

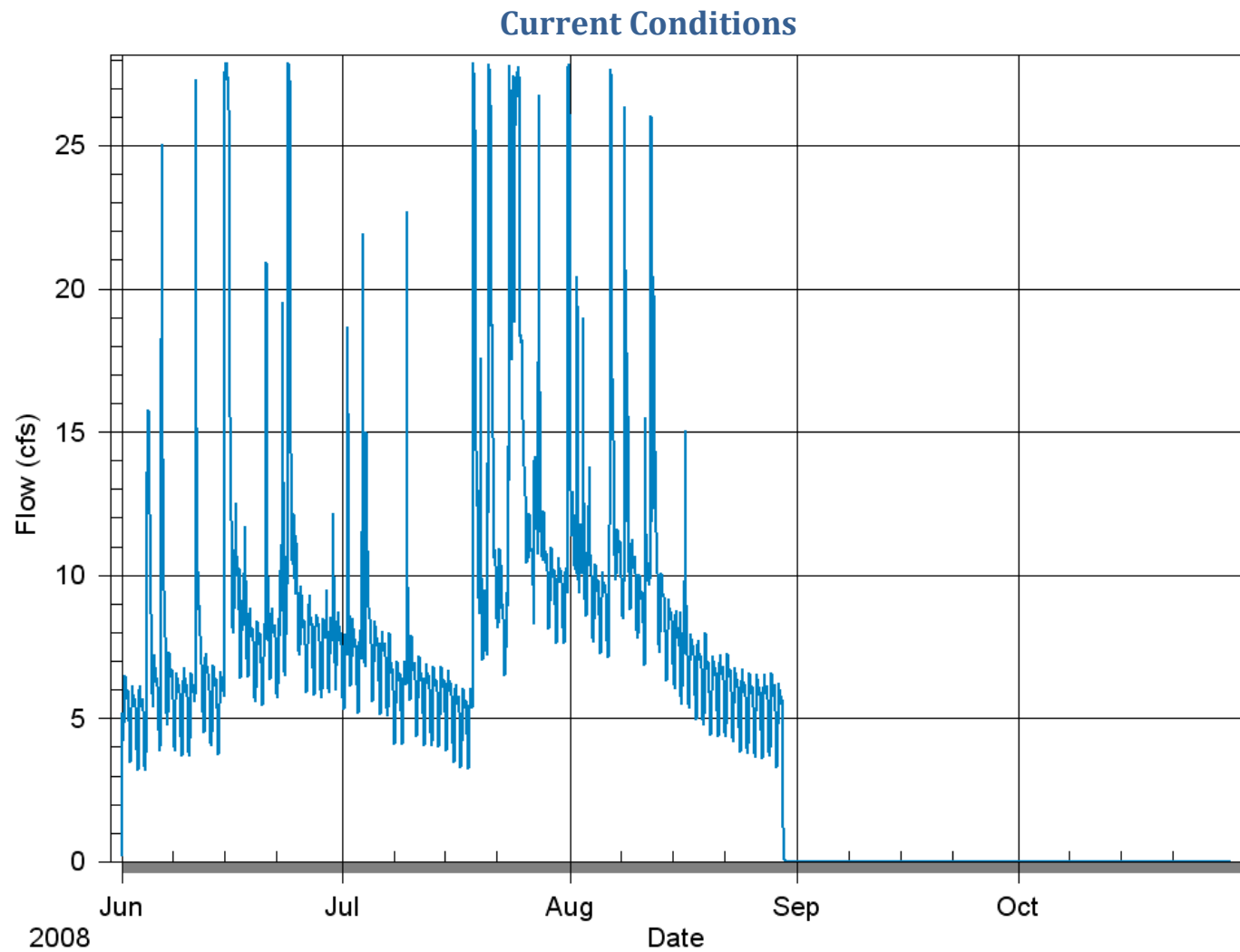
Overview:

The data in the following plots came from output of modeling done for the City of Portsmouth in 2009. The various scenarios, baseline conditions (which include future planned separation projects), and current conditions. Only data that was relevant to results needed were generated; if a period is not shown it is because that output was not crucial to the planning process or all the values were 0.

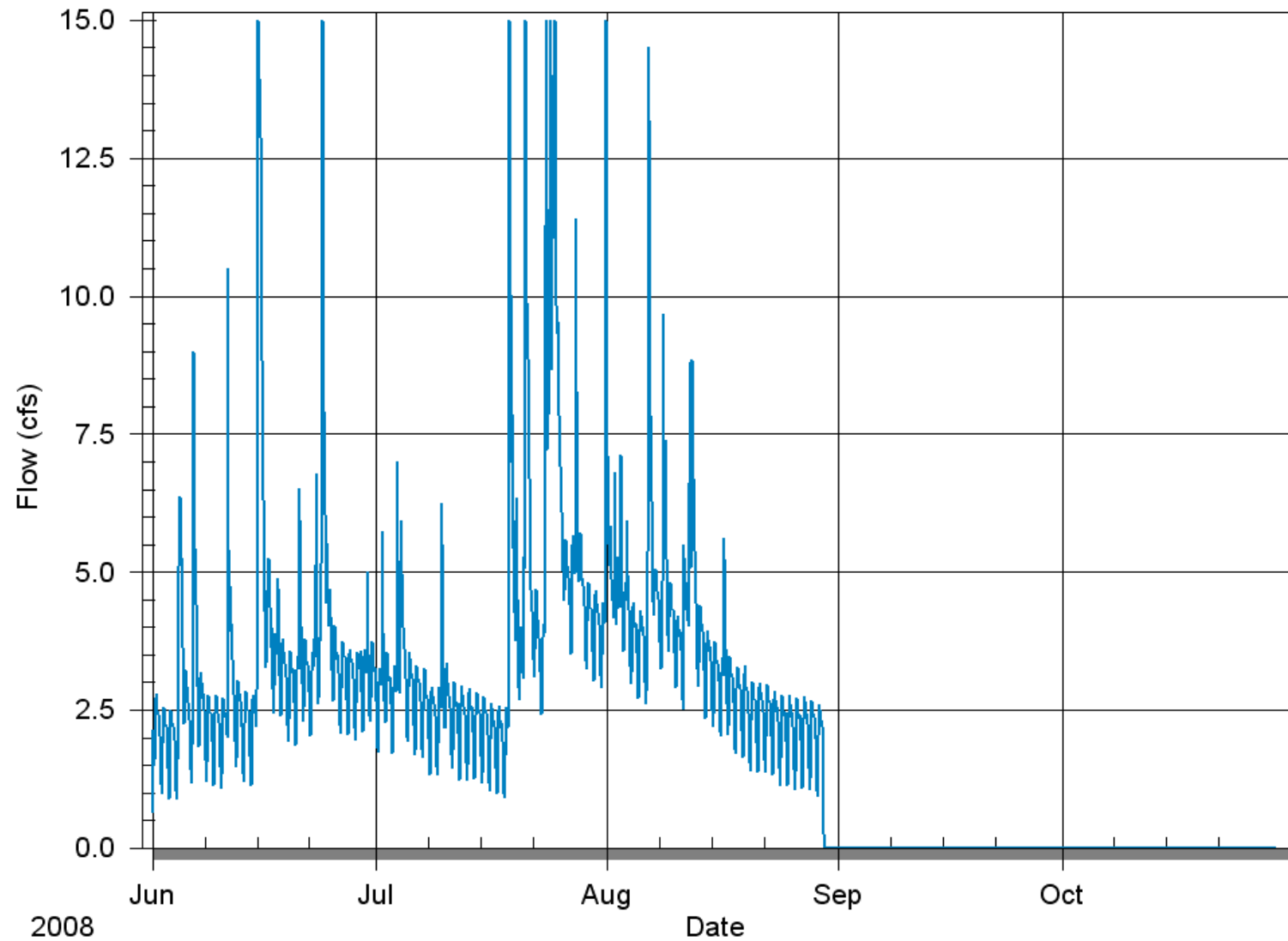
Current Conditions	4
1. Modeled Flow from Mechanic St Pump Station during 2008 Calibration Period - Current Conditions	4
2. Modeled Flow from Deer St Pump Station during 2008 Calibration Period - Current Conditions	5
3. Modeled Flow from LaFayette St Pump Station during 2008 Calibration Period - Current Conditions	6
4. Modeled Flow from CSO 010A during 2008 Calibration Period - Current Conditions	7
5. Modeled Flow from CSO 010B during 2008 Calibration Period - Current Conditions	8
6. Modeled Flow from CSO 013 during 2008 Calibration Period - Current Conditions	9
7. Modeled Flow from Mechanic St Pump Station during 1968 Typical Year - Current Conditions	10
8. Modeled Flow from Mechanic St Pump Station during 1990, and 1993 Typical Years - Current Conditions	11
9. Modeled Flow from Deer St Pump Station during 1968 Typical Year - Current Conditions	12
10. Modeled Flow from Deer St Pump Station during 1990, and 1993 Typical Years - Current Conditions	13
11. Modeled Flow from LaFayette St Pump Station during 1968 Typical Year - Current Conditions	14
12. Modeled Flow from LaFayette St Pump Station during 1990, and 1993 Typical Years - Current Conditions	15
13. Modeled Flow from CSO 010A during 1968 Typical Year - Current Conditions	16
14. Modeled Flow from CSO 010A during 1990, and 1993 Typical Years - Current Conditions	17
15. Modeled Flow from CSO 010B during 1968 Typical Year - Current Conditions	18
16. Modeled Flow from CSO 010B during 1990, and 1993 Typical Years - Current Conditions	19
17. Modeled Flow from CSO 013 during 1968 Typical Year - Current Conditions	20

18. Modeled Flow from CSO 013 during 1990, and 1993 Typical Years - Current Conditions	21
Baseline Conditions	22
19. Modeled Flow from Mechanic St Pump Station during 1968 Typical Year - Baseline Conditions	22
20. Modeled Flow from Mechanic St Pump Station during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions	23
21. Modeled Flow from Deer St Pump Station during 1968 Typical Year - Baseline Conditions	24
22. Modeled Flow from Deer St Pump Station during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions	25
23. Modeled Flow from LaFayette St Pump Station during 1968 Typical Year - Baseline Conditions	26
24. Modeled Flow from LaFayette St Pump Station during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions	27
25. Modeled Flow from CSO 010A during 1968 Typical Year - Baseline Conditions	28
26. Modeled Flow from CSO 010A during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions	29
27. Modeled Flow from CSO 010B during 1968 Typical Year - Baseline Conditions	30
28. Modeled Flow from CSO 010B during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions	31
29. Modeled Flow from CSO 013 during 1968 Typical Year - Baseline Conditions	32
30. Modeled Flow from CSO 013 during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions	33
Model Scenario 1	34
31. Modeled Flow from CSO 010A during 1968 Typical Year - Scenario 1	34
32. Modeled Flow from CSO 010A during 1988, 1989, 1990, and 1993 Typical Years - Scenario 1	35
33. Modeled Flow from CSO 010B during 1968 Typical Year - Scenario 1	36
34. Modeled Flow from CSO 010B during 1988, 1989, 1990, and 1993 Typical Years - Scenario 1	37
35. Modeled Flow from CSO 013 during 1988, 1989, 1990, and 1993 Typical Years - Scenario 1	38
Model Scenario 3	39
36. Modeled Flow from CSO 010A during 1968 Typical Year - Scenario 3	39
37. Modeled Flow from CSO 010A during 1988, 1989, and 1990 Typical Years - Scenario 3	40

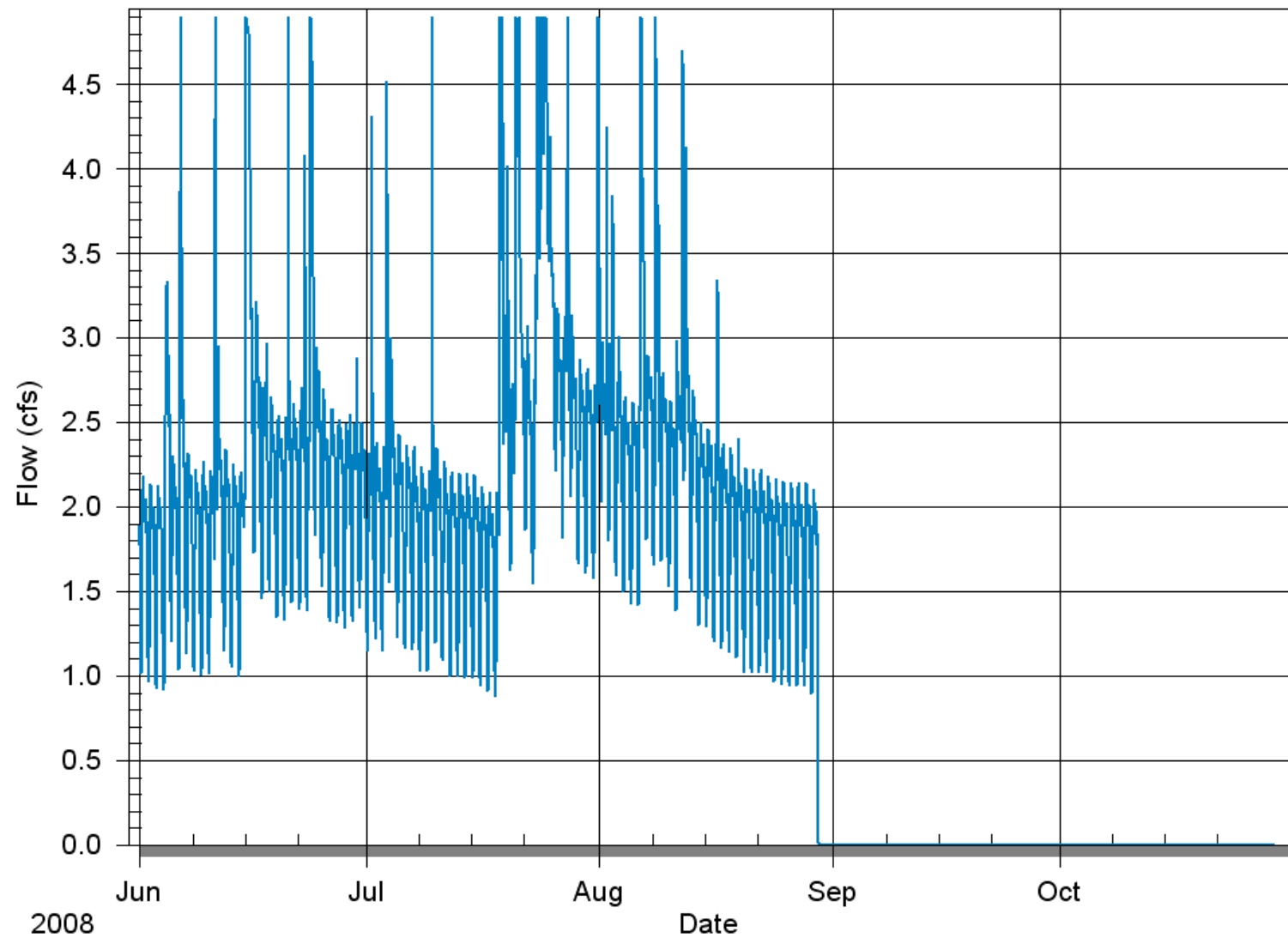
38. Modeled Flow from CSO 010B during 1968 Typical Year - Scenario 3	41
39. Modeled Flow from CSO 010B during 1988, 1989, and 1990 Typical Years - Scenario 3	42
Model Scenario 4	43
40. Modeled Flow from CSO 010A during 1968 Typical Year - Scenario 4	43
41. Modeled Flow from CSO 010A during 1988, 1989, 1990, and 1993 Typical Years - Scenario 4	44
42. Modeled Flow from CSO 010B during 1968 Typical Year - Scenario 4	45
43. Modeled Flow from CSO 010B during 1988, 1989, 1990, and 1993 Typical Years - Scenario 4	46
Model Scenario 4 (Optimized Storage from Pipeline Replacement)	47
Model Scenario 5	48
44. Modeled Flow from CSO 010A during 1968 Typical Year - Scenario 5	48
45. Modeled Flow from CSO 010A during 1988, 1989, and 1990 Typical Years - Scenario 5	49
46. Modeled Flow from CSO 010B during 1968 Typical Year - Scenario 5	50
47. Modeled Flow from CSO 010B during 1988, 1989, and 1990 Typical Years - Scenario 5	51
48. Modeled Flow from CSO 013 during 1968 Typical Year - Scenario 5	52
49. Modeled Flow from CSO 013 during 1988, 1989, and 1990 Typical Years - Scenario 5	53



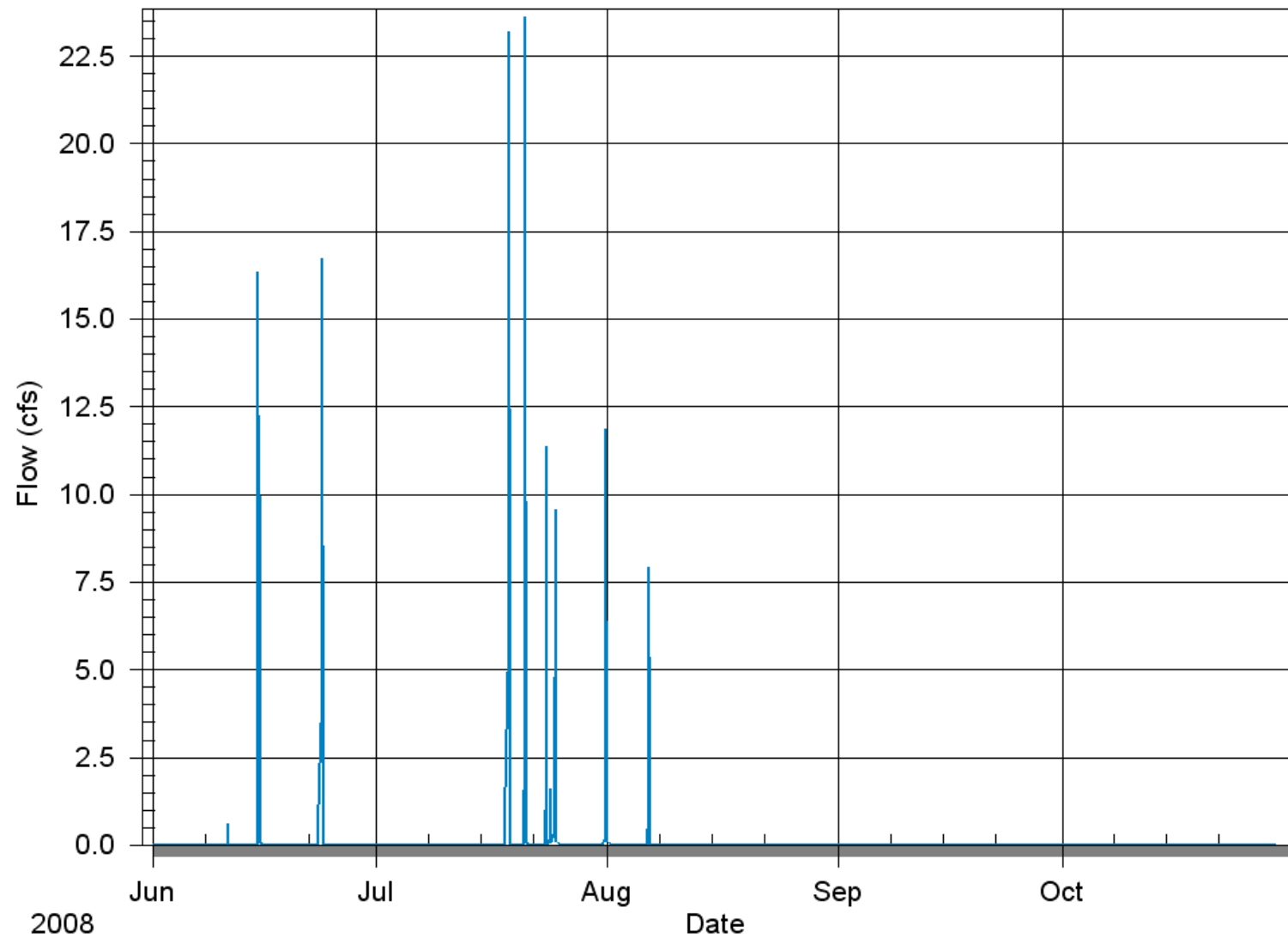
1. Modeled Flow from Mechanic St Pump Station during 2008 Calibration Period - Current Conditions



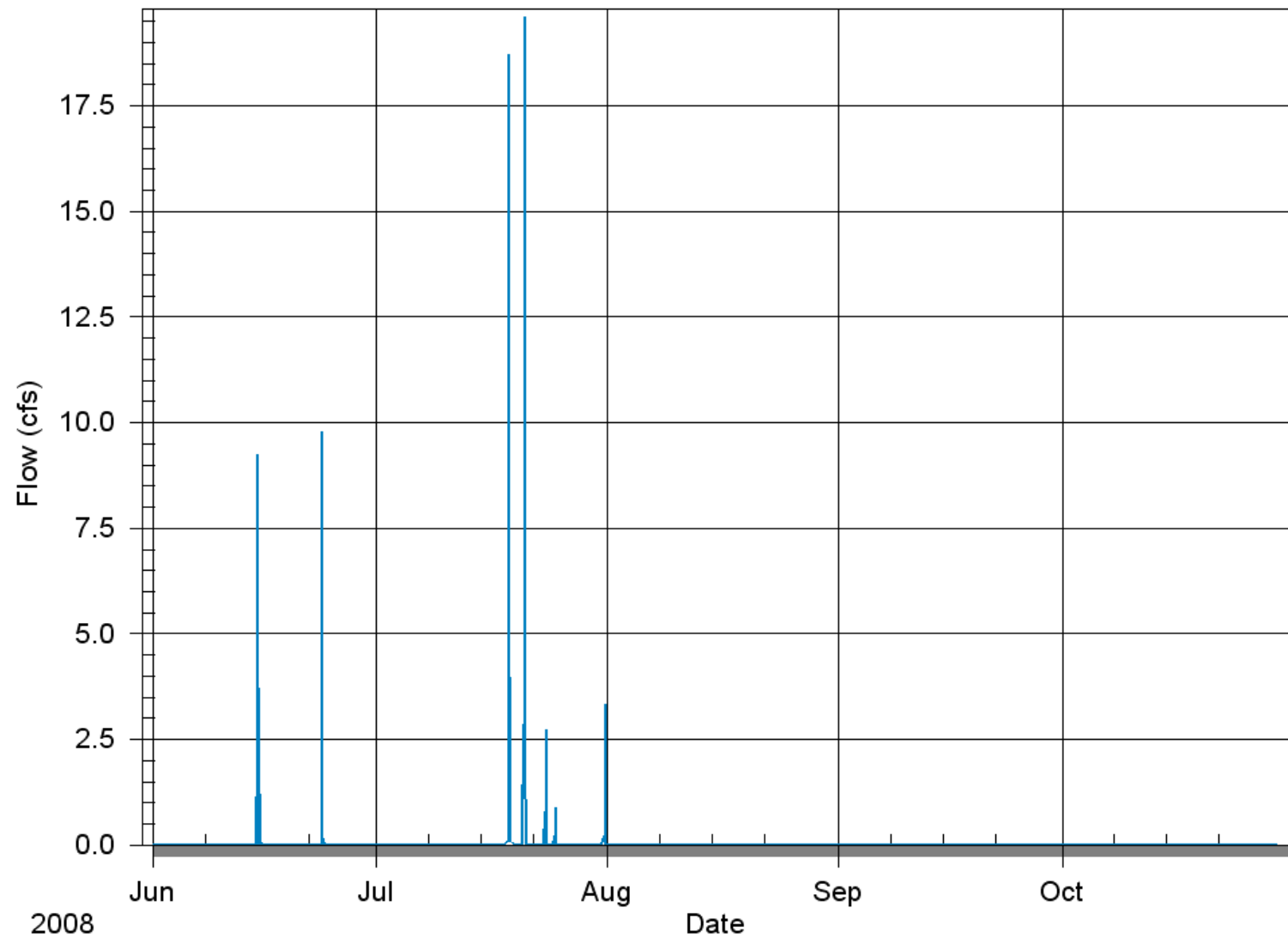
2. Modeled Flow from Deer St Pump Station during 2008 Calibration Period - Current Conditions



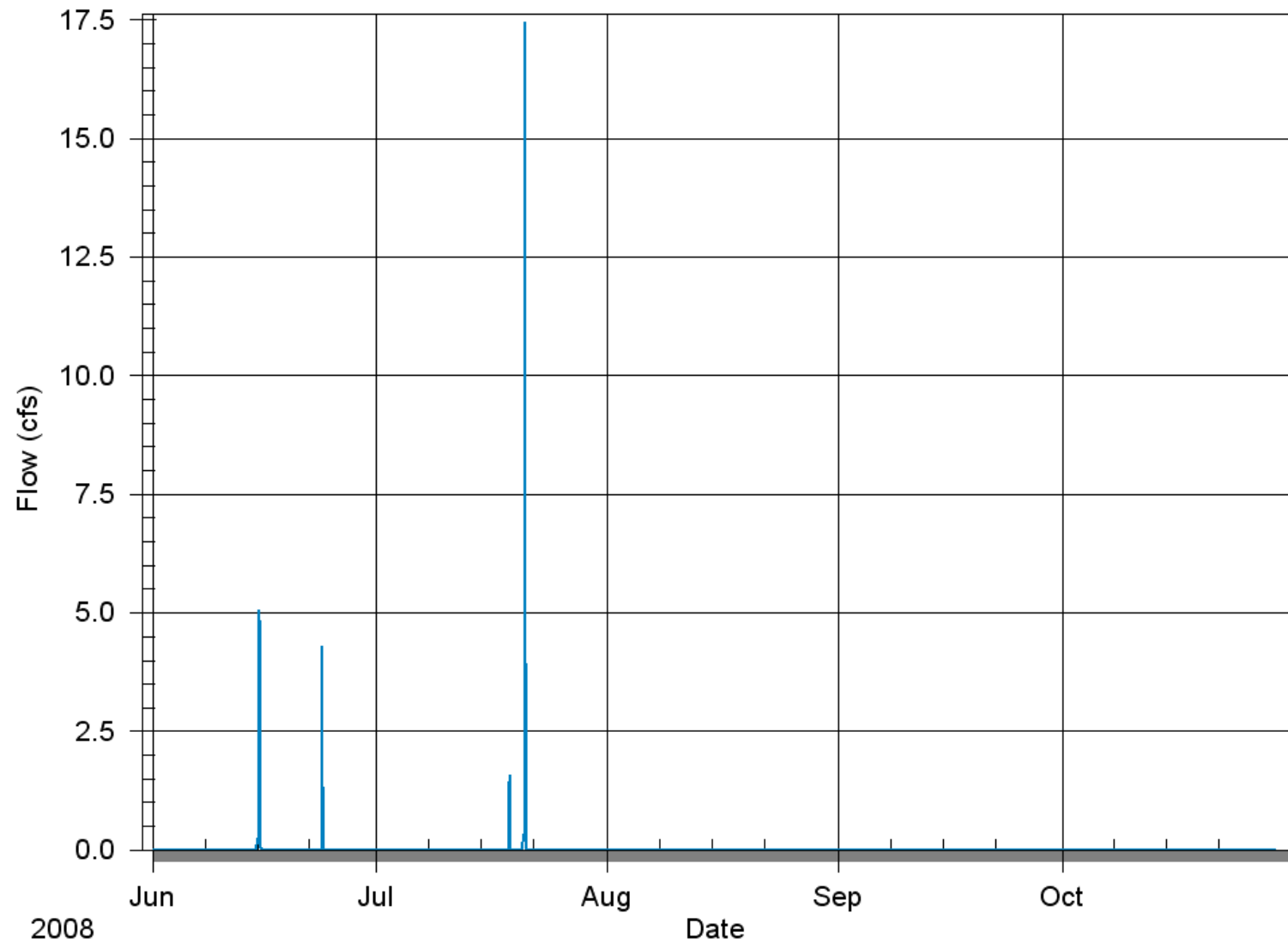
3. Modeled Flow from LaFayette St Pump Station during 2008 Calibration Period - Current Conditions



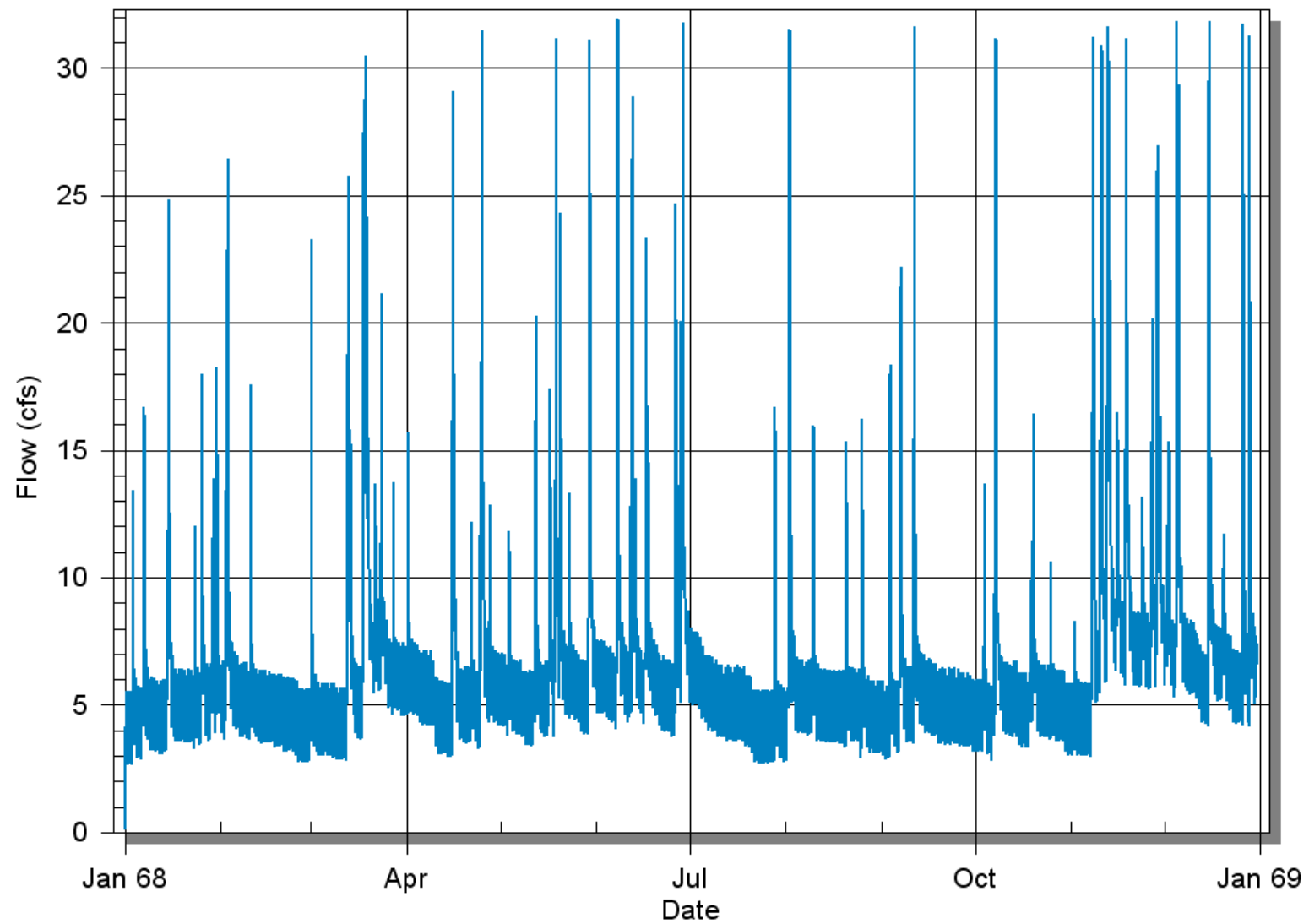
4. Modeled Flow from CSO 010A during 2008 Calibration Period - Current Conditions



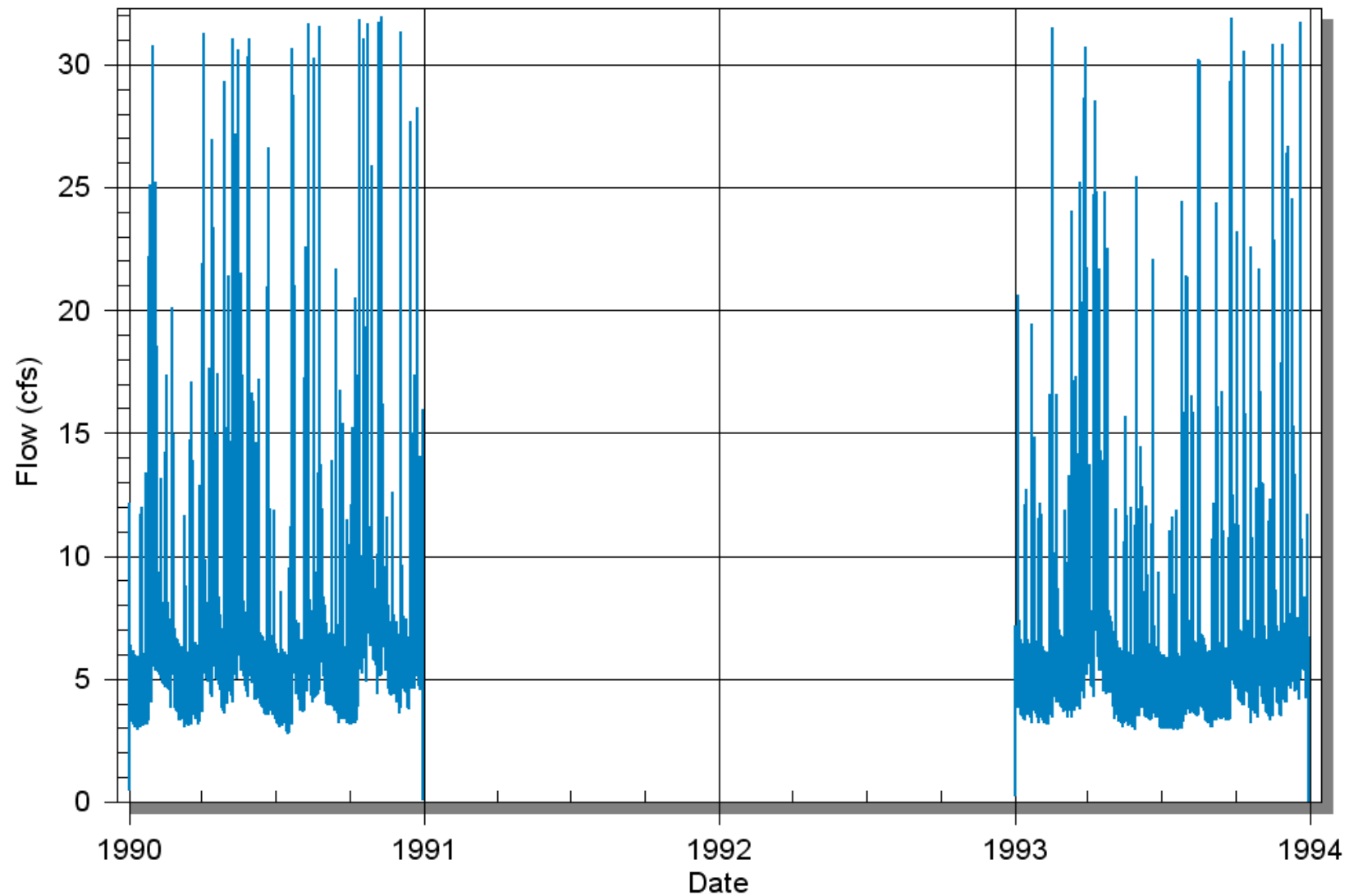
5. Modeled Flow from CSO 010B during 2008 Calibration Period - Current Conditions



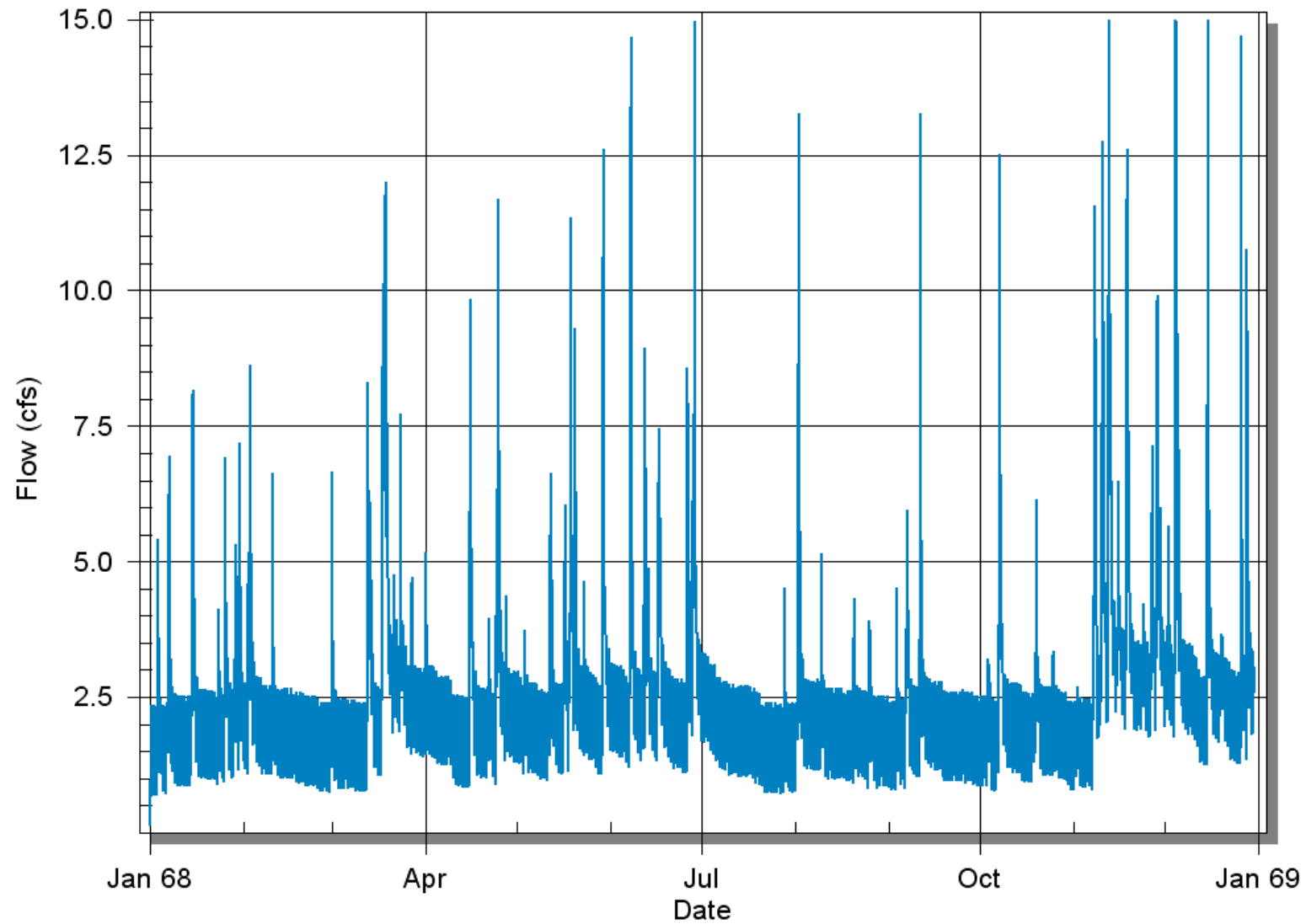
6. Modeled Flow from CSO 013 during 2008 Calibration Period - Current Conditions



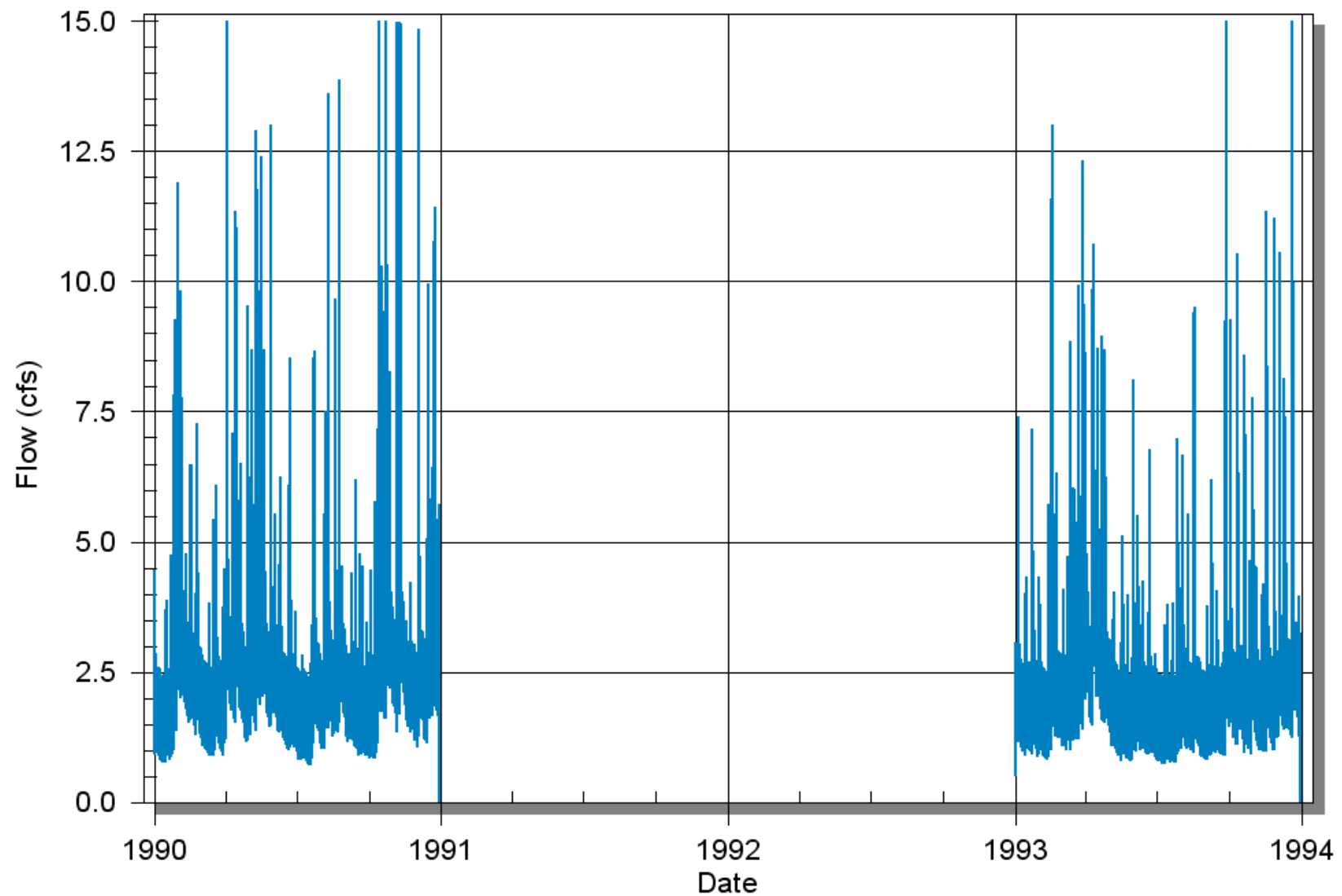
7. Modeled Flow from Mechanic St Pump Station during 1968 Typical Year - Current Conditions



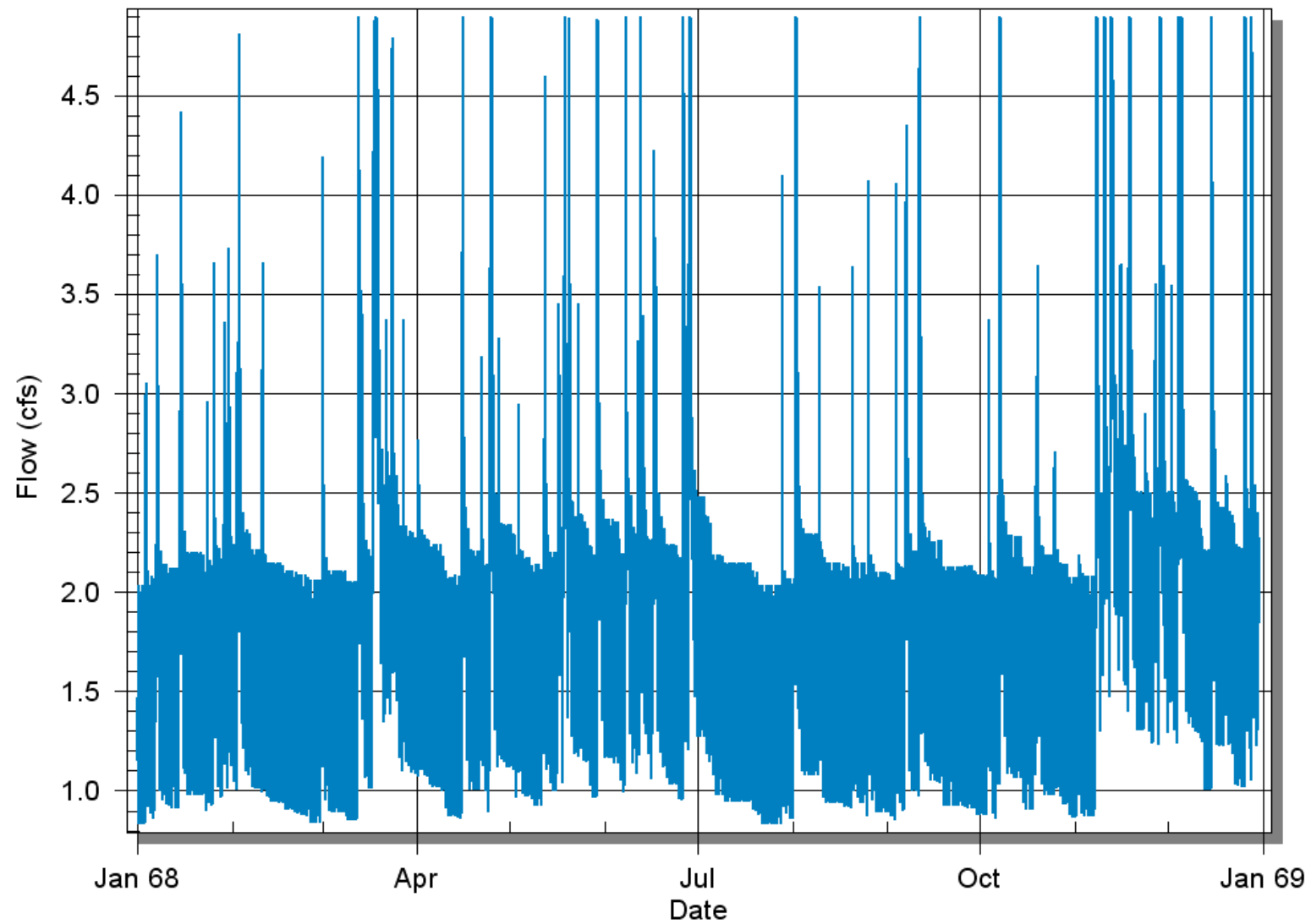
8. Modeled Flow from Mechanic St Pump Station during 1990, and 1993 Typical Years - Current Conditions



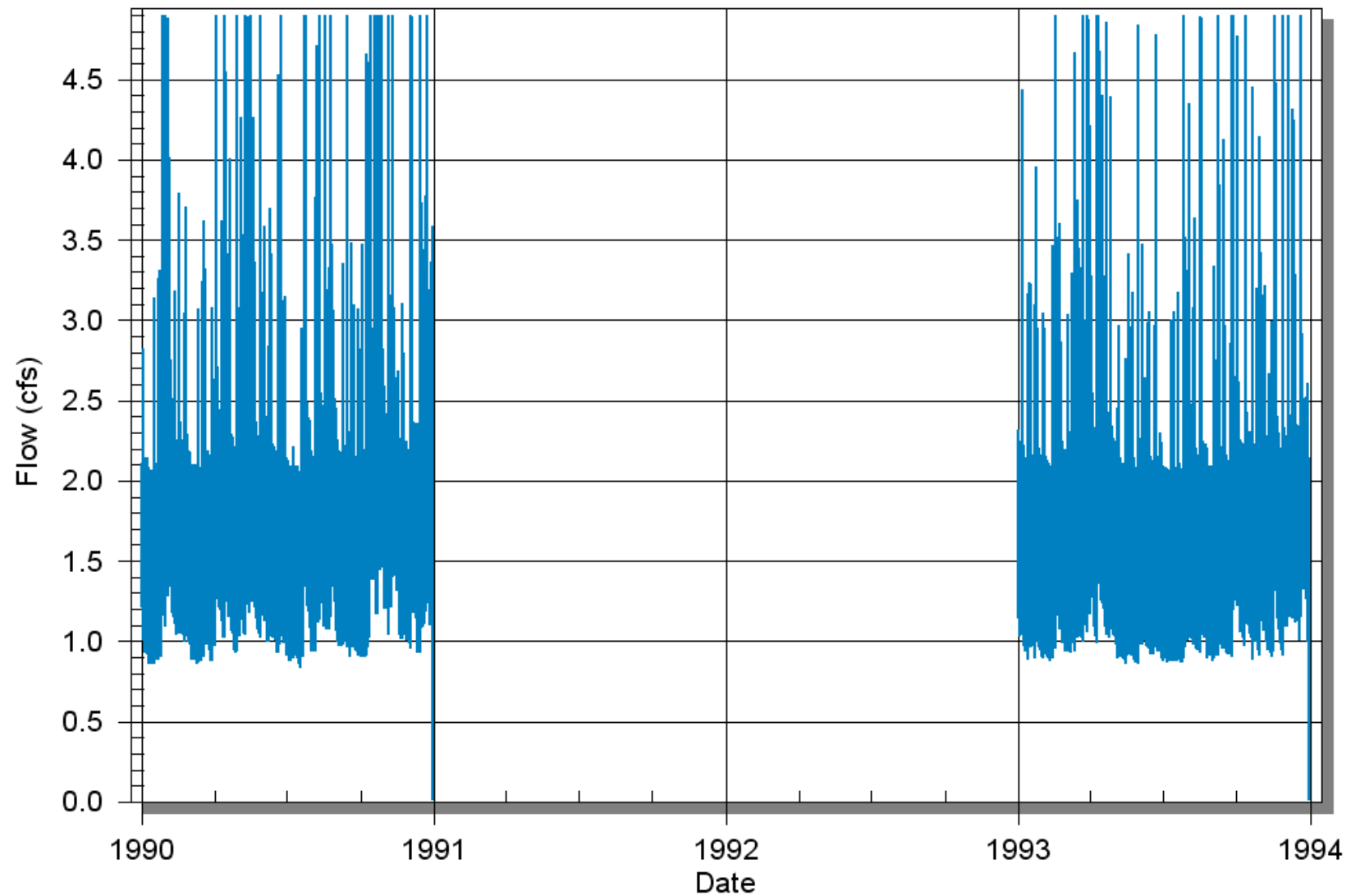
9. Modeled Flow from Deer St Pump Station during 1968 Typical Year - Current Conditions



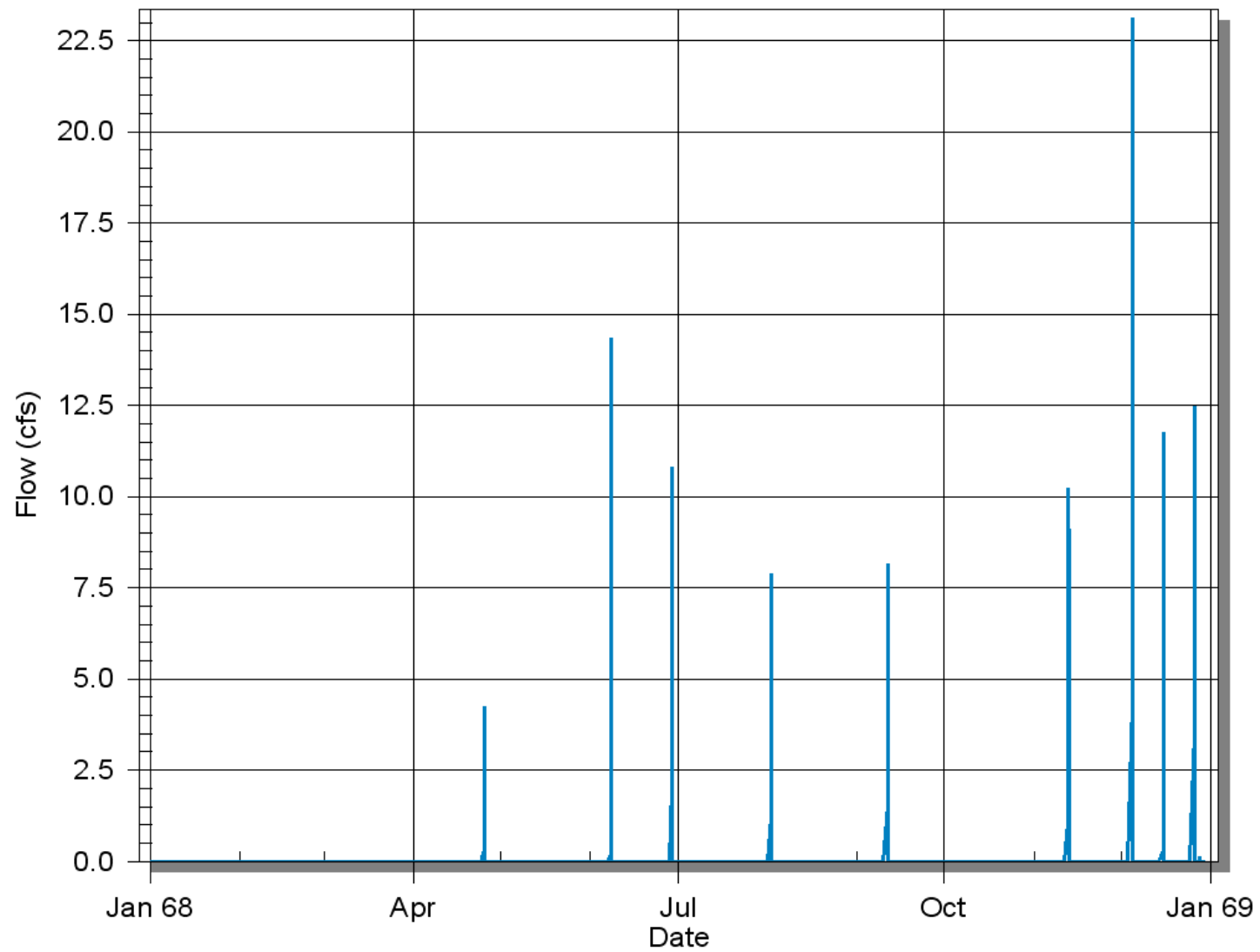
10. Modeled Flow from Deer St Pump Station during 1990, and 1993 Typical Years - Current Conditions



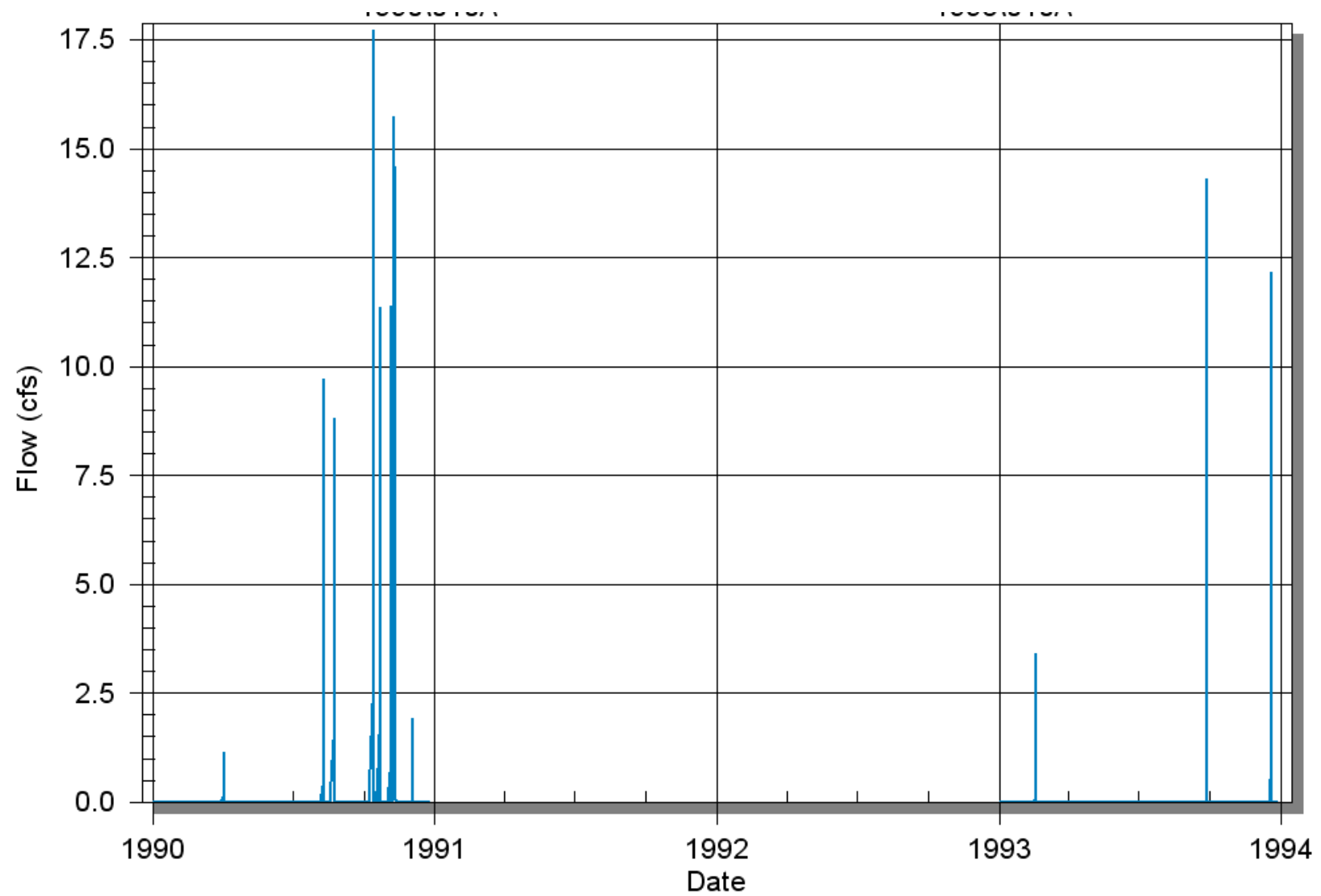
11. Modeled Flow from LaFayette St Pump Station during 1968 Typical Year - Current Conditions



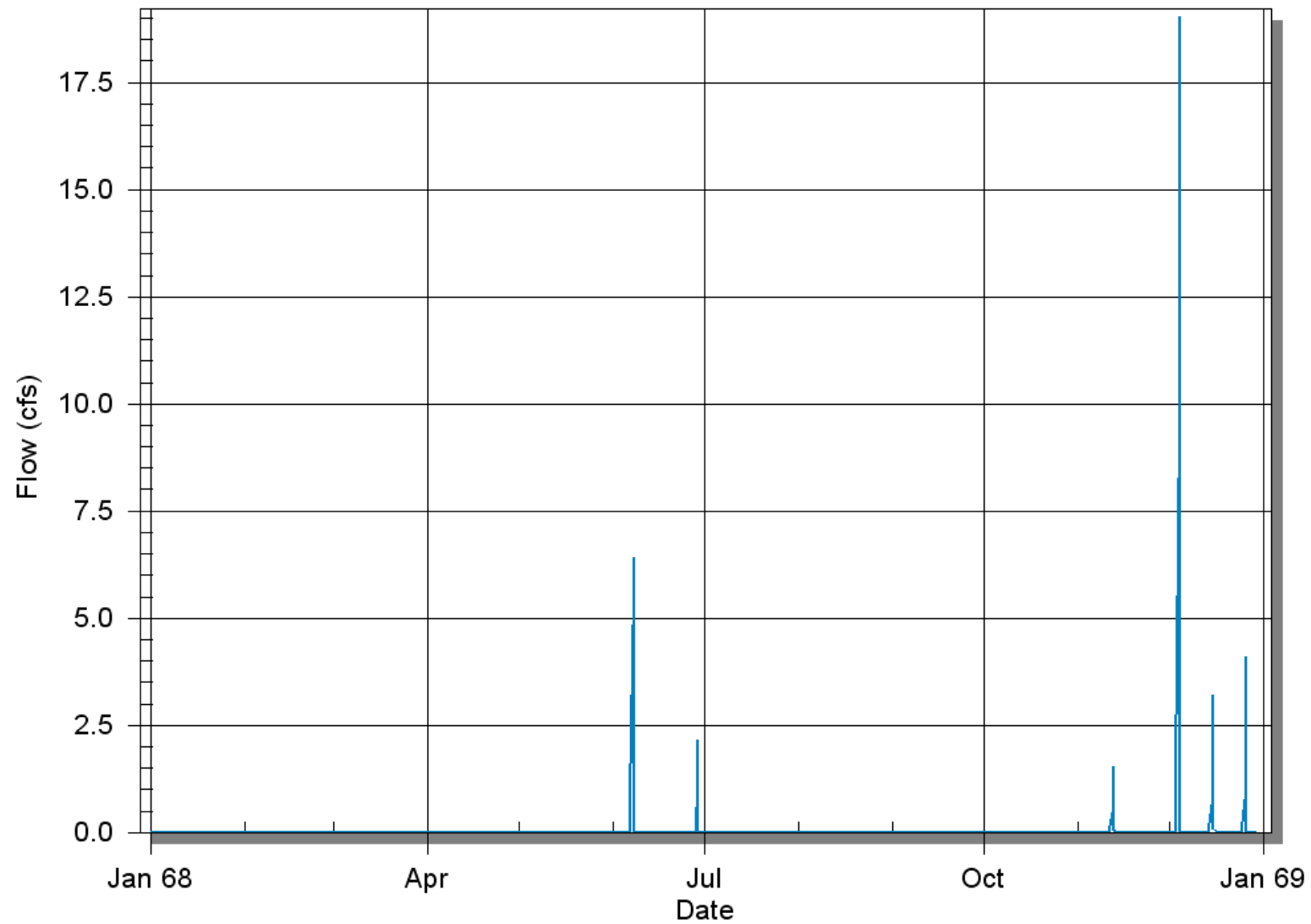
12. Modeled Flow from LaFayette St Pump Station during 1990, and 1993 Typical Years - Current Conditions



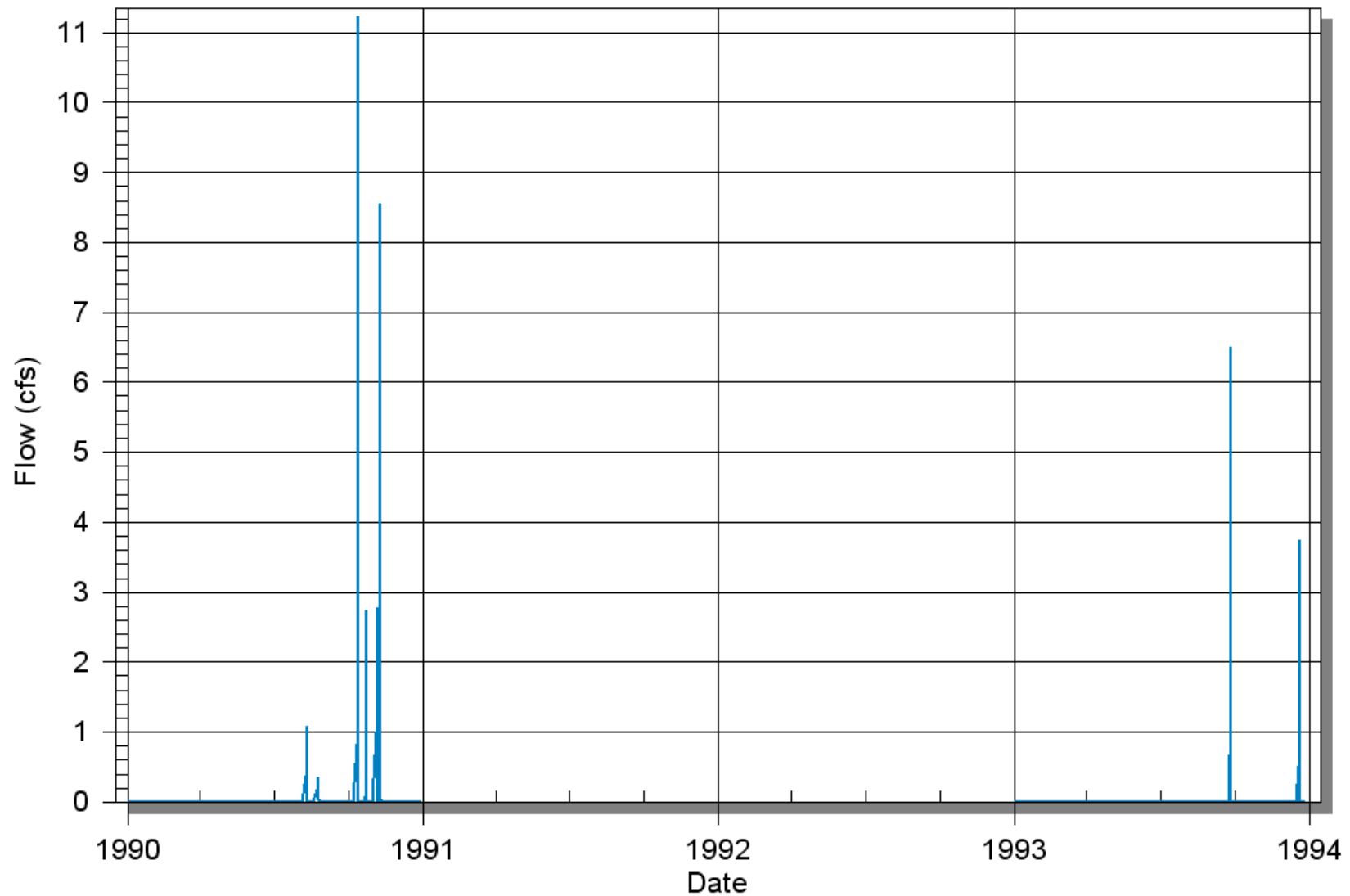
13. Modeled Flow from CSO 010A during 1968 Typical Year - Current Conditions



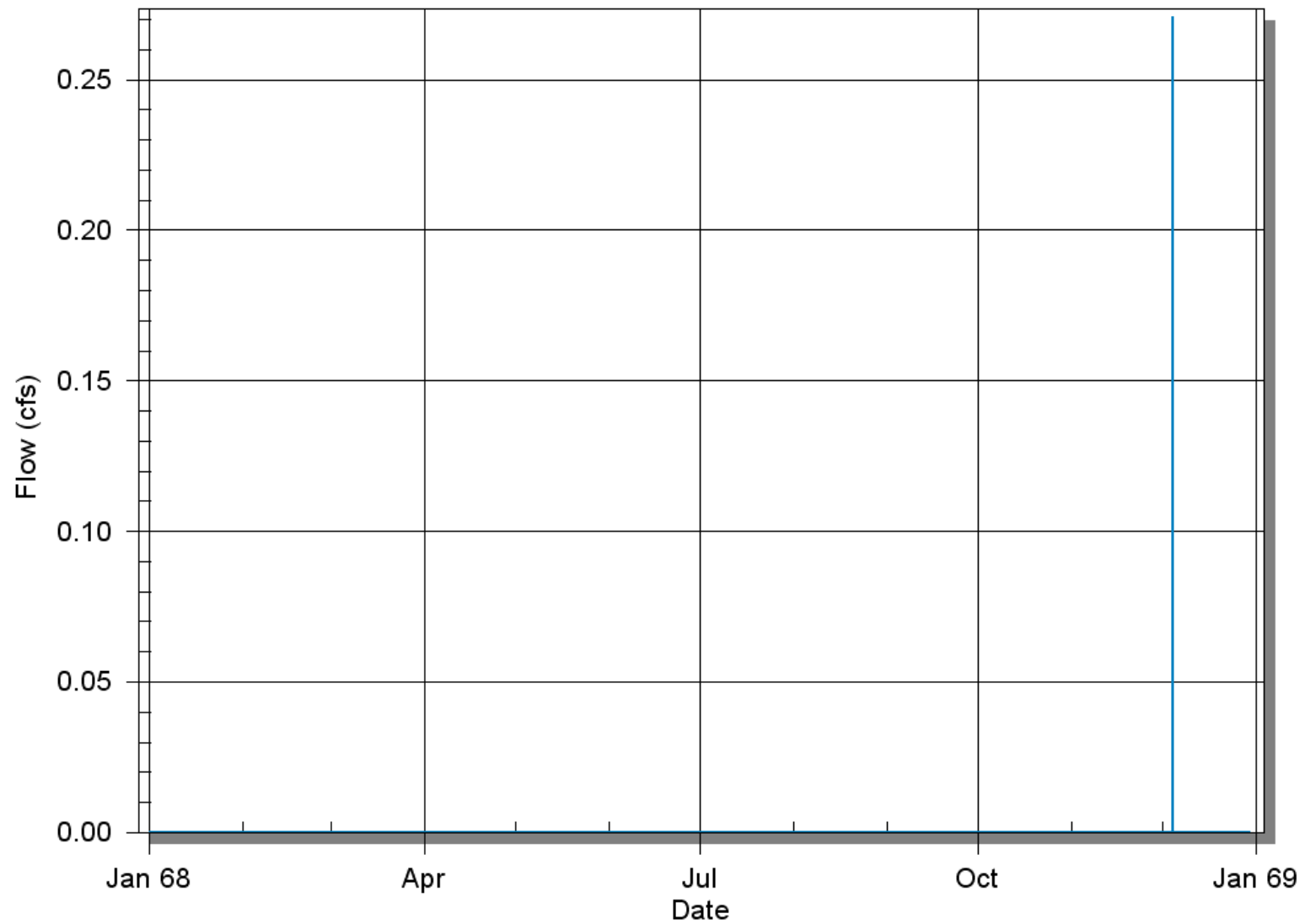
14. Modeled Flow from CSO 010A during 1990, and 1993 Typical Years - Current Conditions



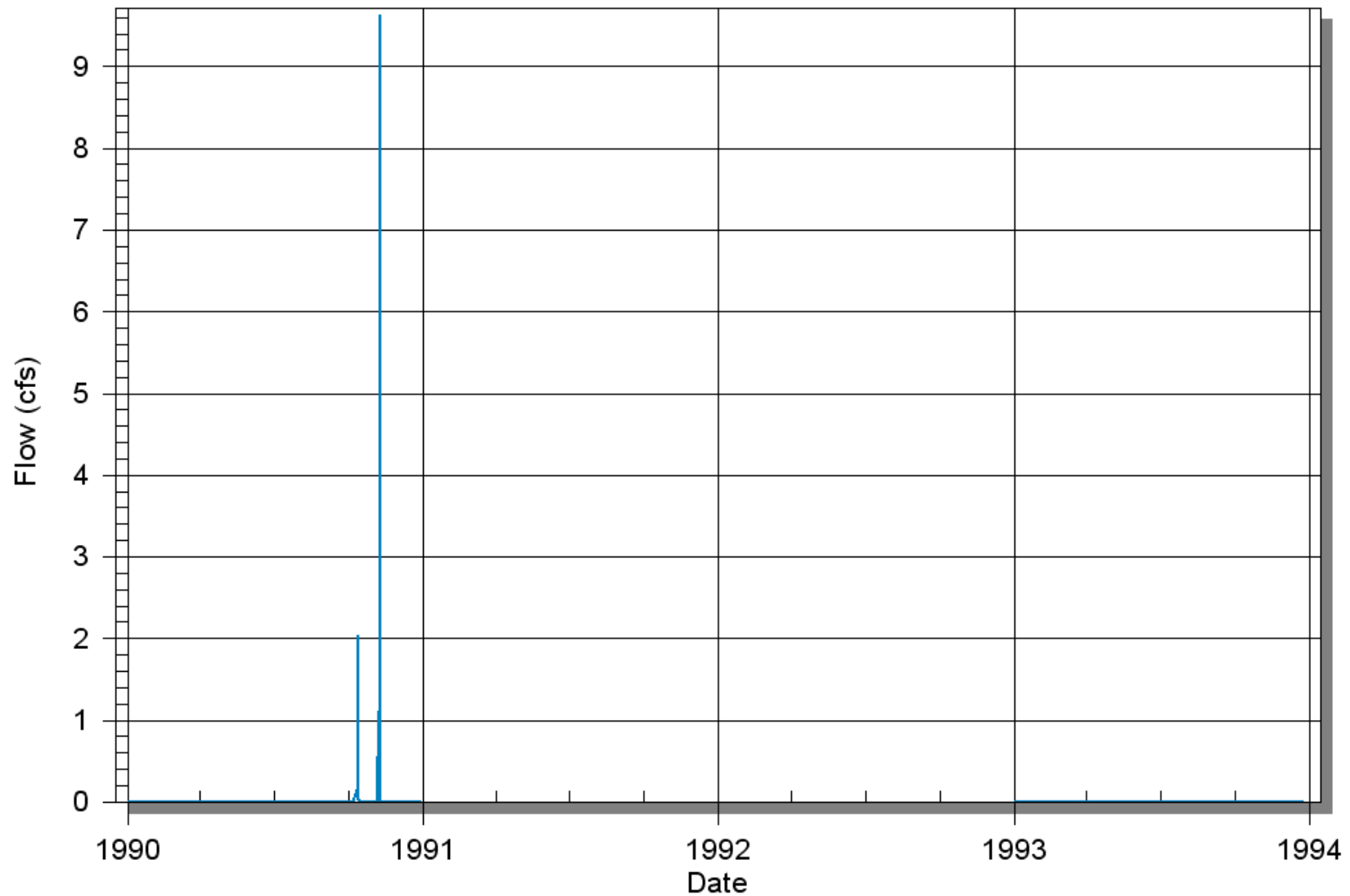
15. Modeled Flow from CSO 010B during 1968 Typical Year - Current Conditions



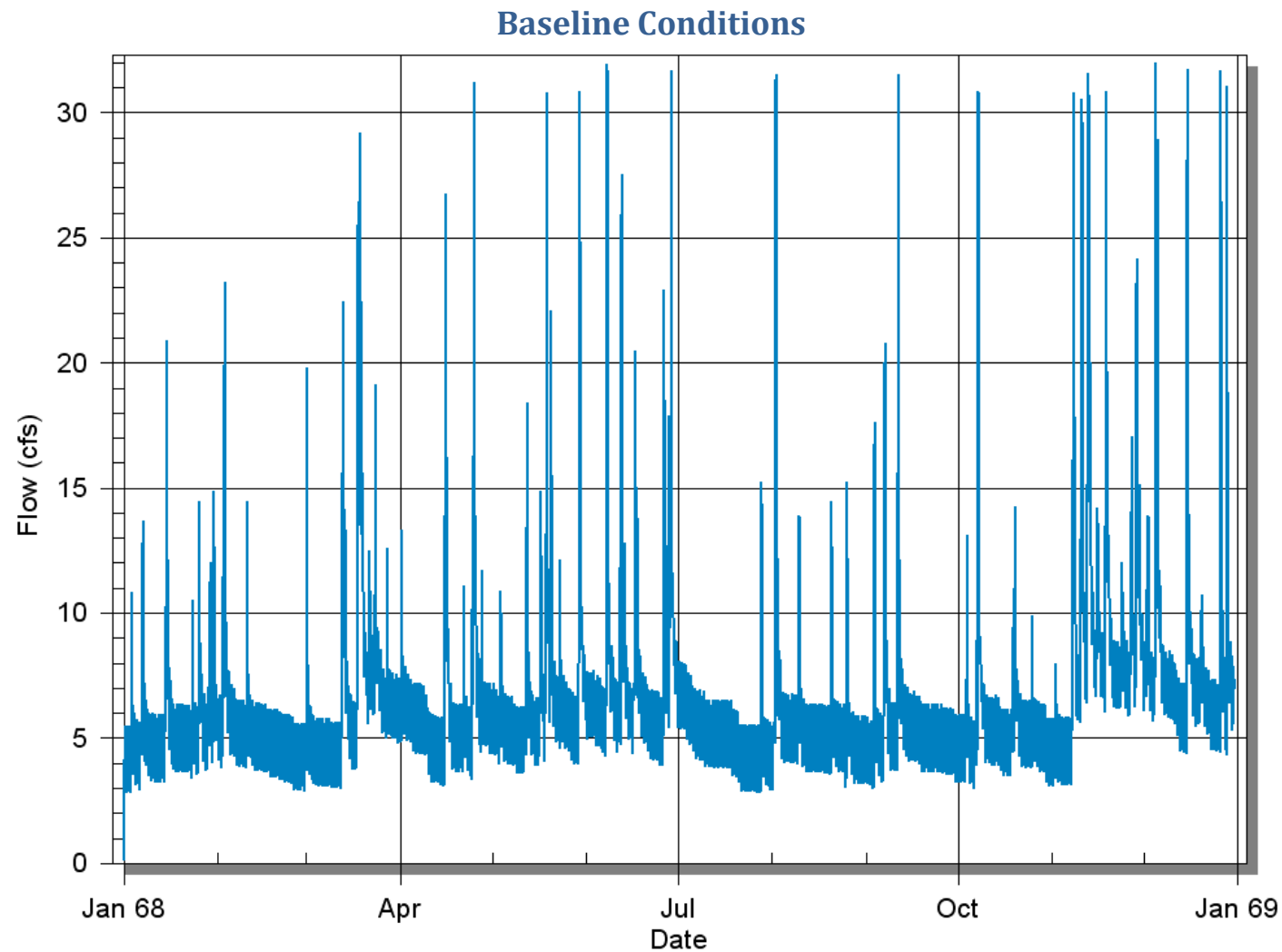
16. Modeled Flow from CSO 010B during 1990, and 1993 Typical Years - Current Conditions



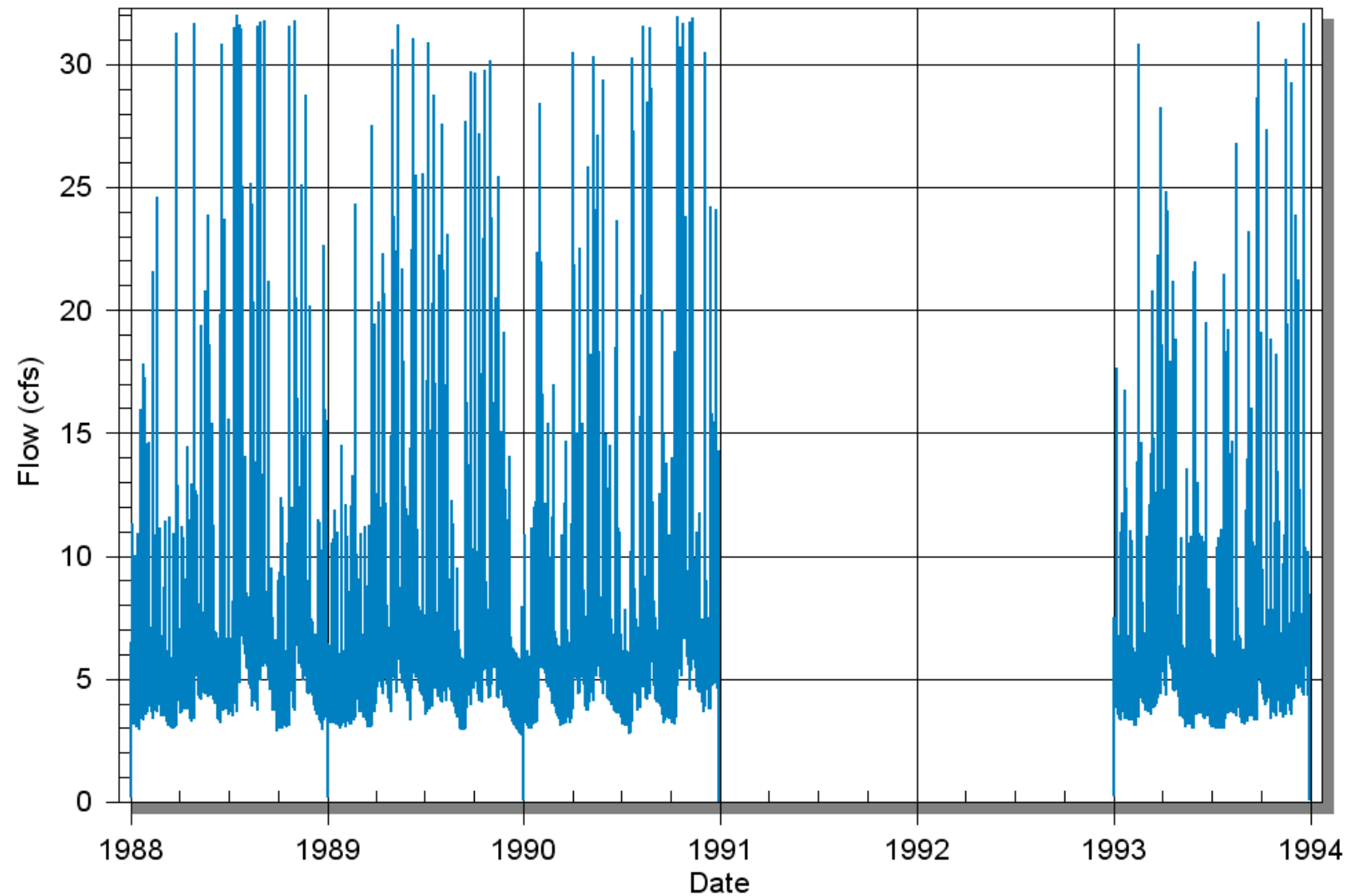
17. Modeled Flow from CSO 013 during 1968 Typical Year - Current Conditions



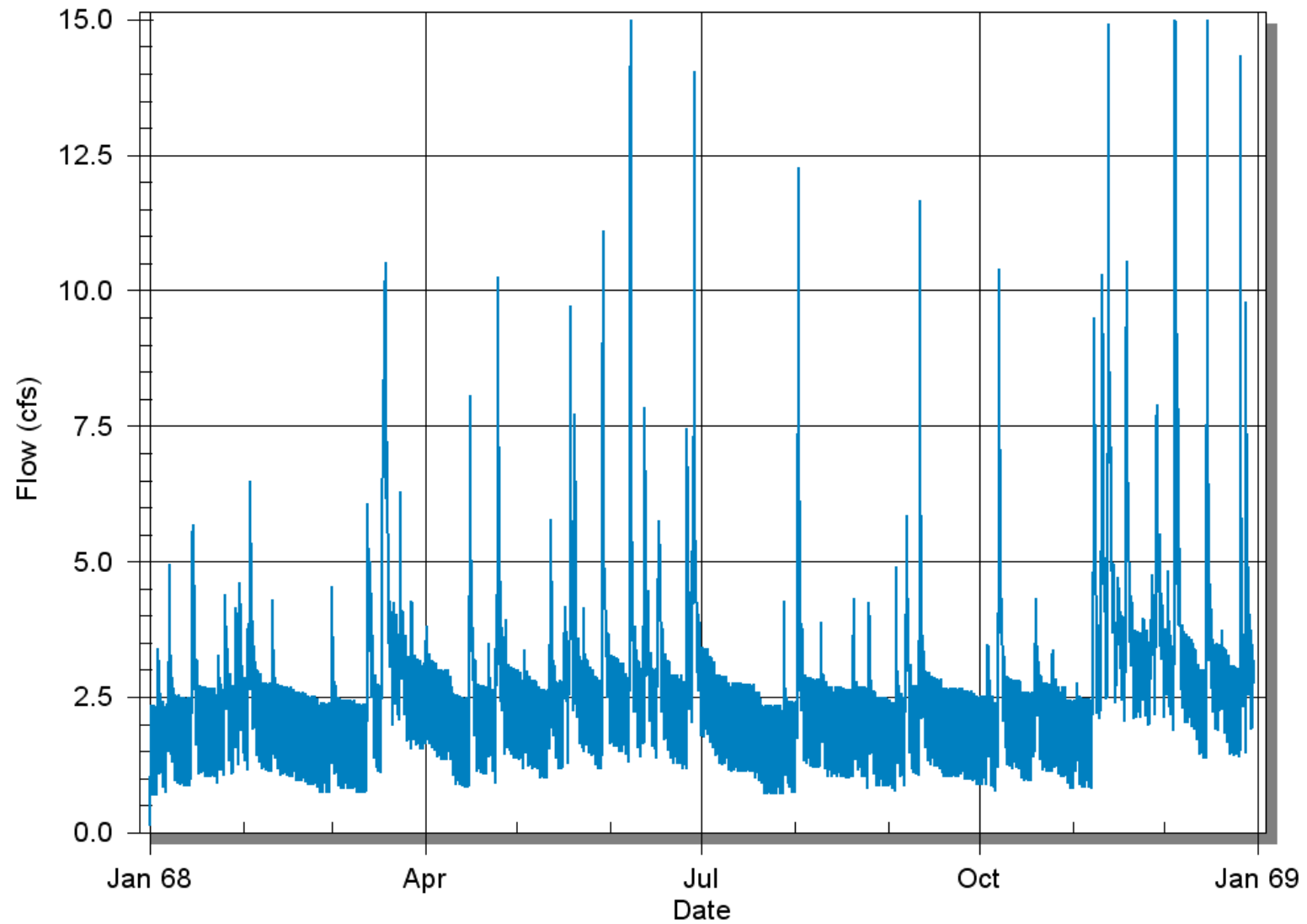
18. Modeled Flow from CSO 013 during 1990, and 1993 Typical Years - Current Conditions



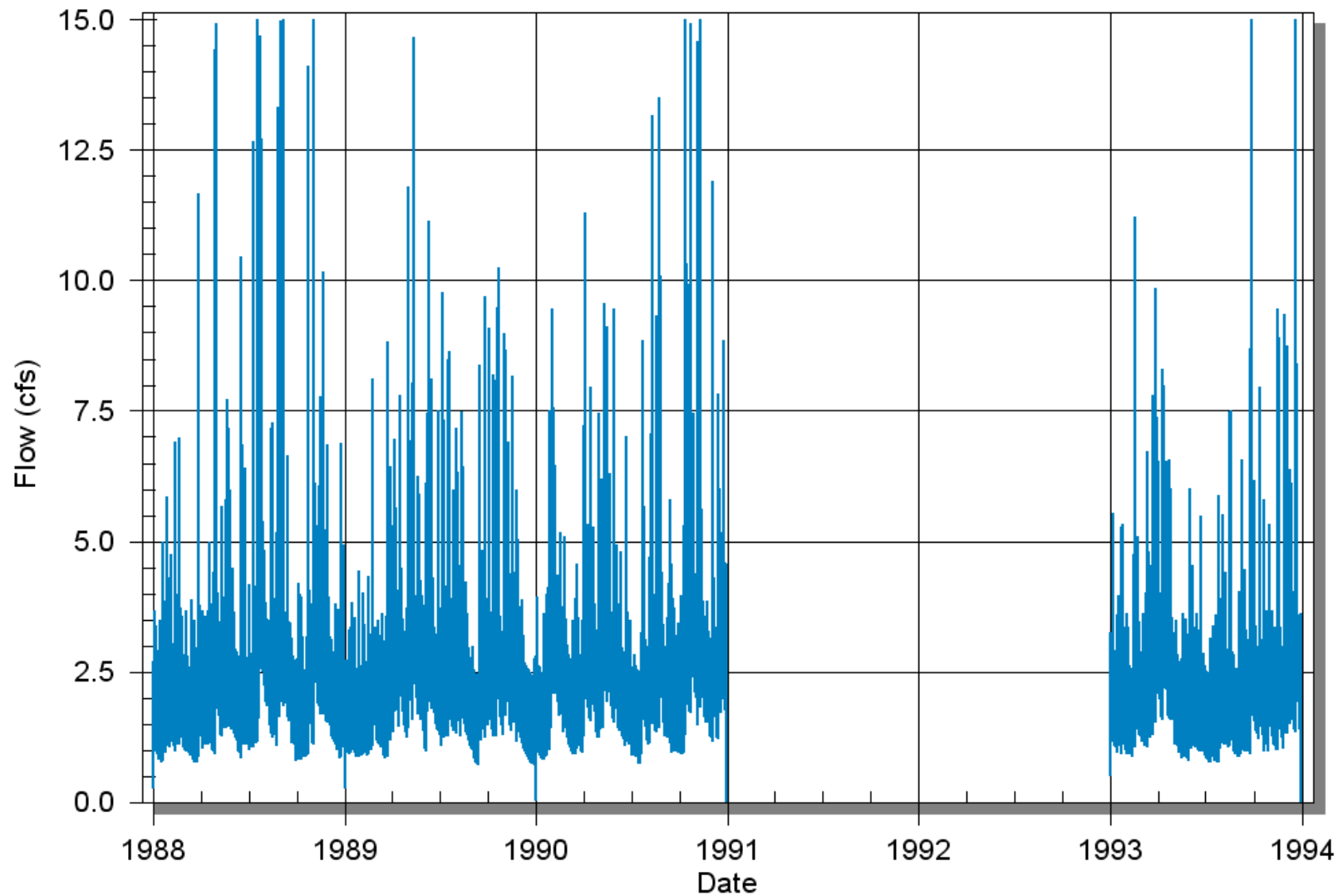
19. Modeled Flow from Mechanic St Pump Station during 1968 Typical Year - Baseline Conditions



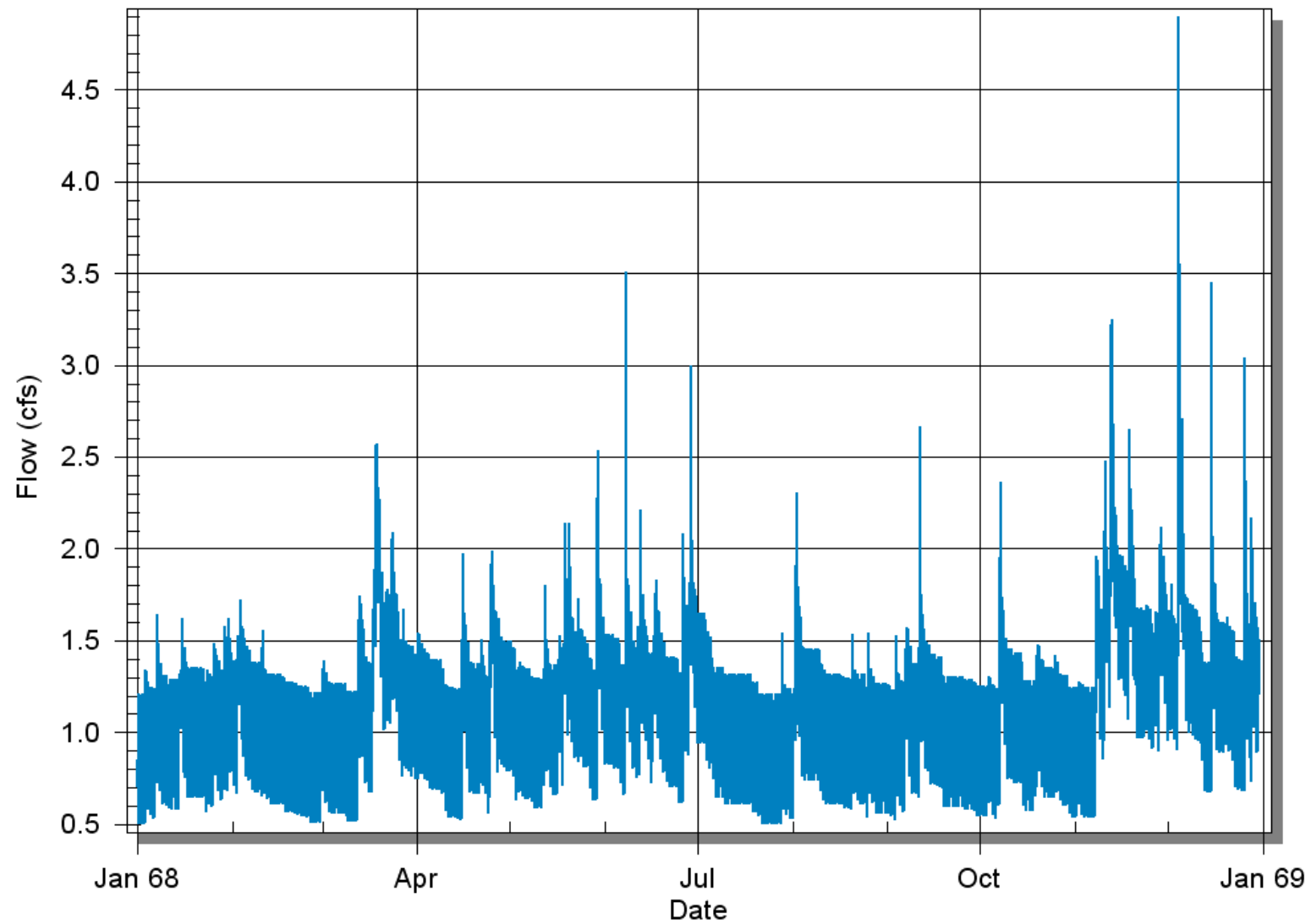
20. Modeled Flow from Mechanic St Pump Station during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions



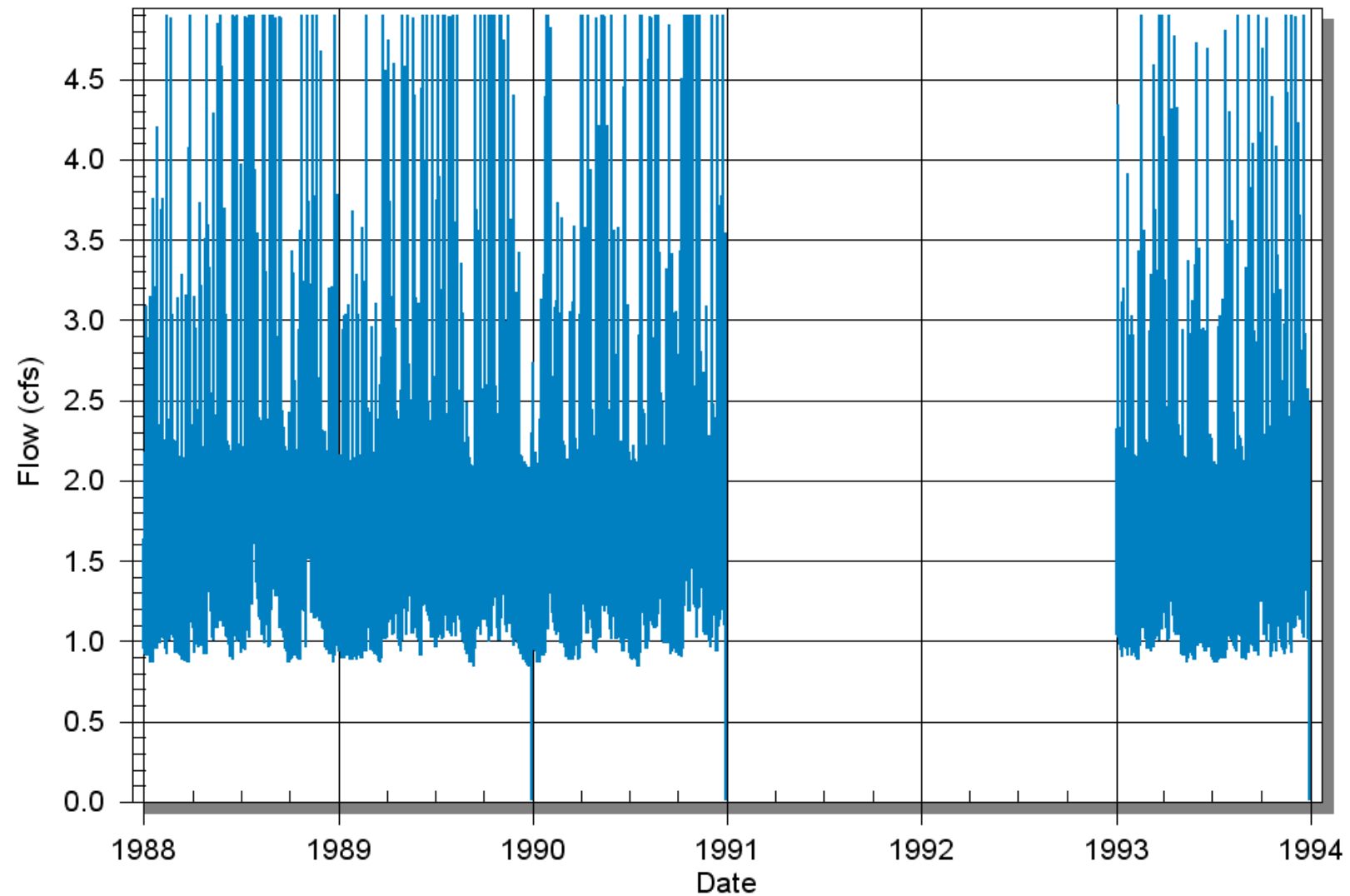
21. Modeled Flow from Deer St Pump Station during 1968 Typical Year - Baseline Conditions



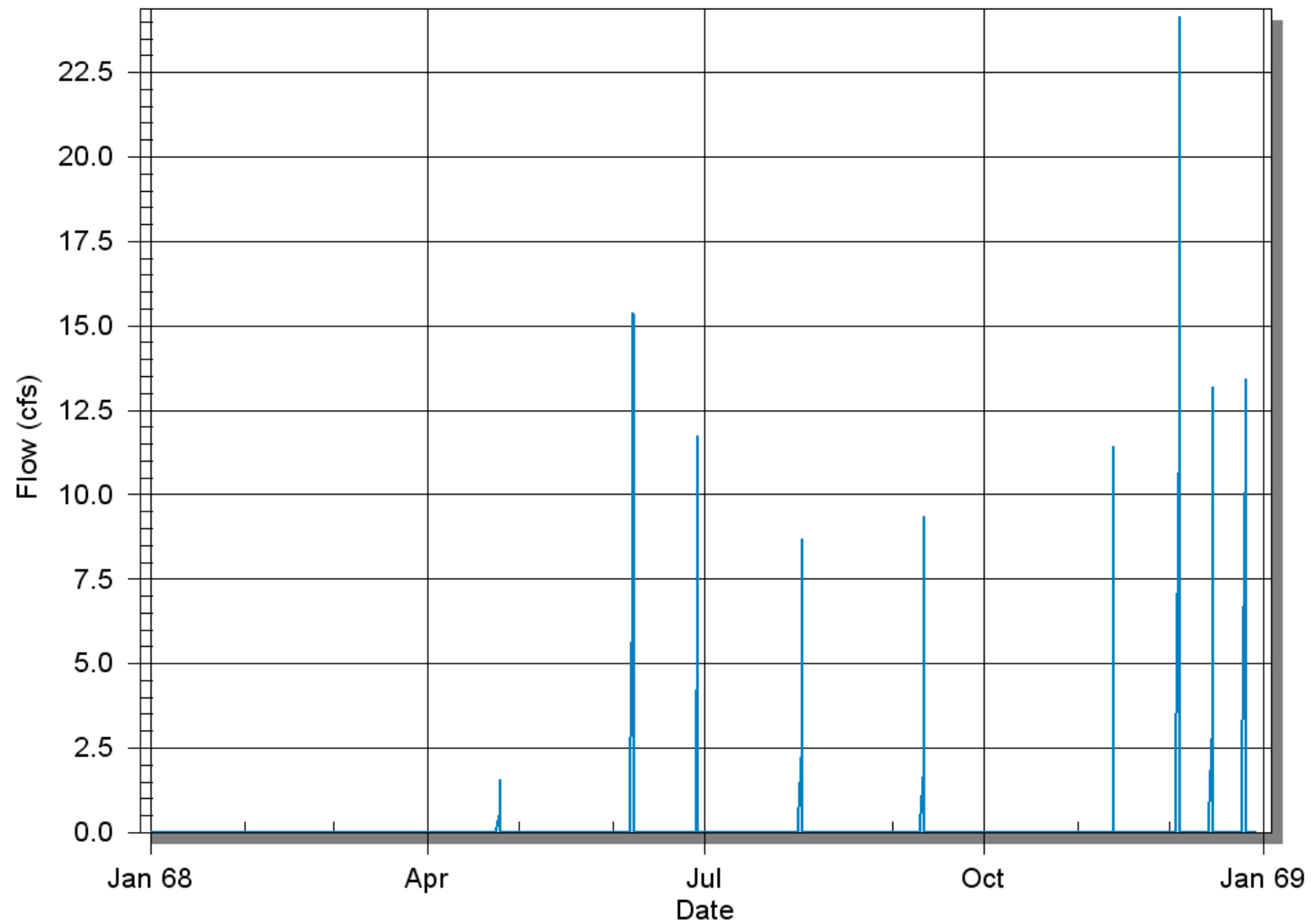
22. Modeled Flow from Deer St Pump Station during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions



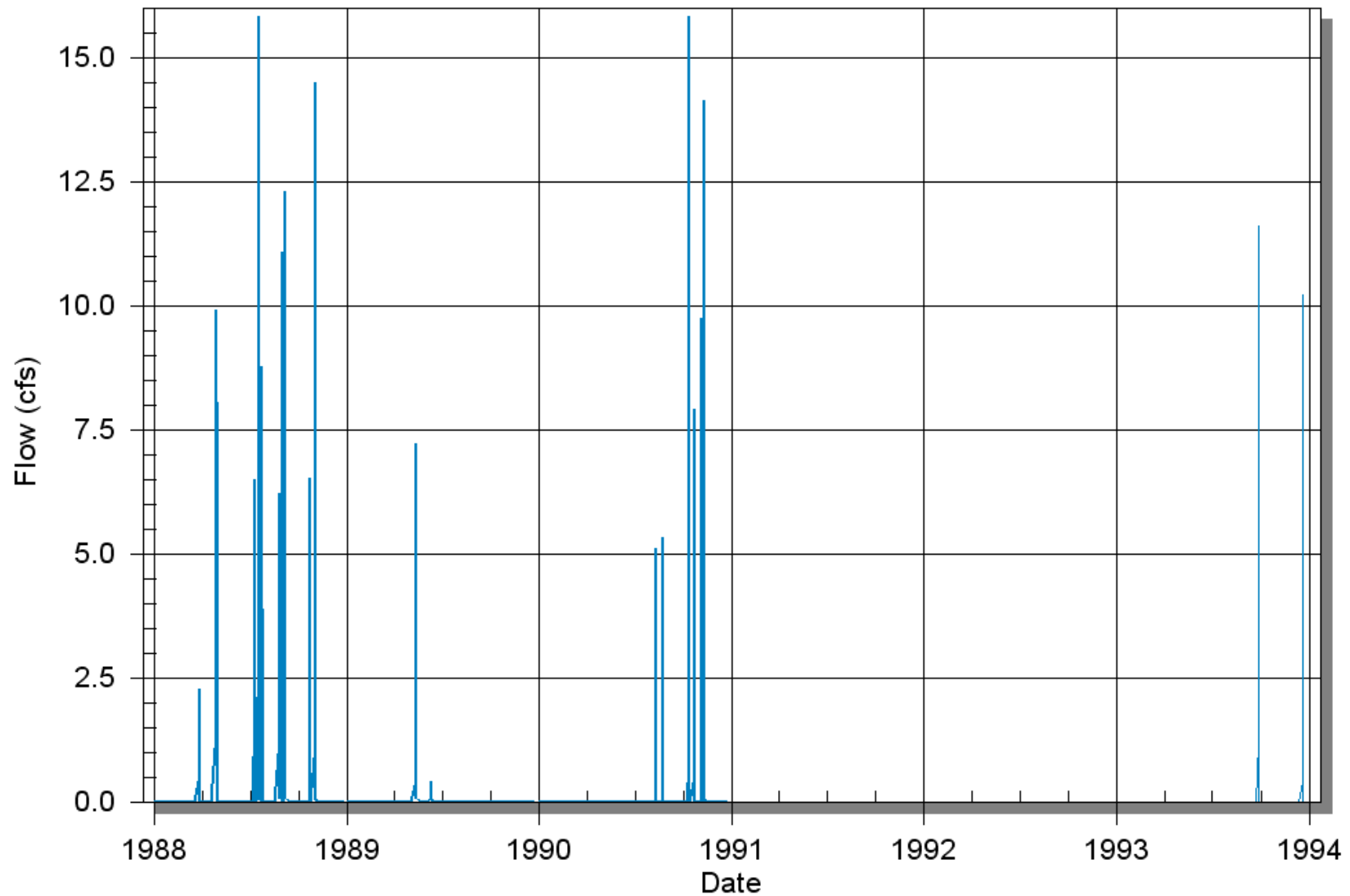
23. Modeled Flow from LaFayette St Pump Station during 1968 Typical Year - Baseline Conditions



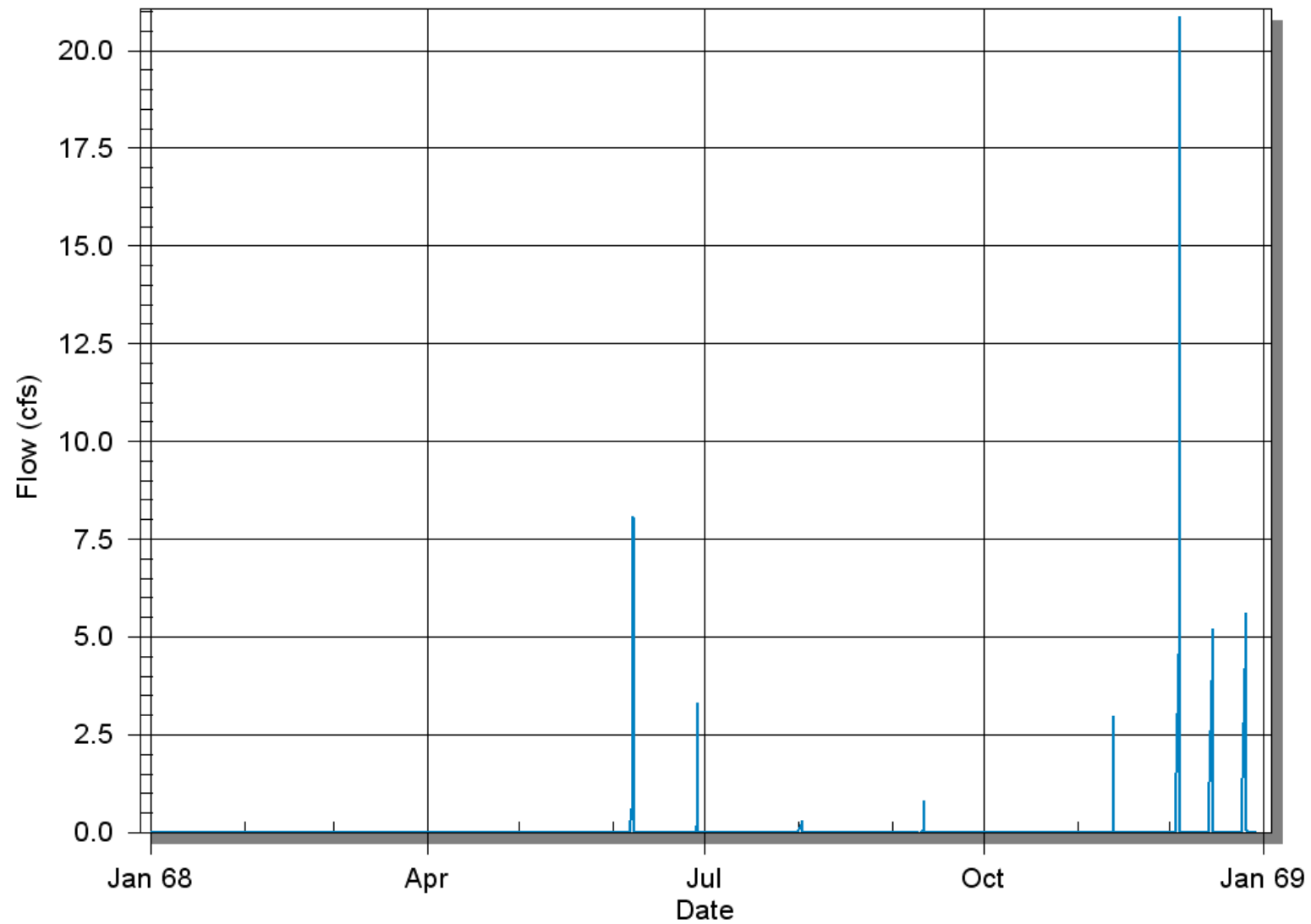
24. Modeled Flow from LaFayette St Pump Station during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions



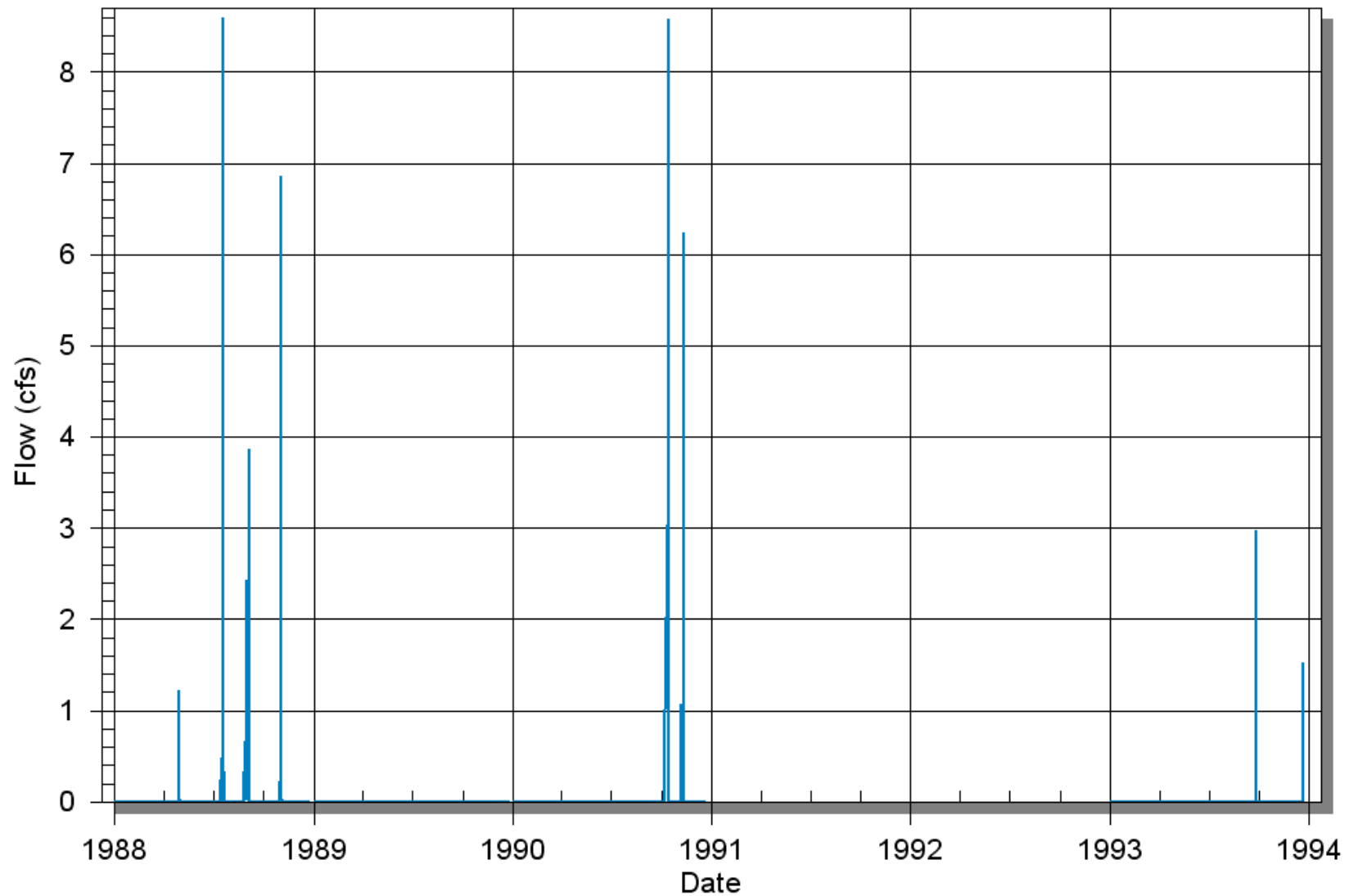
25. Modeled Flow from CSO 010A during 1968 Typical Year - Baseline Conditions



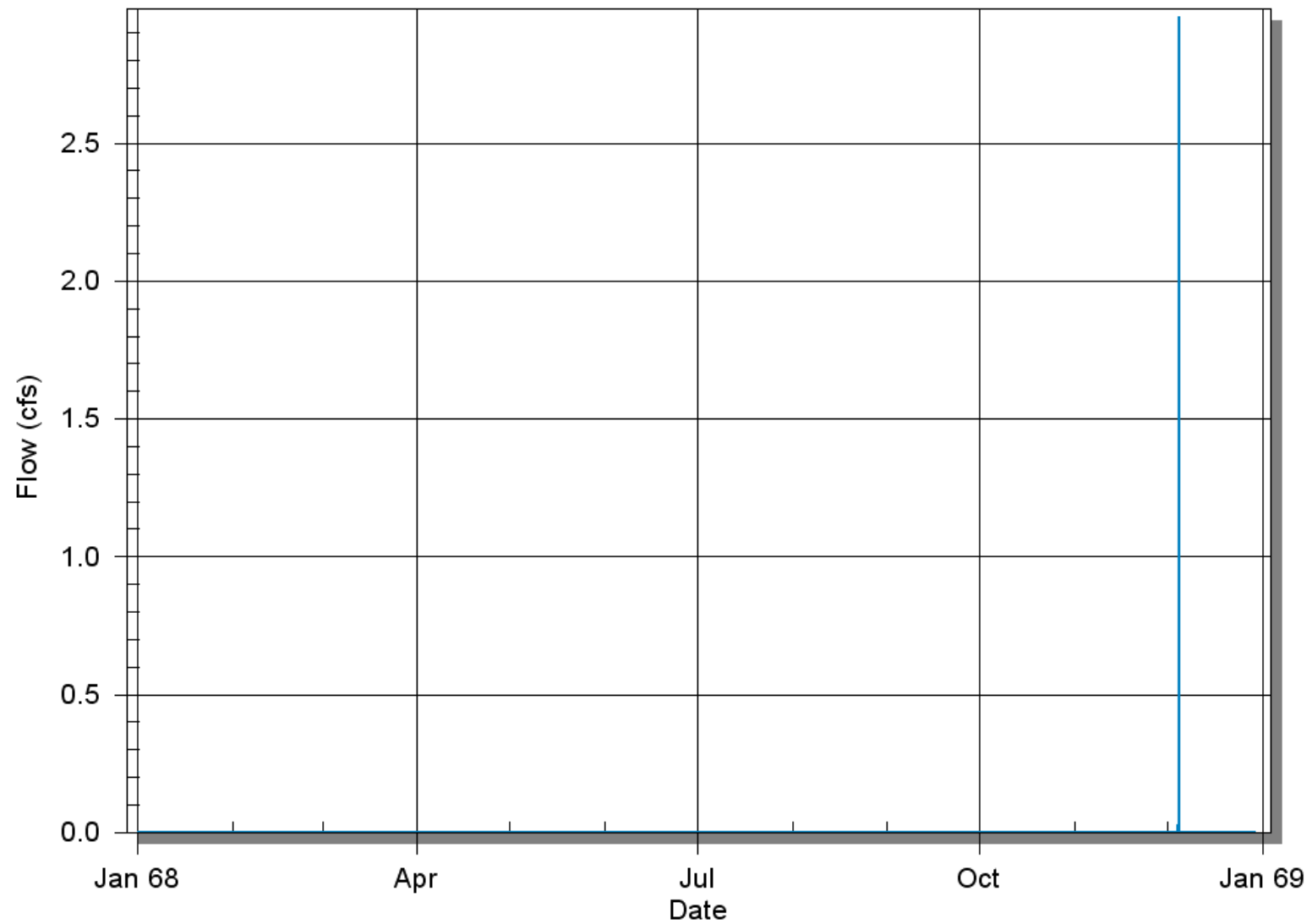
26. Modeled Flow from CSO 010A during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions



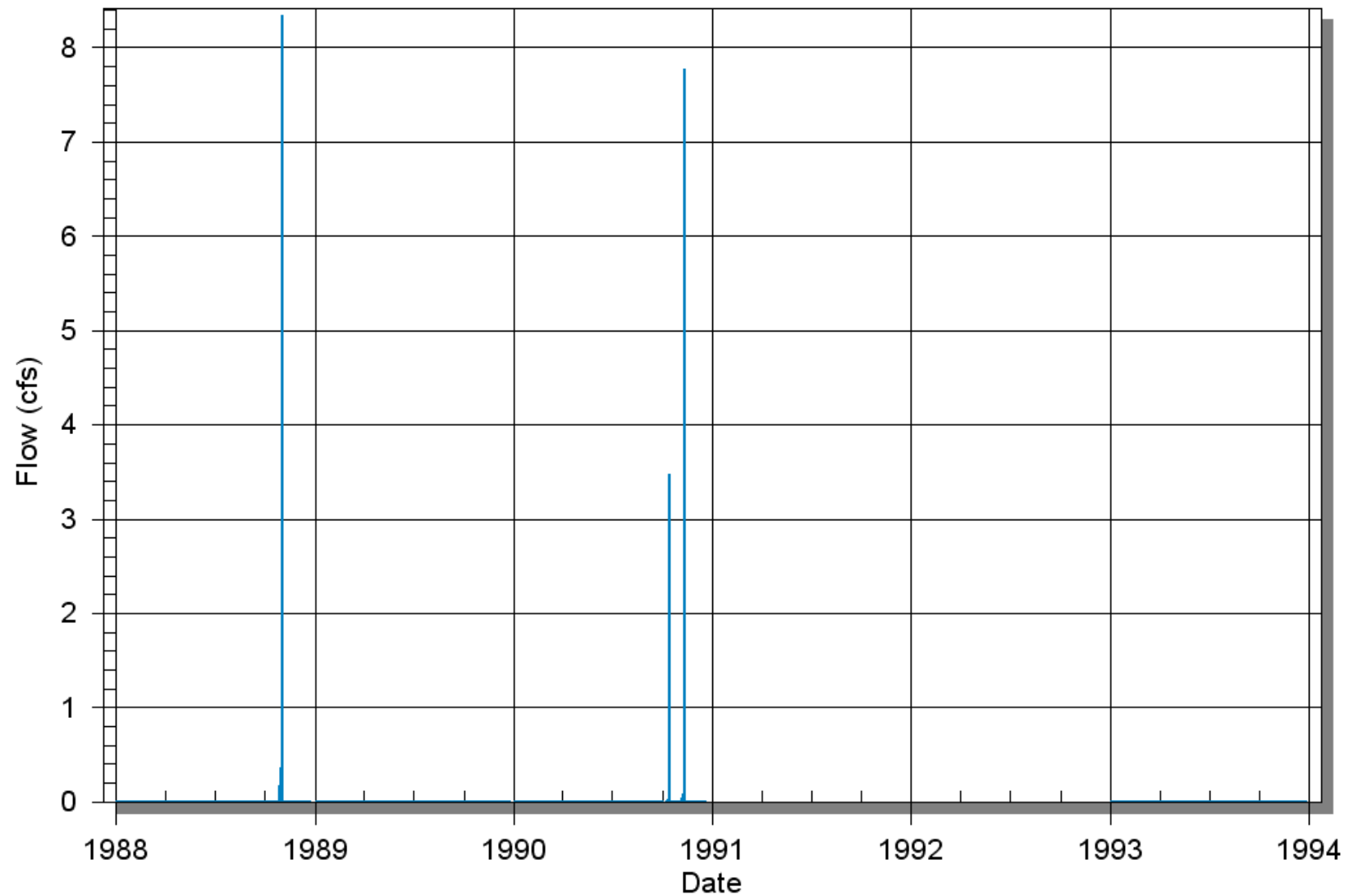
27. Modeled Flow from CSO 010B during 1968 Typical Year - Baseline Conditions



28. Modeled Flow from CSO 010B during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions

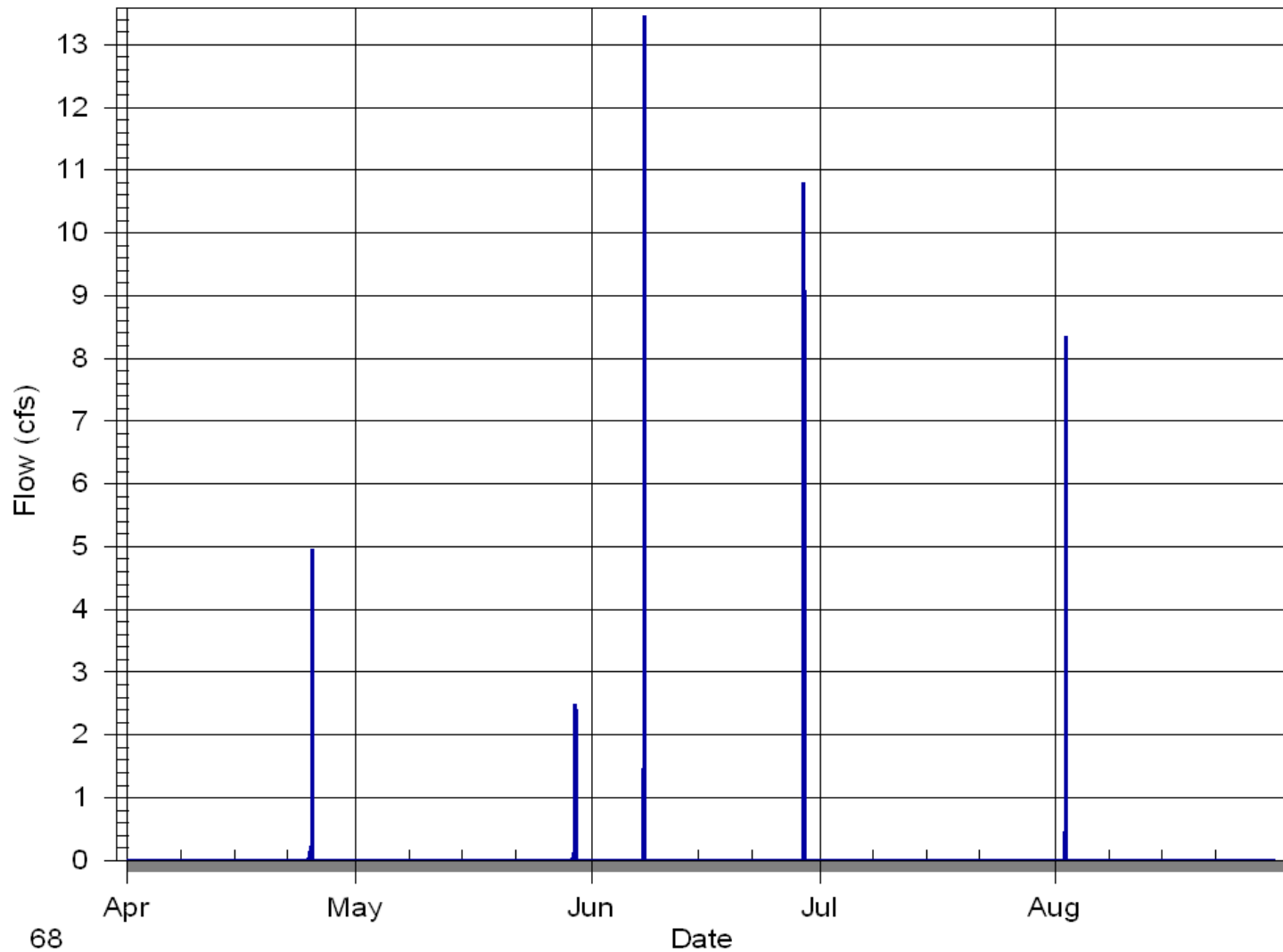


29. Modeled Flow from CSO 013 during 1968 Typical Year - Baseline Conditions

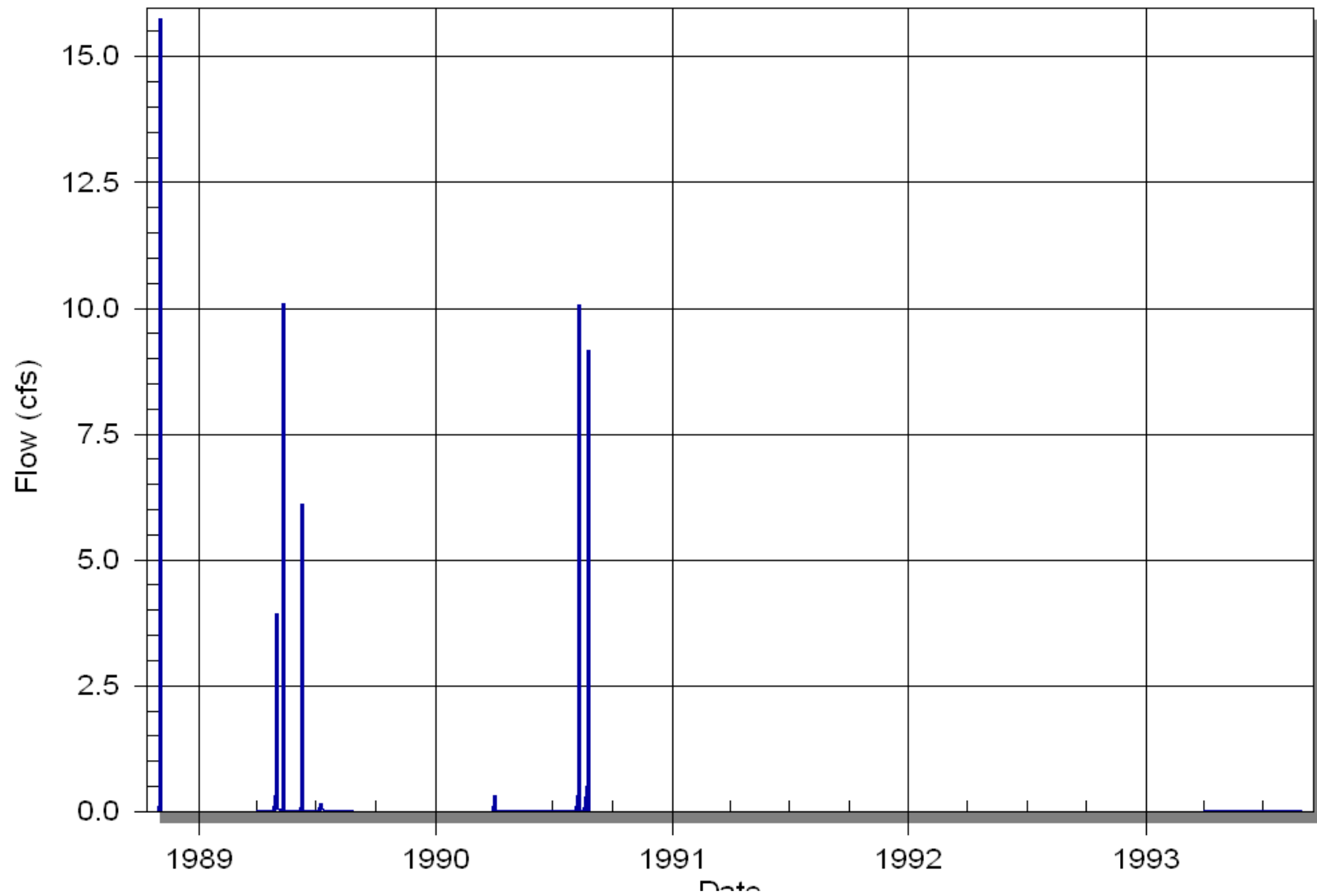


30. Modeled Flow from CSO 013 during 1988, 1989, 1990, and 1993 Typical Years - Baseline Conditions

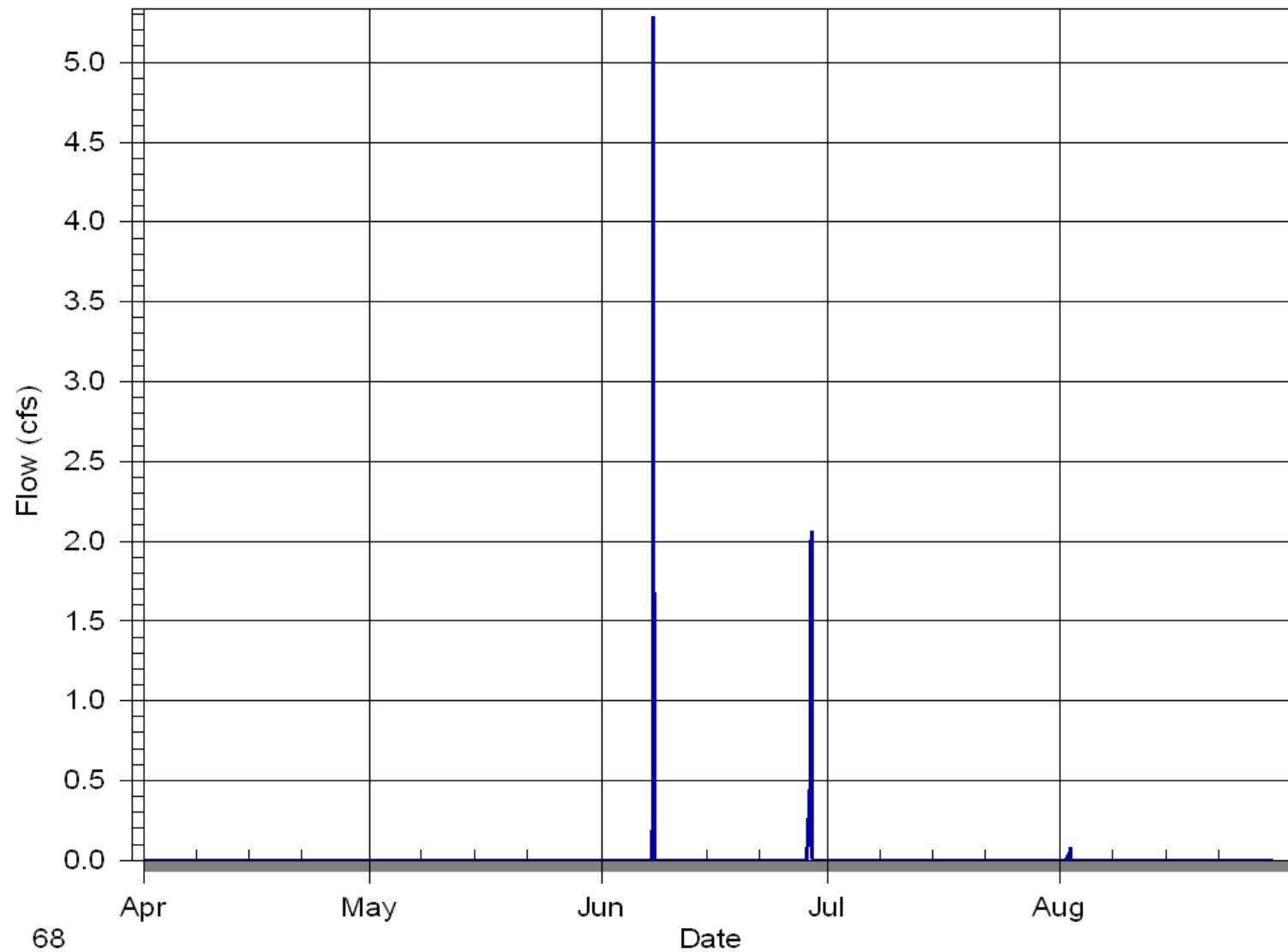
Model Scenario 1



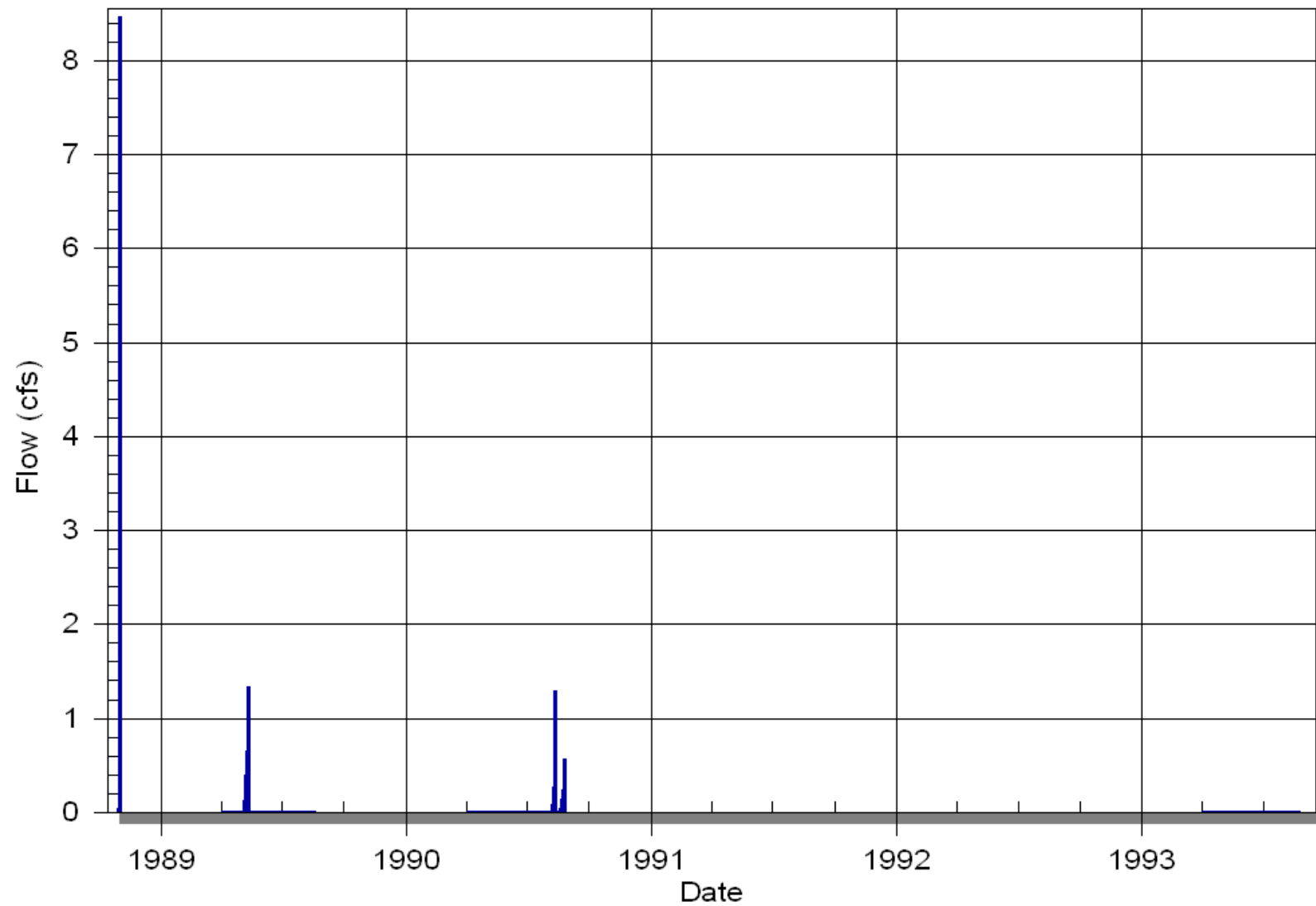
31. Modeled Flow from CSO 010A during 1968 Typical Year - Scenario 1



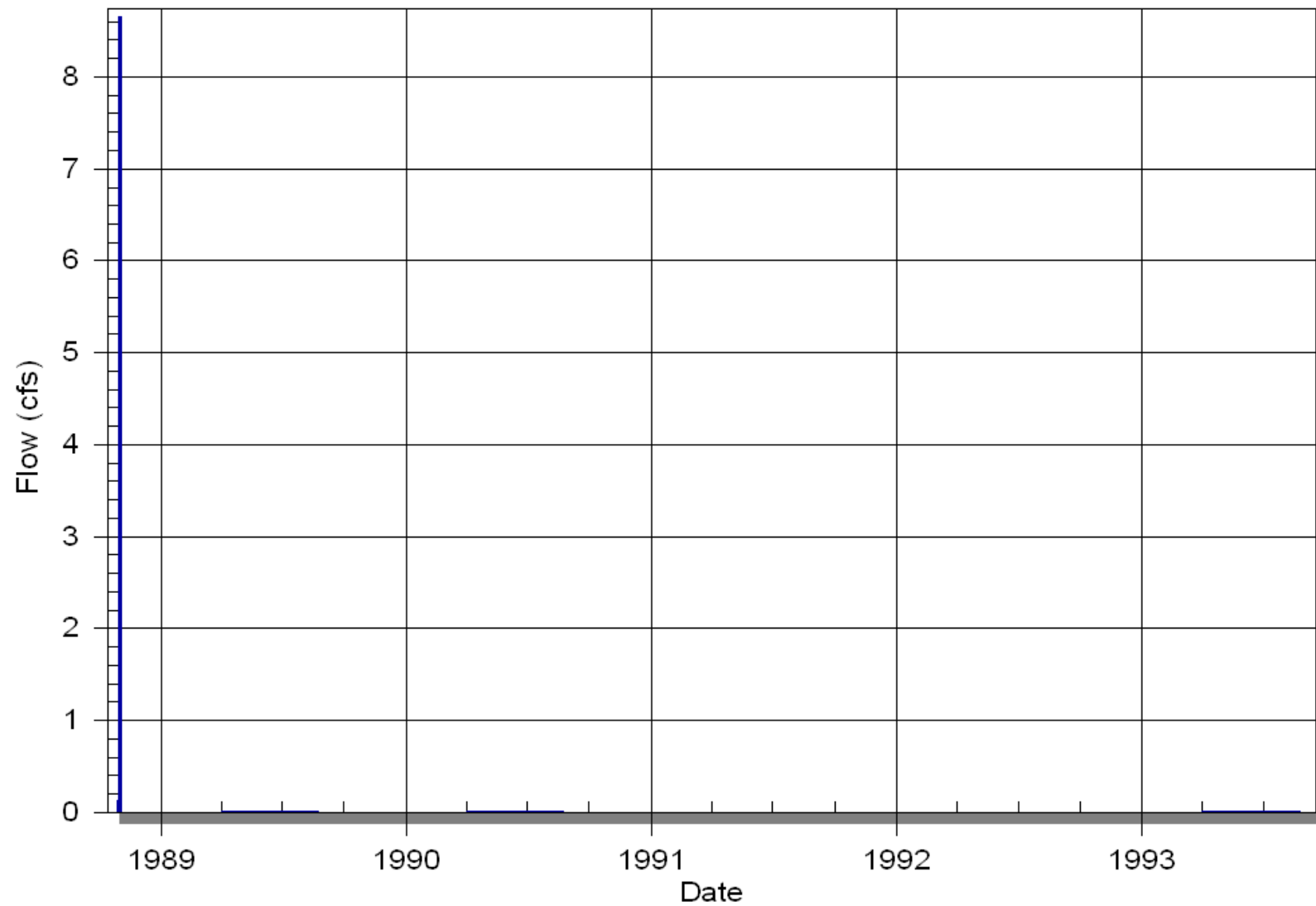
32. Modeled Flow from CSO 010A during 1988, 1989, 1990, and 1993 Typical Years - Scenario 1



33. Modeled Flow from CSO 010B during 1968 Typical Year - Scenario 1

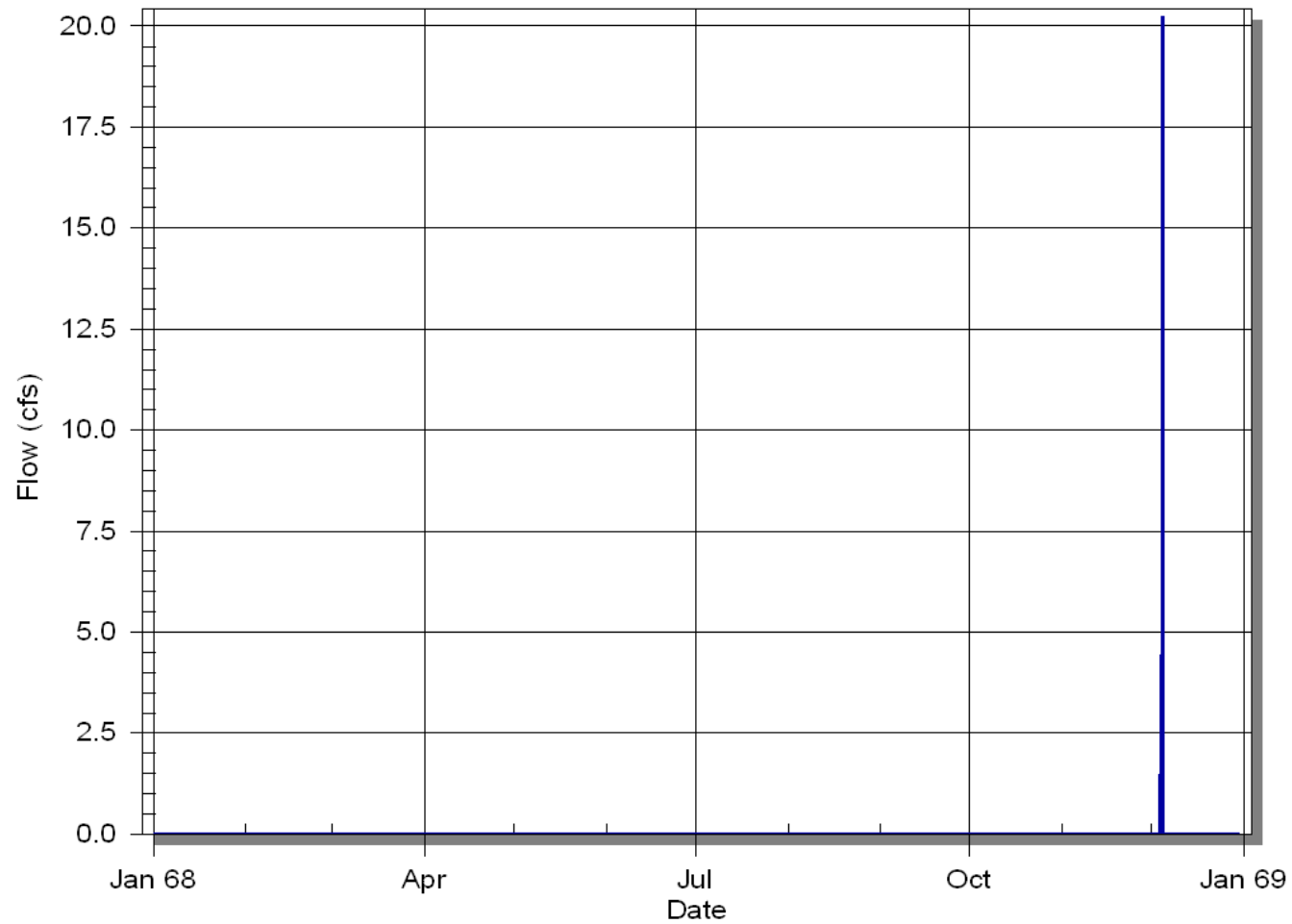


34. Modeled Flow from CSO 010B during 1988, 1989, 1990, and 1993 Typical Years - Scenario 1

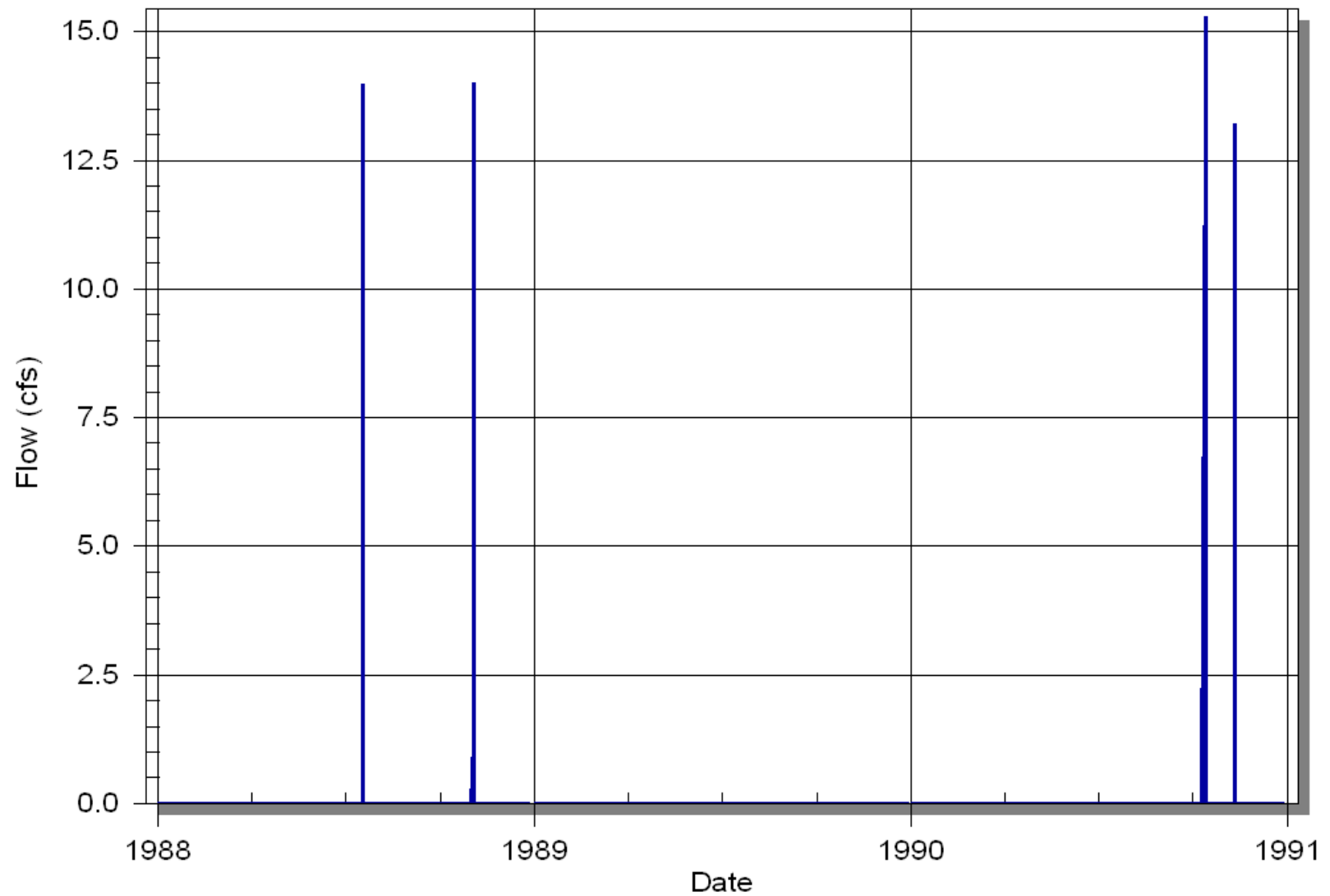


35. Modeled Flow from CSO 013 during 1988, 1989, 1990, and 1993 Typical Years - Scenario 1

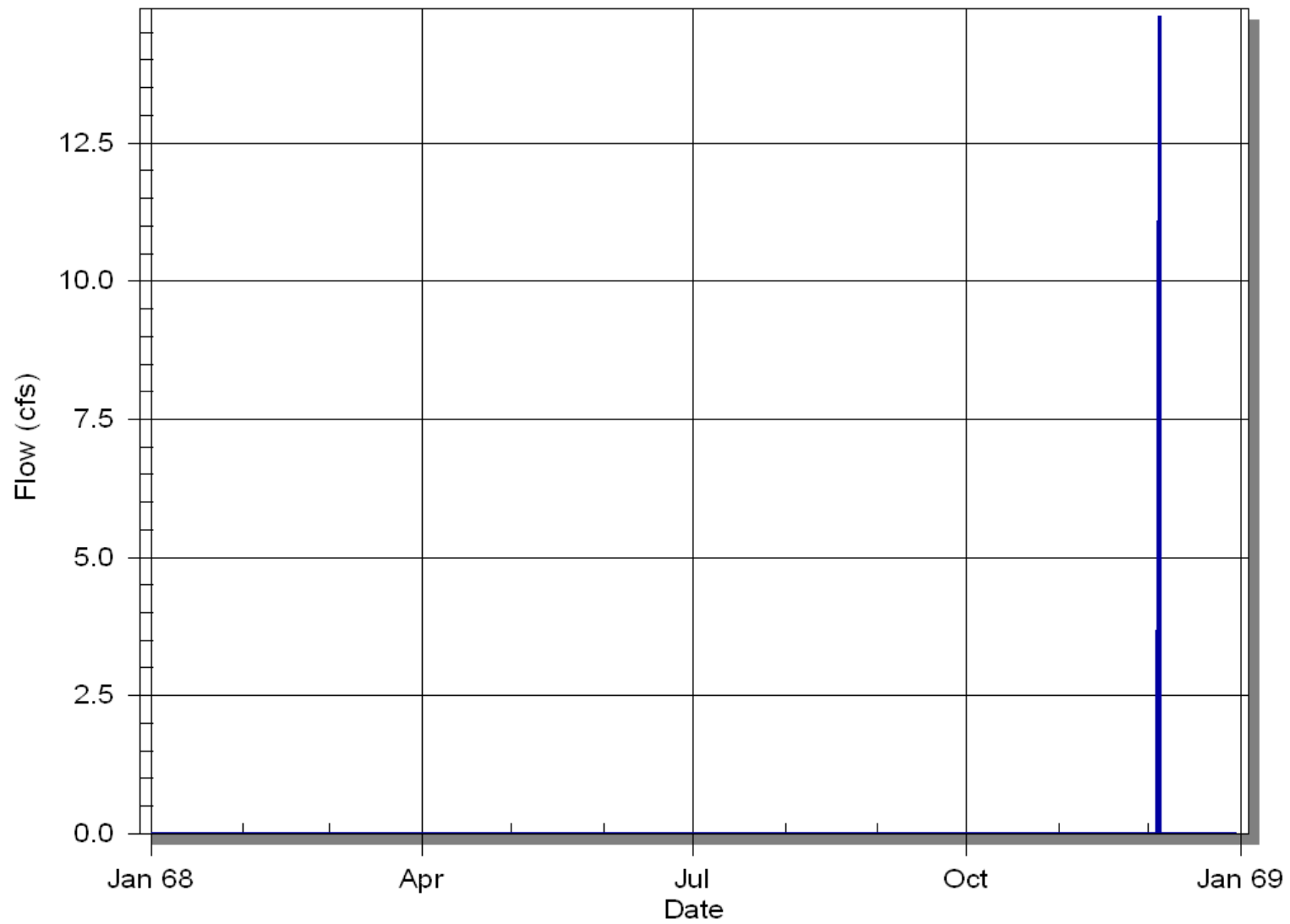
Model Scenario 3



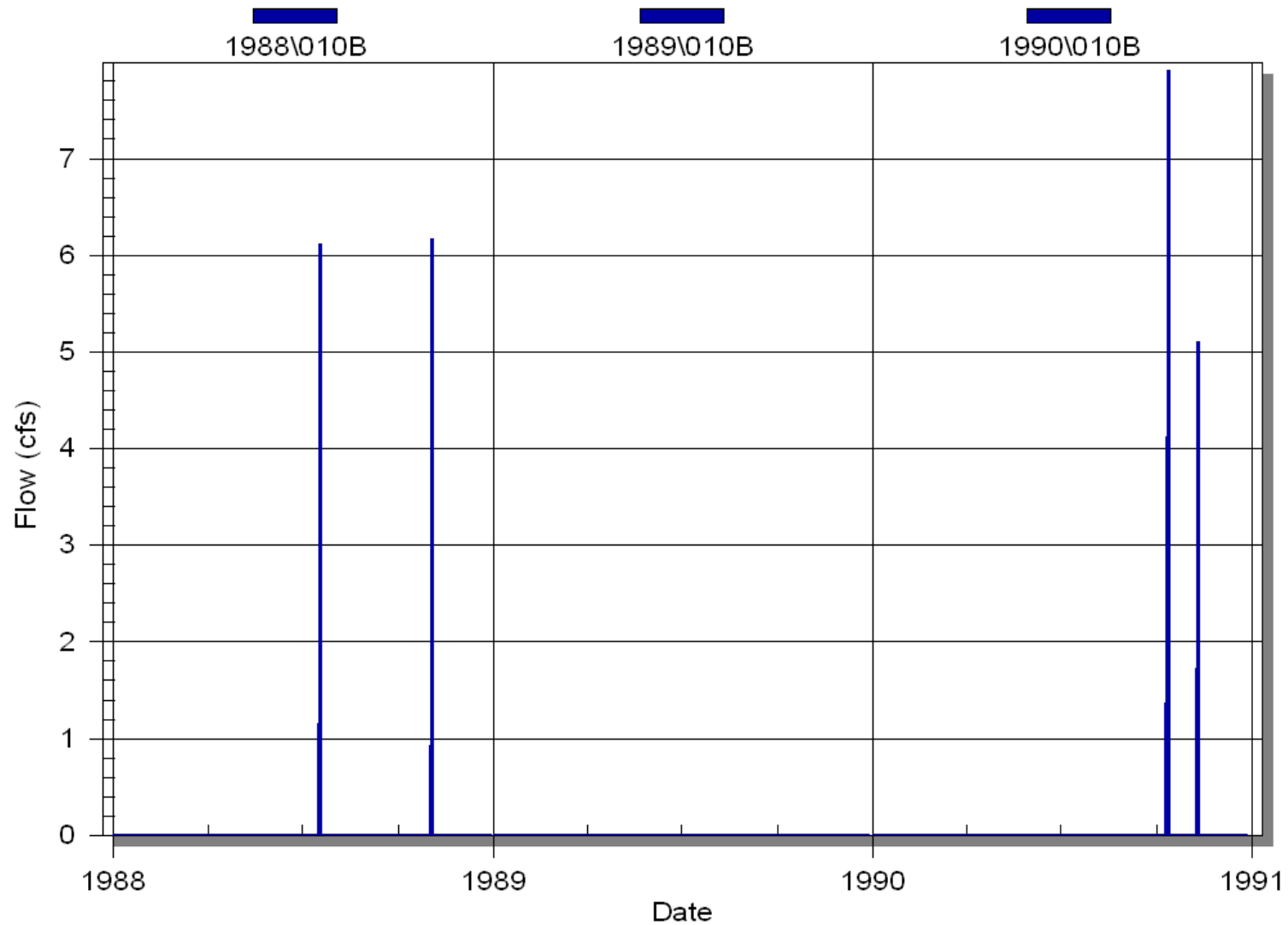
36. Modeled Flow from CSO 010A during 1968 Typical Year - Scenario 3



37. Modeled Flow from CSO 010A during 1988, 1989, and 1990 Typical Years - Scenario 3

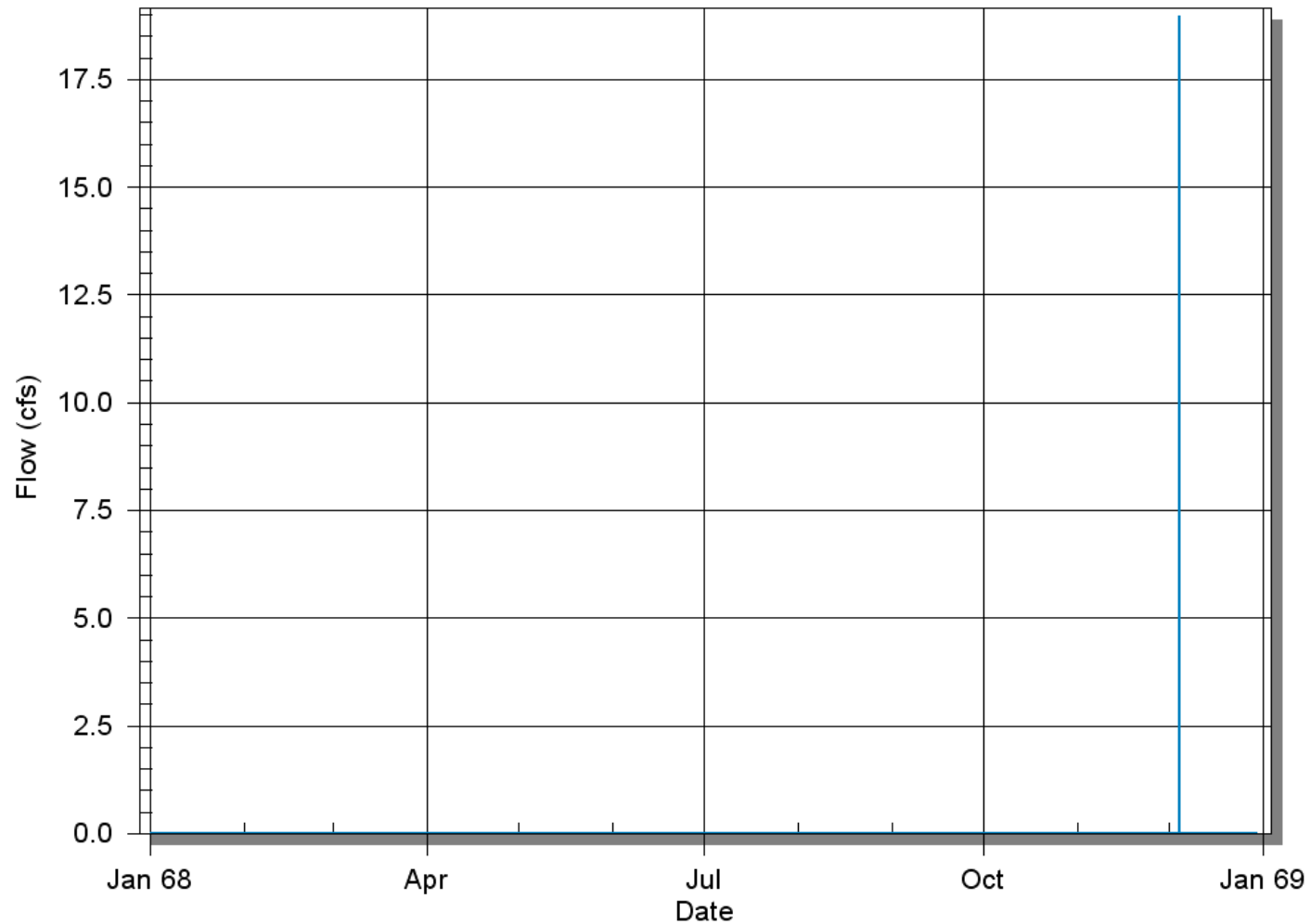


38. Modeled Flow from CSO 010B during 1968 Typical Year - Scenario 3

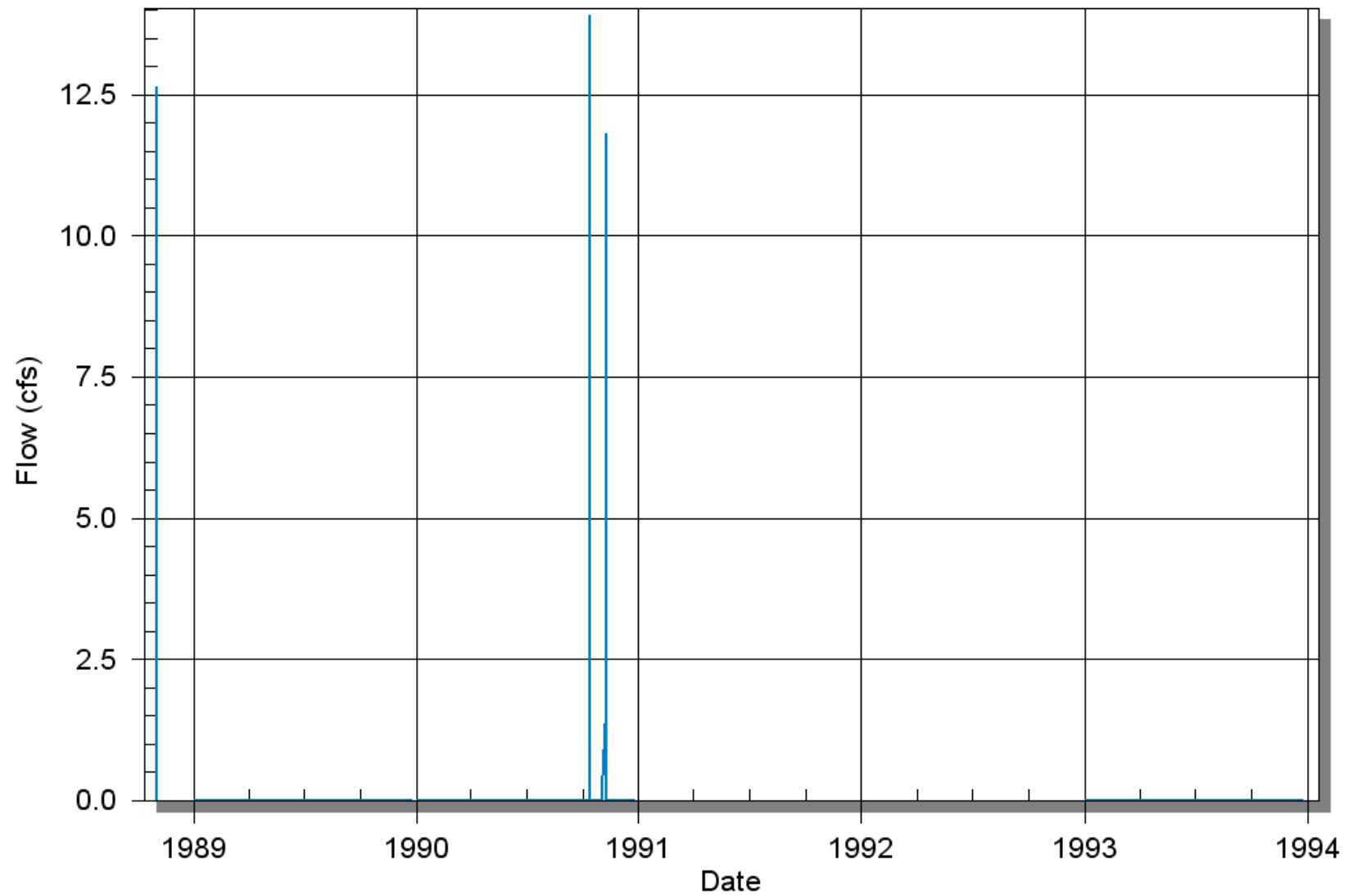


39. Modeled Flow from CSO 010B during 1988, 1989, and 1990 Typical Years - Scenario 3

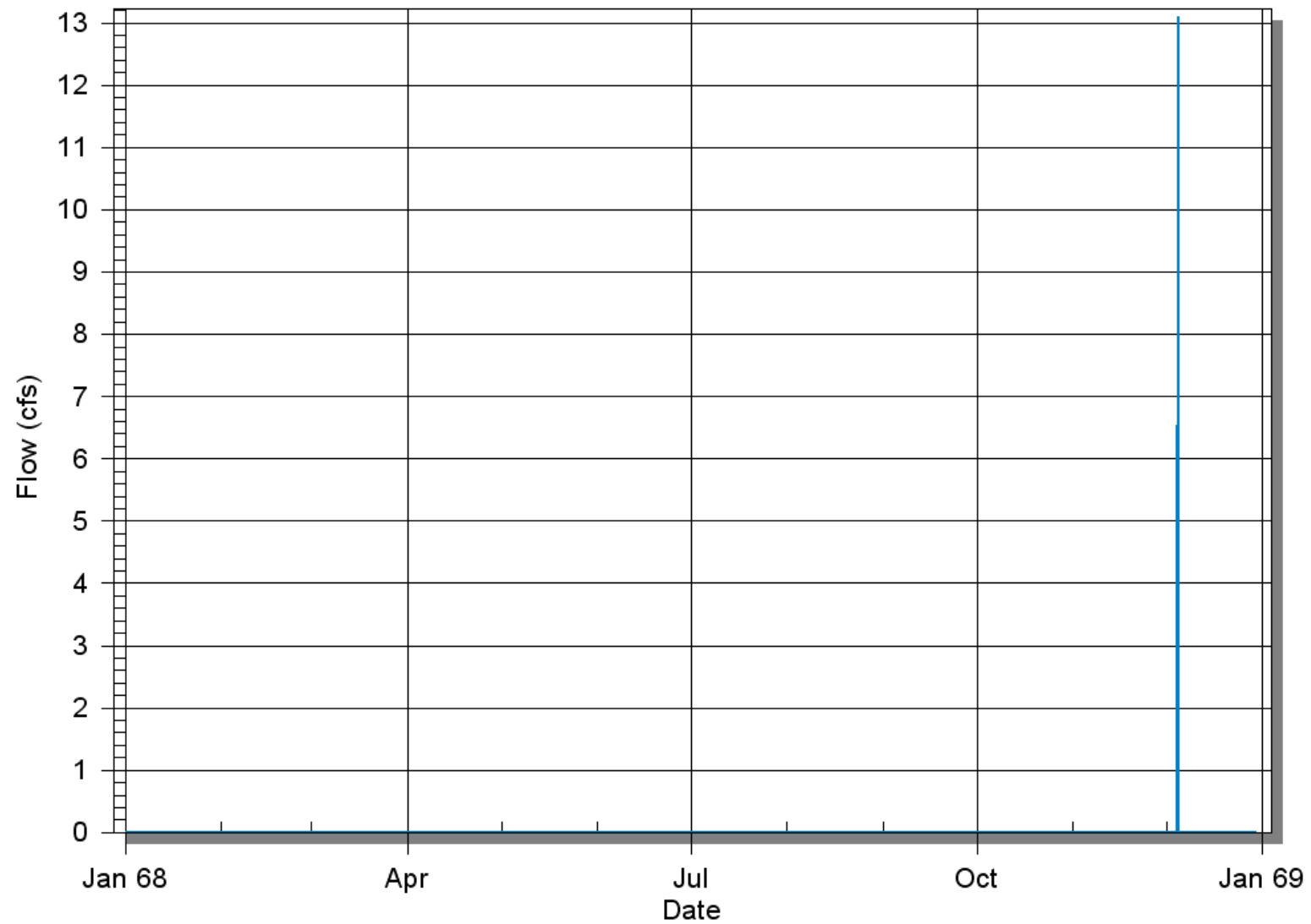
Model Scenario 4



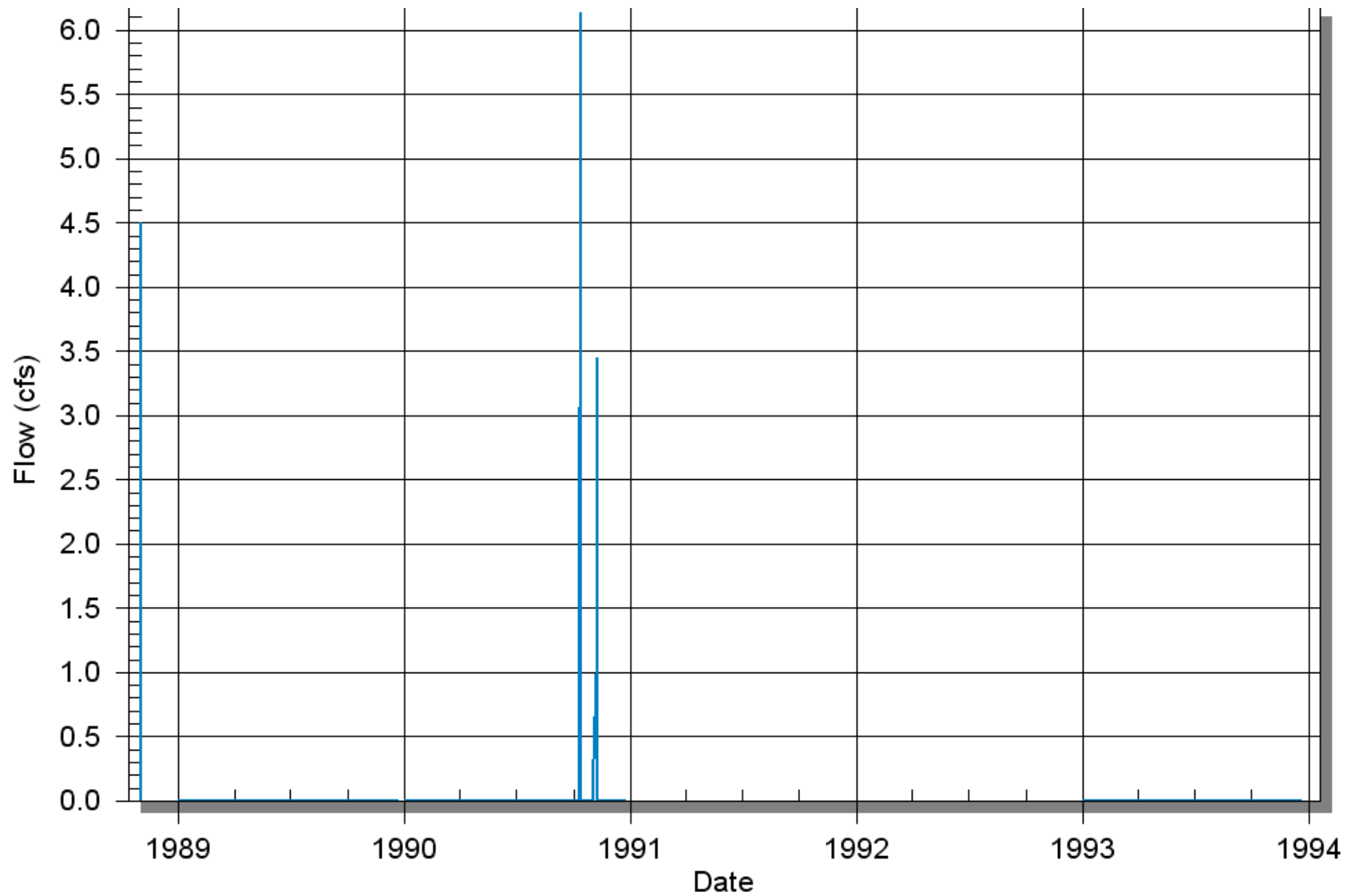
40. Modeled Flow from CSO 010A during 1968 Typical Year - Scenario 4



41. Modeled Flow from CSO 010A during 1988, 1989, 1990, and 1993 Typical Years - Scenario 4



42. Modeled Flow from CSO 010B during 1968 Typical Year - Scenario 4

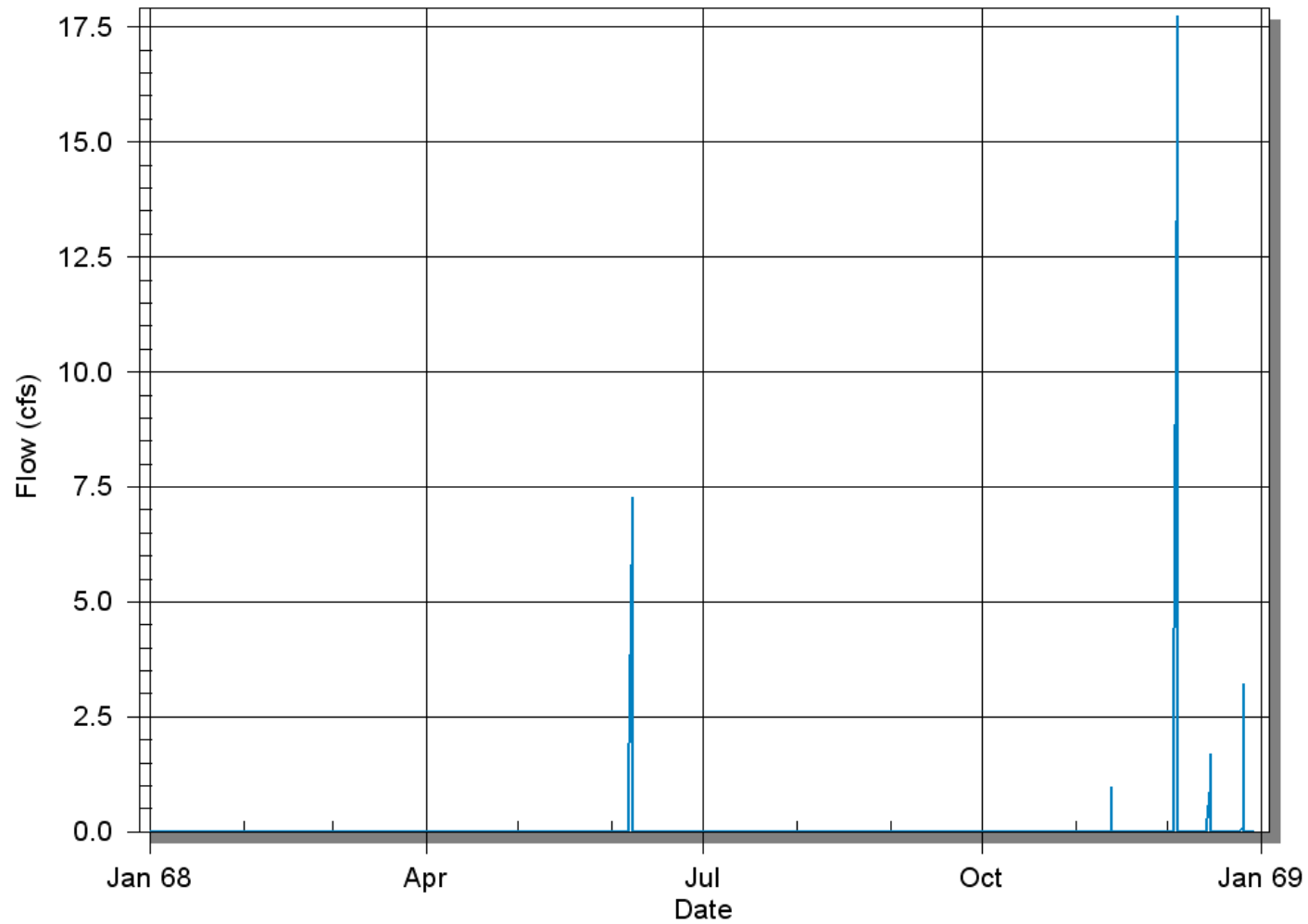


43. Modeled Flow from CSO 010B during 1988, 1989, 1990, and 1993 Typical Years - Scenario 4

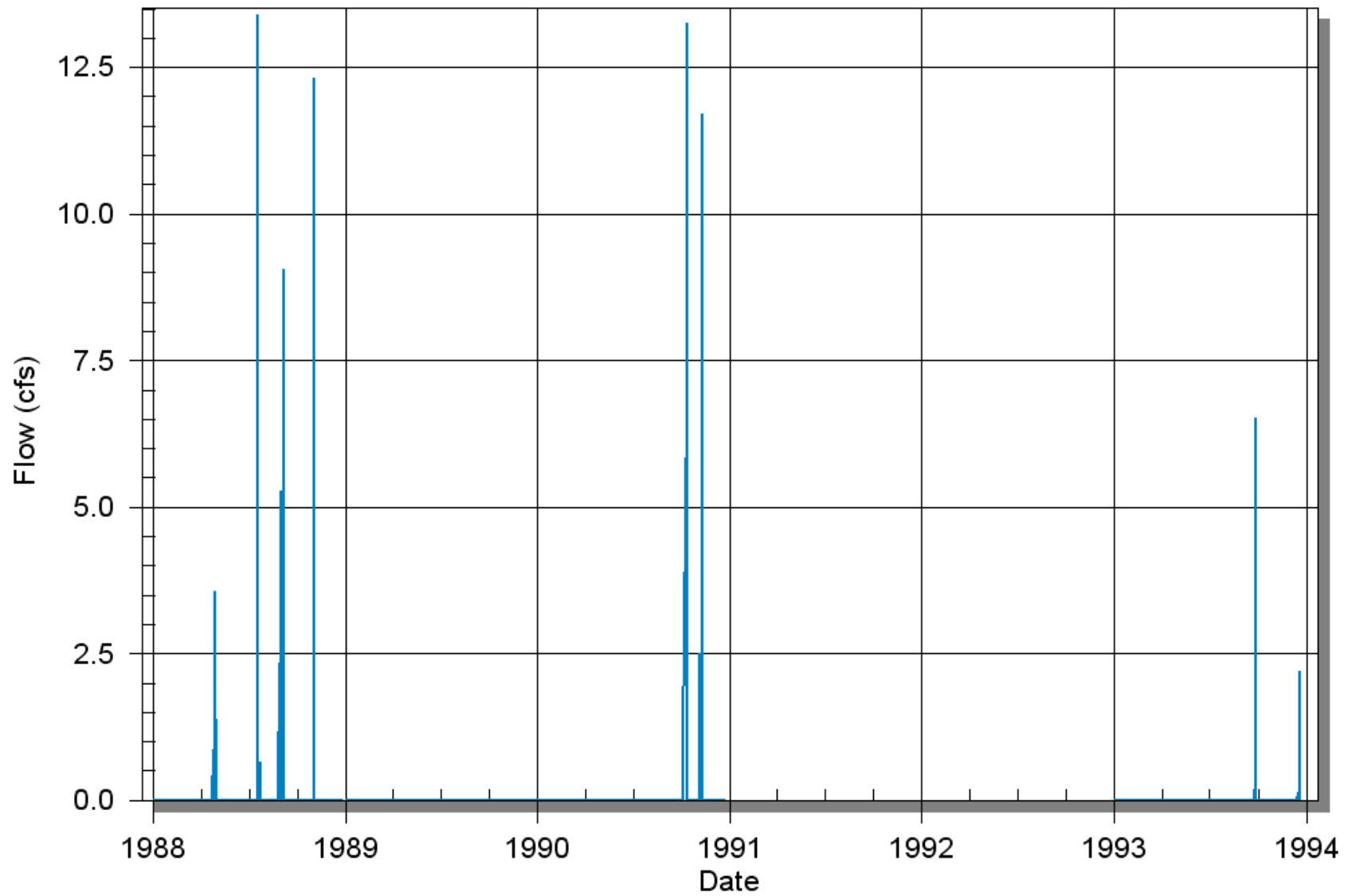
Model Scenario 4 (Optimized Storage from Pipeline Replacement)

No Flow from CSOs

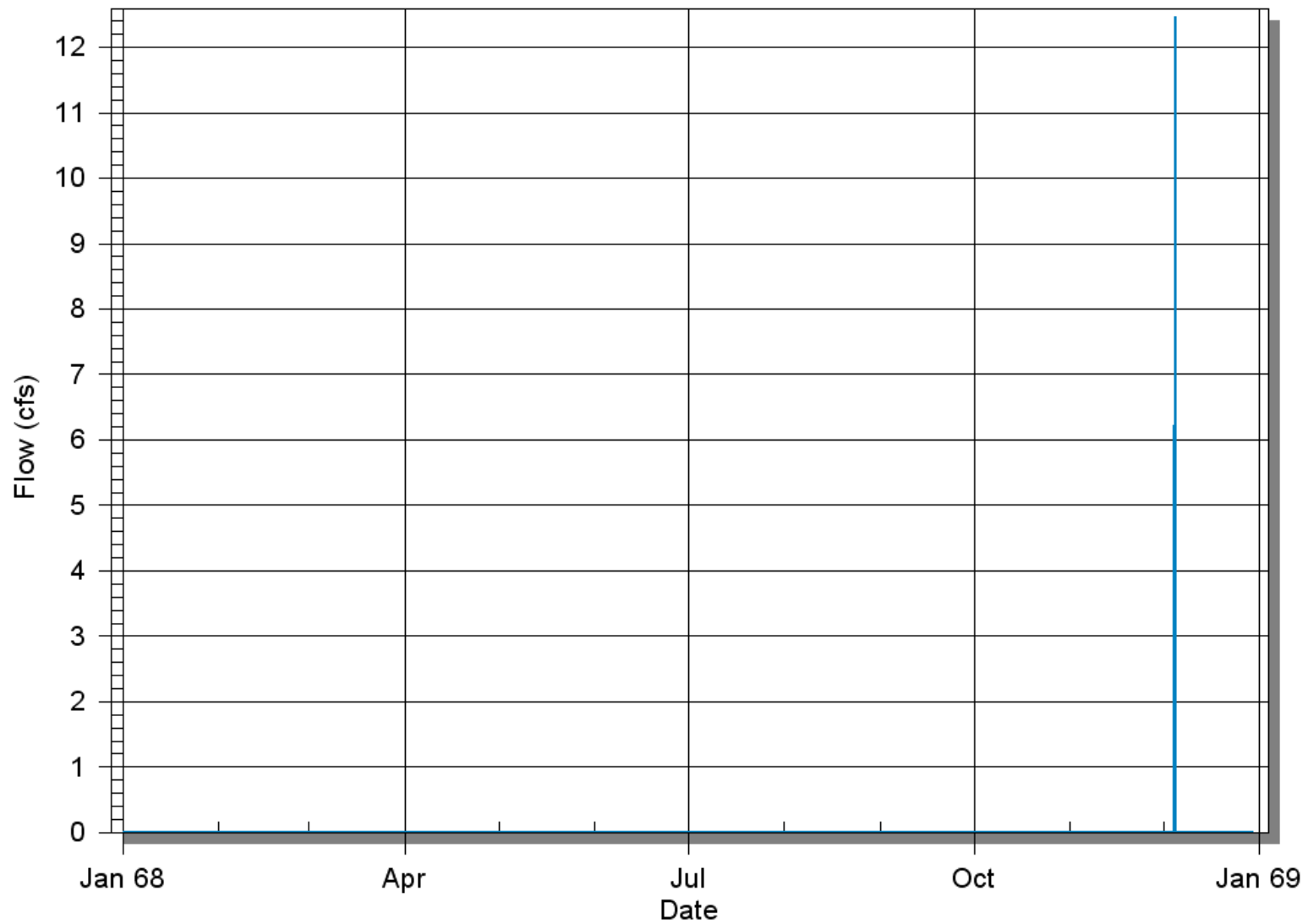
Model Scenario 5



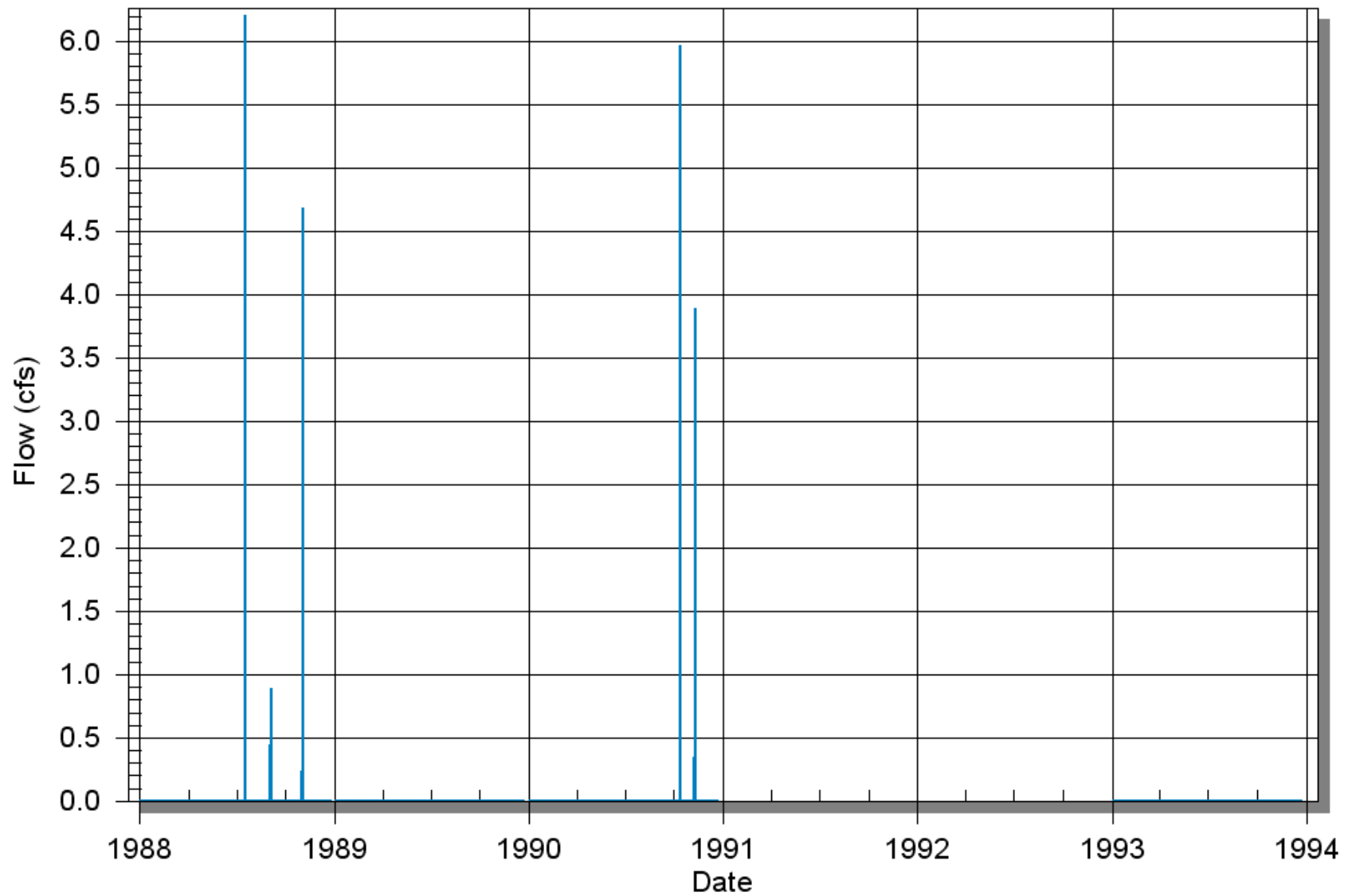
44. Modeled Flow from CSO 010A during 1968 Typical Year - Scenario 5



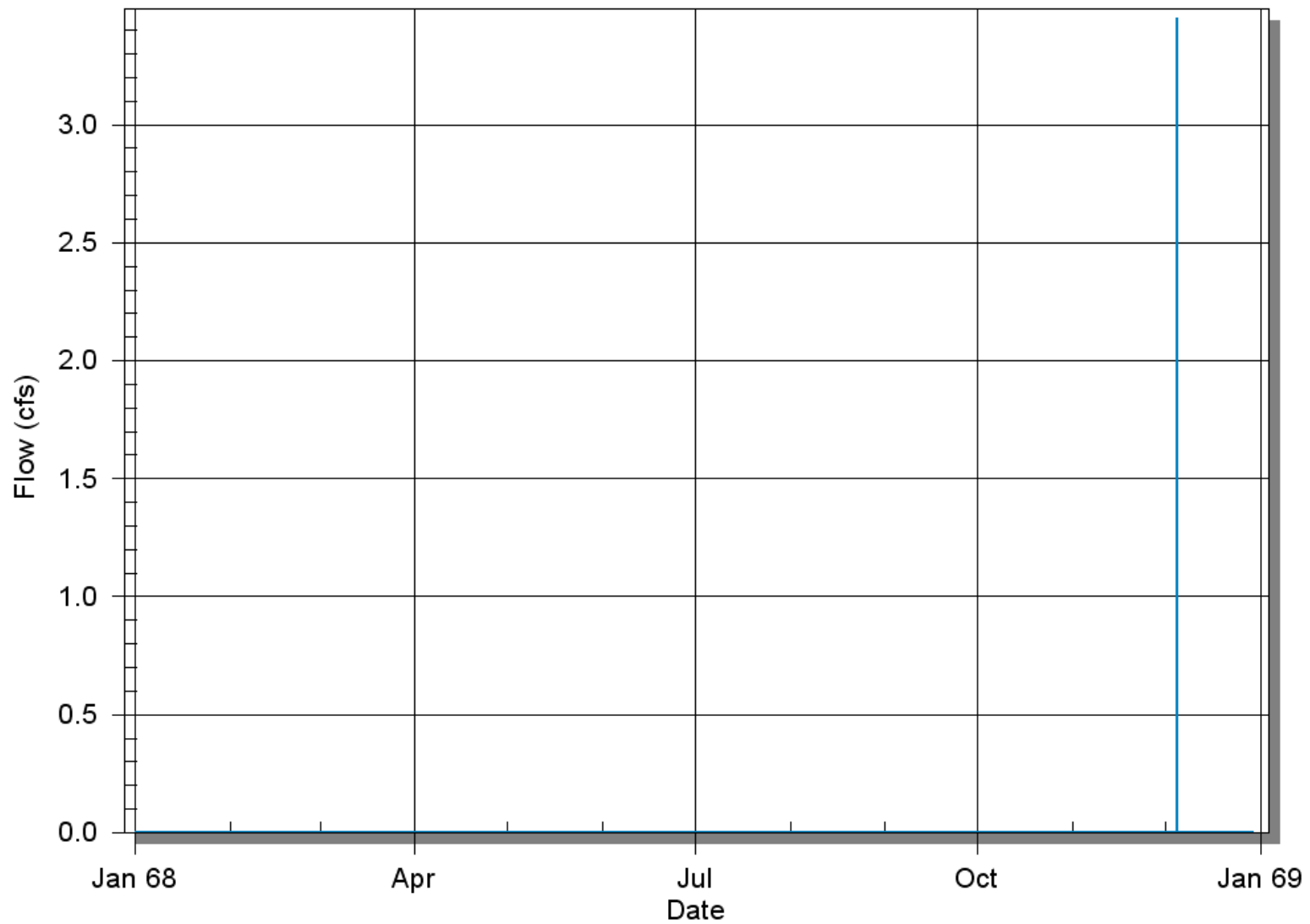
45. Modeled Flow from CSO 010A during 1988, 1989, and 1990 Typical Years - Scenario 5



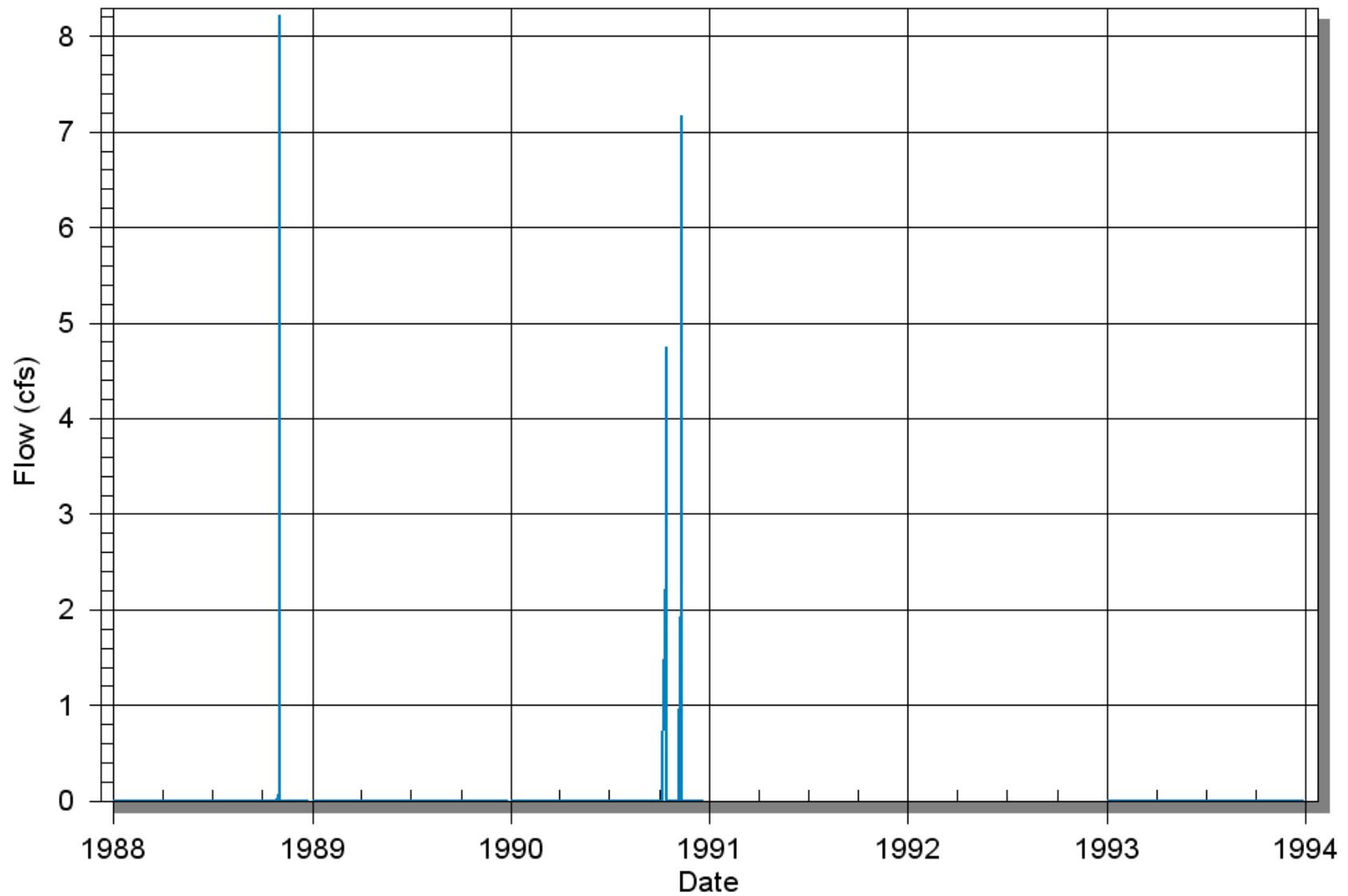
46. Modeled Flow from CSO 010B during 1968 Typical Year - Scenario 5



47. Modeled Flow from CSO 010B during 1988, 1989, and 1990 Typical Years - Scenario 5



48. Modeled Flow from CSO 013 during 1968 Typical Year - Scenario 5



49. Modeled Flow from CSO 013 during 1988, 1989, and 1990 Typical Years - Scenario 5