Wisconsin Electric- Wisconsin Gas

Appendix D

Results of Ambient Air, Precipitation, and Flow Analyses; Possible Factors Contributing to Low Dissolved Oxygen Discharge Event at Peavy Falls Project

Peavy Falls Hydroelectric Project –FERC No. 11830-000

November 27, 2001

Appendix D

AN EVALUATION OF ENVIRONMENTAL FACTORS THAT CONTRIBUTED TO LOW DISSOLVED OXYGEN LEVELS IN PEAVY FALLS TAILWATERS IN 2001

PURPOSE OF THIS SECTION

During initial continuous monitoring work conducted by the company in 1993, one sub-5.0 mg/l measurement was reported out of hundreds taken during the period, June-September. By contrast, more than one hundred sub-5.0 mg/l measurements were reported during the 2001 monitoring effort that was conducted over the same timeframe. It is important to understand the factors accounting for this substantial difference in outcomes.

APPROACH

The key to this situation are the factors that cause stratification in the project's flowage. As was initially documented during the 1993 survey, the thermocline in the flowage is very steep. That is, DO declines very rapidly with depth. This is significant because the intake for the plant withdraws water across a depth ranging between 2 and 10 M below the surface.

Factors contributing to stratification include ambient air temperature, spring runoff, precipitation, and related to all previous factors, flow through the project. High air temperatures and low numbers of precipitation events facilitate the setup of relatively stagnant conditions in any flowage. To this end, monthly mean ambient air temperatures and total monthly precipitation measurements for Iron Mountain, MI (taken at the Iron Mountain Airport, which is located approximately 6 miles to the southeast) for 1993, 2000, and 2001 were obtained and compared. In addition, daily flow records for 1993 and 2001 for the project were obtained and compared, both to each other and with the continuous DO measurements.

RESULTS

Air Temperature, Precipitation

Table D-1 provides the monthly mean temperature and total monthly precipitation data collected for Iron Mountain, while Figures D-1 and D-2 graphically depict this data, respectively. Note that at the time this report was prepared, data for September, 2001 was unavailable.

For five of the first 8 months of the year, mean monthly air temperatures were 3-6 degrees higher in 2001 than in 1993. Of greatest significance, was the observation that the spring / early summer months were very warm during 2001 relative to 1993. This

was coupled with much lower precipitation. For added comparison, data for 2000 was included in the figures. Note that 2001 differed greatly from 2000 as well.

Flow Records

Figure D-3 provides a day by day comparison of flow through Peavy Falls Plant for 1993 and 2001. To interpret the data, recall that each unit's hydraulic capacity is approximately 1000 cfs. In 1993, there was sufficient water to allow continuous operation of at least one unit through July 20th, after which time, the plant resorted to peaking one unit or at times, both units on a daily basis through mid-September. At this time, sufficient water allowed for the continuous operation of one unit..

By contrast, during 2001, water supplies during June and early July, only allowed for daily peaking of both units for variable lengths of time. During July, water supplies often allowed for daily peaking of only one unit and then, the duration of the peak was limited. Similar conditions were observed during August, although during the first week, precipitation events allowed for daily peaking of both units. At no time during the four month period did water supply enable continuous operation of one or both units.

Flow vs. Dissolved Oxygen Levels

Figures D-4 and D-5 provide comparisons between flow through the project and resultant DO levels in the project's tailrace as documented by continuously recording instruments. During some weeks in 1993, there appears to be a relationship between flow and DO levels in the tailrace. In general, DO levels tend to track the daily variations in flows starting in July and extending into September. However, the daily fluctuations in DO are somewhat inconsequential given the generally high levels of DO during the entire period. For example, DO was, for the most part, at or above 7.0 mg/l during June and July, while during August, DO ranged between 8.0 and 5.5 mg/l. By early September, DO returned to levels above 8.0 mg/l.

During 2001, (Figure D-5) June DO levels started at 8.0 mg/l but by mid-month, were already varying between 6.0 and 7.0, coincident with daily peaking. By the end of the month, DO had declined to less than 5.0 during the hours of non-generation. During the first half of July, DO varied substantially with the daily peaking of both units. When peaking was restricted to one unit (see for example, the week of July 15th), DO levels remained above 5.0. However, during August, this pattern was not maintained; sometimes DO remained above 5.0 even with two unit peaking (see week of July 29th). During much of August, DO during non-generation hours was typically below 5.0 mg/l (see, for example, the week of August 19th). During this time, it matter little if there was one or two units being peaked. DO levels in the tailrace typically varied between 4.5 and 7.0 mg/l (non-generation vs. generation hours). DO slowly recovered in early September.

Discussion

It is clear that 1993 and 2001 meteorological conditions were substantially different. 1993 was cooler and wetter than 2001. The warm, dry spring of 2001 allowed the Peavy Flowage to stratify intensely by early summer. In fact, sub-5.0 mg/l conditions in the flowage were noted during the June 7th vertical profile survey (sub-5.0 conditions existed at depths below 13 m). By July 11th, sub-5.0 DO conditions had extended to depths greater than 9 m and by August 8th, sub-5.0 conditions existed at depths greater than 5m. Since the opening to the intake for Peavy Falls Plant is situated between 2 and 10 m, the plant was likely entraining sub-5.0 mg/l waters during July, August, and early September (refer to vertical profile measurements, Appendix B). In 1993, when the flowage stratified, the depth of the thermocline was at or below the entrance of the intake. Under these conditions, entrainment of water above the thermocline or entrainment of some hypolimnetic water would be of inconsequence for the purposes of maintaining tailrace waters above 5.0 mg/l. However, during 2001, the position of the thermocline was so far up in the water column that entrainment of large amounts of sub-5.0 mg/l water was unavoidable.

The Company's operations staff have determined that leakage flow through the Peavy Falls units is approximately 80 cfs. The origin of this flow would likely be hypolimnetic water, since a withdrawal rate of this magnitude would not induce entrainment of oxygen-rich water from the upper layers of the water column. This explanation would account for the low DO levels in the tailrace during non-generation hours.

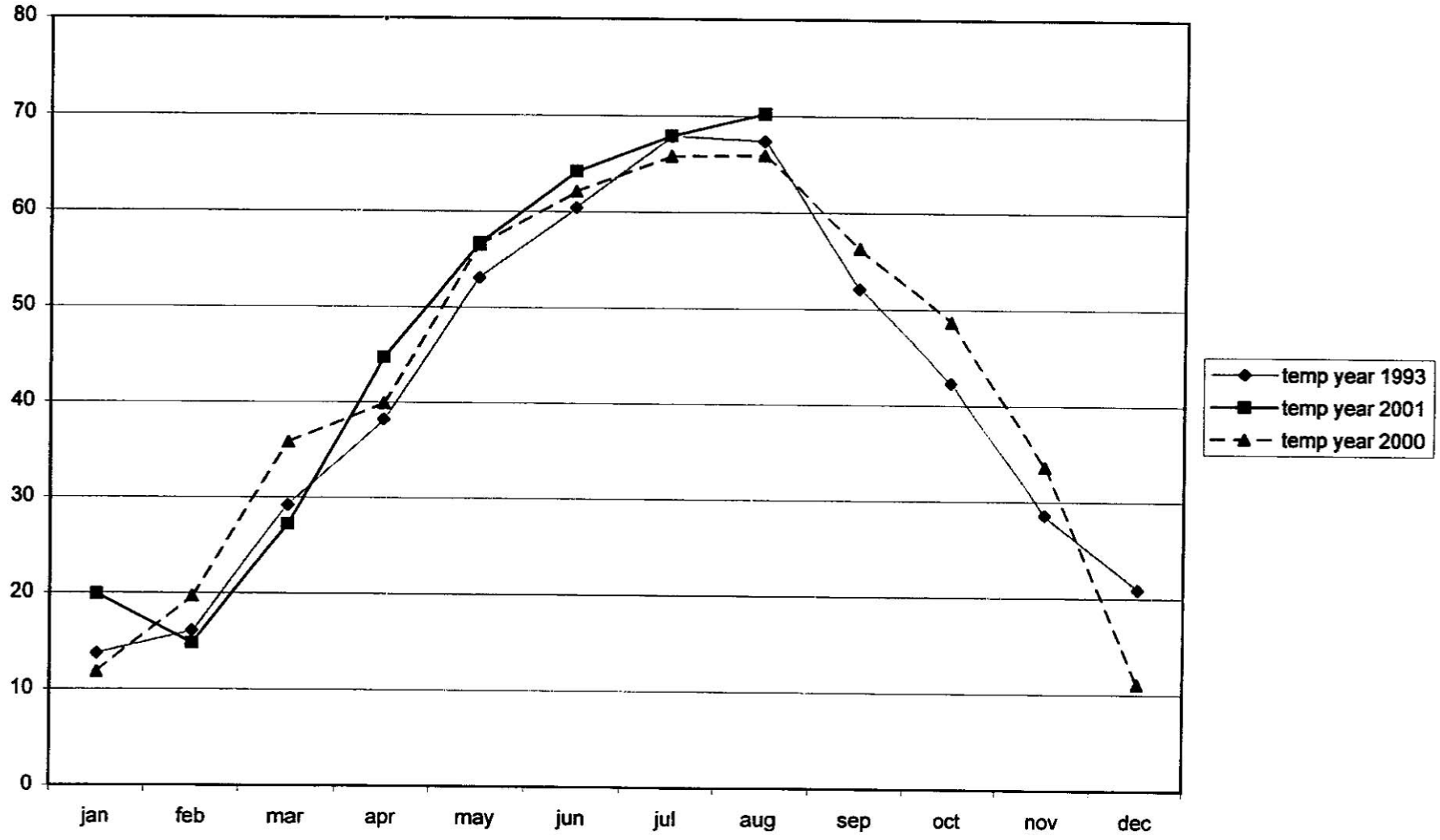
Iron Mountain Weather Data

Table D- 1

	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec
Year 1993												
Monthly Precipitation	1.43	0.05	0.38	2.93	5.45	5.46	2.21	3.75	3.26	1.97	1.7	0.56
Monthly Mean Temperature	13.7	16.1	29.2	38.2	53.1	60.4	67.9	67.4	52.1	42.3	28.6	20.9
Year 2000												
Monthly Precipitation	1.85	1.48	2.18	2.6	2.17	4.47	6.07	4.26	6.12	0.76	2.31	1.2
Monthly Mean Temperature	11.8	19.7	35.8	39.9	56.5	62.1	65.8	65.9	56.3	48.7	33.6	11.1
Year 2001												
Monthly Precipitation	1.3	1.46	0.63	2.73	3.41	3.64	1.97	1.59				
Monthly Mean Temperature	19.9	14.8	27.2	44.7	56.7	64.2	67.9	70.2				

Figure D- 1

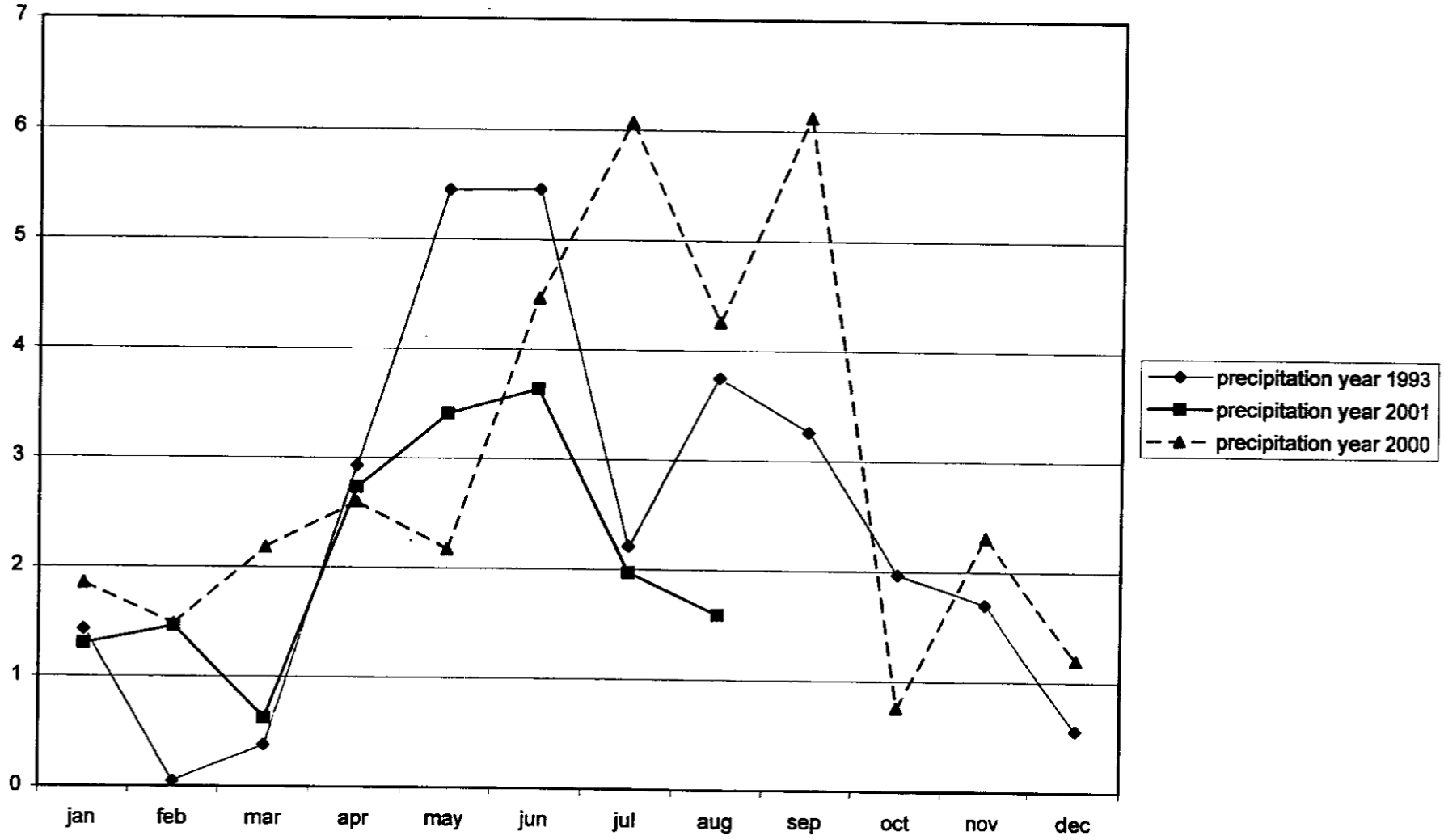
Monthly Mean Temperature- Iron Mountain, MI



peavy 93 and 2001.xls Temperature

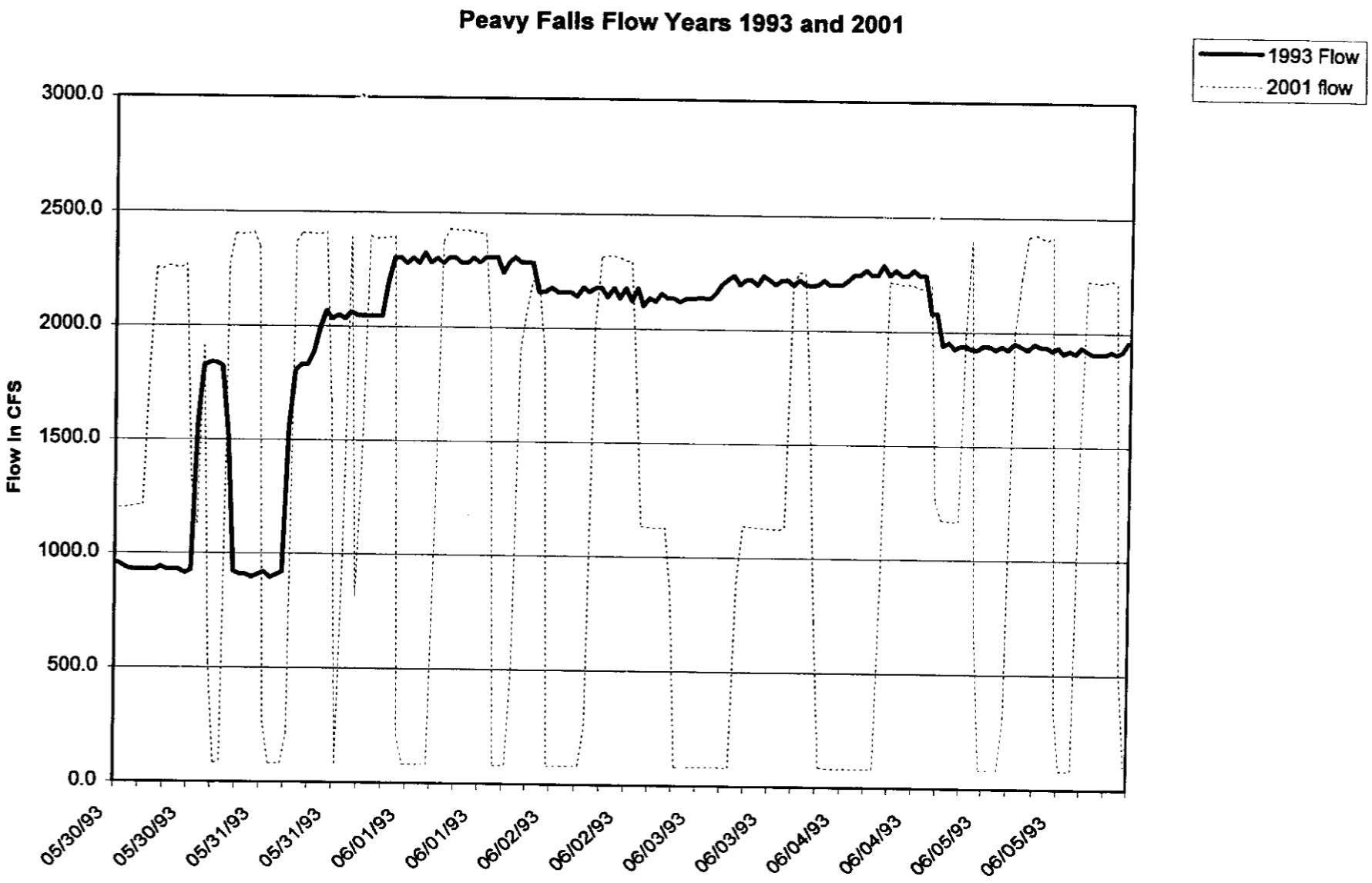
Figure D- 2

Monthly Precipitation- Iron Mountain, MI



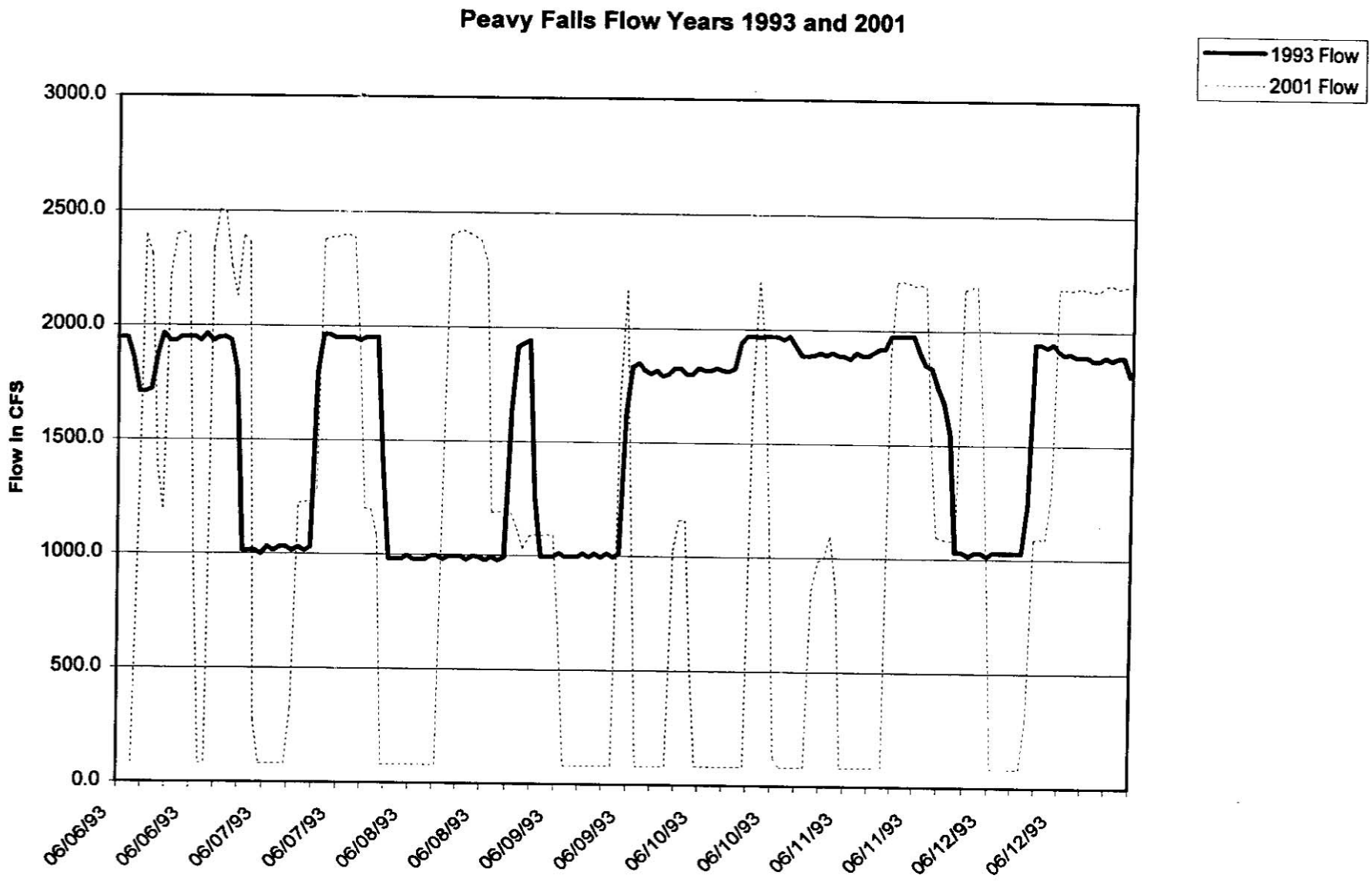
peavy 93 and 2001.xls Precipitation

Figure D- 3



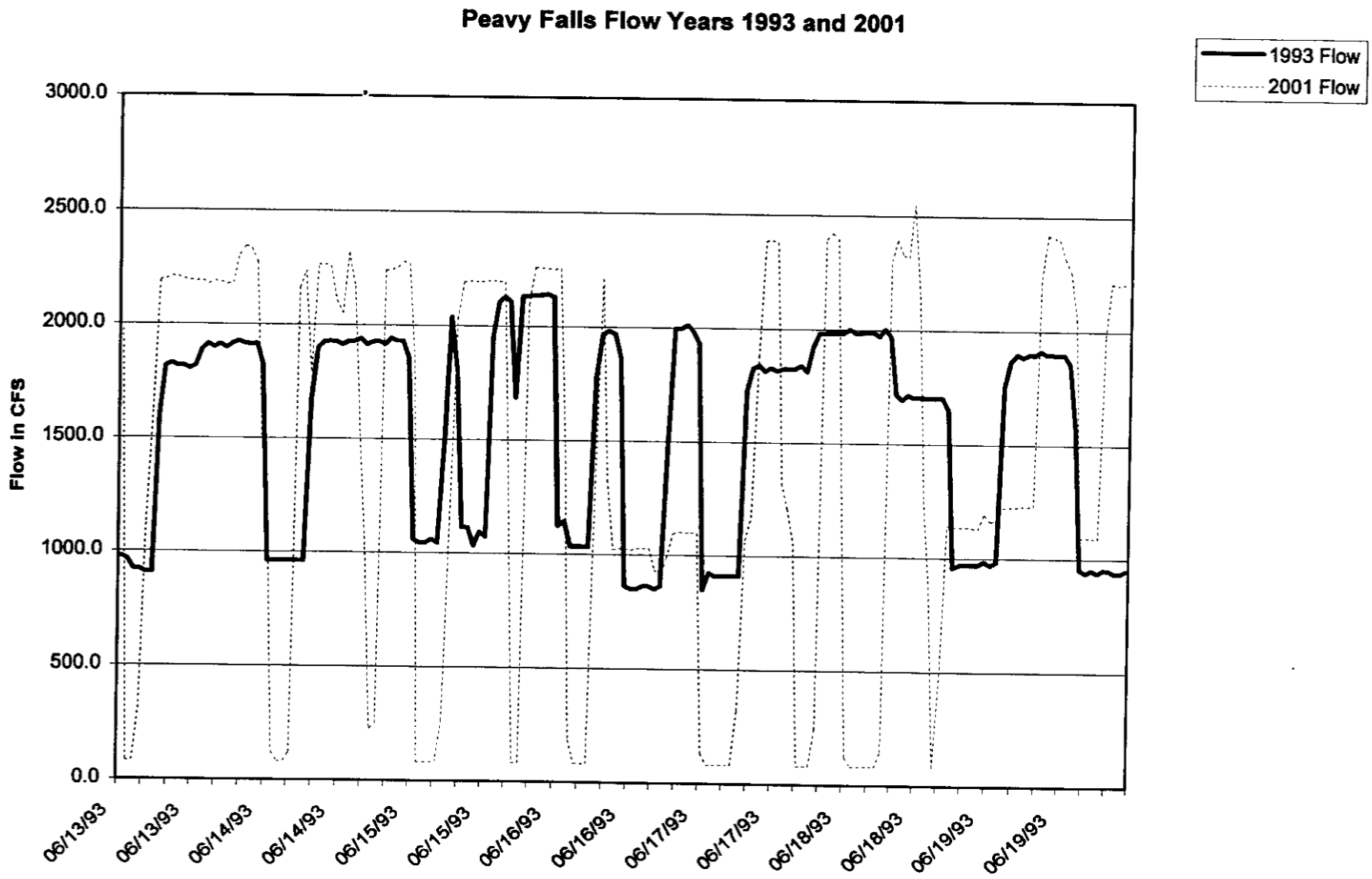
peavy flow 93 vs 2001.xls May 30- June 5

Figure D- 3



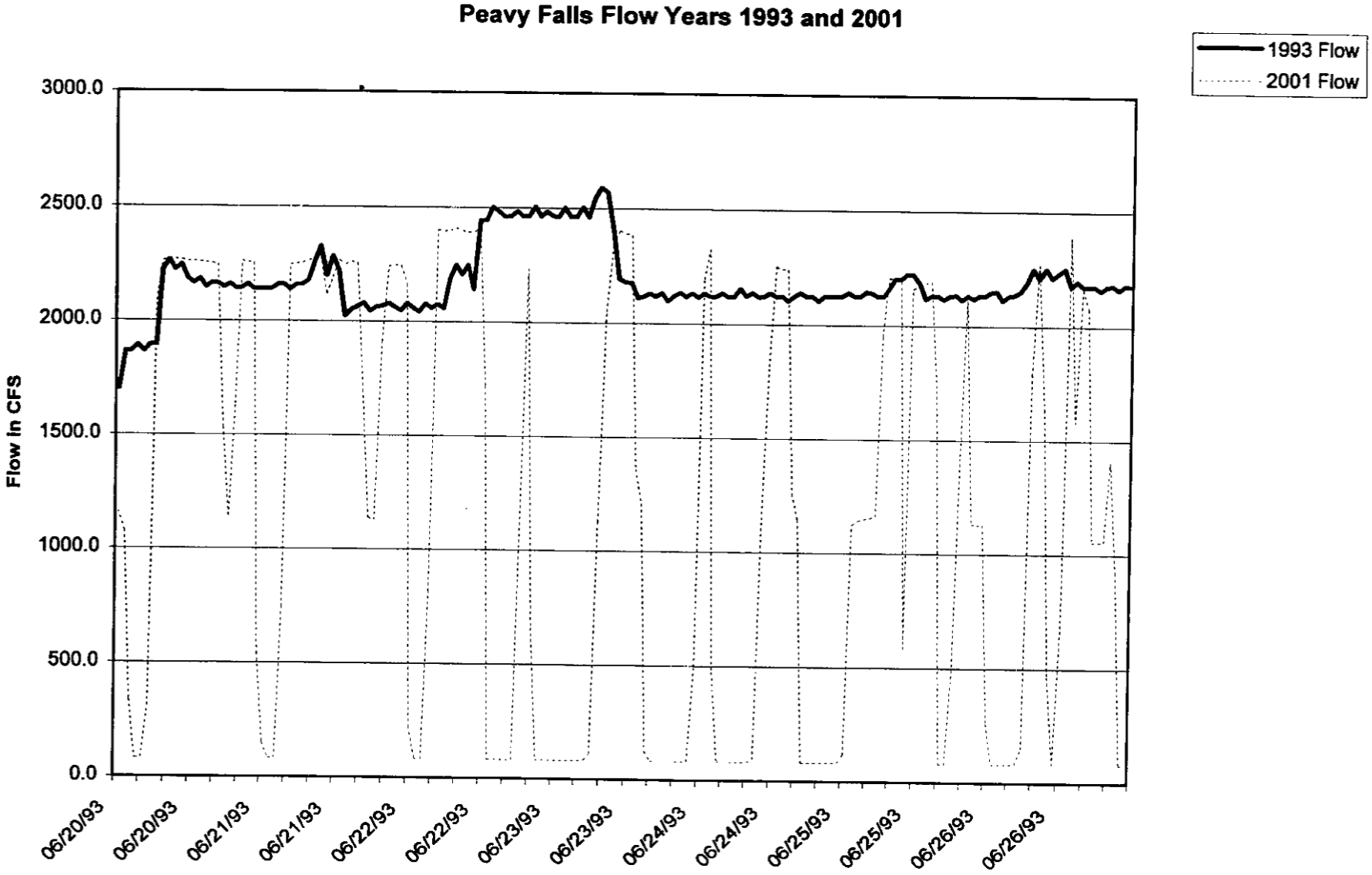
peavy flow 93 vs 2001.xls June 6-12

Figure D- 3



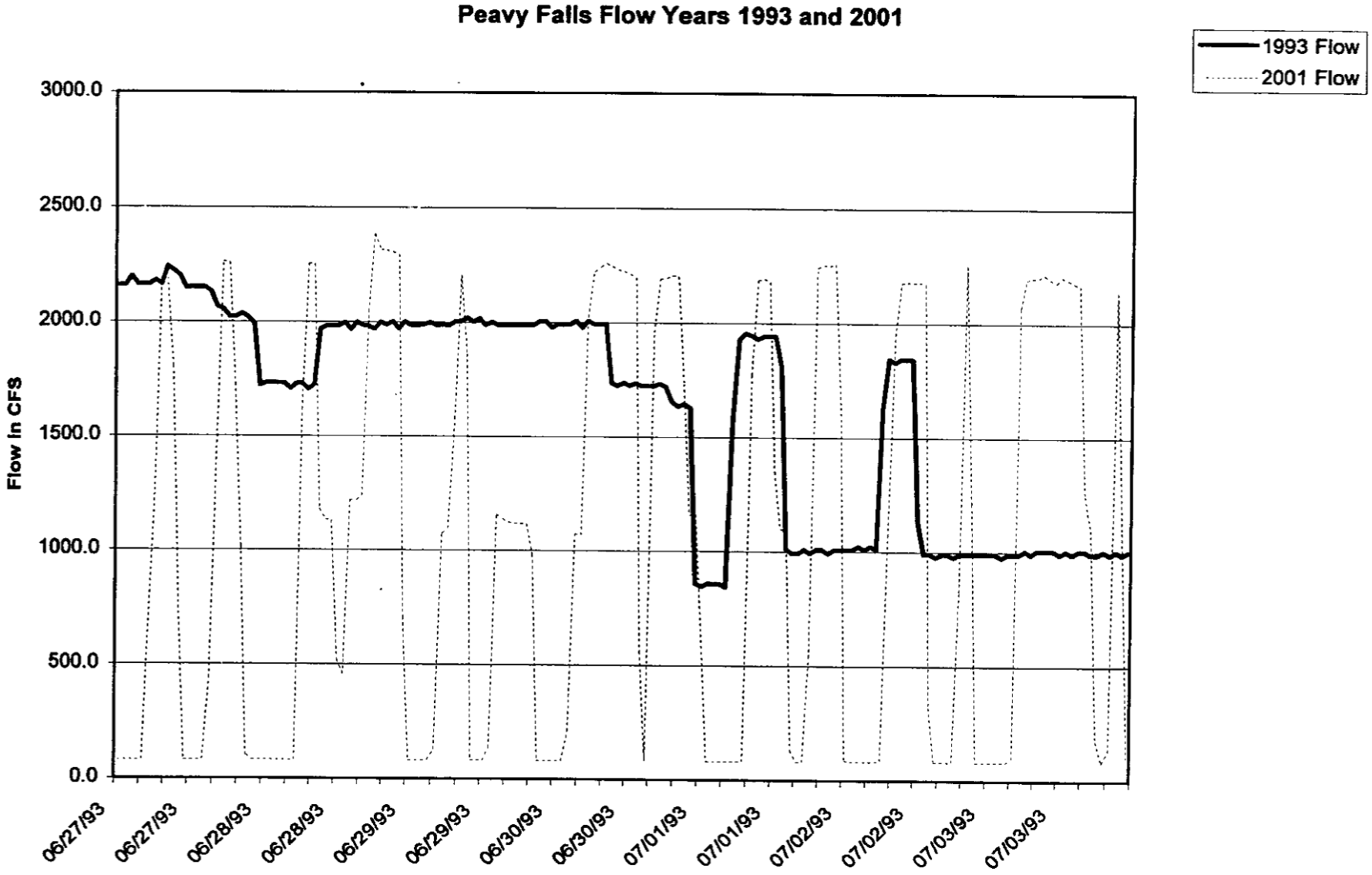
peavy flow 93 vs 2001.xls June 13-19

Figure D- 3



peavy flow 93 vs 2001.xls June 20-26

Figure D- 3


Peavy Falls Flow Years 1993 and 2001
1993 Flow
2001 Flow
Flow in CFS
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
06/27/93
06/27/93
06/28/93
06/28/93
06/29/93
06/29/93
06/30/93
06/30/93
07/01/93
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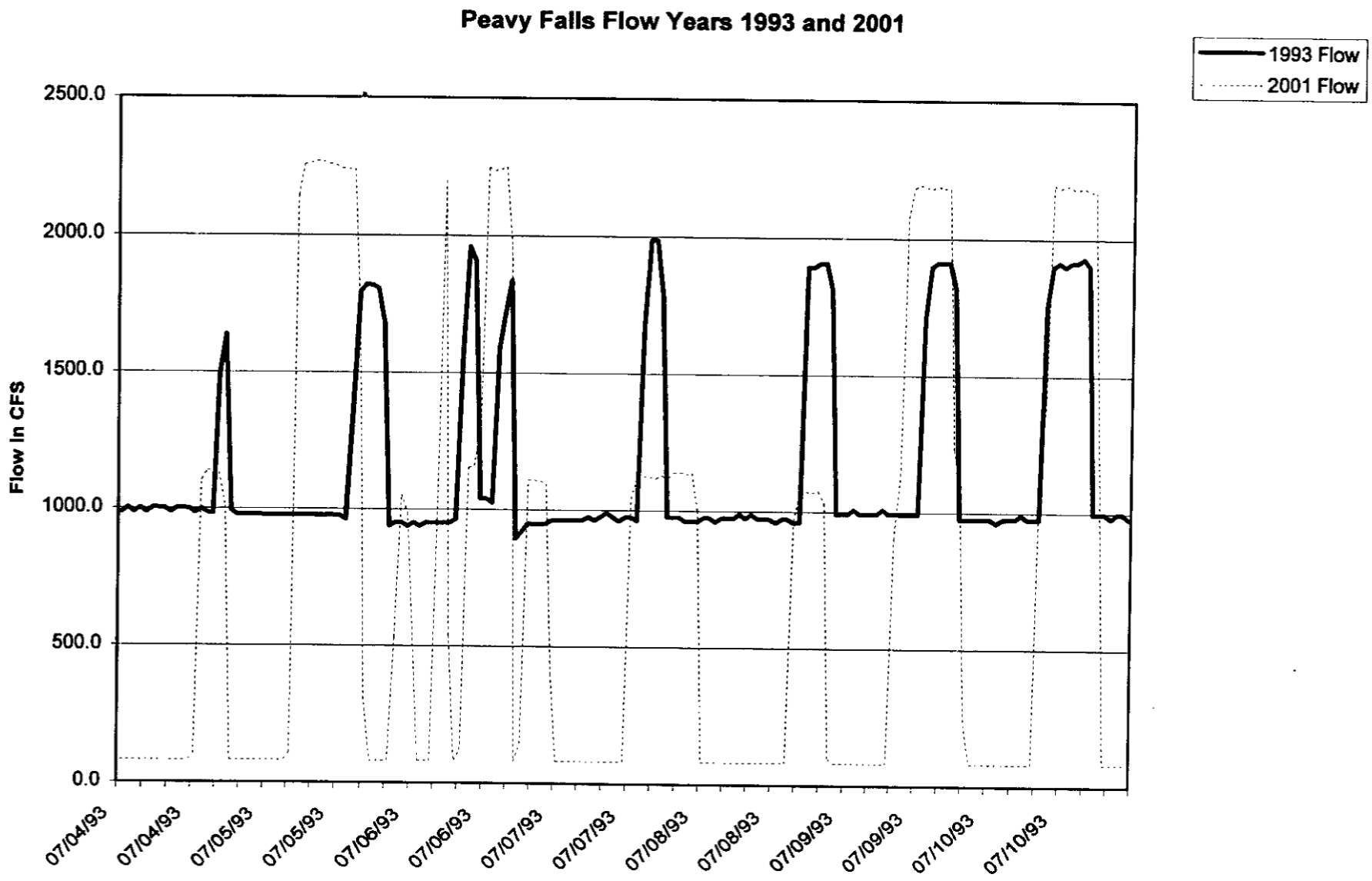
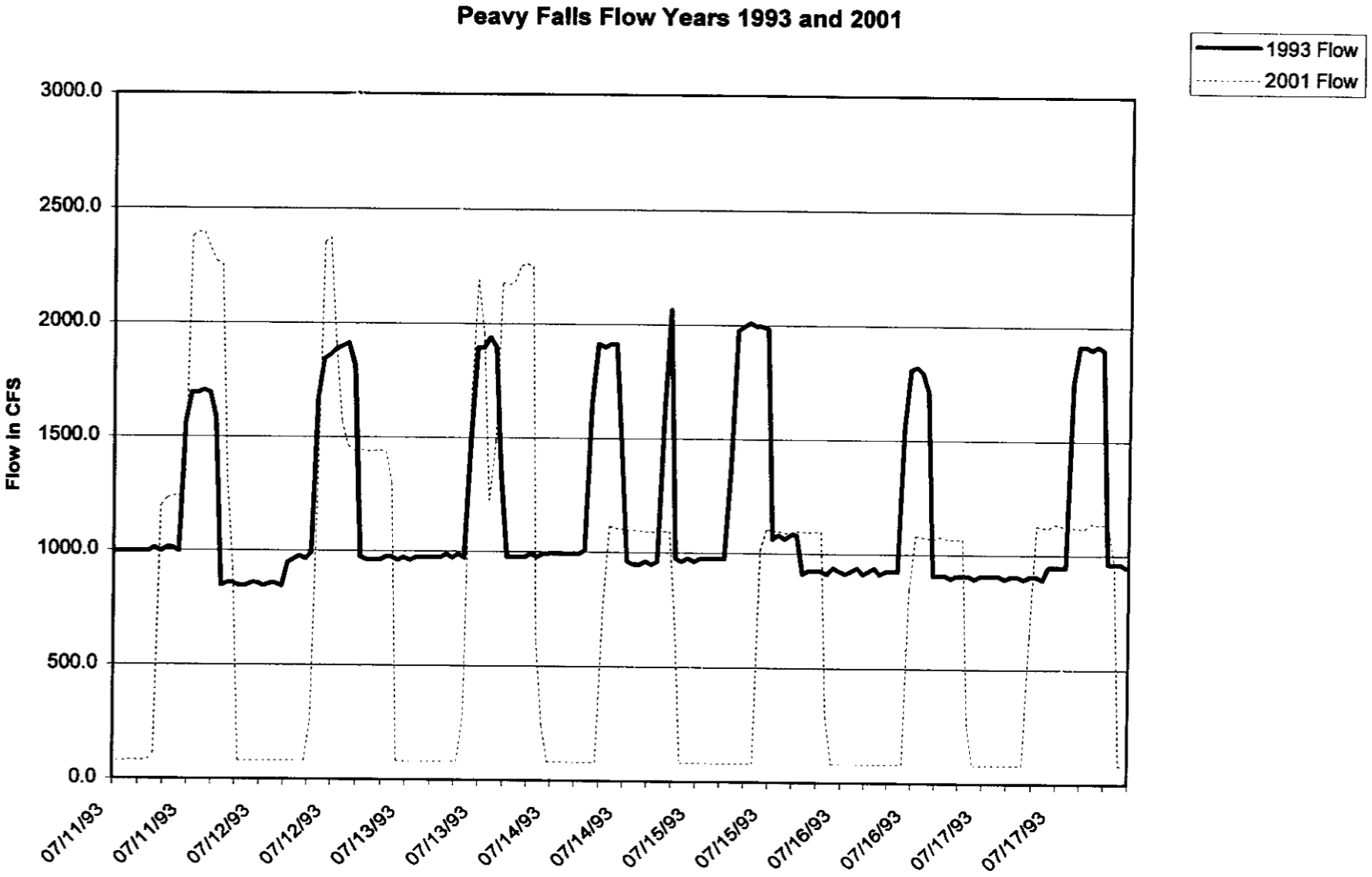
07/02/93
07/03/93
07/03/93

Figure D- 3



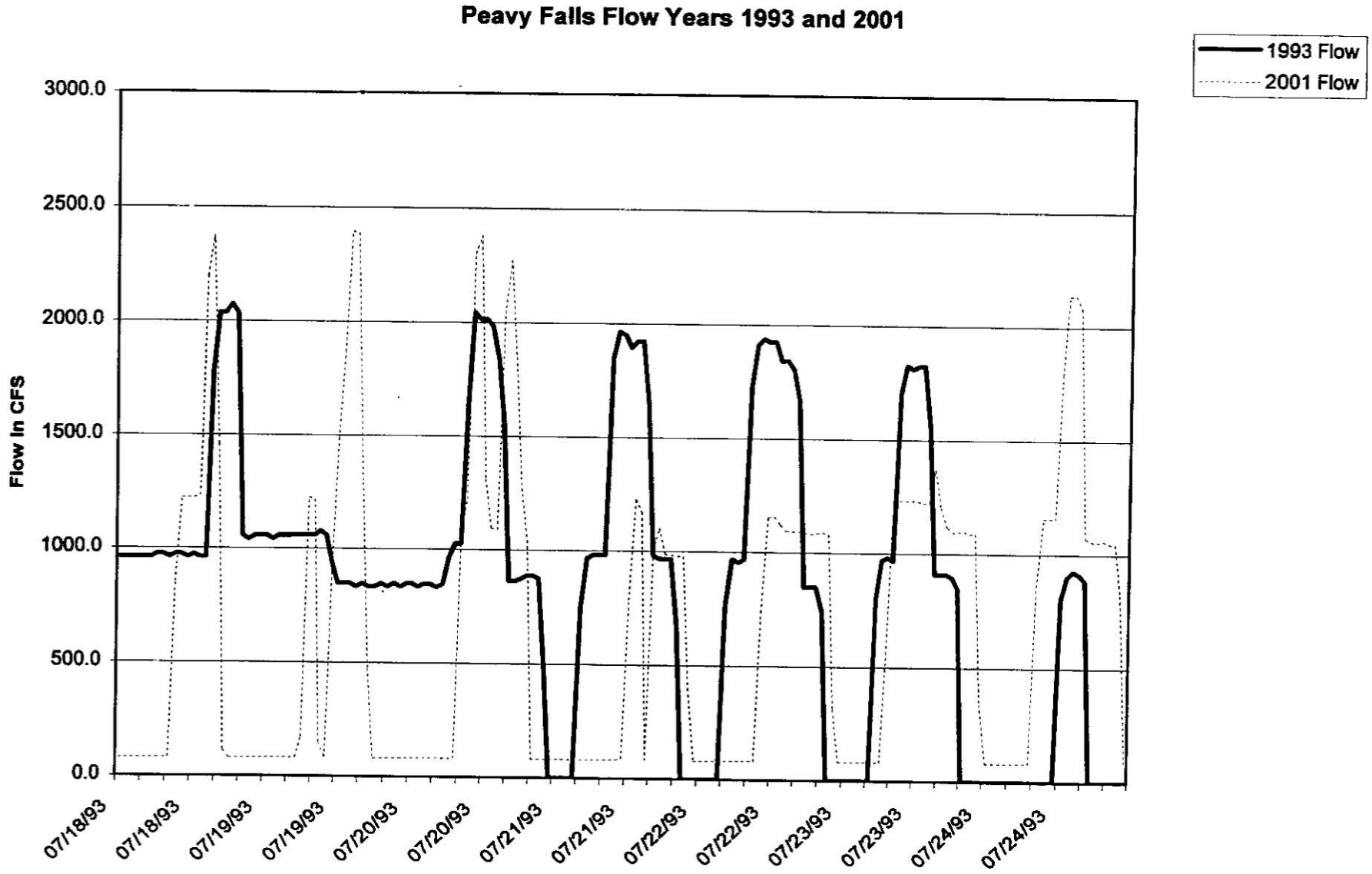
peavy flow 93 vs 2001.xls July 4-10

Figure D- 3



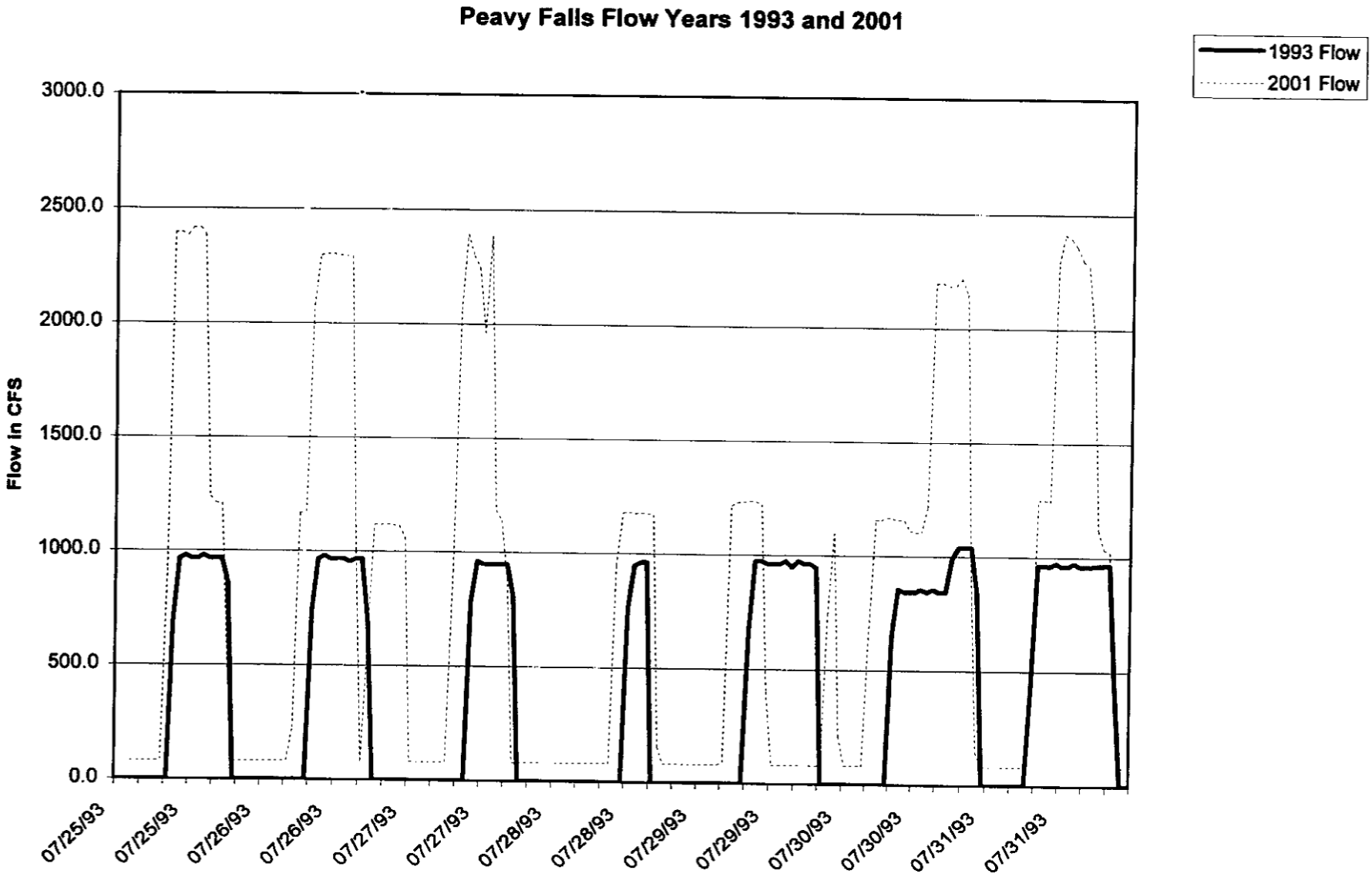
peavy flow 93 vs 2001.xls July 11-17

Figure D- 3



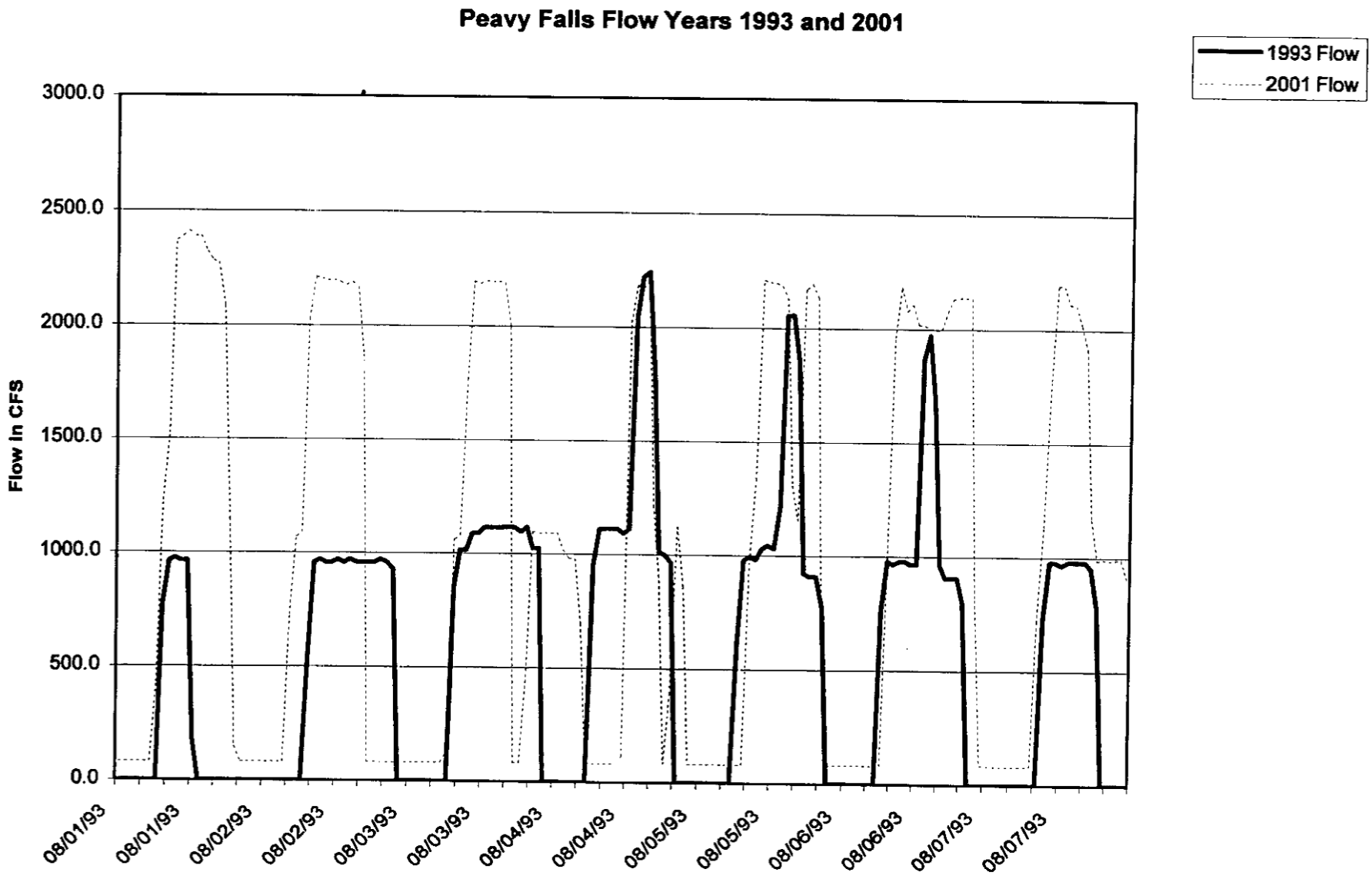
peavy flow 93 vs 2001.xls July 18-24

Figure D- 3



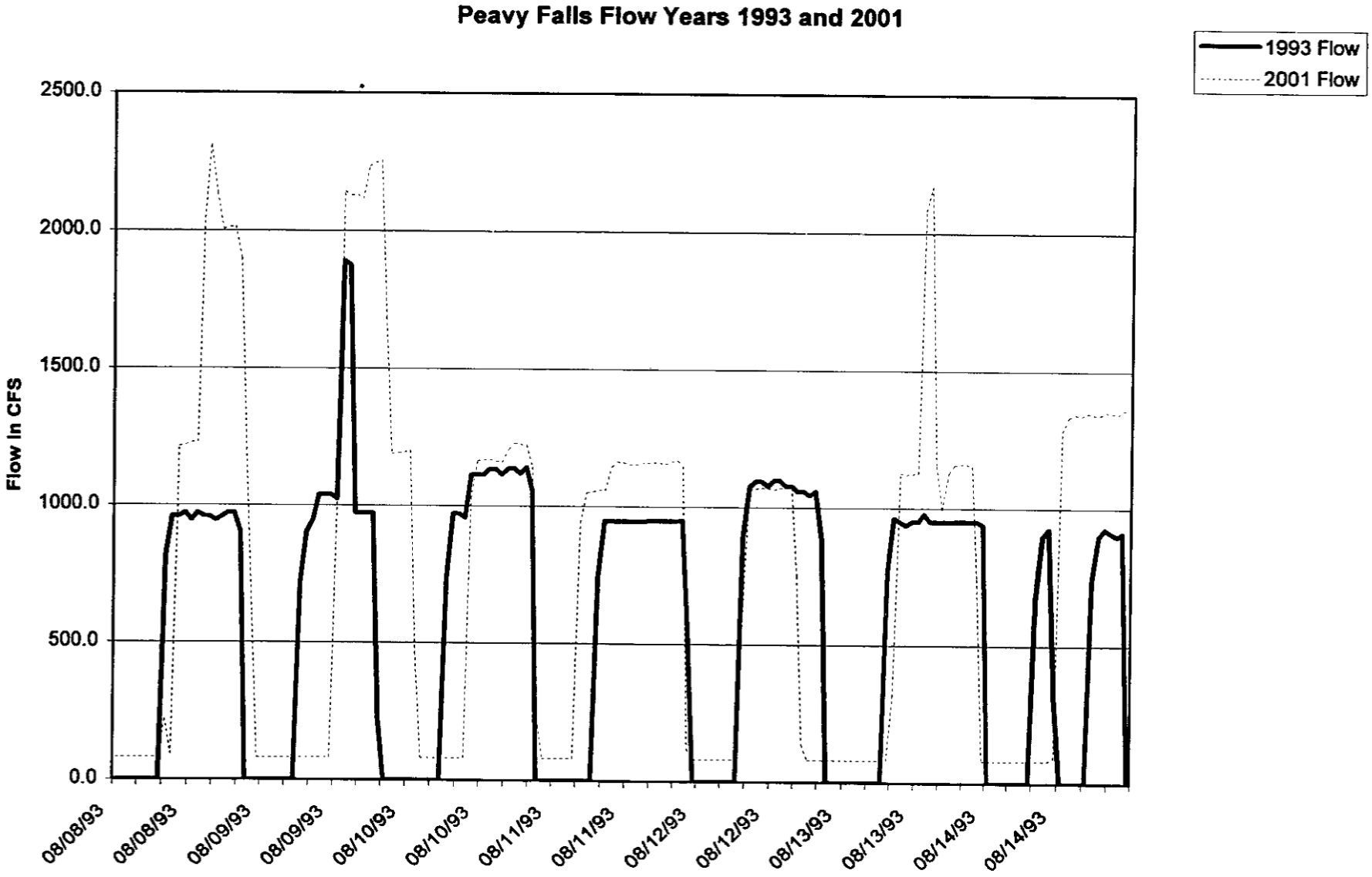
peavy flow 93 vs 2001.xls July 25-31

Figure D- 3



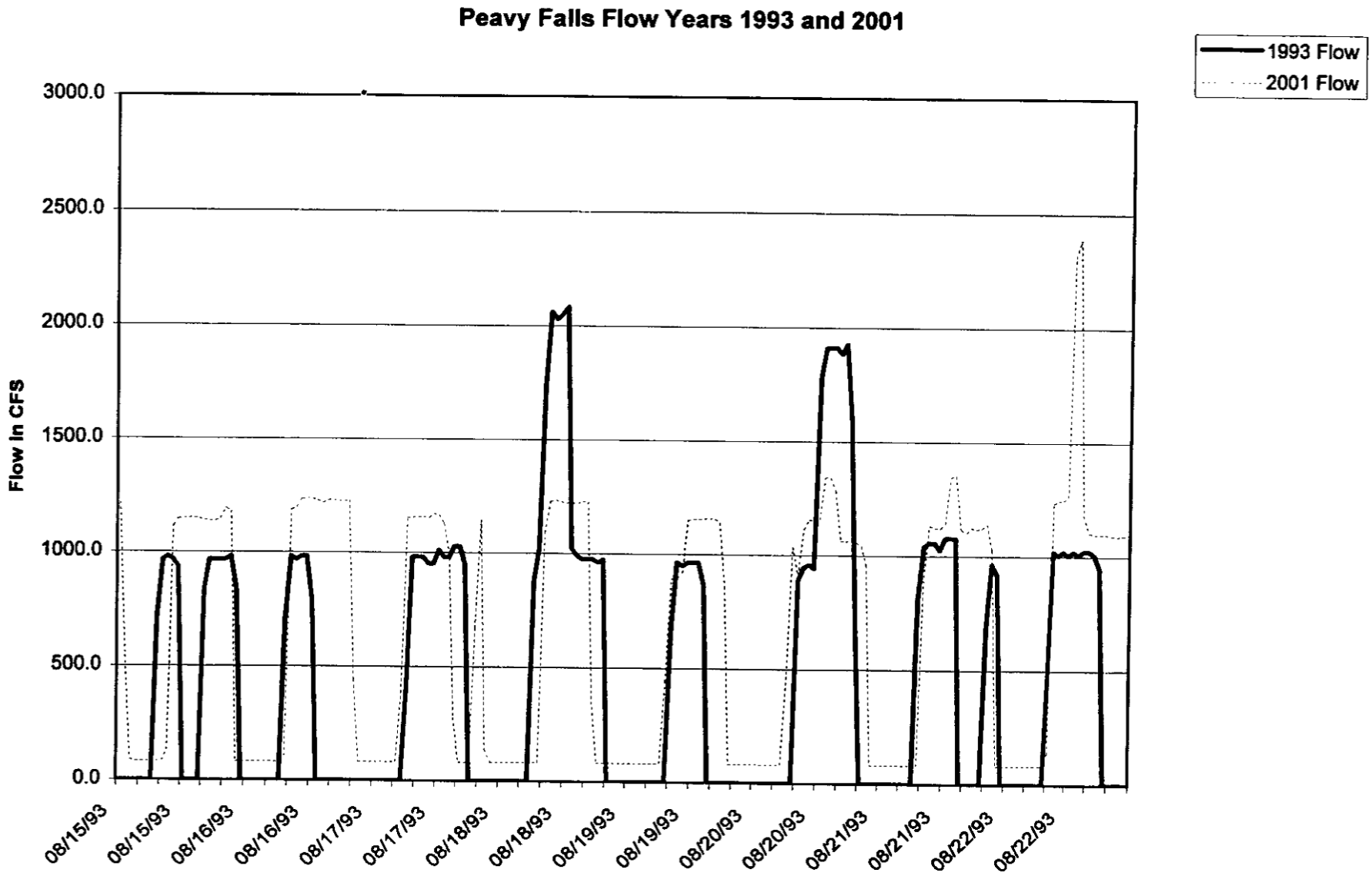
peavy flow 93 vs 2001.xls August 1-7

Figure D- 3



peavy flow 93 vs 2001.xls August 8- 14

Figure D- 3


Peavy Falls Flow Years 1993 and 2001
1993 Flow
2001 Flow
Flow In CFS
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
08/15/93
08/15/93
08/16/93
08/16/93
08/17/93
08/17/93
08/18/93
08/18/93
08/19/93
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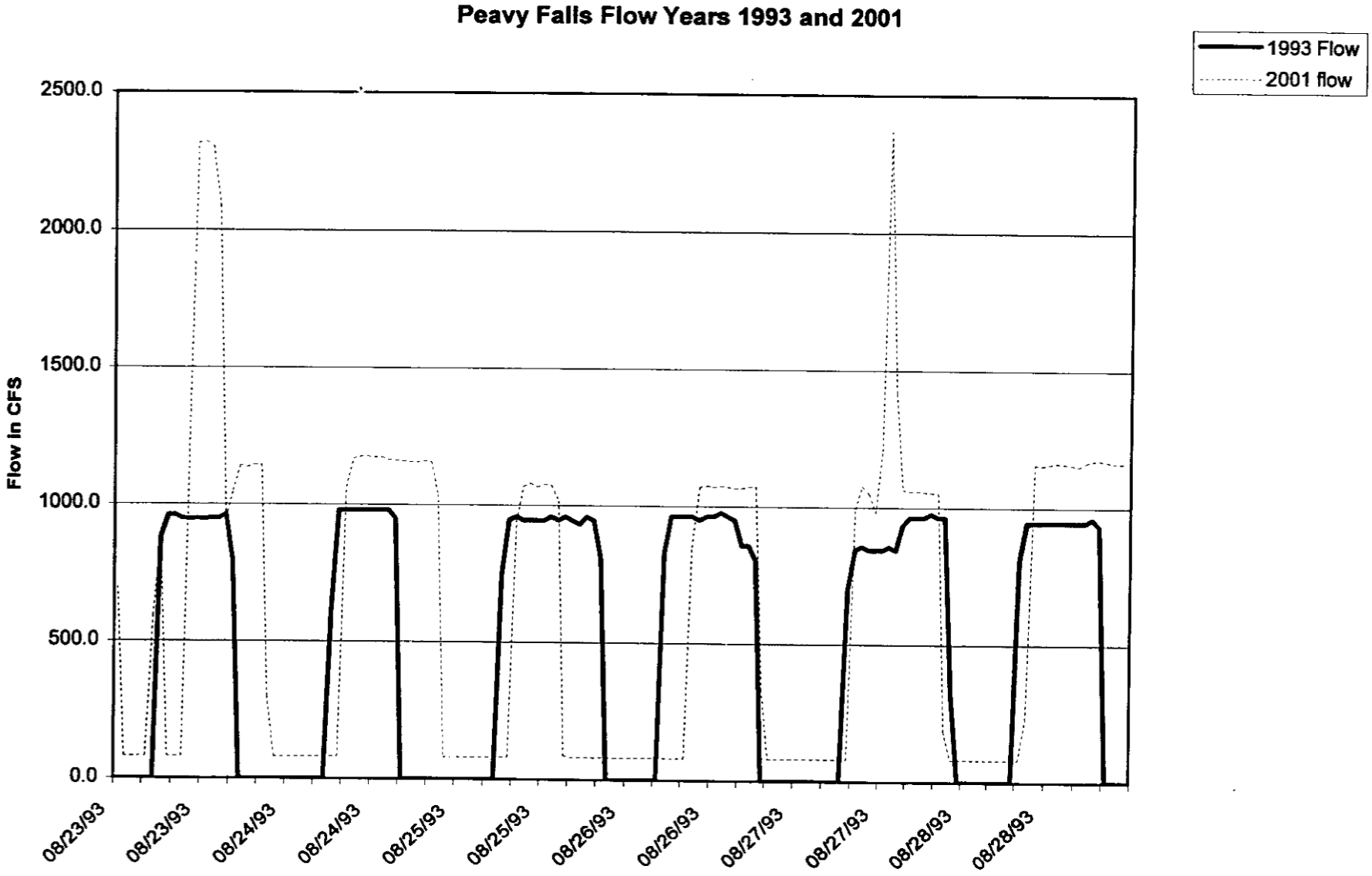
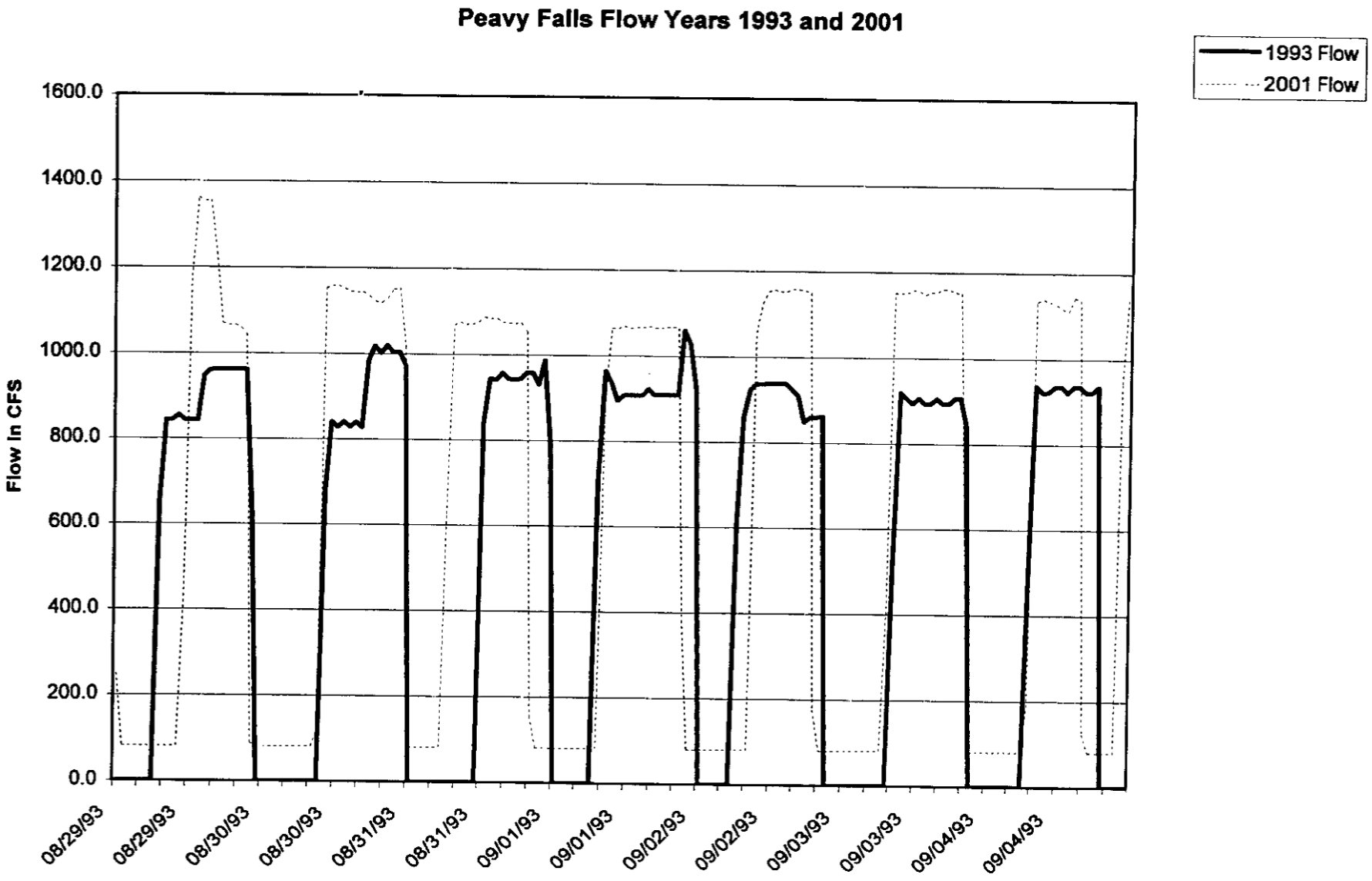
08/21/93
08/22/93
08/22/93

Figure D- 3



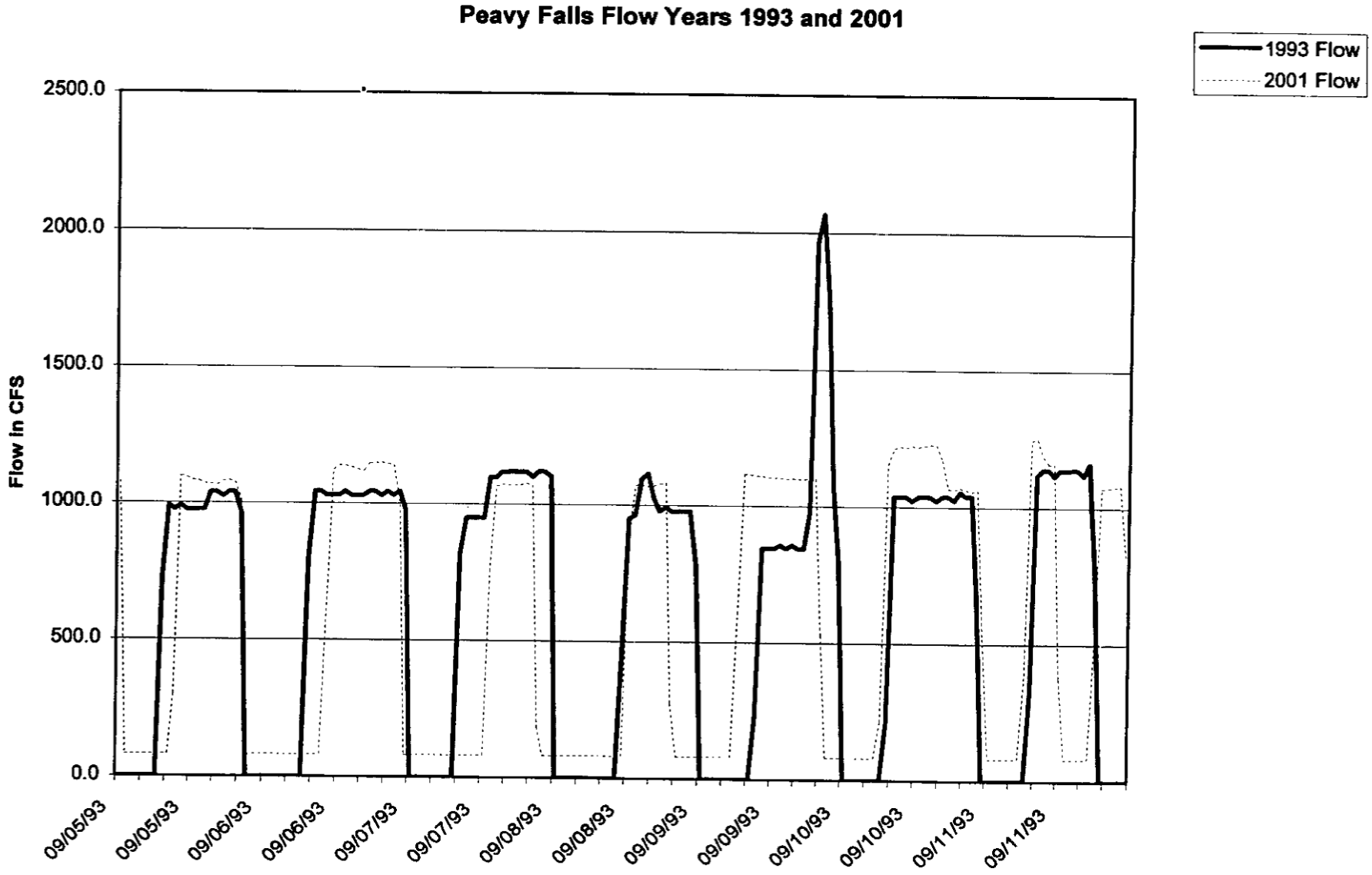
peavy flow 93 vs 2001.xls August 22 - 28

Figure D- 3



peavy flow 93 vs 2001.xls August 29- September 4

Figure D- 3



peavy flow 93 vs 2001.xls September 5-11

Figure D- 3

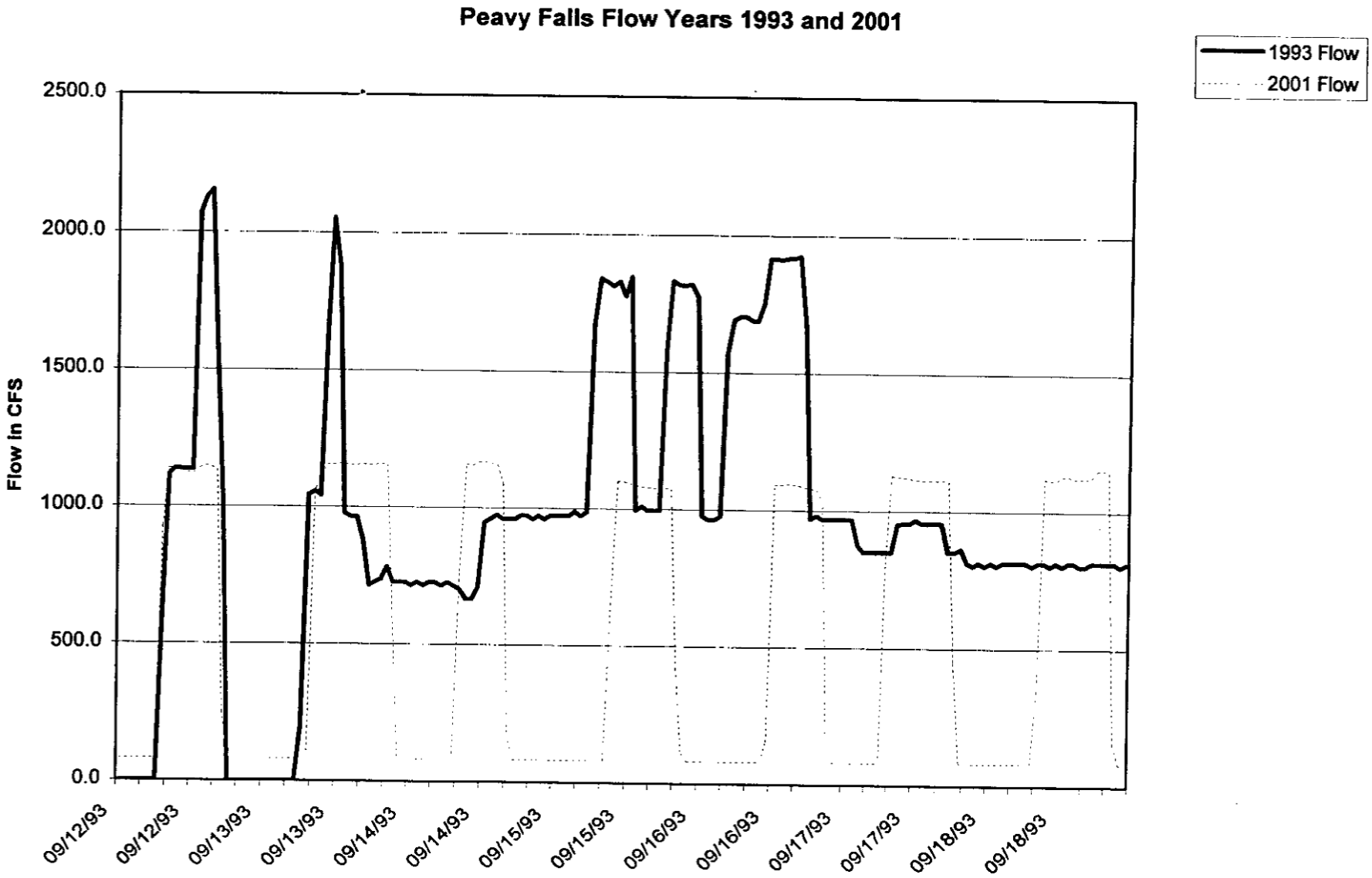
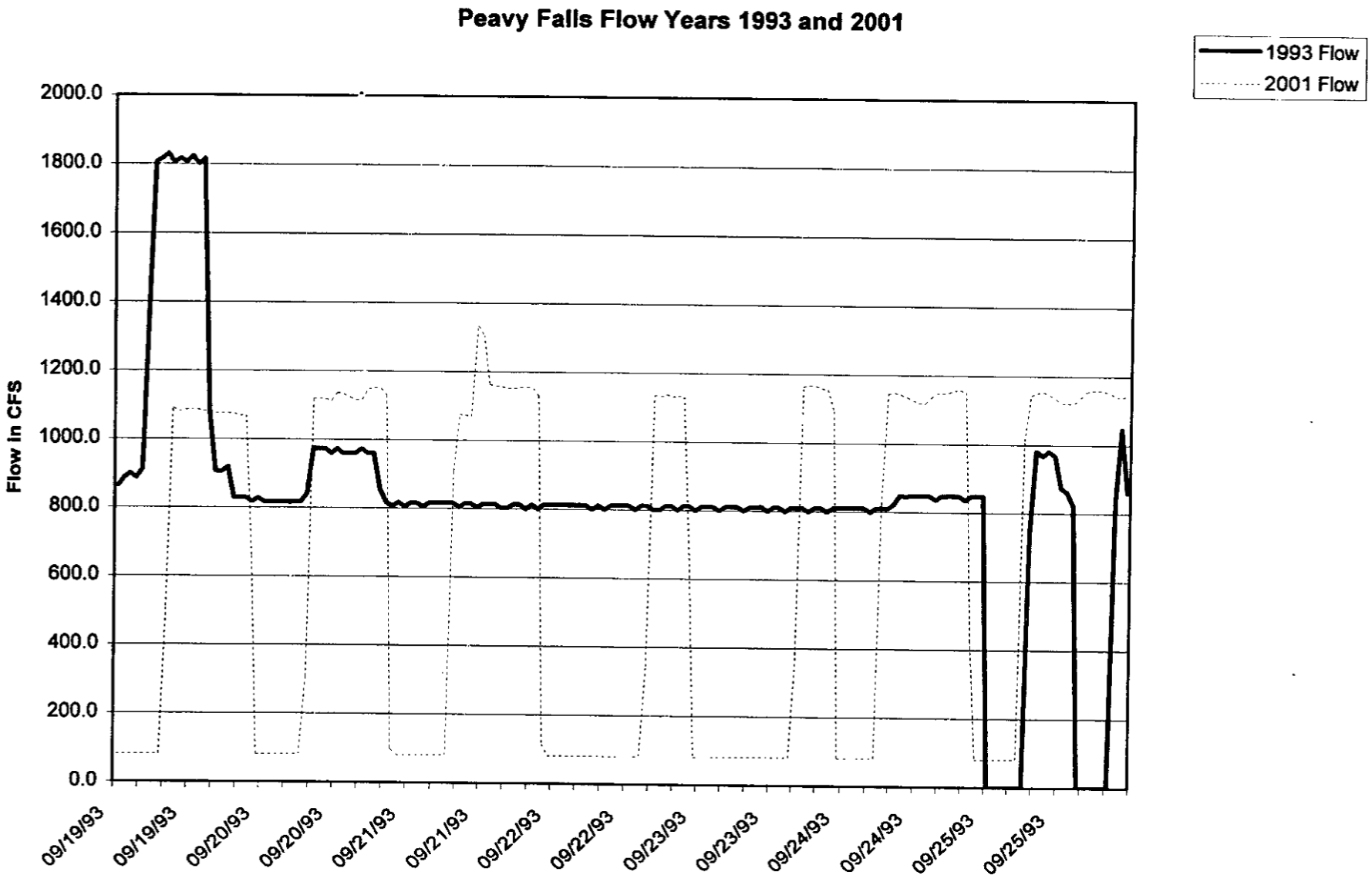
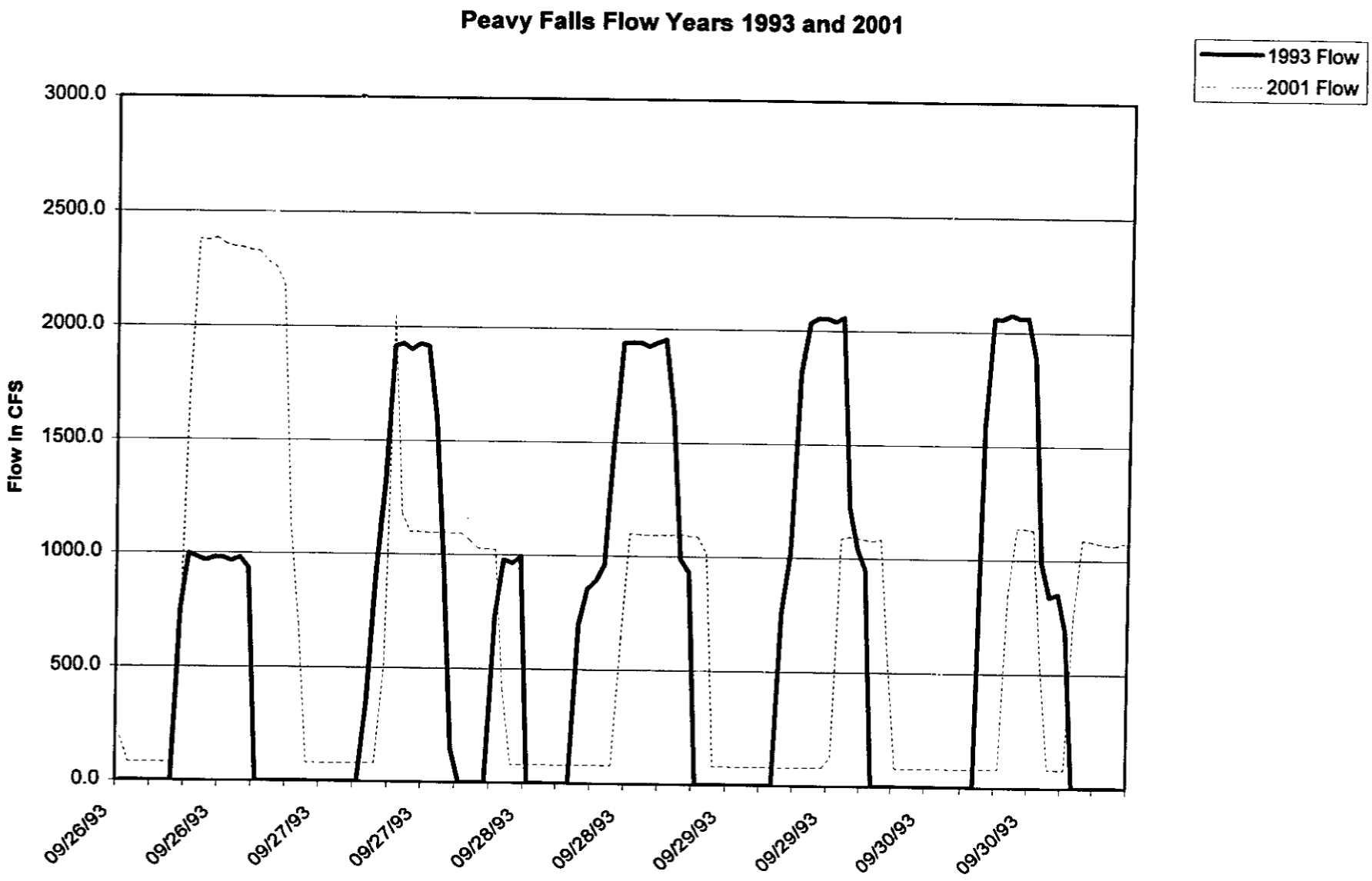

Peavy Falls Flow Years 1993 and 2001
1993 Flow
2001 Flow
Flow in CFS
2500.0
2000.0
1500.0
1000.0
500.0
0.0
09/12/93
09/12/93
09/13/93
09/13/93
09/14/93
09/14/93
09/15/93
09/15/93
09/16/93
09/16/93
09/17/93
09/17/93
09/18/93
09/18/93

Figure D- 3



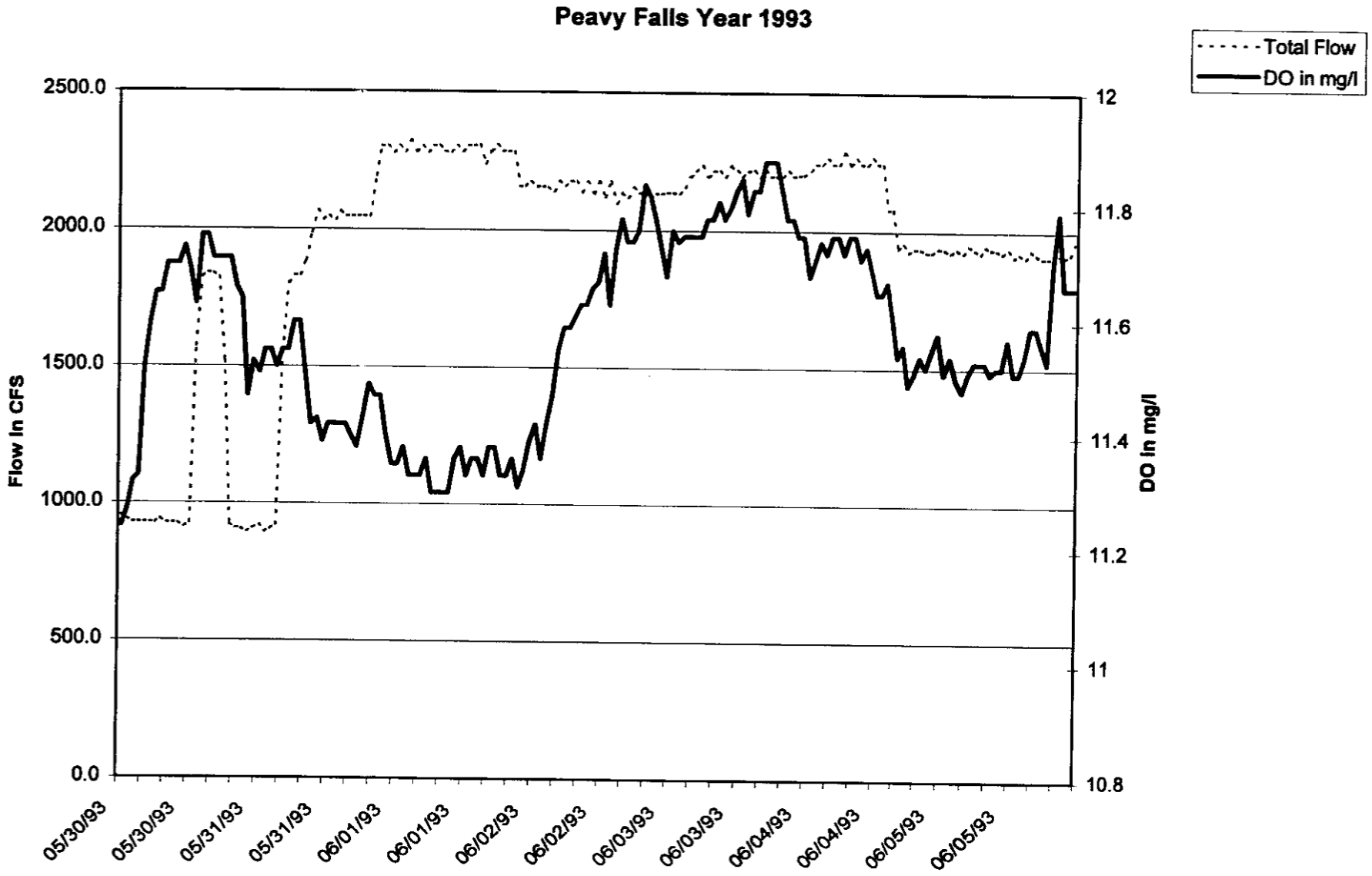
peavy flow 93 vs 2001.xls September 19-25

Figure D- 3



peavy flow 93 vs 2001.xls September 26 - 30

Figure D- 4


Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
12
11.8
11.6
11.4
11.2
11
10.8
05/30/93
05/30/93
05/31/93
05/31/93
06/01/93
06/01/93
06/02/93
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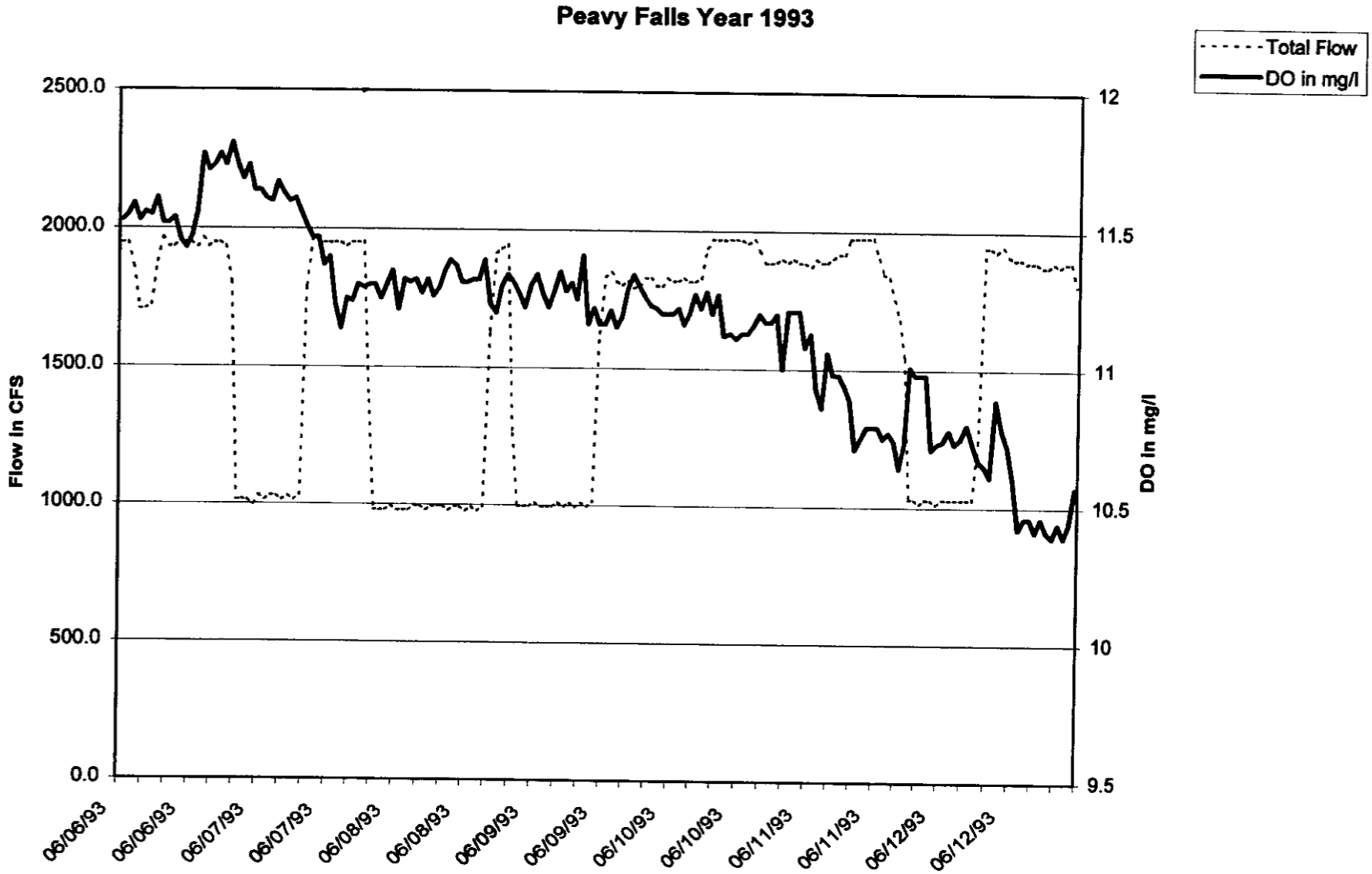
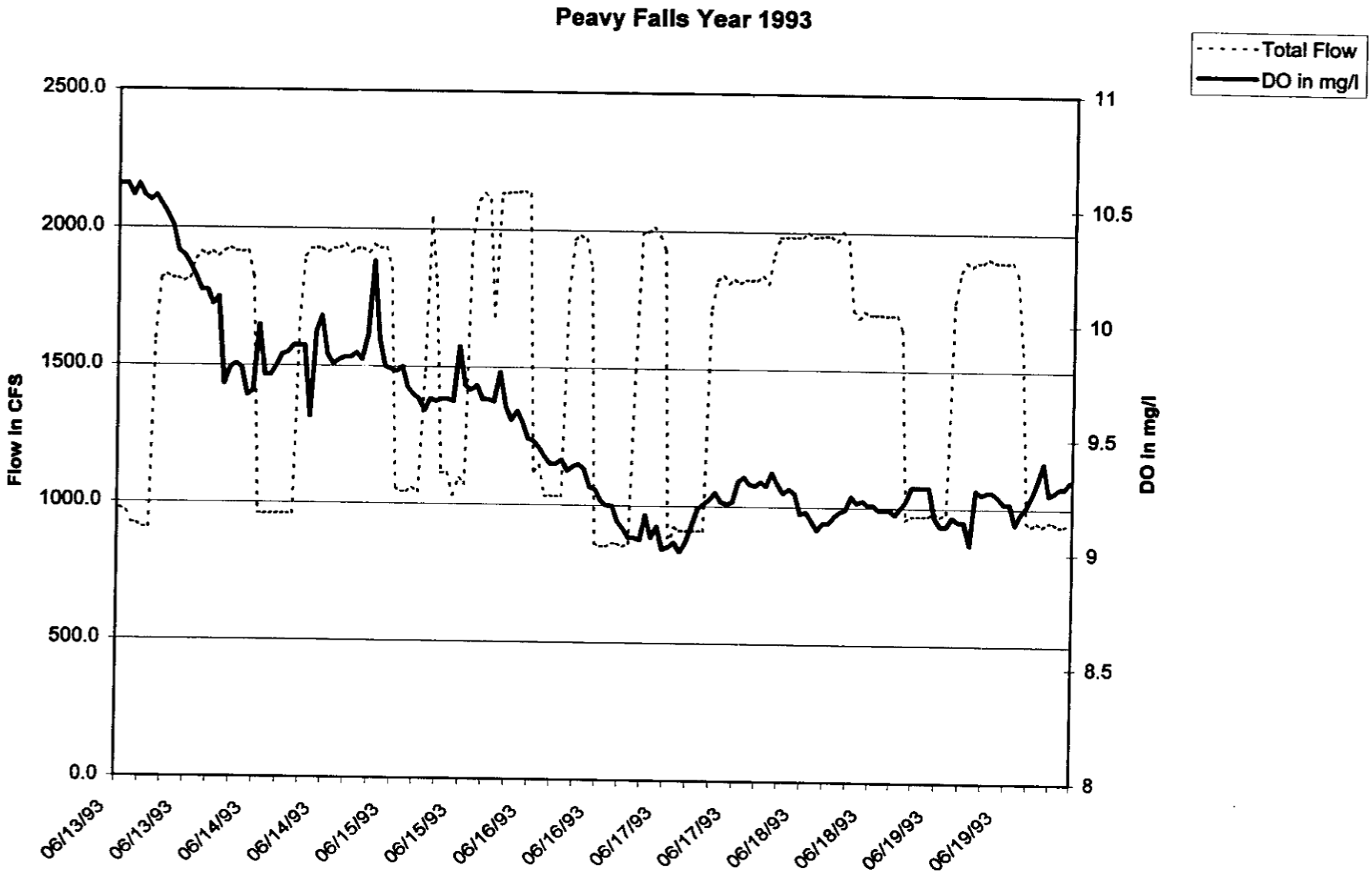
06/04/93
06/05/93
06/05/93

Figure D- 4



Peavy Falls year 1993 flow analysis.xls June 6-12, 1993

Figure D- 4



Peavy Falls year 1993 flow analysis.xls June 13- 19, 1993

Figure D- 4

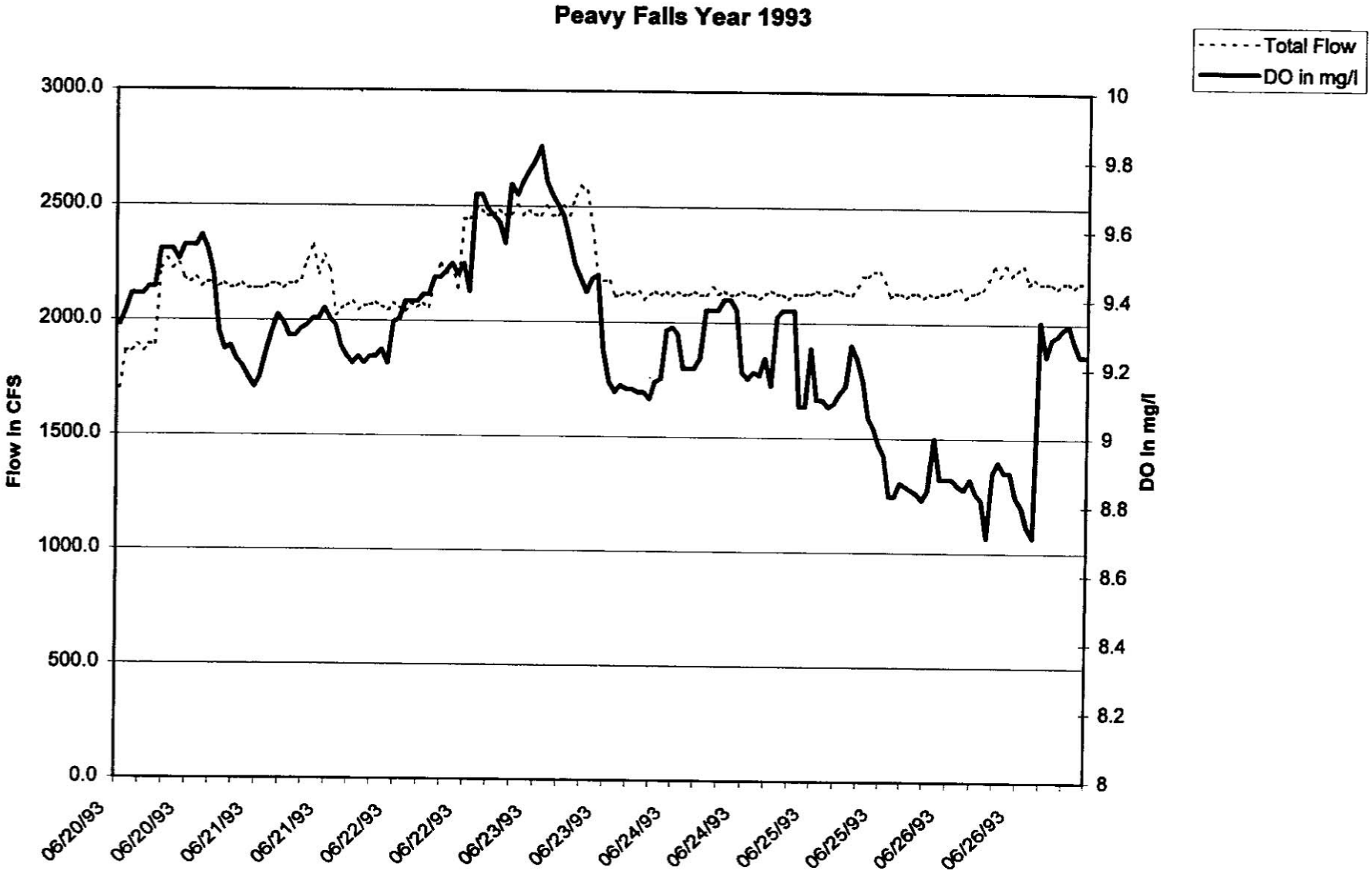


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Figure D- 4

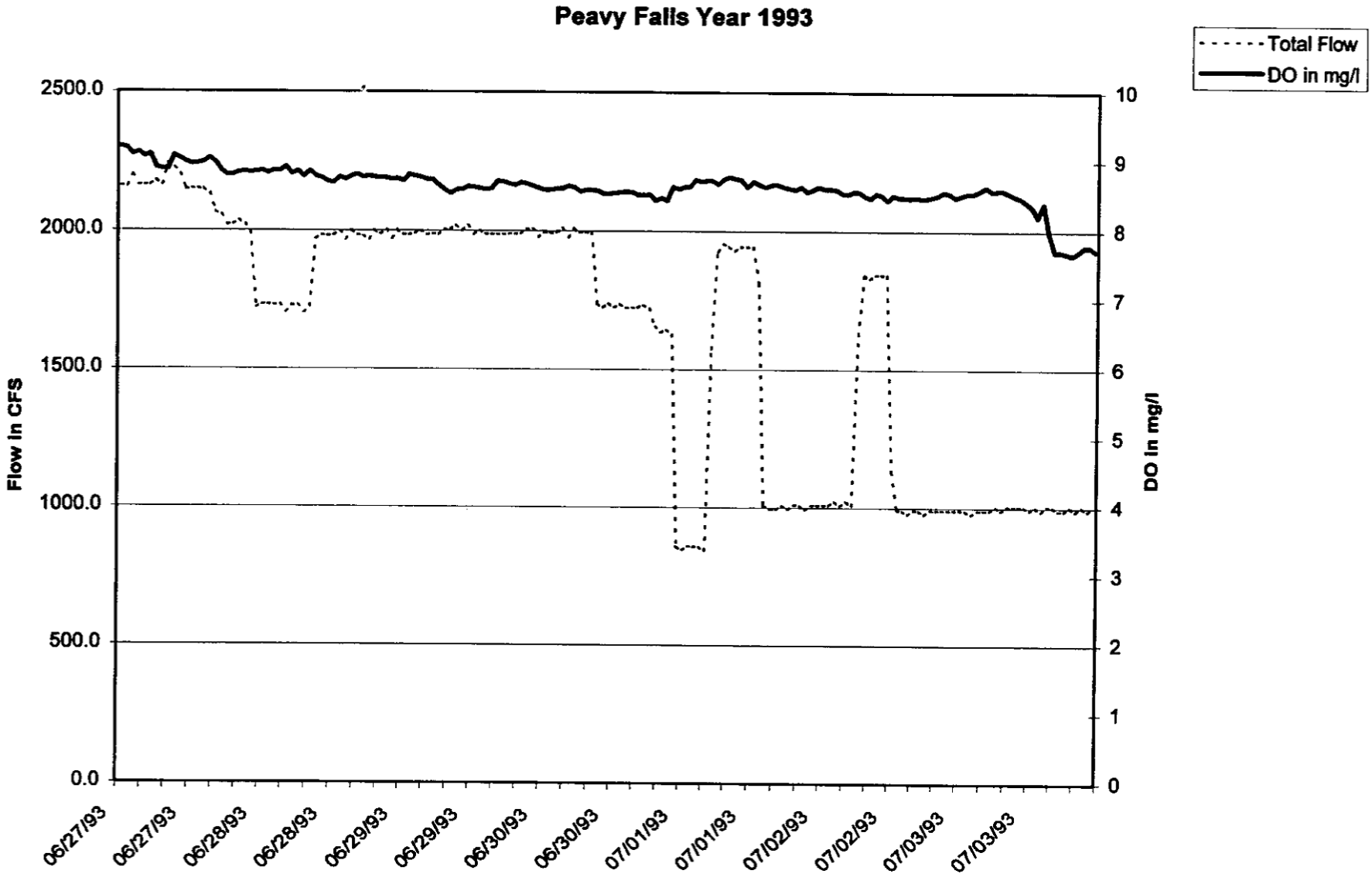

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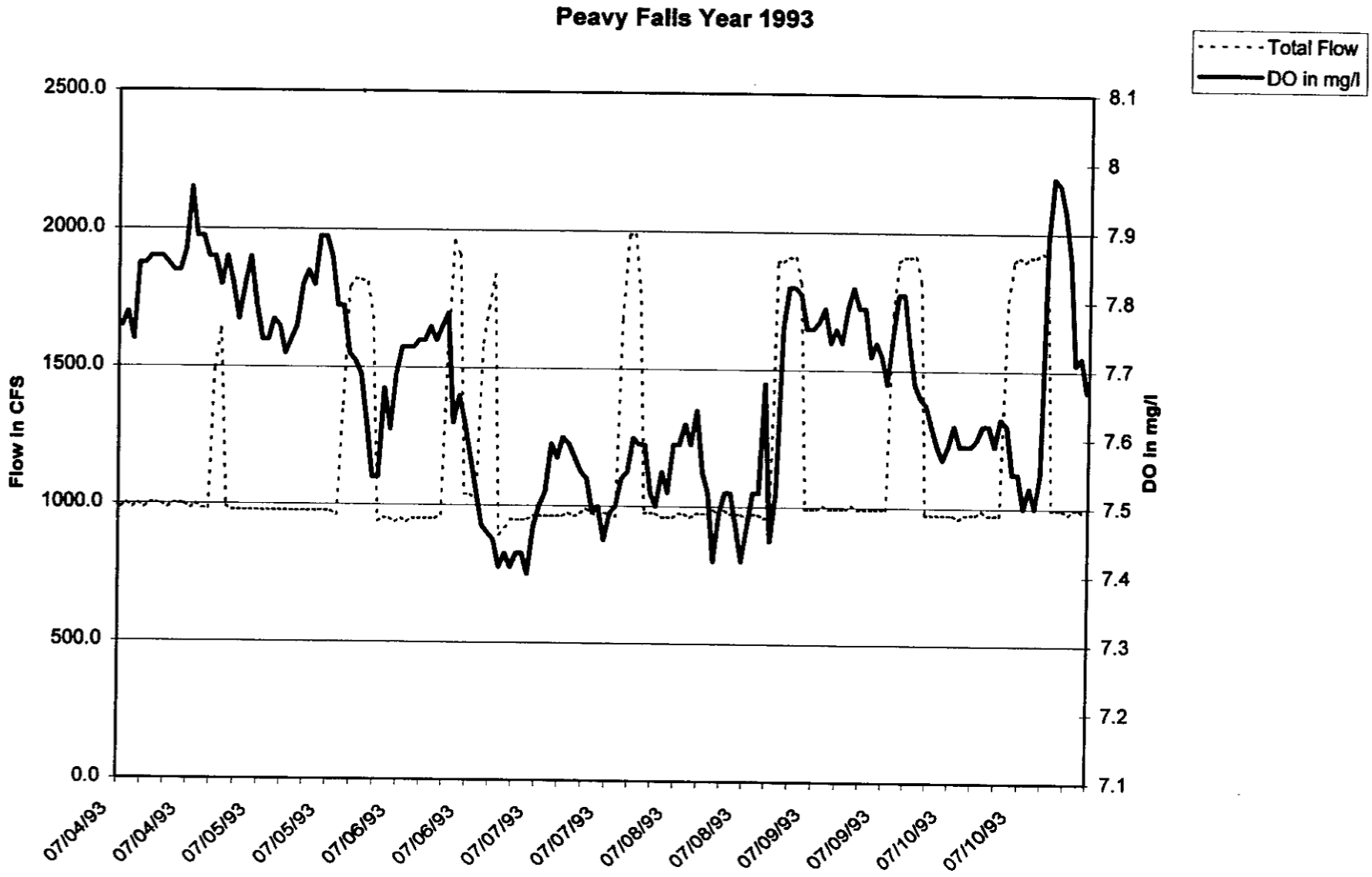
Figure D- 4



Peavy Falls year 1993 flow analysis.xls July 4- 10, 1993

Figure D- 4

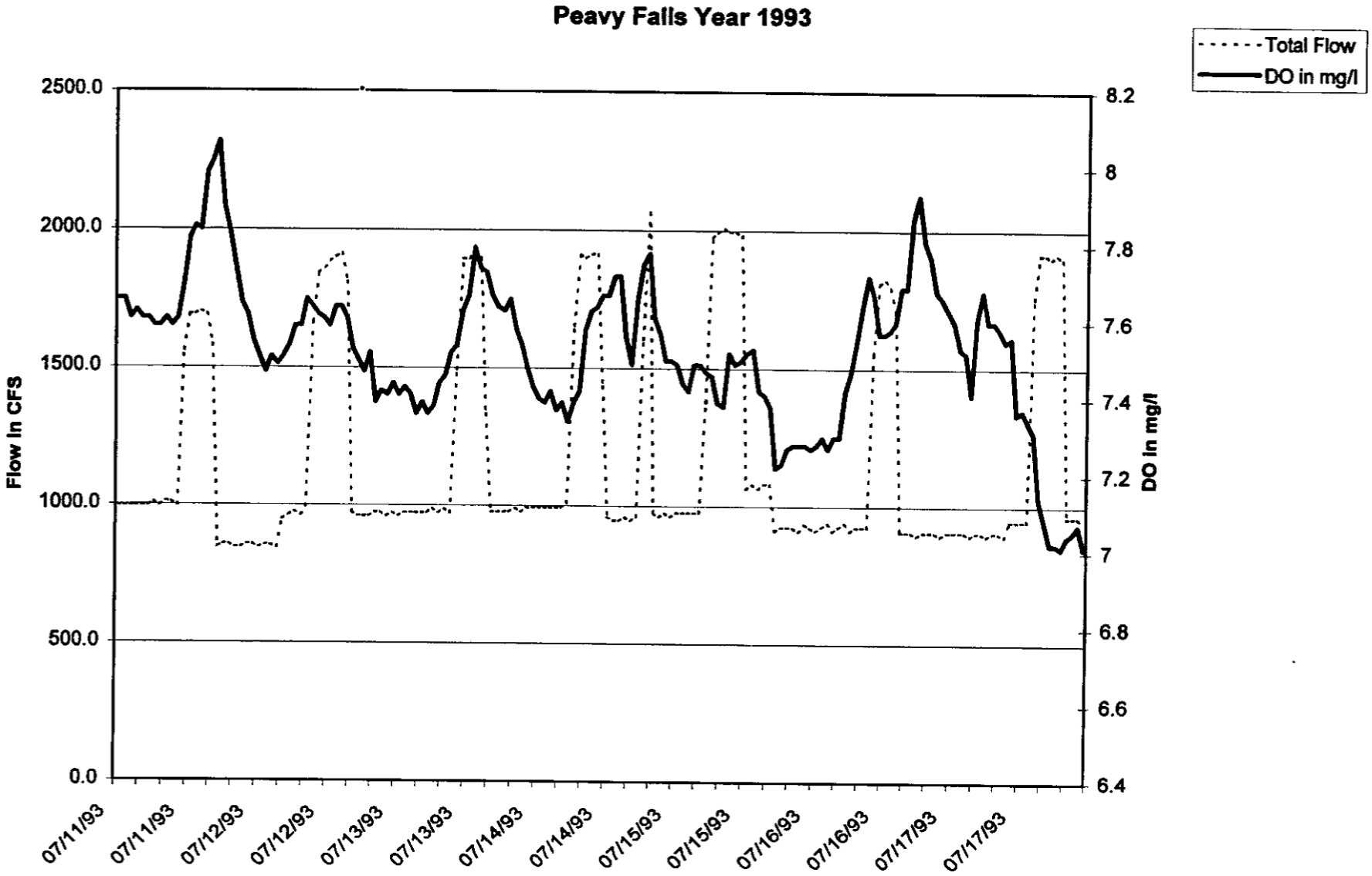
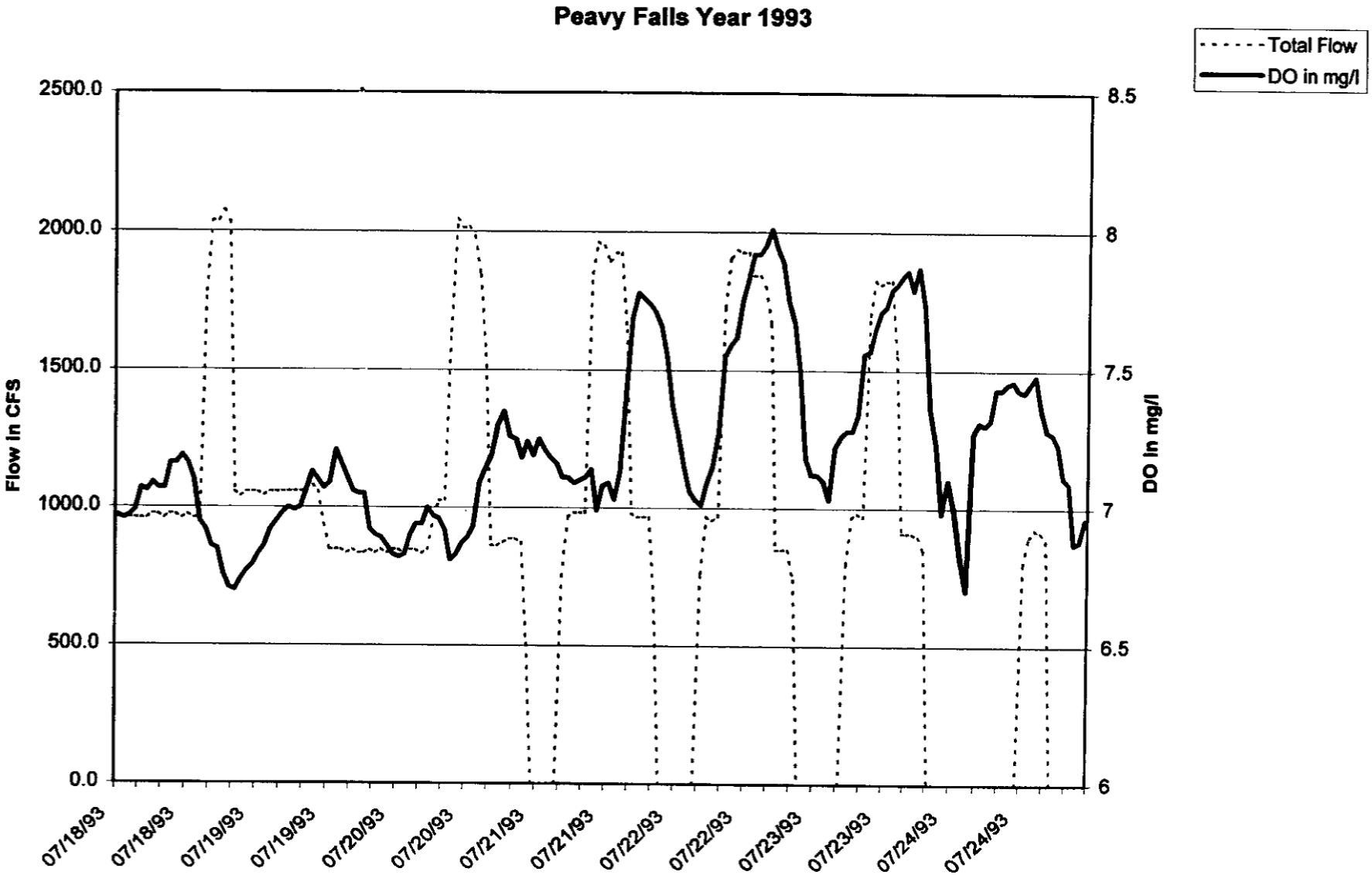

Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow In CFS
DO in mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
07/11/93
07/11/93
07/12/93
07/12/93
07/13/93
07/13/93
07/14/93
07/14/93
07/15/93
07/15/93
07/16/93
07/16/93
07/17/93
07/17/93

Figure D- 4


Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
8.5
8
7.5
7
6.5
6
07/18/93
07/18/93
07/19/93
07/19/93
07/20/93
07/20/93
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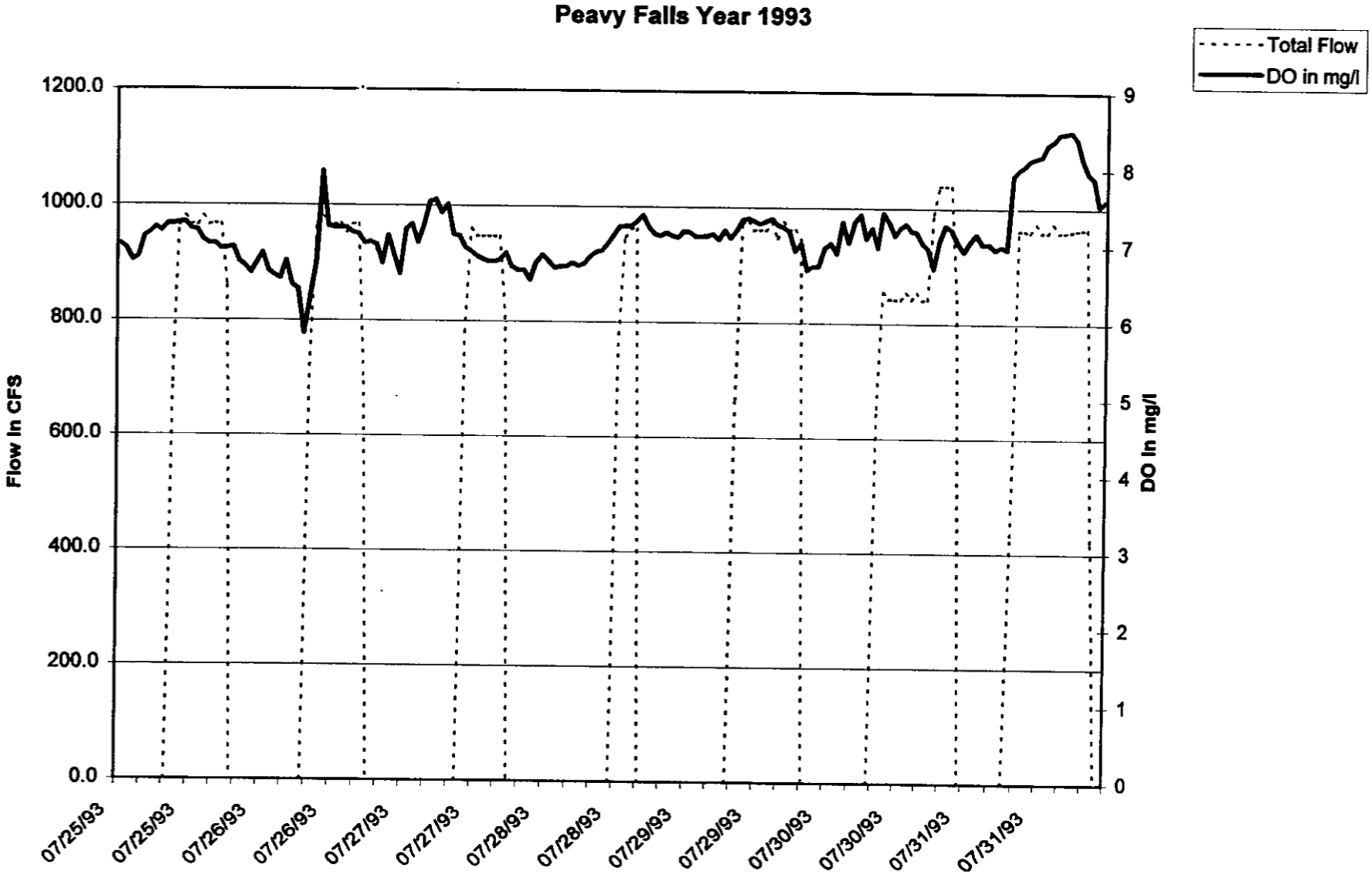
07/23/93
07/24/93
07/24/93

Figure D- 4



Peavy Falls year 1993 flow analysis.xls July 25- 31, 1993

Figure D- 4

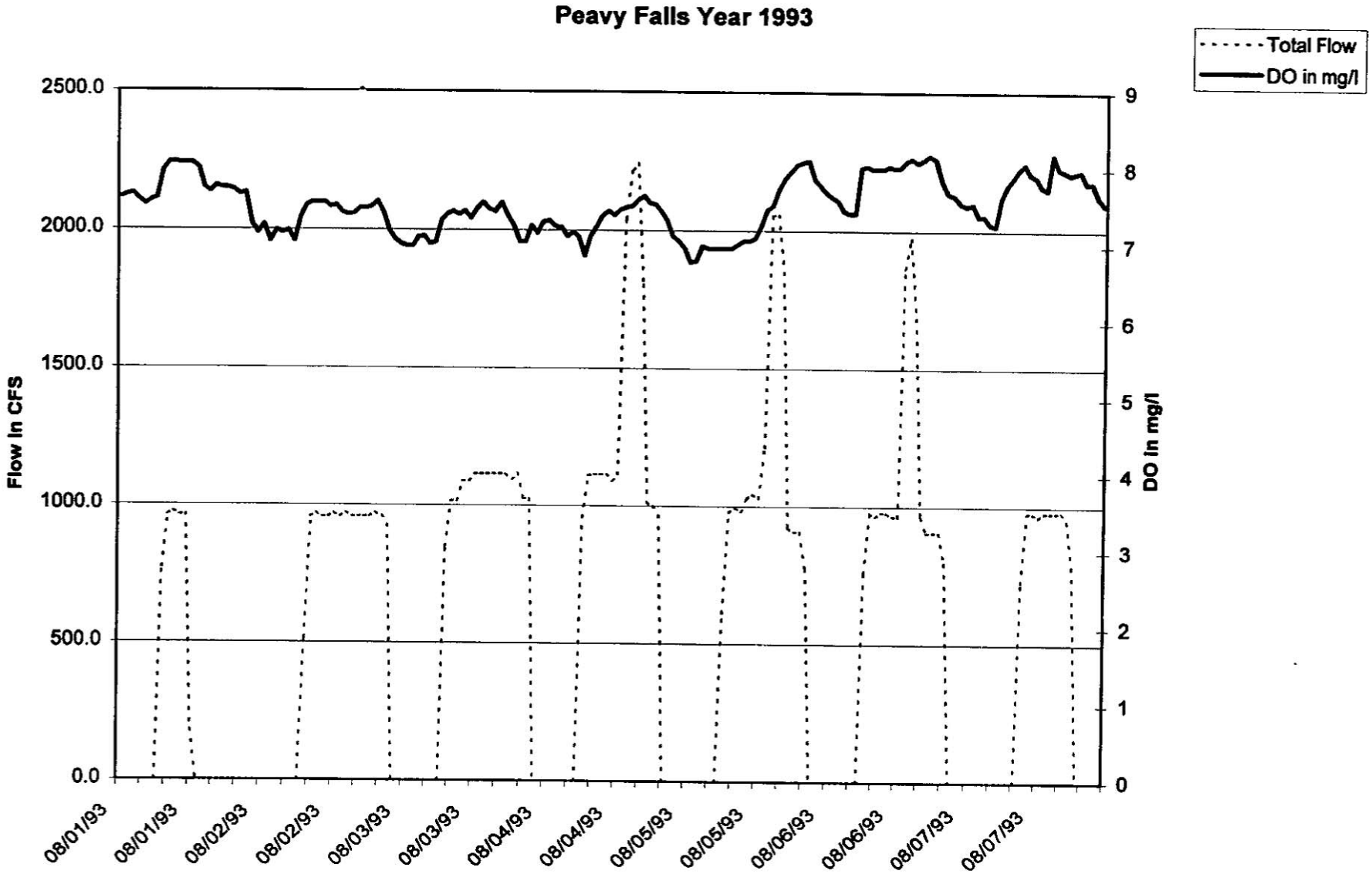
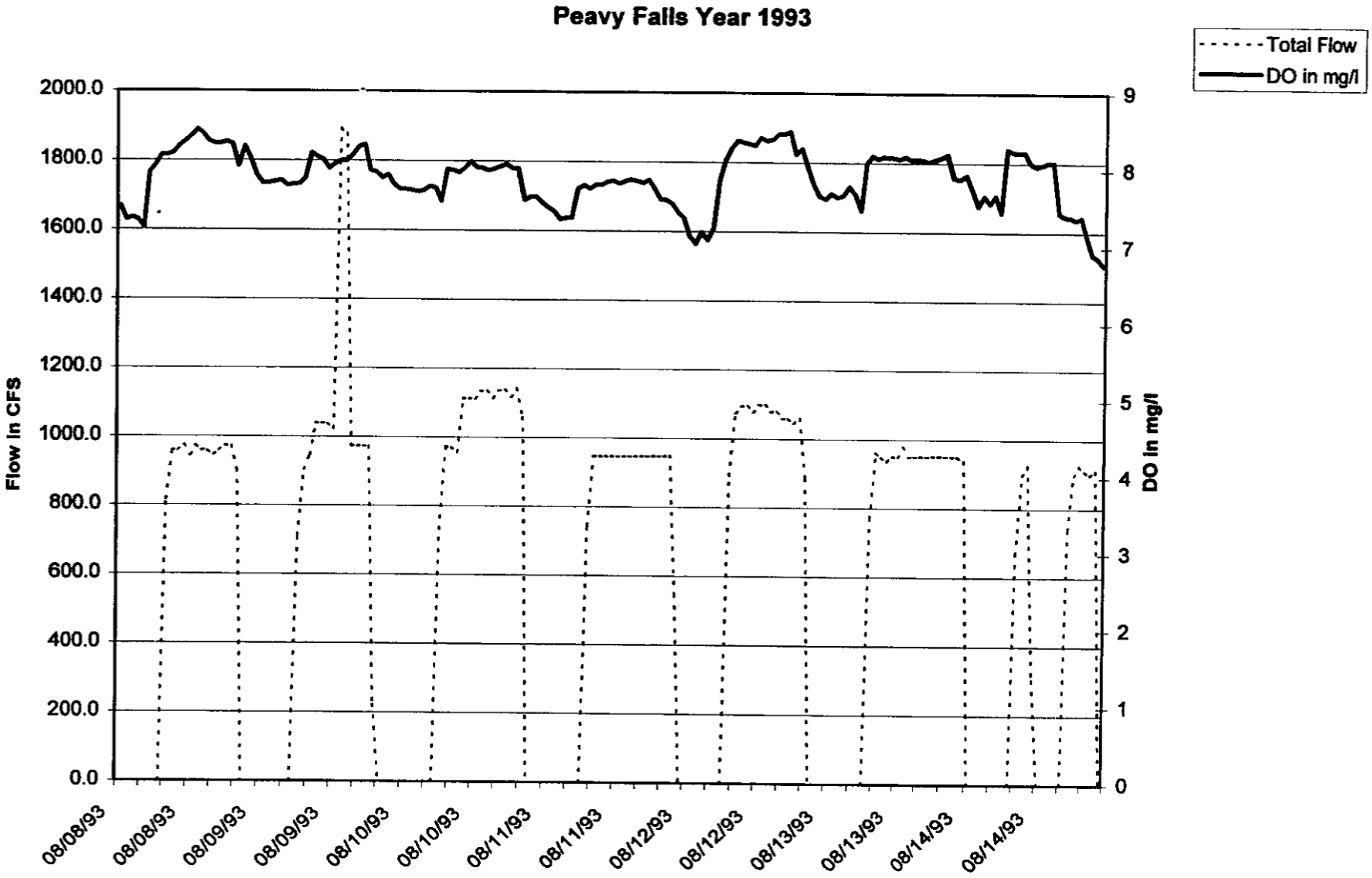

Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow In CFS
DO In mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
9
8
7
6
5
4
3
2
1
0
08/01/93
08/01/93
08/02/93
08/02/93
08/03/93
08/03/93
08/04/93
08/04/93
08/05/93
08/05/93
08/06/93
08/06/93
08/07/93
08/07/93

Figure D- 4


Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
2000.0
1800.0
1600.0
1400.0
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
9
8
7
6
5
4
3
2
1
0
08/08/93
08/08/93
08/09/93
08/09/93
08/10/93
08/10/93
08/11/93
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08/12/93
08/12/93
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08/13/93
08/14/93
08/14/93

Figure D- 4

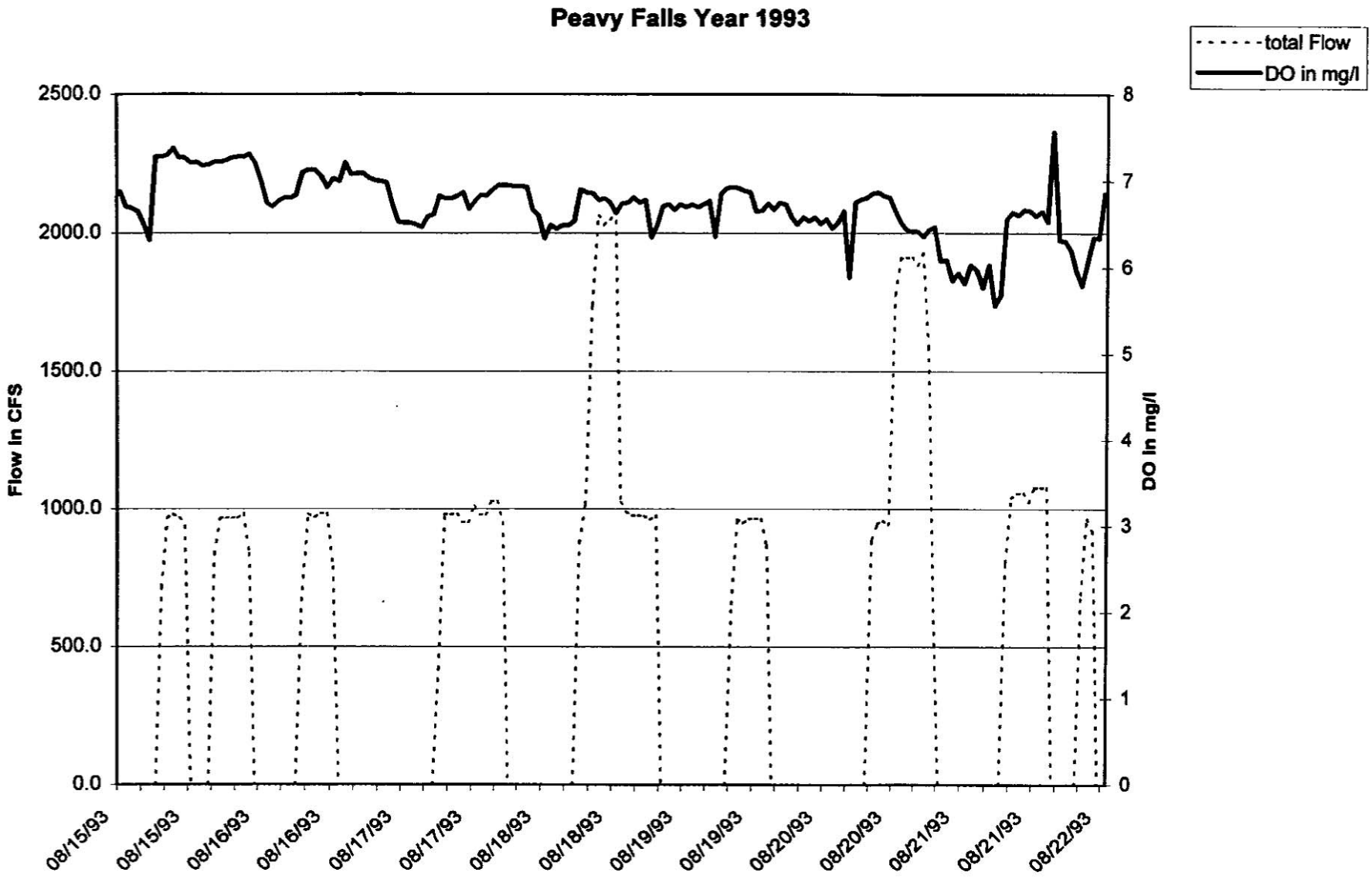

Peavy Falls Year 1993
total Flow
DO in mg/l
Flow in CFS
DO in mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
8
7
6
5
4
3
2
1
0
08/15/93
08/15/93
08/16/93
08/16/93
08/17/93
08/17/93
08/18/93
08/18/93
08/19/93
08/19/93
08/20/93
08/20/93
08/21/93
08/21/93
08/22/93

Figure D- 4

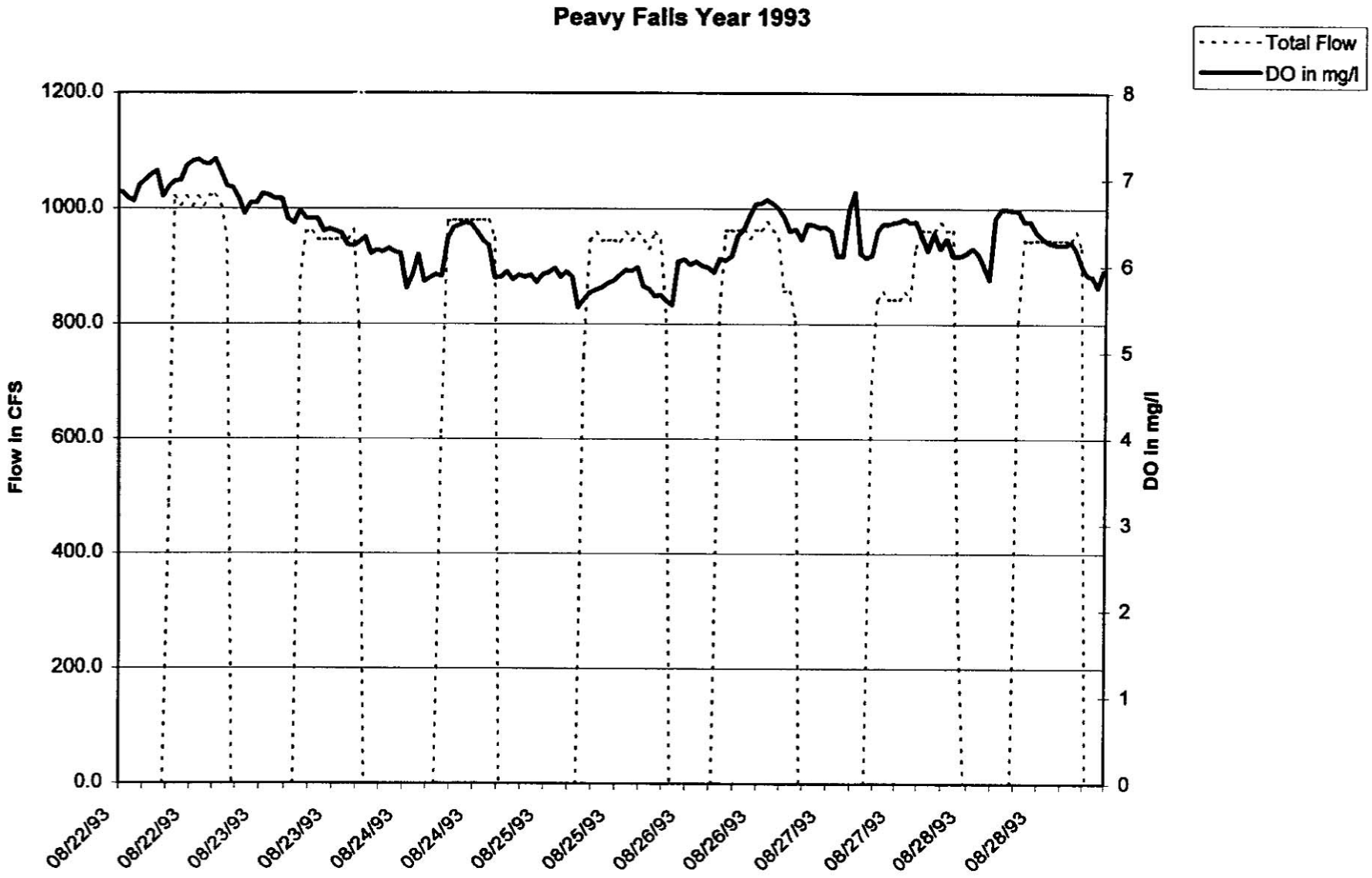

Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
8
7
6
5
4
3
2
1
0
08/22/93
08/22/93
08/23/93
08/23/93
08/24/93
08/24/93
08/25/93
08/25/93
08/26/93
08/26/93
08/27/93
08/27/93
08/28/93
08/28/93

Figure D- 4

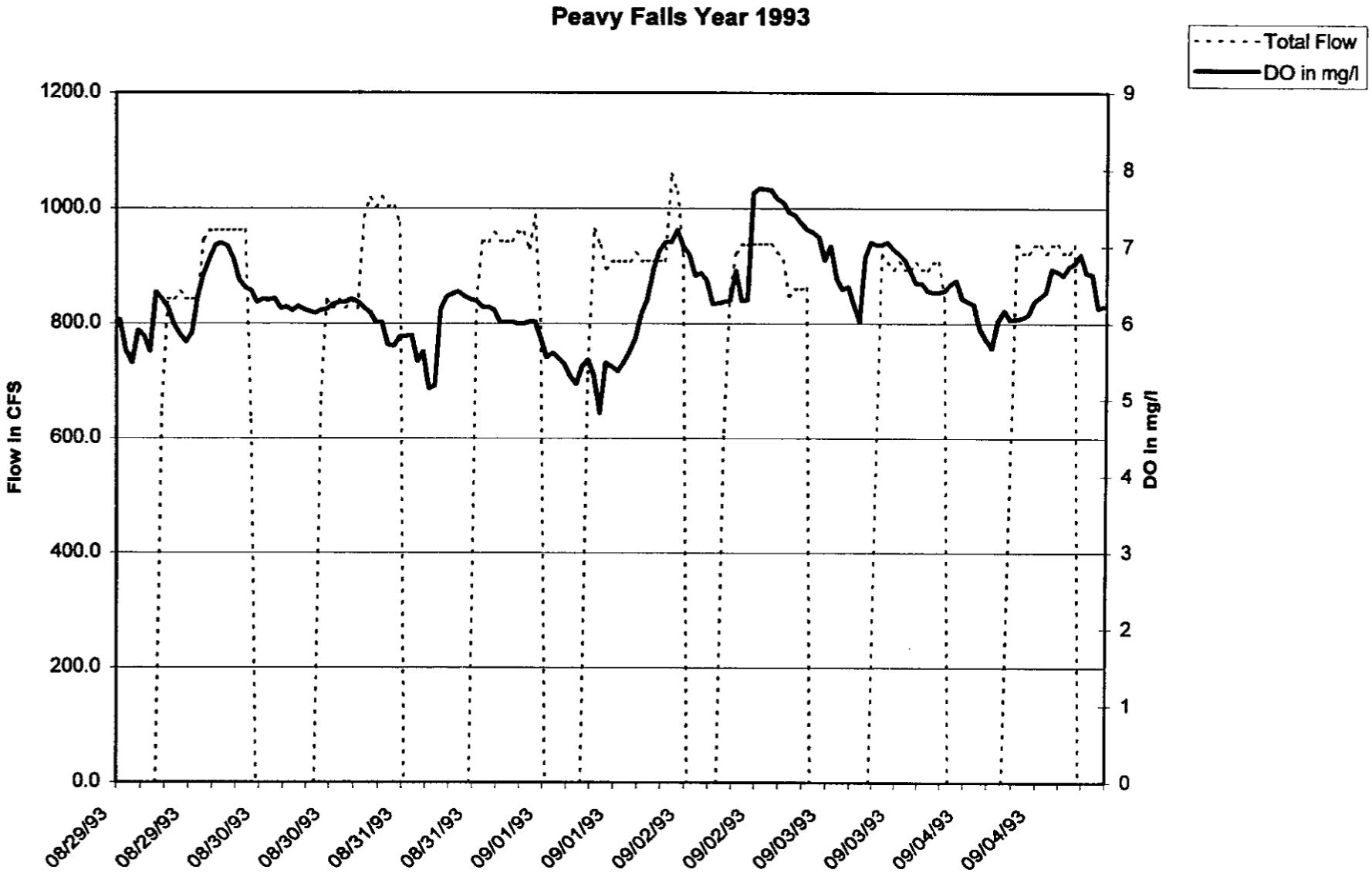

Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
9
8
7
6
5
4
3
2
1
0
08/29/93
08/29/93
08/30/93
08/30/93
08/31/93
08/31/93
09/01/93
09/01/93
09/02/93
09/02/93
09/03/93
09/03/93
09/04/93
09/04/93

Figure D- 4

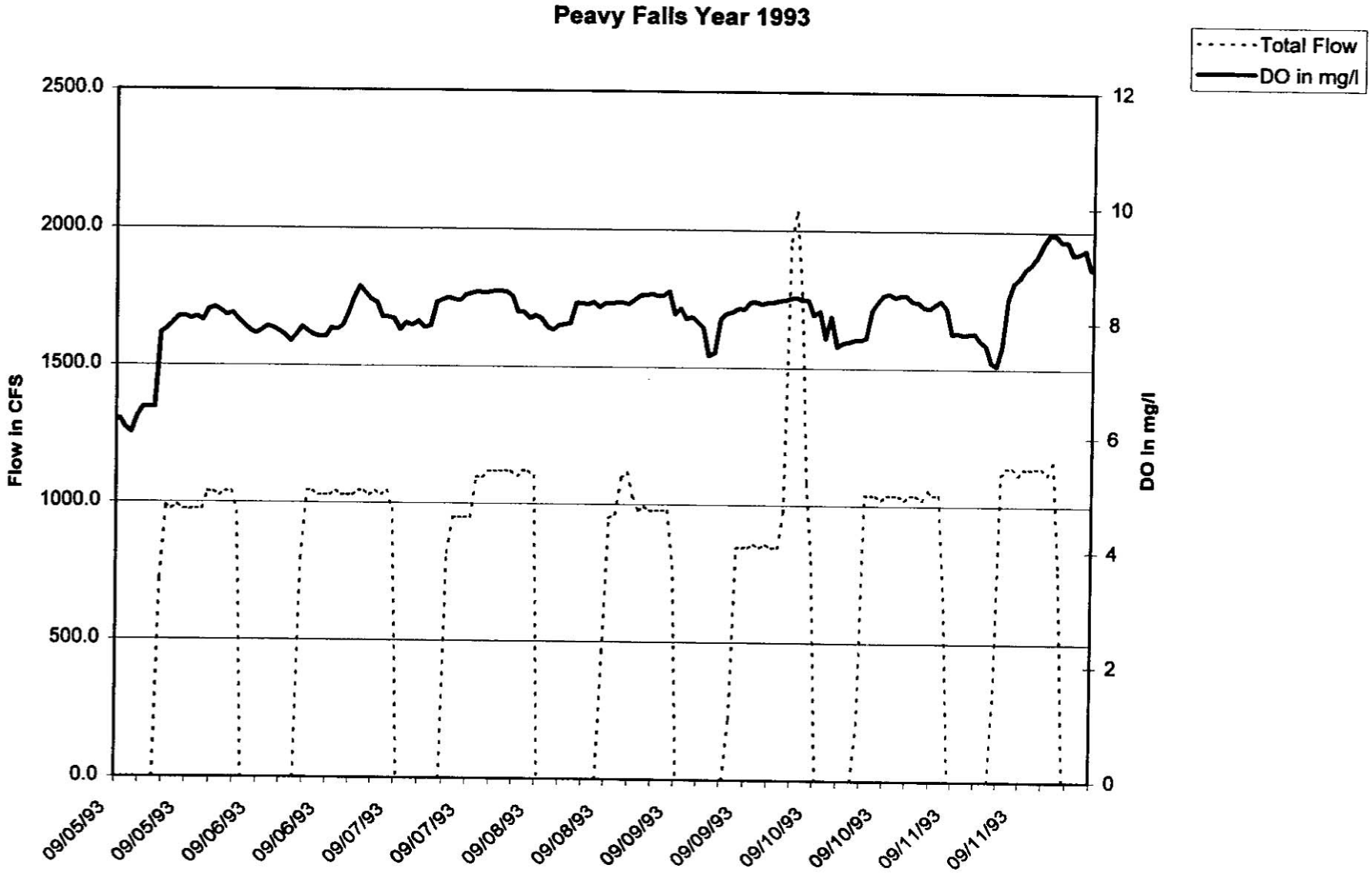

Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
12
10
8
6
4
2
0
09/05/93
09/05/93
09/06/93
09/06/93
09/07/93
09/07/93
09/08/93
09/08/93
09/09/93
09/09/93
09/10/93
09/10/93
09/11/93
09/11/93

Figure D- 4

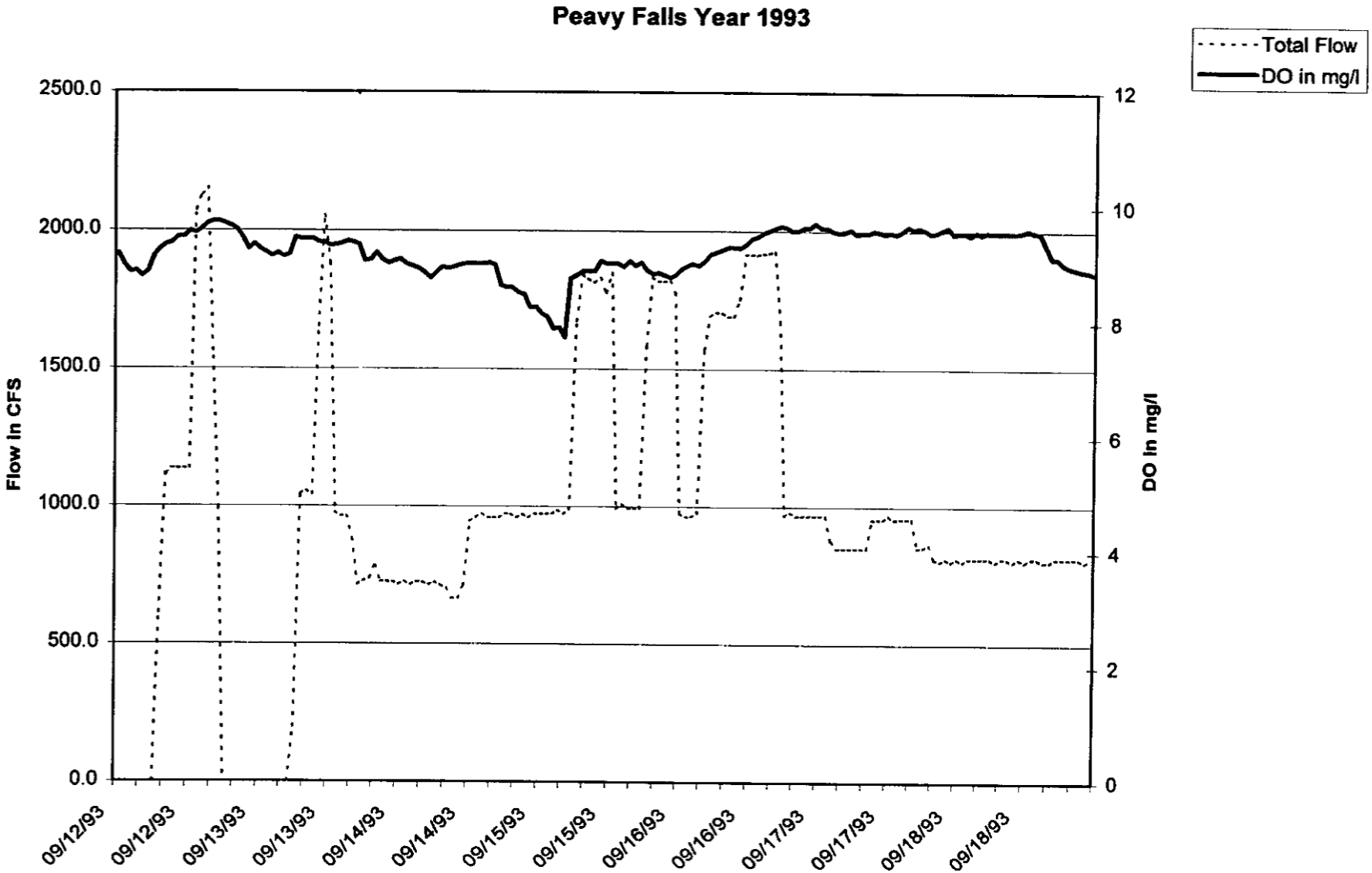

Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
12
10
8
6
4
2
0
09/12/93
09/12/93
09/13/93
09/13/93
09/14/93
09/14/93
09/15/93
09/15/93
09/16/93
09/16/93
09/17/93
09/17/93
09/18/93
09/18/93

Figure D- 4

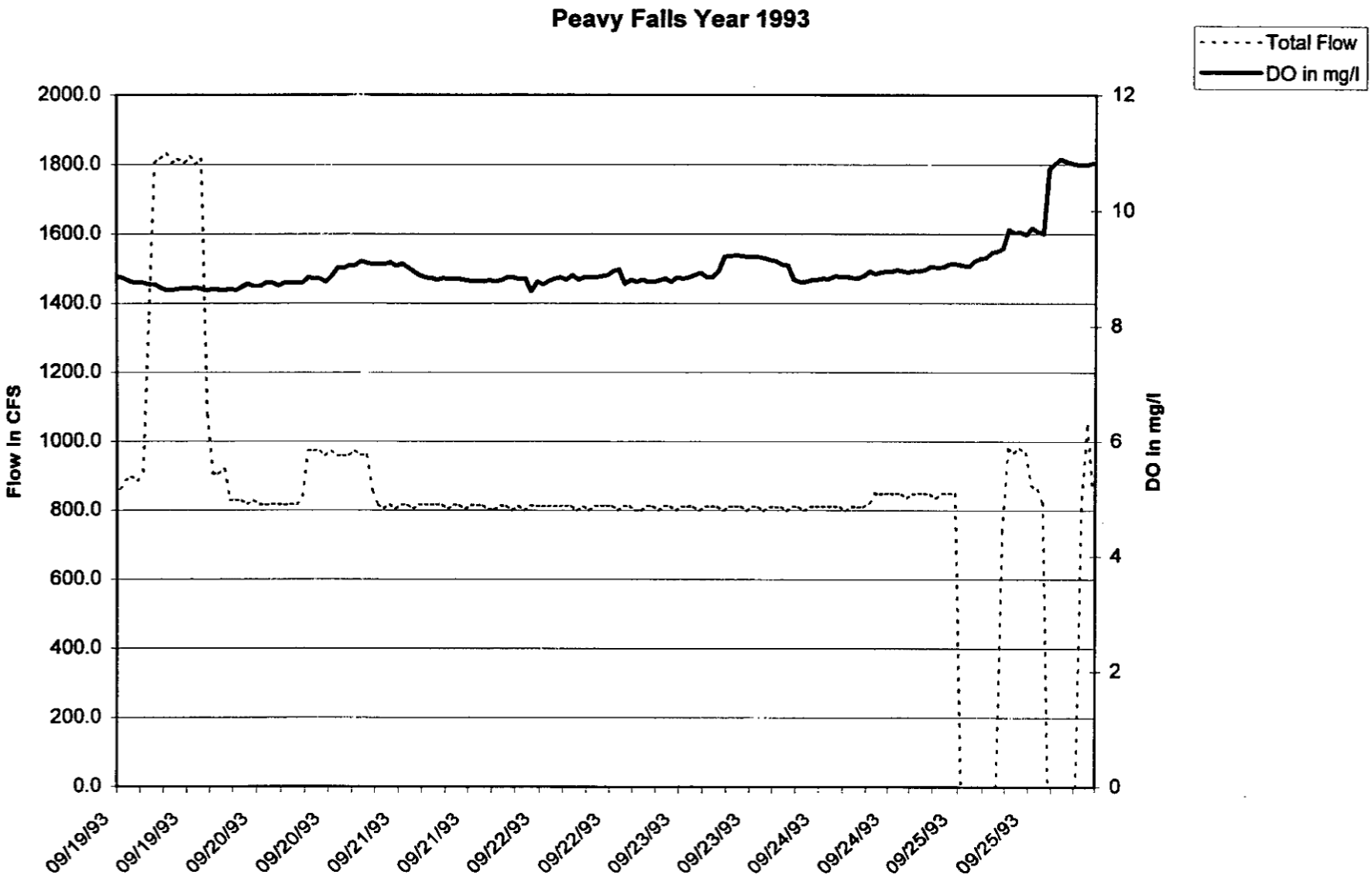

Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
2000.0
1800.0
1600.0
1400.0
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
12
10
8
6
4
2
0
09/19/93
09/19/93
09/20/93
09/20/93
09/21/93
09/21/93
09/22/93
09/22/93
09/23/93
09/23/93
09/24/93
09/24/93
09/25/93
09/25/93

Figure D- 4

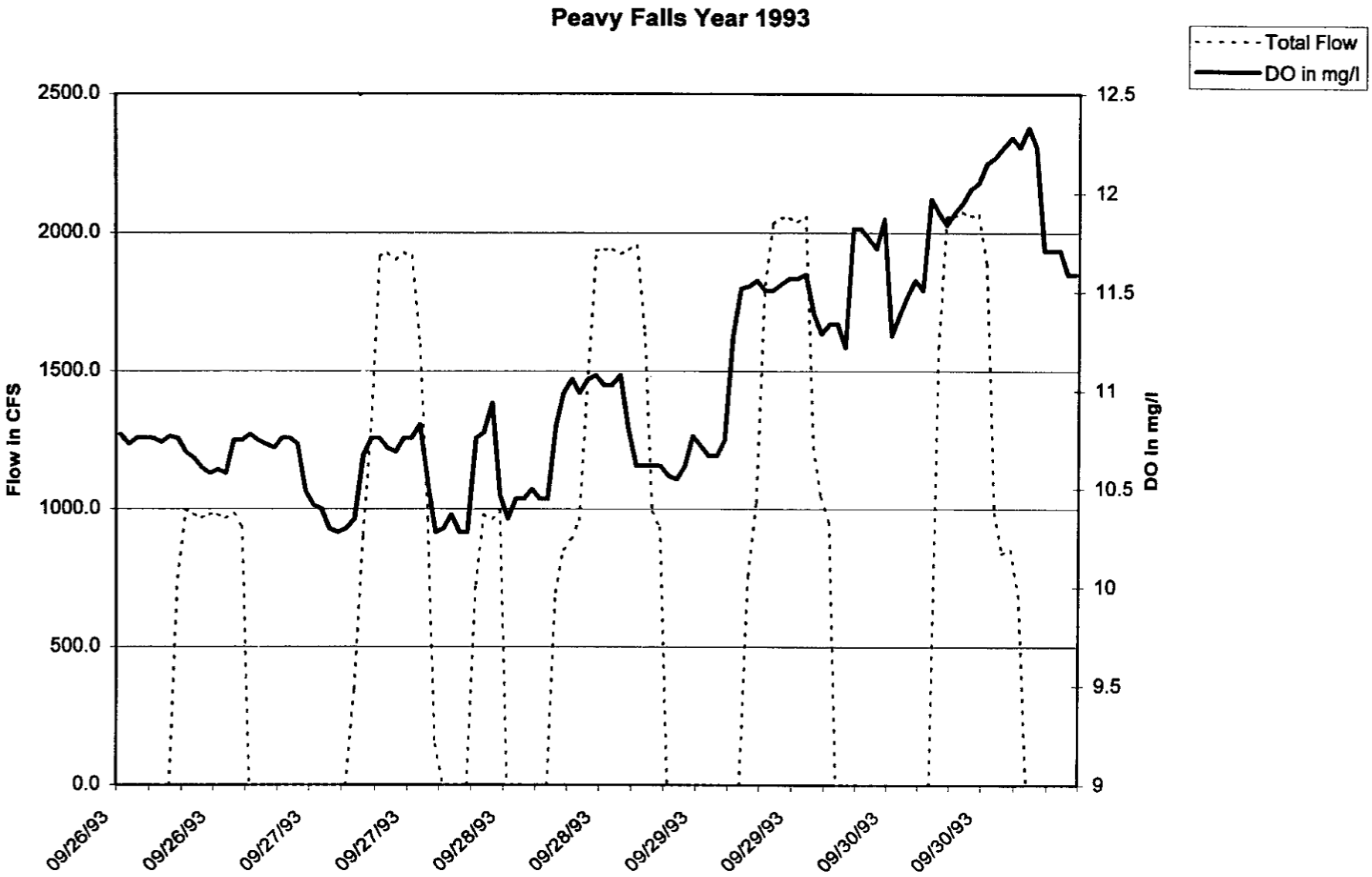

Peavy Falls Year 1993
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
12.5
12
11.5
11
10.5
10
9.5
9
09/26/93
09/26/93
09/27/93
09/27/93
09/28/93
09/28/93
09/29/93
09/29/93
09/30/93
09/30/93

Figure D- 5

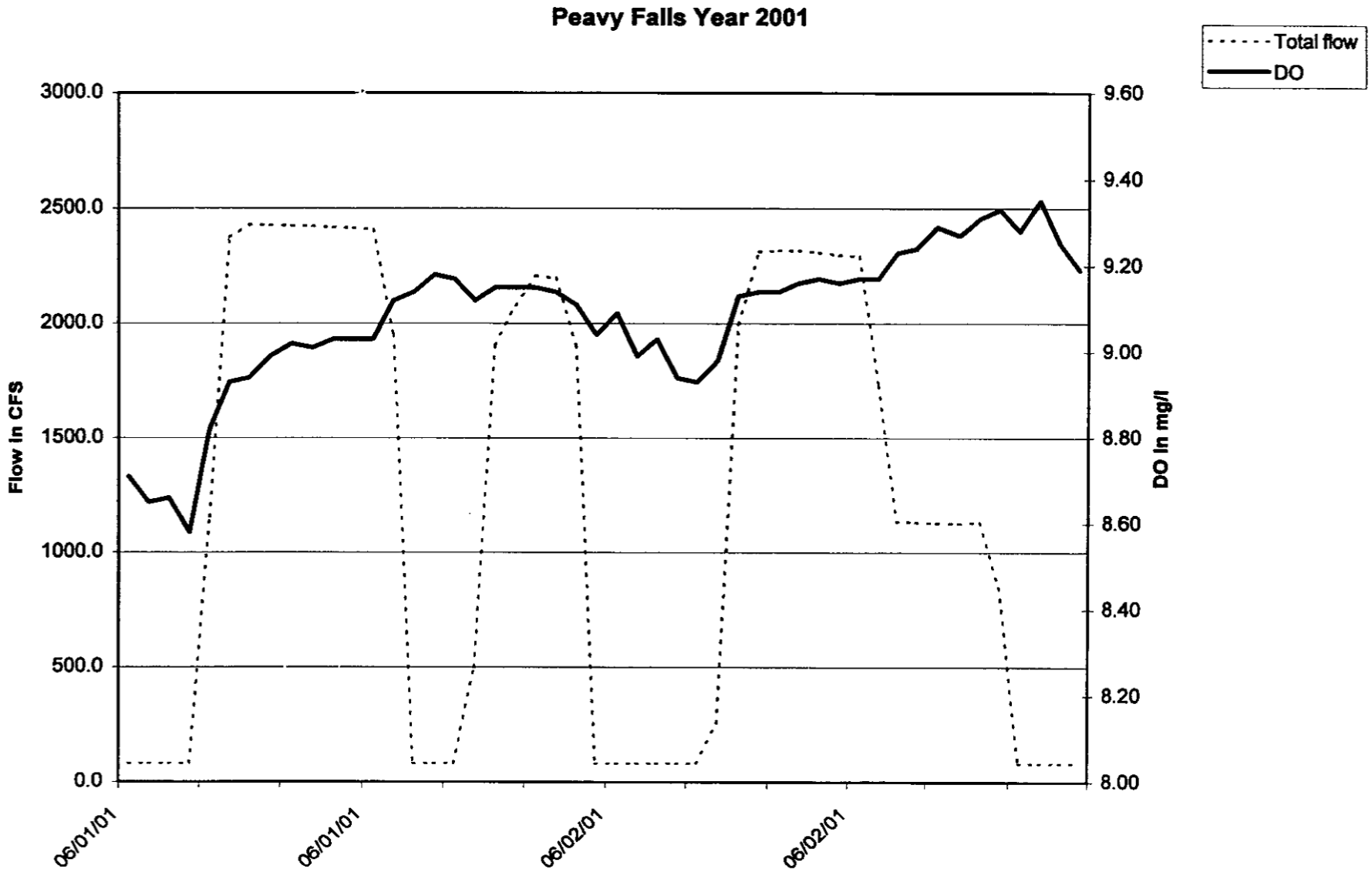

Peavy Falls Year 2001
Total flow
DO
Flow in CFS
DO in mg/l
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
9.60
9.40
9.20
9.00
8.80
8.60
8.40
8.20
8.00
06/01/01
06/01/01
06/02/01
06/02/01

Figure D- 5

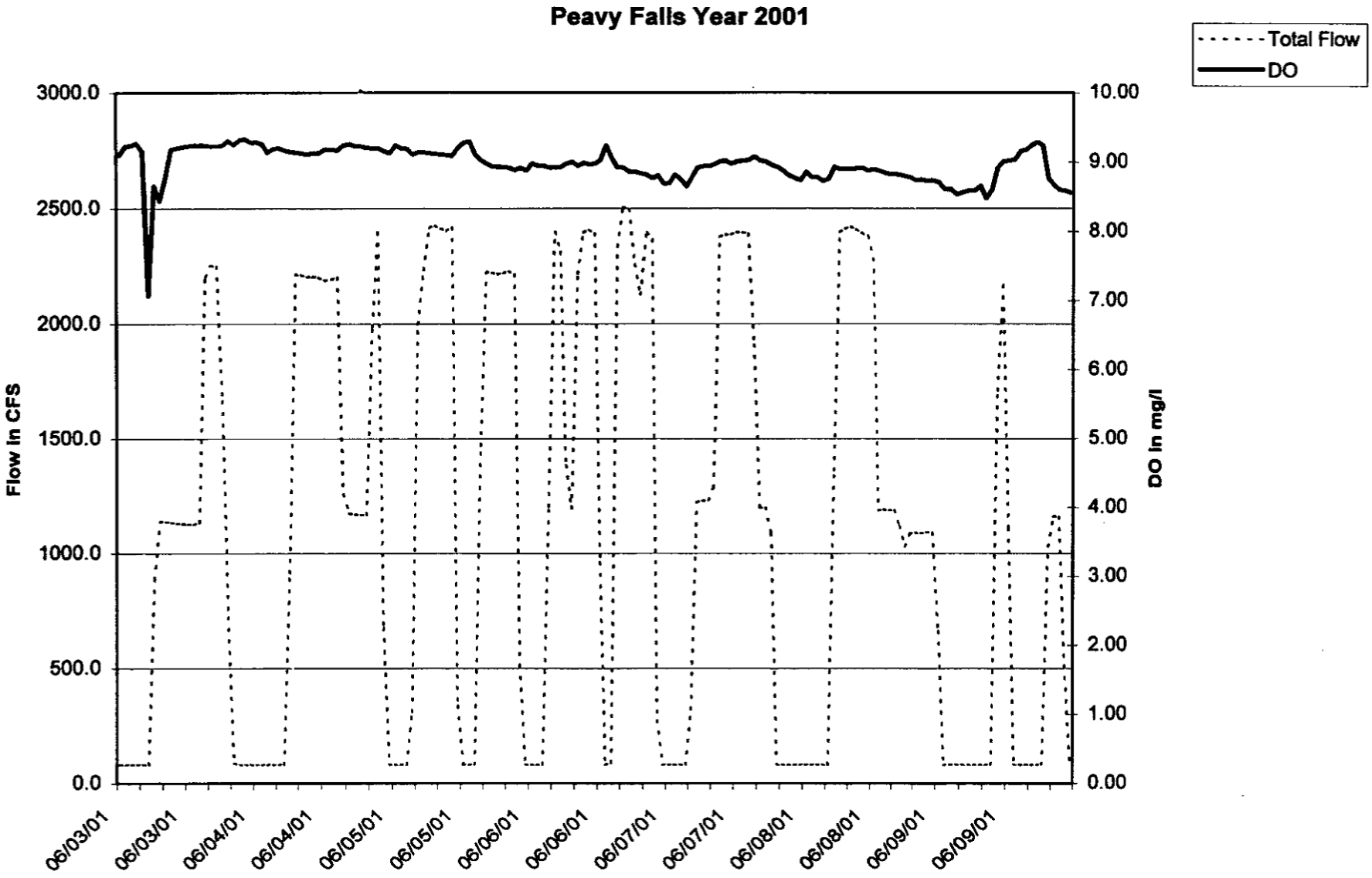

Peavy Falls Year 2001
Total Flow
DO
Flow in CFS
DO in mg/l
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
06/03/01
06/03/01
06/04/01
06/04/01
06/05/01
06/05/01
06/06/01
06/06/01
06/07/01
06/07/01
06/08/01
06/08/01
06/09/01
06/09/01

Figure D- 5

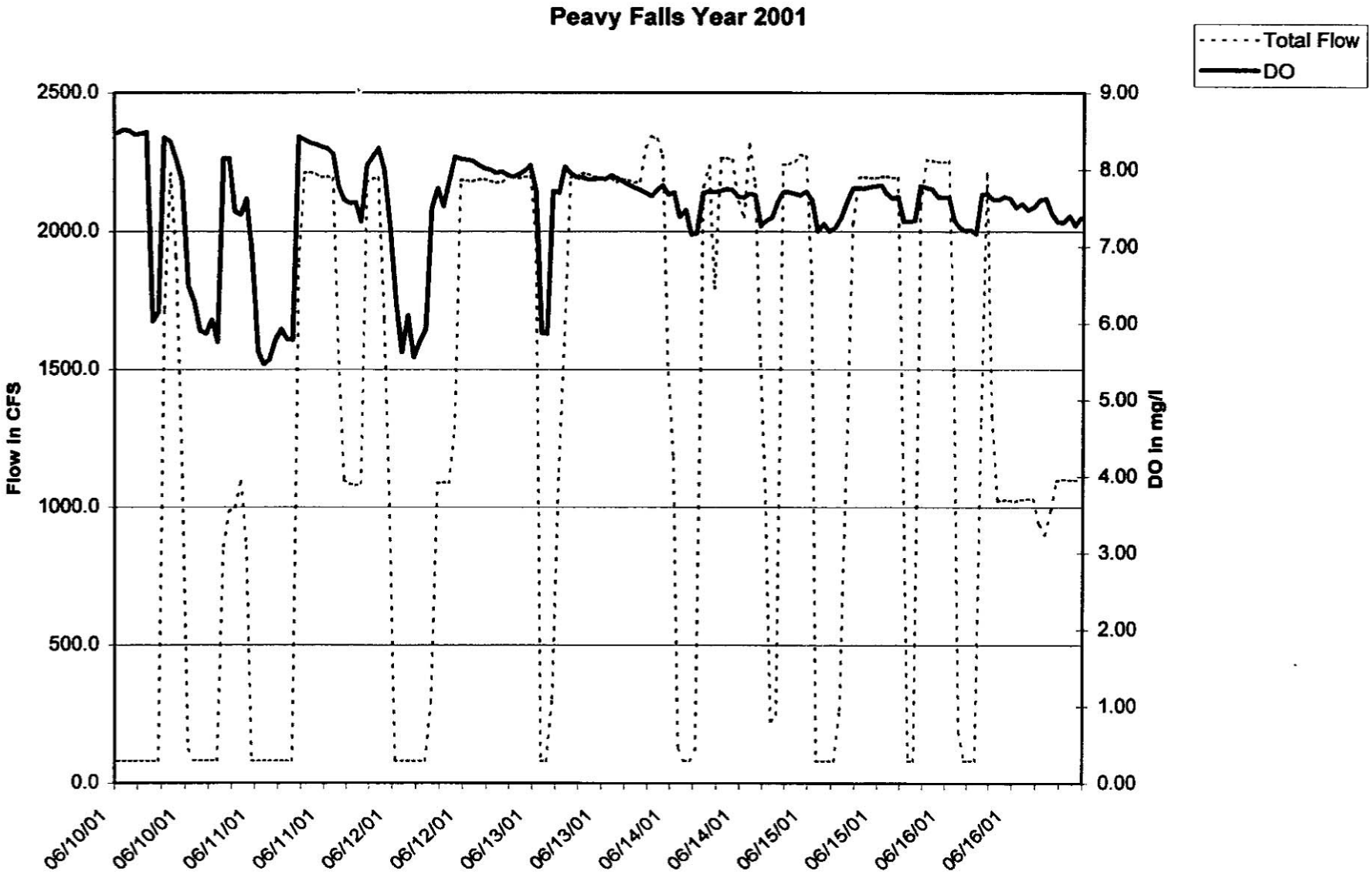

Peavy Falls Year 2001
Total Flow
DO
Flow In CFS
DO In mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
06/10/01
06/10/01
06/11/01
06/11/01
06/12/01
06/12/01
06/13/01
06/13/01
06/14/01
06/14/01
06/15/01
06/15/01
06/16/01
06/16/01

Figure D- 5

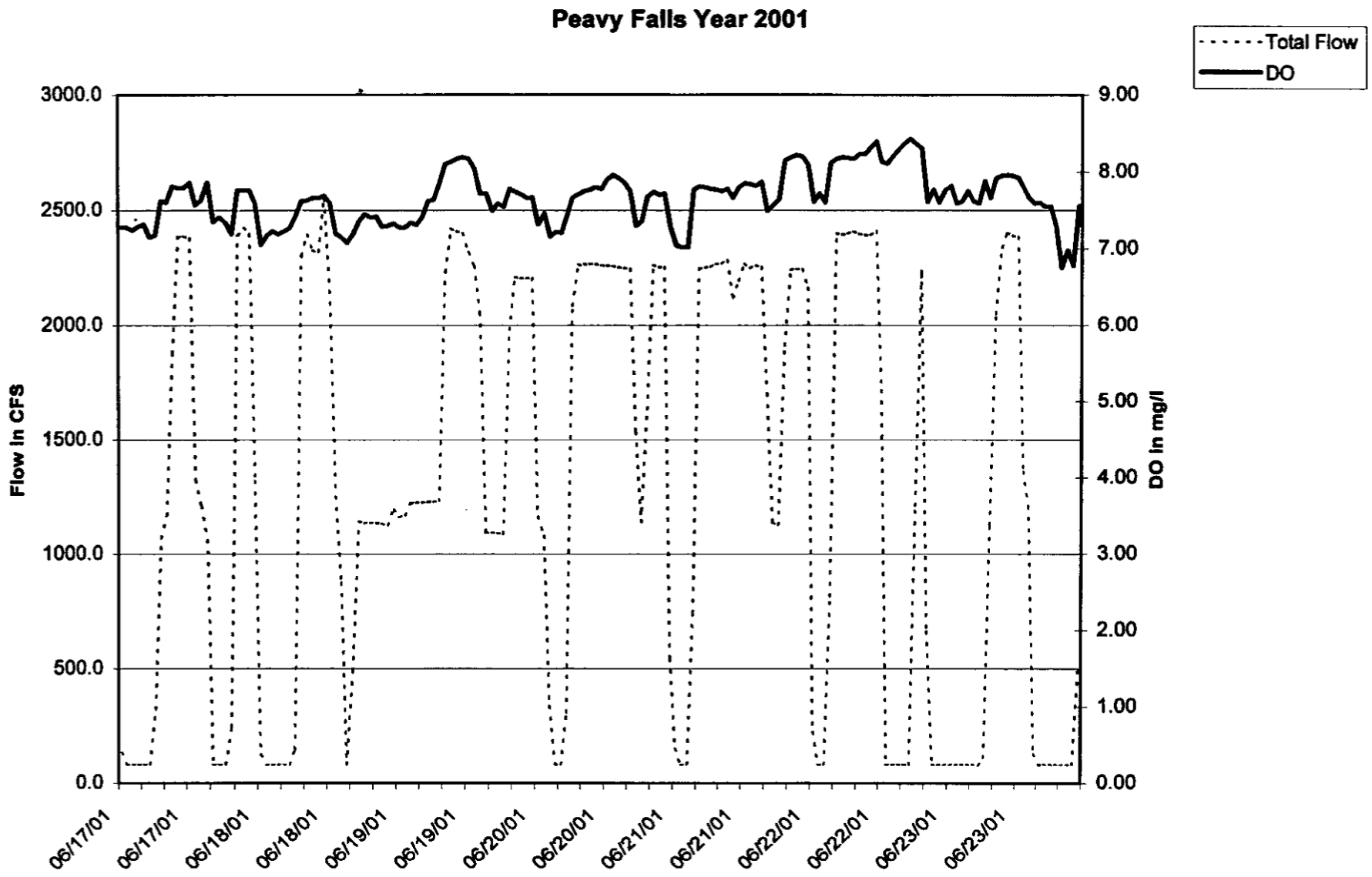

Peavy Falls Year 2001
Total Flow
DO
Flow In CFS
DO In mg/l
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
06/17/01
06/17/01
06/18/01
06/18/01
06/19/01
06/19/01
06/20/01
06/20/01
06/21/01
06/21/01
06/22/01
06/22/01
06/23/01
06/23/01

Figure D- 5

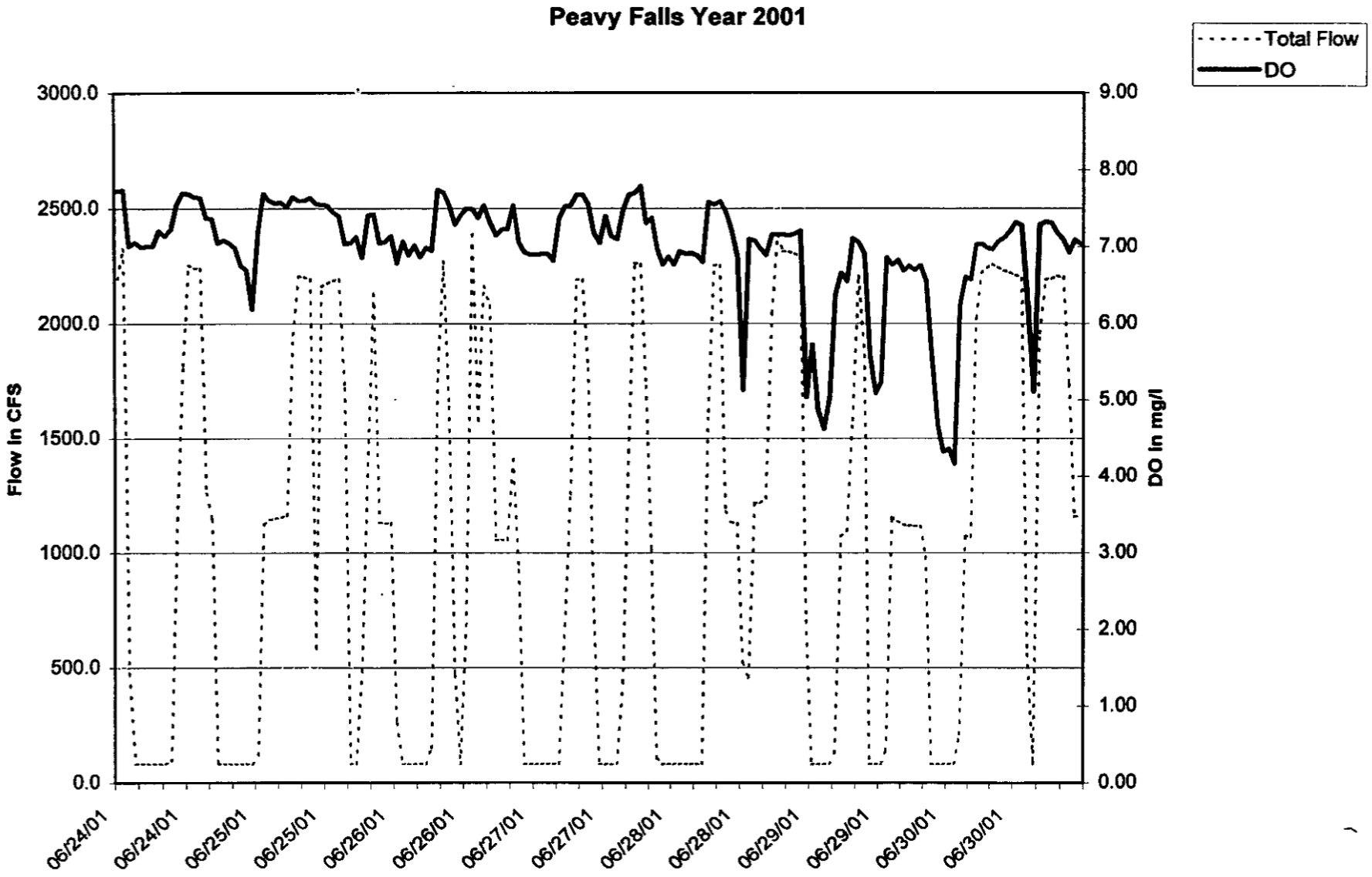

Peavy Falls Year 2001
Total Flow
DO
Flow in CFS
DO in mg/l
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
06/24/01
06/24/01
06/25/01
06/25/01
06/26/01
06/26/01
06/27/01
06/27/01
06/28/01
06/28/01
06/29/01
06/29/01
06/30/01
06/30/01

Figure D- 5

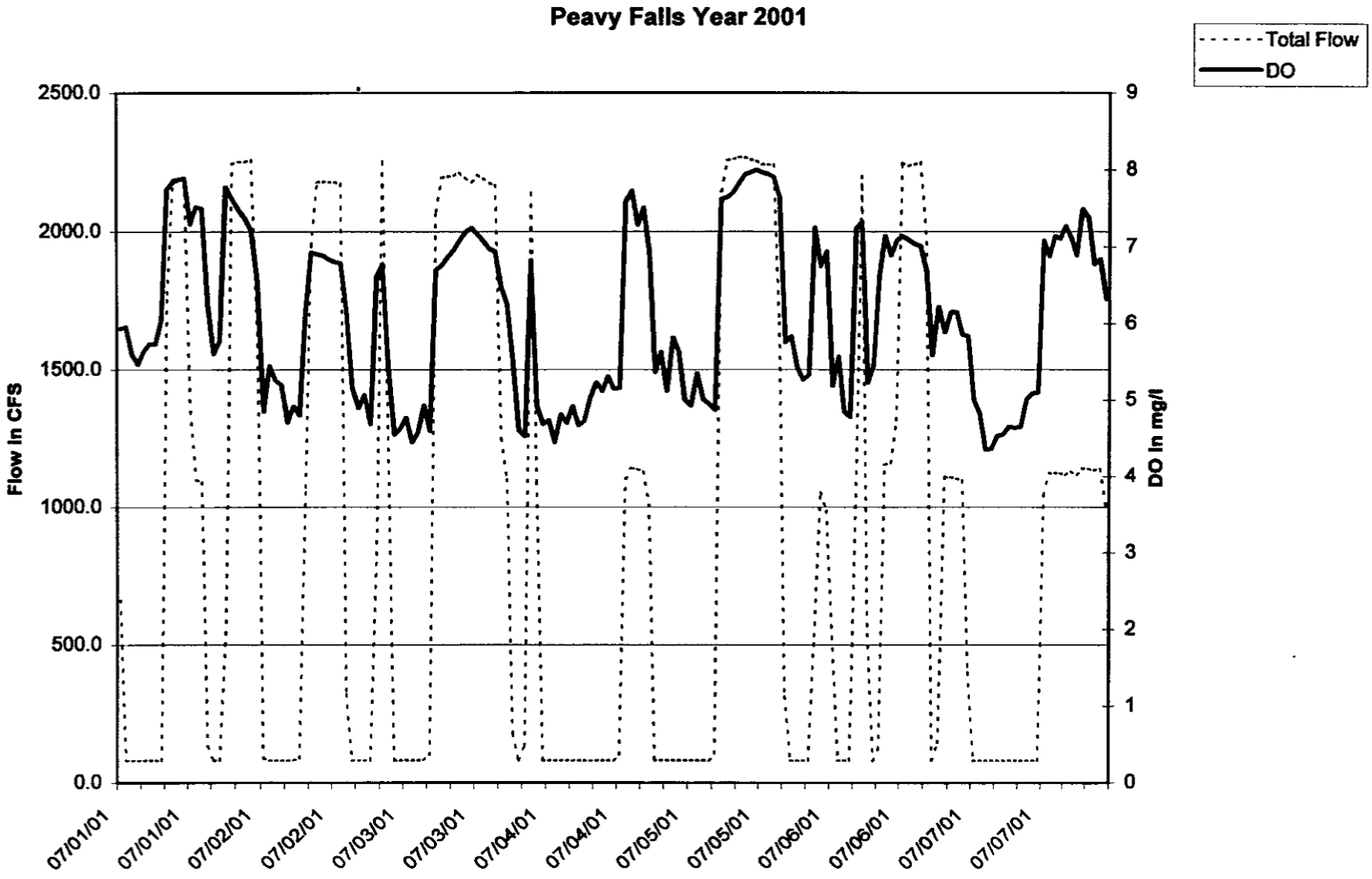

Peavy Falls Year 2001
Total Flow
DO
Flow In CFS
DO In mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
9
8
7
6
5
4
3
2
1
0
07/01/01
07/01/01
07/02/01
07/02/01
07/03/01
07/03/01
07/04/01
07/04/01
07/05/01
07/05/01
07/06/01
07/06/01
07/07/01
07/07/01

Figure D- 5

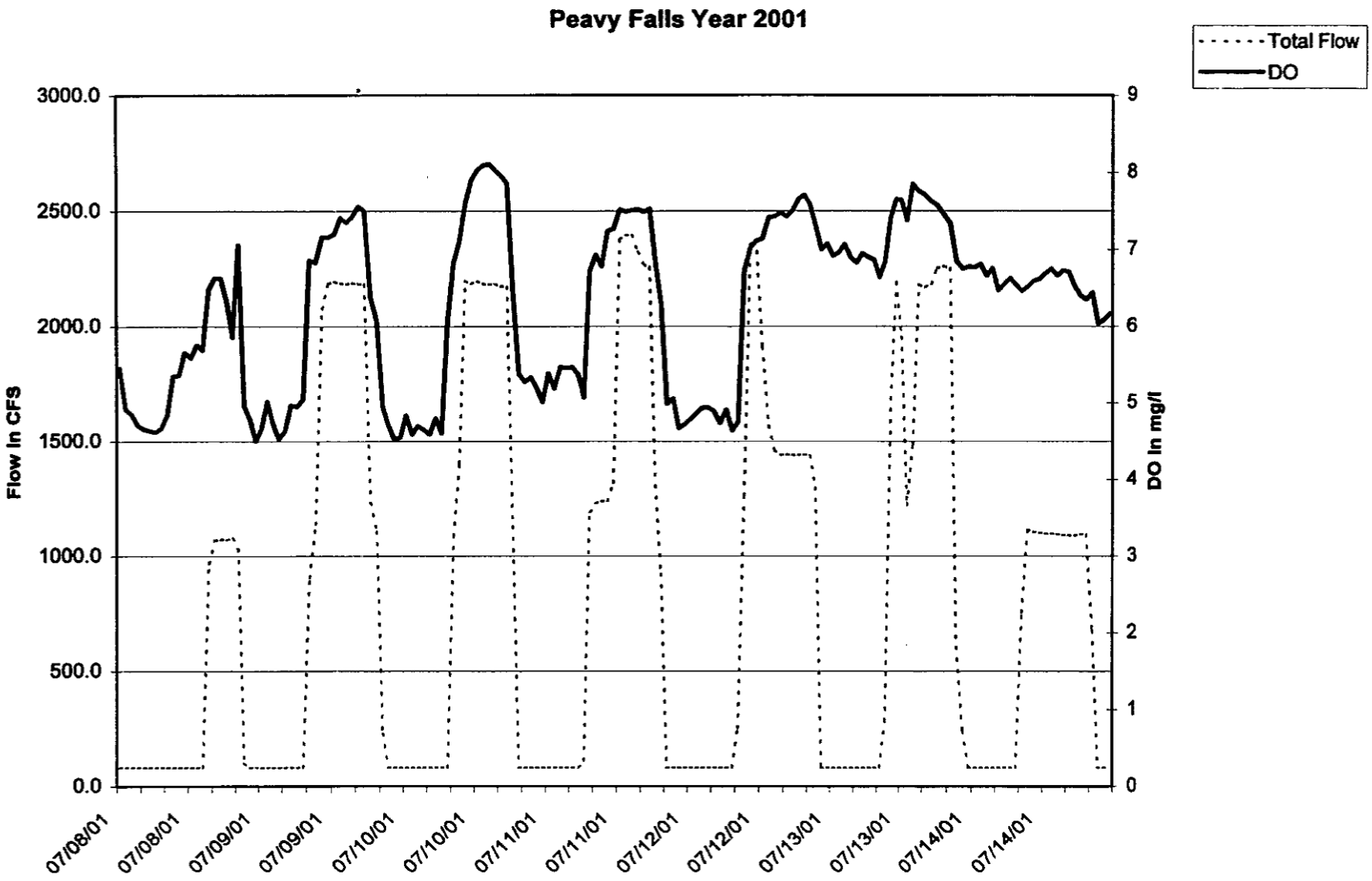

Peavy Falls Year 2001
Total Flow
DO
Flow In CFS
DO In mg/l
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
9
8
7
6
5
4
3
2
1
0
07/08/01
07/08/01
07/09/01
07/09/01
07/10/01
07/10/01
07/11/01
07/11/01
07/12/01
07/12/01
07/13/01
07/13/01
07/14/01
07/14/01

Figure D- 5

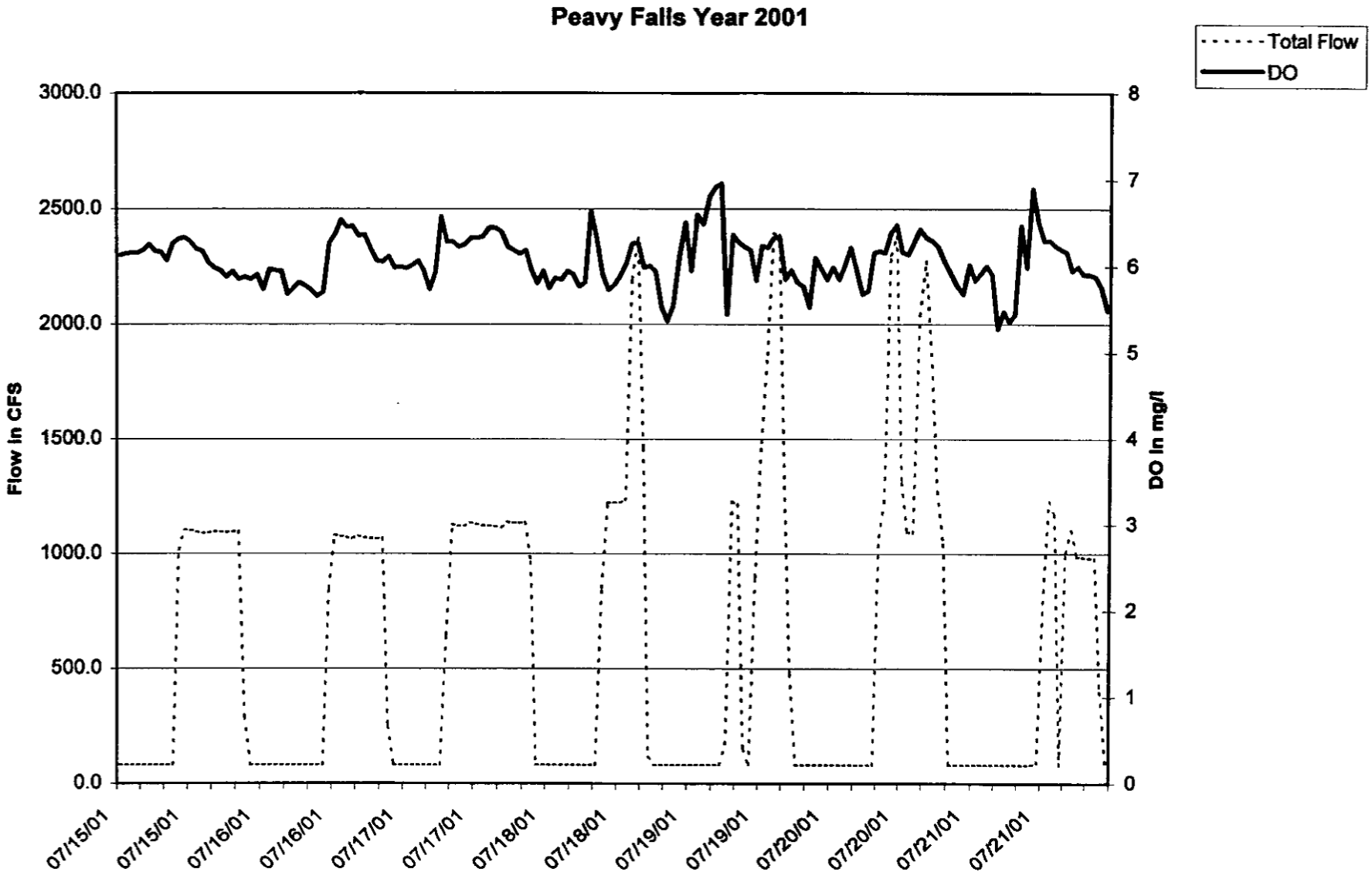

Peavy Falls Year 2001
Total Flow
DO
Flow in CFS
DO in mg/l
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
8
7
6
5
4
3
2
1
0
07/15/01
07/15/01
07/16/01
07/16/01
07/17/01
07/17/01
07/18/01
07/18/01
07/19/01
07/19/01
07/20/01
07/20/01
07/21/01
07/21/01

Figure D- 5

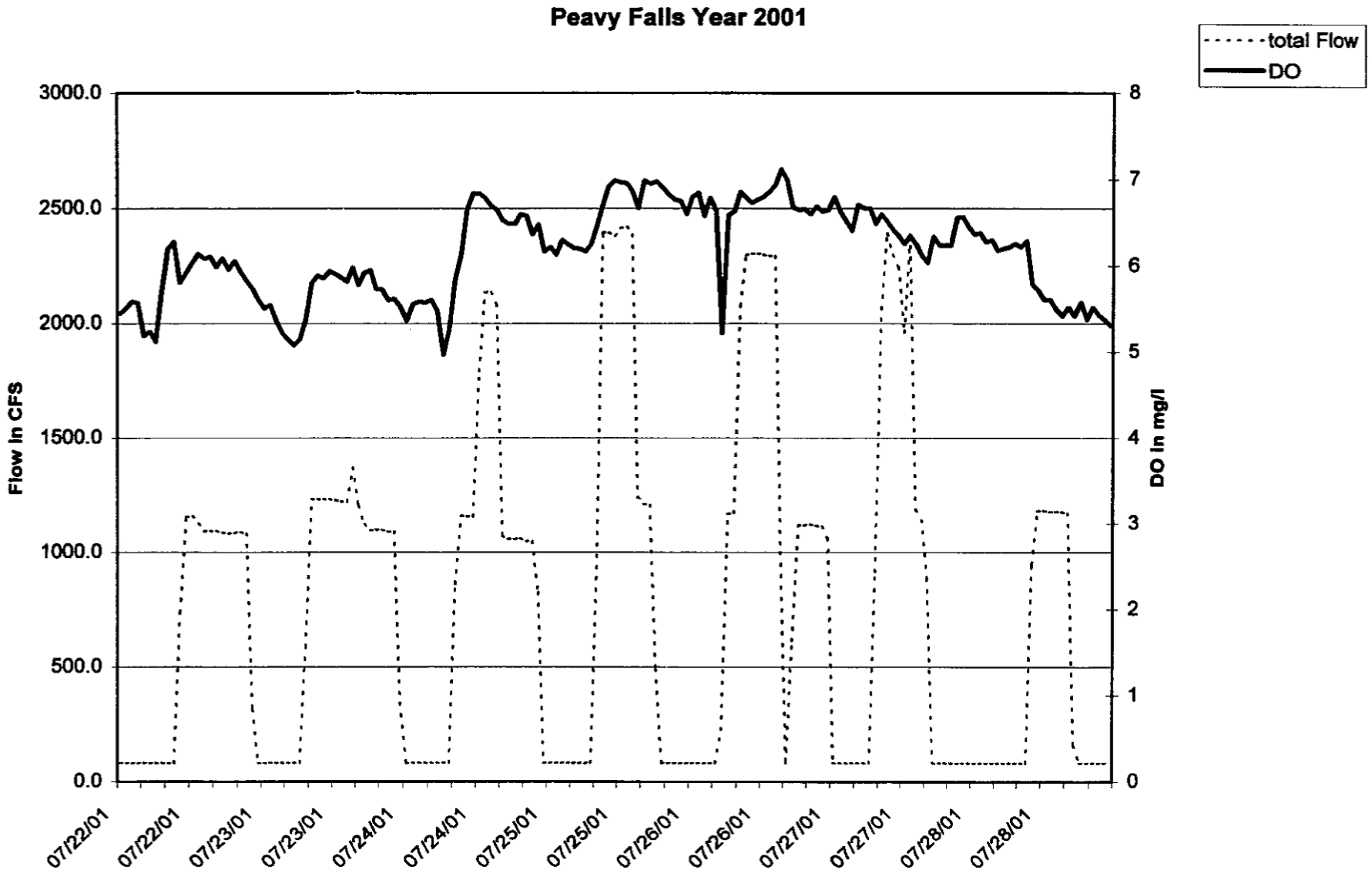

Peavy Falls Year 2001
total Flow
DO
Flow in CFS
DO in mg/l
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
8
7
6
5
4
3
2
1
0
07/22/01
07/22/01
07/23/01
07/23/01
07/24/01
07/24/01
07/25/01
07/25/01
07/26/01
07/26/01
07/27/01
07/27/01
07/28/01
07/28/01

Figure D- 5

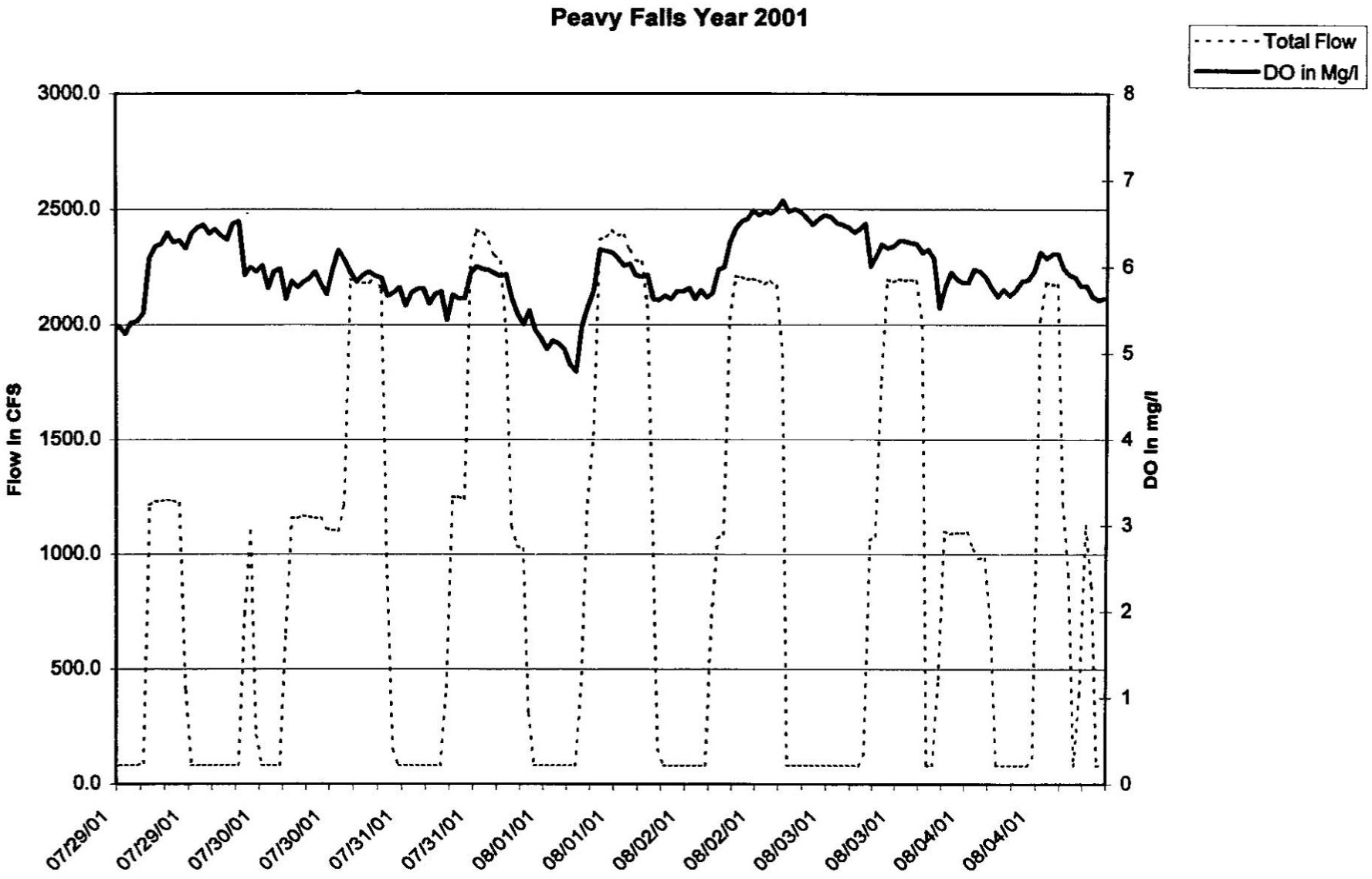

Peavy Falls Year 2001
Total Flow
DO in Mg/l
Flow In CFS
DO In mg/l
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
8
7
6
5
4
3
2
1
0
07/29/01
07/29/01
07/30/01
07/30/01
07/31/01
07/31/01
08/01/01
08/01/01
08/02/01
08/02/01
08/03/01
08/03/01
08/04/01
08/04/01

Figure D- 5

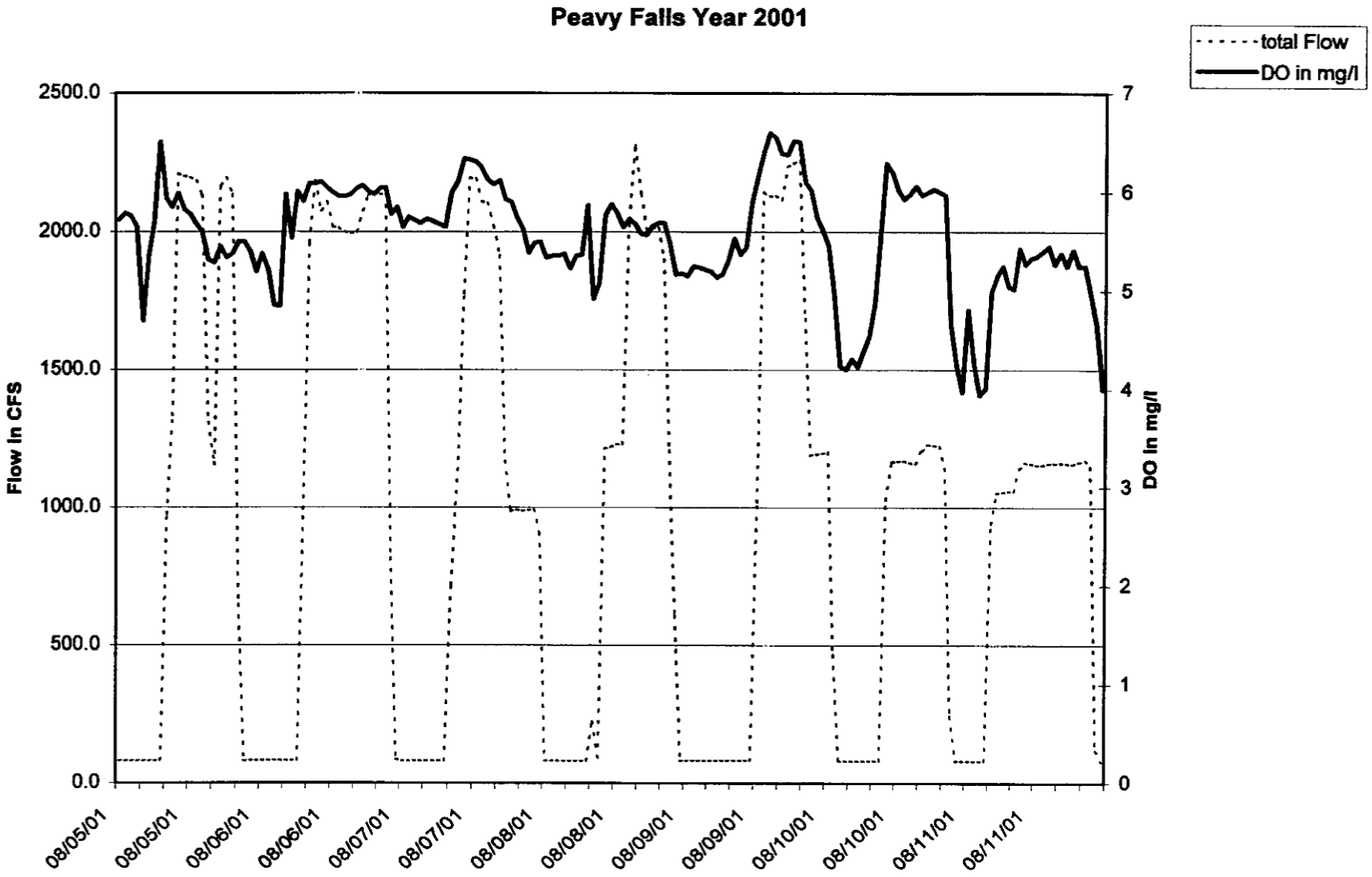

Peavy Falls Year 2001
total Flow
DO in mg/l
Flow in CFS
DO in mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
7
6
5
4
3
2
1
0
08/05/01
08/05/01
08/06/01
08/06/01
08/07/01
08/07/01
08/08/01
08/08/01
08/09/01
08/09/01
08/10/01
08/10/01
08/11/01
08/11/01

Figure D- 5

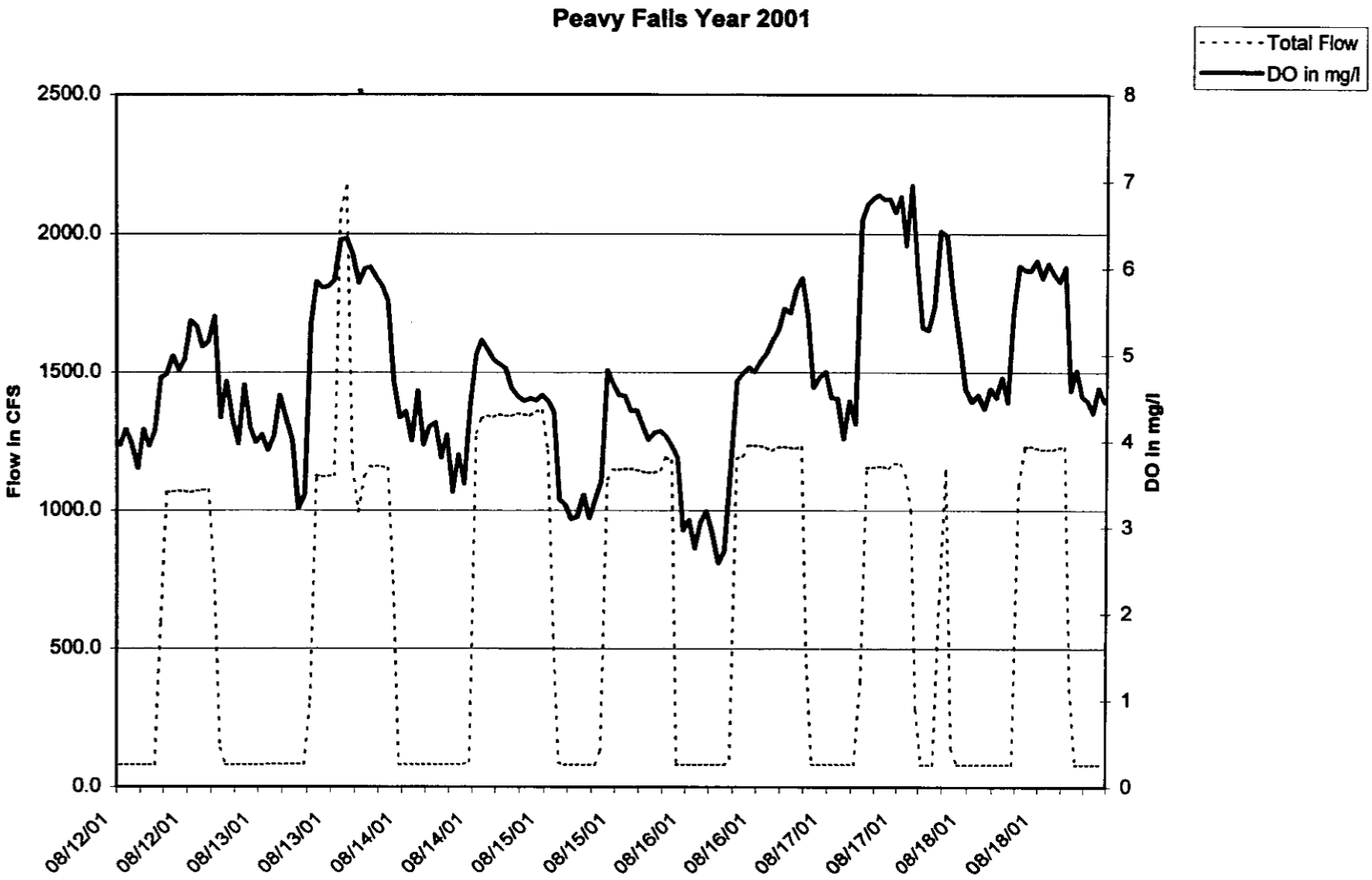

Peavy Falls Year 2001
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
8
7
6
5
4
3
2
1
0
08/12/01
08/12/01
08/13/01
08/13/01
08/14/01
08/14/01
08/15/01
08/15/01
08/16/01
08/16/01
08/17/01
08/17/01
08/18/01
08/18/01

Figure D- 5

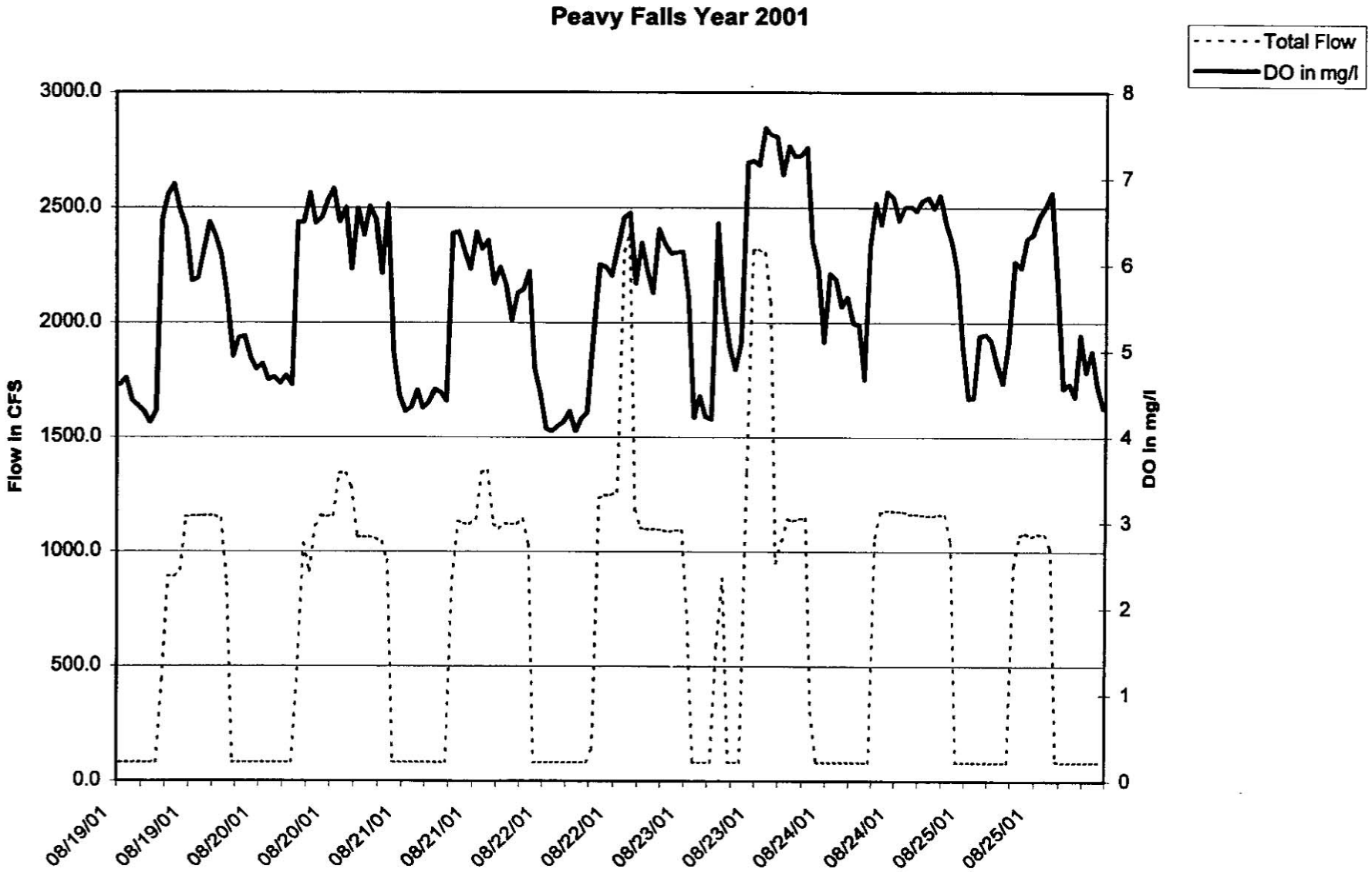

Peavy Falls Year 2001
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
8
7
6
5
4
3
2
1
0
08/19/01
08/19/01
08/20/01
08/20/01
08/21/01
08/21/01
08/22/01
08/22/01
08/23/01
08/23/01
08/24/01
08/24/01
08/25/01
08/25/01

Figure D- 5

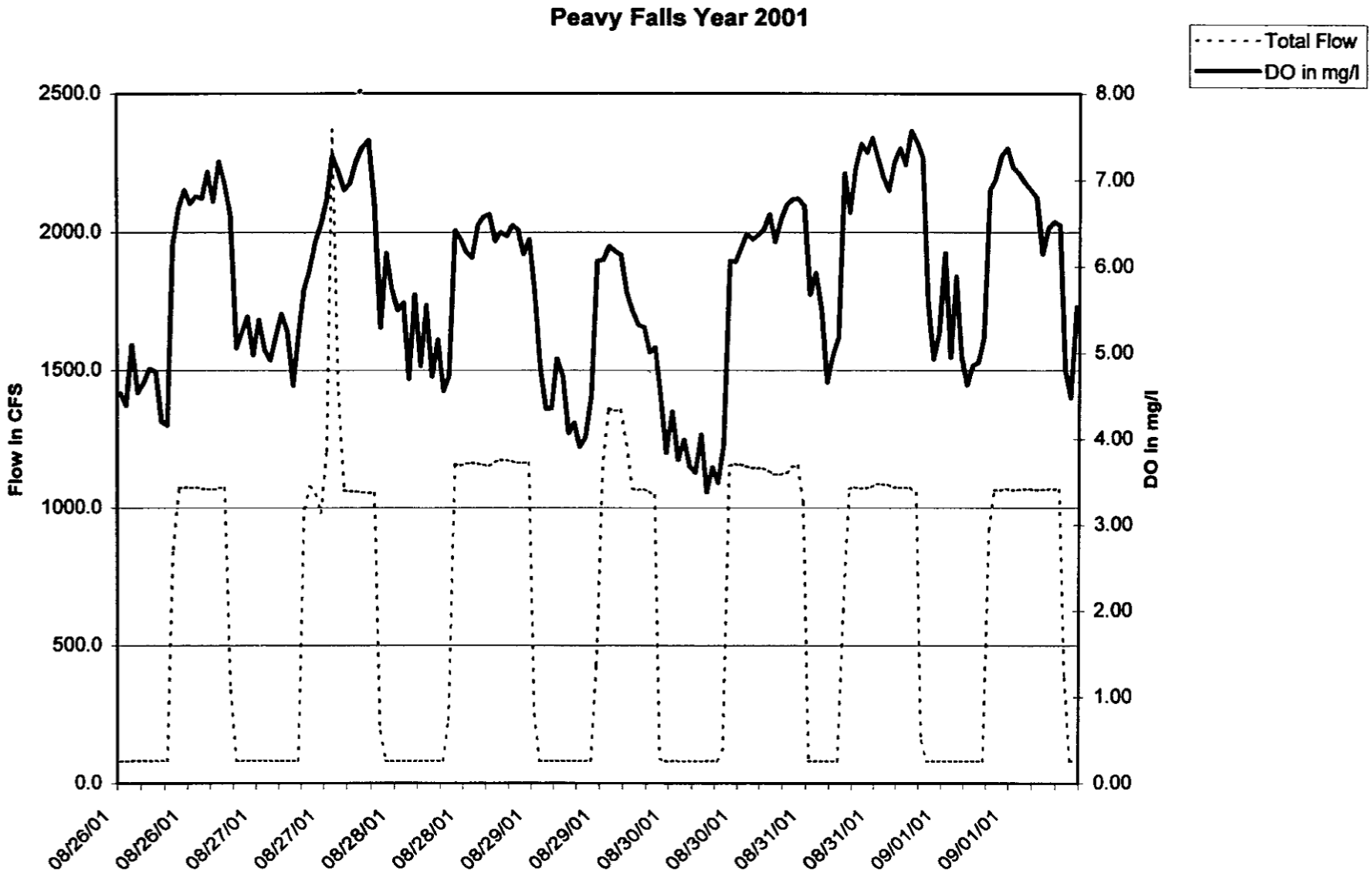

Peavy Falls Year 2001
Total Flow
DO in mg/l
Flow In CFS
DO in mg/l
2500.0
2000.0
1500.0
1000.0
500.0
0.0
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
08/26/01
08/26/01
08/27/01
08/27/01
08/28/01
08/28/01
08/29/01
08/29/01
08/30/01
08/30/01
08/31/01
08/31/01
09/01/01
09/01/01

Figure D- 5

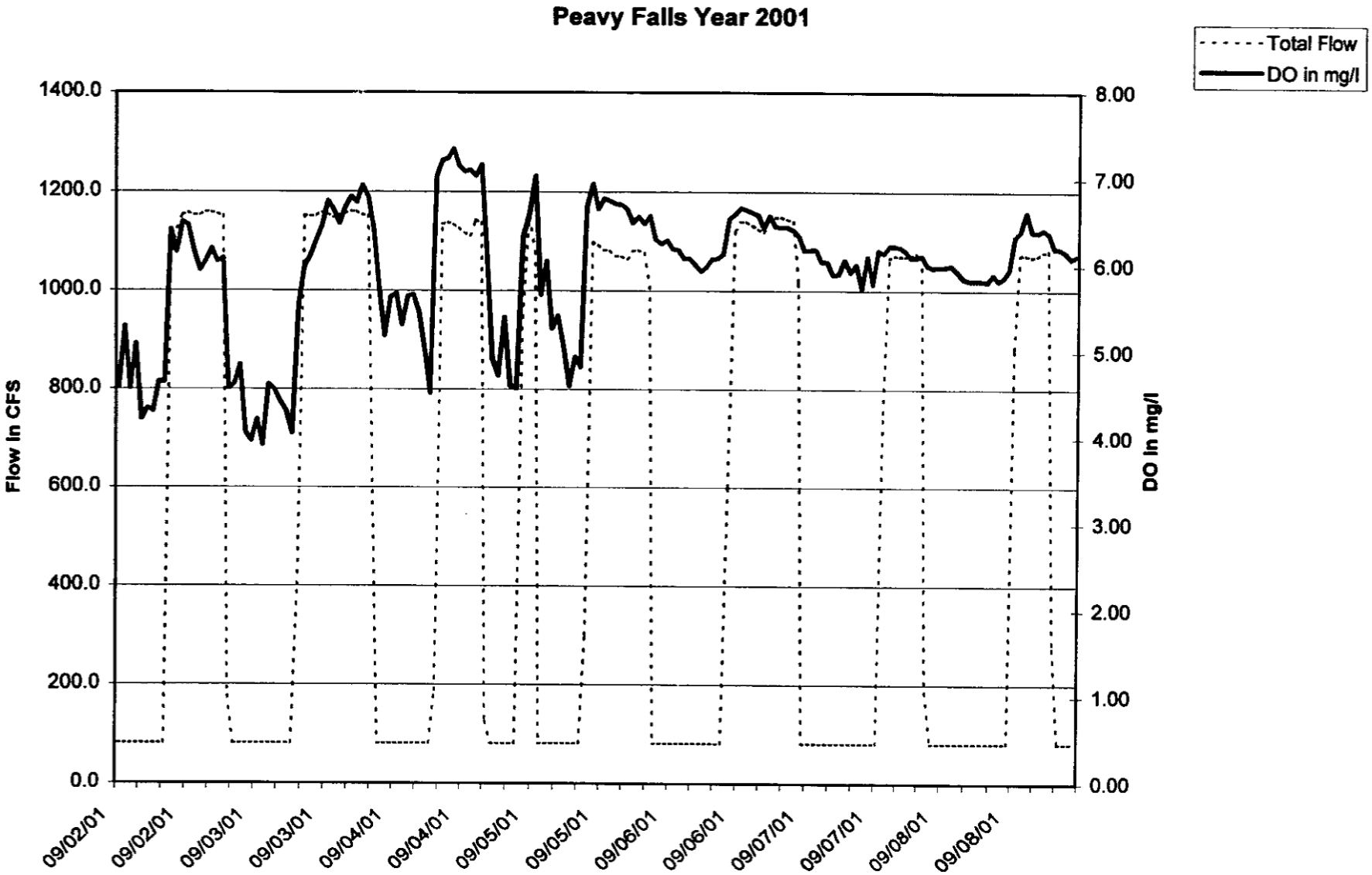

Peavy Falls Year 2001
Total Flow
DO in mg/l
Flow In CFS
DO In mg/l
1400.0
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
09/02/01
09/02/01
09/03/01
09/03/01
09/04/01
09/04/01
09/05/01
09/05/01
09/06/01
09/06/01
09/07/01
09/07/01
09/08/01
09/08/01

Figure D- 5

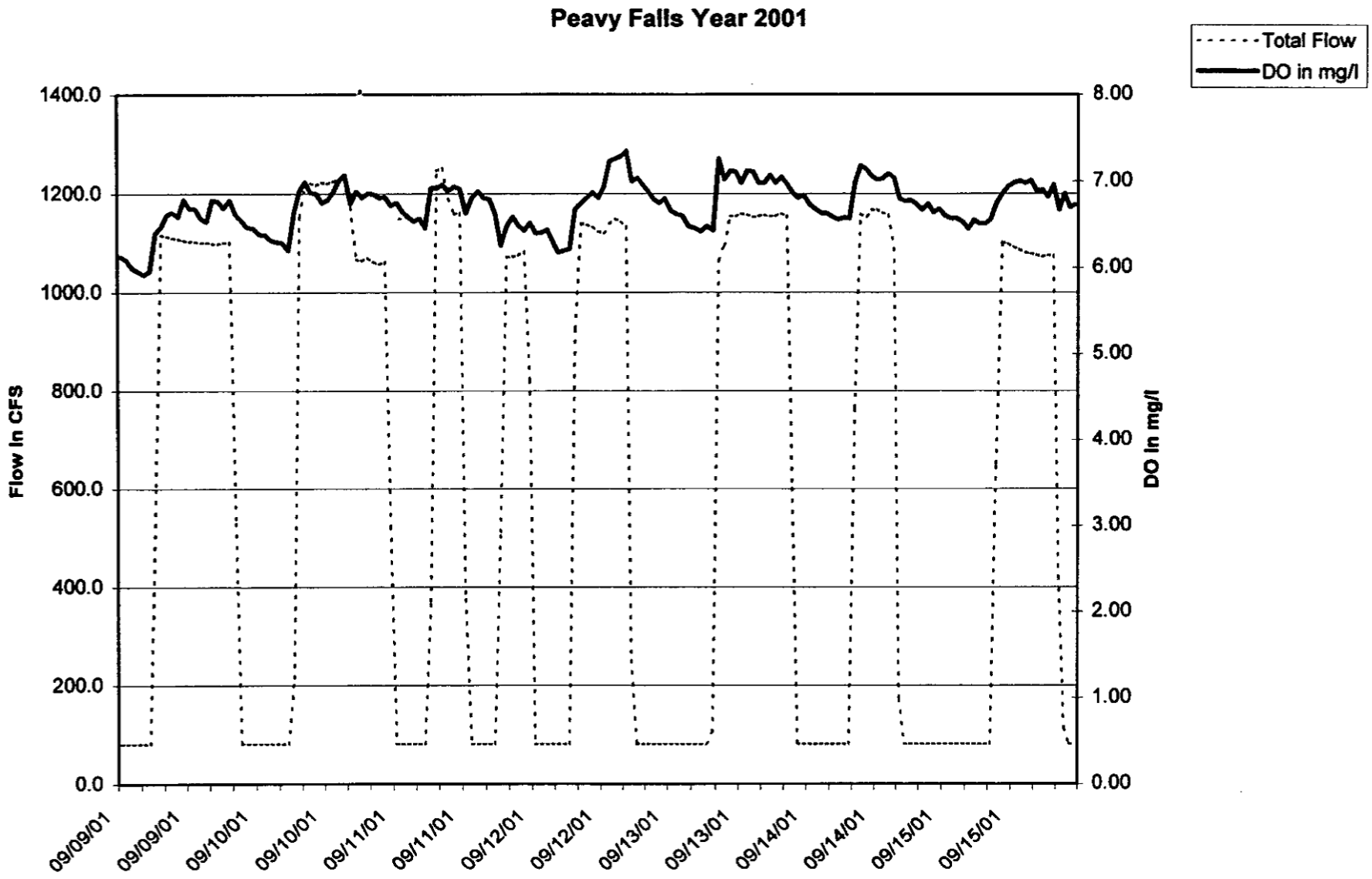

Peavy Falls Year 2001
Total Flow
DO in mg/l
Flow In CFS
DO in mg/l
1400.0
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
09/09/01
09/09/01
09/10/01
09/10/01
09/11/01
09/11/01
09/12/01
09/12/01
09/13/01
09/13/01
09/14/01
09/14/01
09/15/01
09/15/01

Figure D- 5

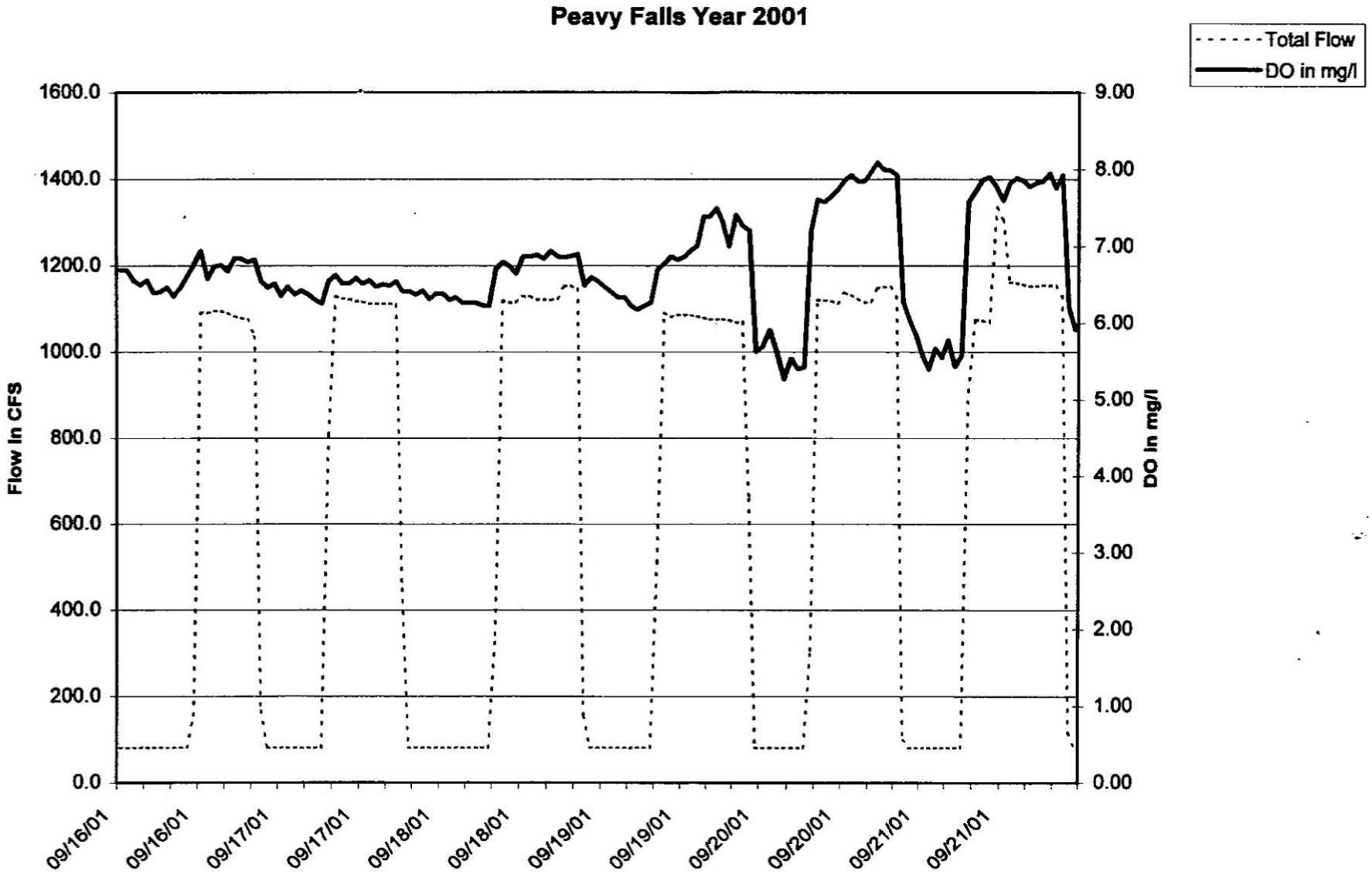
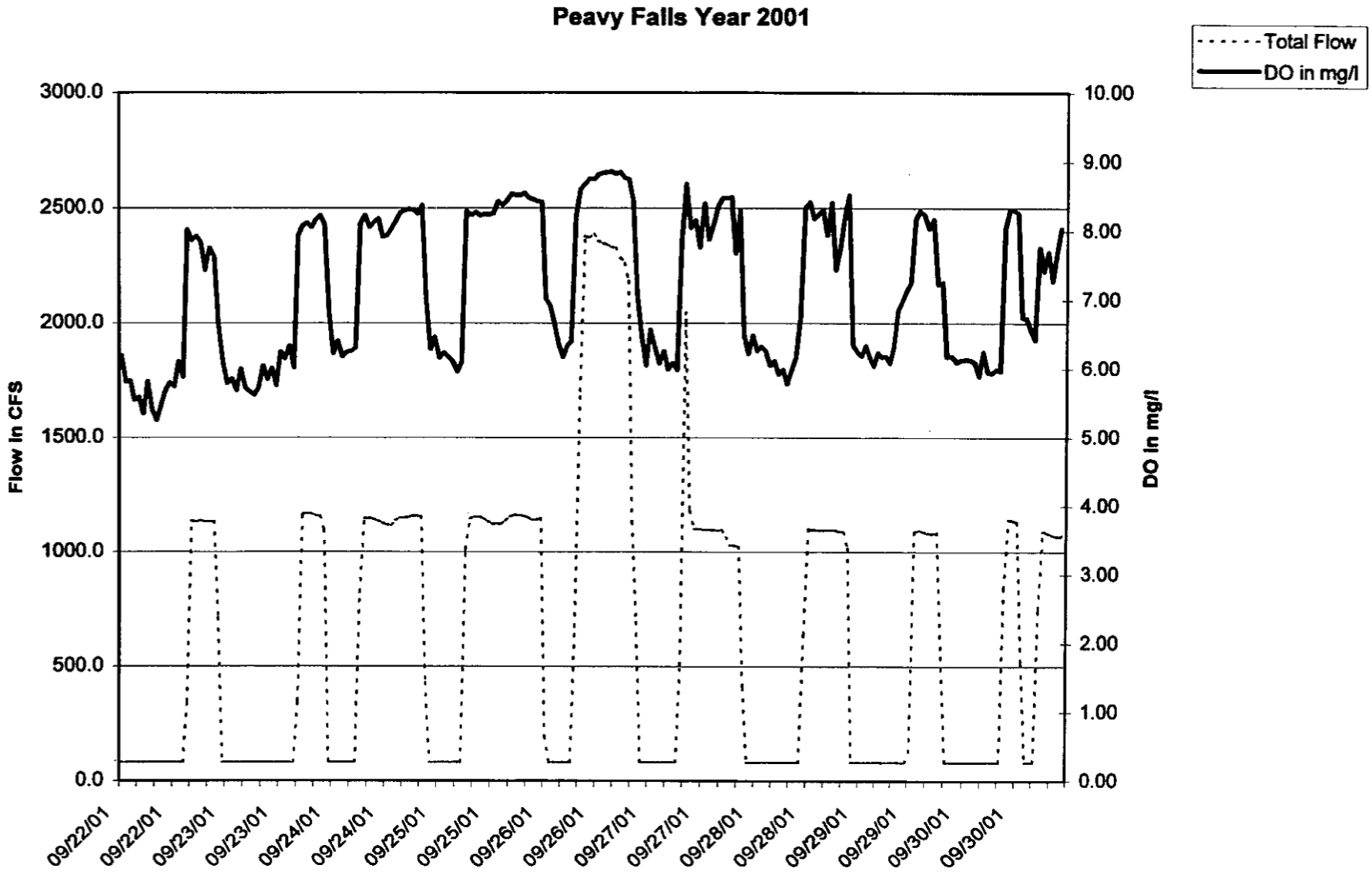

Peavy Falls Year 2001
Total Flow
DO in mg/l
Flow In CFS
DO in mg/l
1600.0
1400.0
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
09/16/01
09/16/01
09/17/01
09/17/01
09/18/01
09/18/01
09/19/01
09/19/01
09/20/01
09/20/01
09/21/01
09/21/01

Figure D- 5


Peavy Falls Year 2001
Total Flow
DO in mg/l
Flow in CFS
DO in mg/l
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
09/22/01
09/22/01
09/23/01
09/23/01
09/24/01
09/24/01
09/25/01
09/25/01
09/26/01
09/26/01
09/27/01
09/27/01
09/28/01
09/28/01
09/29/01
09/29/01
09/30/01
09/30/01