

Figure 2:
New Castle County Public Water Supply System Service Areas

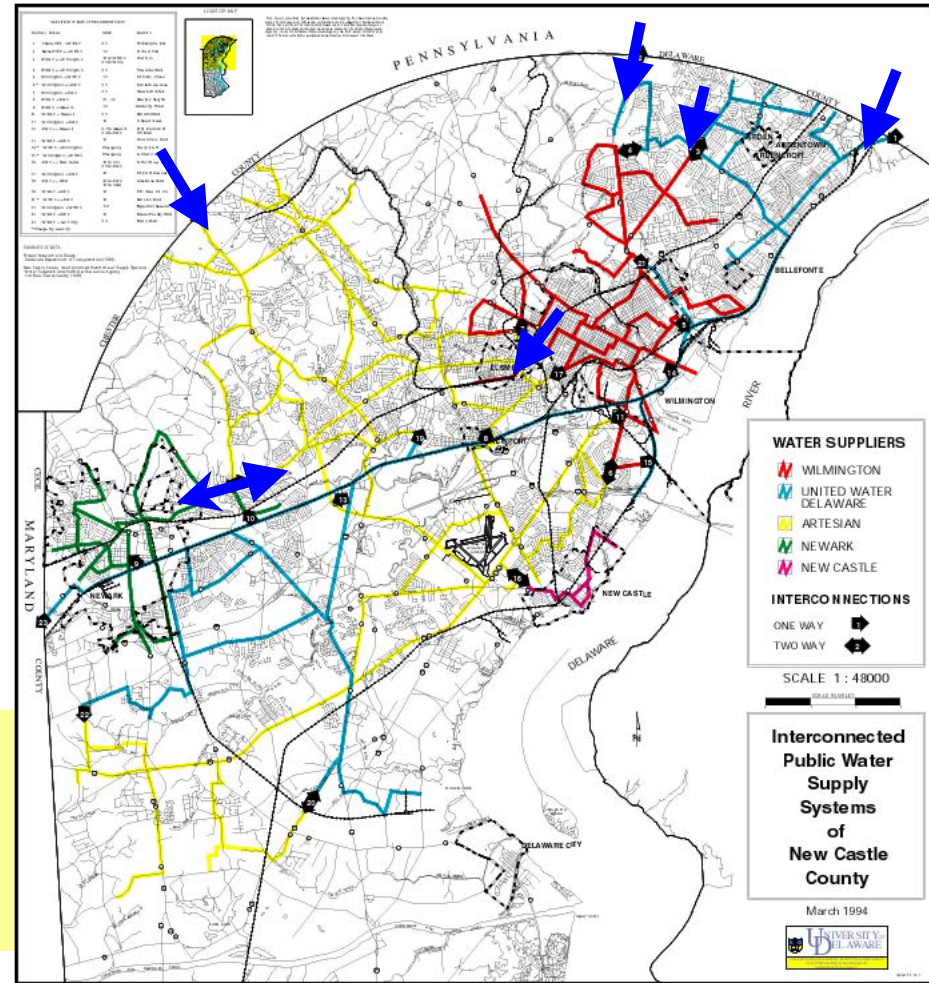
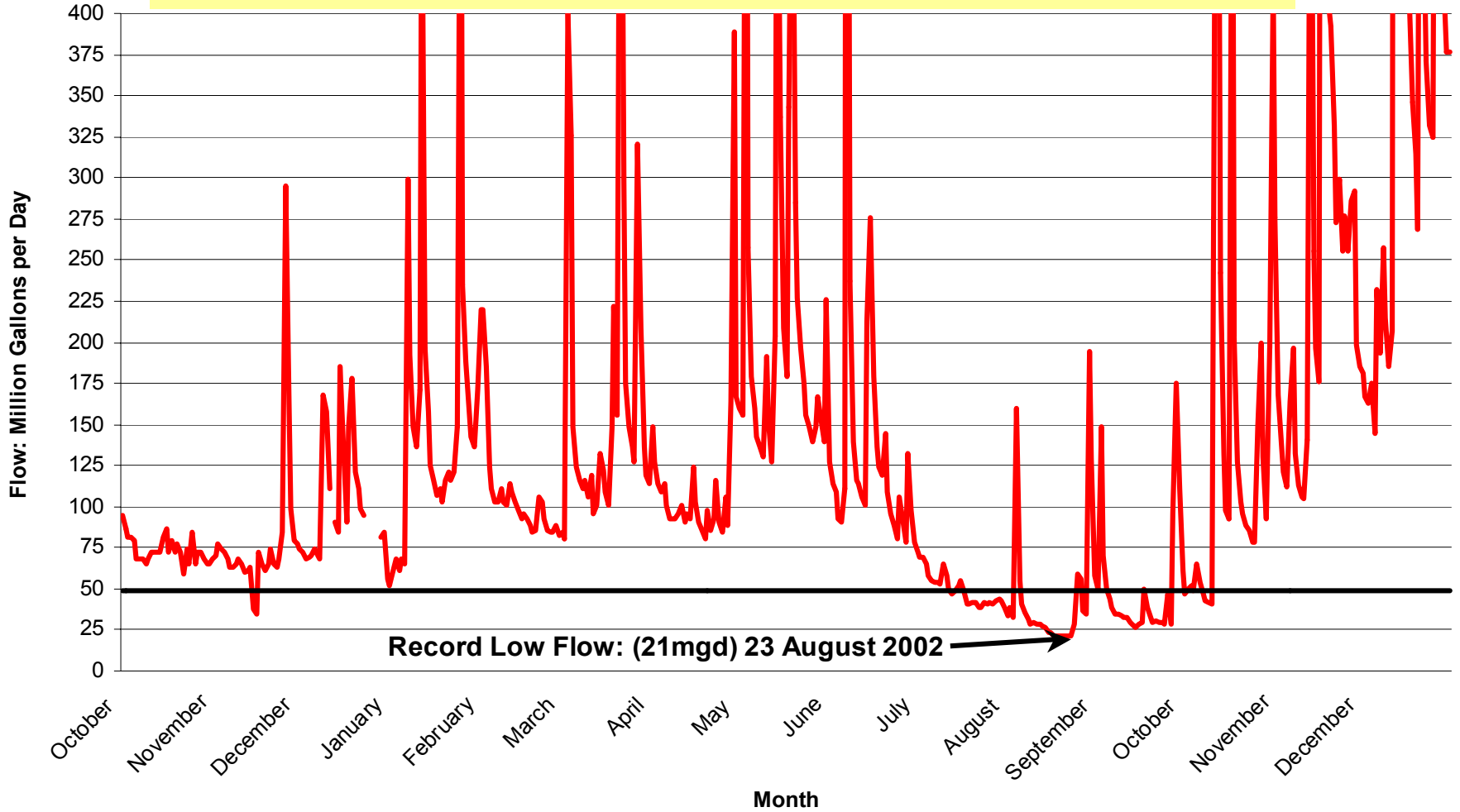


Figure 3:
New Castle County Public Water Supply System Interconnections

Figure 4: Brandywine Creek at Wilmington Streamflow Data, October 2001 - December 2002

*The 7Q10 is the minimum flow necessary to protect fishery and habitat that is likely to occur for 7 consecutive days, once every 10 years

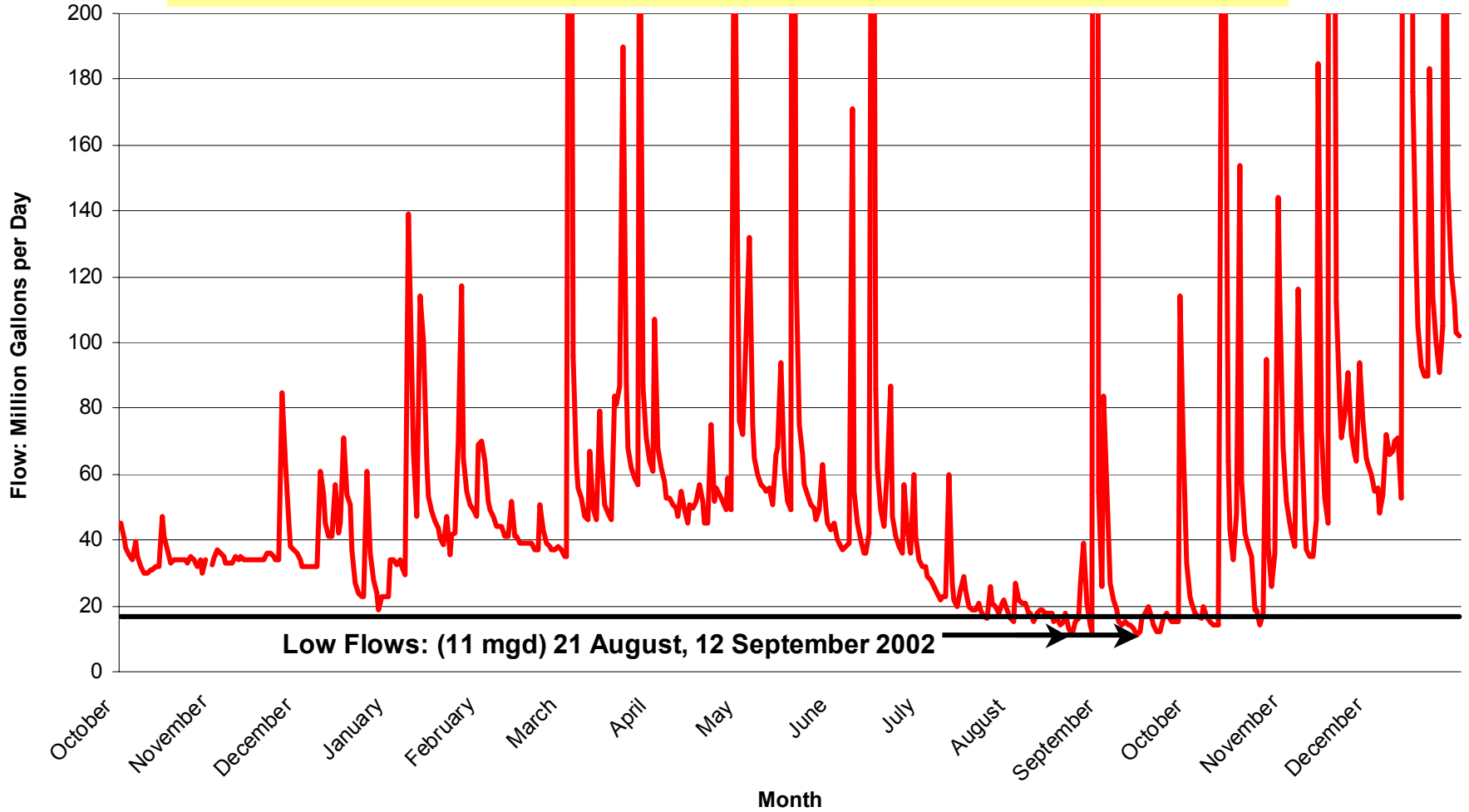


— BWW

— BWW 7Q10

**Figure 5: White Clay Creek at Stanton Streamflow Data,
October 2001 - December 2002**

*The 7Q10 is the minimum flow necessary to protect fishery and habitat that is likely to occur for 7 consecutive days, once every 10 years

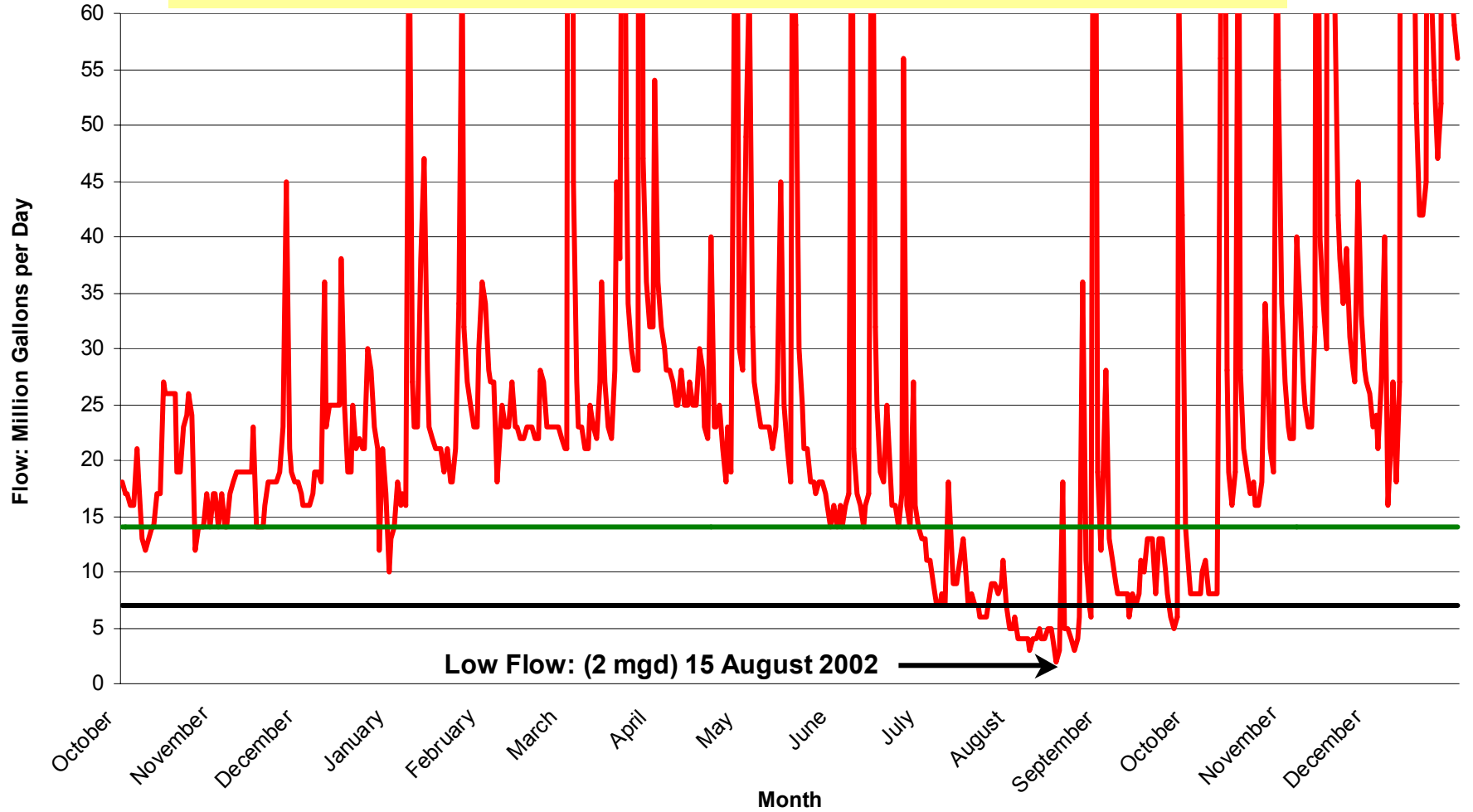


— WCS

— WCS 7Q10

**Figure 6: White Clay Creek at Newark Streamflow Data,
October 2001 - December 2002**

*The 7Q10 is the minimum flow necessary to protect fishery and habitat that is likely to occur for 7 consecutive days, once every 10 years

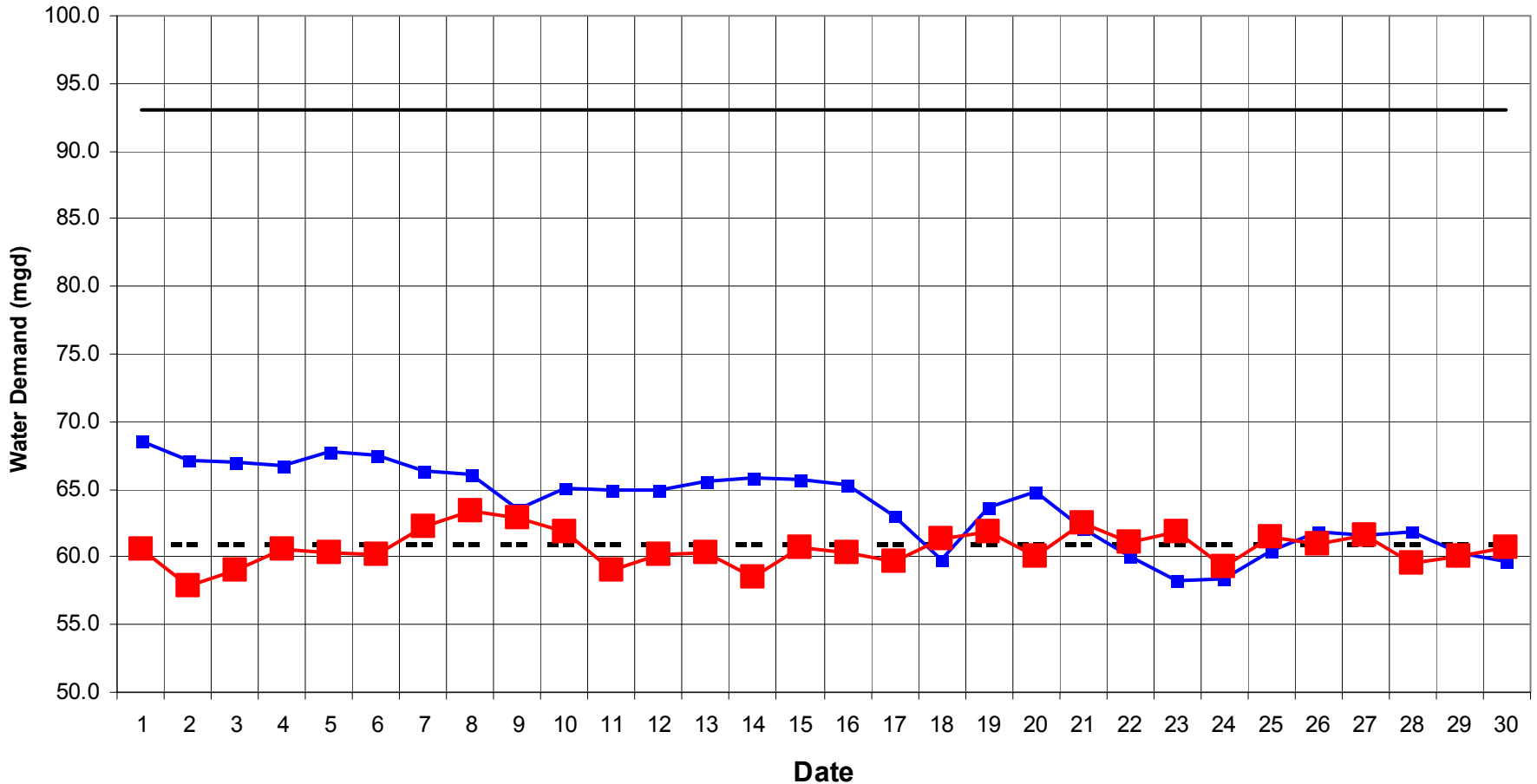


— WCN

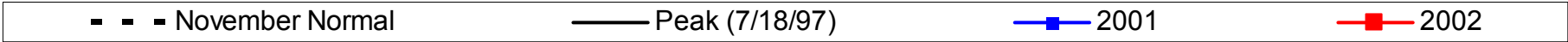
— WCN 7Q10

— DRBC Passby

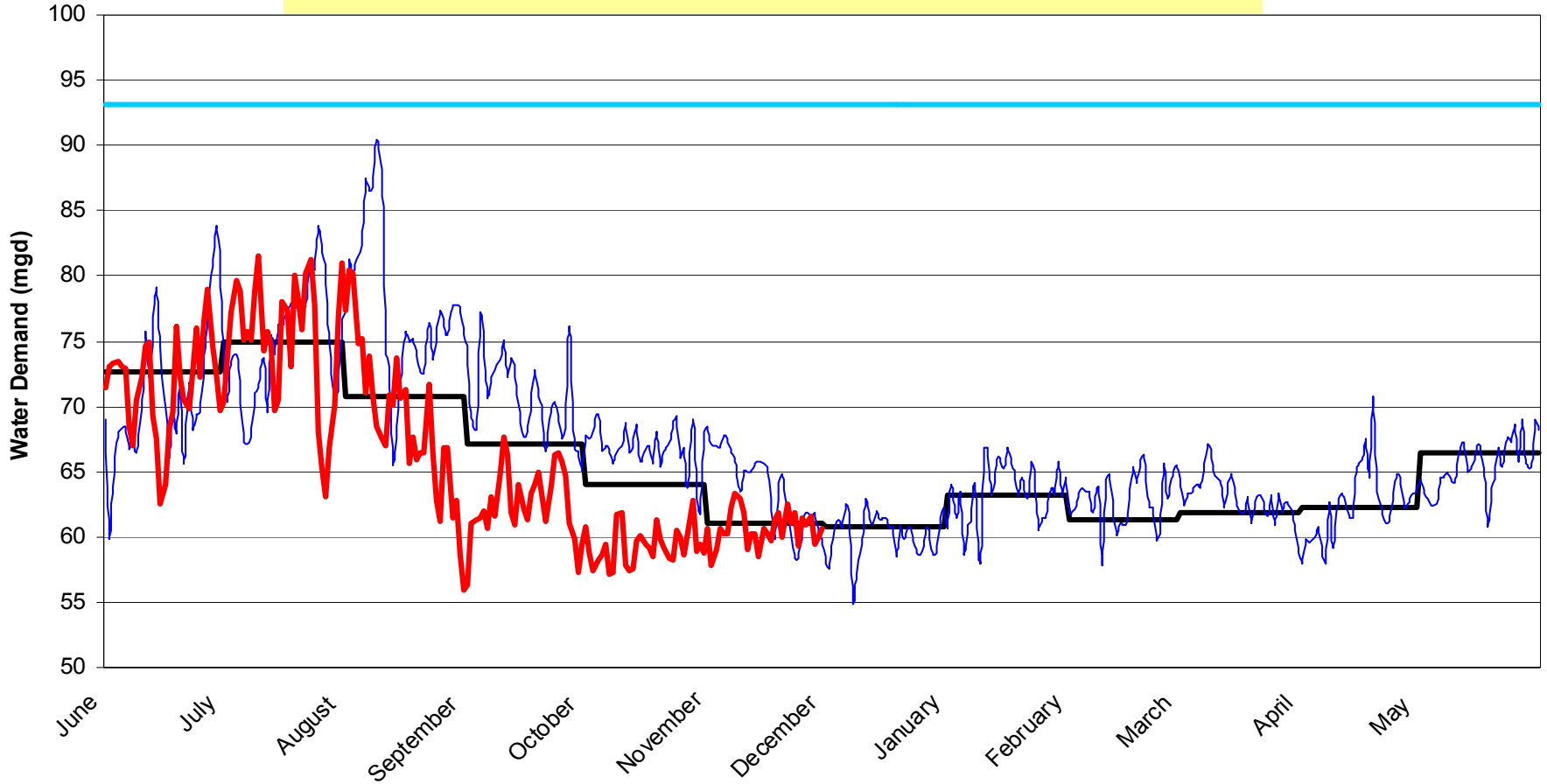
Figure 7: Public Water Demand: Northern New Castle County, November 2002



Compiled by the University of Delaware, Institute for Public Administration, Water Resources Agency, using data from: Artesian Water Co., City of Newark, City of Wilmington, New Castle Municipal Services Commission, and United Water Delaware



**Figure 8: Public Water Demand: Northern New Castle County
June 2001 - November 2002**



Compiled by the University of Delaware, Institute for Public Administration, Water Resources Agency, using data from: Artesian Water Co., City of Newark, City of Wilmington, New Castle Municipal Services Commission, and United Water Delaware

— Monthly Average — Historic Peak (7/18/97) — June 2001 - May 2002 — June 2002 - May 2003

Figure 9: Hoopes Reservoir Water Level, July 2002 - November 2002

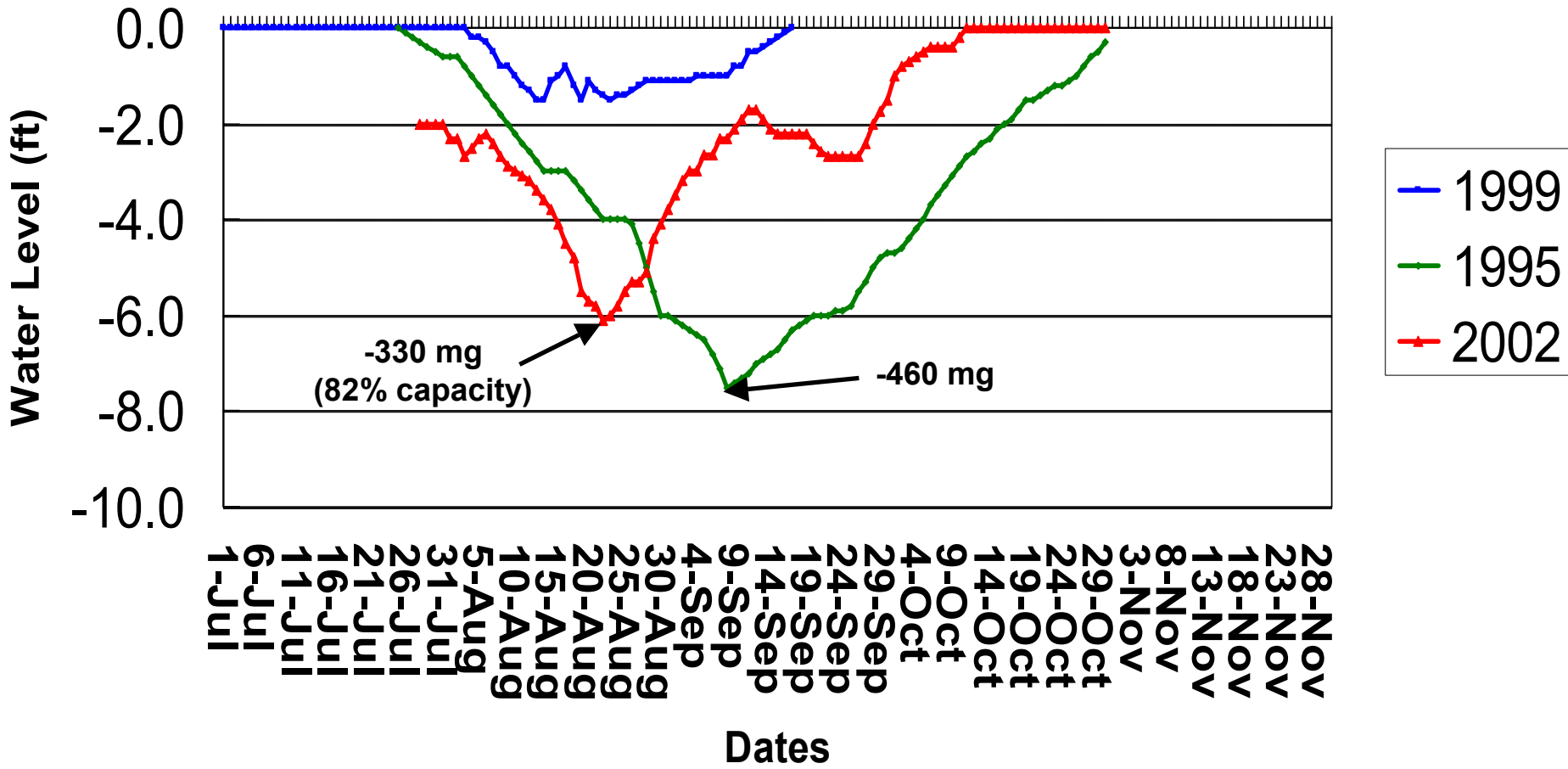


Figure 10: Octoraro Reservoir Water Level, January 2002 – November 2002

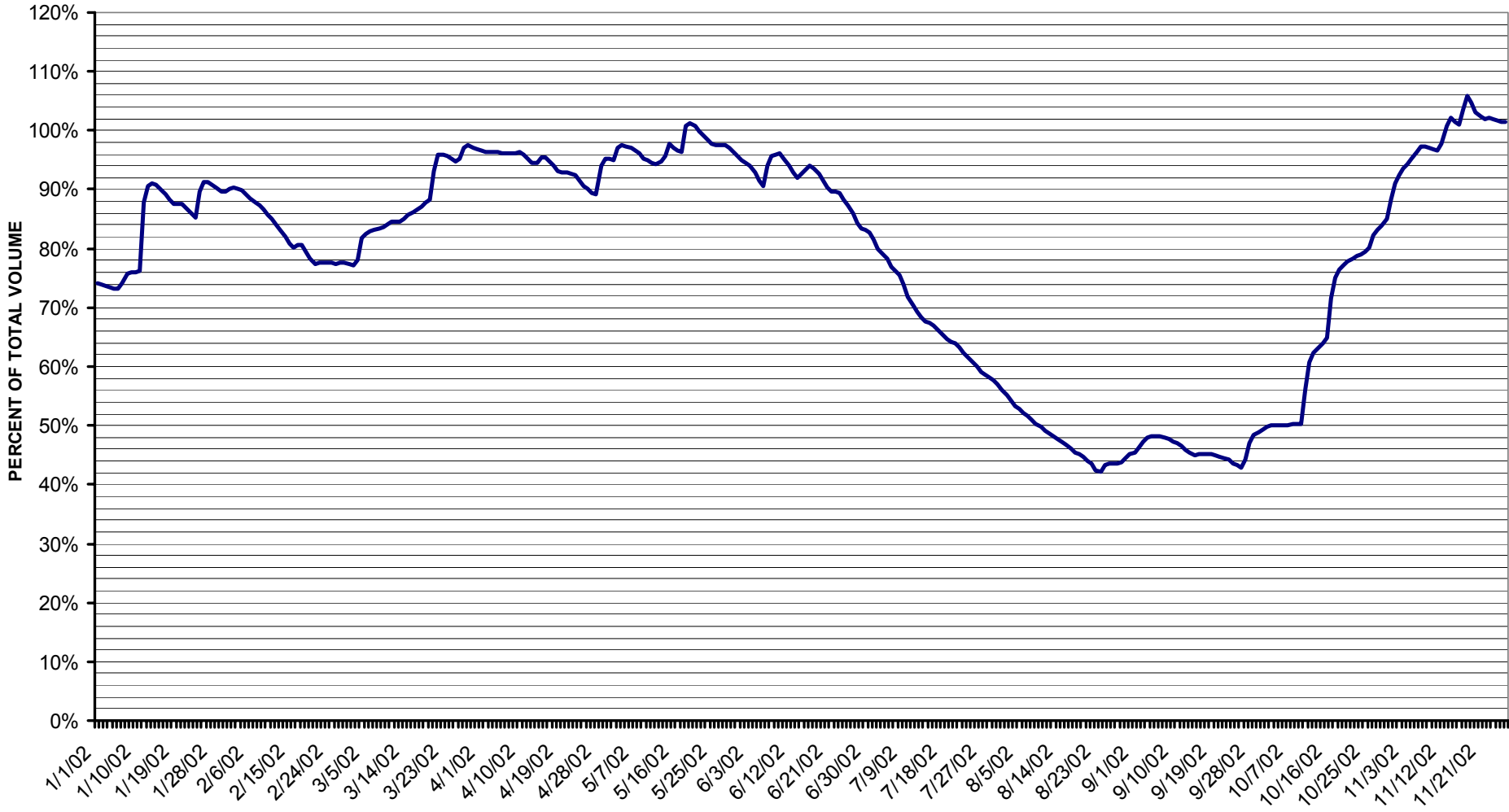
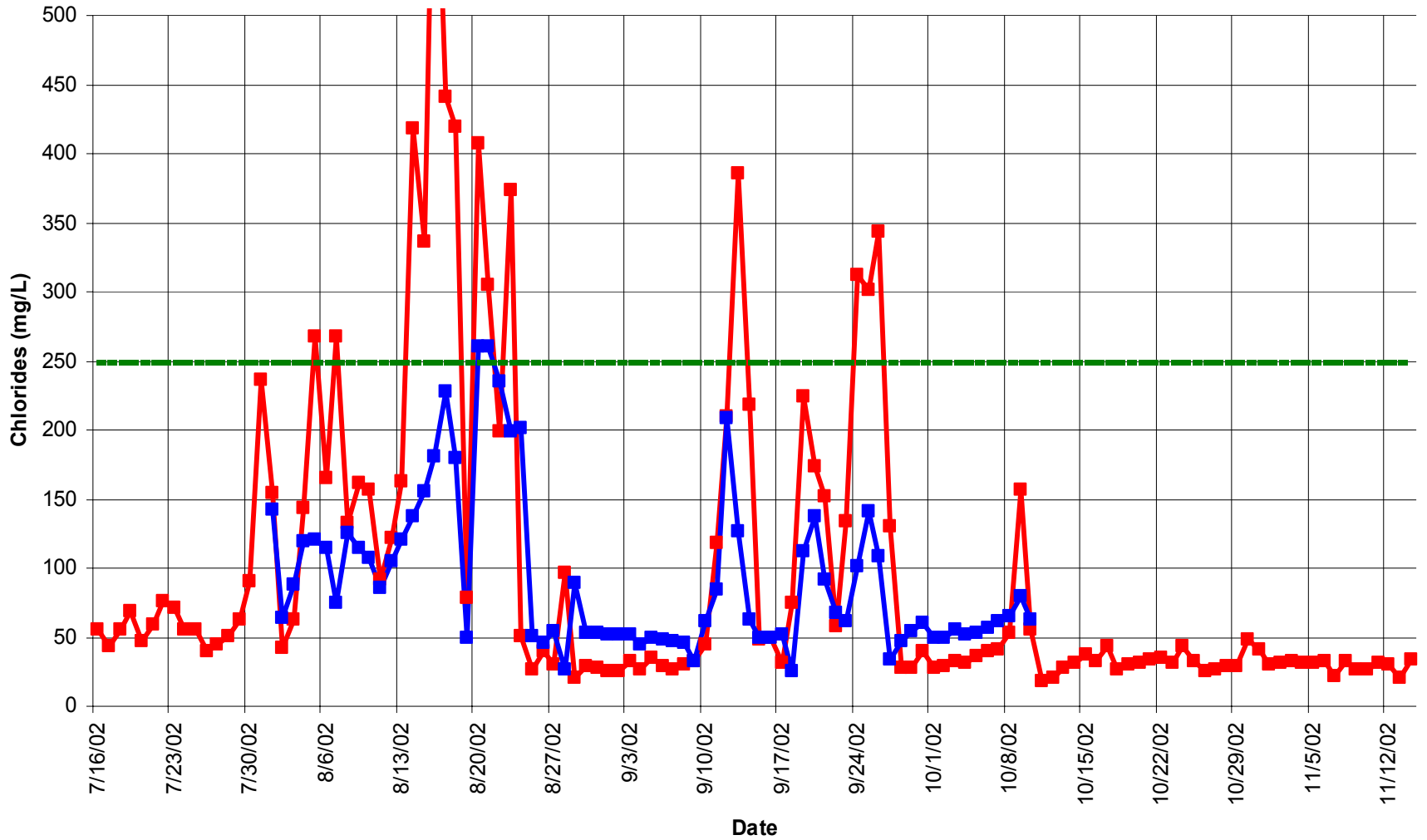
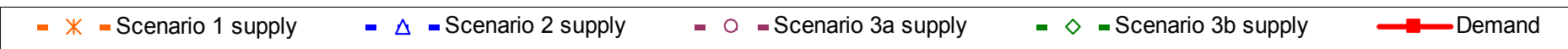
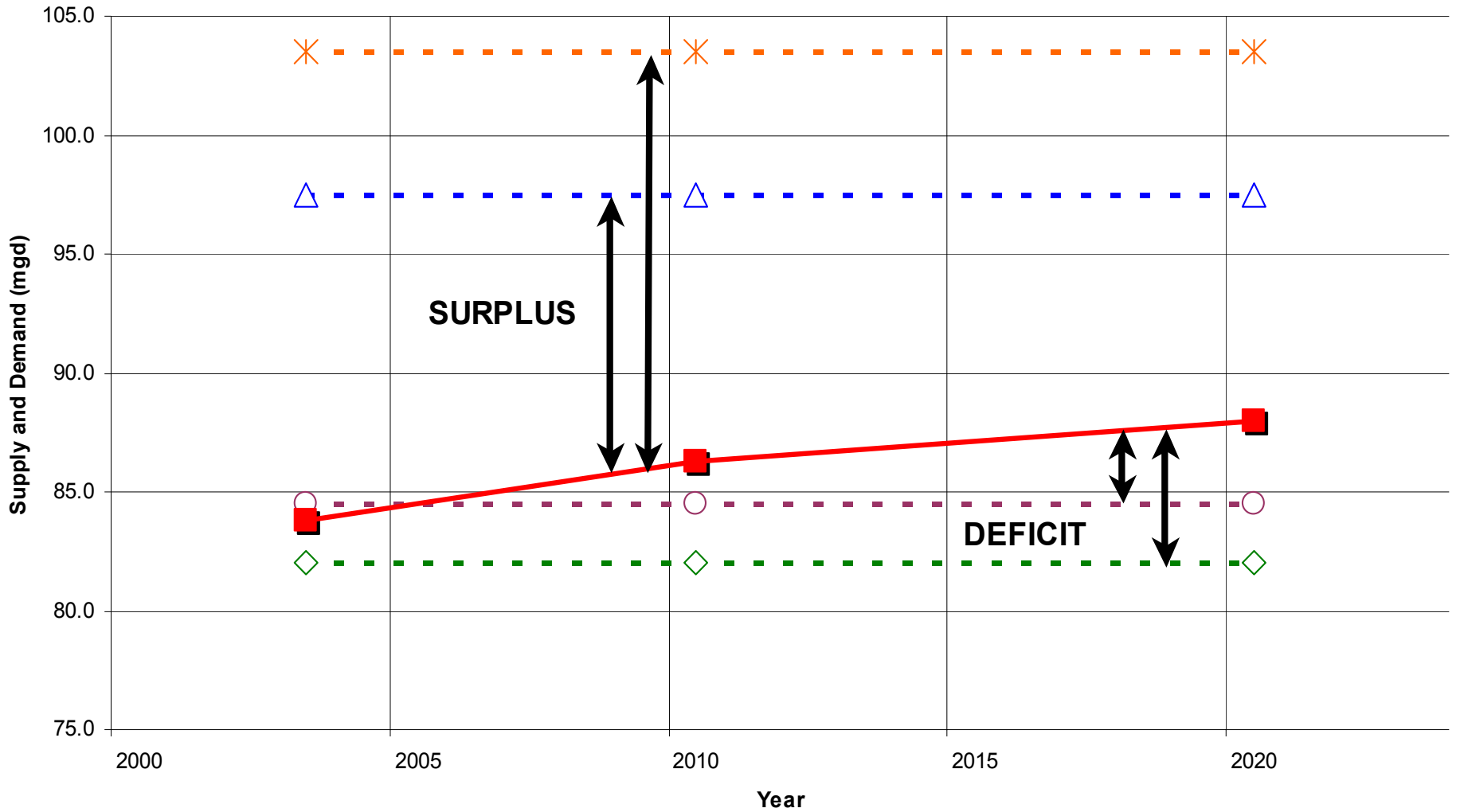


Figure 11: Chlorides, White Clay Creek at Stanton, July 2002 - November 2002



**Figure 12: Water Supply and Demand Projections:
Northern New Castle County, Delaware, All Scenarios: Through 2020**



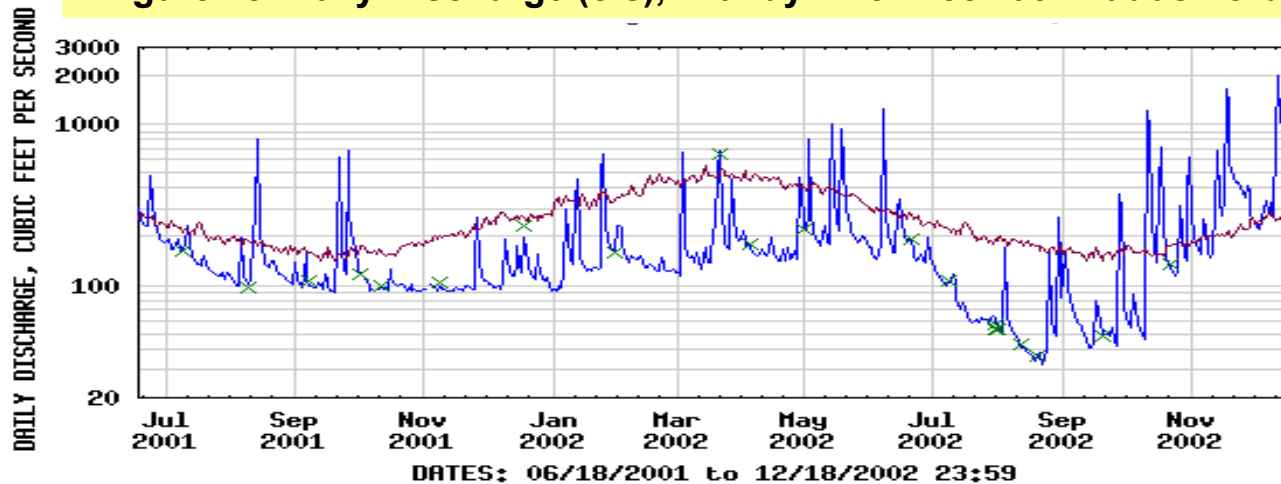


**Figure 13:
Newark
Reservoir**



**Figure 14:
Hoopes
Reservoir**

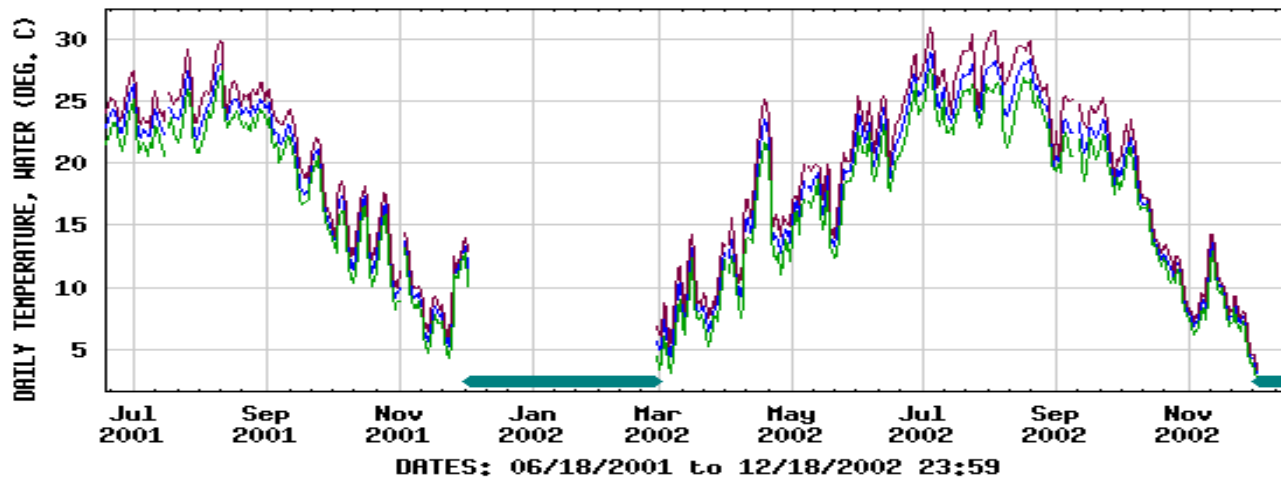
Figure 15: Daily Discharge (cfs), Brandywine Creek at Chadds Ford



EXPLANATION

- DAILY MEAN DISCHARGE
- MEDIAN DAILY STREAMFLOW BASED ON 81 YEARS OF RECORD
- × MEASURED DISCHARGE

Figure 16: Daily Temperature (C), Brandywine Creek at Chadds Ford



EXPLANATION

- DAILY MEAN TEMPERATURE
- DAILY MAXIMUM TEMPERATURE
- DAILY MINIMUM TEMPERATURE
- ◇ Station operated seasonally

Figure 17: Daily Dissolved Oxygen (mg/L), Brandywine Creek at Chadds Ford

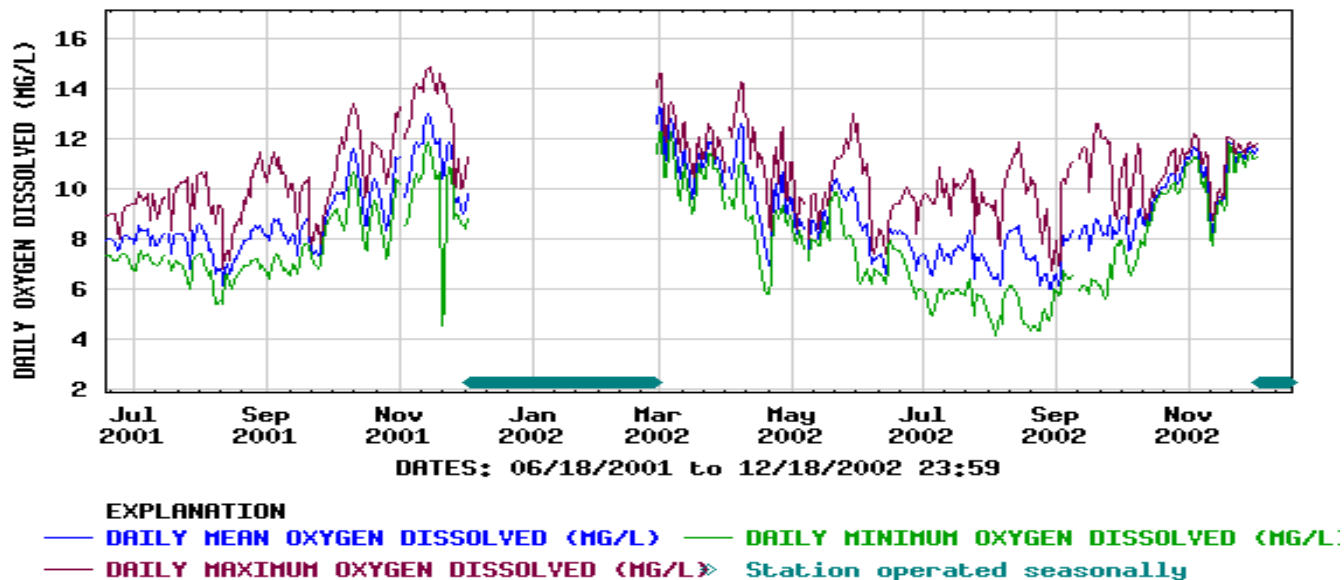


Figure 18: Daily Specific Conductance ($\mu\text{s}/\text{cm}$), Brandywine Creek at Chadds Ford

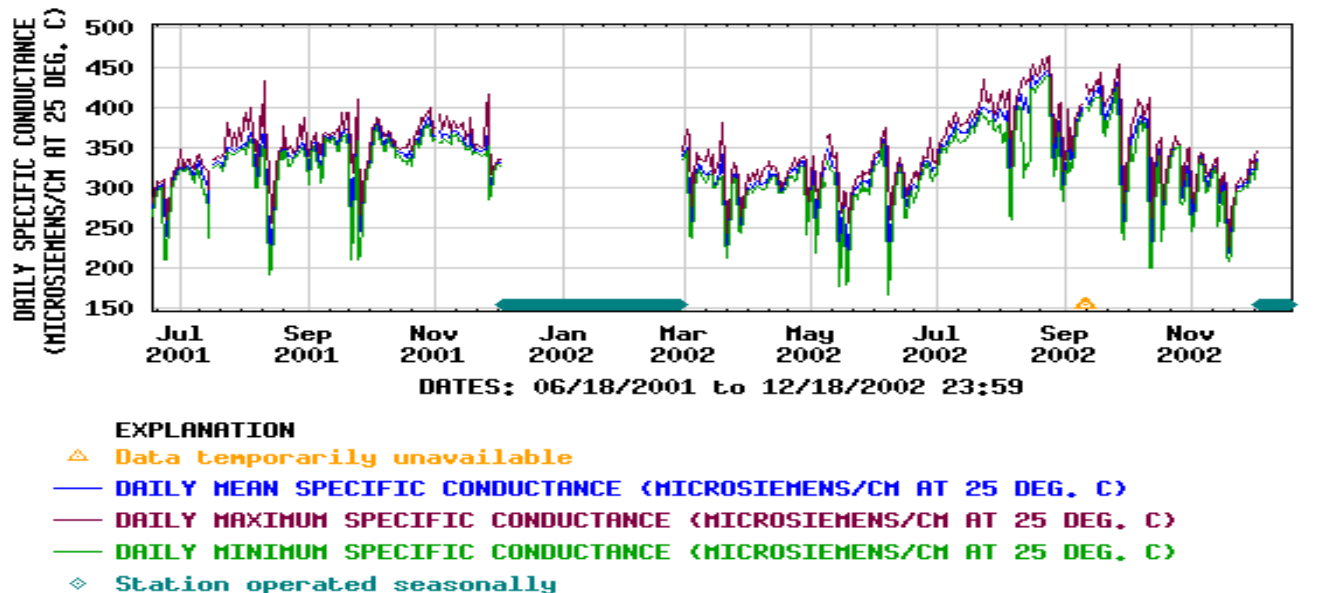
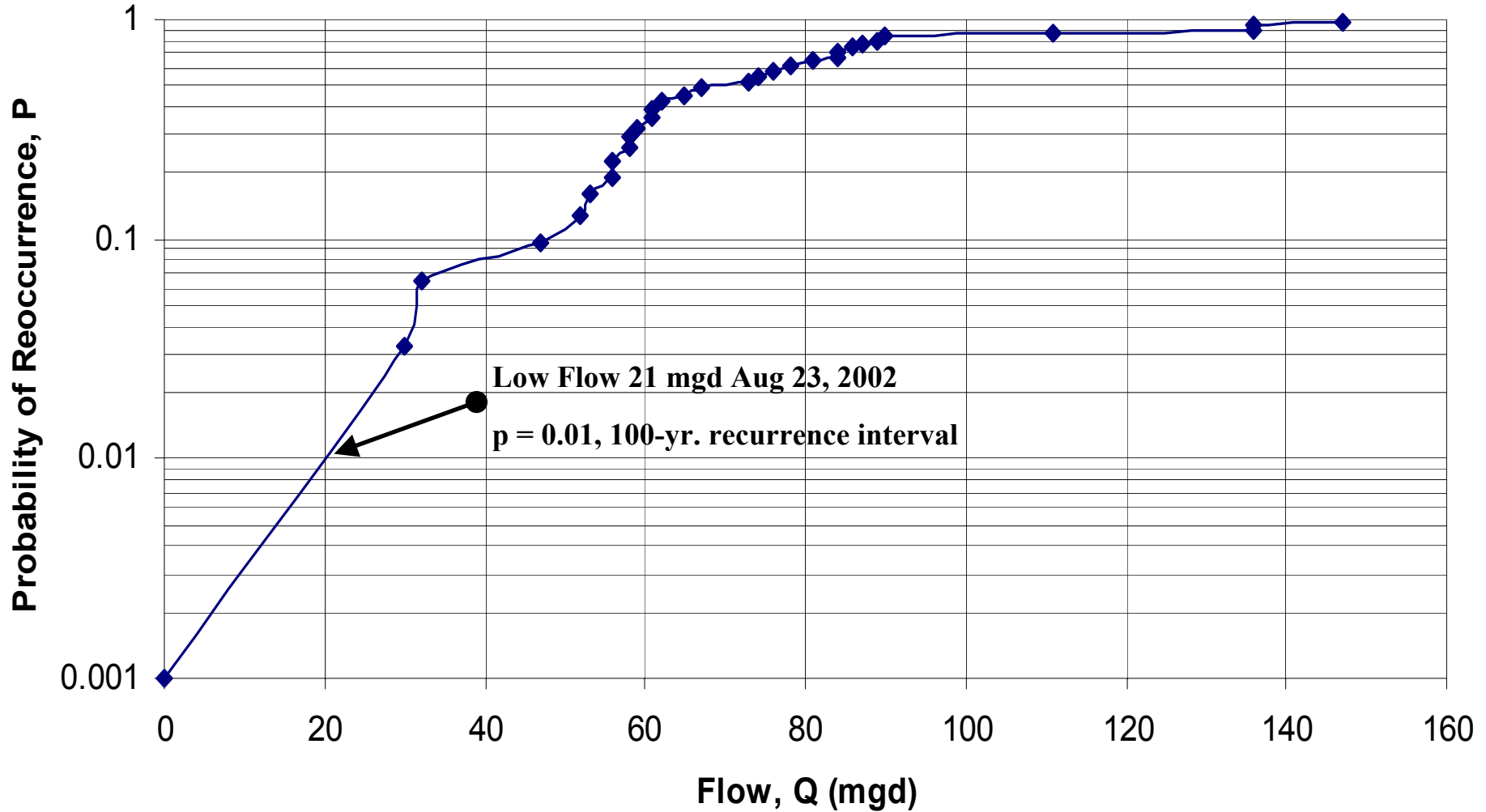


Figure 18.

Estimate of Low Flow Recurrence Interval with the Weibull Distribution
Brandywine Creek at Chadds Ford - 1972-2001



FLOW (mgd)	YEAR	RANK	P
0	-	-	0.001
30	1999	1	0.0323
32	1995	2	0.0645
47	1978	3	0.0968
52	1998	4	0.1290
53	1997	5	0.1613
56	1981	6	0.1935
56	1986	7	0.2258
58	1985	8	0.2581
58	2001	9	0.2903
59	1991	10	0.3226
61	1987	11	0.3548
61	1992	12	0.3871
62	1994	13	0.4194
65	1983	14	0.4516
67	1977	15	0.4839
73	1988	16	0.5161
74	1976	17	0.5484
76	1993	18	0.5806
78	1982	19	0.6129
81	1996	20	0.6452
84	1989	21	0.6774
84	2000	22	0.7097
86	1972	23	0.7419
87	1990	24	0.7742
89	1974	25	0.8065
90	1973	26	0.8387
111	1984	27	0.8710
136	1979	28	0.9032
136	1980	29	0.9355
147	1975	30	0.9677