

Memorandum

To : Files

Date: December 6, 2000

From : Department of Fish and Game - Post Office Box 47, Yountville, California 94599

Subject: Marin-Sonoma Counties Agricultural Runoff Influence Investigation - 1999-2000 Summary

This program, supported in part by funding from the San Francisco Bay Regional Water Quality Control Board, was undertaken as a service to the Marin-Sonoma Animal Waste Committee, and local operators of confined animal feeding operations (CAFO), e.g. stables and dairies. The Department's program is limited to monitoring water quality at 20 stations in San Antonio, Stemple and Americano Creek watersheds of Sonoma County, and 20 stations in the Tomales Bay watershed of Marin County.

The 1999-2000 winter was relatively wet; yet most dairy operators were able to contain enough of their contaminated stormwater from entering local creeks, and causing significant water quality problems. The major exception to this was an incident this spring in upper Stemple Creek where runoff from one or more dairy operations above the study area was found to be the principal causal agent for unacceptable levels of dissolved oxygen, ammonia, and conductivity which moved downstream through the study area over a prolonged period of time. None-the-less, the data set continues to demonstrate the steady improvement in water quality within these watersheds since the early '90s as a result of increased attention to animal waste management by area producers.

Methods

A water sample was collected from each of 40 stations identified on Figures 1a-e with the aid of an ACE 3-gallon, LRB sampler (little red bucket), and 50 feet of rope. Samples were collected from each station at least biweekly, with the Tomales watershed being sampled on alternating weeks with the Stemple, Americano, and San Antonio Creek watersheds. Some stations were sampled on a more frequent basis as a result of sample collection routing preferences.

All samples were initially collected with the LRB sampler, and then subsampled by immersing a chemically clean, glass, quart jar slowly into the sample as if it were the receiving water. Each subsample was then characterized in the field by measurement of pH, temperature, dissolved oxygen, and electrical conductivity, using a Cole/Parmer Model 5941-00 electronic pH probe, and a YSI Model 85 Dissolved Oxygen-Conductivity-Temperature Meter, respectively.

The quart samples were topped-off, sealed, labeled, placed in a sample carrier, kept cool and transported to the DFG Water Quality Laboratory in Yountville for analysis of turbidity and total ammonia, (usually the next morning), using a Hach Model 2100A Turbidimeter calibrated with Gelex® Secondary Turbidity Standards, and an Orion Model 290A pH/ISE meter with an Orion model 95-12 ammonia electrode. Concentrations of un-ionized ammonia (NH₃-tox) were calculated according to methods outlined in Morgan and Turner, 1977. Samples were also collected periodically for bacterial analysis in coordination the San Francisco Bay Regional Water Quality Control Board's contract laboratory (Sequoia Analytical Laboratories, 1455 McDowell Blvd. North, Suite D, Petaluma, CA 94954) as well as by Tomales Bay Oyster Growers and submitted to the County of Sonoma Public Health Laboratory in Santa Rosa for bacterial analysis. Although not an element of this program, laboratory results of bacterial analysis for samples collected at our station locations are included herein.

Results

The following tables represent descriptive statistics for the 1999-2000 water year as a whole, as well as by watershed. The entire data set arranged by station and date with descriptive statistics is included as Appendix A; summary data by watershed is included as Appendix B; and a summary by water years by station over the period of investigation are contained in Appendix C.

**Table I
 All 99-2000 (98-9) Data**

	Dissolved Oxygen mg/l	Total Ammonia mg/l	Un-ionized Ammonia mg/l	Conductivity µmhos/cm
Average *	9.29 (10.09)	0.420 (1.004)	0.0068 (0.014)	577 (412)
Range	6.2-10.3 (2.0-15.9)	0-25.2 (0-17.4)	0-1.071 (0- 0.377)	8-2342 (75-1690)
Criteria**	5.0-7.0	-	0.025	750
Exceedances	53 (14)	-	39 (77)	125 (73)
Percent Exceedance	6.36 (2)	-	4.68 (12)	15 (12)

* 833 measurements

** SF Bay RWQCB Basin Plan

Discussion

The majority of stations sampled revealed acceptable concentrations of all parameters, e.g. concentration of dissolved oxygen near saturation, low total ammonia and conductivity during most sampling events. Even at those locations where exceedances were locally great, the station averages appeared to indicate that conditions were marginally acceptable, --most of the time. However, it's important to keep in mind that averages of any water quality parameter do not adequately represent the health of the environment, as fish and aquatic life are extremely sensitive to change, and are more likely to be stressed, seriously compromised or even killed by rapid changes in just about any parameter. Likewise, if a lethal threshold of any parameter is reached, even for just a few minutes, i.e. toxic levels of ammonia, or insufficient concentrations of dissolved oxygen, sensitive species of fish or invertebrates upon which they rely for food, will be killed. If the adverse water quality condition dissipates, or is made more acceptable, either by abatement of discharge, reduction of contaminated stormwater runoff, or dilution, the habitat may again be able to sustain life, but few, if any organisms remain. Clearly, if our local streams are to have abundant fish and aquatic life, we must work hard to prevent receiving waters from experiencing these deleterious water quality excursions.

With the early onset of rains in the fall, streams began flowing; and we were again able to begin monitoring by the middle of November. The marginal habitat conditions resulting from oxygen depressions and lethal concentrations of ammonia observed during the first flush in 1998-9 wet weather season was much less pronounced this year. While probably not a true flush, it does represent the effect of mobilized decomposable organics and nutrients, either deposited during the dry season within the stream channels, or washed into channels with the first periods of runoff. Under these low flow conditions pollutants are neither diluted significantly, nor carried out of the system; and bacterial decomposition and conversion of urea and ammonia to nitrate is very active. These adverse conditions can inhibit the later establishment of the food web necessary for the survival of fish and invertebrates which will colonize the habitat when flows increase.

Trends

From Table I, and Figures 1- we can see a dramatic improvement in nearly all parameters. The mean total ammonia concentrations, for example, for all data by year represented in Figure 1 shows an increase of about 30% in 97/98 from the previous winter, but then an equivalent decline in 98/99, followed by an amazing 60% decline in 99/00. The range of total ammonia represented in Figure 2 does not compliment the image of continual improvement, but rather the variability of the worst case scenarios.

Figure 1
All Data-Mean Total NH3

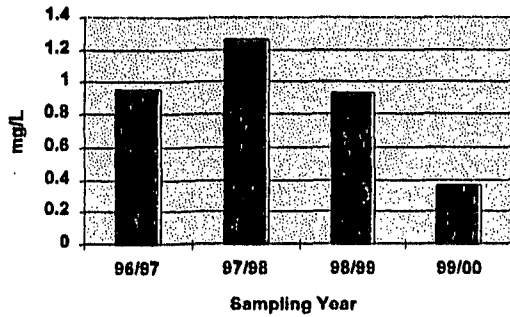


Figure 2
All Data-Mean Total NH3
With Range

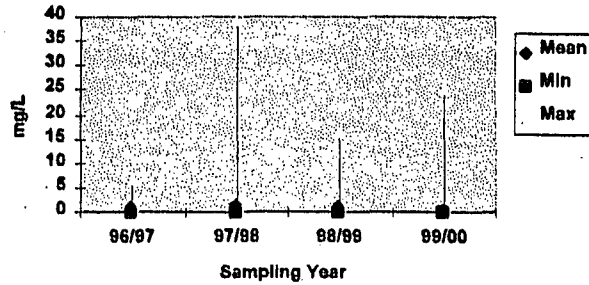


Figure 3
All Data-Mean Toxic NH3

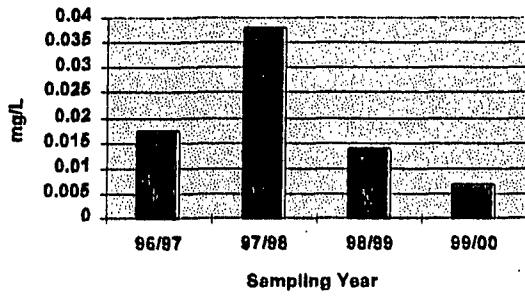


Figure 4
All Data-Mean Toxic NH3
With Range

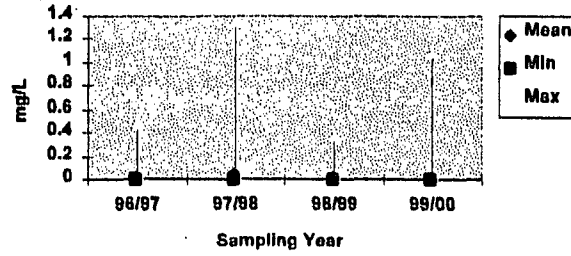


Figure 5
All Data-Maximum Total NH3

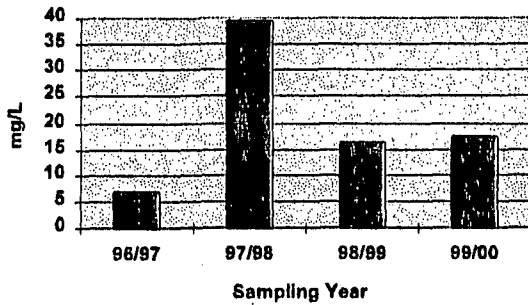


Figure 6
All Data-Maximum Toxic NH3

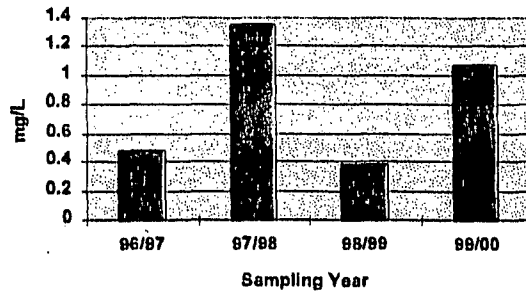


Figure 7
 All Data-Mean D.O.

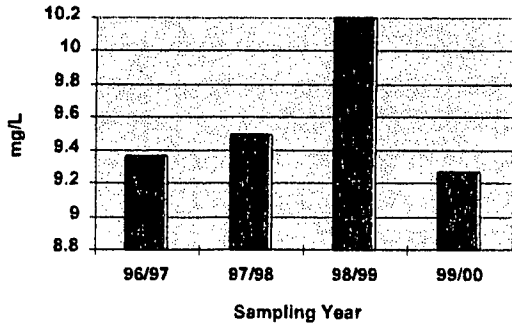


Figure 8
 All Data-Mean D.O.
 With Range

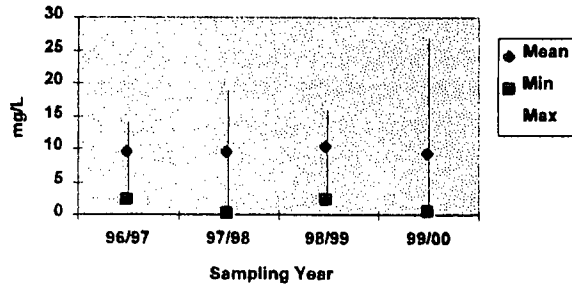


Figure 9
 All Data-Minimum D.O.

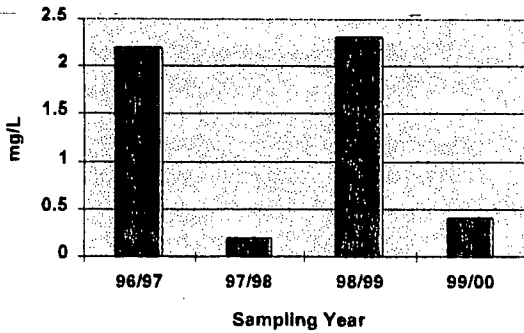


Figure 10
 All Data-Mean Turbidity

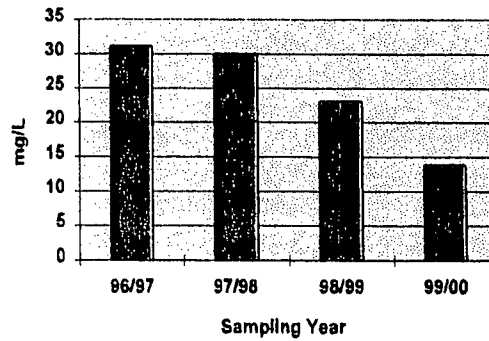


Figure 11
 All Data-Mean Conductivity

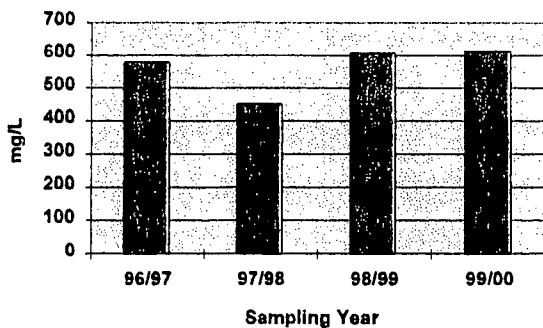
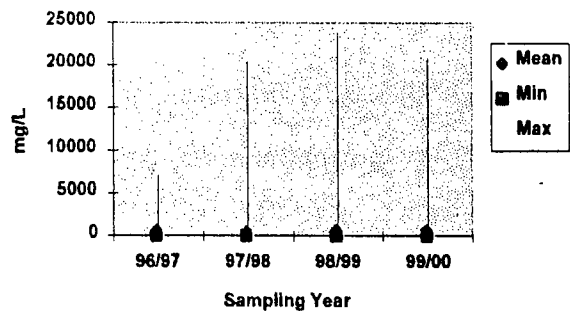


Figure 12
 All Data-Mean Conductivity
 With Range



San Antonio Creek (>Petaluma River)

Water quality in the San Antonio Watershed, a small basin tributary to the Petaluma river, for which we have the longest continuous record, has shown steady, and at times dramatic improvement over the years. Most recently the tributary sampled as Station 3, a site which has experienced severe fluctuations in both dissolved oxygen and toxic concentrations of ammonia during the past several years, now reveals an entirely different condition; comparable to most reference, or animal-free watersheds. Unfortunately, the change is not attributable to improvements in animal waste management, but rather changes in land use brought about by cessation of dairy operations at a facility located immediately upstream.

Table II
San Antonio Creek Watershed
99-00 (98-99)

	Dissolved Oxygen mg/l	Total Ammonia mg/l	Un-ionized Ammonia mg/l	Conductivity µmhos/cm
Average *	9.28 (10)	0.4212 (1.173)	0.00494 (0.0115)	568 (463)
Range	1.78 - 22.39 (2.0-13.9)	0 - 7.15 (0.0-17.4)	0 - 0.086 (0.0-0.152)	66 - 2092 (20-1690)
Criteria**	5.0-7.0	-	0.025	(750)
Exceedance	10 (2)	-	14 (15)	43(18)
Percent Exceedance	4.88 (1.47)	-	6.83 (11)	20.98 (13.2)

* 205 (136) measurements

** SF Bay RWQCB Basin Plan

Figure 13
 San Antonio Ck.-Mean Total NH3

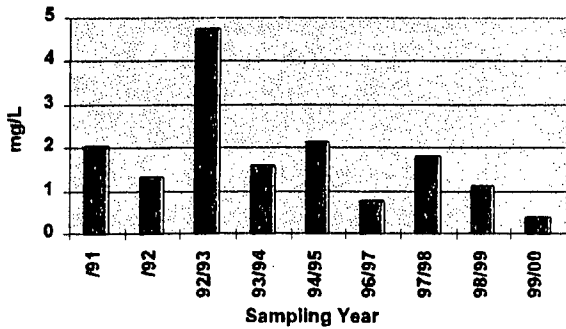


Figure 14
 San Antonio Ck.-Mean Total HN3
 With Range

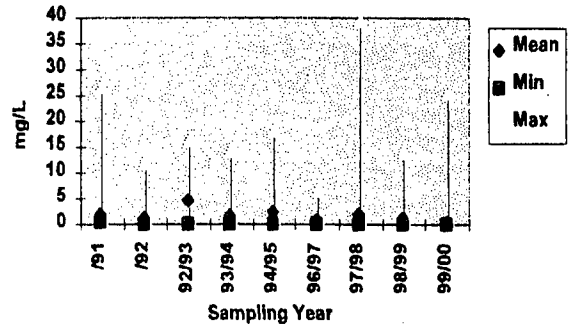


Figure 15
 San Antonio Ck.-Mean Toxic NH3

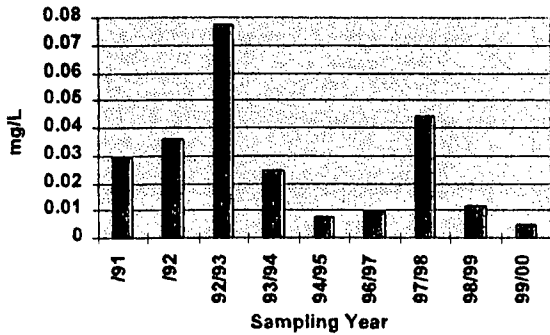


Figure 16
 San Antonio Ck.-Mean Toxic NH3
 With Range

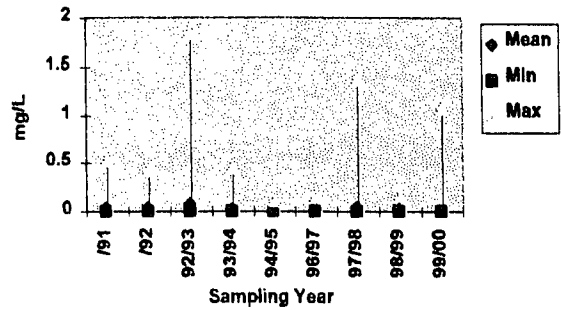
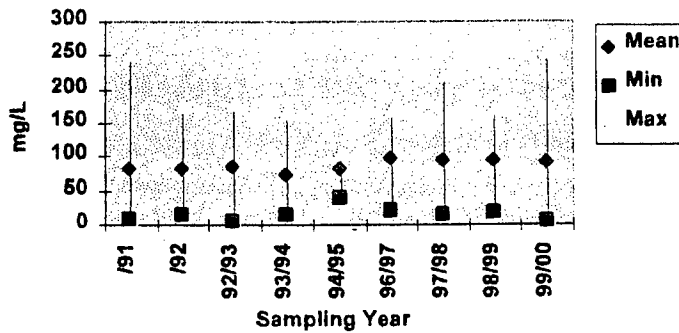


Figure 17
 San Antonio Ck.-Mean Percent Sat.
 With Range



Ellis Creek Watershed (>Petaluma River)

Mean concentrations of dissolved oxygen have dipped slightly, while those for total and un-ionized ammonia have improved dramatically. The continued excursions of conductivity, especially during the higher flow periods, reflects the increasing load of salts from animal wastes in the watershed.

Table III
Ellis Creek Watershed
99-00 (98-9) Data

	Dissolved Oxygen mg/l	Total Ammonia mg/l	Un-ionized Ammonia mg/l	Conductivity µmhos/cm
Average *	9.38 (11.3)	0.1693 (0.534)	0.003921 (0.0226)	998 (790)
Range	2.98 - 15.8 (8.0-15.9)	0.0 - 0.94 (0.07-2.45)	0.0 - 0.0262 (0.001-0.058)	489 - 1980 (330-1070)
Criteria**	5.0-7.0	-	0.025	(750)
Exceedance	3 (13)	-	1 (4.3)	24 (9)
Percent Exceedance	10.34 (0)	-	3.5 (53)	79.3 (50)

* 29(18) measurements

** SF Bay RWQCB Basin Plan

Figure 18
Ellis Ck.-Mean Total NH3

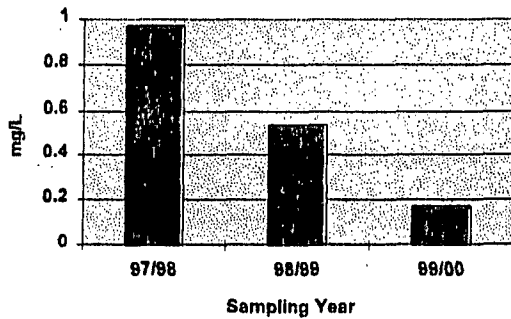


Figure 19
Ellis Ck.-Mean Total NH3
With Range

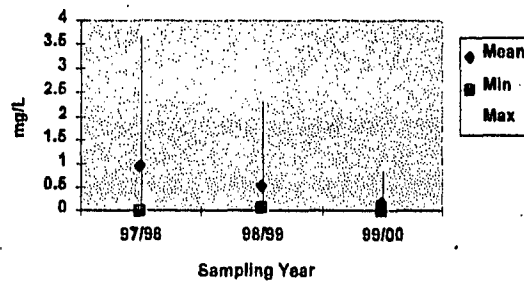


Figure 20
Ellis Ck.-Mean Toxic NH3

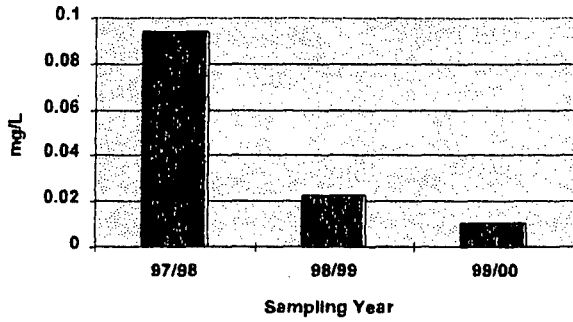


Figure 21
Ellis Ck.-Mean Toxic NH3
With Range

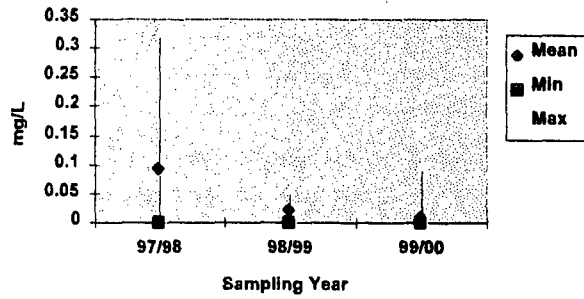


Figure 22
Ellis Ck.-Mean Percent Sat.

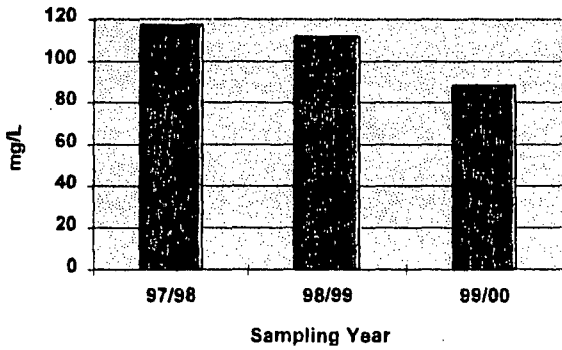
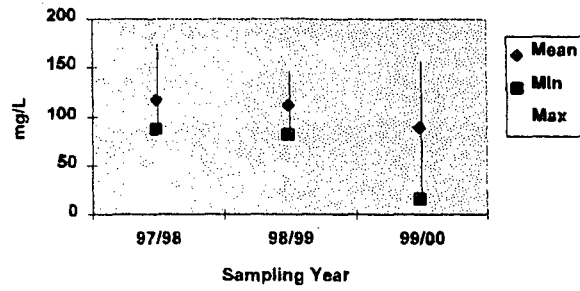


Figure 23
Ellis Ck.-Mean Percent Sat.
With Range



Stemple Creek Watershed (>Estero Americano> Pacific Ocean)

Data from Table IV (below) show a significant reduction in the average dissolved oxygen, and percent saturation with only a slight improvement in the average total and un-ionized ammonia. The range of all parameters was greater this year than last, representing the influence of a single, but long-term excursion in water quality which resulted from a release of animal wastes upstream of the study area. The extremely low dissolved oxygen concentrations (<1ppm), the extremely high concentrations of total and un-ionized ammonia (17.4, and 1.07ppm respectively) together with increased conductivity would be lethal to any and all aquatic life, sensitive or not, during it's prolonged existence in the creek. This release of animal wastes was sufficient to negate the water quality improvements realized in the previous year; and emphasizes the point that continued water quality improvement is a cumulative function of everyone working together.

Table IV
Stemple Creek Watershed
99-00 (98-9) Data

	Dissolved Oxygen mg/l	Total Ammonia mg/l	Un-ionized Ammonia mg/l	Conductivity µmhos/cm
Average *	8.9 (10.1)	0.876 (1.055)	0.0180 (0.0194)	546 (437)
Range	0.75 - 27.71 (2.7-15.9)	0.0 - 17.4 (0.07-8.95)	0.0 - 1.071 (0.0-0.229)	6 - 1789 (75-1200)
Criteria**	5.0-7.0	-	0.025	(750)
Exceedance	23(7)	-	19(35)	27(11)
Percent Exceedance	11(3.6)	-	9.3(17.85)	13(5.6)

*203 (196) measurements

** SF Bay RWQCB Basin Plan

Figure 24
 Stemple Ck.-Mean Total NH3

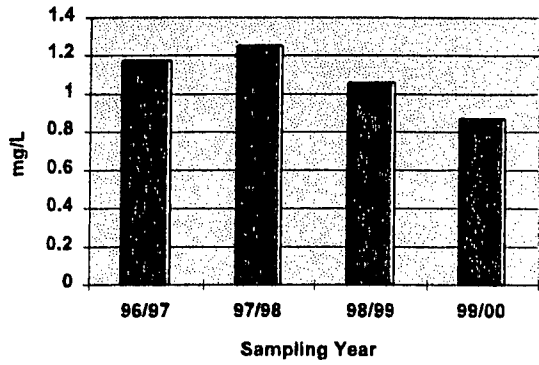


Figure 25
 Stemple Ck.-Mean Total NH3
 With Range

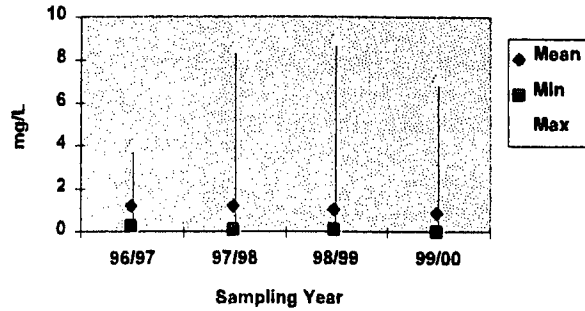


Figure 26
 Stemple Ck.-Mean Toxic NH3

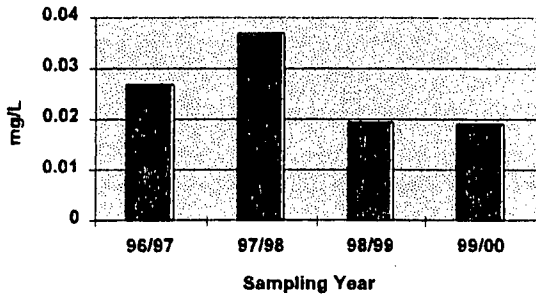


Figure 27
 Stemple Ck.-Mean Toxic NH3
 With Range

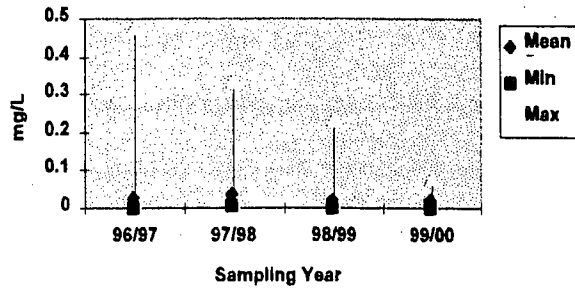


Figure 28
 Stemple Ck.-Mean Percent Sat.

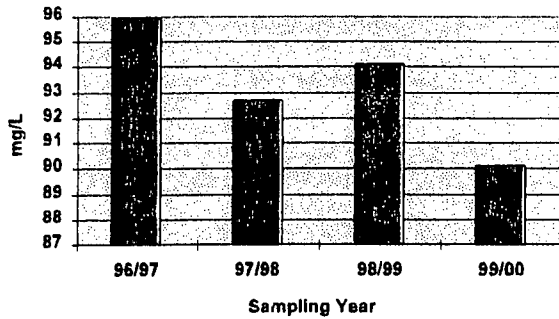
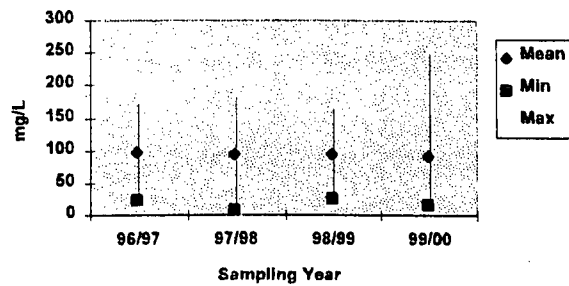


Figure 29
 Stemple Ck.-Mean Percent Sat.
 With Range



Bloomfield Fork of Americano Creek (>Americano Creek> Estero San Antonio)

Water quality in this sub basin had been steadily improving over the past 10 years; however, that trend was quickly, and significantly reversed this year due to release of animal wastes at Station 16. the average total ammonia increased by 280% over last season's average, while the maximum increased by nearly an order of magnitude. The number, and percentage of exceedances as well as the maximum conductivity increased dramatically. This, again, demonstrates the effect of one producer's management on receiving water quality of the entire sub-basin.

**Bloomfield Fork
 99-00 (98-9) Data**

	Dissolved Oxygen mg/l	Total Ammonia mg/l	Un-ionized Ammonia mg/l	Conductivity µmhos/cm
Average *	7.68 (9.76)	1.938 (0.684)	0.010 (0.007)	447 (334)
Range	1.62-12.6 (6.0-12.8)	0-25.2 (0.1-2.73)	0-0.201 (0.001-0.043)	190-1127 (75-650)
Criteria**	5.0-7.0	-	0.025	(750)
Exceedance	5 (0)	-	3 (0)	1 (0)
Percent Exceedance	13 (0)	-	7.9 (0)	2.6 (0)

*38 (31) measurements

** SF Bay RWQCB Basin Plan

Figure 30
Bloomfield Trib.-Mean Total NH3

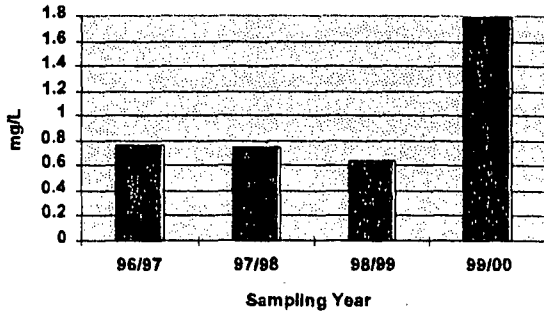


Figure 31
Bloomfield Trib.-Mean Total NH3
With Range

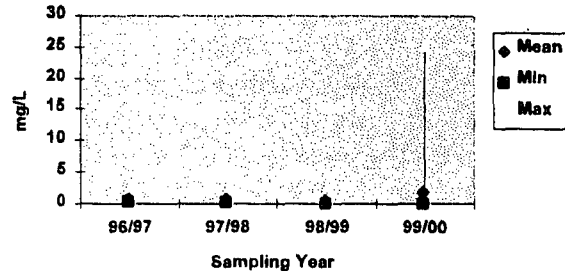


Figure 32
Bloomfield Trib.-Mean Toxic NH3

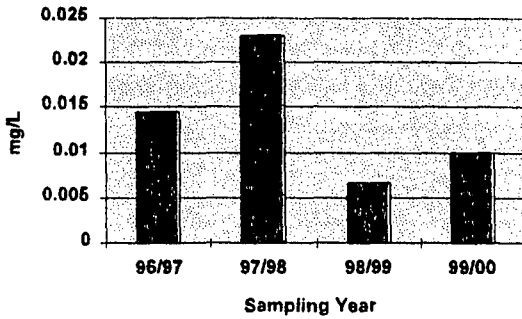
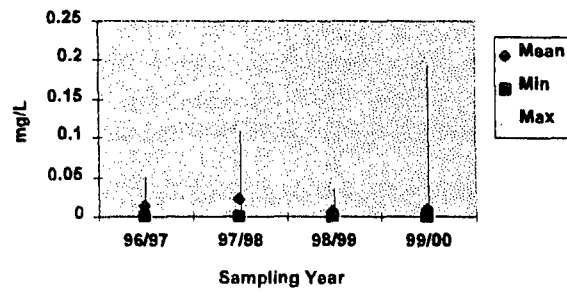


Figure 33
Bloomfield Trib.-Mean Toxic NH3
With Range



Tomales Bay Watershed (>Pacific Ocean)

Twenty (20) stations were sampled again this year along the south and eastern shoreline of Tomales Bay at bridges or culverts under Hwy 1 wherever flow could be sampled. No attempt was made to specifically sample streams draining known dairy lands. Many of the tributary streams flow from areas which do not contain any confined animal operations, and as such provide a good reference.

With three notable exceptions, water quality parameters for samples collected within this watershed were very good. D.O. was consistently at or near saturation, total ammonia was low, with a notable exception, the toxic form of ammonia was low, and conductivity showed some slight improvement.

**Tomales Bay Watershed
 99-00 (98-9) Data**

	Dissolved Oxygen mg/l	Total Ammonia mg/l	Un-ionized Ammonia mg/l	Conductivity µmhos/cm
Average *	9.87 (10.1)	0.061 (0.678)	0.001 (0.0071)	624 (781)
Range	0.4-14.2 (6.4-9.0)	0-3.45 (0-14.0)	0-0.109 (0-0.19)	8-21,500 (85-24,500)
Criteria**	5.0-7.0	-	0.025	(750)
Exceedance	5 (1)	-	3 (14)	28 (9)
Percent Exceedance	1.5(<1)	-	<1 (6.4)	8.5 (4.1)

*329 measurements

** SF Bay RWQCB Basin Plan

Figure 34
 Tomales Tribs.-Mean Total NH3

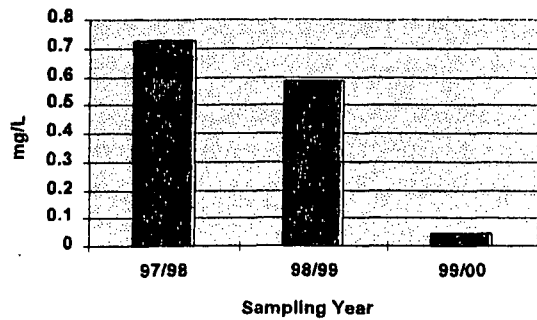


Figure 35
 Tomales Tribs.-Mean Total NH3
 With Range

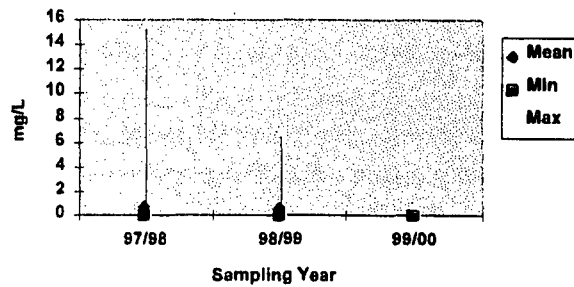


Figure 35
 Tomales Tribs.-Mean Toxic NH3

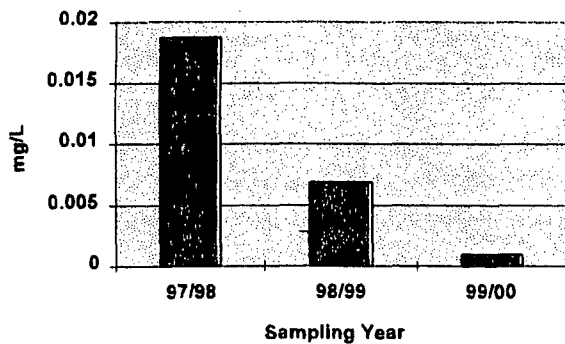


Figure 36
 Tomales Tribs.-Mean Toxic NH3
 With Range

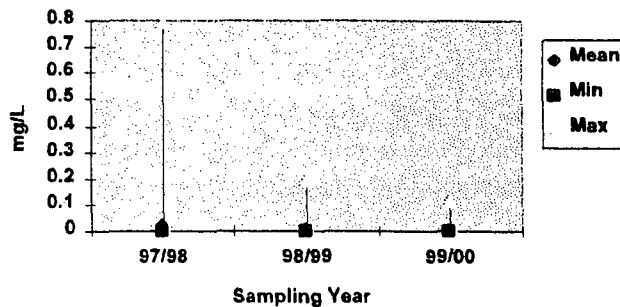


Figure 38
 Tomales Tribs.-Mean Percent Sat.

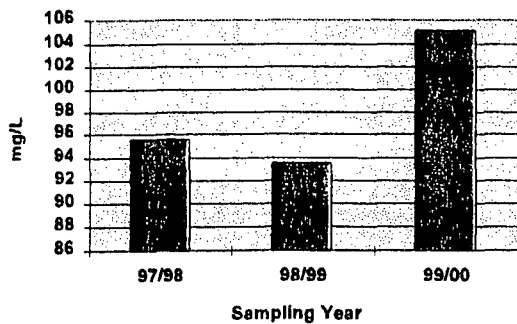
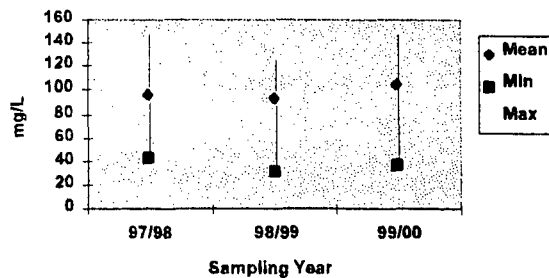


Figure 39
 Tomales Tribs.-Mean Percent Sat.
 With Range



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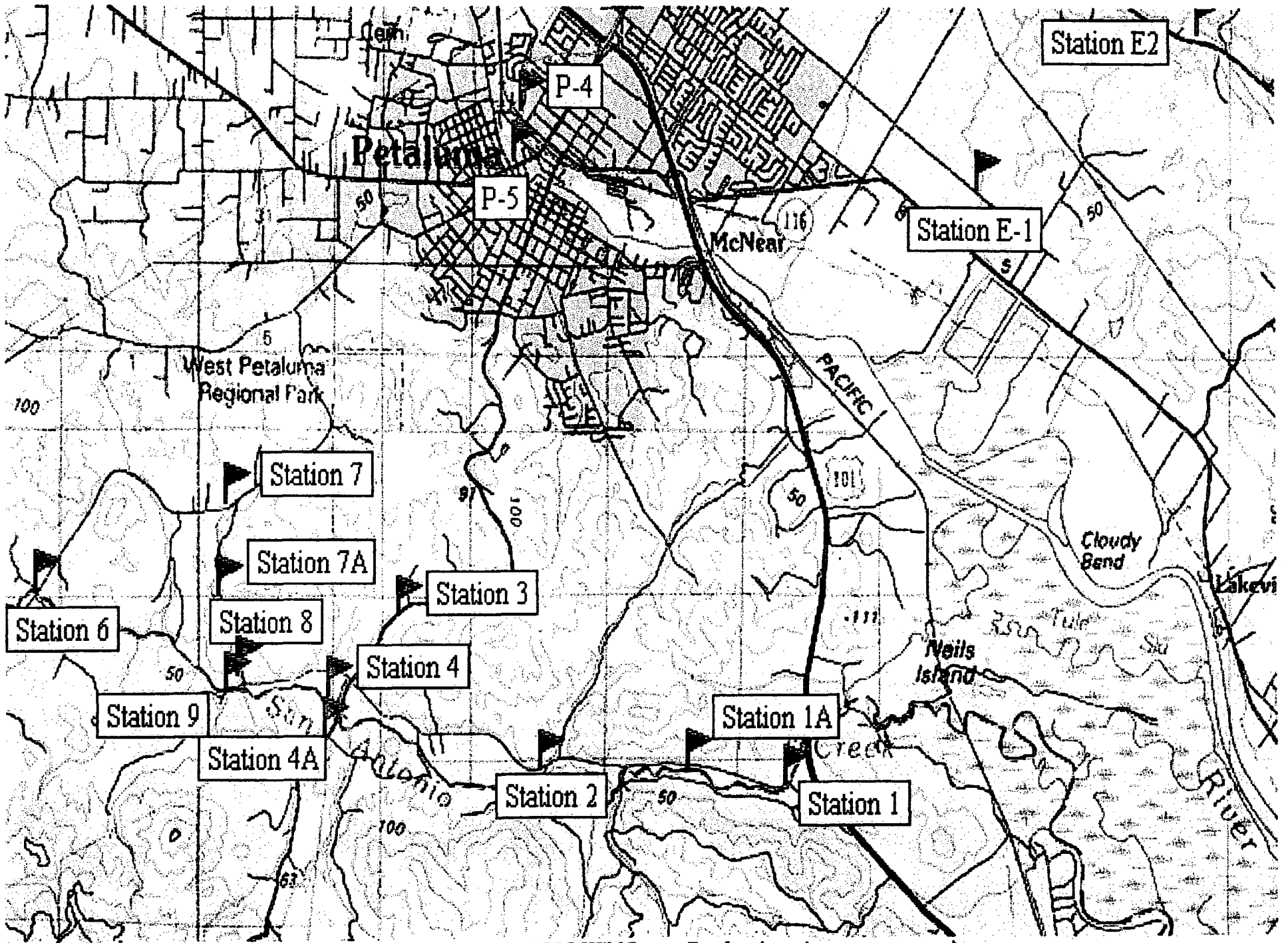
Conclusions

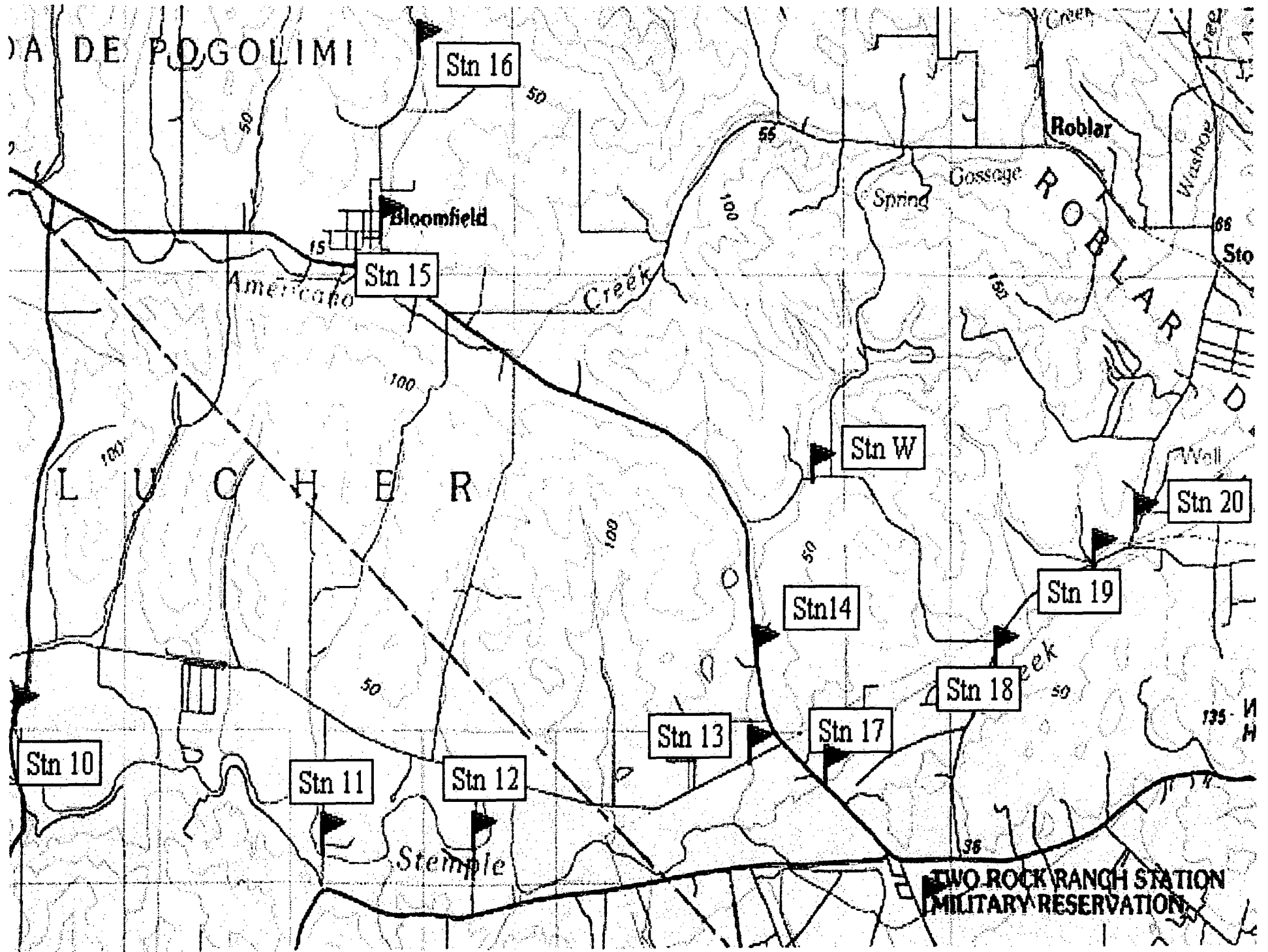
The nearly normal winter did not create any serious water quality problems in most streams within the study area. Water quality problems encountered were principally the result of runoff of animal wastes from loafing areas, walkways, or disposal areas, or the resultant eutrophication and disruptive effects upon oxygen dynamics. Operators who experienced problems were contacted by Committee members or Western United Dairymen and responded appropriately to provide the necessary interim corrective action. Most problems encountered were not related to the unusual rainfall pattern, but rather to poor planning or management on the part of a few operators. Increased participation by operators on the Animal Waste Committee, together with completion of the UC Cooperative Extension Ranch Planning Workshops could bring about the necessary improvements in water quality.

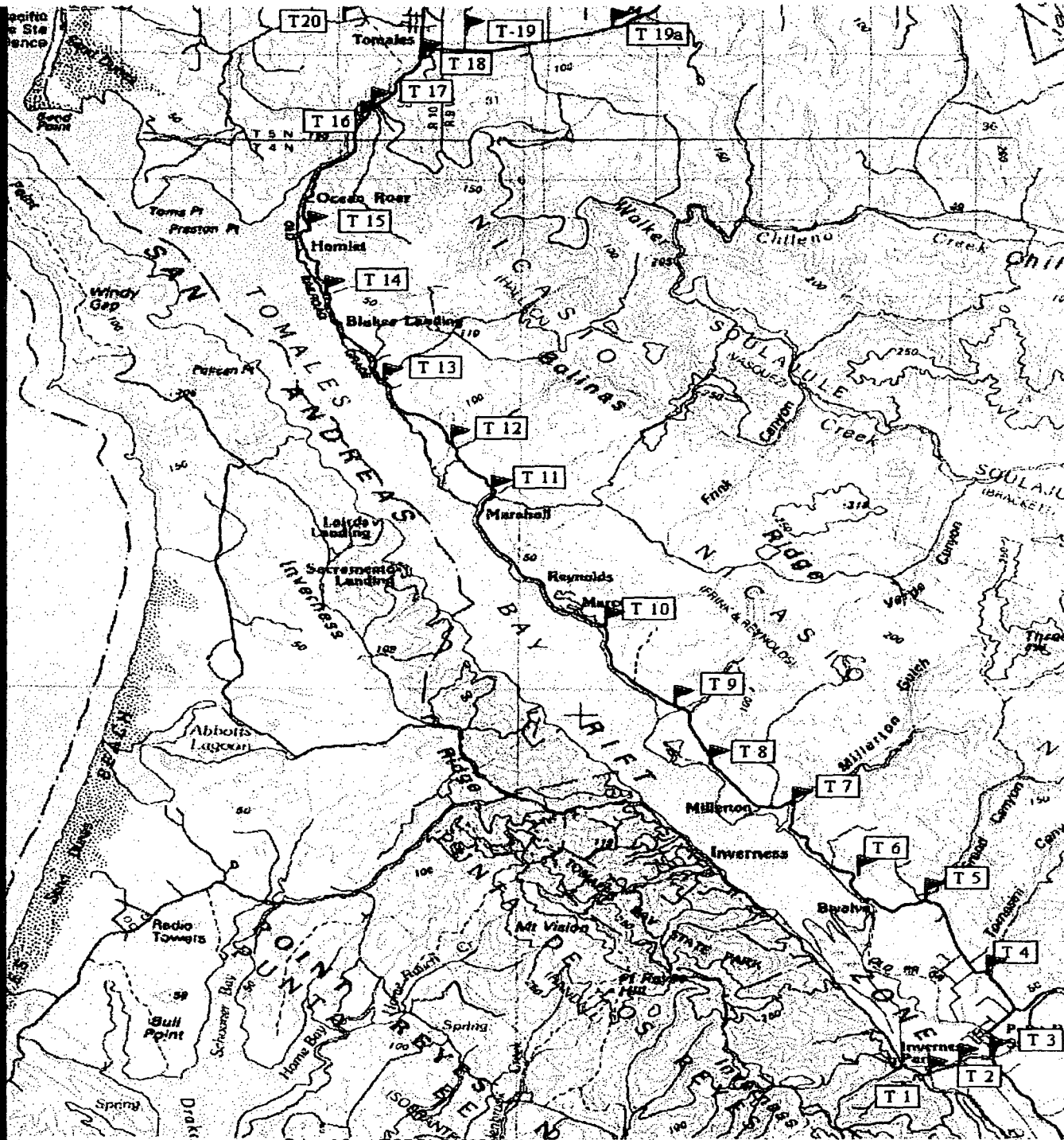
If there are any questions on the sample methods, station locations, data or its evaluation, please give me a call at (707) 944-5523.



Michael E. Rugg
Water Quality Biologist
Region 3







Appendix A
1998-99 Data Set

California Department of Fish and Game Marin-Sonoma County Agricultural
Runoff Influence Investigation Tomales Bay and Ellis Creek Watersheds -
Report for 1999-2000

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
1	1/24/00	7.2	12.3	9.74	91.4	3.35	0.012	129	210
1	2/7/00	7.3	10.8	11.4	103	0	0	290.9	10
1	2/22/00	7.4	12	8.97	83.3	0.019	0	242.3	17
1	3/28/00	7.7	11.2	11.4	105	0.0312	0.0003	381.8	3.4
1	4/4/00	7.4	14.8	7.7	76.2	0	0	458	3.9
1	4/10/00	7.8	14.4	10.4	101.4	0	0	490	2.2
1	4/18/00	7.6	13	10.75	102.1	0.152	0.0014	370.4	13
1	4/24/00	7.6	15.6	8.29	83.3	0	0	477	2.5
1	5/2/00	7.5	16.5	7.61	77.6	0.0326	0.0003	571	3.7
1	5/7/00	7.6	16	12.04	122.2	0.0057	0.0001	531	3.5
1	5/16/00	7.5	16	10.11	102.4	0	0	526	2.3
1	5/24/00	7.5	18.4	6.16	65.6	0.0702	0.0008	578	2
1	5/31/00	7.6	17.3	7.87	82.1	0	0	563	1.6
1	6/7/00	7.4	17.6	7.41	77.8	0	0	563	2.3
1	6/13/00	8.2	20.3	6.58	72.6	0.0615	0.0036	604	1.1
1a	12/20/99	7.4	9.4	7.2	62	0	0	671	1
1a	1/10/00	7	11.6	9.47	87	0.35	0.001	781	
1a	1/24/00	7.2	12.3	9.77	91.3	3	0.011	130	180

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
1a	2/7/00	7.1	10.8	11.7	106	0	0	283	
1a	2/22/00	7.4	11.8	9.02	83.3	0	0	235.1	20
1a	3/20/00	7.8	12.1	11.96	111	0.0076	0	325	3.8
1a	3/28/00	7.9	11.2	12.4	113.5	0	0	369.7	2.2
1a	4/4/00	7.7	14.5	7.5	73.6	0	0	450.5	1.9
1a	4/10/00	7.8	13.4	10.5	101.5	0	0	464	2
1a	4/18/00	7.6	13.6	9.29	89.3	0.156	0.0015	368	13
1a	4/24/00	8	15.5	10.4	104.2	0	0	471	1.9
1a	5/2/00	7.8	16.8	8.84	91.3	0.0007	0	523	2.7
1a	5/7/00	7.8	15.8	13.04	131.8	0.0098	0.0002	529	2
1a	5/16/00	7.8	16.3	10.68	108.9	0	0	519	1.9
1a	5/24/00	7.6	19.2	5.53	60.1	0.0256	0.0004	578	1.6
1a	5/31/00	7.8	17.7	7.41	77.8	0	0	598	1.9
1a	6/7/00	7.5	17.8	6.88	72.8	0	0	463	2
1a	6/13/00	8.3	20.5	5.27	58.6	0.0206	0.0016	524	1.5
2	11/17/99	7.7	10.7	7.8	69.6	0.16	0.002	630	8
2	12/15/99	7.5	6.8	8.7	71.5	0.13	0	568	2
2	12/20/99	7.4	8.1	7	60	0.07	0	587	2
2	1/10/00	6.9	11.6	8.2	76	0.26	0	618	
2	1/24/00	7.1	12.5	9.11	85.6	1.73	0.005	203	100
2	2/7/00	7	10.3	11	99	0.005	0	356.1	6
2	2/22/00	7.3	11.8	9.23	85.2	0.083	0	249.3	25

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
2	3/20/00	7.6	10.7	12	108	0	0	405	5.5
2	3/28/00	7.7	10.4	11.8	105.3	0	0	453.4	5.5
2	4/4/00	7.5	13.6	7.8	75.5	0	0	528	2.9
2	4/10/00	7.8	12.7	11.2	106	0	0	534	2.3
2	4/18/00	7.9	12.2	9.33	86.8	0.119	0.002	498	6.6
2	4/24/00	7.8	14.3	10.79	105.3	0	0	569	2.6
2	5/2/00	7.6	15.8	10.18	102.6	0.0089	0.0001	606	3.5
2	5/7/00	7.6	15.2	12.95	128.9	0.0062	0.0001	594	3.5
2	5/16/00	7.5	15.4	10.41	103.7	0	0	558	3.1
2	5/24/00	7.4	17.7	6.28	65.7	0.124	0.001	652	2
2	5/31/00	7.6	16	7.45	75.5	0	0	634	3.6
2	6/7/00	7.4	16.8	8.06	83.1	0	0	642	2.6
2	6/13/00	8.1	19.8	6.28	69	0.099	0.0047	687	2.5
3	1/24/00	7.7	12.6	9.22	86.6	0.825	0.009	449	30
3	2/7/00	7.4	11.2	12.36	113	0.0058	0	66.2	11
3	2/22/00	7.6	11.9	9.15	84.8	0	0	478	15
3	3/20/00	8	11.7	13.5	125.3	0	0	135	6.8
3	3/28/00	7.7	10.2	11.9	106.3	0	0	381.1	6.1
3	4/4/00	7.8	13.1	8.7	83.3	0	0	497	8
3	4/10/00	8.4	13.4	12.2	116.7	0	0	422	15
3	4/18/00	8.1	13.3	10.86	103.7	0	0	478	8.7
3	4/24/00	8	15.4	9.84	98.7	0	0	455	17

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
3	5/2/00	7.8	16.6	8.83	90.6	0.0741	0.0014	399.8	15
3	5/7/00	7.8	15.6	12.39	124.4	0.0541	0.001	416.7	9
3	5/16/00	7.7	16.2	10.26	104.4	0	0	431.9	9
3	5/24/00	7.6	17.8	7.25	76.3	0.0454	0.0006	447.2	19
3	5/31/00	7.8	16.6	8.44	86.4	0	0	334.2	8.5
3	6/7/00	8	16.4	8.05	82.4	0	0	382.4	7.9
3	6/13/00	8.5	19.2	7.55	81.6	0.0185	0.0019	466	6.3
4	11/17/99	7.6	10.9	1.78	16	1.4	0.011	734	31
4	12/15/99	7.4	10.7	2.82	23.2	1.575	0.008	280	4
4	12/20/99	7.3	7.9	2	17	0.92	0.003	676	3
4	1/10/00	7	6.4	7.2	58.5	0.45	0.001	627	6
4	1/24/00	7.5	12.2	9.65	89.5	2.23	0.015	125.8	120
4	2/7/00	7.3	11.6	10.7	99	0.027	0	290	10
4	2/22/00	7.3	11.7	7.94	73.3	0	0	247.3	20
4	3/20/00	7.8	11.7	12.6	116.7	0.042	0	317	4.7
4	3/28/00	7.7	11.4	9.97	91.6	0	0	365.8	4.1
4	4/4/00	7.7	15.3	6.7	67.3	0.0327	0.0005	464	3.4
4	4/10/00	8.6	15	10.1	100.6	0	0	470	3.4
4	4/18/00	8	13.9	7.65	74.1	0.145	0.0036	375.3	12
4	4/24/00	7.8	16.1	7.1	72.1	0.0742	0.0001	470	7
4	5/2/00	7.5	17.1	5.83	60.5	0.0176	0.0002	544	6
4	5/7/00	7.5	16.3	9.86	100.5	0.156	0.0015	536	6.4

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
4	5/16/00	7.6	16.4	9.68	99	0.0892	0.0011	531	5.9
4	5/24/00	7.4	19.2	4.07	44.5	0.178	0.0016	619	2.9
4	5/31/00	7.6	16.1	4.14	41.9	0	0	646	4.8
4	6/7/00	7.4	16.9	6.05	62.5	0	0	696	3
4	6/13/00	8.1	18.6	3.08	32.7	0.712	0.0305	707	2.9
4a	12/20/99	7.6	7.8	7	59	0.25	0.002	768	2
4a	1/10/00	7.2	11.7	10.3	95	0.9	0.003	370	70
4a	1/24/00	7.5	12.7	9.63	89	1.15	0.008	189	200
4a	2/7/00	7.5	11.1	11.9	108	0	0	379	3
4a	2/22/00	7.2	11.3	9.59	87.7	0.03	0	312	13
4a	3/20/00	7.6	12.7	10.8	101.3	0	0	475	2.5
4a	3/28/00	7.7	10.8	11	99.6	0	0	537	2.9
4a	4/4/00	7.7	13.1	9.4	89.5	0	0	644	2.6
4a	4/10/00	8.5	14.1	14.6	141.4	0	0	689	1.9
4a	4/18/00	8.1	13.2	10.2	106.9	0	0	504	5.3
4a	4/24/00	8.2	13.9	13.39	129.6	0	0	660	2.1
4a	5/2/00	8	14.9	11.17	112.4	0.0198	0.0005	703	3.1
4a	5/7/00	8.1	14.6	15.52	152.1	0.0303	0.001	681	2.4
4a	5/16/00	8	14.3	12.03	116.4	0	0	673	2.5
4a	5/24/00	7.7	17.6	5.81	60.4	0.0769	0.0013	797	2.3
4a	5/31/00	8.1	15.1	8.1	79.8	0	0	764	2.4
4a	6/7/00	8.1	15.9	10.38	104.4	0	0	794	1.5

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
4a	6/13/00	8.8	18.1	2.96	31.1	0.435	0.0774	828	2
5	1/24/00	7	12.9	7.96	75.4	3.45	0.008	323	125
5	2/7/00	7.2	13.1	10.3	98	0.763	0.003	451	10
5	2/22/00	7.3	11.2	8.99	82	0.731	0.003	250.3	28
5	3/20/00	7.9	15.9	11.2	112.7	0.03	0.002	403	13
5	3/28/00	7.7	12.6	10.8	102.6	0	0	505	5.6
5	4/4/00	7.8	13.2	9.3	89.8	0.148	0.0022	559	6.2
5	4/10/00	8.3	16.1	9.5	97.4	0.247	0.0137	631	84
5	4/18/00	7.9	15.3	9.32	93.3	0.527	0.0116	557	19
5	4/24/00	8.3	18.5	9.39	100.9	0.15	0.0011	700	9.4
5	5/2/00	7.9	17.3	8.76	90.9	0.15	0.0038	691	17
5	5/7/00	7.9	15.8	12.47	125.7	0.13	0.003	729	9.4
5	5/16/00	7.9	18.5	10.01	106.9	0.0766	0.0021	793	9.4
6	11/17/99	7.2	13.3	6.4	60.6	0.48	0.002	209	19
6	12/20/99	7.6	10	7.7	69	0.18	0.001	393	1
6	1/10/00	6.9	11.2	10.1	92.3	0.225	0	282	18
6	1/24/00	6.4	12.3	9.27	86.3	1.2	0.001	88	80
6	2/7/00	7	11.9	6.71	62	0	0	284	12
6	2/22/00	7.1	11.4	7.22	66.2	0	0	233.9	21
6	3/20/00	7.5	12.4	11.8	110.7	0.481	0.0016	243.2	7
6	3/29/00	8	8.8	9.7	85.1	0	0	288.2	6
6	4/3/00	8.3	18.7	14.2	150.3	0.0619	0.00425	368	3.6

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
6	4/10/00	7.8	13.6	10.1	96.6	0.386	0.0059	336.9	5.6
6	4/17/00	7.4	15.5	8.1	81	0.0306	0.0002	528	35
6	4/24/00	8.1	17.5	11.19	115.4	0.723	0.0029	426	6.4
6	5/2/00	7.4	13.9	8.49	82.2	0.0355	0.0002	352.9	5.5
6	5/7/00	7.3	13.6	12.23	117.5	0.0264	0.0001	327.8	2.8
6	5/16/00	7.3	14.9	9.24	91.5	0	0	370	3.9
6	5/24/00	7.5	23.9	7.4	87.7	0.057	0.0009	433.2	3.6
6	5/31/00	7.4	15	5.99	60.2	0	0	363.1	2.2
6	6/7/00	7.7	17.4	7.23	75.7	0	0	370.4	3.4
6	6/13/00	8	20.2	6.13	67.3	0.104	0.004	399.2	1.2
7	1/24/00	7.1	12.4	9.09	85.4	1.15	0.003	452	70
7	2/7/00	7.3	11.9	9.3	86.6	0.001	0	563	12
7	2/22/00	7.3	11.6	8.57	79	0.198	0.001	318.4	20
7	3/20/00	7.3	12.9	9.13	86.5	0.0246	0	609	21
7	3/29/00	7.7	9.9	8.9	79	0	0	642	5.4
7	4/3/00	8	20.2	10.5	112.5	0	0	826	3.9
7	4/10/00	7.5	13.3	9.5	90	0.297	0.0022	799	6.8
7	4/17/00	7.6	17.6	9.2	96.5	0.0673	0.0009	718	12
7	4/24/00	7.7	16.4	9.1	93.2	0	0	825	4.5
7	5/2/00	7.4	14.3	7.2	70.1	0.0437	0.0003	809	4.3
7	5/7/00	7.3	13.7	10.45	100.9	0.0093	0	748	3.9
7	5/16/00	7.6	14.4	8.92	87.2	0	0	706	3.6

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
7	5/24/00	7.6	19.9	10.94	119.3	0.0555	0.0009	971	2.5
7	5/31/00	7.6	12.9	7.84	73.8	0	0	1015	2.7
7	6/7/00	7.9	14.4	8.08	79	0.0588	0.0012	1246	2.6
7	6/13/00	8.3	17.3	7.69	78.9	0	0	1392	2.3
7a	12/15/99	7.7	7	2.51	21.2	3.5	0.026	550	17
7a	1/10/00	7.4	11.1	6.3	58	7.15	0.036	1011	84
7a	1/24/00	7.3	12.7	8.96	84.3	1.975	0.009	341	70
7a	2/7/00	7.5	12.1	10.3	97.6	0.5	0.003	521	12
7a	2/22/00	7.3	11.4	8.51	78.1	1.84	0.008	350.2	24
7a	3/20/00	8	13.8	13.5	130.7	0.0316	0	526	10
7a	3/29/00	8.2	9.1	10	85.5	0.23	0.006	553	10
7a	4/3/00	8.3	22.9	8.9	104.2	0.485	0.0435	845	4.3
7a	4/10/00	7.7	14.1	7.9	76.4	0.884	0.0011	778	7.8
7a	4/17/00	8	19.3	10.5	114.5	0.8	0.0295	554	27
7a	4/24/00	7.9	21	7.92	88.9	0.492	0.0016	893	7.1
7a	5/2/00	7.6	15.5	5.79	58.4	0.141	0.0016	831	6
7a	5/7/00	7.5	14.5	9.77	96.1	0.12	0.001	782	5.1
7a	5/16/00	7.4	15	8.17	81.3	0.453	0.0031	812	7.1
7a	5/24/00	7.9	23.5	10.94	129.3	0	0	1157	15
7a	5/31/00	7.6	15.2	6.27	62.5	0.176	0.0019	978	5.4
7a	6/7/00	7.7	15.2	7.35	73.3	0	0	1065	8.5
7a	6/13/00	8.5	19.8	11.86	126.1	0.664	0.0743	1259	4.5

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
8	11/17/99	7.9	12.3	1.85	17.9	4.85	0.086	2092	20
8	12/15/99	7.5	13.8	10.25	105.4	1.25	0.01	1170	6
8	12/20/99	8	12.1	11.3	101	2.73	0.058	1796	4
8	1/10/00	7.4	12	10	94	2.4	0.013	980	64
8	1/24/00	7.3	12.8	8.67	82.3	2.23	0.01	317	76
8	2/7/00	7.6	13.2	11.5	110	0.72	0.007	563	13
8	2/22/00	7.4	11.5	8.87	81.4	0.546	0.003	347.7	18
8	3/20/00	8.2	14.9	14.5	146.7	0.0542	0.001	577	16.5
8	3/29/00	7.9	9.6	8.4	74	0	0	609	8.2
8	4/3/00	8.6	25	14.5	172.4	0.276	0.0511	966	4.3
8	4/10/00	8	17.3	11.5	120	0	0	865	6
8	4/17/00	8	19.5	10.4	113.7	1.28	0.0472	592	18
8	4/24/00	9.2	22.5	22.39	254.4	0.0835	0.0036	886	2.4
8	5/2/00	8.2	16.4	7.92	81.2	0.0645	0.003	902	1.5
8	5/7/00	7.8	15.7	11.51	116.3	0.0353	0.0006	816	2.2
8	5/16/00	7.6	16	8.44	86	0.148	0.0017	886	5.4
8	5/24/00	8.5	28.9	11.3	148.2	0.216	0.041	1312	2.5
9	11/17/99	7.9	13.1	4.4	42.6	3.7	0.068	1422	29
9	12/15/99	7.5	9.5	12.49	112.3	0.45	0.003	500	3
9	12/20/99	8	11.4	11.3	104	0.58	0.012	766	2
9	1/10/00	7.2	11.6	7.8	72.4	1.4	0.005	863	27
9	1/24/00	6.5	12.4	9.5	88.6	2.23	0.002	101	90

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
9	2/7/00	7.2	13.3	9.35	89.3	0.009	0	281.1	18
9	2/22/00	7.2	11.6	6.6	60.6	0	0	216.6	20
9	3/20/00	8	14.9	14.2	141	0.032	0	285	4.6
9	3/29/00	7.9	10.2	10	88.1	0	0	316.5	3.1
9	4/3/00	8.5	21.5	13.3	150.5	0	0	449.6	4
9	4/10/00	8	16.5	12.1	123.6	0	0	421.8	6.5
9	4/17/00	7.9	17.3	11.3	116.3	0.372	0.0095	330	24
9	4/24/00	8.9	20.3	17.73	196.7	0	0	440.4	4.6
9	5/2/00	7.7	16.8	9.28	95.8	0.0425	0.0007	473	2.2
9	5/7/00	7.6	15.6	12.48	125.3	0.0356	0.0004	419.8	3
9	5/16/00	7.6	15.9	9.32	94.5	0	0	466	2.5
9	5/24/00	8.3	28.7	12.46	161.7	0.0441	0.0006	652	2.2
9	5/31/00	7.8	15.6	8.28	83.6	0	0	550	1.7
9	6/7/00	7.9	16.7	8.32	85.9	0	0	622	2.5
9	6/13/00	8.5	20.9	8.55	95.9	0.0396	0.0047	714	1.3
10	11/17/99	7.4	14.2	9.2	91	0.19	0.001	787	2
10	12/15/99	7.1	10.1	8.3	73	0.26	0.001	470	3
10	12/20/99	7.3	14.9	5.8	62	1.75	0.01	16	3
10	1/10/00	6.7	12.1	8.3	77.2	0.375	0	1789	38
10	1/24/00	7.2	12.6	8.02	75.5	2.8	0.01	351	73
10	2/7/00	7.3	13.8	9.1	88.7	0.701	0.004	387	15
10	2/22/00	7.2	12.7	8.26	77.9	0.428	0.002	247.4	23

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
10	3/20/00	7.5	14.6	10.3	102	0.0279	0	336	9
10	3/28/00	9.1	15.9	14	141.2	0	0	383.5	4.4
10	4/4/00	8.9	17.2	9.6	101.1	0	0	440.2	7.3
10	4/10/00	7.9	18.7			0	0	473	5.1
10	4/18/00	7.2	17	7.56	78.3	0.695	0.0035	361.5	32
10	4/24/00	7.9	18.4	9.99	107.1	0.0318	0.0009	410.3	16.5
10	5/2/00	8	18.1	10.9	116	0.0075	0.0002	409.6	5.6
10	5/7/00	7.7	19.4	12.42	134.2	0.0081	0.0002	424.3	6.1
10	5/16/00	8	19.4	11.2	121.1	0	0	114.4	3.9
10	5/24/00	7.5	21.4	7.04	79.6	0.002	0	502	3.9
10	5/31/00	7.8	22.1	8.15	93	0	0	532	5.5
10	6/7/00	7.8	20.8	6.9	76.5	0	0	515	3.7
10	6/13/00	8.2	23.8	6.95	82.5	0.0533	0.0041	558	2
11	11/17/99	7.7	16.1	8.9	91.5	0.06	0.001	710	4
11	12/15/99	7.3	9	11.8	106	0.07	0	608	7
11	12/20/99	8.4	12.5	10.7	101	0.45	0.024	645	60
11	1/10/00	7.4	11.5	12.1	112	0.375	0.002	564	18
11	1/24/00	7.1	12.5	5.51	51.9	4	0.011	330	85
11	2/7/00	7.2	13.9	8.06	78.5	0.361	0.001	363.9	12
11	2/22/00	7.1	12	8.05	74.6	0.636	0.002	261.8	22
11	3/20/00	7.2	15.2	8.6	85.6	0.831	0.0029	421.3	7.9
11	3/28/00	8.4	16.1	11.7	119.3	0	0	453.9	6.9

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
11	4/4/00	7.9	17.8	7.2	75.9	0	0	514	4.5
11	4/10/00	7.9	17.5	11.7	121.8	0	0	636	2.1
11	4/18/00	7.1	17.6	6.4	67.2	1.58	0.0065	470	32
11	4/24/00	8	18.3	11.07	117.9	0.0103	0.0001	444.7	19.5
11	5/2/00	8	17.9	10.02	106.1	0.0101	0.0003	481	6.4
11	5/7/00	7.7	18.7	12.89	138.4	0.0034	0.0001	492	9.5
11	5/16/00	8.1	19.2	11.16	120.4	0	0	515	6.4
11	5/24/00	7.7	22.6	7.51	86.7	0.0338	0.0008	564	5.5
11	5/31/00	8.6	22.8	9.93	115.6	0	0	633	7
11	6/7/00	8.9	22.2	14.24	164.7	0	0	667	18
11	6/13/00	9.7	20.3	6.46	71.3	0.166	0.1106	690	15.5
12	11/17/99	8.8	15.7		208.5	0.95	0.144	936	57
12	12/15/99	7.5	9.6	13.95	121	1.65	0.009	800	48
12	12/20/99	8.3	11.9	11.3	105	1.68	0.07	866	45
12	1/10/00	7.4	11.8	10.1	93.8	1.15	0.006	841	55
12	1/24/00	6.9	12.4	5.56	52.1	2.35	0.004	299	73
12	2/7/00	7.2	13.1	7.05	67	0.471	0.002	359	12
12	2/22/00	7.1	11.7	7.45	68.8	0.751	0.002	271.9	26
12	3/20/00	7.2	15.5	7.8	78	0.245	0.0003	510	7.8
12	3/28/00	8	16.4	9.7	98.8	0	0	472	5.7
12	4/4/00	7.8	17.6	7.3	76.7	0	0	539	5.5
12	4/10/00	7.7	17.7	10.3	108	0	0	552	5.1

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
12	4/18/00	7.1	16.8	5.57	57.4	1.31	0.0052	417.2	33
12	4/24/00	7.8	17.6	9.19	96.4	0.0425	0.0009	474	17
12	5/2/00	7.8	18	9.16	97.2	0.0102	0.0002	504	9
12	5/7/00	7.4	18.3	11.22	119.1	0.163	0.0014	524	14
12	5/16/00	7.7	17.9	10.68	112.3	0	0	497	6.8
12	5/24/00	8.3	22.7	8.79	102.2	0.0353	0.0031	567	7.8
12	5/31/00	8.8	21	10.77	121.2	0.0118	0.0025	298	8.7
12	6/7/00	8.8	19.9	9.48	103.9	0	0	595	16
12	6/13/00	9.1	22.3	8.09	92.3	0.114	0.0417	638	15
13	12/15/99	8.1	9.2	16.6	144	0.4	0.008	492	4
13	1/10/00	7.3	12.2	10.7	100	1.05	0.004	590	34
13	1/24/00	7	12.3	7.18	67.2	2.3	0.005	331	67
13	2/7/00	7.2	13.9	10.96	106	0.089	0	404	10
13	2/22/00	7.2	11.6	9.01	82.9	0.595	0.002	256.5	26
13	3/20/00	7.9	16.2	14	151.3	0	0	470	5.1
13	3/28/00	8.5	16.4	16.7	171.3	0	0	543	2.7
13	4/4/00	8.3	16.7	11	113.8	0	0	599	2.4
13	4/10/00	8	18.3	13	140	0.0155	0.0005	775	5.6
13	4/18/00	7.5	19.3	11.41	123.8	0.236	0.0028	377.1	16
13	4/24/00	8.4	19.2	12.99	141.5	0.0064	0.0005	597	5.3
13	5/2/00	8.3	18.4	15.3	152.8	0.0063	0.0004	761	3.4
13	5/7/00	8.2	19.3	15.16	164.9	0.0264	0.0018	504	4.9

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
13	5/16/00	8	17.8	11.8	124.1	0.0668	0.0022	515	4.6
13	5/24/00	9	26.5	16.85	211.3	0.0134	0.0052	726	5.3
13	5/31/00	9.4	24.1	14.3	171.3	0	0	749	6.5
13	6/7/00	9.2	23	11.02	129	0	0	789	6.5
13	6/13/00	10.3	26.5	8.55	106.7	0.017	0.0148	901	5.1
14	12/20/99	7.3	9.6	5.7	50	0.38	0.001	510	3
14	1/10/00	6.8	11.1	8.5	77.5	0.9	0.001	485	69
14	1/24/00	7.2	12.4	7.33	68.6	1.63	0.006	294	67
14	2/7/00	7.3	13	8.22	78	0.089	0	364	15
14	3/20/00	7.4	15.4	12.5	125.2	0	0	395.7	6.6
14	3/28/00	7.5	10.3	8.9	80.2	0	0	411.2	3.2
14	4/4/00	7.6	14	6.3	61.7	0	0	526	2
14	4/10/00	7.7	18.7	10.4	110.6	0	0	691	3.2
14	4/18/00	7.2	13	9	86.1	0.256	0.0009	299.5	14
14	4/24/00	7.3	12.2	7.71	71.9	0.469	0.0043	495	3.6
14	5/2/00	7.6	16.2	11.09	112.7	0.0324	0.0004	503	3.4
14	5/7/00	7.1	13.7	9.09	87.8	0.0639	0.0002	424.1	5.4
14	5/16/00	7.5	14.2	9.29	90.8	0.024	0.0002	450.8	3.5
14	5/24/00	7.2	16.6	3.9	40.2	0.135	0.0007	611	1.4
14	5/31/00	7.6	13.3	5.24	50.2	0	0	607	2.2
14	6/7/00	7.9	14.4	6.69	65.8	0	0	698	2.3
14	6/13/00	7.6	15.9	6.76	68.3	0.0954	0.0011	750	2.8

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
15	12/15/99	7.4	7	6.35	52.5	0.478	0.002	546	2
15	1/10/00	6.7	11.7	5.22	48.2	5	0.005	608	32
15	1/24/00	7.4	12.9	7.04	66.7	2.43	0.014	344	62
15	2/7/00	7.2	13.4	7.2	68	0.124	0.001	348	10
15	2/22/00	7.3	11.4	8.75	80.1	0.505	0.002	291.2	19
15	3/20/00	7.6	15.2	12.6	126.5	0.0692	0	363.5	6.6
15	3/28/00	7.7	10.1	7	62.6	0.136	0.0013	399.2	4.7
15	4/4/00	7.6	14.6	4.3	42.8	0.242	0.00252	534	4
15	4/10/00	7.5	19.1	8.6	92.8	0.0903	0.001	608	4.4
15	4/18/00	7.2	10.6	9.2	83.7	3.75	0.0115	372.6	41
15	4/24/00	7.3	12.3	6.95	65.1	0.113	0.0008	470	5.3
15	5/2/00	7.3	15.5	6.62	66.4	0.0485	0.0003	528	4.5
15	5/7/00	7	14.7	7.76	76.7	0.126	0.0003	452.7	6.4
15	5/16/00	7.4	14.4	9.3	91.2	0.079	0.0005	464	5
15	5/24/00	7.3	16.7	4.41	45.5	0.136	0.0009	598	2.1
15	5/31/00	7.5	13	5.08	48.1	0.136	0.0001	606	2.7
15	6/7/00	7.7	14.8	5.63	55.4	0.0182	0.0002	650	2.6
15	6/13/00	9.1	15.6	3.73	37.3	0.0172	0.0045	655	3.1
16	12/15/99	7.2	11	10.9	99.5	0.175	0.001	343	8
16	1/10/00	7	11.6	7.35	68.2	7.84	0.016	692	155
16	1/24/00	7.4	12.6	9.15	86	0.46	0.003	190	32
16	2/7/00	7.2	13	9.8	93.5	0.0128	0	206.5	4

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
16	2/22/00	7.5	11.1	6.99	63.6	5.33	0.034	315.5	70
16	3/20/00	7.9	15.4	10.7	107	0	0	221	6
16	3/28/00	7.6	8.8	10.1	86.7	0	0	232.9	3.4
16	4/4/00	8	12.8	8.2	77.2	0	0	257.1	3.3
16	4/10/00	7.6	20	7.7	84.5	0.0913	0.0014	378	6.5
16	4/18/00	7.3	9	12.2	111.5	2.56	0.0088	239	25
16	4/25/00	7.5	10.7	9.74	89.1	0.0166	0.0001	283.2	3.6
16	5/2/00	7.5	14	8.07	77.6	0.0331	0.0003	334.9	2.6
16	5/7/00	7.3	13.4	9.86	94.5	0.114	0.0006	318.6	4.1
16	5/16/00	7.4	13.7	9.9	95	0.149	0.0009	313.8	20
16	5/24/00	7.2	15.3	4.07	40.6	4.67	0.026	518	6.9
16	5/31/00	7.6	10.8	1.62	14.8	25.2	0.201	1127	44
17	1/24/00	7.2	12.7	6.04	57.1	1.98	0.007	313	82
17	2/7/00	7.4	14.2	9.36	91.2	0.33	0.002	462	20
17	3/20/00	7.3	14.9	7.8	77	0.617	0.0021	640	8
17	3/28/00	7.6	12	5.4	50	0.152	0.0013	581	9.4
17	4/4/00	8.2	15.4	7.7	76.6	0.024	0.001	673	11
17	4/10/00	8.9	16.2	15	152.5	0	0	812	22
17	4/18/00	7.2	12.9	5.7	54.2	2.43	0.009	440.5	30
17	4/24/00	7.7	14.5	5.47	53.9	0.183	0.0024	587	7.5
17	5/2/00	7.6	14.6	6.28	61.8	0.0855	0.0009	624	5.4
17	5/7/00	7.5	15.9	6.95	69.6	0.29	0.0027	824	6.6

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
17	5/16/00	7.7	14.7	8.77	86.6	0.379	0.0005	729	8.8
17	5/24/00	8	17.3	6.01	62.8	0.315	0.0101	761	6
17	5/31/00	7.9	14.2	4.42	43.1	0.72	0.0014	739	5.2
17	6/7/00	8.2	14.8	6.24	61.3	0.583	0.024	759	5
17	6/13/00	8.6	16.1	6.21	63.1	0.639	0.0671	783	4.4
18	1/24/00	7.2	13	5.27	50.2	1.5	0.006	303	77
18	2/7/00	7	14.6	4.4	43.1	0.67	0.002	473	15
18	2/22/00	7.1	11.2	7.4	67.6	0.576	0.002	328.4	18
18	3/20/00	7.6	18.9	10.3	111.5	0.705	0.0074	558	10
18	3/28/00	7.5	9.8	3.7	32	1.6	0.0094	564	20
18	4/4/00	7.8	14.8	1.5	14.9	5.36	0.0911	898	24
18	4/10/00	8.8	20.7	26.76	290.9	0.888	0.1829	995	26
18	4/18/00	7.3	12	7.2	66.6	2.32	0.01	451.8	25
18	4/24/00	7.5	14.4	4.5	44.2	1.7	0.0141	699	11
18	5/2/00	7.5	5.5	4.44	42.5	0.52	0.0046	866	14
18	5/7/00	7.1	14.9	4.29	42.8	1.88	0.0065	672	9.8
18	5/16/00	7.1	15.1	7.93	79	1.87	0.006	647	15
18	5/24/00	7.4	17.4	2.51	26.1	1.19	0.0098	734	3.4
18	5/31/00	7.5	15.3	1.44	14.5	2.64	0.0235	713	6.4
18	6/7/00	7.7	15.2	3.37	33.5	3.82	0.0515	727	9.4
18	6/13/00	8.4	17.2	7.03	72.7	3.28	0.2472	768	7.9
19	11/17/99	7.1	14.8	2.89	29.3	0.7	0.002	800	10

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
19	12/15/99	7.1	9.7	8.97	79	2.5	0.006	670	8
19	12/20/99	8.3	12.8	16.3	156	1.9	0.085	696	10
19	1/10/00	6.9	11.8	11.1	102	0.8	0.001	567	15
19	1/24/00	6.8	13.2	7.35	70	0.925	0.001	247	71
19	2/7/00	7.1	13.8	10.6	103	0.198	0.001	357	10
19	2/22/00	7.1	11.2	6.16	56.2	0.418	0.001	262.8	12
19	3/20/00	7.4	17.4	11.5	120.2	0.0157	0	395	6.2
19	3/28/00	7.5	9.6	5.8	50.5	0.02	0.0001	353.5	11
19	4/4/00	7.9	15	0.75	7.5	13.8	0.2939	791	39
19	4/10/00	8.9	19	27.71	298	4.72	1.071	717	24
19	4/18/00	7.2	12.2	8.5	78.8	0.302	0.001	353.8	21
19	4/24/00	7.4	14.7	4.84	47.7	0.589	0.0039	471	13
19	5/2/00	7.8	15.8	8.29	83.5	0.0074	0.0001	491	7.3
19	5/7/00	6.9	14.9	6.95	68.7	0.53	0.0012	394.2	23
19	5/16/00	6.9	13.9	8.03	79.5	0.314	0.0006	433.3	20
19	5/24/00	7.5	18.7	4.73	47.7	0.184	0.0021	547	4.4
19	5/31/00	7.9	15.6	5.91	59.3	0	0	518	2.2
19	6/7/00	7.9	16.6	4.91	50.4	0.0518	0.0012	558	3.8
19	6/13/00	8.4	18.9	4.89	52.9	0.102	0.0087	603	2.8
20	1/10/00	6.9	12.1	9.96	92.5	3.6	0.006	292	235
20	1/24/00	7.1	13.1	8.18	78.1	0.875	0.003	247	65
20	2/7/00	7.3	14.9	9.77	96.7	0.18	0.001	356.4	12

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
20	2/22/00	7.1	11.2	7.42	67.7	0.39	0.001	262.7	11
20	3/20/00	8.8	18.6	13.6	146.5	0.01	0	387	7
20	3/28/00	7.5	9.4	7.8	68.3	17.4	0.098	669	42
20	4/4/00	7.2	13.9	1.6	15.5	13.1	0.0525	673	31
20	4/10/00	7.7	14	8.4	80.7	2.41	0.0304	492	8.3
20	4/18/00	7.2	11.6	10	91.4	0.14	0.0005	334.6	20
20	4/24/00	7.5	12.4	7.39	69.3	0.199	0.0014	461	14
20	5/2/00	7.6	13.8	8.31	80.2	0.142	0.0014	459	2.5
20	5/7/00	7.3	13.4	11.22	107.3	0.0423	0.0002	478	8.2
20	5/16/00	7	14.2	9.07	88.3	0.032	0	469	13
20	5/24/00	7.5	16.3	5.9	60.1	0.255	0.0024	525	1.5
20	5/31/00	7.8	12.7	7.7	72.1	0.186	0.0027	489	2.2
20	6/7/00	8.3	14.5	9.3	90.7	0	0	518	3.7
20	6/13/00	8.5	16	6.51	65.3	0.462	0.0394	558	4
E 1	2/7/00	8.1	14.2	11.1	109	0.94	0.01	761	45
E 1	3/20/00	8.9	17.4	15.8	163	0	0	489	12
E 1	3/29/00	7.9	10.3	9	80.6	0.46	0.007	587	8.6
E 1	4/3/00	8	21.6	9.6	109.4	0	0	880	8.2
E 1	4/10/00	7.8	12.6	9.6	90.7	0	0	830	6.4
E 1	4/17/00	7.7	17.4	10.1	105.7	0.85	0.0139	850	29
E 1	4/24/00	8.6	22.4	11.88	138.8	0	0	850	4.1
E 1	5/2/00	8	16.2	8.23	85.9	0.102	0.0029	842	2.5

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
E 1	5/7/00	7.9	16.8	11.57	119.4	0.0025	0.0001	917	3.9
E 1	5/16/00	8	17	9.74	100.8	0	0	1016	3.5
E 1	5/24/00	7.6	18.4	2.98	31.6	0.118	0.0017	1125	3.8
E 1	5/30/00	8.1	26	9.89	122.8	0.368	0.0262	1438	2.4
E 1	6/7/00	7.2	16.8	3.53	36.5	0	0	1329	3.3
E 1	6/13/00	8	18.7	4.98	53.3	0.0324	0.0012	1346	4.4
E 2	11/17/99	7.9	13.2	9.96	95.6	0.46	0.008	1980	3
E 2	2/7/00	7.7	14.4	8.75	86.3	0.79	0.01	871	42
E 2	3/20/00	8.8	17.3	15	156	0	0	500	15
E 2	3/29/00	8.1	10.7	10.1	91.2	0.4	0.01	565	8.5
E 2	4/3/00	8.7	23.8	13.5	160.5	0.0215	0.0045	895	3.5
E 2	4/10/00	8	13.9	9.8	95.5	0	0	807	3.4
E 2	4/17/00	8.1	17.9	11.1	117.2	0	0	643	18
E 2	4/24/00	7.9	20.7	8.78	97.6	0	0	847	7
E 2	5/2/00	7.6	16.1	7.23	73.5	0.0588	0.0007	949	8.5
E 2	5/7/00	7.7	15.1	11.9	116.8	0.0048	0.0001	1165	5
E 2	5/16/00	7.7	15.2	9.82	97.9	0	0	1486	6.3
E 2	5/24/00	7.6	17.9	5.42	58.2	0.0616	0.0083	1271	4.5
E 2	5/30/00	7.5	23.6	7.65	89.9	0	0	1447	2.6
E 2	6/7/00	7.5	17.9	6.46	68.4	0.0469	0.0005	1108	1.9
E 2	6/13/00	8	20.3	8.7	97.3	0.225	0.0086	1154	3.5
K 1	1/24/00	7.5	12.7	7.78	73.7	2.4	0.017	635	55

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
K 1	2/22/00	7.3	11.3	8.73	79.8	1.69	0.007	459	38
K 1	3/28/00	7.8	13.8	11.2	106.7	0.97	0.015	840	8.6
K 1	4/4/00	7.8	15.3	7.6	75.7	0.122	0.0022	722	6.8
K 1	4/10/00	7.7	19.3	7.4	81	0.0496	0.0009	888	6.4
K 1	4/18/00	7.6	10.2	11.7	103.5	0.919	0.0068	671	16
K 1	4/24/00	7.8	12.1	9.74	90	0.136	0.0018	754	7
K 1	5/2/00	7.3	14.3	5.57	54.6	0.207	0.0011	727	8.1
K 1	5/7/00	7.2	13.8	9.74	93.9	0.315	0.0013	668	6.5
K 1	5/16/00	7.2	14.8	8.92	88.2	0.156	0.0007	668	7.5
K 1	5/24/00	7.5	21.3	6.43	71.2	0.0555	0.0008	861	4.5
K 1	5/31/00	7.5	13.5	5.25	50.5	0.0151	0.0001	7565	5.4
K 1	6/7/00	7.3	14.9	5.24	52	0	0	757	4.2
K 1	6/13/00	8.2	16.2	4.67	47.5	0.0577	0.0026	772	3.5
K 2	1/24/00	7.9	13.1	8.16	78.3	4.7	0.086	758	60
K 2	2/1/00	7.5	13.6	7.7	74.3	0.804	0.006	927	33
K 2	2/7/00	7.3	12.5	8.5	80	0.21	0.001	733	15
K 2	2/17/00	7.8	15.2	8.67	85.5	0.484	0.008	528	35
K 2	2/22/00	7.9	10.9	9.67	87.7	5.39	0.085	508	210
K 2	3/28/00	8.7	16.8	10	103.2	0	0	779	7.4
K 2	4/4/00	8	16.2	7.7	79	0.0694	0.002	817	8
K 2	4/10/00	7.6	15.1	9.8	97.6	0.0856	0.0009	726	7.2
K 2	4/18/00	7.4	11.4	9.8	90.4	0.715	0.0037	624	17

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
K 2	4/24/00	7.6	12.4	9.06	66.2	0.222	0.002	705	7
K 2	5/2/00	7.6	13.8	8	77	0.2	0.002	797	7.4
K 2	5/7/00	7.5	13.3	11.07	105.8	0.299	0.0022	793	9
K 2	5/16/00	7.5	14.3	9.28	90.7	0.183	0.0015	787	15
K 2	5/24/00	7.7	22.9	6.08	70.8	0.0333	0.0008	966	4.5
K 2	5/31/00	7.8	13	8.5	79.3	0.192	0.0028	775	4.2
K 2	6/7/00	7.7	14.8	8.39	82.3	0	0	797	3.5
K 2	6/13/00	8.5	16.2	7.08	72	0.184	0.0157	824	3.4
L 1	6/21/00	7.3	13.8	10.7	104	0	0	121	3
L 2	6/21/00	7.5	15.1	10.2	101	0	0	156	2.8
L 3	6/21/00	8	15.9	10	98.8	0	0	288	2
L 4	6/21/00	7.8	17.1	9.8	103	0	0	179	2.5
L 5	6/21/00	7.3	16.8	8.85	84.2	0	0	18.6	1.4
L 6	6/21/00	7	16.8	5.81	58.4	0	0	232	1.5
N 1	6/29/00	6.9	23	4.74	55.8	0	0	228.3	1.6
N 5	6/29/00	7.7	25.5	10.31	128.7	0.0138	0.0004	470.5	2.5
N 6	6/29/00	7.3	23.8	7.28	86.4	0	0	409.1	2
N 7	6/29/00	7.5	24.8	10.75	117.7	0.009	0.0002	310.7	1.6
N 8	6/29/00	7.5	25.1	8.31	100.7	0.0198	0.0004	278.7	1.5
N 8a	6/29/00	7.6	24.5	10.24	107.3	0.0073	0.0002	275.5	2.1
N 9	6/29/00	7.5	25.4	8.31	101.2	0.0042	0	287.5	1.6
N10	6/29/00	7.5	26.9	9.04	113.5	0.0027	0	313.4	1.8

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
N11	6/29/00	7.6	23.7	7.87	92.7	0.0428	0.0009	339.2	0.8
N16	6/29/00	8.1	22.9	8.71	102.8	0.047	0.0003	448.6	1.2
N17	6/29/00	8.2	23.7	10.64	126.8	0	0	811	3.9
N18b	6/29/00	7.7	23	6.9	82.1	0.0409	0.001	7460	5
N20	6/29/00	7.7	73.6	7.69	81.6	0.0039	0	11430	6.5
O 1	6/21/00	7.8	17.9	9.9	106	0	0	213	2.2
O 2	6/21/00	7.6	19.2	9.4	103	0	0	248	1.8
P 1	6/29/00	8.1	18.4	5.2	56.1	0	0	2027	7.4
P 2	6/29/00	7.8	16.5	3.3	34.3	0.0147	0.0003	1499	3.5
P 3	6/29/00	7.7	17.9	5.54	57.9	0.0848	0.0014	1156	15
P 4	6/29/00	7.6	21.2	4.55	52.6	0.155	0.0026	16370	7
P 5	6/29/00	7.6	20.6	5.18	61.8	0.159	0.0026	16680	7.5
S 1	6/29/00	8.1	20.2	8.07	97	0.0095	0.00055	372.1	1
S 2	6/29/00	7.9	19.6	6.97	76.3	0.0097	0.0003	609	1.4
S 3	6/29/00	8	21.1	11.59	96.7	0.0273	0.0011	393.4	1
S 4	6/29/00	7.8	20.5	6.25	70.8	0.0322	0.0008	414.8	1.7
SG 1	6/21/00	7.1	16.8	7.1	74	0	0	288	2.3
SG 2	6/21/00	7.6	16.8	8.6	89.3	0	0	345	1.6
SG 3	6/21/00	7.5	17.9	9.43	99.6	0	0	379.3	1.5
SG 4	6/21/00	7.6	17.2	8.75	91	0	0	4.1	1.7
SG 5	6/21/00	7.6	17.5	7.3	97.7	0	0	324	1.7
SG 6	6/21/00	7.8	7.1	9.56	99	0	0	322.6	1.4

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
SH 1	2/1/00	7	14.7	7.1	70	0.061	0	158.5	25
SH 1	2/17/00	6.9	14	5.28	51.1	0.23	0	316.5	26
SH 1	3/20/00	7.2	16	11	112.3	0.0187	0	417.9	7
SH 1	4/18/00	6.8	12.7	6	56.8	0.574	0.0008	193.5	20
SH 1	5/16/00	7.2	14.8	8.73	86.2	0.235	0.0001	214	15
SH 1	5/24/00	7.1	16.6	1.73	17.7	0.743	0.0029	234.2	7.6
SH 2	2/1/00	7.2	13.5	6.9	67.5	0.433	0.002	585	30
SH 2	2/17/00	7.3	13	8	74.5	0.26	0	370.9	35
SH 2	3/20/00	8.5	17.3	18.8	197	0	0	593	5
SH 2	3/28/00	8.6	16.8	16.7	173	0	0	649	4.4
SH 2	4/4/00	8.4	16.9	9.6	96.5	0	0	694	4.5
SH 2	4/10/00	8.6	20	14.5	157.6	0	0	764	3.4
SH 2	4/18/00	6.9	12.4	5.8	54.3	0.322	0.0006	344.6	20
SH 2	4/24/00	8.4	13.9	7.84	75.8	0	0	525	4.5
SH 2	5/2/00	7.8	15.9	4.59	46.5	0.0495	0.0009	650	4.4
SH 2	5/7/00	7.5	14.8	8.35	82.7	0.206	0.0018	637	4.3
SH 2	5/16/00	7.8	15.1	8.61	85.6	0.193	0.0032	571	5.6
SH 2	5/24/00	7.7	18.4	4.88	51.9	0.261	0.0046	715	5.3
SH 2	5/31/00	7.8	15.6	3.42	34.3	0.0298	0.0005	714	5.5
SH 2	6/7/00	8.2	16	5.21	52.5	0.208	0.0093	724	3.7
SH 2	6/13/00	8.8	17	6.17	64	0.669	0.1117	749	3.3
SH 3	2/1/00	7.2	13.4	8.95	86.5	0.235	0.001	469	50

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
SH 3	2/17/00	7.2	14	8.35	81.3	0.273	0.001	285.6	40
SH 3	3/20/00	8.5	17.5	15.5	163	0.0194	0	492	6.5
SH 3	3/28/00	8.9	15.7	16.4	165.6	0	0	534	6.6
SH 3	4/4/00	7.9	16.3	7.4	75.8	0.0179	0.0043	699	5
SH 3	4/10/00	8.2	20.4	15.2	169.3	0.01	0.0006	804	4.1
SH 3	4/18/00	7.3	12.4	8.6	80.3	0.13	0.0006	424.4	6.3
SH 3	4/24/00	7.6	13.8	6.2	59.9	0.0848	0.0008	701	3
SH 3	5/2/00	7.5	14.4	6.95	60	0.0425	0.0004	814	2
SH 3	5/7/00	7.2	14.6	9.44	93.1	0.051	0.0002	511	4.5
SH 3	5/16/00	7.2	14.7	8.55	84.4	0.0034	0	511	4
SH 3	5/24/00	7.5	15.9	3.43	34.8	0.874	0.0081	650	1.9
T 1	12/10/99	7.4	8.7	11.6	101	0.06	0	202	3
T 1	1/4/00	7	7.9	10.3	86.6	0.09	0	204	1
T 1	2/1/00	6.7	11.6	10.1	93	0.0028	0	183.3	3
T 1	2/17/00	7.1	10.4	10.5	93	0.001	0	141	35
T 1	3/1/00	6.8	11.4	11.3	103	0	0	129.6	22
T 1	3/13/00	7.1	12.7	10.8	101	0.012	0	156	
T 1	3/28/00	7.5	10.5	10.9	98	0.04	0.0003	182.4	4.2
T 1	4/4/00	7.7	12.3	9.7	91	0	0	196.9	2.3
T 1	4/10/00	7.8	15.2	12.2	120	0	0	207.4	2.4
T 1	4/18/00	7.8	13.3	10.92	101.3	0	0	171.6	10
T 1	4/24/00	7.8	13	11.16	105.3	0	0	190.5	2.5

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T 1	5/2/00	7.6	14.4	10.33	99.7	0.0065	0	206.1	2.5
T 1	5/7/00	7.7	14.2	13.3	128.5	0	0	197.1	1.9
T 1	5/16/00	7.6	14.4	11.84	115.3	0	0	201.7	2.9
T 1	5/24/00	7.6	17.4	8.83	91.2	0.0111	0.0001	228.5	1.9
T 1	5/31/00	7.8	16.5	9.5	95.3	0	0	217.1	1.6
T 1	6/7/00	7.5	16.3	8.95	90.7	0	0	232.8	2
T 2	12/10/99	7.4	7.5	11.9	99	0.07	0	212	1
T 2	1/4/00	6.9	7.2	10.34	85.8	0.04	0	211	2
T 2	2/1/00	6.3	11.6	9.8	90	0.0096	0	135	20
T 2	2/17/00	7.1	10.3	10.2	91	0.008	0	106.6	30
T 2	3/1/00	6.8	11.4	11.24	104	0	0	94.4	45
T 2	3/13/00	6.9	12.3	10.3	96.4	0.0049	0	122.2	11
T 2	3/28/00	6.8	11.2	10.2	93	0.09	0.0002	166.6	2.4
T 2	4/4/00	7.8	13.6	10.1	96.9	0	0	192.2	2
T 2	4/10/00	7.8	14.3	12	116.3	0	0	201.5	2
T 2	4/18/00	7.9	12.5	10.65	99.5	0	0	115.4	46
T 2	4/24/00	7.6	13.6	10.59	101.4	0	0	169.2	3
T 2	5/2/00	7.6	14.1	9.66	93.8	0.003	0	186.3	3.6
T 2	5/7/00	7.6	14.1	13.21	128.2	0	0	181.7	3.9
T 2	5/16/00	7.5	14.2	11.57	112.5	0	0	160.7	6
T 2	5/24/00	7.5	16.6	8.76	90.7	0	0	199.8	1.9
T 2	5/31/00	7.9	15.1	9.36	92.6	0	0	203.4	2.3

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T2	6/7/00	7.9	15.7	8.83	88.8	0	0	219	2.4
T3	12/10/99	7.3	9.6	11.8	104	0.06	0	230	2
T3	1/4/00	7	8.5	11.25	96.5	0	0	123	1
T3	2/1/00	7.1	11.5	9.75	89	0.004	0	166.6	15
T3	2/17/00	7.3	11.5	9.84	90.5	0.021	0	136.3	17
T3	3/1/00	6.8	12	11.1	103	0	0	115.9	22
T3	3/13/00	6.9	12.7	10.2	96.4	0.0025	0	128.4	13
T3	3/28/00	7.1	12.4	10.8	101.3	0.1	0.0003	175.9	3.4
T3	4/4/00	7.8	14.1	9.4	91.8	0	0	186.9	2.4
T3	4/10/00	7.8	15.1	11.5	113.6	0	0	199.7	2.1
T3	4/18/00	7.8	14	10.05	97.9	0	0	142.6	26
T3	4/24/00	7.7	14.4	10.82	106	0	0	194.8	3.5
T3	5/2/00	7.6	14.6	9.31	91.5	0.0014	0	202.7	3.6
T3	5/7/00	7.5	14.5	12.66	124.2	0	0	203.1	4.8
T3	5/16/00	7.3	15.1	11.08	109.8	0	0	199.3	7.5
T3	5/24/00	7.4	18.5	7.77	82.5	0.0142	0.0001	222.9	2
T3	5/31/00	7.7	17.3	8.06	83.8	0	0	214.1	3.4
T3	6/7/00	7.8	16.9	8.12	84.1	0	0	203.9	2.5
T4	12/10/99	7.4	8.6	11.7	100.7	0.09	0	412	3
T4	1/4/00	7	7.6	8.05	69.5	0.21	0	431	2
T4	2/1/00	7.1	12	9.95	92.2	0.0086	0	175.7	30
T4	2/17/00	7.1	10.5	10.4	92.7	0	0	136.5	38

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T 4	3/1/00	6.7	12.6	11.7	107	0	0	124	50
T 4	3/13/00	6.9	12.6	10.5	98	0.0224	0	161.6	18
T 4	3/28/00	7.1	12	10.3	95.3	0	0	257.6	3.2
T 4	4/4/00	7.7	14	9.7	94.3	0	0	296.1	2
T 4	4/10/00	7.6	15.1			0.265	0.0029	427	3.8
T 4	4/18/00	7.8	12.9	10.74	101.1	0	0	168.6	50
T 4	4/24/00	7.5	14.3	10.74	104	0	0	263.3	4.9
T 4	5/2/00	7.4	14.6	9.55	94	0.0047	0	296.8	2.6
T 4	5/7/00	7.4	14.8	13.06	128.9	0	0	271.5	3.9
T 4	5/16/00	7.3	15.3	11.36	113.1	0	0	273.8	3.7
T 4	5/24/00	7.4	17.4	8.5	88.5	0	0	350.5	2.2
T 4	5/31/00	7.6	16.1	8.88	89.9	0	0	371.8	2.8
T 4	6/7/00	7.7	16.3	8.52	86.8	0	0	390.4	2.5
T 5	12/10/99	7.2	8.5	11	95	0.07	0	300	4
T 5	1/4/00	7.1	8.4	9.51	81.2	0.1	0	268.8	1
T 5	2/1/00	7.1	12.1	9.77	91	0.0173	0	179.5	32
T 5	2/17/00	6.9	10.5	10.1	90.4	0	0	132.3	34
T 5	3/1/00	6.6	12.6	10.86	102	0	0	121	46
T 5	3/13/00	6.8	13.2	10.1	96.2	0.0075	0	153.1	17
T 5	3/28/00	6.7	12.8	10.2	95.8	0.013	0	186.8	2.9
T 5	4/4/00	7.6	13.3	10	95	0	0	197.2	2.3
T 5	4/10/00	6.9	15	8.9	87.5	0	0	336.5	3

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T 5	4/18/00	7.6	13.7	10.3	99.4	0	0	182.9	48
T 5	4/24/00	7.3	15.6	10.27	103.3	0	0	224.1	5.4
T 5	5/2/00	7.2	16.6	9.03	92.9	0.0101	0	241.1	4.2
T 5	5/7/00	7.2	16.3	12.3	125.4	0	0	227.7	6
T 5	5/16/00	7.1	17.1	10.55	109.5	0	0	240.1	7.4
T 5	5/24/00	7.2	19.6	8.56	82	0.0127	0	274.6	1.6
T 5	5/31/00	6.8	15.8	5.35	53.6	0	0	382.8	3.8
T 5	6/7/00	7.4	16.9	7.37	76.1	0	0	310.8	3.2
T 6	12/10/99	7.2	9.3	7	61	0.08	0	810	3
T 6	1/4/00	6.7	8.9	4.21	37	0.475	0	705	5
T 6	2/1/00	7.2	12.5	8.9	83.1	0.505	0.002	527	30
T 6	2/17/00	7.2	11.1	9.57	87.3	0.195	0.001	279.5	50
T 6	3/1/00	6.8	13	10.15	97.1	0.122	0	243	40
T 6	3/13/00	6.9	13.3	9.38	90	0.047	0	309	13
T 6	3/28/00	7	12.1	11.9	110.4	0.0243	0	473	4.9
T 6	4/4/00	7.4	13.1	8	75.3	0	0	525	3
T 6	4/10/00	7.2	14.1	9.5	91.6	0.024	0	564	3.3
T 6	4/18/00	7.4	13.5	9.25	88.7	0.144	0.0009	474	18
T 6	4/24/00	7.3	14	9.08	87.6	0.288	0.0015	556	4.5
T 6	5/2/00	7.2	14.5	8.75	85.5	0.0535	0.0002	599	5.5
T 6	5/7/00	7.1	15.3	11.42	113.3	0.0685	0.0002	628	5.2
T 6	5/16/00	7.2	15.8	10.32	103.6	0.106	0.0005	660	6.5

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T 6	5/24/00	7.2	16.9	5.63	58.3	0.101	0.0006	686	4.1
T 7	12/10/99	7.7	9.5	11.8	116	0	0	208	3
T 7	1/4/00	7.2	9.7	8.5	84.2			21500	3
T 7	2/1/00	7	12	9.57	89.2	0.0576	0	198	27
T 7	2/17/00	7	10.9	9.79	88.5	0.102	0	234.3	33
T 7	3/1/00	6.7	12.7	10.7	100.5	0.033	0	121.6	33
T 7	3/13/00	6.8	13.1	10	95.1	0.0175	0	152.6	20
T 7	3/28/00	7.4	13	12.9	123	0	0	245	4
T 7	4/4/00	8	13.6	12.5	120.9	0	0	289	3
T 7	4/10/00	7.8	18.5	14.2	152	0	0	1403	2.5
T 7	4/18/00	7.7	14.6	10.32	101.2	0	0	225.8	33
T 7	4/24/00	7.7	15.6	12.27	123.6	0	0	293.6	4
T 7	5/2/00	7.5	15.6	11.08	111.3	0.017	0.0002	327.8	4.7
T 7	5/7/00	7.5	16.2	13.24	134.7	0.0122	0.0001	451.3	4.5
T 7	5/16/00	7.5	18.6	11.1	118.8	0	0	357	4.2
T 7	5/24/00	7.4	21.2	8.43	95.8	0.0087	0	734	4.1
T 7	5/31/00	7.3	22.1	7.91	86.6	0	0	6490	3.5
T 7	6/7/00	7.4	19.8	8.26	93.4	0.0304	0.0003	7560	4.5
T 8	2/1/00	6.7	11.6	8.23	76	0.0012	0	162.5	25
T 8	2/17/00	6.7	10.7	8.91	80.3	0	0	116.4	27
T 8	3/1/00	6.4	12.2	10.36	96	0	0	106	30
T 8	3/13/00	6.6	12.6	8.86	83.6	0.0044	0	138.4	24

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T 8	3/28/00	6.5	12.9	6.8	63.8	0	0	189.4	3.6
T 8	4/18/00	6.8	13.5	8.98	85.2	0	0	167.6	54
T 8	4/24/00	7	14.2	7.65	74.2	0	0	218.4	4
T 9	12/10/99	7.6	9.6	9.2	81	0.09	0.001	389	1
T 9	2/1/00	7.1	12.2	9.72	91	0.01	0	202.9	30
T 9	2/17/00	7	11.5	9.96	91.3	0	0	140.6	30
T 9	3/1/00	6.7	12.9	10.63	102	0	0	132	20
T 9	3/13/00	6.9	13.6	9.96	96.1	0.0046	0	160.7	18
T 9	3/28/00	7.2	13.4	11.7	112.6	0	0	221.4	3
T 9	4/4/00	7.8	13.6	11.1	106.8	0	0	238.9	2.2
T 9	4/10/00	7.7	16.4	13.3	136	0	0	323	1.9
T 9	4/18/00	7.5	14.4	10.87	106.4	0	0	225.6	35
T 9	4/24/00	7.7	14.8	11.85	116.8	0.0439	0.0006	250.9	4.2
T 9	5/2/00	7.5	15.1	10.62	104.7	0.0178	0.0002	267	4
T 9	5/7/00	7.6	16.3	13.33	135.8	0	0	287.5	3.3
T 9	5/16/00	7.6	17.4	11.37	118.3	0	0	291.6	3.2
T 9	5/24/00	7.4	18.7	8.74	93	0	0	335.6	3.1
T 9	5/31/00	7.9	18.8	9.25	95.7	0	0	373.8	3.4
T 9	6/7/00	8.2	17.2	9.26	95.7	0	0	489	1.5
T10	2/1/00	7.1	12.1	9.9	92.8	0.0146	0	162.5	27
T10	2/17/00	7.3	11.5	10.1	92.7	0	0	114.9	30
T10	3/1/00	6.9	12.7	10.9	103	0	0	115	27

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T10	3/13/00	7.1	14.1	10.04	96.7	0.0072	0	142.3	15
T10	3/28/00	7.9	14	9.8	95.3	0	0	194.5	5.5
T10	4/4/00	8	14.9	9.6	95.7	0	0	213.1	4.2
T10	4/10/00	7.9	16.8	10.8	111	0	0	236	4.9
T10	4/18/00	7.3	16.4	9.82	100.2	0	0	199.5	41
T10	4/24/00	7.9	15.4	10.34	103.5	0	0	222.3	4
T10	5/2/00	7.7	16.1	9.92	100.6	0.0137	0.0002	230.2	3.9
T10	5/7/00	7.9	16.9	12.58	130	0.0039	0.0001	228.3	5.5
T10	5/16/00	7.8	17.1	10.84	111.9	0	0	245.8	7.4
T10	5/24/00	7.5	19.4	8.21	90	0	0	275.8	8.5
T10	5/31/00	8.1	17.7	8.75	90.9	0	0	285.9	7.2
T10	6/7/00	8.2	17.9	8.66	91.4	0	0	310.6	5.6
T11	12/10/99	7.9	9.2	11.7	101	0.07	0	219	1
T11	1/4/00	7.9	8.8	11.56	99.5	0.01	0	242	4
T11	2/1/00	7.1	12.1	10	93.1	0.0031	0	185.2	17
T11	2/17/00	7	11.6	9.98	91.6	0	0	121	22
T11	3/1/00	6.8	12.4	10.87	101	0	0	116	25
T11	3/13/00	6.9	13.1	9.2	96.7	0.0049	0	136.1	13
T11	3/28/00	7.6	13.2	10	94.9	0	0	195.6	3.6
T11	4/4/00	7.2	13.4	10.2	97.7	0	0	200.3	3
T11	4/10/00	7.5	15.3	11.4	113.5	0	0	215	2
T11	4/18/00	7.5	14.6	10.37	101.2	0	0	212.1	30

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T11	4/24/00	7.4	14	10.66	102.9	0	0	211.1	3.5
T11	5/2/00	7.4	14.2	10.53	102	0.0109	0	220.4	3
T11	5/7/00	7.4	15.7	13.06	130.9	0.0043	0	247.4	3.6
T11	5/16/00	7.3	15.9	11.22	113.1	0	0	244.4	2.9
T11	5/24/00	7.4	18	9.25	97.7	0	0	254.9	2.2
T11	5/31/00	7.8	17.3	9.46	98.2	0	0	246.3	1.7
T12	2/1/00	7	12.7	9.9	93	0	0	177.4	23
T12	2/17/00	7	12	9.88	92.9	0.002	0	138.5	32
T12	3/1/00	6.8	13	10.6	102	0	0	119	40
T12	3/13/00	6.7	14.5	9.85	96.4	0.004	0	147.8	30
T12	3/28/00	7.7	16.4	9.5	97.9	0	0	210.3	6.4
T12	4/4/00	7.1	15.7	9.4	94.3	0	0	220.5	4.8
T12	4/10/00	7.5	21	9.8	111.4	0	0	258	3.1
T12	4/18/00	7.6	16.3	10.36	105.4	0	0	197.9	51
T12	4/24/00	7.7	17.4	10.77	113	0	0	224.6	5.2
T12	5/2/00	7.7	16.9	10.61	110	0.0178	0.0003	247.1	6.6
T12	5/7/00	7.6	18.9	12.42	133.8	0	0	259.2	8.6
T12	5/16/00	7.8	19.8	10.18	112.3	0	0	270.5	15
T12	5/24/00	8.2	23.5	9.41	111.8	0.175	0.0127	300.2	3.5
T12	5/31/00	7.3	22.3	5.79	67	0.882	0.0083	369.8	6.8
T13	2/1/00	6.9	12.1	7.84	73	0.0224	0	396	6
T13	2/17/00	7.2	12.2	9.42	87.7	0.18	0.001	317.8	32

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T13	3/1/00	6.9	13.4	10.1	96.7	0.138	0	287	32
T13	3/13/00	6.9	14	9.05	93.6	0.004	0	298	21
T13	3/28/00	7.2	14.1	8.2	78.7	0	0	349.9	3
T13	4/4/00	6.6	13.2	6.6	62.3	0	0	383.6	2.7
T13	4/10/00	6.9	17.2	7.8	81	0	0	456	2.9
T13	4/18/00	7.4	16.5	9.52	97.6	0	0	331	21
T13	4/24/00	7	14.4	8.6	83.9	0	0	372.4	2.9
T13	5/2/00	6.9	15.1	7.5	74.4	0.0197	0	425.1	5
T13	5/7/00	6.9	16.9	11.68	120.3	0	0	469	2.6
T13	5/16/00	7	17.9	9.91	104.4	0	0	502	3.3
T13	5/24/00	7.5	18.5	8.57	91.3	0.0193	0.0002	555	2.6
T14	2/1/00	6.8	12.2	8.83	82.5	0.0231	0	424.7	10
T14	2/17/00	7.2	11.3	9.31	86.2	0.004	0	250.4	70
T14	3/1/00	6.9	13	10.18	97	0	0	18.5	42
T14	3/13/00	6.5	13.4	9.55	91.6	0.0029	0	214.6	29
T14	3/28/00	6.9	14.1	8.3	80.9	0	0	334	6.2
T14	4/4/00	6.4	13.3	8.2	78.5	0	0	352.6	2.6
T14	4/10/00	6.7	17.4	10.1	106.4	0	0	490	2.8
T14	4/18/00	7.2	16.1	9.13	93.2	0	0	341.1	33
T14	4/24/00	6.8	14.7	9.32	91.8	0	0	365.2	5.5
T14	5/2/00	6.7	15	8.73	86.5	0.0054	0	395.4	2.8
T14	5/7/00	6.7	16.3	11.78	119.5	0	0	1593	3.1

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T14	5/16/00	6.8	17.9	10.25	108.2	0	0	766	3.4
T14	5/24/00	6.7	18.3	6.7	71	0	0	586	1.6
T14	5/31/00	6.8	21.6	8.39	95.5	0	0	2342	3
T14	6/7/00	6.9	20.7	9.97	116.3	0	0	9450	5.5
T15	1/4/00	7	9.9	8.73	79.8	0.4	0.001	7410	16
T15	2/1/00	6.9	12.8	9.34	88.1	0.005	0	296.9	10
T15	2/17/00	7.1	11.7	9.8	90	0	0	145	43
T15	3/1/00	6.8	12.8	10.3	97.9	0	0	163	33
T15	3/13/00	6.6	13.8	9.73	93.2	0.0045	0	193.5	20
T15	3/28/00	7	12.5	9.4	88	0	0	285.8	7.6
T15	4/4/00	7.1	12.8	9.4	88.8	0	0	316.1	4.5
T15	4/10/00	6.6	14	9.9	95.7	0	0	474	4.5
T15	4/18/00	7	16	9.72	98.5	0	0	275	30
T15	4/24/00	6.9	14.5	9.68	94.7	0	0	302.8	6.1
T15	5/2/00	6.7	14.6	9.01	88.6	0.007	0	334.1	4.1
T15	5/7/00	6.8	15.4	12.18	121.8	0	0	408.2	4.3
T15	5/16/00	6.8	15.6	10.29	103.2	0	0	582	6.4
T15	5/24/00	6.9	18.5	7.84	82.9	0	0	464	4.3
T15	5/31/00	7.1	17.8	7.35	76.6	0	0	786	4.5
T15	6/7/00	6.7	17.8	2.26	76.2	0	0	5180	6.5
T16	12/10/99	7.7	8.3	10.4	93	0.19	0.002	8	
T16	1/4/00	7.5	7.8	10.6	90	0.21	0.001	2027	5

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T16	2/1/00	7.3	12	9.78	90.5	0.0431	0	234	25
T16	2/17/00	7.1	11.5	9.72	88.9	0.124	0	132	48
T16	3/1/00	6.8	12.3	10.7	99.4	0.027	0	121	
T16	3/13/00	6.2	13.3	9.98	95.3	0.0099	0	149.2	20
T16	3/28/00	7.6	14.5	10.9	107.3	0	0	272	6.2
T16	4/4/00	7.9	15	9.2	93.1	0	0	7890	5.7
T16	4/10/00	7.6	16.9	11.6	120.6	0	0	349	5
T16	4/18/00	7.3	16.7	8.93	91.3	0.0835	0.0005	607	43
T16	4/24/00	7.5	13.6	9.76	99.7	0	0	244.5	7.9
T16	5/2/00	7.6	16.8	9.67	100.6	0.0392	0.0005	4410	15
T16	5/7/00	7.3	17.9	11.79	124.2	0.012	0.0001	382.9	7.2
T16	5/16/00	7.9	18.4	10.65	114.8	0	0		6.4
T16	5/24/00	7.5	21	8.14	91.8	0.0066	0	995	4.3
T16	5/31/00	7.8	20	8.57	97.4	0	0	14160	4.3
T16	6/7/00	7.9	20.5	9.7	97.3	0	0	1725	2.9
T17	12/10/99	7.6	8.2	10.8	93	0.15	0.001	3340	
T17	1/4/00	7.5	7.4	10.97	91	0.04	0	317.9	5
T17	2/1/00	7.2	12	9.74	90.8	0.0475	0	165	28
T17	2/17/00	7.1	11.6	9.71	89.4	0.135	0	131.8	50
T17	3/1/00	6.9	12	10.86	100.5	0	0	115	
T17	3/13/00	6.8	13.2	9.96	95	0.0071	0	141.3	20
T17	3/28/00	7.6	14.2	10.9	105.8	0	0	189	7.2

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T17	4/4/00	7.9	15	8.9	89.8	0	0	1944	5
T17	4/10/00	7.9	17.2	12.8	134.3	0	0	222	5.4
T17	4/18/00	7.2	15.5	9.2	92.3	0.0667	0.0003	221.3	40
T17	4/24/00	7.5	16.3	10.42	106.3	0	0	205.2	6
T17	5/2/00	7.6	16.5	8.73	89.6	0.0175	0.0002	697	6.5
T17	5/7/00	7.4	17.7	11.91	124.9	0.0069	0.0001	241.3	5.5
T17	5/16/00	7.7	17.9	10.54	111.7	0	0	2210	6.6
T17	5/24/00	7.7	21.1	9.21	103.8	0.0119	0.0002	344.3	3
T17	5/31/00	7.9	19.3	8.62	94.5	0	0	7160	3.4
T17	6/7/00	8.2	21.2	9.39	104.8	0	0	694	2.4
T18	12/10/99	8	7.8	11.7	99	0.08	0.001	366	7
T18	1/4/00	7.8	8.9	11.42	98.5	0.24	0.003	406.3	8
T18	2/1/00	7.2	13.4	9.78	94	0.0629	0	237	26
T18	2/17/00	7.1	12.9	9.81	92.9	0.042	0	173.6	30
T18	3/1/00	7	14.2	10.5	104	0	0	154	
T18	3/13/00	7.3	15.16	10.4	104	0.0067	0	198	16
T18	3/28/00	8	14.9	10.9	108.9	0	0	305.8	6.5
T18	4/4/00	8.1	14.8	9.4	93.5	0	0	390.1	5.3
T18	4/10/00	7.5	16.2	11.2	114.4	0	0	373	5.6
T18	4/18/00	7.4	17.5	9.98	104.9	0.0243	0.0002	251.6	34
T18	4/24/00	7.9	17.1	11.29	117.4	0	0	334.7	7.5
T18	5/2/00	7.8	16.8	10.58	109.4	0.0095	0.0002	382.4	4.5

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T18	5/7/00	7.7	18.8	13.04	140.2	0.0359	0.0007	353.4	18
T18	5/16/00	8	17.9	11.1	117	0	0	416.2	7.6
T18	5/24/00	7.4	19.4	7.8	84.6	0.0585	0.0006	419.7	2.8
T18	5/31/00	8.1	18.4	7.66	81.4	0.0484	0.0021	539	4
T18	6/7/00	8.2	19.3	8.92	96	0	0	530	3.5
T18	6/13/00	8.4	21.8	6.97	78.5	0.141	0.0145	475	6
T19	12/10/99	8	9.3	11.1	96	0.45	0.008	457	30
T19	2/1/00	7.2	13.2	9.94	95.4	0.065	0	243.7	25
T19	2/17/00	7.1	12.8	9.8	92.4	0.051	0	176.5	20
T19	3/1/00	7	14.5	10.3	102	0	0	196	
T19	3/13/00	7	15	10.5	104.3	0.0058	0	195.3	17
T19	3/28/00	7.7	15.4	10.2	101.9	0	0	324.5	10
T19	4/4/00	7.9	16.7	8.6	88.5	0	0	378.5	4.8
T19	4/10/00	7.7	19.2	10.7	115.5	0	0	421.1	6.4
T19	4/18/00	7.2	17.1	10.56	109.6	0.0248	0.0001	253.8	39
T19	4/24/00	7.8	17.8	10.91	115.1	0	0	355.2	17
T19	5/2/00	7.6	18.5	9.63	103.1	0.006	0	410.6	8
T19	5/7/00	7.4	20.2	12.39	137.2	0	0	364.7	22
T19	5/16/00	7.9	19.8	10.63	116.3	0	0	412.1	7.6
T19	5/24/00	7.6	22.6	8.37	96.9	0.0373	0.0007	463	4.5
T19	5/31/00	8.2	11.7	8.37	97.7	0.139	0.0108	532	6.3
T19	6/7/00	8.1	23.2	7.38	87.1	1.87	0.1094	664	33

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T19	6/13/00	8.4	25.2	6.29	76.3	0.623	0.0779	612	15
T19a	12/10/99	7.9	9	10.4	90	0.15	0.002	404	18
T19a	1/4/00	7.8	9.8	11.05	98	0.48	0.006	395.6	10
T19a	3/28/00	8	16	13.7	139.5	0	0	328.5	10
T19a	4/18/00	7.2	18.5	9.59	102.7	0.0283	0.0002	264.2	35
T19a	5/2/00	7.6	17.4	10.42	109	0.0092	0	404.2	5.5
T19a	6/13/00	9.3	22.4	6.49	74.9	0.0507	0.0247	570	2.6
T19s	1/24/00	7	13	9.91	93.3	0.875	0.002	157	65
T19s1	1/24/00	6.2	12.7	8.86	83.6	0.1	0	272	16
T20	12/10/99	7.6	8.7	8.5	73	0.18	0.001	834	12
T20	2/1/00	7.5	13.9	9.25	89.5	0.0842	0.001	505	22
T20	2/17/00	7.4	13.8	9.35	90.8	0.125	0.001	331.5	
T20	3/1/00	7.2	14.9	9.55	99.5	0.085	0	295	
T20	3/13/00	8.1	16.6	10.42	107.3	0.062	0	362.8	18
T20	3/28/00	8.3	15.5	10.6	106.6	0.007	0.0004	629	10
T20	4/4/00	7.9	14.4	9	87.6	0.158	0.0032	724	8
T20	4/10/00	7.6	18.6	11.9	127.6	0	0	830	7.5
T20	4/18/00	7.3	19.2	8.03	87.1	0.131	0.001	407.1	25
T20	4/24/00	7.8	17.5	9.71	99	0.0633	0.0013	706	13
T20	5/2/00	7.8	15.8	9.2	92.8	0.112	0.002	780	7.1
T20	5/7/00	7.8	18.3	11.41	121.1	0.113	0.0025	746	14
T20	5/16/00	7.5	18.5	9.24	98.5	0.09	0.0001	969	9.6

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

STATION	DATE	PH	TEMP	DO	PERCENTSAT	NH3TOTAL	NH3TOXIC	COND	TURB
T20	5/24/00	7.3	21	3.92	43.5	0.277	0.0023	959	17
T21	6/21/00	7.8	18	9.8	103	0	0	268	1.3
T22	6/21/00	7.6	17	10	103	0	0	191	1.7
T23	6/21/00	7.3	17.1	9.8	101	0	0	154	1.3
T24	6/21/00	7.2	18	9.49	99	0	0	195	1.5
T25	6/21/00	7.5	17.1	9.96	101	0	0	179	1.7
W	1/10/00	7	11.3	1.91	17.7	15	0.31	805	48
W	2/1/00	7.2	12.1	8.57	79.2	1.05	0.004	289.7	40
W	2/7/00	7.1	13.2	8.7	83	0.76	0.002	335	25
W	2/22/00	7.3	11.3	9.26	84.5	1.36	0.006	257.1	64
W	3/20/00	7.1	14.8	9.2	90.8	0.0841	0	268	9.4
W	3/28/00	7.5	9.3	8.1	70.1	0.259	0.0014	275.1	5
W	4/4/00	7.3	13.1	4.2	40.3	0.237	0.0011	473	6.3
W	4/18/00	7.3	11.5	10	92.8	0.233	0.001	273	7.4
W	4/24/00	7	11.1	4.76	43.2	0.485	0.0011	534	8.4
W	5/2/00	7.3	14.2	7.26	70.9	0.0922	0.0005	298.9	7
W	5/7/00	7.3	13.4	8.89	85.5	0.133	0.0006	308.9	5.7
W	5/16/00	7.4	14.7	8.58	84.5	0.358	0.0024	368.9	7.8
W	5/24/00	7.3	15.3	3.87	38.7	0.29	0.0016	463	3.5
W	6/7/00	7.3	13.5	4.58	44	0.425	0.0021	503	3.7

Criteria: Dissolved oxygen > 5.0 ppm; Percent oxygen saturation 85% - 125%; NH3 Toxic (un-ionized ammonia) < 0.025 mg/L; Conductivity, 750 umh

Appendix B

1998-99

Descriptive Statistics

MSCARII - 1999-2000 Station 1

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.53	13.95	9.80	94.00	0.3601	0.0022		402.5	17.9
Standard Error	0.08	0.70	0.31	2.64	0.1505	0.0007		27.9	8.0
Median	7.50	14.50	10.40	96.00	0.0900	0.0008		458.0	3.5
Standard Deviation	0.43	3.62	1.63	13.74	0.7821	0.0035		145.0	41.3
Sample Variance	0.18	13.12	2.67	188.86	0.6117	0.0000		21014.4	1709.1
Range	1.70	14.80	5.88	56.60	3.3500	0.0140		475.0	209.0
Minimum	6.60	5.50	6.16	65.60	0.0000	0.0000		129.0	1.0
Maximum	8.30	20.30	12.04	122.20	3.3500	0.0140		604.0	210.0
Count	27	27	27	27	27	27		27	27

MSCARII - 1999-2000 Station 1a

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.59	13.57	9.85	90.79	0.3348	0.0018		425.2	16.5
Standard Error	0.08	0.67	0.36	4.04	0.1363	0.0006		31.4	6.7
Median	7.60	13.40	10.40	91.30	0.0256	0.0004		460.0	2.0
Standard Deviation	0.45	3.66	1.98	22.48	0.7465	0.0032		172.2	36.9
Sample Variance	0.20	13.42	3.94	505.49	0.5573	0.0000		29643.7	1361.3
Range	1.90	15.00	7.77	113.80	3.0000	0.0130		651.0	179.0
Minimum	6.60	5.50	5.27	18.00	0.0000	0.0000		130.0	1.0
Maximum	8.50	20.50	13.04	131.80	3.0000	0.0130		781.0	180.0
Count	29	29	29	29	29	29		29	26

MSCARII - 1999-2000 Station 2

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.48	12.65	9.62	90.43	90.4290	0.2421		0.0	499.2
Standard Error	0.07	0.61	0.33	3.23	3.2264	0.1001		0.0	25.4
Median	7.50	12.20	10.10	89.00	89.0000	0.0990		0.0	550.0
Standard Deviation	0.39	3.38	1.83	17.96	17.9637	0.5575		0.0	141.6
Sample Variance	0.15	11.41	3.34	322.69	322.6928	0.3109		0.0	20047.0
Range	1.50	13.80	6.67	68.90	68.9000	2.7300		0.0	484.0
Minimum	6.80	6.00	6.28	60.00	60.0000	0.0000		0.0	203.0
Maximum	8.30	19.80	12.95	128.90	128.9000	2.7300		0.0	687.0
Count	31	31	31	31	31	31		31	31

MSCARII - 1999-2000 Station 3

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.87	14.45	10.03	97.78	0.0639	0.0009		390.0	12.0
Standard Error	0.07	0.65	0.49	4.01	0.0511	0.0006		30.3	1.6
Median	7.80	14.40	9.53	94.65	0.0000	0.0000		427.0	9.0
Standard Deviation	0.29	2.61	1.95	16.02	0.2043	0.0022		121.2	6.3
Sample Variance	0.08	6.83	3.80	256.79	0.0417	0.0000		14693.4	39.6
Range	1.10	9.00	6.25	49.00	0.8250	0.0090		430.8	23.9
Minimum	7.40	10.20	7.25	76.30	0.0000	0.0000		66.2	6.1
Maximum	8.50	19.20	13.50	125.30	0.8250	0.0090		497.0	30.0
Count	16	16	16	16	16	16		16	16

MSCARII - 1999-2000 Station 4

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.59	13.14	8.14	76.87	0.4477	0.0044		441.2	14.8
Standard Error	0.08	0.69	0.57	5.17	0.0995	0.0012		33.7	4.4
Median	7.60	12.50	8.80	89.50	0.2300	0.0011		464.0	6.0
Standard Deviation	0.42	3.86	3.19	28.80	0.5542	0.0067		187.4	24.3
Sample Variance	0.17	14.94	10.21	829.19	0.3071	0.0000		35126.9	591.4
Range	1.90	13.20	12.42	100.70	2.2300	0.0305		608.2	118.0
Minimum	6.70	6.00	1.78	16.00	0.0000	0.0000		125.8	2.0
Maximum	8.60	19.20	14.20	116.70	2.2300	0.0305		734.0	120.0
Count	31	31	31	31	31	31		31	31

MSCARII - 1999-2000 Station 4a

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.84	13.71	10.39	99.98	0.1968	0.0052		576.1	21.6
Standard Error	0.11	0.50	0.68	6.52	0.0893	0.0043		44.9	11.7
Median	7.85	13.55	10.34	100.45	0.0000	0.0000		652.0	2.6
Standard Deviation	0.45	2.11	2.90	27.67	0.3791	0.0181		190.4	49.5
Sample Variance	0.20	4.45	8.40	765.65	0.1437	0.0003		36251.6	2449.8
Range	1.60	7.30	12.56	121.00	1.1500	0.0774		639.0	198.5
Minimum	7.20	10.80	2.96	31.10	0.0000	0.0000		189.0	1.5
Maximum	8.80	18.10	15.52	152.10	1.1500	0.0774		828.0	200.0
Count	18	18	18	18	18	18		18	18

MSCARII - 1999-2000 Station 5

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.76	15.03	9.83	97.97	0.5336	0.0045		549.4	28.0
Standard Error	0.12	0.70	0.35	3.89	0.2757	0.0012		48.8	10.8
Median	7.90	15.55	9.45	97.70	0.1500	0.0030		558.0	11.5
Standard Deviation	0.40	2.41	1.21	13.48	0.9550	0.0043		169.2	37.3
Sample Variance	0.16	5.82	1.48	181.73	0.9120	0.0000		28631.0	1391.9
Range	1.30	7.30	4.51	50.30	3.4500	0.0137		542.7	119.4
Minimum	7.00	11.20	7.96	75.40	0.0000	0.0000		250.3	5.6
Maximum	8.30	18.50	12.47	125.70	3.4500	0.0137		793.0	125.0
Count	12	12	12	12	12	12		12	12

MSCARII - 1999-2000 Station 6

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.44	14.63	9.18	90.02	0.1975	0.0012		332.0	13.1
Standard Error	0.11	0.88	0.53	5.32	0.0759	0.0004		22.4	4.4
Median	7.40	13.75	9.26	87.00	0.0463	0.0002		344.9	5.8
Standard Deviation	0.49	3.75	2.25	22.58	0.3220	0.0018		95.2	18.8
Sample Variance	0.24	14.05	5.07	509.73	0.1037	0.0000		9055.1	355.2
Range	1.90	15.10	8.21	90.10	1.2000	0.0059		440.0	78.8
Minimum	6.40	8.80	5.99	60.20	0.0000	0.0000		88.0	1.2
Maximum	8.30	23.90	14.20	150.30	1.2000	0.0059		528.0	80.0
Count	18	18	18	18	18	18		18	18

MSCARII - 1999-2000 King Rd. Data

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.67	14.46	8.31	80.31	0.6617	0.0087	746.5	20.3	
Standard Error	0.06	0.49	0.31	2.72	0.2235	0.0036	20.0	6.6	
Median	7.60	13.80	8.45	79.90	0.1960	0.0020	757.5	7.5	
Standard Deviation	0.34	2.75	1.75	15.38	1.2645	0.0206	113.0	37.6	
Sample Variance	0.12	7.55	3.06	236.55	1.5990	0.0004	12758.5	1413.1	
Range	1.50	12.70	7.03	59.20	5.3900	0.0860	507.0	206.6	
Minimum	7.20	10.20	4.67	47.50	0.0000	0.0000	459.0	3.4	
Maximum	8.70	22.90	11.70	106.70	5.3900	0.0860	966.0	210.0	
Count	32	32	32	32	32	32	32	32	

MSCARII - 1998-1999 King Rd. Data

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.65	14.24	8.07	78.05	2.7509	0.0481	723.4	26.6	
Standard Error	0.10	0.84	0.41	3.88	0.9765	0.0205	39.8	6.3	
Median	7.75	13.00	8.30	84.00	0.7700	0.0100	735.0	18.5	
Standard Deviation	0.48	3.85	1.87	17.78	4.5800	0.0964	186.8	29.4	
Sample Variance	0.23	14.79	3.49	316.05	20.9764	0.0093	34884.3	864.5	
Range	1.60	15.00	6.80	71.00	16.1700	0.3760	720.0	137.0	
Minimum	6.80	9.00	3.80	34.00	0.2300	0.0010	380.0	3.0	
Maximum	8.40	24.00	10.60	105.00	16.4000	0.3770	1100.0	140.0	
Count	22	21	21	21	22	22	22	22	

MSCARII - 1999-2000 Ellis Ck. Data

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.69	17.37	12.34	98.34	0.1693	0.0050	998.2	9.3	
Standard Error	0.11	0.70	3.02	6.00	0.0521	0.0015	63.1	2.1	
Median	7.50	17.30	9.74	97.60	0.0048	0.0005	895.0	4.5	
Standard Deviation	0.62	3.78	16.26	32.34	0.2805	0.0080	339.9	11.1	
Sample Variance	0.38	14.30	264.51	1045.61	0.0787	0.0001	115521.5	122.5	
Range	2.10	15.70	92.52	131.40	0.9400	0.0324	1491.0	43.1	
Minimum	6.80	10.30	2.98	31.60	0.0000	0.0000	489.0	1.9	
Maximum	8.90	26.00	95.50	163.00	0.9400	0.0324	1980.0	45.0	
Count	33	29	29	29	29	29	29	29	

MSCARII - 1998-1999 Ellis Ck. Data

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	8.14	15.64	11.25	111.83	0.5335	0.0226	790.8	20.3	
Standard Error	0.12	1.11	0.53	5.30	0.1406	0.0044	79.6	4.6	
Median	8.10	13.25	11.15	108.50	0.3100	0.0210	780.0	17.0	
Standard Deviation	0.49	4.70	2.25	22.49	0.5798	0.0183	337.7	19.1	
Sample Variance	0.24	22.05	5.04	505.91	0.3361	0.0003	114071.3	366.5	
Range	1.70	14.50	7.90	70.00	2.3800	0.0570	1070.0	65.0	
Minimum	7.30	10.50	8.00	82.00	0.0700	0.0010	330.0	1.0	
Maximum	9.00	25.00	15.90	152.00	2.4500	0.0580	1400.0	66.0	
Count	18	18	18	18	17	17	18	17	

MSCARII - 1994-1995 Stemple Ck.

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	6.87	10.90	9.32	83.11	2.2026	0.0049		321.0	39.1
Standard Error	0.04	0.34	0.29	2.45	0.3967	0.0012		16.6	5.1
Median	6.80	10.00	9.40	84.00	1.2700	0.0020		330.0	27.0
Standard Deviation	0.36	2.74	2.39	19.75	3.2231	0.0096		133.7	27.8
Sample Variance	0.13	7.52	5.70	389.91	10.3882	9.2700		17885.0	769.8
Range	1.30	9.50	13.00	107.00	18.0000	0.0640		705.0	113.0
Minimum	6.30	7.50	3.00	29.00	0.0000	0.0000		95.0	12.0
Maximum	7.60	17.00	16.00	136.00	18.0000	0.0640		800.0	125.0
Count	66	66	66	65	66	65		65	30

MSCARII - 1993-1994 Stemple Ck.

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.76	15.14	8.40	83.02	2.7834	0.0870		755.5	28.1
Standard Error	0.03	0.34	0.27	2.72	0.9805	0.0438		162.5	2.4
Median	7.70	15.50	8.40	85.00	1.0000	0.0140		550.0	22.0
Standard Deviation	0.35	3.42	2.65	26.82	9.8046	0.4380		1624.7	24.1
Sample Variance	0.12	11.72	7.03	719.08	96.1300	0.1918			582.9
Range	2.00	16.00	14.10	153.00	91.9100	4.2810		16275.0	118.0
Minimum	7.00	8.00	1.80	19.00	0.0900	0.0010		225.0	2.0
Maximum	9.00	24.00	15.90	172.00	92.0000	4.2820		16500.0	120.0
Count	100	100	97	97	100	100		100	99

MSCARII - 1992-1993 Stemple Ck.

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.82	15.87	9.07	92.10	2.3911	0.0946		626.8	31.2
Standard Error	0.04	0.38	0.24	2.83	0.4621	0.0204		82.3	2.9
Median	7.80	16.50	9.35	88.00	1.0900	0.0180		450.0	23.5
Standard Deviation	0.55	5.20	3.14	37.59	6.2677	0.2761		1118.8	39.1
Sample Variance	0.31	27.07	9.84	1413.30	39.2836	0.0762			1529.3
Range	5.60	23.00	15.10	219.00	47.9400	2.6990		13880.0	472.0
Minimum	3.30	6.00	0.80	7.00	0.0600	0.0010		120.0	3.0
Maximum	8.90	29.00	15.90	226.00	48.0000	2.7000		14000.0	475.0
Count	185	184	176	176	184	184		185	184

MSCARII - 1991-1992 Stemple Ck.

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.90	19.23	8.39	91.11	4.9547	0.3831		796.1	45.0
Standard Error	0.08	0.77	0.46	5.68	1.6857	0.2066		72.8	6.1
Median	7.90	20.00	8.30	87.00	2.0000	0.0500		700.0	26.0
Standard Deviation	0.57	5.25	3.16	38.94	11.5570	1.4166		498.8	41.6
Sample Variance	0.32	27.54	9.98	1516.49	133.5520	2.0067		248826.0	1729.7
Range	2.60	18.00	14.50	185.00	75.9000	8.5880		2315.0	157.0
Minimum	7.00	10.00	0.50	5.00	0.1000	0.0020		135.0	3.0
Maximum	9.60	28.00	15.00	190.00	76.0000	8.5900		2450.0	160.0
Count	47	47	47	47	47	47		47	47

MSCARII - 1999-2000 Stemple Ck.

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.68	15.25	8.90	90.26	0.8769	0.0180	546.5	18.0	
Standard Error	0.05	0.28	0.28	3.15	0.1604	0.0068	16.9	1.9	
Median	7.50	14.85	8.45	80.70	0.2405	0.0012	515.0	8.9	
Standard Deviation	0.63	3.67	3.70	41.22	2.1034	0.0890	222.1	25.2	
Sample Variance	0.39	13.47	13.66	1699.28	4.4242	0.0079	49344.5	635.3	
Range	3.60	21.00	26.96	290.50	17.4000	1.0710	1783.0	233.6	
Minimum	6.70	5.50	0.75	7.50	0.0000	0.0000	6.0	1.4	
Maximum	10.30	26.50	27.71	298.00	17.4000	1.0710	1789.0	235.0	
Count	172	172	170	171	172	172	172	172	

MSCARII - 1998-1999 Stemple Ck.

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.71	13.70	9.79	94.09	1.0553	0.0194	437.5	26.9	
Standard Error	0.06	0.39	0.24	2.58	0.1122	0.0030	16.1	2.6	
Median	7.60	13.00	10.00	90.00	0.6700	0.0080	420.0	21.0	
Standard Deviation	0.60	4.12	2.48	26.92	1.1932	0.0318	171.7	27.6	
Sample Variance	0.37	16.97	6.14	724.84	1.4238	0.0010	29467.1	759.9	
Range	3.30	18.00	13.20	146.00	8.8800	0.2290	760.0	158.0	
Minimum	6.50	7.00	2.70	27.00	0.0700	0.0000	140.0	2.0	
Maximum	9.80	25.00	15.90	173.00	8.9500	0.2290	900.0	160.0	
Count	113	109	109	109	113	113	113	112	

MSCARII - 1997-1998 Stemple Ck.

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.87	17.28	8.86	92.69	1.2511	0.0367	415.1	27.5	
Standard Error	0.06	0.41	0.31	3.70	0.1431	0.0059	18.2	2.3	
Median	7.70	17.00	8.40	84.00	0.7200	0.0130	380.0	22.0	
Standard Deviation	0.55	4.04	3.12	36.80	1.4234	0.0590	181.4	23.1	
Sample Variance	0.30	16.30	9.72	1353.91	2.0260	0.0035	32895.1	532.4	
Range	2.20	15.00	15.20	182.00	8.5800	0.3290	900.0	137.0	
Minimum	7.10	10.50	0.80	8.00	0.0600	0.0040	150.0	3.0	
Maximum	9.30	25.50	16.00	190.00	8.6400	0.3330	1050.0	140.0	
Count	99	99	99	99	99	99	99	99	

MSCARII - 1996-1997 Stemple Ck.

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.47	16.98	9.21	95.91	1.1751	0.0268	636.0	35.1	
Standard Error	0.06	0.64	0.32	4.12	0.1188	0.0082	121.1	4.0	
Median	7.50	14.00	9.00	93.00	0.8900	0.0070	472.5	25.0	
Standard Deviation	0.50	5.17	2.60	33.22	0.9431	0.0649	969.0	28.9	
Sample Variance	0.25	26.71	6.75	1103.80	0.8894	0.0042	938895.4	833.7	
Range	2.40	18.00	12.60	156.00	3.7600	0.4730	7810.0	140.0	
Minimum	6.60	9.00	2.40	23.00	0.2400	0.0010	190.0	0.0	
Maximum	9.00	27.00	15.00	179.00	4.0000	0.4740	8000.0	140.0	
Count	65	65	65	65	63	63	64	53	

MSCARII 1990- 1991 San Antonio Ck. Data

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Tox.	Cond.	Turb.
Mean	7.59	14.31	8.86	86.51	2.2085	0.0301	601.7	28.4	
Standard Error	0.04	0.34	0.35	3.87	0.5662	0.0090	40.2	9.7	
Median	7.60	14.00	9.60	91.00	0.8100	0.0095	530.0	11.5	
Standard Deviation	0.35	3.01	3.10	34.39	5.0005	0.0796	357.5	85.7	
Sample Variance	0.12	9.05	9.59	1182.38	25.0045	0.0063	127804.0	7344.9	
Range	1.90	15.00	15.60	247.00	26.3900	0.5270	2100.0	545.0	
Minimum	6.40	8.50	0.30	3.00	0.2100	0.0000	100.0	0.0	
Maximum	8.30	23.50	15.90	250.00	26.6000	0.5270	2200.0	545.0	
Count	79	79	79	79	79	79	79	79	

MSCARII - 1999-2000 Tomales Tribs. Data

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.37	14.71	9.87	102.45	0.0610	0.0011	624.0	12.9	
Standard Error	0.02	0.18	0.09	3.65	0.0133	0.0004	97.0	0.8	
Median	7.40	14.50	9.96	96.40	0.0000	0.0000	267.0	6.0	
Standard Deviation	0.45	3.27	1.70	66.23	0.2406	0.0077	1759.4	15.0	
Sample Variance	0.20	10.68	2.88	4386.26	0.0579	0.0001	#####	225.6	
Range	3.10	18.00	13.80	999.30	3.4500	0.1094	21492.0	124.0	
Minimum	6.20	7.20	0.40	7.70	0.0000	0.0000	8.0	1.0	
Maximum	9.30	25.20	14.20	1007.00	3.4500	0.1094	21500.0	125.0	
Count	330	330	329	329	329	329	329	321	

MSCARII - 1998-1999 Tomales Tribs. Data

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.49	11.95	10.15	93.21	0.6146	0.0068	768.4	21.4	
Standard Error	0.03	0.17	0.10	0.83	0.0756	0.0012	170.3	2.2	
Median	7.50	12.00	10.50	96.00	0.2600	0.0020	240.0	12.0	
Standard Deviation	0.43	2.50	1.46	12.16	1.1341	0.0173	2553.9	33.7	
Sample Variance	0.19	6.25	2.12	147.86	1.2863	0.0003	#####	1136.3	
Range	2.60	15.50	9.70	99.00	8.4500	0.1900	24415.0	369.0	
Minimum	6.40	6.00	3.30	31.00	0.0000	0.0000	85.0	1.0	
Maximum	9.00	21.50	13.00	130.00	8.4500	0.1900	24500.0	370.0	
Count	225	214	214	214	225	225	225	225	

MSCARII - 1997-1998 Tomales Tribs. Data

	pH	Temp.	D.O.	Percent Sat	NH3	Total NH3	Toxi	Cond.	Turb.
Mean	7.76	15.26	9.55	94.59	0.9206	0.0188	514.6	34.0	
Standard Error	0.03	0.22	0.09	0.91	0.1955	0.0038	112.3	3.6	
Median	7.80	15.00	9.80	95.00	0.3300	0.0040	211.0	18.0	
Standard Deviation	0.38	3.35	1.30	13.76	2.9715	0.0574	1709.9	54.8	
Sample Variance	0.15	11.20	1.68	189.34	8.8300	0.0033	#####	2997.9	
Range	2.50	20.00	12.20	135.00	39.4000	0.7900	21025.0	550.0	
Minimum	6.50	7.00	1.80	16.00	0.0000	0.0000	75.0	0.0	
Maximum	9.00	27.00	14.00	151.00	39.4000	0.7900	21100.0	550.0	
Count	230	232	230	230	231	231	232	231	

MSCARII - 1999-2000 All Data

	pH	Temp.	D.O.	Percent Sat	NH3 Total	NH3 Tox.	Cond.	Turb.
Mean	7.56	14.84	9.29	92.20	0.4203	0.0068	577.5	14.5
Standard Error	0.02	0.12	0.09	1.01	0.0542	0.0015	31.0	0.8
Median	7.50	14.60	9.42	91.60	0.0252	0.0000	451.0	6.3
Standard Deviation	0.51	3.43	2.71	29.17	1.5633	0.0439	894.0	23.0
Sample Variance	0.26	11.74	7.33	851.06	2.4439	0.0019	799288.5	531.0
Range	4.10	23.40	26.96	290.50	25.2000	1.0710	14152.0	234.0
Minimum	6.20	5.50	0.75	7.50	0.0000	0.0000	8.0	1.0
Maximum	10.30	28.90	27.71	298.00	25.2000	1.0710	14160.0	235.0
Count	833	833	830	831	832	832	831	821

MSCARII - 1998-1999 All Data

	pH	Temp.	D.O.	Percent Sat	NH3 Total	NH3 Tox.	Cond.	Turb.
Mean	7.57	12.58	10.24	95.70	0.8695	0.0120	533.3	21.4
Standard Error	0.02	0.16	0.09	0.91	0.0775	0.0014	44.6	1.4
Median	7.50	12.00	10.40	96.00	0.3800	0.0030	348.0	13.0
Standard Deviation	0.51	3.51	1.94	19.51	1.6746	0.0306	964.6	29.7
Sample Variance	0.26	12.34	3.76	380.60	2.8041	0.0009	930422.0	885.0
Range	3.20	19.50	12.60	144.00	16.4000	0.3770	11915.0	369.0
Minimum	6.40	5.50	3.30	31.00	0.0000	0.0000	85.0	1.0
Maximum	9.60	25.00	15.90	175.00	16.4000	0.3770	12000.0	370.0
Count	469	457	457	457	467	467	467	467

MSCARII - 1997-1998 All Data

	pH	Temp.	D.O.	Percent Sat	NH3 Total	NH3 Tox.	Cond.	Turb.
Mean	7.86	16.06	9.54	96.28	1.2433	0.0373	407.4	29.9
Standard Error	0.02	0.17	0.12	1.32	0.1387	0.0045	19.3	1.9
Median	7.80	16.00	9.80	94.00	0.5000	0.0120	330.0	18.0
Standard Deviation	0.52	3.93	2.68	30.10	3.1621	0.1019	439.7	43.7
Sample Variance	0.27	15.43	7.17	906.28	9.9986	0.0104	193334.6	1911.8
Range	3.70	21.50	19.50	217.00	39.4000	1.3500	7425.0	550.0
Minimum	5.90	7.00	0.20	2.00	0.0000	0.0000	75.0	0.0
Maximum	9.60	28.50	19.70	219.00	39.4000	1.3500	7500.0	550.0
Count	521	523	521	521	520	520	521	521

MSCARII - 1996-1997 All Data

	pH	Temp.	D.O.	Percent Sat	NH3 Total	NH3 Tox.	Cond.	Turb.
Mean	7.37	16.59	9.50	97.31	0.9427	0.0174	574.5	31.7
Standard Error	0.04	0.43	0.20	2.39	0.0759	0.0039	56.9	2.3
Median	7.40	14.00	9.60	94.00	0.6400	0.0050	470.0	23.0
Standard Deviation	0.49	5.15	2.43	28.67	0.9041	0.0467	680.7	24.4
Sample Variance	0.24	26.50	5.92	822.15	0.8174	0.0022	463388.8	597.6
Range	2.70	19.00	12.80	158.00	6.5100	0.4740	7900.0	140.0
Minimum	6.30	8.00	2.20	21.00	0.0900	0.0000	100.0	0.0
Maximum	9.00	27.00	15.00	179.00	6.6000	0.4740	8000.0	140.0
Count	144	144	144	144	142	142	143	113

Appendix C

Summary Data by Watershed

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.39	15.10	10.74	107.93	0.0174	0.0000		2399.5	11.2
Standard Error	0.09	0.94	0.46	4.64	0.0068	0.0000		1310.4	3.0
Median	7.40	14.60	10.70	101.20	0.0044	0.0000		293.6	4.2
Standard Deviation	0.36	3.86	1.89	19.14	0.0279	0.0001		5402.8	12.3
Sample Variance	0.13	14.89	3.58	366.51	0.0008	0.0000	#####		151.5
Range	1.30	12.60	6.29	67.80	0.1020	0.0003		21378.4	30.5
Minimum	6.70	9.50	7.91	84.20	0.0000	0.0000		121.6	2.5
Maximum	8.00	22.10	14.20	152.00	0.1020	0.0003		21500.0	33.0
Count	17	17	17	17	16	16		17	17

MSCARII - 1999-2000 Station T 8

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	6.67	12.53	8.54	79.87	0.0008	0.0000		157.0	23.9
Standard Error	0.07	0.44	0.43	3.80	0.0006	0.0000		15.1	6.5
Median	6.70	12.60	8.86	80.30	0.0000	0.0000		162.5	25.0
Standard Deviation	0.20	1.17	1.13	10.07	0.0016	0.0000		39.9	17.1
Sample Variance	0.04	1.37	1.28	101.34	0.0000	0.0000		1592.9	293.7
Range	0.60	3.50	3.56	32.20	0.0044	0.0000		112.4	50.4
Minimum	6.40	10.70	6.80	63.80	0.0000	0.0000		106.0	3.6
Maximum	7.00	14.20	10.36	96.00	0.0044	0.0000		218.4	54.0
Count	7	7	7	7	7	7		7	7

MSCARII - 1999-2000 Station T 9

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.46	14.74	10.68	105.41	0.0104	0.0001		270.6	10.2
Standard Error	0.10	0.65	0.35	3.87	0.0060	0.0001		24.0	3.0
Median	7.55	14.60	10.63	103.35	0.0000	0.0000		259.0	3.4
Standard Deviation	0.39	2.61	1.39	15.49	0.0241	0.0003		96.2	12.0
Sample Variance	0.16	6.79	1.93	240.04	0.0006	0.0000		9245.8	144.6
Range	1.50	9.20	4.59	55.00	0.0900	0.0010		357.0	34.0
Minimum	6.70	9.60	8.74	81.00	0.0000	0.0000		132.0	1.0
Maximum	8.20	18.80	13.33	136.00	0.0900	0.0010		489.0	35.0
Count	16	16	16	16	16	16		16	16

MSCARII - 1999-2000 Station T10

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.64	15.53	10.02	100.38	0.0026	0.0000		211.8	13.1
Standard Error	0.11	0.59	0.27	2.76	0.0013	0.0000		15.2	3.1
Median	7.80	16.10	9.92	96.70	0.0000	0.0000		222.3	7.2
Standard Deviation	0.41	2.29	1.06	10.68	0.0051	0.0001		58.7	12.0
Sample Variance	0.17	5.23	1.12	113.96	0.0000	0.0000		3448.8	144.9
Range	1.30	7.90	4.37	40.00	0.0146	0.0002		195.7	37.1
Minimum	6.90	11.50	8.21	90.00	0.0000	0.0000		114.9	3.9
Maximum	8.20	19.40	12.58	130.00	0.0146	0.0002		310.6	41.0
Count	15	15	15	15	15	15		15	15

MSCARII - 1999-2000 Station T 3

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.41	13.69	10.21	97.99	0.0119	0.0000		179.2	7.7
Standard Error	0.08	0.64	0.33	2.75	0.0066	0.0000		8.9	1.9
Median	7.40	14.10	10.20	96.50	0.0000	0.0000		194.8	3.5
Standard Deviation	0.34	2.64	1.38	11.35	0.0272	0.0001		36.8	7.8
Sample Variance	0.12	6.97	1.90	128.92	0.0007	0.0000		1354.0	61.5
Range	1.00	10.00	4.89	41.70	0.1000	0.0003		114.1	25.0
Minimum	6.80	8.50	7.77	82.50	0.0000	0.0000		115.9	1.0
Maximum	7.80	18.50	12.66	124.20	0.1000	0.0003		230.0	26.0
Count	17	17	17	17	17	17		17	17

MSCARII - 1999-2000 Station T 4

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.34	13.34	10.23	97.25	0.0353	0.0002		282.8	13.1
Standard Error	0.08	0.65	0.33	3.13	0.0193	0.0002		25.1	4.2
Median	7.40	14.00	10.35	94.80	0.0000	0.0000		273.8	3.7
Standard Deviation	0.31	2.66	1.36	12.91	0.0798	0.0007		103.4	17.5
Sample Variance	0.10	7.08	1.84	166.67	0.0064	0.0000		10684.4	304.6
Range	1.10	9.80	5.01	59.40	0.2650	0.0029		307.0	48.0
Minimum	6.70	7.60	8.05	69.50	0.0000	0.0000		124.0	2.0
Maximum	7.80	17.40	13.06	128.90	0.2650	0.0029		431.0	50.0
Count	17	17	16	16	17	17		17	17

MSCARII - 1999-2000 Station T 5

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.10	14.00	9.66	92.72	0.0136	0.0000		232.9	13.0
Standard Error	0.07	0.74	0.38	3.70	0.0068	0.0000		17.7	3.9
Median	7.10	13.70	10.10	95.00	0.0000	0.0000		227.7	4.2
Standard Deviation	0.29	3.07	1.55	15.24	0.0280	0.0000		72.8	16.2
Sample Variance	0.08	9.40	2.41	232.13	0.0008	0.0000		5299.1	262.5
Range	1.00	11.20	6.95	71.80	0.1000	0.0000		261.8	47.0
Minimum	6.60	8.40	5.35	53.60	0.0000	0.0000		121.0	1.0
Maximum	7.60	19.60	12.30	125.40	0.1000	0.0000		382.8	48.0
Count	17	17	17	17	17	17		17	17

MSCARII - 1999-2000 Station T 6

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.13	13.16	8.87	84.65	0.1489	0.0005		535.9	13.1
Standard Error	0.05	0.57	0.52	5.22	0.0404	0.0002		41.8	3.9
Median	7.20	13.30	9.25	87.60	0.1010	0.0002		556.0	5.2
Standard Deviation	0.20	2.20	2.02	20.22	0.1566	0.0006		161.8	15.0
Sample Variance	0.04	4.85	4.09	408.70	0.0245	0.0000		26165.4	224.7
Range	0.70	8.00	7.69	76.30	0.5050	0.0020		567.0	47.0
Minimum	6.70	8.90	4.21	37.00	0.0000	0.0000		243.0	3.0
Maximum	7.40	16.90	11.90	113.30	0.5050	0.0020		810.0	50.0
Count	15	15	15	15	15	15		15	15

MSCARII - 1999-2000 Station E 1

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.99	17.56	9.14	96.25	0.2030	0.0067		947.1	9.8
Standard Error	0.11	1.06	0.91	9.93	0.0877	0.0028		74.3	3.3
Median	8.00	17.20	9.67	103.25	0.0019	0.0009		865.0	4.3
Standard Deviation	0.41	3.97	3.41	37.14	0.3282	0.0106		278.1	12.2
Sample Variance	0.16	15.77	11.65	1379.20	0.1077	0.0001		77348.6	150.0
Range	1.70	15.70	12.82	131.40	0.9400	0.0324		949.0	42.6
Minimum	7.20	10.30	2.98	31.60	0.0000	0.0000		489.0	2.4
Maximum	8.90	26.00	15.80	163.00	0.9400	0.0324		1438.0	45.0
Count	14	14	14	14	14	14		14	14

MSCARII - 1999-2000 Station E 2

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.92	17.20	15.33	94.41	0.1379	0.0034		1045.9	8.8
Standard Error	0.10	0.96	5.76	9.49	0.0606	0.0011		101.4	2.6
Median	7.90	17.30	9.82	95.60	0.0215	0.0005		949.0	5.0
Standard Deviation	0.39	3.73	22.33	36.74	0.2347	0.0043		392.7	10.3
Sample Variance	0.15	13.89	498.41	1349.59	0.0551	0.0000		154178.1	105.2
Range	1.30	13.10	90.08	150.70	0.7900	0.0100		1480.0	40.1
Minimum	7.50	10.70	5.42	9.80	0.0000	0.0000		500.0	1.9
Maximum	8.80	23.80	95.50	160.50	0.7900	0.0100		1980.0	42.0
Count	15	15	15	15	15	15		15	15

MSCARII - 1999-2000 Station T 1

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.44	12.95	10.72	100.82	0.0131	0.0000		191.0	6.1
Standard Error	0.09	0.65	0.28	2.73	0.0063	0.0000		6.9	2.2
Median	7.60	13.00	10.80	99.70	0.0000	0.0000		197.1	2.5
Standard Deviation	0.36	2.69	1.16	11.25	0.0258	0.0001		28.3	9.3
Sample Variance	0.13	7.21	1.34	126.53	0.0007	0.0000		801.1	85.9
Range	1.10	9.50	4.47	41.90	0.0900	0.0003		103.2	34.0
Minimum	6.70	7.90	8.83	86.60	0.0000	0.0000		129.6	1.0
Maximum	7.80	17.40	13.30	128.50	0.0900	0.0003		232.8	35.0
Count	17	17	17	17	17	17		17	16

MSCARII - 1999-2000 Station T 2

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.40	12.66	15.23	99.29	0.0133	0.0000		169.2	10.9
Standard Error	0.10	0.63	4.68	2.64	0.0066	0.0000		9.8	3.7
Median	7.50	13.60	10.34	96.90	0.0000	0.0000		181.7	3.0
Standard Deviation	0.42	2.61	19.30	10.87	0.0272	0.0000		40.4	15.1
Sample Variance	0.18	6.79	372.59	118.19	0.0007	0.0000		1628.2	229.1
Range	1.10	9.40	81.24	42.40	0.0900	0.0002		124.6	45.0
Minimum	6.80	7.20	8.76	85.80	0.0000	0.0000		94.4	1.0
Maximum	7.90	16.60	90.00	128.20	0.0900	0.0002		219.0	46.0
Count	17	17	17	17	17	17		17	17

MSCARII - 1999-2000 Station 14

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.37	13.85	8.20	79.59	0.2703	0.0009		499.4	16.1
Standard Error	0.07	0.54	0.51	5.29	0.1112	0.0004		32.7	6.1
Median	7.40	13.70	8.50	77.50	0.0639	0.0002		485.0	3.5
Standard Deviation	0.30	2.21	2.11	21.82	0.4584	0.0017		134.9	25.2
Sample Variance	0.09	4.87	4.45	476.14	0.2101	0.0000		18199.2	636.4
Range	1.10	8.40	8.60	85.00	1.6300	0.0060		456.0	67.6
Minimum	6.80	10.30	3.90	40.20	0.0000	0.0000		294.0	1.4
Maximum	7.90	18.70	12.50	125.20	1.6300	0.0060		750.0	69.0
Count	17	17	17	17	17	17		17	17

MSCARII - 1999-2000 Station 15

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.46	13.62	6.88	66.44	0.7643	0.0027		502.8	11.7
Standard Error	0.12	0.68	0.54	5.48	0.3610	0.0010		26.5	4.1
Median	7.40	14.40	6.95	65.10	0.1260	0.0010		528.0	4.7
Standard Deviation	0.49	2.80	2.21	22.60	1.4884	0.0041		109.4	16.9
Sample Variance	0.24	7.83	4.90	510.57	2.2153	0.0000		11969.7	286.3
Range	2.40	12.10	8.87	89.20	4.9828	0.0140		311.0	60.0
Minimum	6.70	7.00	3.73	37.30	0.0172	0.0000		344.0	2.0
Maximum	9.10	19.10	12.60	126.50	5.0000	0.0140		655.0	62.0
Count	17	17	17	17	17	17		17	17

MSCARII - 1999-2000 Station 16

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.41	12.54	8.59	80.94	3.0370	0.0172		389.2	31.0
Standard Error	0.06	0.62	0.61	5.61	1.4564	0.0111		55.6	11.4
Median	7.40	12.10	9.45	86.35	0.1620	0.0010		317.1	7.5
Standard Deviation	0.27	2.63	2.58	23.80	6.1789	0.0470		235.7	48.5
Sample Variance	0.07	6.91	6.63	566.56	38.1785	0.0022		55575.6	2353.1
Range	1.00	11.20	10.58	96.70	25.2000	0.2010		937.0	152.4
Minimum	7.00	8.80	1.62	14.80	0.0000	0.0000		190.0	2.6
Maximum	8.00	20.00	12.20	111.50	25.2000	0.2010		1127.0	155.0
Count	18	18	18	18	18	18		18	18

MSCARII - 1999-2000 Station 17

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.80	14.69	7.16	70.72	0.5818	0.0088		648.5	15.4
Standard Error	0.13	0.37	0.66	6.78	0.1812	0.0045		38.8	5.1
Median	7.70	14.70	6.24	62.80	0.3300	0.0021		673.0	8.0
Standard Deviation	0.50	1.41	2.54	26.26	0.7018	0.0173		150.1	19.9
Sample Variance	0.25	2.00	6.45	689.82	0.4925	0.0003		22527.0	394.9
Range	1.70	5.30	10.58	109.40	2.4300	0.0671		511.0	77.6
Minimum	7.20	12.00	4.42	43.10	0.0000	0.0000		313.0	4.4
Maximum	8.90	17.30	15.00	152.50	2.4300	0.0671		824.0	82.0
Count	15	15	15	15	15	15		15	15

MSCARII - 1999-2000 Station 7

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	11.85	14.57	9.03	88.62	0.1191	0.0006		790.0	11.1
Standard Error	4.28	0.74	0.26	3.36	0.0718	0.0002		68.1	4.2
Median	7.60	14.00	9.10	86.55	0.0170	0.0000		773.5	4.4
Standard Deviation	17.11	2.95	1.03	13.42	0.2871	0.0009		272.5	16.8
Sample Variance	292.73	8.71	1.06	180.20	0.0824	0.0000		74235.8	282.9
Range	68.90	10.30	3.74	49.20	1.1500	0.0030		1073.6	67.7
Minimum	7.10	9.90	7.20	70.10	0.0000	0.0000		318.4	2.3
Maximum	76.00	20.20	10.94	119.30	1.1500	0.0030		1392.0	70.0
Count	16	16	16	16	16	16		16	16

MSCARII - 1999-2000 Station 7a

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.73	15.41	8.85	89.07	1.2829	0.0142		792.6	21.8
Standard Error	0.08	1.00	0.50	5.69	0.5202	0.0049		63.4	6.4
Median	7.65	14.75	8.71	84.90	0.4885	0.0031		821.5	9.3
Standard Deviation	0.36	4.23	2.11	24.16	2.2072	0.0209		268.8	27.4
Sample Variance	0.13	17.88	4.45	583.72	4.8719	0.0004		72243.0	748.3
Range	1.20	14.40	7.71	72.70	7.1500	0.0743		918.0	79.7
Minimum	7.30	9.10	5.79	58.00	0.0000	0.0000		341.0	4.3
Maximum	8.50	23.50	13.50	130.70	7.1500	0.0743		1259.0	84.0
Count	18	18	18	18	18	18		18	18

MSCARII - 1999-2000 Station 8

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.94	16.49	11.33	118.31	0.6969	0.0130		773.2	20.1
Standard Error	0.14	1.40	0.95	12.24	0.2373	0.0046		68.9	6.6
Median	7.90	15.70	10.40	110.00	0.2160	0.0036		865.0	8.2
Standard Deviation	0.54	5.43	3.67	47.41	0.9190	0.0179		266.9	25.6
Sample Variance	0.29	29.49	13.47	2247.74	0.8445	0.0003		71210.6	653.4
Range	1.90	19.30	14.47	180.40	2.4000	0.0511		995.0	74.5
Minimum	7.30	9.60	7.92	74.00	0.0000	0.0000		317.0	1.5
Maximum	9.20	28.90	22.39	254.40	2.4000	0.0511		1312.0	76.0
Count	15	15	15	15	15	15		15	15

MSCARII - 1999-2000 Station 9

	pH	Temp.	D.O.	Percent Sat.	NH3	Total NH3	Tox	Cond.	Turb.
Mean	7.77	16.19	10.47	107.90	0.3114	0.0016		470.3	13.6
Standard Error	0.14	1.07	0.66	8.43	0.1544	0.0006		49.5	5.0
Median	7.85	15.75	9.43	95.15	0.0205	0.0000		445.0	4.3
Standard Deviation	0.58	4.54	2.80	35.75	0.6550	0.0027		210.1	21.3
Sample Variance	0.34	20.59	7.85	1277.81	0.4290	0.0000		44156.7	452.4
Range	2.40	18.50	11.13	136.10	2.2300	0.0095		762.0	88.7
Minimum	6.50	10.20	6.60	60.60	0.0000	0.0000		101.0	1.3
Maximum	8.90	28.70	17.73	196.70	2.2300	0.0095		863.0	90.0
Count	18	18	18	18	18	18		18	18