Appendix 2-A

2004 SAMPLING RESULTS

August 4, 2004 Observed and Average DO

Reach	Sample Site	River Mile	Average Temp	Average DO from Hand Held Meters		24 Hour Average DO Hydrolab		
			F	DO % Sat	DO mg/L	Temp F	DO % Sat	DO mg/L
1	37-CTC	71.14	**75.02**	**40.05**	**3.34**			
2	36-CTC	70.1	**79.70**	**58.98**	**4.75**			
3								
4*	34-CTC	68.17	**79.27**	**79.37**	**6.43**	**79.2**	**85.01**	**6.66**
5	33-CTC	67.99	Flow	Flow	Flow	Flow	Flow	Flow
	32T-CTC	67.78	**77.09**	**72.83**	**6.04**			
6	32M-CTC	67.2	**76.01**	**79.85**	**6.65**	**75.85**	**87.12**	**7.06**
7	32-CTC	66.71	**75.20**	**77.55**	**6.53**	**75.47**	**87.9**	**7.15**
8								
9	31C-CTC	66.29	**75.38**	**80.70**	**6.79**			
	31B-CTC	65.54	**74.57**	**83.25**	**6.86**			
	31AT-CTC	65.48	**73.40**	**82.15**	**7.07**			
10	31AF-CTC	65.18	**73.22**	**82.80**	**7.12**			
11	31-CTC	64.37	**71.78**	**83.35**	**7.31**			
12	30M-CTC	63.67	**72.14**	**89.20**	**7.72**			
13**	30-CTC	62.96	**71.78**	**74.08**	**6.82**	**72.16**	**90.28**	**7.6**
14								
15	29-CTC	61.85	**74.12**	**82.45**	**7.00**			
16	28-CTC	61.34	**75.83**	**82.60**	**6.86**	**73.9**	**84.81**	**7.01**
17	27M-CTC	60.74	**74.03**	**80.75**	**6.88**			
18	27-CTC	59.5	**75.92**	**66.55**	**5.60**	**75.13**	**91.71**	**7.48**
19	25Y-CTC	58.7	**75.56**	**79.90**	**6.71**			

Temp Degree F	Sample Site	REACH	AVG Handheld (HH) and Hydrolab DO mg/L
79.27	34-CTC	**HW**	**3.33**
77.09	32T-CTC	**1**	6.04
76.01	32M-CTC	**2**	**6.86**
75.61	"	**3**	**6.86**
75.2	32-CTC	**4**	6.84
75.38	31C-CTC	**5**	6.79
74.57	31B-CTC	**6**	6.86
73.4	31AT-CTC	**7**	7.07
73.72	31AF-CTC	**8**	7.12
71.78	31-CTC	**9**	7.31
72.14	30M-CTC	**10**	7.72
71.78	30-CTC	**11**	**3.80**
71.78	"	**12**	7.37
74.12	29-CTC	**13**	7.00
75.83	28-CTC	**14**	**6.94**
74.03	27M-CTC	**15**	6.88
75.92	27-CTC	**16**	**6.54**
75.56	25Y-CTC	**17**	6.71

* Reach 4 Avg DO from Hand Held Meter of 6.43 mg/L is the avg using the top three am and pm DO measurements (no bottom) at 34-CTC

** Reach 13 Avg DO from Hand Held Meter of 6.82 mg/L is the avg using the top three an and pm DO measurements (no bottom) at 30-CTC

Reach	Sample Site	Average Temp	AMST DO				PMST DO				A.M. Hydrolab DO			P.M. Hydrolab DO		
		C	Time	Temp C	DO % Sat	DO mg/L	Time	Temp C	DO % Sat	DO mg/L	Time	DO % Sat	DO mg/L	Time	DO % Sat	DO mg/L
1	37-CTC	23.90	6:47	22.60	33.95	2.88	14:37	25.20	46.15	3.80						
2	36-CTC	26.50	6:34	24.95	54.50	4.50	14:10	28.05	63.45	4.99						
3																
4	34-CTC surface	26.26	6:47	25.50	70.88	6.05	14:11	27.02	87.87	7.16	6:45	77.8	6.17	14:00	89.6	6.98
	34-CTC 25%					6.09				7.02						
	34-CTC 50%					5.5				6.76						
	34-CTC bottom					5.6				—						
	34-CTC AVG top 3					**5.88**				**6.98**						
5	33-CTC															
	32T-CTC	25.05	7:13	23.90	67.30	5.66	14:07	26.20	78.35	6.42						
6	32M-CTC	24.45	7:29	23.00	74.00	6.35	14:32	25.90	85.70	6.95	7:30	86.2	7.14	14:30	94.5	7.44
7	32-CTC	24.00	7:41	22.70	71.70	6.18	15:34	25.30	83.40	6.88	7:45	87.5	7.29	15:15	94.5	7.42
8	31BR-CTC															
9	31C-CTC	24.10	7:48	22.50	78.40	6.80	14:40	25.70	83.00	6.77						
	31B-CTC	23.65	7:29	21.70	81.50	6.78	15:57	25.60	85.00	6.93						
	31AT-CTC	23.00	7:44	21.30	81.70	7.29	16:37	24.70	82.60	6.85						
10	31AF-CTC	22.90	8:10	21.40	78.50	6.94	14:53	24.40	87.10	7.29						
11	31-CTC	22.10	8:26	20.20	83.70	7.62	15:04	24.00	83.00	7.00						
12	30M-CTC	22.30	8:35	20.10	83.90	7.61	16:15	24.50	94.50	7.83						
13	30-CTC surface	22.10	8:25	21.35	62.90	6.13	15:24	22.85	85.25	8.15	8:30	82.1	7.14	15:30	102.1	8.58
	30-CTC 25%					5.64				7.77						
	30-CTC 50%					5.61				7.62						
	30-CTC bottom					4.92				5.80						
	30-CTC AVG top 3					**5.79**				**7.85**						
14																
15	29-CTC	23.40	8:40	21.60	77.20	6.81	15:52	25.20	87.70	7.19						
16	28-CTC	24.35	8:59	22.80	76.50	6.52	15:52	25.90	88.70	7.20	9:00	81.7	6.9	14:45	90.3	7.37
17	27M-CTC	23.35	8:59	22.40	75.30	6.53	17:46	24.30	86.20	7.22						
18	27-CTC	24.40	9:14	23.80	67.70	5.72	16:18	25.00	65.40	5.47	9:15	82.9	6.89	16:15	102.7	8.23
19	25Y-CTC	24.20	9:20	23.10	71.30	6.11	16:10	25.30	88.50	7.30						

August 11, 2004 Observed DO

Reach	Sample Site	River Mile	Average Temp	Average of am and pm DO from Hand Held Meters		24 Hour Average DO Hydrolab			AVG DO from Hand Held Meters	AVG DO from Hydrolabs	Temp	REACH	AVG of Hand Held Meters and the Hydrolabs
			F	DO % Sat	DO mg/L	Temp F	DO % Sat	DO mg/L	DO mg/L	DO mg/L	Degrees F	New Reach	DO mg/L
HW	34	68.17	71.60	72.65	6.13	71.4	66.9	6.05	6.13	6.05	71.60	HW	6.09
1	32T	67.78	72.64	72.60	6.26				6.26		72.64	1	
2	32M	67.2	70.79	81.65	7.20	69.3	90.9	7.64	7.2	7.64	70.79	2	7.42
3											70.57	3	
4	32		70.34	82.40	7.31	69.6	86.1	7.17	7.31	7.17	70.34	4	7.24
5	31C	66.29	69.98	81.45	7.26				7.26		69.98	5	
6	31B	65.54	69.80	86.30	7.70				7.7		69.80	6	
7	31AT	65.48	69.44	84.60	7.57				7.57		69.44	7	
8	31AF	65.18	67.37	81.30	7.45				7.45		67.37	8	
9	31C	64.37	66.83	87.40	8.05				8.05		66.83	9	
10	30M	63.67	67.91	94.90	8.63				8.63		67.91	10	
11	30	62.96	68.27	83.30	7.55	66.8	94.8	8.25	7.55	8.25	68.27	11	7.90
12											68.27	12	
13	29	61.85	67.82	83.30	7.58				7.58		67.82	13	
14	28	61.34	70.61	80.35	7.11	67.0	79.0	7.14	7.11	7.14	70.61	14	7.13
15	27M	60.74	70.97	91.20	8.01				8.01		70.97	15	
16	27	59.5	70.88	78.65	6.69	69.8	84.4	7.58	6.69	7.58	70.88	16	7.14
17	25Y	58.7	72.05	81.43	7.07				7.07		72.05	17	

Reach	Sample Site	Average Temp	AMST DO				PMST DO				A.M. Hydrolab DO			P.M. Hydrolab DO		
		C	Time	Temp C	DO % Sat	DO mg/L	Time	Temp C	DO % Sat	DO mg/L	Time	DO % Sat	DO mg/L	Time	DO % Sat	DO mg/L
HW	34-CTC Surface	22.00	6:44	21.7	62.7	5.5	13:47	24	89.6	7.43	6:45	68.2	5.83	13:45	65.5	5.59
	34-CTC 25%		6:43	21.7	62.7	5.5	13:50	22.3	84.4	7.33						
	34-CTC 50%		6:41	21.6	6.3.	5.5	13:53	22.1	72	6.33						
	34-CTC bottom		6:40	21.5	55.7	4.96										
	34-AVG top 3					**5.5**				**7.03**						
HW	34-CTC Surface REP						14:04	24.1	84	7.1						
	34-CTC 25% REP						14:06	24	75.8	6.41						
	34-CTC 50% REP						14:08	22.4	68.7	5.91						
	34-CTC bottom REP															
	34-AVG top 3 REP									**6.47**						
1	32T	22.58	6:44	21.70	62.70	5.5	13:50	23.45	82.50	7.01						
2	32M	21.55	6:58	20.70	77.90	7.00	14:10	22.4	85.4	7.4	7:00	85.1	7.55	14:15	96.7	8.24
3																
4	32	21.30	7:25	20.10	74.50	6.80	14:37	22.50	90.30	7.82	7:30	81.5	7.21	14:30	90.7	7.71
5	31C	21.10	7:31	20.00	79.00	7.21	14:10	22.2	83.9	7.31						
6	31B	21.00	6:47	19.80	82.40	7.52	14:57	22.20	90.20	7.88						
7	31AT	20.80	7:04	19.40	82.60	7.6	15:28	22.20	86.60	7.53						
8	31AF	19.65	7:44	18.50	83.90	7.85	14:32	20.8	78.7	7.05						
9	31	19.35	7:44	17.90	84.70	8.05	14:29	20.80	90.10	8.05						
10	30M	19.95	7:59	17.80	88.50	8.42	15:15	22.10	101.30	8.83						
11	30-CTC surface	20.15	7:57	18.10	80.20	7.55	14:54	22.20	86.40	7.54	8:00	87.5	8.09	15:00	102	8.81
	30-CTC 25%															
	30-CTC 50%															
	30-CTC bottom															
	30-CTC AVG top 3					**7.55**		22.20	86.40	**7.54**						
12																
13	29	19.90	8:08	18.30	77.00	7.25	14:59	21.50	89.60	7.90						
14	28	21.45	8:32	20.80	80.40	7.2	15:09	22.1	80.3	7.01	8:30	77.2	6.95	15:00	80.8	7.17
15	27M	21.65	8:20	20.40	79.10	7.15	16:16	22.90	103.30	8.87						
16	27	21.60	8:47	20.80	78.70	7.05	15:18	22.40	78.60	6.32	8:45	82	7.24	15:15	86.8	7.47
17	25Y	22.25	8:29	20.90	82.25	7.3	15:29	23.60	80.60	6.83						

Contoocok River Hydrolab Data August 3 to August 6, 2004

Site 34-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/3/2004 15:00-23:45	Min	24.67	67.9	5.41	114.9
	Max	26.8	92.7	7.35	122
	Mean	25.60	79.97	6.34	117.93
8/4/2004 0:00-23:45	Min	25.15	72.6	5.69	117
	Max	27.14	97.3	7.6	165.8
	Mean	26.22	85.01	6.66	121.38
8/5/2004 0:00-23:45	Min	24.54	72	5.77	118.8
	Max	26.26	95.4	7.48	129.5
	Mean	25.30	81.63	6.50	121.81
8/6/2004 0:00-10:30	Min	23.2	70.4	5.83	122.3
	Max	24.48	85.2	6.96	133
	Mean	23.65	77.03	6.32	128.08

Site 30-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/3/2004 15:00-23:45	Min	22.08	88	7.28	107.2
	Max	24.03	109.7	9.07	108.9
	Mean	23.46	99.99	8.24	108.07
8/4/2004 0:00-23:45	Min	20.69	79.9	6.89	106.2
	Max	24.41	103.5	8.63	111.2
	Mean	22.31	90.28	7.60	108.27
8/5/2004 0:00-23:45	Min	16.01	78.3	6.52	0
	Max	23.93	104	9.44	117.4
	Mean	20.56	88.14	7.71	74.76
8/6/2004 0:00-10:30	Min	11.62	95.3	9.02	0
	Max	17.47	98.9	10.21	0
	Mean	14.10	97.56	9.74	0.00

Site 32M-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/3/2004 15:00-23:45	Min	24.23	83.5	6.71	129.7
	Max	26.58	96.1	7.48	134.1
	Mean	25.35	88.01	7.00	131.59
8/4/2004 0:00-23:45	Min	23.17	80.8	6.58	128.3
	Max	26.52	95.6	7.7	135.7
	Mean	24.36	87.12	7.06	130.40
8/5/2004 0:00-23:45	Min	22.01	80.9	6.71	130.2
	Max	24.2	95.2	7.82	135.2
	Mean	23.02	85.98	7.15	132.50
8/6/2004 0:00-10:30	Min	20.3	81.5	6.95	133.1
	Max	22.06	90.6	7.88	138.9
	Mean	20.97	84.24	7.28	136.25

Site 28-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/3/2004 15:00-23:45	Min	23.31	85.3	6.98	77.9
	Max	24.5	99.8	8.15	111.6
	Mean	24.09	92.74	7.55	92.50
8/4/2004 0:00-23:45	Min	22.1	79.5	6.67	91.7
	Max	24.6	91	7.55	113.1
	Mean	23.28	84.81	7.01	102.80
8/5/2004 0:00-23:45	Min	21.93	78.4	6.54	93.3
	Max	23.92	94.5	7.95	108.9
	Mean	22.69	85.09	7.12	99.49
8/6/2004 0:00-10:30	Min	19.01	80.7	6.96	88.5
	Max	22.5	83.3	7.46	102.7
	Mean	20.64	82.43	7.18	97.00

Site 32-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/3/2004 15:00-23:45	Min	24.07	84.2	6.81	142.6
	Max	26.34	95.8	7.51	146.5
	Mean	25.29	88.31	7.03	144.44
8/4/2004 0:00-23:45	Min	22.87	83.4	6.78	140.2
	Max	26.09	95.7	7.7	146.3
	Mean	24.15	87.90	7.15	143.14
8/5/2004 0:00-23:45	Min	21.77	83.2	6.89	145.5
	Max	26.09	95.7	7.85	152.2
	Mean	22.75	87.29	7.29	148.30
8/6/2004 0:00-10:30	Min	19.9	83.6	7.13	144.9
	Max	21.79	90.9	7.97	148.6
	Mean	20.62	85.37	7.43	146.97

Site 27-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/3/2004 15:00-23:45	Min	23.86	90.5	7.4	85.4
	Max	25.67	108.7	8.61	98.8
	Mean	24.85	100.23	8.05	93.81
8/4/2004 0:00-23:45	Min	22.94	82.4	6.85	87.6
	Max	25.08	103.6	8.29	108.3
	Mean	23.96	91.71	7.48	98.97
8/5/2004 0:00-23:45	Min	22.15	82.7	6.91	96.4
	Max	24.05	102.8	8.49	106.7
	Mean	23.12	91.47	7.59	100.92
8/6/2004 0:00-10:30	Min	20.64	83.6	7.25	100
	Max	22.1	91.8	7.77	106.5
	Mean	21.36	86.32	7.41	101.66

Contoocok River Hydrolab Data August 10 to August 13, 2004

Site 34-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/10/2004 14:00-23:45	Min	20.98	63.3	5.45	112.2
	Max	21.99	74.9	6.38	118.9
	Mean	21.43	69.58	5.96	115.11
8/11/2004 0:00-23:45	Min	21.34	60.3	5.12	113
	Max	22.74	81.1	6.87	120.1
	Mean	21.88	71.24	6.05	117.04
8/12/2004 0:00-23:45	Min	21.86	61.4	5.21	115.4
	Max	22.72	79.3	6.68	118.9
	Mean	22.14	68.90	5.82	117.09
8/13/2004 0:00-10:00	Min	22.58	65.7	5.48	116
	Max	22.96	78.2	6.55	117.2
	Mean	22.73	73.20	6.12	116.90

Site 30-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/10/2004 14:00-23:45	Min	18.7	83.4	7.52	110.9
	Max	22.09	104.4	9.12	112.9
	Mean	20.62	93.78	8.16	112.42
8/11/2004 0:00-23:45	Min	17.47	83.4	7.56	109.3
	Max	21.53	103.1	8.85	114.3
	Mean	19.32	92.42	8.25	111.76
8/12/2004 0:00-23:45	Min	18.43	82.8	7.41	107.2
	Max	19.88	90.2	8.05	118.1
	Mean	18.93	84.69	7.63	115.36
8/13/2004 0:00-10:00	Min	19.05	81.5	7.22	114.7
	Max	20.29	90	7.92	118.8
	Mean	19.73	84.40	7.48	116.65

Site 32M-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/10/2004 14:00-23:45	Min	20.69	83.3	7.18	139.3
	Max	23.2	101.8	8.58	142.6
	Mean	22.23	91.16	7.69	140.96
8/11/2004 0:00-23:45	Min	19.65	79.7	6.93	129.7
	Max	22.32	99.2	8.4	140.8
	Mean	20.71	87.96	7.64	135.82
8/12/2004 0:00-23:45	Min	20.21	81.1	6.98	131.8
	Max	22.61	95.3	8.14	137.3
	Mean	21.12	86.60	7.46	135.09
8/13/2004 0:00-10:00	Min	20.62	80.6	7	135.7
	Max	21.07	88.2	7.65	137
	Mean	20.75	82.78	7.19	136.38

Site 28-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/10/2004 14:00-23:45	Min	17.97	80.3	7.19	75.8
	Max	20.02	93.4	8.24	84
	Mean	19.00	86.59	7.79	81.09
8/11/2004 0:00-23:45	Min	18.86	73	6.52	68.2
	Max	21.15	89.3	7.87	85.4
	Mean	19.42	80.10	7.14	83.21
8/12/2004 0:00-23:45	Min	19.45	67.6	5.97	79.7
	Max	21.11	82.6	7.2	84.3
	Mean	20.16	74.07	6.51	83.21
8/13/2004 0:00-10:00	Min	20.48	67.3	5.85	83.4
	Max	20.92	74.8	6.49	90.7
	Mean	20.73	71.59	6.22	86.05

Site 32-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/10/2004 14:00-23:45	Min	21.12	78.4	6.72	131.7
	Max	22.99	93.7	7.9	138
	Mean	22.28	85.37	7.19	135.69
8/11/2004 0:00-23:45	Min	19.8	77.9	6.71	132.1
	Max	22.41	91.6	7.77	140.3
	Mean	20.91	82.83	7.17	136.59
8/12/2004 0:00-23:45	Min	20.21	77.7	6.7	126.2
	Max	22.55	91.2	7.74	138.2
	Mean	21.17	82.84	7.13	130.81
8/13/2004 0:00-10:00	Min	20.56	78.2	6.73	128.6
	Max	21.35	84.5	7.31	131.3
	Mean	20.81	79.65	6.91	130.09

Site 27-CTC		Temp (degree C)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)	Specific Conductivity æS/cm
8/10/2004 14:00-23:45	Min	19.99	86.2	7.58	88.6
	Max	21.66	96.7	8.26	90.4
	Mean	21.14	92.66	7.99	89.62
8/11/2004 0:00-23:45	Min	19.93	80.7	7.12	88.6
	Max	21.95	94.7	8.11	91.8
	Mean	21.00	87.77	7.58	90.43
8/12/2004 0:00-23:45	Min	20.87	75.3	6.52	88
	Max	22.16	93	7.91	92.4
	Mean	21.54	83.79	7.16	89.55
8/13/2004 0:00-10:00	Min	21.61	78.6	6.71	89
	Max	22.24	90.7	7.65	93.2
	Mean	22.03	86.25	7.31	91.07

DATE: 8/4/2004 CONTOOCOK RIVER
EARLY MORNING SAMPLE TEAM DATA

Station ID	Waterbody Name	EMST Members Initials	Approx. Width of River (feet)	Approx. Depth of River (feet)	Sample Depth from Surface (feet)	Sample Distance from River Right Bank (feet)	Time of Field Measurement	Specific Conductivity 200 us/cm standard reading	Specific Conductivity (us/cm)	Temp (C)	DO % Sat	DO (mg/L)	DO Meter Serial #	Pre-sample Storage Chamber Reading % Sat	Post-sample Storage Chamber Reading % Sat	DO Meter Calibration Value Setting % Sat
37-CTC	Contoocook River	PF + GA	35	3	0.5	15	6:45	219.0	93.7	22.6	35	3.01	25229	96.3	99	97
37-CTC REP	Contoocook River	PF + GA	35	3	0.5	15	6:50	221.0	93.6	22.6	32.9	2.75	25229	96.8	96	97
01-MBR	Mountain Brook Reservoir	PF + GA	30	2.5	0.5	30	7:00	221.5	85.0	25.7	83.6	6.81	25229	97	96.8	97
36-CTC	Contoocook River	GB + MJ	70	3	0.5	5	6:19	203.5	94.8	24.3	40.6	3.4	25240	96.6	106	97
36-CTC REP	Contoocook River	GB + MJ	70	3	0.5	5	6:26	204.4	94.8	24.3	35.8	3.01	25240	106	92.7	97
34-CTC	Contoocook River	GB + MJ	200	2.6	0.5	15	6:49	203.2	124.8	25.6	68.4	5.6	25240	97	97	97
34-CTC	Contoocook River	GB + MJ	200	2.6	0.8	15	6:48	*********	**********	25.5	67.2	5.5	25240	**********	**********	**********
34-CTC	Contoocook River	GB + MJ	200	2.6	1.3	15	6:47	*********	**********	25.5	74.3	6.09	25240	**********	**********	**********
34-CTC	Contoocook River	GB + MJ	200	2.6	1.6	15	6:45	*********	**********	25.4	73.6	6.05	25240	**********	**********	**********
32T-CTC	Contoocook River	GB + MJ	20	2	0.5	8	7:13	204.1	130.6	23.9	67.3	5.66	25240	97	89.9	97
32M-CTC	Contoocook River	GB + MJ	45	2	0.5	5	7:29	203.8	135.5	23	74	6.35	25240	97	99.1	97
NH0100595	Jaffrey WWTF Effluent	GB + MJ	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********
32-CTC	Contoocook River	GB + MJ	20	2.5	0.5	10	7:41	203.5	159.2	22.7	71.7	6.18	25240	97	95.5	97
31C-CTC	Contoocook River	GB + MJ	40	1	0.5	15	7:48	203.4	159.2	22.5	78.4	6.8	25240	97	100.3	97
31B-CTC	Contoocook River	PF + GA	30	1.5	0.5	20	7:29	220.2	163.0	21.7	81.5	6.78	25229	97	98.8	97
OOH-TWN	Town Farm Brook	PF + GA	15	1	0.5	5	7:35	220.3	88.8	20.3	82.7	7.49	25229	97	97.9	97
31AT-CTC	Contoocook River	PF + GA	35	1	0.5	20	7:44	219.1	154.1	21.3	81.7	7.29	25229	97	99	97
02-GRD	Contoocook River	PF + GA	15	0.5	0.5	7.5	8:02	219.1	65.5	19.6	71.6	6.55	25229	97	97.8	97
31AF-CTC	Contoocook River	GB + MJ	50	0.5	0.5	12	8:10	203.0	150.9	21.4	78.5	6.94	25240	97.1	95.3	97
01-MDB	Meadow Brook	PF + GA	15	3	0.5	10	8:19	217.5	55.1	19.5	83	7.58	25229	97.2	97.3	97
31-CTC	Contoocook River	PF + GA	40	2	0.5	35	8:26	218.8	120.7	20.2	83.7	7.62	25229	97	96.9	97
30M-CTC	Contoocook River	PF + GA	15	2.5	0.5	5	8:35	216.4	221.1	20.1	83.9	7.61	25229	97	95.6	97
30-CTC	Contoocook River	GB + MJ	150	7.4	0.5	75	8:27	201.7	115.9	22.1	56.3	4.92	25240	96.4	99.4	97
30-CTC	Contoocook River	GB + MJ	150	7.4	1.85	75	8:26	*********	**********	21.5	63.5	5.61	25240	**********	**********	**********
30-CTC	Contoocook River	GB + MJ	150	7.4	3.7	75	8:25	*********	**********	21.1	63.4	5.64	25240	**********	**********	**********
30-CTC	Contoocook River	GB + MJ	150	7.4	6.4	75	8:23	*********	**********	20.7	68.4	6.13	25240	**********	**********	**********
29-CTC	Contoocook River	GB + MJ	70	1.1	0.5	25	8:40	202.7	128.8	21.6	77.2	6.81	25240	96.5	98.6	97
OOH-NUB	Nubanusit Brook	PF + GA	20	1.5	0.5	10	8:50	218.1	77.0	23.1	88	7.5	25229	96.9	97.2	97
28-CTC	Contoocook River	PF + GA	80	2	0.5	75	8:59	215.0	91.6	22.8	76.5	6.52	25229	97	98.3	97
27M-CTC	Contoocook River	GB + MJ	60	2	0.5	10	8:59	203.2	112.2	22.4	75.3	6.53	25240	97.1	99.3	97
27-CTC	Contoocook River	PF + GA	125	3.5	0.5	110	9:14	216.7	99.8	23.8	67.7	5.72	25229	97	96.5	97
25Y-CTC	Contoocook River	GB + MJ	70	1	0.5	25	9:20	200.5	100.5	23.1	71.3	6.11	25240	97	95.5	97

DATE : 8/04/2004 CONTOOCOOK
AFTERNOON
SAMPLE TEAM
DATA

								Water Quality Information			Calibration Information			
Station ID	**Waterbody Name**	**PMST Members Initials**	**Approx. Depth of River (feet)**	**Approx. Width of River (feet)**	**Sample Depth from Surface (feet)**	**Sample Distance from River Right Bank (feet)**	**Time of Field Measurement**	**Temp (C)**	**DO % sat**	**DO mg/L**	**DO Meter Serial #**	**DO Zero Std Reading (mg/L)**	**Post-sample Storage Chamber Reading % sat**	**DO Meter Calibration Value Setting % sat**
37-CTC	Contoocook	EB + DS	2	40	0.5	12.0	14:32	25.0	47.50	3.93	25229	0.00	102.9	97.0
37-CTC REP	Contoocook	EB + DS	"	"	"	"	14:42	25.4	44.80	3.67	25229	0.01	97.3	97.0
01-MBR	Mountain Brook	EB + DS	2.5	35	0.5	18.0	14:58	27.5	86.50	6.87	25229	0.01	100.5	97.0
36-CTC	Contoocook River	MJ + PT	3	60	0.5	7	14:08	28.2	63.60	5.02	25240	0.00	97.4	97.0
36-CTC REP	Contoocook	MJ + PT	"	"	"	"	14:13	27.9	63.3	4.96	25240	0.05	96.5	97.0
34-CTC	Contoocook	GA + AT	2.9	150	0.5	10	14:01	27.3	90.7	7.18	25239	0.03	99.9	97.0
34-CTC	Contoocook	GA + AT	2.9	150	1.5	10	14:03	27	88.6	7.06	25239	***	***	97.0
34-CTC	Contoocook	GA + AT	2.9	150	2.5	10	14:05	26.7	85.6	6.95	25239	***	***	97.0
34-CTC REP	Contoocook	GA + AT	2.9	150	0.5	10	14:18	27.4	90.2	7.16	25239	0.02	96.9	97.0
34-CTC REP	Contoocook	GA + AT	2.9	150	1.5	10	14:19	26.9	87.6	7.02	25239	***	***	97.0
34-CTC REP	Contoocook	GA + AT	2.9	150	2.5	10	14:20	26.8	84.5	6.76	25239	***	***	97.0
32T-CTC	Contoocook	PF + EL	2	10	0.5	1	14:05	26.2	78.4	6.4	25238	-0.02	101.7	97.0
32T-CTC REP	Contoocook	PF + EL	"	"	"	"	14:10	26.2	78.3	6.43	25238	-0.02	98.6	97.0
32M-CTC	Contoocook River	MJ + PT	1.5	30	0.5	7	14:32	25.9	85.7	6.95	25240	0.00	97.2	97.0
NH0100595	Jaffrey WWTF													
32-CTC	Contoocook	GA + AT	3	25	0.5	10	15:34	25.3	83.4	6.88	25239	0.03	98.5	97.0
31C-CTC	Contoocook	PF + EL	1	40	0.5	20	14:40	25.7	83	6.77	25238	-0.04	95.9	97.0
31B-CTC	Contoocook	DS + EB	3	20	0.5	8	15:57	25.6	85	6.93	25229	0.01	97.3	97.0
OOH-TWN	Town Farm	EB + DS	0.5	10	0.5	5	16:17	23.5	81	6.87	25229	0.01	94.4	97.0
31AT-CTC	Contoocook	EB + DS	1	35	0.5	20	16:37	24.7	82.6	6.85	25229	0.02	101.4	97.0
02-GRD	Contoocook	GA + AT	0.5	16	0.5	6	16:59	23.2	82.7	7.07	25239	0.01	96.3	97.0
31AF-CTC	Contoocook	MJ + PT	1	50	0.5	25	14:53	24.4	87.1	7.29	25240	0.00	98.3	97.0
01-MDB	Meadow Brook	PF + EL	3	20	0.5	10	15:31	22.8	84.1	7.24	25238	-0.04	94.9	97.0
31-CTC	Contoocook	PF + EL	2	45	0.5	15	15:04	24	83	7	25238	-0.04	99.7	97.0
30M-CTC	Contoocook	GA + AT	3.5	35	0.5	17	16:15	24.5	94.5	7.83	25239	0.01	98.9	97.0
30-CTC	Contoocook	MJ + PT	7.5	100	0.5	50	15:26	24.9	98.3	8.15	25240	0.00	106.5	97.0
30-CTC	Contoocook	MJ + PT	7.5	100	1.9	50	15:25	23	90.5	7.77	25240	***	***	97.0
30-CTC	Contoocook	MJ + PT	7.5	100	3.75	50	15:23	22.3	88.2	7.62	25240	***	***	97.0
30-CTC	Contoocook	MJ + PT	7.5	100	6.5	50	15:22	21.2	64	5.8	25240	***	***	97.0
29-CTC	Contoocook	PF + EL	1	100	0.5	50	15:52	25.2	87.7	7.19	25238	-0.04	101.8	97.0
OOH-NUB	Nubanusit Brook	DS + EB	1	35	0.5	17	17:13	25.1	82.8	6.8	25229	0.01	97.9	97.0
28-CTC	Contoocook	MJ + PT	2.5	75	0.5	75	15:52	25.9	88.7	7.2	25240	0.01	94.6	97.0
27M-CTC	Contoocook River	GA + AT	2.5	100	0.5	50	17:46	24.3	86.2	7.22	25239	0.00	94.0	97.0
27-CTC	Contoocook	PF + EL	3	150	0.5	40	16:18	25	65.4	5.47	25238	-0.04	95.7	97.0
25Y-CTC	River	MJ + PT	1.5	50	0.5	45	16:10	25.3	88.5	7.3	25240	0.00	97.7	97.0

DATE: 8/11/2004 CONTOOCOK RIVER
EARLY MORNING SAMPLE TEAM DATA

Station ID	Waterbody Name	EMST Members Initials	Approx. Width of River (feet)	Approx. Depth of River (feet)	Sample Depth from Surface (feet)	Sample Distance from River Right Bank	Time of Field Measurement	Specific Conductivity (us/cm)	Specific Conductivity Calibration 200 us/cm	Temp (C)	DO % Sat	DO (mg/L)	Post-sample Storage Chamber Reading % Sat	DO Meter Serial #	DO Meter Calibration Value Setting % Sat
37-CTC	Contoocook River	PF + GA	35	2	0.5	10	6:19	95.60	204.6	19.2	40.7	3.77	99.8	25229	97
01-MBR	Mountain Brook Reservoir	PF + GA	45	3.5	0.5	5	6:28	86.60	206.0	22.9	78.1	6.7	96.9	25229	97
36-CTC	Contoocook River	MJ + GC	60	3	0.5	5	6:18	91.20	198.8	21.3	62.9	5.6	101.8		97
34-CTC	Contoocook River	MJ + GC	100	2.8	0.5	75	6:44	132.00	194.9	21.7	62.7	5.5	91.4		97
34-CTC	Contoocook River	MJ + GC	"	"	0.7	"	6:43	***	***	21.7	62.7	5.53	***		97
34-CTC	Contoocook River	MJ + GC	"	"	1.4	"	6:41	***	***	21.6	63.3	5.5	***		97
34-CTC	Contoocook River	MJ + GC	"	"	1.8	"	6:40	***	***	21.5	55.7	4.96	***		97
32T-CTC	Contoocook River	MJ + GC	25	2	0.5	5	6:58	130.30	189.5	20.7	77.9	7	105.1		97
32M-CTC	Contoocook River	MJ + GC	30	2	0.5	5	7:15	139.30	189.5	19.8	74	6.75	95.9		97
NH0100595	Jaffrey WWTF Effluent	***	***	***	***	***	***	***	***	***	***	***	***	***	***
32-CTC	Contoocook River	MJ + GC	15	3	0.5	10	7:25	179.80	192.3	20.1	74.5	6.8	93.5		97
31C-CTC	Contoocook River	MJ + GC	30	1	0.5	15	7:31	176.70	191.9	20	79	7.21	101.4		97
31B-CTC	Contoocook River	PF + GA	30	2.5	0.5	15	6:47	196.50	206.2	19.8	82.4	7.52	98	25229	97
OOH-TWN	Town Farm Brook	PF + GA	15	0.5	0.5	7.5	6:52	97.90	205.0	18.2	82.6	7.79	96.8	25229	97
31AT-CTC	Contoocook River	PF + GA	35	1	0.5	20	7:04	182.30	205.5	19.4	82.6	7.6	97.2	25229	97
02-GRD	Contoocook River	PF + GA	12	0.5	0.5	6	7:24	60.30	206.9	17	74.7	7.22	95	25229	97
31AF-CTC	Contoocook River	MJ + GC	60	1.5	0.5	40	7:44	134.20	193.1	18.5	83.9	7.85	95.1		97
01-MDB	Meadow Brook	PF + GA	30	3	0.5	25	7:37	56.90	204.8	17.3	83	8	99.2	25229	97
31-CTC	Contoocook River	PF + GA	50	1	0.5	40	7:44	126.40	205.0	17.9	84.7	8.05	97.6	25229	97
30M-CTC	Contoocook River	PF + GA	25	2	0.5	12	7:59	127.00	204.0	17.8	88.5	8.42	97.4	25229	97
30-CTC	Contoocook River	MJ + GC	25	2	0.5	12	7:57	111.90	191.5	18.1	80.2	7.55	101.1		97
30-CTC	Contoocook River	MJ + GC	!!!	!!!	***	***	***	***	***	***	***	***	***	***	97
30-CTC	Contoocook River	MJ + GC	!!!	!!!	***	***	***	***	***	***	***	***	***	***	97
30-CTC	Contoocook River	MJ + GC	!!!	!!!	***	***	***	***	***	***	***	***	***	***	97
29-CTC	Contoocook River	MJ + GC	60	1	0.5	30	8:08	115.10	192.1	18.3	77	7.25	95.2		97
OOH-NUB	Nubanusit Brook	PF + GA	40	0.8	0.5	20	8:19	68.20	205.2	21.8	86.6	7.6	96.9	25229	97
28-CTC	Contoocook River	PF + GA	100	4	0.5	95	8:32	101.10	204.6	20.8	80.4	7.2	97.6	25229	97
28-CTC REP	Contoocook River	PF + GA	"	"	"	"	8:35	102.20	204.4	20.8	80.6	7.22	97.2	25229	97
27M-CTC	Contoocook River	MJ + GC	60	2	0.5	10	8:20	106.00	193.1	20.4	79.1	7.15	95.9		97
27-CTC	Contoocook River	PF + GA	125	3	0.5	120	8:47	116.50	204.9	20.8	78.8	7.05	97.6	25229	97
25Y-CTC	Contoocook River	MJ + GC	50	2	0.5	40	8:29	107.70	192.5	20.9	81.1	7.25	96.2		97
25Y-CTC REP	Contoocook River	MJ + GC	"	"	"	"	8:35	107.80	192.8	20.9	83.4	7.34	98.1		97

Notes:
" = same number as cell above
***** = no measurement taken/required**
!!! = Impoundment drain

DATE : 8/11/2004 CONTOOCOOK RIVER
AFTERNOON SAMPLE TEAM DATA

							Water Quality Information				Calibration Information				Aquatic Plant Growth				Weather, Stream Characteristics			
Station ID	**Waterbody Name**	**PMST Members Initials**	**Approx. Depth of River (feet)**	**Approx. Width of River (feet)**	**Sample Depth from Surface (feet)**	**Sample Distance from River Right Bank (feet)**	**Time of Field Measurement**	**Temp (C)**	**DO % sat**	**DO mg/L**	**DO Meter Serial #**	**DO Zero Std Reading (mg/L)**	**Post-sample Storage Chamber Reading % sat**	**DO Meter Calibration Value Setting % sat**	**Macrophytes (%)**	**Phytoplankton (%)**	**Periphyton (%)**	**Vegetated Canopy (%)**	**Weather % Cloud Cover**	**Water Color**	**Substrate Type**	**River Character, Comments**
37-CTC	Contoocook River	GC + KS	2	25	0.5	12.5	13:54	23.0	47.00	4.03	25229	0.01	102.6	97.0	67-100	0-33	0-33%	0-33	67-100	Straw	can't see, too many macrophytes	many pond lilies upstream in impoundmemnt
37-CTC REP	Contoocook River	GC + KS	2	25	0.5	12.5	14:06	23.4	50.70	4.41	25229	0.03	87.5	97.0	67-100	0-34	0-33%	0-33	67-100	Straw	can't see, too many macrophytes	many pond lilies upstream in impoundmemnt
01-MBR	Mountain Brook Reservoir	GC + KS	2	25	0.5	12.0	14:24	24.3	84.80	7.10	25229	0.01	91.1	97.0	34-66	0-33	0-33	0-33	67-100	Straw	cobble, boulders	slow moving
36-CTC	Contoocook River	MJ + SS	3	50	0.5	5	13:41	22.5	56.30	4.87	25240	0.07	105.3	97.0	0-33	0-33	34-66	0-33	67-100	Tea	sandy, cobbles	slow moving
36-CTC REP	Contoocook River	MJ + SS	3	50	0.5	5	13:49	22.7	52.8	4.56	25240	0.07	104.7	97.0	"	"	"	"	"	"	"	"
34-CTC	Contoocook River	GA + TW	2.9	175	0.5		13:47	24	89.6	7.43	25239	0.02	98.6	97.0	10	1	0	0-33	67-100	Straw	too deep to see	impoundment, windy, angry geese
34-CTC	Contoocook River	GA + TW	"	"	1.5		13:50	22.3	84.4	7.33	25239	***	***	97.0	"	"	"	"	"	"	"	"
34-CTC	Contoocook River	GA + TW	"	"	2.5		13:53	22.1	72	6.33	25239	***	***	97.0	"	"	"	"	"	"	"	"
34-CTC REP	Contoocook River	GA + TW	"	"	0.5		14:04	24.1	84	7.1	25239	0.02	97.5	97.0	"	"	"	"	"	"	"	"
34-CTC REP	Contoocook River	GA + TW	"	"	1.5		14:06	24	75.8	6.41	25239	***	***	97.0	"	"	"	"	"	"	"	"
34-CTC REP	Contoocook River	GA + TW	"	"	2.5		14:08	22.4	68.7	5.91	25239	***	***	97.0	"	"	"	"	"	"	"	"
32T-CTC	Contoocook River	PF + LF	2	20	0.5	10	13:50	23.5	82.5	7	25238	-0.04	97.0	97.0	0-33	0-33	0-33	67-100	67-100	Tea	rocks and sand	slow moving
32T-CTC REP	Contoocook River	PF + LF	2	20	0.5	10	13:53	23.4	82.5	7.02	25238	-0.04	97.0	97.0	"	"	"	"	"	"	"	"
32M-CTC	Contoocook River	MJ + SS	1.5	35	0.5	10	14:10	22.4	85.4	7.4	25240	0.05	108.7	97.0	0-33	0-33	67-100	67-100	67-100	clear, tea	sandy, cobbles	riffle, run. Sample taken at hydrolab location, 30 ft upstream of effluent pipe.
NH0100595	Jaffrey WWTF Effluent																					
32-CTC	Contoocook River	GA + TW	1.5	20	0.5	10	14:37	22.5	90.3	7.82	25239	0.03	99.5	97.0	0-33	0-33	0-33	34-66	0-33	Straw	sand , large cobble	slow flat water, milfoil present
31C-CTC	Contoocook River	PF + LF	0.5	30	0.5	15	14:10	22.2	83.9	7.31	25238	-0.04	96.9	97.0	0-33	0-33	0-33	34-67	67-100	Tea	sandy, cobbles	riffle, run, riffle run, slow moving
31B-CTC	Contoocook River	GC + KS	2	15	0.5	7.5	14:57	22.2	90.2	7.88	25229	0.08	102.3	97.0	0-33	0-33	67-100	67-100	67-100	Straw	boulders, some sand	riffle, hazy
OOH-TWN	Town Farm Brook	GC + KS	1	15	0.5	7.5	15:12	19.7	85.5	7.7	25229	0.07	98.7	97.0	0-33	0-33	67-100	67-100	34-66	Straw	boulders, sand	riffle
31AT-CTC	Contoocook River	GC + KS	1	15	0.5	7.5	15:28	22.2	86.6	7.53	25229	0.01	96.5	97.0	0-33	0-33	67-100	34-67	67-100	Straw	cobble, boulders	riffle, hazy
02-GRD	Contoocook River	GA + TW	1	18	0.5	8	15:42	20.6	86.9	7.75	25239	0.02	95.8	97.0	34-66	0	67-100	34-67	67-100	Tea	sandy, big cobbles	riffle, beaver dam 50 ft upstream
31AF-CTC	Contoocook River	MJ + SS	1	60	0.5	40	14:32	20.8	78.8	7.05	25240	0.06	90.9	97.0	33-66	0-33	67-100	34-67	67-100	clear, tea colored	sandy pockets, cobbles	riffle, run, fish in stream, flowers in middle of stream
01-MDB	Meadow Brook	PF + LF	3	20	0.5	18	14:42	20	85.9	7.8	25238	-0.04	96.7	97.0	0-33	0-33	0-33	34-67	67-100	Tea	sandy, cobles	slow
31-CTC	Contoocook River	PF + LF	1	45	0.5	40	14:29	20.8	90.1	8.05	25238	-0.04	96.5	97.0	0-33	0-33	0-33	34-67	67-100	Tea	sandy, rocks, cobbles @ riffles	riffle, run, riffle, run
30M-CTC	Contoocook River	GA + TW	2.5	40	0.5	20	15:15	22.1	101.3	8.83	25239	0.00	96.5	97.0	0-33	0-33	0-33	0-33	67-100	Straw	cobbles	slow
30-CTC	Contoocook River	MJ + SS	3	50	0.5	20	14:54	22.2	86.4	7.54	25240	0.05	98.9	97.0	0-33	0-33	0-33	0-33	67-100	Tea colored, clear	sandy	slow moving, fish in water, leaf debris and sticks floating downstream, men working on cement wall downstream
30-CTC	Contoocook River	MJ + SS	!!!	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
30-CTC	Contoocook River	MJ + SS	!!!	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
30-CTC	Contoocook River	MJ + SS	!!!	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
29-CTC	Contoocook River	PF + LF	1	50	0.5	20	14:59	21.5	89.6	7.9	25238	-0.04	96.4	97.0	0-33	0-33	0-33	0-33	67-100	Tea	sandy, cobbles	slow moving
OOH-NUB	Nubanusit Brook	GC + KS	0.9	40	0.5	20	15:59	22.9	88.9	7.67	25229	0.02	104.7	97.0	0-33	0-33	67-100	34-67	67-100	Straw	cobbles	riffle
28-CTC	Contoocook River	MJ + SS	3	70	0.5	60	15:09	22.1	80.3	7.01	25240	0.05	103.5	97.0	0-33	0-33	0-33	0-33	67-100	Tea colored	sandy	slow
27M-CTC	Contoocook River	GA + TW	2	100	0.5	40	16:16	22.9	103.3	8.87	25239	0.02	100.9	97.0	0-33	0-33	0-33	0-33	100	Straw	sandy	slow, had a little rain
27-CTC	Contoocook River	PF + LF	3	150	0.5	145	15:18	22.4	78.6	6.32	25238	-0.04	97.1	97.0	0-33	0-33	0-33	0-33	67-100	Tea	muck,sand	slow moving, impoundment
25Y-CTC	Contoocook River	MJ + SS	2	50	0.5	40	15:29	23.6	80.6	6.83	25240	0.04	91.9	97.0	34-66	0-33	34-66	0-33	67-100	Tea colored	sandy, cobbles	very slow moving

Notes:
" = number/info is the same as cell above
!!! = impoundment drainined, surface sample only

DATE: 8/04/2004 CONTOOCOOK RIVER

LABORATORY RESULTS

Station ID	Category	= < > --	BOD-5	= < > --	BOD-20	= < > --	CBOD (calculated)	= < > --	CHLOR "A"	= < > --	NO+NO3	= < > --	NH3	= < > --	TKN	= < > -	ORG N (calculated)	= < > --	TSS	= < > --	ORTHO P	= < > --	TP	= < > -	ORG P (calculated)	= < > -	SOD*
Units			mg/L		mg/L		mg/L		mg/m3		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L
QAPP Reporting Detection Limits			3		3			0	0.5		0.05		0.1		0.1		na		2		0.01		0.005		na		
								0																			
37-CTC	ROUTINE SAMPLE	=			6.2		6.15		1.26		0.05		0.05		0.4	=	0.35	=	5		0.01		0.012	=	0.00	=	
37-CTC	FIELD REPLICATE	=			7.1		7.1		2.4		0.05		0.05		0.4	=	0.35	*	5		0.01		0.009	=	0.00	=	
01-MBR	ROUTINE SAMPLE	=			2.3		2.3		2.92		0.05		0.05		0.4	=	0.35	*	5		0.01		0.010	=	0.00	=	
36-CTC	ROUTINE SAMPLE	=			4.4		3.85		1.61		0.05		0.05		0.4	=	0.35	*	6		0.01		0.013	=	0.00	=	
36-CTC	FIELD REPLICATE	=			4.2		3.97		1.61		0.05		0.05		0.3	=	0.25	*	5		0.01		0.012	=	0.00	=	
34-CTC	ROUTINE SAMPLE	=			3.7		3.01		2.7		0.05		0.05		0.4	=	0.35	=	5		0.01		0.014	=	0.00	=	5.17
34-CTC	FIELD REPLICATE	=			4.2		3.7		3.46		0.05		0.05		0.4	=	0.35	*	5		0.01		0.014	=	0.00	=	
32T-CTC	ROUTINE SAMPLE	=			4.4		2.07		1.97		0.05		0.05		0.4	=	0.35	*	5		0.01		0.015	=	0.01	=	
32T-CTC	FIELD REPLICATE	=			4.4		2.53		2.14		0.05		0.05		0.3	=	0.25	=	5		0.01		0.016	=	0.01	=	
32M-CTC	ROUTINE SAMPLE	=			3.8		1.61		2.3		0.07		0.13		0.4	=	0.27	*	5		0.01		0.016	=	0.01	=	
NH0100595	ROUTINE SAMPLE	=	7.2		37.5		21.51		155.4		5.67		1.93		4.7	=	2.77	=	34		2.583		2.664	=	0.08	=	
NH0100595	24 HOUR COMPOSITE	=	5.4		32.7		16.57		***		5.83		1.82		4.9		3.08		11.5		2.551		2.604		0.05		
32-CTC	ROUTINE SAMPLE	=			6.0		3.85		4.53		0.30		0.1		0.4		0.30		5		0.062		0.110		0.05		
31C-CTC	ROUTINE SAMPLE	=			5.6		3.59		4.91		0.32		0.06		0.5	=	0.44	=	5		0.051		0.105	=	0.05	=	
31B-CTC	ROUTINE SAMPLE	=			4.9		3.03		5.43		0.33		0.05		0.4	=	0.35	=	5		0.053		0.111	=	0.06	=	
00H-TWN	ROUTINE SAMPLE	=			3.8		1.79		2.35		0.22		0.05		0.3	=	0.25	*	5		0.01		0.022	=	0.01	=	
31AT-CTC	ROUTINE SAMPLE	=			5.3		3.11		2.51		0.32		0.05		0.3	=	0.25	*	5		0.047		0.092	=	0.05	=	
02-GRD	ROUTINE SAMPLE	=			2.9		2.53		7.17		0.05		0.05		0.5	=	0.45	=	5		0.01		0.021	=	0.01	=	
31AF-CTC	ROUTINE SAMPLE	=			4.8		2.93		3.06		0.34		0.05		0.4	=	0.35	=	5		0.04		0.081	=	0.04	=	
01-MDB	ROUTINE SAMPLE	=			1.8		1.3		1.07		0.05		0.05		0.3	=	0.25	=	5		0.01		0.016	=	0.01	=	
31-CTC	ROUTINE SAMPLE	=			4.7		2.6		2.32		0.31		0.05		0.4	=	0.35	=	5		0.028		0.054	=	0.03	=	
30M-CTC	ROUTINE SAMPLE	=			4.2		2.37		2.13		0.29		0.05		0.3	=	0.25	=	5		0.01		0.051	=	0.04	=	
30-CTC	ROUTINE SAMPLE	=			5.9		3.66		16.39		0.17		0.05		0.5	=	0.45	=	5		0.01		0.042	=	0.03	=	1.29
29-CTC	ROUTINE SAMPLE	=			5.8		3.79		7.42		0.18		0.05		0.6	=	0.55	=	5		0.011		0.040	=	0.03	=	
00H-NUB	ROUTINE SAMPLE	=			4.3		2.2		1.64		0.05		0.05		0.3	=	0.25	=	5		0.01		0.017	=	0.01	=	
28-CTC	ROUTINE SAMPLE	=			4.4		2.34		1.8		0.08		0.05		0.4	=	0.35	=	5		0.01		0.023	=	0.01	=	1.01
27M-CTC	ROUTINE SAMPLE	=			4.6		2.5		3.98		0.12		0.05		0.4	=	0.35	=	5		0.01		0.031	=	0.02	=	
27-CTC	ROUTINE SAMPLE	=			4.4		2.39		3.25		0.15		0.05		0.4	=	0.35	=	5		0.01		0.032	=	0.02	=	1.12
25Y-CTC	ROUTINE SAMPLE				5.2		2.92		2.66		0.16		0.05		0.4		0.35		5		0.01		0.031		0.02		

QA/QC	BOD-5	BOD-20	CBOD (calculated)	CHLOR "A"	NO+NO3	NH3	TKN	ORG N (calculated)	TSS	ORTHO P	TP	ORG P (calculated)	SOD
n(samples)	29	29		29	29	29	29		29	29	29		29
n(values)	2	29		28	29	29	29		29	29	29		4
Min	5.40	1.80		1.07	0.05	0.05	0.30		5.00	0.01	0.01		1.01
Max	7.20	37.50		155.40	5.83	1.93	4.90		34.00	2.58	2.66		5.17
Range	1.80	35.70		154.33	5.78	1.88	4.60		29.00	2.57	2.66		4.16
Average	6.30	6.67		9.49	0.53	0.18	0.70		6.26	0.19	0.22		2.15
Standard Deviation	1.3	8.0		29.4	1.4	0.5	1.1		5.5	0.7	0.7		2.0

* Note: SOD sample and analysis done by EPA on 8/6/2003 - 8/9/2003

DATE: 8/11/2004 CONTOOCOOK RIVER

LABORATORY RESULTS

Station ID	Category	= < > --	BOD-5	= < > --	BOD-20	= < > --	CBOD (calculated)	= < > --	CHLOR "A"	= < > --	NO2+NO3	= < > --	NH3	= < > --	TKN	= < > -	ORG N (calculated)	= < > --	TSS	= < > --	ORTHO P	= < > --	TP	= < > -	ORG P (calculated)	= < > -	SOD*
Units			mg/L		mg/L		mg/L		mg/m3		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L
QAPP Reporting Detection Limits			3		3				0.5		0.05		0.1		0.1		na		2		0.01		0.005		na		
37-CTC	ROUTINE SAMPLE	=			5.6		5.6		4.53		0.05		0.05		0.4	=	0.35	*	5		0.006		0.011	=	0.01	=	
37-CTC	FIELD REPLICATE	=			5.3		5.3		3.6		0.05		0.05		0.4	=	0.35	=	5		0.006		0.013	=	0.01	=	
01-MBR	ROUTINE SAMPLE	=			2.5		2.45		3.08		0.05		0.05		0.3	=	0.25	*	5		0.006		0.01	=	0.00	=	
36-CTC	ROUTINE SAMPLE	=			4.4		2.85		1.45		0.05		0.05		0.3	=	0.25	*	5		0.006		0.014	=	0.01	=	
36-CTC	FIELD REPLICATE	=			4.6		3.18		2.87		0.05		0.05		0.4	=	0.35	*	5		0.006		0.014	=	0.01	=	
34-CTC	ROUTINE SAMPLE	=			1.9		1.67		3.25		0.05		0.05		0.4	=	0.35	*	5		0.005		0.016	=	0.01	=	5.17
34-CTC	FIELD REPLICATE	=			2.5		2.18		2.35		0.05		0.05		0.4	=	0.35	=	5		0.006		0.015	=	0.01	=	
32T-CTC	ROUTINE SAMPLE	=			3.5		1.26		1.61		0.05		0.05		0.4	=	0.35	=	5		0.007		0.017	=	0.01	=	
32T-CTC	FIELD REPLICATE	=			3.5		1.17		1.99		0.05		0.05		0.4	=	0.35	*	5		0.006		0.016	=	0.01	=	
32M-CTC	ROUTINE SAMPLE	=			4.9		2.16		2.16		0.12		0.24		0.5	=	0.26	*	5		0.004		0.015	=	0.01	=	
NH0100595	ROUTINE SAMPLE	<	7.2		44.4		24.75		47.87		4.46		2.81		6.3	=	3.49	=	5.5		2.82		3.13	=	0.31	=	
NH0100595	24 HOUR COMPOSITE	<	14.4		38.1		7.94		***		4.53		2.75		5.5		2.75		5		2.81		3.06		0.25		
32-CTC	ROUTINE SAMPLE	<			5.5		3.26		5.45		0.62		0.18		0.7		0.52		5		0.148		0.214		0.07		
31C-CTC	ROUTINE SAMPLE	=			3.4		1.12		4.72		0.68		0.09		0.5	=	0.41	=	5		0.135		0.203	=	0.07	=	
31B-CTC	ROUTINE SAMPLE	=			3.8		2.38		4.36		0.7		0.05		0.5	=	0.45	=	5		0.116		0.183	=	0.07	=	
00H-TWN	ROUTINE SAMPLE	=			3.1		1.04		1.61		0.34		0.05		0.3	=	0.25	*	5		0.007		0.017	=	0.01	=	
31AT-CTC	ROUTINE SAMPLE	=			3.8		1.97		3.79		0.64		0.05		0.4	=	0.35	*	5		0.097		0.151	=	0.05	=	
02-GRD	ROUTINE SAMPLE	=			2.2		0.83		2.16		0.05		0.05		0.4	=	0.35	=	9		0.007		0.024	=	0.02	=	
31AF-CTC	ROUTINE SAMPLE	=			3.6		2		3.08		0.63		0.05		0.3	=	0.25	=	5		0.068		0.122	=	0.05	=	
01-MDB	ROUTINE SAMPLE	=			1.6		0.59		1.61		0.05		0.05		0.25	=	0.20	=	5.5		0.007		0.014	=	0.01	=	
31-CTC	ROUTINE SAMPLE	=			2.6		0.95		2.68		0.51		0.05		0.3	=	0.25	=	5		0.037		0.071	=	0.03	=	
30M-CTC	ROUTINE SAMPLE	=			3.4		1.71		2.89		0.46		0.05		0.3	=	0.25	=	5		0.031		0.064	=	0.03	=	
30-CTC	ROUTINE SAMPLE	=			3.7		1.87		2.89		0.43		0.05		0.3	=	0.25	=	5		0.022		0.059	=	0.04	=	1.29
29-CTC	ROUTINE SAMPLE	=			6.6		5		2.87		0.44		0.05		0.3	=	0.25	=	5		0.012		0.042	=	0.03	=	
00H-NUB	ROUTINE SAMPLE	=			2.5		0.49		0.9		0.06		0.05		0.3	=	0.25	=	5		0.008		0.014	=	0.01	=	
28-CTC	ROUTINE SAMPLE	=			3.5		1.63		2.51		0.37		0.05		0.3	=	0.25	=	5		0.009		0.034	=	0.03	=	1.01
27M-CTC	ROUTINE SAMPLE	=			3.5		1.03		1.97		0.29		0.05		0.5	=	0.45	=	5		0.009		0.028	=	0.02	=	
27-CTC	ROUTINE SAMPLE	=			2.9		0.89		0.69		0.25		0.05		0.3	=	0.25	=	5		0.008		0.029	=	0.02	=	1.12
25Y-CTC	ROUTINE SAMPLE				2.6		0.59		1.59		0.25		0.05		0.25		0.20		5		0.009		0.028		0.02		
Bottle Blank	BLANK	=		<	3				0.5	<	0.05	<	0.05	<	0.25			<	5		0.005		0				
Bucket Blank	BLANK	=		<	3				0.33	<	0.05	<	0.05	<	0.25			<	5		0.005		0				

QA/QC	BOD-5	BOD-20	CBOD (calculated)	CHLOR "A"	NO2+NO3	NH3	TKN	ORG N (calculated)	TSS	ORTHO P	TP	ORG P (calculated)	SOD
n(samples)	29	29		29	29	29	29		29	29	29		29
n(values)	2	29		28	29	29	29		29	29	29		4
Min	7.20	1.60		0.69	0.05	0.05	0.25		5.00	0.00	0.01		1.01
Max	14.40	44.40		47.87	4.53	2.81	6.30		9.00	2.82	3.13		5.17
Range	7.20	42.80		47.18	4.48	2.76	6.05		4.00	2.82	3.12		4.16
Average	10.80	6.19		4.04	0.56	0.25	0.76		5.17	0.22	0.26		2.15
Standard Deviation	5.1	9.8		8.6	1.1	0.7	1.4		0.7	0.7	0.8		2.0

* Note: SOD sample and analysis performed by EPA on 8/6/2003-8/8/2003

Flow Summary Sheet

8/4/2004

Station ID	Measured Flow (cfs)	Estimated Flow (cfs)	Discharge (mgd)	Withdrawals (mgd)
37-CTC				
01-MBR				
36-CTC				
34-CTC				
32T-CTC	6.09			
32M-CTC				
Jaffrey WWTF			0.300	
32-CTC	12.64			
31C-CTC				
31B-CTC				
OOH-TWN	1.31			
31AT-CTC	13.29			
02-GRD	2.41			
31AF-CTC	15.87			
01-MDB	2.22			
31-CTC	18.98			
30M-CTC				
30-CTC				
29-CTC				
OOH-NUB	29.73			
28-CTC				
27M-CTC				
27W-CTC	79.58			
27-CTC				
25Y-CTC	69.48			

Sample Sites in bold type were sites where flow was measured by field teams

Flow Summary Sheet

8/11/2004

Station ID	Measured Flow (cfs)	Estimated Flow (cfs)	Discharge (mgd)	Withdrawals (mgd)
37-CTC				
01-MBR				
36-CTC				
34-CTC				
32T-CTC	1.83			
32M-CTC				
Jaffrey WWTF				
32-CTC	5.31			
31C-CTC				
31B-CTC				
OOH-TWN	0.83			
31AT-CTC	4.28			
02-GRD	2.11			
31AF-CTC	10.05			
01-MDB	1.61			
31-CTC	11.85			
30M-CTC	13.21			
30-CTC				
29-CTC				
OOH-NUB	12.41			
28-CTC				
27M-CTC				
27W-CTC	29.38			
27-CTC				
25Y-CTC	29.07			

Sample Sites in bold type were sites where flow was measured by field teams

Contoocook TMDL, TDS Calcs for 8/4/04

Location / Load	Obs. Sp.Cond	Temp C	25C-Temp	SpC(25C)	Factor*	Obs TDS, mg/l	reach	Initial Cond TDS
37-CTC ave	93.65	22.6	2.4	98.1	0.656880516	64.47		
01-MBR	85	25.7	0.7	83.8	0.656292201	55.00		
36-CTC ave	94.8	24.3	0.7	96.1	0.656797783	63.14		
34-CTC	124.8	25.6	0.6	123.3	0.657913239	81.12	1	81.12
32T-CTC	130.6	23.9	1.1	133.5	0.658330718	87.87		
32M-CTC	135.5	23	2	140.9	0.658636386	92.82	2	121.80
NH0100595 **	798	25	0	798.0	0.685607438	547.11		
32-CTC	159.2	22.7	2.3	166.5	0.659687316	109.85	3	101.72
31C-CTC	159.2	22.5	2.5	167.2	0.659713455	110.28	4	98.65
31B-CTC	163	21.7	3.3	173.8	0.659984282	114.68	5	98.65
00H-TWN (T.Farm Bk)	88.8	20.3	4.7	97.1	0.656839651	63.81		
31AT-CTC	154.1	21.3	3.7	165.5	0.659645456	109.17	5	98.65
02-GRD	65.5	19.6	5.4	72.6	0.655830999	47.60		
31AF-CTC	150.9	21.4	3.6	161.8	0.659491999	106.68	6	95.16
01-MDB	55.1	19.5	5.5	61.2	0.655362531	40.08		
31-CTC	120.7	20.2	4.8	132.3	0.658282037	87.08	7	87.07
30M-CTC	221.1	20.1	4.9	242.8	0.662816915	160.91	8	81.43***
30-CTC	115.9	22.1	2.9	122.6	0.657885319	80.67	9 + 10	81.44
29-CTC	128.8	21.6	3.4	137.6	0.658498403	90.58	11	81.47
00H-NUB	77	23.1	1.9	79.9	0.656132775	52.44		
28-CTC	91.6	22.8	2.2	95.6	0.656777391	62.81	12	80.05
27M-CTC	112.2	22.4	2.6	118.0	0.657697004	77.63	13	69.08
27-CTC	99.8	23.8	1.2	102.2	0.657046855	67.15	14	69.12
25Y-CTC	100.5	23.1	1.9	104.3	0.657134031	68.55	15	69.33

TDS	reach
81.12	HW
87.87	1
92.82	2
92.82	3
109.85	4
110.28	5
114.68	6
109.17	7
106.68	8
87.08	9
160.91	10
80.67	11+12
90.58	13
62.81	14
77.63	15
67.15	16
68.55	17

8/4/2006 Input to Model for Calibration	
reach	TDS
HW	81.12
1	87.87
2	92.82
3	92.82
4	109.86
5	110.28
6	114.68
7	109.17
8	106.68
9	87.08
10	160.91
11	80.67
12	80.67
13	90.58
14	62.81
15	77.63
16	67.16
17	68.66

** Average Monthly Result from Whole Effluent Toxicity Test performed by Aquatic Biological Sciences in Williston Vermont (7 samples analyzed in July 2004)

82.37 ***(87.53 mg/l when change 30M-Ctc sp.cond. to 121.1 uS/cm)

SpC(25)	ppm TDS	Factor*
84	50.5	0.6563
447	300	0.6712

*Conductivity to TDS Conversion Factor for a formulation that most closely represents the conductivity to ppm relationship, on average, for naturally occurring surface water. Multiply conductivity by this factor to get ppm TDS. (source Eutech Instruments - See www.eutechinst.com/techtips/tech-tips40.htm)

Contoocook TMDL, TDS Calcs for 8/11/04

Location / Load	Obs. Sp.Cond	Temp C	25C-Temp	SpC(25C)	Factor*	Obs TDS, mg/l	reach	Initial Cond TDS	TDS	reach
37-CTC ave				0.0	0.652852066	0.00				
01-MBR				0.0	0.652852066	0.00				
36-CTC ave				0.0	0.652852066	0.00				
34-CTC	132	22.85	2.2	137.7	0.658503230	90.66	Head Water	90.66	90.66	HW
32T-CTC	130.3	22.1	2.9	137.9	0.658510676	90.78	1	90.78	90.78	1
32M-CTC	139.3	21.1	3.9	150.2	0.659015880	98.96	2	98.96	98.96	2 + 3
NH0100695 **	798	23	2.0	829.9	0.686917653	570.09		570.09		
32-CTC	179.8	21.3	3.7	193.1	0.660778423	127.60	3	127.60	127.6	4
31C-CTC	176.7	21.1	3.9	190.5	0.660670773	125.85	4	125.85	125.85	5
31B-CTC	196.5	21	4.0	212.2	0.661553025	140.40	5		140.4	6
00H-TWW (T.Farm Bk)	97.9	18.95	6.1	109.7	0.657356788	72.14		135.51		
31AT-CTC	182.3	20.8	4.2	197.6	0.660953462	130.62	5		130.62	7
02-GRD	60.3	18.8	6.2	67.8	0.655634105	44.44				
31AF-CTC	134.2	19.65	5.4	148.6	0.658949959	97.89	6	97.89	97.89	8
01-MDB	56.9	18.65	6.4	64.1	0.655484248	42.03				
31-CTC	126.4	19.35	5.7	140.7	0.658626656	92.66	7	92.66	92.66	9
30M-CTC	127	19.95	5.1	139.8	0.658591521	92.09	8	92.09	92.09	10
		20.05	5.0	0.0	0.652852066	0.00	9	86.43		
30-CTC	111.9	20.15	4.9	122.8	0.657890741	80.76	10	80.76	80.76	11 + 12
29-CTC	115.1	19.9	5.1	126.8	0.658058454	83.47	11	83.47	83.47	13
00H-NUB	68.2	22.35	2.7	71.8	0.655799828	47.10				
28-CTC	101.7	21.45	3.6	108.9	0.657322916	71.60	12	71.60	71.6	14
27M-CTC	105	21.65	3.4	113.1	0.657494545	74.36	13	74.36	74.36	15
27-CTC	116.5	21.6	3.4	124.4	0.657959195	81.86	14	81.86	81.86	16
25Y-CTC	107.8	22.25	2.8	113.7	0.657520281	74.78	15	74.78	74.78	17

	8/11/2005 Input to model for Verifioation	
reach	TDS	
HW	90.66	
1	90.78	
2	98.96	
3	98.96	
4	127.6	
5	125.86	
6	140.4	
7	130.62	
8	97.89	
9	92.66	
10	92.09	
11	80.76	
12	80.76	
13	83.47	
14	71.6	
15	74.36	
16	81.86	
17	74.78	

** Average Monthly Result from Whole Effluent Toxicity Test performed by Aquatic Biological Sciences in Williston Vermont (7 samples analyzed in July 2004)

82.37

SpC(25)	ppm TDS	Factor*
84	50.5	0.6563
447	300	0.6712

*Conductivity to TDS Conversion Factor for a formulation that most closely represents the conductivity to ppm relationship, on average, for naturally occurring surface water. Multiply conductivity by this factor to get ppm TDS. (source Eutech Instruments - See www.eutechinst.com/techtips/tech-tps40.htm)