

1996 WATER TESTING SUMMARY**

Basin 1 - Lower Basin

Basin Characteristics: Maximum Depth: 104 ft. Surface Area: 2928.1 acres
 Flushing Rate: 0.23 flushes/yr. Drainage Area: 7.41 sq. mi.
 % Watershed/Town: Enfield - 43.1% Lowell - 56.9%

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

YEAR	MEAN	MEAN	MEAN	MEAN	TOTAL PHOS. MEANS (ppb)			SECCHI DISK (m.)				CHLOROPHYLL A(ppb)			TROPHIC STATE INDICES				
	COLOR (SPU)	pH	ALK	COND. (µMHOS /cm)	EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	C	G	SEC	CHL
1970	-	-	-	-	-	-	-	-	7.9	8.1	8.5	3	-	-	-	-	-	-	-
1971	-	-	-	-	-	5	-	-	6.7	7.9	8.8	3	-	-	-	-	-	-	-
1972	-	-	-	-	-	3	-	-	8.5	9.1	9.4	3	-	-	-	-	-	-	-
1978	-	-	-	-	-	30	-	-	7.8	9.8	12.2	3	-	-	-	-	-	-	-
1979	20	6.60	7.0	24	4	-	5	-	3.0	9.1	10.0	5	1.3	1.3	1.3	-	-	21	-
1981	12	6.80	6.0	37	16	-	6	-	8.1	8.1	8.1	1	1.5	1.5	1.5	-	-	-	-
1983	-	-	-	-	-	-	-	-	8.8	9.3	9.4	2	-	-	-	-	-	-	-
1984	-	-	-	-	4	-	11	-	7.6	8.7*	10.0*	5	1.5	1.5	1.5	-	-	-	-
1985	-	-	-	-	-	-	-	-	9.4	10.6	11.8	5	-	-	-	-	-	15	-
1986	-	-	-	-	-	-	-	-	9.7	10.7	11.6	5	-	-	-	-	-	15	-
1987	5	6.30	4.0	30	3	-	5	-	9.8	11.1	13.1	4	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-	9.8	11.4	12.5	6	-	-	-	-	-	12	-
1989	-	-	-	-	-	-	-	-	8.8	9.6	10.9	6	-	-	-	-	-	19	-
1990	-	-	-	-	-	-	-	-	8.8	10.3	11.5	3	-	-	-	-	-	-	-
1991	9	6.90	10.0	27	5	-	-	-	10.7	11.1	11.5	2	-	-	-	-	-	-	-
1995	2	-	7.0	-	3	-	-	-	13.7	13.7	13.7	1	-	-	-	-	-	-	-
1996	-	6.84	3.8	31	5	-	-	-	8.2	9.7	11.1	5	1.1	1.5	2.0	25	-	18	24
SUMMARY:	10	6.63	6.3	30	6	13	7	-	3.0	9.9*	13.7		1.1	1.5	2.0	25	-	17	24

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

DEPTH m	09/10/81		09/06/84		08/20/87		08/28/91		08/11/95		08/08/96		08/23/96		09/04/96	
	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm
0.0	19.5	9.2	-	-	23.5	8.2	21.9	9.5	24.8	8.7	23.5	8.3	22.0	8.8	20.0	8.8
1.0	-	-	19.7	8.7	-	-	21.6	9.4	23.8	8.9	23.5	8.3	22.0	8.9	20.0	8.7
2.0	19.3	9.2	19.7	8.8	23.5	8.2	21.2	9.5	23.5	8.9	23.4	8.3	22.0	8.9	20.0	8.7
3.0	-	-	19.7	8.8	-	-	21.1	9.5	23.1	9.3	23.3	8.3	22.0	8.9	20.0	8.7
4.0	19.3	9.2	19.5	8.8	23.0	8.2	21.0	9.5	23.0	8.9	21.0	8.8	22.0	8.9	20.0	8.7
5.0	-	-	-	-	-	-	20.8	9.4	23.0	8.9	21.0	8.8	21.9	8.9	20.0	8.7
6.0	19.4	9.2	19.5	8.7	21.1	8.5	20.7	9.5	22.8	8.9	20.3	8.8	21.7	8.9	20.0	8.7
7.0	-	-	19.5	8.7	-	-	20.7	9.4	21.8	9.1	20.0	8.5	21.7	8.9	20.0	8.7
8.0	19.2	9.2	19.5	8.7	20.5	8.5	20.4	9.4	16.0	11.4	19.5	8.5	21.0	8.8	20.0	8.7
14.0	13.0	8.4	10.5	7.9	10.8	8.4	11.3	8.8	8.8	10.8	10.6	8.2	10.6	8.8	11.0	8.1
20.0	10.5	7.0	9.6	7.2	10.0	7.5	-	-	7.9	9.7	10.0	8.3	9.9	8.4	9.5	7.6
23.0	-	-	9.5	7.2	9.9	6.5	10.0	7.9	-	-	9.8	7.8	9.8	8.0	9.2	7.6
30.0	-	-	-	-	-	-	9.9	7.2	-	-	9.7	7.4	-	-	9.1	7.6
31.0	-	-	9.1	6.2	-	-	-	-	7.9	8.9	-	-	-	-	-	-

Basin 2 - Upper Basin

Basin Characteristics: Maximum Depth: 56 ft. Surface Area: 696.8 acres
 Flushing Rate: 1.19 flushes/yr. Drainage Area: 8.68 sq. mi.
 % Watershed/Town: Enfield - 12.3% Lincoln - 50.5% Lowell - 37.2%

1996 WATER TESTING SUMMARY**

Basin 2 - Upper Basin, continued

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

YEAR	MEAN	MEAN	MEAN	MEAN	TOTAL PHOS. MEANS (ppb)			SECCHI DISK (m.)				CHLOROPHYLL A(ppb)			TROPIC STATE INDICES				
	COLOR (SPU)	pH	ALK	COND. (µMHOS /cm)	EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	C	G	SEC	CHL
1972	-	-	-	-	-	5	-	-	4.9	5.7	6.1	3	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	7.0	8.0	9.0	2	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	7.0	7.5	8.0	3	-	-	-	-	-	-	-
1987	15	-	3.5	29	4	-	12	-	7.8	7.8	7.8	1	-	-	-	-	-	-	-
1991	19	6.89	12.0	27	4	-	7	-	7.2	7.4	7.5	2	-	-	-	-	-	-	-
1995	3	-	9.0	-	4	-	8	-	8.6	8.6	8.6	1	-	-	-	-	-	-	-
1996	-	6.77	4.5	31	7	-	8	-	4.6	5.8	7.5	5	2.0	2.3	2.8	34	-	41	34
SUMMARY:	12	6.83	7.3	29	5	5	9	-	4.6	7.3	9.0		2.0	2.3	2.8	34	-	41	34

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

DEPTH m	SAMPLE DATE											
	08/20/87		08/28/91		08/11/95		08/08/96		08/23/96		09/04/96	
	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm
0.0	24.0	8.2	22.3	9.3	25.2	8.4	25.0	8.2	22.0	8.7	20.5	8.3
1.0	24.0	8.2	22.0	9.4	25.2	8.4	25.0	8.2	22.0	8.6	20.0	8.3
2.0	24.0	8.2	21.2	9.4	24.8	8.4	24.0	8.4	22.0	8.6	20.0	8.3
3.0	23.5	8.2	21.0	9.4	23.9	8.6	22.0	8.6	22.0	8.6	20.0	8.3
4.0	23.0	8.6	20.6	9.3	23.3	8.6	20.2	7.7	22.0	8.4	20.0	8.2
5.0	21.5	8.5	20.4	9.1	22.7	8.4	19.5	7.5	21.8	8.2	20.0	8.2
6.0	20.5	7.9	20.1	8.6	19.0	8.6	19.0	6.8	19.5	5.8	19.7	8.1
7.0	19.8	7.1	20.1	8.8	13.1	6.1	17.0	5.4	16.3	3.9	19.2	8.0
8.0	17.5	4.3	19.5	7.9	12.0	5.3	14.8	4.7	15.0	3.1	15.5	3.0
16.0	12.0	2.0	12.1	2.1	10.5	3.6	12.0	3.6	11.8	2.8	11.5	2.1
17.0	11.8	1.8	12.0	0.4	10.3	3.4	11.9	3.6	11.8	2.7	-	-
18.0	-	-	-	-	10.4	0.2	-	-	-	-	-	-

** All data provided by Department of Environmental Protection

