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\* DRAFT \*

Tonetta Lake & Watershed  
2007 Data

## 2007 - Tonetta Lake & Tributary pH

Weather	Cloudy ~75	
pH		
09/10/07		
250 SD	NW	
218 SD	7.66	
210 SD	NW	
182 SD	7.05	
75 TLW	NW	
OUTLET	8.40	
Lake Top	8.44	
Lake Mid	8.21	
Lake Bot	7.04	

NW = No water, therefore no sample collected

ND = No data available

Blank = Sampling not scheduled for this site on this date

### **pH is the negative logarithm of the Hydrogen ion activity.**

The pH of pure water is 7. In general, water with a pH lower than 7 is considered acidic, and a pH greater than 7, basic. The normal range for pH in surface water systems is 6.5 to 8.5, and for groundwater systems 6 to 8.5.

Acidic water with a low pH (< 6.5) could be soft, and corrosive. The water might contain elevated levels of toxic metals such as iron, manganese, copper, lead, and zinc. Acidic water can cause damage to metal piping, and have associated aesthetic problems such as a metallic or sour taste, staining of laundry, and the characteristic "blue-green" staining of sinks and drains. More importantly, there are health risks associated with the potential toxins.

Basic water with a high pH (> 8.5) could be hard. Hard water does not pose a health risk, but can cause aesthetic problems. These problems include an alkali (bitter) taste to the water, formation of deposits on dishes and utensils, difficulty in getting soaps and detergents to lather, and formation of insoluble precipitates on clothing.

## 2007 - Tonetta Lake Tributary & Outlet Flow Measurements (CFS)

Weather	Sunny, ~80	Sunny, ~80	Sunny, ~85	Sunny, ~70	Cloudy ~75	Raining				
Site	05/26/07	06/19/07	07/09/07	09/01/07	09/10/07	09/11/07				
250 SD	0.01	0.01	0.01	<0.01	NW	0.06				
218 SD	0.03	0.06	0.04	0.06	0.01	0.12				
210 SD	0.01	NW	NW	NW	NW	ND				
182 SD	0.02	0.01	0.02	<0.01	<0.01	0.04				
75 TLW	0.01	<.01	NW	NW	NW	0.02				
OUTLET	0.75	0.55	0.45	0.35	0.33	0.40				
WL Height (1/10 ft)	-0.17	-0.50	-0.67	ND	ND	ND				

<0.1 indicates a value between 0.1 and 0.01 cfs

<0.01 indicates minimal flow, but not dry conditions

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**CFS = Cubic Feet per Second. CFS is a standard unit of flow.**

The measurements are relative and no conclusions can be drawn from any one figure or date. Over time, after sufficient data has been collected, correlations in flow rates can be made between tributaries. Additionally, flow projections can be made based on precipitation data.

**2007 - Tonetta Lake & Tributary Temperature (C°) & Conductivity (umhos/cm)**

		Temperature (C°)									
		05/26/07	06/19/07	07/09/07	09/01/07	09/10/07	09/11/07				
250 SD		15.1	16.5	19.1	19.0	NW	20.2				
218 SD		13.5	16.2	17.8	17.5	20.0	19.9				
210 SD		15.2	NW	NW	NW	NW	ND				
182 SD		16.5	18.4	18.8	20.0	20.4	20.5				
75 TLW		16.8	17.7	NW	NW	NW	20.5				
OUTLET		16.1	25.4	28.2	26.2	26.0	26.1				
Lake Top			25.8	27.3	24.6	21.1					
Lake Mid			23.0	23.7	24.6	20.9					
Lake Bot			10.5	12.7	18.1	18.9					
		Conductivity (umhos/cm)									
250 SD		578	649	671	609	NW	461				
218 SD		628	1350	777	676	2550	373				
210 SD		490	NW	NW	NW	NW	ND				
182 SD		556	1090	616	578	815	298				
75 TLW		525	920	NW	NW	NW	165				
OUTLET		352	546	316	348	380	337				
Lake Top					349	544					
Lake Mid						539					
Lake Bot						686					

NW = No water, therefore no sample collected

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**Conductivity is reported in micromhos per centimeter (µmho/cm).**

Conductivity or specific conductance is the measure of water's ability to conduct an electric current. Conductivity depends on the number of ions or charged particles in the water. Electricity passes easily through water that is high in electrolytes or ions, and poorly through low electrolyte materials such as pure water.

Why do we take conductivity measurements at Tonetta Lake?

Conductivity determinations are useful in aquatic studies because they provide an estimate of dissolved ionic matter in the water. Low values of specific conductance are characteristic of high-quality, oligotrophic (low nutrient) lake waters. High values of specific conductance are observed in eutrophic lakes where plant nutrients (fertilizer) are in greater abundance. Very high values are good indicators of possible pollution sites. For instance, industrial discharges, road salt, and failing septic tanks can raise conductivity. A sudden change in conductivity can indicate a direct discharge or other source of pollution into the water. Unless an historic baseline is established and maintained fluctuations are less meaningful.

**2007 - Tonetta Lake & Tributary Turbidity (Reported in NTU)**

Site	Turbidity (NTU)										
	05/26/07	06/19/07	07/09/07	09/01/07	09/10/08	09/11/07					
250 SD	1.41	1.36	1.33	1.26	NW	2.94					
218 SD	1.76	1.53	1.50	1.01	0.95	14.66					
210 SD	2.23	NW	NW	NW	NW	ND					
182 SD	5.30	4.41	3.76	2.95	1.97	7.90					
75 TLW	4.90	15.20	NW	NW	NW	5.20					
OUTLET	1.63	1.51	1.39	1.25	1.26	1.39					
Lake Top				0.99	1.38						
Lake Mid					1.69						
Lake Bot					67.20						

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Detection Limits: .01 - 1000 ntu

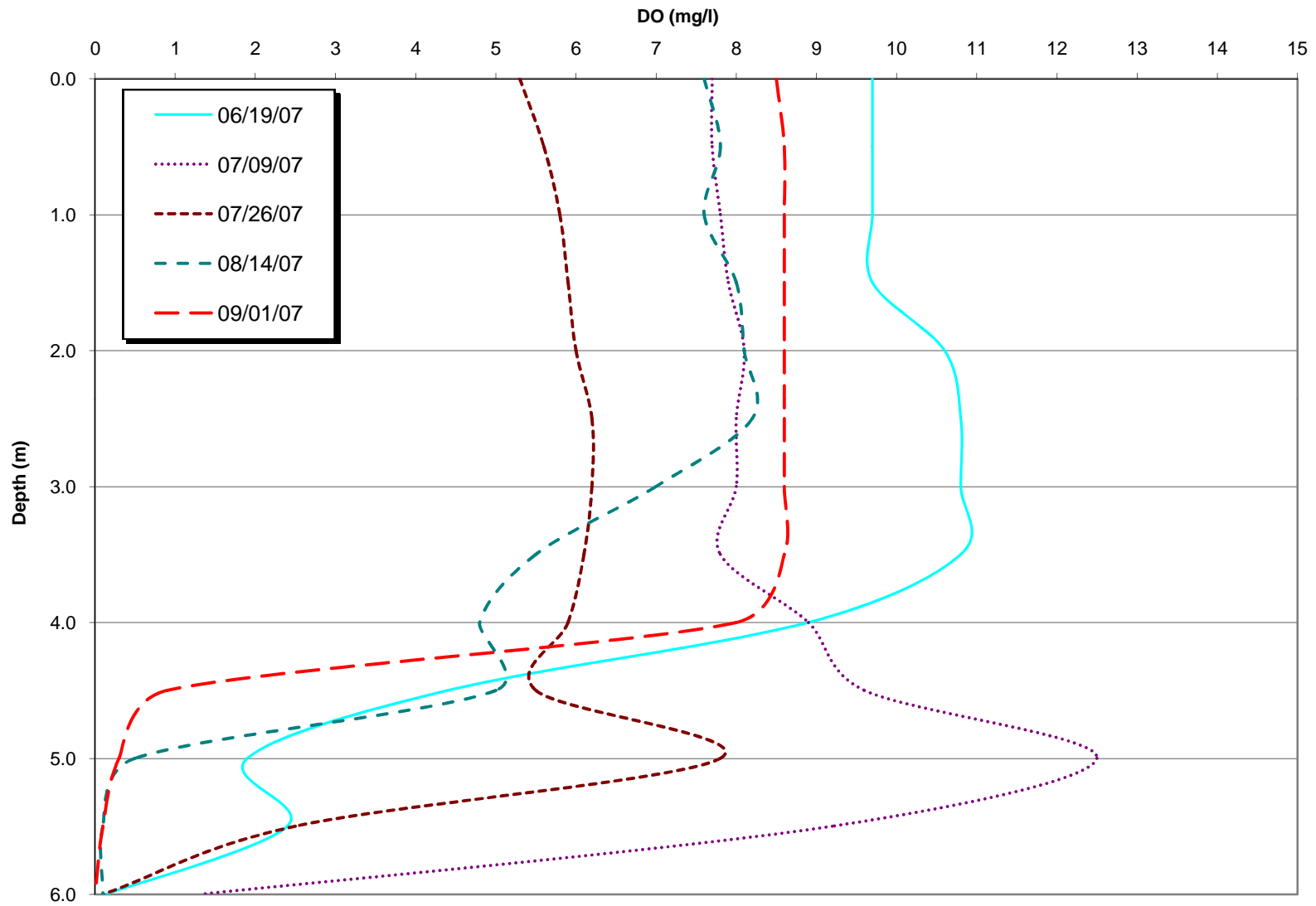
**Turbidity is measured in Nephelometric Turbidity Units (NTU).**

Turbidity measures the degree to which light traveling through a water column is scattered by the suspended organic (including algae) and inorganic particles. This scattering of light increases with a greater suspended load and is directly related to total suspended solids (description following).

Total suspended solids (TSS) (mg/L) is a measure of particles floating in the water column. Suspended solids consist of an inorganic fraction (silts, clays, etc.) and an organic fraction (algae, zooplankton, bacteria, and detritus). Suspended solids clog and scour pipes and machinery, interfere with effective water treatment, reduce light penetration, smother bottom-dwelling organisms, clog fish gills, absorb sunlight and increase water temperature and adsorb and transport nutrients, toxic chemicals and microorganisms.

The vast majority of suspended solids will be conveyed during storm events. In general, lower numbers are better but little can be concluded from a single measurement. Turbidity readings are ideally looked at in the context of an historical data set that includes storm events.

# 2007 Tonetta Lake Dissolved Oxygen Profiles



2007 - Tonetta Lake Temperature & Dissolved Oxygen Profiles @ TL-1 (C° for temperature and as listed for oxygen)

Site	Date:	06/19/07			07/09/07			07/26/07			08/14/07			09/01/07					
	Conditions: Lake Level	Sunny -80 WSW 5-10			Sunny -85 SSW 5-10			Sunny -85 S 3-5			Sunny -80 SSW 5-10			Sunny -70 N 8-12					
Depth (m)	Temp. C°	DO %	DO mg/L	Temp. C°	DO %	DO mg/L	Temp. C°	DO %	DO mg/L	Temp. C°	DO %	DO mg/L	Temp. C°	DO %	DO mg/L	Temp. C°	DO %	DO mg/L	
TL1-0.0	0.0	25.8	119	9.7	27.3	97	7.7	27.4	67	5.3	26.7	95	7.6	24.6	101	8.5			
TL1-0.5	0.5	25.7	119	9.7	27.3	97	7.7	25.8	69	5.6	26.5	97	7.8	24.6	103	8.6			
TL1-1.0	1.0	25.6	119	9.7	26.8	97	7.8	25.5	71	5.8	26.5	99	7.6	24.6	103	8.6			
TL1-1.5	1.5	24.9	117	9.7	26.0	98	7.9	25.3	72	5.9	26.4	99	8.0	24.6	104	8.6			
TL1-2.0	2.0	23.6	123	10.6	25.2	98	8.1	25.0	73	6.0	26.4	100	8.1	24.6	104	8.6			
TL1-2.5	2.5	23.2	127	10.8	24.5	96	8.0	24.6	74	6.2	26.2	102	8.2	24.6	104	8.6			
TL1-3.0	3.0	22.7	125	10.8	24.2	94	8.0	24.4	74	6.2	24.7	84	7.0	24.6	103	8.6			
TL1-3.5	3.5	20.0	118	10.8	23.2	91	7.8	24.2	73	6.1	24.4	70	5.5	24.6	103	8.6			
TL1-4.0	4.0	17.3	94	8.9	21.6	99	8.9	23.7	70	5.9	24.0	56	4.8	24.5	98	8.0			
TL1-4.5	4.5	14.2	41	4.4	19.7	104	9.6	22.4	63	5.5	22.7	60	5.0	22.0	11	0.9			
TL1-5.0	5.0	12.8	18	1.9	15.4	124	12.5	19.9	85	7.8	20.3	3	0.5	21.2	2	0.3			
TL1-5.5	5.5	11.3	23	2.4	13.8	88	9.2	16.5	25	2.5	17.9	1	0.1	19.1	1	0.1			
TL1-6.0	6.0	10.5	1	0.1	12.7	14	1.3	13.9	1	0.1	15.9	1	0.1	18.1	0	0.0			
TL1-6.5	6.5																		
TL1-7.0	7.0																		

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ND = No data available

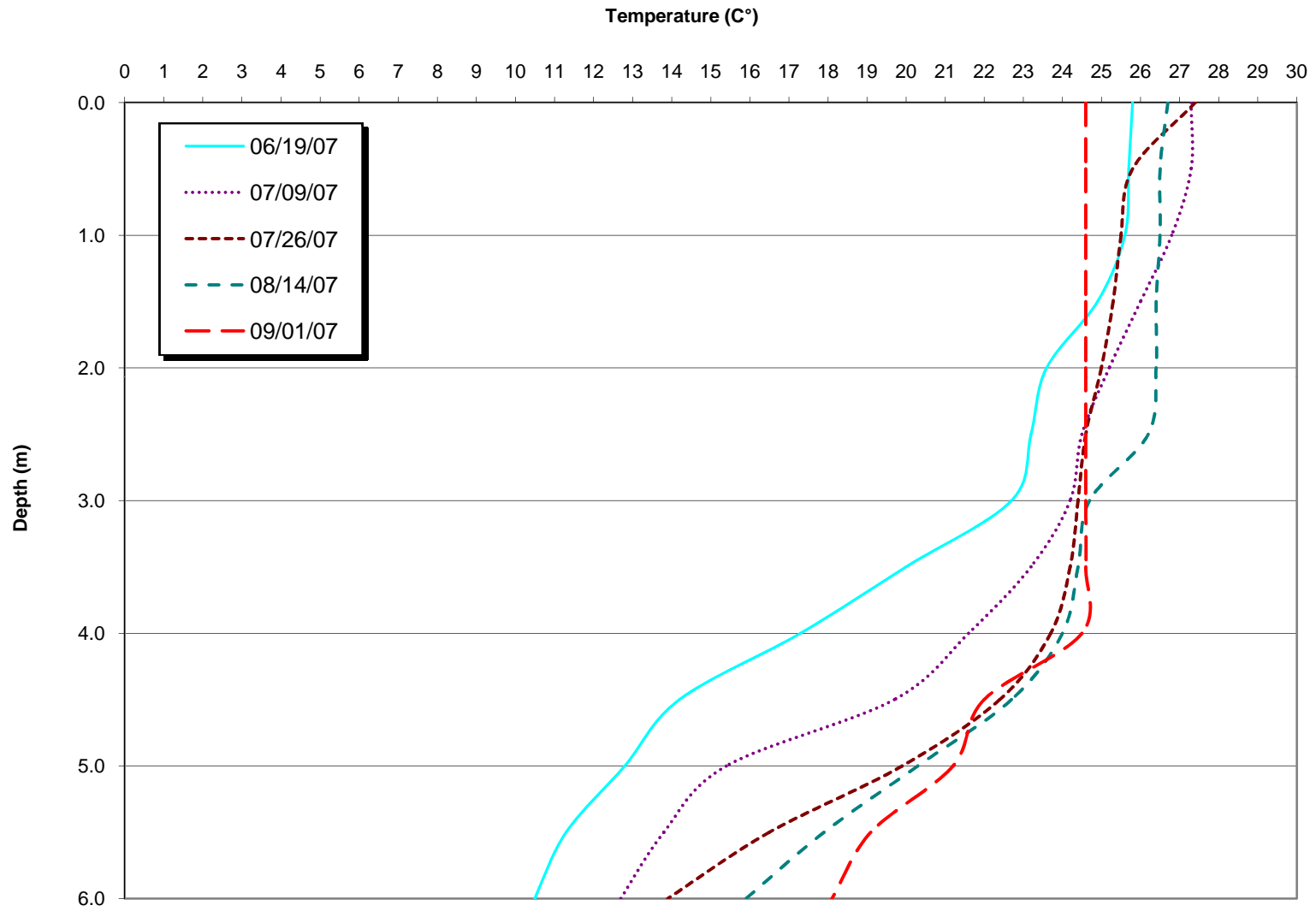
Blank = Sampling not scheduled for this site on this date

**Dissolved Oxygen is reported in both mg/l and as a percent of saturation (The % saturation is the maximum concentration of dissolved oxygen that can be present given a specific temperature)**

While there are no regulatory guidelines for dissolved oxygen, fish, invertebrates, plants, and aerobic bacteria all require oxygen for respiration. Much of the dissolved oxygen in water comes from the atmosphere. After dissolving at the surface, oxygen is distributed by current and turbulence. Algae and rooted aquatic plants also deliver oxygen to water through photosynthesis. However, when the algae and plants die off in late summer, the large decaying bio-mass becomes the driving force contributing to decreased dissolved oxygen levels. This decay coupled with higher metabolic rates of aquatic animals, and fewer oxygen producing plants can cause major shifts in the kinds of aquatic organisms found in water bodies.

Specifically for Byram Lake, in addition to giving a general picture of lake conditions, dissolved oxygen and temperature profiles are very useful in determining which of the two intakes (4m or 8m) to draw from.

# 2007 Tonetta Lake Temperature Profiles





**2007 - Tonetta Lake Secchi Disk Transparency (m) For TL-1**

(TL-1 is ~170 yards from the Private beach & ~80 yards from the public beach)

<b>2007</b>	<b>Julian Day</b>	170	190	207	226	244
	<b>Date</b>	06/19/07	07/09/07	07/26/07	08/14/07	09/01/07
	<b>Meters</b>	3.30	5.25	4.65	2.95	3.20
<b>2008</b>	<b>Julian Day</b>					
	<b>Date</b>					
	<b>Meters</b>					
<b>2009</b>	<b>Julian Day</b>					
	<b>Date</b>					
	<b>Meters</b>					
<b>2010</b>	<b>Julian Day</b>					
	<b>Date</b>					
	<b>Meters</b>					
<b>2011</b>	<b>Julian Day</b>					
	<b>Date</b>					
	<b>Meters</b>					

**The Secchi disk is used to measure water clarity by quantifying the depth of visibility (measured in meters (m))**

There are no Secchi disk standards, and readings from one lake should not be compared to another. The most valuable information from Secchi disk data are the temporal changes. Secchi disk readings which show a significant decrease during the summer season can signal a pending algal bloom.

Secchi disk measurements are inexpensive (no lab fees) and easily obtained, yet they provide a very useful "snapshot" of the algal conditions within the lake. In Tonetta Lake, as Secchi disk readings decline, microscopic sampling increases to determine which, if any, algal populations are rising.

**2007 - Tonetta Lake Algal Data (Qualitative Analysis)**

Date	Location	Notes
7/26/2007	Lake Surface	Masses of decaying Blue Green algae found floating and suspended throughout lake. Microscopic analysis suggests a species of Oscillatoria, a filamentous blue-green algae found in thick benthic mats. Will begin to float when enough oxygen builds up within the filaments.

**While some Algal samples are quantitatively measured in ASU/ml or Aerial Surface Units/ml. the above samples are considered only qualitatively.**

In either case the results are most meaningful if an historical data set for the specific body of water is available for reference and comparison. Additionally, meteorological parameters play a large role in algal fluctuations as do limnologic (in lake) conditions. While all conditions and history should be considered before determinations can be made on the use of algaecides, this data used in conjunction with Secchi disk measurements create an excellent guidance tool.

**2007 - Tonetta Lake and Watershed Ammonia as N (Reported in mg/L)**

Sample Type Weather	Grab	Grab				
	Dry	Wet	Ammonia as N (mg/L)			
	09/10/07	09/11/07				
250 SD	NW	0.28				
218 SD	<0.2	<0.2				
210 SD	NW	ND				
182 SD	<0.2	<0.2				
75 TLW	NW	<0.2				
OUTLET						
Lake Top	<0.2					
Lake Mid	<0.2					
Lake Bot	2.24					

NW = No water, therefore no sample collected

ND = No data available

Blank = Sampling not scheduled for this site on this date

Detection limit for Ammonia = 0.2 mg/L.

<0.2 = less than detection limit

LE = Lab Error

**Ammonia is measured in parts per million which is expressed in volumetric terms as milligrams per liter (mg/L).**

Ammonia occurs as a breakdown product of nitrogenous materials in natural waters. Its presence could be indicative of contamination from domestic effluent or industrial waste water. In addition, Ammonia can be harmful to fish and other forms of aquatic life. Ammonia analysis is routinely used in the monitoring of drinking water supplies.

The EPA does not publish a Maximum Contaminant Level (MCL) for Ammonia. Measurements less than 1.00 mg/l are generally considered acceptable in drinking water supplies.

**2007 - Tonetta Lake and Watershed Nitrate as N (Reported in mg/L)**

Sample Type Weather	Grab	Grab				
	Dry	Wet	Nitrate as N (mg/L)			
	09/10/07	09/11/07				
250 SD	NW	1.60				
218 SD	4.50	1.80				
210 SD	NW	ND				
182 SD	1.90	1.30				
75 TLW	NW	0.60				
OUTLET						
Lake Top	<0.5					
Lake Mid	<0.5					
Lake Bot	<0.5					

NW = No water, therefore no sample collected

ND = No data available

Blank = Sampling not scheduled for this site on this date

Detection limit for Nitrate = 0.5 mg/L.

<0.5 = less than detection limit

LE = Lab Error

**Nitrate is measured in parts per million which is expressed in volumetric terms as milligrams per liter (mg/L).**

The EPA MCL for nitrate is set at 10 parts per million (ppm) or 10 mg/l. Nitrates are very soluble and do not bind to soils and therefore have a high potential to migrate to ground water. Because they do not evaporate, nitrates are likely to remain in water until consumed by plants or other organisms.

Most nitrogenous materials in natural waters tend to be converted to nitrate, so all sources of combined nitrogen, particularly organic nitrogen and ammonia, should be considered as potential nitrate sources. Primary sources of organic nitrates include human sewage and animal waste. The primary inorganic nitrates found in drinking water are potassium nitrate and ammonium nitrate both of which are widely used as fertilizers.

**2007 - Tonetta Lake Kjeldahl Nitrogen as N (Reported in mg/L)**

Sample Type Weather	Grab	Grab				
	Dry	Wet	Kjeldahl Nitrogen as N (mg/L)			
	09/10/07	09/11/07				
250 SD	NW	1.12				
218 SD	0.28	0.56				
210 SD	NW	ND				
182 SD	0.28	0.28				
75 TLW	NW	1.68				
OUTLET						
Lake Top	0.28					
Lake Mid	0.56					
Lake Bot	5.88					

NW = No water, therefore no sample collected

ND = No data available

Blank = Sampling not scheduled for this site on this date

Detection limit for Kjeldahl Nitrogen = 0.2 mg/L.

<0.2 = less than detection limit

LE = Lab Error

**Kjeldahl Nitrogen is measured in parts per million which is expressed in volumetric terms as milligrams per liter (mg/L).**

The EPA MCL for nitrate is set at 10 parts per million (ppm) or 10 mg/l. Nitrates are very soluble and do not bind to soils and therefore have a high potential to migrate to ground water. Because they do not evaporate, nitrates are likely to remain in water until consumed by plants or other organisms.

Most nitrogenous materials in natural waters tend to be converted to nitrate, so all sources of combined nitrogen, particularly organic nitrogen and ammonia, should be considered as potential nitrate sources. Primary sources of organic nitrates include human sewage and animal waste. The primary inorganic nitrates found in drinking water are potassium nitrate and ammonium nitrate both of which are widely used as fertilizers.

## 2007 - Tonetta Lake and Watershed Total Phosphorus (ug/L)

Sample Type Weather	Grab	Grab				
	Dry	Wet	Total Phosphorus (ug/L)			
	09/10/07	09/11/07				
250 SD	NW	221.40				
218 SD	272.90	274.10				
210 SD	NW	ND				
182 SD	154.10	97.60				
75 TLW	NW	401.70				
OUTLET						
Lake Top	23.4					
Lake Mid	25.3					
Lake Bot	633.8					

NW = No water, therefore no sample collected

ND = No data available

Blank = Sampling not scheduled for this site on this date

Detection limit for Total Phosphorus = 0.6 ug/L.

<0.6 = less than detection limit

**Total Phosphorus is measured in parts per billion and is expressed volumetrically as micrograms per liter (ug/L).**

Phosphorus is an essential nutrient for the growth of aquatic plants and it is only needed in very small quantities relative to nitrogen. Additionally, Phosphorus is typically the limiting element to growth. For this reason even a slight phosphorus enrichment can trigger an algal bloom. Total phosphorus (TP) can be used as an indicator of trophic state. In lake phosphorus levels below 10ug/l are considered oligotrophic. Concentrations in excess of 25-30ug/l are considered eutrophic and usually associated with algal blooms and other related problems.

Typically, the total phosphorus content of a water body must be reduced below 10 ppb to significantly improve water clarity.

**2007 - Tonetta Lake and Watershed Total Dissolved Phosphorus (ug/L)**

Sample Type Weather	Grab	Grab			
	Dry	Wet	Total Dissolved Phosphorus (ug/L)		
	09/10/07	09/11/07			
250 SD	NW	181.00			
218 SD	257.90	206.10			
210 SD	NW	ND			
182 SD	119.50	54.10			
75 TLW	NW	259.80			
OUTLET					
Lake Top	4.8				
Lake Mid	5.5				
Lake Bot	11.1				

NW = No water, therefore no sample collected

ND = No data available

Blank = Sampling not scheduled for this site on this date

Detection limit for Total Dissolved Phosphorus = 0.6 ug/L.

<0.6 = less than detection limit

**Total Dissolved Phosphorus is measured in parts per billion and is expressed volumetrically as micrograms per liter (ug/L).**

Total dissolved phosphorus is the measure of only the dissolved fraction. The particulate fraction is removed through filtration. Phosphorus is an essential nutrient for the growth of aquatic plants and it is only needed in very small quantities relative to nitrogen. Additionally, Phosphorus is typically the limiting element to growth. For this reason even a slight phosphorus enrichment can trigger an algal bloom.

Typically, the total phosphorus content of a water body must be reduced below 10 ppb to significantly improve water clarity.

**2007 - Tonetta Lake - ZOOPLANKTON BIOMASS (UG/L)**

**Quantitative Results**

TAXON	09/10/07	11/02/07
<b>PROTOZOA</b>		
Ciliophora	0.0	0.0
Mastigophora	0.0	0.0
Sarcodina	0.0	0.0
<b>ROTIFERA</b>		
<i>Asplanchna</i>	13.6	0.8
<i>Conochilus</i>	0.5	0.1
<i>Keratella</i>	2.8	0.5
<i>Lecane</i>	0.0	0.5
<i>Polyarthra</i>	1.2	1.6
<i>Ptygura</i>	0.0	0.0
<i>Synchaeta</i>	0.0	3.2
<i>Trichocerca</i>	0.3	0.0
<b>COPEPODA</b>		
<b>Copepoda-Cyclopoida</b>		
<i>Cyclops</i>	12.4	1.0
<i>Mesocyclops</i>	8.5	0.5
<b>Copepoda-Calanoida</b>		
<i>Diaptomus</i>	0.0	0.0
<b>Copepoda-Harpacticoida</b>	0.0	0.0
<b>Other Copepoda-Adults</b>	0.0	0.0
<b>Other Copepoda-Copepodites</b>	0.0	0.0
<b>Other Copepoda-Nauplii</b>	22.5	19.1
<b>CLADOCERA</b>		
<i>Bosmina</i>	1.7	0.8
<i>Ceriodaphnia</i>	4.4	0.0
<i>Chydorus</i>	0.0	0.4
<b>OTHER ZOOPLANKTON</b>		
Bryozoa	0.0	0.0
Chaoboridae	0.0	0.0
Chironomidae	0.0	0.0
Coelentarata	0.0	0.0
Culicidae	0.0	0.0
Eubranchiopoda	0.0	0.0
Gastrotrichia	0.0	0.0
Hydracarina	0.0	0.0
Mysidacea	0.0	0.0
Nematoda	0.0	0.0
Ostracoda	0.0	0.0

**SUMMARY STATISTICS**

TAXON	09/10/07	11/02/07
<b>DENSITY</b>		
PROTOZOA	0.0	0.0
ROTIFERA	18.4	6.8
COPEPODA	43.5	20.6
CLADOCERA	6.1	1.2
OTHER ZOOPLANKTON	0.0	0.0
<b>TOTAL ZOOPLANKTON</b>	<b>67.9</b>	<b>28.6</b>



2007 - Tonetta Lake - ZOOPLANKTON DENSITY (#/L)

Quantitative Results

TAXON	09/10/07	11/02/07
<b>PROTOZOA</b>		
<i>Ciliophora</i>	0.0	0.0
<i>Mastigophora</i>	0.0	0.0
<i>Sarcodina</i>	0.0	0.0
<b>ROTIFERA</b>		
<i>Asplanchna</i>	6.8	0.4
<i>Conochilus</i>	13.6	3.6
<i>Keratella</i>	30.6	5.6
<i>Lecane</i>	0.0	6.0
<i>Polyarthra</i>	13.6	17.6
<i>Ptygura</i>	0.0	0.0
<i>Synchaeta</i>	0.0	81.2
<i>Trichocerca</i>	6.8	0.0
<b>COPEPODA</b>		
<b>Copepoda-Cyclopoida</b>		
<i>Cyclops</i>	5.1	0.4
<i>Mesocyclops</i>	6.8	0.4
<b>Copepoda-Calanoida</b>		
<i>Diaptomus</i>	0.0	0.0
<b>Copepoda-Harpacticoida</b>	0.0	0.0
<b>Other Copepoda-Adults</b>	0.0	0.0
<b>Other Copepoda-Copepodites</b>	0.0	0.0
<b>Other Copepoda-Nauplii</b>	8.5	7.2
<b>CLADOCERA</b>		
<i>Bosmina</i>	1.7	0.8
<i>Ceriodaphnia</i>	1.7	0.0
<i>Chydorus</i>	0.0	0.4
<b>OTHER ZOOPLANKTON</b>		
<b>Bryozoa</b>	0.0	0.0
<b>Chaoboridae</b>	0.0	0.0
<b>Chironomidae</b>	0.0	0.0
<b>Coelenterata</b>	0.0	0.0
<b>Culicidae</b>	0.0	0.0
<b>Eubranchiopoda</b>	0.0	0.0
<b>Gastrotrichia</b>	0.0	0.0
<b>Hydracarina</b>	0.0	0.0
<b>Mysidacea</b>	0.0	0.0
<b>Nematoda</b>	0.0	0.0
<b>Ostracoda</b>	0.0	0.0

SUMMARY STATISTICS

TAXON	09/10/07	11/02/07
<b>DENSITY</b>		
<b>PROTOZOA</b>	0.0	0.0
<b>ROTIFERA</b>	71.4	114.4
<b>COPEPODA</b>	20.4	8.0
<b>CLADOCERA</b>	3.4	1.2
<b>OTHER ZOOPLANKTON</b>	0.0	0.0
<b>TOTAL ZOOPLANKTON</b>	95.2	123.6
<b>TAXONOMIC RICHNESS</b>		
<b>PROTOZOA</b>	0	0
<b>ROTIFERA</b>	5	6
<b>COPEPODA</b>	3	3
<b>CLADOCERA</b>	2	2
<b>OTHER ZOOPLANKTON</b>	0	0
<b>TOTAL ZOOPLANKTON</b>	10	11
<b>S-W DIVERSITY INDEX</b>	0.87	0.53
<b>EVENNESS INDEX</b>	0.87	0.51
<b>MEAN LENGTH (mm): ALL FORMS</b>	0.22	0.12
<b>MEAN LENGTH: CRUSTACEANS</b>	0.46	0.33

**2007 - Tonetta Lake - Southeast Beach: Fecal Coliform Results (F. Coliform / 100ml)**

Sample Type	Grab	Grab	Grab	Grab	Grab	Grab
Fecal Coliform (F. Coliform /100ml)						
	06/08/07	07/05/07	07/27/07	07/30/07	08/01/07	08/03/07
Right Side	70	70	450	660	4200	1150
Left Side	ND	ND	460	950	2360	310

According to Section 6-2.15 of the New York State Sanitary Code, Fecal Coliform levels must be < 1000 / 100ml , for single sample results.

ND = No data available