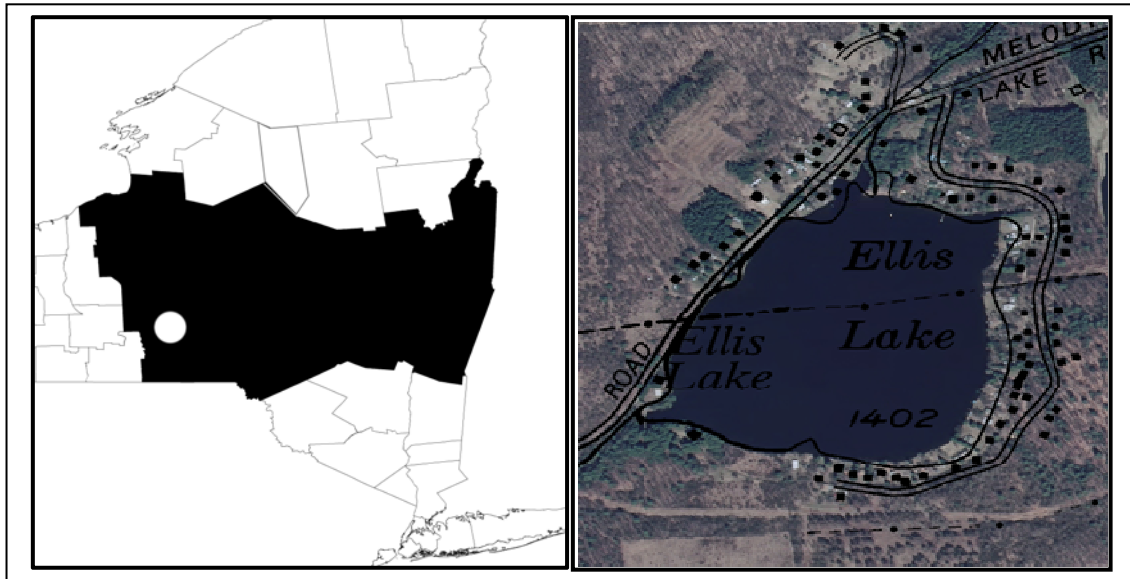


## CSLAP 2010 Lake Water Quality Summary: Melody Lake

### General Lake Information

<b>Location</b>	Town of Willet
<b>County</b>	Cortland
<b>Basin</b>	Susquehanna River
<b>Size</b>	15.5 hectares (38.3 acres)
<b>Lake Origins</b>	Augmented by Dam
<b>Watershed Area</b>	500 hectares (1,235 acres)
<b>Retention Time</b>	0.2 years
<b>Mean Depth</b>	2.1 meters
<b>Sounding Depth</b>	4.7 meters
<b>Public Access?</b>	no
<b>Major Tributaries</b>	no named tribs
<b>Lake Tributary To...</b>	Turner Brook to Willet Creek to Otselic River to Tioughnioga River to Susquehanna River
<b>WQ Classification</b>	C (non-contact recreation = boating, angling)
<b>Lake Outlet Latitude</b>	42.469
<b>Lake Outlet Longitude</b>	-75.878
<b>Sampling Years</b>	1987-1991, 1994, 1997-2010
<b>2010 Samplers</b>	Bob and Carol Rosati
<b>Main Contact</b>	Bob Rosati

### Lake Map



## Background

Melody Lake is a 38 acre, class C lake found in the Town of Willet in Cortland County, in central New York State. The lake was first sampled as part of CSLAP in 1987.

It is one of two CSLAP lakes among the more than 15 lakes found in Cortland County, and one of 24 CSLAP lakes among the more than 120 lakes and ponds in the Susquehanna River drainage basin.

## Lake Uses

Melody Lake is a Class C lake; this means that the best intended use for the lake is for non-contact recreation, including fishing and boating, aquatic life, and aesthetics. The lake is used by lake residents for swimming, low power boating and other recreation via shoreline properties; the public does not have access to the lake.

It is not known whether Melody Lake has been stocked through any state fisheries stocking programs, or if any private stocking has occurred.

General statewide fishing regulations are applicable in Melody Lake.

## Historical Water Quality Data

CSLAP sampling was conducted on Melody Lake from 1987 to 1991, 1994, and 1997 to 2009. The CSLAP reports for Melody Lake will be posted on the NYSFOLA website at [www.nysfola.org](http://www.nysfola.org), under NYS Lake Association Lake List.

Melody Lake was not sampled as part of any of the major New York State water quality monitoring programs. It is not known if the lake was sampled in support of any fisheries management or other lake management activities conducted by state or local government.

There are no RIBS monitoring sites on or near Melody Lake, and none of the unnamed tributaries or the outlet (Turner Brook) has been sampled through any statewide monitoring programs.

## Lake Association and Management History

Melody Lake is served by the Melody Lake Association, which serves 85 families. Although the lake was formed in the late 1800s, the lake association was formed in 1962. The lake association developed a lake management plan and State of the Lake report as part of the NYSFOLA small lake management program in 2002. Some of the lake management actions conducted by the lake association and supported as part of the plan include:

- Grass carp stocking to reduce the impacts from nuisance weeds
- Requiring buffer zones at shoreline of all association-owned property
- Installing sediment controls at inlet
- Setting up routine septic maintenance (inspection and pumpout) program
- Discouraging dumping compost in ditches
- Evaluating use of lake drawdown
- Public education within the lake residential community and local schools

The Melody Lake Association maintains a website at <http://www.stny.info/melodylake/>.

## Summary of 2010 CSLAP Sampling Results

### Evaluation of Eutrophication Indicators

Secchi disk transparency, chlorophyll *a* and total phosphorus readings were close to normal in 2010, and none of these trophic indicators has exhibited any clear long-term trends. The lake can be characterized as *eutrophic*, or highly productive, based on water clarity, total phosphorus, and chlorophyll *a* readings (all indicative of *eutrophic* lakes). The trophic state indices (TSI) evaluation suggests that each of these trophic indicators is “internally consistent”—each of these indicators is in the expected range given the readings of the other indicators. Phycocyanin readings were below the levels indicating susceptibility for harmful algal blooms (HABs) in 2009, but above these levels in 2010. An analysis of algae samples in 2009 indicated microcystin levels in an October algal bloom, but not the open water, to be above the levels needed to support safe swimming. Overall trophic conditions are summarized on the Lake Scorecard and Lake Condition Summary Table.

### Evaluation of Potable Water Indicators

Algae levels are sufficiently high to render the lake susceptible to taste and odor compounds or elevated DBP (disinfection by product) compounds that could affect the potability of the water, but the lake is not used for drinking water. Hypolimnetic phosphorus and ammonia readings are similar to those measured at the lake surface, perhaps as expected given the weak thermal stratification in the lake. Potable water conditions, at least as measurable through CSLAP, are summarized in the Lake Scorecard and Lake Condition Summary Table.

### Evaluation of Limnological Indicators

Ammonia, total nitrogen, pH and conductivity readings were higher than normal in 2010. However, none of these limnological indicators has exhibited any clear long-term trends, and it is likely that the small changes in each of the limnological indicators have been within the normal range of variability in the lake. Overall limnological conditions are summarized in the Lake Scorecard and Lake Condition Summary Table.

### Evaluation of Biological Condition

Macrophyte surveys conducted through CSLAP and the recent DEC biomonitoring study showed a small number of aquatic plants, and at least two exotic plant species (*Myriophyllum spicatum*, Eurasian watermilfoil; and *Lythrum salicaria*, purple loosestrife) have been found in the lake. The modified floristic quality index (FQI) data indicate that the quality of the aquatic plant community is “fair,” although it is not known if the aquatic plant population has changed significantly since the grass carp stocking. The composition of the fish community in the lake has not been reported.

Melody Lake was among 12 New York state lakes sampled as part of the lake biomonitoring study in 2009. The results from the study are not yet available. Phytoplankton and zooplankton surveys have not been conducted through CSLAP at Melody Lake.

Biological conditions in the lake are summarized in the Lake Scorecard and Lake Condition Summary Table.

## Evaluation of Lake Perception

Aquatic plant coverage was less extensive than normal in the last few years, and has decreased over the last twenty years. This is in response to the grass carp stocking. However, recreational and water quality assessments in 2010 were close to normal, and have not exhibited any clear long-term changes. Overall lake perception is summarized on the Lake Scorecard and Lake Condition Summary Table.

## Evaluation of Local Climate Change

Air and water temperature readings in the summer index period were close to normal in 2010, and water temperature readings have increased slightly over the last twenty years. It is not known if this is an indication of local climate change or represents normal variability.

## Lake Condition Summary

Category	Indicator	Min	87-10 Avg	Max	2010 Avg	Classification	2010 Change?	Long-term Change?
Eutrophication Indicators	Water Clarity	0.65	1.99	3.50	1.98	Eutrophic	Within Normal Range	No Change
	Chlorophyll <i>a</i>	0.40	12.23	106.00	13.09	Eutrophic	Within Normal Range	No Change
	Total Phosphorus	0.004	0.021	0.069	0.026	Eutrophic	Within Normal Range	No Change
Potable Water Indicators	Hypolimnetic NH <sub>4</sub>	0.01	0.06	0.20	0.10	Close to Surface NH <sub>4</sub> Readings	Higher than Normal	Not known
	Hypolimnetic As							
	Hypolimnetic Iron							
	Hypolimnetic Mn							
Limnological Indicators	Hypolimnetic TP	0.014	0.026	0.048	0.026	Close to Surface TP Readings	Within Normal Range	Not known
	Nitrate + Nitrite	0.00	0.02	0.37	0.04	Low NO <sub>x</sub>	Within Normal Range	No Change
	Ammonia	0.00	0.04	0.27	0.11	Low Ammonia	Higher than Normal	No Change
	Total Nitrogen	0.10	0.53	1.01	0.68	Intermediate Total Nitrogen	Higher than Normal	No Change
	pH	6.32	7.44	8.78	7.72	Circumneutral	Higher than Normal	No Change
	Specific Conductance	38	81	195	97	Softwater	Higher than Normal	No Change
	True Color	2	24	76	28	Intermediate Color	Within Normal Range	No Change
	Calcium	6.8	9.0	12.3	10.8	Not Susceptible to Zebra Mussels	Within Normal Range	No Change
Lake Perception	WQ Assessment	1	2.1	4	2.0	Not Quite Crystal Clear	Within Normal Range	No Change
	Plant Coverage	1	2.0	4	1.0	Subsurface Plant Growth	Less Extensive Than Normal	Highly Improving
	Rec. Assessment	1	2.3	5	2.3	Excellent	Within Normal Range	No Change
Biological Condition	Phytoplankton					Not measured through CSLAP	Not known	Not known
	Macrophytes					Fair quality of aquatic plant community	Not known	Not known
	Zooplankton					Not measured through CSLAP	Not known	Not known
	Macroinvertebrates					2009 data not yet analyzed	Not known	Not known
	Fish					Not reported	Not known	Not known
	Invasive Species					Eurasian watermilfoil, purple loosestrife	Not known	Not known
Local Climate Change	Air Temperature	3	22.1	34	21.1		Within Normal Range	No Change
	Water Temperature	9	22.5	28	22.3		Within Normal Range	Increasing Slightly

## **Evaluation of Lake Condition Impacts to Lake Uses**

The 2008 NYSDEC Priority Waterbody Listings (PWL) for the Susquehanna River drainage basin indicated that *recreation* is *stressed* in Melody Lake due to excessive algae and weeds. The PWL listing for Melody Lake is listed in Appendix B.

### **Potable Water (Drinking Water)**

The CSLAP dataset at Melody Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, is inadequate to evaluate the use of the lake for potable water, and the lake is not used for this purpose.

### **Contact Recreation (Swimming)**

The CSLAP dataset at Melody Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggests that swimming and contact recreation may be *stressed* by excessive algae, poor water clarity, and the potential for harmful algal blooms, although additional information about bacterial levels is needed to evaluate the safety of the water for swimming. Contact recreational conditions in 2010 may have been more typical of *impaired* lakes.

### **Non-Contact Recreation (Boating and Fishing)**

The CSLAP dataset on Melody Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that non-contact recreation was *threatened* by excessive weeds (Eurasian watermilfoil), although these impacts have been substantially reduced in response to the grass carp stocking.

### **Aquatic Life**

The CSLAP dataset on Melody Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that aquatic life may be *threatened* by the presence of Eurasian watermilfoil, although additional data are needed to evaluate the food and habitat conditions for aquatic organisms in the lake.

### **Aesthetics**

The CSLAP dataset on Melody Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that aesthetics may be *threatened* by algal blooms.

### **Fish Consumption**

There are no fish consumption advisories posted for Melody Lake.

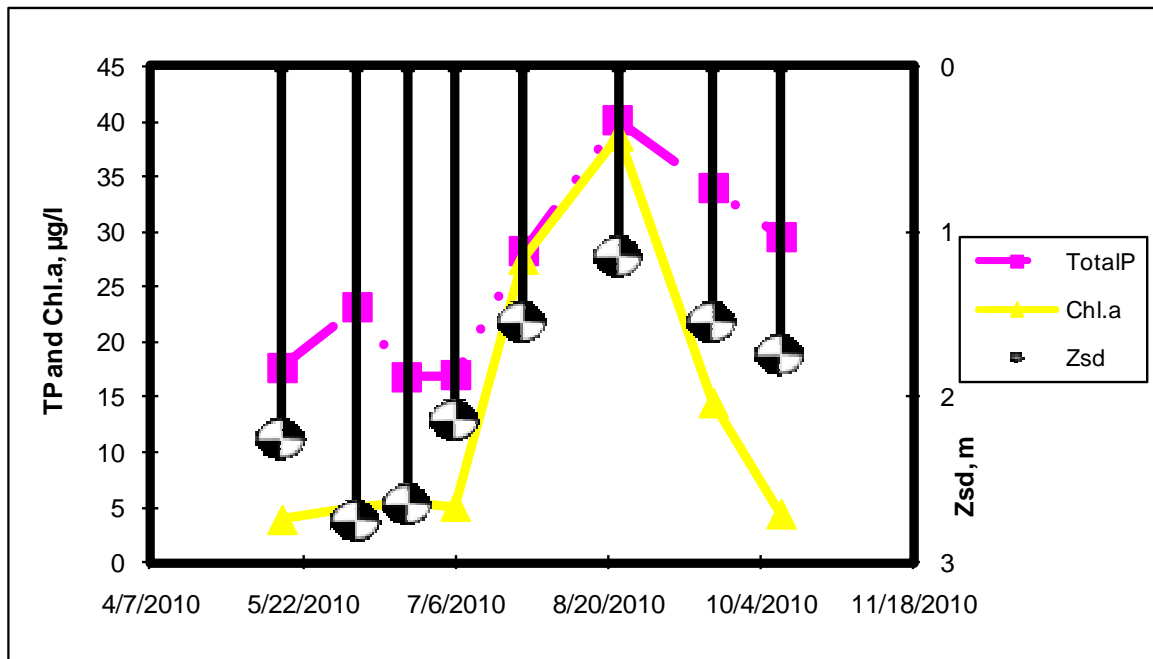
## **Additional Comments and Recommendations**

The continued evaluation of the 2009 lake biomonitoring survey results and the floristic quality index will help to determine if aquatic life in the lake has been compromised by excessive nutrients or other stressors.

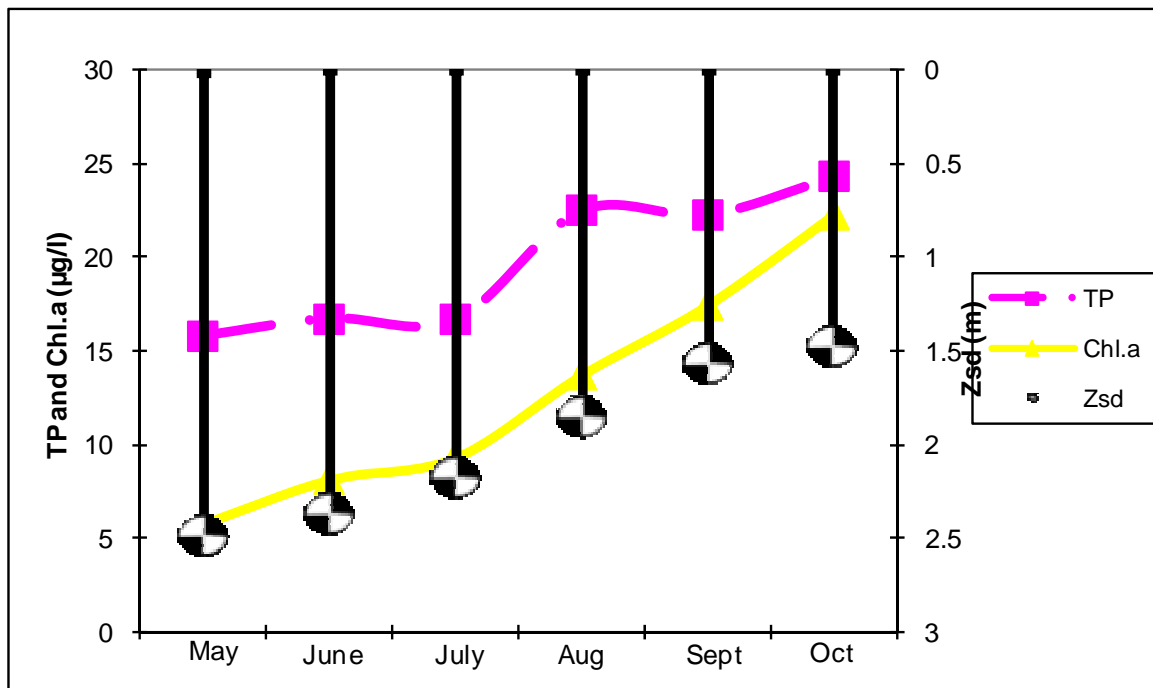
### **Aquatic Plant IDs-2010**

None submitted for identification.

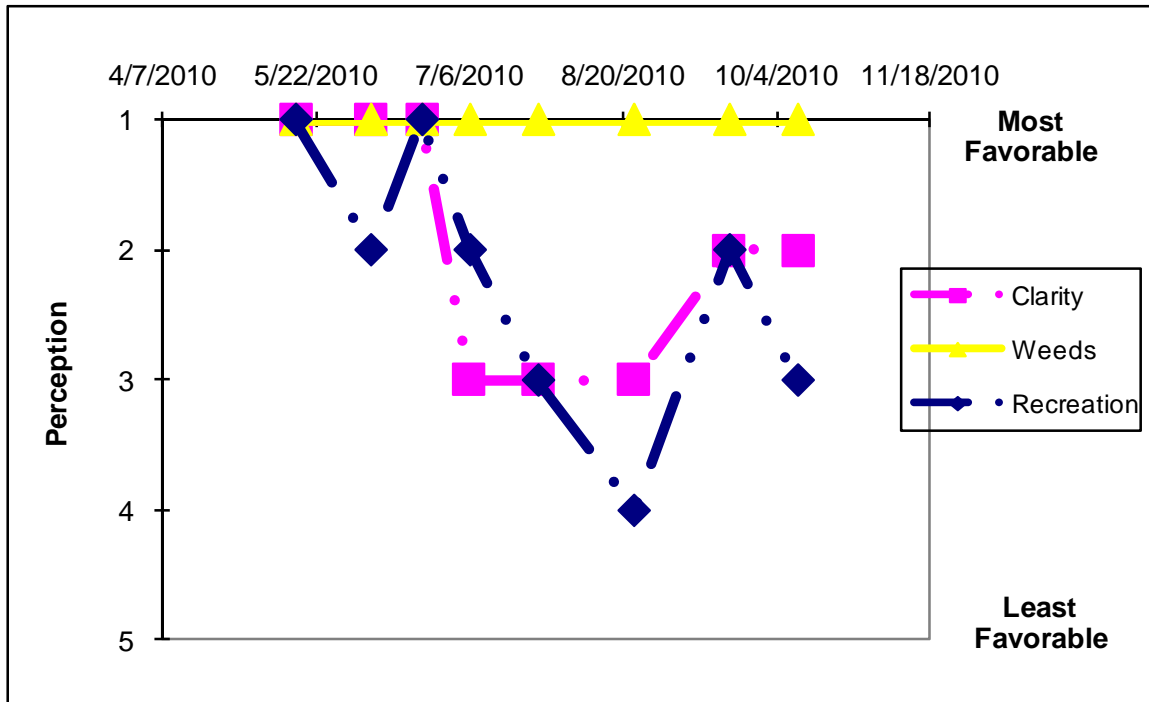
### Time Series: Trophic Indicators, 2010



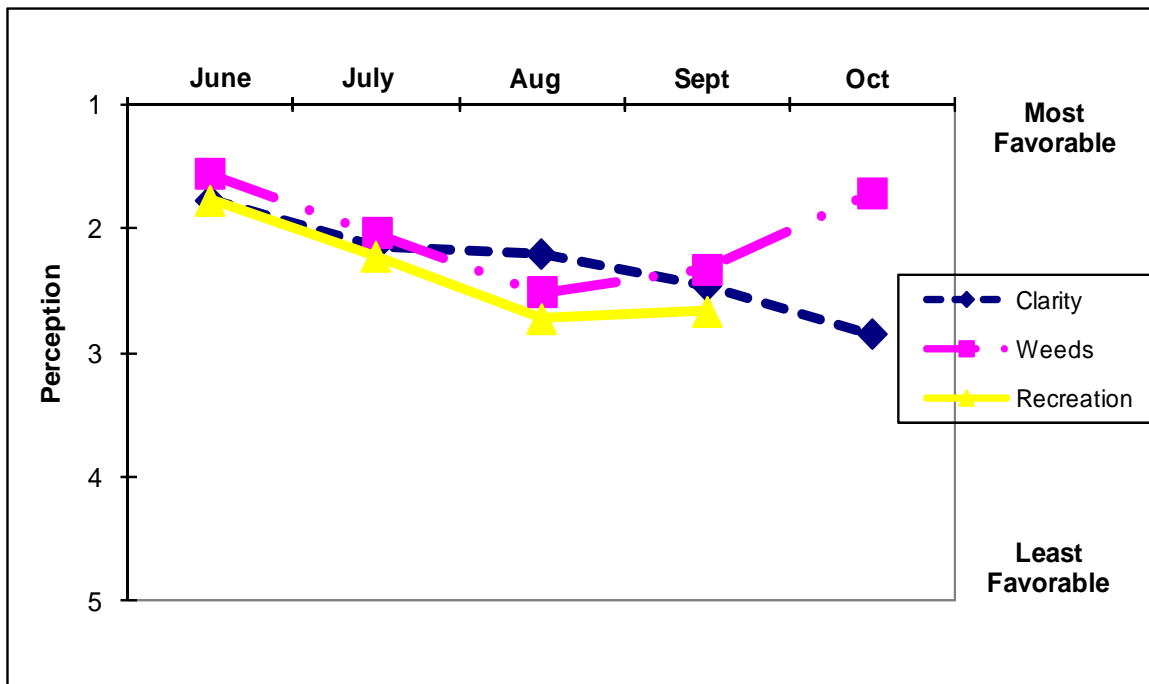
### Time Series: Trophic Indicators, Typical Year (1987-2010)



## Time Series: Lake Perception Indicators, 2010



## Time Series: Lake Perception Indicators, Typical Year (1987-2010)



## Appendix A- CSLAP Water Quality Sampling Results for Melody Lake

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a
31	Melody L	6/12/1987	3.0	1.50	1.5	0.023	0.01				22	7.75	62		17.70
31	Melody L	6/21/1987	2.5	1.30	1.5	0.034	0.01				23	7.32	71		15.30
31	Melody L	6/28/1987	2.5	1.30	1.5	0.039	0.01				24	6.70	77		34.00
31	Melody L	7/5/1987	2.5	1.50	1.5	0.044	0.01				23	6.80	76		
31	Melody L	7/12/1987	2.5	1.35	1.5	0.029	0.01				21	6.92	77		23.70
31	Melody L	7/19/1987	2.5	1.05	1.5	0.015	0.01				23	6.92	76		27.40
31	Melody L	7/26/1987	2.5	1.35	1.5	0.030	0.01				26	7.25	77		18.60
31	Melody L	8/3/1987	2.5	1.00	1.5	0.039	0.01				23	6.97	74		32.60
31	Melody L	8/9/1987	2.8	1.35	1.5	0.040	0.01				23	6.98	76		25.90
31	Melody L	8/16/1987	2.5	0.75	1.5	0.069	0.01				23				106.00
31	Melody L	8/23/1987	2.5	0.65	1.5	0.048	0.01				24	6.89	74		
31	Melody L	8/30/1987	2.5	0.95	1.5	0.044	0.01				20	7.24	71		
31	Melody L	9/13/1987	2.8	1.20	1.5	0.036	0.02					7.19	76		
31	Melody L	9/20/1987	2.9	1.00	1.5	0.031	0.02					6.79	82		
31	Melody L	9/27/1987	3.3	1.20	1.5	0.016	0.01					6.89	82		
31	Melody L	10/4/1987	3.5	1.60	1.5	0.027	0.01					7.24	81		0.40
31	Melody L	6/17/1988	4.5	2.88	1.5	0.020	0.01				19	7.70	94		5.18
31	Melody L	6/26/1988	4.0	2.00	1.5	0.016					18	7.58	88		8.73
31	Melody L	7/3/1988	3.0	1.35	1.5	0.019					16	7.60	98		12.00
31	Melody L	7/10/1988	4.3	2.35	1.5	0.014					15	7.83	93		4.29
31	Melody L	7/17/1988	4.5	3.10	1.5	0.017	0.01				15	7.61	89		5.55
31	Melody L	7/24/1988	4.5	3.00	1.5	0.016					16	7.79	91		6.29
31	Melody L	7/29/1988	4.5	2.75	1.5	0.014	0.01				15				6.44
31	Melody L	8/7/1988	4.5	2.00	1.5	0.013	0.03				16	8.24	87		15.60
31	Melody L	8/14/1988	2.3	2.30	1.5	0.016					10	7.41	87		10.40
31	Melody L	8/21/1988	2.5	2.55	1.5	0.020					22	7.74	97		8.26
31	Melody L	8/28/1988	4.5	1.45	1.5	0.025	0.01				18	7.60	97		16.30
31	Melody L	9/4/1988	4.5	1.35	1.5	0.025	0.01				15	7.58	94		15.50
31	Melody L	9/11/1988	4.5	1.40	1.5	0.022	0.01				14	7.07	95		15.50
31	Melody L	9/18/1988	4.5	1.60	1.5	0.021	0.01				12	7.54	95		14.20
31	Melody L	9/25/1988	4.5	2.00	1.5	0.020	0.01				14	7.90	100		13.40
31	Melody L	7/2/1989	4.5	2.60	1.5	0.017					26	6.88	83		8.50
31	Melody L	7/9/1989	4.5	2.45	1.5	0.015					22	7.47	82		7.79
31	Melody L	7/16/1989	4.5	2.25	1.5	0.016					25	7.21	80		6.16
31	Melody L	7/23/1989	4.5	1.80	1.5	0.018					25	7.39	81		7.98
31	Melody L	7/26/1989			1.5	0.021	0.01				23	7.29	84		6.73
31	Melody L	7/30/1989	4.3	1.65	1.5	0.024	0.01				17	7.71	85		7.03
31	Melody L	8/5/1989	4.3	1.25	1.5	0.018					17	7.54	85		9.75
31	Melody L	8/13/1989	4.3	1.35	1.5	0.017					20	7.58	86		11.30
31	Melody L	8/20/1989	4.5	1.30	1.5	0.029					15	7.85	86		14.20
31	Melody L	8/27/1989	4.5	1.35	1.5	0.018	0.01				15	7.77	89		11.60
31	Melody L	9/4/1989	4.5	0.90	1.5	0.022					17	7.45	89		19.20
31	Melody L	9/10/1989	4.3	1.00	1.5	0.022					17	7.66	89		22.20
31	Melody L	9/17/1989	4.4	1.05	1.5	0.019					17	7.59	90		15.90
31	Melody L	9/24/1989	4.5	1.05	1.5	0.026	0.03				22	7.51	91		18.40
31	Melody L	7/8/1990	4.5	1.70	1.5	0.017	0.01				15	7.39	82		12.90
31	Melody L	7/15/1990	4.5	1.50	1.5	0.017					18	6.99	82		8.32
31	Melody L	7/29/1990	4.5	1.55	1.5	0.012	0.01				15	7.93	83		5.78
31	Melody L	8/12/1990	4.5	1.35	1.5	0.015					13	7.85	84		11.20
31	Melody L	8/26/1990	4.5	1.90	1.5	0.021	0.01				14	6.61	38		32.50
31	Melody L	9/9/1990	4.5	1.25	1.5	0.016					16	7.49	52		12.70
31	Melody L	9/23/1990	4.5	1.30	1.5	0.019	0.01				15	7.42	86		22.60
31	Melody L	6/16/1991	4.5	1.70	1.5	0.016	0.01				24	6.99	75		12.60
31	Melody L	6/30/1991	4.5	1.95	1.5	0.013					17	7.75	77		7.03
31	Melody L	7/14/1991	4.2	1.55	1.5	0.021	0.01				13	7.13	79		9.58
31	Melody L	7/28/1991	4.2	1.20	1.5	0.014					15	7.61	79		17.20
31	Melody L	8/11/1991	4.2	0.95	1.5	0.020					17	7.42	81		22.70
31	Melody L	8/25/1991	4.2	1.35	1.5	0.014	0.01				15	7.44	83		9.95
31	Melody L	9/15/1991	4.3	1.40	1.5	0.021					12	7.75	85		29.00
31	Melody L	9/22/1991	4.3	1.30	1.5	0.022	0.01				6	7.66	86		26.20
31	Melody L	6/18/1994	4.3	2.95											
31	Melody L	7/3/1994	4.3	2.50											
31	Melody L	7/18/1994	4.3	2.80											

LN	LNNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a
	31	Melody L	7/31/1994	4.3	2.80											
	31	Melody L	8/14/1994	4.3	2.80											
	31	Melody L	8/28/1994	4.3	2.60											
	31	Melody L	6/1/1997	4.8	2.35	1.5	0.018	0.04				20	7.06	77		12.40
	31	Melody L	6/15/1997	4.2	3.05	1.5	0.011	0.01				15	7.46	78		4.14
	31	Melody L	6/29/1997	4.4	3.00	1.5	0.010	0.01				15	7.62	81		4.14
	31	Melody L	7/13/1997		2.33	1.5	0.024	0.01				15	6.84	84		5.73
	31	Melody L	7/27/1997	4.3	2.65		0.014	0.01				15	6.43	89		7.14
	31	Melody L	8/10/1997	4.2	2.53	1.5	0.011	0.01				14	7.71	87		5.94
	31	Melody L	8/24/1997	4.2	1.65	1.5	0.016	0.01				12	7.56	87		14.40
	31	Melody L	9/8/1997	4.1	1.95	1.5	0.017	0.01				15	7.69	88		9.98
	31	Melody L	5/30/1998	4.2	2.38	1.5	0.010	0.01				16	7.70	76		1.58
	31	Melody L	6/15/1998	4.3	2.73	1.5	0.020	0.01				19	7.74	74		8.59
	31	Melody L	6/28/1998	4.3	2.05	1.5		0.01				14	7.74	77		5.65
	31	Melody L	7/12/1998	4.4	1.90	1.5		0.01				25	7.68	74		6.27
	31	Melody L	7/26/1998	4.3	2.35	1.5		0.01				24	7.58	77		4.41
	31	Melody L	8/8/1998	4.3	2.30	1.5		0.01				24	7.60	78		4.14
	31	Melody L	8/23/1998	4.3	2.10	1.5						25	7.40	79		6.60
	31	Melody L	9/7/1998	4.2	1.80	1.5	0.018					24	7.47	82		20.30
	31	Melody L	5/31/1999	4.5	2.88	1.5	0.015	0.01				16	7.43	87		4.98
	31	Melody L	6/13/1999	4.4	2.60	1.5	0.013	0.01				16	6.61	88		4.32
	31	Melody L	6/29/1999	4.3	3.20	1.5	0.014	0.01				11	7.63	88		3.20
	31	Melody L	7/11/1999	4.5	2.30	1.5	0.016	0.01				17	6.77	89		17.50
	31	Melody L	7/26/1999	4.4	2.48	1.5	0.014	0.01				12	8.43	88		7.15
	31	Melody L	8/7/1999	4.3	1.60	1.5	0.022	0.01				2	7.61	93		4.03
	31	Melody L	8/22/1999	4.2	1.90	1.5	0.019	0.01				18	8.00	95		12.60
	31	Melody L	9/5/1999	4.2	2.15	1.5	0.014	0.01				17	7.82	96		5.85
	31	Melody L	5/29/2000	4.1	1.90	1.5	0.018	0.01				35	7.41	69		4.45
	31	Melody L	6/12/2000	4.0	1.90	1.5	0.016	0.01				31	7.80	70		5.65
	31	Melody L	6/25/2000	4.0	1.90	1.5	0.014	0.01				37	7.94	74		5.40
	31	Melody L	7/10/2000	4.3	2.00	1.5	0.015	0.01				37	7.77	77		9.95
	31	Melody L	7/23/2000	4.0	1.90	1.5	0.021	0.01				34	6.64	75		18.40
	31	Melody L	8/7/2000	4.0	2.20	1.5	0.017	0.01				33	7.02	79		8.35
	31	Melody L	8/20/2000	3.9	1.90	1.5	0.017	0.01				34	7.40	80		7.50
	31	Melody L	9/9/2000	4.1	2.30	1.5	0.021	0.01				30	6.66	84		7.30
	31	Melody L	6/12/2001	4.2	2.55	1.5	0.014	0.01				17	7.36			7.30
	31	Melody L	6/24/2001	4.2	1.60	1.5	0.028	0.37				30	6.83	72		14.10
	31	Melody L	7/9/2001	3.9	2.10	1.5	0.017	0.20				26	7.07	76		17.60
	31	Melody L	7/23/2001	3.9	2.10	1.5	0.015	0.07				22	7.43	77		7.50
	31	Melody L	8/6/2001	3.9	2.90	1.5	0.011	0.01				17	6.64	78		3.15
	31	Melody L	8/25/2001	3.6	1.90	1.5	0.014	0.01				27	7.18	82		
	31	Melody L	9/9/2001	3.5	2.30	1.5	0.016	0.01				37	7.51	84		9.12
	31	Melody L	9/23/2001	3.5	2.40	1.5	0.020	0.01				26	6.44	84		10.28
	31	Melody L	05/21/02	4.1	2.00	1.5	0.020	0.01	0.02	0.55	59.56	42	7.19	82		14.84
	31	Melody L	06/03/02	3.8	2.30	1.5	0.010	0.00	0.03	0.56	127.08	28	7.72	84		4.93
	31	Melody L	06/16/02	4.1	1.70	1.5	0.031	0.05	0.02	0.62	45.05	47	7.11	71		8.01
	31	Melody L	07/02/02	4.6	2.60		0.019	0.00	0.03	0.48	55.91	52	7.63	73		8.28
	31	Melody L	07/13/02	4.3	3.20	1.5	0.015	0.01	0.04	0.49	71.13	39	7.30	78		2.43
	31	Melody L	07/29/02	4.3	3.50	1.5	0.006	0.00	0.04	0.65	242.77	24	7.57	78		0.51
	31	Melody L	08/12/02	4.1	3.05	1.5	0.016	0.00	0.02	0.55	74.48	30	7.69	84		2.19
	31	Melody L	08/25/02	4.0	2.90	1.5	0.013			0.57	94.57	41	7.38	85		0.95
	31	Melody L	5/27/2003	4.1	2.90	1.5	0.009	0.02	0.03	0.68	164.64	17	7.5	77.0	7.6	6.0
	31	Melody L	6/8/2003	4.1	3.10	1.5	0.011	0.00	0.02	0.31	60.98	5	7.0	195.0		3.5
	31	Melody L	6/22/2003	4.5	3.00	1.5	0.009	0.00	0.00	0.43	99.15	13	7.4	78.9		10.4
	31	Melody L	7/6/2003	4.0	2.80	1.5		0.01	0.02	0.30		16	7.5	84.5		
	31	Melody L	7/20/2003	4.0	3.00	1.5	0.015	0.00	0.03	0.47	69.32	22	7.7	88.8	8.6	6.4
	31	Melody L	8/3/2003	4.0	2.50	1.5	0.013	0.00		0.27	43.93	25	6.8	84.4		7.1
	31	Melody L	8/17/2003	4.0	3.00	1.5	0.012	0.00	0.01	0.34	61.67	24	7.5	83.1		6.1
	31	Melody L	9/6/2003	4.2	2.70	1.5	0.017	0.02	0.06			37	7.1	91.3		9.8
	31	Melody L	6/15/2004	4.4	2.40	1.5	0.004	0.01	0.01	0.50	307.82	32	7.1	79.2		0.6
	31	Melody L	6/29/2004	4.3	2.40	1.5	0.016	0.01	0.02	0.27	36.00	30	6.8	87.2		2.9
	31	Melody L	7/13/2004	4.0	2.30	1.5	0.015	0.01	0.01	0.11	15.28	24	6.9	83.2		3.1
	31	Melody L	8/2/2004	4.4	2.30	1.5	0.021	0.01	0.01	0.51	52.51	26	6.8	69.3		6.1
	31	Melody L	8/16/2004	4.3	2.30	1.5	0.017	0.01	0.06	0.45	56.82	49	7.4	71	9.7	9.2
	31	Melody L	8/31/2004	4.3	1.80	1.5	0.023	0.01	0.01	0.63	59.23	50	7.4	68.5		24.5
	31	Melody L	9/21/2004	4.1	1.70	1.5	0.028	0.04	0.13	0.65	51.95	68	7.2	63.8		16.4

LN	PN	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a
31	Melody L	10/24/2004	2.9	1.60	1.5	0.027	0.01	0.04	0.40	33.05	57	7	52.9		
31	Melody L	7/9/2005	3.6	1.70	1.5	0.014	0.04	0.01	0.36	54.32	9	8.39	61	7.6	12.7
31	Melody L	7/18/2005	3.3	1.90	1.5	0.018	0.03	0.01	0.41	50.04	23	7.20	68		8.4
31	Melody L	8/9/2005	2.3	1.30	1.5	0.033	0.02	0.01	0.31	20.44	12	7.36	78		11.1
31	Melody L	8/29/2005	2.4	1.30	1.5	0.063	0.01	0.01	0.42	14.57	42	6.81	67		11.4
31	Melody L	9/9/2005	2.3	1.70	1.5	0.028	0.03	0.01	0.26	20.33	33	7.03	74	8.7	12.0
31	Melody L	9/20/2005	2.4	1.20	1.5	0.036	0.02	0.01	0.10	5.87	23	8.08	114		13.6
31	Melody L	10/9/2005	2.7	1.10	1.5	0.009	0.03	0.04	0.38	89.04	20	7.09	42		27.6
31	Melody L	10/23/05	3.4	1.30	1.5	0.032	0.01	0.01	0.27	18.63	32	7.27	81		26.8
31	Melody L	5/30/2006	4.4	2.90	1.5	0.022	0.02	0.03	0.44	44.08	26	7.5	87	7.4	2.72
31	Melody L	6/13/2006	4.2	3.20	1.5	0.020	0.06	0.08	0.63	69.92	21	7.1	80		4.43
31	Melody L	6/25/2006	4.3	2.60	1.5	0.015	0.03	0.02	0.74	106.32	25	7.3			4.92
31	Melody L	7/10/2006	4.2	2.30	1.5	0.016	0.01	0.01	0.56	78.99	41	8.1	68		3.81
31	Melody L	7/23/2006	4.3	2.20	1.5	0.019	0.01	0.02	0.77	90.54	46	8.1	58	7.6	7.55
31	Melody L	8/7/2006	4.2	2.30	1.5	0.016	0.02	0.03	0.83	113.53	39	8.4	73		3.55
31	Melody L	8/20/2006	4.2	2.20	1.5	0.020	0.01	0.02	1.01	113.55	29	7.2	72		7.02
31	Melody L	9/4/2006	4.2	1.60	1.5	0.021			0.63	66.09	62	6.9	63		5.20
31	Melody L	7/7/2007	4.1	2.20	1.5	0.019	0.01	0.02	0.49	57.38	9	8.37	74	11.9	8.71
31	Melody L	8/7/2007	3.8	1.80	1.5	0.019	0.01	0.01	0.66	77.48	12	8.78	71		13.98
31	Melody L	8/26/2007	3.9	2.00	1.5	0.018	0.01	0.05	0.76	91.67	26	8.38	80		9.17
31	Melody L	9/4/2007	3.9	1.90	1.5	0.015	0.01	0.02	0.75	113.93	23	7.32	72		7.89
31	Melody L	9/11/2007	4.1	1.90	1.5	0.019	0.05	0.04	0.75	86.87	25	7.44	79	9.8	16.08
31	Melody L	10/2/2007	3.9	1.90	1.5	0.022	0.01	0.18	0.80	79.98	16	7.73	85		15.68
31	Melody L	10/9/2007	4.0	1.80	1.5	0.026	0.02	0.09	0.74	61.36	13	7.99	88		16.22
31	Melody L	10/18/2007	4.8	1.30	1.5	0.022	0.03	0.09	0.80	80.11	14	7.83	89		12.50
31	Melody L	6/9/2008	4.1	2.80	1.5	0.015	0.01	0.02	0.67	97.04	12	7.30	77	6.8	5.51
31	Melody L	6/29/2008	3.9	2.80	1.5	0.014	0.00	0.03	0.34	53.65	9	7.68	83		4.33
31	Melody L	7/11/2008	3.8	2.40	1.5	0.019	0.02	0.02	0.29	33.44	13	8.32	72		8.40
31	Melody L	7/26/2008	3.8	1.75	1.5	0.015			0.71	106.14	15	8.06	51		10.36
31	Melody L	8/12/2008	4.2	1.45	1.5	0.023	0.07	0.08	0.50	48.01	20	7.76	86	9.1	17.29
31	Melody L	8/24/2008	3.7	1.95	1.5	0.023	0.00	0.02			16	7.53	76		9.56
31	Melody L	9/5/2008	3.8	1.70	1.5	0.019	0.00	0.01	0.50	57.36	13	8.40	85		23.20
31	Melody L	9/20/2008	3.6	1.35	1.5	0.030	0.01	0.10	0.59	42.69	11	8.11	71		45.28
31	Melody L	06/17/2009	4.1	2.25	1.5	0.021	0.01	0.01	0.44	46.16	46	8.11	69	8.5	13.16
31	Melody L	06/29/2009	3.8	2.35	1.5	0.017	0.01	0.01	0.33	43.87	29	6.87	80		4.94
31	Melody L	07/21/2009	3.8	2.35	1.5	0.017	0.02	0.03	0.38	49.89	30	6.77	125		5.34
31	Melody L	08/11/2009	4.3	0.90	1.5	0.038	0.06	0.08	0.50	29.12	76	6.32	54		8.50
31	Melody L	08/21/2009	4.0	2.05	1.5	0.026	0.01	0.06	0.49	42.04	52	7.76	54	9.6	8.30
31	Melody L	09/11/2009	3.8	1.45	1.5	0.024	0.01	0.02	0.65	58.82	73	7.09	56		31.30
31	Melody L	09/24/2009	3.8	1.33	1.5	0.030	0.03	0.07	0.70	51.46	57	7.92	65		36.70
31	Melody L	10/19/2009	4.0	1.25	1.5	0.029	0.03	0.01	0.56	42.19	68	7.21	73		56.40
31	Melody L	5/16/2010	3.8	2.25	1.5	0.018	0.07	0.04			30	8.10	93	9.2	3.90
31	Melody L	6/7/2010	4.2	2.75	1.5	0.023	0.02	0.03			18	8.01	95		5.10
31	Melody L	6/22/2010	4.2	2.65	1.5	0.017	0.01	0.03	0.62	80.67	31	7.75	94		5.50
31	Melody L	7/6/2010	4.2	2.15	1.5	0.017	0.01	0.27	0.42	54.93	44	7.92	93		5.10
31	Melody L	7/26/2010	4.0	1.55	1.5	0.028	0.01	0.03	0.75	58.59	19	8.22	96	12.3	27.50
31	Melody L	8/23/2010	4.1	1.15	1.5	0.040	0.03	0.11	0.81	44.16	14	7.50	104		38.70
31	Melody L	9/20/2010	3.8	1.55	1.5	0.034	0.10	0.21	0.76	49.13	19	7.48	105		14.50
31	Melody L	10/10/2010	4.4	1.75	1.5	0.030	0.09	0.18	0.75	55.67	47	6.76	93		4.40
31	Melody L	06/17/2009			3.0	0.018		0.01							
31	Melody L	06/29/2009			3.0	0.014		0.01							
31	Melody L	07/21/2009			3.0	0.021		0.02							
31	Melody L	08/11/2009			3.0	0.048		0.01							
31	Melody L	08/21/2009			3.0	0.034		0.07							
31	Melody L	09/11/2009			3.0	0.023		0.02							
31	Melody L	09/24/2009			3.0	0.023		0.01							
31	Melody L	10/19/2009			3.0	0.028		0.01							
31	Melody L	5/16/2010	3.8			0.019		0.20							
31	Melody L	6/7/2010	4.2			0.029		0.04							
31	Melody L	6/22/2010	4.2			0.023		0.02							
31	Melody L	7/6/2010	4.2			0.023		0.02							
31	Melody L	7/26/2010	4.0			0.025		0.03							
31	Melody L	8/23/2010	4.1			0.036		0.15							
31	Melody L	9/20/2010	3.8			0.027		0.16							
31	Melody L	10/10/2010	4.4			0.029		0.19							
31.1	Melody L-trib	06/08/03				0.022									

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a
31.1	Melody L-trib	07/06/03				0.029									
31.1	Melody L-trib	6/28/2004				0.038									
31.1	Melody L-trib	7/13/2004				0.038									
31.1	Melody L-trib	8/2/2004				0.029									
31.1	Melody L-trib	8/16/2004				0.024									
31.1	Melody L-trib	7/9/05				0.040									
31.1	Melody L-trib	8/30/05				0.028									
31.1	Melody L-trib	9/20/05				0.035									

LNum	PName	Date	Zbot	Site	TAir	TH20	QA	QB	QC	QD
31	Melody L	6/12/1987	3.0	epi	17	19				
31	Melody L	6/21/1987	2.5	epi	22	24				
31	Melody L	6/28/1987	2.5	epi	18	22				
31	Melody L	7/5/1987	2.5	epi	21	23				
31	Melody L	7/12/1987	2.5	epi	26	25				
31	Melody L	7/19/1987	2.5	epi	28	24				
31	Melody L	7/26/1987	2.5	epi	20	25				
31	Melody L	8/3/1987	2.5	epi	22	24				
31	Melody L	8/9/1987	2.8	epi	17	23				
31	Melody L	8/16/1987	2.5	epi	25	22				
31	Melody L	8/23/1987	2.5	epi	15	21				
31	Melody L	8/30/1987	2.5	epi	13	17				
31	Melody L	9/13/1987	2.8	epi	17	20				
31	Melody L	9/20/1987	2.9	epi	11	15				
31	Melody L	9/27/1987	3.3	epi	11	14				
31	Melody L	10/4/1987	3.5	epi	3	11				
31	Melody L	6/17/1988	4.5	epi	24	22				
31	Melody L	6/26/1988	4.0	epi	15	23				
31	Melody L	7/3/1988	3.0	epi	24	18				
31	Melody L	7/10/1988	4.3	epi	28	26				
31	Melody L	7/17/1988	4.5	epi	26	25				
31	Melody L	7/24/1988	4.5	epi	24	24				
31	Melody L	7/29/1988	4.5	epi	30	25				
31	Melody L	8/7/1988	4.5	epi	22	26				
31	Melody L	8/14/1988	2.3	epi	30	26				
31	Melody L	8/21/1988	2.5	epi	20	24				
31	Melody L	8/28/1988	4.5	epi	25	23				
31	Melody L	9/4/1988	4.5	epi	16	19				
31	Melody L	9/11/1988	4.5	epi	15	19				
31	Melody L	9/18/1988	4.5	epi	20	17				
31	Melody L	9/25/1988	4.5	epi	15	16				
31	Melody L	7/2/1989	4.5	epi	34	23				
31	Melody L	7/9/1989	4.5	epi	32	25				
31	Melody L	7/16/1989	4.5	epi	20	23				
31	Melody L	7/23/1989	4.5	epi	22	25				
31	Melody L	7/26/1989		epi						
31	Melody L	7/30/1989	4.3	epi	22	23				
31	Melody L	8/5/1989	4.3	epi	26	24				
31	Melody L	8/13/1989	4.3	epi	23	21				
31	Melody L	8/20/1989	4.5	epi	19	22				
31	Melody L	8/27/1989	4.5	epi	21	23				
31	Melody L	9/4/1989	4.5	epi	14	20				
31	Melody L	9/10/1989	4.3	epi	25	21				
31	Melody L	9/17/1989	4.4	epi	18	16				
31	Melody L	9/24/1989	4.5	epi	7	15				
31	Melody L	7/8/1990	4.5	epi	21	22				
31	Melody L	7/15/1990	4.5	epi	25	22				
31	Melody L	7/29/1990	4.5	epi	28	27				
31	Melody L	8/12/1990	4.5	epi	22	23				
31	Melody L	8/26/1990	4.5	epi	19	21				
31	Melody L	9/9/1990	4.5	epi	15	20				
31	Melody L	9/23/1990	4.5	epi	11	15				

LNum	PName	Date	Zbot	epi	TAir	TH20	QA	QB	QC	QD
31	Melody L	6/16/1991	4.5	epi	24	22				
31	Melody L	6/30/1991	4.5	epi	22	25				
31	Melody L	7/14/1991	4.2	epi	22	27				
31	Melody L	7/28/1991	4.2	epi	30	25				
31	Melody L	8/11/1991	4.2	epi	21	21				
31	Melody L	8/25/1991	4.2	epi	23	24				
31	Melody L	9/15/1991	4.3	epi	20	20				
31	Melody L	9/22/1991	4.3	epi	12	17				
31	Melody L	6/18/1994	4.3	epi			2	3	3	2
31	Melody L	7/3/1994	4.3	epi			3	3	3	2
31	Melody L	7/18/1994	4.3	epi			3	3	3	2
31	Melody L	7/31/1994	4.3	epi			3	3	3	3
31	Melody L	8/14/1994	4.3	epi			3	3	3	3
31	Melody L	8/28/1994	4.3	epi			3	3	3	3
31	Melody L	6/1/1997	4.8	epi	19	18	1	1	2	5
31	Melody L	6/15/1997	4.2	epi	25	25		2	2	1
31	Melody L	6/29/1997	4.4	epi	29	27	2	2	1	
31	Melody L	7/13/1997		epi	32	26	2	1	2	
31	Melody L	7/27/1997	4.3	epi	29	26	2	3	2	
31	Melody L	8/10/1997	4.2	epi	29	26	2	3	3	2
31	Melody L	8/24/1997	4.2	epi	23	22	2	3	3	2
31	Melody L	9/8/1997	4.1	epi	18	21	2	4	4	2
31	Melody L	5/30/1998	4.2	epi	25	25	2	2	2	25
31	Melody L	6/15/1998	4.3	epi	19	20	1	1	1	
31	Melody L	6/28/1998	4.3	epi	32	27	2	1	2	5
31	Melody L	7/12/1998	4.4	epi	21	24	2	2	2	
31	Melody L	7/26/1998	4.3	epi	25	25	2	2	2	2
31	Melody L	8/8/1998	4.3	epi	27	26	2	3	3	2
31	Melody L	8/23/1998	4.3	epi	28	25	2	3	3	2
31	Melody L	9/7/1998	4.2	epi	17	23	2	3	3	25
31	Melody L	5/31/1999	4.5	epi	32	23	2	2	2	
31	Melody L	6/13/1999	4.4	epi	27	24	2	2		25
31	Melody L	6/29/1999	4.3	epi	29	26	2	2	2	
31	Melody L	7/11/1999	4.5	epi	22	25	2	1	1	
31	Melody L	7/26/1999	4.4	epi	27	27	1	2	2	
31	Melody L	8/7/1999	4.3	epi	27	25	2	3	2	2
31	Melody L	8/22/1999	4.2	epi	26	23	2	3	2	
31	Melody L	9/5/1999	4.2	epi	27	26	2	3	2	
31	Melody L	5/29/2000	4.1	epi	20	18	2	2	2	
31	Melody L	6/12/2000	4.0	epi	22	23	2	2	2	
31	Melody L	6/25/2000	4.0	epi	32	25	2	2	2	2
31	Melody L	7/10/2000	4.3	epi	25	23	2	3	3	2
31	Melody L	7/23/2000	4.0	epi	25	21	2	2	2	2
31	Melody L	8/7/2000	4.0	epi	31	24	2	2	3	2
31	Melody L	8/20/2000	3.9	epi	19	22	2	3	2	5
31	Melody L	9/9/2000	4.1	epi	25	22	3	3	2	
31	Melody L	6/12/2001	4.2	epi	25	23	2	1	2	
31	Melody L	6/24/2001	4.2	epi	26	21	3	1	3	1
31	Melody L	7/9/2001	3.9	epi	25	23	2	1	1	
31	Melody L	7/23/2001	3.9	epi	28	27	2	2	2	
31	Melody L	8/6/2001	3.9	epi		28	2	3	3	2
31	Melody L	8/25/2001	3.6	epi	29	25	2	3	2	2
31	Melody L	9/9/2001	3.5	epi	26	24	2	3	3	2
31	Melody L	9/23/2001	3.5	epi	23	21	2	3	3	2
31	Melody L	05/21/02	4.1	epi	16	12	2	1		5
31	Melody L	06/03/02	3.8	epi	20	21	2	2	2	5
31	Melody L	06/16/02	4.1	epi	18	19	3	3	2	12
31	Melody L	07/02/02	4.6	epi	28	25	3	3	3	28
31	Melody L	07/13/02	4.3	epi	28	25	2	4	3	2
31	Melody L	07/29/02	4.3	epi	28	26	2	3	3	2
31	Melody L	08/12/02	4.1	epi	29	26	1	3	3	2
31	Melody L	08/25/02	4.0	epi	26	25	2	3	3	2

LNum	PName	Date	Zbot	epi	TAir	TH20	QA	QB	QC	QD
31	Melody L	5/27/2003	4.1	epi	16	19	1	1	1	
31	Melody L	6/8/2003	4.1	epi	22	20	1	1	1	5
31	Melody L	6/22/2003	4.5	epi	21	20	2	1	2	58
31	Melody L	7/6/2003	4.0	epi	25	28	2	2	2	8
31	Melody L	7/20/2003	4.0	epi	21	24	2	2	2	2
31	Melody L	8/3/2003	4.0	epi	29	25	2	3	3	2
31	Melody L	8/17/2003	4.0	epi	20	25	2	4	4	2
31	Melody L	9/6/2003	4.2	epi	18	21				
31	Melody L	6/15/2004	4.4	epi	26	24	1	1	1	0
31	Melody L	6/29/2004	4.3	epi	18	22	2	2	2	0
31	Melody L	7/13/2004	4.0	epi	21	24	2	2	2	0
31	Melody L	8/2/2004	4.4	epi	23	24	2	3	3	2
31	Melody L	8/16/2004	4.3	epi	19	22	2	3	3	2
31	Melody L	8/31/2004	4.3	epi	22	23	3	3	3	25
31	Melody L	9/21/2004	4.1	epi	17	19	3	3	3	2
31	Melody L	10/24/2004	2.9	epi	10	10	3	3		28
31	Melody L	7/9/2005	3.6	epi	20	24	3	1	3	58
31	Melody L	7/18/2005	3.3	epi	30	27	3	2	3	18
31	Melody L	8/9/2005	2.3	epi	23	27	2	2	3	18
31	Melody L	8/29/2005	2.4	epi	25	24	3	2	4	148
31	Melody L	9/9/2005	2.3	epi	22	23	3	2	4	148
31	Melody L	9/20/2005	2.4	epi	24	23	3	2	4	48
31	Melody L	10/9/2005	2.7	epi	14	16	3	2	4	158
31	Melody L	10/23/05	3.4	epi	8	12	2	1	2	5
31	Melody L	5/30/2006	4.4	epi	21	20	1	1	1	0
31	Melody L	6/13/2006	4.2	epi	16	18	2	2	2	0
31	Melody L	6/25/2006	4.3	epi	21	26				
31	Melody L	7/10/2006	4.2	epi	27	25	1	2	2	5
31	Melody L	7/23/2006	4.3	epi	23	26	2	2	2	5
31	Melody L	8/7/2006	4.2	epi	28	28	3	2	2	8
31	Melody L	8/20/2006	4.2	epi	27	25	2	2	2	2
31	Melody L	9/4/2006	4.2	epi	17	20				
31	Melody L	7/7/2007	4.1	epi	26	25	2	1	2	0
31	Melody L	8/7/2007	3.8	epi	26	27	3	2	3	138
31	Melody L	8/26/2007	3.9	epi	20	25	2	2	2	5
31	Melody L	9/4/2007	3.9	epi	24	25	2	2	2	0
31	Melody L	9/11/2007	4.1	epi	22	24	2	2	2	58
31	Melody L	10/2/2007	3.9	epi	18	20	2	2	2	0
31	Melody L	10/9/2007	4.0	epi	23	22	3	2	3	35
31	Melody L	10/18/2007	4.8	epi	20	18	4	1	4	134
31	Melody L	6/9/2008	4.1	epi	30	25	1	1	2	0
31	Melody L	6/29/2008	3.9	epi	23	25	2	1	1	8
31	Melody L	7/11/2008	3.8	epi	20	25	2	1	2	8
31	Melody L	7/26/2008	3.8	epi	22	26	2	1	1	8
31	Melody L	8/12/2008	4.2	epi	21	24	2	1	1	8
31	Melody L	8/24/2008	3.7	epi	27	25	2	1	2	0
31	Melody L	9/5/2008	3.8	epi	27	25	3	2	2	3
31	Melody L	9/20/2008	3.6	epi	23	20	3	1	2	0
31	Melody L	06/17/2009	4.1	epi	16	23	1	1	1	0
31	Melody L	06/29/2009	3.8	epi	20	24	1	1	1	0
31	Melody L	07/21/2009	3.8	epi	19	23	2	1	2	6
31	Melody L	08/11/2009	4.3	epi	20	23	3	1	5	14568
31	Melody L	08/21/2009	4.0	epi	24	26	2	1	1	0
31	Melody L	09/11/2009	3.8	epi	18	20	3	1	2	5
31	Melody L	09/24/2009	3.8	epi	17	20	2	1	2	0
31	Melody L	10/19/2009	4.0	epi	8	9	3	1	2	8
31	Melody L	5/16/2010	3.8	epi	19	18	1	1	1	0
31	Melody L	6/7/2010	4.2	epi	22	23	1	1	2	5
31	Melody L	6/22/2010	4.2	epi	23	25	1	1	1	5
31	Melody L	7/6/2010	4.2	epi	28	27	3	1	2	0
31	Melody L	7/26/2010	4.0	epi	23	27	3	1	3	1
31	Melody L	8/23/2010	4.1	epi	20	24	3	1	4	158

LNum	PName	Date	Zbot	Site	TAir	TH20	QA	QB	QC	QD
31	Melody L	9/20/2010	3.8	epi	17	19	2	1	2	5
31	Melody L	10/10/2010	4.4	epi	17	15	2	1	3	5
31	Melody L	06/17/2009		hypo		20				
31	Melody L	06/29/2009		hypo		22				
31	Melody L	07/21/2009		hypo		22				
31	Melody L	08/11/2009		hypo		21				
31	Melody L	08/21/2009		hypo		24				
31	Melody L	09/11/2009		hypo		19				
31	Melody L	09/24/2009		hypo		19				
31	Melody L	10/19/2009		hypo		9				

## Legend Information

<i>Indicator</i>	<i>Description</i>	<i>Detection Limit</i>	<i>Standard (S) / Criteria (C)</i>
<b>General Information</b>			
<b>Lnum</b>	lake number (unique to CSLAP)		
<b>Lname</b>	name of lake (as it appears in the Gazetteer of NYS Lakes)		
<b>Date</b>	sampling date		
<b>Field Parameters</b>			
<b>Zbot</b>	lake depth at sampling point, meters (m)		
<b>Zsd</b>	Secchi disk transparency or clarity	0.1m	1.2m ( C)
<b>Zsamp</b>	water sample depth (m)	0.1m	none
<b>Tair</b>	air temperature ( C)	-10C	none
<b>TH20</b>	water temperature ( C)	-10C	none
<b>Laboratory Parameters</b>			
<b>Tot.P</b>	total phosphorus (mg/l)	0.003 mg/l	0.020 mg/l ( C)
<b>NOx</b>	nitrate + nitrite (mg/l)	0.01 mg/l	10 mg/l NO3 (S), 2 mg/l NO2 (S)
<b>NH4</b>	total ammonia (mg/l)	0.01 mg/l	2 mg/l NH4 (S)
<b>TN</b>	total nitrogen (mg/l)	0.01 mg/l	none
<b>TN/TP</b>	nitrogen to phosphorus (molar) ratio, = (TKN + NOx)*2.2/TP		none
<b>TCOLOR</b>	true (filtered) color (ptu, platinum color units)	1 ptu	none
<b>pH</b>	powers of hydrogen (S.U., standard pH units)	0.1 S.U.	6.5, 8.5 S.U. (S)
<b>Cond25</b>	specific conductance, corrected to 25C (umho/cm)	1 umho/cm	none
<b>Ca</b>	calcium (mg/l)	1 mg/l	none
<b>Chl.a</b>	chlorophyll a (ug/l)	0.01 ug/l	none
<b>Fe</b>	iron (mg/l)	0.1 mg/l	1.0 mg/l (S)
<b>Mn</b>	manganese (mg/l)	0.01 mg/l	0.3 mg/l (S)
<b>As</b>	arsenic (ug/l)	1 ug/l	10 ug/l (S)
<b>Lake Assessment</b>			
<b>QA</b>	water quality assessment, 5 point scale; 1 = crystal clear, 2 = not quite crystal clear, 3 = definite algae greenness, 4 = high algae levels, 5 = severely high algae levels		
<b>QB</b>	aquatic plant assessment, 5 point scale; 1 = no plants visible, 2 = plants below surface, 3 = plants at surface, 4 = plants dense at surface, 5 = surface plant coverage		
<b>QC</b>	recreational assessment, 5 point scale; 1 = could not be nicer, 2 = excellent, 3 = slightly impaired, 4 = substantially impaired, 5 = lake not usable		
<b>QD</b>	reasons for recreational assessment, 8 choices; 1 = poor water clarity, 2 = excessive weeds, 3 = too much algae, 4 = lake looks bad, 5 = poor weather, 6 = litter/surface debris, 7 = too many lake users, 8 = other		

## Appendix B: Priority Waterbody Listing for Melody Lake

### Ellis/Melody Lake ( 0602-0053)

### MinorImpacts

#### Waterbody Location Information

Revised: 07/06/2009

<b>Water Index No:</b>	SR- 44-14-27-23-P39	<b>Drain Basin:</b>	Susquehanna River
<b>Hydro Unit Code:</b>	02050102/070	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	Lake (Eutrophic)	<b>Reg/County:</b>	7/Cortland Co. (12)
<b>Waterbody Size:</b>	40.8 Acres	<b>Quad Map:</b>	WILLET (L-17-1)
<b>Seg Description:</b>	entire lake		

#### Water Quality Problem/Issue Information (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Recreation	Stressed	Suspected

#### Type of Pollutant(s)

Known: ALGAL/WEED GROWTH (algal blooms, vegetation), Nutrients (phosphorus)  
Suspected: ---  
Possible: ---

#### Source(s) of Pollutant(s)

Known: ---  
Suspected: AGRICULTURE  
Possible: ---

#### Resolution/Management Information

<b>Issue Resolvability:</b>	1 (Needs Verification/Study (see STATUS))	
<b>Verification Status:</b>	3 (Cause Identified, Source Unknown)	
<b>Lead Agency/Office:</b>	ext/WQCC	<b>Resolution Potential:</b> Medium
<b>TMDL/303d Status:</b>	n/a	

#### Further Details

##### Overview

Recreational uses (swimming, fishing, boating) in Ellis Pond/Melody Lake are known to experience impacts from excessive algal and weed growth. Elevated nutrient levels may contribute to the plant growth. Sampling from 1980s and 1990s and continuing through the present indicate a trend toward improving water quality. In more recent years impacts have been primarily related to weeds.

##### Water Quality Sampling

Ellis Pond/Melody Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) from 1987 through 1991 and from 1997 and continuing through 2006. An Interpretive Summary report of the findings of this sampling was published in 2007. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately productive. Phosphorus levels in the lake occasionally exceed the state guidance values indicating impacted/stressed recreational uses but exceedences appear to be less frequent. Corresponding transparency measurements only rarely fail to exceed the recommended minimum for swimming beaches. Measurements of pH fall within the state water quality range of 6.5 to 8.5. The lake water is weakly colored, but color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, March 2007)

#### Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be increasingly favorable. The recreational suitability of the lake during more recent sampling is described most frequently as "excellent." The lake itself is most often described as "not quite crystal clear" or as having "definite algal greenness," an assessment that is consistent measured water quality characteristics. Assessments have noted that aquatic plants do not grow to the lake surface in more recent sampling years. Aquatic plants are dominated by a mix of native species and non-native Eurasian milfoil and have been cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, March 2007)

#### Lake Uses

This lake waterbody is designated class C, suitable for use as general recreation and aquatic life support, but not as a public water supply or public bathing beach. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

#### Segment Description

This segment includes the total area of the lake.