

## 2000 Gauge reading and concentrations

Site: CC 1 @ Campbell Creek at CTY HWY 149

Date	Gauge Culvert	Hi up Strm - Zero = 1381.69				ortho	suspsol	comments
		Gauge Middle	Gauge MPCA	totphos				
8-Jan							frozen	
23-Jan							frozen	
6-Feb							<b>frozen</b>	
16-Feb							<b>frozen</b>	
28-Feb		4.42	3.06	199				
4-Mar		4.5	3.10	95	40	6		
8-Mar		3.6	2.24					
9-Mar		3.8	2.42					
11-Mar			3.05	77	29	10.0		
18-Mar				39	17	9.0	ice on gage	
25-Mar			2.60	175	48	16.0		
1-Apr			2.20	82	0	16		
9-Apr			2	40	16	7.5		
15-Apr			1.9	36	10	6.5		
24-Apr			2.1	32	10	7.5		
29-Apr			1.7	29	12	5.5		
8-May			1.4	32	15	5.0	hard to reach	
14-May			1.35	28	10	7.0	hard to reach	
21-May			1.20-1.30	59	22	8.5		
30-May			0.8	129	n/a	n/a		
5-Jun			2.2	90	48	1.5		
13-Jun			1.16	69				
19-Jun			2.1	79	47	24.0		
26-Jun			3.85	107		22.5		
5-Jul			1.91	130	94.000			
10-Jul			1.45	133	95.000	19.5		
17-Jul			1.08	97				
25-Jul			0.98	65	45.000	4.5		
3-Aug			0.89	98	67.000	15.5		
7-Aug			0.71	82	64.000	3.0		
14-Aug			0.6					
21-Aug			0.71					
28-Aug			0.67					
15-Sep				93	39.000			
27-Sep			0.79					
30-Sep			0.73	42	13.000			
8-Oct			0.68	53	32.000	7.0		
13-Oct			0.73	44	21.000	2.0		
27-Oct			1.2	36	18.000	5.0		
11-Nov			2	37	12.000	7.5		

Site: PRO @ Richwood Road Culvert between Mud &amp; Little Floyd

Date	Gauge	totphos	ortho	suspsol	comments
8-Jan	1.3	28	13	2.5	

23-Jan	1.3	32	12	
6-Feb	1.25	39	10	2
16-Feb	1.4	24		4
28-Feb	1.54	26		
4-Mar	1.5	23	7	
8-Mar	1.6			
9-Mar	1.65			
11-Mar	1.65	20	9	0.5
18-Mar	1.65	18	9	1
24-Mar	1.69			
25-Mar	1.7	36	7	1.5
1-Apr	1.7	32	6	1.5
9-Apr	1.7	26	5	0.5
15-Apr	1.65	24	4	0.5
23-Apr	1.7	21	4	1
29-Apr	1.65	19	7	0.5
	1.65	20	0	1
14-May	1.55	21	4	1.5
21-May	1.6	26	1	3
30-May	1.5	20	n/a	n/a
5-Jun	1.6	23	0	1.5
13-Jun	1.58	20		
19-Jun	1.7	44	2	4
26-Jun	2.29	56		3.5
5-Jul	2.27	32	9	
10-Jul	2.15	47	10	8.5
17-Jul	1.92	97		
25-Jul	1.76	42	6	4
3-Aug	1.68	39	6	3.5
7-Aug	1.59	44	12	4
14-Aug	1.45			
21-Aug	1.44			
28-Aug	1.36			
27-Sep		55	10	
27-Sep	1.36			
30-Sep	1.37	28	4	
8-Oct	1.3	47	10	4.5
13-Oct	1.3	37	9	4
27-Oct	1.6	48	10	4.5
11-Nov	1.78	53	7	5

**Site: PR1 @ Floyd Lake outlet at L. Floyd Rd**

Date	Gauge	totphos	ortho	suspsol	comments
8-Jan	2.3	26	12		
23-Jan	2.3	26	13		
6-Feb	2.25	37	15		
16-Feb	2.4	26			
28-Feb	2.38	21		0.5	
4-Mar	2.4	18	6	1	

11-Mar	2.5	18	7	
18-Mar	2.5	21	6	
25-Mar	2.55	23	6	
1-Apr	2.66	20	4	
9-Apr	2.55	21	2	
15-Apr	2.5	23	2	
23-Apr	2.55	24	6	
29-Apr	2.5	24	4	
8-May	2.5	21	2	
14-May	2.45	18	4	
21-May	2.35	28	3	
30-May	2.34	18	n/a	n/a
5-Jun	2.38	18	10	
13-Jun	2.4	16		
19-Jun	2.55	20	0	
26-Jun	3.08	28		
5-Jul	3.04	20	4	
10-Jul	3.02	24	4	
17-Jul	2.73	24		
25-Jul	2.54		2	
3-Aug	2.49	23	4	
7-Aug	2.4	26	4	
14-Aug	2.3			
21-Aug	2.28			
28-Aug	2.21			
5-Feb	10			
27-Sep	2.23			
30-Sep	2.22	18	2	
8-Oct	2.16	42	9	
13-Oct	2.16	34	7	
27-Oct	2.4	36	6	
11-Nov	2.6	34	4	

**Site: PR 2 @ Anchor Road and PR**

Date	Gauge	totphos	ortho	comments
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**Site : PR 3 @ Hwy 34 at PR**

Date	Gauge	tail	totphos	ortho	suspsol	comments
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29-Feb	1.7					
27-Mar	1.95					
6-Apr	1.66					
23-May	1.2					
30-May	1.29	63				
5-Jun	1.4	48	28			
13-Jun	1.12		57			

19-Jun	2.02	47	24	2.5
26-Jun	2.78	72		2.5
5-Jul	2.55	92	61	
10-Jul	2.85	191	122	13.5
17-Jul	3.15	211		
25-Jul	2.26	77	54	2.5
3-Aug	2.23	168	97	30.5
7-Aug	2.08	89	62	2.5
14-Aug	1.88			
21-Aug	1.82			
21-Aug	1.62			
27-Sep	2.26			

**Site PR4/PR5 guage at Corbett:Sample at NSD**

Date	Gauge	Tphos	ortho	suspsol	Comments
8-Jan					frozen
23-Jan					frozen
6-Feb					frozen
16-Feb					frozen
28-Feb	1.95	294		9	
4-Mar	1.7	106	48	10.5	
8-Mar	1.92				
9-Mar	2.15				
11-Mar	1.9	66	23	10.5	
18-Mar	1.75	36	20	6.5	
24-Mar	2				
25-Mar	2.15	74	24	12.5	
29-Mar	1.92				
1-Apr		44	17	12.5	
4-Apr	1.88				
6-Apr	1.9				
9-Apr		31	10	3.5	
15-Apr		31	9	1.5	
23-Apr		24	6	1	
29-Apr		27	7	1.5	
8-May		26	10	2.0	
14-May		23	7	1.5	
21-May		20	12	1.5	
30-May		55			
5-Jun		42	15	3.5	
13-Jun		76			
19-Jun		52	31		
26-Jun		69		4.5	
5-Jul		89	61		
10-Jul		123	89		
17-Jul		150			
25-Jul			164	19.0	
3-Aug		164	135	6.0	
7-Aug		117	94	6.0	
9/15		31	13		
9/30		23	15		

10/8	40	24	3.0
10/13	39	24	2.0
10/27	60	29	4.0
11/11	42	23	3.0

**Site PR4a @ Long Ave.**

Date	Gauge			Comments
1-Apr	1.85			
9-Apr	1.85			
15-Apr	1.8			
23-Apr	2			
29-Apr	1.8			
8-May	2.1			
14-May	2			
21-May	1.95			
30-May	1.72			
5-Jun	1.72			
13-Jun	1.49			
19-Jun	2.05			
26-Jun	2.45			
5-Jul	2.02			
10-Jul	1.92			
17-Jul	2.21			
25-Jul	1.86			
3-Aug	1.68			
7-Aug	1.58			
14-Aug	1.53			
21-Aug	1.48			
28-Aug	1.35			
27-Sep	1.52			
30-Sep	1.46			
8-Oct	1.48			
13-Oct	1.43			
27-Oct	1.39			
8-Nov	1.35			
11-Nov	2.2			

**Site: PR 6 Outlet from Detroit Lake**

Date	Gauge	totphos	ortho	Comments
8-Jan	1.2	28	17	
23-Jan	1.2	31	20	
6-Feb	1.2	31	21	
16-Feb	1.2	21		
28-Feb				
4-Mar	1.35	15	6	
9-Mar	1.46			
11-Mar	1.45	16	4	
13-Mar	1.46			
18-Mar	1.5	18	6	

22-Mar	1.46		
25-Mar	1.5	15	4
27-Mar	1.56		
29-Mar	1.56		
1-Apr	1.55	18	6
5-Apr	1.56		
9-Apr	1.55	18	2
12-Apr	1.5		
15-Apr	1.5	20	4
23-Apr	1.60	16	6
29-Apr	1.60	24	7
8-May	1.60	24	4
14-May	1.60	21	2
21-May	1.60	26	5
30-May	1.66	18	
5-Jun	1.62	18	2
13-Jun	1.52	16	
19-Jun	2.78	18	0
26-Jun	2.00		
5-Jul	1.94	20	9
10-Jul	1.94	23	4
17-Jul	1.78	20	
25-Jul	1.65	23	4
3-Aug	1.65	20	4
7-Aug	1.64	21	4
14-Aug	1.44		
21-Aug	1.38		
8/28	1.32		
9/15		24	6
9/27	1.20		
9/30	1.20	14	3
10/8	1.13	26	6
10/13	1.15	26	6
10/27	1.32	21	4
11/8	1.61		
11/11	1.65	20	6
11/13	1.67		

**Site: PR 7 Muskrat outlet at Dunton Locks**

Date	Gauge	totphos	ortho	suspsol	DO	Comments
8-Jan	4.3	29	15	1		
23-Jan	4.25	28	18	3		
6-Feb	4.3	34	18			
16-Feb	4.3	18				
28-Feb	4.37	31				
4-Mar	4.4	21	9	3		
11-Mar	4.5	21	10	2		
18-Mar	4.5	18	12	1		
25-Mar	4.55	23	10	1		
1-Apr	4.55	23	10			
9-Apr	4.6	20	5	1.5		

15-Apr	4.55	26	4	0
23-Apr	4.6	24	7	1.5
29-Apr	4.6	22	4	2
8-May	4.5	24	2	1.5
14-May	4.5	20	6	2.5
21-May	4.4	26	2	2.5
30-May	1.75	29		
5-Jun	1.7	32	2	
13-Jun	1.8	13		
19-Jun	2.12	32	0	
26-Jun	2.36	44		
5-Jul	2.46	32	6	
10-Jul	2.48	32	7	
17-Jul	2.33	34		
25-Jul	2.15	26	4	
3-Aug	2.14	45	6	
7-Aug	2.05	40	4	
14-Aug	2			
21-Aug	4.4			
28-Aug	4.32			
15-Sep		37	6	
27-Sep	4.35			
30-Sep	1.6	19	3	
8-Oct	1.5	31	7	
13-Oct	1.5	26	9	
27-Oct	1.68	37	6	2
8-Nov	4.59			
11-Nov	2.1	29	6	3

**Site:PR 8 Sallie Outlet at Shoreham**

Date	Gauge	totphos	ortho	suspsol
8-Jan	1.45	37	15	
23-Jan	1.45	36	12	
6-Feb	1.45	32	18	
16-Feb	1.65	31		
28-Feb	1.50	21		0.5
4-Mar	1.55	16	6	
11-Mar	1.65	18	6	
18-Mar	1.70	20	9	
25-Mar	1.75	21	10	
1-Apr	1.75	20	9	
9-Apr	1.80	20	7	
15-Apr	1.80	26	4	
24-Apr	1.80	20	10	
29-Apr	1.80	19	6	
8-May	1.80	23	4	
5/14	1.75	23	7	
21-May	1.65	29	4	
30-May	1.60	87		
5-Jun	1.65	21	4	
13-Jun	1.68	28		

**Sallie gauge at Dunton Loc  
Sallie Comments:**

19-Jun	1.87	29	6
26-Jun	2.08	31	
5-Jul	2.15	32	4
10-Jul	2.18	34	6
17-Jul	2.11	39	
25-Jul	1.96	32	7
3-Aug	1.96	32	6
7-Aug	1.88	44	9
14-Aug	1.81		
21-Aug	1.78		
28-Aug	1.70		
15-Sep		57	10
27-Sep	1.55		
30-Sep	1.55	21	2
8-Oct	1.45	31	6
13-Oct	1.40	32	6
27-Oct	1.45	28	4
8-Nov	1.74		
11-Nov	1.80	20	2

Site: PR 9 @ Melissa Beach Resort

Buck's Mill

Date	Gauge	totphos	ortho	suspsol	Comments:
8-Jan		29	10	5	
23-Jan		28	12	5	
6-Feb		24	17	5	
16-Feb		15		5.05	
28-Feb				5	
4-Mar		24	9	5	
11-Mar		24	10	5.1	
18-Mar		16	6	5.1	
25-Mar		13	7	5.15	
1-Apr		16	6	5.15	
9-Apr		15	7	5.2	
15-Apr		23	4	5.2	
23-Apr		20	4	5.2	
29-Apr		21	2	5.2	
8-May		24	4	5.2	
14-May		21	4	5.2	
21-May		24	1		
30-May	1.85	28			
5-Jun	1.85	31	4	4	
13-Jun	2.81	23			
19-Jun	2.07	23	2	1.5	
26-Jun	2.3	23		2.5	
5-Jul	2.48	23	2		
10-Jul	2.58	23	4	3.5	
17-Jul	2.45	24			
25-Jul	2.27	37	6	10.5	
3-Aug	2.26	20	4	5.5	
7-Aug	2.14	29	6	5.5	
14-Aug	2				

21-Aug	1.9				
28-Aug	1.85				
15-Sep		28	7		
27-Sep	1.63				
30-Sep	1.48	16	2		
8-Oct	1.43	23	7		
13-Oct	1.39	20	4		
27-Oct	1.48	23	4		
6-Nov	1.68			1.82	
8-Nov	1.96				
13-Nov	1.84				
11-Nov	1.78	21	2		

**Site: SC 3 @ St. Clair Outlet at HWY 59, Putt N Pump**

Date	Gauge	totphos	ortho	suspsol	DO	Alkalinity	PH	Chloride
8-Jan	3.3	42	21					
23-Jan	3.4	36	10					
6-Feb	3.2	31	17					
16-Feb	3.4	37						
28-Feb								
4-Mar	3.7	50	17					
11-Mar	3.90	47	10					
18-Mar	3.85	47	7					
25-Mar	3.95	42	13					
1-Apr	3.90	40	7	1.0				
9-Apr	3.60	39	7					
15-Apr	3.45-3.50	39	7					
23-Apr	3.70	37	7					
29-Apr	3.50	0.35	6					
8-May	3.50	37	6					
14-May	3.55	36	7					
21-May	3.30-3.40	39	8					
30-May	below	90						
5-Jun	3.40	40	4	2.5				
13-Jun	3.20	55						
19-Jun	3.93	42	6					
26-Jun	4.48	61						
5-Jul	4.12	37	13					
10-Jul	3.98	47	10					
17-Jul	3.72	24						
								<---guage plugged
3-Aug	3.51	73	10					
7-Aug	3.34	97	15					
14-Aug	3.14	76	12					
21-Aug	3.07							
28-Aug	2.98							
15-Sep		55	12					
27-Sep	3.32							
30-Sep	3.30	29	4					
8-Oct	3.25	45	13					

13-Oct	2.90	39	10
27-Oct	3.40		
8-Nov	3.91		
11-Nov			

**Dissolved Oxygen**

21-Jul	1:15	8.41	
25-Jul	1:00	6.05	Light rain night before
2-Aug	10:30	5.93	
7-Aug	10:30	5.93	
14-Aug	11:00	6.17	T-Storm in the morning
21-Aug	1:00	5.75	
28-Aug	0.45	4.05	

**SCL-2**

**SCL-3**

**Site: SC 3 a @ Ditch 14 at Cty Rd 6 sample downstream**

Date	Gauge	DS	totphos	ortho	suspsol	DO	Comments
30-May	2.6						
5-Jun	2.78		53	0	4.5		
19-Jun	>3.3		73	36	2.5		Water over
26-Jun	>3.3		82		1.5		Water over
5-Jul	>3.3		87	56			Water over
10-Jul	>3.3		85	50	0.5		Water over
7/17	3		60				guage hard
7/25	2.78		21		2.5		
8/3	2.94		84	12	9.5		
8/7	2.79		101	13	9.5		
8/14	2.58		77	15			
8/21	2.54						
8/28	2.37						
9/27	2.39						

**Dissolved Oxygen**

Date	Time	Top	Bottom	Notes
7/21	1:25	5.11	5.14	
7/25	1:00	3.75	3.62	Light Rain & Night Before
8/2	10:20	4.08	4.07	

8/7	9:30	3.36	3.34
8/14	11:15	5.21	5.25
8/21	9:30	3.55	3.62
8/25	6:30	1.9-2.0	
8/28	9:15	1.99	2
8/28	6:30	1.90-2.05	

**Site: SC4 @ Ditch 14 outlet to PR**

Date	Gauge	DS	totphos	ortho	suspsol	DO	Comments
9-Mar	1.1						
13-Mar	1.1						
27-Mar	1.2						

Date	Gauge	upstream	totphos	ortho	suspsol	DO	pH	Comments
8-Jan	0.9		39	24				
23-Jan								frozen
6-Feb								frozen
16-Feb								frozen
28-Feb								frozen
4-Mar	1		52	18	12			
11-Mar	1.1		48	10				
18-Mar	1.1		48	13				
25-Mar	1.15		73	15	6.5			
1-Apr	1.15		45	15	6.5			
9-Apr	1.2		42	10	6.5			
15-Apr	1.2		40	7	6.5			
23-Apr	1.3		39	9	6.5			
29-Apr	1.25		40	7	8			
8-May	1.3		37	6	9.5			
14-May	1.35		39	6	11			
21-May	1.35		44	21	11			
30-May	1.32		79					
5-Jun	1.3		71	39	1			
13-Jun	1.15		111					
19-Jun	1.44		81	48	0.5			
24-Jun	1.73		86		5.5			
5-Jul	1.62		97	67				
7/10	1.67		90	73	4			
7/17	1.42		100					
7/25				32	7			
8/3	1.25		93	15	9.5			
8/7	1.17		104	13	9			
8/14	1		77	28				
8/21	0.99							
8/28	0.91							
9/15			73	15				
9/27	0.88							
9/30	0.86		32	6	12			
10/8	0.8		57	10	9.5			

10/13	0.8	32	6	4.5
10/27	0.9	47	10	3
11/8	1.27			
11/11	1.35	48	9	4

**Dissolved Oxygen**

7/21	1:30	5.05	
7/25	1:10	5.6	Light rain, nightbefore
8/2	9:20	3.12	
8/7	9:20	2.89	
8/14	11:30	5.02	T-Storm in the Morning
8/21	9:25	3.95	
8/25	6:40	2.4-2.5	
8/28	9:30	3.11	
8/28	6:40	2.35-2.55	

**Site: SE 1 @Drainage from Lind Lake at Hwy 59**

Date	Gauge	totphos	ortho	suspsol	Comments:
21-May					
30-May	1	39			
5-Jun	1.05	32	6		
13-Jun	0.95	29			
19-Jun	1.2	26	0		
26-Jun	1.5	33			
5-Jul	1.56	52	6		
10-Jul	1.72	48	10		
17-Jul	1.57	50			
25-Jul	1.58		6		
3-Aug	1.38	<b>53</b>	<b>13</b>		
7-Aug	1.36	37	<b>7</b>		
8/14	0.98				
8/21	1.3				
8/28	0.92				
9/27	0.98				

**Site: LL 1 @ Long Lake Outlet Gauge Zero = 1342.00**

Date	Gauge	totphos	ortho	
21-May				
30-May	0.6	20		
5-Jun	0.58	16	0	
13-Jun	0.61	13		
19-Jun	0.71	10	0	
26-Jun	0.85	14		[4.42]
5-Jul	0.75	15	2	
10-Jul	0.72	23	2	
17-Jul	0.69	177		
25-Jul			2	
3-Aug	0.56	15	4	

7-Aug	0.58	18	4
14-Aug	0.5		
21-Aug	0.43		
28-Aug	0.41		
27-Sep	0.58		

**Site: SU 1 @ Sucker Creek at South Shore Dr.**

Date	Gauge	Gauge	totphos	ortho	suspsol	Comments:
	Upstream downstream					
30-May	1.5	1.29	231			
5-Jun	1.45	1.28	93	53		
13-Jun	1.31		55			
19-Jun	1.45		34	18	3.5	
26-Jun	1.68		46		8.5	
5-Jul	1.5		69	45		
10-Jul	1.35		52	36	4	
17-Jul	1.62		76			
25-Jul	1.15			31	1	