



UNIVERSITY OF FLORIDA

Institute of Food and Agricultural Sciences
Department of Fisheries and Aquatic Sciences



Long-Term Fish, Plants, and Water Quality Monitoring Program:
2006 and 2007 Data



**Florida LAKEWATCH, Department of Fisheries and Aquatic Sciences in
Cooperation with Florida Fish and Wildlife Conservation Commission**

Acknowledgments

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Florida LAKEWATCH Long-term Fish Monitoring Program

Introduction

Florida LAKEWATCH is a volunteer citizen's lake monitoring program. Citizens from throughout Florida are trained by staff from the University of Florida's Department of Fisheries and Aquatic Sciences to conduct long-term scientific lake monitoring programs. Special attention is given to the monitoring of water quality and the distribution of scientifically sound lake management information. Florida LAKEWATCH also provides citizens with educational material regarding their lakes and provides a vehicle by which concerned citizens can work with professionals in government to foster a better understanding of Florida lakes.

The Florida LAKEWATCH program is extremely successful and to date, over 1000 lakes from 50 Florida Counties have been part of the LAKEWATCH program. Currently Florida LAKEWATCH is maintaining approximately 600 active lakes in the program with over 800 active citizen volunteers. One major concern of the citizens involved with LAKEWATCH is the health of the fish populations in their lakes. To help get more information on fish and long-term trends in fish populations Florida LAKEWATCH began cooperating with the Florida Fish and Wildlife Conservation Commission (FWCC) in the collection of fish data on 32 water bodies. These lakes have all been in Florida LAKEWATCH for the duration of sampling, yielding good background information on water chemistry and aquatic plants in these lakes. In 2007 FWCC and Florida LAKEWATCH expanded this cooperative sampling to cover 52 lakes statewide. The list of lakes now in the monitoring program, along with each group's responsibilities for sampling are listed in Table 1.

The fish populations in 32 lakes have been sampled with electrofishing in the springs of 1999 through 2007, although some lakes were missed due to low water in the spring of 2000 and 2001. Florida LAKEWATCH's staff is currently analyzing the long-term electrofishing data to identify trends in indexes of fish communities over the last eight years. Beginning in the fall of 2007 Florida LAKEWATCH will shift community sampling from spring to fall to coincide with the FWCC sampling schedule. This shift will allow better pooling and comparison of electrofishing data in the future.

Lakes for the long-term fish sampling program were selected to cover most of Florida (Table 1), thereby spreading the work load to different regional personnel of both Florida LAKEWATCH and FWCC. The lakes were also selected to cover a wide range of lake trophic states and

aquatic macrophyte abundances because these are major factors impacting fish populations in lakes. The goals of this project are three fold: 1) to examine the long-term variation in fish communities from a range of lakes in relation to: water chemistry, lake trophic status, aquatic macrophyte abundances, and lake morphology, 2) educate citizens in the functioning of Florida fish populations and 3) facilitate the interaction and cooperation among Florida citizens, the Department of Fisheries and Aquatic Sciences, University of Florida/Institute of Food and Agricultural Sciences, and Florida Fish and Wildlife Conservation Commission.

Methods

Florida LAKEWATCH Fish Sampling Procedures:

Electrofishing samples were collected in the fall (September-December) of 2006 and spring (January-February) of 2007. Forty nine electrofishing sampling events were conducted on 29 of the lakes listed in Table 1 (29 lakes in spring 2006, 10 duplicates in fall 2006, and 10 different duplicates in spring 2007). Six transects (10 minutes each) were collected at fixed stations spaced uniformly around each lake. The latitude and longitude of these transects were marked with Global Positioning System units (GPS) (Table 2) to insure constant sampling locations though time. Electrofishing was conducted with one dipper, along the shore with the pedal down constantly for 10 minutes.

All fish were collected and placed in an aerated tank. At the end of each transect all fish were measured and released. Largemouth bass, black crappie, and all sunfish species were measured to the nearest mm. All other fishes were grouped by species into 2-cm size groups (1-20 mm, 21-40, 41-60, etc.). For each species, the total number of fish for each size group was recorded for each individual transect. Other data collected from each transect included time of day, approximate depth and percent composition of each prominent macrophyte species along the transect (estimated visually).

Only fish length was measured on all of the fish collected during this study. This was done to minimize the amount of time needed to work up fish and expedite live releases. However, to examine weights in relation to other Florida Lakes, weights were calculated using length/weight regressions from unpublished data (Bill Schaeffer, Florida Fish and Wildlife Conservation Commission).

Seven fish community measures were calculated for each sampling event (Catch per unit effort for numbers and weights, percent composition of total numbers and weight, species richness,

diversity, and evenness). Species richness was measured as the number of individual species caught per lake per sampling event (season). The reciprocal of the Simpson's Index was used to determine species diversity and is defined as the probability of picking two organisms from the sample that are the same species. This method gives more weight to commonly sampled, and often more desired, species (Krebs 1999). Species evenness is a measure of the relative abundance of the different species making up the richness of a sample and was determined by dividing the Simpson's Diversity value by the species richness value. This evenness calculation gives values that range from 0 to 1 with greater evenness having values closer to 1.

Florida LAKEWATCH Aquatic Plant Sampling Procedures:

An aquatic macrophyte survey for 21 of the lakes listed in Table 1 was conducted during 2006. The percent volume infested with aquatic macrophytes (PVI) and the percent area covered with macrophytes (PAC) were determined according to the methods of Maceina and Shireman (1980). The above-ground standing crop of emergent, floating-leaved, and submerged vegetation was measured along uniformly placed transects (9 to 30, depending on the size of the water body) around the water body. At each transect divers cut the above-ground portions of aquatic macrophytes that were inside a 0.25m² plastic square randomly thrown once in each plant zone. The vegetation was placed in nylon mesh bags, spun to remove excess water, and weighed to the nearest 0.1 kg. Average standing crop (kg/m²) for each vegetation zone was calculated by averaging samples from each transect. The combined width (m) of the floating-leaved and emergent zones was estimated at each transect and then averaged for each water body. All plant species seen while sampling were listed according to the frequency that they occurred in evenly spaced transects around the water body.

PAC and PVI in deeper, open water portions of the lakes was measured using sonar bottom maps from transects run with a Lowrance LCX – 26c HD sonar and GPS system. Random samples from all data points on each water body were taken and measured for lake depth and plant height, if plants were present. This data was used in conjunction with the littoral zone measurements to acquire estimates of whole lake PAC and PVI.

Florida LAKEWATCH Water Sampling Field and Laboratory Procedures:

On sampling dates throughout the year, citizen volunteers, UF staff, or FFWCC staff collected surface water samples from one to six mid-water locations (depending upon water body size) on 43 lakes from Table 1. Water samples for nutrients (total phosphorus and total nitrogen) were collected at each sampling station in 250-ml, acid-cleaned, triple-rinsed Nalgene bottles provided by the Department of Fisheries and Aquatic Sciences. Water clarity at each sampling location was measured with a Secchi disc and additional surface water samples were collected at each

location in 4-L, tap-water rinsed, plastic jugs. To estimate the concentration of plankton algae at each sampling station, a measured volume of water from the 4-L jugs was collected and filtered through a Gelman Type A-E glass fiber filter. Filters were then stored over silica gel desiccant and frozen.

Water samples and the glass fiber filters were stored frozen at the homes of the citizen volunteers, at one of thirty-four collection centers located across the state, or at FFWCC facilities for one to four months. All frozen samples along with Secchi disc information was delivered to the Department of Fisheries and Aquatic Science's water quality laboratory where the water samples and filters were analyzed for total phosphorus, total nitrogen and chlorophyll concentrations.

At the laboratory, total phosphorus concentrations ($\mu\text{g/L}$) were determined using the procedures of Murphy and Riley (1962) with a persulfate digestion (Menzel and Corwin 1965). Total nitrogen concentrations ($\mu\text{g/L}$) were determined by oxidizing water samples with persulfate and determining nitrate-nitrogen with second derivative spectroscopy (D'Elia et al. 1977; Simal et al. 1985; Wollin 1987). A total nitrogen equivalency study of nitrogen in surface waters demonstrated that this method is a suitable substitute for the standard USEPA method involving the sum of nitrate-nitrogen and Kjeldahl-nitrogen as measured with an automated analyzer (Sylvia S. Labie, Administrator Florida Department of Environmental Regulation Quality Assurance Section, 1991). Chlorophyll concentrations ($\mu\text{g/L}$) were determined spectrophotometrically (Method 10200 H; APHA 1989) following pigment extraction with ethanol (Sartory and Grobbelaar 1984).

Deliverables

Contract Deliverable 1: Electrofishing data for 2006 and Spring 2007 (pages 12-61):

Forty nine sampling electrofishing events were conducted on 29 of lakes in 12 counties by Florida LAKEWATCH and FFWCC personnel during the spring and fall of 2006 and the spring of 2007. GPS coordinates for all transects sampled are provided in Table 2. Results for each lake sampled are shown in Appendix A. Catch per unit effort (CPUE) data is provided for both numbers (number/hour) and weights (grams/hour) of fish caught as well as percent composition of total numbers and weight by species. Species richness, diversity, and evenness measures are shown for each sampling event. A CD with the raw data is attached to the end of this section.

Contract Deliverable 2: 2006 Aquatic Plant Sampling data (pages 62-86):

Aquatic plant communities were sampled from 21 lakes in 13 counties by Florida LAKEWATCH personnel during the summer of 2006. Results for each lake sampled are shown in Appendix B. Percent area covered (PAC), percent volume infested (PVI), biomass (emergent, floating, and submerged plants), littoral zone width, and average depth are presented for each

lake as well as the common and scientific name and frequency of occurrence of each aquatic plant species present. A CD with the raw data is attached to the end of this section.

Contract Deliverable 3: 2006 Water Quality Sampling data (pages 87-146):

Water chemistry from 43 lakes in 17 counties were sampled by volunteers, Florida LAKEWATCH, and FFWCC personnel throughout 2006. Results for each lake sampled are shown in Appendix C. Physical characteristics and sampling history of each lake are provided. Long-term average and 2006 values for total phosphorus (TP)(μ grams/liter), total nitrogen (TN) (μ grams/liter), chlorophyll (CHL) (μ grams/liter), and secchi depth for each sampling occasion are listed. A CD with the raw data is attached to the end of this section.

Table 1. List of sampling responsibilities for Florida LAKEWATCH (LW) and Florida Fish and Wildlife Conservation Commission (FFWCC) long-term fish monitoring lakes. Water samples being taken by the local Water Management District offices (District) are noted.

County	Lake	Fish Sampler	Water Sampler	Plant Sampler
Alachua	Lochloosa	FFWCC	LW	LW
Alachua	Newnan	FFWCC	LW	LW
Alachua	Orange	FFWCC	LW	LW
Alachua	Santa Fe	FFWCC	LW	LW
Alachua	Wauberg	LW	LW	LW
Bay	Deerpoint	FFWCC	LW	LW
Bradford	Sampson	FFWCC	LW	LW
Brevard	Poinsett	FFWCC	LW	LW
Broward	Cons. Area 3	FFWCC	LW	LW
Collier	Trafford	FFWCC	LW	LW
Gadsden	Talquin	FFWCC	LW	LW
Gulf	Dead Lakes	FFWCC	LW	LW
Highlands	Istokpoga	FFWCC	LW	LW
Highlands	Josephine	FFWCC	LW	LW
Highlands	June	LW	LW	LW
Hillborough	Wilson	LW	LW	LW
Indian River	Stick Marsh	FFWCC	LW	LW
Lake	Apopka	FFWCC	District	LW
Lake	Cherry	FFWCC	LW	LW
Lake	Dorr	FFWCC	LW	LW
Lake	Grasshopper	LW	LW	LW
Lake	Griffin	FFWCC	LW	LW
Lake	Harris	FFWCC	LW	LW
Lake	Minneola	FFWCC	LW	LW
Lake	Sellers	LW	LW	LW
Lake	Wildcat	LW	LW	LW
Leon	Jackson	FFWCC	LW	LW
Marion	Mill Dam	FFWCC	LW	LW
Marion	Weir	LW	LW	LW
Miami-Dade	E	LW	LW	LW
Orange	Butler	LW	LW	LW
Orange	Conway	LW	LW	LW
Orange	Ivanhoe	LW	LW	LW
Orange	John's	FFWCC	LW	LW
Orange	Starke	LW	LW	LW
Osceola	Alligator	FFWCC	LW	LW
Osceola	Kissimmee	FFWCC	LW	LW
Osceola	Tohopekaliga	FFWCC	LW	LW
Osceola	Toho East	LW	LW	LW
Palm Beach	Okeechobee	FFWCC	District	LW
Pinellas	Tarpon	FFWCC	LW	LW
Polk	Dexter	LW	LW	LW
Polk	Eloise	FFWCC	LW	LW
Polk	Weohyakapka	FFWCC	LW	LW
Putnam	Crescent	FFWCC	LW	LW
Putnam	George	FFWCC	LW	LW
Putnam	Rodman	FFWCC	LW	LW
Seminole	Jesup	FFWCC	LW	LW
Seminole	Monroe	FFWCC	LW	LW
Sumter	Panasoffkee	FFWCC	LW	LW
Walton	Juniper	LW	LW	LW
Walton	Spring	LW	LW	LW

Table 2: Latitude and Longitudes for all transects sampled in long term monitoring project lakes during the spring and fall of 2006 and spring of 2007. Sections with a (.) are locations where coordinates were not taken.

<u>County</u>	<u>Lake</u>	<u>Trans</u>	<u>Start</u>		<u>Stop</u>					
			<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>				
Alachua	Lochloosa	1	29	30.173	82	6.265	29	30.285	82	6.193
		2	29	29.968	82	7.952	29	29.860	82	7.883
		3	29	30.148	82	8.624	29	30.254	82	8.550
		4	29	30.398	82	9.006	29	30.529	82	9.003
		5	29	32.012	82	8.748	29	31.897	82	8.778
		6	29	31.990	82	6.650	29	31.836	82	6.625
Alachua	Newnan	1	29	37.437	82	14.938	29	37.657	82	14.930
		2	29	37.194	82	13.346	29	37.323	82	13.114
		3	29	38.373	82	12.051	29	38.614	82	12.003
		4	29	40.334	82	12.681	29	40.394	82	12.935
		5	29	40.165	82	14.075	29	39.943	82	14.156
		6	29	38.842	82	14.240	29	38.639	82	14.214
Alachua	Orange	1	29	29.600	82	11.537	29	29.589	82	11.593
		2	29	30.332	82	12.459	29	30.334	82	12.637
		3	29	27.450	82	11.249	29	27.604	82	11.271
		4	29	26.555	82	11.847	29	26.477	82	11.926
		5	29	26.420	82	10.166	29	26.330	82	10.043
		6	29	28.011	82	10.229	29	28.180	82	10.237
Alachua	Santa Fe	1	29	43.052	82	3.847	29	43.095	82	3.983
		2	29	43.792	82	5.373	29	43.882	82	5.505
		3	29	45.569	82	5.381	29	45.470	82	5.529
		4	29	47.017	82	6.146	29	46.954	82	6.026
		5	29	45.538	82	4.255	29	45.437	82	4.103
		6	29	44.006	82	3.336	29	43.840	82	3.295
Alachua	Wauberg	1	29	31.765	82	17.926	29	31.647	82	17.899
		2	29	31.443	82	17.973	29	31.432	82	18.125
		3	29	31.489	82	18.293	29	31.601	82	18.368
		4	29	31.791	82	18.422	29	31.917	82	18.353
		5	29	32.113	82	18.207	29	32.187	82	18.100
		6	29	32.034	82	17.970	29	31.911	82	17.924
Highlands	June	1	27	18.858	81	22.371	27	18.853	81	22.178
		2	27	18.763	81	22.853	27	18.73	81	23.01
		3	27	18.16	81	23.459	27	18.005	81	23.437
		4	27	17.556	81	24.827	27	17.682	81	24.933
		5	27	18.524	81	25.038	27	18.606	81	25.018
		6	27	19.243	81	24.528	27	19.29	81	24.368
Hillsborough	Wilson	1	28	8.659	82	29.074	28	8.657	82	29.198
		2	28	8.683	82	29.253	28	8.779	82	29.341
		3	28	8.841	82	29.316	28	8.954	82	29.277
		4	28	8.993	82	29.253	28	9.042	82	29.176
		5	28	9.011	82	29.153	28	8.832	82	29.139
		6	28	8.804	82	29.126	28	8.701	82	29.074

Table 2: Continued.

<u>County</u>	<u>Lake</u>	<u>Trans</u>	<u>Start</u>		<u>Stop</u>		<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>
			<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>				
Indian River	Stick Marsh	1	27	47.805	80	42.51	27	47.897	80	42.726
		2	27	47.42	80	44.561	27	47.714	80	44.553
		3	27	48.331	80	42.521	27	48.661	80	42.514
		4	27	45.562	80	43.56	27	45.563	80	43.825
		5	27	49.347	80	43.126	27	49.349	80	42.881
		6	27	48.106	80	44.555	27	48.403	80	44.556
Lake	Cherry	1	28	35.489	81	48.743	28	35.403	81	48.904
		2	28	35.584	81	49.27	28	35.594	81	49.337
		3	28	36.11	81	49.213	28	36.13	81	49.131
		4	28	36.325	81	48.926	28	36.301	81	48.85
		5	28	35.948	81	48.343	28	35.894	81	48.413
		6	28	35.72	81	48.672	28	35.591	81	48.691
Lake	Dorr	1	29	0.794	81	38.068	29	0.656	81	38.069
		2	29	0.391	81	38.151	29	0.580	81	38.084
		3	29	0.225	81	38.173	29	0.089	81	38.070
		4	28	59.221	81	37.478	28	59.138	81	37.556
		5	29	0.053	81	36.297	29	0.197	81	36.342
		6	29	0.870	81	37.136	29	0.891	81	37.272
Lake	Grasshopper	1	29	8.081	81	37.161	29	8.009	81	37.136
		2	29	7.974	81	36.960	29	8.041	81	36.954
		3	29	8.165	81	36.806	29	8.257	81	36.799
		4	29	8.458	81	36.607	29	8.529	81	36.633
		5	29	8.614	81	36.814	29	8.506	81	36.787
		6	29	8.382	81	36.791	29	8.276	81	36.859
Lake	Sellers	1	29	6.620	81	37.890	29	6.570	81	38.001
		2	29	6.557	81	38.288	29	6.484	81	38.452
		3	29	6.467	81	38.851	29	6.552	81	38.802
		4	29	6.881	81	38.577	29	6.967	81	38.554
		5	29	7.021	81	38.426	29	7.129	81	38.465
		6	29	7.034	81	37.770	29	6.871	81	37.806
Lake	Wildcat	1	29	10.216	81	37.595	29	10.174	81	37.746
		2	29	10.032	81	38.085	29	9.964	81	38.151
		3	29	9.293	81	37.620	29	9.194	81	37.524
		4	29	9.462	81	37.510	29	9.580	81	37.559
		5	29	9.921	81	37.522	29	10.024	81	37.488
		6	29	10.019	81	37.556	29	9.992	81	37.666
Marion	Mill Dam	1	29	10.732	81	50.041	29	10.928	81	49.991
		2	29	10.933	81	49.992	29	11.080	81	50.080
		3	29	11.084	81	50.086	29	11.142	81	50.199
		4	29	11.172	81	50.273	29	11.091	81	50.387
		5	29	11.012	81	50.551	29	10.886	81	50.558
		6	29	10.716	81	50.472	29	10.727	81	50.412

Table 2: Continued.

<u>County</u>	<u>Lake</u>	<u>Trans</u>	<u>Start</u>		<u>Stop</u>					
			<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>				
Marion	Weir	1	29	1.668	81	54.826	29	1.550	81	54.772
		2	29	0.656	81	55.040	29	0.535	81	55.109
		3	28	59.589	81	55.928	28	59.573	81	56.169
		4	29	0.085	81	57.028	29	0.276	81	57.090
		5	29	1.287	81	57.583	29	1.460	81	57.510
		6	29	2.269	81	56.739	29	2.293	81	56.586
Miami-Dade	E	1	25	38.325	80	20.835	25	38.24	80	20.643
		2	25	38.217	80	20.854	25	38.373	80	20.912
		3	25	38.564	80	20.695	25	38.449	80	20.588
		4	.	.	.	.	.	.	.	.
		5	25	38.449	80	20.582	25	38.43	80	20.799
		6	25	30.43	80	20.799	25	38.348	80	20.62
Orange	Butler	1	28	29.951	81	32.984	28	29.962	81	33.132
		2	28	29.643	81	33.927	28	29.575	81	33.862
		3	28	28.890	81	33.646	28	28.792	81	33.667
		4	28	28.697	81	32.718	28	28.765	81	32.617
		5	28	29.132	81	32.139	28	29.225	81	32.087
		6	28	29.739	81	32.600	28	29.761	81	32.696
Orange	Conway	1	28	27.838	81	21.438	28	27.804	81	21.295
		2	28	27.778	81	20.679	28	27.668	81	20.503
		3	28	27.290	81	21.040	28	27.375	81	21.148
		4	28	27.853	81	21.472	28	27.888	81	21.620
		5	28	28.816	81	20.941	28	28.811	81	20.789
		6	28	28.236	81	20.409	28	28.042	81	20.627
Orange	Ivanhoe	1	28	33.891	81	22.412	28	33.747	81	22.426
		2	28	33.616	81	22.601	28	33.728	81	22.672
		3	28	33.800	81	22.722	28	33.652	81	22.791
		4	28	33.640	81	22.941	28	33.738	81	22.943
		5	28	33.832	81	22.830	28	33.812	81	22.978
		6	28	33.966	81	23.040	28	33.999	81	22.885
Orange	John's	1	28	32.156	81	39.739	28	32.141	81	39.639
		2	28	31.631	81	40.017	28	31.597	81	39.878
		3	28	31.671	81	39.609	28	31.626	81	39.668
		4	28	32.015	81	38.971	28	32.015	81	38.852
		5	28	31.704	81	38.385	28	31.690	81	38.513
		6	28	32.436	81	38.656	28	32.549	81	38.585
Orange	Starke	1	28	34.353	81	32.530	28	34.343	81	32.455
		2	28	34.553	81	32.336	28	34.564	81	32.169
		3	28	34.212	81	31.906	28	34.190	81	31.815
		4	28	34.076	81	32.343	28	34.203	81	32.460
		5	28	33.906	81	32.337	28	33.816	81	32.280
		6	28	34.047	81	32.090	28	33.987	81	32.254

Table 2: Continued.

<u>County</u>	<u>Lake</u>	<u>Trans</u>	<u>Start</u>		<u>Stop</u>					
			<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>				
Osceola	Alligator	1	28	18.889	81	23.479	28	18.766	81	23.212
		2	28	18.894	81	21.55	28	19.091	81	21.495
		3	28	21.658	81	19.077	28	21.506	81	18.907
		4	28	23.199	81	18.915	28	23.413	81	19.152
		5	28	21.97	81	21.125	28	22.204	81	20.869
		6	28	20.139	81	23.343	28	19.999	81	23.426
Osceola	Kissimmee	1	27	56.235	81	13.894	27	56.308	81	14.116
		2	27	51.997	81	12.414	27	51.932	81	12.218
		3	27	50.597	81	13.723	27	50.683	81	13.887
		4	27	51.551	81	16.869	27	51.606	81	17.053
		5	27	55.049	81	18.438	27	55.213	81	18.516
		6	27	58.169	81	19.931	27	58.108	81	19.834
Osceola	Toho East	1	28	15.685	81	17.130	28	15.678	81	17.327
		2	28	16.217	81	18.296	28	16.355	81	18.448
		3	28	17.737	81	18.987	28	17.959	81	18.988
		4	28	19.330	81	17.543	28	19.425	81	17.279
		5	28	18.707	81	15.101	28	18.607	81	14.998
		6	28	17.149	81	15.189	28	17.021	81	15.230
Polk	Dexter	1	27	59.593	81	40.593	27	59.423	81	40.617
		2	27	59.373	81	40.74	27	39.285	81	40.798
		3	27	59.163	81	40.88	27	59.121	81	40.992
		4	27	59.252	81	40.967	27	59.384	81	41.016
		5	27	59.61	81	41.002	27	59.702	81	40.842
		6	27	59.72	81	40.795	27	59.642	81	40.61
Polk	Weohyakapka	1	27	49.086	81	26.345	27	49.196	81	26.337
		2	27	48.8	81	26.215	27	48.678	81	26.232
		3	27	47.893	81	26.251	27	47.795	81	26.189
		4	27	50.802	81	24.184	27	50.772	81	24.074
		5	27	49.2	81	23.03	.	.	.	.
		6	27	48.414	81	23.366	27	48.303	81	23.517
Sumter	Panasoffkee	1	28	48.847	82	8.463	28	48.692	82	8.384
		2	28	49.064	82	7.587	28	49.174	82	7.787
		3	28	47.513	82	6.582	28	47.724	82	6.526
		4	28	46.246	82	6.664	28	46.208	82	6.526
		5	28	47.326	82	7.081	28	47.204	82	7.098
		6	28	48.167	82	7.965	28	48.010	82	7.890
Walton	Juniper	1	30	46.422	86	8.002	30	46.44	86	7.765
		2	30	46.443	86	7.763	30	30.513	86	38.633
		3	30	46.402	86	7.357	30	46.2	86	7.293
		4	30	46.145	86	7.38	30	46.817	86	7.638
		5	30	46.032	86	7.723	30	46.107	86	7.987
		6	30	46.215	86	8.282	30	46.228	86	8.053

Table 2: Continued.

<u>County</u>	<u>Lake</u>	<u>Trans</u>	<u>Start</u>		<u>Stop</u>	
			<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>
Walton	Spring	1	30 44.907	86 3.687	30 45.033	86 3.827
		2	30 45.1	86 3.772	30 45.225	86 3.915
		3	30 45.382	86 3.017	30 45.308	86 3.41
		4	30 45.248	86 3.355	30 45.062	86 3.465
		5	30 45.052	86 3.482	30 44.895	86 3.577
		6	30 44.867	86 3.595	30 44.872	86 3.682

Appendix A: Electrofishing data for all lakes sampled by Florida LAKEWATCH and FFWCC personnel during the spring and fall of 2006 and spring of 2007.

Electrofishing Data (Average of Six 10 Minute Transects)
Alachua County/Lochloosa

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	8	1.7	3	0.8
Blue tilapia	4	0.8	0	0.0
Bluefin killifish	0	0.0	3	0.8
Bluegill	259	54.9	270	68.5
Bowfin	11	2.3	14	3.6
Brook silverside	4	0.8	10	2.5
Brown bullhead	11	2.3	0	0.0
Dollar sunfish	1	0.2	1	0.3
Florida gar	41	8.7	6	1.5
Gizzard shad	24	5.1	2	0.5
Golden shiner	6	1.3	6	1.5
Inland silverside	0	0.0	2	0.5
Largemouth bass	39	8.3	19	4.8
Redear sunfish	33	7.0	23	5.8
Seminole killifish	1	0.2	0	0.0
Spotted sunfish	1	0.2	0	0.0
Threadfin shad	15	3.2	13	3.3
Warmouth	14	3.0	21	5.3
Yellow bullhead	0	0.0	1	0.3
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Total	472		394	
Species Richness	16		15	
Diversity (Simpson's)	3.1		2.1	
Evenness (Simpson's)	0.19		0.14	

Electrofishing Data (Average of Six 10 Minute Transects)
Alachua County/Lochloosa

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	2173	1.5	367	0.8
Blue tilapia	6580	4.5	0	0.0
Bluefin killifish	0	0.0	2	0.0
Bluegill	31834	21.9	5378	12.3
Bowfin	18397	12.7	16342	37.5
Brook silverside	12	0.0	29	0.1
Brown bullhead	7433	5.1	0	0.0
Dollar sunfish	10	0.0	6	0.0
Florida gar	22388	15.4	3546	8.1
Gizzard shad	9969	6.9	284	0.7
Golden shiner	1184	0.8	235	0.5
Inland silverside	0	0.0	3	0.0
Largemouth bass	38679	26.6	10400	23.8
Redear sunfish	5075	3.5	4073	9.3
Seminole killifish	13	0.0	0	0.0
Spotted sunfish	93	0.1	0	0.0
Threadfin shad	135	0.1	114	0.3
Warmouth	1194	0.8	2357	5.4
Yellow bullhead	0	0.0	500	1.1
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Total	145169		43637	
Species Richness	16		15	
Diversity (Simpson's)	5.9		4.3	
Evenness (Simpson's)	0.37		0.29	

Electrofishing Data (Average of Six 10 Minute Transects)
Alachua County/Newnan

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	30	14.8	23	4.0
Bluegill	81	39.9	429	73.7
Bowfin	18	8.9	25	4.3
Brook silverside	2	1.0	6	1.0
Brown bullhead	16	7.9	9	1.5
Eastern mosquitofish	0	0.0	2	0.3
Florida gar	20	9.9	17	2.9
Gizzard shad	19	9.4	14	2.4
Golden shiner	1	0.5	5	0.9
Largemouth bass	4	2.0	1	0.2
Redear sunfish	5	2.5	20	3.4
Swamp darter	0	0.0	1	0.2
Threadfin shad	0	0.0	20	3.4
Warmouth	7	3.4	9	1.5
Yellow bullhead	0	0.0	1	0.2
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Total	203		582	
Species Richness	11		15	
Diversity (Simpson's)	4.6		1.8	
Evenness (Simpson's)	0.4		0.1	

Electrofishing Data (Average of Six 10 Minute Transects)
Alachua County/Newnan

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	3913	5.5	2699	5.3
Bluegill	11091	15.6	9049	17.9
Bowfin	31017	43.6	21147	41.7
Brook silverside	8	0.0	12	0.0
Brown bullhead	4469	6.3	3197	6.3
Eastern mosquitofish	0	0.0	1	0.0
Florida gar	9996	14.0	11194	22.1
Gizzard shad	7137	10.0	1841	3.6
Golden shiner	194	0.3	48	0.1
Largemouth bass	1510	2.1	324	0.6
Redear sunfish	1046	1.5	335	0.7
Swamp darter	0	0.0	1	0.0
Threadfin shad	0	0.0	160	0.3
Warmouth	773	1.1	396	0.8
Yellow bullhead	0	0.0	263	0.5
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Total	71154		50669	
Species Richness	11		15	
Diversity (Simpson's)	4.0		3.8	
Evenness (Simpson's)	0.4		0.3	

Electrofishing Data (Average of Six 10 Minute Transects)
Alachua County/Orange

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	21	7.3	1	0.3
Bluefin killifish	4	1.4	1	0.3
Bluegill	92	32.2	262	85.3
Bluespotted sunfish	6	2.1	0	0.0
Bowfin	19	6.6	8	2.6
Brook silverside	3	1.0	3	1.0
Brown bullhead	11	3.8	0	0.0
Chain pickerel	5	1.7	0	0.0
Dollar sunfish	1	0.3	0	0.0
Eastern mosquitofish	6	2.1	0	0.0
Florida gar	52	18.2	1	0.3
Gizzard shad	7	2.4	1	0.3
Golden shiner	4	1.4	2	0.7
Lake chubsucker	8	2.8	1	0.3
Largemouth bass	8	2.8	9	2.9
Least killifish	1	0.3	0	0.0
Redear sunfish	10	3.5	13	4.2
Sailfin molly	2	0.7	0	0.0
Threadfin shad	1	0.3	0	0.0
Warmouth	25	8.7	5	1.6
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Total	286		307	
Species Richness	20		12	
Diversity (Simpson's)	6.2		1.4	
Evenness (Simpson's)	0.3		0.1	

Electrofishing Data (Average of Six 10 Minute Transects)
Alachua County/Orange

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	1428	2	459	2
Bluefin killifish	2	0	0	0
Bluegill	3784	4	5420	29
Bluespotted sunfish	30	0	0	0
Bowfin	25277	29	8518	46
Brook silverside	10	0	7	0
Brown bullhead	8487	10	0	0
Chain pickerel	50	0	0	0
Dollar sunfish	13	0	0	0
Eastern mosquitofish	7	0	0	0
Florida gar	28021	32	398	2
Gizzard shad	3585	4	218	1
Golden shiner	273	0	33	0
Lake chubsucker	3855	4	821	4
Largemouth bass	6246	7	1116	6
Least killifish	0	0	0	0
Redear sunfish	3068	3	1048	6
Sailfin molly	4	0	0	0
Threadfin shad	11	0	0	0
Warmouth	3766	4	537	3
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Total	87918		18574	
Species Richness	20		12	
Diversity (Simpson's)	4.8		3.3	
Evenness (Simpson's)	0.2		0.3	

Electrofishing Data (Average of Six 10 Minute Transects)
Alachua County/Santa Fe

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	3	0.5	0	0
Bluegill	289	51.0	42	10.0719424
Bowfin	10	1.8	3	0.71942446
Brook silverside	18	3.2	290	69.5443645
Chain pickerel	10	1.8	6	1.43884892
Dollar sunfish	4	0.7	1	0.23980815
Eastern mosquitofish	2	0.4	0	0
Florida gar	35	6.2	0	0
Golden shiner	23	4.1	6	1.43884892
Lake chubsucker	19	3.4	8	1.91846523
Largemouth bass	118	20.8	53	12.7098321
Redear sunfish	5	0.9	7	1.67865707
Spotted sunfish	5	0.9	0	0
Taillight shiner	1	0.2	0	0
Warmouth	23	4.1	1	0.23980815
Yellow bullhead	2	0.4	0	0
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Total	567		417	
Species Richness	16		10	
Diversity (Simpson's)	3.2		2.0	
Evenness (Simpson's)	0.20		0.20	

Electrofishing Data (Average of Six 10 Minute Transects)
Alachua County/Santa Fe

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	311	0.3	0	0.0
Bluegill	9724	9.8	1929	4.1
Bowfin	14487	14.6	2457	5.3
Brook silverside	32	0.0	494	1.1
Chain pickerel	6183	6.2	3476	7.4
Dollar sunfish	36	0.0	6	0.0
Eastern mosquitofish	0	0.0	0	0.0
Florida gar	16182	16.4	0	0.0
Golden shiner	726	0.7	537	1.1
Lake chubsucker	8104	8.2	4413	9.4
Largemouth bass	40215	40.7	31468	67.3
Redear sunfish	989	1.0	1845	3.9
Spotted sunfish	90	0.1	0	0.0
Taillight shiner	1	0.0	0	0.0
Warmouth	1321	1.3	127	0.3
Yellow bullhead	526	0.5	0	0.0
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Total	98928		46752	
Species Richness	16		10	
Diversity (Simpson's)	4.3		2.1	
Evenness (Simpson's)	0.27		0.21	

Electrofishing Data (Average of Six 10 Minute Transects)
Alachua County/Wauberg

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	33	6.8	0	0
Bluegill	215	44.5	125	55.6
Bowfin	1	0.2	13	5.8
Brook silverside	42	8.7	8	3.6
Brown bullhead	49	10.1	2	0.9
Eastern mosquitofish	22	4.6	2	0.9
Florida gar	2	0.4	12	5.3
Gizzard shad	5	1.0	28	12.4
Golden shiner	19	3.9	7	3.1
Largemouth bass	28	5.8	14	6.2
Redear sunfish	18	3.7	11	4.9
Seminole killifish	0	0.0	1	0.4
Threadfin shad	1	0.2	0	0
Warmouth	48	9.9	2	0.9
Total	483		225	
Species Richness	13		12	
Diversity (Simpson's)	4.2		2.9	
Evenness (Simpson's)	0.32		0.25	

Electrofishing Data (Average of Six 10 Minute Transects)
Alachua County/Wauberg

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	6183	6.9	0	0.0
Bluegill	11896	13.2	4386	7.2
Bowfin	763	0.8	26664	43.6
Brook silverside	95	0.1	24	0.0
Brown bullhead	28206	31.3	1148	1.9
Eastern mosquitofish	15	0.0	1	0.0
Florida gar	1698	1.9	11941	19.5
Gizzard shad	1643	1.8	1637	2.7
Golden shiner	818	0.9	211	0.3
Largemouth bass	32503	36.1	12976	21.2
Redear sunfish	4766	5.3	2042	3.3
Seminole killifish	0	0.0	13	0.0
Threadfin shad	21	0.0	0	0.0
Warmouth	1467	1.6	59	0.1
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Total	90075		61102	
Species Richness	13		12	
Diversity (Simpson's)	3.9		3.6	
Evenness (Simpson's)	0.30		0.30	

Electrofishing Data (Average of Six 10 Minute Transects)
Highlands County/June

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	1	0.2	243	0.3
Bluegill	341	51.8	17072	22.0
Bluespotted sunfish	1	0.2	2	0.0
Bowfin	1	0.2	1471	1.9
Brook silverside	8	1.2	19	0.0
Brown bullhead	1	0.2	871	1.1
Chain pickerel	6	0.9	4413	5.7
Dollar sunfish	3	0.5	19	0.0
Eastern mosquitofish	9	1.4	7	0.0
Florida gar	12	1.8	6754	8.7
Golden shiner	25	3.8	837	1.1
Lake chubsucker	5	0.8	1482	1.9
Largemouth bass	128	19.5	37720	48.6
Redear sunfish	65	9.9	6578	8.5
Seminole killifish	10	1.5	120	0.2
Taillight shiner	42	6.4	47	0.1
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Total	658		77656	
Species Richness	16		16	
Diversity (Simpson's)	3.1		3.3	
Evenness (Simpson's)	0.19		0.21	

Electrofishing Data (Average of Six 10 Minute Transects)
Hillsborough County/Wilson

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Bluegill	34	13.5	11	12.6
Bowfin	2	0.8	3	3.4
Brook silverside	5	2.0	0	0.0
Dollar sunfish	5	2.0	0	0.0
Florida gar	6	2.4	5	5.7
Grass carp	2	0.8	0	0.0
Lake chubsucker	12	4.8	2	2.3
Largemouth bass	87	34.5	40	46.0
Redear sunfish	94	37.3	26	29.9
Taillight shiner	3	1.2	0	0.0
Walking catfish	1	0.4	0	0.0
Warmouth	1	0.4	0	0.0
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Total	252		87	
Species Richness	12		6	
Diversity (Simpson's)	3.6		3.1	
Evenness (Simpson's)	0.30		0.52	

Electrofishing Data (Average of Six 10 Minute Transects)
Hillsborough County/Wilson

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Bluegill	3743	4.1	593	1.6
Bowfin	2481	2.7	4165	11.4
Brook silverside	10	0.0	0	0.0
Dollar sunfish	32	0.0	0	0.0
Florida gar	4110	4.5	3135	8.6
Grass carp	8443	9.2	0	0.0
Lake chubsucker	6424	7.0	985	2.7
Largemouth bass	53846	58.7	22827	62.6
Redear sunfish	11609	12.6	4750	13.0
Taillight shiner	6	0.0	0	0.0
Walking catfish	1015	1.1	0	0.0
Warmouth	88	0.1	0	0.0
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Total	91808		36455	
Species Richness	12		6	
Diversity (Simpson's)	2.6		2.3	
Evenness (Simpson's)	0.22		0.39	

Electrofishing Data (Average of Six 10 Minute Transects)
Indian River County/Stick Marsh

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Blue tilapia	10.5	3.7	11706	9.9
Bluegill	87	30.4	8565	7.2
Bowfin	1.5	0.5	1957	1.7
Brown bullhead	12	4.2	6747	5.7
Chain pickerel	1.5	0.5	1329	1.1
Gizzard shad	69	24.1	22940	19.4
Golden shiner	1.5	0.5	1	0.0
Lake chubsucker	3	1.0	2090	1.8
Largemouth bass	24	8.4	28012	23.7
Redear sunfish	30	10.5	7871	6.7
Sailfin catfish	9	3.1	10584	9.0
Threadfin shad	7.5	2.6	91	0.1
White catfish	30	10.5	16292	13.8
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Total	286.5		118185	
Species Richness	13		13	
Diversity (Simpson's)	5.4		6.9	
Evenness (Simpson's)	0.42		0.53	

Electrofishing Data (Average of Six 10 Minute Transects)
Lake County/Cherry

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Bluegill	73	43.7	2550	8.4
Bowfin	4	2.4	5128	17.0
Brook silverside	7	4.2	16	0.1
Eastern mosquitofish	6	3.6	4	0.0
Florida gar	36	21.6	11647	38.5
Gizzard shad	2	1.2	832	2.8
Golden topminnow	1	0.6	4	0.0
Largemouth bass	21	12.6	6639	22.0
Redear sunfish	9	5.4	969	3.2
Spotted sunfish	1	0.6	57	0.2
Taillight shiner	2	1.2	2	0.0
Warmouth	4	2.4	313	1.0
White catfish	1	0.6	2082	6.9
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Total	167		30244	
Species Richness	13		13	
Diversity (Simpson's)	3.8		4.2	
Evenness (Simpson's)	0.29		0.32	

Electrofishing Data (Average of Six 10 Minute Transects)
Lake County/Dorr

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	1	0.1	0	0
Bluegill	123	18.0	56	16.0
Bowfin	2	0.3	1	0.3
Brook silverside	63	9.2	201	57.6
Chain pickerel	1	0.1	6	1.7
Eastern mosquitofish	25	3.7	0	0
Florida gar	5	0.7	0	0
Golden shiner	28	4.1	41	11.7
Inland silverside	52	7.6	0	0
Lake chubsucker	11	1.6	4	1.1
Largemouth bass	40	5.9	38	10.9
Longnose gar	3	0.4	0	0
Redear sunfish	11	1.6	1	0.3
Spotted sunfish	1	0.1	0	0
Swamp darter	2	0.3	0	0
Taillight shiner	313	45.8	0	0
Warmouth	2	0.3	1	0.3
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Total	683		349	
Species Richness	17		9	
Diversity (Simpson's)	3.8		2.6	
Evenness (Simpson's)	0.22		0.29	

Electrofishing Data (Average of Six 10 Minute Transects)
Lake County/Dorr

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	243	1.1	0	0.0
Bluegill	4668	21.3	2293	9.5
Bowfin	1800	8.2	269	1.1
Brook silverside	164	0.8	340	1.4
Chain pickerel	527	2.4	2947	12.2
Eastern mosquitofish	19	0.1	0	0.0
Florida gar	3002	13.7	0	0.0
Golden shiner	736	3.4	2090	8.6
Inland silverside	123	0.6	0	0.0
Lake chubsucker	5780	26.4	1124	4.6
Largemouth bass	3140	14.3	14928	61.7
Longnose gar	707	3.2	0	0.0
Redear sunfish	560	2.6	161	0.7
Spotted sunfish	57	0.3	0	0.0
Swamp darter	1	0.0	0	0.0
Taillight shiner	234	1.1	0	0.0
Warmouth	145	0.7	57	0.2
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Total	21908		24211	
Species Richness	17		9	
Diversity (Simpson's)	6.1		2.4	
Evenness (Simpson's)	0.36		0.27	

Electrofishing Data (Average of Six 10 Minute Transects)
Lake County/Grasshopper

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Bluegill	43	27.2	186	65.3
Bluespotted sunfish	4	2.5	2	0.7
Bowfin	0	0.0	1	0.4
Chain pickerel	1	0.6	2	0.7
Eastern mosquitofish	30	19.0	0	0
Florida gar	4	2.5	3	1.1
Lake chubsucker	50	31.6	81	28.4
Largemouth bass	15	9.5	3	1.1
Lined topminnow	7	4.4	3	1.1
Redfin pickerel	1	0.6	1	0.4
Warmouth	3	1.9	3	1.1
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Total	158		285	
Species Richness	10		10	
Diversity (Simpson's)	4.5		2.0	
Evenness (Simpson's)	0.45		0.20	

Electrofishing Data (Average of Six 10 Minute Transects)
Lake County/Grasshopper

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Bluegill	1217	5.5	1340	7.2
Bluespotted sunfish	14	0.1	5	0.0
Bowfin	0	0.0	1471	7.9
Chain pickerel	784	3.6	179	1.0
Eastern mosquitofish	19	0.1	0	0.0
Florida gar	2121	9.7	1035	5.6
Lake chubsucker	7248	33.0	14073	75.7
Largemouth bass	10416	47.4	377	2.0
Lined topminnow	34	0.2	12	0.1
Redfin pickerel	4	0.0	21	0.1
Warmouth	101	0.5	71	0.4
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Total	21959		18585	
Species Richness	10		10	
Diversity (Simpson's)	2.9		1.7	
Evenness (Simpson's)	0.29		0.17	

Electrofishing Data (Average of Six 10 Minute Transects)
Lake County/Sellers

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Bluegill	47	26.1	66	24.8
Bluespotted sunfish	0	0.0	1	0.4
Bowfin	8	4.4	1	0.4
Brook silverside	12	6.7	154	57.9
Eastern mosquitofish	2	1.1	0	0.0
Florida gar	9	5.0	0	0.0
Lake chubsucker	79	43.9	25	9.4
Largemouth bass	13	7.2	19	7.1
Lined topminnow	4	2.2	0	0.0
Warmouth	5	2.8	0	0.0
Yellow bullhead	1	0.6	0	0.0
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Total	180		266	
Species Richness	10		6	
Diversity (Simpson's)	3.6		2.4	
Evenness (Simpson's)	0.36		0.41	

Electrofishing Data (Average of Six 10 Minute Transects)
Lake County/Sellers

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Bluegill	1747	3.1	847	4.0
Bluespotted sunfish	0	0.0	3	0.0
Bowfin	18132	32.4	3052	14.3
Brook silverside	26	0.0	281	1.3
Eastern mosquitofish	1	0.0	0	0
Florida gar	5654	10.1	0	0
Lake chubsucker	21760	38.9	5830	27.3
Largemouth bass	8009	14.3	11348	53.1
Lined topminnow	21	0.0	0	0
Warmouth	489	0.9	0	0
Yellow bullhead	156	0.3	0	0
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Total	55997		21361	
Species Richness	10		6	
Diversity (Simpson's)	3.5		2.6	
Evenness (Simpson's)	0.35		0.44	

Electrofishing Data (Average of Six 10 Minute Transects)
Lake County/Wildcat

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	3	1.0	1	0.3
Bluegill	166	55.3	283	93.7
Bluespotted sunfish	3	1.0	0	0.0
Bowfin	1	0.3	1	0.3
Eastern mosquitofish	79	26.3	0	0.0
Florida gar	4	1.3	0	0.0
Lake chubsucker	12	4.0	4	1.3
Largemouth bass	18	6.0	11	3.6
Lined topminnow	9	3.0	1	0.3
Pygmy sunfish	1	0.3	0	0.0
Redfin pickerel	3	1.0	0	0.0
Warmouth	1	0.3	1	0.3
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Total	300		302	
Species Richness	12		7	
Diversity (Simpson's)	2.6		1.1	
Evenness (Simpson's)	0.22		0.16	

Electrofishing Data (Average of Six 10 Minute Transects)
Lake County/Wildcat

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	378	1.3	305	3.5
Bluegill	3248	11.2	1094	12.6
Bluespotted sunfish	10	0.0	0	0
Bowfin	1151	4.0	1847	21.2
Eastern mosquitofish	58	0.2	0	0
Florida gar	1569	5.4	0	0
Lake chubsucker	6480	22.3	1769	20.3
Largemouth bass	15968	55.0	3657	42.0
Lined topminnow	33	0.1	4	0.0
Pygmy sunfish	2	0.0	0	0
Redfin pickerel	66	0.2	0	0
Warmouth	88	0.3	37	0.4
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Total	29052		8712	
Species Richness	12		7	
Diversity (Simpson's)	2.7		3.6	
Evenness (Simpson's)	0.23		0.51	

Electrofishing Data (Average of Six 10 Minute Transects)
Marion County/Mill Dam

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	9	3.6	1	0.1
Bluefin killifish	0	0.0	2	0.3
Bluegill	15	6.1	180	23.9
Bowfin	0	0.0	4	0.5
Brook silverside	142	57.5	497	65.9
Chain pickerel	2	0.8	11	1.5
Dollar sunfish	0	0.0	2	0.3
Eastern mosquitofish	0	0.0	4	0.5
Florida gar	27	10.9	1	0.1
Golden shiner	4	1.6	12	1.6
Golden topminnow	0	0.0	4	0.5
Lake chubsucker	11	4.5	6	0.8
Largemouth bass	33	13.4	17	2.3
Lined topminnow	0	0.0	1	0.1
Redear sunfish	4	1.6	5	0.7
Swamp darter	0	0.0	1	0.1
Warmouth	0	0.0	4	0.5
Yellow bullhead	0	0.0	2	0.3
Total	247		754	
Species Richness	9		18	
Diversity (Simpson's)	2.7		2.0	
Evenness (Simpson's)	0.30		0.11	

Electrofishing Data (Average of Six 10 Minute Transects)
Marion County/Mill Dam

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	1740	7.5	243	1.1
Bluefin killifish	0	0.0	1	0.0
Bluegill	663	2.9	1607	7.4
Bowfin	0	0.0	9187	42.3
Brook silverside	205	0.9	544	2.5
Chain pickerel	492	2.1	2016	9.3
Dollar sunfish	0	0.0	10	0.0
Eastern mosquitofish	0	0.0	3	0.0
Florida gar	5884	25.4	665	3.1
Golden shiner	65	0.3	78	0.4
Golden topminnow	0	0.0	7	0.0
Lake chubsucker	3885	16.8	1296	6.0
Largemouth bass	9953	43.0	4439	20.4
Lined topminnow	0	0.0	2	0.0
Redear sunfish	256	1.1	209	1.0
Swamp darter	0	0.0	0	0.0
Warmouth	0	0.0	515	2.4
Yellow bullhead	0	0.0	909	4.2
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Total	23143		21730	
Species Richness	9		18	
Diversity (Simpson's)	3.5		4.1	
Evenness (Simpson's)	0.39		0.23	

Electrofishing Data (Average of Six 10 Minute Transects)
Marion County/Weir

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	6	4.0	0	0
Bluegill	69	46.3	32	17.8
Brook silverside	1	0.7	33	18.3
Chain pickerel	2	1.3	5	2.8
Florida gar	5	3.4	1	0.6
Golden shiner	7	4.7	0	0
Inland silverside	0	0.0	53	29.4
Lake chubsucker	20	13.4	4	2.2
Largemouth bass	20	13.4	24	13.3
Redear sunfish	19	12.8	28	15.6
Total	149		180	
Species Richness	9		8	
Diversity (Simpson's)	3.7		5.1	
Evenness (Simpson's)	0.41		0.64	

Electrofishing Data (Average of Six 10 Minute Transects)
Marion County/Weir

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	2064	4.4	0	0.0
Bluegill	5393	11.4	4379	15.0
Brook silverside	3	0.0	42	0.1
Chain pickerel	2138	4.5	4300	14.7
Florida gar	4376	9.3	747	2.6
Golden shiner	896	1.9	0	0.0
Inland silverside	0	0.0	87	0.3
Lake chubsucker	14444	30.5	3160	10.8
Largemouth bass	13943	29.5	9221	31.5
Redear sunfish	4025	8.5	7350	25.1
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Total	47283		29286	
Species Richness	9		8	
Diversity (Simpson's)	4.7		4.6	
Evenness (Simpson's)	0.52		0.57	

Electrofishing Data (Average of Six 10 Minute Transects)
Miami-Dade County/E

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Bluegill	7.2	22.2	27	0.2
Butterfly peacock	1.2	3.7	1328	9.9
Largemouth bass	18	55.6	10879	80.9
Redear sunfish	4.8	14.8	1213	9.0
Taillight shiner	1.2	3.7	1	0.0
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Total	32.4		13448	
Species Richness	5		5	
Diversity (Simpson's)	2.6		1.5	
Evenness (Simpson's)	0.52		0.30	

Electrofishing Data (Average of Six 10 Minute Transects)
Orange County/Butler

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Bluegill	40	21.5	3	1.4
Bowfin	6	3.2	6	2.9
Brook silverside	32	17.2	120	57.4
Chain pickerel	4	2.2	2	1.0
Florida gar	9	4.8	4	1.9
Golden shiner	3	1.6	0	0.0
Lake chubsucker	10	5.4	4	1.9
Largemouth bass	70	37.6	55	26.3
Redear sunfish	11	5.9	14	6.7
Seminole killifish	0	0.0	1	0.5
Warmouth	1	0.5	0	0.0
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Total	186		209	
Species Richness	10		9	
Diversity (Simpson's)	4.4		2.5	
Evenness (Simpson's)	0.44		0.27	

Electrofishing Data (Average of Six 10 Minute Transects)
Orange County/Butler

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Bluegill	1901	3.4	199	0.3
Bowfin	9974	17.7	9559	16.5
Brook silverside	83	0.1	279	0.5
Chain pickerel	3451	6.1	1671	2.9
Florida gar	5855	10.4	3909	6.8
Golden shiner	153	0.3	0	0
Lake chubsucker	6572	11.7	2465	4.3
Largemouth bass	27302	48.4	37382	64.7
Redear sunfish	930	1.6	2291	4.0
Seminole killifish	0	0.0	17	0.0
Warmouth	176	0.3	0	0
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Total	56397		57771	
Species Richness	10		9	
Diversity (Simpson's)	3.4		2.2	
Evenness (Simpson's)	0.34		0.24	

Electrofishing Data (Average of Six 10 Minute Transects)
Orange County/Conway

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	1	0.5	2	0.3
Bluegill	51	28.0	91	14.7
Bluespotted sunfish	2	1.1	0	0.0
Brook silverside	24	13.2	4	0.6
Chain pickerel	6	3.3	6	1.0
Florida gar	6	3.3	0	0.0
Golden shiner	7	3.8	0	0.0
Lake chubsucker	8	4.4	2	0.3
Largemouth bass	20	11.0	53	8.6
Redear sunfish	23	12.6	10	1.6
Seminole killifish	0	0.0	1	0.2
Taillight shiner	24	13.2	0	0.0
Threadfin shad	8	4.4	448	72.5
Warmouth	2	1.1	1	0.2
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Total	182		618	
Species Richness	13		10	
Diversity (Simpson's)	6.7		1.8	
Evenness (Simpson's)	0.52		0.18	

Electrofishing Data (Average of Six 10 Minute Transects)
Orange County/Conway

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	377	1.6	69	0.2
Bluegill	1346	5.8	1022	3.0
Bluespotted sunfish	7	0.0	0	0.0
Brook silverside	57	0.2	7	0.0
Chain pickerel	2383	10.3	3196	9.3
Florida gar	3299	14.2	0	0.0
Golden shiner	324	1.4	0	0.0
Lake chubsucker	3666	15.8	1096	3.2
Largemouth bass	8869	38.2	25804	74.8
Redear sunfish	2708	11.7	962	2.8
Seminole killifish	0	0.0	13	0.0
Taillight shiner	31	0.1	0	0.0
Threadfin shad	79	0.3	2158	6.3
Warmouth	49	0.2	176	0.5
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Total	23193		34503	
Species Richness	13		10	
Diversity (Simpson's)	4.6		1.7	
Evenness (Simpson's)	0.35		0.17	

Electrofishing Data (Average of Six 10 Minute Transects)
Orange County/Ivanhoe

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	3	1.0	0	0.0
Blue tilapia	1	0.3	0	0.0
Bluegill	115	38.5	71	36.0
Brook silverside	22	7.4	39	19.8
Brown bullhead	1	0.3	0	0.0
Florida gar	5	1.7	5	2.5
Grass carp	1	0.3	0	0.0
Largemouth bass	98	32.8	50	25.4
Redbreast sunfish	4	1.3	5	2.5
Redear sunfish	3	1.0	17	8.6
Seminole killifish	17	5.7	10	5.1
Spotted sunfish	15	5.0	0	0.0
Warmouth	13	4.3	0	0.0
Yellow bullhead	1	0.3	0	0.0
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Total	299		197	
Species Richness	14		7	
Diversity (Simpson's)	3.7		4.1	
Evenness (Simpson's)	0.27		0.58	

Electrofishing Data (Average of Six 10 Minute Transects)
Orange County/Ivanhoe

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	201	0.5	0	0
Blue tilapia	1097	2.7	0	0
Bluegill	4255	10.6	3228	7.5
Brook silverside	74	0.2	97	0.2
Brown bullhead	100	0.3	0	0
Florida gar	4692	11.7	4116	9.5
Grass carp	9476	23.7	0	0
Largemouth bass	18104	45.2	33475	77.6
Redbreast sunfish	189	0.5	319	0.7
Redear sunfish	449	1.1	1709	4.0
Seminole killifish	222	0.6	202	0.5
Spotted sunfish	602	1.5	0	0
Warmouth	442	1.1	0	0
Yellow bullhead	156	0.4	0	0
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Total	40059		43146	
Species Richness	14		7	
Diversity (Simpson's)	3.5		1.6	
Evenness (Simpson's)	0.25		0.23	

Electrofishing Data (Average of Six 10 Minute Transects)
Orange County/John's

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	5	1.3	2	0.8
Blue tilapia	2	0.5	0	0.0
Bluegill	175	44.1	145	57.1
Bowfin	5	1.3	7	2.8
Brook silverside	5	1.3	2	0.8
Brown bullhead	1	0.3	0	0.0
Chain pickerel	6	1.5	2	0.8
Dollar sunfish	0	0.0	2	0.8
Florida gar	65	16.4	8	3.1
Gizzard shad	0	0.0	1	0.4
Golden shiner	1	0.3	34	13.4
Lake chubsucker	4	1.0	3	1.2
Largemouth bass	66	16.6	30	11.8
Redear sunfish	6	1.5	16	6.3
Seminole killifish	10	2.5	2	0.8
Taillight shiner	43	10.8	0	0.0
Warmouth	2	0.5	0	0.0
Yellow bullhead	1	0.3	0	0.0
Total	397		254	
Species Richness	16		13	
Diversity (Simpson's)	3.8		2.7	
Evenness (Simpson's)	0.24		0.21	

Electrofishing Data (Average of Six 10 Minute Transects)
Orange County/John's

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	1867	1.8	763	2.2
Blue tilapia	2135	2.1	0	0.0
Bluegill	5105	5.0	4217	12.2
Bowfin	8350	8.2	11083	32.1
Brook silverside	10	0.0	4	0.0
Brown bullhead	626	0.6	0	0.0
Chain pickerel	3726	3.7	255	0.7
Dollar sunfish	0	0.0	10	0.0
Florida gar	31816	31.2	4313	12.5
Gizzard shad	0	0.0	609	1.8
Golden shiner	26	0.0	956	2.8
Lake chubsucker	1583	1.6	836	2.4
Largemouth bass	45355	44.5	9286	26.9
Redear sunfish	820	0.8	2156	6.2
Seminole killifish	132	0.1	20	0.1
Taillight shiner	41	0.0	0	0.0
Warmouth	49	0.0	0	0.0
Yellow bullhead	331	0.3	0	0.0
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Total	101971		34506	
Species Richness	16		13	
Diversity (Simpson's)	3.3		4.7	
Evenness (Simpson's)	0.20		0.36	

Electrofishing Data (Average of Six 10 Minute Transects)
Orange County/Starke

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Blue tilapia	0	0.0	2	0.7
Bluegill	134	32.1	78	29.2
Brook silverside	0	0.0	1	0.4
Brown bullhead	7	1.7	0	0.0
Eastern mosquitofish	0	0.0	1	0.4
Golden shiner	65	15.6	19	7.1
Lake chubsucker	18	4.3	13	4.9
Largemouth bass	52	12.4	40	15.0
Longnose gar	1	0.2	0	0.0
Redbreast sunfish	33	7.9	13	4.9
Redear sunfish	47	11.2	10	3.7
Seminole killifish	45	10.8	72	27.0
Threadfin shad	5	1.2	17	6.4
Warmouth	9	2.2	1	0.4
Yellow bullhead	2	0.5	0	0.0
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Total	418		267	
Species Richness	12		12	
Diversity (Simpson's)	5.7		5.1	
Evenness (Simpson's)	0.47		0.43	

Electrofishing Data (Average of Six 10 Minute Transects)
Orange County/Starke

<u>Common Name</u>	<u>Spring 2006</u>		<u>Fall 2006</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Blue tilapia	0	0.0	1719	3.9
Bluegill	4338	8.9	3325	7.5
Brook silverside	0	0.0	2	0.0
Brown bullhead	1107	2.3	0	0.0
Eastern mosquitofish	0	0.0	1	0.0
Golden shiner	1198	2.5	269	0.6
Lake chubsucker	9988	20.6	6702	15.2
Largemouth bass	25456	52.4	29887	67.7
Longnose gar	257	0.5	0	0.0
Redbreast sunfish	3070	6.3	831	1.9
Redear sunfish	1682	3.5	504	1.1
Seminole killifish	421	0.9	730	1.7
Threadfin shad	22	0.0	73	0.2
Warmouth	467	1.0	127	0.3
Yellow bullhead	594	1.2	0	0.0
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Total	48600		44170	
Species Richness	12		12	
Diversity (Simpson's)	3.0		2.0	
Evenness (Simpson's)	0.25		0.17	

Electrofishing Data (Average of Six 10 Minute Transects)
Osceola County/Alligator

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Atlantic needlefish	1	1.1	19	0.0
Bluegill	22	24.7	1315	3.0
Bowfin	1	1.1	763	1.8
Brown bullhead	3	3.4	2417	5.6
Chain pickerel	1	1.1	456	1.0
Channel catfish	21	23.6	13252	30.5
Florida gar	9	10.1	2748	6.3
Gizzard shad	2	2.2	1060	2.4
Lake chubsucker	5	5.6	3621	8.3
Largemouth bass	16	18.0	12672	29.2
Longnose gar	2	2.2	4148	9.6
Redear sunfish	5	5.6	936	2.2
Warmouth	1	1.1	22	0.1
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Total	89		43429	
Species Richness	13		13	
Diversity (Simpson's)	5.9		4.9	
Evenness (Simpson's)	0.46		0.38	

Electrofishing Data (Average of Six 10 Minute Transects)
Osceola County/Kissimmee

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	24	19.7	1	0.6
Bluegill	24	19.7	28	16.9
Bowfin	1	0.8	1	0.6
Brook silverside	0	0.0	7	4.2
Chain pickerel	1	0.8	0	0.0
Florida gar	8	6.6	2	1.2
Gizzard shad	0	0.0	7	4.2
Golden shiner	2	1.6	4	2.4
Lake chubsucker	2	1.6	3	1.8
Largemouth bass	24	19.7	25	15.1
Longnose gar	1	0.8	0	0.0
Redear sunfish	14	11.5	12	7.2
Seminole killifish	5	4.1	7	4.2
Suckermouth Catfish	0	0.0	3	1.8
Taillight shiner	2	1.6	0	0.0
Threadfin shad	9	7.4	66	39.8
Warmouth	5	4.1	0	0.0
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Total	122		166	
Species Richness	14		13	
Diversity (Simpson's)	7.0		4.5	
Evenness (Simpson's)	0.50		0.35	

Electrofishing Data (Average of Six 10 Minute Transects)
Osceola County/Kissimmee

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	9425	24.1	305	1.1
Bluegill	2773	7.1	1808	6.4
Bowfin	2056	5.2	1847	6.5
Brook silverside	0	0.0	13	0.0
Chain pickerel	996	2.5	0	0.0
Florida gar	4539	11.6	817	2.9
Gizzard shad	0	0.0	471	1.7
Golden shiner	117	0.3	135	0.5
Lake chubsucker	700	1.8	1793	6.3
Largemouth bass	14359	36.7	13755	48.5
Longnose gar	435	1.1	0	0.0
Redear sunfish	2998	7.7	2557	9.0
Seminole killifish	63	0.2	108	0.4
Suckermouth Catfish	0	0.0	4436	15.7
Taillight shiner	2	0.0	0	0.0
Threadfin shad	62	0.2	291	1.0
Warmouth	649	1.7	0	0.0
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Total	39174		28335	
Species Richness	14		13	
Diversity (Simpson's)	4.5		3.5	
Evenness (Simpson's)	0.32		0.27	

Electrofishing Data (Average of Six 10 Minute Transects)
Osceola County/Tohopekaliga East

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	1	0.5	4	9.1
Bluegill	79	39.7	0	0.0
Bowfin	4	2.0	0	0.0
Brook silverside	4	2.0	3	6.8
Chain pickerel	3	1.5	1	2.3
Channel catfish	1	0.5	0	0.0
Florida gar	24	12.1	0	0.0
Golden shiner	6	3.0	0	0.0
Lake chubsucker	11	5.5	0	0.0
Largemouth bass	49	24.6	30	68.2
Longnose gar	1	0.5	0	0.0
Redear sunfish	10	5.0	6	13.6
Taillight shiner	4	2.0	0	0.0
Warmouth	2	1.0	0	0.0
Total	199		44	
Species Richness	14		5	
Diversity (Simpson's)	4.2		2.0	
Evenness (Simpson's)	0.30		0.40	

Electrofishing Data (Average of Six 10 Minute Transects)
Osceola County/Tohopekaliga East

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	6	0.0	2125	16.5
Bluegill	3939	6.0	0	0.0
Bowfin	4487	6.9	0	0.0
Brook silverside	5	0.0	7	0.1
Chain pickerel	791	1.2	456	3.5
Channel catfish	2469	3.8	0	0.0
Florida gar	11838	18.1	0	0.0
Golden shiner	58	0.1	0	0.0
Lake chubsucker	5730	8.8	0	0.0
Largemouth bass	31846	48.7	9227	71.7
Longnose gar	1033	1.6	0	0.0
Redear sunfish	2805	4.3	1058	8.2
Taillight shiner	5	0.0	0	0.0
Warmouth	412	0.6	0	0.0
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Total	65422		12872	
Species Richness	14		5	
Diversity (Simpson's)	3.5		1.8	
Evenness (Simpson's)	0.25		0.36	

Electrofishing Data (Average of Six 10 Minute Transects)
Polk County/Dexter

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Blue tilapia	2	1.0	3300	10.6
Bluefin killifish	1	0.5	0	0.0
Bluegill	67	32.1	1852	6.0
Brook silverside	20	9.6	43	0.1
Florida gar	10	4.8	4198	13.5
Golden shiner	2	1.0	53	0.2
Golden topminnow	1	0.5	7	0.0
Lake chubsucker	27	12.9	7128	22.9
Largemouth bass	43	20.6	12266	39.5
Redear sunfish	24	11.5	1267	4.1
Spotted sunfish	2	1.0	226	0.7
Warmouth	10	4.8	736	2.4
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Total	209		31076	
Species Richness	12		12	
Diversity (Simpson's)	5.3		4.1	
Evenness (Simpson's)	0.44		0.34	

Electrofishing Data (Average of Six 10 Minute Transects)
Polk County/Weohyakapka

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Atlantic needlefish	4	1.7	2	0.0
Black crappie	7	2.9	3253	3.1
Bluegill	36	15.1	2193	2.1
Bowfin	2	0.8	3498	3.3
Brook silverside	24	10.1	60	0.1
Chain pickerel	4	1.7	2442	2.3
Golden shiner	1	0.4	0	0.0
Inland silverside	10	4.2	21	0.0
Largemouth bass	128	53.8	89848	85.1
Plated catfish	4	1.7	2957	2.8
Pugnose minnow	8	3.4	10	0.0
Redear sunfish	5	2.1	1287	1.2
Taillight shiner	5	2.1	7	0.0
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Total	238		105580	
Species Richness	13		13	
Diversity (Simpson's)	3.0		1.4	
Evenness (Simpson's)	0.23		0.11	

Electrofishing Data (Average of Six 10 Minute Transects)
Sumter County/Panasoffkee

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Number/hour</u>	<u>Percent of Total</u>
Black crappie	12	1.2	0	0.0
Bluefin killifish	8	0.8	0	0.0
Bluegill	438	45.5	89	47.8
Bowfin	21	2.2	7	3.8
Brook silverside	41	4.3	0	0.0
Brown bullhead	4	0.4	1	0.5
Chain pickerel	4	0.4	0	0.0
Dollar sunfish	2	0.2	0	0.0
Eastern mosquitofish	2	0.2	0	0.0
Florida gar	7	0.7	0	0.0
Gizzard shad	1	0.1	5	2.7
Golden shiner	127	13.2	5	2.7
Inland silverside	4	0.4	0	0.0
Lake chubsucker	20	2.1	5	2.7
Largemouth bass	47	4.9	11	5.9
Redear sunfish	194	20.2	38	20.4
Seminole killifish	0	0.0	14	7.5
Taillight shiner	2	0.2	0	0.0
Threadfin shad	0	0.0	9	4.8
Warmouth	28	2.9	2	1.1
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Total	962		186	
Species Richness	18		11	
Diversity (Simpson's)	3.7		3.5	
Evenness (Simpson's)	0.20		0.32	

Electrofishing Data (Average of Six 10 Minute Transects)
Sumter County/Panasoffkee

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2007</u>	
	<u>Grams/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Black crappie	2185	3.0	0	0
Bluefin killifish	3	0.0	0	0
Bluegill	14722	20.0	2416	13.2
Bowfin	29748	40.5	8971	49.0
Brook silverside	87	0.1	0	0
Brown bullhead	3644	5.0	871	4.8
Chain pickerel	248	0.3	0	0
Dollar sunfish	13	0.0	0	0
Eastern mosquitofish	1	0.0	0	0
Florida gar	4200	5.7	0	0
Gizzard shad	800	1.1	127	0.7
Golden shiner	1800	2.5	125	0.7
Inland silverside	5	0.0	0	0
Lake chubsucker	2953	4.0	834	4.6
Largemouth bass	8396	11.4	3261	17.8
Redear sunfish	3236	4.4	1237	6.8
Seminole killifish	0	0.0	261	1.4
Taillight shiner	2	0.0	0	0
Threadfin shad	0	0.0	75	0.4
Warmouth	1405	1.9	125	0.7
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Total	73449		18302	
Species Richness	18		11	
Diversity (Simpson's)	4.4		3.3	
Evenness (Simpson's)	0.24		0.30	

Electrofishing Data (Average of Six 10 Minute Transects)
Walton County/Juniper

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Bluegill	129	73.3	3209	21.8
Brook silverside	5	2.8	12	0.1
Chain pickerel	2	1.1	3	0.0
Golden topminnow	2	1.1	8	0.1
Lake chubsucker	5	2.8	3320	22.5
Largemouth bass	22	12.5	7294	49.4
Redear sunfish	10	5.7	894	6.1
Redfin pickerel	1	0.6	14	0.1
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Total	176		14755	
Species Richness	8		8	
Diversity (Simpson's)	1.8		2.9	
Evenness (Simpson's)	0.22		0.36	

Electrofishing Data (Average of Six 10 Minute Transects)
Walton County/Spring

<u>Common Name</u>	<u>Spring 2006</u>		<u>Spring 2006</u>	
	<u>Number/hour</u>	<u>Percent of Total</u>	<u>Grams/hour</u>	<u>Percent of Total</u>
Bluegill	86	43.9	2692	7.5
Lake chubsucker	40	20.4	16477	46.1
Largemouth bass	39	19.9	15977	44.7
Redear sunfish	31	15.8	597	1.7
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Total	196		35744	
Species Richness	4		4	
Diversity (Simpson's)	3.3		2.4	
Evenness (Simpson's)	0.84		0.60	

Appendix B: Long-term monitoring project plant survey results for lakes sampled during 2006.

Wauberg / Alachua

Aquatic plant data collected on September 26, 2006

Percent area covered with aquatic vegetation (PAC, %)	0.0
Percent of lake's volume filled with vegetation (PVI, %)	0.0
Average emergent plant biomass (kg wet wt/m ²)	5.8
Average floating-leaved plant biomass (kg wet wt/m ²)	3.9
Average submersed plant biomass (kg wet wt/m ²)	0.2
Average width of emergent and floating-leaved zone (ft.)	58.5
Average lake depth (m)	3.0

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
smartweed	<i>Polygonum densiflorum</i>	100
maidencane	<i>Panicum hemitomon</i>	90
pickerelweed	<i>Pontederia cordata</i>	70
water-pennywort	<i>Hydrocotyle umbellata</i>	60
Egyptian paspalidium	<i>Paspalidium geminatum</i>	60
buttonbush	<i>Cephalanthus occidentalis</i>	50
wax myrtle	<i>Myrica cerifera</i>	50
smartweed	<i>Polygonum hydropiperoides</i>	50
American cupscale	<i>Sacciolepis striata</i>	50
duck-potato	<i>Sagittaria lancifolia</i>	50
red maple	<i>Acer rubrum</i>	40
sweetbay	<i>Magnolia virginiana</i>	40
giant duckweed	<i>Spirodela polyrhiza</i>	40
spatterdock	<i>Nuphar luteum</i>	30
swamp tupelo	<i>Nyssa sylvatica</i>	30
cat-tail	<i>Typha spp.</i>	30
coontail	<i>Ceratophyllum demersum</i>	20
floating water-hyacinth	<i>Eichhornia crassipes</i>	20
arrow-arum	<i>Peltandra virginica</i>	20
lizard's-tail	<i>Saururus cernuus</i>	20
beggar-ticks	<i>Bidens spp.</i>	10
swamp loosestrife	<i>Decodon verticillatus</i>	10
frog's-bit	<i>Limnobium spongia</i>	10
sweetgum	<i>Liquidambar styraciflua</i>	10
water primrose	<i>Ludwigia octovalvis</i>	10
climbing hempvine	<i>Mikania scandens</i>	10
southern naiad	<i>Najas guadalupensis</i>	10
torpedograss	<i>Panicum repens</i>	10
dwarf arrowhead	<i>Sagittaria subulata</i>	10
common salvinia	<i>Salvinia rotundifolia</i>	10

Sampson / Bradford

Aquatic plant data collected on September 20, 2006

Percent area covered with aquatic vegetation (PAC, %)	24.0
Percent of lake's volume filled with vegetation (PVI, %)	8.6
Average emergent plant biomass (kg wet wt/m ²)	6.0
Average floating-leaved plant biomass (kg wet wt/m ²)	2.5
Average submersed plant biomass (kg wet wt/m ²)	1.8
Average width of emergent and floating-leaved zone (ft.)	307.4
Average lake depth (m)	1.4

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
hydrilla	<i>Hydrilla verticillata</i>	100
pickerelweed	<i>Pontederia cordata</i>	100
bald cypress	<i>Taxodium distichum</i>	100
tapegrass	<i>Vallisneria americana</i>	100
green algae	<i>Chlorophyta</i>	90
southern naiad	<i>Najas guadalupensis</i>	90
American lotus	<i>Nelumbo lutea</i>	90
maidencane	<i>Panicum hemitomon</i>	90
fragrant water-lily	<i>Nymphaea odorata</i>	80
common salvinia	<i>Salvinia rotundifolia</i>	80
water primrose	<i>Ludwigia octovalvis</i>	70
slender spikerush	<i>Eleocharis baldwinii</i>	60
red ludwigia	<i>Ludwigia repens</i>	60
Egyptian paspalidium	<i>Paspalidium geminatum</i>	60
water spikerush	<i>Eleocharis elongata</i>	50
alligator-weed	<i>Alternanthera philoxeroides</i>	40
coontail	<i>Ceratophyllum demersum</i>	40
rush fuirena	<i>Fuirena scirpoidea</i>	40
water-pennywort	<i>Hydrocotyle umbellata</i>	40
spatterdock	<i>Nuphar luteum</i>	40
willow	<i>Salix spp.</i>	40
cone-spur bladderwort	<i>Utricularia gibba</i>	40
buttonbush	<i>Cephalanthus occidentalis</i>	30
red root	<i>Lachnanthes caroliniana</i>	30
torpedograss	<i>Panicum repens</i>	30
Illinois pondweed	<i>Potamogeton illinoensis</i>	30
cat-tail	<i>Typha spp.</i>	30
musk-grass	<i>Chara spp.</i>	20
wax myrtle	<i>Myrica cerifera</i>	20
stonewort	<i>Nitella spp.</i>	20
cordgrass	<i>Spartina bakeri</i>	20
lemon bacopa	<i>Bacopa caroliniana</i>	10
purple fanwort	<i>Cabomba pulcherrima</i>	10
coinwort	<i>Centella asiatica</i>	10
floating water-hyacinth	<i>Eichhornia crassipes</i>	10
southern water-grass	<i>Hydrochloa caroliniensis</i>	10
.	<i>Rhyncospora nitens</i>	10
dwarf arrowhead	<i>Sagittaria subulata</i>	10
purple bladderwort	<i>Utricularia purpurea</i>	10

June / Highlands

Aquatic plant data collected on May 30, 2006

Percent area covered with aquatic vegetation (PAC, %)	6.3
Percent of lake's volume filled with vegetation (PVI, %)	1.0
Average emergent plant biomass (kg wet wt/m ²)	2.4
Average floating-leaved plant biomass (kg wet wt/m ²)	0.3
Average submersed plant biomass (kg wet wt/m ²)	0.2
Average width of emergent and floating-leaved zone (ft.)	149.8
Average lake depth (m)	4.3

Frequency that plant species occur in 20 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
torpedograss	<i>Panicum repens</i>	90
maidencane	<i>Panicum hemitomon</i>	80
common salvinia	<i>Salvinia rotundifolia</i>	75
elephant-ear	<i>Colocasia esculenta</i>	70
pickerelweed	<i>Pontederia cordata</i>	70
slender spikerush	<i>Eleocharis baldwinii</i>	60
rush fuirena	<i>Fuirena scirpoidea</i>	55
water primrose	<i>Ludwigia octovalvis</i>	55
respuinata bladderwort	<i>Utricularia resupinata</i>	55
wax myrtle	<i>Myrica cerifera</i>	50
spatterdock	<i>Nuphar luteum</i>	45
buttonbush	<i>Cephalanthus occidentalis</i>	40
stonewort	<i>Nitella spp.</i>	40
water-pennywort	<i>Hydrocotyle umbellata</i>	35
loblolly bay	<i>Gordonia lasianthus</i>	25
tapegrass	<i>Vallisneria americana</i>	25
flat-sedge	<i>Cyperus odoratus</i>	20
duck-potato	<i>Sagittaria lancifolia</i>	20
cat-tail	<i>Typha spp.</i>	20
yellow-eyed grass	<i>Xyris spp.</i>	20
variableleaf pondweed	<i>Potamogeton diversifolius</i>	15
mock bishop's weed	<i>Ptilimnium cappillaceum</i>	15
elderberry	<i>Sambucus canadensis</i>	15
alligator-weed	<i>Alternanthera philoxeroides</i>	10
beggar-ticks	<i>Bidens spp.</i>	10
leconte sedge	<i>Cyperus lecontei</i>	10
variable-leaf milfoil	<i>Myriophyllum heterophyllum</i>	10
willow	<i>Salix spp.</i>	10
salt-bush	<i>Baccharis spp.</i>	5
para grass	<i>Brachiaria mutica</i>	5
musk-grass	<i>Chara spp.</i>	5
water hemlock	<i>Cicuta mexicana</i>	5
pipewort	<i>Eriocaulon spp.</i>	5
baby-tears	<i>Micranthemum umbrosum</i>	5
banana-lily	<i>Nymphoides aquatica</i>	5
common arrowhead	<i>Sagittaria latifolia</i>	5
dwarf arrowhead	<i>Sagittaria subulata</i>	5
lizard's-tail	<i>Saururus cernuus</i>	5
Brazilian pepper	<i>Schinus terebinthifolius</i>	5
giant bulrush	<i>Scirpus californicus</i>	5

Apopka / Lake

Aquatic plant data collected on November 1, 2006

Percent area covered with aquatic vegetation (PAC, %)	2.0
Percent of lake's volume filled with vegetation (PVI, %)	1.1
Average emergent plant biomass (kg wet wt/m ²)	5.9
Average floating-leaved plant biomass (kg wet wt/m ²)	3.7
Average submersed plant biomass (kg wet wt/m ²)	1.2
Average width of emergent and floating-leaved zone (ft.)	151.5
Average lake depth (m)	1.1

Frequency that plant species occur in 16 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
cat-tail	<i>Typha spp.</i>	94
elephant-ear	<i>Colocasia esculenta</i>	75
duck-potato	<i>Sagittaria lancifolia</i>	75
floating water-hyacinth	<i>Eichhornia crassipes</i>	69
pickerelweed	<i>Pontederia cordata</i>	69
water-pennywort	<i>Hydrocotyle umbellata</i>	63
giant bulrush	<i>Scirpus californicus</i>	56
torpedograss	<i>Panicum repens</i>	44
Egyptian paspalidium	<i>Paspalidium geminatum</i>	44
willow	<i>Salix spp.</i>	44
sawgrass	<i>Cladium jamaicense</i>	38
flat-sedge	<i>Cyperus odoratus</i>	38
water primrose	<i>Ludwigia octovalvis</i>	38
common salvinia	<i>Salvinia rotundifolia</i>	38
tapegrass	<i>Vallisneria americana</i>	38
alligator-weed	<i>Alternanthera philoxeroides</i>	31
American cupscale	<i>Sacciolepis striata</i>	25
soft stem bulrush	<i>Scirpus validus</i>	25
swamp tupelo	<i>Nyssa sylvatica</i>	19
smartweed	<i>Polygonum hydrophiloides</i>	19
common duckweed	<i>Lemna minor</i>	13
water-lily	<i>Nymphaea spp.</i>	13
maidencane	<i>Panicum hemitomon</i>	13
arrow-arum	<i>Peltandra virginica</i>	13
red maple	<i>Acer rubrum</i>	6
musk-grass	<i>Chara spp.</i>	6
jointed flat sedge	<i>Cyperus haspan</i>	6
spider-lily	<i>Hymenocallis spp.</i>	6
southern cutgrass	<i>Leersia hexandra</i>	6
wax myrtle	<i>Myrica cerifera</i>	6
spatterdock	<i>Nuphar luteum</i>	6
.	<i>Pithophora spp.</i>	6
lizard's-tail	<i>Saururus cernuus</i>	6
bald cypress	<i>Taxodium distichum</i>	6
arrow root	<i>Thalia geniculata</i>	6

Cherry / Lake

Aquatic plant data collected on June 15, 2006

Percent area covered with aquatic vegetation (PAC, %)	2.0
Percent of lake's volume filled with vegetation (PVI, %)	1.1
Average emergent plant biomass (kg wet wt/m ²)	3.6
Average floating-leaved plant biomass (kg wet wt/m ²)	2.7
Average submersed plant biomass (kg wet wt/m ²)	0.2
Average width of emergent and floating-leaved zone (ft.)	461.1
Average lake depth (m)	3.4

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
buttonbush	<i>Cephalanthus occidentalis</i>	80
water primrose	<i>Ludwigia octovalvis</i>	80
maidencane	<i>Panicum hemitomon</i>	80
pickerelweed	<i>Pontederia cordata</i>	70
duck-potato	<i>Sagittaria lancifolia</i>	60
sawgrass	<i>Cladium jamaicense</i>	50
slender spikerush	<i>Eleocharis baldwinii</i>	50
wax myrtle	<i>Myrica cerifera</i>	50
floating water-hyacinth	<i>Eichhornia crassipes</i>	40
spatterdock	<i>Nuphar luteum</i>	40
burhead sedge	<i>Scirpus cubensis</i>	40
Mallows	<i>Hibiscus spp.</i>	30
Egyptian paspalidium	<i>Paspalidium geminatum</i>	30
common salvinia	<i>Salvinia rotundifolia</i>	30
cat-tail	<i>Typha spp.</i>	30
bladderwort	<i>Utricularia foliosa</i>	30
southern water-grass	<i>Hydrochloa caroliniensis</i>	20
stonewort	<i>Nitella spp.</i>	20
fragrant water-lily	<i>Nymphaea odorata</i>	20
American cupscale	<i>Sacciolepis striata</i>	20
yellow-eyed grass	<i>Xyris spp.</i>	20
red maple	<i>Acer rubrum</i>	10
salt-bush	<i>Baccharis spp.</i>	10
water-pennywort	<i>Hydrocotyle umbellata</i>	10
red root	<i>Lachnanthes caroliniana</i>	10
southern cutgrass	<i>Leersia hexandra</i>	10
common duckweed	<i>Lemna minor</i>	10
red ludwigia	<i>Ludwigia repens</i>	10
sweetbay	<i>Magnolia virginiana</i>	10
climbing hempvine	<i>Mikania scandens</i>	10
torpedograss	<i>Panicum repens</i>	10
arrow-arum	<i>Peltandra virginica</i>	10
willow	<i>Salix spp.</i>	10
purple bladderwort	<i>Utricularia purpurea</i>	10

Dorr / Lake

Aquatic plant data collected on September 12, 2006

Percent area covered with aquatic vegetation (PAC, %)	4.0
Percent of lake's volume filled with vegetation (PVI, %)	1.6
Average emergent plant biomass (kg wet wt/m ²)	4.9
Average floating-leaved plant biomass (kg wet wt/m ²)	4.3
Average submersed plant biomass (kg wet wt/m ²)	0.2
Average width of emergent and floating-leaved zone (ft.)	80.6
Average lake depth (m)	3.9

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
wax myrtle	<i>Myrica cerifera</i>	90
maidencane	<i>Panicum hemitomon</i>	90
buttonbush	<i>Cephalanthus occidentalis</i>	80
spatterdock	<i>Nuphar luteum</i>	80
floating water-hyacinth	<i>Eichhornia crassipes</i>	70
water primrose	<i>Ludwigia octovalvis</i>	70
pickerelweed	<i>Pontederia cordata</i>	70
slender spikerush	<i>Eleocharis baldwinii</i>	60
American cupscale	<i>Sacciolepis striata</i>	60
common salvinia	<i>Salvinia rotundifolia</i>	60
elephant-ear	<i>Colocasia esculenta</i>	50
southern water-grass	<i>Hydrochloa caroliniensis</i>	50
water-pennywort	<i>Hydrocotyle umbellata</i>	50
sweetbay	<i>Magnolia virginiana</i>	50
red ludwigia	<i>Ludwigia repens</i>	40
burhead sedge	<i>Scirpus cubensis</i>	40
red maple	<i>Acer rubrum</i>	30
jointed flat sedge	<i>Cyperus haspan</i>	30
azolla	<i>Azolla caroliniana</i>	20
dahoon holly	<i>Ilex cassine</i>	20
willow	<i>Salix spp.</i>	20
giant bulrush	<i>Scirpus californicus</i>	20
bald cypress	<i>Taxodium distichum</i>	20
.	<i>Cyperus virens</i>	10
southern cutgrass	<i>Leersia hexandra</i>	10
frog's-bit	<i>Limnobium spongia</i>	10
torpedograss	<i>Panicum repens</i>	10
swamp bay	<i>Persea palustris</i>	10
variableleaf pondweed	<i>Potamogeton diversifolius</i>	10
cat-tail	<i>Typha spp.</i>	10
yellow-eyed grass	<i>Xyris spp.</i>	10

Griffin / Lake

Aquatic plant data collected on October 10, 2006

Percent area covered with aquatic vegetation (PAC, %)	0.0
Percent of lake's volume filled with vegetation (PVI, %)	0.0
Average emergent plant biomass (kg wet wt/m ²)	4.2
Average floating-leaved plant biomass (kg wet wt/m ²)	1.1
Average submersed plant biomass (kg wet wt/m ²)	2.2
Average width of emergent and floating-leaved zone (ft.)	84.6
Average lake depth (m)	2.0

Frequency that plant species occur in 18 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
duck-potato	<i>Sagittaria lancifolia</i>	83
elephant-ear	<i>Colocasia esculenta</i>	67
water-pennywort	<i>Hydrocotyle umbellata</i>	67
pickerelweed	<i>Pontederia cordata</i>	67
water-lily	<i>Nymphaea spp.</i>	61
Egyptian paspalidium	<i>Paspalidium geminatum</i>	61
sawgrass	<i>Cladium jamaicense</i>	50
water primrose	<i>Ludwigia octovalvis</i>	44
willow	<i>Salix spp.</i>	44
cat-tail	<i>Typha spp.</i>	44
bladderwort	<i>Utricularia foliosa</i>	39
hydrilla	<i>Hydrilla verticillata</i>	33
spatterdock	<i>Nuphar luteum</i>	33
arrow-arum	<i>Peltandra virginica</i>	33
wax myrtle	<i>Myrica cerifera</i>	28
tapegrass	<i>Vallisneria americana</i>	28
giant bulrush	<i>Scirpus californicus</i>	22
floating water-hyacinth	<i>Eichhornia crassipes</i>	17
coontail	<i>Ceratophyllum demersum</i>	11
flat-sedge	<i>Cyperus odoratus</i>	11
southern naiad	<i>Najas guadalupensis</i>	11
maidencane	<i>Panicum hemitomon</i>	11
torpedograss	<i>Panicum repens</i>	11
water-lettuce	<i>Pistia stratiotes</i>	11
Illinois pondweed	<i>Potamogeton illinoensis</i>	11
American cupscale	<i>Sacciolepis striata</i>	11
red maple	<i>Acer rubrum</i>	6
alligator-weed	<i>Alternanthera philoxeroides</i>	6
southern water-hemp	<i>Amaranthus australis</i>	6
red root	<i>Lachnanthes caroliniana</i>	6
water paspalum	<i>Paspalum repens</i>	6
smartweed	<i>Polygonum hydropiperoides</i>	6
three-square	<i>Scirpus americanus</i>	6
giant cutgrass	<i>Zizaniopsis miliacea</i>	6

Harris / Lake

Aquatic plant data collected on October 25, 2006

Percent area covered with aquatic vegetation (PAC, %)	0.0
Percent of lake's volume filled with vegetation (PVI, %)	0.0
Average emergent plant biomass (kg wet wt/m ²)	5.4
Average floating-leaved plant biomass (kg wet wt/m ²)	0.5
Average submersed plant biomass (kg wet wt/m ²)	1.4
Average width of emergent and floating-leaved zone (ft.)	120.0
Average lake depth (m)	3.5

Frequency that plant species occur in 15 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
Egyptian paspalidium	<i>Paspalidium geminatum</i>	100
bald cypress	<i>Taxodium distichum</i>	100
maidencane	<i>Panicum hemitomon</i>	93
duck-potato	<i>Sagittaria lancifolia</i>	80
elephant-ear	<i>Colocasia esculenta</i>	73
tapegrass	<i>Vallisneria americana</i>	73
pickerelweed	<i>Pontederia cordata</i>	60
cat-tail	<i>Typha spp.</i>	53
water-pennywort	<i>Hydrocotyle umbellata</i>	40
giant cutgrass	<i>Zizaniopsis miliacea</i>	33
coontail	<i>Ceratophyllum demersum</i>	27
water primrose	<i>Ludwigia octovalvis</i>	27
smartweed	<i>Polygonum hydropiperoides</i>	27
American cupscale	<i>Sacciolepis striata</i>	27
common salvinia	<i>Salvinia rotundifolia</i>	27
sawgrass	<i>Cladium jamaicense</i>	20
flat-sedge	<i>Cyperus odoratus</i>	20
torpedograss	<i>Panicum repens</i>	20
floating water-hyacinth	<i>Eichhornia crassipes</i>	13
lemon bacopa	<i>Bacopa caroliniana</i>	7
canna	<i>Canna spp.</i>	7
musk-grass	<i>Chara spp.</i>	7
hydrilla	<i>Hydrilla verticillata</i>	7
common duckweed	<i>Lemna minor</i>	7
wax myrtle	<i>Myrica cerifera</i>	7
spatterdock	<i>Nuphar luteum</i>	7
willow	<i>Salix spp.</i>	7

Minneola / Lake

Aquatic plant data collected on October 5, 2006

Percent area covered with aquatic vegetation (PAC, %)	2.0
Percent of lake's volume filled with vegetation (PVI, %)	0.0
Average emergent plant biomass (kg wet wt/m ²)	7.4
Average floating-leaved plant biomass (kg wet wt/m ²)	0.2
Average submersed plant biomass (kg wet wt/m ²)	0.0
Average width of emergent and floating-leaved zone (ft.)	148.8
Average lake depth (m)	4.4

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
maidencane	<i>Panicum hemitomon</i>	100
water primrose	<i>Ludwigia octovalvis</i>	90
torpedograss	<i>Panicum repens</i>	80
elephant-ear	<i>Colocasia esculenta</i>	70
red ludwigia	<i>Ludwigia repens</i>	70
common salvinia	<i>Salvinia rotundifolia</i>	60
water-pennywort	<i>Hydrocotyle umbellata</i>	50
Egyptian paspalidium	<i>Paspalidium geminatum</i>	40
smartweed	<i>Polygonum hydropiperoides</i>	40
pickerelweed	<i>Pontederia cordata</i>	40
red maple	<i>Acer rubrum</i>	30
buttonbush	<i>Cephalanthus occidentalis</i>	30
jointed flat sedge	<i>Cyperus haspan</i>	30
flat-sedge	<i>Cyperus odoratus</i>	30
willow	<i>Salix spp.</i>	30
burhead sedge	<i>Scirpus cubensis</i>	30
wax myrtle	<i>Myrica cerifera</i>	20
water tupelo	<i>Nyssa aquatica</i>	20
American cupscale	<i>Sacciolepis striata</i>	20
duck-potato	<i>Sagittaria lancifolia</i>	20
bald cypress	<i>Taxodium distichum</i>	20
alligator-weed	<i>Alternanthera philoxeroides</i>	10
sawgrass	<i>Cladium jamaicense</i>	10
slender spikerush	<i>Eleocharis baldwinii</i>	10
rush fuirena	<i>Fuirena scirpoidea</i>	10
southern water-grass	<i>Hydrochloa caroliniensis</i>	10
red root	<i>Lachnanthes caroliniana</i>	10
American lipocarpha	<i>Lipocarpha maculata</i>	10
stonewort	<i>Nitella spp.</i>	10
water-lettuce	<i>Pistia stratiotes</i>	10
elderberry	<i>Sambucus canadensis</i>	10
cone-spur bladderwort	<i>Utricularia gibba</i>	10

Wildcat / Lake

Aquatic plant data collected on September 12, 2006

Percent area covered with aquatic vegetation (PAC, %)	0.0
Percent of lake's volume filled with vegetation (PVI, %)	0.0
Average emergent plant biomass (kg wet wt/m ²)	6.9
Average floating-leaved plant biomass (kg wet wt/m ²)	1.1
Average submersed plant biomass (kg wet wt/m ²)	0.3
Average width of emergent and floating-leaved zone (ft.)	43.4
Average lake depth (m)	4.5

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
buttonbush	<i>Cephalanthus occidentalis</i>	90
sawgrass	<i>Cladium jamaicense</i>	80
maidencane	<i>Panicum hemitomon</i>	80
pickerelweed	<i>Pontederia cordata</i>	70
purple bladderwort	<i>Utricularia purpurea</i>	70
dahoon holly	<i>Ilex cassine</i>	60
sweetbay	<i>Magnolia virginiana</i>	60
spatterdock	<i>Nuphar luteum</i>	60
banana-lily	<i>Nymphoides aquatica</i>	50
red ludwigia	<i>Ludwigia repens</i>	40
fragrant water-lily	<i>Nymphaea odorata</i>	40
rush fuirena	<i>Fuirena scirpoidea</i>	30
southern cutgrass	<i>Leersia hexandra</i>	30
variable-leaf milfoil	<i>Myriophyllum heterophyllum</i>	30
pipewort	<i>Eriocaulon spp.</i>	20
lemon bacopa	<i>Bacopa caroliniana</i>	10
slender spikerush	<i>Eleocharis baldwinii</i>	10
water spikerush	<i>Eleocharis elongata</i>	10
water-moss	<i>Fontinalis spp.</i>	10
water-pennywort	<i>Hydrocotyle umbellata</i>	10
St. John's wort	<i>Hypericum spp.</i>	10
red root	<i>Lachnanthes caroliniana</i>	10
wax myrtle	<i>Myrica cerifera</i>	10
torpedograss	<i>Panicum repens</i>	10
sago pondweed	<i>Potamogeton pectinatus</i>	10
dwarf arrowhead	<i>Sagittaria subulata</i>	10
willow	<i>Salix spp.</i>	10
spider-grass	<i>Websteria confervoides</i>	10

Mill Dam / Marion

Aquatic plant data collected on June 15, 2006

Percent area covered with aquatic vegetation (PAC, %)	14.0
Percent of lake's volume filled with vegetation (PVI, %)	3.5
Average emergent plant biomass (kg wet wt/m ²)	5.2
Average floating-leaved plant biomass (kg wet wt/m ²)	1.8
Average submersed plant biomass (kg wet wt/m ²)	1.2
Average width of emergent and floating-leaved zone (ft.)	137.7
Average lake depth (m)	5.5

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
maidencane	<i>Panicum hemitomon</i>	100
purple fanwort	<i>Cabomba pulcherrima</i>	90
bog-moss	<i>Mayaca fluviatilis</i>	90
banana-lily	<i>Nymphoides aquatica</i>	90
buttonbush	<i>Cephalanthus occidentalis</i>	80
wax myrtle	<i>Myrica cerifera</i>	80
fragrant water-lily	<i>Nymphaea odorata</i>	80
pickerelweed	<i>Pontederia cordata</i>	80
lemon bacopa	<i>Bacopa caroliniana</i>	70
sawgrass	<i>Cladium jamaicense</i>	60
rush fuirena	<i>Fuirena scirpoidea</i>	60
red ludwigia	<i>Ludwigia repens</i>	60
bladderwort	<i>Utricularia foliosa</i>	60
water-shield	<i>Brasenia schreberi</i>	50
water-pennywort	<i>Hydrocotyle umbellata</i>	50
slender spikerush	<i>Eleocharis baldwinii</i>	40
variable-leaf milfoil	<i>Myriophyllum heterophyllum</i>	40
smartweed	<i>Polygonum hydro Piperoides</i>	40
purple bladderwort	<i>Utricularia purpurea</i>	40
red maple	<i>Acer rubrum</i>	30
torpedograss	<i>Panicum repens</i>	30
strap-leaf sag	<i>Sagittaria kurziana</i>	30
spatterdock	<i>Nuphar luteum</i>	20
Egyptian paspalidium	<i>Paspalidium geminatum</i>	20
salt-bush	<i>Baccharis spp.</i>	10
sedge spp.	<i>Cyperus spp.</i>	10
red root	<i>Lachnanthes caroliniana</i>	10
southern cutgrass	<i>Leersia hexandra</i>	10
water primrose	<i>Ludwigia octovalvis</i>	10
sweetbay	<i>Magnolia virginiana</i>	10
variableleaf pondweed	<i>Potamogeton diversifolius</i>	10
sago pondweed	<i>Potamogeton pectinatus</i>	10
willow	<i>Salix spp.</i>	10
cordgrass	<i>Spartina bakeri</i>	10

Weir / Marion

Aquatic plant data collected on June 27, 2006

Percent area covered with aquatic vegetation (PAC, %)	6.0
Percent of lake's volume filled with vegetation (PVI, %)	0.6
Average emergent plant biomass (kg wet wt/m ²)	3.6
Average floating-leaved plant biomass (kg wet wt/m ²)	0.0
Average submersed plant biomass (kg wet wt/m ²)	0.1
Average width of emergent and floating-leaved zone (ft.)	107.4
Average lake depth (m)	6.1

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
duck-potato	<i>Sagittaria lancifolia</i>	80
rush fuirena	<i>Fuirena scirpoidea</i>	70
maidencane	<i>Panicum hemitomon</i>	70
torpedograss	<i>Panicum repens</i>	70
buttonbush	<i>Cephalanthus occidentalis</i>	60
Illinois pondweed	<i>Potamogeton illinoensis</i>	60
willow	<i>Salix spp.</i>	60
lemon bacopa	<i>Bacopa caroliniana</i>	50
water-pennywort	<i>Hydrocotyle umbellata</i>	50
water primrose	<i>Ludwigia octovalvis</i>	50
red maple	<i>Acer rubrum</i>	40
wax myrtle	<i>Myrica cerifera</i>	30
Egyptian paspalidium	<i>Paspalidium geminatum</i>	30
hydrilla	<i>Hydrilla verticillata</i>	20
stonewort	<i>Nitella spp.</i>	20
pickerelweed	<i>Pontederia cordata</i>	20
musk-grass	<i>Chara spp.</i>	10
slender spikerush	<i>Eleocharis baldwinii</i>	10
.	<i>Hibiscus coccineus</i>	10
banana-lily	<i>Nymphoides aquatica</i>	10
sago pondweed	<i>Potamogeton pectinatus</i>	10
American cupscale	<i>Sacciolepis striata</i>	10
dwarf arrowhead	<i>Sagittaria subulata</i>	10
bald cypress	<i>Taxodium distichum</i>	10
cone-spur bladderwort	<i>Utricularia gibba</i>	10
tapegrass	<i>Vallisneria americana</i>	10

E / Miami-Dade

Aquatic plant data collected on May 18, 2006

Percent area covered with aquatic vegetation (PAC, %)	18.0
Percent of lake's volume filled with vegetation (PVI, %)	4.2
Average emergent plant biomass (kg wet wt/m ²)	0.0
Average floating-leaved plant biomass (kg wet wt/m ²)	0.0
Average submersed plant biomass (kg wet wt/m ²)	3.2
Average width of emergent and floating-leaved zone (ft.)	0.0
Average lake depth (m)	6.9

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
musk-grass	<i>Chara spp.</i>	100
Illinois pondweed	<i>Potamogeton illinoensis</i>	90
.	<i>Eleocharis spp.</i>	70
marine naiad	<i>Najas marina</i>	70
stonewort	<i>Nitella spp.</i>	60
hydrilla	<i>Hydrilla verticillata</i>	50
southern naiad	<i>Najas guadalupensis</i>	40
green algae	<i>Chlorophyta</i>	30
torpedograss	<i>Panicum repens</i>	10

Tohopekaliga East / Osceola

Aquatic plant data collected on June 28, 2006

Percent area covered with aquatic vegetation (PAC, %)	6.0
Percent of lake's volume filled with vegetation (PVI, %)	1.1
Average emergent plant biomass (kg wet wt/m ²)	2.8
Average floating-leaved plant biomass (kg wet wt/m ²)	1.2
Average submersed plant biomass (kg wet wt/m ²)	1.1
Average width of emergent and floating-leaved zone (ft.)	1184.8
Average lake depth (m)	2.5

Frequency that plant species occur in 20 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
giant bulrush	<i>Scirpus californicus</i>	100
slender spikerush	<i>Eleocharis baldwinii</i>	95
spatterdock	<i>Nuphar luteum</i>	90
torpedograss	<i>Panicum repens</i>	90
pickerelweed	<i>Pontederia cordata</i>	85
cat-tail	<i>Typha spp.</i>	85
water primrose	<i>Ludwigia octovalvis</i>	75
duck-potato	<i>Sagittaria lancifolia</i>	75
common salvinia	<i>Salvinia rotundifolia</i>	75
tapegrass	<i>Vallisneria americana</i>	75
willow	<i>Salix spp.</i>	70
maidencane	<i>Panicum hemitomon</i>	65
wax myrtle	<i>Myrica cerifera</i>	60
fragrant water-lily	<i>Nymphaea odorata</i>	55
Egyptian paspalidium	<i>Paspalidium geminatum</i>	55
southern water-grass	<i>Hydrochloa caroliniensis</i>	50
water-pennywort	<i>Hydrocotyle umbellata</i>	45
Illinois pondweed	<i>Potamogeton illinoensis</i>	45
bladderwort	<i>Utricularia foliosa</i>	40
hydrilla	<i>Hydrilla verticillata</i>	35
purple bladderwort	<i>Utricularia purpurea</i>	35
red root	<i>Lachnanthes caroliniana</i>	30
.	<i>Limnophila sessiflora</i>	30
elephant-ear	<i>Colocasia esculenta</i>	25
stonewort	<i>Nitella spp.</i>	25
lemon bacopa	<i>Bacopa caroliniana</i>	20
buttonbush	<i>Cephalanthus occidentalis</i>	20
coontail	<i>Ceratophyllum demersum</i>	20
floating water-hyacinth	<i>Eichhornia crassipes</i>	20
common arrowhead	<i>Sagittaria latifolia</i>	20
dwarf arrowhead	<i>Sagittaria subulata</i>	20
alligator-weed	<i>Alternanthera philoxeroides</i>	15
southern naiad	<i>Najas guadalupensis</i>	15
elderberry	<i>Sambucus canadensis</i>	15
salt-bush	<i>Baccharis spp.</i>	10
coinwort	<i>Centella asiatica</i>	10
Mallows	<i>Hibiscus spp.</i>	10
red ludwigia	<i>Ludwigia repens</i>	10
baby-tears	<i>Micranthemum umbrosum</i>	10
banana-lily	<i>Nymphoides aquatica</i>	10

Tohopekaliga East / Osceola

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
smartweed	<i>Polygonum hydropiperoides</i>	10
variableleaf pondweed	<i>Potamogeton diversifolius</i>	10
red maple	<i>Acer rubrum</i>	5
para grass	<i>Brachiaria mutica</i>	5
musk-grass	<i>Chara spp.</i>	5
green algae	<i>Chlorophyta</i>	5
jointed flat sedge	<i>Cyperus haspan</i>	5
.	<i>Eleocharis spp.</i>	5
rush fuirena	<i>Fuirena scirpoidea</i>	5
umbrella-grass	<i>Fuirena squarrosa</i>	5
frog's-bit	<i>Limnobium spongia</i>	5
water-lettuce	<i>Pistia stratiotes</i>	5
smartweed	<i>Polygonum densiflorum</i>	5
burhead sedge	<i>Scirpus cubensis</i>	5
Florida bladderwort	<i>Utricularia floridana</i>	5
cone-spur bladderwort	<i>Utricularia gibba</i>	5

Tarpon / Pinellas

Aquatic plant data collected on October 12, 2006

Percent area covered with aquatic vegetation (PAC, %)	14.0
Percent of lake's volume filled with vegetation (PVI, %)	4.4
Average emergent plant biomass (kg wet wt/m ²)	6.5
Average floating-leaved plant biomass (kg wet wt/m ²)	6.9
Average submersed plant biomass (kg wet wt/m ²)	7.8
Average width of emergent and floating-leaved zone (ft.)	108.9
Average lake depth (m)	2.9

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
coontail	<i>Ceratophyllum demersum</i>	100
floating water-hyacinth	<i>Eichhornia crassipes</i>	100
hydrilla	<i>Hydrilla verticillata</i>	100
cat-tail	<i>Typha spp.</i>	100
tapegrass	<i>Vallisneria americana</i>	90
alligator-weed	<i>Alternanthera philoxeroides</i>	80
common salvinia	<i>Salvinia rotundifolia</i>	80
water-pennywort	<i>Hydrocotyle umbellata</i>	60
elephant-ear	<i>Colocasia esculenta</i>	40
red ludwigia	<i>Ludwigia repens</i>	40
water primrose	<i>Ludwigia octovalvis</i>	30
water-lettuce	<i>Pistia stratiotes</i>	30
bald cypress	<i>Taxodium distichum</i>	30
common duckweed	<i>Lemna minor</i>	20
spatterdock	<i>Nuphar luteum</i>	20
torpedograss	<i>Panicum repens</i>	20
flat-sedge	<i>Cyperus odoratus</i>	10
fragrant water-lily	<i>Nymphaea odorata</i>	10
maidencane	<i>Panicum hemitomon</i>	10
Egyptian paspalidium	<i>Paspalidium geminatum</i>	10
Illinois pondweed	<i>Potamogeton illinoensis</i>	10
duck-potato	<i>Sagittaria lancifolia</i>	10
willow	<i>Salix spp.</i>	10
giant bulrush	<i>Scirpus californicus</i>	10
soft stem bulrush	<i>Scirpus validus</i>	10
purple bladderwort	<i>Utricularia purpurea</i>	10

Eloise / Polk

Aquatic plant data collected on November 6, 2006

Percent area covered with aquatic vegetation (PAC, %)	10.0
Percent of lake's volume filled with vegetation (PVI, %)	3.2
Average emergent plant biomass (kg wet wt/m ²)	13.8
Average floating-leaved plant biomass (kg wet wt/m ²)	7.6
Average submersed plant biomass (kg wet wt/m ²)	10.6
Average width of emergent and floating-leaved zone (ft.)	139.5
Average lake depth (m)	4.1

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
bald cypress	<i>Taxodium distichum</i>	100
tapegrass	<i>Vallisneria americana</i>	100
hydrilla	<i>Hydrilla verticillata</i>	90
torpedograss	<i>Panicum repens</i>	90
Egyptian paspalidium	<i>Paspalidium geminatum</i>	90
common salvinia	<i>Salvinia rotundifolia</i>	80
Illinois pondweed	<i>Potamogeton illinoensis</i>	70
giant bulrush	<i>Scirpus californicus</i>	70
water primrose	<i>Ludwigia octovalvis</i>	60
maidencane	<i>Panicum hemitomon</i>	60
floating water-hyacinth	<i>Eichhornia crassipes</i>	50
water-pennywort	<i>Hydrocotyle umbellata</i>	50
coontail	<i>Ceratophyllum demersum</i>	40
elephant-ear	<i>Colocasia esculenta</i>	40
common duckweed	<i>Lemna minor</i>	40
cat-tail	<i>Typha spp.</i>	40
pickerelweed	<i>Pontederia cordata</i>	30
willow	<i>Salix spp.</i>	30
spatterdock	<i>Nuphar luteum</i>	20
fragrant water-lily	<i>Nymphaea odorata</i>	20
duck-potato	<i>Sagittaria lancifolia</i>	20
alligator-weed	<i>Alternanthera philoxeroides</i>	10
flat-sedge	<i>Cyperus odoratus</i>	10
.	<i>Nitella prolonga</i>	10
water-lettuce	<i>Pistia stratiotes</i>	10
bladderwort species	<i>Utricularia spp.</i>	10

Crescent / Putnam

Aquatic plant data collected on October 16, 2006

Percent area covered with aquatic vegetation (PAC, %)	0.0
Percent of lake's volume filled with vegetation (PVI, %)	0.0
Average emergent plant biomass (kg wet wt/m ²)	2.3
Average floating-leaved plant biomass (kg wet wt/m ²)	1.6
Average submersed plant biomass (kg wet wt/m ²)	0.1
Average width of emergent and floating-leaved zone (ft.)	125.5
Average lake depth (m)	3.1

Frequency that plant species occur in 15 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
bald cypress	<i>Taxodium distichum</i>	93
elephant-ear	<i>Colocasia esculenta</i>	60
alligator-weed	<i>Alternanthera philoxeroides</i>	53
water-pennywort	<i>Hydrocotyle umbellata</i>	53
Egyptian paspalidium	<i>Paspalidium geminatum</i>	47
soft stem bulrush	<i>Scirpus validus</i>	47
asters	<i>Aster spp.</i>	27
smartweed	<i>Polygonum hydropiperoides</i>	27
pickerelweed	<i>Pontederia cordata</i>	27
spider-lily	<i>Hymenocallis spp.</i>	20
water primrose	<i>Ludwigia octovalvis</i>	20
spatterdock	<i>Nuphar luteum</i>	20
.	<i>Panicum spp.</i>	20
water-lettuce	<i>Pistia stratiotes</i>	20
American cupscale	<i>Sacciolepis striata</i>	20
common salvinia	<i>Salvinia rotundifolia</i>	20
lizard's-tail	<i>Saururus cernuus</i>	20
cat-tail	<i>Typha spp.</i>	20
tapegrass	<i>Vallisneria americana</i>	20
sedge spp.	<i>Cyperus spp.</i>	13
common duckweed	<i>Lemna minor</i>	13
.	<i>Sagittaria spp.</i>	13
willow	<i>Salix spp.</i>	13
coinwort	<i>Centella asiatica</i>	7
sawgrass	<i>Cladium jamaicense</i>	7
flat-sedge	<i>Cyperus odoratus</i>	7
barnyard grass	<i>Echinochloa crusgalli</i>	7
Walter's-millet	<i>Echinochloa walteri</i>	7
baby-tears	<i>Micranthemum umbrosum</i>	7
wax myrtle	<i>Myrica cerifera</i>	7
torpedograss	<i>Panicum repens</i>	7
arrow-arum	<i>Peltandra virginica</i>	7
giant reed	<i>Phragmites australis</i>	7
duck-potato	<i>Sagittaria lancifolia</i>	7

George / Putnam

Aquatic plant data collected on October 18, 2006

Percent area covered with aquatic vegetation (PAC, %)	4.0
Percent of lake's volume filled with vegetation (PVI, %)	0.7
Average emergent plant biomass (kg wet wt/m ²)	3.7
Average floating-leaved plant biomass (kg wet wt/m ²)	2.6
Average submersed plant biomass (kg wet wt/m ²)	4.1
Average width of emergent and floating-leaved zone (ft.)	264.5
Average lake depth (m)	2.8

Frequency that plant species occur in 20 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
tapegrass	<i>Vallisneria americana</i>	95
bald cypress	<i>Taxodium distichum</i>	90
smartweed	<i>Polygonum hydropiperoides</i>	85
musk-grass	<i>Chara spp.</i>	75
floating water-hyacinth	<i>Eichhornia crassipes</i>	75
alligator-weed	<i>Alternanthera philoxeroides</i>	70
water-lettuce	<i>Pistia stratiotes</i>	65
widgeon grass	<i>Ruppia maritima</i>	65
cat-tail	<i>Typha spp.</i>	65
water-lily	<i>Nymphaea spp.</i>	60
common salvinia	<i>Salvinia rotundifolia</i>	50
hydrilla	<i>Hydrilla verticillata</i>	45
.	<i>Panicum spp.</i>	45
pickerelweed	<i>Pontederia cordata</i>	45
coontail	<i>Ceratophyllum demersum</i>	40
common duckweed	<i>Lemna minor</i>	40
southern naiad	<i>Najas guadalupensis</i>	40
duck-potato	<i>Sagittaria lancifolia</i>	40
jointed flat-sedge	<i>Cyperus articulatus</i>	35
.	<i>Eleocharis spp.</i>	30
soft stem bulrush	<i>Scirpus validus</i>	25
water-pennywort	<i>Hydrocotyle umbellata</i>	20
common arrowhead	<i>Sagittaria latifolia</i>	20
giant bulrush	<i>Scirpus californicus</i>	20
giant cutgrass	<i>Zizaniopsis miliacea</i>	20
elephant-ear	<i>Colocasia esculenta</i>	15
sedge spp.	<i>Cyperus spp.</i>	15
wax myrtle	<i>Myrica cerifera</i>	15
American cupscale	<i>Sacciolepis striata</i>	15
bacopa	<i>Bacopa monnieri</i>	10
flat-sedge	<i>Cyperus odoratus</i>	10
maidencane	<i>Panicum hemitomon</i>	10
water paspalum	<i>Paspalum repens</i>	10
willow	<i>Salix spp.</i>	10
.	.	5
canna	<i>Canna spp.</i>	5
Walter's-millet	<i>Echinochloa walteri</i>	5
slender spikerush	<i>Eleocharis baldwinii</i>	5
spider-lily	<i>Hymenocallis spp.</i>	5
spatterdock	<i>Nuphar luteum</i>	5

George / Putnam

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
Egyptian paspalidium	<i>Paspalidium geminatum</i>	5
knot grass	<i>Paspalum distichum</i>	5
Illinois pondweed	<i>Potamogeton illinoensis</i>	5
lizard's-tail	<i>Saururus cernuus</i>	5
three-square	<i>Scirpus americanus</i>	5
cordgrass	<i>Spartina bakeri</i>	5

Monroe / Seminole

Aquatic plant data collected on November 9, 2006

Percent area covered with aquatic vegetation (PAC, %)	14.0
Percent of lake's volume filled with vegetation (PVI, %)	4.7
Average emergent plant biomass (kg wet wt/m ²)	6.7
Average floating-leaved plant biomass (kg wet wt/m ²)	6.9
Average submersed plant biomass (kg wet wt/m ²)	6.8
Average width of emergent and floating-leaved zone (ft.)	343.5
Average lake depth (m)	1.7

Frequency that plant species occur in 15 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
water-lettuce	<i>Pistia stratiotes</i>	100
coontail	<i>Ceratophyllum demersum</i>	87
floating water-hyacinth	<i>Eichhornia crassipes</i>	87
hydrilla	<i>Hydrilla verticillata</i>	87
giant reed	<i>Phragmites australis</i>	87
common salvinia	<i>Salvinia rotundifolia</i>	87
giant bulrush	<i>Scirpus californicus</i>	87
tapegrass	<i>Vallisneria americana</i>	87
alligator-weed	<i>Alternanthera philoxeroides</i>	80
water-pennywort	<i>Hydrocotyle umbellata</i>	80
common duckweed	<i>Lemna minor</i>	60
spatterdock	<i>Nuphar luteum</i>	53
cat-tail	<i>Typha spp.</i>	53
smartweed	<i>Polygonum hydropiperoides</i>	40
willow	<i>Salix spp.</i>	40
bald cypress	<i>Taxodium distichum</i>	33
southern naiad	<i>Najas guadalupensis</i>	27
Egyptian paspalidium	<i>Paspalidium geminatum</i>	27
American cupscale	<i>Sacciolepis striata</i>	27
water primrose	<i>Ludwigia octovalvis</i>	20
water paspalum	<i>Paspalum repens</i>	20
sesbans	<i>Sesbania spp.</i>	13
para grass	<i>Brachiaria mutica</i>	7
elephant-ear	<i>Colocasia esculenta</i>	7
jointed flat-sedge	<i>Cyperus articulatus</i>	7
flat-sedge	<i>Cyperus odoratus</i>	7
slender spikerush	<i>Eleocharis baldwinii</i>	7
African elodea	<i>Lagarosiphon spp.</i>	7
knot grass	<i>Paspalum distichum</i>	7
duck-potato	<i>Sagittaria lancifolia</i>	7
soft stem bulrush	<i>Scirpus validus</i>	7
arrow root	<i>Thalia geniculata</i>	7

Juniper East / Walton

Aquatic plant data collected on July 12, 2006

Percent area covered with aquatic vegetation (PAC, %)	100.0
Percent of lake's volume filled with vegetation (PVI, %)	63.8
Average emergent plant biomass (kg wet wt/m ²)	0.4
Average floating-leaved plant biomass (kg wet wt/m ²)	2.0
Average submersed plant biomass (kg wet wt/m ²)	7.7
Average width of emergent and floating-leaved zone (ft.)	189.0
Average lake depth (m)	1.2

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
lemon bacopa	<i>Bacopa caroliniana</i>	100
slender spikerush	<i>Eleocharis baldwinii</i>	80
banana-lily	<i>Nymphoides aquatica</i>	80
Florida bladderwort	<i>Utricularia floridana</i>	80
fragrant water-lily	<i>Nymphaea odorata</i>	60
torpedograss	<i>Panicum repens</i>	50
American cupscale	<i>Sacciolepis striata</i>	50
marsh St. John's wort	<i>Triadenum virginicum</i>	50
red maple	<i>Acer rubrum</i>	40
water-shield	<i>Brasenia schreberi</i>	40
flat-sedge	<i>Cyperus odoratus</i>	40
red root	<i>Lachnanthes caroliniana</i>	40
maidencane	<i>Panicum hemitomon</i>	40
water-pennywort	<i>Hydrocotyle umbellata</i>	30
water primrose	<i>Ludwigia octovalvis</i>	30
wax myrtle	<i>Myrica cerifera</i>	30
beak rush	<i>Rhynchospora spp.</i>	30
swamp titi	<i>Cyrilla racemiflora</i>	20
rush	<i>Juncus marginatus</i>	20
woolgrass bulrush	<i>Scirpus cyperinus</i>	20
cat-tail	<i>Typha spp.</i>	20
respuinata bladderwort	<i>Utricularia resupinata</i>	20
green algae	<i>Chlorophyta</i>	10
.	<i>Cyperus brevifolius</i>	10
St. John's wort	<i>Hypericum spp.</i>	10
smartweed	<i>Polygonum hydropiperoides</i>	10
giant bulrush	<i>Scirpus californicus</i>	10
bald cypress	<i>Taxodium distichum</i>	10
yellow-eyed grass	<i>Xyris spp.</i>	10

Juniper West / Walton

Aquatic plant data collected on July 12, 2006

Percent area covered with aquatic vegetation (PAC, %)	100.0
Percent of lake's volume filled with vegetation (PVI, %)	89.2
Average emergent plant biomass (kg wet wt/m ²)	0.6
Average floating-leaved plant biomass (kg wet wt/m ²)	3.3
Average submersed plant biomass (kg wet wt/m ²)	8.4
Average width of emergent and floating-leaved zone (ft.)	355.8
Average lake depth (m)	1.0

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
banana-lily	<i>Nymphoides aquatica</i>	100
lemon bacopa	<i>Bacopa caroliniana</i>	80
torpedograss	<i>Panicum repens</i>	80
American cupscale	<i>Sacciolepis striata</i>	80
fragrant water-lily	<i>Nymphaea odorata</i>	70
Florida bladderwort	<i>Utricularia floridana</i>	70
slender spikerush	<i>Eleocharis baldwinii</i>	60
wax myrtle	<i>Myrica cerifera</i>	60
red root	<i>Lachnanthes caroliniana</i>	50
red maple	<i>Acer rubrum</i>	40
water-shield	<i>Brasenia schreberi</i>	40
spatterdock	<i>Nuphar luteum</i>	40
swamp titi	<i>Cyrilla racemiflora</i>	30
beak rush	<i>Rhynchospora spp.</i>	30
coinwort	<i>Centella asiatica</i>	20
water-pennywort	<i>Hydrocotyle umbellata</i>	20
water primrose	<i>Ludwigia octovalvis</i>	20
salt-bush	<i>Baccharis spp.</i>	10
bur marigold	<i>Bidens mitis</i>	10
flat-sedge	<i>Cyperus odoratus</i>	10
hatpin	<i>Eriocaulon decangulare</i>	10
St. John's wort	<i>Hypericum spp.</i>	10
rush	<i>Juncus marginatus</i>	10
bog-moss	<i>Mayaca fluviatilis</i>	10
variable-leaf milfoil	<i>Myriophyllum heterophyllum</i>	10
willow	<i>Salix spp.</i>	10
marsh St. John's wort	<i>Triadenum virginicum</i>	10

Spring / Walton

Aquatic plant data collected on July 11, 2006

Percent area covered with aquatic vegetation (PAC, %)	54.0
Percent of lake's volume filled with vegetation (PVI, %)	15.4
Average emergent plant biomass (kg wet wt/m ²)	4.0
Average floating-leaved plant biomass (kg wet wt/m ²)	0.3
Average submersed plant biomass (kg wet wt/m ²)	2.5
Average width of emergent and floating-leaved zone (ft.)	7.9
Average lake depth (m)	1.7

Frequency that plant species occur in 10 evenly spaced transects around the lake.

<u>Common Name</u>	<u>Plant Species</u>	<u>Frequency (%)</u>
bog-moss	<i>Mayaca fluviatilis</i>	100
torpedograss	<i>Panicum repens</i>	100
Florida bladderwort	<i>Utricularia floridana</i>	100
slender spikerush	<i>Eleocharis baldwinii</i>	90
creeping rush	<i>Juncus repens</i>	80
respinata bladderwort	<i>Utricularia resupinata</i>	80
water-shield	<i>Brasenia schreberi</i>	60
water-pennywort	<i>Hydrocotyle umbellata</i>	60
coinwort	<i>Centella asiatica</i>	50
red root	<i>Lachnanthes caroliniana</i>	50
beak rush	<i>Rhynchospora spp.</i>	50
horned bladderwort	<i>Utricularia cornuta</i>	50
wax myrtle	<i>Myrica cerifera</i>	40
duck-potato	<i>Sagittaria lancifolia</i>	40
marsh St. John's wort	<i>Triadenum virginicum</i>	40
.	<i>Eleocharis spp.</i>	20
hatpin	<i>Eriocaulon decangulare</i>	20
St. John's wort	<i>Hypericum spp.</i>	20
rush	<i>Juncus marginatus</i>	20
maidencane	<i>Panicum hemitomon</i>	20
red maple	<i>Acer rubrum</i>	10
jointed flat sedge	<i>Cyperus haspan</i>	10
flat-sedge	<i>Cyperus odoratus</i>	10
water primrose	<i>Ludwigia octovalvis</i>	10
sweetbay	<i>Magnolia virginiana</i>	10
variable-leaf milfoil	<i>Myriophyllum heterophyllum</i>	10
banana-lily	<i>Nymphoides aquatica</i>	10
swamp tupelo	<i>Nyssa sylvatica</i>	10
bald cypress	<i>Taxodium distichum</i>	10
cat-tail	<i>Typha spp.</i>	10
yellow-eyed grass	<i>Xyris spp.</i>	10

Appendix C: Water chemistry data for all lakes sampled in 2006 as part of the long-term fish monitoring program.

Lochloosa (Alachua County)

LW Water Chemistry Summary

Period of record: 110 sampling dates; 9/3/93 to 11/28/06

Surface Area (LAKEWATCH): 5648.7 acres / 2286 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Alachua Prairies subdivision of the Northern Peninsular Plains division of the Ocala Uplift District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 7 sampling dates:

pH	7.4	Total alkalinity (mg/L as CaCO ₃)	24.4
Conductance (µS/cm @ 25 °C)	90	Color (Pt-Co units)	89
Chloride (mg/L)	11.6		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 110 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	29	68	180
Long-term total nitrogen concentrations (µg/L)	750	2145	6460
Long-term total chlorophyll concentrations (µg/L)	9.3	89.3	348.8
Long-term Secchi depth (ft)	0.6	1.8	5.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 4 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/24/06	87	1318	17	2
2/20/06	85	1198	57	2
3/20/06	118	1270	22	2
4/25/06	180	1560	43	2
5/18/06	148	1422	26	2
6/27/06	150	1308	62	3
7/26/06	149	958	26	3
8/22/06	146	1470	64	2
9/27/06	93	1382	54	3
10/25/06	70	1510	65	2
11/28/06	60	1192	38	3
2006 Average	117	1326	43.2	2.3

Newnan (Alachua County)

LW Water Chemistry Summary

Period of record: 96 sampling dates; 9/10/93 to 12/26/06

Surface Area (Shafer et al. 1986): 7427 acres / 3006 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, clayey fine sand, and clay of the Bone Valley Formation, and by the phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Newnans Lake Basin subdivision of the Northern Peninsular Plains division of the Ocala Uplift District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 4 sampling dates:

pH	6.9	Total alkalinity (mg/L as CaCO ₃)	13.3
Conductance (µS/cm @ 25 °C)	65	Color (Pt-Co units)	103
Chloride (mg/L)	11.5		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 96 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	58	126	298
Long-term total nitrogen concentrations (µg/L)	1250	3265	11500
Long-term total chlorophyll concentrations (µg/L)	19.0	196.1	493.3
Long-term Secchi depth (ft)	0.4	1.1	2.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/31/06	98	1557	46	1
2/23/06	97	1493	53	2
3/15/06	132	2070	70	1
4/14/06	158	2507	153	1
5/21/06	174	2330	96	1
6/22/06	114	1787	37	2
7/15/06	151	2147	90	2
8/11/06	188	2600	110	1
9/19/06	154	2540	97	2
10/24/06	211	3545	134	1
11/27/06	230	4110	191	1
12/26/06	272	4340	264	1
2006 Average	165	2585	111.8	1.3

Orange (Alachua County) LW Water Chemistry Summary

Period of record: 108 sampling dates; 9/3/93 to 11/28/06

Surface Area (LAKEWATCH): 13859.8 acres / 5609 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by terrace deposits of surface sand over clayey sand and clay with basal deposits of limestone of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Alachua Prairies subdivision of the Northern Peninsular Plains division of the Ocala Uplift District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 4 sampling dates:

pH	7.1	Total alkalinity (mg/L as CaCO ₃)	19.4
Conductance (µS/cm @ 25 °C)	74	Color (Pt-Co units)	53
Chloride (mg/L)	10.8		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 108 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	22	76	303
Long-term total nitrogen concentrations (µg/L)	955	1690	5483
Long-term total chlorophyll concentrations (µg/L)	5.3	49.3	307.5
Long-term Secchi depth (ft)	0.7	2.7	7.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 4 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/24/06	160	1632	17	2
2/20/06	158	1612	16	3
3/20/06	200	1520	22	2
4/25/06	230	1538	44	2
5/18/06	209	1772	17	2
6/27/06	206	1612	36	3
7/26/06	154	1410	31	3
8/22/06	130	1465	28	3
9/27/06	95	1910	68	2
10/25/06	74	1765	40	2
11/28/06	55	1508	26	3
2006 Average	152	1613	31.4	2.6

Santa Fe (Alachua County)

LW Water Chemistry Summary

Period of record: 235 sampling dates; 8/16/86 to 12/10/06

Surface Area (LAKEWATCH): 4970 acres / 2011 hectares

Lake Region (Griffith et al. 1997): Upper Santa Fe Flatwoods (75-03)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered clayey sand and granular sand of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Perched Lake and Prairies division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 7 sampling dates:

pH	5.9	Total alkalinity (mg/L as CaCO ₃)	1.8
Conductance (µS/cm @ 25 °C)	60	Color (Pt-Co units)	30
Chloride (mg/L)	12.7		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 235 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	4	11	39
Long-term total nitrogen concentrations (µg/L)	273	458	847
Long-term total chlorophyll concentrations (µg/L)	1.3	6.9	34.3
Long-term Secchi depth (ft)	3.3	7.5	17.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/22/06	14	713	4	4
2/28/06	15	717	7	5
3/27/06	16	743	6	4
4/26/06	15	660	6	5
5/23/06	15	660	9	4
7/24/06	15	627	10	6
8/16/06	14	687	8	4
9/20/06	14	613	10	6
10/26/06	13	630	9	7
12/10/06	12	570	5	6
2006 Average	14	662	7.6	5.2

Wauberg (Alachua County)

LW Water Chemistry Summary

Period of record: 193 sampling dates; 3/31/90 to 12/27/06

Surface Area (LAKEWATCH): 370.6 acres / 150 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by clayey sand and clay with sandy to clayey limestone of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Fairfield Hills subdivision of the Marion Hills division of the Ocala Uplift District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 8 sampling dates:

pH	7.6	Total alkalinity (mg/L as CaCO ₃)	19.7
Conductance (µS/cm @ 25 °C)	78	Color (Pt-Co units)	24
Chloride (mg/L)	11.7		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 193 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	54	123	317
Long-term total nitrogen concentrations (µg/L)	1153	1862	3240
Long-term total chlorophyll concentrations (µg/L)	29.7	94.4	240.3
Long-term Secchi depth (ft)	1.0	1.9	3.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/21/06	128	1870	58	2
2/27/06	158	2287	99	2
3/24/06	203	2967	174	.
4/25/06	211	2563	86	2
5/26/06	238	3180	230	1
6/22/06	191	2757	142	2
7/22/06	180	2497	130	2
8/29/06	176	2700	114	2
9/28/06	174	3017	163	1
10/25/06	141	2847	161	1
11/25/06	138	2797	141	1
12/27/06	169	3037	124	2
2006 Average	176	2710	135.2	1.6

Sampson (Bradford County)

LW Water Chemistry Summary

Period of record: 92 sampling dates; 4/16/99 to 12/24/06

Surface Area (LAKEWATCH): 1865.6 acres / 755 hectares

Lake Region (Griffith et al. 1997): Upper Santa Fe Flatwoods (75-03)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered clayey sand and granular sand of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Perched Lake and Prairies division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 5 sampling dates:

pH	6.8	Total alkalinity (mg/L as CaCO ₃)	9.3
Conductance (µS/cm @ 25 °C)	143	Color (Pt-Co units)	66
Chloride (mg/L)	17.9		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 92 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	5	23	67
Long-term total nitrogen concentrations (µg/L)	347	706	1393
Long-term total chlorophyll concentrations (µg/L)	1.0	6.9	33.7
Long-term Secchi depth (ft)	1.5	4.9	11.3

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/22/06	32	707	25	3
2/25/06	36	903	13	2
3/28/06	41	940	7	2
4/27/06	49	917	8	2
5/21/06	40	883	7	3
6/27/06	29	743	6	4
7/29/06	25	707	9	4
8/30/06	27	863	13	4
9/24/06	20	680	7	5
10/22/06	18	573	4	6
11/28/06	19	533	3	6
12/24/06	21	650	.	.
2006 Average	30	758	9.3	3.7

Talquin (Gadsden County)

LW Water Chemistry Summary

Period of record: 24 sampling dates; 1/6/92 to 12/10/06

Surface Area (Shafer et al. 1986): 8850 acres / 3582 hectares

Lake Region (Griffith et al. 1997): Tifton/Tallahassee Uplands (65-04)

Geologic formation (Brooks 1981):

The geology is dominated by clayey sand and clay with sandy to clayey limestone of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Quincy Hills division of the Tifton Uplands District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 5 sampling dates:

pH	6.4	Total alkalinity (mg/L as CaCO ₃)	14.7
Conductance (µS/cm @ 25 °C)	81	Color (Pt-Co units)	56
Chloride (mg/L)	12.7		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 24 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	37	53	93
Long-term total nitrogen concentrations (µg/L)	437	700	993
Long-term total chlorophyll concentrations (µg/L)	5.0	34.7	76.3
Long-term Secchi depth (ft)	2.4	3.1	3.8

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
6/5/06	55	980	57	2
7/4/06	55	847	40	3
8/6/06	51	910	52	3
9/11/06	66	993	76	3
10/9/06	59	843	29	3
11/6/06	56	843	51	3
12/10/06	49	743	.	.
2006 Average	56	880	50.8	3.1

Istokpoga (Highlands County) LW Water Chemistry Summary

Period of record: 131 sampling dates; 2/24/96 to 12/18/06

Surface Area (LAKEWATCH): 30116.54 acres / 12188 hectares

Lake Region (Griffith et al. 1997): Kissimmee/Okeechobee Lowland (75-35)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The lake lies in the Istokpoga Prairie division of the Eastern Flatwoods District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 5 sampling dates:

pH	7.0	Total alkalinity (mg/L as CaCO ₃)	12.8
Conductance (µS/cm @ 25 °C)	115	Color (Pt-Co units)	106
Chloride (mg/L)	16.7		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 131 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	16	57	107
Long-term total nitrogen concentrations (µg/L)	753	1318	2587
Long-term total chlorophyll concentrations (µg/L)	2.0	39.3	90.7
Long-term Secchi depth (ft)	1.2	2.6	6.7

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/22/06	69	1333	60	2
2/21/06	60	1270	51	2
3/23/06	72	1533	55	2
4/21/06	67	1233	28	3
5/25/06	65	1350	39	2
6/21/06	68	1360	34	2
7/21/06	61	1323	40	2
8/15/06	60	1317	39	2
9/15/06	59	1463	47	2
10/17/06	48	1400	42	2
11/18/06	62	1627	45	2
12/18/06	52	1300	36	2
2006 Average	62	1376	43.1	2.2

Josephine Center (Highlands County)

LW Water Chemistry Summary

Period of record: 121 sampling dates; 3/16/96 to 12/13/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Lake Wales Ridge Transition (75-34)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered beach and dune sand with some clay lenses of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Eastern Complex of the Central Ridge subdivision of the Lake Wales Ridge division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 3 sampling dates:

pH	6.4	Total alkalinity (mg/L as CaCO ₃)	4.8
Conductance (µS/cm @ 25 °C)	80	Color (Pt-Co units)	113
Chloride (mg/L)	16.9		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 121 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	32	68	162
Long-term total nitrogen concentrations (µg/L)	523	1008	1390
Long-term total chlorophyll concentrations (µg/L)	8.0	23.5	57.7
Long-term Secchi depth (ft)	1.0	1.7	6.8

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
3/13/06	103	1007	18	2
4/29/06	73	1263	23	2
10/20/06	61	1150	28	2
11/28/06	66	1150	32	2
12/13/06	74	1240	38	2
2006 Average	75	1162	27.7	1.8

Josephine East (Highlands County)

LW Water Chemistry Summary

Period of record: 116 sampling dates; 5/9/95 to 10/11/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Lake Wales Ridge Transition (75-34)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered beach and dune sand with some clay lenses of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Eastern Complex of the Central Ridge subdivision of the Lake Wales Ridge division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 3 sampling dates:

pH	6.5	Total alkalinity (mg/L as CaCO ₃)	3.8
Conductance (µS/cm @ 25 °C)	99	Color (Pt-Co units)	76
Chloride (mg/L)	16.0		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 116 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	22	50	128
Long-term total nitrogen concentrations (µg/L)	623	1003	1490
Long-term total chlorophyll concentrations (µg/L)	13.7	36.1	104.0
Long-term Secchi depth (ft)	1.2	2.3	4.7

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/13/06	50	953	43	2
2/28/06	76	1173	47	1
3/14/06	62	893	34	2
4/19/06	57	1093	27	2
9/17/06	45	903	31	2
10/11/06	49	1100	33	2
2006 Average	56	1019	36.1	1.6

Josephine West (Highlands County)

LW Water Chemistry Summary

Period of record: 123 sampling dates; 3/16/96 to 12/13/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Lake Wales Ridge Transition (75-34)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered beach and dune sand with some clay lenses of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Eastern Complex of the Central Ridge subdivision of the Lake Wales Ridge division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 3 sampling dates:

pH	6.3	Total alkalinity (mg/L as CaCO ₃)	5.1
Conductance (µS/cm @ 25 °C)	80	Color (Pt-Co units)	149
Chloride (mg/L)	17.1		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 123 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	56	107	206
Long-term total nitrogen concentrations (µg/L)	710	1066	1597
Long-term total chlorophyll concentrations (µg/L)	8.0	23.0	94.0
Long-term Secchi depth (ft)	1.0	1.5	2.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/24/06	104	903	12	2
2/16/06	120	943	12	2
10/20/06	84	1170	19	2
11/28/06	77	1127	18	2
12/13/06	83	1107	21	2
2006 Average	94	1050	16.4	1.8

June (Highlands County) LW Water Chemistry Summary

Period of record: 138 sampling dates; 4/22/94 to 12/18/06

Surface Area (LAKEWATCH): 5724 acres / 2317 hectares

Lake Region (Griffith et al. 1997): Southern Lake Wales Ridge (75-33)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered beach and dune sand with some clay lenses of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Eastern Complex of the Central Ridge subdivision of the Lake Wales Ridge division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 3 sampling dates:

pH	6.8	Total alkalinity (mg/L as CaCO ₃)	8.1
Conductance (µS/cm @ 25 °C)	162	Color (Pt-Co units)	9
Chloride (mg/L)	20.4		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 138 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	5	13	25
Long-term total nitrogen concentrations (µg/L)	340	566	920
Long-term total chlorophyll concentrations (µg/L)	3.0	10.3	25.0
Long-term Secchi depth (ft)	3.3	7.0	12.1

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
2/6/06	20	620	13	5
3/15/06	18	727	10	6
4/17/06	19	590	11	5
5/9/06	17	647	9	7
6/11/06	17	587	10	6
7/13/06	14	470	11	5
8/14/06	11	580	7	8
9/16/06	13	533	8	6
10/15/06	15	513	9	6
11/15/06	13	463	10	6
12/18/06	14	520	8	7
2006 Average	16	568	9.7	6.2

Wilson (Hillsborough County)

LW Water Chemistry Summary

Period of record: 82 sampling dates; 2/21/93 to 6/11/06

Surface Area (LAKEWATCH): 62 acres / 25 hectares

Lake Region (Griffith et al. 1997): Land-o-Lakes (75-24)

Geologic formation (Brooks 1981):

The geology is dominated by argillaceous to sandy impure limestone of the Tampa Formation

Physiographic region (Brooks 1981):

The lake lies in the Land-o-Lakes subdivision of the Tampa Plain division of the Ocala Uplift District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 1 sampling date:

pH	7.7	Total alkalinity (mg/L as CaCO ₃)	32.0
Conductance (µS/cm @ 25 °C)	292	Color (Pt-Co units)	.
Chloride (mg/L)	54.5		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 82 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	8	18	32
Long-term total nitrogen concentrations (µg/L)	560	797	1157
Long-term total chlorophyll concentrations (µg/L)	3.7	10.1	32.3
Long-term Secchi depth (ft)	4.0	6.7	10.7

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/22/06	25	790	7	6
2/18/06	21	730	7	7
3/19/06	25	720	7	7
4/15/06	23	703	4	8
6/11/06	23	850	10	6
2006 Average	23	759	7.0	6.9

Stick Marsh (Indian River County)

LW Water Chemistry Summary

Period of record: 68 sampling dates; 1/30/01 to 11/17/06

Surface Area (LAKEWATCH): 2379 acres / 963 hectares

Lake Region (Griffith et al. 1997): Eastern Flatlands (75-10)

Geologic formation (Brooks 1981):

The geology is dominated clastic and shell deposits of the Fort Thompson Group Formation

Physiographic region (Brooks 1981):

The lake lies in the Upper St Johns Karst division of the Eastern Flatwoods District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 2 sampling dates:

pH	7.9	Total alkalinity (mg/L as CaCO ₃)	129.5
Conductance (µS/cm @ 25 °C)	846	Color (Pt-Co units)	76
Chloride (mg/L)	161.3		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 68 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	49	129	341
Long-term total nitrogen concentrations (µg/L)	1243	1726	2977
Long-term total chlorophyll concentrations (µg/L)	7.3	49.3	151.3
Long-term Secchi depth (ft)	0.7	2.3	4.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/9/06	168	1437	38	2
2/7/06	138	1853	34	1
3/14/06	114	1530	33	2
4/20/06	154	1890	53	1
5/18/06	171	1690	19	2
6/21/06	151	2230	142	2
7/26/06	183	1630	34	3
8/21/06	197	1740	43	3
9/29/06	206	1583	46	3
10/26/06	192	1773	42	2
11/17/06	162	2033	37	2
2006 Average	167	1763	47.4	2.0

Cherry (Lake County)

LW Water Chemistry Summary

Period of record: 68 sampling dates; 5/9/90 to 12/14/06

Surface Area (LAKEWATCH): 613 acres / 248 hectares

Lake Region (Griffith et al. 1997): Clermont Uplands (75-19)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered clayey sand and granular sand of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Groveland Karst division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 9 sampling dates:

pH	5.8	Total alkalinity (mg/L as CaCO ₃)	2.4
Conductance (µS/cm @ 25 °C)	86	Color (Pt-Co units)	60
Chloride (mg/L)	17.3		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 68 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	6	15	41
Long-term total nitrogen concentrations (µg/L)	457	880	1940
Long-term total chlorophyll concentrations (µg/L)	1.3	5.0	25.7
Long-term Secchi depth (ft)	1.4	6.6	14.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/10/06	22	1427	4	2
2/16/06	20	1330	4	2
3/14/06	16	1057	4	2
4/15/06	17	910	5	2
5/12/06	19	1440	4	2
6/16/06	21	1353	.	2
7/14/06	20	1333	6	2
8/16/06	24	1493	11	2
9/17/06	19	1210	10	3
10/16/06	20	1605	11	2
11/19/06	17	1443	5	2
12/14/06	17	1477	12	3
2006 Average	19	1340	6.8	2.4

Dorr (Lake County)

LW Water Chemistry Summary

Period of record: 155 sampling dates; 1/30/90 to 12/21/06

Surface Area (LAKEWATCH): 1877 acres / 759 hectares

Lake Region (Griffith et al. 1997): Eastern Flatlands (75-10)

Geologic formation (Brooks 1981):

The geology is dominated by dune sand and shell with silty sand, silt, and clay of the Princess Ann Formation

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division and the Mount Dora Ridge subdivision of the Apopka Upland division of the Centra

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 8 sampling dates:

pH	5.3	Total alkalinity (mg/L as CaCO ₃)	1.4
Conductance (µS/cm @ 25 °C)	61	Color (Pt-Co units)	92
Chloride (mg/L)	12.2		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 155 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	11	17	28
Long-term total nitrogen concentrations (µg/L)	310	465	743
Long-term total chlorophyll concentrations (µg/L)	2.0	10.7	29.3
Long-term Secchi depth (ft)	1.0	2.8	6.7

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/13/06	17	613	5	.
2/23/06	17	650	6	.
3/29/06	23	633	5	3
5/24/06	14	503	8	3
6/14/06	17	547	6	2
7/19/06	12	457	4	4
8/28/06	18	607	5	3
9/28/06	14	413	6	3
10/18/06	16	377	5	4
11/30/06	15	387	4	4
12/21/06	13	390	6	5
2006 Average	16	507	5.4	3.5

Grasshopper (Lake County)

LW Water Chemistry Summary

Period of record: 199 sampling dates; 1/30/90 to 12/29/06

Surface Area (LAKEWATCH): 197 acres / 47 hectares

Lake Region (Griffith et al. 1997): Ocala Scrub (75-09)

Geologic formation (Brooks 1981):

The geology is dominated by sand dunes and well sorted fine sand of the Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Ocala Scrub division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 6 sampling dates:

pH	4.5	Total alkalinity (mg/L as CaCO ₃)	0.1
Conductance (µS/cm @ 25 °C)	67	Color (Pt-Co units)	33
Chloride (mg/L)	12.8		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 199 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	0	6	15
Long-term total nitrogen concentrations (µg/L)	43	477	1760
Long-term total chlorophyll concentrations (µg/L)	1.0	2.9	14.7
Long-term Secchi depth (ft)	1.0	7.0	16.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/10/06	9	480	4	.
2/23/06	9	490	4	.
3/29/06	8	400	4	6
5/24/06	6	300	2	9
6/14/06	10	377	3	9
7/19/06	6	263	2	10
8/23/06	6	253	3	10
9/28/06	6	250	3	11
10/18/06	5	277	3	8
11/28/06	4	223	2	15
12/29/06	8	250	3	11
2006 Average	7	324	3.0	9.9

Griffin (Lake County)

LW Water Chemistry Summary

Period of record: 107 sampling dates; 5/8/90 to 12/18/06

Surface Area (Shafer et al. 1986): 16505 acres / 6679 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered clayey sand and granular sand of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Central Lakes division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 5 sampling dates:

pH	8.6	Total alkalinity (mg/L as CaCO ₃)	100.9
Conductance (µS/cm @ 25 °C)	292	Color (Pt-Co units)	22
Chloride (mg/L)	26.8		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 107 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	27	68	127
Long-term total nitrogen concentrations (µg/L)	1510	3028	5463
Long-term total chlorophyll concentrations (µg/L)	11.0	144.7	384.0
Long-term Secchi depth (ft)	0.5	1.4	4.3

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/25/06	54	2543	87	1
2/21/06	49	2240	75	2
3/20/06	55	2637	104	2
4/24/06	41	2177	78	2
5/23/06	30	1710	39	2
6/21/06	28	1510	41	2
7/18/06	27	1717	42	2
8/23/06	27	1920	48	2
9/20/06	37	2190	69	2
10/20/06	40	2300	78	2
11/28/06	49	2473	68	1
12/18/06	51	2630	85	1
2006 Average	41	2171	67.8	1.6

Harris (Lake County)

LW Water Chemistry Summary

Period of record: 176 sampling dates; 1/20/90 to 12/16/06

Surface Area (Shafer et al. 1986): 13788 acres / 5580 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered clayey sand and granular sand of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Central Lakes division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 8 sampling dates:

pH	8.6	Total alkalinity (mg/L as CaCO ₃)	101.0
Conductance (µS/cm @ 25 °C)	257	Color (Pt-Co units)	14
Chloride (mg/L)	19.6		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 176 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	15	35	70
Long-term total nitrogen concentrations (µg/L)	840	1756	2327
Long-term total chlorophyll concentrations (µg/L)	4.0	59.5	121.3
Long-term Secchi depth (ft)	0.8	2.1	9.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/13/06	27	1220	35	3
2/23/06	33	1240	32	3
3/22/06	30	1233	36	5
4/17/06	36	1407	30	3
5/22/06	32	1210	26	3
7/25/06	35	1210	37	3
8/25/06	32	1280	56	3
9/25/06	32	1533	49	1
10/24/06	35	1617	63	2
11/15/06	.	.	74	3
12/16/06	40	1910	67	1
2006 Average	33	1386	45.8	2.7

Minneola (Lake County) LW Water Chemistry Summary

Period of record: 63 sampling dates; 6/1/90 to 9/11/06

Surface Area (Shafer et al. 1986): 1888 acres / 764 hectares

Lake Region (Griffith et al. 1997): Clermont Uplands (75-19)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered clayey sand and granular sand of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Groveland Karst division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 8 sampling dates:

pH	5.8	Total alkalinity (mg/L as CaCO ₃)	4.0
Conductance (µS/cm @ 25 °C)	93	Color (Pt-Co units)	104
Chloride (mg/L)	20.1		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 63 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	4	25	44
Long-term total nitrogen concentrations (µg/L)	363	1075	2033
Long-term total chlorophyll concentrations (µg/L)	1.0	6.2	28.0
Long-term Secchi depth (ft)	1.5	4.4	12.3

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
2/18/06	30	1310	3	2
3/17/06	31	1453	4	2
4/9/06	28	1523	6	2
5/8/06	31	1347	6	2
6/8/06	31	1387	28	2
7/25/06	35	1313	11	3
8/15/06	37	1420	23	2
9/11/06	36	1393	8	3
2006 Average	33	1393	11.1	2.6

Sellers (Lake County)

LW Water Chemistry Summary

Period of record: 198 sampling dates; 1/30/90 to 12/21/06

Surface Area (LAKEWATCH): 501 acres / 203 hectares

Lake Region (Griffith et al. 1997): Ocala Scrub (75-09)

Geologic formation (Brooks 1981):

The geology is dominated by sand dunes and well sorted fine sand of the Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Ocala Scrub division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 7 sampling dates:

pH	4.6	Total alkalinity (mg/L as CaCO ₃)	0.5
Conductance (µS/cm @ 25 °C)	55	Color (Pt-Co units)	3
Chloride (mg/L)	9.4		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 198 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	0	3	8
Long-term total nitrogen concentrations (µg/L)	0	97	537
Long-term total chlorophyll concentrations (µg/L)	0.0	1.5	7.7
Long-term Secchi depth (ft)	10.5	19.5	26.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/10/06	8	237	5	.
2/23/06	5	200	3	.
3/29/06	4	173	1	25
5/24/06	3	120	1	.
6/14/06	6	143	6	.
7/19/06	3	83	2	20
8/28/06	5	90	7	15
9/28/06	6	140	8	12
10/18/06	6	133	3	14
11/28/06	4	137	1	25
12/21/06	4	97	1	.
2006 Average	5	141	3.5	18.4

Wildcat (Lake County)

LW Water Chemistry Summary

Period of record: 94 sampling dates; 11/24/90 to 12/29/06

Surface Area (LAKEWATCH): 351 acres / 142 hectares

Lake Region (Griffith et al. 1997): Ocala Scrub (75-09)

Geologic formation (Brooks 1981):

The geology is dominated by sand dunes and well sorted fine sand of the Pleistocene

Physiographic region (Brooks 1981):

The Lake lies in the Ocala Scrub division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 7 sampling dates:

pH	4.6	Total alkalinity (mg/L as CaCO ₃)	0.6
Conductance (µS/cm @ 25 °C)	45	Color (Pt-Co units)	36
Chloride (mg/L)	9.6		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 94 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	4	7	13
Long-term total nitrogen concentrations (µg/L)	143	324	560
Long-term total chlorophyll concentrations (µg/L)	1.0	3.7	15.3
Long-term Secchi depth (ft)	2.0	7.5	16.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/11/06	7	503	4	.
2/23/06	8	450	15	.
3/29/06	7	350	2	6
5/24/06	7	327	3	6
6/14/06	9	367	13	5
7/20/06	9	340	7	7
9/29/06	7	300	5	6
10/19/06	8	353	4	6
11/28/06	8	323	8	6
12/29/06	7	300	4	9
2006 Average	8	361	6.5	6.4

Mill Dam (Marion County) LW Water Chemistry Summary

Period of record: 73 sampling dates; 1/31/90 to 11/28/06

Surface Area (LAKEWATCH): 310 acres / 125 hectares

Lake Region (Griffith et al. 1997): Ocala Scrub (75-09)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered clayey sand and granular sand of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Lynne Karst division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 10 sampling dates:

pH	6.4	Total alkalinity (mg/L as CaCO ₃)	2.9
Conductance (µS/cm @ 25 °C)	53	Color (Pt-Co units)	12
Chloride (mg/L)	10.2		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 73 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	7	12	43
Long-term total nitrogen concentrations (µg/L)	333	498	763
Long-term total chlorophyll concentrations (µg/L)	2.0	4.1	10.7
Long-term Secchi depth (ft)	4.3	8.1	14.7

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/3/06	10	577	2	12
6/15/06	11	590	3	9
7/21/06	7	713	3	10
9/18/06	8	553	4	10
11/28/06	9	600	3	12
2006 Average	9	607	3.1	10.6

Weir (Marion County) LW Water Chemistry Summary

Period of record: 156 sampling dates; 3/9/90 to 11/24/06

Surface Area (LAKEWATCH): 7071 acres / 2862 hectares

Lake Region (Griffith et al. 1997): Lake Weir/Leesburg Upland (75-14)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered clayey sand and granular sand of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Central Lakes division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 6 sampling dates:

pH	7.0	Total alkalinity (mg/L as CaCO ₃)	19.7
Conductance (µS/cm @ 25 °C)	168	Color (Pt-Co units)	5
Chloride (mg/L)	30.1		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 156 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	6	11	26
Long-term total nitrogen concentrations (µg/L)	290	752	973
Long-term total chlorophyll concentrations (µg/L)	3.0	11.5	22.7
Long-term Secchi depth (ft)	4.0	6.2	12.2

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/3/06	12	680	8	8
4/29/06	15	910	13	5
6/25/06	12	687	11	6
8/30/06	8	733	12	7
11/24/06	10	950	14	5
2006 Average	12	792	11.7	6.4

E (Miami-Dade County) LW Water Chemistry Summary

Period of record: 45 sampling dates; 6/27/99 to 10/15/06

Surface Area (LAKEWATCH): 98 acres / 37 hectares

Lake Region (Griffith et al. 1997): Miami Ridge/Atlantic Coastal Strip (76-03)

Geologic formation (Brooks 1981):

The geology is dominated by oolite, bioclastic and quartz sand of the Miami Formation

Physiographic region (Brooks 1981):

The lake lies in the Miami Rock Ridge subdivision of the Southern Atlantic Coastal Strip division of the Gold Coast-Florida Bay District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 2 sampling dates:

pH	8.2	Total alkalinity (mg/L as CaCO ₃)	101.0
Conductance (µS/cm @ 25 °C)	386	Color (Pt-Co units)	5
Chloride (mg/L)	49.8		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 45 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	3	5	7
Long-term total nitrogen concentrations (µg/L)	233	349	730
Long-term total chlorophyll concentrations (µg/L)	0.7	1.7	3.0
Long-term Secchi depth (ft)	14.2	18.2	23.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
3/2/06	5	427	3	19
3/17/06	4	357	2	15
4/16/06	3	510	2	17
5/14/06	4	440	1	20
6/17/06	5	297	1	21
7/23/06	5	297	2	18
8/20/06	5	327	2	22
2006 Average	5	359	2.0	18.3

Butler (Orange County)

LW Water Chemistry Summary

Period of record: 102 sampling dates; 10/14/93 to 10/9/06

Surface Area (LAKEWATCH): 1904 acres / 771 hectares

Lake Region (Griffith et al. 1997): Doctor Phillips Ridge (75-20)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Apopka Hills subdivision of the Apopka Upland division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 6 sampling dates:

pH	5.8	Total alkalinity (mg/L as CaCO ₃)	12.4
Conductance (µS/cm @ 25 °C)	218	Color (Pt-Co units)	7
Chloride (mg/L)	31.0		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 102 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	5	14	49
Long-term total nitrogen concentrations (µg/L)	387	570	1130
Long-term total chlorophyll concentrations (µg/L)	0.0	3.0	15.3
Long-term Secchi depth (ft)	4.0	11.9	23.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/23/06	18	490	3	9
2/22/06	13	480	1	11
3/27/06	15	487	1	10
4/9/06	19	477	2	10
5/10/06	18	467	2	10
6/7/06	19	513	1	11
7/22/06	21	660	6	6
8/21/06	16	617	6	7
9/25/06	12	560	2	10
10/9/06	13	387	2	10
2006 Average	16	514	2.5	9.4

Conway North (Orange County) LW Water Chemistry Summary

Period of record: 49 sampling dates; 8/1/92 to 8/4/06

Surface Area (LAKEWATCH): 676 acres / 274 hectares

Lake Region (Griffith et al. 1997): Orlando Ridge (75-21)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Orlando Promontory division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 4 sampling dates:

pH	7.4	Total alkalinity (mg/L as CaCO ₃)	25.5
Conductance (µS/cm @ 25 °C)	243	Color (Pt-Co units)	7
Chloride (mg/L)	33.2		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 49 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	7	11	17
Long-term total nitrogen concentrations (µg/L)	327	449	817
Long-term total chlorophyll concentrations (µg/L)	1.0	6.4	22.3
Long-term Secchi depth (ft)	3.9	12.0	19.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/12/06	11	457	2	18
3/28/06	12	393	2	14
8/4/06	10	420	3	11
2006 Average	11	423	2.2	14.3

Conway South (Orange County) LW Water Chemistry Summary

Period of record: 67 sampling dates; 7/27/92 to 8/4/06

Surface Area (LAKEWATCH): 869 acres / 352 hectares

Lake Region (Griffith et al. 1997): Orlando Ridge (75-21)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Orlando Promontory division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 5 sampling dates:

pH	7.5	Total alkalinity (mg/L as CaCO ₃)	28.6
Conductance (µS/cm @ 25 °C)	239	Color (Pt-Co units)	7
Chloride (mg/L)	32.5		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 67 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	7	10	15
Long-term total nitrogen concentrations (µg/L)	260	393	773
Long-term total chlorophyll concentrations (µg/L)	1.0	5.2	25.3
Long-term Secchi depth (ft)	4.6	13.2	21.4

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/12/06	14	417	4	14
3/28/06	11	320	1	17
8/4/06	10	357	3	12
2006 Average	12	364	2.6	14.2

Ivanhoe East (Orange County)

LW Water Chemistry Summary

Period of record: 135 sampling dates; 3/24/92 to 8/4/06

Surface Area (LAKEWATCH): 109 acres / 44 hectares

Lake Region (Griffith et al. 1997): Orlando Ridge (75-21)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Orlando Promontory division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 4 sampling dates:

pH	8.7	Total alkalinity (mg/L as CaCO ₃)	57.8
Conductance (µS/cm @ 25 °C)	207	Color (Pt-Co units)	14
Chloride (mg/L)	16.8		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 135 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	11	27	167
Long-term total nitrogen concentrations (µg/L)	427	749	1360
Long-term total chlorophyll concentrations (µg/L)	3.0	29.1	88.7
Long-term Secchi depth (ft)	1.3	3.5	13.3

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/12/06	17	673	3	13
4/18/06	18	493	4	12
8/4/06	19	553	7	7
2006 Average	18	573	4.6	10.7

Ivanhoe Middle (Orange County)

LW Water Chemistry Summary

Period of record: 140 sampling dates; 4/20/92 to 8/4/06

Surface Area (LAKEWATCH): 69 acres / 28 hectares

Lake Region (Griffith et al. 1997): Orlando Ridge (75-21)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Orlando Promontory division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 3 sampling dates:

pH	8.0	Total alkalinity (mg/L as CaCO ₃)	54.3
Conductance (µS/cm @ 25 °C)	199	Color (Pt-Co units)	13
Chloride (mg/L)	16.4		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 140 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	7	29	48
Long-term total nitrogen concentrations (µg/L)	400	644	1260
Long-term total chlorophyll concentrations (µg/L)	3.0	25.2	55.7
Long-term Secchi depth (ft)	1.9	4.4	14.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/12/06	21	603	6	8
4/18/06	19	470	3	14
8/4/06	30	1260	47	2
2006 Average	23	778	18.7	7.9

Ivanhoe Northwest (Orange County)

LW Water Chemistry Summary

Period of record: 6 sampling dates; 5/26/06 to 10/31/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Orlando Ridge (75-21)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Orlando Promontory division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 6 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	30	37	42
Long-term total nitrogen concentrations (µg/L)	483	629	750
Long-term total chlorophyll concentrations (µg/L)	6.0	20.2	38.3
Long-term Secchi depth (ft)	3.8	6.2	10.4

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
5/26/06	37	590	7	10
6/20/06	30	483	6	7
7/13/06	32	530	14	7
8/29/06	42	750	27	5
9/30/06	38	710	38	4
10/31/06	40	713	29	4
2006 Average	37	629	20.2	6.2

Ivanhoe West (Orange County)

LW Water Chemistry Summary

Period of record: 124 sampling dates; 4/5/93 to 8/4/06

Surface Area (LAKEWATCH): 70 acres / 28 hectares

Lake Region (Griffith et al. 1997): Orlando Ridge (75-21)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Orlando Promontory division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 3 sampling dates:

pH	8.0	Total alkalinity (mg/L as CaCO ₃)	52.7
Conductance (µS/cm @ 25 °C)	198	Color (Pt-Co units)	12
Chloride (mg/L)	16.9		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 124 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	9	32	74
Long-term total nitrogen concentrations (µg/L)	287	634	1040
Long-term total chlorophyll concentrations (µg/L)	3.0	29.4	59.7
Long-term Secchi depth (ft)	1.7	3.9	16.8

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/12/06	22	670	4	10
4/18/06	17	473	3	17
8/4/06	23	743	15	4
2006 Average	21	629	7.2	10.3

John's (Orange County) LW Water Chemistry Summary

Period of record: 132 sampling dates; 10/29/89 to 12/10/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Apopka Upland (75-16)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered beach and dune sand with some clay lenses of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Gap subdivision of the Lake Wales Ridge division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 6 sampling dates:

pH	6.7	Total alkalinity (mg/L as CaCO ₃)	12.1
Conductance (µS/cm @ 25 °C)	225	Color (Pt-Co units)	47
Chloride (mg/L)	31.6		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 132 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	13	42	79
Long-term total nitrogen concentrations (µg/L)	720	1086	1768
Long-term total chlorophyll concentrations (µg/L)	2.0	14.2	79.2
Long-term Secchi depth (ft)	1.2	4.0	6.8

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 6 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/8/06	36	1007	13	6
1/8/06	36	1007	13	6
2/11/06	37	997	14	6
2/11/06	37	997	14	6
3/12/06	35	938	12	5
3/12/06	35	938	12	5
4/9/06	38	967	22	5
4/9/06	38	967	22	5
6/3/06	30	918	16	5
6/3/06	30	918	16	5
7/15/06	31	1012	25	4
7/15/06	31	1012	25	4
8/5/06	30	1058	24	3
8/5/06	30	1058	24	3
8/5/06	30	1058	24	3
2006 Average	32	966	18.2	4.6

Starke (Orange County)

LW Water Chemistry Summary

Period of record: 124 sampling dates; 7/30/92 to 11/13/06

Surface Area (LAKEWATCH): 328 acres / 133 hectares

Lake Region (Griffith et al. 1997): Apopka Upland (75-16)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Apopka Hills subdivision of the Apopka Upland division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 124 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	13	27	51
Long-term total nitrogen concentrations (µg/L)	637	1023	1520
Long-term total chlorophyll concentrations (µg/L)	6.3	25.2	71.7
Long-term Secchi depth (ft)	2.0	3.2	5.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
2/21/06	25	887	12	4
4/10/06	24	780	16	3
10/12/06	24	1030	31	3
11/13/06	30	1053	35	3
2006 Average	26	938	23.4	3.4

Alligator (Osceola County)

LW Water Chemistry Summary

Period of record: 158 sampling dates; 6/19/90 to 7/29/06

Surface Area (LAKEWATCH): 3501 acres / 1417 hectares

Lake Region (Griffith et al. 1997): Osceola Slope (75-27)

Geologic formation (Brooks 1981):

The geology is dominated by coastal sand and shelly silty sand of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Kissimmee Valley division of the Eastern Flatwoods District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 4 sampling dates:

pH	5.8	Total alkalinity (mg/L as CaCO ₃)	2.3
Conductance (µS/cm @ 25 °C)	109	Color (Pt-Co units)	47
Chloride (mg/L)	22.4		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 158 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	6	14	26
Long-term total nitrogen concentrations (µg/L)	396	641	1182
Long-term total chlorophyll concentrations (µg/L)	1.0	3.9	12.8
Long-term Secchi depth (ft)	2.6	5.4	10.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 5 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/26/06	19	994	4	3
3/28/06	20	970	4	4
4/20/06	20	984	3	4
6/24/06	18	982	4	5
7/29/06	20	882	5	5
2006 Average	20	962	4.0	4.2

Kissimmee (Osceola County)

LW Water Chemistry Summary

Period of record: 51 sampling dates; 4/12/95 to 8/18/06

Surface Area (LAKEWATCH): 48945 acres / 19808 hectares

Lake Region (Griffith et al. 1997): Kissimmee/Okeechobee Lowland (75-35)

Geologic formation (Brooks 1981):

The geology is dominated by coastal sand and shelly silty sand of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Kissimmee Valley division of the Eastern Flatwoods District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 5 sampling dates:

pH	7.9	Total alkalinity (mg/L as CaCO ₃)	25.6
Conductance (µS/cm @ 25 °C)	140	Color (Pt-Co units)	55
Chloride (mg/L)	16.9		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 51 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	27	52	100
Long-term total nitrogen concentrations (µg/L)	907	1283	2050
Long-term total chlorophyll concentrations (µg/L)	6.0	31.4	75.7
Long-term Secchi depth (ft)	1.5	2.7	4.8

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
2/14/06	74	1537	22	2
3/7/06	72	1347	23	2
8/18/06	77	1427	52	2
2006 Average	74	1437	32.2	1.9

Tohopekaliga-Middle (Osceola County)

LW Water Chemistry Summary

Period of record: 28 sampling dates; 6/13/00 to 6/29/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Kissimmee/Okeechobee Lowland (75-35)

Geologic formation (Brooks 1981):

The geology is dominated by coastal sand and shelly silty sand of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Kissimmee Valley division of the Eastern Flatwoods District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 28 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	23	54	86
Long-term total nitrogen concentrations (µg/L)	750	1122	1553
Long-term total chlorophyll concentrations (µg/L)	9.3	24.5	50.7
Long-term Secchi depth (ft)	1.8	3.0	4.7

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/5/06	32	850	19	3
2/17/06	44	1020	41	3
3/19/06	50	1227	39	2
4/22/06	60	1237	40	2
5/27/06	69	1553	46	2
6/29/06	76	1497	51	2
2006 Average	55	1231	39.1	2.3

Tohopekaliga-North (Osceola County)

LW Water Chemistry Summary

Period of record: 34 sampling dates; 6/13/00 to 12/7/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Kissimmee/Okeechobee Lowland (75-35)

Geologic formation (Brooks 1981):

The geology is dominated by coastal sand and shelly silty sand of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Kissimmee Valley division of the Eastern Flatwoods District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 34 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	36	70	136
Long-term total nitrogen concentrations (µg/L)	680	1112	2163
Long-term total chlorophyll concentrations (µg/L)	6.3	29.9	102.3
Long-term Secchi depth (ft)	1.4	2.8	7.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/5/06	45	800	9	3
2/17/06	41	680	10	5
3/19/06	60	903	26	3
4/22/06	75	1137	30	3
5/27/06	98	1450	54	2
6/29/06	93	1353	57	2
7/27/06	93	1450	58	2
8/29/06	98	1330	44	1
9/9/06	78	1310	.	.
10/6/06	72	1337	48	2
11/3/06	62	1207	.	.
12/7/06	62	1190	.	.
2006 Average	73	1179	37.1	2.4

Tohopekaliga East (Osceola County)

LW Water Chemistry Summary

Period of record: 85 sampling dates; 12/17/97 to 11/17/06

Surface Area (LAKEWATCH): 13691 acres / 5541 hectares

Lake Region (Griffith et al. 1997): Osceola Slope (75-27)

Geologic formation (Brooks 1981):

The geology is dominated by coastal sand and shelly silty sand of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Kissimmee Valley division of the Eastern Flatwoods District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 7 sampling dates:

pH	6.4	Total alkalinity (mg/L as CaCO ₃)	10.2
Conductance (µS/cm @ 25 °C)	112	Color (Pt-Co units)	37
Chloride (mg/L)	20.9		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 85 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	12	21	32
Long-term total nitrogen concentrations (µg/L)	487	673	1053
Long-term total chlorophyll concentrations (µg/L)	1.3	5.3	16.0
Long-term Secchi depth (ft)	3.3	5.7	11.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
4/15/06	18	663	4	7
5/18/06	17	630	4	6
6/22/06	18	667	5	8
10/19/06	13	577	.	.
11/17/06	15	570	.	.
2006 Average	16	621	4.4	6.9

Tarpon (Pinellas County) LW Water Chemistry Summary

Period of record: 1 sampling date; 10/13/06

Surface Area (Shafer et al. 1986): 2534 acres / 1026 hectares

Lake Region (Griffith et al. 1997): Tampa Plain (75-22)

Geologic formation (Brooks 1981):

The geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Pinellas Peninsula division of the Southwestern Flatwoods District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 3 sampling dates:

pH	6.8	Total alkalinity (mg/L as CaCO ₃)	15.8
Conductance (µS/cm @ 25 °C)	596	Color (Pt-Co units)	50
Chloride (mg/L)	171.8		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 1 month sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	44	44	44
Long-term total nitrogen concentrations (µg/L)	1113	1113	1113
Long-term total chlorophyll concentrations (µg/L)	41.3	41.3	41.3
Long-term Secchi depth (ft)	2.3	2.3	2.3

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
10/13/06	44	1113	41	2
2006 Average	44	1113	41.3	2.3

Dexter (Polk County)

LW Water Chemistry Summary

Period of record: 135 sampling dates; 12/21/92 to 12/23/06

Surface Area (LAKEWATCH): 173 acres / 70 hectares

Lake Region (Griffith et al. 1997): Winter Haven/Lake Henry Ridges (75-31)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered clayey sand and granular sand of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Winter Haven Karst division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 1 sampling date:

pH	7.9	Total alkalinity (mg/L as CaCO ₃)	34.0
Conductance (µS/cm @ 25 °C)	273	Color (Pt-Co units)	8
Chloride (mg/L)	21.3		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 135 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	5	10	24
Long-term total nitrogen concentrations (µg/L)	293	442	770
Long-term total chlorophyll concentrations (µg/L)	1.0	2.8	10.0
Long-term Secchi depth (ft)	7.7	13.0	19.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/27/06	11	443	2	.
3/14/06	10	400	1	17
5/21/06	10	413	1	14
6/25/06	9	440	2	.
7/29/06	8	393	2	.
8/22/06	15	507	3	.
9/24/06	11	460	2	.
10/21/06	11	487	1	.
11/19/06	11	440	2	14
12/23/06	9	397	1	.
2006 Average	11	438	1.6	15.1

Eloise (Polk County)

LW Water Chemistry Summary

Period of record: 10 sampling dates; 10/29/91 to 11/6/06

Surface Area (Shafer et al. 1986): 1160 acres / 469 hectares

Lake Region (Griffith et al. 1997): Winter Haven/Lake Henry Ridges (75-31)

Geologic formation (Brooks 1981):

The geology is dominated by deeply weathered clayey sand and granular sand of the Hawthorne Formation

Physiographic region (Brooks 1981):

The lake lies in the Winter Haven Karst division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 10 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	25	37	53
Long-term total nitrogen concentrations (µg/L)	1107	1298	1533
Long-term total chlorophyll concentrations (µg/L)	25.3	45.1	73.0
Long-term Secchi depth (ft)	1.8	2.7	3.2

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
11/6/06	53	1240	42	3
2006 Average	53	1240	42.3	2.5

Weohyakapka (Polk County) LW Water Chemistry Summary

Period of record: 123 sampling dates; 10/26/92 to 5/30/06

Surface Area (LAKEWATCH): 7325 acres / 2964 hectares

Lake Region (Griffith et al. 1997): Kissimmee/Okeechobee Lowland (75-35)

Geologic formation (Brooks 1981):

The geology is dominated by coastal sand and shelly silty sand of the preglacial Pleistocene

Physiographic region (Brooks 1981):

The lake lies in the Kissimmee Valley division of the Eastern Flatwoods District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 4 sampling dates:

pH	7.1	Total alkalinity (mg/L as CaCO ₃)	13.6
Conductance (µS/cm @ 25 °C)	99	Color (Pt-Co units)	35
Chloride (mg/L)	15.3		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 123 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	11	22	44
Long-term total nitrogen concentrations (µg/L)	407	702	1100
Long-term total chlorophyll concentrations (µg/L)	1.0	10.7	47.0
Long-term Secchi depth (ft)	2.0	4.9	8.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/23/06	20	630	10	3
2/28/06	29	890	12	3
3/27/06	31	787	13	2
5/3/06	34	773	14	4
5/30/06	28	737	10	5
2006 Average	28	763	11.8	3.3

George South (Putnam County)

LW Water Chemistry Summary

Period of record: 60 sampling dates; 2/9/99 to 8/24/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Eastern Flatlands (75-10)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 60 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	26	53	111
Long-term total nitrogen concentrations (µg/L)	437	983	1727
Long-term total chlorophyll concentrations (µg/L)	3.3	27.6	93.0
Long-term Secchi depth (ft)	1.0	2.2	4.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
2/22/06	47	970	16	.
3/31/06	35	623	10	.
4/25/06	40	937	23	.
5/24/06	26	450	20	.
6/27/06	38	803	18	.
7/26/06	32	870	22	.
8/24/06	44	1173	44	.
2006 Average	37	832	21.7	.

Rodman-1 (Putnam County)

LW Water Chemistry Summary

Period of record: 75 sampling dates; 1/25/00 to 11/13/06

Surface Area (Shafer et al. 1986): 13000 acres / 5261 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 75 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	5	31	112
Long-term total nitrogen concentrations (µg/L)	230	645	1710
Long-term total chlorophyll concentrations (µg/L)	1.0	7.4	33.0
Long-term Secchi depth (ft)	1.5	6.2	13.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 1 mid-lake station for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/21/06	36	860	24	6
2/16/06	61	970	7	3
3/21/06	39	810	6	6
4/14/06	30	510	3	9
5/13/06	21	410	3	10
6/25/06	14	270	8	11
7/21/06	14	280	9	13
8/17/06	9	300	3	14
9/21/06	8	230	1	.
10/10/06	7	300	1	.
11/13/06	5	240	.	.
2006 Average	22	471	6.5	8.9

Rodman-2 (Putnam County) LW Water Chemistry Summary

Period of record: 74 sampling dates; 1/25/00 to 11/13/06

Surface Area (Shafer et al. 1986): 13000 acres / 5261 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 74 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	7	33	135
Long-term total nitrogen concentrations (µg/L)	240	639	1630
Long-term total chlorophyll concentrations (µg/L)	1.0	7.9	33.0
Long-term Secchi depth (ft)	1.5	5.7	13.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 1 mid-lake station for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/21/06	41	1010	13	6
2/16/06	60	1030	7	3
3/21/06	44	960	4	6
4/14/06	25	500	2	9
5/13/06	21	430	3	10
6/25/06	15	260	4	10
7/21/06	9	290	5	12
8/17/06	8	320	1	13
9/21/06	9	330	3	12
10/10/06	9	390	2	.
11/13/06	7	240	.	.
2006 Average	23	524	4.4	9.1

Rodman-3 (Putnam County)

LW Water Chemistry Summary

Period of record: 84 sampling dates; 1/25/00 to 12/17/06

Surface Area (Shafer et al. 1986): 13000 acres / 5261 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 84 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	8	29	97
Long-term total nitrogen concentrations (µg/L)	150	523	1480
Long-term total chlorophyll concentrations (µg/L)	1.0	2.9	24.0
Long-term Secchi depth (ft)	1.5	4.6	11.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 1 mid-lake station for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/13/06	25	380	1	5
2/12/06	28	680	1	3
3/14/06	53	790	12	4
4/9/06	23	500	5	6
5/14/06	15	180	2	.
6/11/06	19	430	3	8
7/15/06	16	390	3	10
8/15/06	21	360	4	7
9/17/06	15	310	2	7
10/15/06	11	380	1	8
11/12/06	8	190	1	10
12/17/06	11	200	1	6
2006 Average	20	399	3.0	6.7

Rodman-4 (Putnam County)

LW Water Chemistry Summary

Period of record: 69 sampling dates; 1/25/00 to 9/21/06

Surface Area (Shafer et al. 1986): 13000 acres / 5261 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 69 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	6	36	166
Long-term total nitrogen concentrations (µg/L)	200	668	2260
Long-term total chlorophyll concentrations (µg/L)	0.0	4.9	39.0
Long-term Secchi depth (ft)	1.5	5.5	11.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 1 mid-lake station for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
2/22/06	23	810	.	7
3/23/06	25	800	5	7
4/25/06	13	260	0	8
5/31/06	9	260	4	8
7/8/06	6	230	0	.
9/21/06	13	360	2	8
2006 Average	15	453	2.2	7.6

Rodman-5 (Putnam County) LW Water Chemistry Summary

Period of record: 70 sampling dates; 1/25/00 to 10/16/06

Surface Area (Shafer et al. 1986): 13000 acres / 5261 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 70 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	15	38	142
Long-term total nitrogen concentrations (µg/L)	300	724	1730
Long-term total chlorophyll concentrations (µg/L)	0.0	2.7	20.0
Long-term Secchi depth (ft)	1.5	6.9	17.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 1 mid-lake station for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
3/23/06	26	770	2	9
4/25/06	44	680	1	9
5/31/06	40	580	2	11
9/18/06	42	580	1	9
10/16/06	29	690	1	10
2006 Average	36	660	1.4	9.6

Rodman-6 (Putnam County) LW Water Chemistry Summary

Period of record: 84 sampling dates; 1/25/00 to 12/16/06

Surface Area (Shafer et al. 1986): 13000 acres / 5261 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 84 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	18	46	148
Long-term total nitrogen concentrations (µg/L)	530	1069	2430
Long-term total chlorophyll concentrations (µg/L)	1.0	7.4	49.0
Long-term Secchi depth (ft)	1.0	5.2	9.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 1 mid-lake station for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/16/06	44	1260	2	5
2/17/06	38	1310	7	4
3/15/06	52	1130	6	3
4/10/06	54	1230	3	5
5/12/06	42	1050	10	5
6/11/06	39	1100	4	6
7/16/06	39	880	15	5
8/17/06	38	1050	5	8
9/18/06	50	1030	4	6
10/16/06	41	610	18	6
11/11/06	50	1100	3	6
12/16/06	47	830	5	4
2006 Average	45	1048	6.8	5.1

Rodman-out 1 (Putnam County)

LW Water Chemistry Summary

Period of record: 84 sampling dates; 1/25/00 to 12/17/06

Surface Area . : . acre / . hectare

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The station lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 84 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	6	35	122
Long-term total nitrogen concentrations (µg/L)	250	711	1860
Long-term total chlorophyll concentrations (µg/L)	1.0	6.7	32.0
Long-term Secchi depth (ft)	1.0	5.4	14.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 1 mid-lake station for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/13/06	32	1040	16	5
2/12/06	68	1290	8	2
3/14/06	48	930	7	4
4/9/06	40	740	5	5
5/14/06	28	530	5	6
6/11/06	22	620	4	9
7/15/06	18	640	9	6
8/15/06	15	450	5	9
9/17/06	10	390	1	.
10/15/06	11	380	1	.
11/12/06	8	250	1	.
12/17/06	6	280	1	.
2006 Average	26	628	5.3	5.8

Rodman-out 2 (Putnam County) LW Water Chemistry Summary

Period of record: 75 sampling dates; 1/25/00 to 11/13/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The station lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 75 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	5	33	128
Long-term total nitrogen concentrations (µg/L)	240	652	1670
Long-term total chlorophyll concentrations (µg/L)	1.0	9.1	32.0
Long-term Secchi depth (ft)	1.5	5.9	14.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 1 mid-lake station for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/21/06	31	820	20	6
2/16/06	51	870	10	3
3/21/06	41	830	5	5
4/14/06	26	430	4	8
5/13/06	24	390	4	10
6/25/06	15	320	4	11
7/21/06	11	360	5	12
8/17/06	10	440	3	14
9/21/06	11	380	3	.
10/10/06	10	370	3	.
11/13/06	8	340	.	.
2006 Average	22	505	6.1	8.7

Rodman-out 3 (Putnam County)

LW Water Chemistry Summary

Period of record: 52 sampling dates; 5/17/01 to 9/21/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated by undifferentiated sand, shell, clay, marl, and peat of the Holocene

Physiographic region (Brooks 1981):

The station lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from . sampling dates:

pH	.	Total alkalinity (mg/L as CaCO ₃)	.
Conductance (µS/cm @ 25 °C)	.	Color (Pt-Co units)	.
Chloride (mg/L)	.		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 52 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	22	107	341
Long-term total nitrogen concentrations (µg/L)	170	1096	2490
Long-term total chlorophyll concentrations (µg/L)	0.0	1.9	14.0
Long-term Secchi depth (ft)	0.5	2.4	4.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 1 mid-lake station for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
2/22/06	146	1420	0	2
3/23/06	143	1450	1	3
4/25/06	128	1180	1	2
5/31/06	35	330	5	4
7/8/06	36	420	0	4
9/21/06	22	430	3	4
2006 Average	85	872	1.7	3.2

Jesup (Seminole County)

LW Water Chemistry Summary

Period of record: 67 sampling dates; 4/25/91 to 12/18/06

Surface Area (Shafer et al. 1986): 10011 acres / 4051 hectares

Lake Region (Griffith et al. 1997): Eastern Flatlands (75-10)

Geologic formation (Brooks 1981):

The geology is dominated by dune sand and shell with silty sand, silt, and clay of the Princess Ann Formation

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 5 sampling dates:

pH	7.9	Total alkalinity (mg/L as CaCO ₃)	73.8
Conductance (µS/cm @ 25 °C)	729	Color (Pt-Co units)	54
Chloride (mg/L)	177.5		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 67 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	90	173	339
Long-term total nitrogen concentrations (µg/L)	1320	2780	6007
Long-term total chlorophyll concentrations (µg/L)	36.5	130.3	356.3
Long-term Secchi depth (ft)	0.6	1.4	2.5

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
3/11/06	140	2710	104	1
4/15/06	94	2213	79	2
5/14/06	128	2503	91	1
6/24/06	137	3367	92	1
7/16/06	121	3613	134	1
8/20/06	119	4180	230	1
9/23/06	116	3463	196	1
10/21/06	121	3777	173	1
12/18/06	165	3867	182	1
2006 Average	127	3299	142.3	0.9

Monroe East (Seminole County)

LW Water Chemistry Summary

Period of record: 16 sampling dates; 9/25/00 to 11/14/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Eastern Flatlands (75-10)

Geologic formation (Brooks 1981):

The geology is dominated by dune sand and shell with silty sand, silt, and clay of the Princess Ann Formation

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 1 sampling date:

pH	8.0	Total alkalinity (mg/L as CaCO ₃)	44.0
Conductance (µS/cm @ 25 °C)	1687	Color (Pt-Co units)	35
Chloride (mg/L)	434.0		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 16 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	47	106	248
Long-term total nitrogen concentrations (µg/L)	1347	1737	2093
Long-term total chlorophyll concentrations (µg/L)	5.3	25.1	60.3
Long-term Secchi depth (ft)	1.4	1.7	2.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
11/14/06	72	2090	20	2
2006 Average	72	2090	20.3	1.7

Monroe West (Seminole County) LW Water Chemistry Summary

Period of record: 42 sampling dates; 9/24/00 to 6/10/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Eastern Flatlands (75-10)

Geologic formation (Brooks 1981):

The geology is dominated by dune sand and shell with silty sand, silt, and clay of the Princess Ann Formation

Physiographic region (Brooks 1981):

The lake lies in the St John's Offset division of the Central Lake District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 1 sampling date:

pH	8.0	Total alkalinity (mg/L as CaCO ₃)	44.0
Conductance (µS/cm @ 25 °C)	1687	Color (Pt-Co units)	35
Chloride (mg/L)	434.0		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 42 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	30	77	182
Long-term total nitrogen concentrations (µg/L)	837	1492	3277
Long-term total chlorophyll concentrations (µg/L)	0.0	12.9	72.7
Long-term Secchi depth (ft)	0.8	2.0	4.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
3/4/06	48	1340	1	2
4/30/06	74	1535	6	3
6/10/06	69	1333	40	2
2006 Average	64	1403	15.8	2.1

Panasoffkee (Sumter County) LW Water Chemistry Summary

Period of record: 100 sampling dates; 8/5/88 to 7/21/06

Surface Area (Shafer et al. 1986): 4460 acres / 1805 hectares

Lake Region (Griffith et al. 1997): Central Valley (75-08)

Geologic formation (Brooks 1981):

The geology is dominated undifferentiated sand, shell, clay, marl, and peat of the Holocene and limestone consisting of skeletons of fossils in a silt to sand size matrix of the Ocala Limestone Formation

Physiographic region (Brooks 1981):

The lake lies in the Tsala Apopka Basin division of the Ocala Uplift District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 6 sampling dates:

pH	8.2	Total alkalinity (mg/L as CaCO ₃)	102.9
Conductance (μS/cm @ 25 °C)	259	Color (Pt-Co units)	51
Chloride (mg/L)	10.5		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 100 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (μg/L)	10	32	125
Long-term total nitrogen concentrations (μg/L)	333	789	1867
Long-term total chlorophyll concentrations (μg/L)	2.0	13.7	139.7
Long-term Secchi depth (ft)	2.0	3.9	8.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, μg/L), total nitrogen (TN, μg/L), chlorophyll (CHL, μg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (μg/L)</u>	<u>TN (μg/L)</u>	<u>CHL (μg/L)</u>	<u>SECCHI (ft)</u>
1/5/06	75	963	16	3
7/21/06	32	1020	24	2
2006 Average	54	992	20.2	2.7

Juniper (Walton County) LW Water Chemistry Summary

Period of record: 103 sampling dates; 4/19/97 to 5/1/06

Surface Area : . acre / . hectare

Lake Region (Griffith et al. 1997): Dougherty/Marianna Plains (65-02)

Geologic formation (Brooks 1981):

The geology is dominated by gravel, sand and clay of the Citronelle Formation

Physiographic region (Brooks 1981):

The lake lies in the De Funiak Karst division of the Dougherty Karst District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 2 sampling dates:

pH	5.3	Total alkalinity (mg/L as CaCO ₃)	0.2
Conductance (µS/cm @ 25 °C)	17	Color (Pt-Co units)	33
Chloride (mg/L)	4.5		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 103 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	4	11	25
Long-term total nitrogen concentrations (µg/L)	157	384	693
Long-term total chlorophyll concentrations (µg/L)	1.0	5.5	14.0
Long-term Secchi depth (ft)	4.0	7.4	12.0

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 3 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/20/06	6	235	2	.
5/1/06	6	225	1	.
2006 Average	6	230	1.5	.

Spring (Walton County) LW Water Chemistry Summary

Period of record: 174 sampling dates; 2/2/90 to 10/11/06

Surface Area (LAKEWATCH): 242 acres / 98 hectares

Lake Region (Griffith et al. 1997): Dougherty/Marianna Plains (65-02)

Geologic formation (Brooks 1981):

The geology is dominated by silty fine sand to sandy clay of the Shoal River Formation

Physiographic region (Brooks 1981):

The lake lies in the De Funiak Karst division of the Dougherty Karst District

Supplemental, unpublished water chemistry data, University of Florida.

Data reported are means from 2 sampling dates:

pH	5.8	Total alkalinity (mg/L as CaCO ₃)	1.0
Conductance (µS/cm @ 25 °C)	16	Color (Pt-Co units)	11
Chloride (mg/L)	4.7		

Long-term Florida LAKEWATCH Data

Numbers reported below are the minimum, average and maximum value for the 174 months sampled:

	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Long-term total phosphorus concentrations (µg/L)	6	14	36
Long-term total nitrogen concentrations (µg/L)	240	515	1150
Long-term total chlorophyll concentrations (µg/L)	1.3	9.4	84.3
Long-term Secchi depth (ft)	1.8	7.4	12.3

2006 Florida LAKEWATCH Data

Numbers reported below are monthly averages calculated from 4 mid-lake stations for total phosphorus (TP, µg/L), total nitrogen (TN, µg/L), chlorophyll (CHL, µg/L) and Secchi depth (SECCHI, ft) during 2000:

<u>Date</u>	<u>TP (µg/L)</u>	<u>TN (µg/L)</u>	<u>CHL (µg/L)</u>	<u>SECCHI (ft)</u>
1/31/06	.	.	4	9
2/28/06	.	.	3	8
3/31/06	12	350	2	.
4/30/06	9	340	2	9
5/30/06	.	.	2	9
6/30/06	6	417	2	9
8/9/06	7	450	4	8
9/9/06	12	513	6	4
10/11/06	15	587	16	4
2006 Average	10	443	4.7	7.6

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