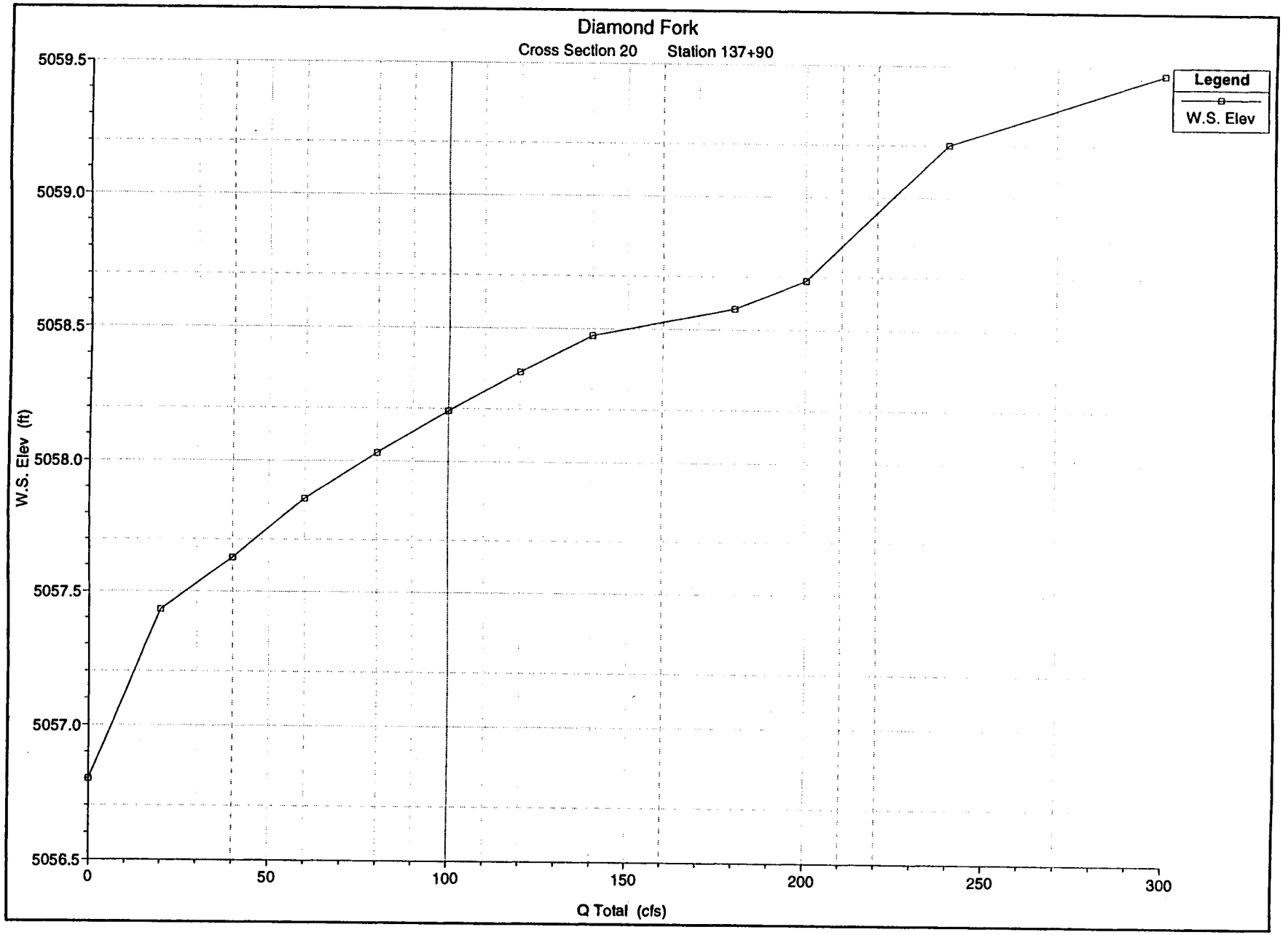

Diamond Fork
Cross Section 15 Station 115+05
Legend
W.S. Elev
W.S. Elev (ft)
5043.0
5042.5
5042.0
5041.5
5041.0
5040.5
5040.0
5039.5
0
50
100
150
200
250
300
Q Total (cfs)

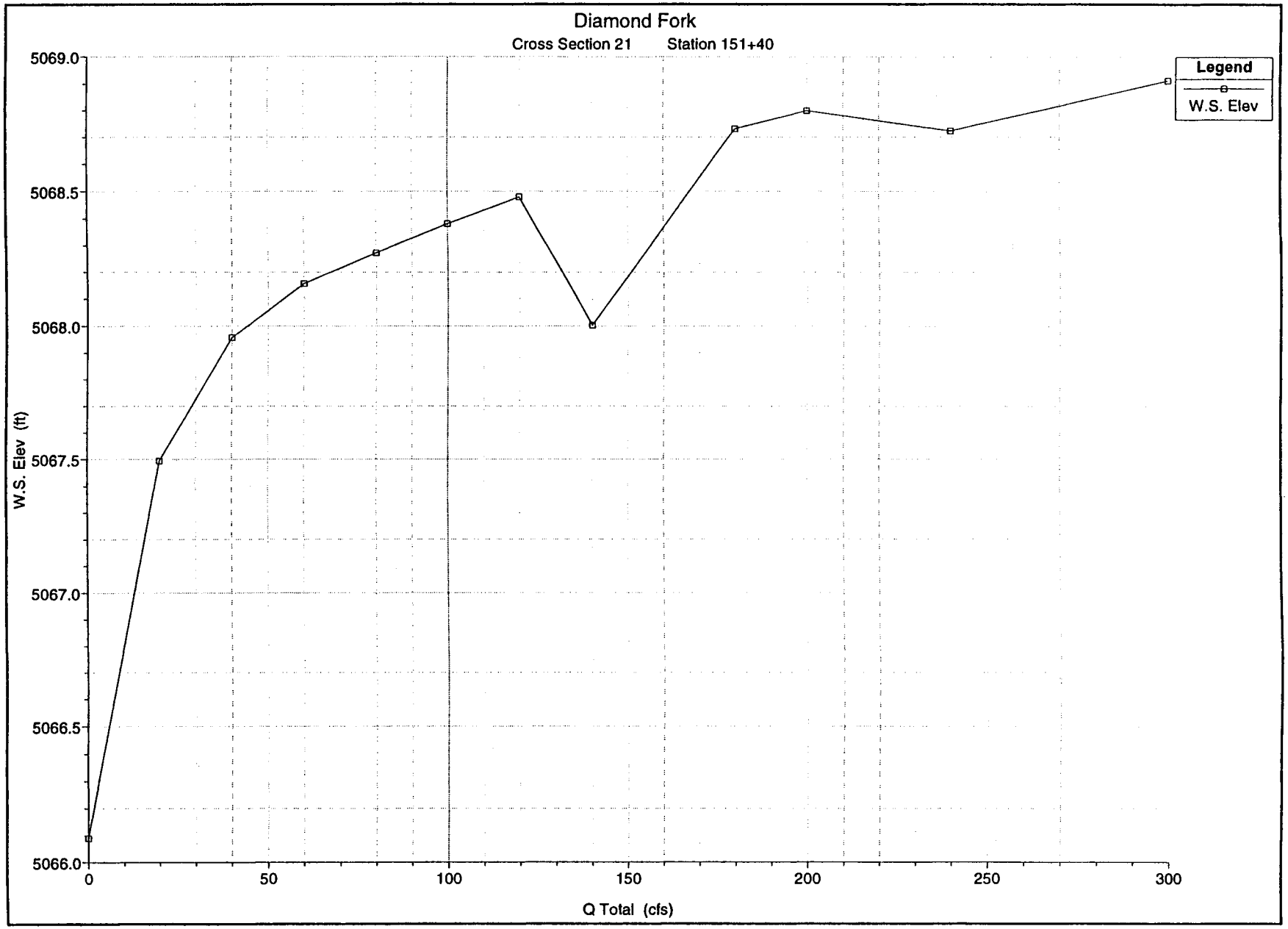

Diamond Fork
Cross Section 16 Station 119+55
Legend
W.S. Elev
W.S. Elev (ft)
5045.5
5045.0
5044.5
5044.0
5043.5
5043.0
5042.5
5042.0
5041.5
0
50
100
150
200
250
300
Q Total (cfs)

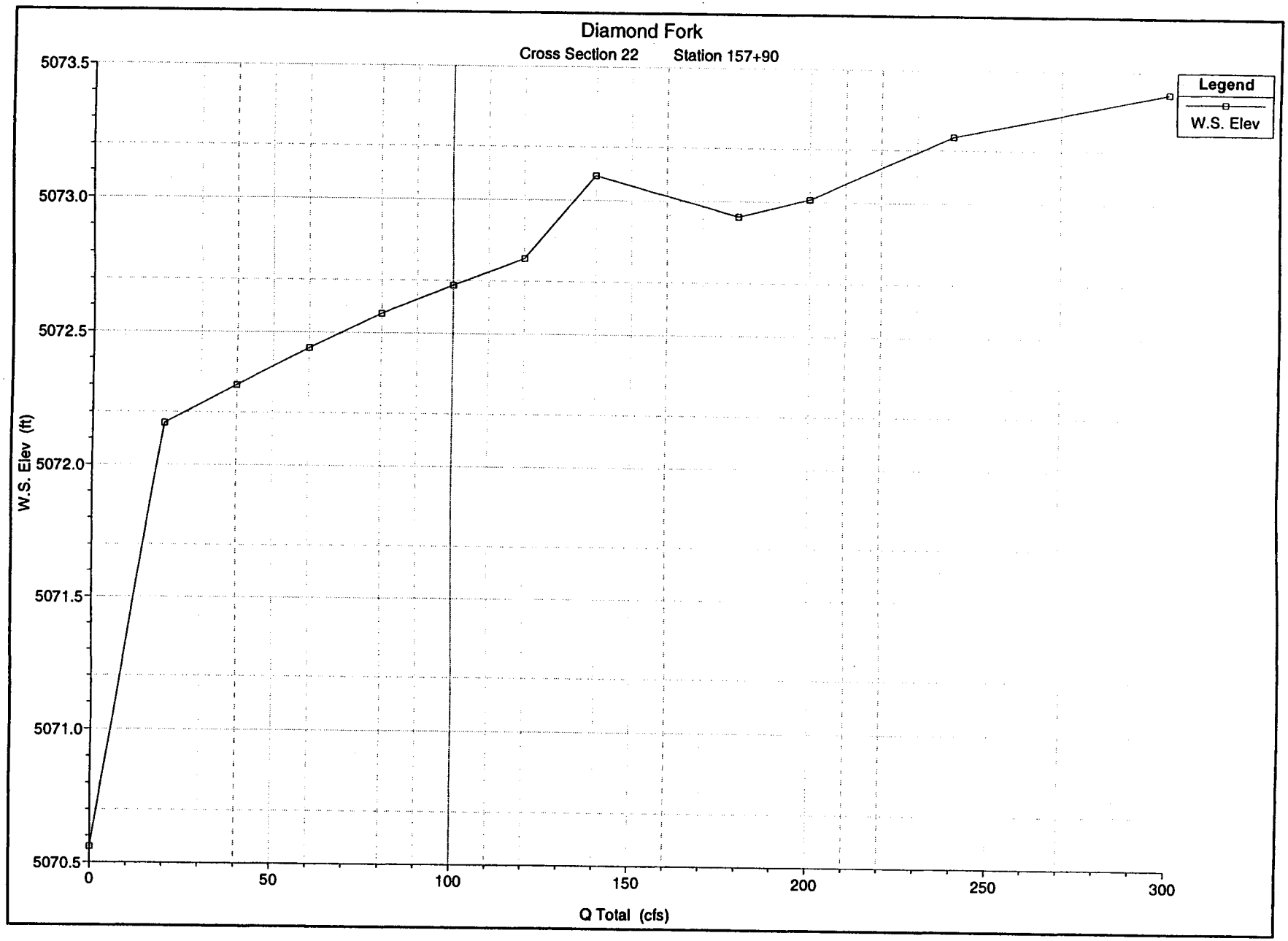

Diamond Fork
Cross Section 17 Station 122+55
Legend
W.S. Elev
W.S. Elev (ft)
5048.2
5048.0
5047.8
5047.6
5047.4
5047.2
5047.0
5046.8
5046.6
5046.4
0
50
100
150
200
250
300
Q Total (cfs)

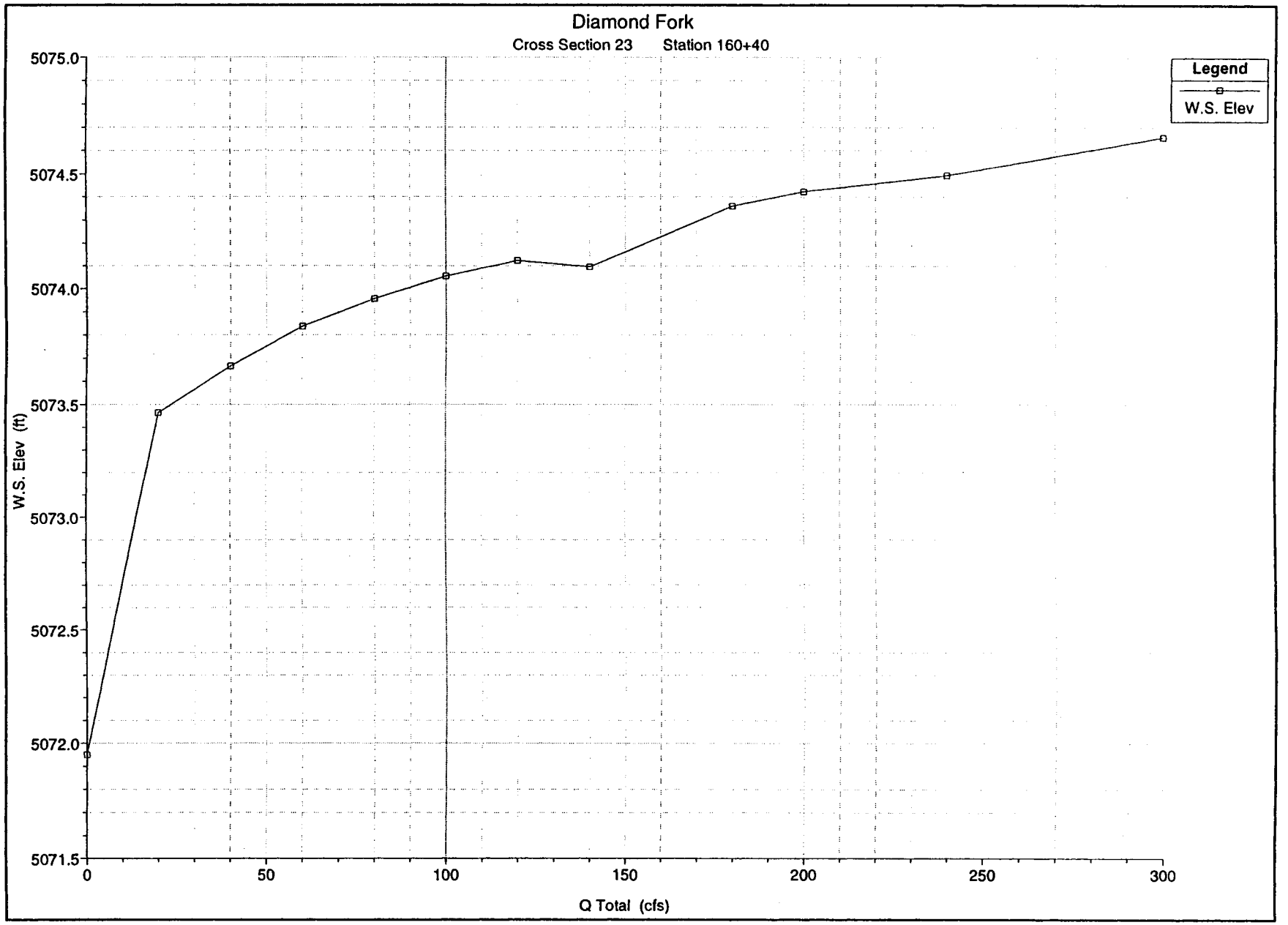

Diamond Fork
Cross Section 18 Station 124+65
Legend
W.S. Elev
W.S. Elev (ft)
5049.5
5049.0
5048.5
5048.0
5047.5
5047.0
5046.5
0
50
100
150
200
250
300
Q Total (cfs)

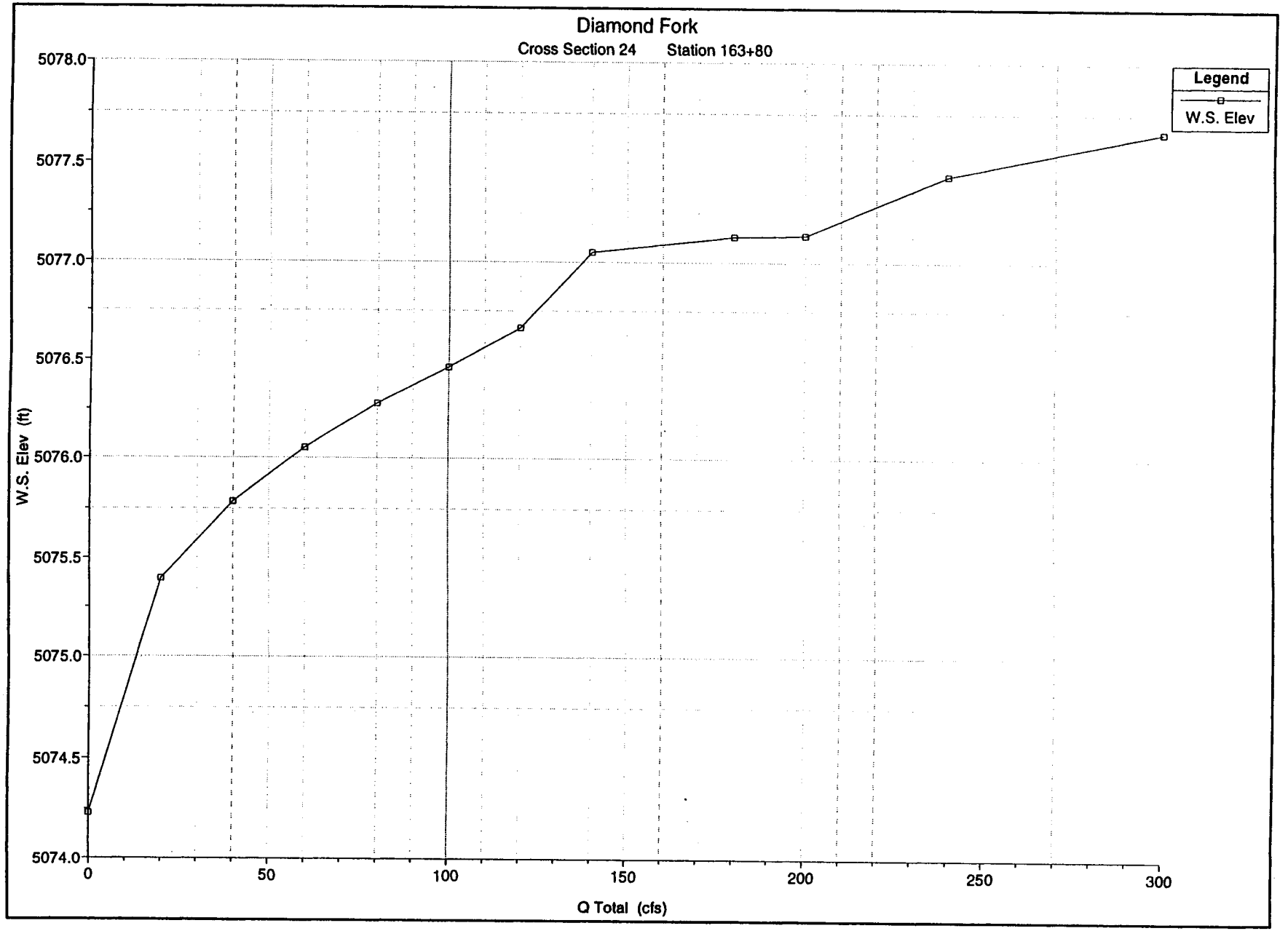

Diamond Fork
Cross Section 19 Station 127+65
Legend
W.S. Elev
W.S. Elev (ft)
5051.0
5050.5
5050.0
5049.5
5049.0
5048.5
5048.0
5047.5
5047.0
0
50
100
150
200
250
300
Q Total (cfs)

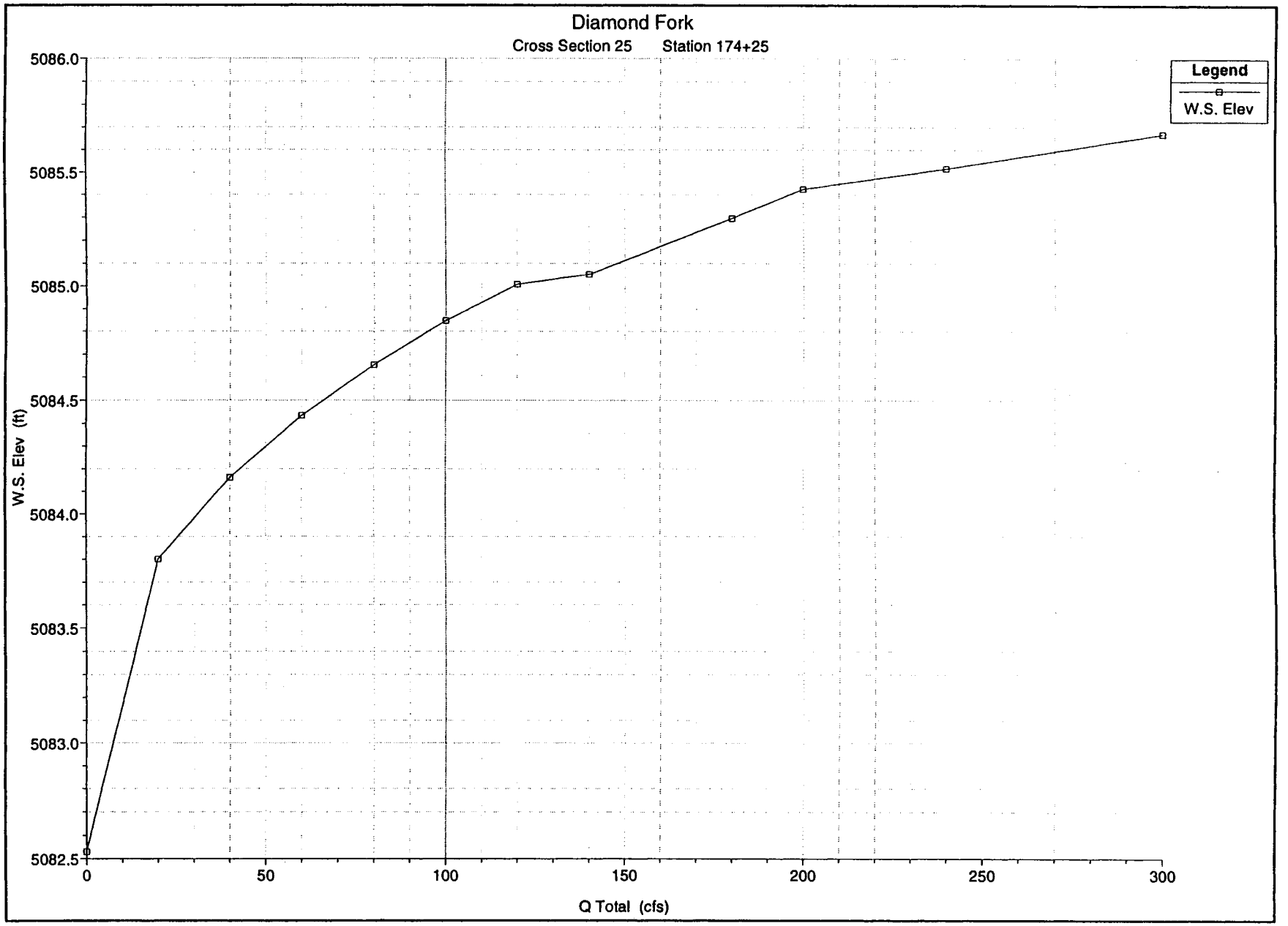

Diamond Fork
Cross Section 20 Station 137+90
Legend
W.S. Elev
W.S. Elev (ft)
5059.5
5059.0
5058.5
5058.0
5057.5
5057.0
5056.5
0
50
100
150
200
250
300
Q Total (cfs)

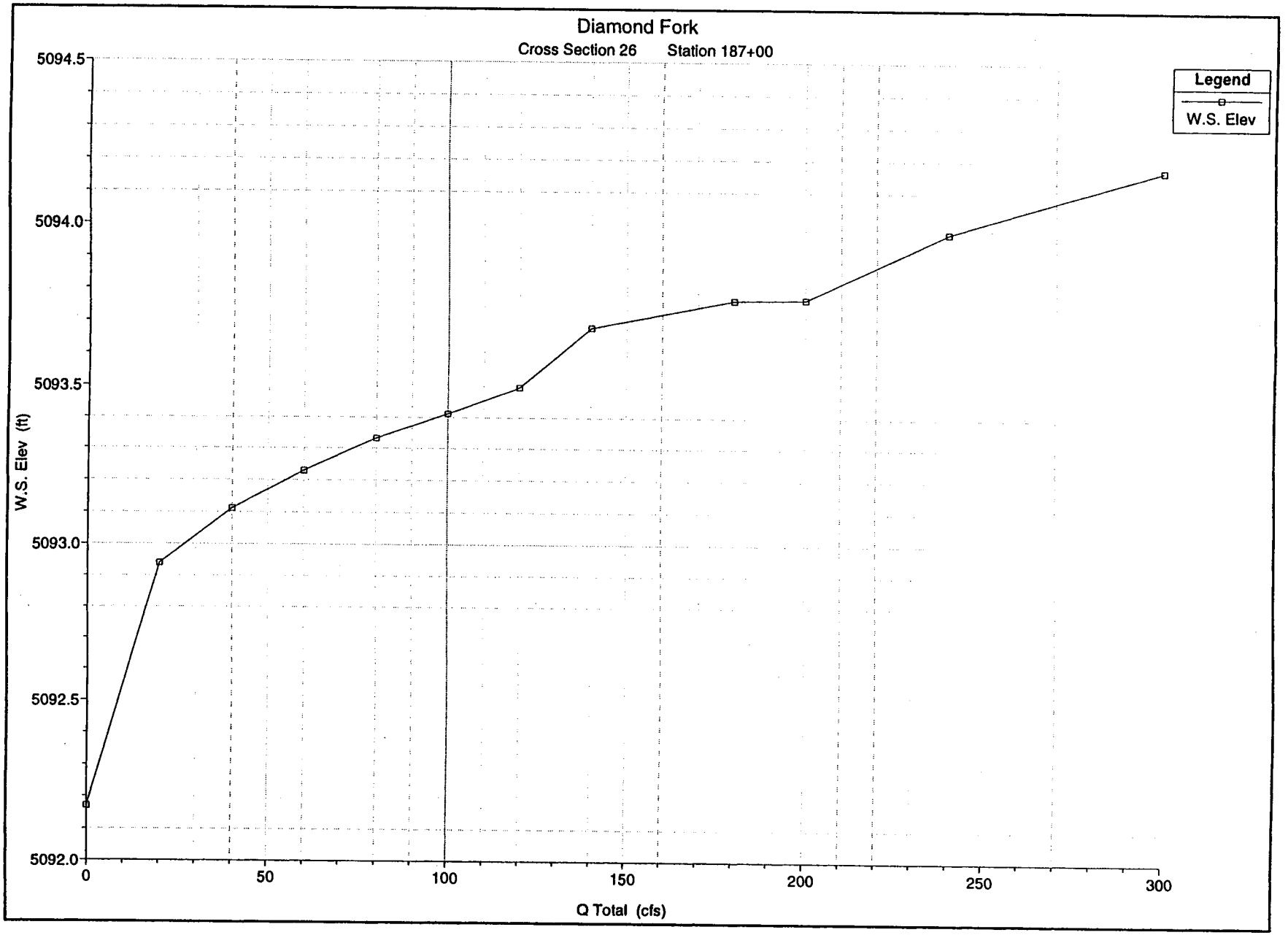

Diamond Fork
Cross Section 21 Station 151+40
Legend
W.S. Elev
W.S. Elev (ft)
5069.0
5068.5
5068.0
5067.5
5067.0
5066.5
5066.0
0
50
100
150
200
250
300
Q Total (cfs)

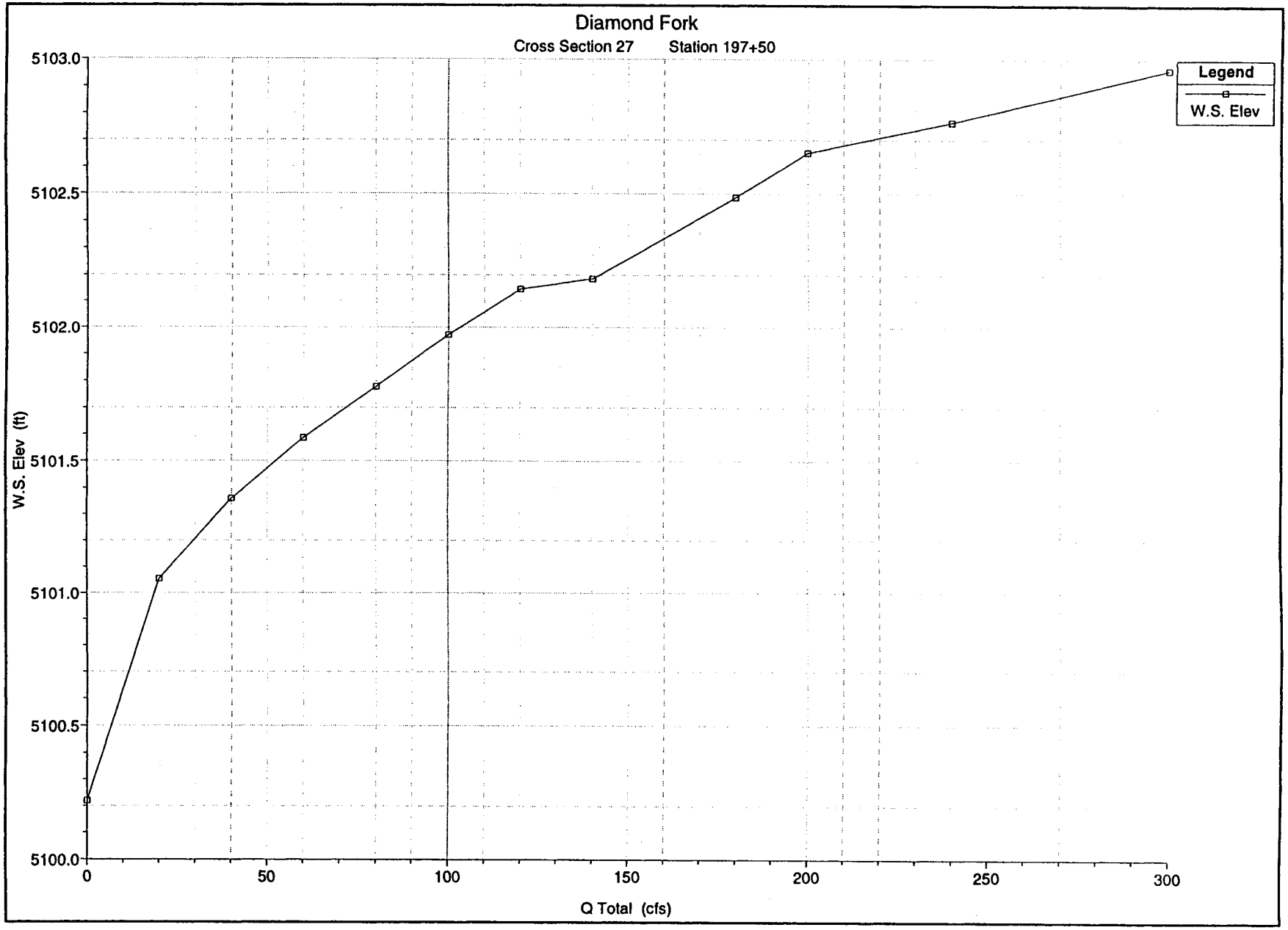

Diamond Fork
Cross Section 22 Station 157+90
Legend
W.S. Elev
W.S. Elev (ft)
5073.5
5073.0
5072.5
5072.0
5071.5
5071.0
5070.5
0
50
100
150
200
250
300
Q Total (cfs)

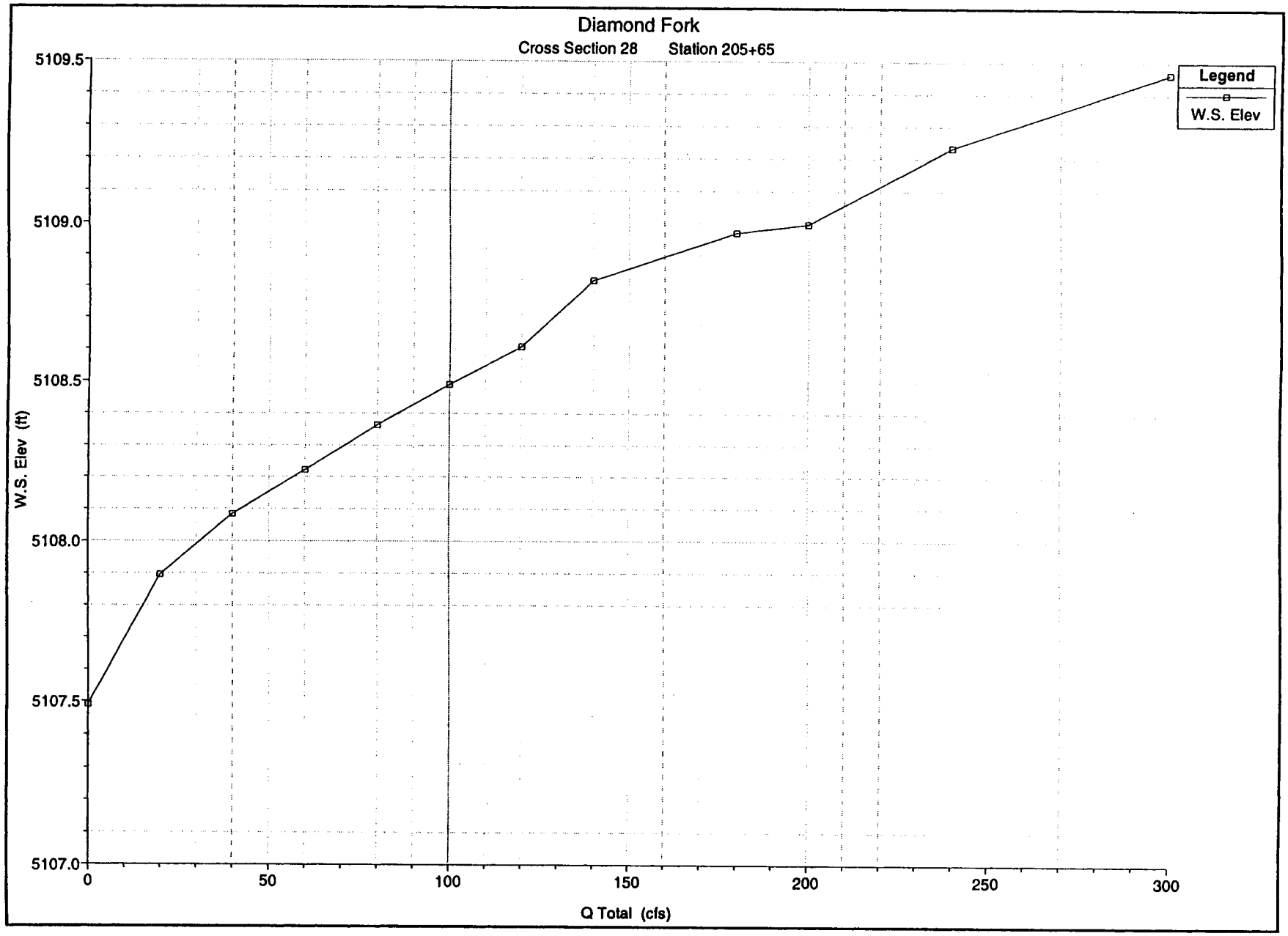

Diamond Fork
Cross Section 23 Station 160+40
Legend
W.S. Elev
W.S. Elev (ft)
5075.0
5074.5
5074.0
5073.5
5073.0
5072.5
5072.0
5071.5
0
50
100
150
200
250
300
Q Total (cfs)

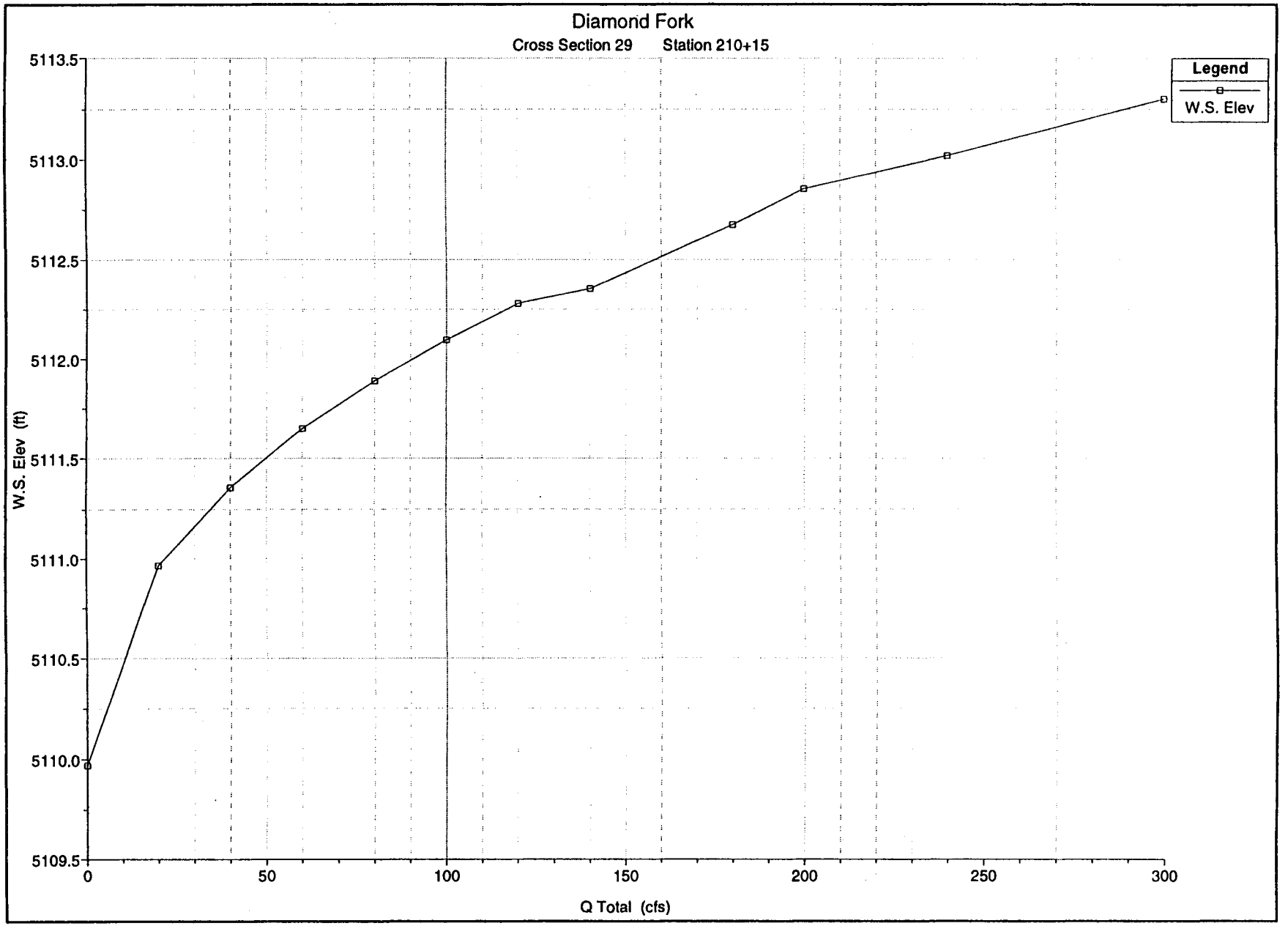

Diamond Fork
Cross Section 24 Station 163+80
Legend
W.S. Elev
W.S. Elev (ft)
5078.0
5077.5
5077.0
5076.5
5076.0
5075.5
5075.0
5074.5
5074.0
0
50
100
150
200
250
300
Q Total (cfs)

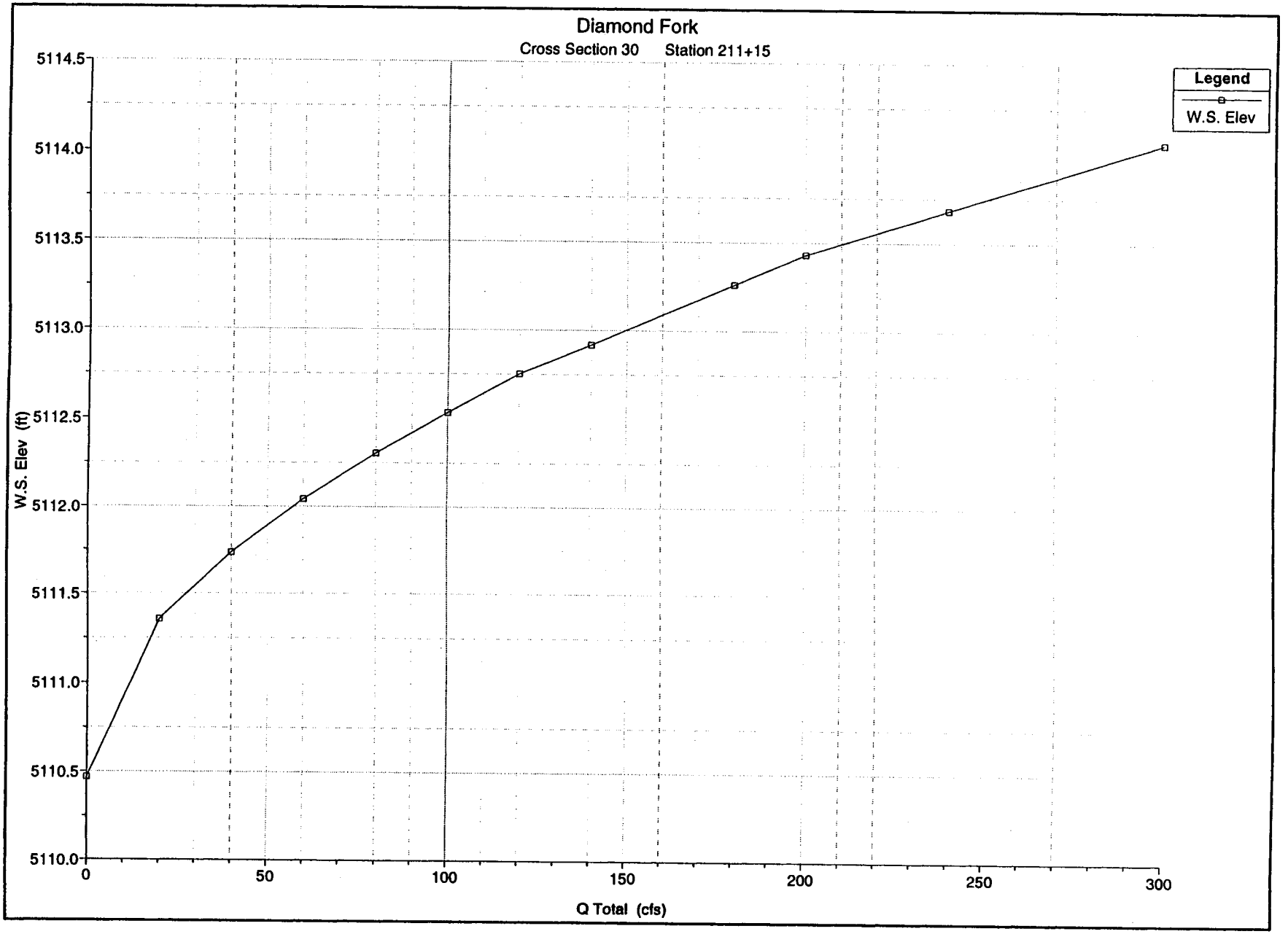

Diamond Fork
Cross Section 25 Station 174+25
Legend
W.S. Elev
W.S. Elev (ft)
5086.0
5085.5
5085.0
5084.5
5084.0
5083.5
5083.0
5082.5
0
50
100
150
200
250
300
Q Total (cfs)

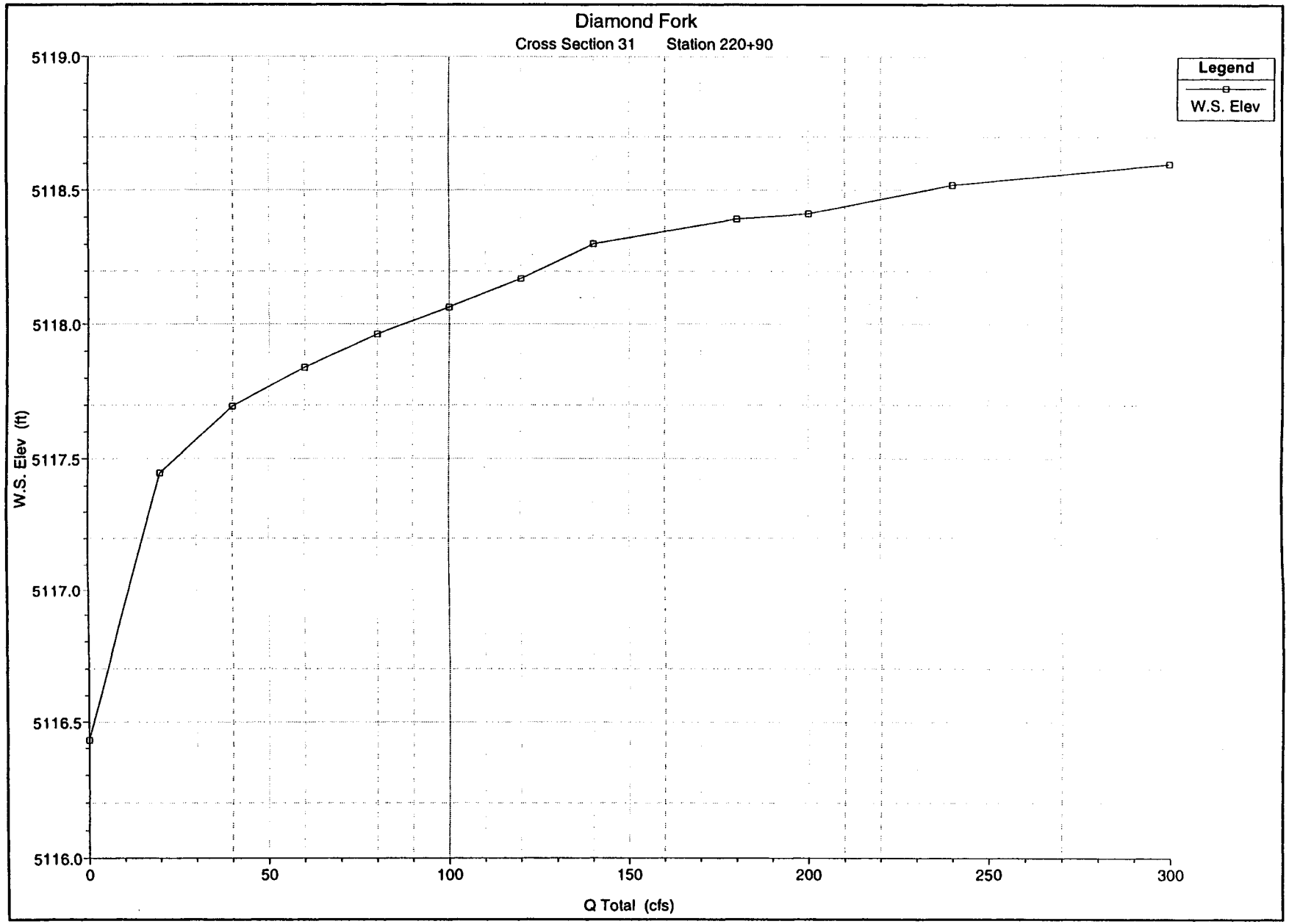

Diamond Fork
Cross Section 26 Station 187+00
Legend
W.S. Elev
W.S. Elev (ft)
5094.5
5094.0
5093.5
5093.0
5092.5
5092.0
0
50
100
150
200
250
300
Q Total (cfs)

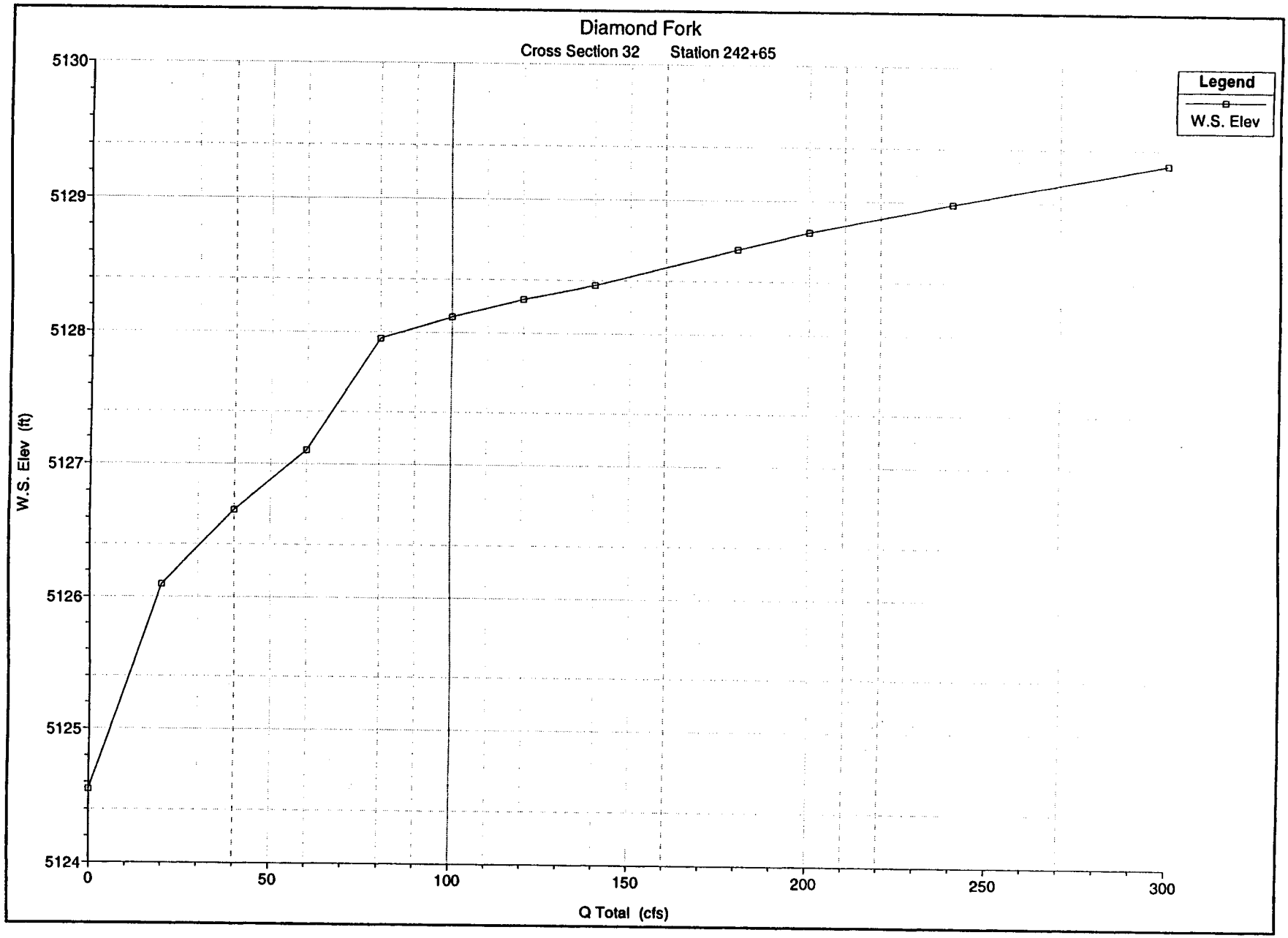

Diamond Fork
Cross Section 27 Station 197+50
Legend
W.S. Elev
W.S. Elev (ft)
5103.0
5102.5
5102.0
5101.5
5101.0
5100.5
5100.0
0
50
100
150
200
250
300
Q Total (cfs)

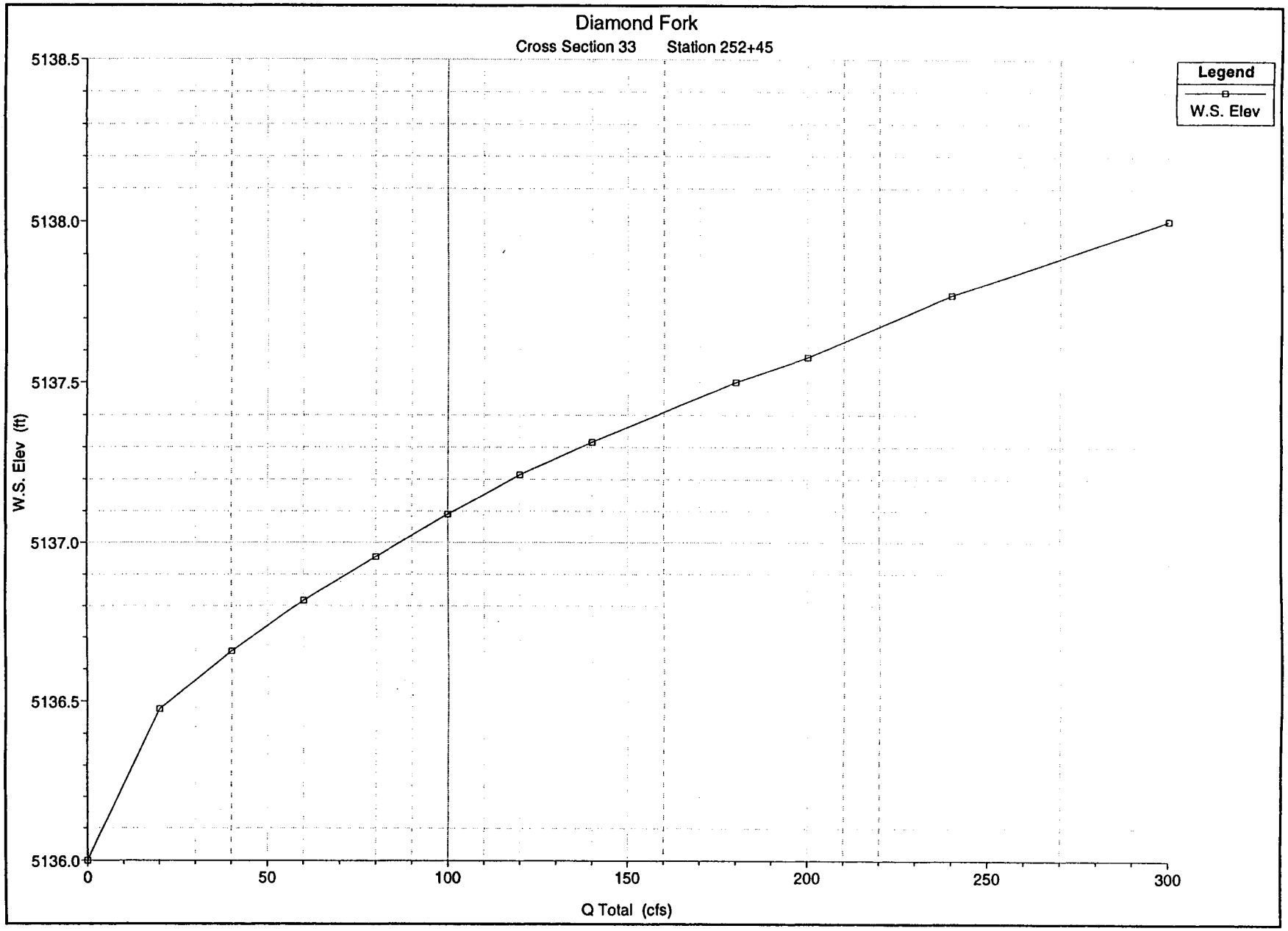

Diamond Fork
Cross Section 28 Station 205+65
Legend
W.S. Elev
W.S. Elev (ft)
5109.5
5109.0
5108.5
5108.0
5107.5
5107.0
0
50
100
150
200
250
300
Q Total (cfs)

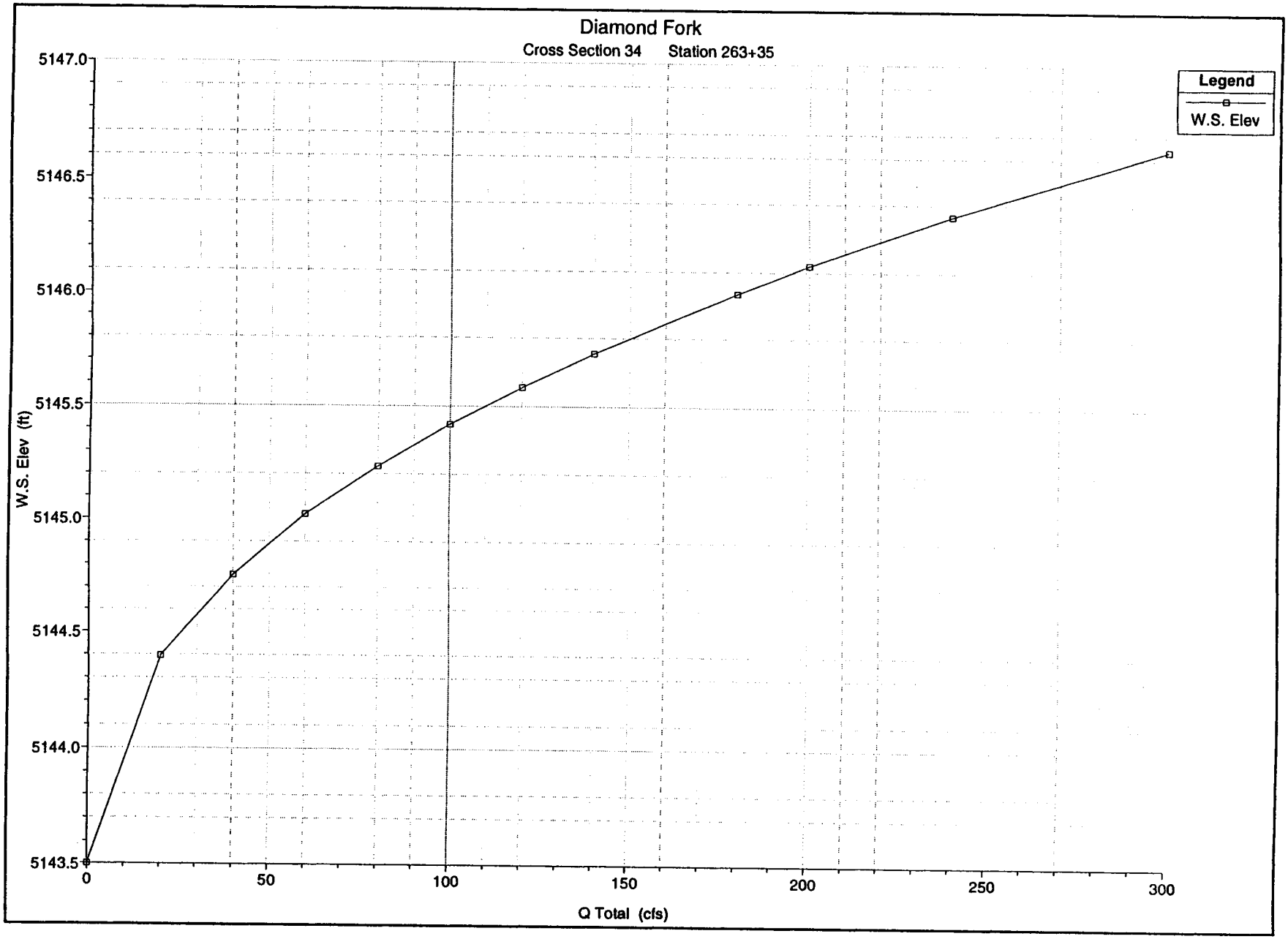

Diamond Fork
Cross Section 29 Station 210+15
Legend
W.S. Elev
W.S. Elev (ft)
5113.5
5113.0
5112.5
5112.0
5111.5
5111.0
5110.5
5110.0
5109.5
0
50
100
150
200
250
300
Q Total (cfs)

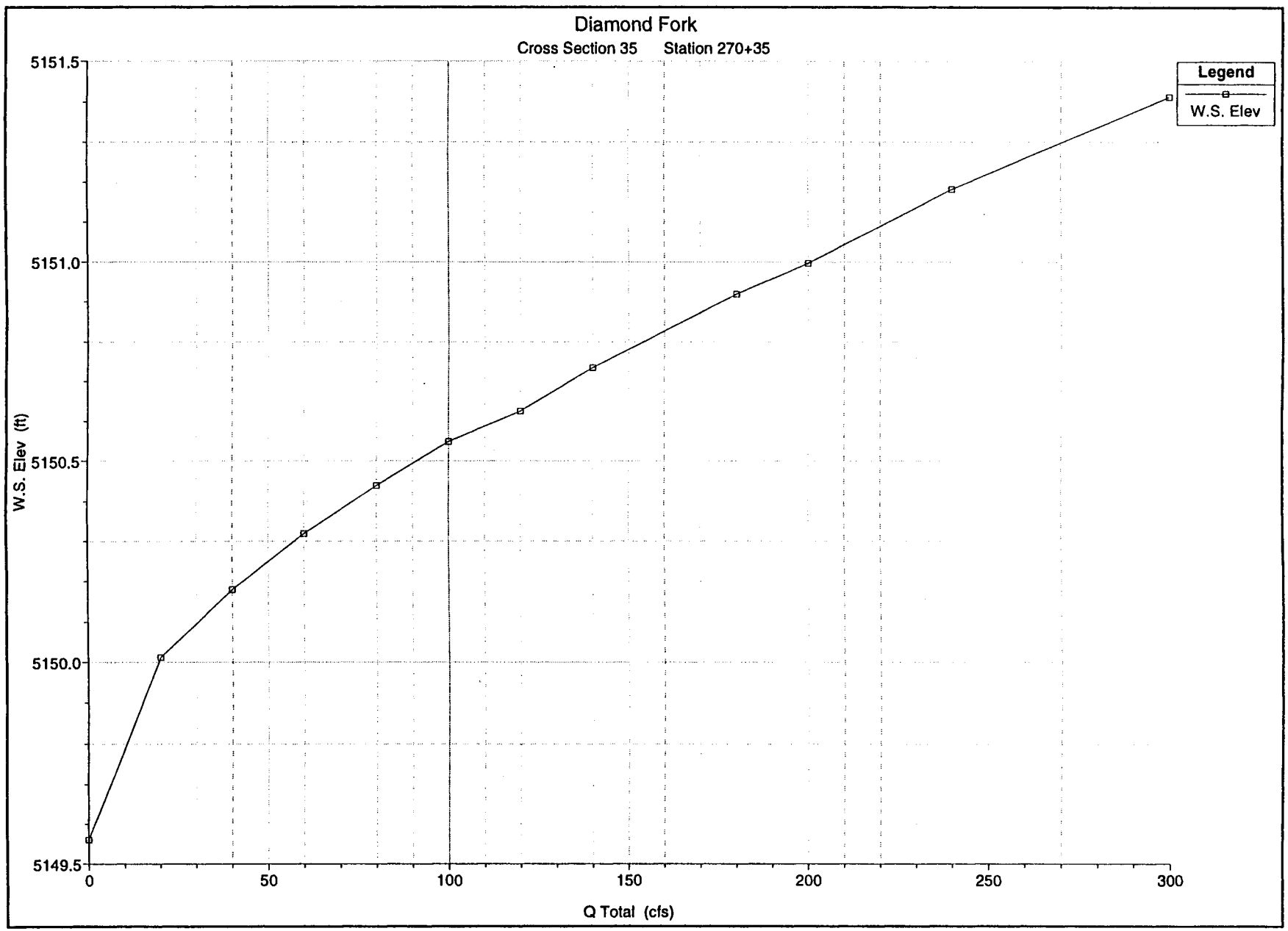

Diamond Fork
Cross Section 30 Station 211+15
Legend
W.S. Elev
W.S. Elev (ft)
5114.5
5114.0
5113.5
5113.0
5112.5
5112.0
5111.5
5111.0
5110.5
5110.0
0
50
100
150
200
250
300
Q Total (cfs)

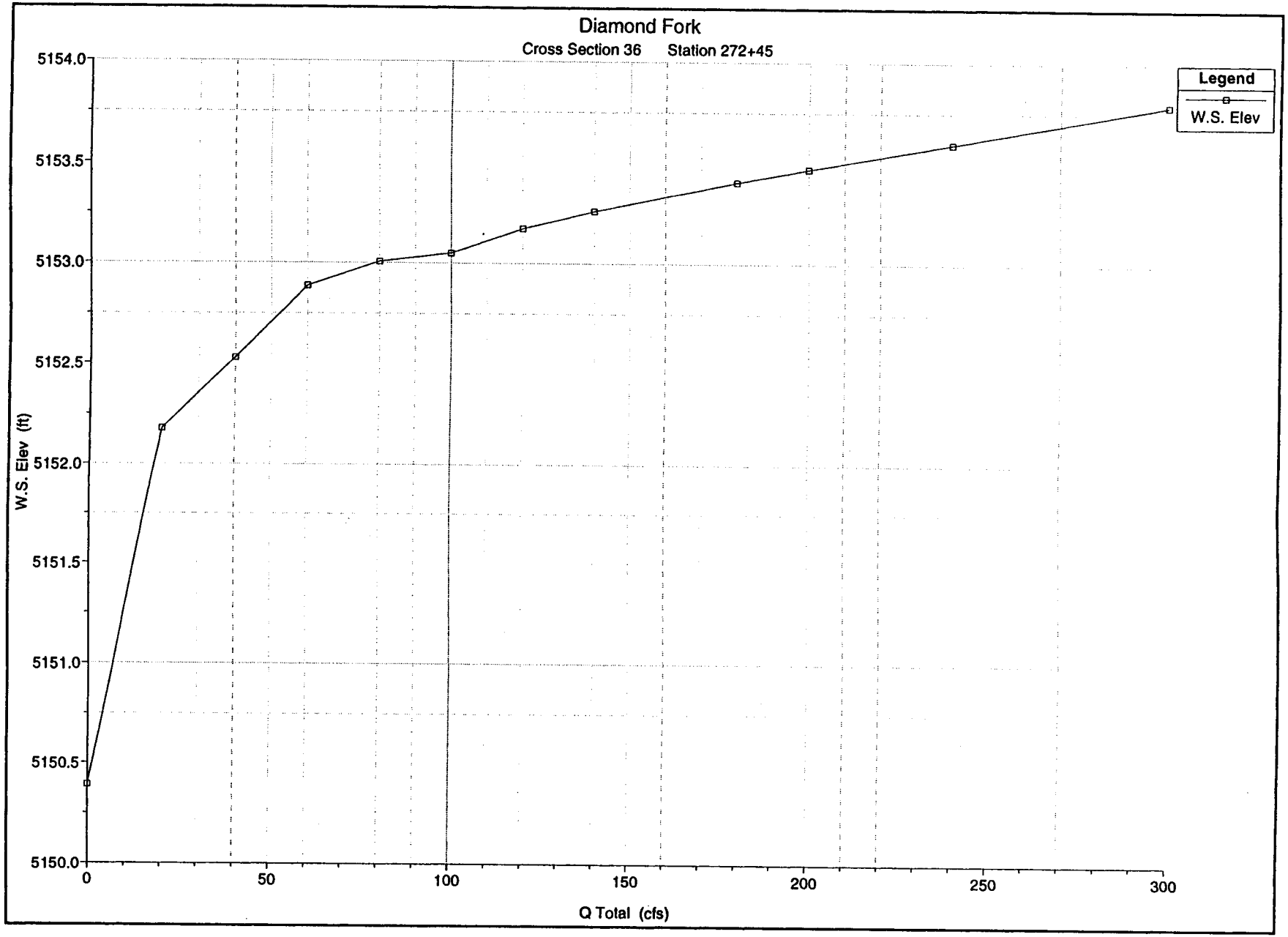

Diamond Fork
Cross Section 31 Station 220+90
Legend
W.S. Elev
W.S. Elev (ft)
5119.0
5118.5
5118.0
5117.5
5117.0
5116.5
5116.0
0
50
100
150
200
250
300
Q Total (cfs)

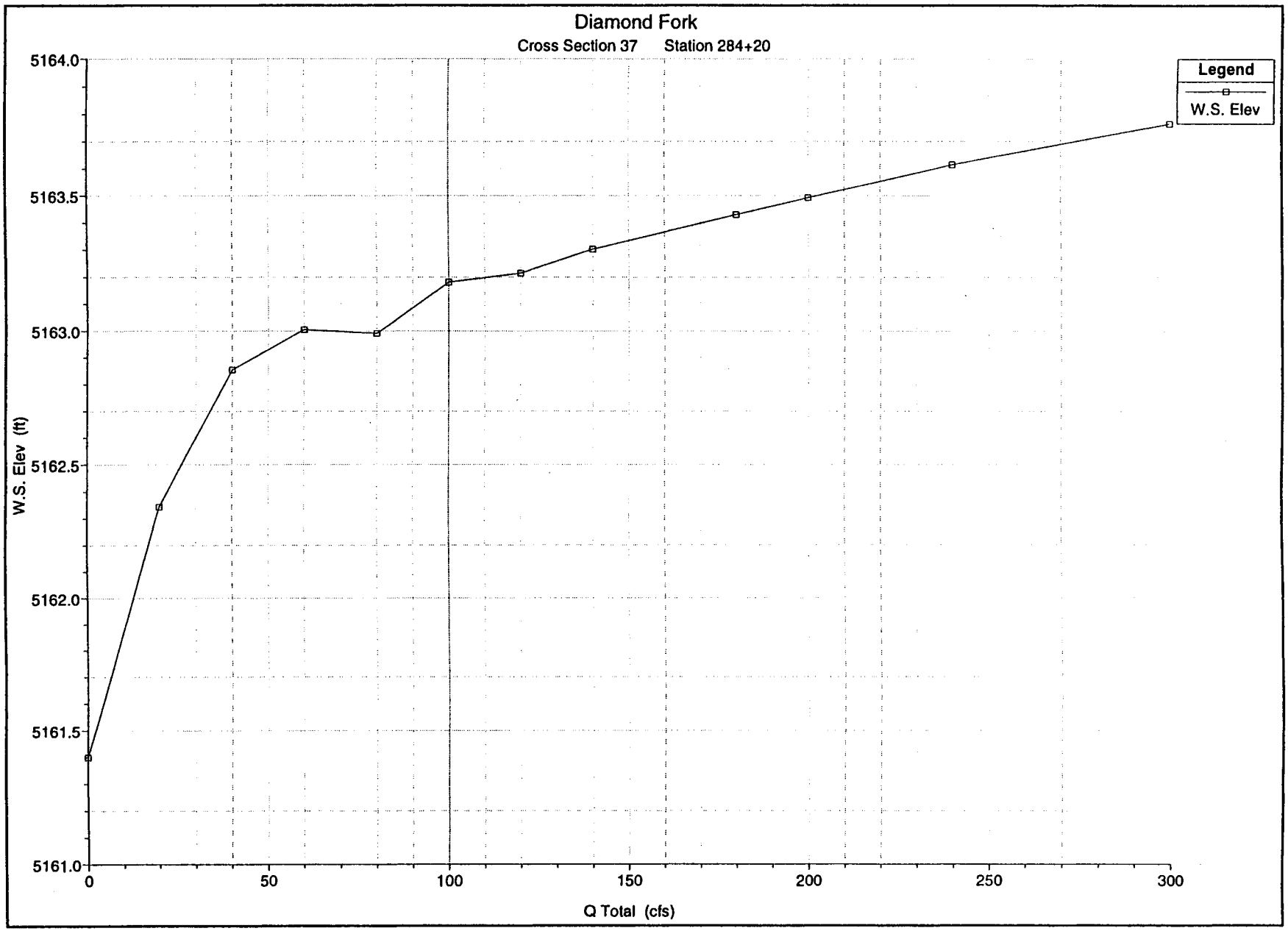

Diamond Fork
Cross Section 32 Station 242+65
Legend
W.S. Elev
W.S. Elev (ft)
5130
5129
5128
5127
5126
5125
5124
0
50
100
150
200
250
300
Q Total (cfs)

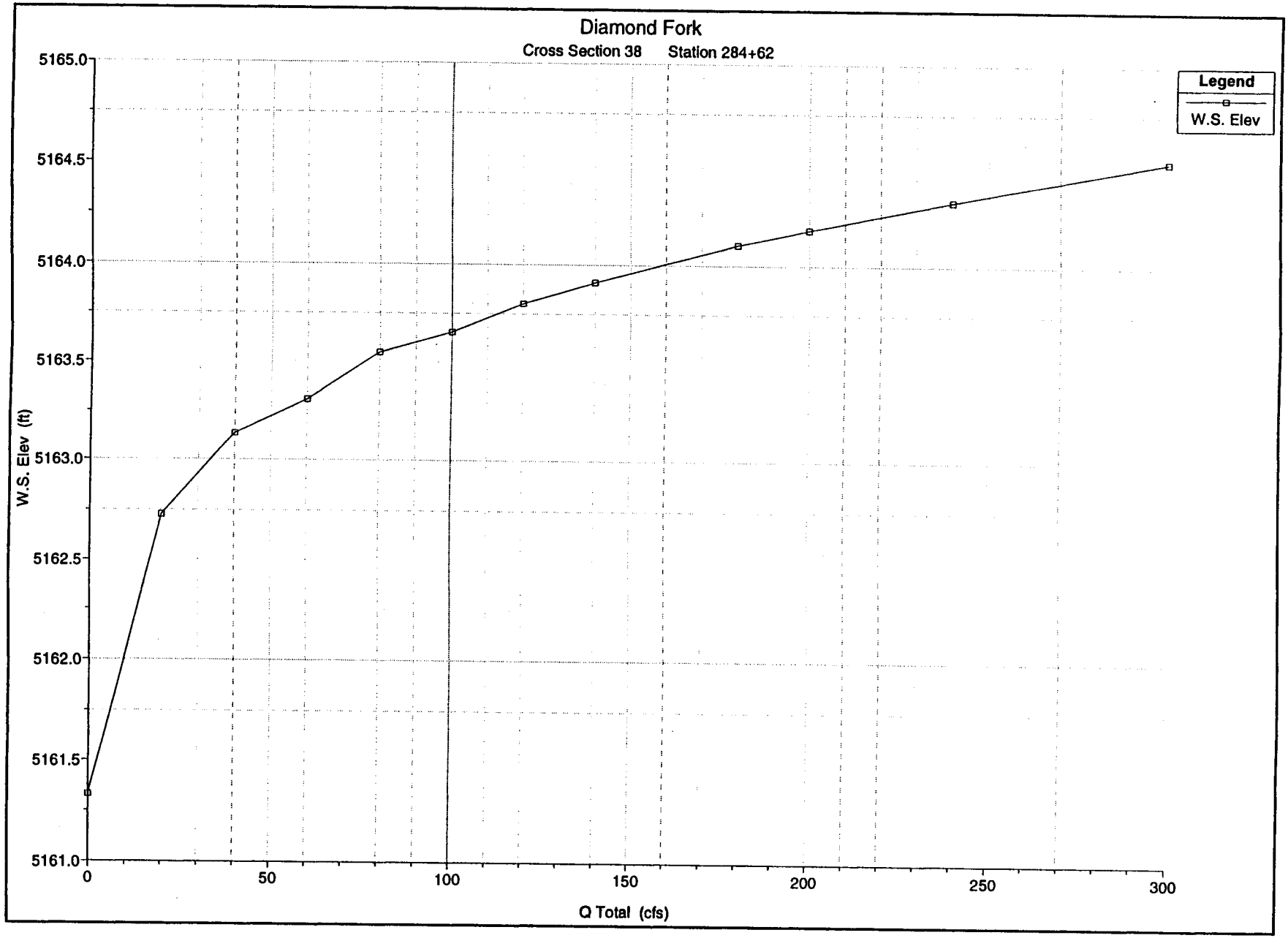

Diamond Fork
Cross Section 33 Station 252+45
Legend
W.S. Elev
W.S. Elev (ft)
5138.5
5138.0
5137.5
5137.0
5136.5
5136.0
0
50
100
150
200
250
300
Q Total (cfs)

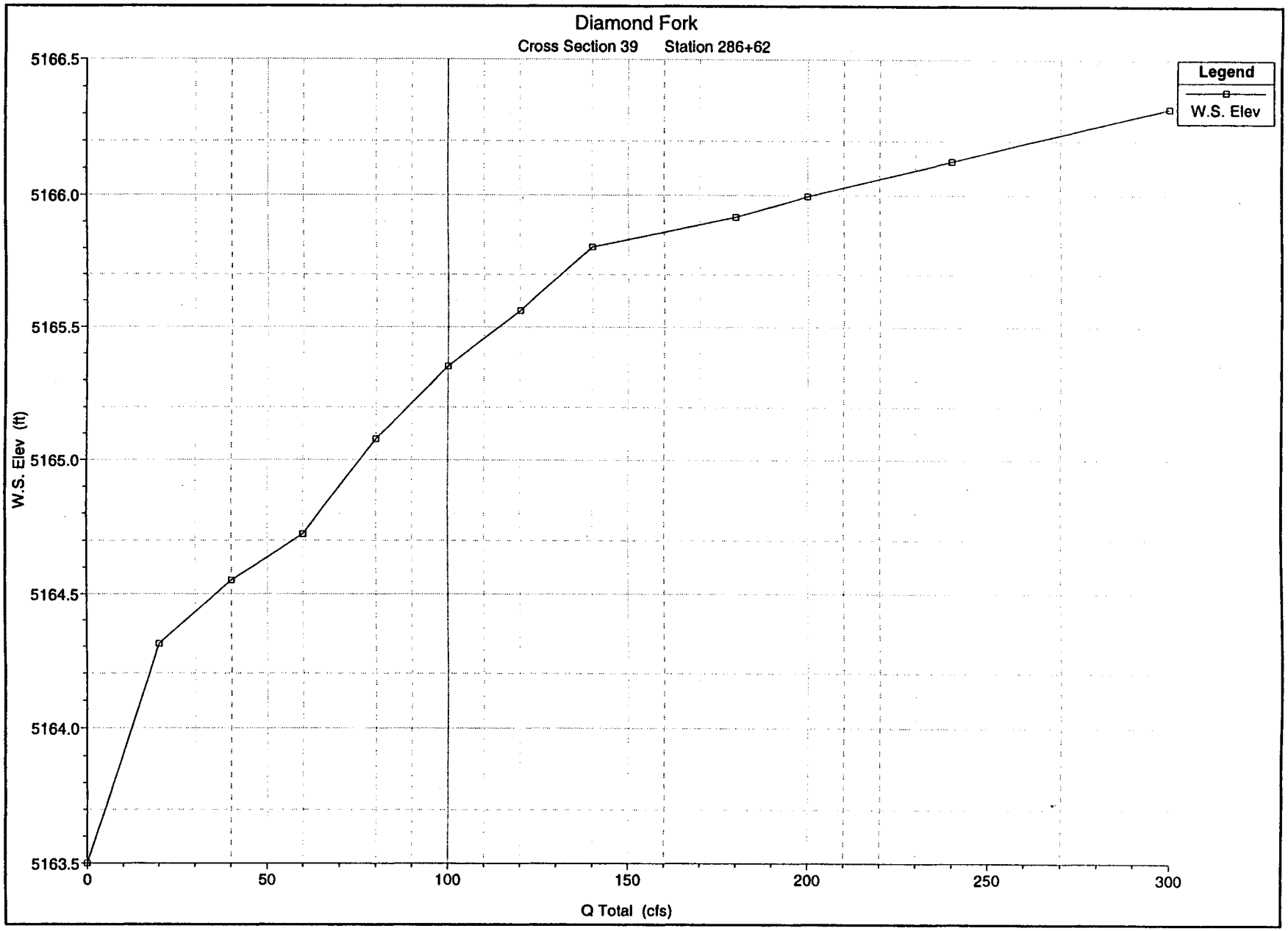

Diamond Fork
Cross Section 34 Station 263+35
Legend
W.S. Elev
W.S. Elev (ft)
5147.0
5146.5
5146.0
5145.5
5145.0
5144.5
5144.0
5143.5
0
50
100
150
200
250
300
Q Total (cfs)

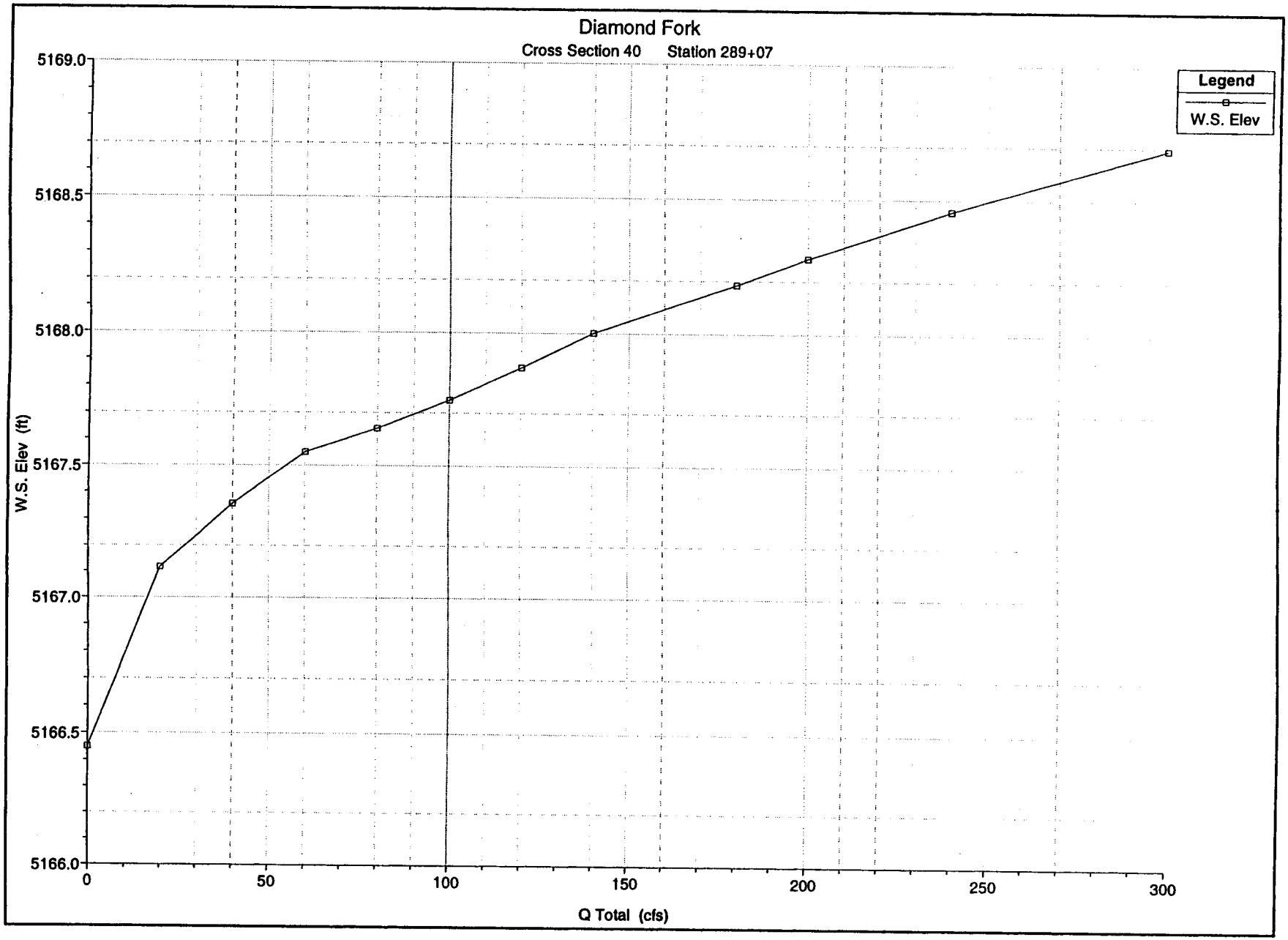

Diamond Fork
Cross Section 35 Station 270+35
Legend
W.S. Elev
W.S. Elev (ft)
5151.5
5151.0
5150.5
5150.0
5149.5
0
50
100
150
200
250
300
Q Total (cfs)

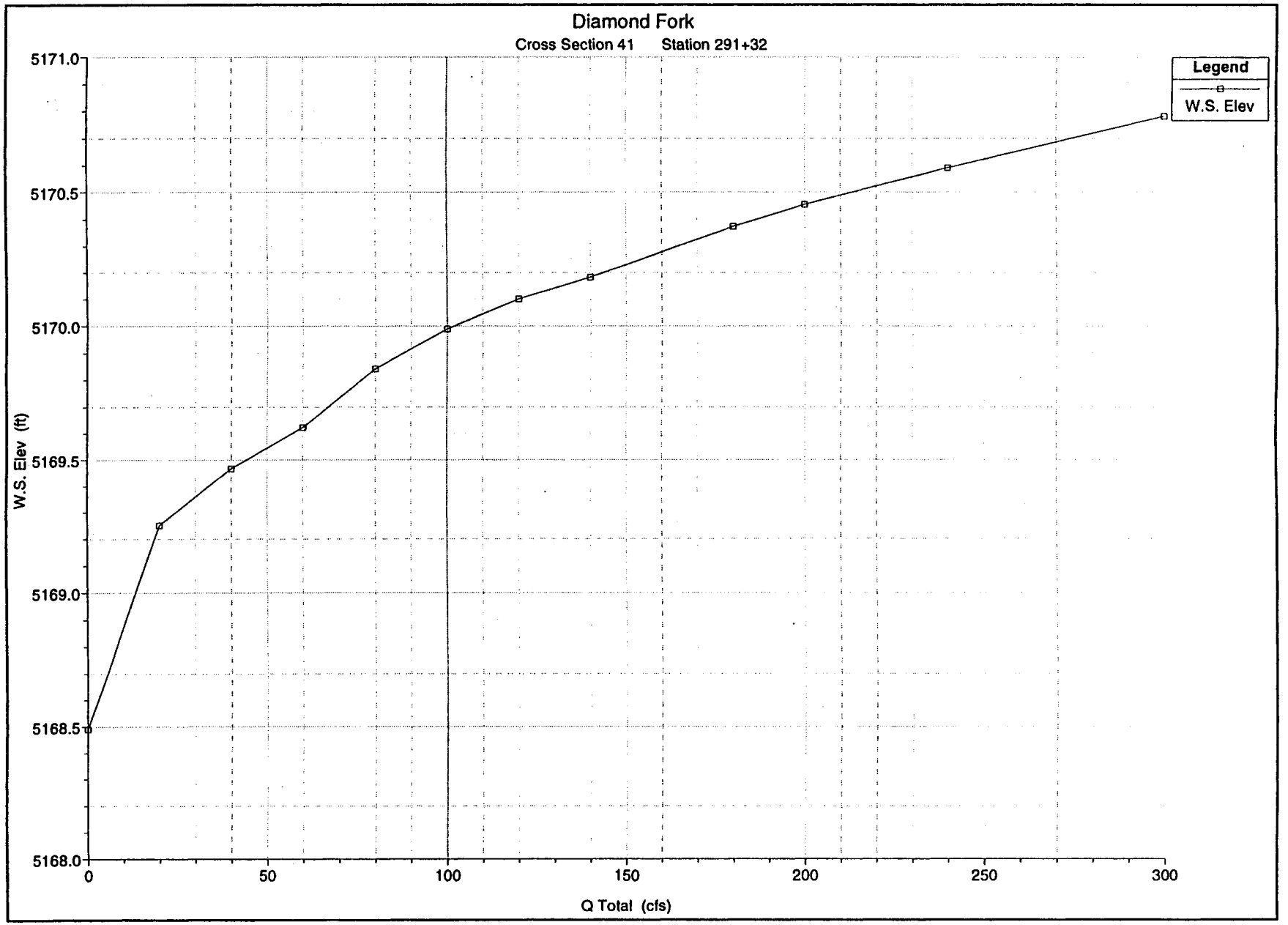

Diamond Fork
Cross Section 36 Station 272+45
Legend
W.S. Elev
W.S. Elev (ft)
5154.0
5153.5
5153.0
5152.5
5152.0
5151.5
5151.0
5150.5
5150.0
0
50
100
150
200
250
300
Q Total (cfs)

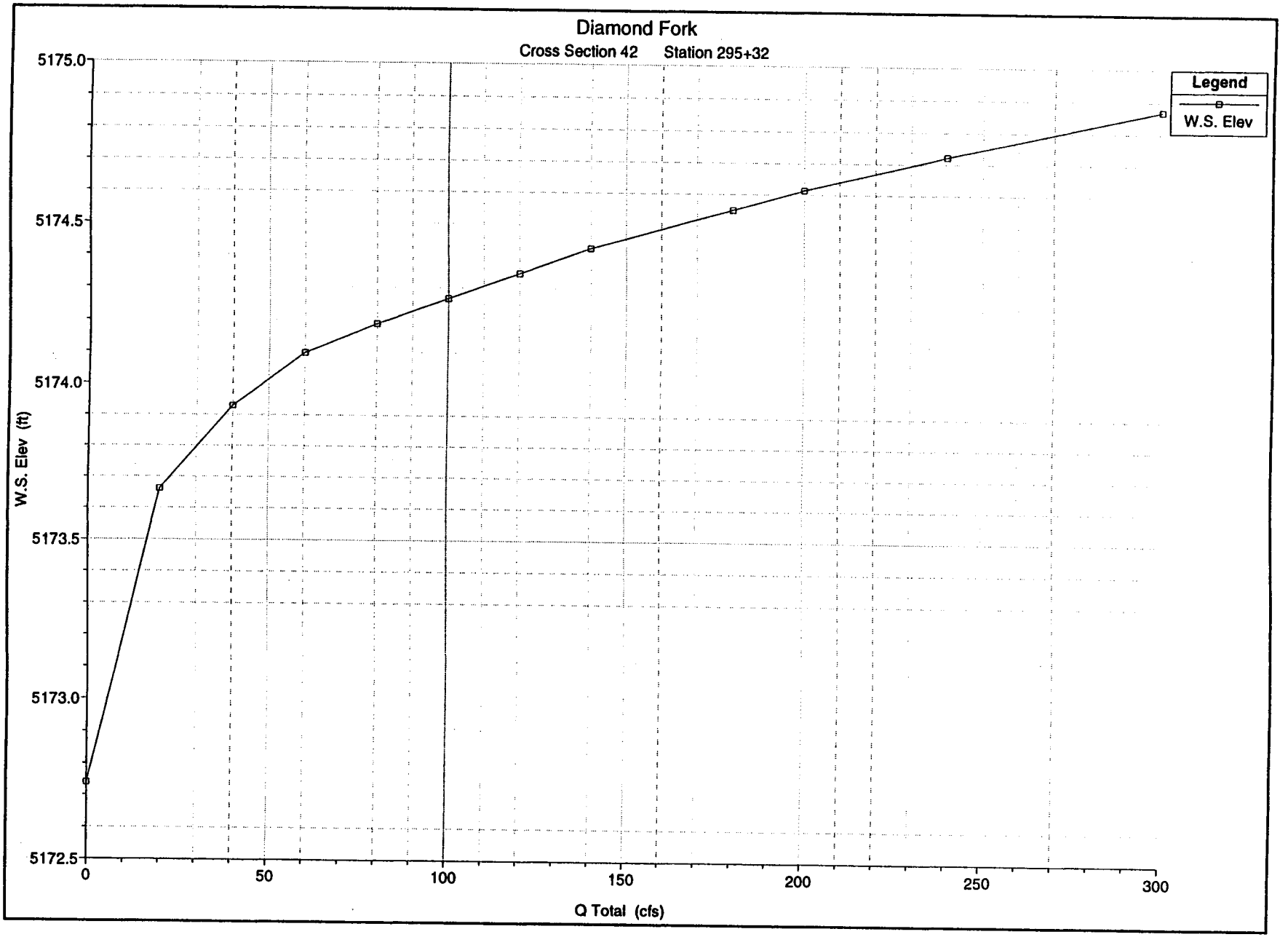

Diamond Fork
Cross Section 37 Station 284+20
Legend
W.S. Elev
W.S. Elev (ft)
5164.0
5163.5
5163.0
5162.5
5162.0
5161.5
5161.0
0
50
100
150
200
250
300
Q Total (cfs)

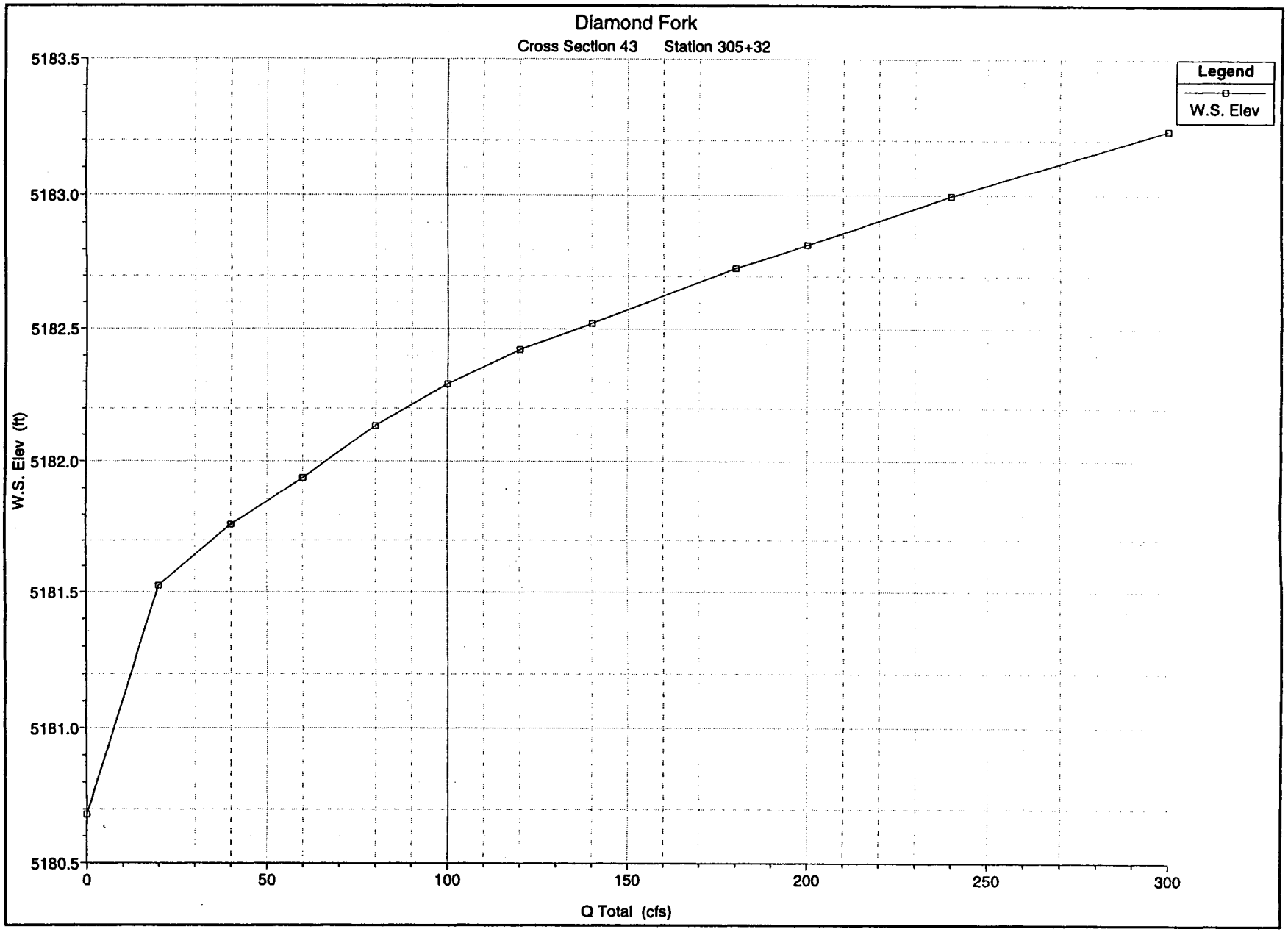

Diamond Fork
Cross Section 38 Station 284+62
Legend
W.S. Elev
W.S. Elev (ft)
5165.0
5164.5
5164.0
5163.5
5163.0
5162.5
5162.0
5161.5
5161.0
0
50
100
150
200
250
300
Q Total (cfs)

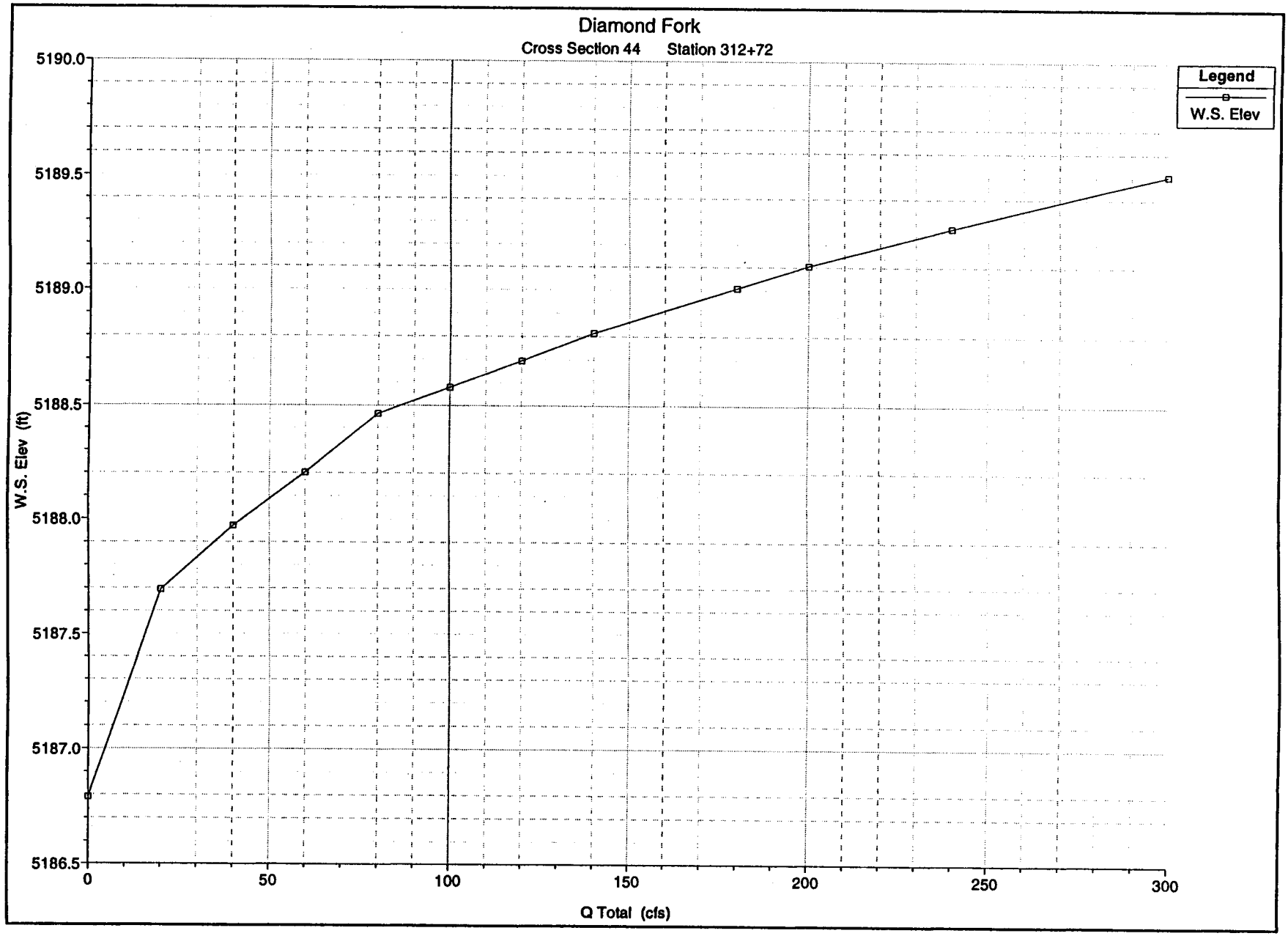

Diamond Fork
Cross Section 39 Station 286+62
Legend
W.S. Elev
W.S. Elev (ft)
5166.5
5166.0
5165.5
5165.0
5164.5
5164.0
5163.5
0
50
100
150
200
250
300
Q Total (cfs)

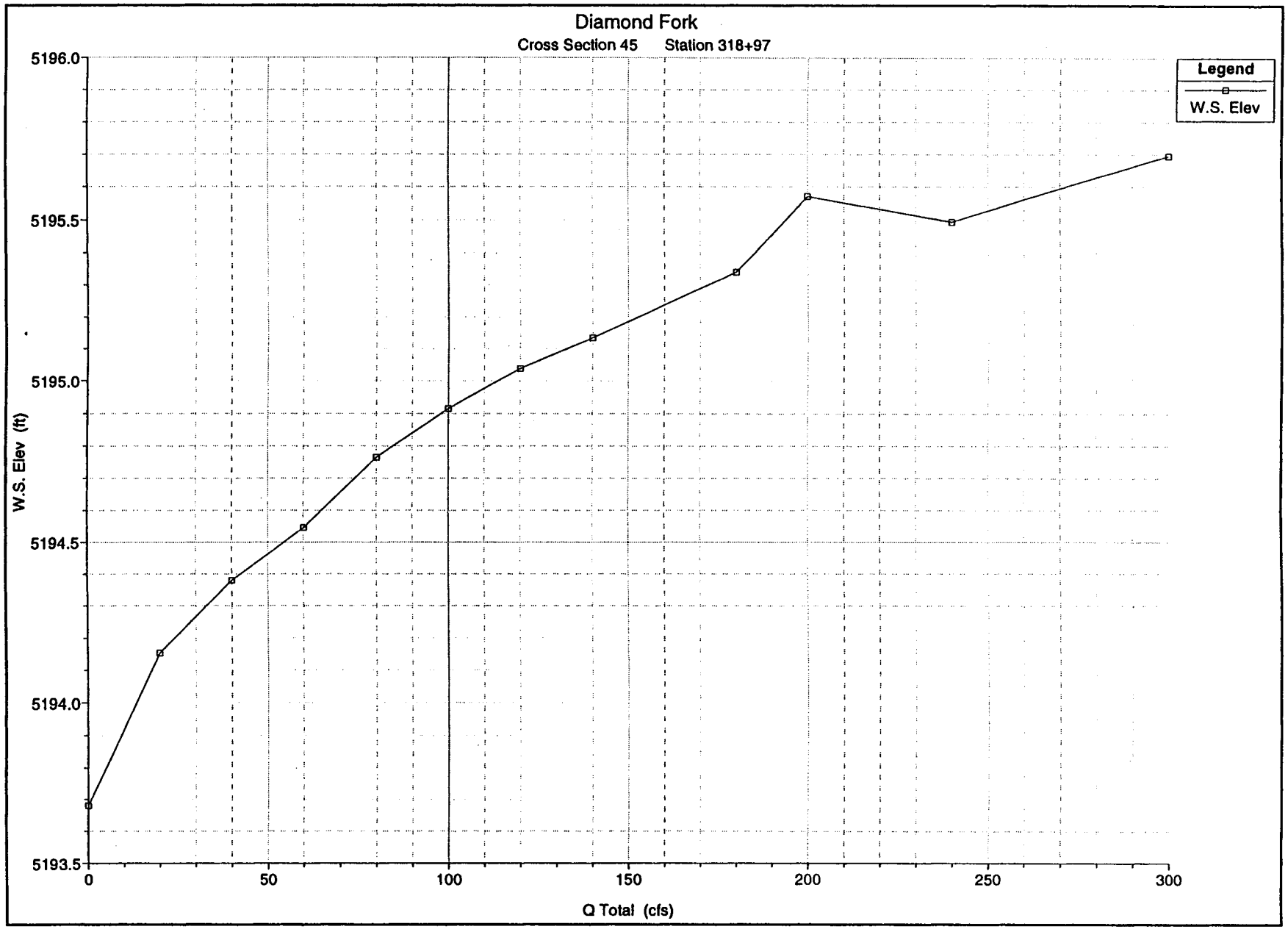

Diamond Fork
Cross Section 40 Station 289+07
Legend
W.S. Elev
W.S. Elev (ft)
5169.0
5168.5
5168.0
5167.5
5167.0
5166.5
5166.0
0
50
100
150
200
250
300
Q Total (cfs)

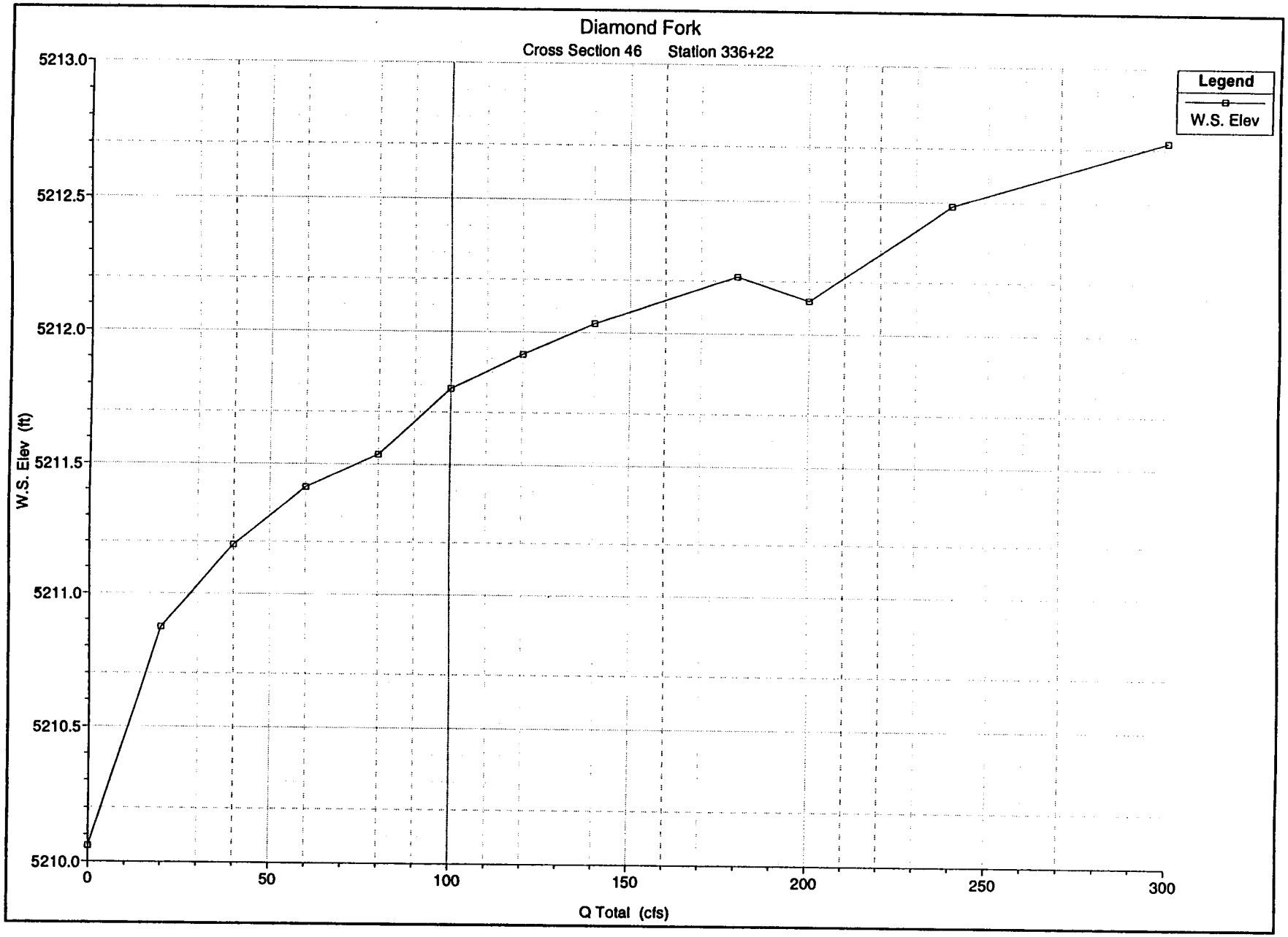

Diamond Fork
Cross Section 41 Station 291+32
Legend
W.S. Elev
W.S. Elev (ft)
5171.0
5170.5
5170.0
5169.5
5169.0
5168.5
5168.0
0
50
100
150
200
250
300
Q Total (cfs)


Diamond Fork
Cross Section 42 Station 295+32
Legend
W.S. Elev
W.S. Elev (ft)
5175.0
5174.5
5174.0
5173.5
5173.0
5172.5
0
50
100
150
200
250
300
Q Total (cfs)

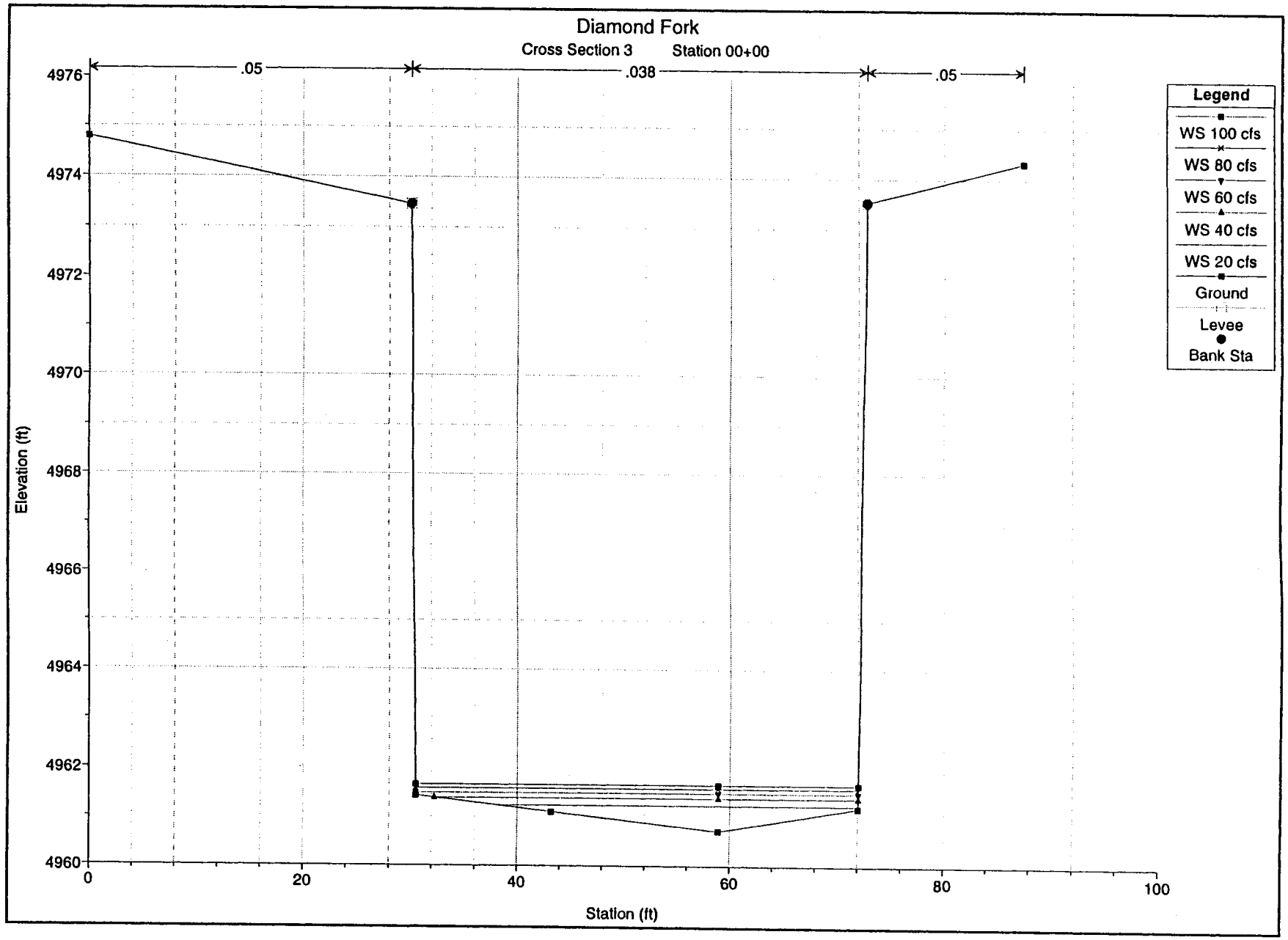

Diamond Fork
Cross Section 43 Station 305+32
Legend
W.S. Elev
W.S. Elev (ft)
5183.5
5183.0
5182.5
5182.0
5181.5
5181.0
5180.5
0
50
100
150
200
250
300
Q Total (cfs)

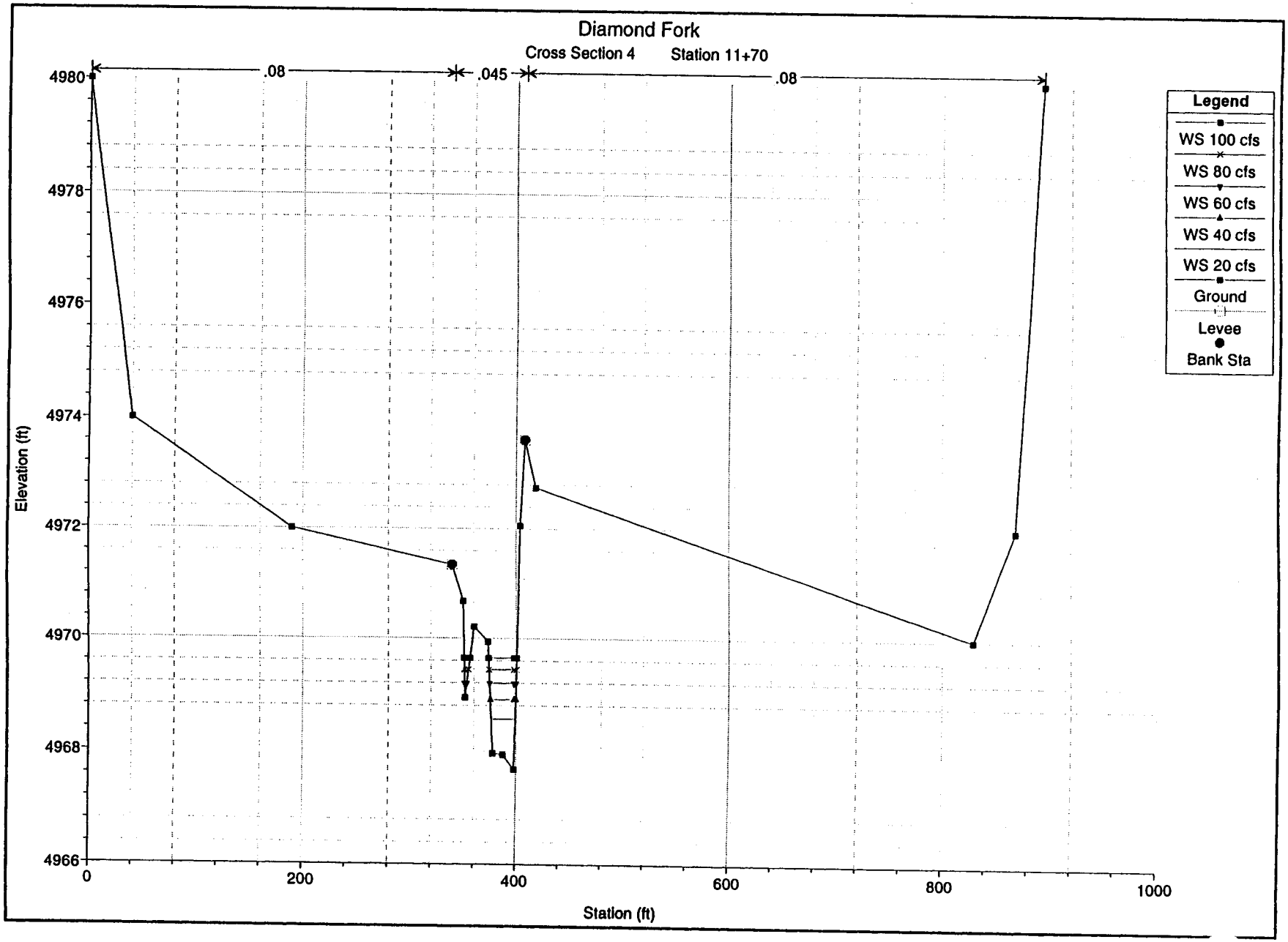

Diamond Fork
Cross Section 44 Station 312+72
Legend
W.S. Elev
W.S. Elev (ft)
5190.0
5189.5
5189.0
5188.5
5188.0
5187.5
5187.0
5186.5
0
50
100
150
200
250
300
Q Total (cfs)

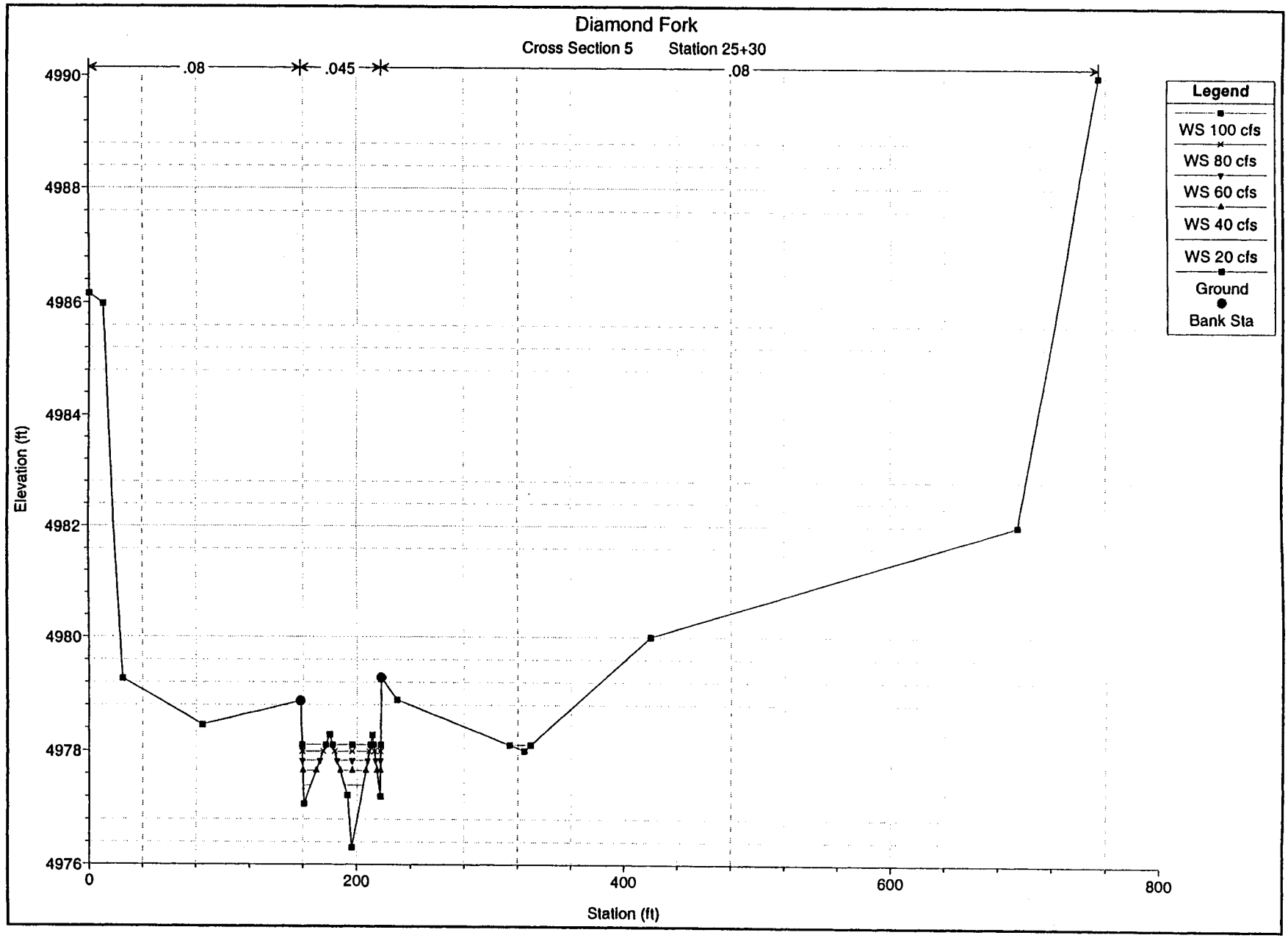

Diamond Fork
Cross Section 45 Station 318+97
Legend
W.S. Elev
W.S. Elev (ft)
5196.0
5195.5
5195.0
5194.5
5194.0
5193.5
0
50
100
150
200
250
300
Q Total (cfs)

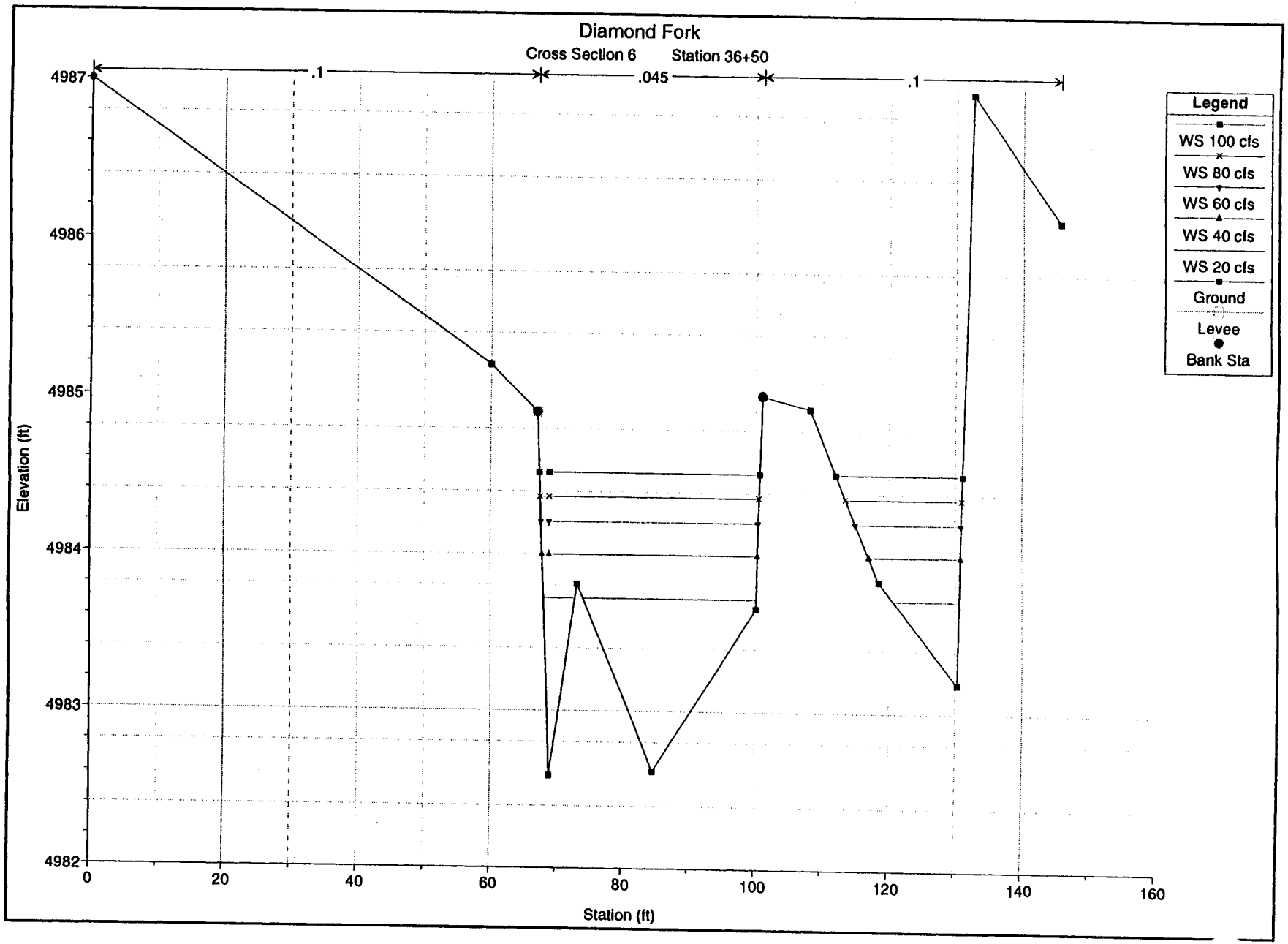

Diamond Fork
Cross Section 46 Station 336+22
Legend
W.S. Elev
W.S. Elev (ft)
5213.0
5212.5
5212.0
5211.5
5211.0
5210.5
5210.0
0
50
100
150
200
250
300
Q Total (cfs)

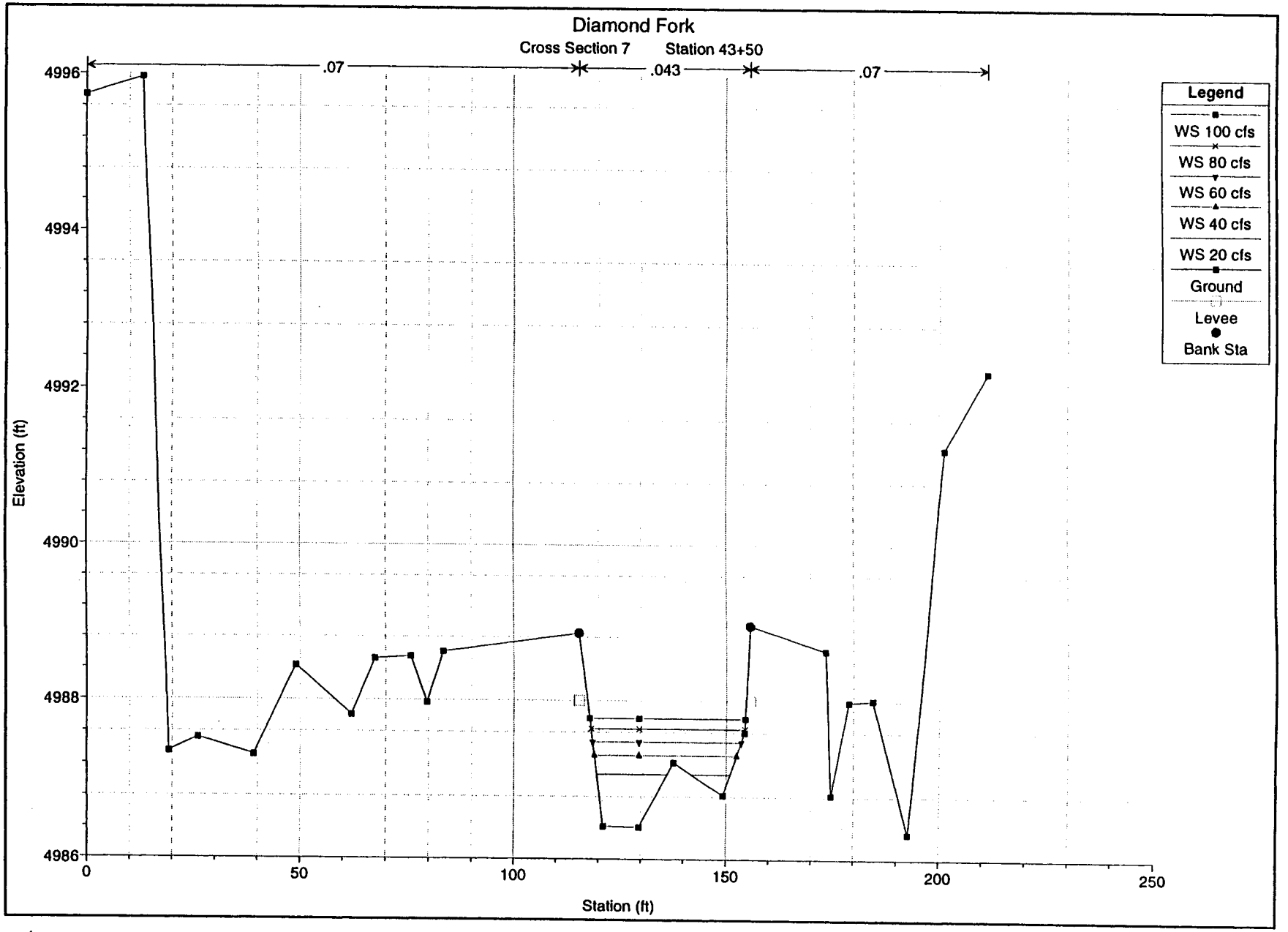
HEC-RAS CROSS SECTIONS AND WATER SURFACE ELEVATIONS (20 - 100 CFS)

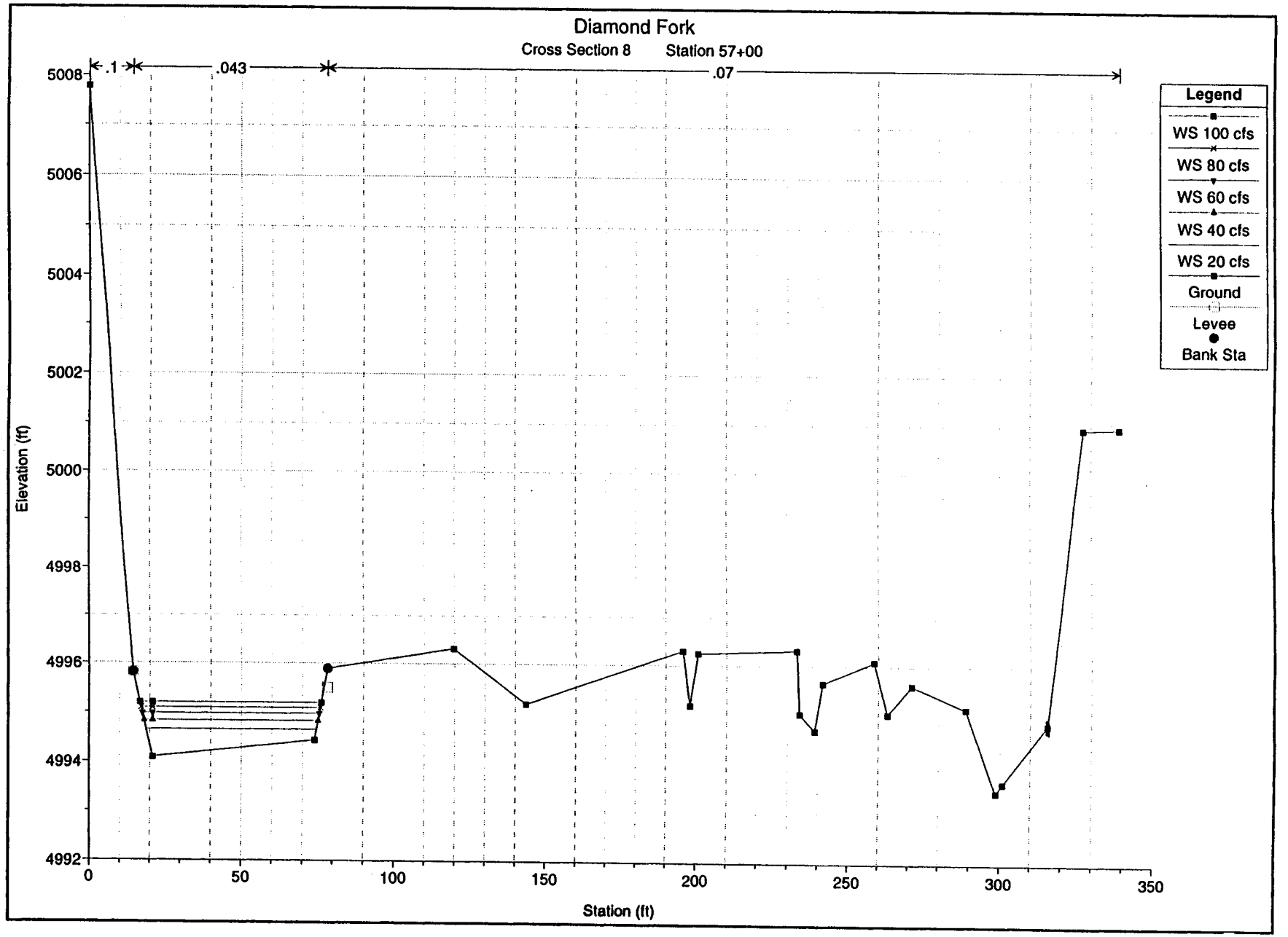

Diamond Fork
Cross Section 3
Station 00+00
.05
.038
.05
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
4976
4974
4972
4970
4968
4966
4964
4962
4960
0
20
40
60
80
100
Station (ft)

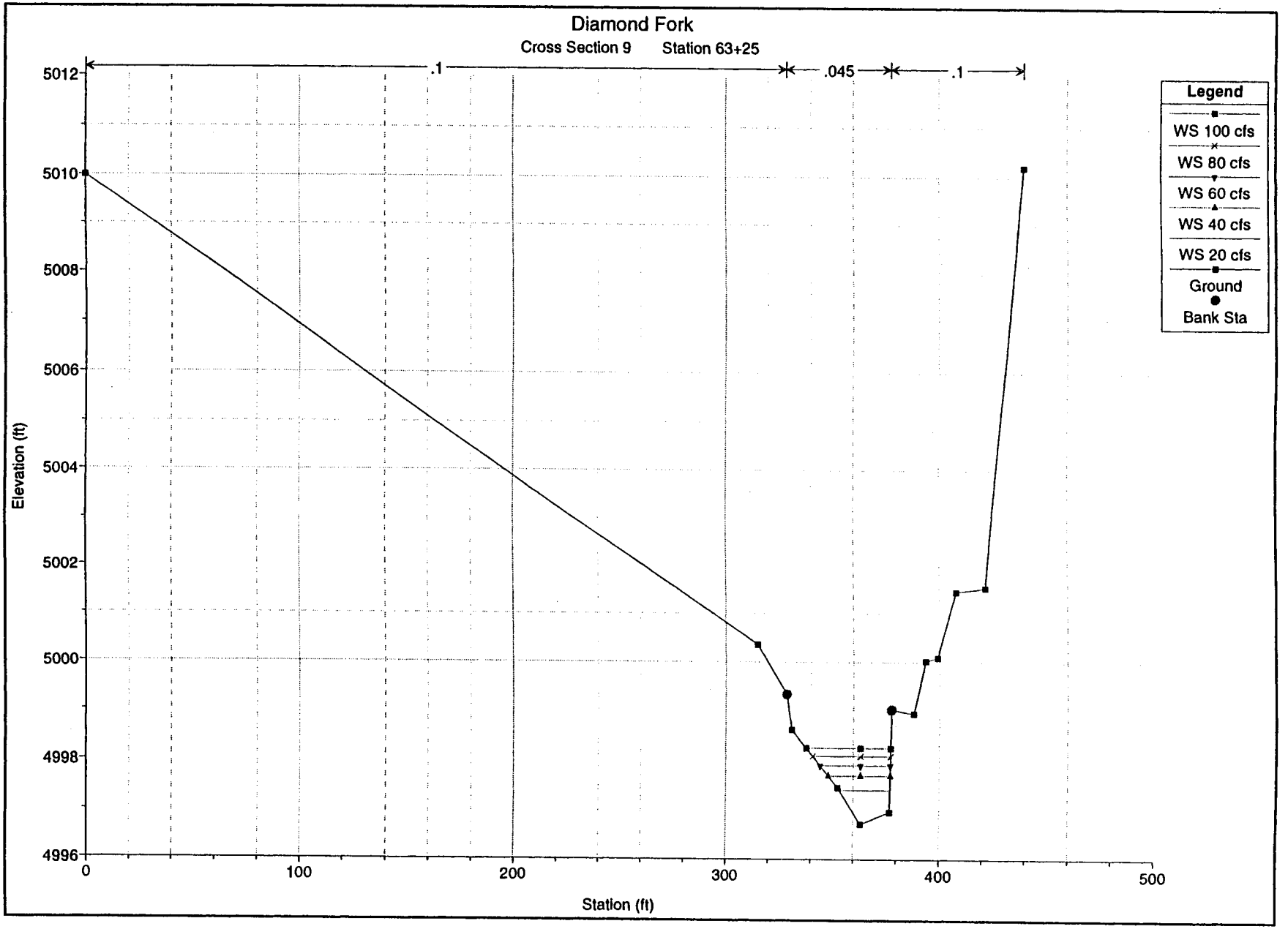

Diamond Fork
Cross Section 4
Station 11+70
.08
.045
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
4980
4978
4976
4974
4972
4970
4968
4966
0
200
400
600
800
1000
Station (ft)

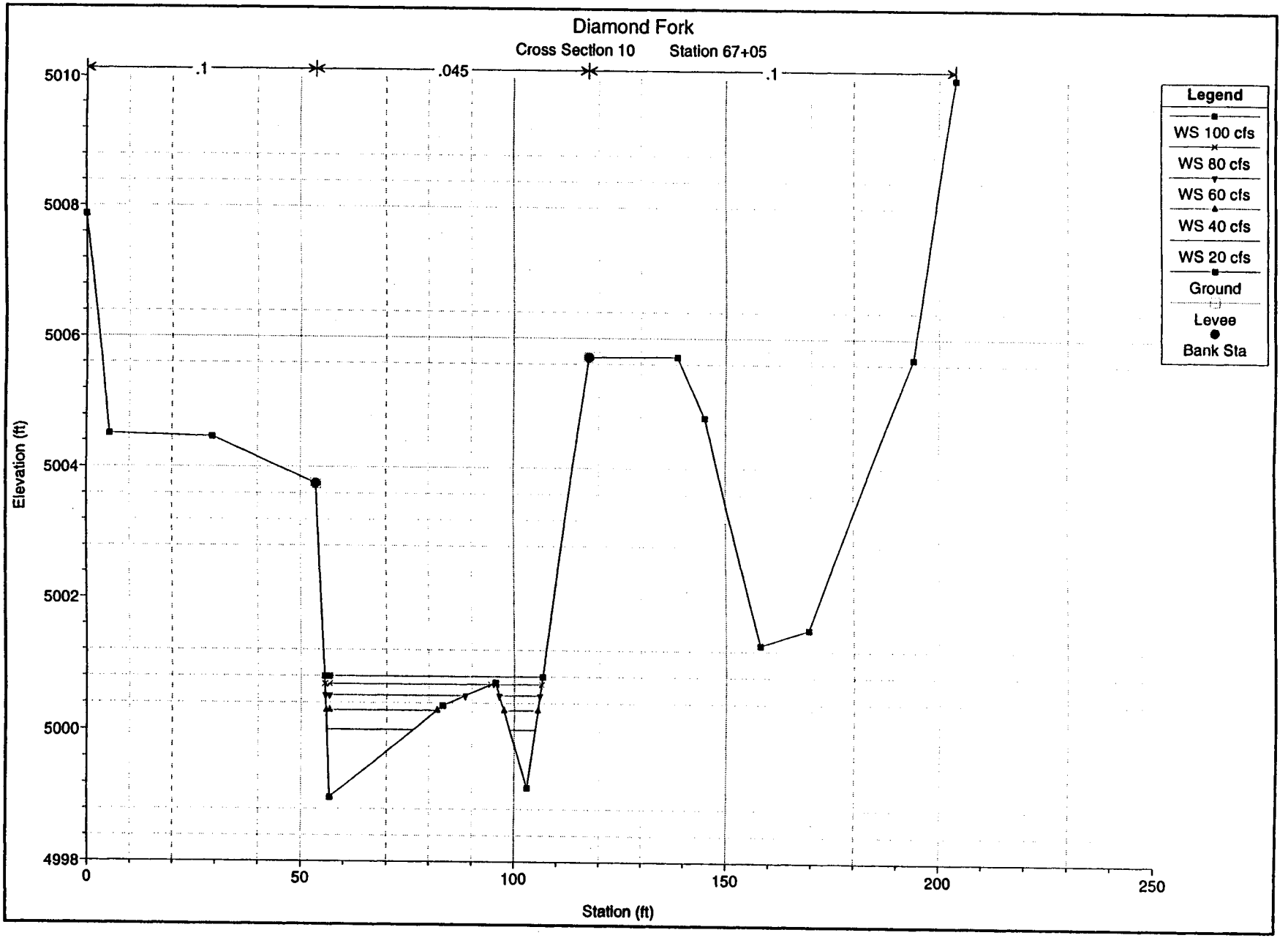

Diamond Fork
Cross Section 5 Station 25+30
.08
.045
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Bank Sta
Elevation (ft)
4990
4988
4986
4984
4982
4980
4978
4976
0
200
400
600
800
Station (ft)

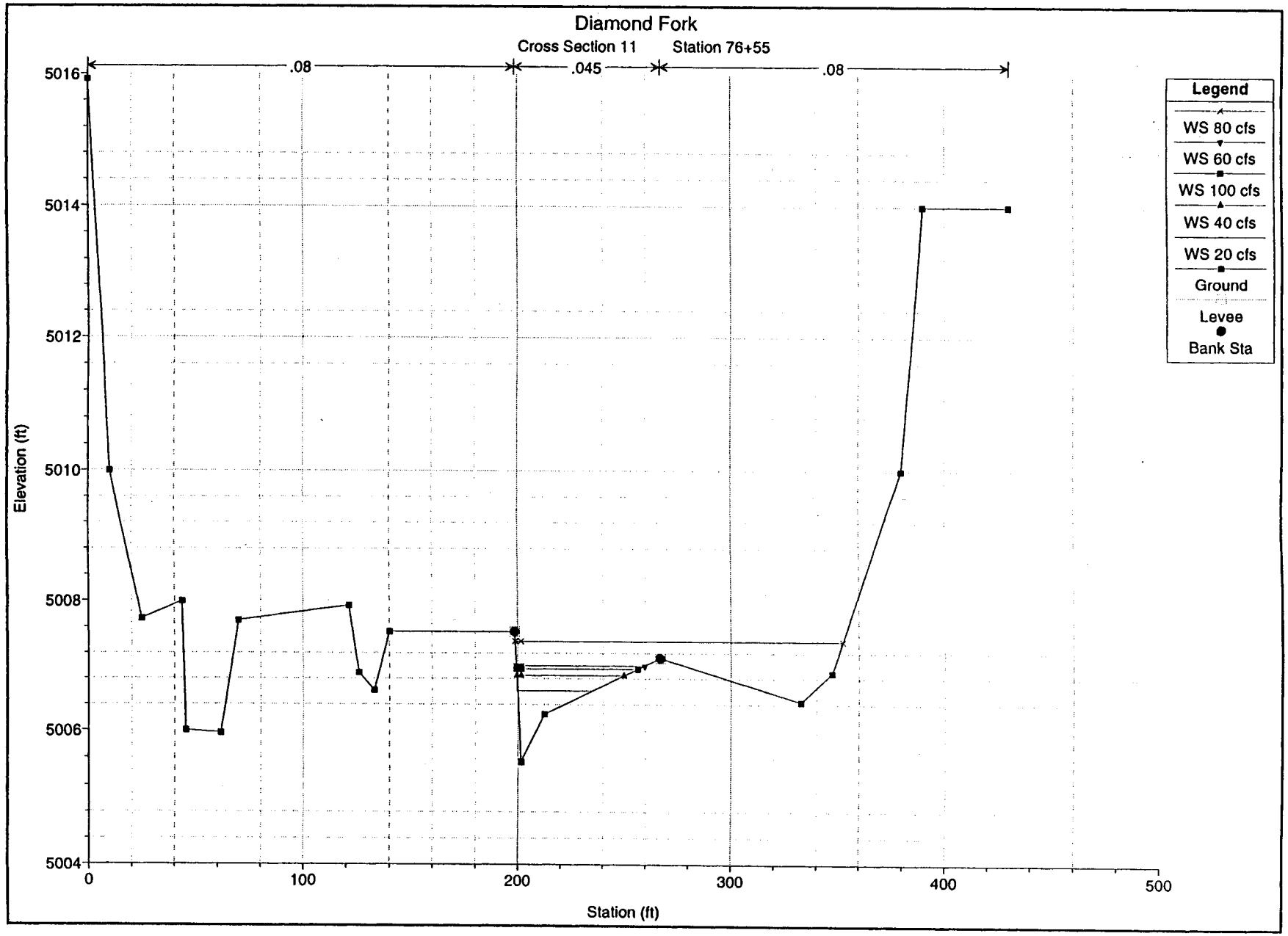

Diamond Fork
Cross Section 6
Station 36+50
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
4987
4986
4985
4984
4983
4982
0
20
40
60
80
100
120
140
160
Station (ft)

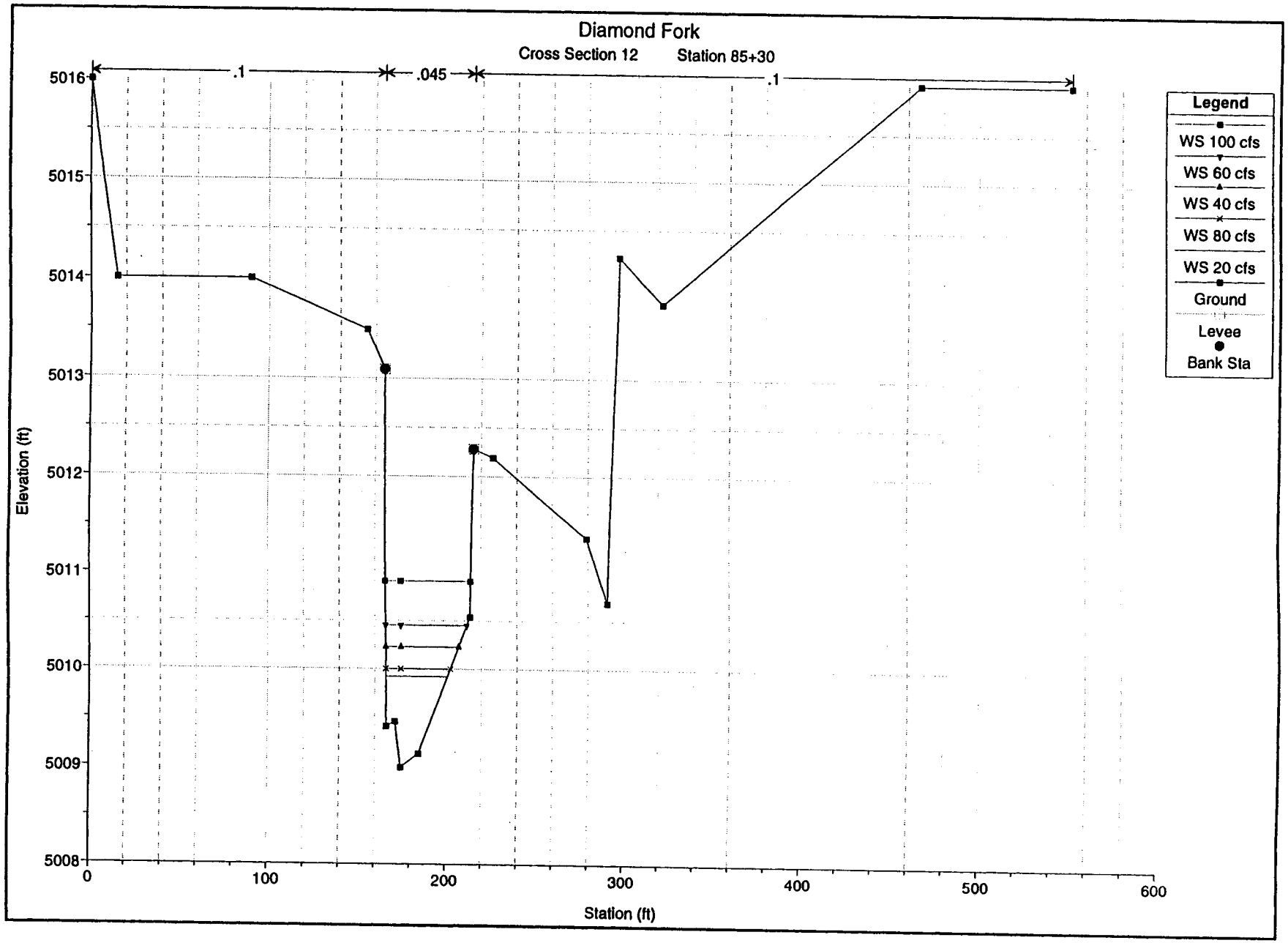

Diamond Fork
Cross Section 7
Station 43+50
.07
.043
.07
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
4996
4994
4992
4990
4988
4986
0
50
100
150
200
250
Station (ft)

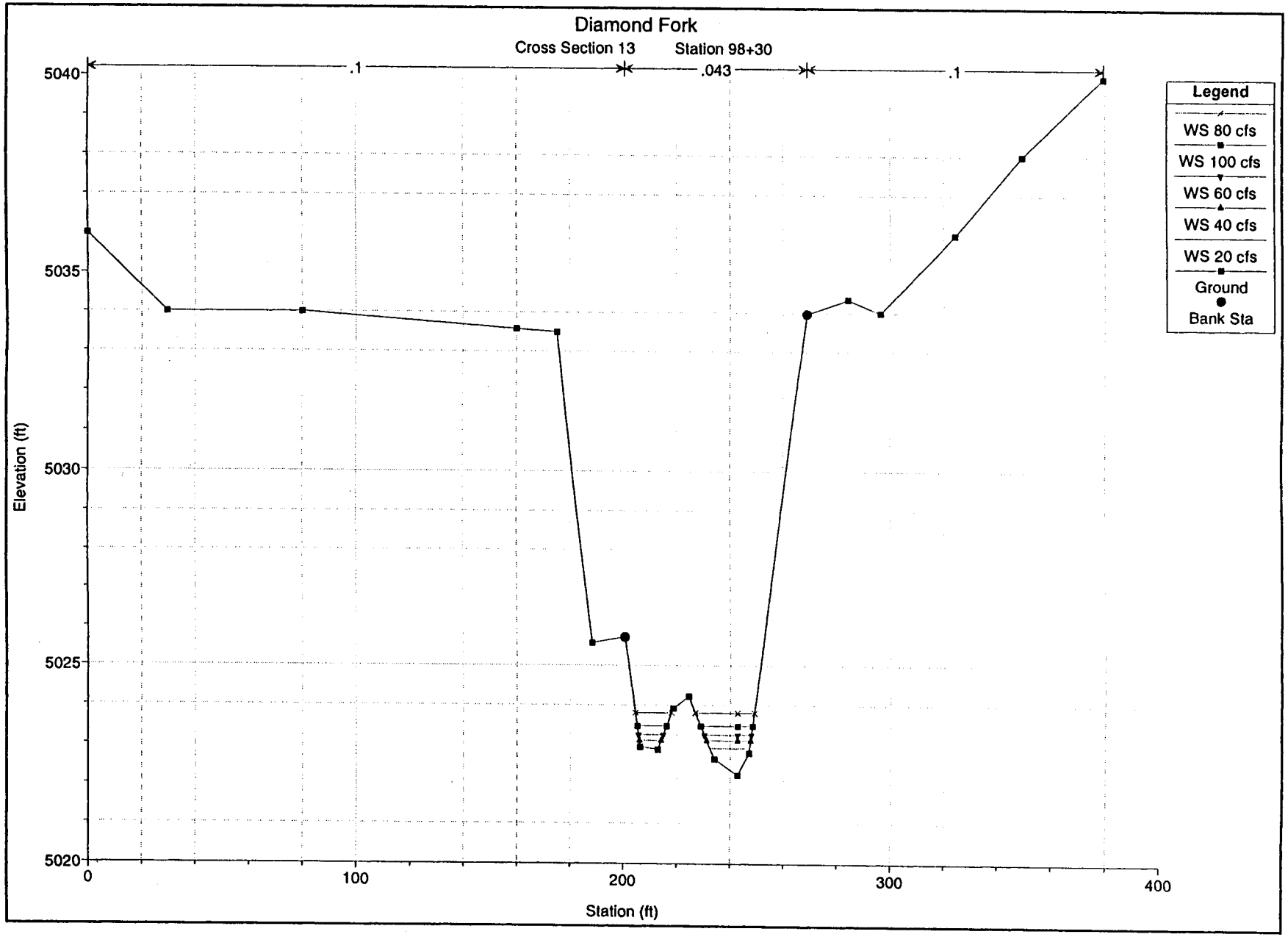

Diamond Fork
Cross Section 8 Station 57+00
.1
.043
.07
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5008
5006
5004
5002
5000
4998
4996
4994
4992
0
50
100
150
200
250
300
350
Station (ft)

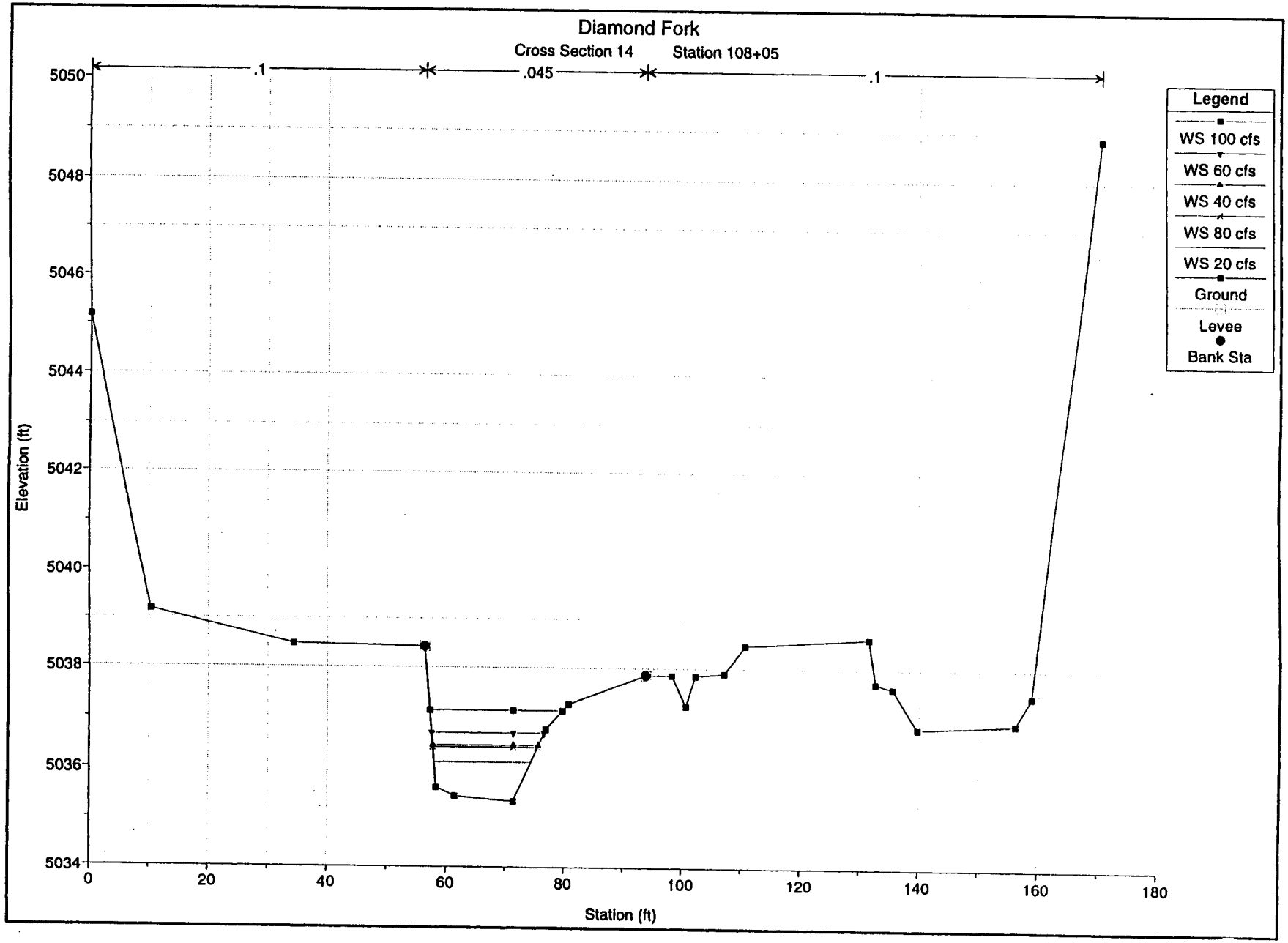

Diamond Fork
Cross Section 9 Station 63+25
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Bank Sta
Elevation (ft)
5012
5010
5008
5006
5004
5002
5000
4998
4996
0
100
200
300
400
500
Station (ft)

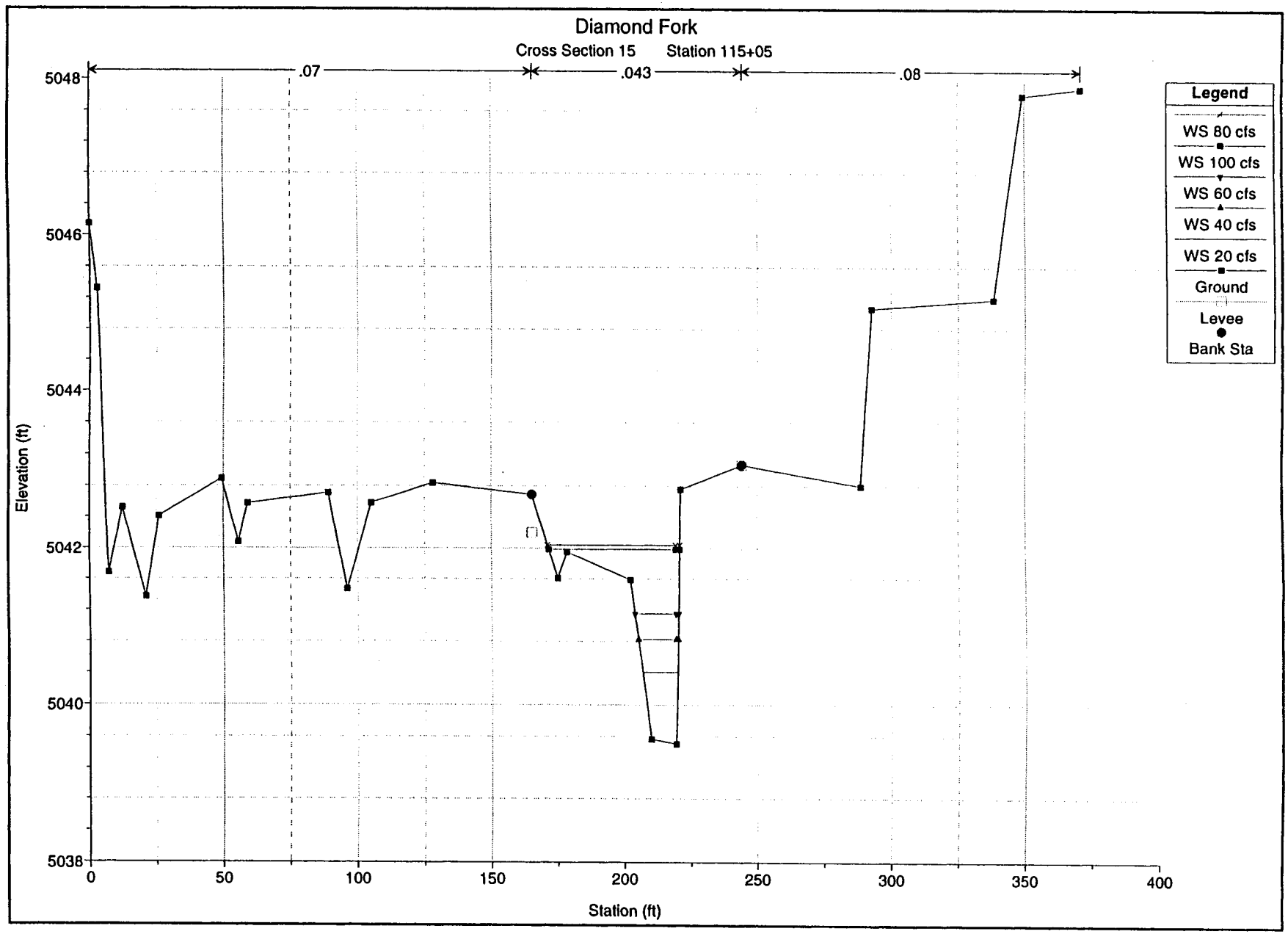

Diamond Fork
Cross Section 10
Station 67+05
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5010
5008
5006
5004
5002
5000
4998
0
50
100
150
200
250
Station (ft)

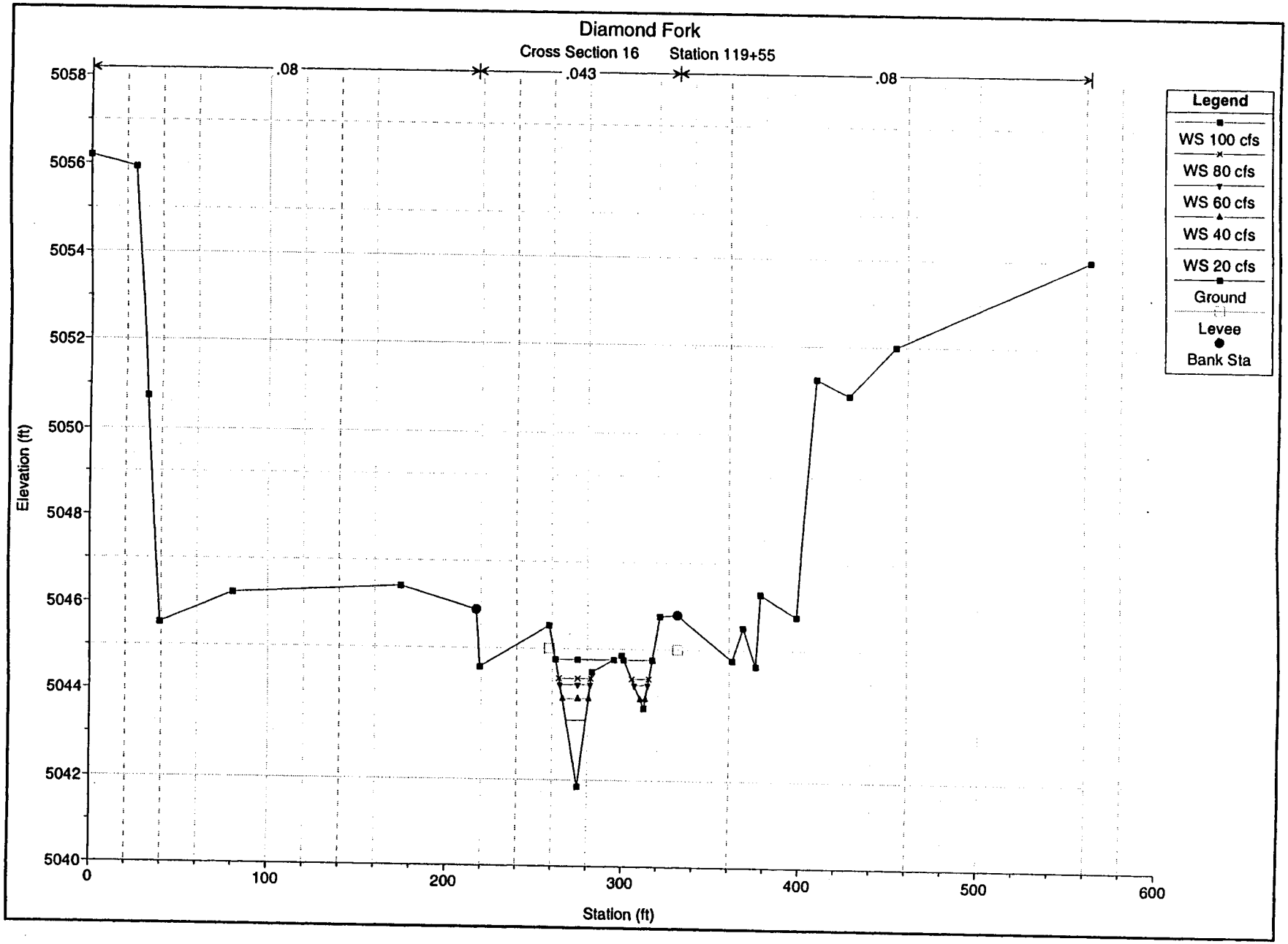

Diamond Fork
Cross Section 11
Station 76+55
.08
.045
.08
Legend
WS 80 cfs
WS 60 cfs
WS 100 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5016
5014
5012
5010
5008
5006
5004
0
100
200
300
400
500
Station (ft)

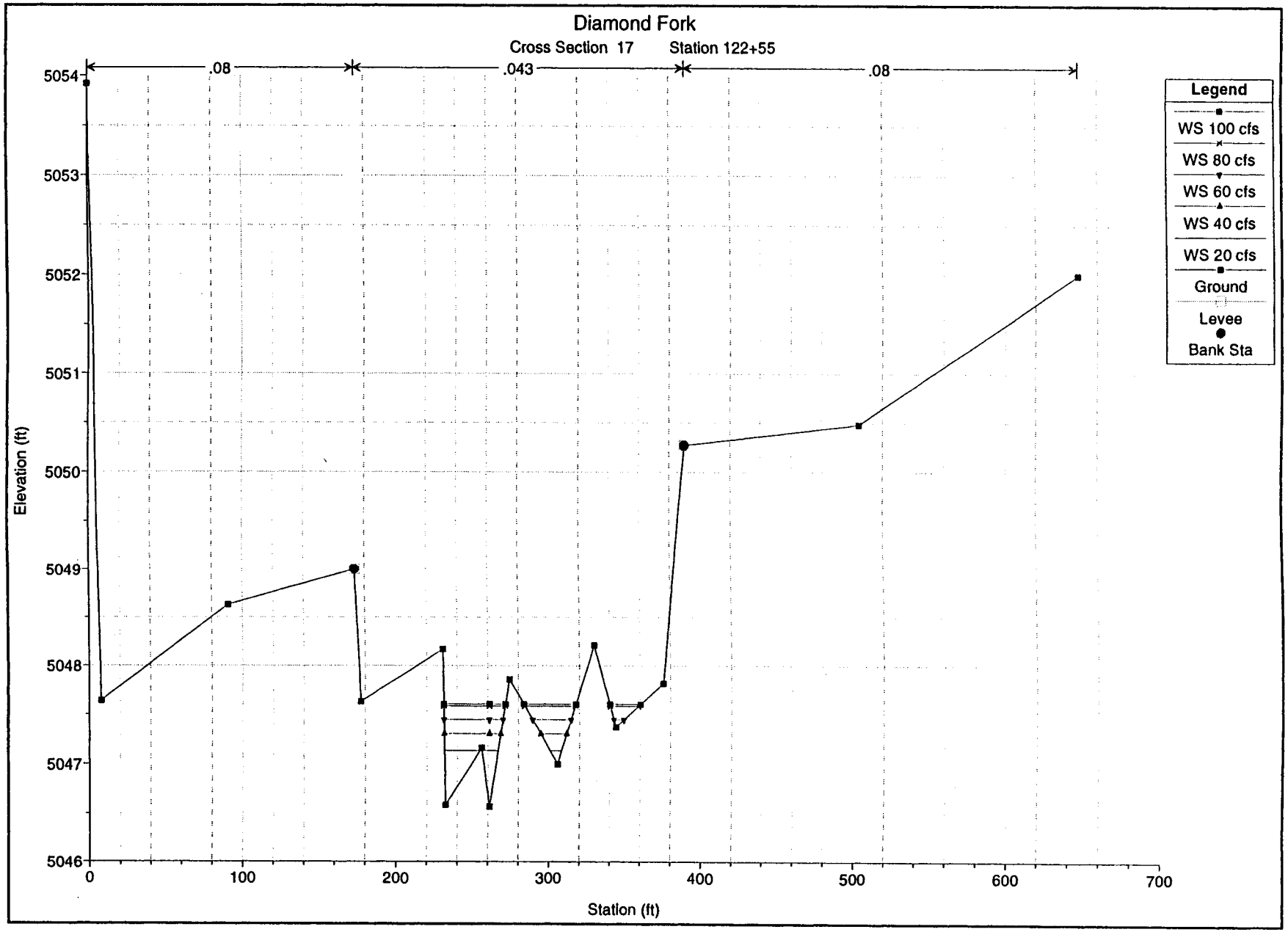

Diamond Fork
Cross Section 12
Station 85+30
.1
.045
.1
Elevation (ft)
5016
5015
5014
5013
5012
5011
5010
5009
5008
0
100
200
300
400
500
600
Station (ft)
Legend
WS 100 cfs
WS 60 cfs
WS 40 cfs
WS 80 cfs
WS 20 cfs
Ground
Levee
Bank Sta

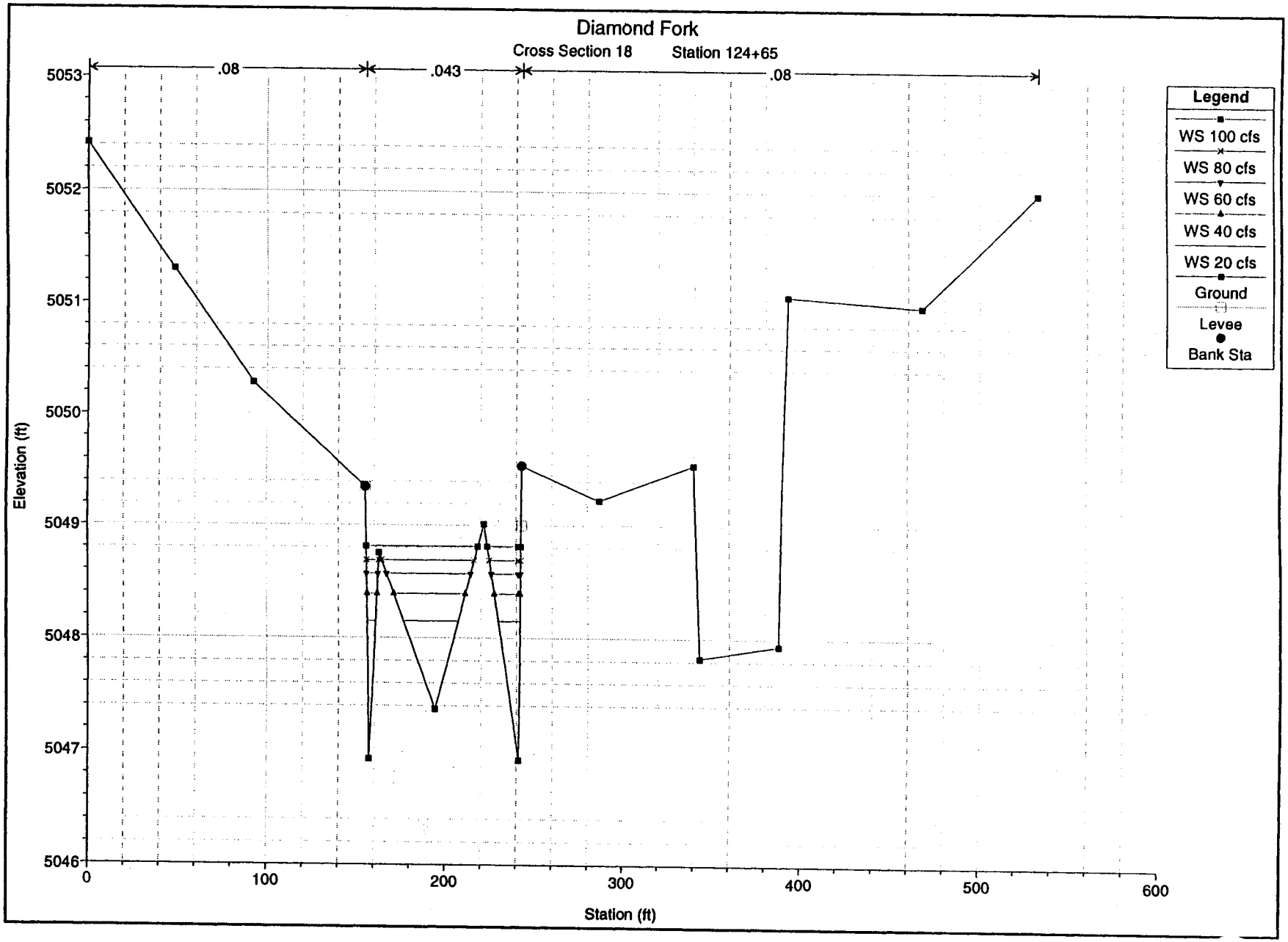

Diamond Fork
Cross Section 13
Station 98+30
.1
.043
.1
Legend
WS 80 cfs
WS 100 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Bank Sta
Elevation (ft)
5040
5035
5030
5025
5020
0
100
200
300
400
Station (ft)

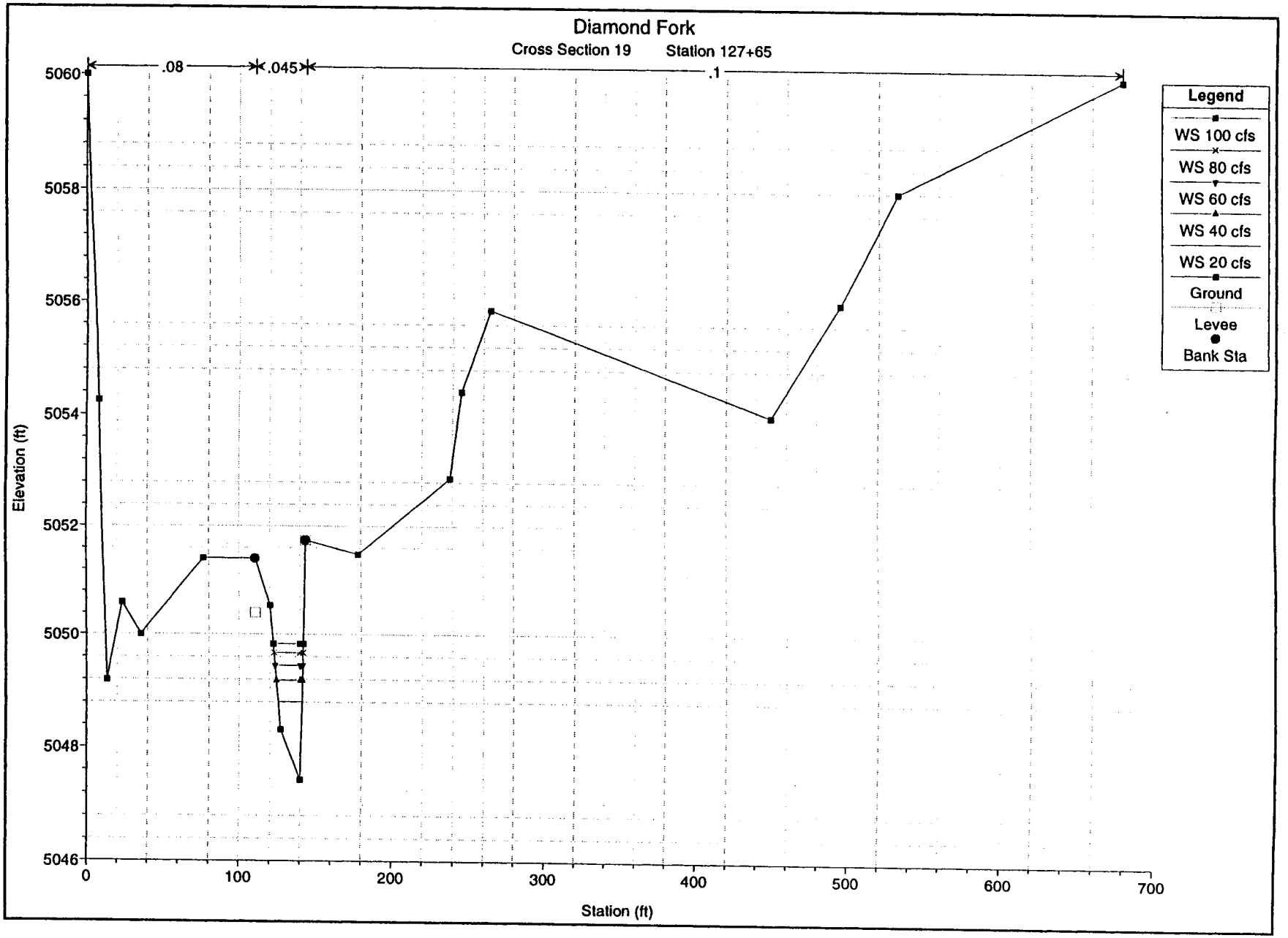

Diamond Fork
Cross Section 14
Station 108+05
.1
.045
.1
Legend
WS 100 cfs
WS 60 cfs
WS 40 cfs
WS 80 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5050
5048
5046
5044
5042
5040
5038
5036
5034
0
20
40
60
80
100
120
140
160
180
Station (ft)

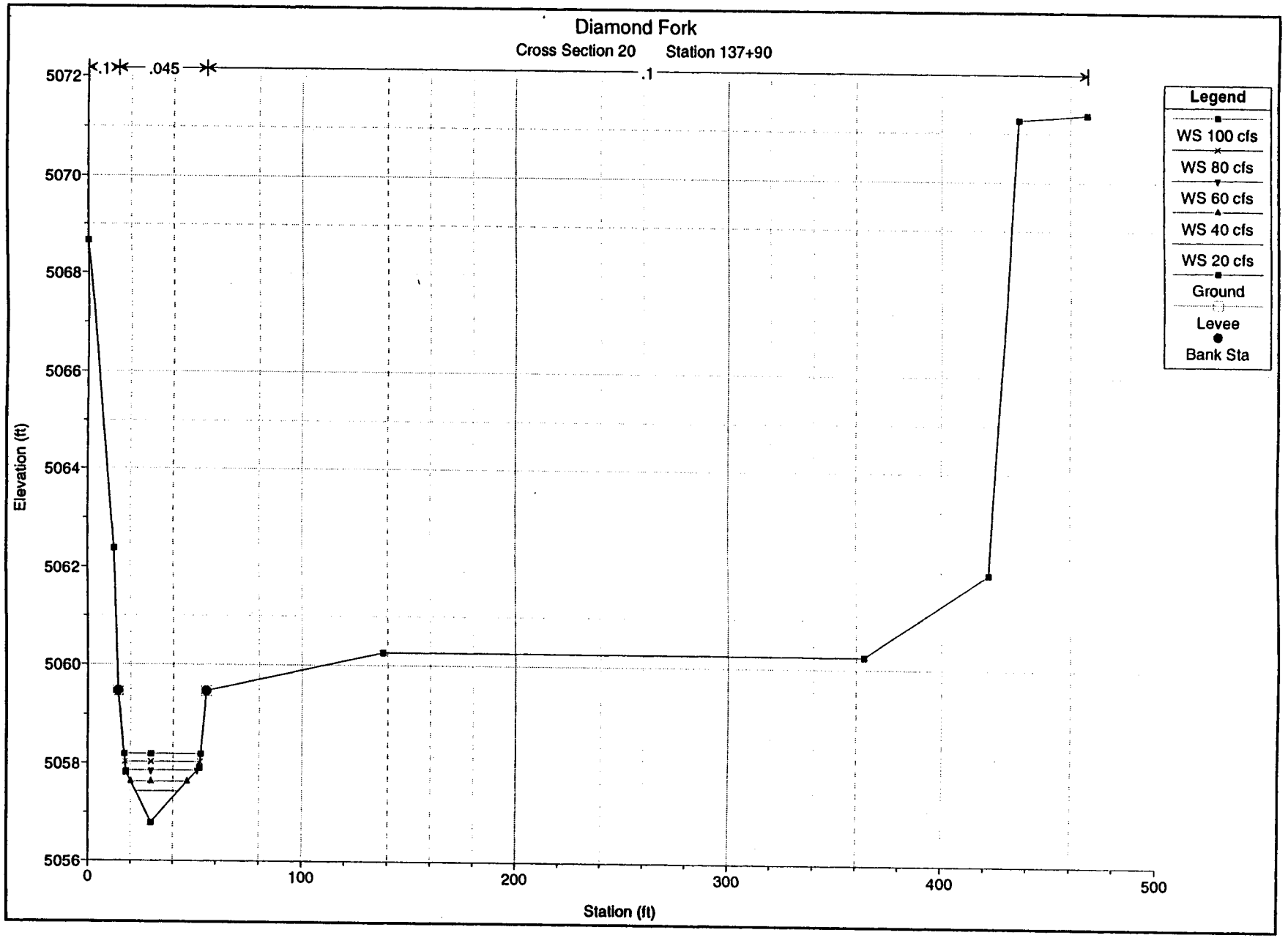

Diamond Fork
Cross Section 15
Station 115+05
.07
.043
.08
Legend
WS 80 cfs
WS 100 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5048
5046
5044
5042
5040
5038
0
50
100
150
200
250
300
350
400
Station (ft)

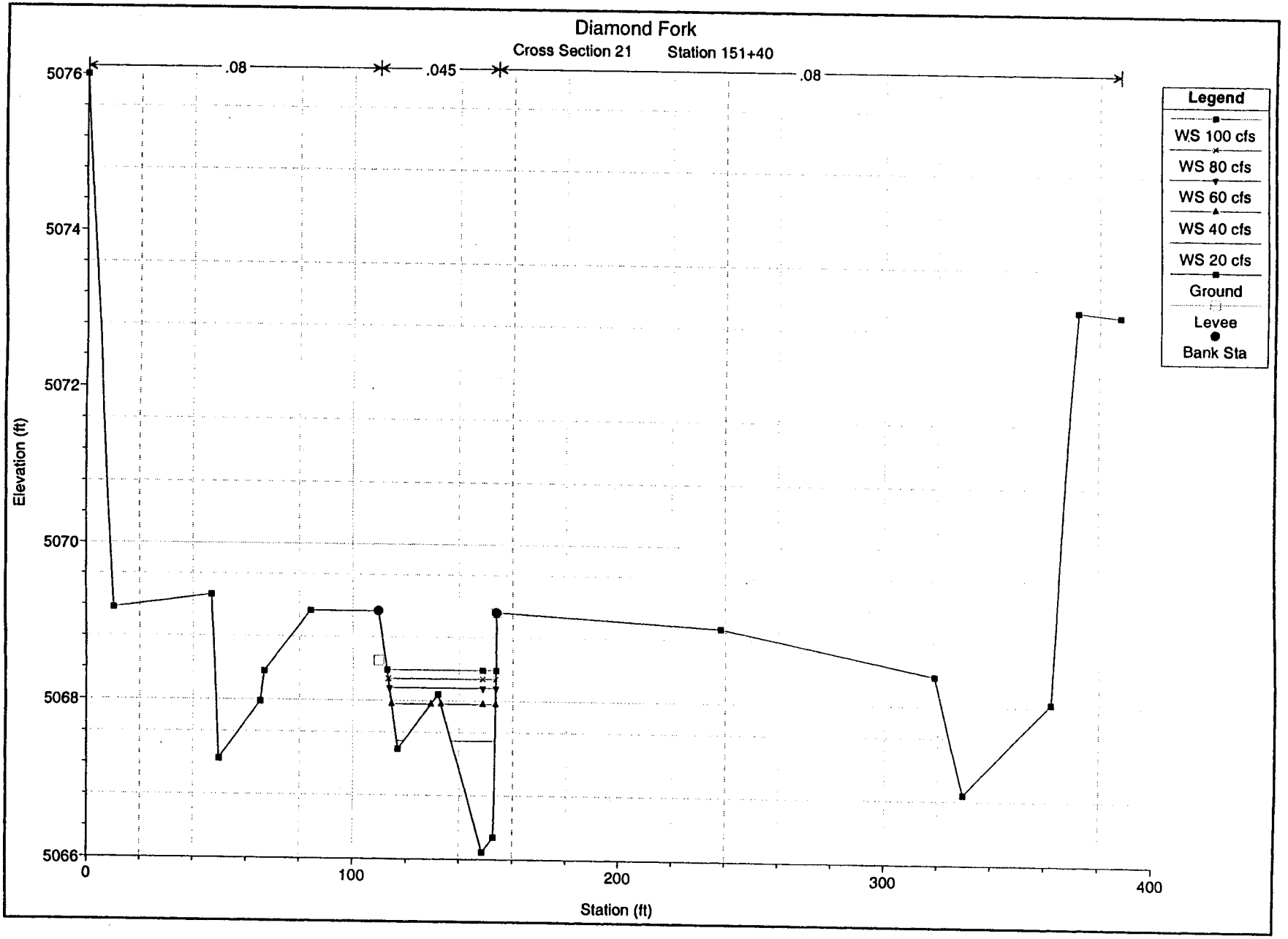

Diamond Fork
Cross Section 16
Station 119+55
.08
.043
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5058
5056
5054
5052
5050
5048
5046
5044
5042
5040
0
100
200
300
400
500
600
Station (ft)

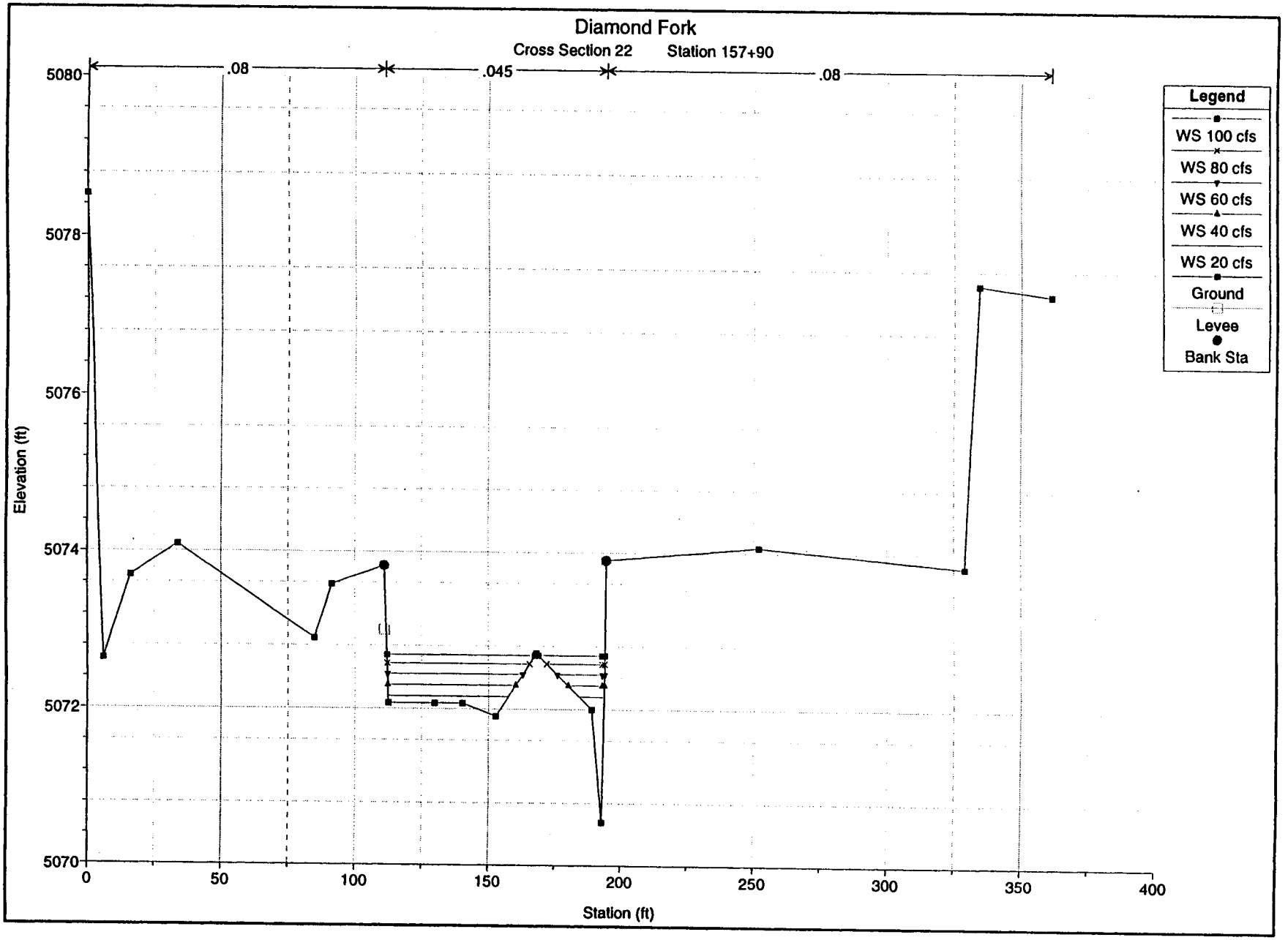

Diamond Fork
Cross Section 17
Station 122+55
.08
.043
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5054
5053
5052
5051
5050
5049
5048
5047
5046
0
100
200
300
400
500
600
700
Station (ft)

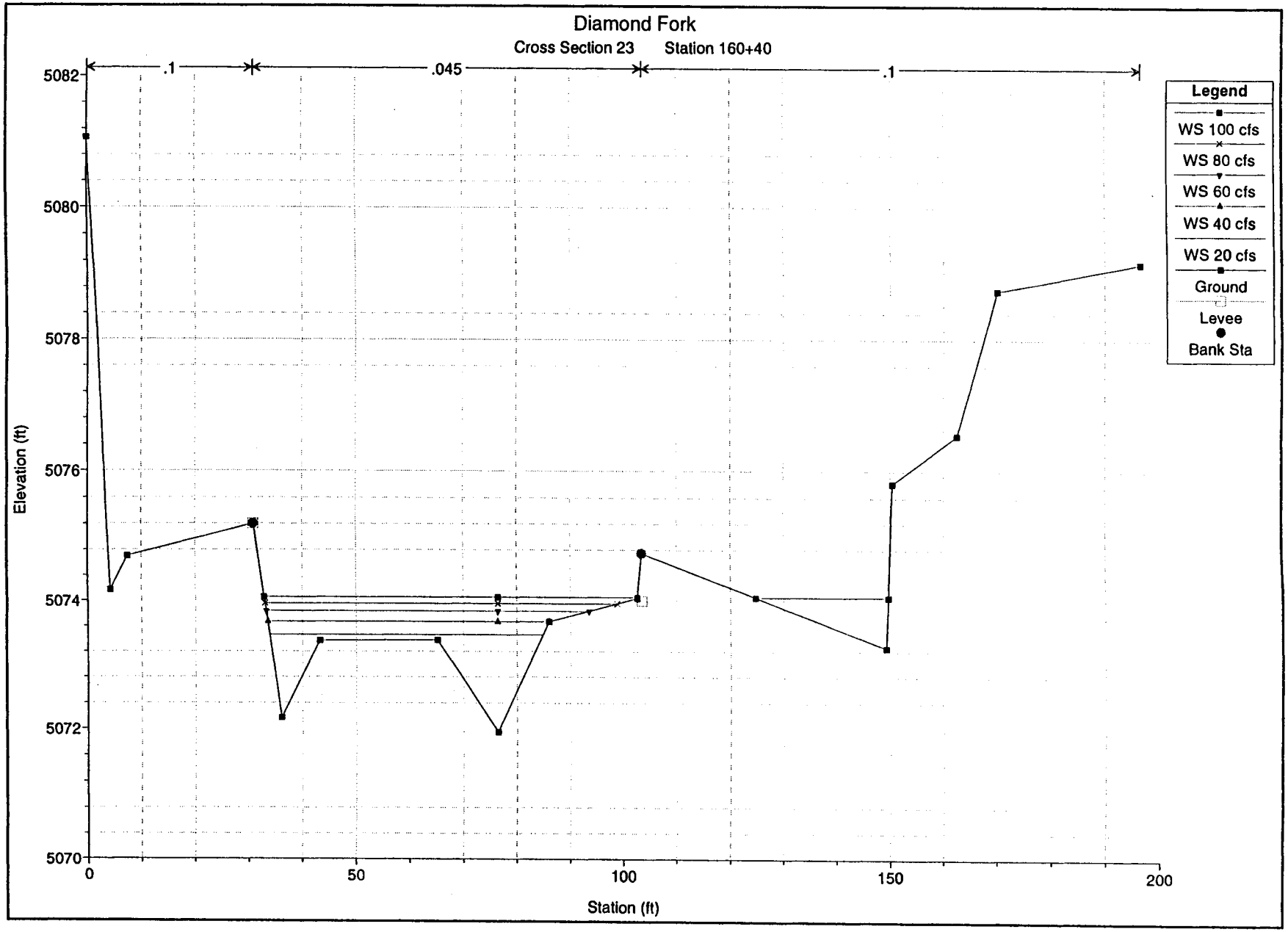

Diamond Fork
Cross Section 18
Station 124+65
.08
.043
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5053
5052
5051
5050
5049
5048
5047
5046
0
100
200
300
400
500
600
Station (ft)

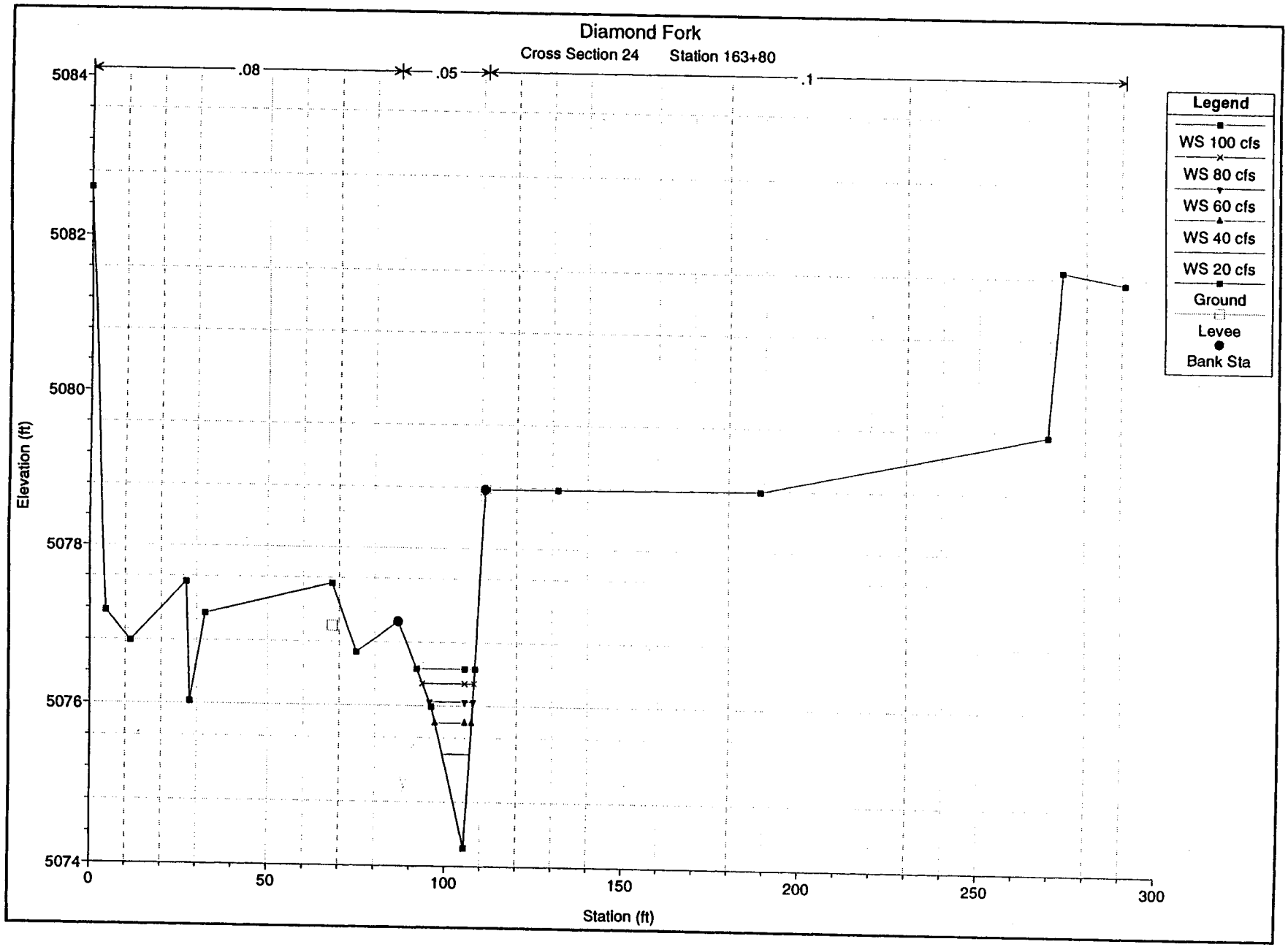

Diamond Fork
Cross Section 19
Station 127+65
.08
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5060
5058
5056
5054
5052
5050
5048
5046
Station (ft)
0
100
200
300
400
500
600
700

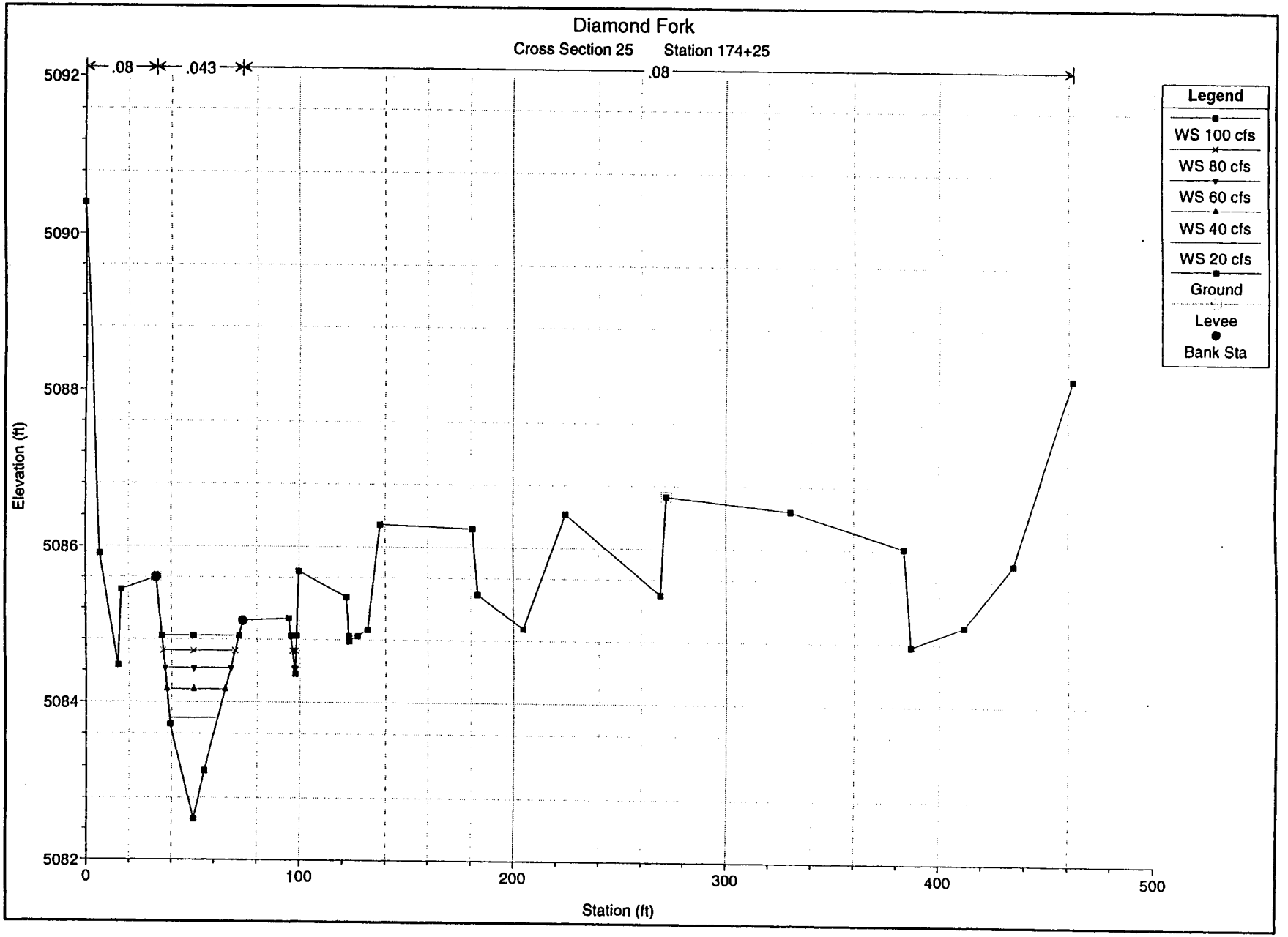

Diamond Fork
Cross Section 20 Station 137+90
.1
.045
.1
Elevation (ft)
5072
5070
5068
5066
5064
5062
5060
5058
5056
0
100
200
300
400
500
Station (ft)
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta

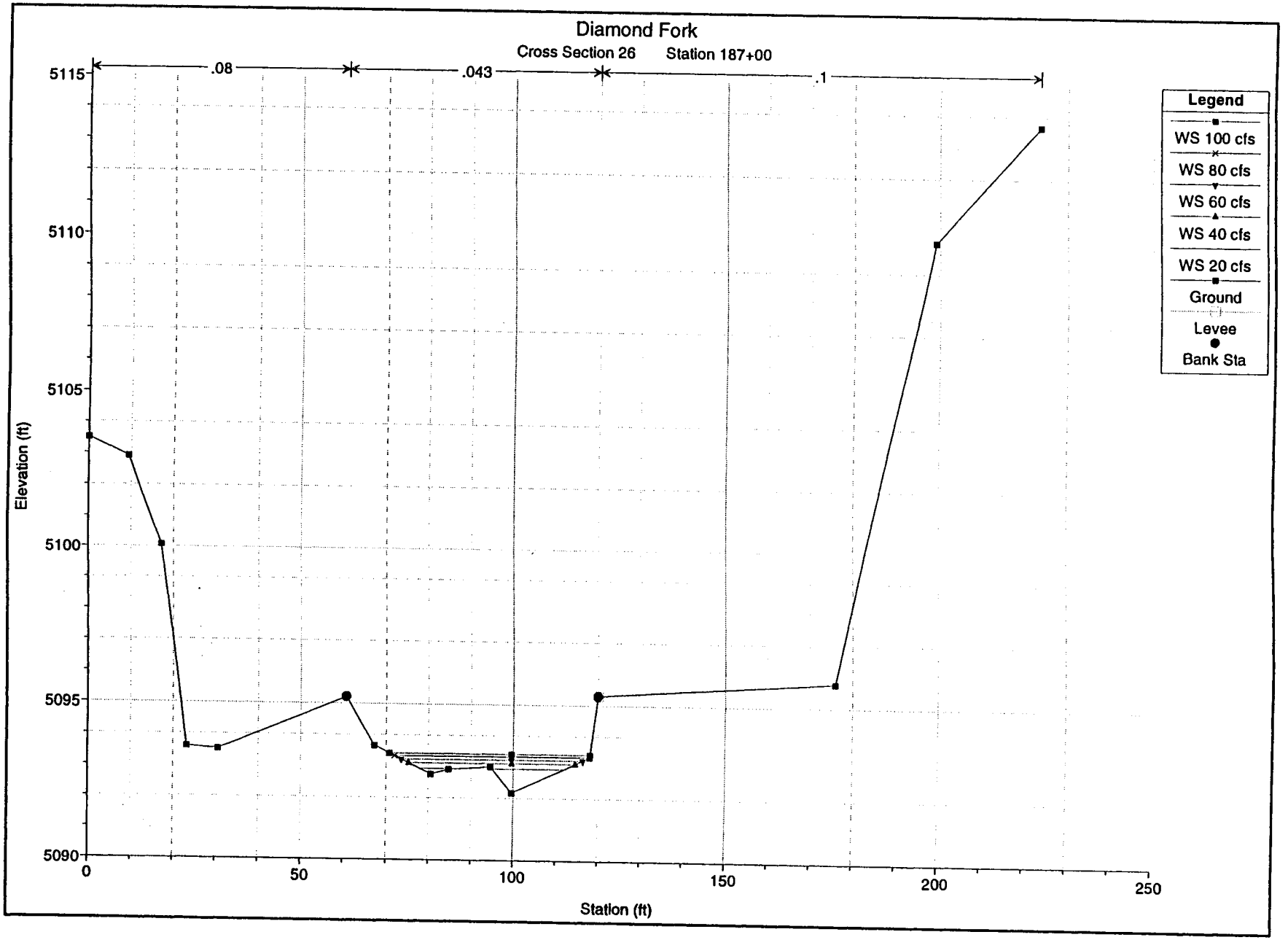

Diamond Fork
Cross Section 21
Station 151+40
.08
.045
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5076
5074
5072
5070
5068
5066
0
100
200
300
400
Station (ft)

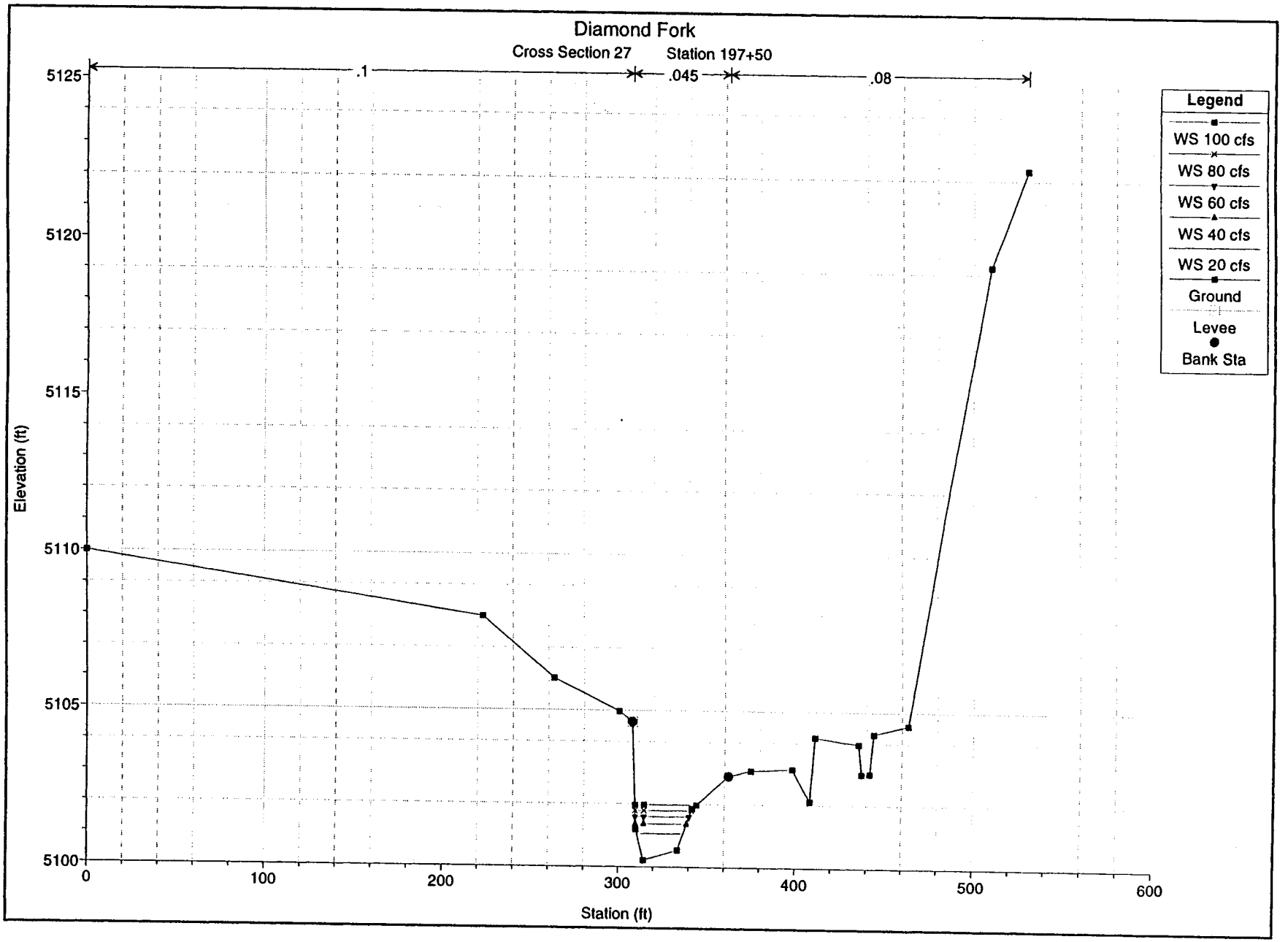

Diamond Fork
Cross Section 22
Station 157+90
.08
.045
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5080
5078
5076
5074
5072
5070
0
50
100
150
200
250
300
350
400
Station (ft)

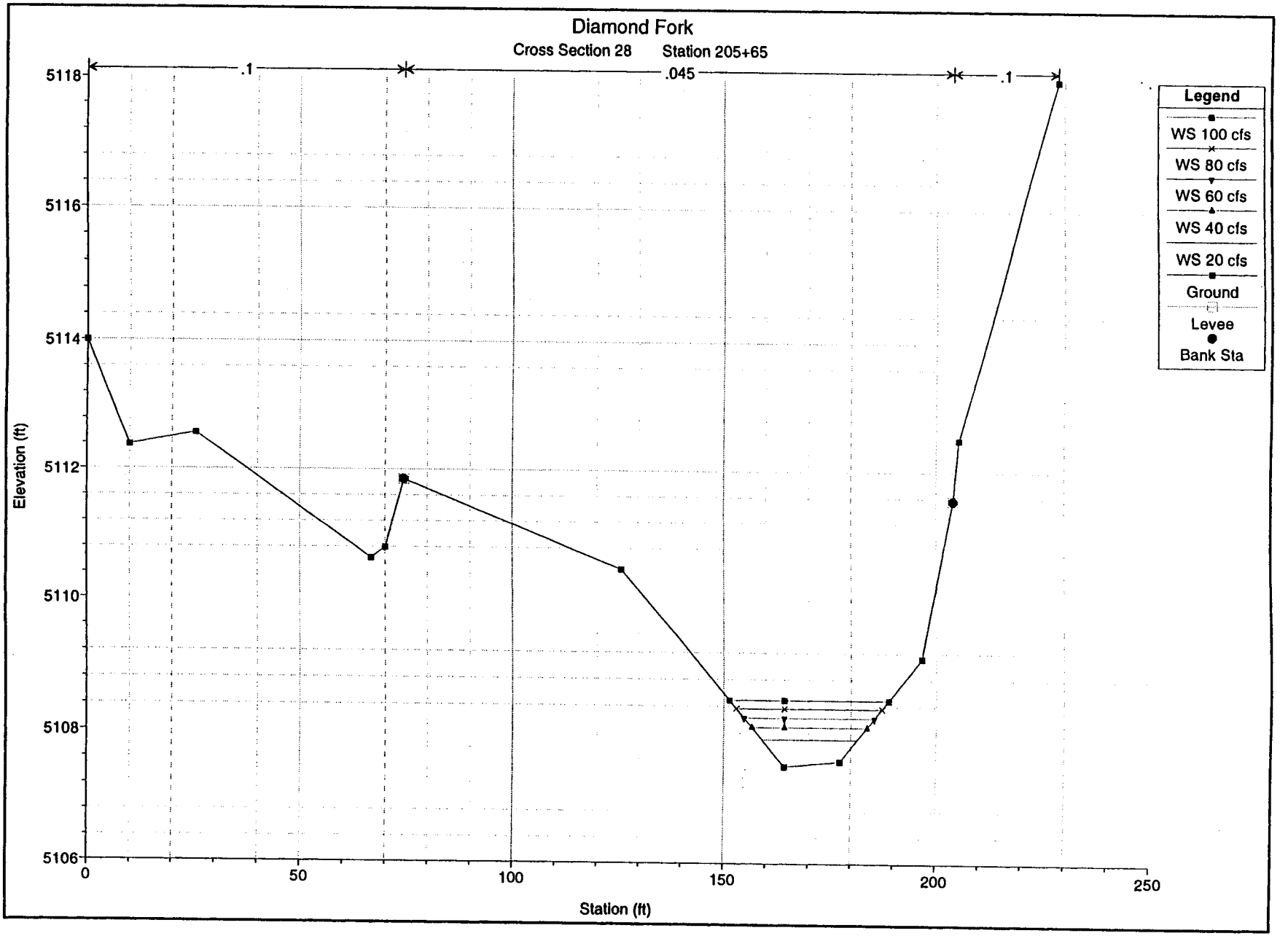

Diamond Fork
Cross Section 23 Station 160+40
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5082
5080
5078
5076
5074
5072
5070
0
50
100
150
200
Station (ft)

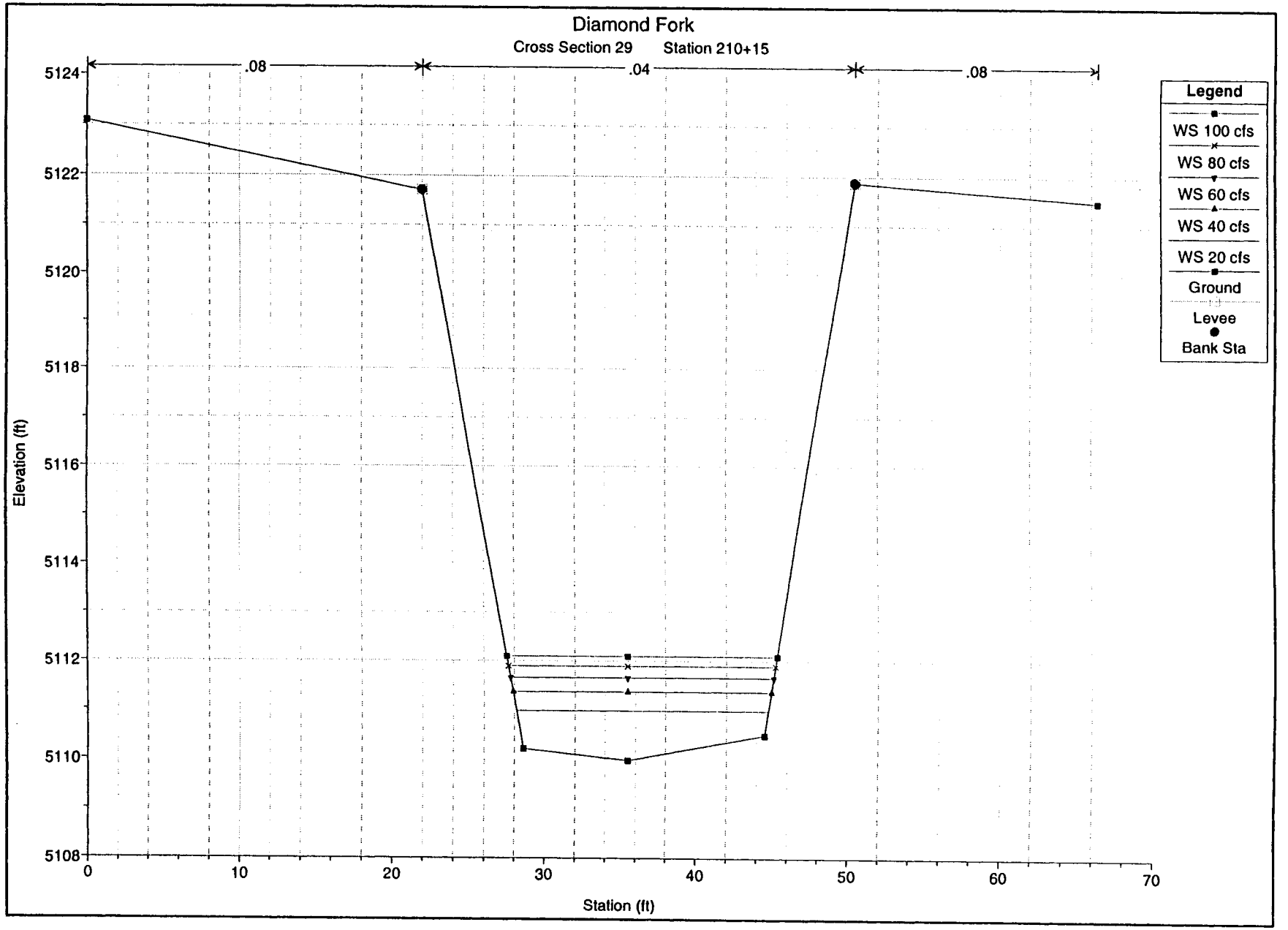

Diamond Fork
Cross Section 24 Station 163+80
.08
.05
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5084
5082
5080
5078
5076
5074
0
50
100
150
200
250
300
Station (ft)

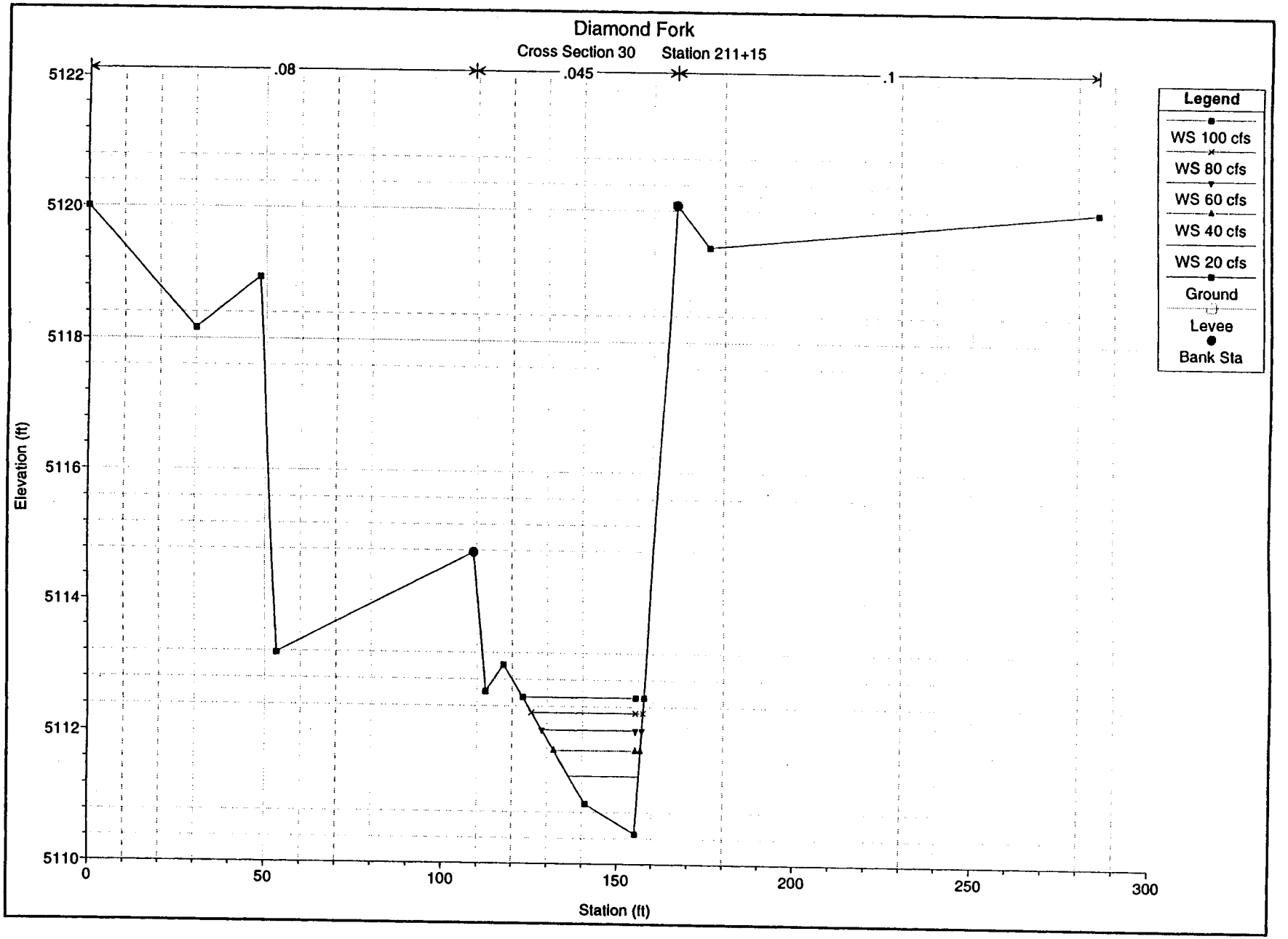

Diamond Fork
Cross Section 25 Station 174+25
.08
.043
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5092
5090
5088
5086
5084
5082
0
100
200
300
400
500
Station (ft)

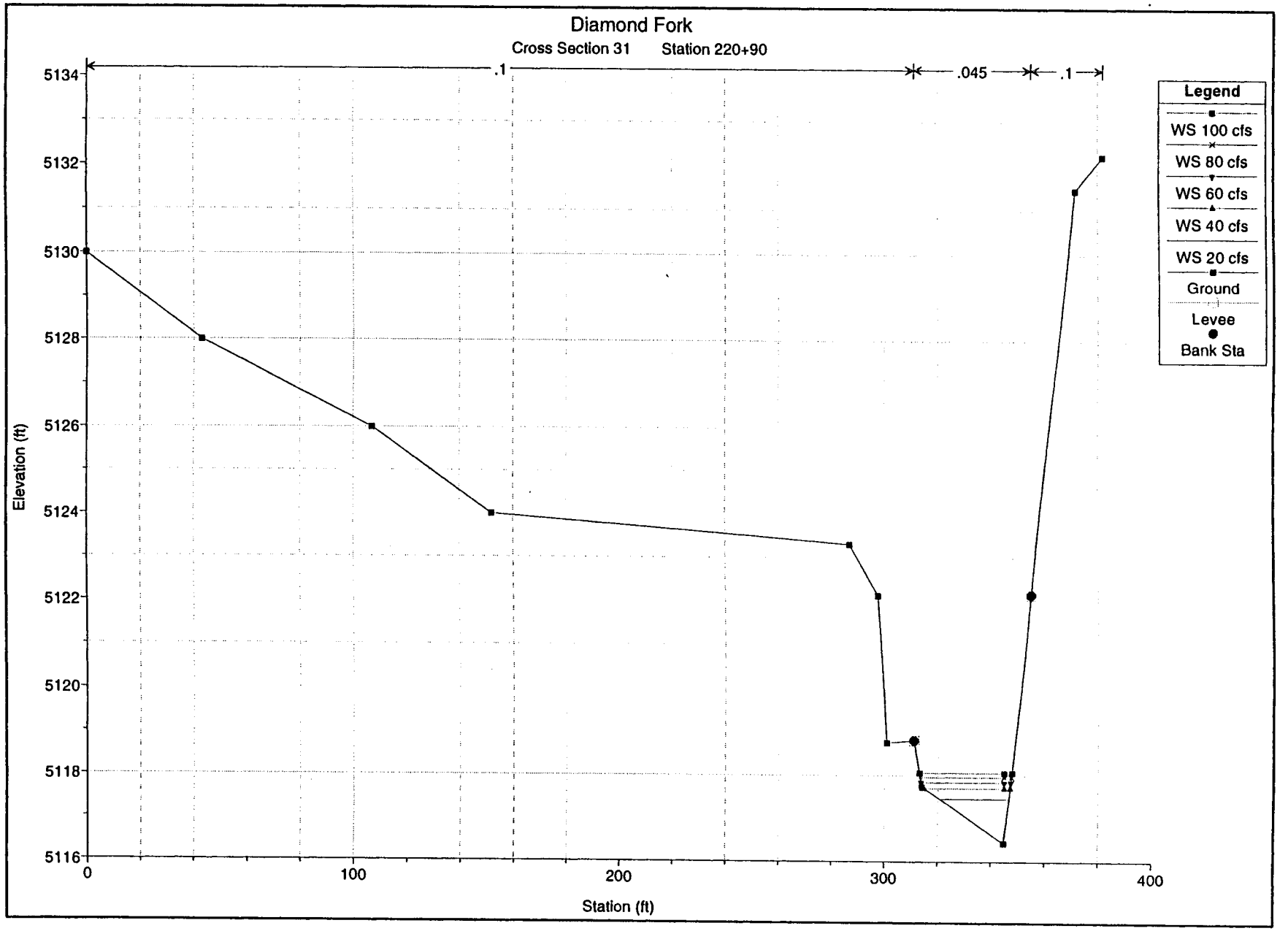

Diamond Fork
Cross Section 26
Station 187+00
.08
.043
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5115
5110
5105
5100
5095
5090
0
50
100
150
200
250
Station (ft)

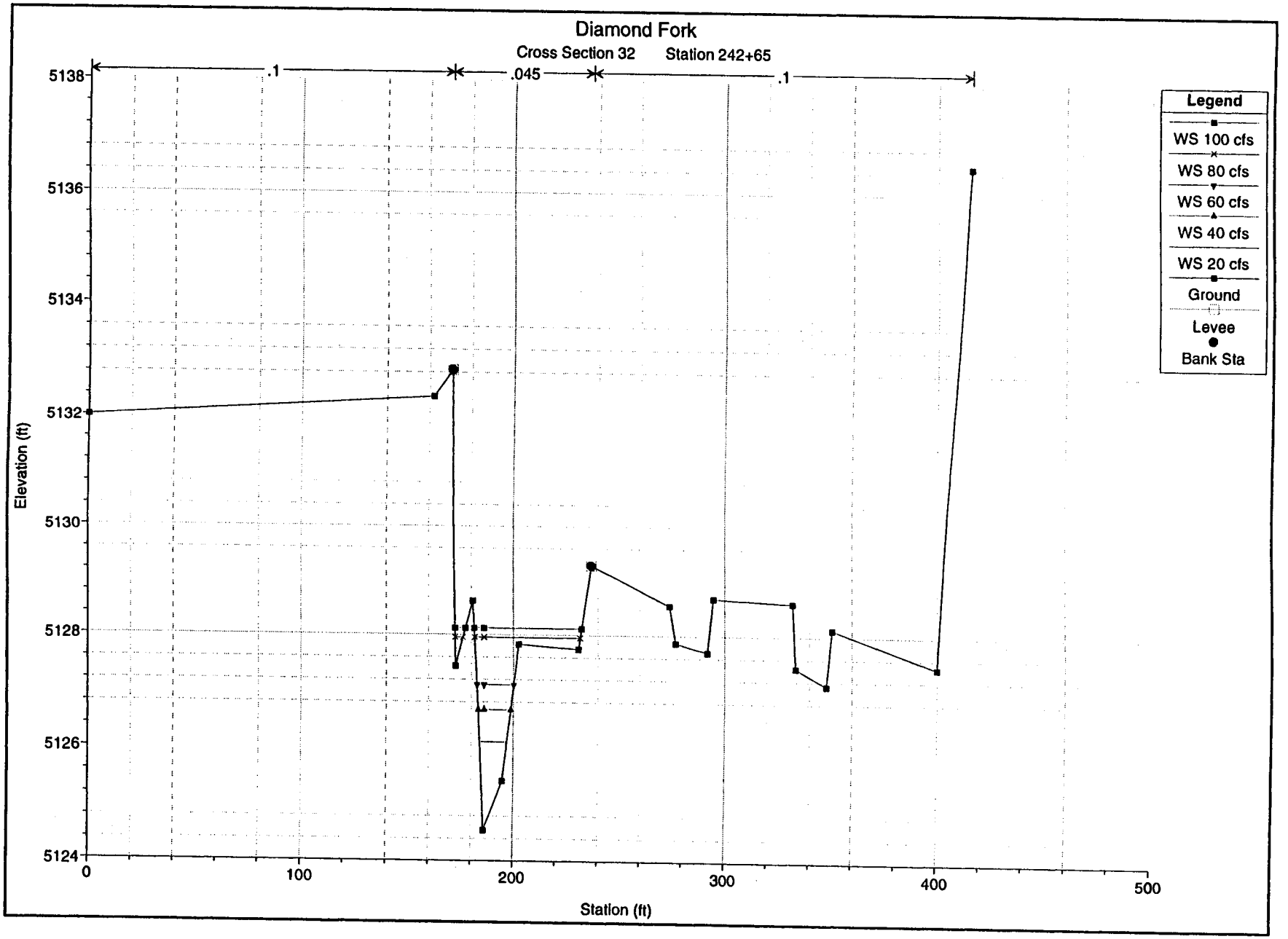

Diamond Fork
Cross Section 27
Station 197+50
.1
.045
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5125
5120
5115
5110
5105
5100
0
100
200
300
400
500
600
Station (ft)

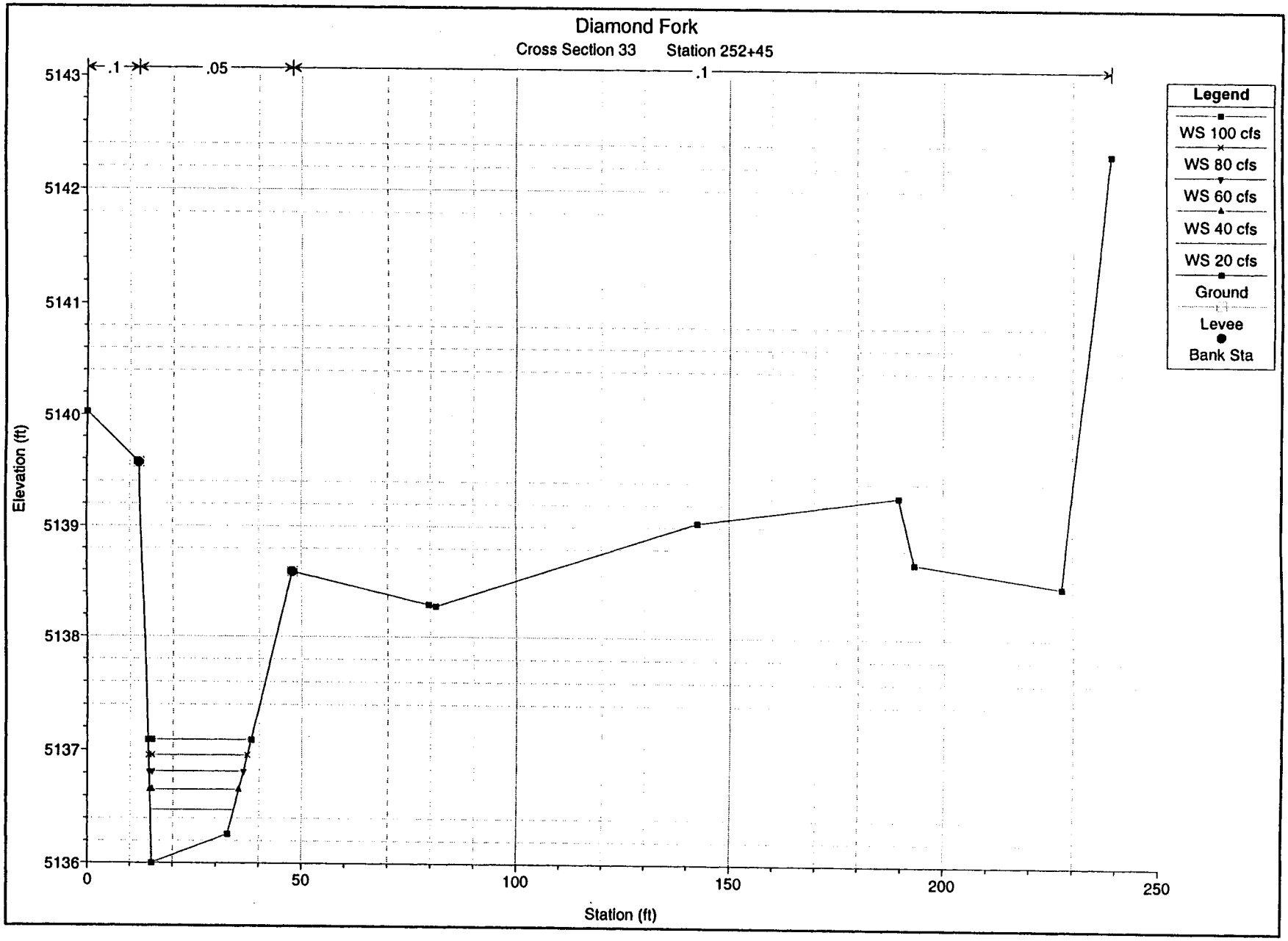

Diamond Fork
Cross Section 28
Station 205+65
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5118
5116
5114
5112
5110
5108
5106
0
50
100
150
200
250
Station (ft)

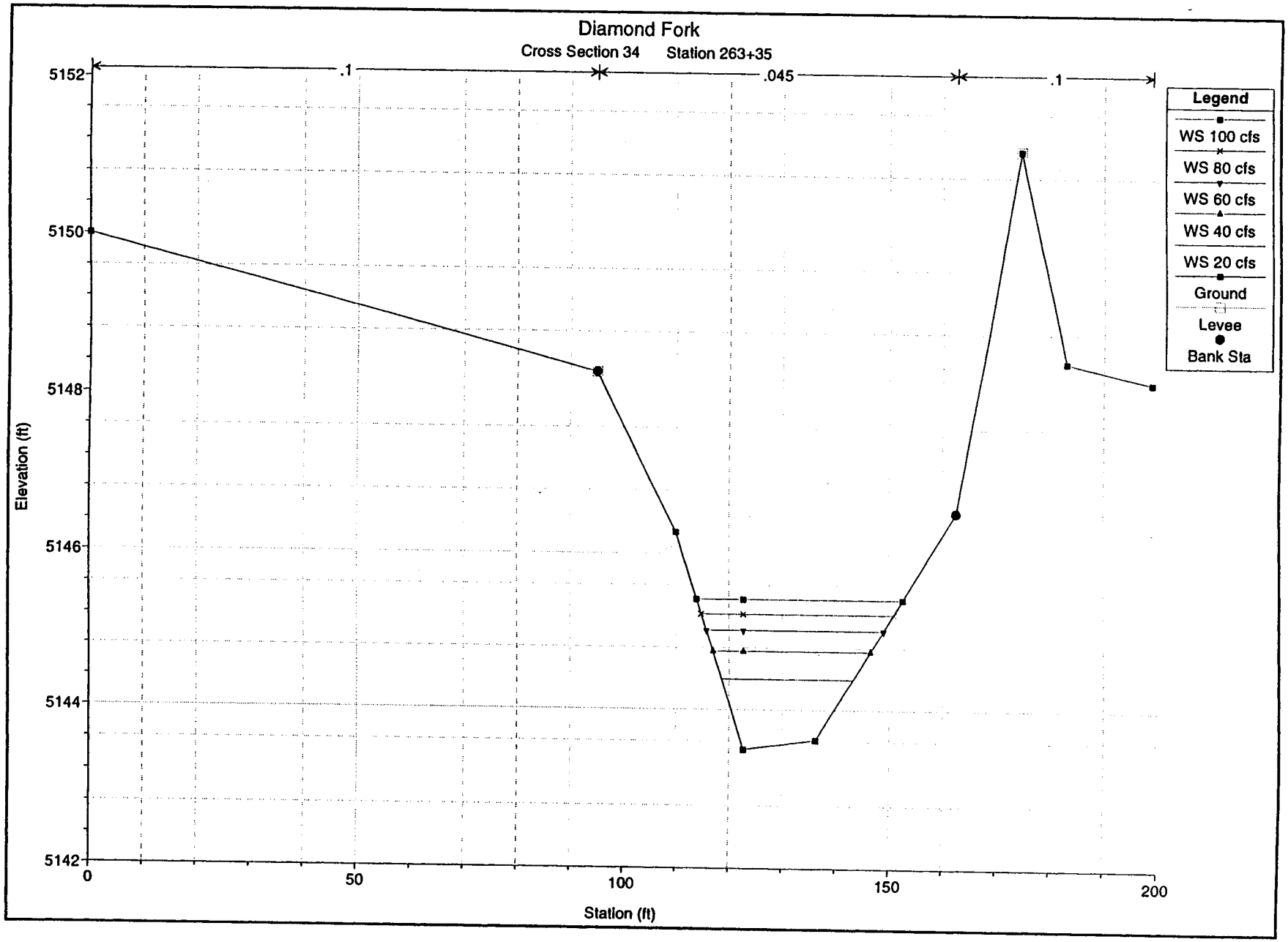

Diamond Fork
Cross Section 29 Station 210+15
.08
.04
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5124
5122
5120
5118
5116
5114
5112
5110
5108
0
10
20
30
40
50
60
70
Station (ft)

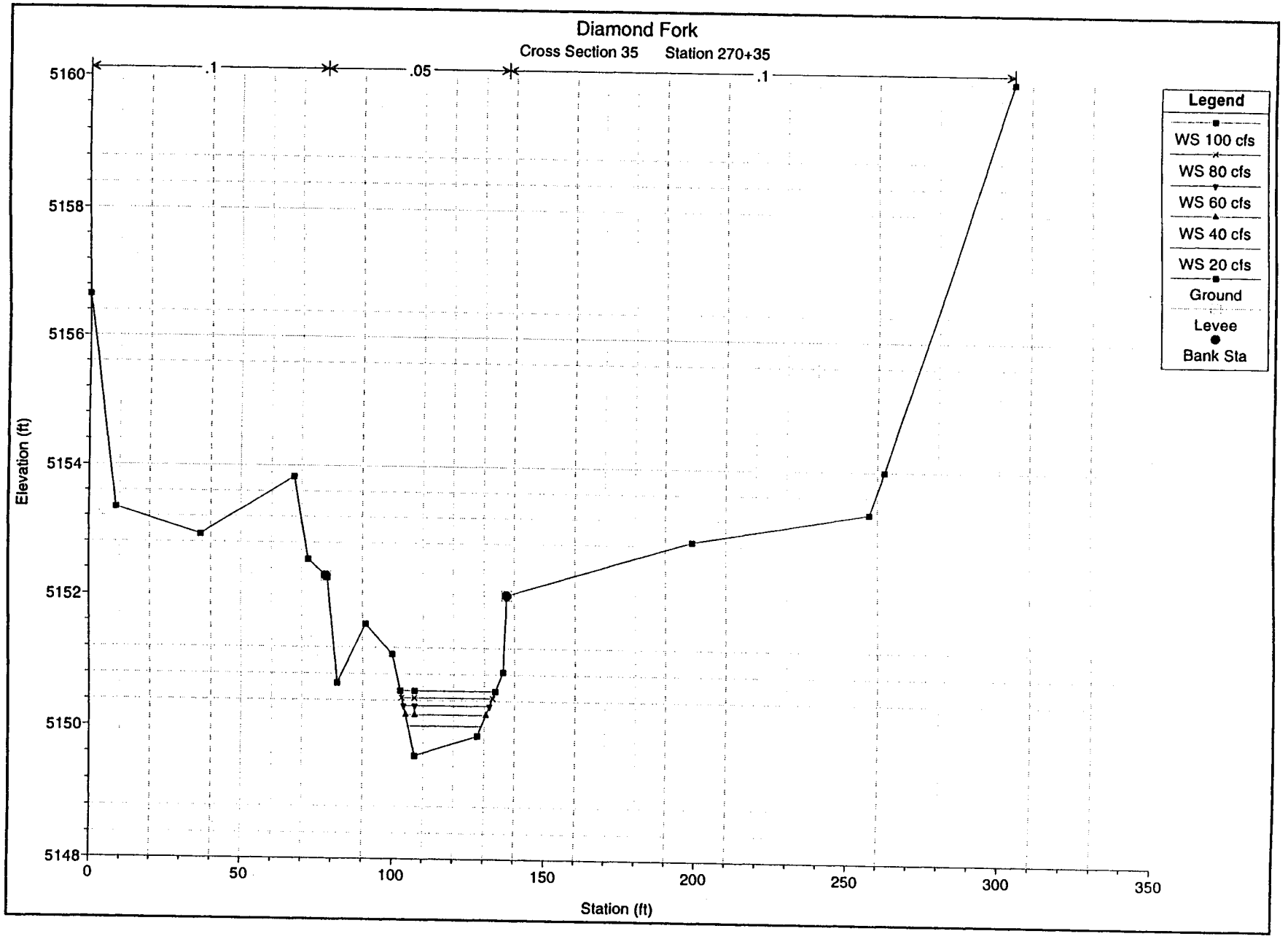

Diamond Fork
Cross Section 30
Station 211+15
.08
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5122
5120
5118
5116
5114
5112
5110
0
50
100
150
200
250
300
Station (ft)

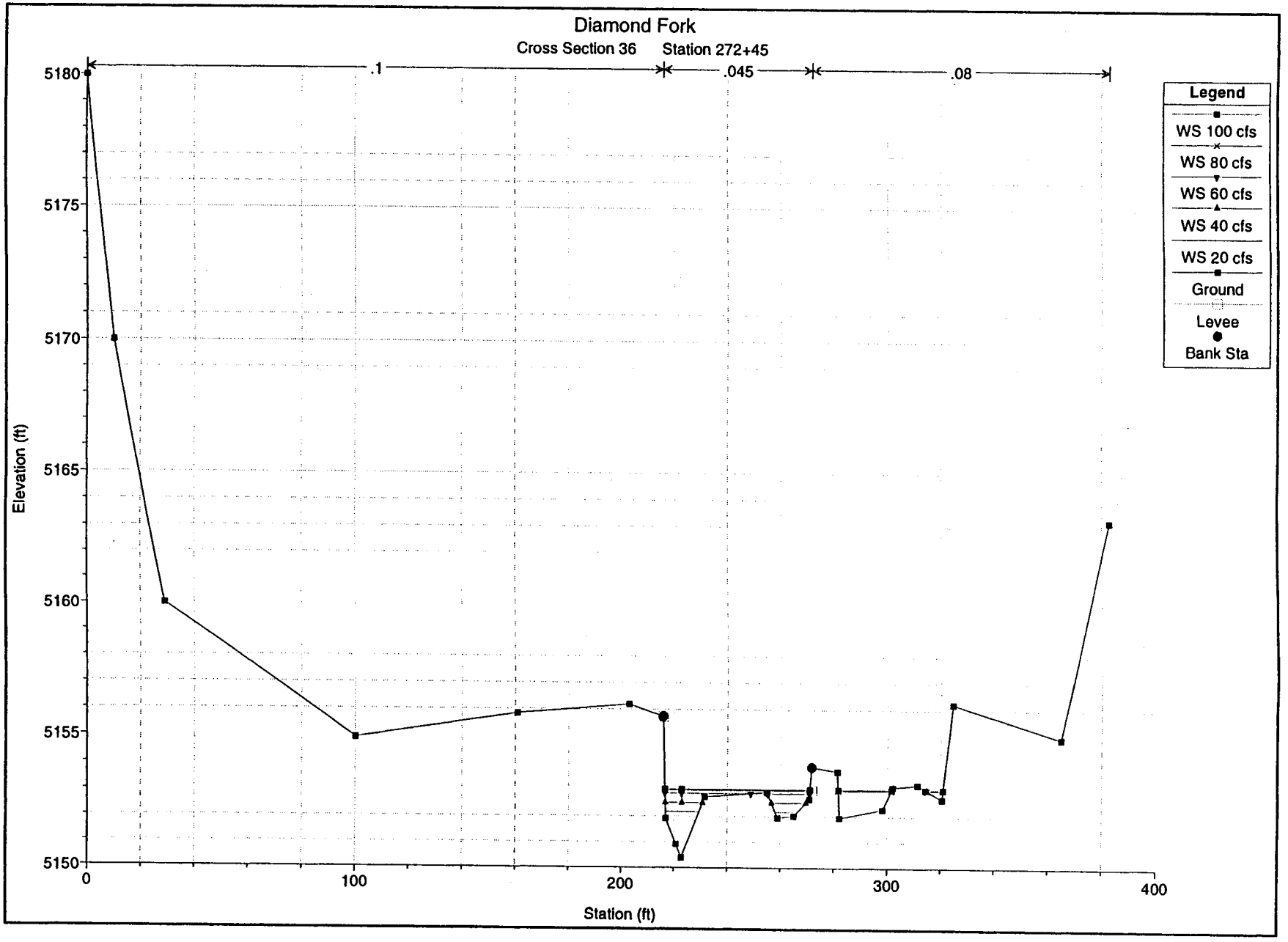

Diamond Fork
Cross Section 31 Station 220+90
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5134
5132
5130
5128
5126
5124
5122
5120
5118
5116
0
100
200
300
400
Station (ft)

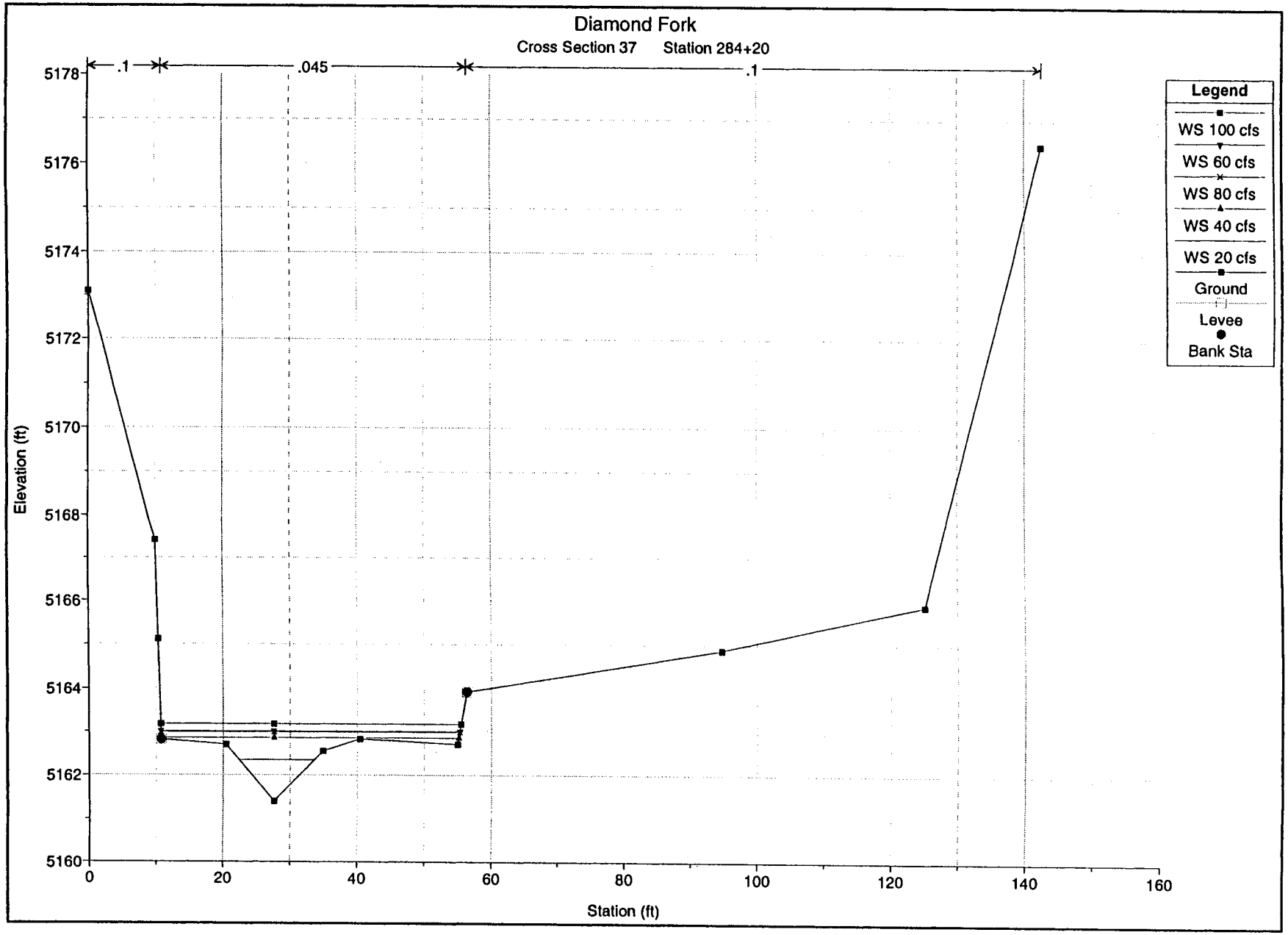

Diamond Fork
Cross Section 32
Station 242+65
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5138
5136
5134
5132
5130
5128
5126
5124
0
100
200
300
400
500
Station (ft)

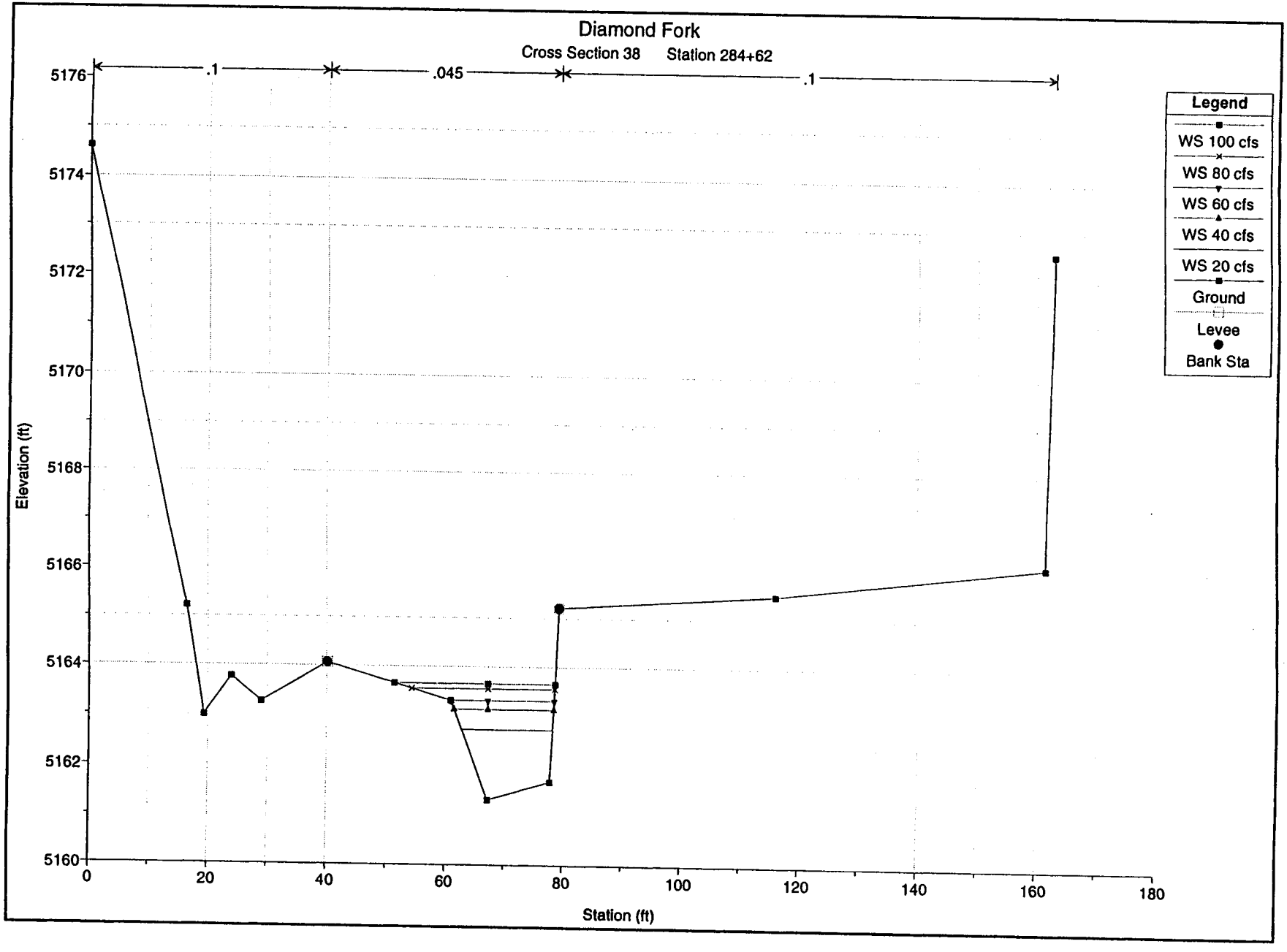

Diamond Fork
Cross Section 33 Station 252+45
.1
.05
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5143
5142
5141
5140
5139
5138
5137
5136
0
50
100
150
200
250
Station (ft)

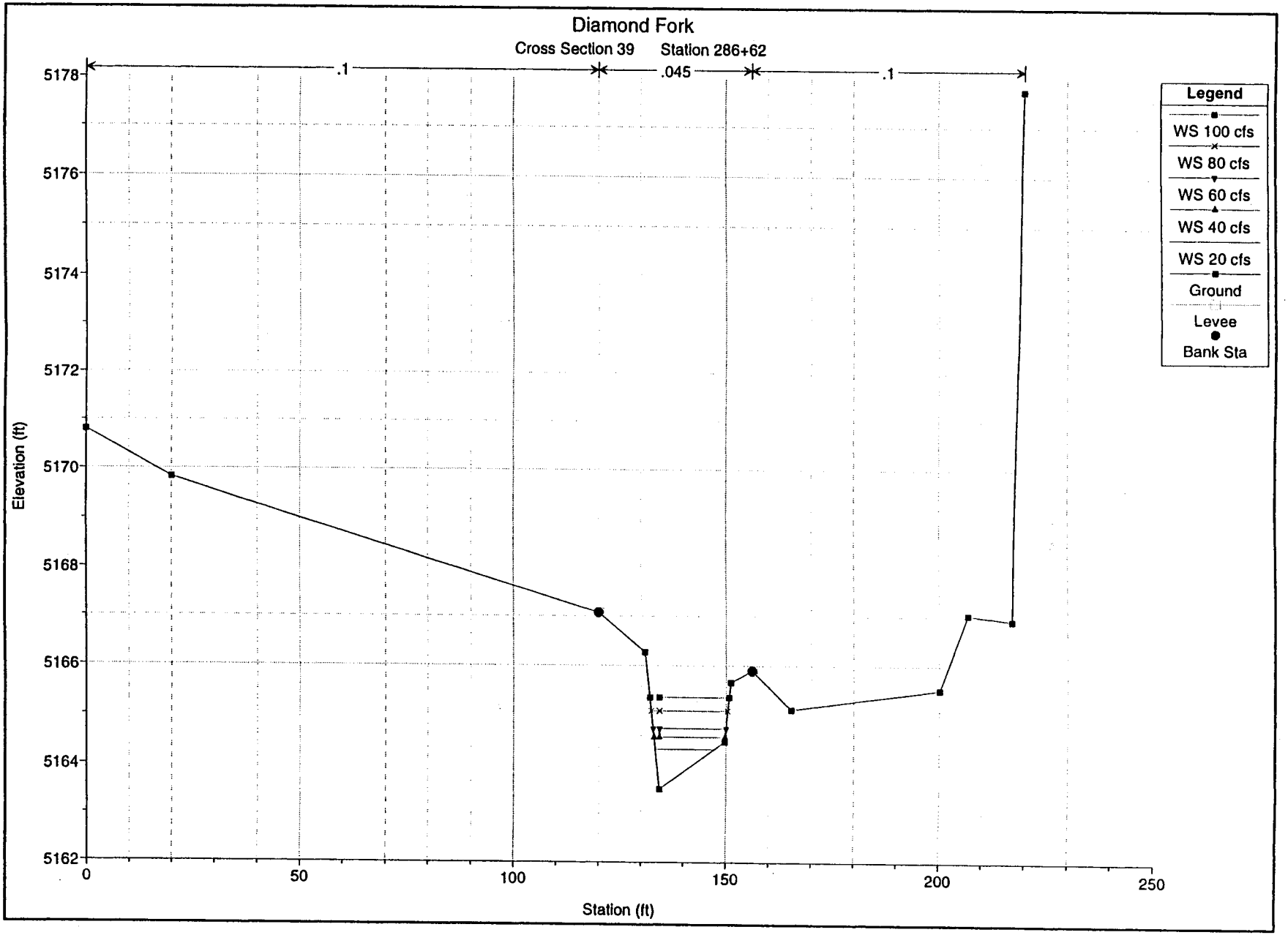

Diamond Fork
Cross Section 34
Station 263+35
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5152
5150
5148
5146
5144
5142
0
50
100
150
200
Station (ft)

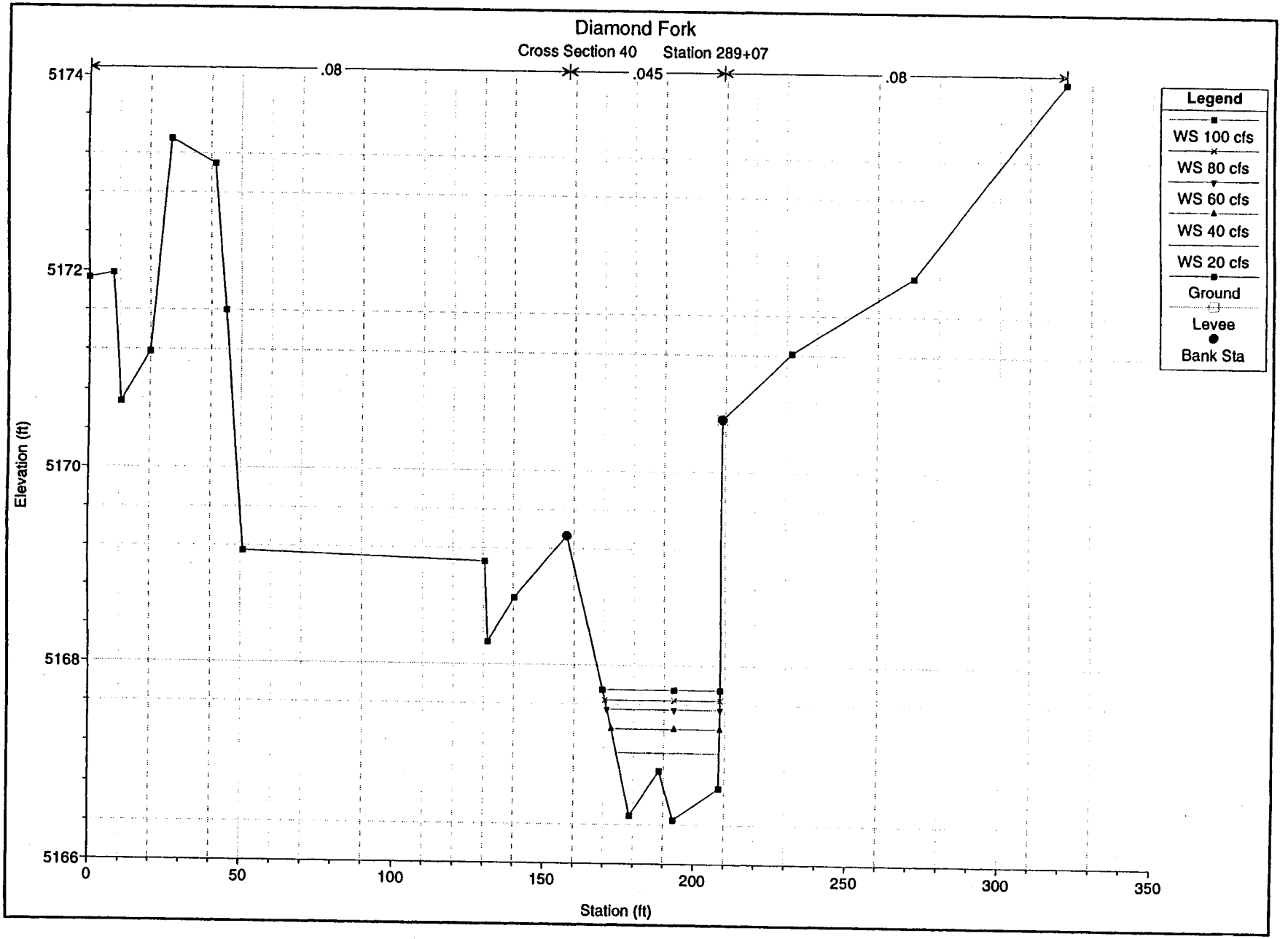

Diamond Fork
Cross Section 35 Station 270+35
.1
.05
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5160
5158
5156
5154
5152
5150
5148
0
50
100
150
200
250
300
350
Station (ft)

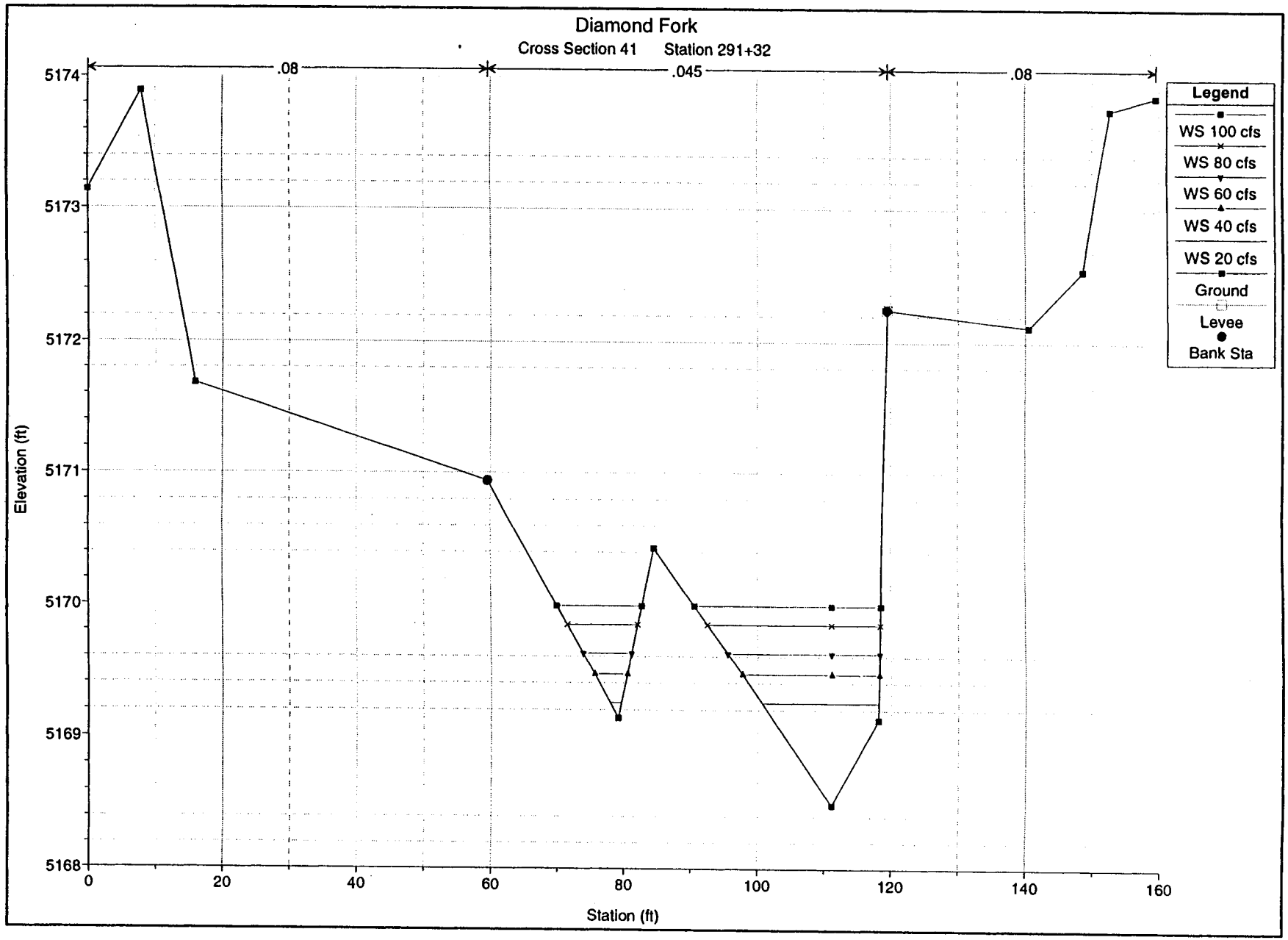

Diamond Fork
Cross Section 36
Station 272+45
.1
.045
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5180
5175
5170
5165
5160
5155
5150
0
100
200
300
400
Station (ft)

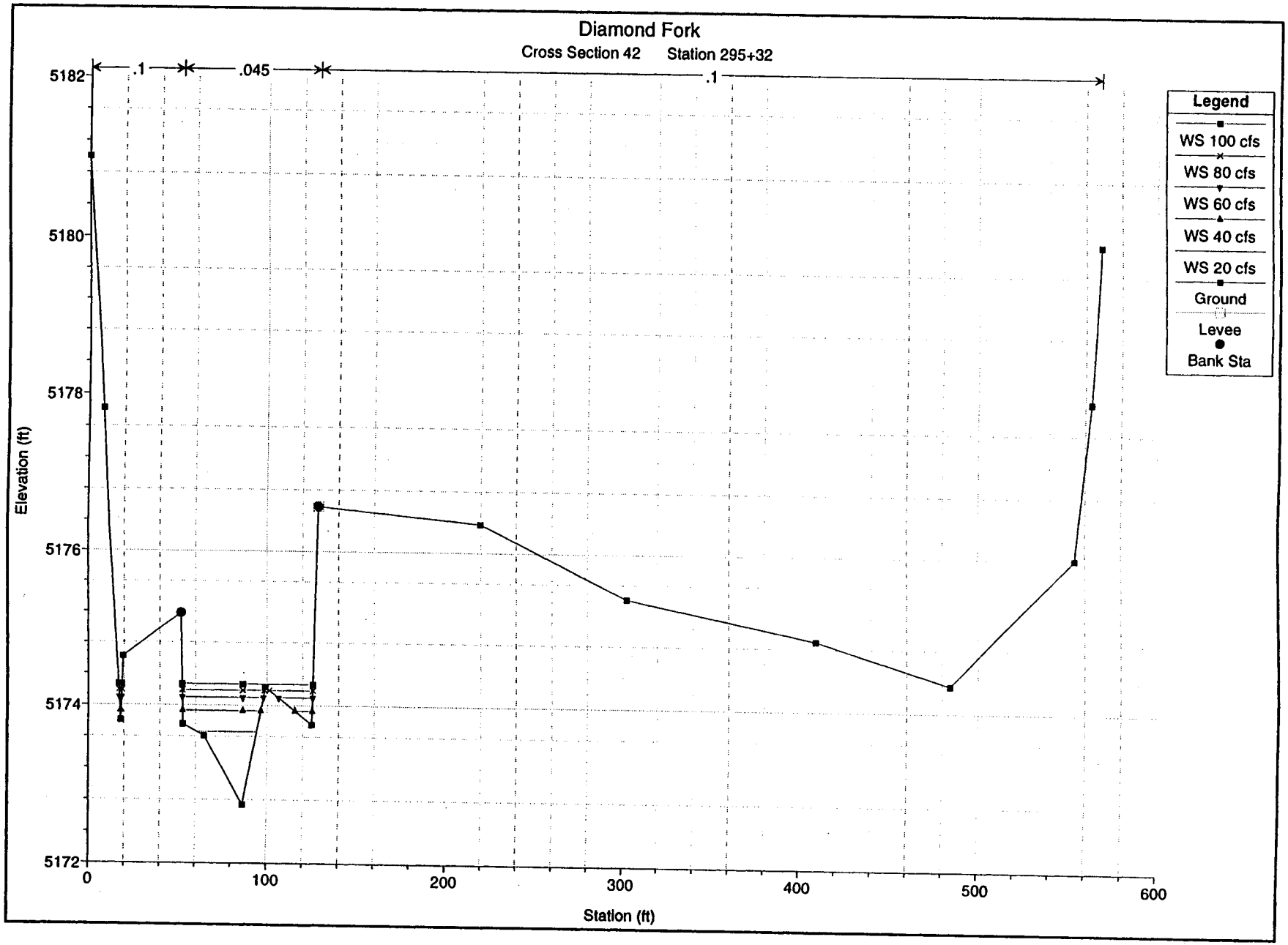

Diamond Fork
Cross Section 37 Station 284+20
.1
.045
.1
Elevation (ft)
5178
5176
5174
5172
5170
5168
5166
5164
5162
5160
0
20
40
60
80
100
120
140
160
Station (ft)
Legend
WS 100 cfs
WS 60 cfs
WS 80 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta

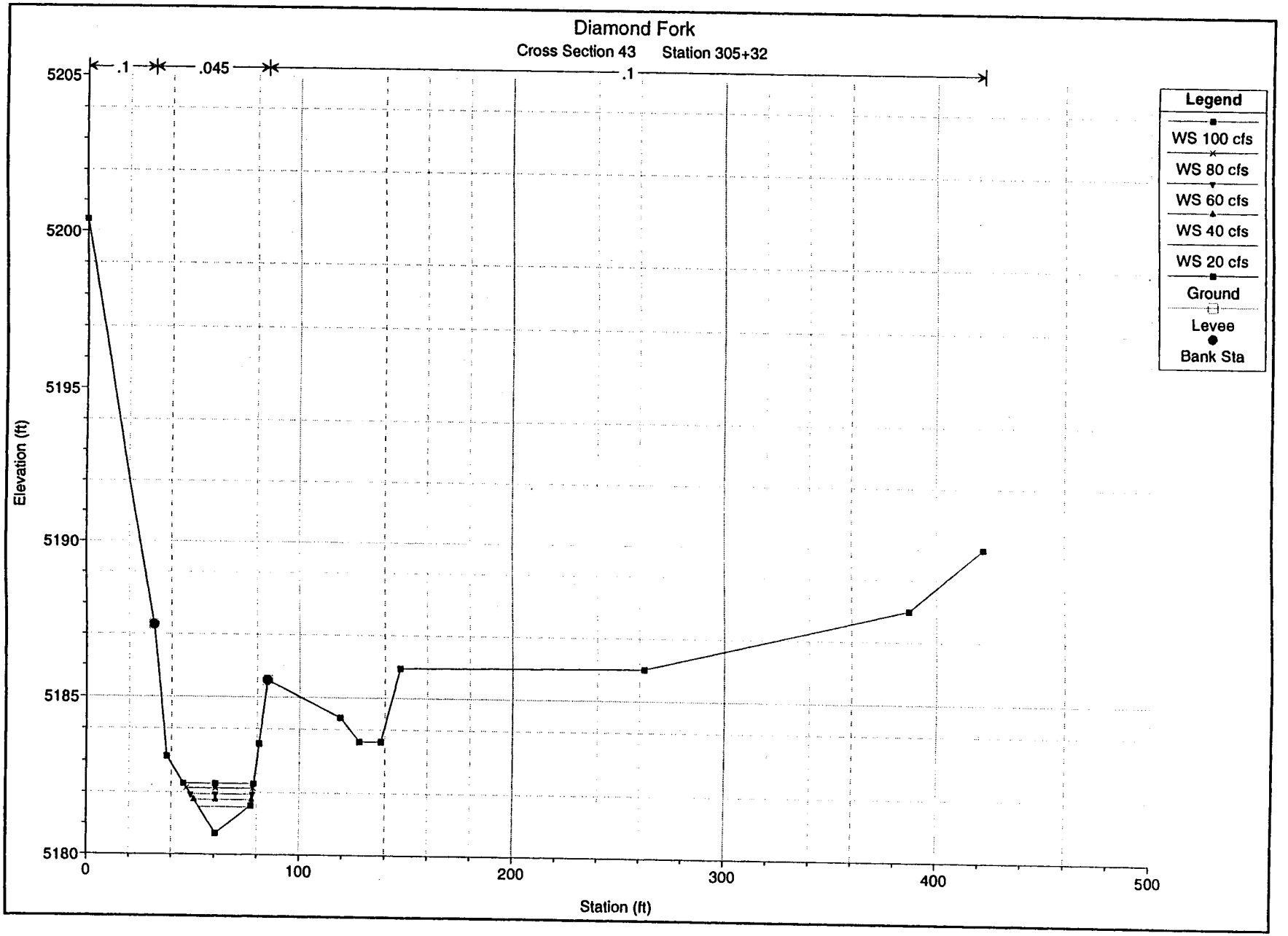

Diamond Fork
Cross Section 38 Station 284+62
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5176
5174
5172
5170
5168
5166
5164
5162
5160
0
20
40
60
80
100
120
140
160
180
Station (ft)

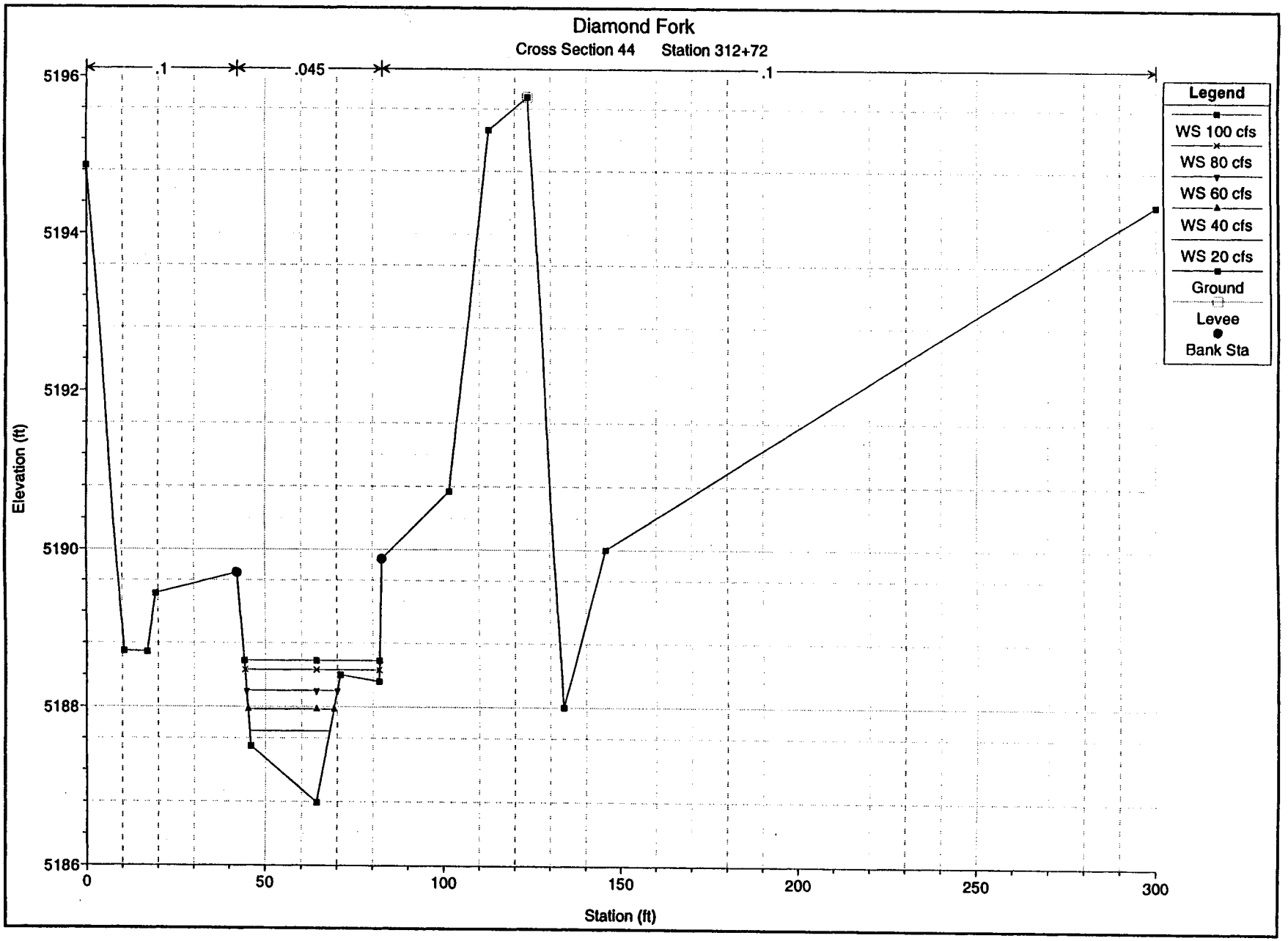

Diamond Fork
Cross Section 39
Station 286+62
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5178
5176
5174
5172
5170
5168
5166
5164
5162
0
50
100
150
200
250
Station (ft)

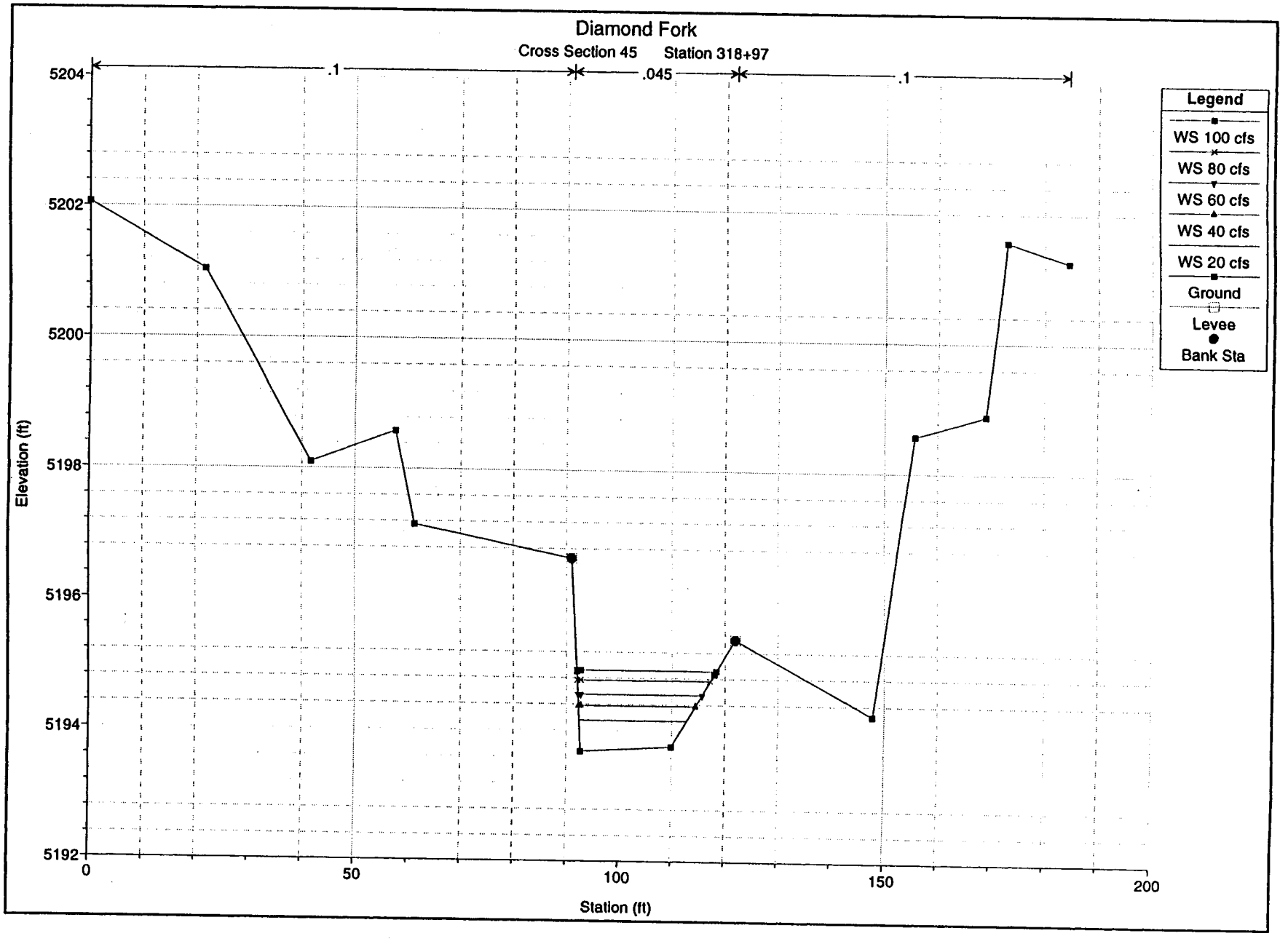

Diamond Fork
Cross Section 40
Station 289+07
.08
.045
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5174
5172
5170
5168
5166
0
50
100
150
200
250
300
350
Station (ft)

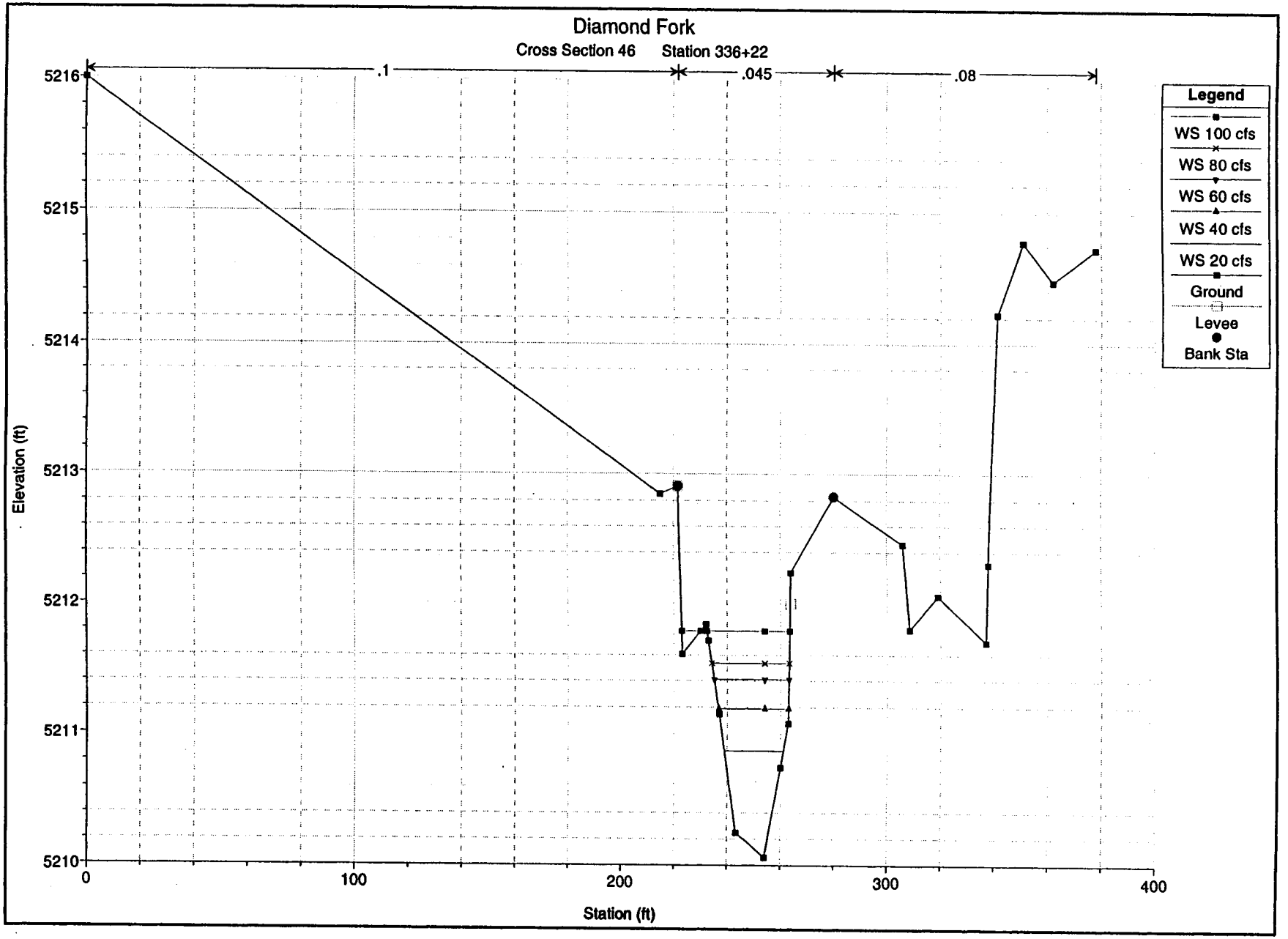

Diamond Fork
Cross Section 41 Station 291+32
.08
.045
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5174
5173
5172
5171
5170
5169
5168
0
20
40
60
80
100
120
140
160
Station (ft)


Diamond Fork
Cross Section 42 Station 295+32
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5182
5180
5178
5176
5174
5172
0
100
200
300
400
500
600
Station (ft)

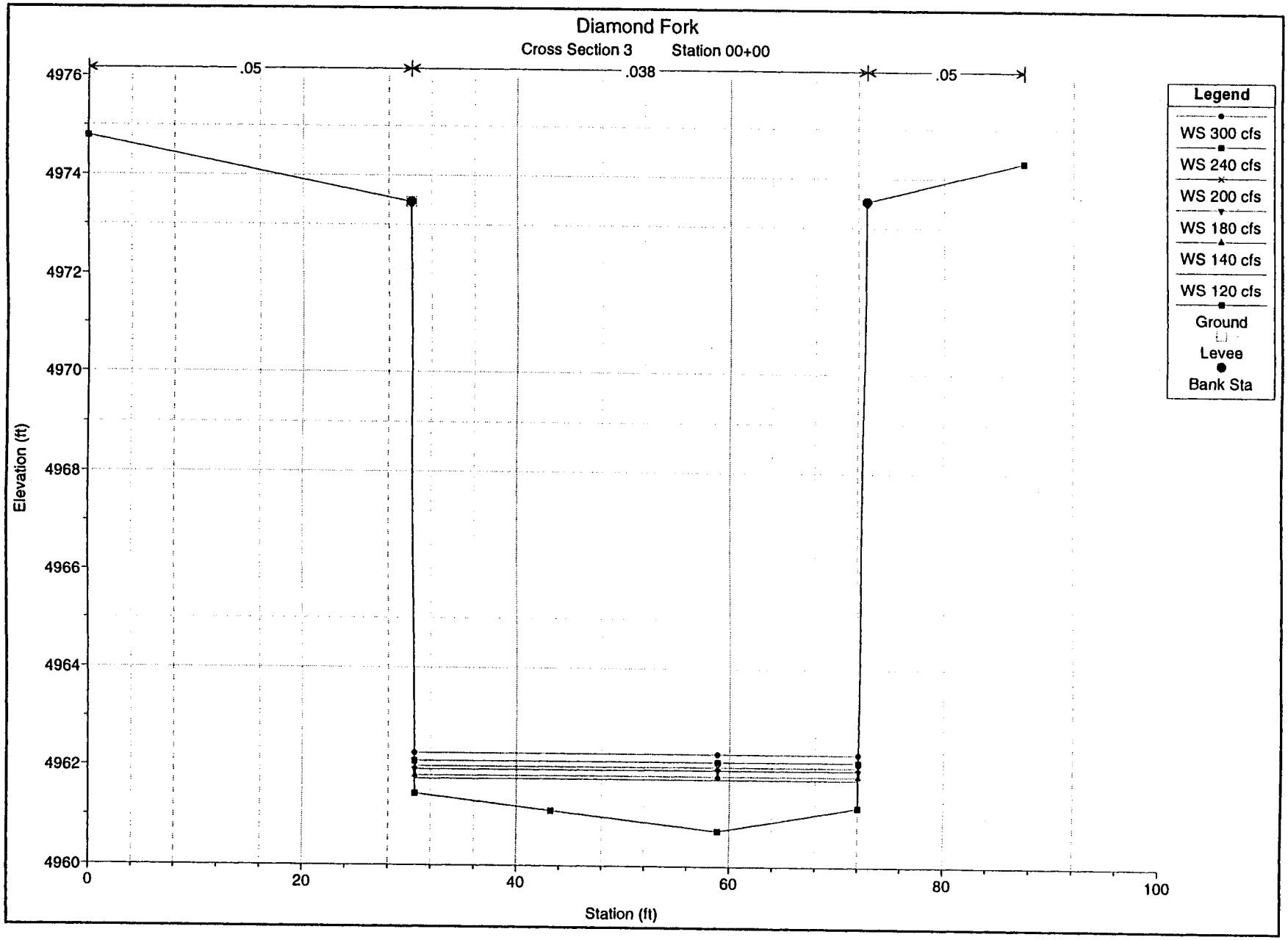

Diamond Fork
Cross Section 43 Station 305+32
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5205
5200
5195
5190
5185
5180
0
100
200
300
400
500
Station (ft)

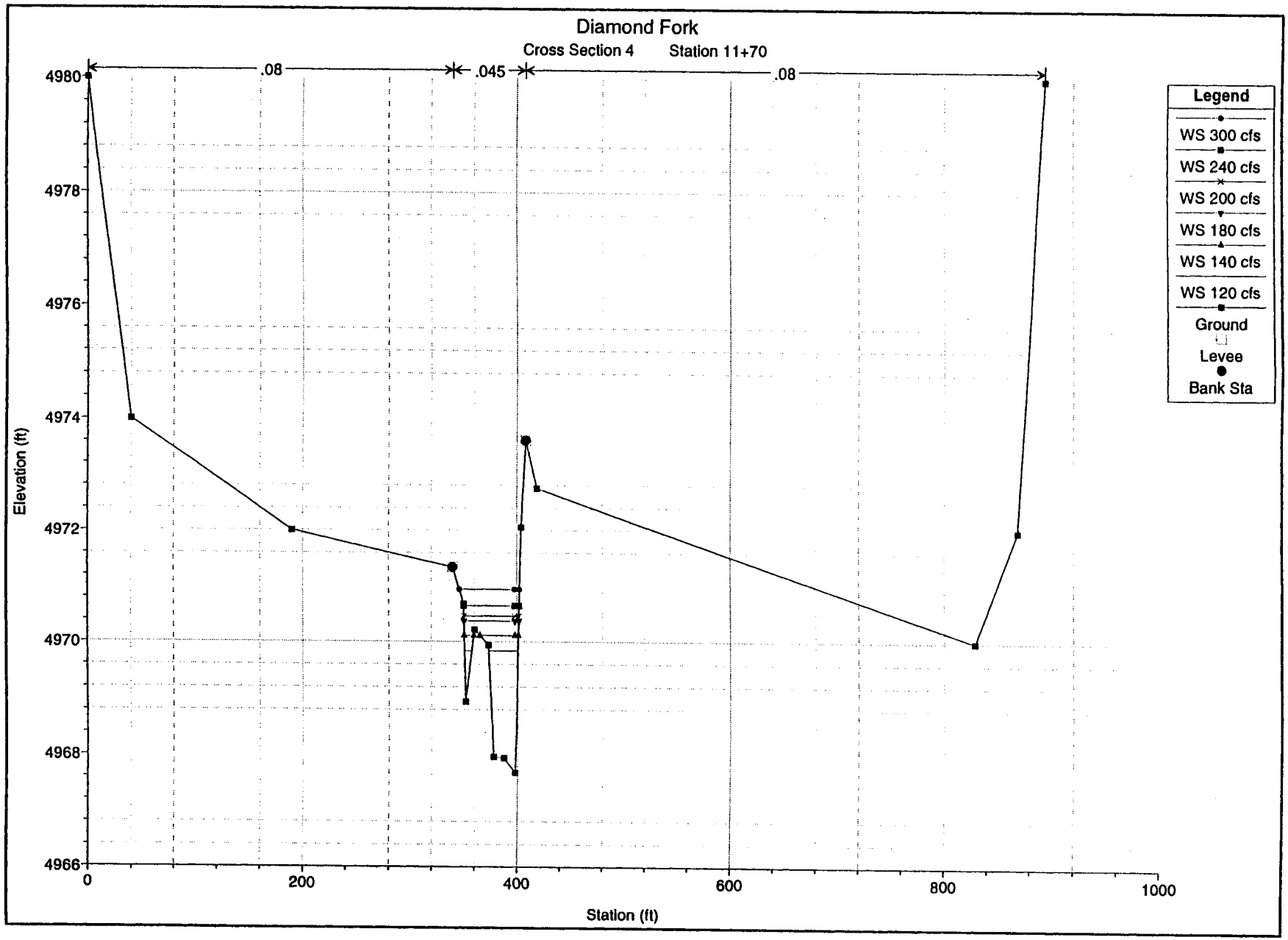

Diamond Fork
Cross Section 44 Station 312+72
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5196
5194
5192
5190
5188
5186
0
50
100
150
200
250
300
Station (ft)

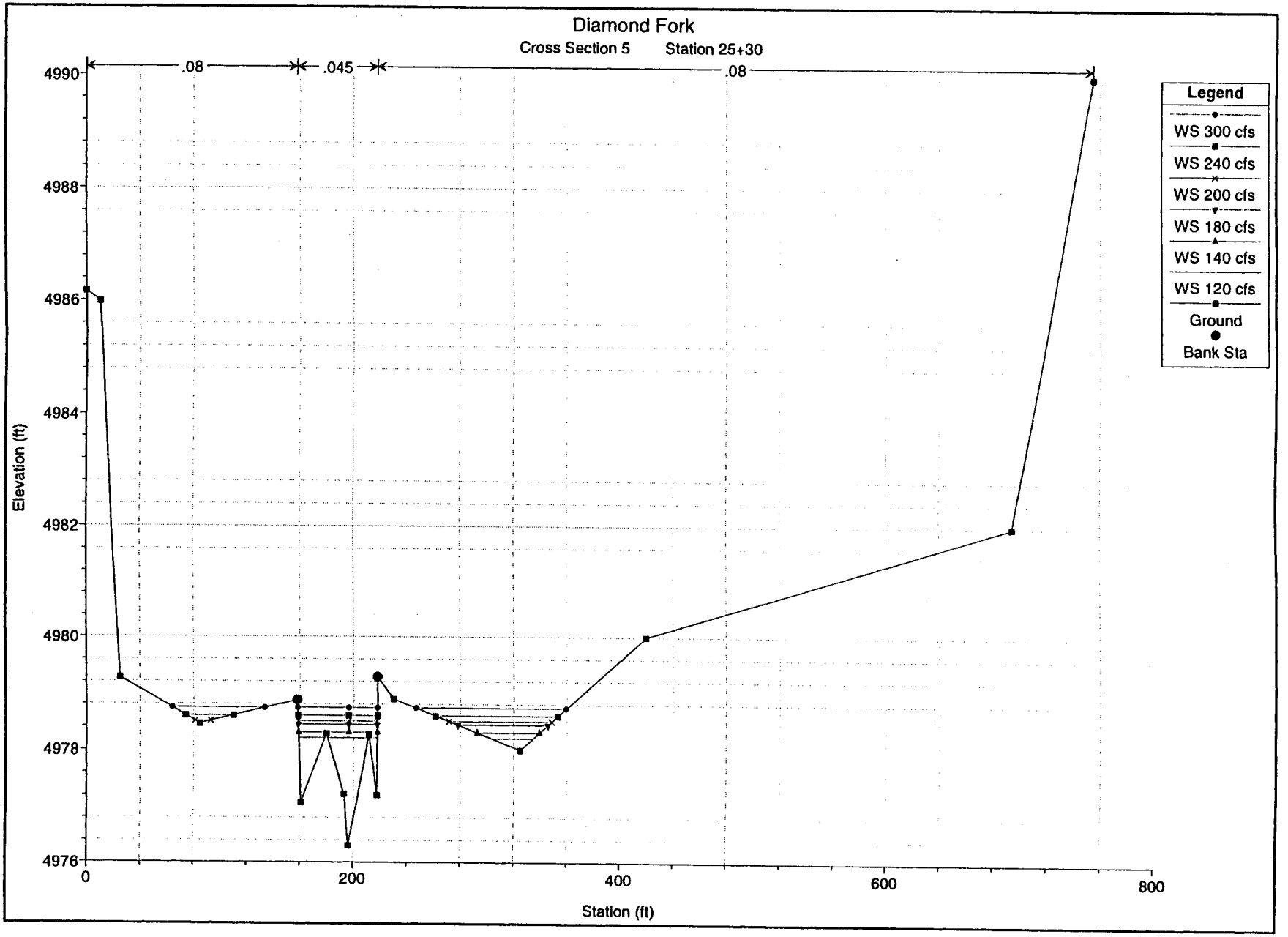

Diamond Fork
Cross Section 45
Station 318+97
.1
.045
.1
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5204
5202
5200
5198
5196
5194
5192
0
50
100
150
200
Station (ft)

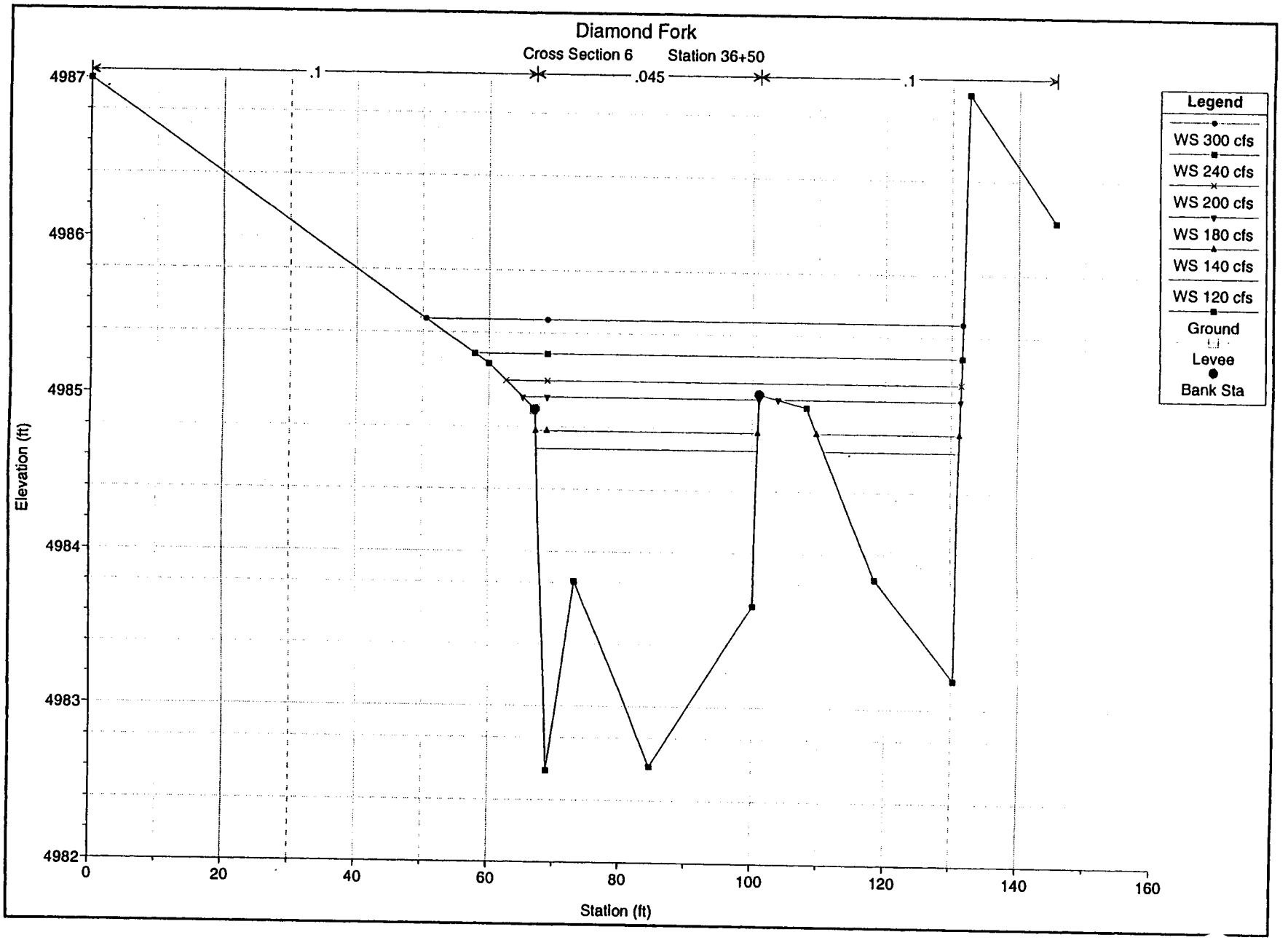

Diamond Fork
Cross Section 46
Station 336+22
.1
.045
.08
Legend
WS 100 cfs
WS 80 cfs
WS 60 cfs
WS 40 cfs
WS 20 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5216
5215
5214
5213
5212
5211
5210
0
100
200
300
400
Station (ft)

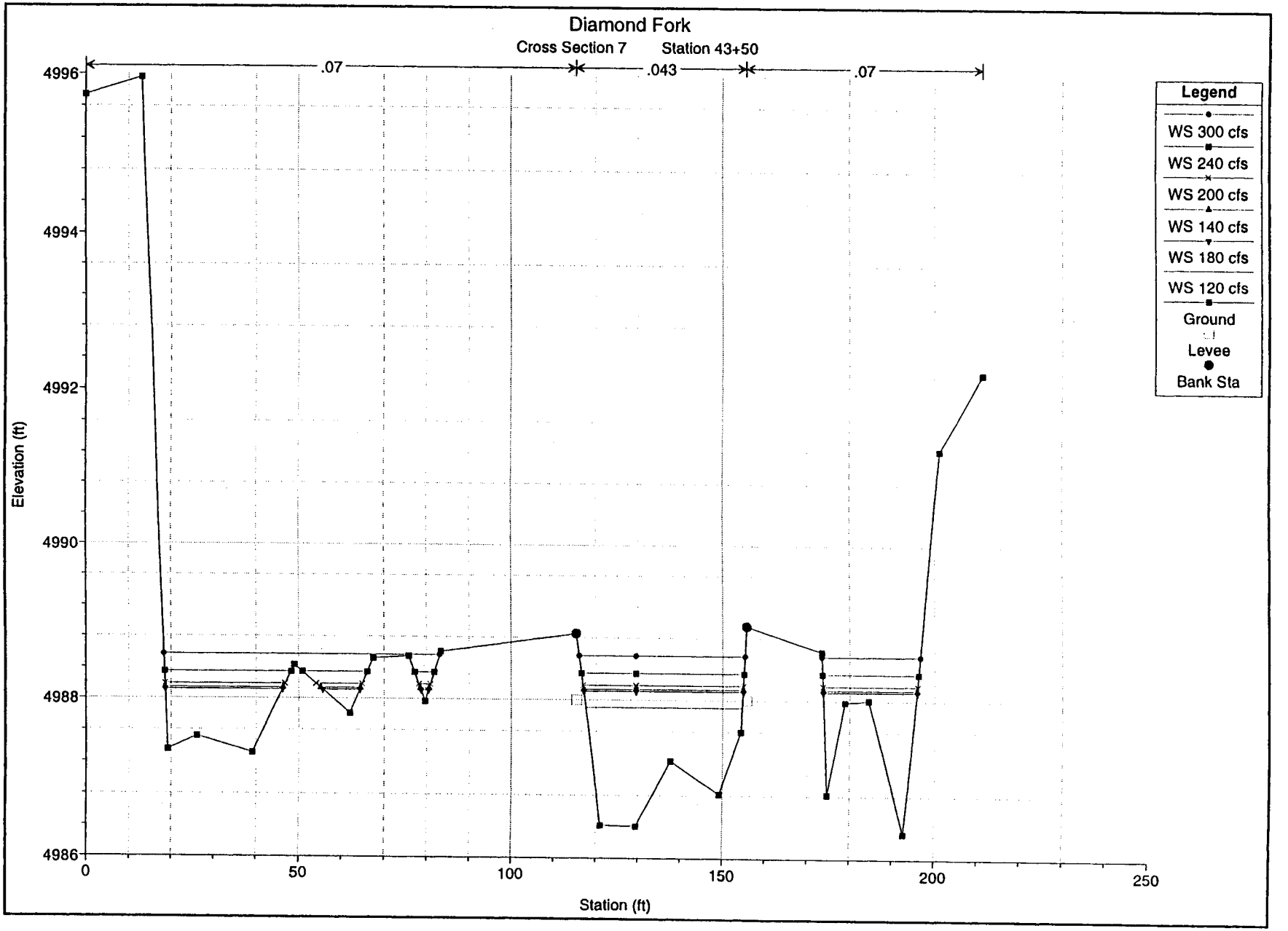
HEC-RAS CROSS SECTIONS AND WATER SURFACE ELEVATIONS (120 - 300 CFS)

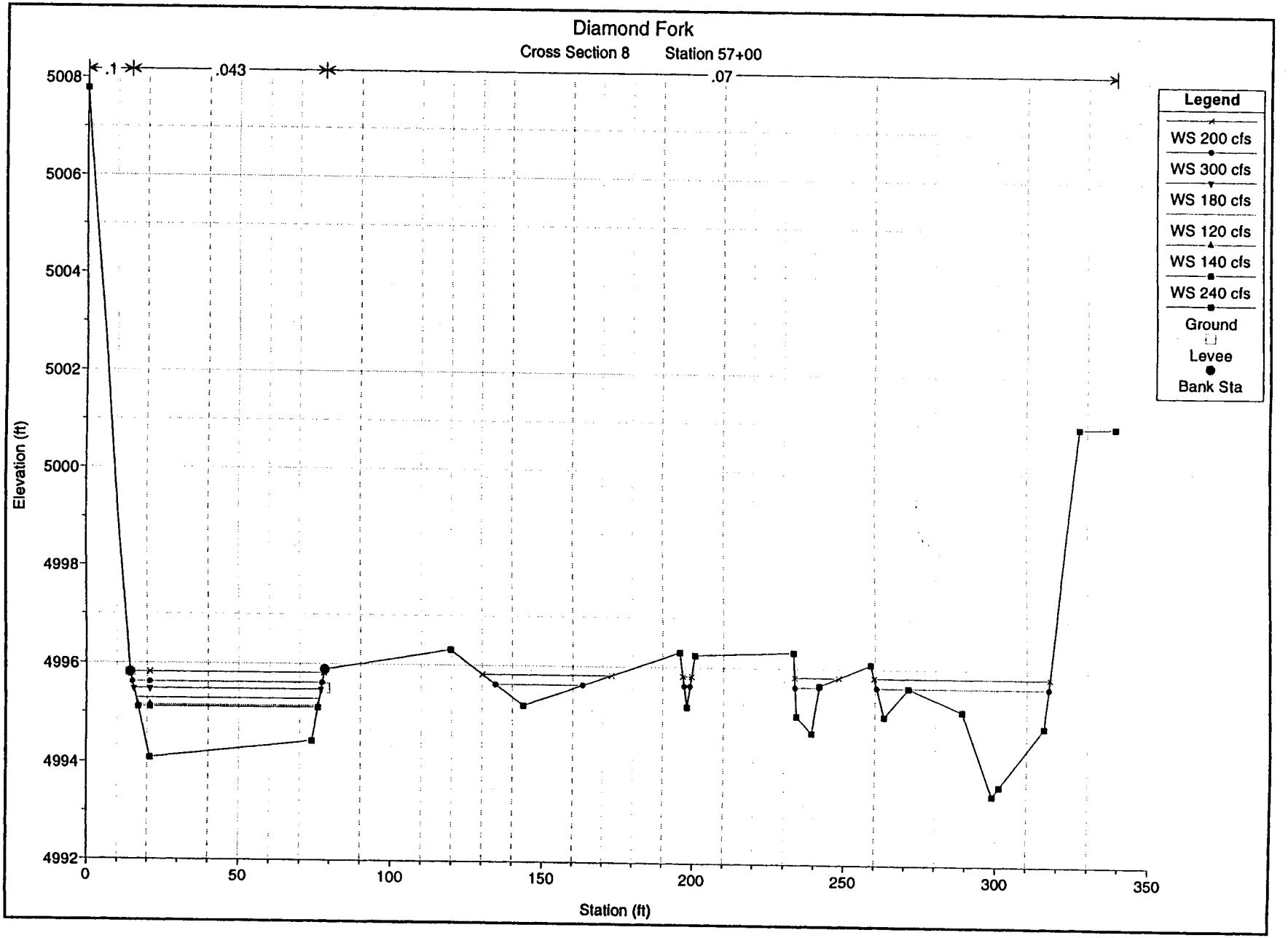

Diamond Fork
Cross Section 3
Station 00+00
.05
.038
.05
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
4976
4974
4972
4970
4968
4966
4964
4962
4960
0
20
40
60
80
100
Station (ft)

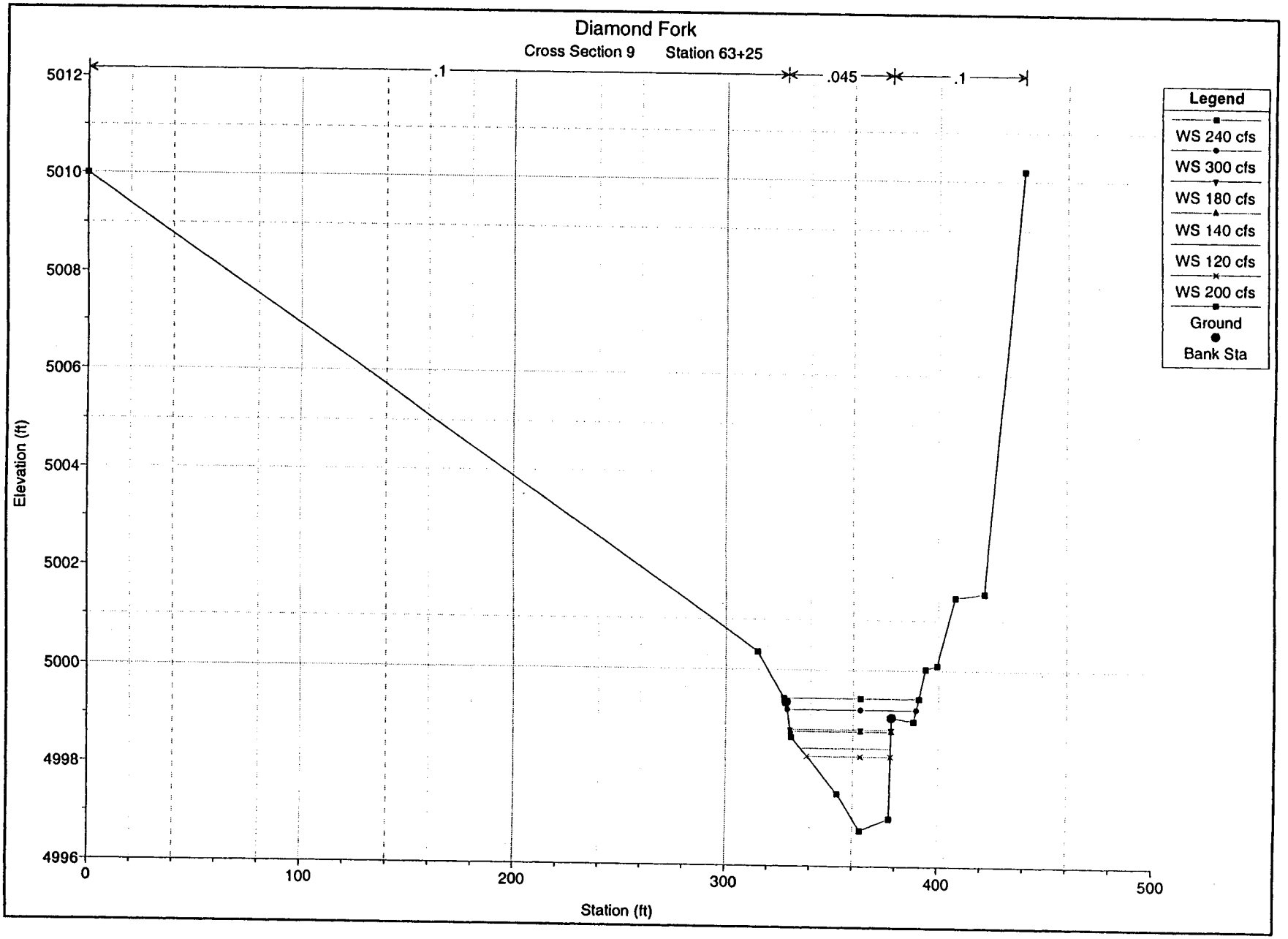

Diamond Fork
Cross Section 4
Station 11+70
.08
.045
.08
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
4980
4978
4976
4974
4972
4970
4968
4966
0
200
400
600
800
1000
Station (ft)

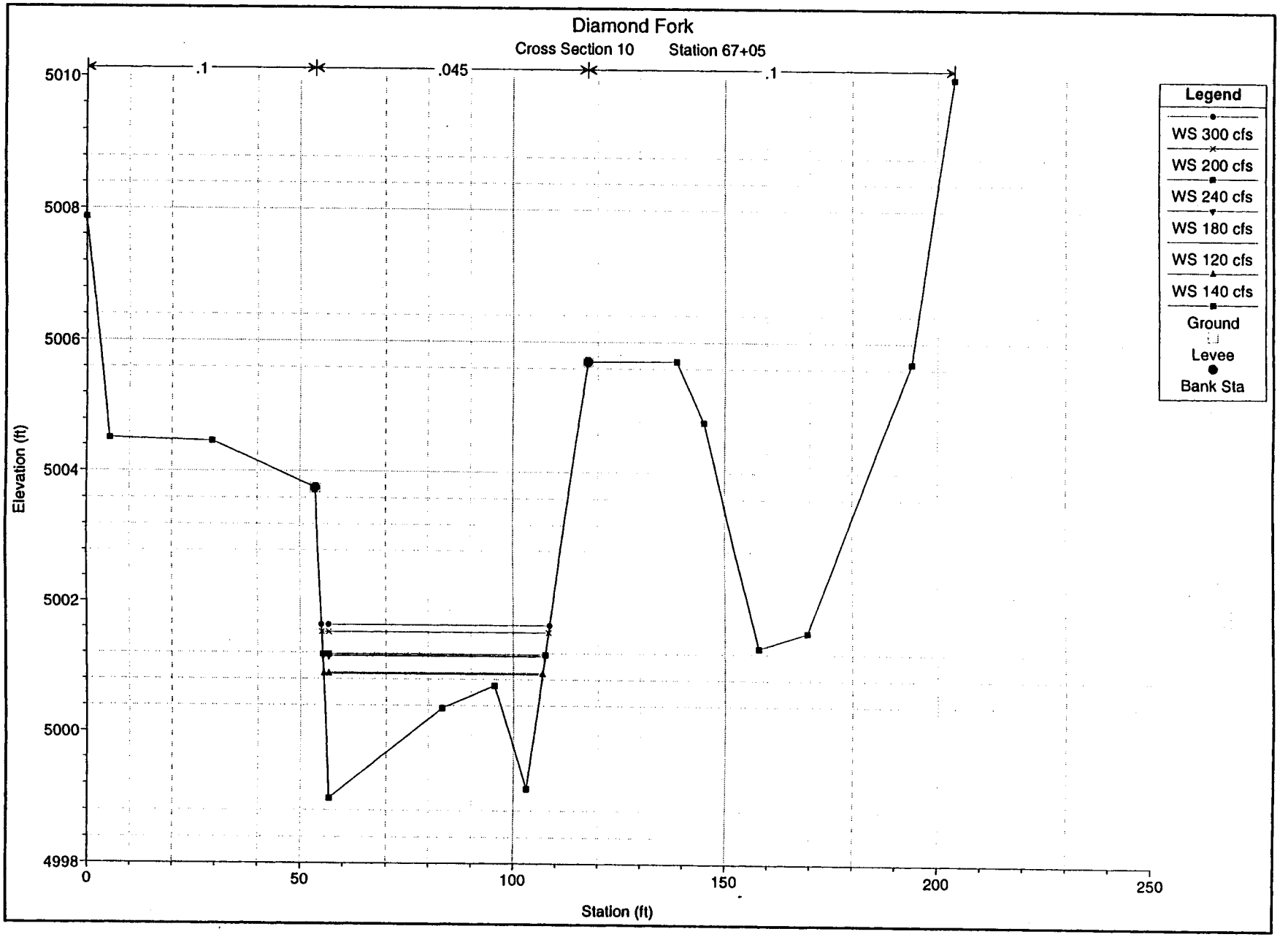

Diamond Fork
Cross Section 5 Station 25+30
.08
.045
.08
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Bank Sta
Elevation (ft)
4990
4988
4986
4984
4982
4980
4978
4976
0
200
400
600
800
Station (ft)

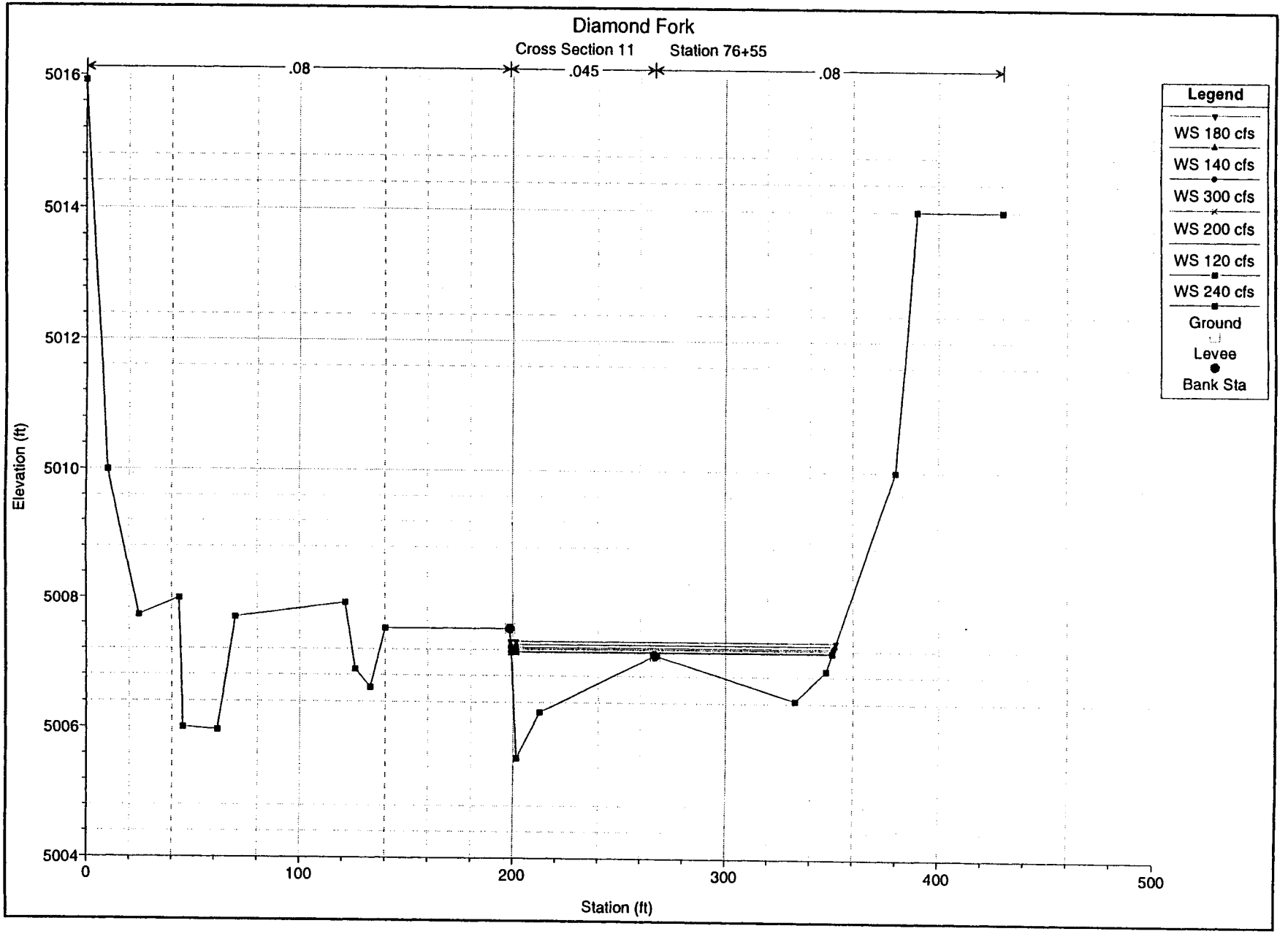

Diamond Fork
Cross Section 6
Station 36+50
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
4987
4986
4985
4984
4983
4982
Station (ft)
0
20
40
60
80
100
120
140
160

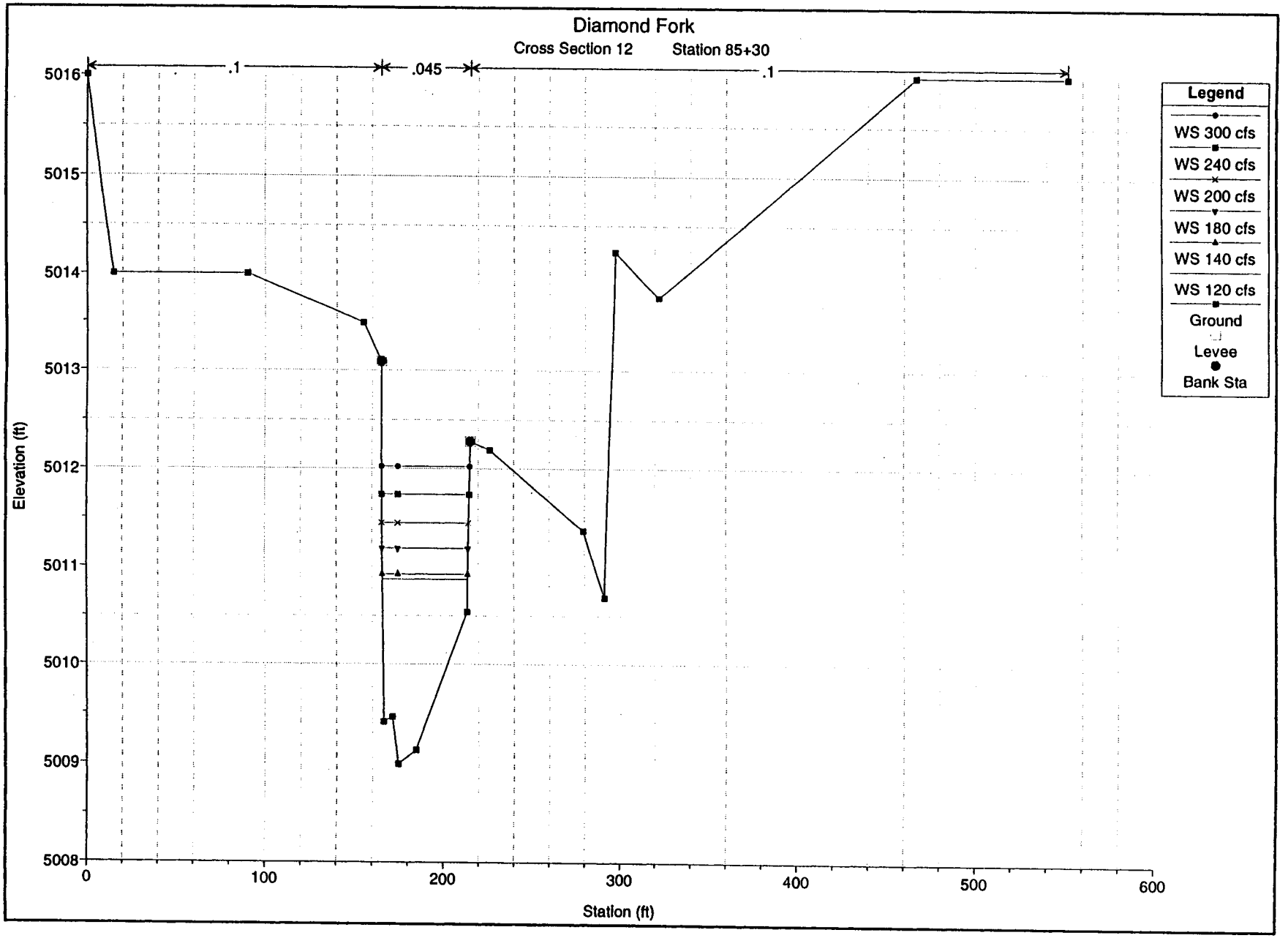

Diamond Fork
Cross Section 7
Station 43+50
.07
.043
.07
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 140 cfs
WS 180 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
4996
4994
4992
4990
4988
4986
0
50
100
150
200
250
Station (ft)

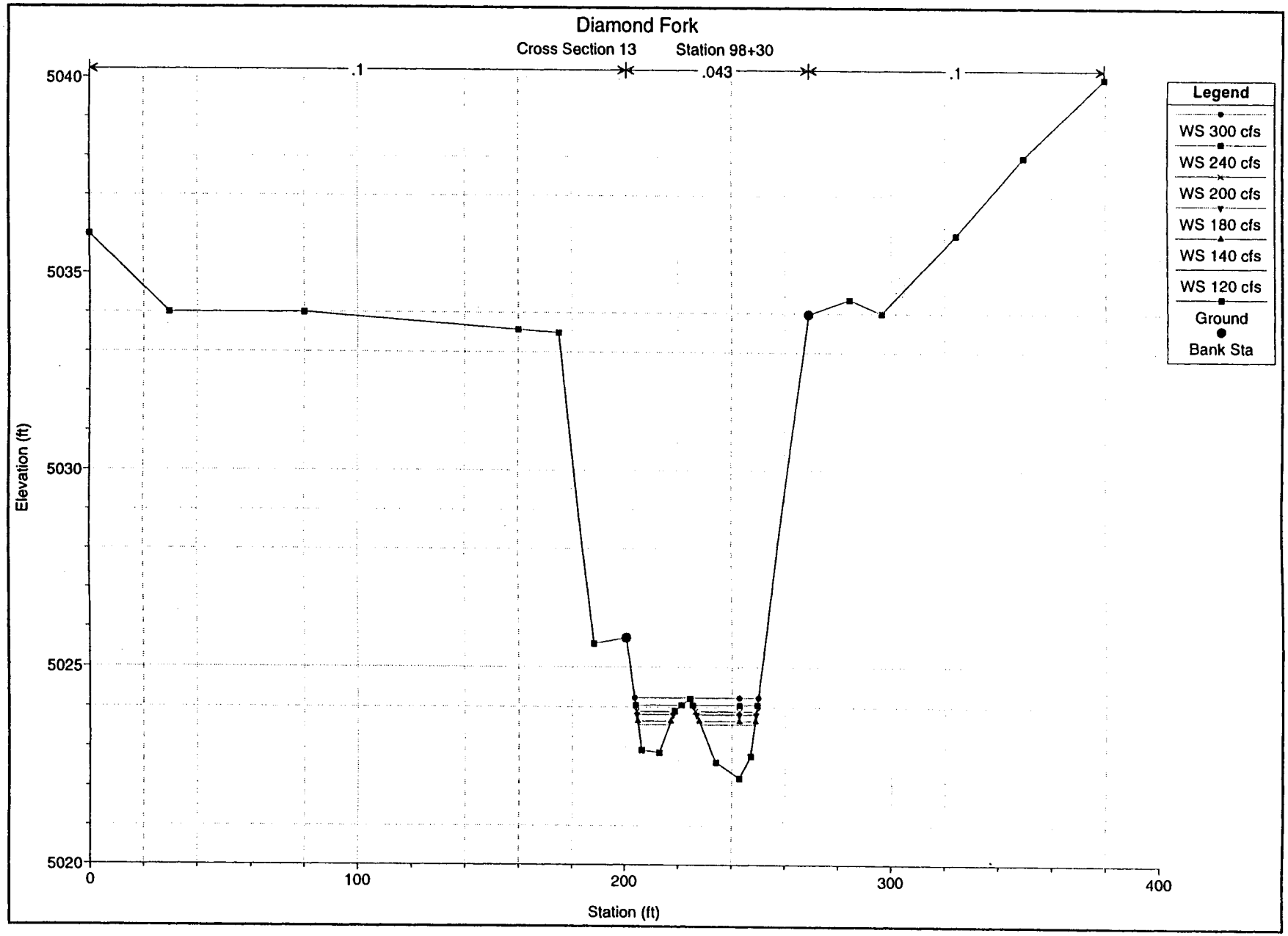

Diamond Fork
Cross Section 8 Station 57+00
.1
.043
.07
Legend
WS 200 cfs
WS 300 cfs
WS 180 cfs
WS 120 cfs
WS 140 cfs
WS 240 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5008
5006
5004
5002
5000
4998
4996
4994
4992
0
50
100
150
200
250
300
350
Station (ft)

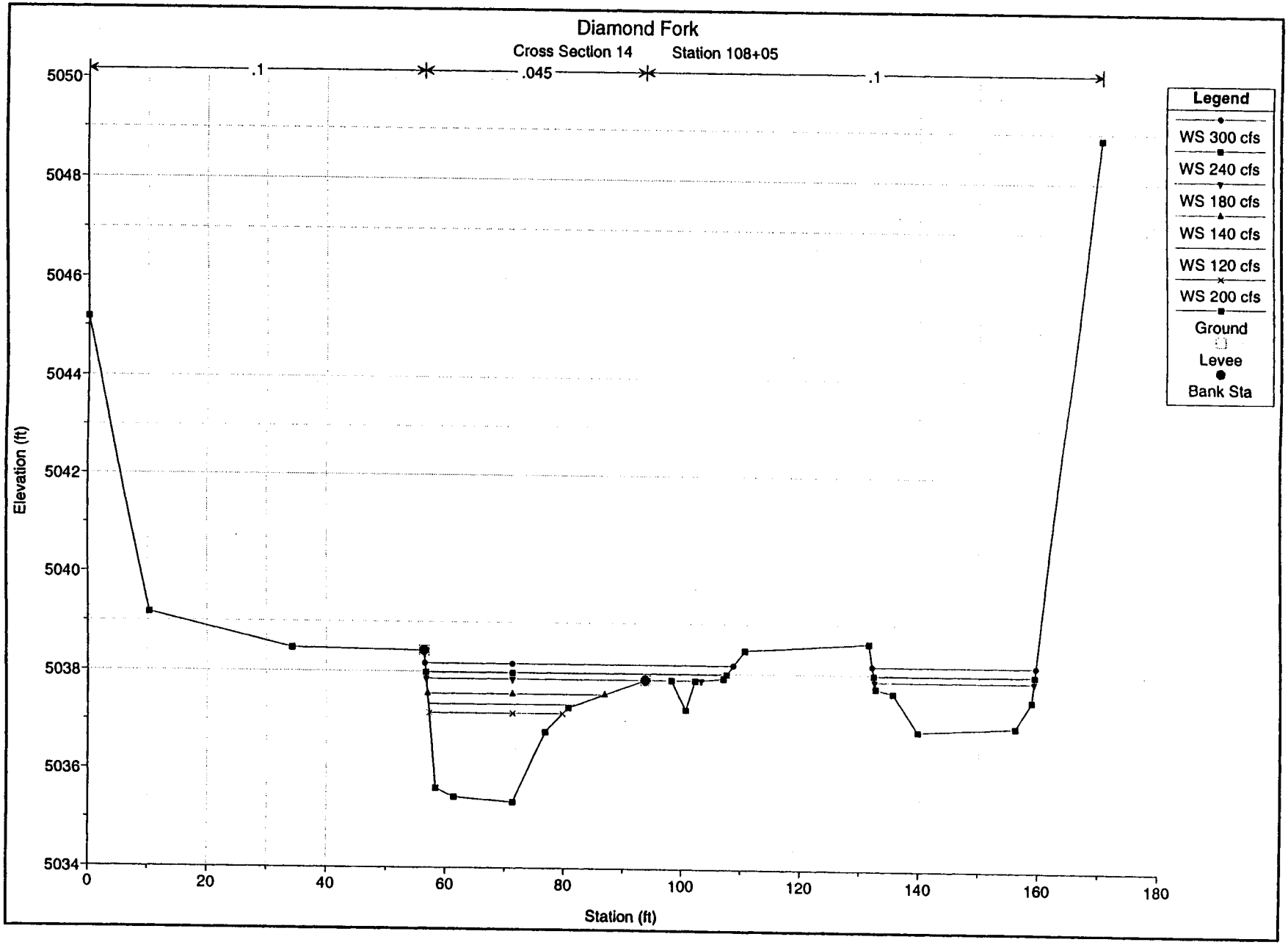

Diamond Fork
Cross Section 9 Station 63+25
.1
.045
.1
Legend
WS 240 cfs
WS 300 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
WS 200 cfs
Ground
Bank Sta
Elevation (ft)
5012
5010
5008
5006
5004
5002
5000
4998
4996
0
100
200
300
400
500
Station (ft)

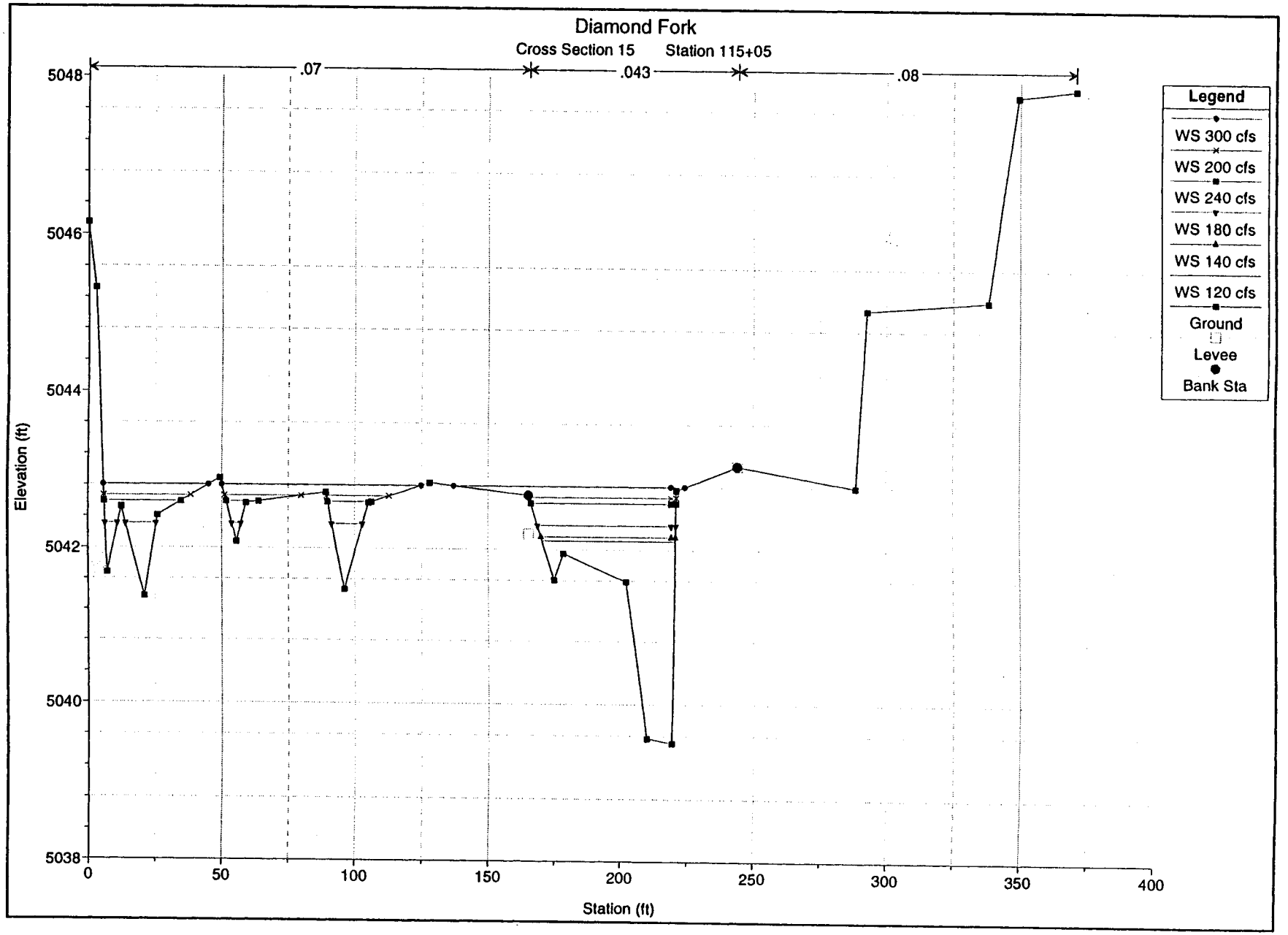

Diamond Fork
Cross Section 10
Station 67+05
.1
.045
.1
Legend
WS 300 cfs
WS 200 cfs
WS 240 cfs
WS 180 cfs
WS 120 cfs
WS 140 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5010
5008
5006
5004
5002
5000
4998
0
50
100
150
200
250
Station (ft)

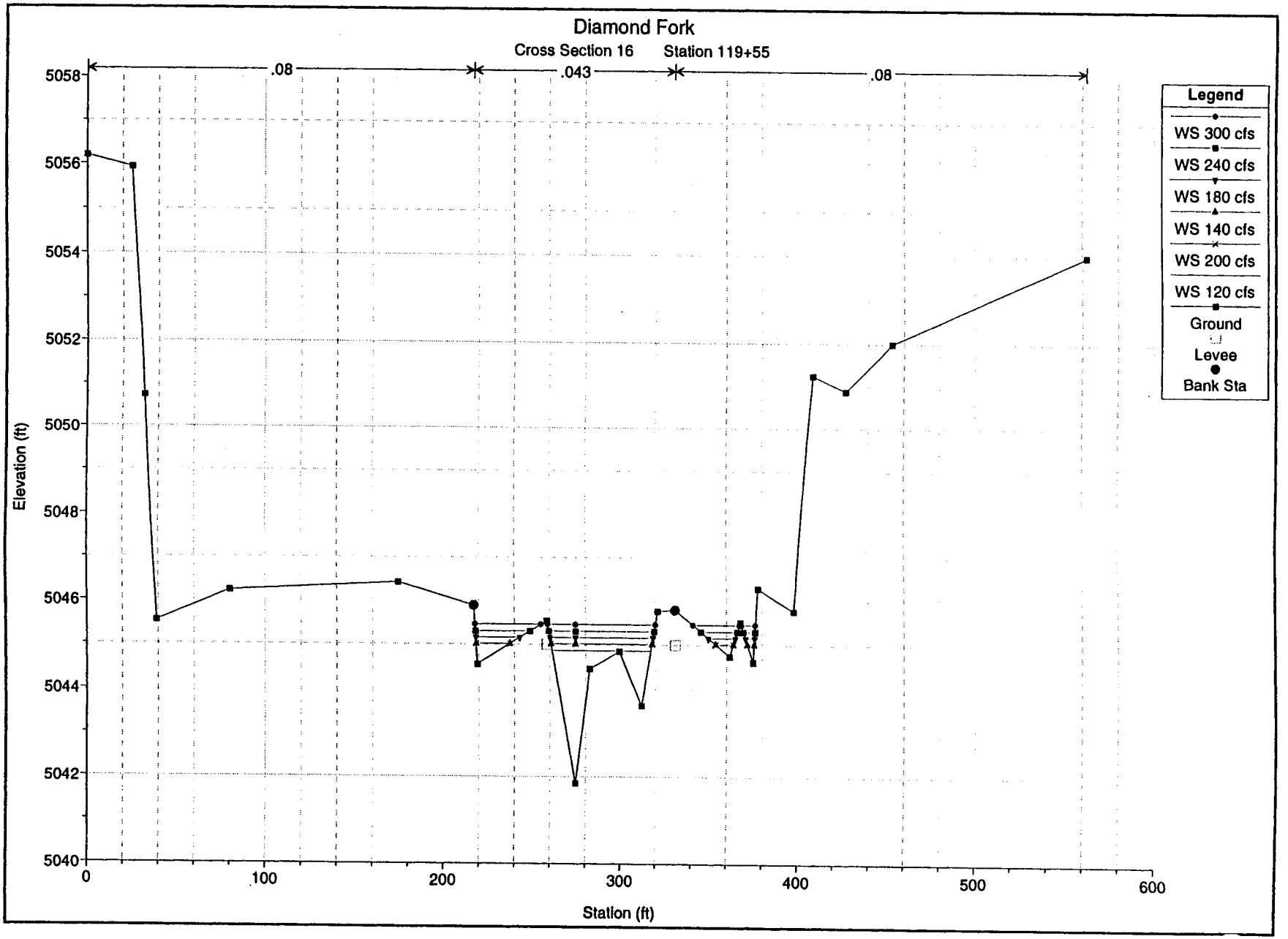

Diamond Fork
Cross Section 11
Station 76+55
.08
.045
.08
Legend
WS 180 cfs
WS 140 cfs
WS 300 cfs
WS 200 cfs
WS 120 cfs
WS 240 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5016
5014
5012
5010
5008
5006
5004
0
100
200
300
400
500
Station (ft)

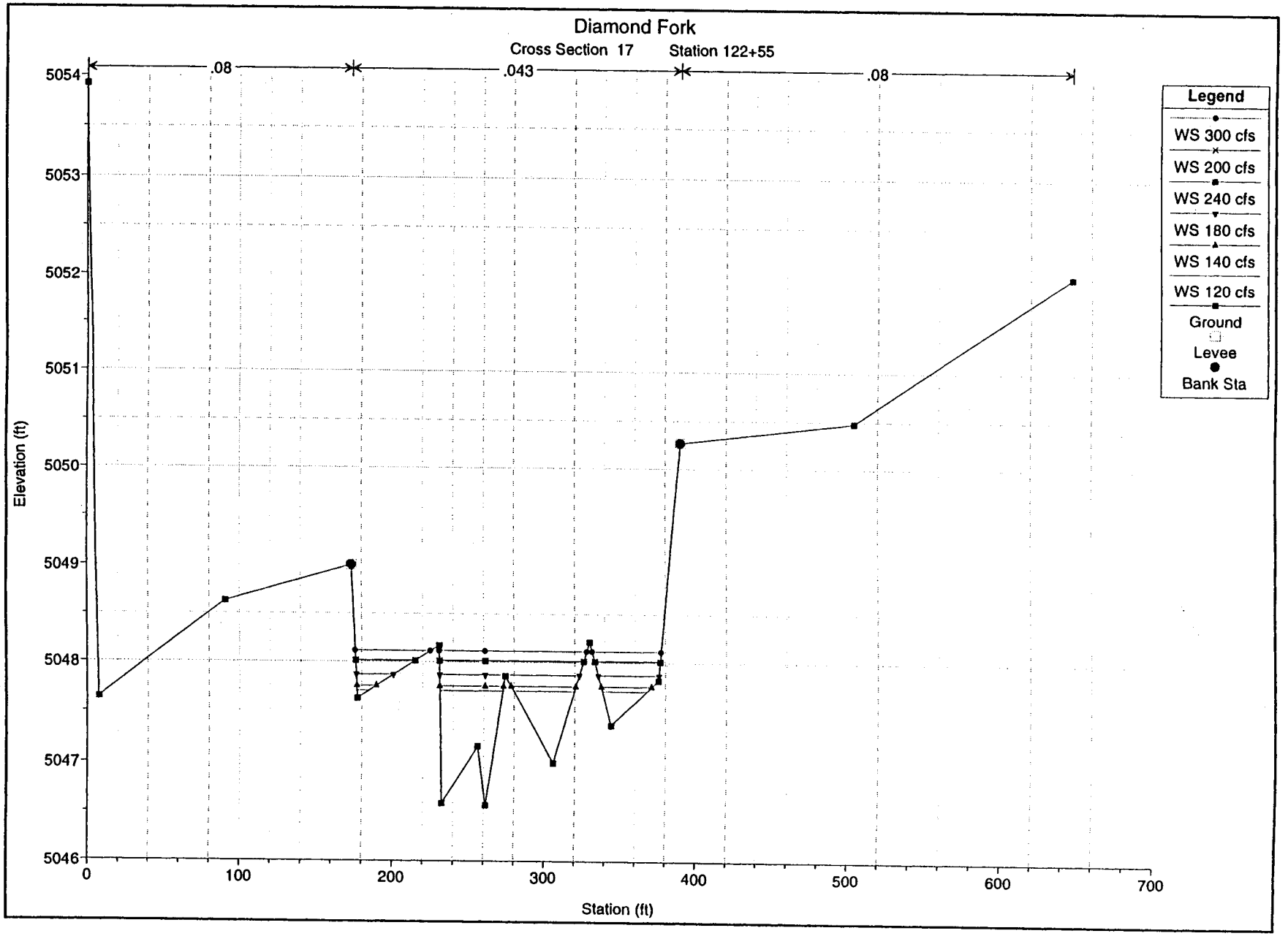

Diamond Fork
Cross Section 12
Station 85+30
.1
.045
.1
Elevation (ft)
5016
5015
5014
5013
5012
5011
5010
5009
5008
0
100
200
300
400
500
600
Station (ft)
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta

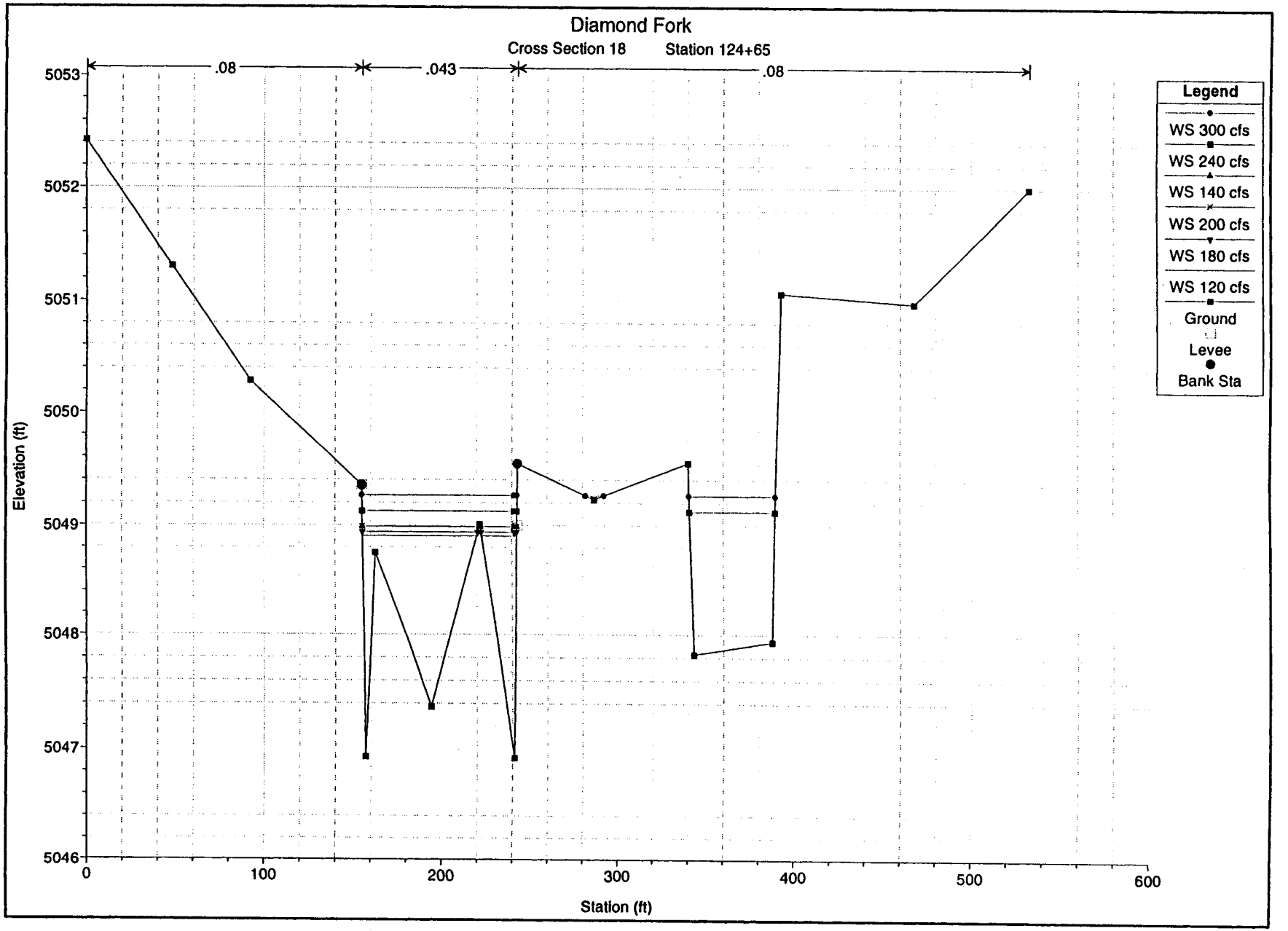

Diamond Fork
Cross Section 13
Station 98+30
.1
.043
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Bank Sta
Elevation (ft)
5040
5035
5030
5025
5020
0
100
200
300
400
Station (ft)

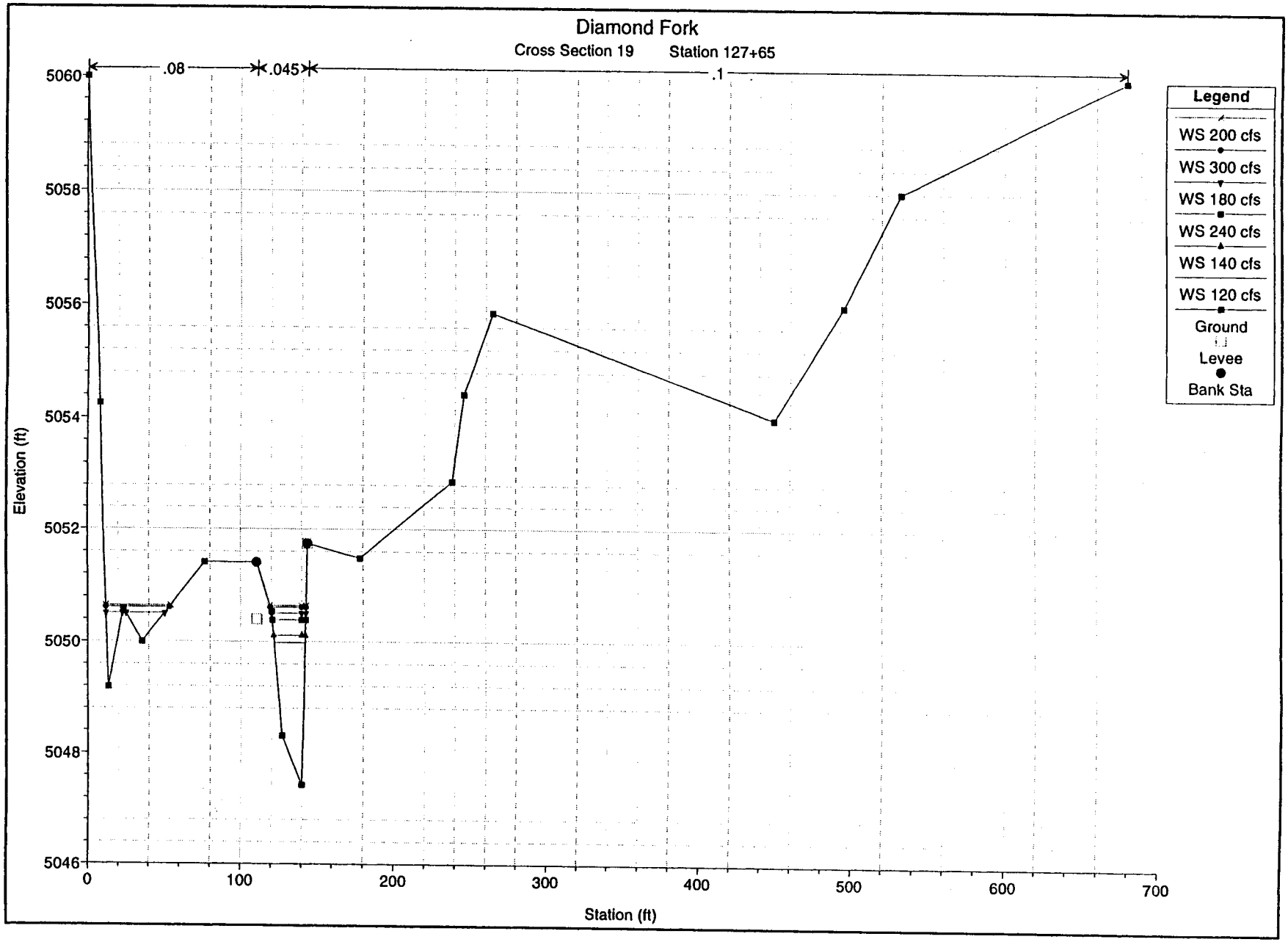

Diamond Fork
Cross Section 14
Station 108+05
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
WS 200 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5050
5048
5046
5044
5042
5040
5038
5036
5034
0
20
40
60
80
100
120
140
160
180
Station (ft)

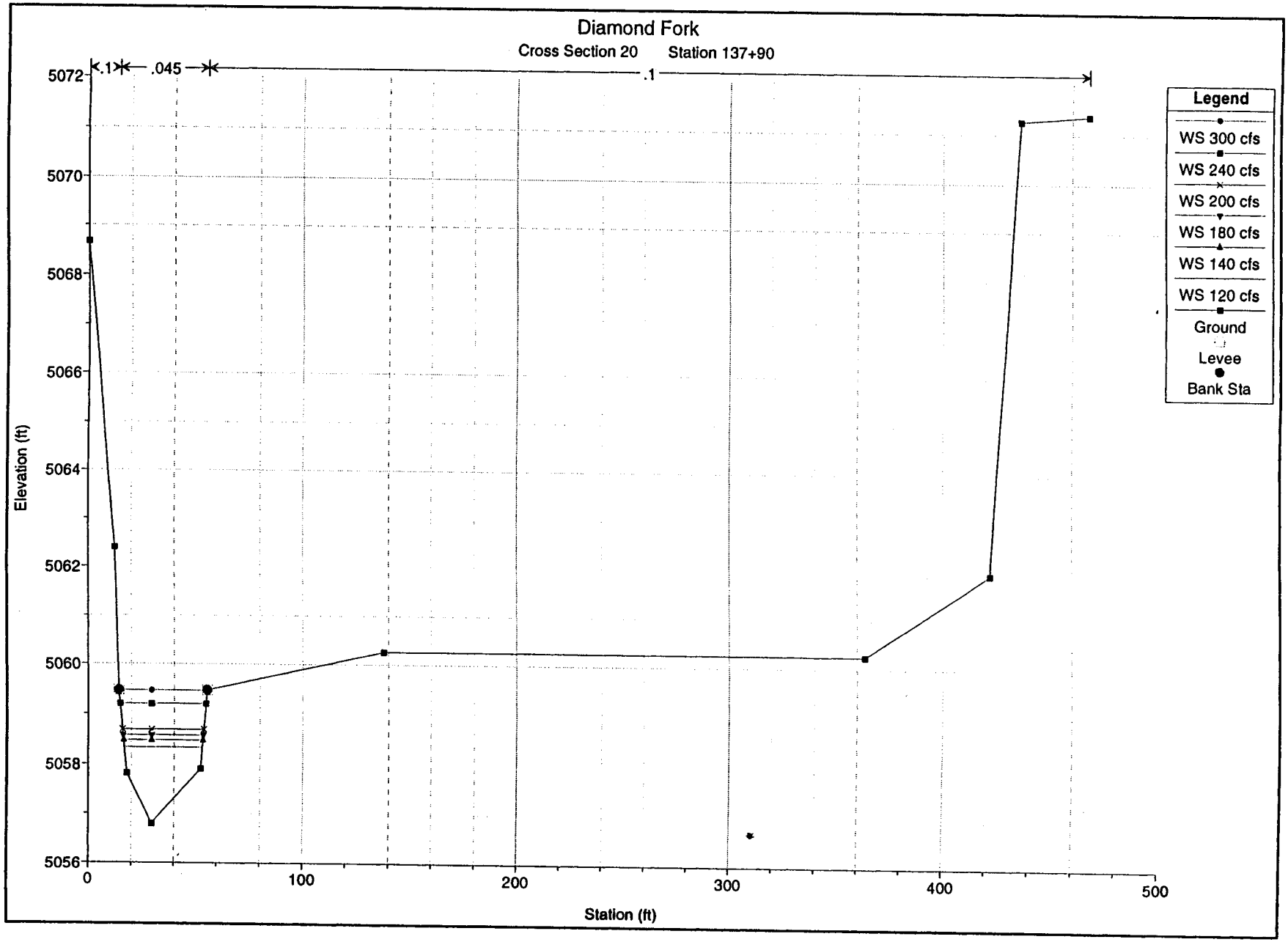

Diamond Fork
Cross Section 15
Station 115+05
.07
.043
.08
Legend
WS 300 cfs
WS 200 cfs
WS 240 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5048
5046
5044
5042
5040
5038
0
50
100
150
200
250
300
350
400
Station (ft)

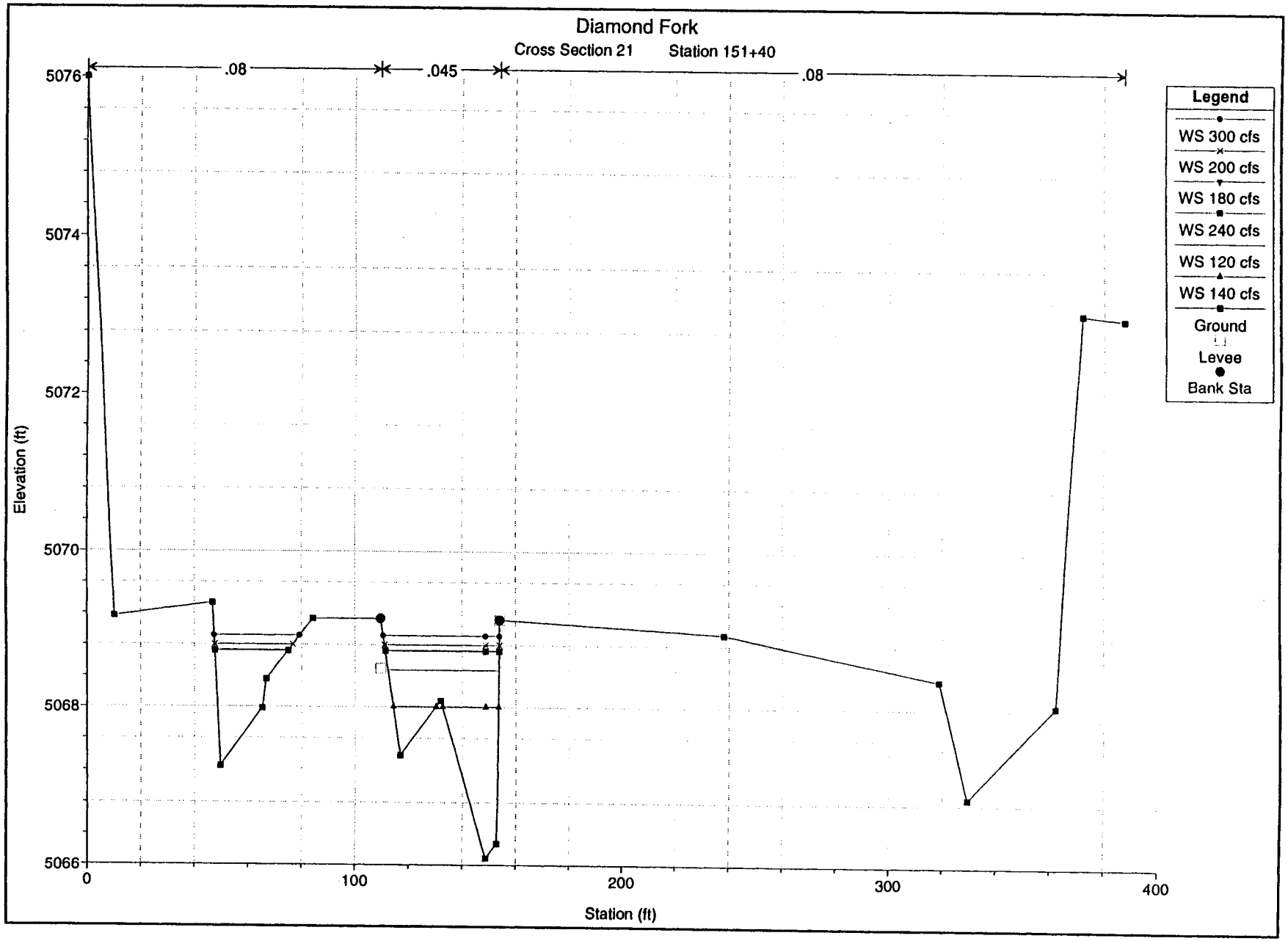

Diamond Fork
Cross Section 16
Station 119+55
.08
.043
.08
Legend
WS 300 cfs
WS 240 cfs
WS 180 cfs
WS 140 cfs
WS 200 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5058
5056
5054
5052
5050
5048
5046
5044
5042
5040
0
100
200
300
400
500
600
Station (ft)

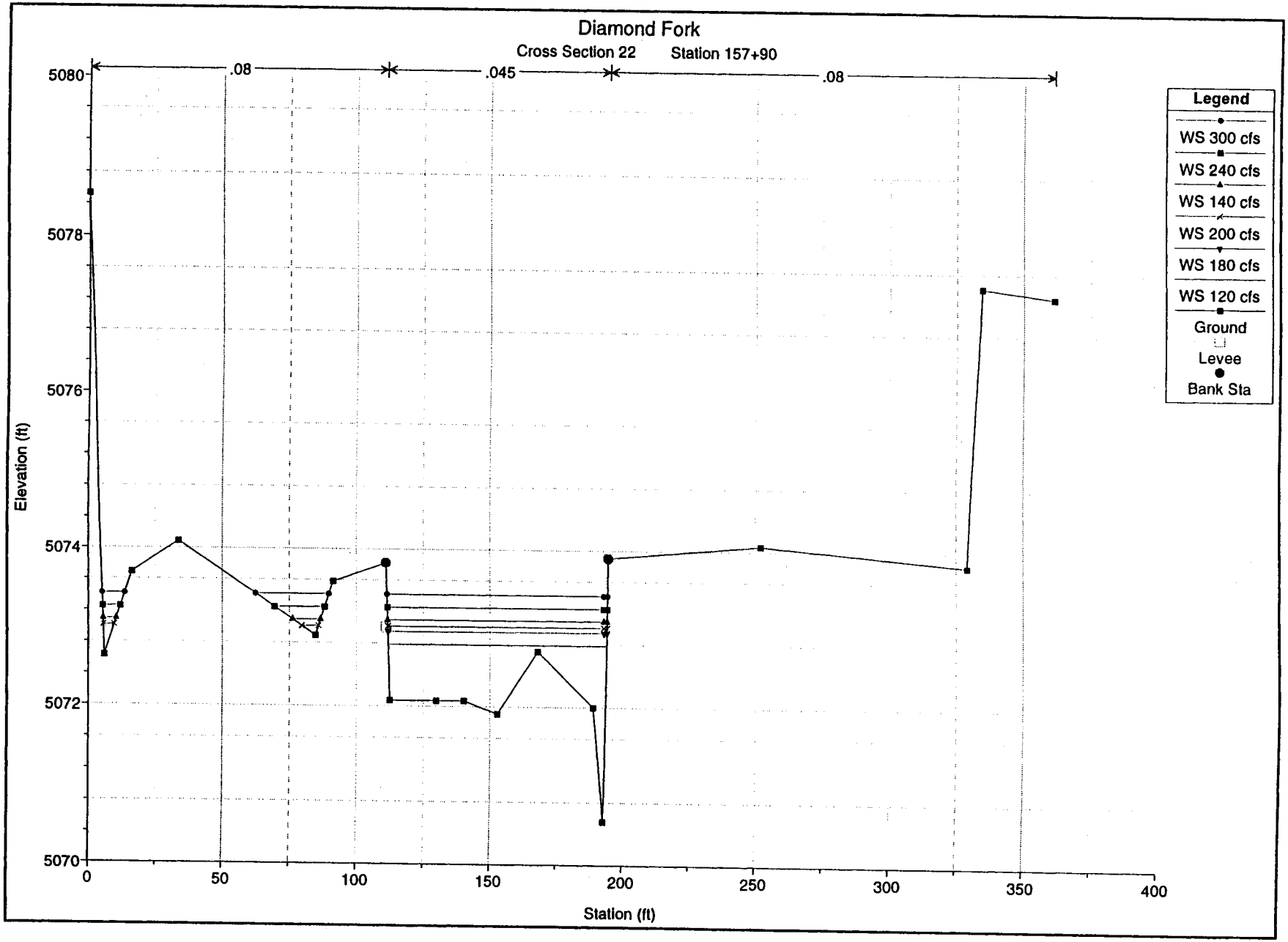

Diamond Fork
Cross Section 17
Station 122+55
.08
.043
.08
Legend
WS 300 cfs
WS 200 cfs
WS 240 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5054
5053
5052
5051
5050
5049
5048
5047
5046
0
100
200
300
400
500
600
700
Station (ft)

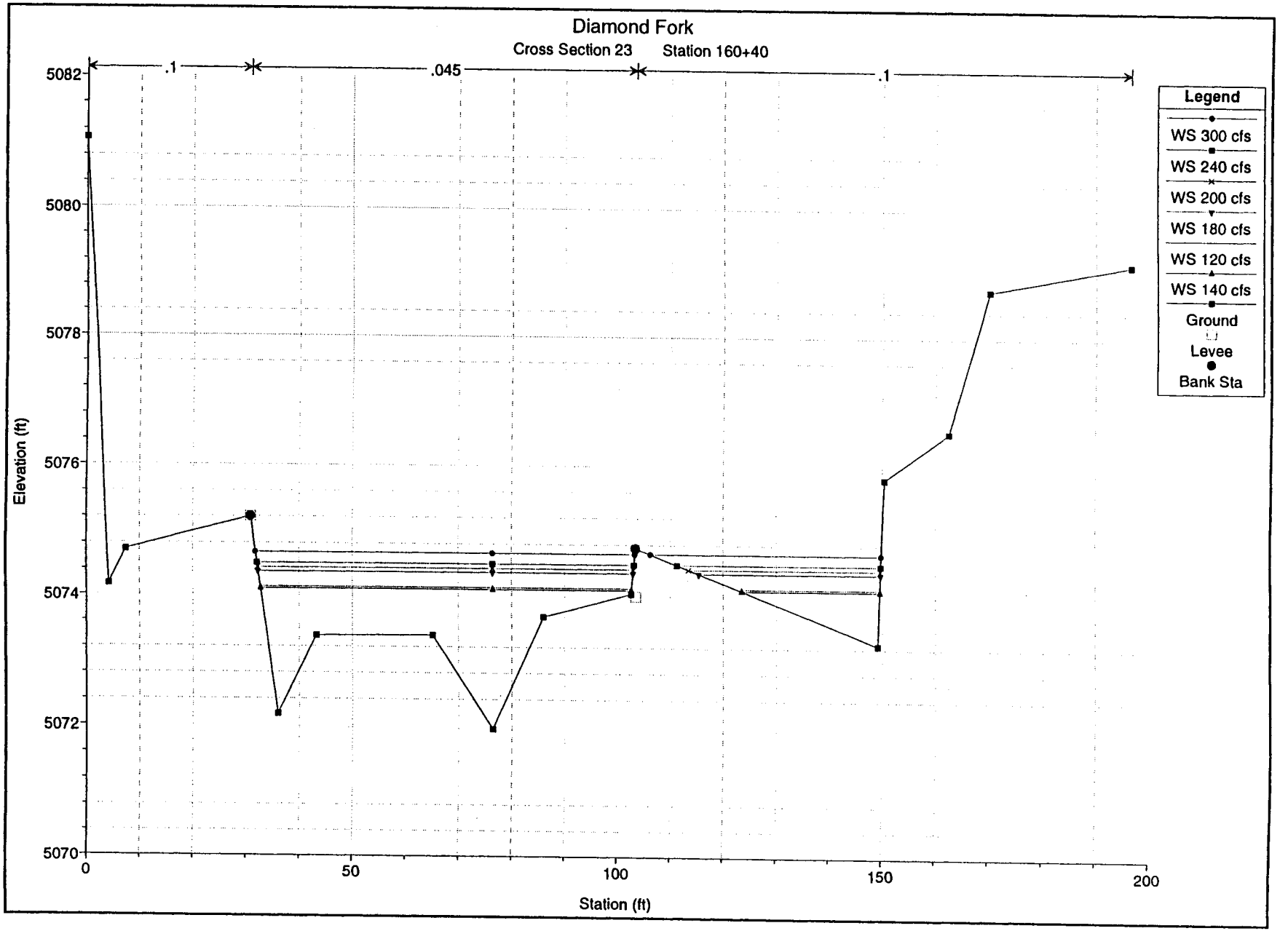

Diamond Fork
Cross Section 18
Station 124+65
.08
.043
.08
Legend
WS 300 cfs
WS 240 cfs
WS 140 cfs
WS 200 cfs
WS 180 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5053
5052
5051
5050
5049
5048
5047
5046
0
100
200
300
400
500
600
Station (ft)

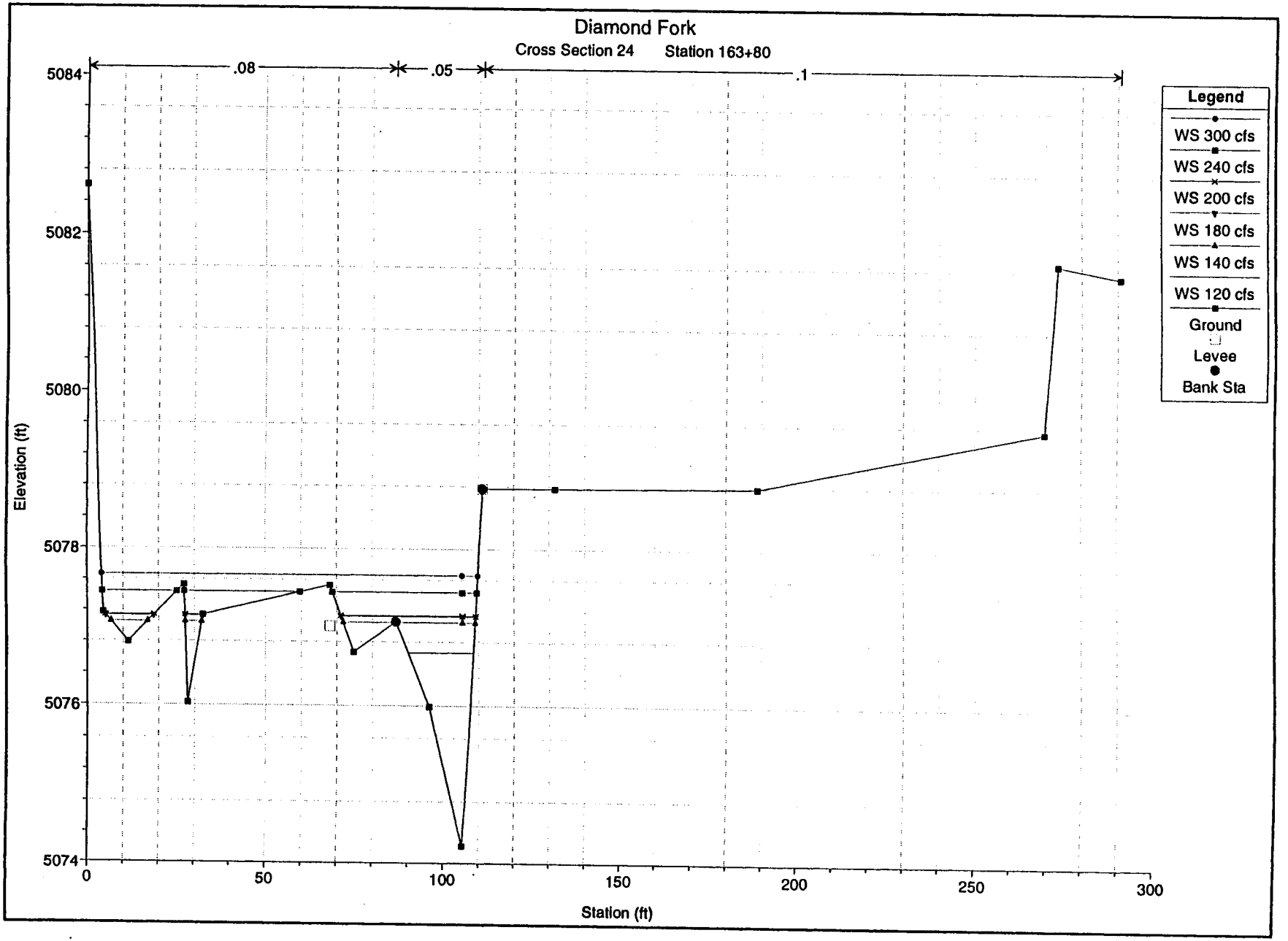

Diamond Fork
Cross Section 19
Station 127+65
.08
.045
.1
Elevation (ft)
5060
5058
5056
5054
5052
5050
5048
5046
0
100
200
300
400
500
600
700
Station (ft)
Legend
WS 200 cfs
WS 300 cfs
WS 180 cfs
WS 240 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta

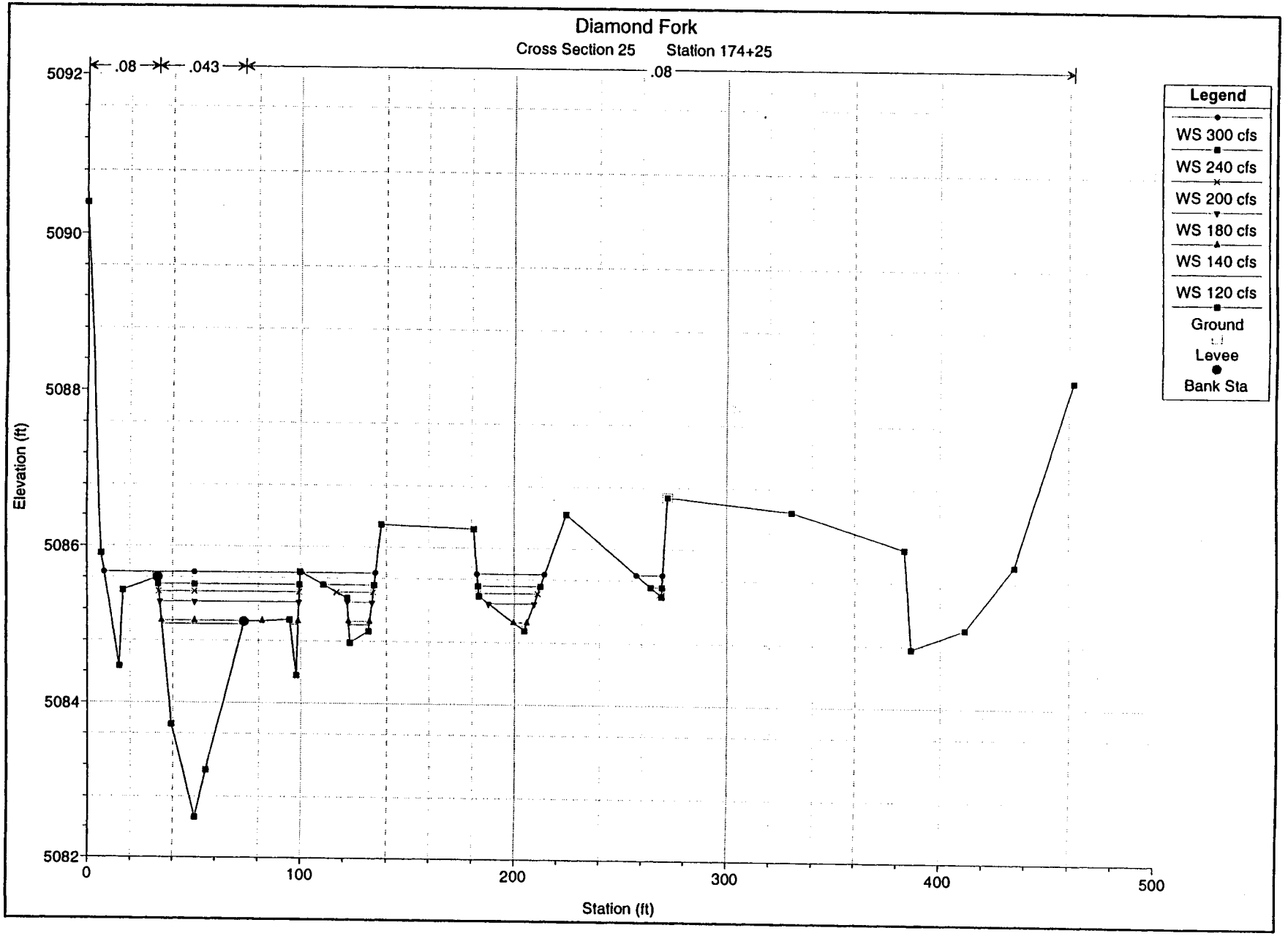

Diamond Fork
Cross Section 20 Station 137+90
.1
.045
.1
Elevation (ft)
5072
5070
5068
5066
5064
5062
5060
5058
5056
0
100
200
300
400
500
Station (ft)
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta

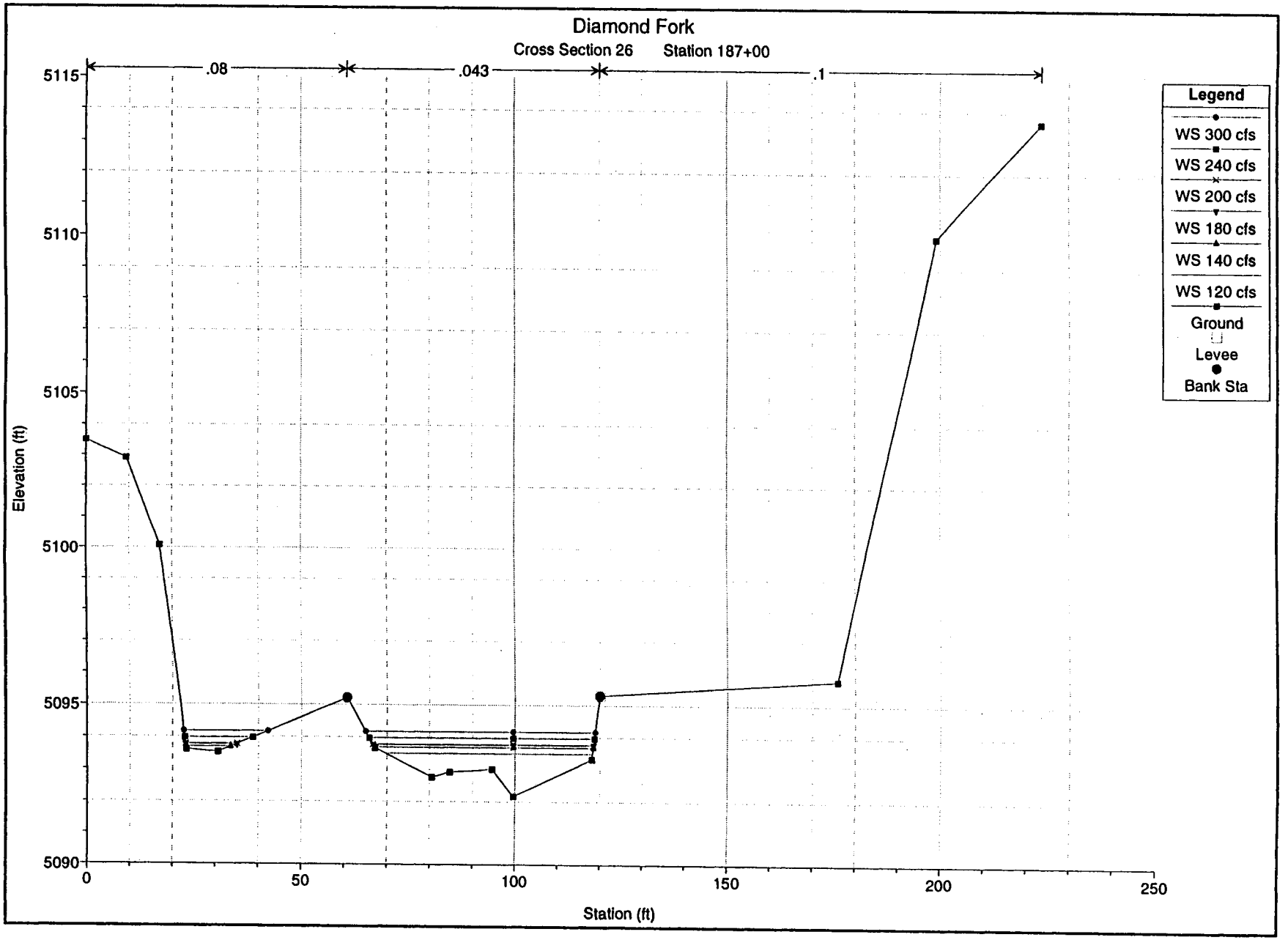

Diamond Fork
Cross Section 21
Station 151+40
.08
.045
.08
Legend
WS 300 cfs
WS 200 cfs
WS 180 cfs
WS 240 cfs
WS 120 cfs
WS 140 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5076
5074
5072
5070
5068
5066
0
100
200
300
400
Station (ft)

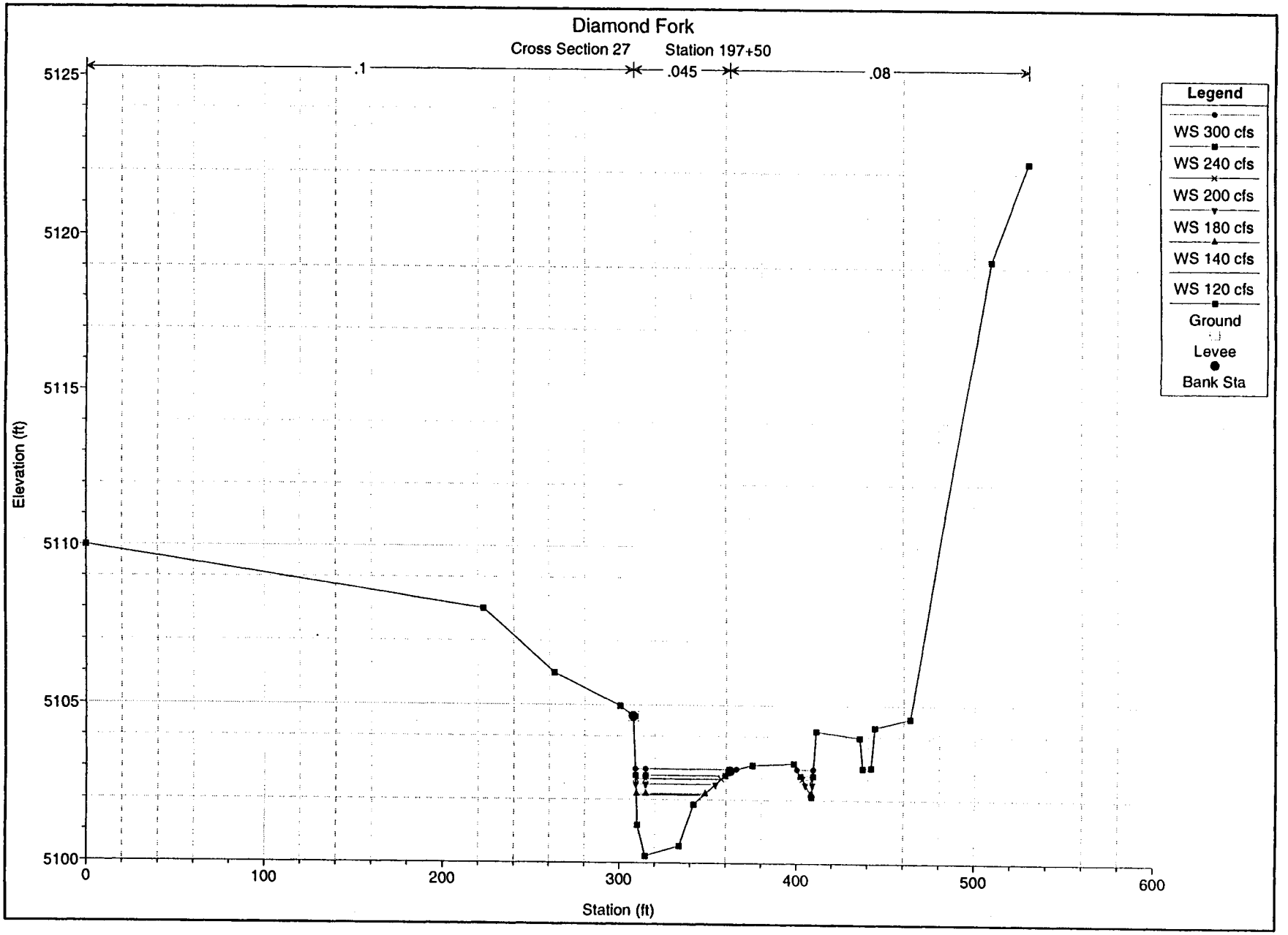

Diamond Fork
Cross Section 22
Station 157+90
.08
.045
.08
Legend
WS 300 cfs
WS 240 cfs
WS 140 cfs
WS 200 cfs
WS 180 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5080
5078
5076
5074
5072
5070
0
50
100
150
200
250
300
350
400
Station (ft)

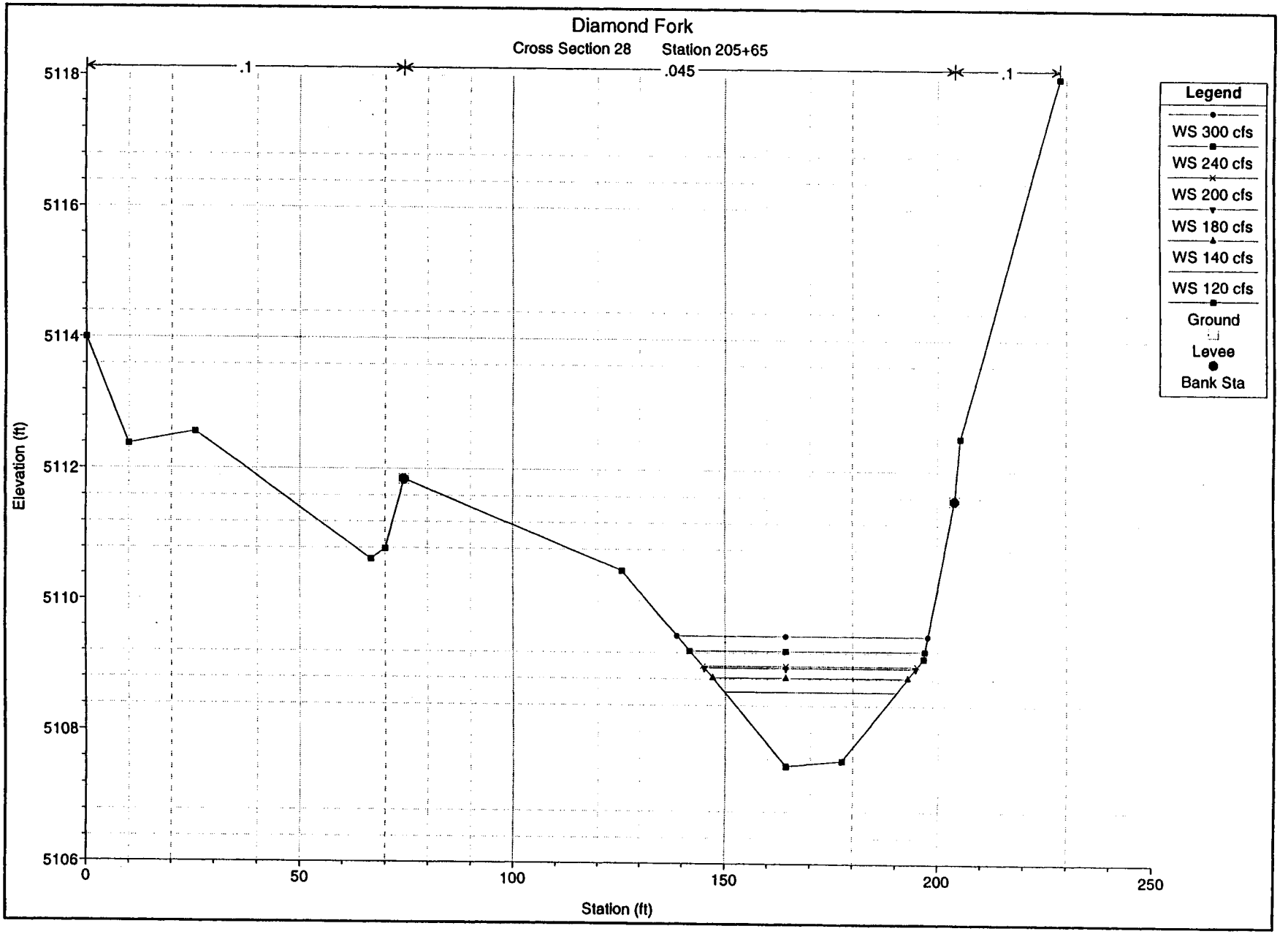

Diamond Fork
Cross Section 23
Station 160+40
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 120 cfs
WS 140 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5082
5080
5078
5076
5074
5072
5070
0
50
100
150
200
Station (ft)

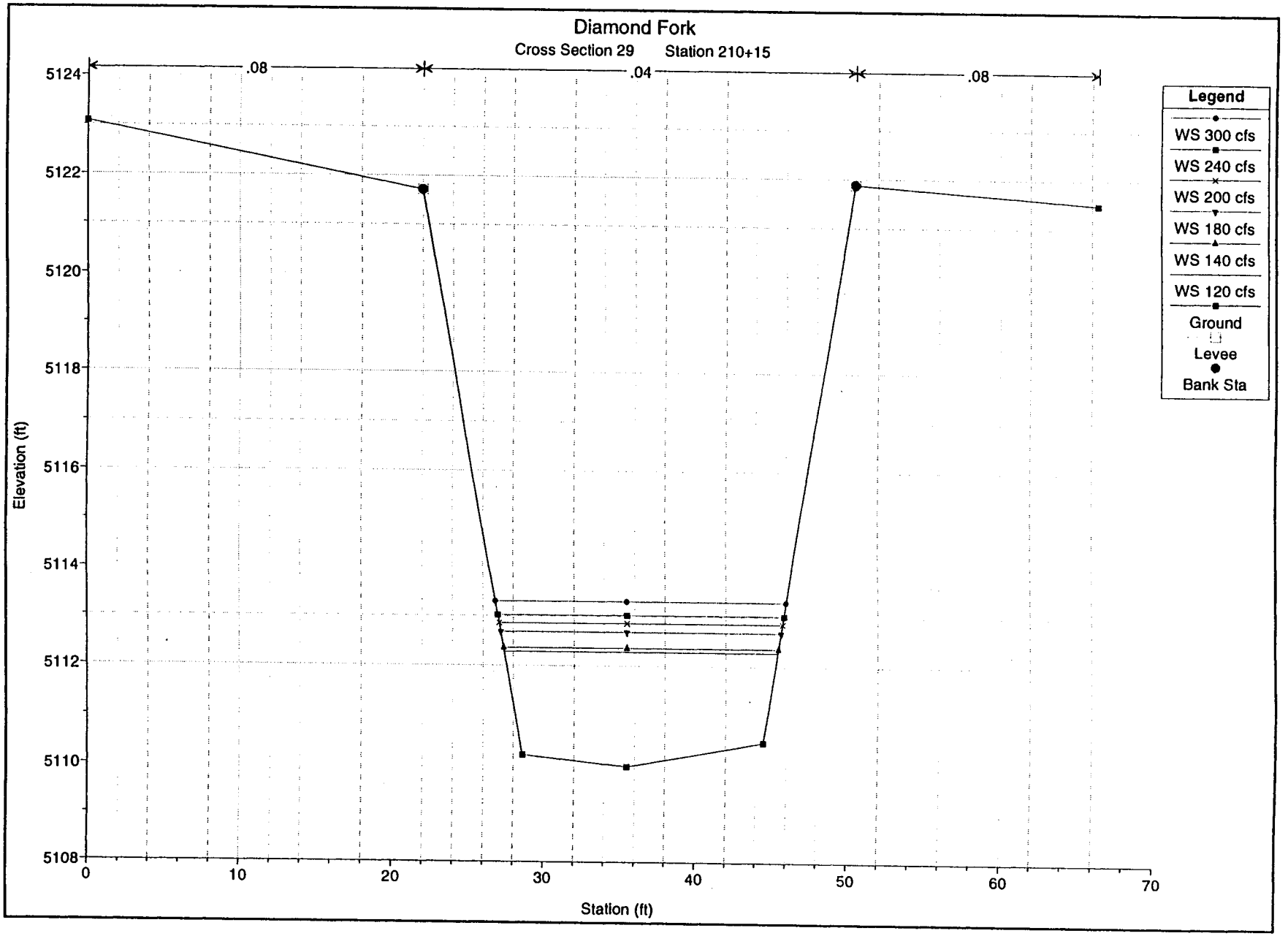

Diamond Fork
Cross Section 24 Station 163+80
.08
.05
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5084
5082
5080
5078
5076
5074
0
50
100
150
200
250
300
Station (ft)

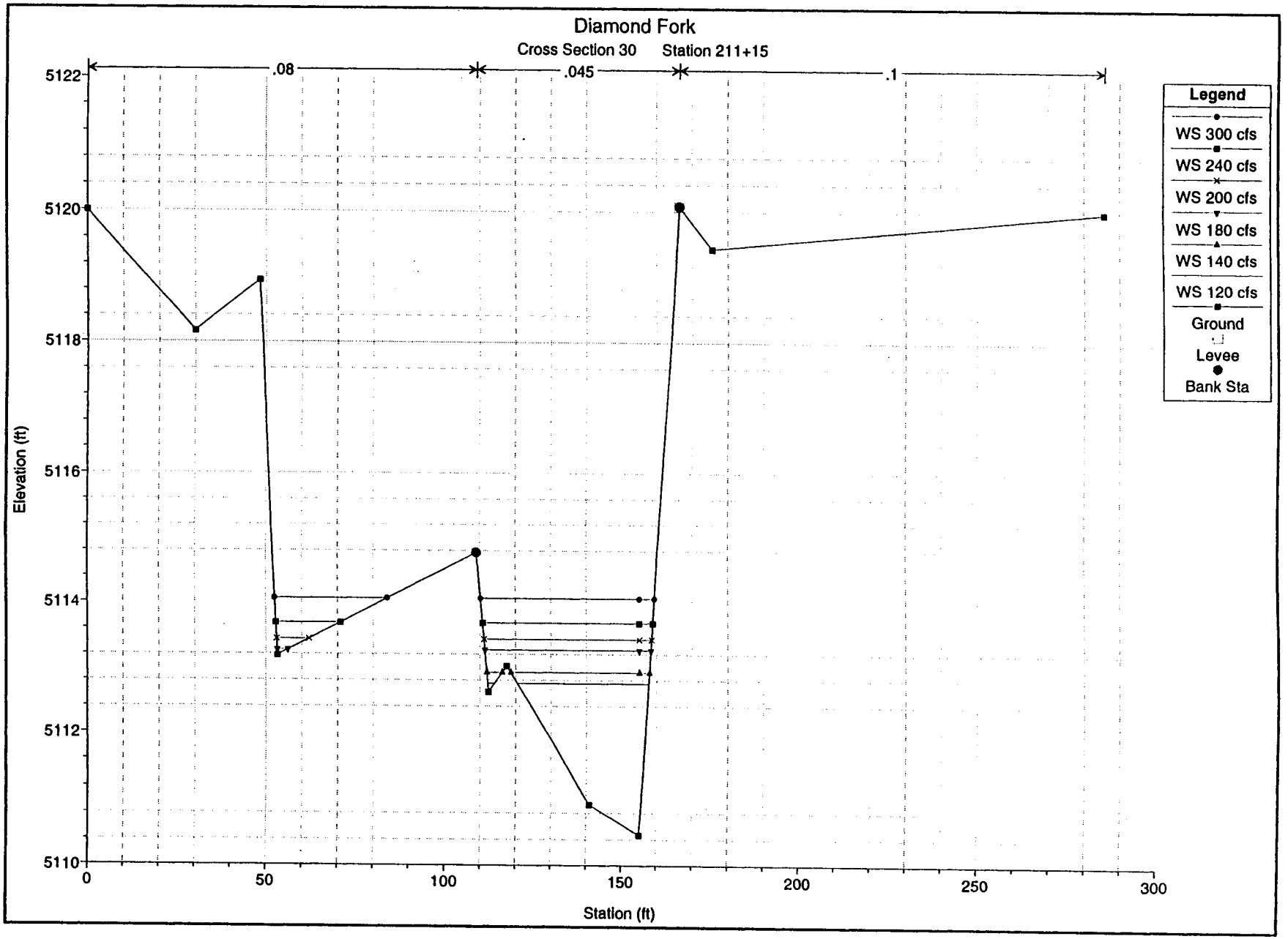

Diamond Fork
Cross Section 25 Station 174+25
.08
.043
.08
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5092
5090
5088
5086
5084
5082
0
100
200
300
400
500
Station (ft)

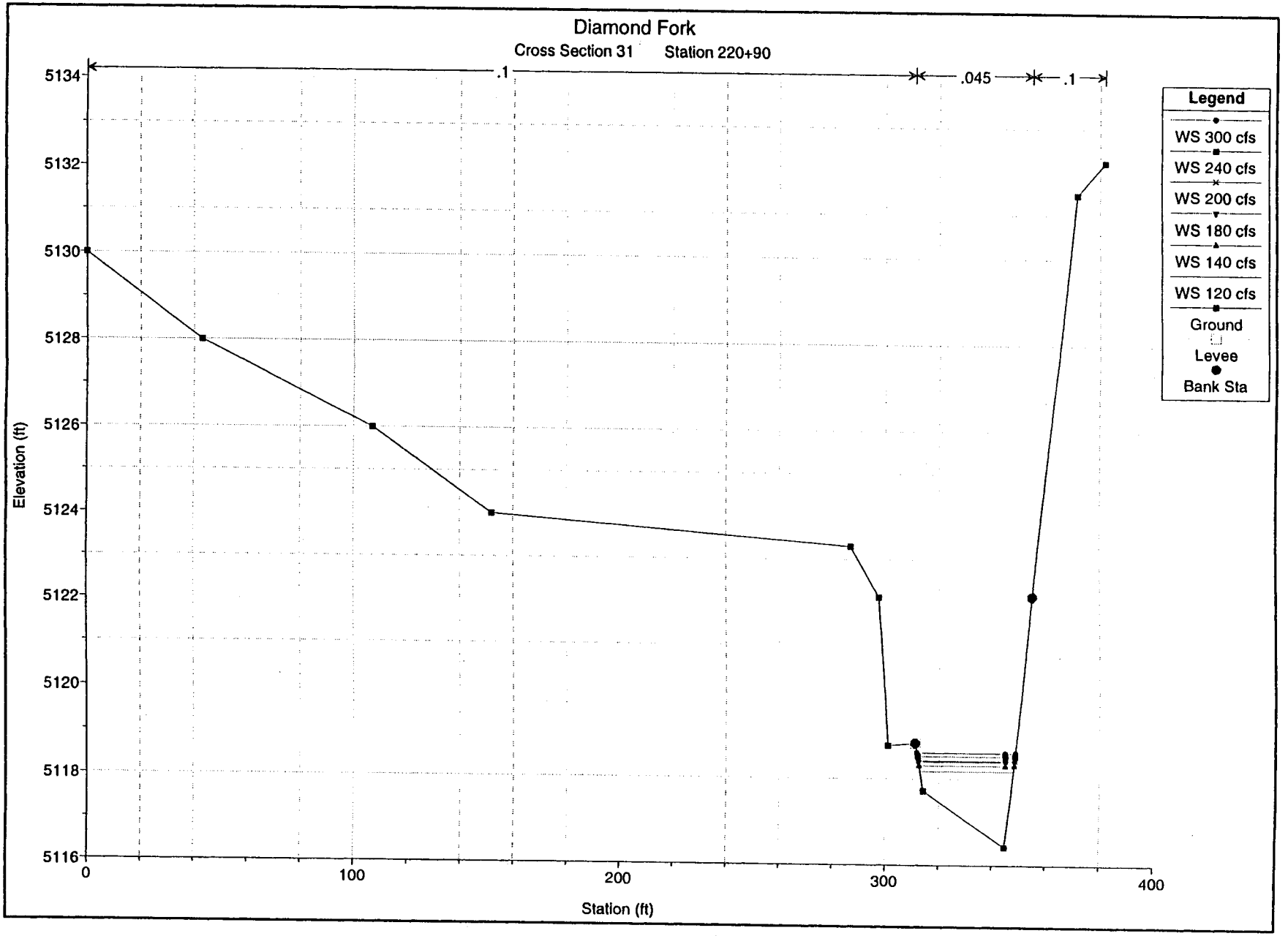

Diamond Fork
Cross Section 26 Station 187+00
.08
.043
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5115
5110
5105
5100
5095
5090
0
50
100
150
200
250
Station (ft)

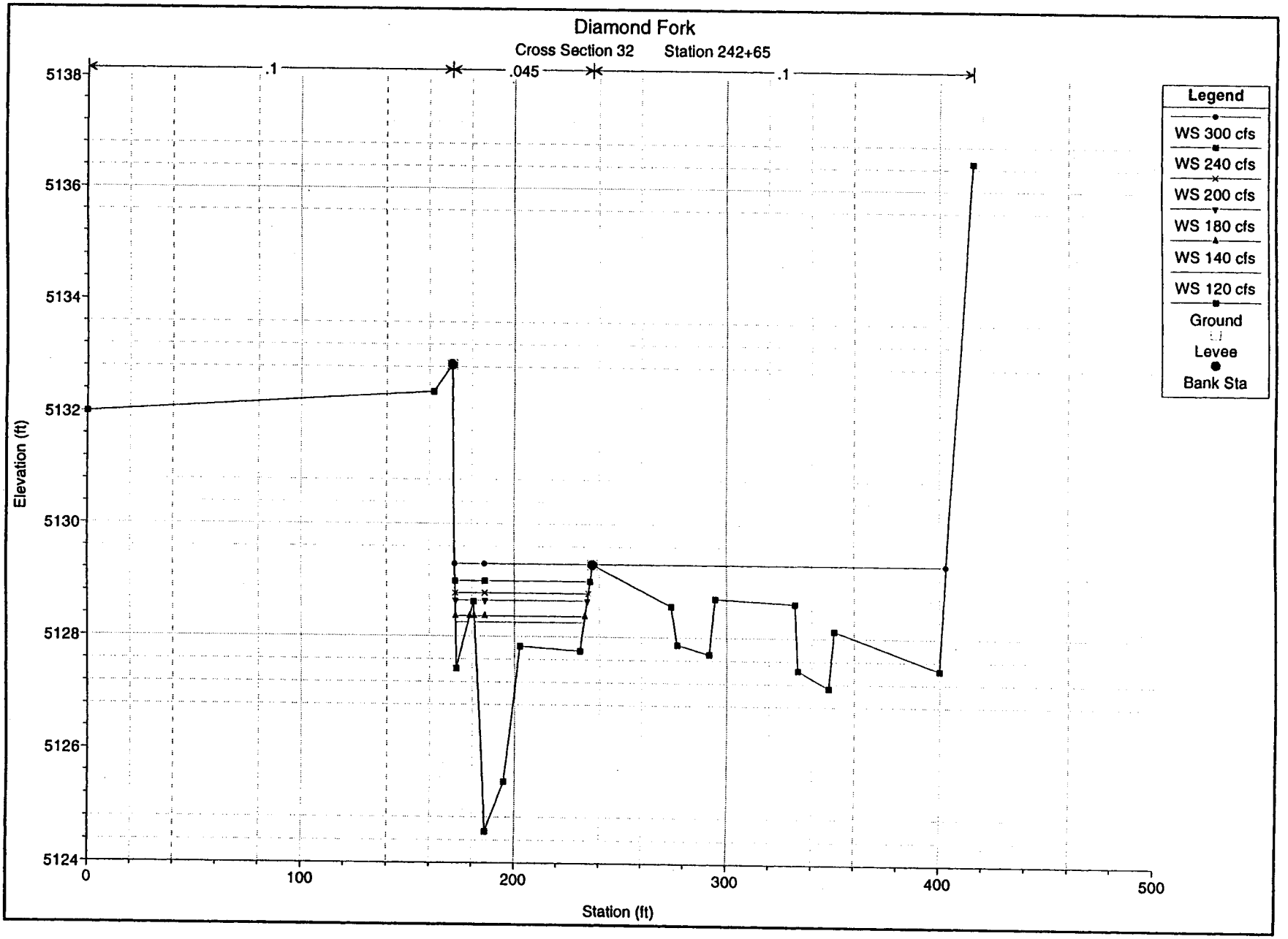

Diamond Fork
Cross Section 27
Station 197+50
.1
.045
.08
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5125
5120
5115
5110
5105
5100
0
100
200
300
400
500
600
Station (ft)

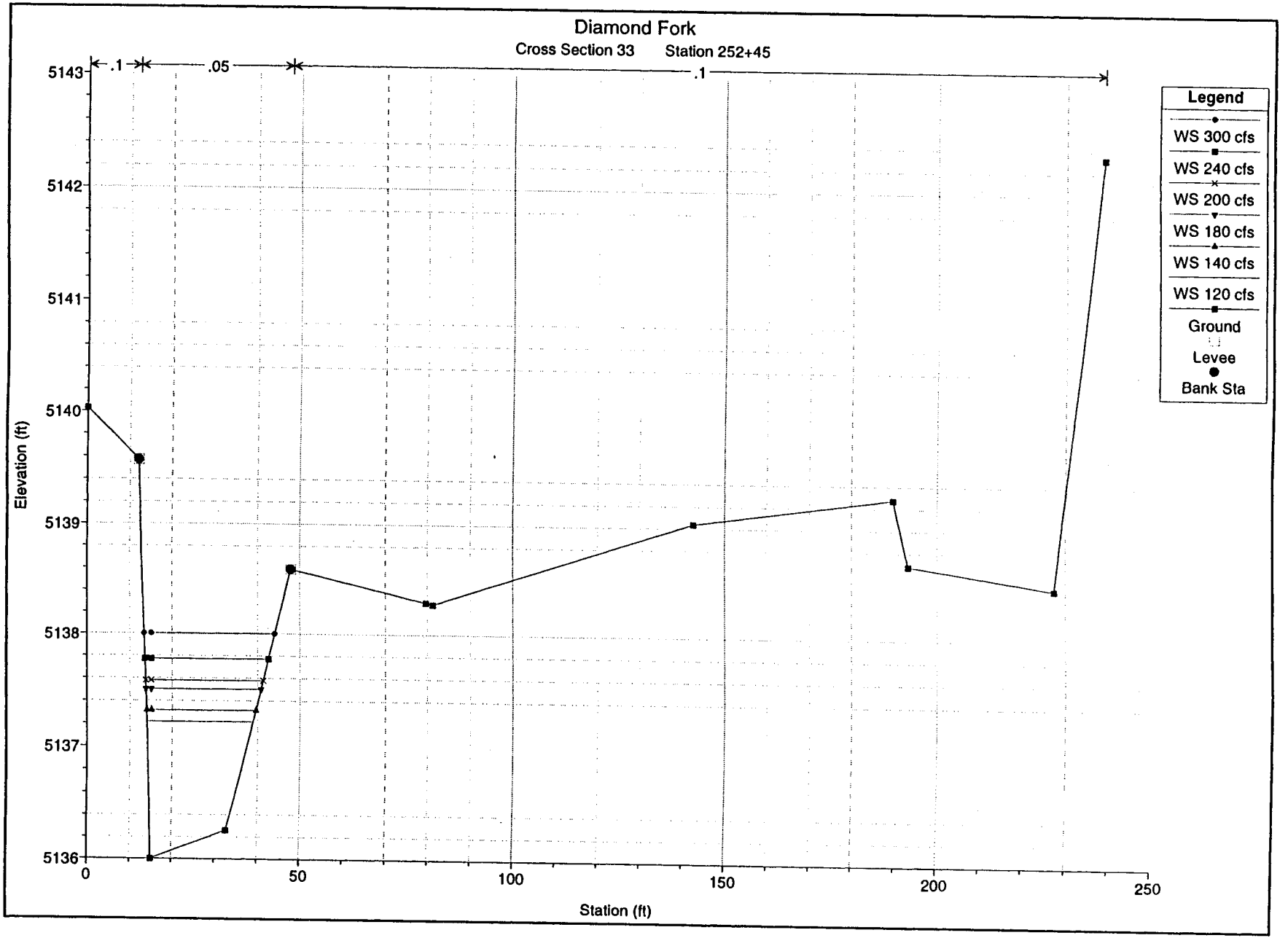

Diamond Fork
Cross Section 28
Station 205+65
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5118
5116
5114
5112
5110
5108
5106
0
50
100
150
200
250
Station (ft)

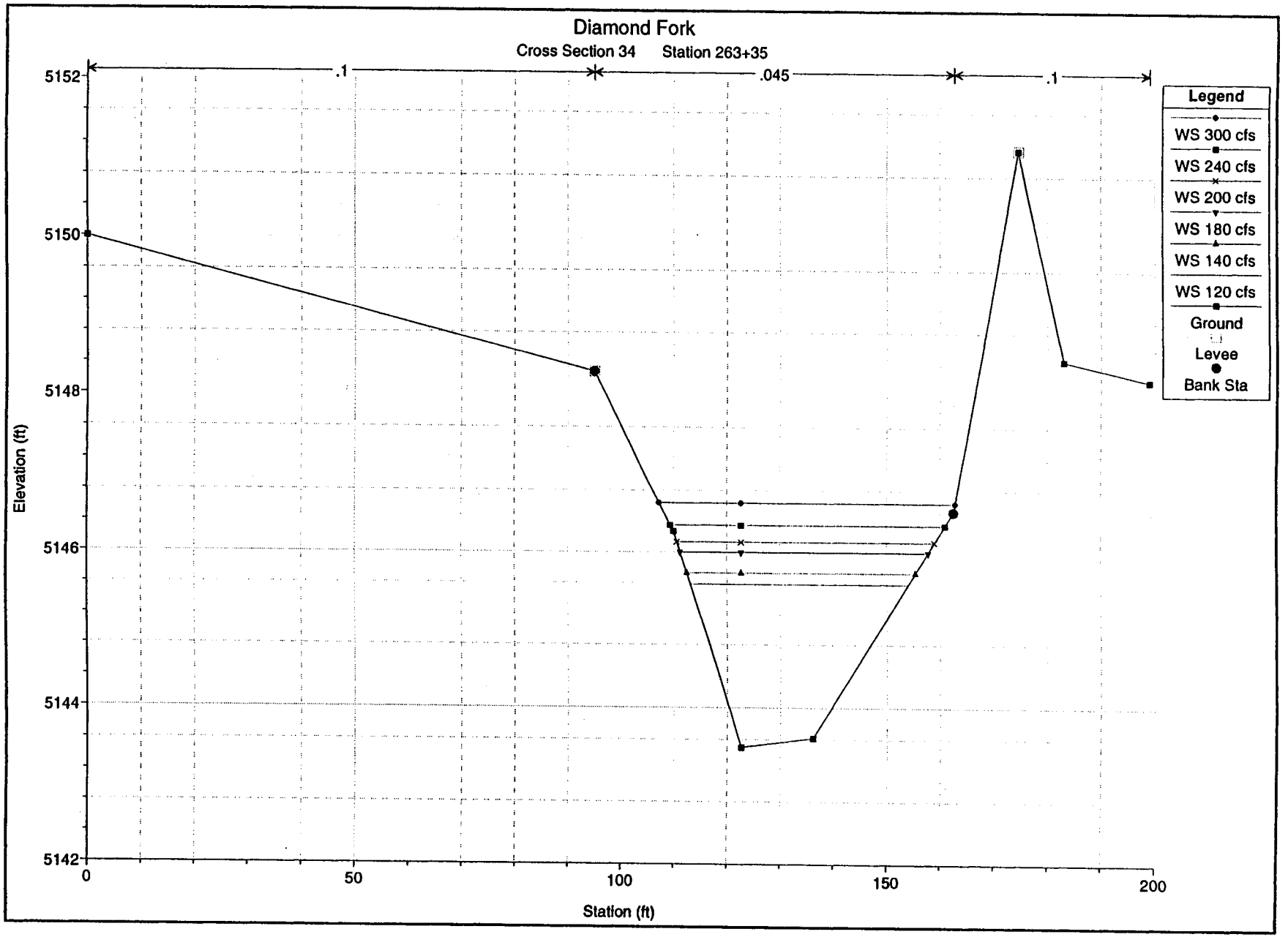

Diamond Fork
Cross Section 29 Station 210+15
.08
.04
.08
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5124
5122
5120
5118
5116
5114
5112
5110
5108
0
10
20
30
40
50
60
70
Station (ft)

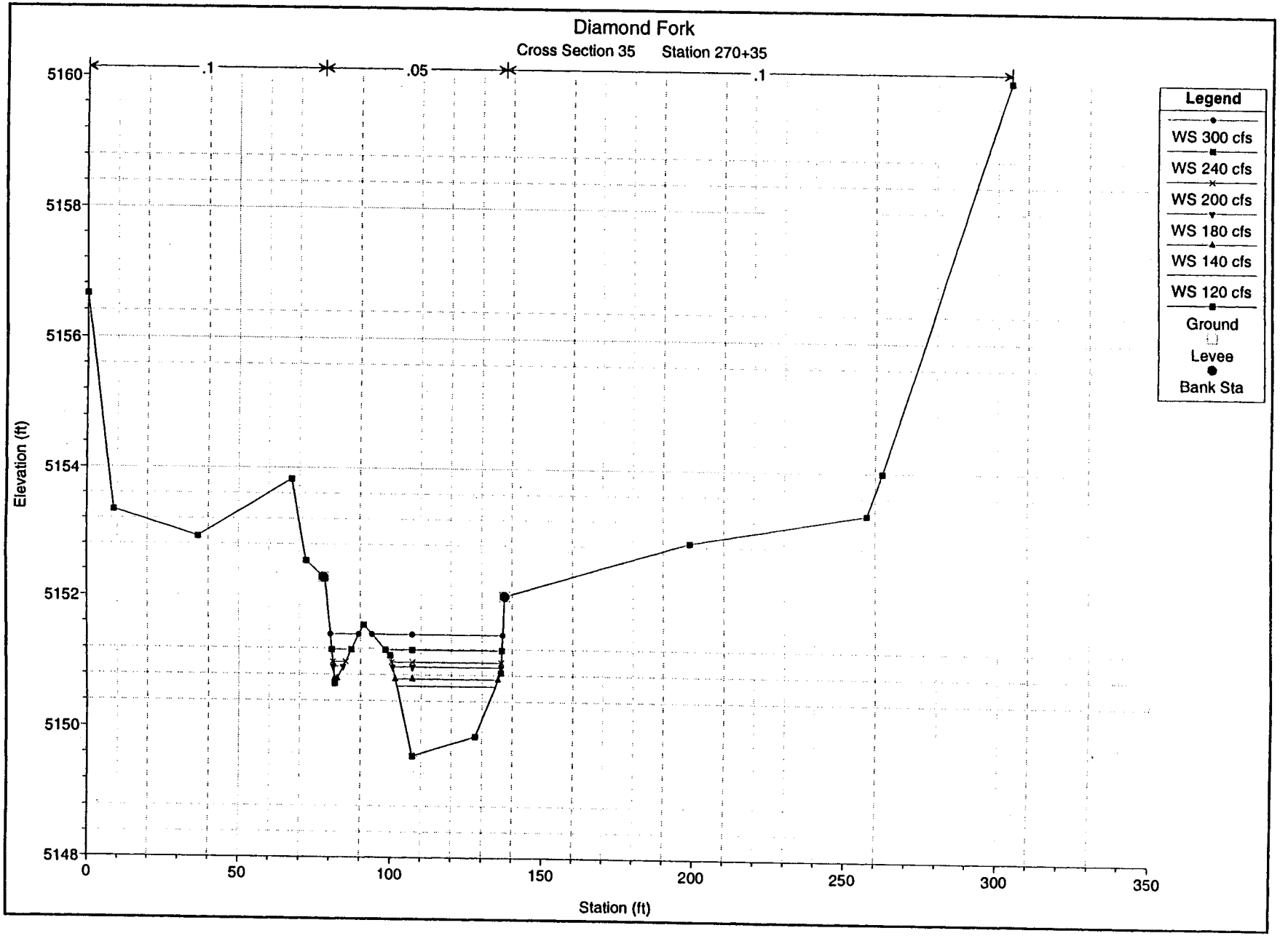

Diamond Fork
Cross Section 30
Station 211+15
.08
.045
.1
Elevation (ft)
5122
5120
5118
5116
5114
5112
5110
0
50
100
150
200
250
300
Station (ft)
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta

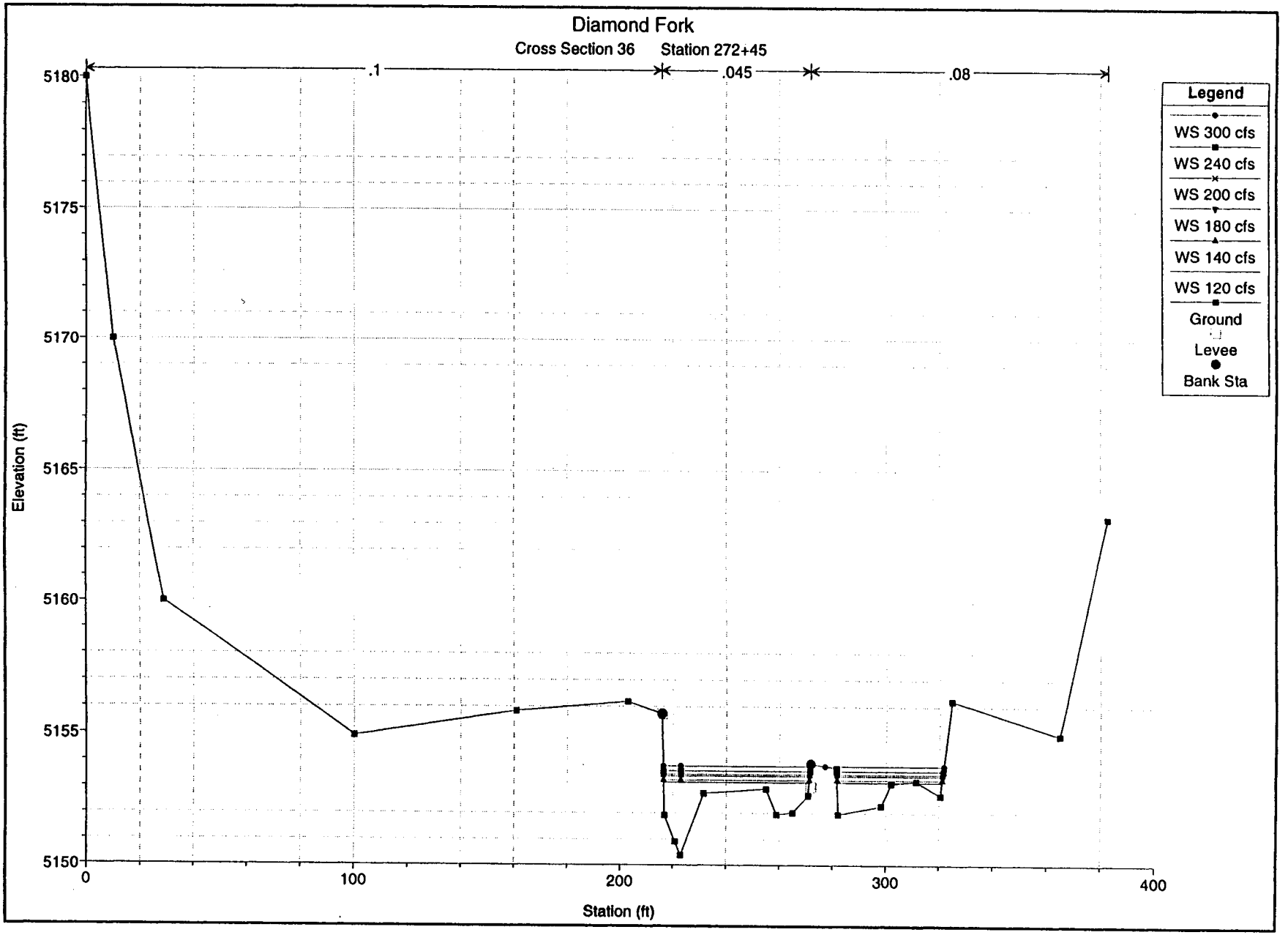

Diamond Fork
Cross Section 31 Station 220+90
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5134
5132
5130
5128
5126
5124
5122
5120
5118
5116
0
100
200
300
400
Station (ft)

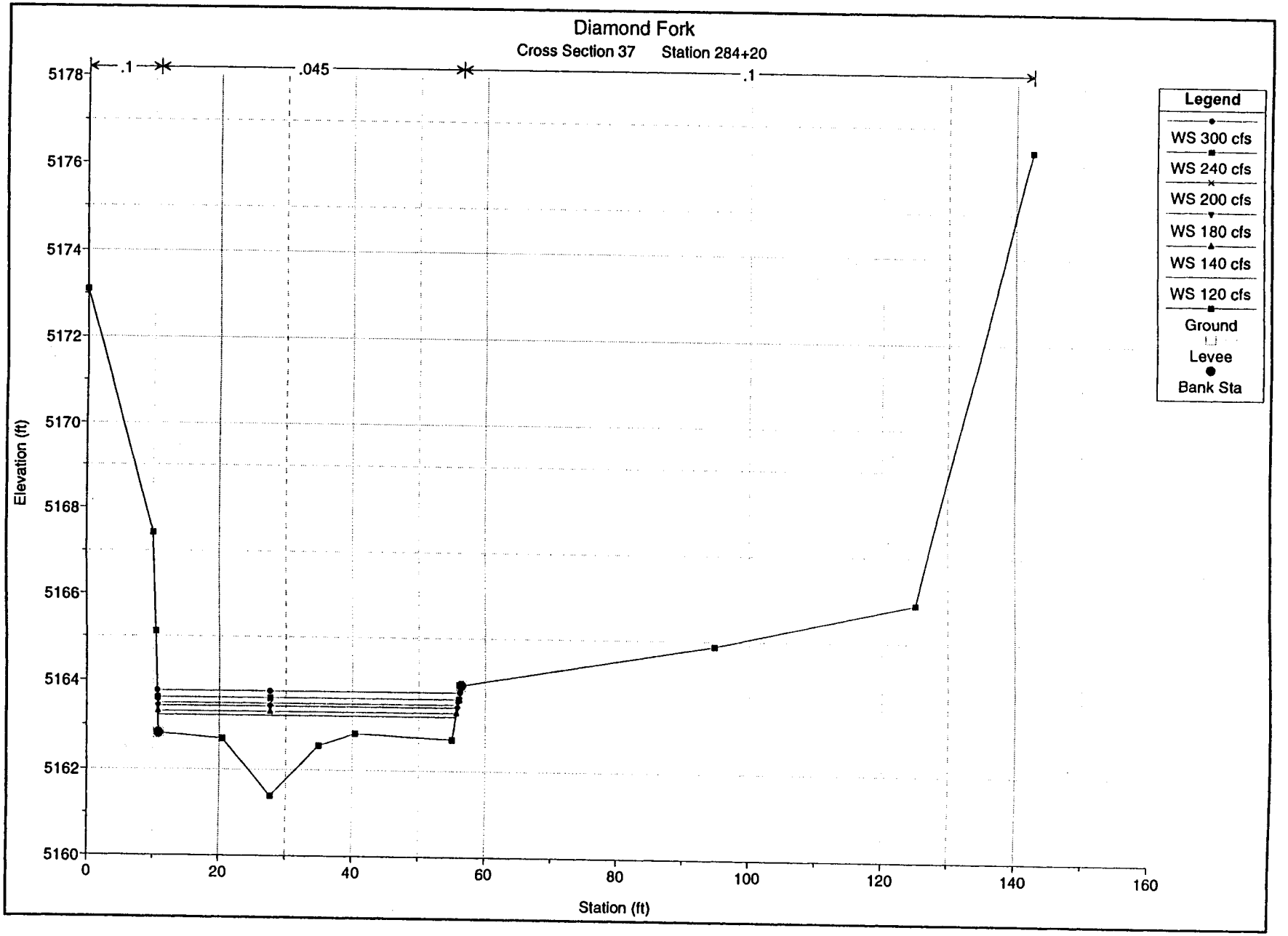

Diamond Fork
Cross Section 32
Station 242+65
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5138
5136
5134
5132
5130
5128
5126
5124
0
100
200
300
400
500
Station (ft)

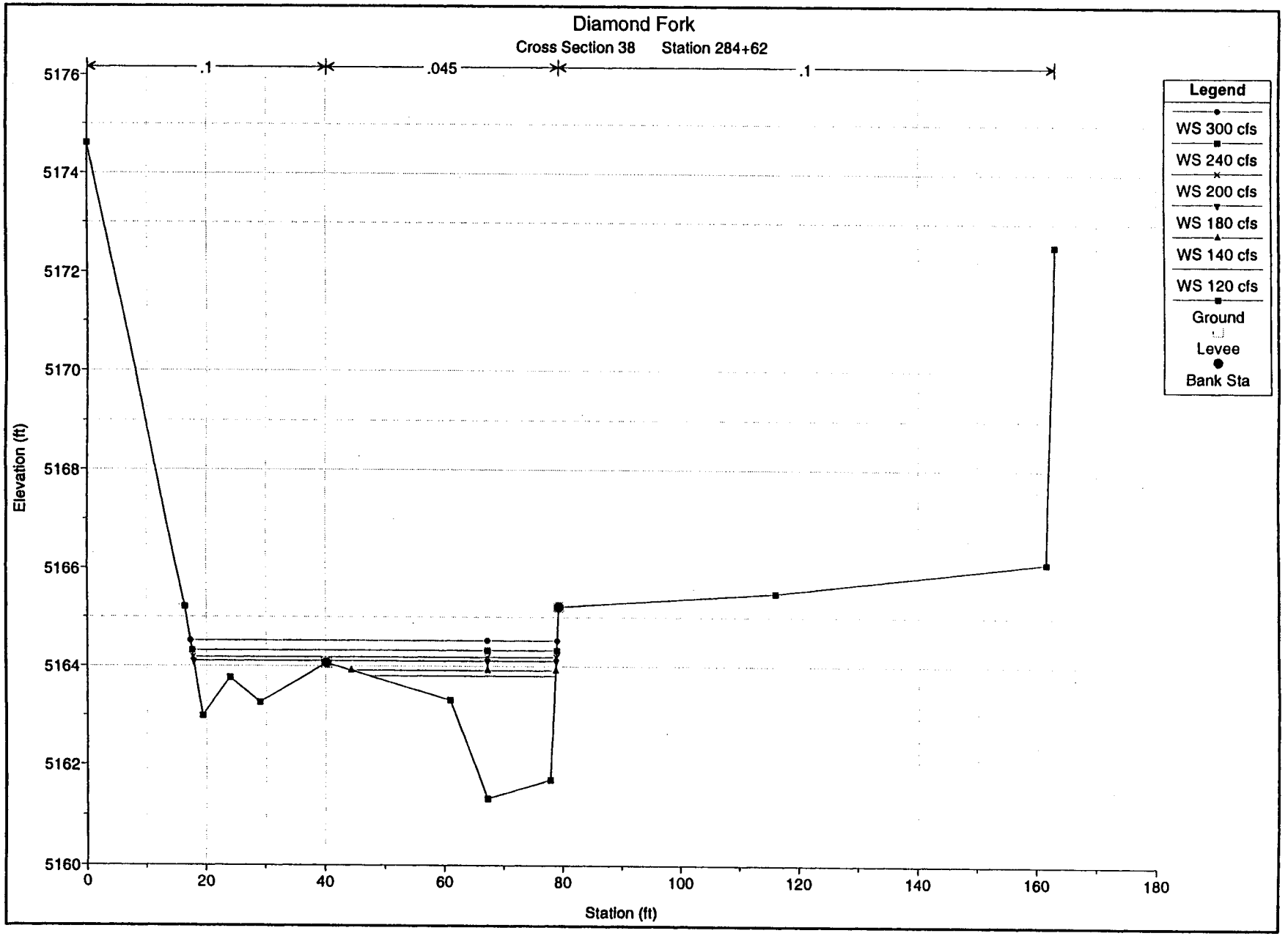

Diamond Fork
Cross Section 33 Station 252+45
.1
.05
.1
Elevation (ft)
5143
5142
5141
5140
5139
5138
5137
5136
0
50
100
150
200
250
Station (ft)
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta

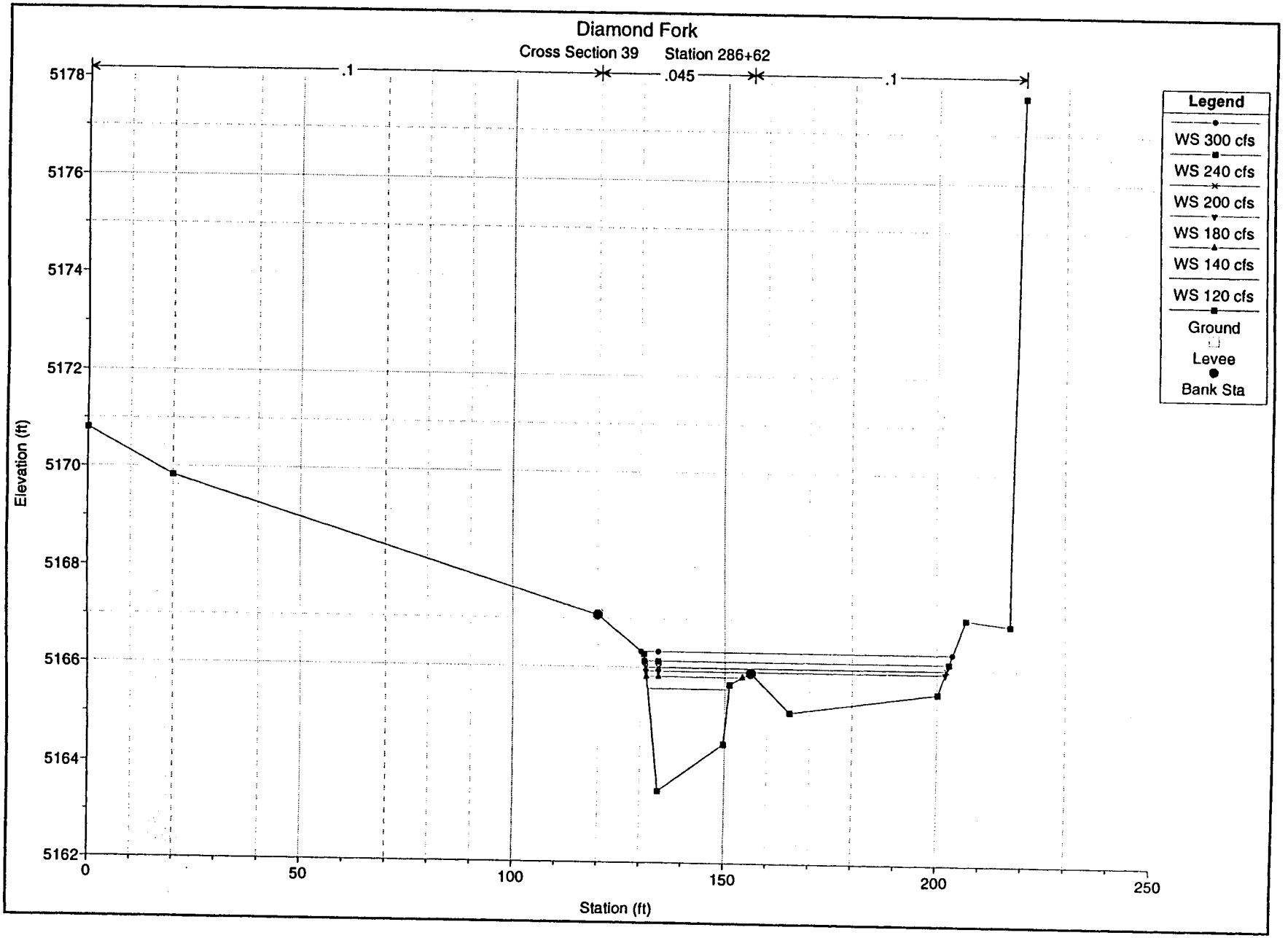

Diamond Fork
Cross Section 34 Station 263+35
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5152
5150
5148
5146
5144
5142
0
50
100
150
200
Station (ft)

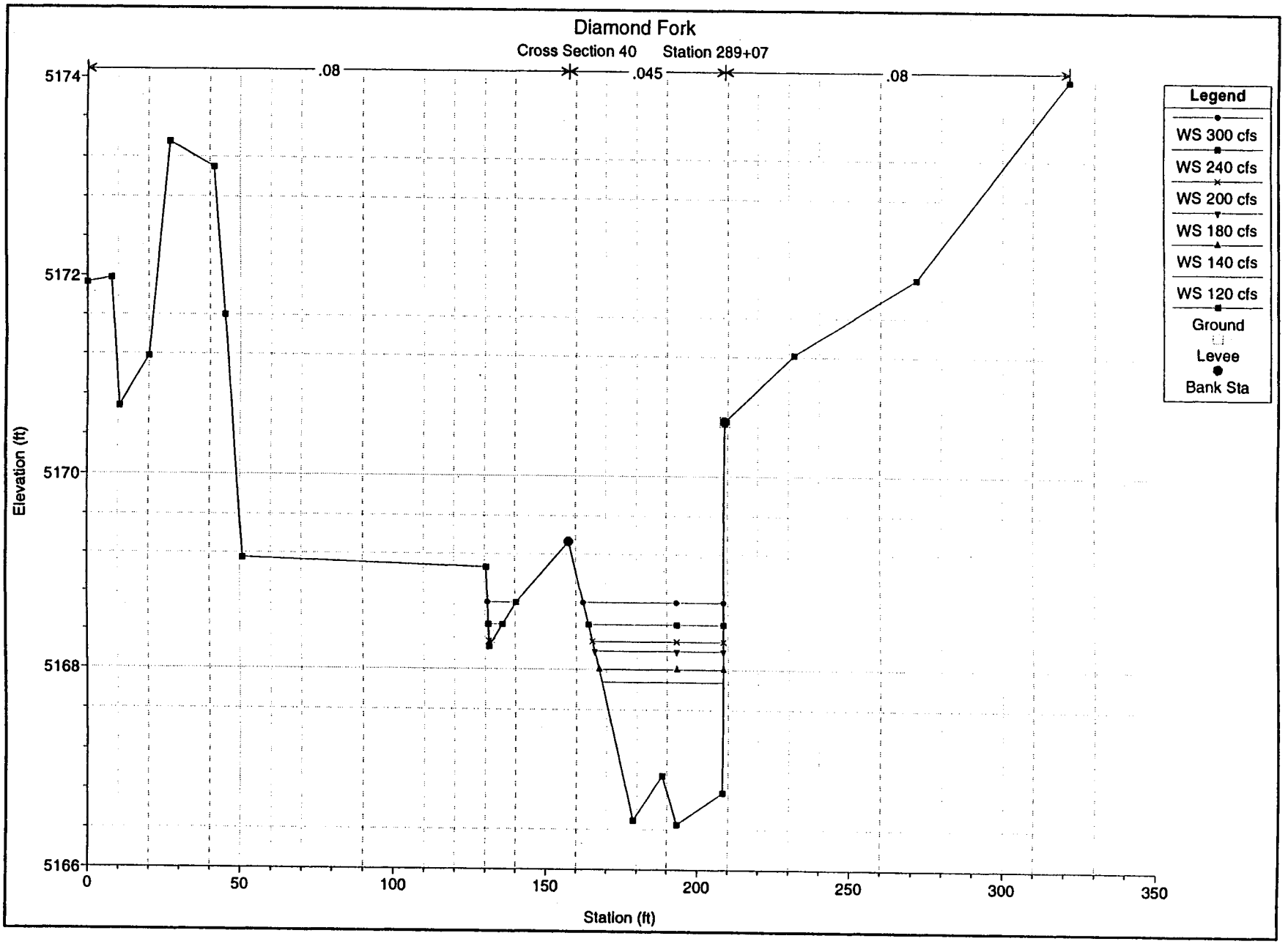

Diamond Fork
Cross Section 35 Station 270+35
.1
.05
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5160
5158
5156
5154
5152
5150
5148
0
50
100
150
200
250
300
350
Station (ft)

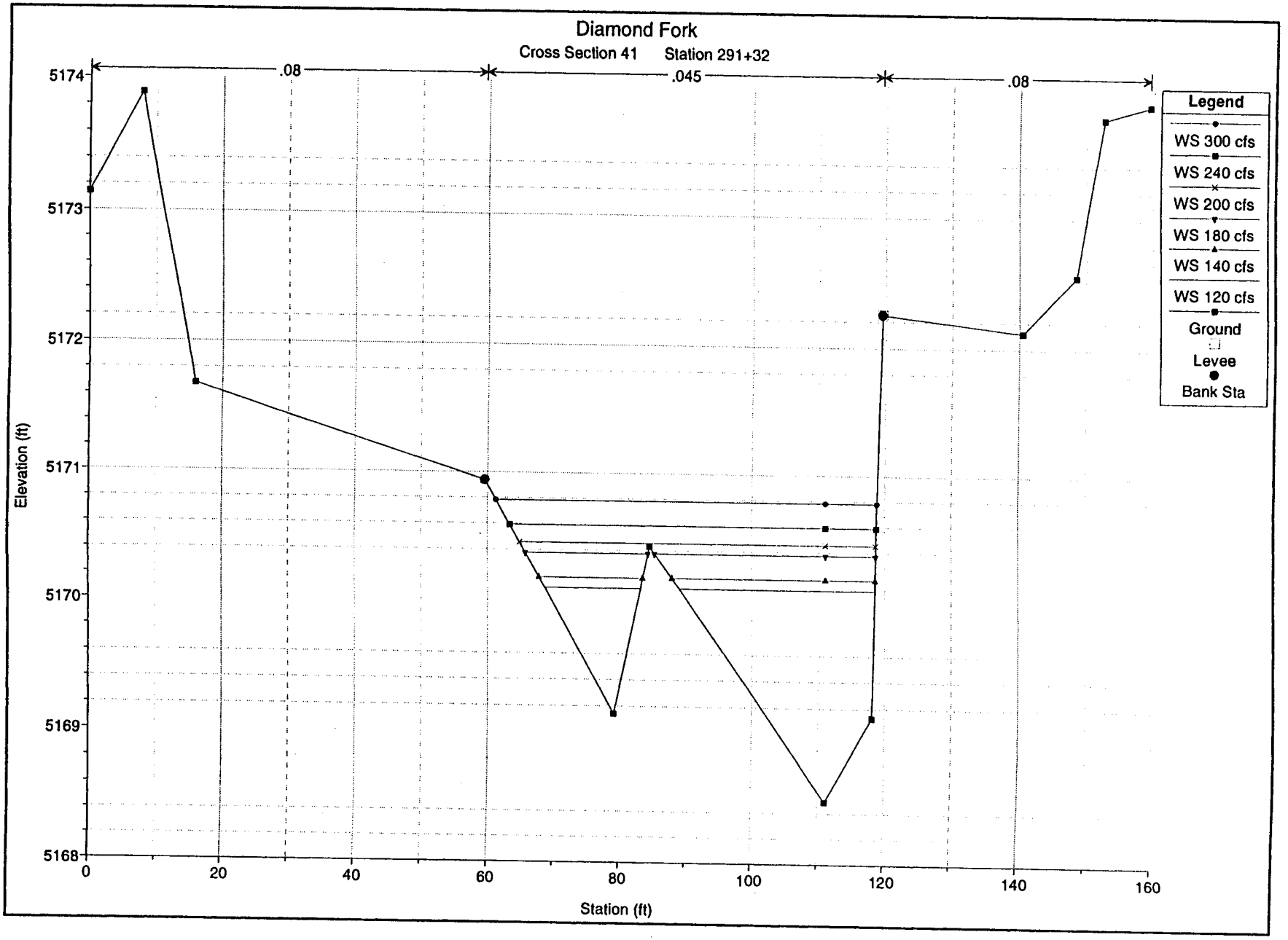

Diamond Fork
Cross Section 36 Station 272+45
.1
.045
.08
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5180
5175
5170
5165
5160
5155
5150
0
100
200
300
400
Station (ft)

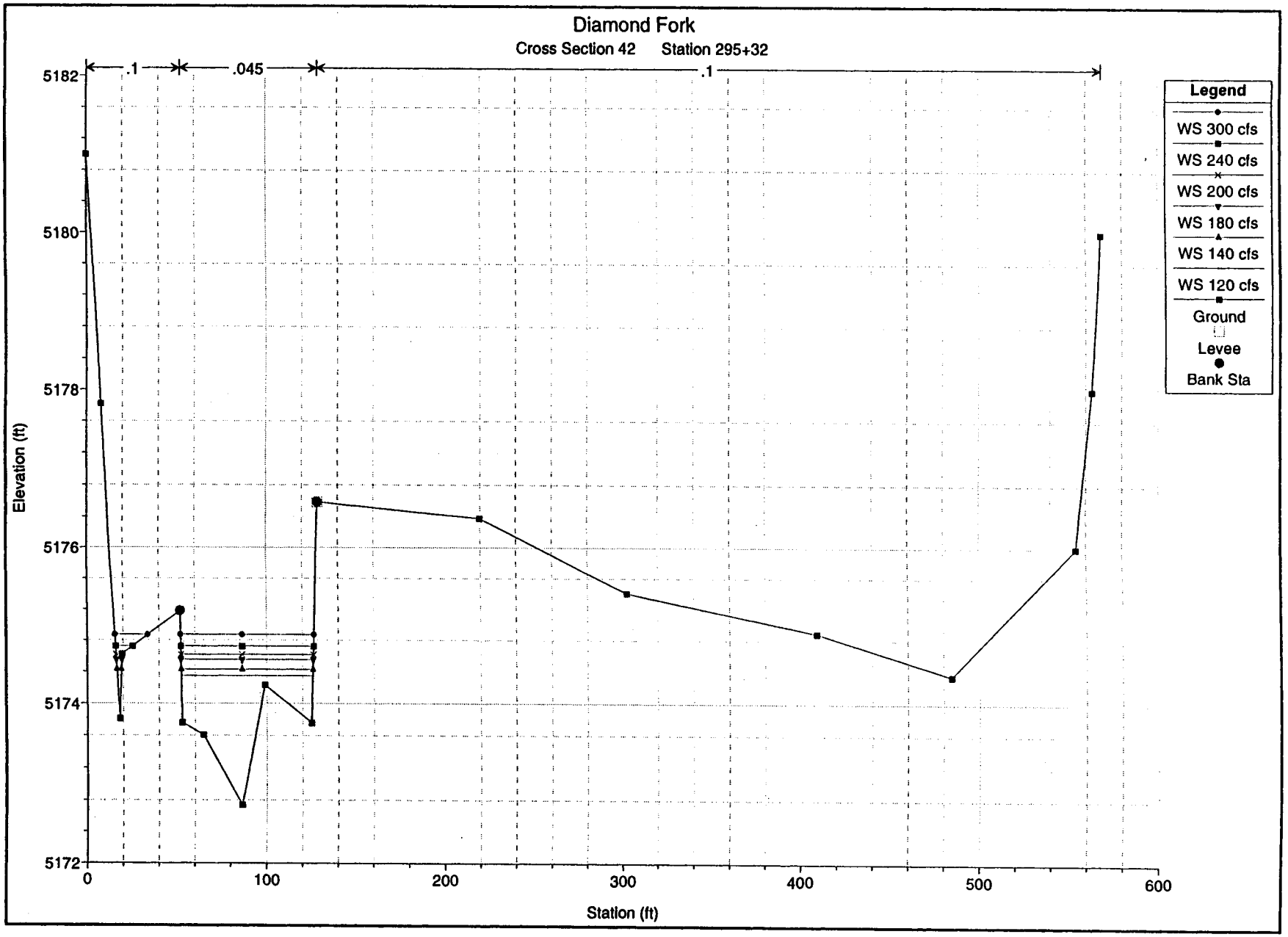

Diamond Fork
Cross Section 37 Station 284+20
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5178
5176
5174
5172
5170
5168
5166
5164
5162
5160
0
20
40
60
80
100
120
140
160
Station (ft)

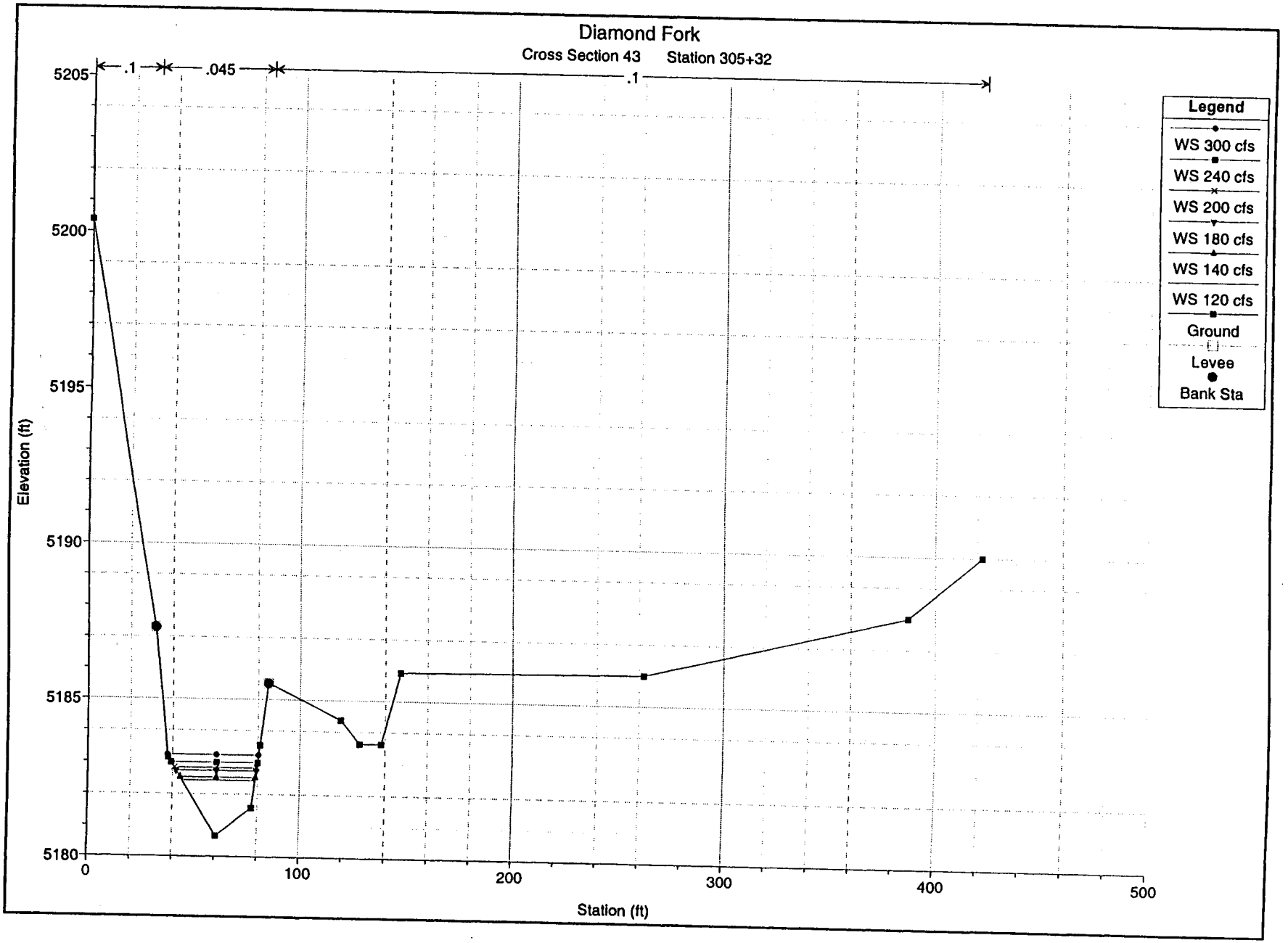

Diamond Fork
Cross Section 38 Station 284+62
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5176
5174
5172
5170
5168
5166
5164
5162
5160
0
20
40
60
80
100
120
140
160
180
Station (ft)

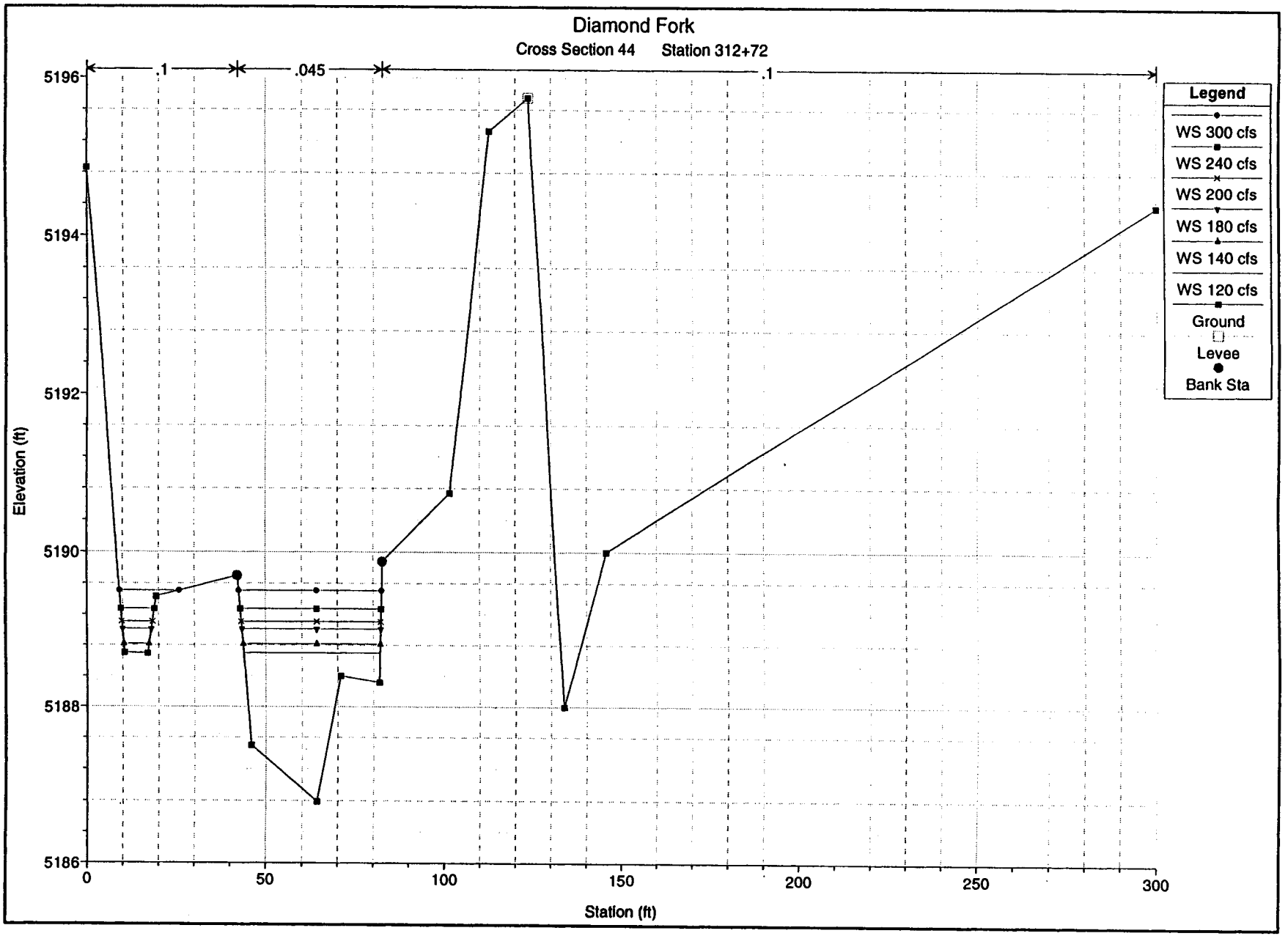

Diamond Fork
Cross Section 39
Station 286+62
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5178
5176
5174
5172
5170
5168
5166
5164
5162
0
50
100
150
200
250
Station (ft)

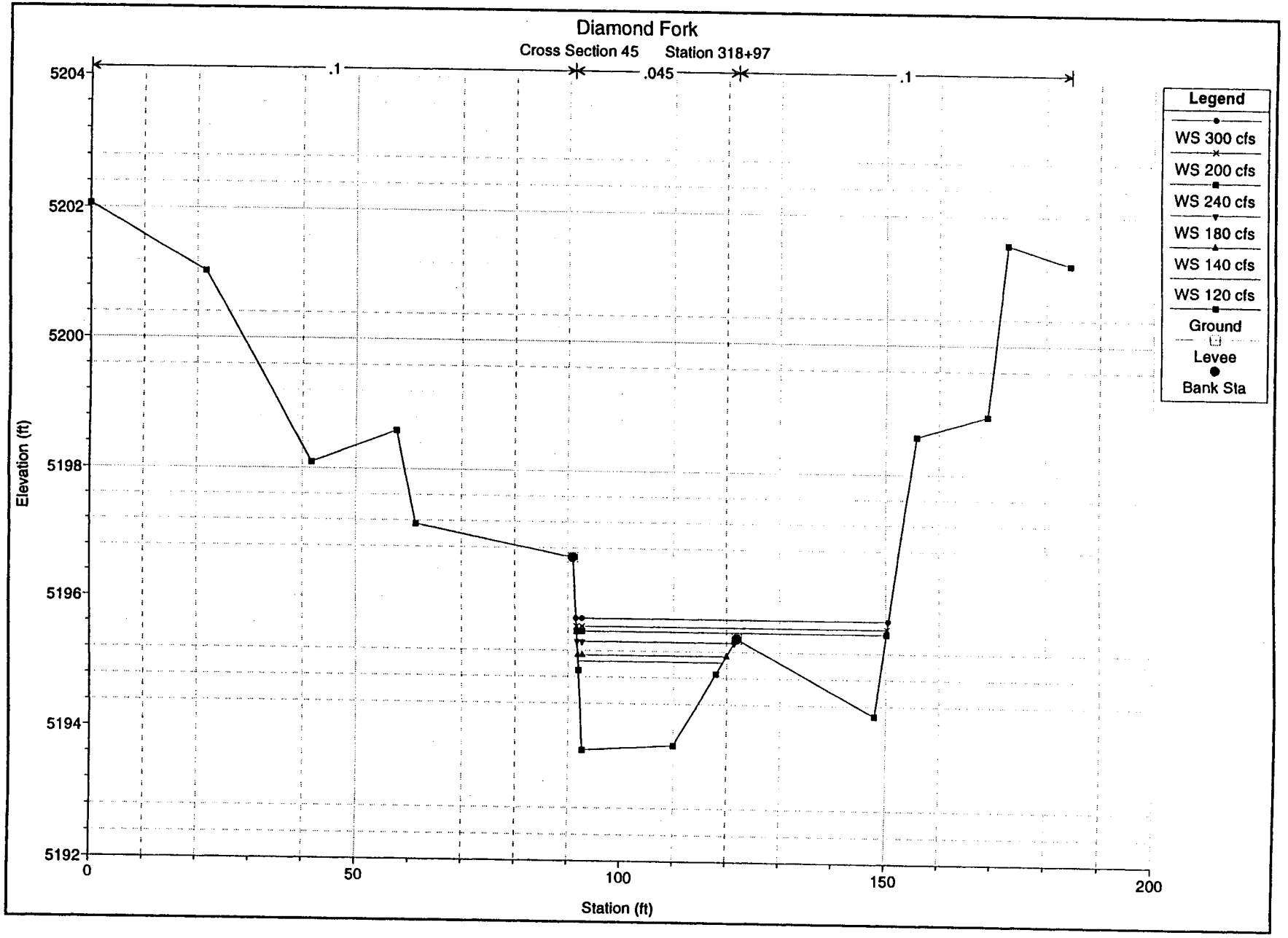

Diamond Fork
Cross Section 40 Station 289+07
.08
.045
.08
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5174
5172
5170
5168
5166
0
50
100
150
200
250
300
350
Station (ft)

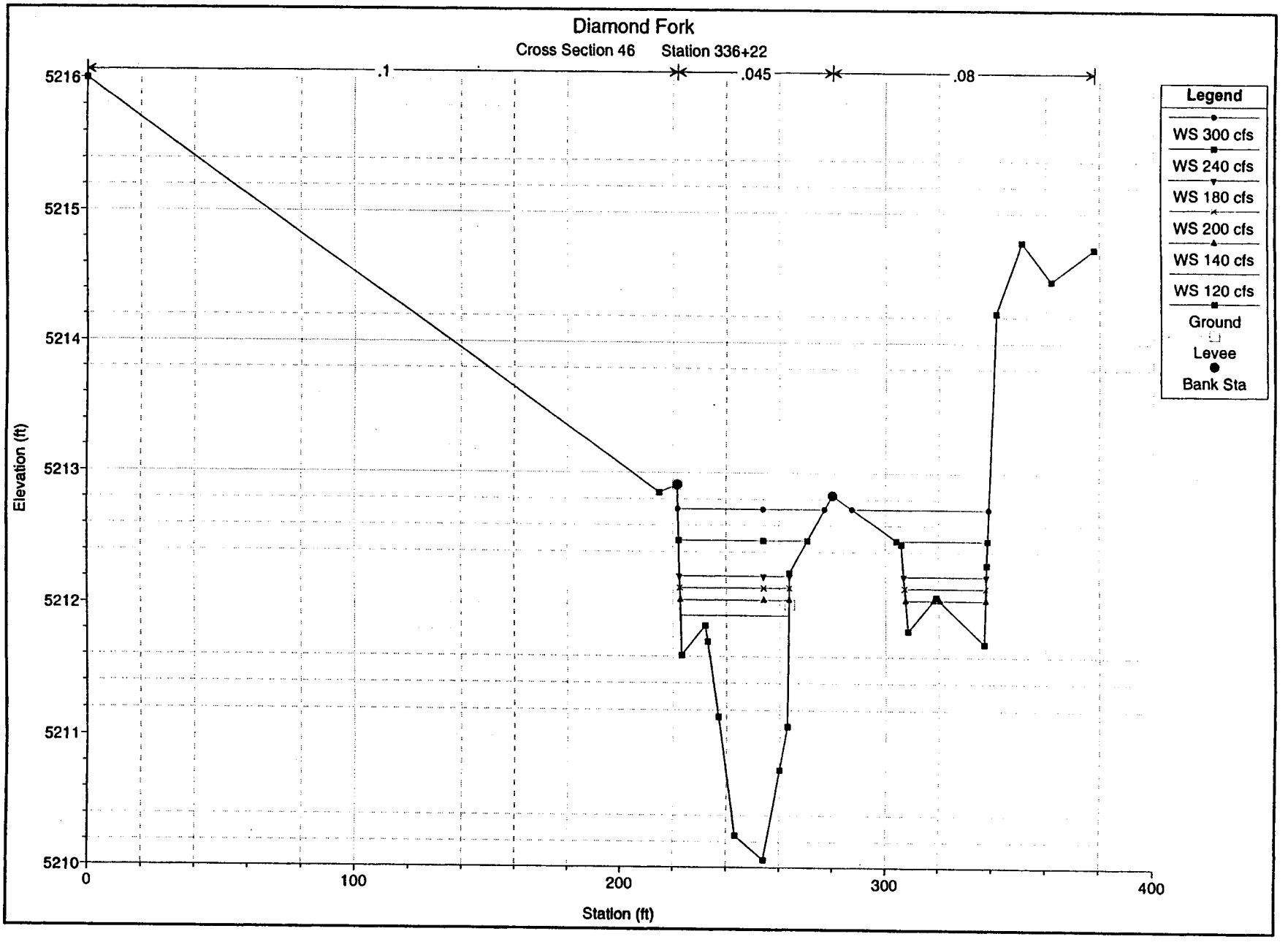

Diamond Fork
Cross Section 41 Station 291+32
.08
.045
.08
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5174
5173
5172
5171
5170
5169
5168
0
20
40
60
80
100
120
140
160
Station (ft)


Diamond Fork
Cross Section 42 Station 295+32
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5182
5180
5178
5176
5174
5172
0
100
200
300
400
500
600
Station (ft)


Diamond Fork
Cross Section 43 Station 305+32
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5205
5200
5195
5190
5185
5180
0
100
200
300
400
500
Station (ft)


Diamond Fork
Cross Section 44 Station 312+72
.1
.045
.1
Legend
WS 300 cfs
WS 240 cfs
WS 200 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5196
5194
5192
5190
5188
5186
0
50
100
150
200
250
300
Station (ft)


Diamond Fork
Cross Section 45 Station 318+97
.1
.045
.1
Legend
WS 300 cfs
WS 200 cfs
WS 240 cfs
WS 180 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5204
5202
5200
5198
5196
5194
5192
0
50
100
150
200
Station (ft)


Diamond Fork
Cross Section 46
Station 336+22
.1
.045
.08
Legend
WS 300 cfs
WS 240 cfs
WS 180 cfs
WS 200 cfs
WS 140 cfs
WS 120 cfs
Ground
Levee
Bank Sta
Elevation (ft)
5216
5215
5214
5213
5212
5211
5210
0
100
200
300
400
Station (ft)