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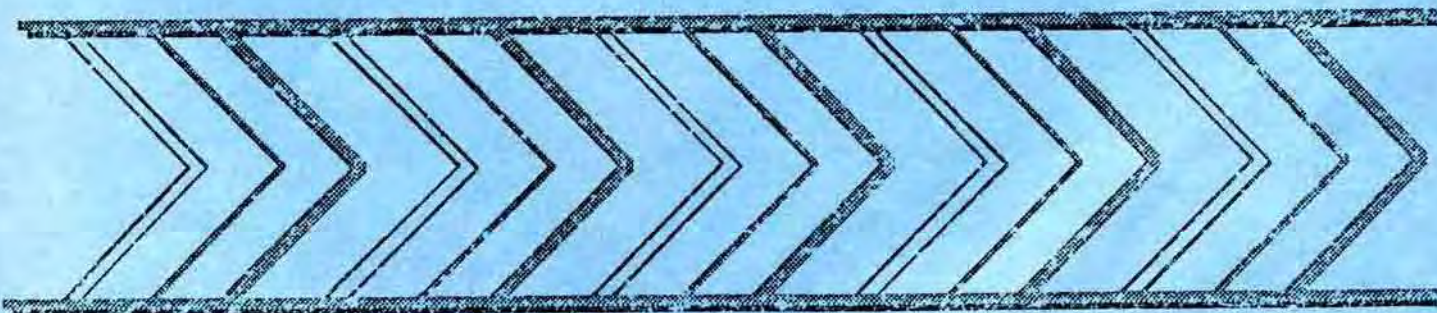
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## LAKE REGIONS OF FLORIDA



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## ABSTRACT

Water resources can be managed more effectively if they are organized by regions that reflect differences in their quality, quantity, hydrology, and their sensitivity or resilience to ecological disturbances. The management of lake resources requires a spatial framework that distinguishes regions within which there is homogeneity in the types and quality of lakes and their association with landscape characteristics, or where there is a particular mosaic of lake types and quality. In the early 1980's, Canfield and others documented regional differences in Florida lake water chemistry and related these to geology and physiography. Building on this work, we have defined forty-seven lake regions of Florida by mapping and analyzing water quality data sets in conjunction with information on soils, physiography, geology, vegetation, climate, and land use/land cover, as well as relying on the expert judgement of local limnologists and resource managers. This spatial framework has also been used to help illustrate the regional differences in parameters such as total phosphorus and acid-neutralizing capacity. A large-format color poster of the lake region maps with photographs and regional descriptions has also been produced. The Florida lake regions and associated maps and graphs of lake chemistry are intended to provide an effective framework for assessing lake characteristics, calibrating predictive models, guiding lake management, and framing expectations by lake users and lakeshore residents.

*To obtain a large color map of the Florida lake regions or an ARC/INFO export file of the region boundaries, contact the first author. To obtain the associated color poster publication of Florida lake regions contact Michael Scheinkman, FL DEP, 2600 Blair Stone Rd, Tallahassee, FL 32399, (904) 921-9918.*



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## PROJECT BACKGROUND

### INTRODUCTION

The lakes of Florida provide important ecological habitats for a diverse flora and fauna, and comprise a valuable resource for human activities. With over 7,700 lakes in Florida, the assessment and management of this resource is complicated by its physical, chemical, and biological diversity. Differences in physiography, geology, soils, hydrology, vegetation, and climate affect lake characteristics, and these can occur in regional patterns. Lake management strategies regarding protective water quality standards or restoration goals cannot be carried out effectively on a lake-by-lake basis only, but must consider regional differences in limnological capabilities and potentials.

Regional frameworks are useful for structuring the research, assessment, monitoring, and management of environmental resources. These frameworks are helpful for comparing regional land and water patterns; locating monitoring, reference or special study sites; extrapolating site-specific information; predicting effects of management practices; and establishing reasonable and realistic regional standards and expectations. A variety of spatial frameworks can be useful for lake assessment and management, ranging from general purpose regional frameworks to specific-purpose single-characteristic maps (Figure 1; Omernik 1994). A national-scale ecoregion framework (Omernik 1987) has proven useful to lake managers in Minnesota for developing realistic regional goals, for protective as well as restorative purposes, relative to summer nutrient concentrations, nuisance algal conditions, and Secchi transparency ranges (Heiskary 1994; Heiskary and Wilson 1989; Wilson and Walker 1989). Lake user expectations and sensitivities to eutrophication conditions can differ greatly between ecoregions (Heiskary 1989; Smeltzer and Heiskary 1990). Ecoregions have been used in Ohio to estimate attainable reservoir phosphorus concentrations and help prioritize reservoir restoration efforts (Fulmer and Cooke 1990). A recent past president of the North American Lake Management Society suggested that a regional approach is needed in the development of lake quality standards with respect to eutrophication:

"Standards should be specific to regions, subregions, and if warranted, even individual lakes. Because bedrock character and soil type, some areas are naturally richer in nutrients than others. Therefore, standards should be based on attainable quality for that region, or subunit. That approach is consistent with the ecoregion concept and would assist the difficult task of allocating the always limited funds for remediation." (Welch 1993).

As part of the Florida Department of Environmental Protection's Lake Bioassessment / Regionalization Initiative, we have examined regional patterns of lake characteristics in Florida to develop a spatial framework for lake assessment and management. In an earlier project with the FL DEP, level IV ecological regions of Florida were defined to help in the assessment of environmental resources (Griffith et al. 1994). The level IV ecoregion

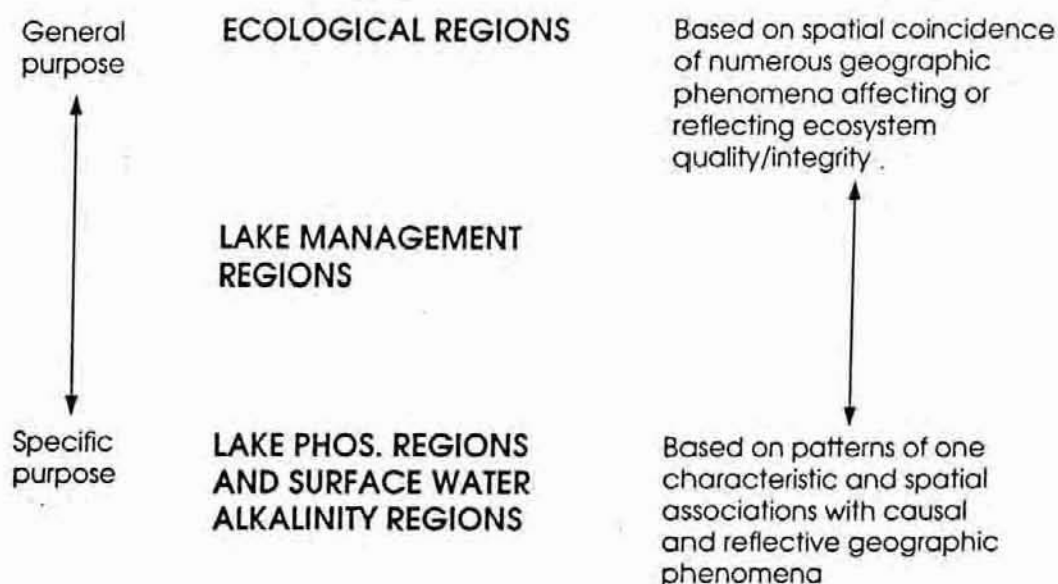


Figure 1. Regional frameworks for lake assessment and management (Omernik 1994).

framework of Florida has been used to select regional stream reference sites, and to assess that data to help develop biological criteria for streams (Barbour et al. 1996). Ecoregion maps are general purpose maps, and for lake assessment and management, more specific maps are often needed (See Figure 1). For the DEP's lake bioassessment work using the paired lake concept (Frydenborg and Lurding 1994; FL DEP 1994), the ecoregion framework appeared too general.

Physiographic maps are also used to classify land and water resources, and have been used to assess Florida lake chemistry (Canfield 1981), but there are several reasons why a physiographic map alone may not work as well as a lake region framework. First, the physiographer obviously has a different purpose and focus than that of lake management. Second, there are several different physiographic frameworks available for Florida, such as Fenneman (1938), Cooke (1939; 1945), White (1958; 1970) and Brooks (1981b; 1982), and each source provides a different interpretation. And third, a particular physiographic division may be too general or too detailed for lake management purposes. Brooks' (1981b) physiographic framework, for example, provides 3 Sections, 10 Districts, and 180 Subdistricts. We have tried to utilize the most useful elements of all of these sources as they appeared to best explain lake differences in Florida.

Hydrologic unit or watershed frameworks are also commonly used for surface water assessments. The DEP has adopted a hybrid watershed/region framework to help implement an ecosystem management strategy to protect the functions of entire ecological systems (Barnett et al. 1995). Florida's unique topographic and hydrological characteristics, however, reduces the significance of basins or watersheds for explaining water quality patterns and, as shown elsewhere, surface water characteristics or ecological characteristics do not coincide with hydrologic units (Omernik and Griffith 1991; Omernik and Bailey 1997). Our intent in this project was to build on the ecological subregion



framework, the regional lake assessment of Canfield (1981), and other sources of ecological and limnological information to define regions of similarity in the physical, chemical, and biological characteristics of Florida lakes and their associations with landscape features.

## OVERVIEW AND CLASSIFICATIONS OF FLORIDA LAKES

Florida has an amazing abundance and diversity of lakes, reflecting the state's differences in surface features, geology, and hydrology. The more than 7,700 lakes of Florida have an uneven spatial distribution (Figure 2), with more than half occurring in the central upland portion of the peninsula. Approximately 35 percent of the lakes are located in the four central Florida counties of Lake, Orange, Polk, and Osceola (Palmer 1984).



Figure 2. Distribution of Florida lakes (after Brenner et al. 1990).

Although the spatial location of lakes helps explain some of their characteristics, gaining an understanding of their features is complicated by temporal considerations. One could generalize that Florida's subtropical climate has essentially two seasons, a warmer wet one and a cooler dry one, and lake physical, chemical and biological conditions can differ within the year. In addition, longer term climatic fluctuations can make lakes appear or disappear, or alter their chemistry. With relatively flat surrounding topography, some Florida lakes historically had wide fluctuations in surface area. Littoral zone habitats expanded during wet periods, creating productive fish and wildlife areas; and in dry

periods, declined, dried out, decomposed, and consolidated, rejuvenating the system (Estevez et al. 1984). As the human population has encroached on these areas with urbanization, agricultural activities, and lake stabilization, these natural processes have been confined and reduced. Other lakes in the state have remarkably stable water levels, such as Kingsley (Deevey 1988).

Average physical configurations of lakes in Florida are varied. There are thousands of lakes with small lake areas, and five lakes, Okeechobee, George, Kissimmee, Apopka, and Istokpoga, have surface areas greater than 40 mi<sup>2</sup> (Heath and Conover 1981). Lake Okeechobee (681 mi<sup>2</sup>) is the largest natural freshwater lake in the conterminous U.S. that is entirely within one state. The smallest lakes are primarily the seepage lakes located on the sandy upland ridges, and the largest lakes are drainage types most often found in lowland areas. Florida lakes in general are relatively shallow, and most of the large lakes are very shallow. Lake Okeechobee has a maximum depth of about 14 feet and Lake Apopka about 11 feet. Some sinkhole lakes are more than 100 feet deep (Heath and Conover 1981). More detailed overviews of Florida lakes and their characteristics can be found in Brenner et al. (1990), Pollman and Canfield (1991), and Fernald and Patton (1984).

Classifications of Florida's water body types can be found in several references. The lake-related sections of some of these classifications are shown in Table 1. Lake types are usually classified using chemical or physical criteria. In the Water Resources Atlas of Florida, Estevez et al. (1984, p. 96) classifies lakes simply as acid clear, acid colored, or alkaline clear. This is similar to the cluster analysis of 55 lakes by Shannon and Brezonik (1972) showing acid colored, alkaline colored, alkaline clear, and softwater clear lakes. Also in the Atlas, Palmer (1984, p. 62) discusses the lake types as impoundments, solution lakes (two basic types: those that are circular at the surface with conical cross sections, and lakes that are elongated and branching formed in valley floor sinkholes), lakes in relict sea bottom depressions, and lakes formed by erosion and sedimentation processes in rivers. He also shows the percentage of total lakes classified by stream connection, i.e., no inlets and outlets, inlets and outlets, outlets only, and inlets only. The Florida Museum of Natural History (Burgess and Walsh 1991) used this common straightforward hydrologic classification, but at least 70% of Florida's 7800+ lakes are of the "landlocked" type (no inlet or outlet). Berner and Pescador (1988) used bottom type, sand or silt, for their lakes and several criteria for ponds, but did not make a clear distinction between a lake and a pond. Huber et al. (1983) undertook a trophic state index classification of Florida's lakes in response to the requirements of the EPA's Clean Lakes Program. Lakes were first classified as nitrogen limited, phosphorus limited, or nutrient balanced. 573 lakes were classified by an average trophic state index (TSI) as well as by several subindices. Hydrologic lake types (inflow, outflow, inflow-outflow, seepage, unspecified) were found to not be a major factor influencing TSI values.

Table 1. Lake types from Florida aquatic classifications.

<u>Berner and Pescador (1988)</u>	<u>FL Natural Areas Inventory (1990)</u>	<u>Burgess and Walsh (1991)</u>	<u>Frydenborg (1991)</u>
Ponds	Clastic Upland Lake	Streams flowing into lake	Karst solution lake
Sinkhole ponds	Coastal Dune Lake	Streams flowing out of lake	Relict estuary lake
Fluctuating ponds	Coastal Rockland Lake	Streams flowing in and out of lake	Stream-capture lake
Temporary woods ponds	Flatwoods/Prairie/Marsh Lake	Landlocked lake	Perched aquifer lake
Sporadic ponds	River Floodplain Lake and Swamp Lake	Riverine lake (St. Johns River)	Others
Jerome sink	Sandhill Upland Lake	Impounded lake	Marsh
Lakes	Sinkhole Lake		Swamp
Sand-bottomed lakes			Temporary pond
Silt-bottomed lakes			Coastal dune pond
Disappearing lakes			

Myers and Edmiston's (1983) Florida lake classification project grouped lakes into "poor" or "fair to good" classes using trophic state index. They then prioritized lakes for restoration using a quantitative scheme based on the trophic state, recreational use, public interest, impaired use, nutrient loading, and the importance as a public water body. They listed the top 50 lakes in Florida in need of restoration. Most all occurred in central Florida and were affected by cultural eutrophication. Myers and Edmiston also formulated a ranking scheme for the top 50 lakes in Florida most deserving protection and preservation (i.e., those with good quality, public interest, recreation use, importance as water body), and these were located throughout the state.

It is obvious that many different classifications of lakes have been made for Florida and for different reasons. The spatial extent of the lake classes of these different classifications is rarely defined.



## FLORIDA LAKE REGIONALIZATION

### METHODS AND MATERIALS

The regionalization process included compiling and reviewing relevant materials, maps, and data; outlining the regional characteristics; drafting the lake region boundaries, creating digital boundary coverages and producing cartographic products; and revising as needed after additional data collection and review by state managers and scientists. In our regionalization process we employed primarily qualitative methods. That is, expert judgement was applied throughout the selection, analysis, and classification of data to form the regions, basing judgments on the quantity and quality of reference data and on interpretation of the relationships between the data and other environmental factors. More detailed descriptions of the methods, materials, rationale, and philosophy for our regionalization process can be found in Omernik (1987; 1995), Gallant et al. (1989), and Omernik and Gallant (1990). Maps of environmental characteristics and other documents were collected from the state of Florida, ERL-C, and several university libraries. The most important of these documents are listed in the References section. The most useful map types for our lake region delineation were physiography or land-surface form, soils, geology, natural vegetation, and land cover. Physiographic and land surface-form information were gathered from many sources including Brooks (1981b; 1982), White (1970), Puri and Vernon (1964), and Fenneman (1938). Geology maps included the 1:250,000-scale Environmental Geology Series from the Florida Bureau of Geology, state scale maps (Brooks 1981a; Vernon and Puri 1964), regional scale quaternary geologic maps (Scott et al. 1986; Copeland et al. 1988), and national scale maps (King and Biekman 1974). Soils information was obtained from the Florida Agricultural Experiment Stations and U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) (1962), Caldwell and Johnson (1982), the 1:250,000-scale SCS (now NRCS) State Soil Geographic Data Base (STATSGO) soil maps, and the USDA's county-level soil survey publications. Some historical county soil maps (USDA 1914, 1927, 1928, 1954) also proved useful. Climate information was collected from Bradley (1974), Fernald (1981), and Jordan (1984). The vegetation and forest cover maps that we used included Davis (1943, 1967), those in the state atlas (Fernald 1981), and a recent vegetation classification of Landsat Thematic Mapper imagery (1985-1989) developed by the Florida Game and Fresh Water Fish Commission. Land use and land cover were interpreted from a hardcopy USGS Landsat Multispectral Scanner imagery (1979-1985; scale 1:500,000) as well as from 1:250,000-scale USGS land use/land cover maps from the 1970's.

Lake chemical and physical data were gathered from several sources. Our primary lake data came from mean values from 1133 lakes, sampled between 1979 and 1996. Most of the data (82%) were from lakes sampled between 1990 and 1996. The data came from the University of Florida Department of Fisheries and Aquatic Sciences (54%), the Lakewatch program (34%), the U.S. EPA's Eastern Lake Survey (8%) (Kanciruk et al. 1986), and from the U.S. Forest Service (4%). A selected set of parameters for the 1133 lakes of the primary data set can be found in Appendix 2. Water quality and limnological data collected from the Florida Department of Environmental Protection, the Florida water management

districts, Huber et al. (1983), the U.S. EPA (Omernik et al. 1988a; Griffith and Omernik 1990), the Gazetteer of Florida Lakes (Shafer et al. 1986), and other sources were also assessed for the delineation of the lake region boundaries, but were not included in our primary data set due to differences in detection limits, sampling methods, duplication of lakes, or other quality control and comparison efforts.

We used USGS 1:250,000-scale topographic maps as the base for delineating the lake region boundaries. Although some maps in this series are old, it does provide quality in terms of the relative consistency and comparability of the series across Florida, in the accuracy of the topographic information portrayed, and in the locational control. It is also a very convenient scale. Fifteen of these maps give complete coverage of the state. Larger-scale (1:100,000) topographic maps were also examined for more detail on hydrology and other physical and cultural features. Lake data were plotted at several scales, but primarily at 1:250,000-scale for overlay on topographic maps.

## RESULTS AND REGIONAL DESCRIPTIONS

We have attempted to synthesize the above material to define a reasonable number of lake regions that appear to have some meaningful differences between them. In our first draft, we defined 41 lake regions of Florida. The current version contains 47 lake regions (Figure A1, Appendix A). These regions were developed primarily by evaluating patterns of features that influence lake characteristics. The numbering system for each lake region consists of two numbers: the first number (65, 75, or 76) relates to the numbering scheme of U.S. ecoregions (Omernik 1987), and the second number refers to the Florida lake regions within an ecoregion.

### 65-01 Western Highlands

The Western Highlands lake region is characterized by rolling hills, 100-300 feet in elevation, of mixed hardwood and pine forest, with some cropland and pasture. The lake region includes the Blackwater Hills, Escambia Terraced Lands, Milton-Crestview Ridge, and Eglin Ridge (Brooks 1982). The hilly areas are composed of the sands, gravels, and clays of the Citronelle Formation, and the sands and clays of the older Shoal River formation (Brooks 1981a). The Citronelle Formation generally contains more coarse sands and gravels than the clayey sands of the Hawthorn and Miccosukee formations that are found in Panhandle uplands east of the Appalachicola River, such as the Tifton/Tallahassee Uplands (Scott et al. 1980). Soils are well-drained, acidic sands and loamy sands, such as the Dothan-Orangeburg soils in the northern clayhill uplands and the excessively drained Lakeland-Troup soils of sandhill areas such as Eglin Ridge. The region receives some of the highest mean annual precipitation totals of the state, generally 60-75 inches, and, with the rest of the northern part of the Panhandle, the coolest mean minimum and mean maximum temperatures (Bradley 1972; Fernald 1981).

The region has very few natural lakes, primarily just a few ponds and small reservoirs. Local farmers or landowners have made many small ponds, often in a series, for cattle or recreation by damming up small drainages, and the clay content of the sediments in some

parts of the region prevents much downward seepage (Schmidt 1978). The largest lakes include Lake Stone in Escambia County, Bear Lake in Santa Rosa County, and lakes Hurricane, Karick, and Silver in Okaloosa County. Similar to the streams of the region that feed these small reservoirs, these would generally be acidic, softwater, low to moderate nutrient lakes, if lake management inputs were low. In Canfield's (1981) study, Western Highland lakes were classified as oligo-mesotrophic, with median phosphorus values generally in the 10-20 µg/l range. However, most lakes in this region, including Karick, Hurricane, and Bear lakes, have been artificially limed and fertilized in an attempt to increase fish production. Bear Lake, for example, in 1980 had a pH of 4.5, alkalinity 2 mg/L, and phosphorus of 15 µg/L. In 1995 the pH was 7.9, alkalinity 20 mg/L, and phosphorus 91 µg/L. Median lake phosphorus values for the region are now generally in the 70-80 µg/l range.

The region also contains some oxbow lakes and other lowland lakes of the river floodplains. Little data exist for these lakes, but they are likely to be darker, more acidic, with moderate nutrients compared to the managed fish ponds and small reservoirs. The characteristics may vary greatly depending on river flow.

65-01 Western Highlands Lake Values

Mean Value	pH (lab) n=4	Total Alkalinity (mg/l) n=4	Conductivity (µS/cm@25°C) n=4	Total phosphorus (µg/l) n=4	Total Nitrogen (µg/l) n=4	Chlorophyll_a (µg/l) n=4	Color (pcu) n=4	Secchi (m) n=4
minimum	7.0	9.6	33	70	417	15	14	1.0
25th %	7.3	12.2	39	76	532	19	15	1.3
median	<b>7.6</b>	<b>16.5</b>	<b>46</b>	<b>85</b>	<b>603</b>	<b>24</b>	<b>15</b>	<b>1.5</b>
75th %	8.0	20.3	50	102	642	27	16	1.6
maximum	8.2	21.0	51	135	657	28	19	1.7

#### 65-02 Dougherty/Marianna Plains

Stream erosion and solution of Eocene, Oligocene and Miocene limestones has lowered the surface to form this broad lowland (Puri and Vernon 1964; Cooke 1945). This region is characterized by low rolling hills, generally more flat than the regions to the east and west, with agriculture as a dominant land use. There are few streams in the eastern portion of the region and more stream dissection and hills to the west. The Floridan aquifer is at or near the surface in much of the region (Conover et al. 1984; Miller 1990). The northwestern boundary of our region extends further west than the Dougherty Karst District boundary of Brooks (1981b) to include Lake Jackson and the apparant karst-like characteristics of northern Walton County. In this part of northern Walton County, the Floridan aquifer is still only thinly confined (Miller 1990). The lake region is different from the Dougherty/Marianna Plains ecological subregion of Griffith et al (1994) in that the New Hope Ridge/Greenhead Slope area has been separated as a distinct lake region (65-03).

Once called the Lime Sink region (Harper 1914), the solution activity on the limestone bedrock has formed numerous sinks, caverns, springs, and other karst features. Many of the shallow depressions or sinks contain ponds or small lakes surrounded by cypress trees



and other hydrophytic vegetation (Hubbel et al. 1956). Bays, dome swamps, or gum ponds are names often used for these wetland areas. Some sinks contain water all year, while many of the others are dry except in rainy periods. Other sinks appear only as areas of darker more moist soils than the surrounding higher land (Head and Marcus 1984). The region contains typically red sandy soils with clay loam subsoils developed on the limestones or on weathered clastic sediments (Fernald 1981; Brooks 1982). The limestone is exposed in some areas, but in other areas, sands and clayey sands reach thicknesses of over 200 feet (Scott et al. 1980). Elevations are generally 100 to 200 feet, but range from 50 feet in the southern ends of the major river floodplains to 345 feet in northwest Walton County, Florida's high point.

The chemical characteristics of lakes in this region can be variable depending upon a lake's contact with bedrock geology or its isolation from the bedrock by surficial deposits of impermeable clays and sands (Canfield 1981). Most of the lakes can be characterized as acidic, slightly acidic or neutral, softwater lakes. They are relatively clear, with low nutrients, and low chlorophyll-*a*. Merritts Mill Pond, which is spring-fed, is somewhat anomalous, with high pH and hard water, and high nitrogen. Blue Lake chemistry also appears affected by limestone near the surface. Cassidy and DeFuniak lakes are somewhat different from the rest of the region's lakes, but the reasons are not readily apparent. Cassidy Lake may be different due to its greater depth. DeFuniak is surrounded by urbanization, but remains clear and unproductive with low color and low nutrients. The Marianna Lowland lakes in Canfield's (1981) study were classified as oligo-mesotrophic or mesotrophic.

65-02 Dougherty/Marianna Plains Lake Values

Mean Value	pH (lab) n=17	Total Alkalinity (mg/l) n=17	Conductivity (µS/cm@25°C) n=17	Total phosphorus (µg/l) n=17	Total Nitrogen (µg/l) n=18	Chlorophyll_a (µg/l) n=18	Color (pcu) n=17	Secchi (m) n=14
minimum	4.7	0.0	11	3	100	1	2	0.5
25th %	5.5	0.8	17	8	317	3	9	1.5
<b>median</b>	<b>6.3</b>	<b>1.8</b>	<b>20</b>	<b>13</b>	<b>438</b>	<b>5</b>	<b>12</b>	<b>2.3</b>
75th %	6.4	5.4	28	16	499	9	20	2.7
maximum	8.2	96.0	191	44	1497	12	45	4.5

#### 65-03 New Hope Ridge/Greenhead Slope

Also known as the Compass Lake Highlands and Crystal Lake Karst (Brooks 1982), this region contains a relatively high density of solution lakes for the Florida Panhandle. The New Hope Ridge section, with its northern boundary along the Holmes Valley scarp, consists of high sand hills developed over Miocene sands, clays, and gravels (Puri and Vernon 1964; Brooks 1981a, 1982). Elevations are generally 100-300 feet. The relief and elevations decrease on the Greenhead Slope to the south, where karst features and numerous lakes have developed on the Plio-Pleistocene clastic deposits that overlie Miocene and earlier limestone. Similar to other well-drained upland sand ridge areas in Florida, the region is a high recharge area for the Floridan aquifer (Conover et al. 1984).

Soils for the lake region are primarily Entisols, such as those in the Lakeland-Troup-Blanton association.

Lakes of the New Hope Ridge/Greenhead Slope region were chemically characterized as acidic, softwater lakes of extremely low mineral content (Canfield 1981; Canfield et al. 1983). Along with the lakes in the Trail Ridge region, these may be some of the most acid-sensitive lakes of the state, and, as precipitation/evaporation ratios are high and in seepage fluxes of acid neutralizing capacity is small, the ionic chemical composition is largely determined by atmospheric inputs (Canfield 1983b; Pollman and Canfield 1991). The composition of the biotic communities of Florida's acid lakes appear to depend more on the phosphorus and nitrogen status than on pH levels (Canfield 1983b; Pollman and Canfield 1991). Lakes in the New Hope Ridge/Greenhead Slope region are clear, low in nitrogen and phosphorus, low in chlorophyll-*a*, and are among the most oligotrophic lakes in the United States (Canfield 1981). Some of the lakes connected to stream drainages, such as Black Double Lake and Lighter Log Lake in Washington County, are more colored. Round Lake in Jackson County has anomalous chemistry with higher pH, conductivity, and alkalinity values. It is not known if this is related to limestone or groundwater contact, greater depth, or if highway runoff is affecting this lake.

65-03 New Hope Ridge/Greenhead Slope Lake Values

Mean Value	pH (lab) n=28	Total Alkalinity (mg/l) n=28	Conductivity ( $\mu$ S/cm@25°C) n=28	Total phosphorus ( $\mu$ g/l) n=28	Total Nitrogen ( $\mu$ g/l) n=21	Chlorophyll_a ( $\mu$ g/l) n=21	Color (pcu) n=28	Secchi (m) n=22
minimum	4.5	0.0	11	0.7	23	0.5	0	0.9
25th %	4.9	0.0	15	2	87	1	3	3.2
median	<b>5.2</b>	<b>0.0</b>	<b>17</b>	<b>3</b>	<b>153</b>	<b>2</b>	<b>5</b>	<b>3.6</b>
75th %	5.7	0.7	19	4	213	2	8	5.0
maximum	7.1	6.7	36	8	233	3	29	6.9

#### 65-04 Tifton/Tallahassee Uplands

The characteristics of this region change distinctly from west to east, and it contains a heterogeneous mosaic of mixed forest, pasture, and agricultural land throughout it. The upland region is composed primarily of sands, clays, and clayey sands of the Hawthorn and Miccosukee formations. Mixed hardwoods and pine are found on the clayhill upland soils, while longleaf pine/xerophytic oak types occur on the sandy, well-drained areas. The western part of the region, the Tifton Upland, includes the Appalachian Bluffs and Ravines and the Quincy Hills, and is classified as Hawthorn and Citronelle formations by Brooks (1981a). Dissection has left many shallow to moderately deep valleys, while flat to rolling land tends to be located on the uplands. Elevations can exceed 300 feet. This western part has few if any natural lakes, but many small ponds and reservoirs created on stream channels. The southwest part of the region consists of thick sand delta deposits (Brooks 1982) and contains one small lake, Lake Mystic three miles south of Bristol in Liberty County, and a large reservoir. Lake Talquin, on the Ochlockonee River, is the second oldest large reservoir in Florida, built originally for power generation in 1929.

(Heath and Conover 1981). To the east of the Ochlockonee River, entering Leon County, karst features are more evident with many solution basins and swampy depressions. Two of the larger lakes in the region, Lakes Iamonia and Miccosukee were classified by Wolfe et al. (1988) as swamp lakes. Lake Iamonia drains periodically (e.g., 1910, 1917, 1934, and 1981) when its karst drainage system becomes unplugged (Lane 1986). Lake Jackson has drained about every 25 years since 1881 when its underground karst drainage system becomes unplugged; the most recent drainage was in 1982 (Lane 1986). With diminishing relief, the lake region narrows between Monticello and Greenville, and extends east to near Madison where it merges with the Northern Peninsula Karst Plains (65-06).

Lakes in this region tend to be slightly acidic to neutral, colored softwater lakes with moderate nutrient values. Some lakes, such as Razor and Simpson in Jefferson County and Blairstone in Leon County, have quite high pH and conductivity values because groundwater is pumped in to counteract draining.

65-04 Tifton/Tallahassee Uplands Lake Values

Mean Value	pH (lab) n=25	Total Alkalinity (mg/l) n=25	Conductivity (μS/cm@25°C) n=25	Total phosphorus (μg/l) n=37	Total Nitrogen (μg/l) n=36	Chlorophyll_a (μg/l) n=36	Color (pcu) n=25	Secchi (m) n=27
minimum	5.4	0.4	11	3	227	1	6	0.2
25th %	6.0	2.8	23	15	396	4	8	0.9
median	6.5	5.1	31	26	538	12	18	1.3
75th %	7.3	16	57	47	697	25	40	2.1
maximum	9.9	69	198	297	3323	216	157	5.8

#### 65-05 Norfleet/Spring Hill Ridge

This lake region contains small, upland, clear, acid type lakes that differ from the darker, swampy, more nutrient-rich lakes of the Tifton/Tallahassee Uplands (65-04) and Gulf Coast Lowlands (75-01) regions. It is somewhat of an anomalous area of xeric sand hills that extend into the Gulf Coast Lowlands. Elevations are generally 60-120 feet, and the natural vegetation consists of longleaf pine and xerophytic oaks (Davis 1967). Acid-tolerant aquatic plants are found here, as most of the lakes have pH levels less than 5.5. Some lakes and ponds show some color associated with rain events, especially Moore Lake and Lofton Ponds.

65-05 Norfleet/Spring Hill Ridge Lake Values

Mean Value	pH (lab) n=6	Total Alkalinity (mg/l) n=6	Conductivity (μS/cm@25°C) n=6	Total phosphorus (μg/l) n=7	Total Nitrogen (μg/l) n=7	Chlorophyll_a (μg/l) n=7	Color (pcu) n=6	Secchi (m) n=3
minimum	4.6	0.0	14	5	197	2	4	2.5
25th %	4.9	0.0	16	5	237	2	9	-
median	5.1	0.1	17	5	300	3	11	2.5
75th %	5.5	0.8	19	6	330	3	17	-
maximum	5.8	2.2	24	11	633	4	20	5.3



#### 65-06 Northern Peninsula Karst Plains

This region, also known as the Suwannee Limestone Plains, is generally a well-drained flat to rolling karst upland with elevations of 50-180 feet, but it contains a diversity of physiographic subdistricts and geologic formations. Natural vegetation consisted of longleaf pine/turkey oak, or hardwood forests on the richer soils (Davis 1967) soils, but agriculture is now extensive in much of the region. Most areas are underlain by the geologically diverse Miocene-age Hawthorn Group or by undifferentiated Quaternary-age sediments. Brooks (1981a) mapped much of the region as the Pliocene Bone Valley formation. Nutrient levels vary, but many lakes tend to have high phosphorus concentrations.

In the north, the Madison Hills and Jennings Hills are somewhat hilly uplands of rich soils with hardwood forests and agriculture. There are a few lakes, mostly small in size; the largest are Grassy and Langford ponds in Madison County and lakes Octahatchee and Alcyone in Hamilton County. Grassy Pond, as shown in the county soil survey, is located in more poorly drained soils, the Plummer-Surrency association compared to the sandy upland soils (Alaga-Blanton-Troup) of Langford Pond.

Many of the lakes in the lake region are located in an area between Live Oak and Lake City in eastern Suwannee and western Columbia counties. The Lake City Karst subdistrict is a karst area with several lake basins and xeric hills with elevations 90-180 feet. Lakes in this subdistrict include Orange Pond, Johns Pond, Hancock Lake, lakes Wilson and Lona (appear intermittent on 1:100,000-scale topographic maps), Lake Jeffery, and several lakes in the Lake City urban area including Lake Hamburg, Alligator Lake, and Watertown Lake. Both Alligator and Watertown lakes are hard-water lakes (Canfield 1981), although Alligator has received municipal sewage and stormwater runoff and parts of it have been diked and drained for agriculture (Hand and Paulic 1992). Groundwater connections as well as anthropogenic inputs could be elevating the conductivity and phosphorus of some lakes around Lake City. The area occurs over Miocene deposits with phosphatic sand and clayey sand (Brooks 1981a,b; 1982). The Wellborn Uplands (Live Oak Hills, Rocky Creek Terrace, and Wellborn Hills) are primarily clastic capped hills of moderate relief. Some areas have thick deposits of fine to medium sands and silts, especially the Wellborn Hills between Wellborn and Live Oak (Knapp 1978b; Brooks 1982).

The McAlpin Plain, Haile Limestone Plain, and Williston Plain, karst plains generally 50-150 feet in elevation, are part of Brooks' (1981b; 1982) Northern Peninsula Plains. Lakes are not abundant in these areas but the many solution basins may fill seasonally.

In summary, the mosaic of lake types in this region has a wide-ranging distribution of chemical and physical characteristics, as can be seen in the ranges between the 25th and 75th percentiles in the table below. Lakes tend to be slightly acidic, with low to moderate alkalinity, and some color. Nutrient levels are variable, with some lakes definitely having high levels. The region's median phosphorus is one of the highest in northern Florida.

65-06 Northern Peninsula Karst Plains Lake Values

Mean Value	pH (lab) n=21	Total Alkalinity (mg/l) n=19	Conductivity ( $\mu$ S/cm@25°C) n=21	Total phosphorus ( $\mu$ g/l) n=28	Total Nitrogen ( $\mu$ g/l) n=26	Chlorophyll_a ( $\mu$ g/l) n=25	Color (pcu) n=21	Secchi (m) n=22
minimum	4.6	0.0	22	11	282	1	12	0.3
25th %	5.8	2.3	39	23	605	6	19	0.7
median	6.5	6.8	52	74	867	12	42	1.2
75th %	7.3	33.5	131	153	1011	37	73	1.5
maximum	9.2	80.7	169	346	3083	300	333	2.8

#### 75-01 Gulf Coast Lowlands

This is a disjunct region of three sections: Escambia County to Wakulla County in the west, parts of Taylor, Madison and Lafayette counties in the center, and a narrow strips of central Gilchrist and Levy counties. In the western Panhandle, xeric coastal strand and pine scrub vegetation are found on the relic lagoon, dune, and barrier island features. Inland, pine flatwoods mixed with some hardwood forest and swamp vegetation are typical on the clastic non-karst terraces and deltas of the Appalachicola area and the other flats and swamps areas.

Several types of lakes occur in this region including coastal dune lakes, flatwood lakes, "edge lakes", river floodplain or oxbow lakes, and reservoirs. Most of the lakes tend to be darkwater, acidic, softwater lakes with low to moderate nutrients. Coastal dune lakes are generally within two miles of the coast. These lakes can be elliptical or irregular in shape, with or without surface inlets and outlets. Water is generally derived from lateral ground water seepage through the well-drained coastal sands. They are slightly acidic, low nutrient, darkwater systems that can freshen or turn salty depending on rainfall and subsurface or overwash saltwater input, or salt spray. As one would expect, these dune lakes have higher sulfate, sodium, and chloride levels than inland lakes. Examples of coastal dune lakes are Morris, Campbell, Western, and Camp Creek lakes in Walton County, Powell Lake in Bay County, and Duck Lake and Corn Landing Lake in Franklin County. Coastal lakes, such as Corn Landing Lake, that are higher in elevation would have longer periods of freshwater. Some lakes such as Western Lake in Walton County contain freshwater fish, with saltwater fish in the more saline bottom layers. Dune lakes are important breeding areas for insects that form the base of many food chains, and are important for birds and mammals inhabiting surrounding xeric and coastal ecosystems (Wolfe et al. 1988; Florida Natural Areas Inventory 1990).

Flatwood lakes receive the majority of their water from direct rainfall and runoff from surrounding poorly drained soils. These are generally acid, softwater lakes that are oligotrophic to oligomesotrophic.

"Edge lakes" or sag ponds are found at the foot of relict marine terrace scarps or where soluble limestone that is near the surface abuts an upland of thick insoluble sands. As Wolfe (1989) explained it, "The slope of the water table steepens behind the face of the scarp with the increased gradient of water flow, bringing the water table closer to the ground surface immediately below the scarp. The increased water flow tends to dissolve

the buried surface of the limestone, creating sag ponds along the tow of the scarp." An example is Chunky Pond near the western edge of the Northern Brooksville Ridge (75-05). In the Wacasassa Flats area of northern Gilchrist County, Sevenmile and Bagget lakes appear to have some limestone influence, showing high pH, alkalinity, and conductivity values (Suwannee River Water Management District data). These lakes are darker in color, however, than the limestone influenced lakes of the nearby Big Bend Karst (75-06).

Two large reservoirs are located in the Gulf Coast Lowlands region. Dead Lake on the Chipola River in Gulf and Calhoun counties was originally a natural impoundment created by the alluvial sediments and old levees of the Appalachicola River. A dam was constructed in the 1960's to enlarge and stabilize the impoundment, but was removed in 1988 (Florida Resources and Environmental Analysis Center 1989). Dead Lake could be classified as a riverine swamp lake. Its pH is generally between 6.0 and 7.0 and the lake receives some limestone groundwater inputs. Deer Point Lake on Econfina Creek, is impounded above North Bay, and is the major potable water supply for Panama City and Bay County (Florida Resources and Environmental Analysis Center 1989).

75-01 Gulf Coast Lowlands Lake Values

Mean Value	pH (lab) n=26	Total Alkalinity (mg/l) n=26	Conductivity (µS/cm@25°C) n=26	Total phosphorus (µg/l) n=32	Total Nitrogen (µg/l) n=32	Chlorophyll_a (µg/l) n=32	Color (pcu) n=26	Secchi (m) n=28
minimum	3.9	0.0	19	5	184	1	28	0.1
25th %	4.9	0.0	30	8	482	3	65	0.6
median	5.3	0.5	44	15	648	4	117	0.9
75th %	6.5	10.5	75	22	863	9	204	1.3
maximum	10.3	34.0	5636	340	2500	65	521	2.9

#### 75-02 Okefenokee Plains

This lake region has the same boundaries as the Okefenokee Swamps and Plains ecological subregion (Griffith et al. 1994). It is characterized by flat plains and terraces with pine flatwoods and swamp forests over peat, muck, clayey sand and some phosphatic deposits. The region separates some distinct lake types from those in lake region 65-06 that were previously lumped together as the Northern Highlands (Canfield 1981). There are only a few lakes in the region, and these are primarily in the southern part. Ocean Pond is located on the Lake City Ridge, and Palestine Lake, Swift Creek Pond, and Lake Fisher are on an upland plain that Brooks (1982) calls the High Flatwoods. These are highly acidic softwater lakes, mostly low clarity and darkly colored, but the color is variable depending on rainfall. The region's median pH value of 4.7 is the lowest of all the Florida lake regions. Although Ocean Pond is one of Florida's most acidic lakes, it supports a sustained sport fishery for largemouth bass, black crappie, bluegill, and other centrarchids (Canfield 1983b). Phosphorus values for the lakes are generally in the 10-20 µg/l range (20-25 µg/l range in Canfield's 1981 study), but Swift Creek Pond has higher phosphorus values than the other lakes, and there may be other phosphatic areas. Palestine Lake and



Swift Creek Pond appear to have more swampy soils surrounding them (Plummer-Pamlico-Dorovan association) than does Ocean Pond.

#### 75-02 Okefenokee Plains Lake Values

Mean Value	pH (lab) n=4	Total Alkalinity (mg/l) n=4	Conductivity ( $\mu\text{S}/\text{cm}@25^\circ\text{C}$ ) n=4	Total phosphorus ( $\mu\text{g}/\text{l}$ ) n=4	Total Nitrogen ( $\mu\text{g}/\text{l}$ ) n=4	Chlorophyll_a ( $\mu\text{g}/\text{l}$ ) n=4	Color (pcu) n=4	Secchi (m) n=3
minimum	4.4	0.0	40	11	383	1	77	0.3
25th %	4.6	0.0	43	12	411	4	109	-
<b>median</b>	<b>4.7</b>	<b>0.0</b>	<b>50</b>	<b>14</b>	<b>731</b>	<b>6</b>	<b>231</b>	<b>0.8</b>
75th %	4.8	0.0	59	27	1086	9	368	-
maximum	5.0	0.0	70	61	1220	16	445	1.2

#### 75-03 Upper Santa Fe Flatwoods

This region includes portions of the High Flatwoods in the Sea Island District, and the Perched Lakes and Prairies physiographic subdistrict from the Central Lakes District of Brooks (1981b; 1982). It is predominantly an area of pine flatwoods with some swamp forests (Davis 1967), and elevations are generally 120-180 feet. Lakes in this region include Butler, Sampson, Crosby, Rowell, Hampton Lake, Alto, Hickory Pond, Santa Fe, and Little Santa Fe. Punchbowl Lake sampled by the Lakewatch Program is on or near the boundary with the adjacent Trail Ridge lake region. Almost all of the lakes in the region occur on thin Plio-Pleistocene undifferentiated sediments that overlie deeply weathered clayey sand, granular sand, and kaolinitic clay of the Miocene Hawthorn Group.

In general the lakes are slightly acid, colored, with low to moderate nutrients. The pH and alkalinity levels are higher than the Okefenokee Plains (75-02) to the north, and phosphorus levels of the lakes are relatively low, averaging in the 10-15  $\mu\text{g}/\text{l}$  range. Lake Rowell phosphorus levels are two to three times higher than the regional average, receiving wastewater treatment plant discharges from the city of Starke via Alligator Creek (Hand and Paulic 1992). Lake Sampson's chemistry may also be affected by these discharges. Santa Fe Lake receives stormwater runoff from the city of Melrose.

#### 75-03 Upper Santa Fe Flatwoods Lake Values

Mean Value	pH (lab) n=9	Total Alkalinity (mg/l) n=9	Conductivity ( $\mu\text{S}/\text{cm}@25^\circ\text{C}$ ) n=9	Total phosphorus ( $\mu\text{g}/\text{l}$ ) n=11	Total Nitrogen ( $\mu\text{g}/\text{l}$ ) n=11	Chlorophyll_a ( $\mu\text{g}/\text{l}$ ) n=11	Color (pcu) n=9	Secchi (m) n=11
minimum	5.0	0.0	52	8	422	3	17	1.0
25th %	5.4	0.3	66	10	515	5	33	1.2
<b>median</b>	<b>5.9</b>	<b>1.0</b>	<b>68</b>	<b>13</b>	<b>557</b>	<b>6</b>	<b>55</b>	<b>1.6</b>
75th %	6.2	1.8	69	14	647	10	72	1.7
maximum	7.2	23.3	234	37	753	15	79	1.8



#### 75-04 Trail Ridge

Our Trail Ridge lake region consists of the Trail Ridge and Interlachen Sand Hills physiographic subdistricts, and extends into the St. Johns Offset (Brooks 1981b; 1982). The lake region has different characteristics from north to south. In the north, the narrow depositional ridge has poor drainage and flatwood forest vegetation. It broadens to the south becoming a karstic landscape with numerous solution depressions and lakes, with longleaf pine-xerophytic oak vegetation. The sands that overlie the Hawthorn Group in western Putnam County are slightly clayey, silty, poorly sorted quartz sands (Readle 1987). The region is dominated by well-drained, nutrient-poor upland soils such as Candler, Apopka, Astatula, and Tavares (Readle 1987; Caldwell and Johnson 1982).

Lakes in the Trail Ridge region are mostly small, acid, clear lakes, with some slightly colored lakes, and are characterized as oligotrophic or oligo-mesotrophic. To the south, conductance and macrophytes in the lakes tend to increase. Average lake phosphorus values were mostly less than 10 µg/l, with several lakes in the 10-15 µg/l range.

With soils that generally have low cation exchange capacity and base saturation, there is concern about increased acidification of Trail Ridge lakes. Although the evidence is not clear for many lakes, there is some evidence that atmospheric deposition is contributing to progressive acidification of lakes in this region (Hendry and Brezonik 1984; Pollman and Canfield 1991).

Kingsley Lake is one of the largest lakes in the region and is also one of the deeper lakes in Florida at around 85 feet (Heath and Conover 1981). It is different chemically from most Trail Ridge lakes, with higher pH, alkalinity, and a different cation/anion mix that reflects groundwater inputs rather than atmospheric controls on chemistry (Canfield 1981). Kingsley Lake water levels were shown to be remarkably stable over time from 1945-1985 (Deevey 1988). Kingsley Lake and Lake Geneva, another lake of elevated alkalinity and pH, also have the most shoreline development in the region.

75-04 Trail Ridge Lake Values

Mean Value	pH (lab) n=50	Total Alkalinity (mg/l) n=50	Conductivity (µS/cm @ 25°C) n=50	Total phosphorus (µg/l) n=72	Total Nitrogen (µg/l) n=62	Chlorophyll_a (µg/l) n=62	Color (pcu) n=50	Secchi (m) n=64
minimum	4.3	0.0	25	2	57	0.5	0	0.7
25th %	4.9	0.0	41	5	137	2	5	1.8
median	5.6	0.3	48	9	243	3	9	2.2
75th %	6.2	1.6	64	12	391	5	11	3.3
maximum	8.0	33	99	40	1161	24	65	7.6

#### 75-05 Northern Brooksville Ridge

This region, also known as the Newberry Sand Hills (Brooks 1981b), extends from the southeast corner of Gilchrist County, through Levy County and into western Marion County. Similar to the Southern Brooksville Ridge (75-13), the region's land surface is very irregular. Elevations vary over short distances from about 70-170 feet. It is an area of internal drainage and xeric sand hills, with natural vegetation of longleaf pine and

turkey oak. Soils are of the Candler-Apopka-Astatula association. The thick sand sequence is underlain by clayey phosphatic sediments of the Alachua Formation (Scott et al 1980). It is these underlying relatively insoluble clastics that provide the ridge's resistance to solution and lowering of elevation compared to surrounding limestone plains areas (Knapp 1978; Scott et al. 1980). Brooks (1981a) mapped these Miocene-age clastics as Hawthorn Formation of the Statenville type.

Several ponds are located west of Archer (Horseshoe, Watermelon, Barrel, Gossman, Cubberly, Jake White) and another group of lakes is located in the southern end in the Rainbow Lakes Estates area (Sand Pond, Little Bonable Lake, Bonable Lake, Tiger Lake, Lindsley Lake, Turner Lake, Section Sixteen Lake). Brooks (1981a,b) puts these southern lakes on Plio-Pleistocene "terrace deposits" in the Waccasassa Flats flatwoods physiographic subdistrict. Data from Bonable, Dinner, Section Sixteen, Tiger, and Watermelon Pond indicate generally acidic lakes with moderately low nutrients and moderate color. Bonable Lake has the darkest color, highest nutrients, and highest alkalinity in the region, but is still slightly acidic.

75-05 Northern Brooksville Ridge Lake Values

Mean Value	pH (lab) n=5	Total Alkalinity (mg/l) n=5	Conductivity ( $\mu$ S/cm @ 25°C) n=5	Total phosphorus ( $\mu$ g/l) n=5	Total Nitrogen ( $\mu$ g/l) n=5	Chlorophyll_a ( $\mu$ g/l) n=5	Color (pcu) n=5	Secchi (m) n=3
minimum	4.8	0.0	31	5	293	1.7	21	0.5
25th %	4.8	0.0	33	8	573	2.1	23	-
median	<b>5.0</b>	<b>0.0</b>	<b>49</b>	<b>31</b>	<b>660</b>	<b>12</b>	<b>26</b>	<b>0.9</b>
75th %	5.8	0.6	49	34	840	24	35	-
maximum	6.1	1.1	54	42	953	26	85	2.4

#### 75-06 Big Bend Karst

In this region, Miocene to Eocene-age limestone is at or near the surface from eastern Wakulla County south to Pasco County. The inland parts of the region are typified by pine flatwoods and swamp forest on poorly drained Spodosol soils, with some areas of mixed pine and hardwood forest. The Big Bend coast is characterized by coastal salt marshes and mangrove, rather than the barrier islands or beaches of the Gulf Coast Lowlands (75-01). Reflecting the limestone influence, pH, alkalinity, and conductivity values in lakes are very high for this part of Florida; nutrients are moderately low and lake color is variable but generally low. Lake Rousseau is a large reservoir located on the Withlacoochee River at the Levy/Citrus county line. Sediments, nutrients, and bacteria are added to this lake from human activities, and abundant hydrilla growth occurs (Hand et al. 1994).

#### 75-06 Big Bend Karst Lake Values

Mean Value	pH (lab) n=6	Total Alkalinity (mg/l) n=6	Conductivity ( $\mu\text{S}/\text{cm}@25^\circ\text{C}$ ) n=6	Total phosphorus ( $\mu\text{g}/\text{l}$ ) n=9	Total Nitrogen ( $\mu\text{g}/\text{l}$ ) n=7	Chlorophyll_a ( $\mu\text{g}/\text{l}$ ) n=7	Color (pcu) n=6	Secchi (m) n=7
minimum	7.1	29	81	7	260	1	14	1.1
25th %	7.5	91	201	12	378	1.2	19	1.8
median	<b>7.9</b>	<b>105</b>	<b>230</b>	<b>18</b>	<b>480</b>	<b>1.4</b>	<b>29</b>	<b>2.0</b>
75th %	8.4	136	280	32	517	2.2	62	2.2
maximum	11.7	234	468	48	863	11	105	3.6

#### 75-07 Marion Hills

This lake region corresponds closely with Brooks' (1981b; 1982) Marion Hills region that includes the Fairfield Hills, Anthony Hills, Kendrick Hills, Ocala Hills, and Cotton Plant Hills. Elevations are generally 75-180 feet with some higher hills, and the natural vegetation was primarily mixed evergreen and deciduous hardwood forests. Miocene-age Hawthorn Group sediments of clayey sands compose much of the hill systems, with the Eocene-age Ocala Limestone (or Crystal River Formation) near the surface in much of the intervening karst terrain (Knapp 1978a; Brooks 1981a).

The region has few if any lakes, but contains about a dozen small ponds and some wet prairie areas. Many of the small ponds are located in the area between Blichton and Cotton Plant. These appear to be associated with soils of the Sparr-Lochloosa-Tavares association that are not as well drained as other upland soils in the area. Bird Pond near Cotton Plant was sampled in the ELS (Kanciruk 1986). Influenced by the near-surface limestone, it had high pH and alkalinity, with low to moderate total phosphorus and color. Small ponds located on the hilly Hawthorn sands would likely have a different chemistry, although there appear to be fewer of these. Thus, while lake resources are not an important characteristic of this region, the pond chemistry types may show a bi-modal distribution. Lillian is a Lakewatch lake in Marion County that shows higher nutrient levels.

#### 75-07 Marion Hills Lake Values

Lake	pH (lab)	Total Alkalinity (mg/l)	Conductivity ( $\mu\text{S}/\text{cm}@25^\circ\text{C}$ )	Total phosphorus ( $\mu\text{g}/\text{l}$ )	Total Nitrogen ( $\mu\text{g}/\text{l}$ )	Chlorophyll_a ( $\mu\text{g}/\text{l}$ )	Color (pcu)	Secchi (m)
Bird Pond	8.5	166	313	11	-	-	30	1.2
Lillian	-	-	-	137	2088	101	-	0.6

#### 75-08 Central Valley

This lake region is more similar to the physiographic divisions made by White (1970) than those of Brooks (1981b), but it includes several physiographic areas and geologic types. Our intent was to enclose an area where the lake types, chemistry, and productivity were similar, but the lakes' sites and situations are variable, and they may have reached their conditions for different physical reasons. In general, lakes of this region tend to be large, shallow, and eutrophic: nitrogen, phosphorus, and chlorophyll-a levels are high, and



Secchi disk transparency is low. The lakes tend to have abundant macrophytes or are green with algae. The wide range of values shown in the table below underscores the fact that lake water characteristics within the region, as well as lake size and type, are variable. Most of the phosphorus values are in the 20 to 80  $\mu\text{g/l}$  range with a median of 40  $\mu\text{g/l}$ , but the range is extreme. Alkalinity values are generally greater than 10  $\text{mg/l}$ , but can range from less than 5 to greater than 100  $\text{mg/l}$ ; pH values are mostly greater than 6.5. Canfield (1981) found that much of the variability could be explained by dividing the lakes into two groups: low mineral content and high mineral content. This relates to geologic influences, although anthropogenic inputs and watershed size to lake volume ratios need to be considered. The northern lakes in sandy deposits, such as Lake Eaton, Lochloosa Lake, Newnans Lake, Orange Lake, and Lake Wauberg, were characterized as the softwater eutrophic lakes, and tend to have lower pH and darker water than the southern lakes. The southern lakes, such as Apopka, Dora, Eustis, Griffin, Harris, and Yale, often receive mineralized groundwater as well as surface inflows through nutrient-rich soils, and were classified as eutrophic hardwater lakes.

In the north, the lakes and marshes in the Alachua Prairies/Gainesville area occur on either a limestone plain of the Eocene-age Ocala Limestone, on some clayey sand and pebbles of the Hawthorn Group, or on fine to medium sands, silts and clays of Plio-Pleistocene age. The small to medium scale geology references show different interpretations of the spatial extent of these geologic formations in this area (Brooks 1981a; Knapp 1978a; Thomas et al. 1983; Scott et al. 1986; Pirkle and Brooks 1959). The prairies and lakes are around 60 feet in elevation and are associated with groundwater levels. Several of the relatively large drainage lakes, such as Newnans, Orange, and Lochloosa in the north, are structurally controlled. Structural controls on these lakes can increase the accumulation of sediment and nutrient-rich detritus, affecting the lake ecosystem's depth, clarity, plant communities, and productivity (Gottgens and Crisman 1993).

In the south, lakes Apopka, Carlton, Beauclair, Dora, Harris, Eustis, Yale and Griffin, are part of the Oklawaha chain of lakes. In this part of the Central Valley the water table is within a few feet of the land surface and the potentiometric surface of the Floridan Aquifer can be above the land surface (Bush 1974). Canals have altered the natural flow patterns and agricultural activities on the muck soils have added chemicals and nutrients to the connected surface water system. Lake Apopka has historically received large amounts of industrial, agricultural, and urban wastes, and with lakes Dora, Eustis, and Griffin are considered hypereutrophic and of poor quality (Hand and Paulic 1992).

We have extended the lake region westward across the Lake Harris Cross Valley (White 1970), to include lakes Deaton, Miona, and Panasoffke in Sumter County. Lake Panasoffke, with aquifer-fed springs, has high pH, hardness, and low to moderate nutrients. It is sometimes included with the Tsala Apopka chain (region 75-12). Panasoffke has stabilized water levels due to a dam on the outlet, and it also receives limestone mining discharges (James Hulbert, FL DEP, personal communication).



75-08 Central Valley Lake Values

Value	pH (lab) n=44	Total Alkalinity (mg/l) n=44	Conductivity ( $\mu$ S/cm @ 25°C) n=44	Total phosphorus ( $\mu$ g/l) n=46	Total Nitrogen ( $\mu$ g/l) n=45	Chlorophyll_a ( $\mu$ g/l) n=46	Color (pcu) n=44	Secchi (m) n=42
minimum	4.3	0.0	36	6	373	1	7	0.2
25th %	6.5	6.8	64	20	900	6	24	0.4
<b>median</b>	<b>7.0</b>	<b>16.1</b>	<b>98</b>	<b>40</b>	<b>1400</b>	<b>22</b>	<b>40</b>	<b>0.7</b>
75th %	8.6	105.1	276	77	2462	80	100	1.3
maximum	9.7	129	590	384	4393	382	700	2.9

75-09 Ocala Scrub

This is a region of ancient dunes with excessively drained deep sandy soils and sand pin scrub forests. The western two-thirds of the region is underlain by deeply weathered Miocene-age Hawthorn Group deposits, and contains more clayey sand with areas of longleaf pine and turkey oak (Brooks 1981a, 1982; Scott 1979). Elevations range from 75-180 feet. The eastern portion is lower in elevation and contains medium to fine sand and silt developed on the Pleistocene sand dunes. Common soil series across the region are Candler and Astatula. The Ocala Scrub contains acid, mostly clearwater, low-nutrient lakes. The clear lakes are generally on the higher sandy ridges, moderate color lakes are in lower transitional areas, and some prairie lakes can have darker water.

75-09 Ocala Scrub Lake Values

Mean Value	pH (lab) n=57	Total Alkalinity (mg/l) n=57	Conductivity ( $\mu$ S/cm @ 25°C) n=57	Total phosphorus ( $\mu$ g/l) n=61	Total Nitrogen ( $\mu$ g/l) n=57	Chlorophyll_a ( $\mu$ g/l) n=57	Color (pcu) n=57	Secchi (m) n=61
minimum	4.1	0.0	22	1	108	0.5	0	0.6
25th %	4.5	0.8	35	10	310	1.0	7	1.7
<b>median</b>	<b>4.7</b>	<b>1.3</b>	<b>43</b>	<b>10</b>	<b>480</b>	<b>1.4</b>	<b>18</b>	<b>2.8</b>
75th %	5.0	2.0	51	11	687	3.2	27	3.5
maximum	8.5	114.5	252	29	2040	11.0	369	5.8

75-10 Eastern Flatlands

Due to a variety of landform features and its latitudinal extent, the Eastern Flatlands forms a diverse lake region. The landform features tend to be coast-parallel, reflecting the marine forces that controlled their shape and formation. Ancient barrier islands, lagoons, dune ridges, spits, and bars have left the current region ribbed by low sand ridges and intervening valleys and swampy lowlands. The geology is a complex mix of Pleistocene sand, shell, and clay deposits, as well as areas of peats. The St. Johns River and its associated large lakes, formed in an ancient coastal lagoon system, are the dominant, physical features of the region. River vegetation changes to hardwood swamp forests north of Lake Harney from wet grassland prairies in the south (Davis 1967).

There are a mix of different lake types in the region. St. Johns River lakes tend to be alkaline, hardwater, eutrophic, colored lakes. These include lakes Harney, Jessup, Monroe, Dexter, and George, among others. To the south, the St. Johns Wet Prairie

contains marshes, grass prairie and clumps of cabbage palms. The lake basins, according to Brooks (1982), are controlled by structures in the Eocene-age Ocala limestone that underlie the fine sand, silty sand, and clayey sand of the Pleistocene lagoonal deposits. The upper St. Johns marsh lakes are also alkaline, mesotrophic to eutrophic, darkwater lakes, but the chemical concentrations are somewhat lower than in the north. These include Blue Cypress, Lake Hellen Blazes, Little Sawgrass and Sawgrass Lakes, Lake Washington, Lake Winder, Lake Poinsett. Once the St. Johns River passes north of Sawgrass Lake, inputs of mineralized water derived from marine sediments and salt springs increase in importance (McLane 1955, Canfield 1981). Brooks (1981a) shows geology changes from Ft. Thompson Group clastic and shell deposits to Princess Ann beach and dune sand and shell deposits between Lake Winder and Lake Poinsett.

Flatwoods lakes in the region are acid to slightly acid, colored softwater lakes of moderate mineral content, with variable trophic states. Other lake types include coastal ridge lakes and dredged "build" ponds that are found along the more populated seaboard area.

75-10 Eastern Flatlands Lake Values

Mean Value	pH (lab) n=39	Total Alkalinity (mg/l) n=39	Conductivity ( $\mu$ S/cm@25°C) n=39	Total phosphorus ( $\mu$ g/l) n=85	Total Nitrogen ( $\mu$ g/l) n=84	Chlorophyll_a ( $\mu$ g/l) n=84	Color (pcu) n=39	Secchi (m) n=75
minimum	4.1	0.0	36	4	101	1	3	0.3
25th %	5.0	0.5	76	17	621	4	85	0.6
<b>median</b>	<b>6.6</b>	<b>3.4</b>	<b>102</b>	<b>26</b>	<b>777</b>	<b>9</b>	<b>106</b>	<b>0.9</b>
75th %	7.6	46.0	420	46	1102	18	236	1.3
maximum	8.5	120.0	1111	165	2440	85	546	3.9

#### 75-11 Crescent City/DeLand Ridges

We have included several sandy upland ridges in this lake region including, from north to south, Palatka Hill, Crescent City Ridge, Deland Ridge, and the Geneva-Chuluota-Oviedo Hills area. The parent material for the thick sand soils of these upland areas is deeply weathered Plio-Pleistocene coastal sand deposits (Brooks 1981a). Candler and Astatula are the typical soil series, and natural vegetation consisted of longleaf pine/xerophytic oak forests and some areas of sand pine scrub forests.

Our boundaries are sometimes different from physiographic boundaries in an attempt to exclude some of the lakes at the edge of the ridges that receive water inputs from poorly-drained soils, such as Lake Margaret. These lakes that have lowland-type soils may be more characteristic of the smaller darkwater lakes of the Eastern Flatlands, region 75-10. Many lakes in region 75-11 are clear, acid, oligotrophic lakes of low mineral content that obtain the majority of water from direct rainfall and surface/subsurface inflows through well-drained sandy soils (e.g., Lake Broward). Canfield (1981) proposed that other lake types on the Crescent City Ridge included mesotrophic lakes of moderate mineral content that receive inputs of groundwater (e.g., Lake Stella). In general, color values tend to increase from north to south.

#### 75-11 Crescent City/DeLand Ridges Lake Values

Mean Value	pH (lab) n=29	Total Alkalinity (mg/l) n=29	Conductivity ( $\mu$ S/cm@25°C) n=29	Total phosphorus ( $\mu$ g/l) n=51	Total Nitrogen ( $\mu$ g/l) n=50	Chlorophyll_a ( $\mu$ g/l) n=50	Color (pcu) n=28	Secchi (m) n=46
minimum	4.2	0.0	52	0.1	118	1	1	0.4
25th %	5.7	1.3	74	7	453	3	16	1.6
<b>median</b>	<b>6.8</b>	<b>11.0</b>	<b>144</b>	<b>12</b>	<b>632</b>	<b>5</b>	<b>31</b>	<b>2.2</b>
75th %	7.1	16.7	167	16	825	7	56	2.7
maximum	7.8	40.7	349	124	1300	38	296	5.7

#### 75-12 Tsala Apopka

This is an erosional valley with thin surficial sands over Eocene-age Ocala limestone. Some medium fine sand and silt cover the Tsala Apopka Lake area, but limestone is at the surface on the other side of the Withlacoochee River within the region (Deuerling and MacGill 1981). Swamps, marshes, and lakes cover much of the west side of the region, with flatwood vegetation types found on firmer ground. Tsala Apopka Lake to the west of the Withlacoochee River is a large area of interconnected ponds and wetlands that may be a relict of a larger former lake that occupied the Tsala Apopka Plain (White 1970). Many of the interconnected water bodies are intermittent. There are generally three open-water pool areas: the Floral City Pool, the Inverness Pool, and the Hernando Pool. The "lake" gets shallower and turns to marsh as one moves east. Canals and flow control structures regulate water movement northward toward the Withlacoochee River. Tsala Apopka water bodies are alkaline, hard-water, and mesotrophic to eutrophic. The average pH shown by Canfield (1981) and Hand and Paulic (1992) was 7.3, and our values are all greater than 7.1. Nutrient levels appear to be variable. Color decreases and conductivity increases as one moves from the Floral City Pool in the south to Hernando Pool in the north.

#### 75-12 Tsala Apopka Lake Values

Mean Value	pH (lab) n=16	Total Alkalinity (mg/l) n=16	Conductivity ( $\mu$ S/cm@25°C) n=16	Total phosphorus ( $\mu$ g/l) n=17	Total Nitrogen ( $\mu$ g/l) n=12	Chlorophyll_a ( $\mu$ g/l) n=18	Color (pcu) n=16	Secchi (m) n=14
minimum	7.1	34.0	113	8	600	1	17	0.7
25th %	7.4	40.9	120	12	905	2	30	0.9
<b>median</b>	<b>7.6</b>	<b>46.0</b>	<b>134</b>	<b>22</b>	<b>1042</b>	<b>9</b>	<b>36</b>	<b>1.2</b>
75th %	7.7	60.3	171	35	1176	27	110	1.5
maximum	8.5	185.1	376	168	1763	48	172	2.7

#### 75-13 Southern Brooksville Ridge

Similar to the Northern Brooksville Ridge (75-05), this region has a very irregular surface, but reaches higher elevations, with several hills between 200 and 300 feet. These hills are often covered by mixed evergreen and deciduous hardwood forests, as well as areas of pine (hammock, turkey oak sandhill, and longleaf pine sandhill communities).



The region is characterized by thick sands, and drainage is generally internal to the Floridan aquifer. Oligocene-age Suwannee Limestone is found near the surface in areas just north of Brooksville and in Citrus County, although Alachua Formation or Hawthorn Group deposits cover much of the region (Brooks 1981a; Deuerling and MacGill 1981). Orange to reddish-orange clayey sands occur the length of the ridge and cap many of the hills in the limestone area near Brooksville (Deuerling and MacGill 1981). Soils include the Arredondo-Sparr-Kendrick, Lake-Candler, and Blichton-Flemington-Kanapaha associations. The lake region includes the Hernando Hammock, Brooksville Hills and Dade City Hills physiographic subdistricts designated by Brooks (1981b, 1982).

The lakes tend to have higher pH, alkalinity, conductivity, and nitrogen than the Northern Brooksville Ridge (75-05). Although a few lakes are acidic, most are neutral to alkaline, slightly colored, mesotrophic or meso-eutrophic lakes. Some lake phosphorus values appear low, as the nutrients are taken up by dense aquatic macrophyte growth. Canfield (1981) divided Brooksville Ridge lakes into two groups: acidic, softwater, mesotrophic lakes; and alkaline, relatively hard, softwater, mesotrophic lakes.

75-13 Southern Brooksville Ridge Lake Values

Mean Value	pH (lab) n=18	Total Alkalinity (mg/l) n=18	Conductivity ( $\mu$ S/cm@25°C) n=18	Total phosphorus ( $\mu$ g/l) n=18	Total Nitrogen ( $\mu$ g/l) n=17	Chlorophyll_a ( $\mu$ g/l) n=17	Color (pcu) n=18	Secchi (m) n=17
minimum	4.6	0.0	33	8	447	2	9	0.5
25th %	6.5	9.9	59	17	737	5	26	0.8
median	<b>7.2</b>	<b>18.2</b>	<b>113</b>	<b>30</b>	<b>1100</b>	<b>10</b>	<b>59</b>	<b>1.3</b>
75th %	8.0	30.2	141	62	1290	21	103	1.9
maximum	8.6	123.3	463	1221	1470	93	204	2.8

#### 75-14 Lake Weir/Leesburg Upland

This upland region with elevations generally 75-125 feet stretches from Lake Weir in the north to the city of Leesburg in the south. Lake Weir is the largest lake in the region and there are numerous small lakes among citrus groves. The natural vegetation was primarily longleaf pine/xerophytic oak (Davis 1967). Soils are primarily in the sandy, well-drained Candler-Apopka-Astatula association (Thomas et al. 1979; Furman et al. 1975), and the underlying material consists of deeply weathered clayey sand of the Hawthorn Group. Lakes in 75-14 are generally clear, acidic to neutral, low nutrient lakes.

75-14 Lake Weir/Leesburg Upland Lake Values

Mean Value	pH (lab) n=13	Total Alkalinity (mg/l) n=13	Conductivity ( $\mu$ S/cm@25°C) n=13	Total phosphorus ( $\mu$ g/l) n=17	Total Nitrogen ( $\mu$ g/l) n=14	Chlorophyll_a ( $\mu$ g/l) n=14	Color (pcu) n=13	Secchi (m) n=16
minimum	5.2	0.0	37	5	403	1	3	0.3
25th %	6.1	2.1	112	10	538	2	8	1.4
median	<b>7.1</b>	<b>12.0</b>	<b>136</b>	<b>10</b>	<b>804</b>	<b>4</b>	<b>10</b>	<b>2.0</b>
75th %	7.3	17.9	153	12	1076	6	15	3.4
maximum	7.9	38.3	178	25	1522	12	68	4.5



#### 75-15 Mount Dora Ridge

The Mount Dora Ridge lake region extends from near the Lake County / Marion County border near Altoona, south to the towns of Eustis and Mount Dora. It is composed of high sand hills, 75-180 feet in elevation, with excessively-drained to well-drained acid soils of the Astatula and Apopka series, developed over coarse sands of Upper Miocene age (Brooks 1981a, 1982). There are many small, circumneutral, clear lakes of low color, low nutrients, low chlorophyll\_a, and moderate to moderately-high alkalinity. Nutrient and color values tend to be slightly less than the adjacent Apopka Upland (75-16), and pH, alkalinity, and conductivity are higher than the Lake Weir/Leesburg Upland (75-14). Steeply sloping sand hills and old orange groves surround the lakes.

75-15 Mount Dora Ridge Lake Values

Mean Value	pH (lab) n=14	Total Alkalinity (mg/l) n=14	Conductivity ( $\mu\text{S}/\text{cm}@25^\circ\text{C}$ ) n=14	Total phosphorus ( $\mu\text{g}/\text{l}$ ) n=18	Total Nitrogen ( $\mu\text{g}/\text{l}$ ) n=16	Chlorophyll_a ( $\mu\text{g}/\text{l}$ ) n=16	Color (pcu) n=14	Secchi (m) n=16
minimum	6.9	8.5	161	5	433	0.8	4	0.7
25th %	7.1	16.0	184	7	482	2	5	1.9
median	7.5	31.6	247	10	524	3	10	3.0
75th %	7.8	40.4	330	12	605	5	15	3.5
maximum	8.5	58.0	449	235	990	25	26	4.9

#### 75-16 Apopka Upland

This is a region of residual sand hills modified by karst processes, with many small lakes and scattered sinkholes. The lake region contains the southern part of White's (1970) Mt. Dora Ridge region, and the Apopka Hills region of Brooks (1981b; 1982). Elevations range from 70-150 feet. Candler-Apopka-Astatula and Tavares-Zolfo-Millhopper are the most common soil associations, developed over more silt and clay than the coarser clastics of the Mount Dora Ridge (Brooks 1981b; 1982). Longleaf pine/xerophytic oak was the natural vegetation, although the current cover consists of citrus, pasture, and urban and residential development. The physical and chemical characteristics of the lakes are varied, and lake water level can be highly fluctuating through drought periods. There are some acidic, clear, softwater lakes of low mineral content; some clear lakes with moderate nutrients (some may lack macrophytes); and some darker water lakes that still have circumneutral pH values. The high nutrient, darkwater data for Orange County's Lake Wekiva stands out, as it once received sewage wastewater. Because of some of the surrounding flatwoods soils, there is some debate that Lake Wekiva might have historically had slightly higher nutrients compared to the upland lakes on the well-drained sandy soils of the region.

The southwest boundary of the region is uncertain, as there was little distinct evidence for the break. Portions of that boundary are similar to Brooks' (1981b) physiographic boundary, but there was some debate among the authors on the placement of the line around Johns Lake.

#### 75-16 Apopka Upland Lake Values

Mean Value	pH (lab) n=47	Total Alkalinity (mg/l) n=47	Conductivity ( $\mu$ S/cm@25°C) n=47	Total phosphorus ( $\mu$ g/l) n=66	Total Nitrogen ( $\mu$ g/l) n=58	Chlorophyll_a ( $\mu$ g/l) n=58	Color (pcu) n=47	Secchi (m) n=65
minimum	6.0	1.3	107	4	330	1	4	0.4
25th %	7.0	16.5	157	12	621	5	20	1.2
<b>median</b>	<b>7.4</b>	<b>32.2</b>	<b>208</b>	<b>20</b>	<b>790</b>	<b>8</b>	<b>40</b>	<b>1.5</b>
75th %	7.9	48.9	268	41	1089	20	59	2.3
maximum	9.0	125.4	543	131	2433	62	183	5.8

#### 75-17 Weeki Wachee Hills

This is an area of Pleistocene sand dunes, with elevations generally 20-80 feet, and numerous solution basins (Brooks 1981a,b; 1982). The region includes mostly upland-type well-drained sandy soils, such as the Candler, Astatula, and Tavares series. The natural vegetation is longleaf pine/xerophytic oak and sand pine scrub (Davis 1967). The named lakes include Whitehurst Pond, Tooke Lake, Great Hope Pond, Weekiwachee Prairie Lake, Hog Pond, Lane Pond, Long Pond, and Hunters Lake. The lakes have circum-neutral pH, with moderately low alkalinity and nutrients, and low chlorophyll-a values. Nutrient values are slightly lower than the adjacent Southern Brooksville Ridge (75-13). Although some have slight color, these are mostly clearwater lakes.

#### 75-17 Weeki Wachee Hills Lake Values

Mean Value	pH (lab) n=6	Total Alkalinity (mg/l) n=6	Conductivity ( $\mu$ S/cm@25°C) n=6	Total phosphorus ( $\mu$ g/l) n=8	Total Nitrogen ( $\mu$ g/l) n=8	Chlorophyll_a ( $\mu$ g/l) n=8	Color (pcu) n=6	Secchi (m) n=5
minimum	6.1	1.1	57	7	440	1	8	1.3
25th %	6.4	3.0	82	9	627	2	17	1.5
<b>median</b>	<b>6.9</b>	<b>9.8</b>	<b>105</b>	<b>14</b>	<b>781</b>	<b>4</b>	<b>25</b>	<b>1.6</b>
75th %	7.2	19.5	126	16	904	7	37	1.6
maximum	7.6	48.3	192	37	1623	20	45	2.0

#### 75-18 Webster Dry Plain

This low-relief plain, with elevations generally 75-125 feet, has only a thin veneer of sand or clayey sand over the Ocala Limestone. The drainage is primarily internal, and only during wet years and high water tables do shallow temporary lakes exist in the solution depressions (Brooks 1982). The small shallow lakes are likely to vary widely in their characteristics, with great temporal differences, as well as differences associated with land use and hydrologic modifications. Many are likely to be alkaline with variable nutrients, color, and clarity, but some prairie lakes are more acidic with high color values. Data for three small, shallow ponds were collected in this region, Big Gant in Sumter County, Bugg Springs in Lake County, and Indian Prairie in Hernando County. While Big Gant and Bugg Spring have high pH, alkalinity, and conductivity, and Bugg Spring is very clear, Indian Prairie is more acidic and dark.

75-18 Webster Dry Plain Lake Values

Lake	pH (lab)	Total Alkalinity (mg/l)	Conductivity ( $\mu$ S/cm@25°C)	Total phosphorus ( $\mu$ g/l)	Total Nitrogen ( $\mu$ g/l)	Chlorophyll_a ( $\mu$ g/l)	Color (pcu)	Secchi (m)
Big Gant	7.6	149.0	351	46	773	10	42	1.7
Bugg Spr.	7.6	121.5	271	83	670	3	3	3.4
Indian Pr.	6.1	5.9	59	11	2520	11	170	0.9

## 75-19 Clermont Uplands

The Clermont Uplands is a region of prairies, swamps, solution lakes, and low to high sand hills covered by citrus groves. Elevations range from 100 feet in the lower swamp and prairie areas to 300 feet on the highest hills. The lake region includes the Groveland Karst and Sugar Loaf Mountains regions of Brooks (1981b). The natural vegetation consisted of pine flatwoods and hardwood swamp forests on Myakka-Placid-Swamp association soils in the lowlands, and longleaf pine/xerophytic oaks on the well-drained Astatula-Apopka soils of the uplands. Water-tolerant grasses grow in the shallow ponds and marshes (Furman et al. 1975; Davis 1967). Deeply weathered clayey sands of the Hawthorn Group make up the geological material on the western part, while the Sugarloaf Mountains are underlain by the quartz sands, gravels, and clayey sands (Brooks 1981a). There are some small areas of peat, especially between lakes Minneola and Minnehaha west of Clermont (Scott 1978). Surface and subsurface waters from the Green Swamp (75-26) flow into this region and parts of the region are drained by the Palatka River.

Lakes of this region are acidic, softwater lakes of low mineral content that are oligotrophic to slightly mesotrophic. Some lakes have low color and high Secchi depth values, such as Crescent, Emma, Hickorynut, and Trout, while other lakes are very dark. Of the larger lakes in the region, the ones that receive drainage from the Green Swamp, such as Lake Louisa are darkwater, and with distance to the north they tend to lighten: Lake Minnehaha has less color than Louisa, while Minneola is clearer and deeper, and Cherry Lake is clear.

75-19 Clermont Uplands Lake Values

Mean Value	pH (lab) n=33	Total Alkalinity (mg/l) n=33	Conductivity ( $\mu$ S/cm@25°C) n=33	Total phosphorus ( $\mu$ g/l) n=39	Total Nitrogen ( $\mu$ g/l) n=32	Chlorophyll_a ( $\mu$ g/l) n=32	Color (pcu) n=33	Secchi (m) n=36
minimum	4.7	0.0	49	5	347	1	5	0.2
25th %	6.3	2.0	101	10	608	2	17	1.0
median	6.6	4.4	122	12	885	3	50	1.6
75th %	7.0	14.0	168	16	1084	5	90	2.4
maximum	8.5	77.0	268	28	1557	21	471	4.6

#### 75-20 Doctor Phillips Ridge

This ridge of thick sands ranges in elevation from 100-170 feet within the region and contains many solution depression lakes. Soils of the ridge are primarily of the sandy Tavares-Zolfo-Millhopper association (Orange County soil survey) or Candler-Astatula (STATSGO), but there are also some wetter, lowland-type soils. The soils are underlain by clayey sands and fine sands and silt of the Hawthorn Group (Brooks 1981a), or by other formations of uncertain identity (Scott 1978; Doolittle and Schellentrager 1989).

There are over 30 lakes in this lake region; they are generally clear with circumneutral pH, and are low in nutrients. As a group, these are some of the clearest lakes in central Florida. The clearest lakes tend to be deeper than the others in the region, and the slightly darker lakes, such as Lake Sheen, are lower in elevation or have wetter, lowland-type soils near the lake. Lake Floy is darker with unusually high nutrients, but is heavily impacted by road and stormwater drainage.

75-20 Doctor Phillips Ridge Lake Values

Mean Value	pH (lab) n=9	Total Alkalinity (mg/l) n=9	Conductivity ( $\mu$ S/cm@25°C) n=9	Total phosphorus ( $\mu$ g/l) n=15	Total Nitrogen ( $\mu$ g/l) n=15	Chlorophyll_a ( $\mu$ g/l) n=16	Color (pcu) n=9	Secchi (m) n=15
minimum	6.9	12.0	129	6	363	1.6	7	1.2
25th %	7.1	14.3	195	7	464	2.7	13	2.5
median	7.2	15.3	217	10	501	3.2	16	3.2
75th %	7.3	24.0	255	11	523	4.6	17	3.5
maximum	8.4	27.0	266	243	1735	66.6	20	5.2

#### 75-21 Orlando Ridge

This is an urbanized karst area of low relief, with elevations from 75-120 feet. Longleaf pine and xerophytic oaks were the dominant trees of the natural vegetation. Soils are primarily the Tavares, Smyrna, and Pomello series. An unnamed unit of non-marine coarse clastic sediments of Miocene age (poorly sorted quartz sands and pebbles imbedded in kaolinitic clay) form the ridge (Scott et al. 1980). Phosphatic sand and clayey sand are at a shallow depth according to Brooks (1982).

Lakes in this region can be characterized as clear, alkaline, hardwater lakes of moderate mineral content. They are mesotrophic to eutrophic (Canfield 1981), but it is difficult to distinguish between effects of urbanization and natural phosphatic levels. Lakes are more phosphatic and green than the Crescent City/DeLand Ridges (75-11), and only slightly more than the Apopka Upland (75-16). The water of clear, low nutrient Lake Conway is somewhat anomalous, possibly related to lake depth.

The area around Cassleberry could be included with the Geneva-Choluota Hills as depicted by Brooks' (1981b) physiographic region, but, perhaps because of the urban influence, it appears to fit with the Orlando Ridge lakes.



#### 75-21 Orlando Ridge Lake Values

Mean Value	pH (lab) n=40	Total Alkalinity (mg/l) n=40	Conductivity ( $\mu$ S/cm @ 25°C) n=40	Total phosphorus ( $\mu$ g/l) n=89	Total Nitrogen ( $\mu$ g/l) n=89	Chlorophyll_a ( $\mu$ g/l) n=89	Color (pcu) n=40	Secchi (m) n=85
minimum	5.7	1.6	13	6	118	0.5	0	0.4
25th %	7.7	29.8	169	21	650	14	10	1.0
<b>median</b>	<b>7.8</b>	<b>48.1</b>	<b>183</b>	<b>31</b>	<b>761</b>	<b>22</b>	<b>14</b>	<b>1.3</b>
75th %	8.1	56.6	205	47	940	35	17	1.9
maximum	9.3	88.7	267	179	2177	116	68	8.1

#### 75-22 Tampa Plain

The low-relief Tampa Plain has elevations ranging from 5 to 90 feet and contains some karst features. Medium to fine sand and silt cover the Quaternary Ft. Thompson Formation clastics and shell deposits, and the Miocene Tampa Member of the Arcadia Formation. The lake region includes the Odessa Flats, Lake Tarpon Basin, and parts of the Land-o-Lakes physiographic subdistricts of Brooks (1981b). Common soil associations include Smyrna-Sellers-Myakka (Pasco County) and Myakka-Bassinger-Holopaw (Hillsborough County). Pine flatwood vegetation was dominant in this area. The region has slightly acidic, darkwater, mesotrophic lakes, in contrast to the clearer lakes of the bordering Keystone Lakes (75-23) and Land-o-Lakes (75-24) regions.

#### 75-22 Tampa Plain Lake Values

Mean Value	pH (lab) n=6	Total Alkalinity (mg/l) n=6	Conductivity ( $\mu$ S/cm @ 25°C) n=6	Total phosphorus ( $\mu$ g/l) n=8	Total Nitrogen ( $\mu$ g/l) n=5	Chlorophyll_a ( $\mu$ g/l) n=5	Color (pcu) n=6	Secchi (m) n=8
minimum	6.6	3.5	39	11	635	4	45	0.4
25th %	6.7	4.2	52	21	807	9	52	0.9
<b>median</b>	<b>6.8</b>	<b>11.1</b>	<b>106</b>	<b>27</b>	<b>812</b>	<b>9</b>	<b>70</b>	<b>1.3</b>
75th %	7.4	24.9	203	38	1319	16	85	1.6
maximum	7.8	69.3	596	136	1450	43	174	2.0

#### 75-23 Keystone Lakes

The Keystone Lakes region is a small, well-drained, sandy upland area within the Tampa Plain, with elevations generally 30 to 60 feet and numerous lakes. Zolfo fine sand soils are common on the better-drained upland areas, with Myakka and Basinger soils in more poorly-drained depressional areas. The lakes of the region are slightly acidic, low nutrient, mostly clearwater lakes. The Keystone Lakes region has lower pH, alkalinity, and nitrogen values than in the nearby Land-o-Lakes region (75-24), and there is also less citrus and residential development.

#### 75-23 Keystone Lakes Lake Values

Mean Value	pH (lab) n=19	Total Alkalinity (mg/l) n=19	Conductivity ( $\mu$ S/cm@25°C) n=19	Total phosphorus ( $\mu$ g/l) n=32	Total Nitrogen ( $\mu$ g/l) n=33	Chlorophyll_a ( $\mu$ g/l) n=32	Color (pcu) n=19	Secchi (m) n=25
minimum	4.6	0.0	100	3	103	1	2	0.7
25th %	6.3	2.2	134	8	413	2	13	1.7
<b>median</b>	<b>6.7</b>	<b>7.2</b>	<b>162</b>	<b>13</b>	<b>567</b>	<b>5</b>	<b>26</b>	<b>2.3</b>
75th %	6.8	10.1	175	18	692	10	34	2.9
maximum	7.6	34.0	248	27	1078	21	75	4.5

#### 75-24 Land-o-Lakes

This is a sandy upland region that separates the Tampa Plain (75-22) and Hillsborough Valley (75-25). Elevations of the region are mostly 30-80 feet, and there is a high density of lakes. Soils are generally similar to those in region 75-23. Natural vegetation was dominated by longleaf pine and turkey oaks, now mostly removed for citrus groves and residential development. The lakes are neutral to slightly alkaline, low to moderate nutrient, clearwater lakes. Some lakes are occasionally augmented with groundwater.

#### 75-24 Land-o-Lakes Lake Values

Mean Value	pH (lab) n=20	Total Alkalinity (mg/l) n=20	Conductivity ( $\mu$ S/cm@25°C) n=20	Total phosphorus ( $\mu$ g/l) n=39	Total Nitrogen ( $\mu$ g/l) n=38	Chlorophyll_a ( $\mu$ g/l) n=38	Color (pcu) n=20	Secchi (m) n=31
minimum	6.1	2.1	56	6	260	1	12	0.4
25th %	7.0	12.3	126	11	537	3	17	1.5
<b>median</b>	<b>7.3</b>	<b>23.0</b>	<b>178</b>	<b>14</b>	<b>734</b>	<b>6</b>	<b>21</b>	<b>2.3</b>
75th %	7.6	40.1	211	21	921	12	33	3.4
maximum	8.4	93.7	257	42	1960	35	93	4.0

#### 75-25 Hillsborough Valley

This is a plain of low-relief containing relatively sluggish surface drainage of the Hillsborough River watershed. Natural vegetation is varied, including longleaf pine/turkey oak, pine flatwoods, and hardwood swamp forests (Davis 1967). There are karst features, but almost no lakes in this region. Data for three lakes indicate that generally alkaline, moderate to high nutrient, darkwater lakes are found in this region. Lake Thonotosassa is the largest, and is alkaline and hypereutrophic (Brenner et al. 1996). High nutrient loadings from urban and industrial sources also enter the lake, and algae blooms and fish kills have been observed (Hand and Paulic 1992, Hand et al. 1994).

#### 75-25 Hillsborough Valley Lake Values

Lake	pH (lab)	Total Alkalinity (mg/l)	Conductivity ( $\mu$ S/cm@25°C)	Total phosphorus ( $\mu$ g/l)	Total Nitrogen ( $\mu$ g/l)	Chlorophyll_a ( $\mu$ g/l)	Color (pcu)	Secchi (m)
no name	7.1	7.1	91	29	-	-	105	1.3
Ten Mile	-	-	-	40	1094	43	-	0.9
Thonoto-sassa	8.3	47.9	214	834	1452	67	82	0.7

#### 75-26 Green Swamp

The Green Swamp is a distinctive feature of the central Florida peninsula. It is an extensive area of flatland and swampland at a relatively high elevation, 75-150 feet, and it contains the headwaters of the Withlacoochee, Oklawaha, Hillsborough, Peace, and Kissimmee rivers. It is not a continuous expanse of swamp, but a composite of many swamps interspersed with low ridges, hills, and flatlands (Pride et al. 1966). Our Green Swamp region includes the Webster Limestone Wet Plain in the west that overlies the Eocene Ocala limestone, as well as the Green Swamp area to the east above the Mioce Hawthorn Group sediments. The overlying layer of clastic deposits of sand and clay are thinner to the west (Pride et al. 1966). The vegetation includes cypress in the swampy areas, pine flatwoods, and some pine and oak in the upland, better-drained areas.

The water table is at or near the surface in much of the region, with large areas of standing water after heavy rainfall. Surface waters are generally colored and acidic, but there are few, if any, natural lakes. Mill Stream Swamp was sampled under the Lakewatch program.

75-26 Green Swamp Lake Values

Lake	pH (lab)	Total Alkalinity (mg/l)	Conductivity ( $\mu\text{S}/\text{cm}@25^\circ\text{C}$ )	Total phosphorus ( $\mu\text{g}/\text{l}$ )	Total Nitrogen ( $\mu\text{g}/\text{l}$ )	Chlorophyll_a ( $\mu\text{g}/\text{l}$ )	Color (pcu)	Secchi (m)
Mill Stream Swamp	-	-	-	46	1346	33	-	-

#### 75-27 Osceola Slope

This region is composed of Pleistocene lagoonal deposits with a top layer of medium to fine sands and silts. Elevations are generally 60-90 feet, and somewhat higher than the Lake Toho area lakes to the west, and the soils are more heterogeneous as well. Smyrna, Myakka, and Tavares soils are on the better-drained low ridges and knolls, and Basinger and Samsula soils are found in the wet and swampy areas adjacent to parts of some lakes. Vegetation is primarily pine flatwoods (Davis 1967), but some low, dry ridges have turkey oak and sand scrub. Osceola Slope lakes are acidic, relatively low nutrient, colored lakes. The lakes have lower color, pH, alkalinity, conductivity, and nutrient values than lakes in the Kissimmee/Okeechobee Lowland (75-35).

75-27 Osceola Slope Lake Values

Mean Value	pH (lab) n=17	Total Alkalinity (mg/l) n=17	Conductivity ( $\mu\text{S}/\text{cm}@25^\circ\text{C}$ ) n=17	Total phosphorus ( $\mu\text{g}/\text{l}$ ) n=18	Total Nitrogen ( $\mu\text{g}/\text{l}$ ) n=16	Chlorophyll_a ( $\mu\text{g}/\text{l}$ ) n=16	Color (pcu) n=16	Secchi (m) n=15
minimum	4.5	0.0	56	10	389	2	22	0.2
25th %	5.6	0.5	88	14	637	4	64	0.6
median	5.8	2.2	101	17	847	7	135	1.1
75th %	6.1	3.1	116	23	985	9	219	1.6
maximum	7.1	11.5	152	84	1280	11	300	2.6



#### 75-28 Pinellas Peninsula

The coastal geology changes in this region from the exposed limestone in regions to the north to a covering of clastic sediments. The northern part of the Pinellas Peninsula is underlain by deeply weathered sand hills of the Miocene Hawthorn Group, with Pleistocene sand, shell, and clay deposits covering the southern part. Besides the coastal strand, the natural vegetation consisted of longleaf pine/xerophytic oak on the north and west, and pine flatwoods on the southeast (Davis 1967). The dominant characteristic of the region now is the Clearwater/St. Petersburg urbanization.

Several small lakes are found in this region, with sampling done at Cliff Stephens Park, Harbor, Loch Haven, Maggiore, Moccasin, and Seminole. They are high nutrient lakes, and this may be a result of phosphoritic pebbles in the Hawthorn Group sediments, as well as due to anthropogenic impacts. Alkalinity and pH values also appear high, although this is based on data only from lakes Maggiore and Seminole.

75-28 Pinellas Peninsula Lake Values

Mean Value	pH (lab) n=2	Total Alkalinity (mg/l) n=2	Conductivity (μS/cm@25°C) n=2	Total phosphorus (μg/l) n=6	Total Nitrogen (μg/l) n=6	Chlorophyll_a (μg/l) n=6	Color (pcu) n=2	Secchi (m) n=6
minimum	8.6	90.4	404	14	545	4	27	0.3
25th %	-	-	-	78	930	45	-	0.4
median	8.7	100.2	706	87	1370	49	29	0.9
75th %	-	-	-	98	1837	61	-	1.2
maximum	8.8	109.9	1008	122	2330	67	32	3.2

#### 75-29 Wimauma Lakes

This very small region includes only Lake Wimauma and Carlton Lake. These are clear, acidic, low nutrient, small water bodies. No lake data were collected from this region for this project. The soils in this area are a complex mosaic of alkaline and acid sands. The extent of these relatively anomalous clear, acidic, oligotrophic lakes within the Southwestern Flatlands (75-36) region is not known, although there are probably very few other lakes similar to Wimauma and Carlton.

#### 75-30 Lakeland/Bone Valley Upland

The lake region includes the Lakeland Ridge, the Bone Valley Uplands, and part of the Bartow Embayment physiographic subdistricts of Brooks (1981b; 1982). The Lakeland Ridge consists of sand hills near 200 feet in elevation with many solution depression lakes; the Bone Valley Uplands and the Bartow Embayment, within White's (1970) Polk Upland physiographic region, tend to be more poorly drained flatwoods areas. All of these areas are covered by phosphatic sand or clayey sand from the Miocene-Pliocene Bone Valley Member of the Peace River Formation in the Hawthorn Group (Scott 1992; Scott and

MacGill 1981). The region generally encompasses the area of most intensive phosphate mining, but phosphate deposits and mining activities are also found south of this region.

As one might expect, the dominant characteristic of all lakes in this region is high phosphorus, along with high nitrogen and chlorophyll-*a* values. The lakes are alkaline, with some receiving limestone-influenced groundwater.

75-30 Lakeland/Bone Valley Upland Lake Values

Mean Value	pH (lab) n=17	Total Alkalinity (mg/l) n=17	Conductivity ( $\mu$ S/cm@25°C) n=17	Total phosphorus ( $\mu$ g/l) n=18	Total Nitrogen ( $\mu$ g/l) n=18	Chlorophyll_a ( $\mu$ g/l) n=18	Color (pcu) n=17	Secchi (m) n=13
minimum	7.3	22.7	101	59	1276	40	15	0.3
25th %	7.5	24.0	152	120	1703	79	18	0.6
<b>median</b>	<b>8.0</b>	<b>50.8</b>	<b>163</b>	<b>344</b>	<b>1852</b>	<b>91</b>	<b>28</b>	<b>0.7</b>
75th %	9.1	66.0	197	526	2420	136	33	0.9
maximum	9.8	143.7	408	965	4493	252	40	1.0

#### 75-31 Winter Haven/Lake Henry Ridges

This upland karst area, 130-170 feet in elevation, has an abundance of small to medium sized lakes. Candler-Tavares-Apopka is the dominant soil association of the well-drained upland areas, with longleaf pine and xerophytic oak natural vegetation. Pliocene quartz pebbly sand and the phosphatic Bone Valley Member (Peace River Formation) of the Hawthorn Group comprise the underlying geology. The lakes can be characterized as alkaline, moderately hardwater lakes of relatively high mineral content, and are eutrophic.

75-31 Winter Haven/Lake Henry Ridges Lake Values

Mean Value	pH (lab) n=25	Total Alkalinity (mg/l) n=25	Conductivity ( $\mu$ S/cm@25°C) n=25	Total phosphorus ( $\mu$ g/l) n=44	Total Nitrogen ( $\mu$ g/l) n=43	Chlorophyll_a ( $\mu$ g/l) n=44	Color (pcu) n=26	Secchi (m) n=40
minimum	6.6	3.2	147	8	358	1.5	8	0.3
25th %	7.5	31.0	191	21	695	13	12	0.8
<b>median</b>	<b>7.8</b>	<b>37.6</b>	<b>275</b>	<b>26</b>	<b>870</b>	<b>24</b>	<b>20</b>	<b>1.1</b>
75th %	8.0	59.4	331	39	1312	40	26	1.8
maximum	9.0	87.0	417	470	1997	105	57	3.7

#### 75-32 Northern Lake Wales Ridge

This narrow ridge forms the topographic crest of central Florida, with our lake region extending south from the Clermont Uplands in Lake County to the Livingston Creek drainage in Highlands County. Elevations are generally 100-300 feet. An unnamed unit of non-marine coarse clastic sediments of Miocene age (poorly sorted quartz sands and pebbles imbedded in kaolinitic clay) form the ridge (Scott 1980). Although the Iron Mountains (Brooks 1981b) are shown as the Miocene Hawthorn Formation, Interlachen facies, other parts of this region are classified as Pleistocene beach and dune sand and Pliocene undifferentiated sand (Brooks 1981a). The well-drained sandy soils are dominated by the Candler-Tavares-Apopka association, covered by citrus groves, pasture,

and urban and residential development. The lakes are mostly alkaline, low to moderate nutrient, clearwater lakes. Nitrogen values tend to be high. These lakes are richer in nutrients than lakes in the Southern Lake Wales Ridge (75-33), although the cause of this is not readily apparent. Citrus production and land cover appear similar in both regions.

75-32 Northern Lake Wales Ridge Lake Values

Mean Value	pH (lab) n=15	Total Alkalinity (mg/l) n=15	Conductivity ( $\mu$ S/cm@25°C) n=15	Total phosphorus ( $\mu$ g/l) n=20	Total Nitrogen ( $\mu$ g/l) n=18	Chlorophyll_a ( $\mu$ g/l) n=18	Color (pcu) n=15	Secchi (m) n=16
minimum	6.0	0.2	79	3	331	1	6	0.5
25th %	7.2	15.2	125	8	632	4	7	1.0
<b>median</b>	<b>7.9</b>	<b>35.0</b>	<b>192</b>	<b>16</b>	<b>1015</b>	<b>11</b>	<b>10</b>	<b>1.9</b>
75th %	8.3	56.5	291	22	1760	20	17	2.6
maximum	8.9	130.6	425	38	5970	52	96	7.5

#### 75-33 Southern Lake Wales Ridge

This lake region contains parts of the southern ridge and the Intraridge Valley where there are mostly clearwater lakes. Elevations range from 70-150 feet, and soils are generally in the sandy, well-drained Astatula-Paola-Tavares association. The landcover is primarily citrus groves, with rapidly expanding urban and residential areas. The lakes in the region range from acidic to alkaline, but almost all are clear with low color and low nutrients.

75-33 Southern Lake Wales Ridge Lake Values

Mean Value	pH (lab) n=35	Total Alkalinity (mg/l) n=35	Conductivity ( $\mu$ S/cm@25°C) n=35	Total phosphorus ( $\mu$ g/l) n=42	Total Nitrogen ( $\mu$ g/l) n=31	Chlorophyll_a ( $\mu$ g/l) n=29	Color (pcu) n=35	Secchi (m) n=41
minimum	5.0	0.0	36	2	233	1	2	0.8
25th %	6.3	1.9	132	5	418	3	5	2.0
<b>median</b>	<b>7.3</b>	<b>14.3</b>	<b>161</b>	<b>8</b>	<b>517</b>	<b>4</b>	<b>9</b>	<b>3.1</b>
75th %	7.7	22.6	233	12	882	6	11	4.8
maximum	9.4	37.1	367	125	4803	35	28	7.2

#### 75-34 Lake Wales Ridge Transition

This lake region includes the ridge margin or transition lakes that are darker colored with higher nutrients than the lakes found on the Southern Lake Wales Ridge (75-33). Elevations are 70-130 feet, and there are more extensive areas of poorly-drained soils, such as the Satellite and Basinger series. Peaty muck Samsula soils border many of the lakes. The lake region also includes the narrow Bombing Range Ridge on the east. This is a narrow, 20 mile long sand ridge located in the Avon Park Bombing Range between Lake Kissimmee and Lake Istokpoga. Elevations reach near 150 feet. The ridge may have been an offshore sand bar associated with and created together with the Lake Wales Ridge (Lane et al. 1980). The sand pine and scrub covered ridge contains soils of the Satellite-Archbold-Pomello association, similar to the edges of the Lake Wales Ridge where the

more colored lakes are located. There are several very small lakes on this ridge, but little is known about them. About ten small lakes are shown within Bombing Range Ridge on the Bartow 1:100, 000-scale topographic map with two named lakes: Submarine Lake and Little Lake. The lake region also includes a small area of upland soils near Lake Buffum on the west. Most of the lakes in the region are acidic, although about one-third of them tend to be alkaline. They have low to moderate nutrients, and are slightly to moderately colored.

75-34 Lake Wales Ridge Transition Lake Values

Mean Value	pH (lab) n=28	Total Alkalinity (mg/l) n=28	Conductivity (μS/cm@25°C) n=28	Total phosphorus (μg/l) n=27	Total Nitrogen (μg/l) n=25	Chlorophyll_a (μg/l) n=25	Color (pcu) n=28	Secchi (m) n=30
minimum	4.4	0.0	50	0	279	4	5	0.1
25th %	5.8	2.3	76	14	517	6	22	0.8
<b>median</b>	<b>6.6</b>	<b>4.9</b>	<b>93</b>	<b>19</b>	<b>810</b>	<b>11</b>	<b>41</b>	<b>1.1</b>
75th %	7.8	26.6	189	42	977	23	68	1.5
maximum	8.9	96.0	346	148	2940	75	250	3.4

#### 75-35 Kissimmee/Okeechobee Lowland

This region includes the Kissimmee Valley, a lowland with prairie type grasslands, flatwoods, and some swamp forest. The regional boundaries also enclose most of the Fisheating Creek drainage to capture the hydrologic inputs to Lake Okeechobee. The wet prairies of this region are seasonally flooded, and dry prairies on seldom-flooded flatland have mostly been converted to pasture (Davis 1967). Pleistocene lagoonal deposits of coastal sand and shelly silty sand characterize the geology (Brooks 1981a). Lakes are alkaline, eutrophic, and colored. The shallow, subtropical Lake Okeechobee is one of the largest lakes in the United States, and historically formed the direct link between waters of the Kissimmee basin and the Everglades (76-01). Now encircled by a flood-control dike, with regulated inflows and outflows, the lake serves as a water supply for urban and agricultural areas, as well as supporting habitat for migratory waterfowl and a valuable fishery (Havens et al. 1996).

75-35 Kissimmee/Okeechobee Lowland Lake Values

Mean Value	pH (lab) n=13	Total Alkalinity (mg/l) n=13	Conductivity (μS/cm@25°C) n=13	Total phosphorus (μg/l) n=13	Total Nitrogen (μg/l) n=13	Chlorophyll_a (μg/l) n=13	Color (pcu) n=13	Secchi (m) n=13
minimum	6.9	8.4	76	17	455	2	42	0.5
25th %	7.0	14.7	102	34	847	10	53	0.6
<b>median</b>	<b>7.3</b>	<b>21.7</b>	<b>118</b>	<b>43</b>	<b>1063</b>	<b>15</b>	<b>91</b>	<b>0.7</b>
75th %	7.8	25.9	126	57	1111	18	116	1.0
maximum	8.5	100.3	443	146	1276	44	216	1.2



#### 75-36 Southwestern Flatlands

This lowland lake region includes barrier islands, Gulf coastal flatlands and valleys, and gently sloping coastal plain terraces at higher elevations. The elevations range from sea level to 150 feet. Much of the pine flatwoods and wet and dry grassland prairies have been converted to extensive areas of pasture, rangeland, and young citrus groves. Urban areas are growing rapidly near the coast. Lakes in this region can range from slightly acidic to alkaline, but almost all are eutrophic and have dark colored water. Some lakes near the Lake Wales/WinterHaven area appear more similar to the Lake Wales Ridge Transition (75-34) lakes, that is, with more moderate levels of nutrients and color, such as in South Crooked, Myrtle, and Lowery lakes in Polk County. The larger number of lakes shown in the phosphorus, nitrogen, chlorophyll-*a*, and Secchi columns in the table below are mostly from small ponds and waterbodies on Sanibel Island and from a small area south of Punta Gorda sampled in the Lakewatch program.

75-36 Southwestern Flatlands Lake Values

Mean Value	pH (lab) n=17	Total Alkalinity (mg/l) n=17	Conductivity (μS/cm@25°C) n=17	Total phosphorus (μg/l) n=44	Total Nitrogen (μg/l) n=42	Chlorophyll_a (μg/l) n=39	Color (pcu) n=16	Secchi (m) n=37
minimum	5.4	1.8	82	16	618	3	23	0.2
25th %	6.6	4.8	121	54	1245	11	60	0.4
<b>median</b>	<b>6.7</b>	<b>10.2</b>	<b>167</b>	<b>101</b>	<b>1662</b>	<b>34</b>	<b>91</b>	<b>0.7</b>
75th %	7.3	30.3	201	219	2182	52	125	1.2
maximum	8.6	76.0	319	564	3686	190	390	2.8

#### 75-37 Immokalee Rise

This area of slightly elevated land, with elevations of 25-35 feet, includes the Immokalee Rise, Corkscrew Swamp, and Devils Garden physiographic subdistricts of Brooks (1981b; 1982). Pine flatwoods and wet prairies are dominant natural vegetation types. Geologic formations include Miocene-age Tamiami Formation sands and clays, and Pleistocene-age calcareous shelly sand of the Caloosahatchie Formation and clastic and shell deposits of the Fort Thompson Group (Brooks 1981a; Vernon and Puri 1964). Lake Trafford is the largest lake in the region. It was characterized as an alkaline, hardwater lake of high mineral content (Canfield 1981). There are few other lakes in the region, and these would tend to be small, swampy, and seasonal.

75-37 Immokalee Rise Lake Values

Lake	pH (lab)	Total Alkalinity (mg/l)	Conductivity (μS/cm@25°C)	Total phosphorus (μg/l)	Total Nitrogen (μg/l)	Chlorophyll_a (μg/l)	Color (pcu)	Secchi (m)
Trafford	8.5	111	225	65	1270	28	48	1.0

#### 76-01 Everglades

This region begins south of Lake Okeechobee to include the Everglades Agricultural Area, the water conservation areas, and the sawgrass and sloughs of the national park.

The eastern and western boundaries of the region are from Griffith et al. (1995). The flat plain of saw-grass marshes, tree-islands, and marsh prairies, with cropland in the north, ranges in elevation from sea level to twenty feet. Peat, muck, and some clay are the main surficial materials over the limestone. Wide sloughs, marshes, and some small ponds contain most of the surface waters in this "River of Grass" region. Canals drain much of the water in some areas. No data for the small ponds were collected for this study.

#### 76-02 Big Cypress

The Big Cypress is a flat region, 5 to 30 feet in elevation and slightly higher than the Everglades, covered by pine flatwoods, open scrub cypress, prairie type grasslands, and extensive marsh and wetlands. Poorly drained soils overlie limestone, calcareous sandstones, marls, swamp deposit mucks, and algal muds. Lakes are absent from the region.

#### 76-03 Miami Ridge/Atlantic Coastal Strip

This is a heavily urbanized region, sea level to 25 feet in elevation, with coastal ridges on the east and flatter terrain to the west that grades into the Everglades. The western side originally had wet and dry prairie marshes on marl and rockland and sawgrass marshes (Davis 1967), but much of it now is covered by cropland, pasture, and suburbs. To the south, the Miami Ridge extends from near Hollywood south to Homestead and west into Long Pine Key of Everglades National Park. It is a gently rolling rock ridge of oolitic limestone that once supported more extensive southern slash pine forests as well as islands of tropical hardwood hammocks. The northern part of the region is occupied by the Green Acres Sand Prairie (Brooks 1981), a plain of pine flatwoods and wet prairie, and coastal sand ridges with scrub vegetation and sand pine. There are few natural lakes in the region, but three types of ponded surface waters occur: 1) Pits dug deep into underlying "rock" containing water that is clear, high pH and alkaline, with moderate nutrients; 2) Shallow, surficial dug drains that are darker water; and 3) flow-through lakes (e.g., Lake Osborne) that are colored and nutrient rich. Data for only two lakes were collected in this region, Osborne in Palm Beach County was sampled by Canfield (1981) and Lakewatch, and Tigertail in Broward County by Canfield (1981).

76-03 Miami Ridge/Atlantic Coastal Strip Mean Lake Values

Lake	pH (lab)	Total Alkalinity (mg/l)	Conductivity ( $\mu$ S/cm@25°C)	Total phosphorus ( $\mu$ g/l)	Total Nitrogen ( $\mu$ g/l)	Chlorophyll_a ( $\mu$ g/l)	Color (pcu)	Secchi (m)
Osborne	8.2	204	477	138	1168	40	60	1.0
Tigertail	8.9	66	166	14	607	2.5	4	-

#### 76-04 Southern Coast and Islands

This region includes the Ten Thousand Islands and Cape Sable, the islands of Florida Bay, and the Florida Keys. It is an area of mangrove swamps and coastal marshes, coral reefs, various coastal strand type vegetation on beach ridge deposits and limestone rock islands. Although freshwater habitats are limited or non-existent in this region, any freshwater that does occur for periods of time may have great ecological significance.

Coastal rockland lakes are small in size and number, occurring primarily in the Florida Keys. With a limestone rock substrate, the waters are alkaline, with high mineral content and highly variable salinity levels. These rockland lakes provide important habitat for several kinds of fish, mammals, and birds of the Keys (Florida Natural Areas Inventory 1990). Reduction in the fresh groundwater lens that floats on the more dense saline groundwater can severely affect these lakes. Chemistry data for these lakes were not available for this study.

### **CONCLUSIONS AND RECOMMENDATIONS**

The lakes of Florida contain a wide range of variation in their limnological characteristics. Similar to findings of other regional lake surveys, there is a strong relationship between the chemical composition of Florida's lakes and factors such as soils, physiography, and surficial geology. In addition to the natural variation of lake characteristics through time and space, a variety of human activities have modified surrounding landscapes, with certain modifications affecting some groups of lakes more than others. The lake region classification for Florida appears to be a useful framework for generalizing some of these complexities as an aid to lake resource assessment and management. It is a formalization of some commonly recognized regions in Florida and has similarities to several other frameworks of the state, but this framework is designed for the specific purpose of lake classification.

The interest in such a regional framework should be in its usefulness as a general stratifier, rather than with the potential correspondence of any single aquatic component. Does the framework and the associated data provide a mechanism to better understand the spatial variations in the characteristics and quality of Florida lakes? Does it help clarify the general limnological capabilities and potentials of these lakes? We believe this work is one piece of the foundation needed to achieve such lake management goals.

Modifications of the lake region framework might be warranted, however, as more information and understanding is gained. Aggregations of several upland regions, for example, might be useful for certain assessments. Small regions such as the Wimauma Lakes (75-29) might be excluded, while large regions such as the Eastern Flatlands (75-10) could be divided. Additional research will be needed to account for the natural variability within the lake regions. If the selected lakes in a region show a high range of variability, additional stratification or classification within the region may be necessary.

Regional maps of the parameters such as phosphorus and alkalinity that appear on the lake region poster, along with their associated histograms of the distribution of lakes, can

be useful in assessing issues such as eutrophication and acidification. With the continued growth of the UF lake database, along with other data sources, more precise maps of various lake parameters should be developed.

The hypothesis that a regional framework and some type of reference lake condition can give managers and scientists a better understanding of the spatial variations in the chemical, physical, and biological components of Florida lakes is intuitive but remains to be tested. Significant time and effort will be required for the collection and creative analysis of data to develop biological or chemical criteria and regional water quality standards, and to more fully understand attainable water conditions. The State of Florida continues to be a national leader in this effort.

Water cannot be viewed in isolation from its watershed and that is why holistic perspectives are important. Although watersheds and basins are useful study units for understanding certain aspects about the quantity and quality of water, it must be recognized that the spatial distribution of factors that affect water quantity and quality (such as vegetation, land cover, soils, geology, etc.), does not coincide with topographic watershed boundaries (Omernik and Griffith 1991). Watershed management or ecosystem management requires a spatial framework that considers the regional tolerances and capacities of landscapes. That is why the ecoregion framework and lake region framework can help in the DEP's ecosystem management approach.

Improving the quality of aquatic and terrestrial ecosystems in Florida will require the cooperation and coordination of local, state, and federal interests, both private and public. It is our hope that these regional frameworks will help improve communication and assessment within and among different groups and agencies. Although pollution of water bodies, fragmentation or loss of habitat, and alteration of landscapes have many causes, regional assessment tools can be valuable to both resource managers and researchers for stratifying natural variability and addressing the nature of these issues.



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APPENDIX A  
LAKE REGION MAPS AND GRAPHS

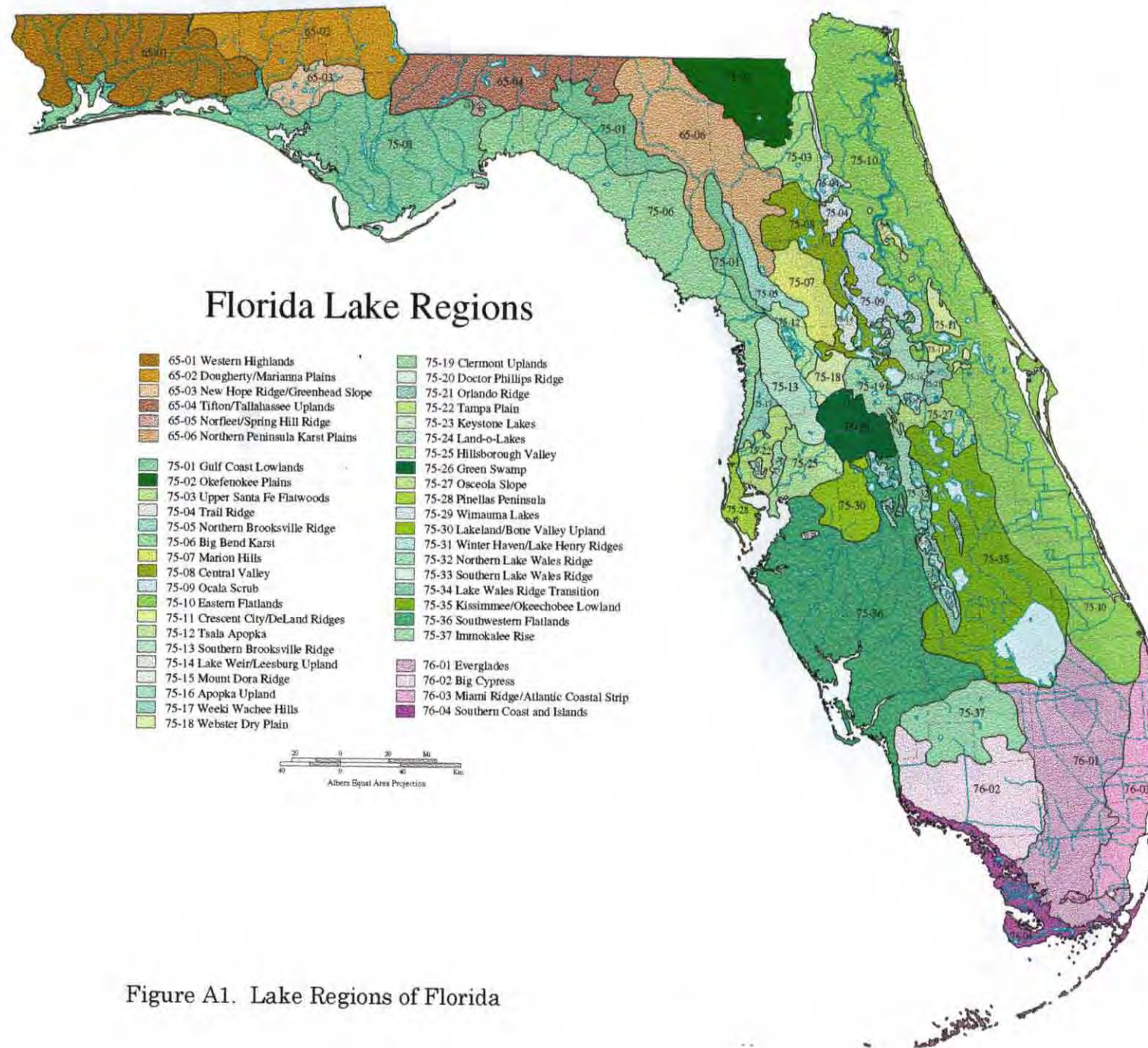


Figure A1. Lake Regions of Florida



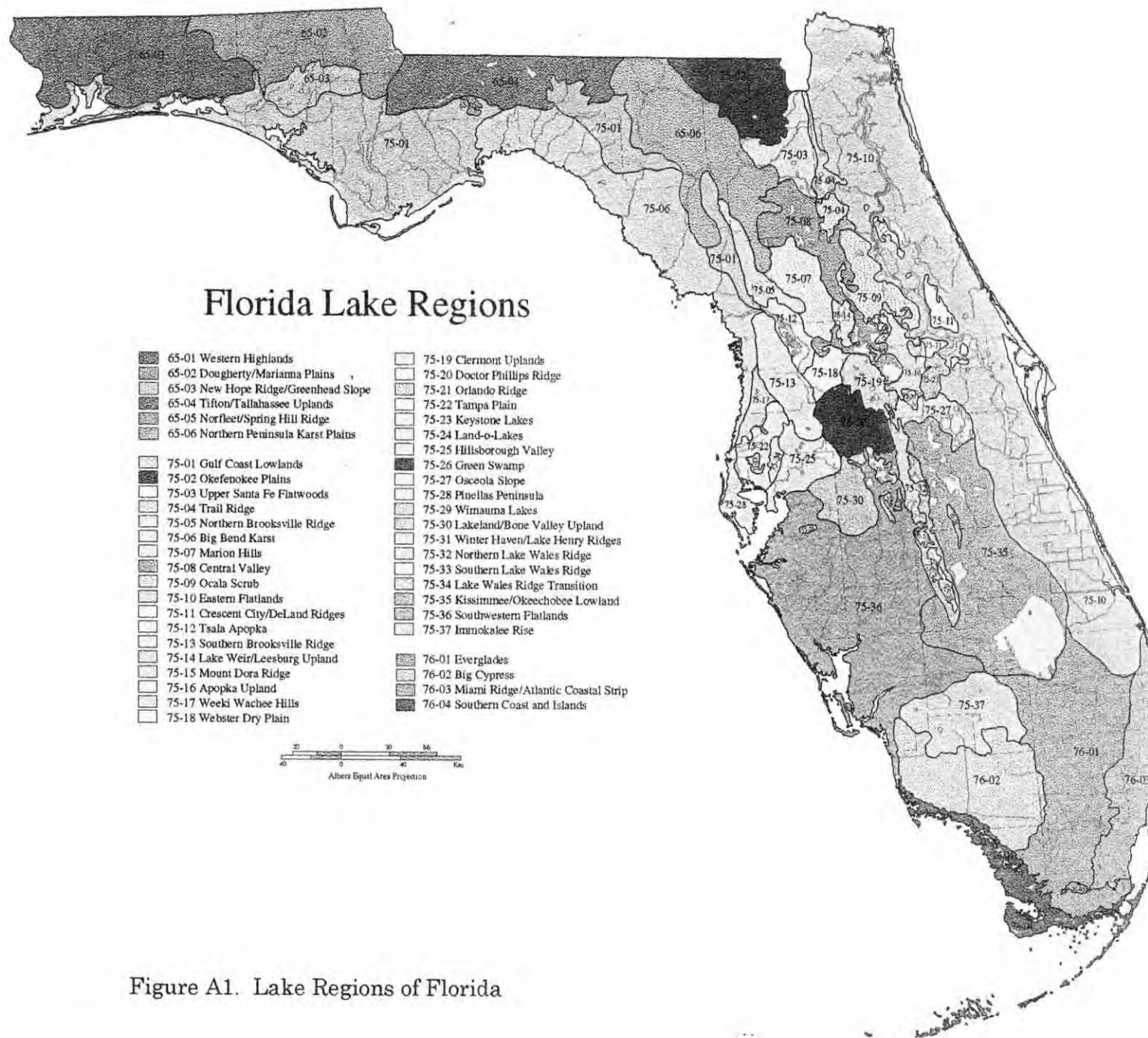


Figure A1. Lake Regions of Florida

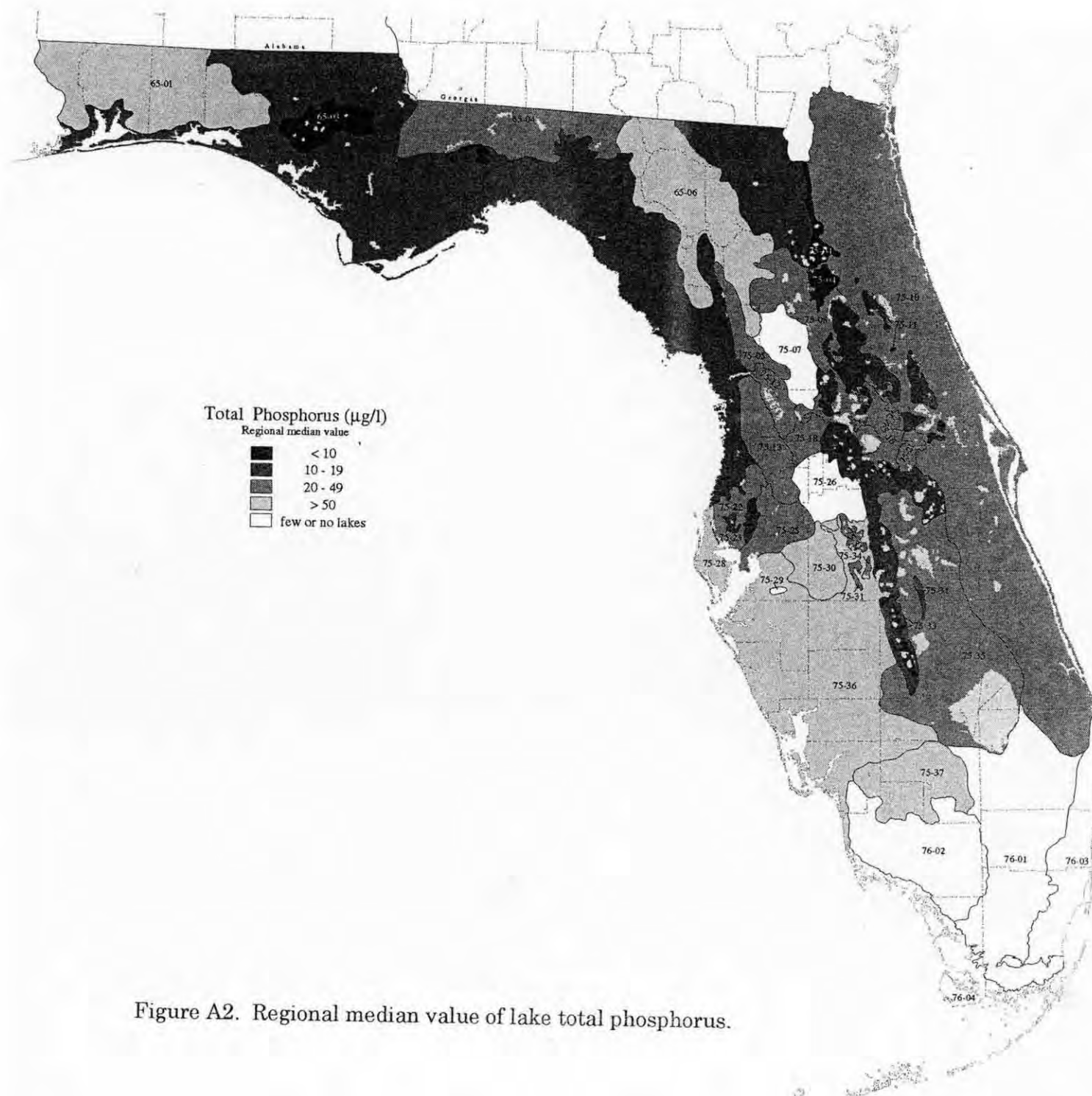


Figure A2. Regional median value of lake total phosphorus.

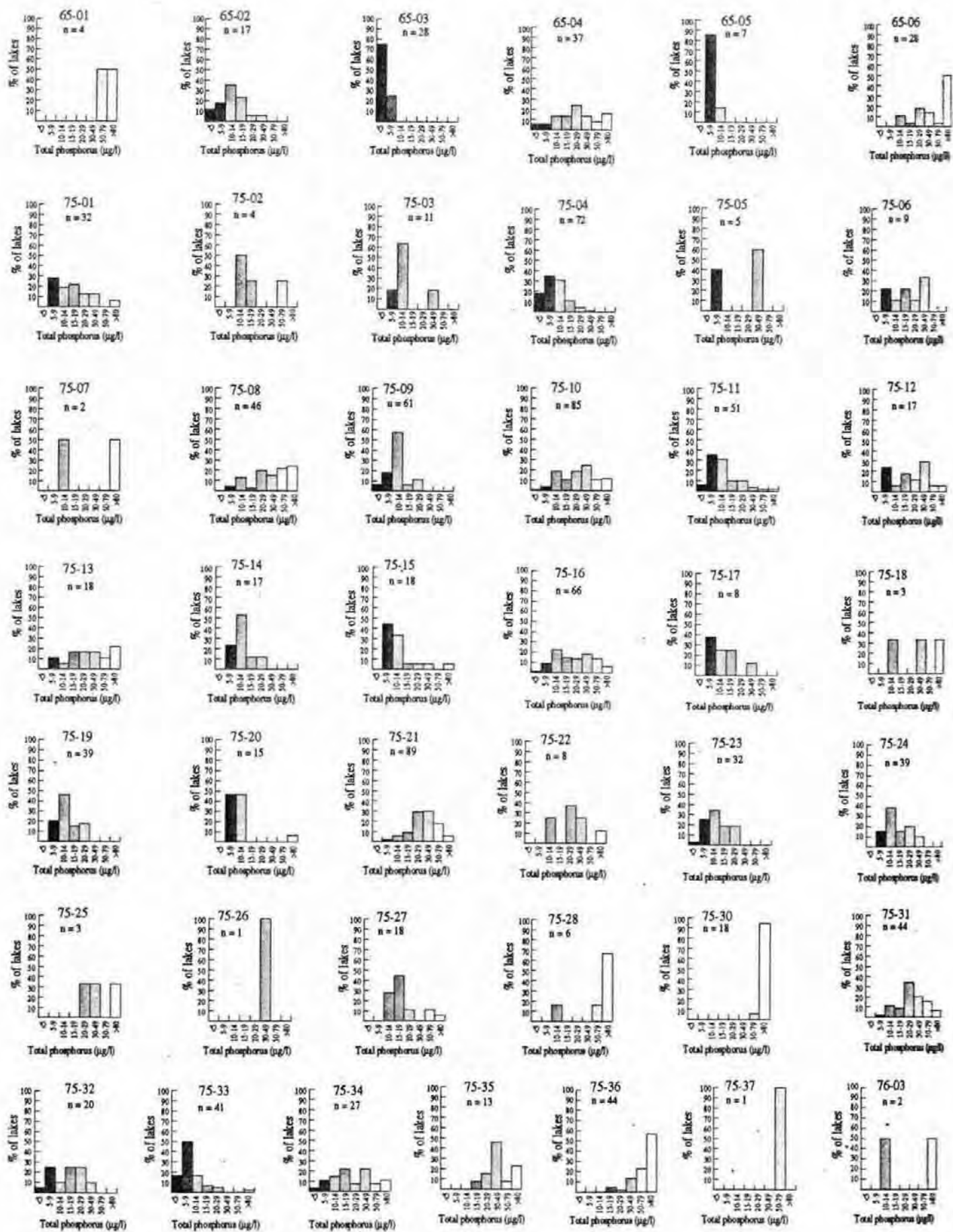


Figure A3. Distribution of lake phosphorus values by region (n=number of lakes sampled).

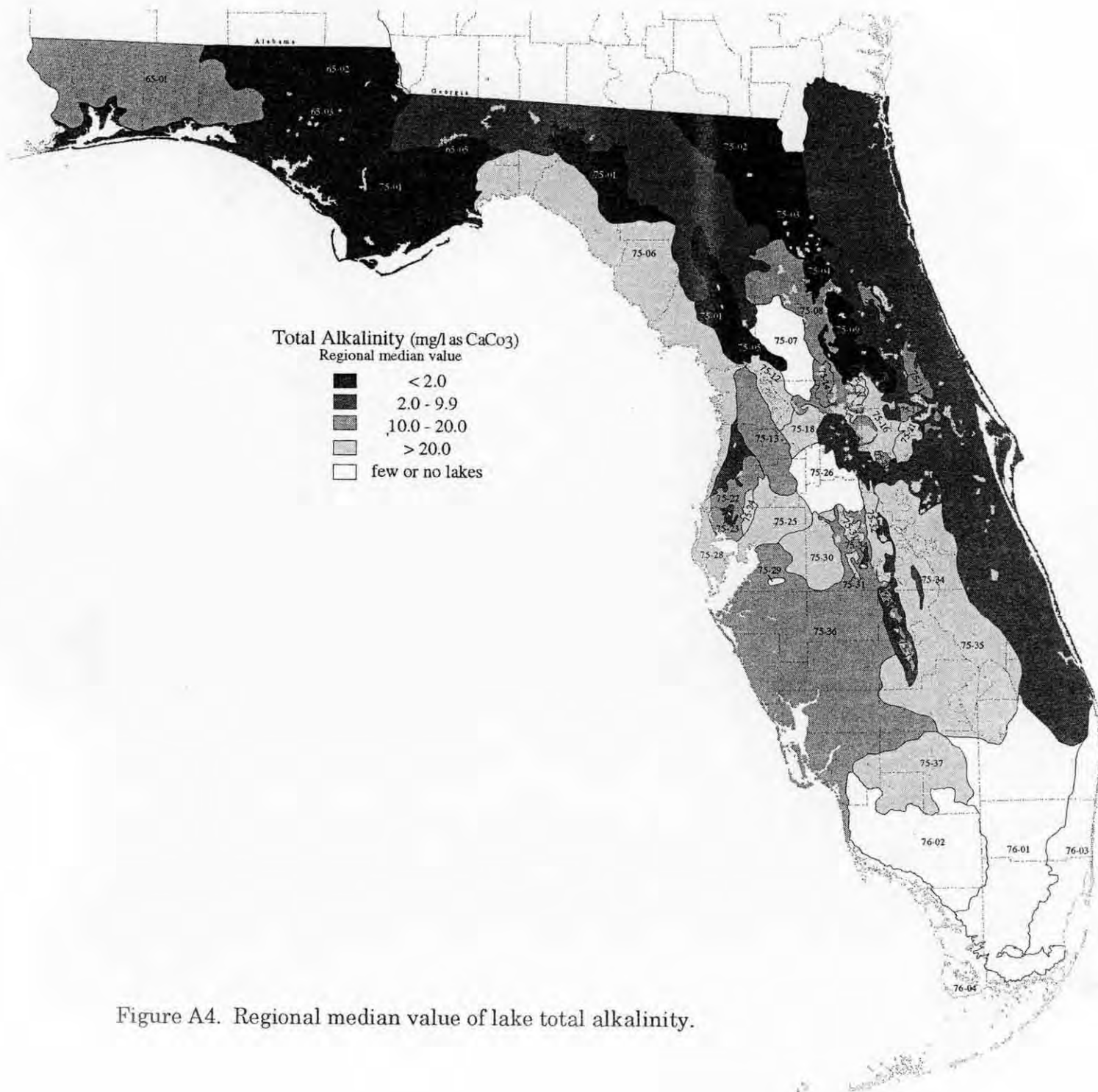


Figure A4. Regional median value of lake total alkalinity.



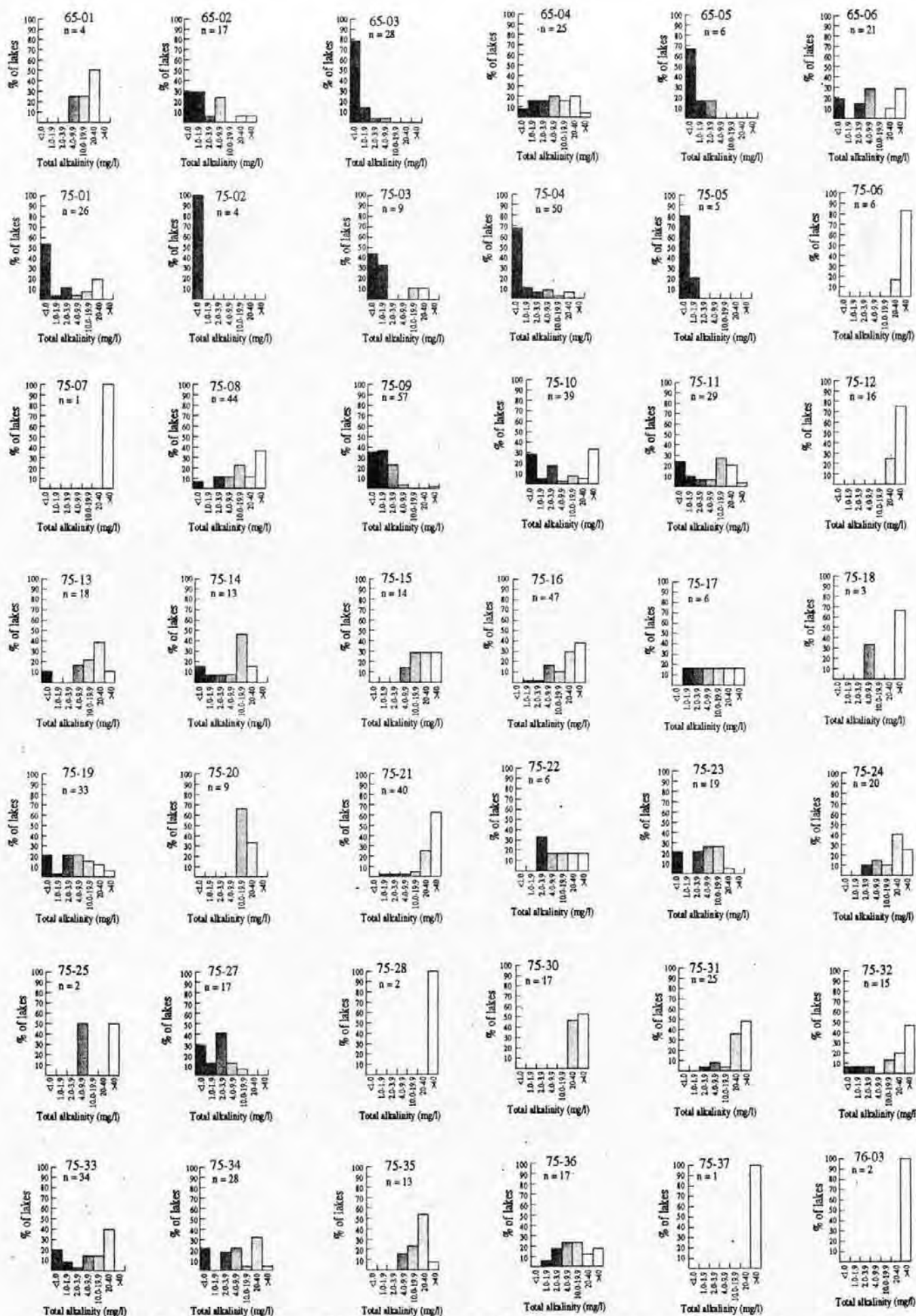


Figure A5 . Distribution of lake alkalinity values by region (n=number of lakes sampled).

APPENDIX B  
SELECTED PARAMETERS FROM LAKE DATABASE

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity ( $\mu$ S/cm @ 25C)	Total Phosphorus ( $\mu$ g/l)	Total Nitrogen ( $\mu$ g/l)	Chlorophyll_a ( $\mu$ g/l)	Color (pcu)	Secchi (m)
2	LW(6/96)	0	East Bay	Bay	30 05 34	85 32 50	-	-	-	16	328	4.3	-	2.4
3	LW(6/96)	0	North Bay	Bay	30 15 29	85 40 07	-	-	-	12	276	2.7	-	2.3
4	LW(6/96)	0	St. Andrew Bay	Bay	30 08 25	85 41 37	-	-	-	14	300	2.9	-	4.0
5	LW(6/96)	0	West Bay	Bay	30 15 55	85 47 18	-	-	-	14	309	3.6	-	2.0
6	LW(6/96)	0	Worth	Palm Beach	26 45 00	80 02 60	-	-	-	48	519	5.2	-	1.9
7	Regions	6501	Bear	Santa Rosa	30 51 51	86 49 49	7.9	20.0	50	91	657	27.5	15	1.0
8	Regions	6501	Hurricane	Okaloosa	30 56 19	86 45 18	8.2	21.0	51	79	570	21.1	14	1.7
9	Regions	6501	Karick	Okaloosa	30 53 45	86 38 38	7.0	9.6	33	70	417	14.8	15	1.5
10	Regions	6501	Stone	Escambia	30 57 55	87 17 27	7.4	13.0	42	135	637	28.4	19	1.4
11	Regions	6502	Back	Walton	30 44 31	86 08 35	6.7	6.1	36	16	497	10.8	12	1.5
12	Regions	6502	Blue	Washington	30 44 33	85 33 04	7.1	5.4	29	20	503	9.2	12	1.7
13	Regions	6502	Cassidy	Holmes	30 49 00	86 01 56	5.2	0.0	20	4	100	1.5	3	4.5
14	Canfield (1981)	6502	Charles Bay	Washington	30 44 26	85 40 42	5.0	1.9	11	14	473	2.5	45	1.5
15	Regions	6502	Compass	Jackson	30 43 14	85 23 13	6.3	0.7	18	3	200	2.0	6	3.9
16	Regions	6502	DeFuniak	Walton	30 43 02	86 06 46	6.4	1.7	20	6	303	3.7	5	3.3
17	LW(6/96)	6502	Haven	Walton	30 48 14	86 06 59	-	-	-	15	435	11.8	-	1.5
18	Canfield (1981)	6502	Jackson(Walton)	Walton	30 59 44	86 19 27	6.4	4.1	19	13	359	2.8	10	2.7
19	Regions	6502	Juniper	Walton	30 46 18	86 07 54	5.8	0.6	17	16	500	4.6	33	2.2
20	Regions	6502	Kings	Walton	30 46 60	86 11 39	6.2	1.4	16	11	433	5.1	9	-
21	Canfield (1981)	6502	Merritts Mill	Jackson	30 46 35	85 10 09	8.2	95.6	191	19	1497	1.1	2	-
22	Regions	6502	Ocheesee	Jackson	30 41 16	84 59 09	5.5	0.8	18	10	440	6.9	27	2.3
23	Regions	6502	Pate	Washington	30 41 44	85 44 33	4.7	0.0	20	8	270	4.5	37	1.3
24	Canfield (1981)	6502	Seminole	Gadsden	30 42 42	84 51 15	6.8	20.1	66	44	514	10.5	20	0.5
25	Summer '96	6502	Spring	Walton	30 45 06	86 03 40	6.2	1.4	15	-	510	12.1	10	-
26	Regions	6502	Stanley	Walton	30 44 16	86 08 14	6.4	2.7	28	8	440	4.9	18	2.3
27	Canfield (1981)	6502	Sun	Holmes	30 45 12	85 41 45	5.3	1.8	15	14	420	2.0	10	-
28	Canfield (1981)	6502	Victor	Holmes	30 56 54	85 53 54	6.4	6.1	25	12	294	2.9	15	2.7
29	EPA-ELS 1984	6503	(NO NAME)	3B1-098	30 29 32	85 48 40	6.6	1.5	23	3	-	-	10	5.0
30	EPA-ELS 1984	6503	BLACK	3B1-113	30 31 48	85 45 14	5.3	0.0	16	8	-	-	15	3.4
31	Regions	6503	Black Double	Washington	30 35 34	85 33 27	5.3	0.0	13	5	170	3.0	23	2.4
32	Regions	6503	Boat	Washington	30 32 07	85 36 26	4.5	0.0	31	1	40	0.6	1	-
33	Regions	6503	Bream	Washington	30 34 09	85 32 60	5.3	0.0	12	2	87	0.8	3	5.6
34	EPA-ELS 1984	6503	COMPASS	3B3-185	30 27 34	85 42 37	6.5	1.2	14	2	-	-	5	7.0
35	Regions	6503	Crystal	Washington	30 27 10	85 42 08	6.3	0.9	18	2	113	1.5	2	6.3
36	Canfield (1981)	6503	Dunford	Washington	30 33 08	85 40 59	5.0	1.0	15	7	220	0.8	6	5.0
37	Regions	6503	Gap	Washington	30 33 02	85 34 18	5.1	0.0	16	3	213	1.7	5	-
38	Regions	6503	Gin	Washington	30 34 22	85 33 01	5.4	0.0	12	3	217	2.3	9	3.0
39	Regions	6503	Hicks	Washington	30 33 22	85 42 39	5.1	0.0	18	2	230	1.5	4	3.7
40	EPA-ELS 1984	6503	HOMESTEAD POND	3B1-064	30 31 17	85 42 15	4.9	0.0	14	1	-	-	5	5.5
41	Regions	6503	Lighter Log	Washington	30 33 10	85 35 20	5.5	0.5	15	3	153	1.7	29	2.6
42	Regions	6503	Lucas	Washington	30 32 47	85 41 45	5.7	0.7	17	5	233	1.9	8	-
43	Regions	6503	McCormick	Jackson	30 38 13	85 20 01	5.4	0.0	16	6	100	1.6	3	-

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
44	Regions	6503	McKenzie	Calhoun	30 30 44	85 18 40	4.7	0.0	19	2	187	1.9	9	3.4
45	Canfield (1981)	6503	Merial	Bay	30 23 24	85 40 37	4.7	0.4	19	6	64	0.5	0	3.2
46	Regions	6503	Mirror	Calhoun	30 31 15	85 20 32	5.2	0.0	19	3	163	1.2	4	5.2
47	EPA-ELS 1984	6503	OPEN	3B1-022	30 29 10	85 42 40	5.0	0.0	15	2	-	-	5	3.3
48	Regions	6503	Owens	Washington	30 39 49	85 35 37	4.9	0.0	20	4	150	1.8	7	2.6
49	EPA-ELS 1984	6503	PAYNE	3B1-130	30 33 25	85 39 55	5.0	0.0	18	6	-	-	10	5.0
50	Regions	6503	Porter	Washington	30 30 38	85 32 12	5.0	0.0	16	3	193	1.8	4	3.5
51	Regions	6503	Round	Jackson	30 39 12	85 23 33	7.1	6.7	36	4	227	2.0	5	3.8
52	Regions	6503	Silver(Seventeen Mile)	Jackson	30 34 40	85 18 50	4.9	0.0	20	3	23	0.8	2	-
53	EPA-ELS 1984	6503	SPARKLEBERRY	3B1-025	30 27 40	85 31 03	5.7	0.0	11	1	-	-	5	0.9
54	Regions	6503	Stewart	Washington	30 32 25	85 42 25	6.8	1.6	17	2	60	0.9	3	-
55	Canfield&Hoyer1991	6503	Turkey Pan	Calhoun	30 33 25	85 17 11	4.7	0.4	21	2	132	1.0	1	3.2
56	Regions	6503	White Double	Washington	30 35 19	85 33 33	6.6	2.7	15	1	77	1.1	3	4.8
57	EPA-ELS 1984	6504	(NO NAME)	3B3-001	30 33 18	84 21 17	8.5	29.0	198	202	-	-	150	0.7
58	Regions	6504	Anderson	Madison	30 26 49	83 25 37	6.5	12.0	45	15	377	2.3	21	2.9
59	LW(6/96)	6504	Arrowhead	Leon	30 34 00	84 13 03	-	-	-	29	425	12.1	-	1.0
60	LW(6/96)	6504	Belmont	Leon	30 33 01	84 10 45	-	-	-	47	1130	22.9	-	0.9
61	Regions	6504	Blair	Madison	30 35 23	83 22 53	5.4	0.4	19	3	487	2.3	16	-
62	LW(6/96)	6504	Blairstone	Leon	30 24 50	84 15 25	-	-	-	71	1187	42.4	-	0.7
63	LW 93	6504	Blue Heron	Leon	30 36 02	84 14 15	7.4	20.0	57	26	610	11.6	15	-
64	LW(6/96)	6504	Bockus	Leon	30 35 05	84 13 09	-	-	-	16	399	4.3	-	1.8
65	LW(6/96)	6504	Carolyn	Leon	30 33 06	84 12 25	-	-	-	34	344	18.3	-	1.4
66	Regions	6504	Carr	Leon	30 34 24	84 17 48	6.5	6.7	27	25	717	12.2	20	1.3
67	Regions	6504	Cherry	Madison	30 36 48	83 24 47	6.1	0.7	40	27	543	21.5	6	1.2
68	Regions	6504	Cobb	Madison	30 31 11	83 25 46	5.7	1.2	15	10	423	3.9	28	1.4
69	LW 93	6504	Diane	Leon	30 35 38	84 14 21	6.9	4.9	31	7	277	2.0	6	-
70	LW(6/96)	6504	Elizabeth	Leon	30 29 36	84 17 49	-	-	-	24	336	13.3	-	3.7
71	LW(6/96)	6504	Erie	Leon	30 22 05	84 07 46	-	-	-	6	424	2.3	-	2.3
72	Summer '96	6504	Hall	Leon	30 31 14	84 14 52	6.8	3.4	26	10	300	1.5	6	5.8
73	Regions	6504	Hay Pond	Jefferson	30 36 46	83 49 20	6.3	1.1	11	21	533	31.1	8	-
74	Regions	6504	Iamonia	Leon	30 38 01	84 14 48	5.8	2.8	23	17	567	6.8	40	-
75	Regions	6504	Jackson	Leon	30 31 47	84 19 40	6.9	13.3	45	24	527	8.8	13	2.0
76	Summer '96	6504	Maclay	Leon	30 30 57	84 14 47	6.7	3.5	27	10	353	1.7	6	5.3
77	Regions	6504	Mays Pond	Jefferson	30 35 31	83 57 11	9.9	27.3	88	91	3323	124.1	157	0.3
78	Regions	6504	Miccosukee	Jefferson	30 33 56	83 58 16	6.0	5.0	26	17	443	5.8	25	1.9
79	LW 93	6504	Monkey Business	Leon	30 36 21	84 13 56	7.2	16.0	54	42	630	30.3	17	-
80	Regions	6504	Mystic	Madison	30 29 00	83 26 36	6.6	14.7	64	28	693	5.6	51	1.1
81	Summer '96	6504	Overstreet	Leon	30 31 45	84 15 24	5.9	1.6	19	11	287	1.4	8	3.6
82	LW(6/96)	6504	Petty Gulf	Leon	30 35 24	84 13 46	-	-	-	33	547	22.4	-	1.0
83	Regions	6504	Rachel	Madison	30 27 31	83 27 57	6.0	1.5	16	4	227	1.6	6	-
84	Regions	6504	Razor	Jefferson	30 36 05	83 45 23	8.0	69.0	152	26	780	3.5	11	-
85	Regions	6504	Rock Island	Madison	30 35 41	83 27 44	6.2	5.1	38	127	607	40.7	88	0.5



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm@25C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
86	LW(6/96)	6504	Shelly Pond	Leon	30 34 35	84 16 17	-	-	-	96	1057	41.5	-	0.9
87	Regions	6504	Silver	Jefferson	30 34 29	83 46 32	6.2	2.8	23	13	387	4.6	18	2.9
88	Regions	6504	Simpson	Jefferson	30 33 51	83 50 58	9.1	31.0	133	297	1593	170.6	77	0.7
89	Regions	6504	Sneads Smokehouse	Jefferson	30 36 42	83 43 17	6.0	5.1	24	31	620	15.5	40	-
90	LW(6/96)	6504	Sommerset	Leon	30 34 26	84 15 47	-	-	-	219	2008	216.3	-	0.5
91	LW(6/96)	6504	Tallavana	Gadsden	30 35 59	84 27 53	-	-	-	59	707	34.7	-	0.9
92	LW 93	6504	Talquin	Gadsden	30 26 23	84 34 10	8.2	22.0	114	50	580	16.6	27	-
93	LW(6/96)	6504	Wooten	Jefferson	30 23 58	83 59 25	-	-	-	16	490	7.6	-	2.0
94	Regions	6505	Andrew	Leon	30 24 04	84 24 25	5.3	0.0	14	5	197	2.7	12	-
95	Regions	6505	Dog	Leon	30 22 39	84 23 45	5.0	0.0	16	5	217	2.5	4	-
96	Regions	6505	Dog Pond	Leon	30 21 02	84 24 47	4.6	0.0	24	5	300	2.1	9	-
97	Canfield&Hoyer1991	6505	Loften	Leon	30 21 16	84 22 52	4.9	1.0	20	5	633	2.0	20	2.5
98	Regions	6505	Lost	Leon	30 21 45	84 23 11	5.6	0.2	17	11	257	3.9	11	-
99	Canfield&Hoyer1991	6505	Moore	Leon	30 23 31	84 24 13	5.8	2.2	17	5	353	3.0	19	5.3
100	LW(6/96)	6505	Trout Pond	Leon	30 20 02	84 23 14	-	-	-	7	307	3.6	-	2.5
101	EPA-ELS 1984	6506	(NO NAME)	3B3-060	29 19 55	82 28 05	8.4	74.0	153	12	-	-	15	2.5
102	Regions	6506	Alcyone	Hamilton	30 37 34	83 15 05	5.5	0.4	26	22	283	5.6	12	2.4
103	Regions	6506	Alligator	Columbia	30 10 05	82 37 51	7.2	26.3	77	136	1933	102.1	46	0.8
104	Regions	6506	Amber Jack	Hamilton	30 34 37	83 11 14	4.6	0.0	22	11	910	3.2	33	-
105	Regions	6506	Blue	Suwannee	30 11 25	82 55 48	5.8	4.0	52	178	903	0.9	333	0.5
106	Regions	6506	Burnetts	Alachua	29 47 27	82 28 08	6.9	21.0	117	334	1020	33.4	102	1.2
107	LW(6/96)	6506	Clear	Alachua	29 39 11	82 23 47	-	-	-	97	865	12.1	-	1.4
108	Regions	6506	DeSoto	Columbia	30 11 29	82 37 60	9.2	51.7	144	116	3083	300.5	70	0.3
109	LW(6/96)	6506	Forest	Hamilton	30 31 56	83 07 23	-	-	-	118	567	6.3	-	1.9
110	Regions	6506	Frances	Madison	30 27 57	83 24 26	8.3	80.7	169	111	1750	70.5	17	0.4
111	LW(6/96)	6506	Hammocks	Alachua	29 42 25	82 26 00	-	-	-	170	1044	36.7	-	1.2
112	EPA-ELS 1984	6506	HAVEN WINQUIPIN	3B3-168	29 33 54	82 45 03	6.5	2.4	38	28	-	-	175	0.6
113	Regions	6506	Jeffery	Columbia	30 12 34	82 41 34	5.8	0.8	39	13	597	5.6	64	1.5
114	Summer '96	6506	Kingswood	Alachua	29 40 49	82 24 19	6.5	6.8	71	20	655	5.5	45	-
115	Canfield (1981)	6506	Louise	Suwannee	30 19 05	82 52 40	6.4	5.0	46	22	632	6.5	42	1.8
116	Regions	6506	Low	Suwannee	30 13 16	82 50 09	5.8	2.4	52	296	937	4.7	242	0.6
117	Regions	6506	Mill Pond	Madison	30 28 22	83 24 00	6.7	8.0	38	23	540	13.1	16	2.8
118	LW(6/96)	6506	Mills Creek	Columbia	30 10 15	82 36 52	-	-	-	253	450	-	-	-
119	Regions	6506	Montgomery	Columbia	30 11 01	82 38 40	7.6	43.0	131	38	840	23.4	19	1.5
120	LW(6/96)	6506	Moon	Alachua	29 40 50	82 24 14	-	-	-	148	878	45.8	-	1.4
121	Regions	6506	Octahatchee	Hamilton	30 36 31	83 12 21	5.7	2.1	44	346	850	2.8	246	0.7
122	LW(6/96)	6506	Peacock	Suwannee	30 14 21	82 53 52	-	-	-	84	1286	39.3	-	1.3
123	Regions	6506	Prairie	Alachua	29 47 49	82 22 39	7.3	40.7	155	195	870	28.1	73	1.1
124	Regions	6506	Suwannee	Suwannee	30 22 51	82 56 57	6.5	6.7	48	49	983	37.9	36	0.9
125	LW(6/96)	6506	Timber	Hamilton	30 32 22	83 06 16	-	-	-	64	827	6.0	-	-
126	Regions	6506	Trout	Alachua	29 50 37	82 18 43	5.7	0.1	36	34	340	5.7	15	-
127	Regions	6506	Watertown	Columbia	30 11 34	82 35 54	8.7	42.0	136	32	1073	36.0	29	0.8

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity ( $\mu$ S/cm @25C)	Total Phosphorus ( $\mu$ g/l)	Total Nitrogen ( $\mu$ g/l)	Chloro- phyll_a ( $\mu$ g/l)	Color (pcu)	Secchl (m)
128	Regions	6506	White	Suwannee	30 14 52	82 54 51	6.6	7.1	46	15	357	4.6	20	-
129	Regions	7501	Adams	Lafayette	29 58 45	83 02 17	5.3	1.5	51	18	1367	2.3	499	0.4
130	Regions	7501	Andrews	Taylor	30 16 24	83 38 54	5.4	0.5	30	15	527	11.4	85	1.1
131	Regions	7501	Booze	Madison	30 22 48	83 19 35	3.9	0.0	67	31	1303	39.5	196	0.6
132	1-QAQC	7501	Bradford	Leon	30 24 09	84 20 29	5.0	0.2	24	18	518	8.5	121	0.4
133	LW(6/96)	7501	Camp Creek	Walton	30 17 48	86 03 22	-	-	-	6	381	3.0	-	1.2
134	LW(6/96)	7501	Campbell	Walton	30 21 55	86 17 20	-	-	-	5	354	2.5	-	2.9
135	LW(6/96)	7501	Cascade	Leon	30 25 10	84 21 38	-	-	-	15	671	8.3	-	0.7
136	Regions	7501	Christmas	Gilchrist	29 41 17	82 43 32	4.0	0.0	78	11	820	5.3	124	1.2
137	Canfield (1981)	7501	Corn Landing	Franklin	29 57 18	84 26 18	7.0	26.6	199	13	574	2.8	82	1.3
138	Canfield (1981)	7501	Dead	Calhoun	30 14 35	85 10 12	6.3	11.8	38	14	297	3.6	68	2.0
139	Canfield (1981)	7501	Deer Point	Bay	30 16 08	85 26 15	6.9	22.6	60	8	184	1.9	62	2.1
140	Regions	7501	Ellen	Wakulla	30 06 46	84 23 56	5.1	0.0	30	6	450	3.9	95	1.0
141	Regions	7501	Found	Leon	30 21 41	84 22 31	4.3	0.0	30	15	497	6.3	87	-
142	LW(6/96)	7501	Grassy	Leon	30 24 33	84 20 11	-	-	-	20	838	5.0	-	0.7
143	1-QAQC	7501	Hiawatha	Leon	30 24 36	84 20 53	4.5	0.0	31	20	625	9.3	129	0.4
144	Regions	7501	Jones	Levy	29 33 25	82 43 46	5.3	0.0	19	9	693	2.8	43	-
145	Canfield&Hoyer1991	7501	Koon	Lafayette	30 02 24	83 07 35	5.2	2.6	29	5	687	3.0	63	1.4
146	Regions	7501	Middle	Madison	30 22 54	83 19 27	3.9	0.0	65	41	1423	64.5	342	0.6
147	1-QAQC	7501	Minniehaha	Leon	30 24 50	84 21 01	4.6	0.0	30	15	720	11.5	126	0.4
148	Regions	7501	Munson	Leon	30 22 09	84 18 30	10.3	34.0	119	109	693	20.2	28	-
149	Canfield (1981)	7501	Otter	Wakulla	30 01 27	84 25 15	4.9	2.3	128	29	501	2.9	222	0.9
150	Canfield (1981)	7501	Oyster	Walton	30 21 08	86 14 43	6.6	18.8	4338	34	554	4.0	208	0.9
151	LW(6/96)	7501	Peach Creek	Walton	30 22 24	86 06 19	-	-	-	6	440	0.9	-	1.0
152	LW(6/96)	7501	Powell	Bay	30 16 07	85 58 49	-	-	-	14	422	4.3	-	1.7
153	Regions	7501	Ten Mile	Madison	30 17 08	83 18 55	5.6	0.5	23	6	807	6.2	48	1.9
154	Regions	7501	Townsend Pond	Lafayette	30 02 15	83 07 05	5.3	0.4	34	10	1070	4.2	206	0.7
155	Regions	7501	Waccasassa	Gilchrist	29 36 50	82 41 35	6.6	6.9	50	42	987	11.6	64	0.5
156	Regions	7501	Waters	Gilchrist	29 42 07	82 44 00	6.2	2.8	50	340	2500	21.1	521	0.1
157	Regions	7501	Waters Pond	Levy	29 33 10	82 42 52	5.2	0.0	36	16	983	10.0	248	0.8
158	Canfield (1981)	7501	Western	Walton	30 19 37	86 09 15	6.8	21.3	5636	6	289	1.3	141	1.7
159	Canfield (1981)	7501	Wimico	Gulf	29 48 16	85 16 19	6.8	21.3	126	28	493	3.9	113	0.5
160	Regions	7501	Winquippin	Levy	29 31 41	82 43 25	5.2	0.0	25	10	937	2.6	53	-
161	Regions	7502	Fisher	Union	30 04 02	82 22 45	4.4	0.0	70	13	1220	1.1	343	-
162	Regions	7502	Ocean Pond	Baker	30 13 37	82 26 13	4.7	0.0	40	16	383	7.4	120	0.8
163	Regions	7502	Palastine	Union	30 07 05	82 24 30	5.0	0.0	44	11	420	4.6	77	1.2
164	Regions	7502	Swift Creek	Union	30 07 30	82 17 53	4.7	0.0	56	61	1042	15.6	445	0.3
165	Regions	7503	Alto	Alachua	29 46 46	82 08 52	5.8	1.0	69	14	553	5.8	62	1.2
166	Regions	7503	Butler	Union	30 02 06	82 20 17	6.2	1.8	52	14	500	2.6	55	1.7
167	Regions	7503	Crosby	Bradford	29 56 38	82 09 26	5.4	0.3	64	11	637	11.1	43	1.8
168	LW(6/96)	7503	DeValerio	Bradford	29 54 27	82 10 19	-	-	-	33	678	11.4	-	1.0
169	Regions	7503	Hampton	Bradford	29 51 34	82 10 08	5.4	0.2	66	10	557	7.6	72	1.5



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm@25C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
170	Regions	7503	Little Santa Fe	Alachua	29 46 25	82 05 46	5.0	0.0	69	8	530	6.2	33	1.2
171	1-QAQC	7503	Melrose Bay	Alachua	29 42 54	82 03 11	6.0	1.1	68	10	422	8.8	17	1.6
172	LW(6/96)	7503	Punchbowl	Putnam	29 43 00	82 02 55	-	-	-	14	607	6.5	-	1.1
173	Regions	7503	Rowell	Bradford	29 55 15	82 09 32	7.2	23.3	234	37	753	15.4	74	1.7
174	Regions	7503	Sampson	Bradford	29 55 40	82 11 18	7.1	11.3	149	13	657	3.0	79	1.8
175	Regions	7503	Santa Fe	Alachua	29 44 33	82 04 37	5.9	0.9	68	8	447	5.3	27	1.9
176	EPA-ELS 1984	7504	(NO NAME)	3B1-029	29 46 10	81 56 45	5.7	0.1	39	12	-	-	65	0.7
177	EPA-ELS 1984	7504	(NO NAME)	3B1-033	29 37 17	81 54 38	7.4	12.3	41	22	-	-	20	3.3
178	EPA-ELS 1984	7504	(NO NAME)	3B1-054	29 47 24	81 57 34	6.4	0.6	45	14	-	-	20	2.0
179	EPA-ELS 1984	7504	(NO NAME)	3B1-089	29 36 30	81 58 25	6.2	0.7	33	8.5	-	-	10	4.4
180	EPA-ELS 1984	7504	(NO NAME)	3B1-099	29 37 07	81 53 52	7.0	3.8	34	13	-	-	10	1.9
181	EPA-ELS 1984	7504	(NO NAME)	3B1-106	29 34 45	81 57 17	4.7	0.0	50	3	-	-	10	2.7
182	Canfield&Hoyer1991	7504	Barco	Putnam	29 40 34	82 00 34	4.5	0.1	43	2	82	1.0	2	5.4
183	Regions	7504	Bedford	Bradford	29 48 34	82 03 04	5.9	0.4	44	40	497	17.7	17	1.1
184	LW(6/96)	7504	Blue	Putnam	29 30 42	82 02 21	-	-	-	5	138	1.6	-	3.1
185	EPA-ELS 1984	7504	BLUE POND	3B1-090	29 52 30	82 01 30	4.4	0.0	43	8	-	-	25	2.5
186	1-QAQC	7504	Bolt Green	Putnam	29 37 53	81 50 19	6.3	2.2	61	10	187	1.7	7	1.5
187	Regions	7504	Bolt	Bradford	29 47 51	82 03 14	5.7	0.2	29	11	263	4.3	7	2.0
188	Canfield&Hoyer1991	7504	Brim pond	Putnam	29 32 12	81 58 32	7.8	29.1	95	9	624	8.0	10	2.2
189	LW(6/96)	7504	Brooklyn	Clay	29 48 09	82 01 52	-	-	-	9	194	4.2	-	2.1
190	LW(6/96)	7504	Brooklyn Bay	Clay	29 47 40	82 01 13	-	-	-	18	379	8.0	-	1.6
191	Canfield&Hoyer1991	7504	Bull Pond	Putnam	29 31 51	81 58 53	5.3	0.7	57	11	522	3.0	9	1.4
192	LW(6/96)	7504	Chipco	Putnam	29 37 44	81 53 32	-	-	-	8	243	4.8	-	3.5
193	LW(6/96)	7504	Church	Putnam	29 39 06	81 52 03	-	-	-	5	154	4.8	-	4.3
194	Regions	7504	Cowpen	Putnam	29 36 04	82 00 07	4.8	0.0	81	6	57	0.7	3	-
195	1-QAQC	7504	Crystal	Clay	29 49 23	82 02 32	6.8	5.7	38	10	363	11.3	9	2.2
196	Canfield&Hoyer1991	7504	Cue	Putnam	29 40 27	81 58 22	4.6	0.5	45	5	91	2.0	0	5.8
197	Canfield&Hoyer1991	7504	Deep	Putnam	29 34 13	81 57 18	4.6	0.3	36	2	158	1.0	4	-
198	LW(6/96)	7504	Deer	Clay	29 50 44	81 56 55	-	-	-	6	105	4.4	-	7.5
199	1-QAQC	7504	Deerback	Marion	29 29 06	81 58 00	5.8	0.7	84	13	747	4.2	14	1.8
200	Regions	7504	DJ	Putnam	29 33 24	81 57 38	4.9	0.0	41	2	297	1.7	6	-
201	LW(6/96)	7504	East	Putnam	29 37 38	81 57 48	-	-	-	24	790	5.7	-	-
202	1-QAQC	7504	Fanny	Putnam	29 33 35	81 59 05	4.6	0.0	78	10	205	3.5	5	2.1
203	LW(6/96)	7504	Gator Bone	Clay	29 48 53	81 57 39	-	-	-	8	316	1.9	-	2.1
204	1-QAQC	7504	Geneva	Clay	29 45 54	82 01 22	5.8	0.4	83	10	380	2.5	5	1.6
205	1-QAQC	7504	Georges	Putnam	29 47 15	81 51 02	4.6	0.0	57	15	133	3.2	7	1.5
206	1-QAQC	7504	Gillis	Putnam	29 34 03	81 59 05	4.9	0.0	65	10	533	6.5	10	0.9
207	LW(6/96)	7504	Gold Head Branch	Clay	29 50 03	81 56 52	-	-	-	6	131	0.5	-	-
208	Regions	7504	Green Pond	Putnam	29 33 14	82 02 10	5.6	0.0	39	3	87	1.9	3	3.1
209	Regions	7504	Halfmoon	Putnam	29 44 18	81 58 58	5.6	0.5	43	5	333	3.6	9	-
210	1-QAQC	7504	Hardesty	Putnam	29 36 10	81 51 20	6.4	4.1	57	10	505	6.0	22	0.8
211	1-QAQC	7504	Hewitt	Putnam	29 32 32	81 55 35	5.3	0.0	51	10	153	1.8	7	1.8

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1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25°C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
212	1-QAQC	7504	Higgenbotham	Putnam	29 33 42	81 58 08	5.6	0.3	55	10	548	4.2	7	2.7
213	Regions	7504	Hutchinson	Clay	29 44 52	82 01 05	5.7	0.3	64	9	267	4.9	4	2.3
214	LW(6/96)	7504	Ida	Putnam	29 37 47	81 51 32	-	-	-	15	326	9.1	-	1.8
215	1-QAQC	7504	Island	Marion	29 28 36	81 58 30	6.1	1.1	65	15	300	5.5	9	1.8
216	LW(6/96)	7504	Johnson	Clay	29 49 30	81 56 16	-	-	-	8	237	3.4	-	1.7
217	Canfield&Hoyer1991	7504	Keys pond	Putnam	29 31 46	81 58 34	5.4	1.7	43	2	208	1.0	2	5.3
218	Canfield (1981)	7504	Kingsley	Clay	29 57 55	82 00 13	7.0	9.6	54	11	278	2.0	6	4.2
219	1-QAQC	7504	Lily	Clay	29 44 26	82 01 25	5.4	0.0	56	10	200	6.3	6	2.7
220	LW(6/96)	7504	Little Crystal	Clay	29 49 47	82 02 50	-	-	-	14	526	14.8	-	1.8
221	Canfield&Hoyer1991	7504	Little Fish	Putnam	29 31 10	81 59 09	6.8	31.8	83	21	1161	13.0	29	1.4
222	LW(6/96)	7504	Little Johnson	Clay	29 49 31	81 56 55	-	-	-	9	217	3.9	-	1.4
223	LW(6/96)	7504	Little Keystone	Clay	29 46 55	82 02 08	-	-	-	13	395	4.4	-	2.5
224	Regions	7504	Long Pond	Putnam	29 40 21	81 59 45	4.6	0.0	64	2	113	1.4	3	-
225	Regions	7504	Lowery	Clay	29 50 52	82 00 03	4.9	0.0	31	6	87	2.9	7	2.3
226	Regions	7504	Magnolia	Clay	29 49 28	82 01 07	4.8	0.0	32	3	123	2.9	12	3.5
227	EPA-ELS 1984	7504	MAGNOLIA	3B1-141	29 49 28	82 01 07	5.1	0.0	26	4	-	-	10	4.4
228	LW(6/96)	7504	Mariner	Putnam	29 38 44	81 53 19	-	-	-	2	120	3.3	-	4.6
229	EPA-ELS 1984	7504	MARINER	3B1-055	29 38 45	81 53 17	4.9	0.0	38	5	-	-	10	3.8
230	LW(6/96)	7504	Mason	Putnam	29 39 47	81 59 02	-	-	-	6	117	6.3	-	2.8
231	LW(6/96)	7504	Miles Kale	Marion	29 28 40	81 58 59	-	-	-	10	270	3.5	-	2.3
232	Regions	7504	Morris	Putnam	29 36 54	81 58 22	6.1	1.5	41	7	150	1.8	10	3.7
233	1-QAQC	7504	North Twin	Putnam	29 36 36	82 01 07	6.8	4.9	43	17	437	24.3	9	1.5
234	LW(6/96)	7504	Opal	Clay	29 44 35	82 01 46	-	-	-	6	435	2.5	-	4.3
235	Regions	7504	Paradise	Bradford	29 47 17	82 02 51	8.0	33.0	99	7	350	3.2	6	2.8
236	LW(6/96)	7504	Pebble	Clay	29 49 32	81 54 15	-	-	-	13	219	4.6	-	1.8
237	1-QAQC	7504	Pegram	Marion	29 28 13	81 59 12	6.3	2.6	73	10	877	9.3	14	1.9
238	Canfield&Hoyer1991	7504	Picnic	Putnam	29 30 52	81 58 28	4.3	0.0	69	8	137	1.0	0	2.6
239	1-QAQC	7504	Riley	Putnam	29 31 07	82 02 00	4.9	0.0	77	15	418	3.2	38	1.2
240	1-QAQC	7504	Rosa	Putnam	29 42 40	82 00 34	5.1	0.0	46	5	123	2.0	3	3.6
241	LW(6/96)	7504	Sheelar	Clay	29 50 24	81 57 31	-	-	-	4	81	1.8	-	7.6
242	Regions	7504	Silver	Bradford	29 47 51	82 03 36	6.3	1.0	42	16	260	7.2	7	3.1
243	LW(6/96)	7504	Spring	Clay	29 49 03	81 59 12	-	-	-	15	244	5.4	-	1.7
244	EPA-ELS 1984	7504	STEVENS	3B1-027	29 53 30	82 00 35	4.8	0.0	30	4	-	-	20	2.7
245	1-QAQC	7504	Swan	Putnam	29 43 30	82 00 37	5.2	0.0	62	2	70	1.0	3	-
246	LW(6/96)	7504	White Sand	Clay	29 48 42	81 58 35	-	-	-	9	216	2.8	-	1.6
247	1-QAQC	7504	Winnott	Putnam	29 38 53	82 03 03	6.2	1.9	52	10	418	2.5	12	1.9
248	Regions	7505	Bonable	Marion	29 08 16	82 31 29	6.1	1.1	54	42	953	25.6	85	0.5
249	Regions	7505	Dinner	Gilchrist	29 40 14	82 43 08	4.8	0.0	49	34	840	23.5	23	-
250	Regions	7505	Section Sixteen	Marion	29 05 37	82 29 13	5.0	0.0	31	8	293	1.7	26	2.4
251	Regions	7505	Tiger	Marion	29 07 52	82 31 05	5.9	0.6	49	31	660	12.4	35	0.9
252	Regions	7505	Watermelon Pond	Alachua	29 32 42	82 36 20	4.8	0.0	33	5	573	2.1	21	-
253	Regions	7506	Blue Creek	Taylor	29 50 27	83 34 07	7.1	141.7	290	18	497	11.1	18	1.7



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254	Regions	7506	Cocker Sog	Taylor	29 49 47	83 30 06	11.7	233.7	468	24	537	1.4	39	-
255	LW(6/96)	7506	Governor Hill	Dixie	29 45 17	83 02 14	-	-	-	9	863	1.3	-	1.1
256	EPA-ELS 1984	7506	HAMMOCK	3B3-068	29 45 52	83 01 07	8.6	119.4	251	18	-	-	105	1.8
257	LW(6/96)	7506	Home Springs	Leon	30 19 06	84 07 53	-	-	-	35	295	0.7	-	2.4
258	Regions	7506	Long Pond	Levy	29 26 39	82 50 49	7.9	91.0	198	12	480	2.0	14	-
259	EPA-ELS 1984	7506	MATTHIS	3B3-006	29 47 32	83 00 36	7.9	29.5	81	7	-	-	20	2.0
260	Canfield (1981)	7506	Rousseau	Levy	29 01 35	82 34 47	7.3	92.2	209	48	462	2.3	70	2.1
261	LW(6/96)	7506	Wacissa	Jefferson	30 20 22	83 59 36	-	-	-	32	260	1.2	-	3.6
262	EPA-ELS 1984	7507	BIRD POND	3B3-089	29 11 48	82 20 18	8.5	166.0	313	11	-	-	30	1.2
263	LW(6/96)	7507	Lillian	Marion	29 03 44	82 03 11	-	-	-	137	2088	100.8	-	0.6
264	EPA-ELS 1984	7508	(NO NAME)	3B1-057	29 00 33	81 51 52	4.3	0.0	43	32	-	-	225	0.5
265	Canfield&Hoyer1991	7508	Apopka	Lake	28 39 06	81 39 29	9.4	111.0	371	140	3789	127.0	34	0.3
266	1-QAQC	7508	Beauclaire	Lake	28 46 09	81 39 36	8.9	128.7	420	152	3767	172.5	45	1.6
267	Canfield&Hoyer1991	7508	Bivans Arm	Alachua	29 37 38	82 20 45	9.7	101.3	227	384	3256	241.0	25	0.4
268	LW 93	7508	Bryant	Marion	29 08 41	81 51 17	7.7	23.0	100	23	1577	39.6	17	-
269	Canfield&Hoyer1991	7508	Carlton	Orange	28 45 32	81 39 29	8.9	104.7	384	92	3228	173.0	37	0.4
270	Regions	7508	Chloe	Lake	28 50 34	81 46 22	6.8	15.0	87	6	1290	2.3	45	-
271	Greis (1985)	7508	Church	Lake	29 11 44	81 55 15	5.0	2.7	36	20	900	3.4	349	0.5
272	Regions	7508	Deaton	Sumter	28 50 10	81 58 53	7.1	25.3	184	20	1613	19.0	29	1.2
273	Canfield (1981)	7508	Dora	Lake	28 47 20	81 41 36	8.9	120.1	321	90	3062	123.5	43	0.4
274	1-QAQC	7508	Dora East	Lake	28 47 32	81 39 24	8.7	126.2	416	75	3433	183.3	36	0.4
275	1-QAQC	7508	Dora West	Lake	28 47 08	81 42 31	8.7	125.0	404	57	3233	163.3	33	0.4
276	1-QAQC	7508	Eustis	Lake	28 50 31	81 43 27	8.8	106.3	324	45	2400	86.7	20	0.5
277	Regions	7508	George's Pond	Alachua	29 32 02	82 18 42	6.5	14.0	93	320	1403	15.7	187	0.7
278	1-QAQC	7508	Griffin	Lake	28 51 33	81 50 52	8.6	107.8	339	65	2817	99.5	21	0.5
279	Greis (1985)	7508	Halfmoon	Marion	29 09 12	81 49 56	6.4	7.4	53	10	820	1.6	80	2.0
280	1-QAQC	7508	Harris	Lake	28 46 19	81 48 50	8.8	108.2	284	33	1533	55.2	13	0.6
281	1-QAQC	7508	Idlewild	Lake	28 52 35	81 53 02	6.8	13.5	104	17	1267	7.2	65	1.3
282	LW(6/96)	7508	Johnson Pond	Alachua	29 43 19	82 21 04	-	-	-	188	1837	187.4	-	0.7
283	Greis (1985)	7508	Jumper	Marion	29 13 09	81 51 11	6.8	15.6	72	140	1800	12.7	405	0.4
284	Greis (1985)	7508	Lake Charles	Marion	29 13 53	81 54 29	6.1	8.8	53	50	1410	0.8	690	0.3
285	Greis (1985)	7508	Lake Eaton	Marion	29 15 25	81 51 57	6.5	11.5	89	50	1160	0.9	613	0.3
286	LW(6/96)	7508	Linda	Lake	28 50 20	81 46 48	-	-	-	-	-	2.0	-	-
287	1-QAQC	7508	Little Harris	Lake	28 43 15	81 45 15	8.5	101.5	274	33	1517	38.3	17	0.8
288	1-QAQC	7508	Little Orange	Alachua	29 34 38	82 03 25	6.6	3.4	63	37	1072	29.0	91	0.9
289	Regions	7508	Lochloosa	Alachua	29 31 38	82 08 26	7.1	27.5	110	51	1358	32.4	92	0.7
290	LW(6/96)	7508	Lorraine	Lake	28 49 39	81 52 56	-	-	-	50	2462	41.4	-	0.6
291	Greis (1985)	7508	Lou	Marion	29 13 55	81 51 36	5.9	5.0	41	20	990	3.7	211	1.4
292	Summer '96	7508	McMeekin	Putnam	29 35 24	82 00 30	6.6	2.8	77	21	597	8.3	19	2.7
293	Canfield&Hoyer1991	7508	Miona	Sumter	28 54 12	82 00 12	7.9	22.2	122	12	867	8.0	16	1.5
294	Canfield (1981)	7508	Newnan	Alachua	29 39 10	82 13 06	6.8	14.4	59	52	1228	38.0	93	0.6
295	Regions	7508	Newnans	Alachua	29 38 42	82 13 08	7.5	10.0	80	133	4393	382.2	133	0.2

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1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25°C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chloro- phyll_a (µg/l)	Color (pcu)	Secchi (m)
296	1-QAQC	7508	North	Marion	29 10 03	81 52 47	6.6	4.4	70	22	642	8.0	19	1.3
297	Canfield&Hoyer1991	7508	Okahumpka	Sumter	28 49 29	82 00 24	9.0	54.6	188	21	1033	11.0	37	1.4
298	Regions	7508	Orange	Alachua	29 27 20	82 10 20	7.0	23.3	96	43	1150	26.3	51	1.1
299	LW 93	7508	Panasoffkee	Sumter	28 48 22	82 07 26	8.4	76.0	243	14	597	2.8	27	-
300	Regions	7508	Pendarvis	Marion	29 04 15	81 53 05	5.4	0.3	40	9	403	4.7	68	1.6
301	1-QAQC	7508	Picciola	Lake	28 50 10	81 52 27	8.8	109.0	340	57	2583	75.2	22	0.6
302	Greis (1985)	7508	Redwater	Marion	29 12 10	81 53 38	6.6	12.8	61	80	1400	1.0	700	0.3
303	1-QAQC	7508	Redwater	Putnam	29 33 50	82 01 04	6.5	4.5	64	27	897	17.8	64	1.1
304	1-QAQC	7508	Silver	Lake	28 50 03	81 48 06	8.1	113.5	590	10	2583	6.0	10	-
305	1-QAQC	7508	Star	Putnam	29 31 33	82 02 15	5.7	0.5	48	25	373	10.5	25	1.3
306	Regions	7508	Trout	Lake	28 51 54	81 40 49	7.0	15.0	142	137	1313	31.9	164	0.8
307	1-QAQC	7508	Unity	Lake	28 52 33	81 52 42	6.0	2.3	83	35	858	24.2	123	0.8
308	1-QAQC	7508	Wauberg	Alachua	29 31 32	82 18 07	8.2	16.7	84	78	1717	81.7	27	0.7
309	Greis (1985)	7508	Wells	Lake	29 07 47	81 50 16	5.0	2.0	40	10	620	0.7	37	2.9
310	Canfield (1981)	7508	Yale	Lake	28 54 43	81 44 08	8.3	116.4	264	14	655	9.8	7	1.4
311	EPA-ELS 1984	7509	(NO NAME)	3B1-039	29 07 06	81 52 45	8.5	114.5	252	29	-	-	35	2.7
312	EPA-ELS 1984	7509	(NO NAME)	3B1-061	28 59 04	81 45 15	6.3	0.8	37	5	-	-	25	3.0
313	EPA-ELS 1984	7509	(NO NAME)	3B1-105	29 09 46	81 36 57	4.5	0.0	56	2	-	-	5	4.2
314	Greis (1985)	7509	Baptist	Marion	29 01 21	81 40 04	4.6	0.8	35	20	560	5.7	26	1.4
315	Greis (1985)	7509	Beakman	Lake	29 07 17	81 37 18	4.6	1.3	43	14	340	0.8	6	3.1
316	Greis (1985)	7509	Big bass	Marion	28 59 17	81 46 50	5.0	2.3	32	10	1110	1.4	66	2.1
317	Greis (1985)	7509	Big Sleep	Marion	29 05 08	81 49 26	4.9	2.7	37	10	350	1.0	20	2.1
318	Greis (1985)	7509	Boyd	Lake	29 08 07	81 33 43	4.1	0.5	49	10	1150	3.0	369	0.6
319	Greis (1985)	7509	Buck	Marion	29 05 33	81 39 09	5.2	2.8	34	10	510	1.8	27	3.1
320	Greis (1985)	7509	Buckskin	Marion	29 25 35	81 44 56	4.9	1.5	30	11	730	1.1	21	2.1
321	Greis (1985)	7509	Bunchground	Lake	29 01 50	81 33 02	4.4	0.5	35	20	1410	5.1	96	1.1
322	Canfield&Hoyer1991	7509	Catherine	Marion	29 03 35	81 49 55	4.7	0.4	48	2	303	2.0	3	3.2
323	Greis (1985)	7509	Chain-O-Lakes	Lake	29 07 16	81 38 48	4.8	2.0	41	20	1230	1.4	12	2.6
324	LW(6/96)	7509	Chastain	Marion	29 21 37	81 45 03	-	-	-	17	647	7.2	-	1.7
325	Canfield&Hoyer1991	7509	Clay	Lake	29 01 28	81 27 10	4.8	0.7	51	7	356	4.0	3	4.0
326	Greis (1985)	7509	Clay	Marion	29 01 28	81 27 10	4.5	0.8	53	10	370	1.1	7	1.6
327	EPA-ELS 1984	7509	CLEAR	3B1-097	29 10 42	81 52 06	6.9	3.6	48	4	-	-	25	3.8
328	Greis (1985)	7509	Clearwater	Lake	28 58 38	81 33 19	4.4	0.3	61	10	400	1.1	3	2.0
329	Greis (1985)	7509	Cowpen Pond	Marion	29 01 10	81 27 24	4.7	1.5	47	10	660	1.0	33	1.5
330	Canfield&Hoyer1991	7509	Crooked	Lake	29 09 10	81 36 10	4.6	0.4	45	7	313	2.0	4	3.1
331	Greis (1985)	7509	Crooked	Marion	29 09 10	81 36 10	4.7	1.3	33	20	470	2.0	13	2.8
332	Greis (1985)	7509	Deer	Marion	29 12 00	81 50 20	4.6	1.3	34	10	230	1.0	9	3.4
333	Greis (1985)	7509	Deerhaven	Marion	29 02 34	81 28 15	4.7	1.5	36	10	510	0.9	22	2.0
334	Regions	7509	Delancy	Marion	29 25 40	81 46 28	5.1	0.0	51	10	750	7.3	24	1.1
335	Greis (1985)	7509	Doe	Marion	29 02 14	81 49 21	4.6	1.8	47	10	180	0.9	5	4.1
336	LW(6/96)	7509	Dolls	Lake	28 29 39	81 41 36	-	-	-	19	862	6.0	-	0.9
337	Greis (1985)	7509	Echo	Marion	29 06 14	81 39 00	4.5	2.0	33	10	310	1.0	8	3.3



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity ( $\mu$ S/cm @ 25C)	Total Phosphorus ( $\mu$ g/l)	Total Nitrogen ( $\mu$ g/l)	Chlorophyll_a ( $\mu$ g/l)	Color (pcu)	Secchi (m)
338	Greis (1985)	7509	Farles	Marion	29 06 42	81 40 23	4.9	2.3	40	10	440	0.6	9	3.9
339	LW(6/96)	7509	Fore	Marion	29 16 23	81 54 48	-	-	-	8	480	5.0	-	3.5
340	Greis (1985)	7509	Fore	Putnam	29 16 23	81 54 48	4.9	1.5	40	10	640	3.7	69	1.9
341	Canfield&Hoyer1991	7509	Grasshopper	Lake	29 08 20	81 36 47	4.5	0.1	61	6	259	1.0	0	3.7
342	Greis (1985)	7509	Grassy	Lake	29 03 31	81 48 57	5.1	3.0	35	10	1110	1.8	164	0.8
343	Greis (1985)	7509	Hopkins Praire	Marion	29 16 39	81 42 29	4.7	1.8	45	10	2040	1.2	160	1.5
344	LW(6/96)	7509	Joes	Marion	29 16 46	81 54 36	-	-	-	12	660	4.9	-	2.7
345	Regions	7509	Kathryn	Lake	29 00 47	81 29 48	6.4	3.7	73	13	513	7.7	20	1.7
346	Regions	7509	Kerr	Marion	29 21 04	81 46 52	6.0	0.6	218	7	203	1.7	7	3.0
347	Regions	7509	Kidney	Marion	29 22 46	81 46 27	4.7	0.0	42	10	1117	4.9	44	1.6
348	1-QAQC	7509	King	Marion	29 12 39	81 54 46	6.4	3.0	48	15	687	7.0	11	2.3
349	Canfield&Hoyer1991	7509	Lawbreaker	Lake	29 09 47	81 36 57	4.4	0.0	65	1	108	1.0	0	5.5
350	Greis (1985)	7509	Little Bryant	Marion	29 08 51	81 53 55	4.7	1.3	47	10	360	1.2	13	3.3
351	Greis (1985)	7509	Mary	Marion	29 04 32	81 49 42	4.5	1.0	52	10	220	0.7	6	4.1
352	Greis (1985)	7509	Mill Dam	Lake	29 10 54	81 50 27	6.5	6.0	43	10	560	1.7	27	3.7
353	1-QAQC	7509	Mill Dam	Marion	29 10 54	81 50 27	6.4	2.2	52	15	592	5.0	8	1.8
354	Greis (1985)	7509	Nicatoon	Marion	28 59 45	81 42 53	6.1	9.3	107	10	1490	2.9	141	1.5
355	Greis (1985)	7509	North Grasshopper	Lake	29 08 58	81 36 21	4.7	1.3	39	7	330	0.5	11	5.8
356	Greis (1985)	7509	Penner	Marion	29 29 30	81 49 23	4.5	0.8	22	10	840	3.2	78	0.9
357	Greis (1985)	7509	Round Lake	Lake	29 07 21	81 54 20	4.8	1.0	33	10	190	1.1	6	4.0
358	Greis (1985)	7509	Round Pond	Marion	29 04 30	81 48 28	4.8	2.0	34	10	560	1.0	23	2.1
359	Greis (1985)	7509	Sellers	Lake	29 06 43	81 38 10	4.6	1.3	45	10	180	0.5	3	5.3
360	Greis (1985)	7509	Shoesole	Marion	29 07 32	81 54 40	4.7	1.5	38	10	380	0.6	16	4.4
361	Regions	7509	Silver	Lake	28 59 14	81 31 05	4.9	0.0	87	5	490	2.3	22	2.7
362	Greis (1985)	7509	Skinny Dip	Marion	29 07 12	81 36 51	4.4	1.3	42	10	630	0.7	3	3.5
363	Regions	7509	South	Lake	28 58 52	81 31 04	4.4	0.0	64	6	723	2.3	94	1.3
364	Greis (1985)	7509	South Grasshopper	Marion	29 08 10	81 36 48	4.7	1.3	36	20	350	0.9	9	3.3
365	Canfield&Hoyer1991	7509	Swim Pond	Marion	29 02 44	81 48 57	5.6	0.9	43	25	1025	11.0	26	0.6
366	Greis (1985)	7509	Tomahawk	Marion	29 07 57	81 54 23	4.7	1.0	32	10	260	0.8	7	4.7
367	Greis (1985)	7509	Trout	Putnam	29 03 02	81 49 35	4.7	1.0	44	10	290	1.2	29	2.8
368	Greis (1985)	7509	Waldena	Marion	29 11 51	81 56 14	5.7	2.7	29	14	380	1.4	29	2.4
369	Canfield (1981)	7509	Wildcat	Lake	29 09 43	81 37 39	4.8	0.9	33	8	192	1.3	18	3.2
370	Greis (1985)	7509	Wildcat	Marion	29 09 43	81 37 39	4.5	1.8	43	10	260	1.1	24	3.5
371	Greis (1985)	7509	Yearling	Marion	29 06 14	81 39 28	4.5	1.5	32	6	230	0.8	2	4.6
372	Regions	7510	Akron	Lake	28 59 50	81 31 22	4.2	0.0	97	129	773	16.3	245	0.7
373	LW(6/96)	7510	Ann	St Lucie	27 32 04	80 24 14	-	-	-	34	1432	41.5	-	0.5
374	LW(6/96)	7510	Asbury North	Clay	30 03 29	81 49 08	-	-	-	13	410	4.0	-	2.5
375	Summer '96	7510	Asbury South	Clay	30 02 52	81 49 15	7.7	27.0	98	11	283	6.0	9	3.7
376	Canfield (1981)	7510	Ashby	Volusia	28 55 29	81 05 58	6.9	12.7	80	18	573	11.4	146	0.8
377	1-QAQC	7510	Ashley	Putnam	29 42 30	81 58 55	4.6	0.0	69	10	180	3.0	3	0.5
378	LW(6/96)	7510	Bel Air	St Lucie	27 31 53	80 23 48	-	-	-	8	502	2.2	-	-
379	LW(6/96)	7510	Belle Aire	Flagler	29 33 45	81 13 48	-	-	-	32	693	9.0	-	0.9

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity ( $\mu$ S/cm @ 25C)	Total Phosphorus ( $\mu$ g/l)	Total Nitrogen ( $\mu$ g/l)	Chlorophyll_a ( $\mu$ g/l)	Color (pcu)	Secchi (m)
380	LW(6/96)	7510	Belle Terre	Flagler	29 36 16	81 15 14	-	-	-	27	619	15.4	-	1.2
381	LW(6/96)	7510	Beresford	Volusia	28 59 10	81 20 34	-	-	-	73	1287	37.9	-	0.7
382	LW(6/96)	7510	Bethel	Volusia	28 50 57	81 12 45	-	-	-	95	1035	20.6	-	1.0
383	EPA-ELS 1984	7510	BIG	3B1-050	28 52 07	81 27 52	6.6	2.9	81	11	-	-	85	1.3
384	LW(6/96)	7510	Birchwood	Flagler	29 34 46	81 14 20	-	-	-	42	473	6.7	-	1.6
385	LW(6/96)	7510	Bird of Paradise	Flagler	29 35 31	81 14 48	-	-	-	19	494	7.8	-	1.4
386	LW(6/96)	7510	Birdway	Flagler	29 35 15	81 14 57	-	-	-	22	621	11.0	-	1.0
387	LW(6/96)	7510	Blue	Lake	29 00 05	81 30 24	-	-	-	25	345	6.7	-	1.2
388	LW(6/96)	7510	Blue	Volusia	29 01 58	81 16 07	-	-	-	36	1100	19.1	-	1.0
389	Regions	7510	Blue Cypress	Indian River	27 44 00	80 45 34	7.5	27.0	133	109	1003	5.7	254	0.6
390	LW(6/96)	7510	Brandon	Flagler	29 26 42	81 13 59	-	-	-	9	350	2.4	-	1.8
391	Greis (1985)	7510	Cathead	Marion	29 24 51	81 40 33	5.0	2.8	36	30	710	5.3	452	0.3
392	LW(6/96)	7510	Clearwater	Putnam	29 40 04	81 52 50	-	-	-	33	670	29.8	-	0.8
393	Regions	7510	Crane	Putnam	29 33 03	81 37 51	4.3	0.0	85	4	2440	2.8	85	-
394	Canfield (1981)	7510	Crescent	Flagler	29 26 24	81 28 48	7.2	19.9	234	30	1104	24.8	247	0.6
395	Regions	7510	Crescent	Putnam	29 25 49	81 29 15	6.8	11.0	152	133	1463	3.8	546	0.3
396	LW(6/96)	7510	David	St Lucie	27 33 21	80 23 49	-	-	-	11	509	3.1	-	1.4
397	Regions	7510	Davis	Putnam	29 38 11	81 41 18	6.0	2.5	94	11	860	4.0	99	0.8
398	LW(6/96)	7510	De Witt	St Lucie	27 33 18	80 24 31	-	-	-	30	739	14.6	-	1.2
399	LW(6/96)	7510	Deborah	St Lucie	27 32 44	80 24 14	-	-	-	16	512	3.9	-	1.7
400	Canfield (1981)	7510	Dexter(Volusia)	Volusia	29 06 26	81 28 44	7.6	51.3	730	114	994	17.6	136	0.7
401	Regions	7510	Dias	Volusia	29 09 40	81 19 07	6.6	4.3	106	21	760	8.4	105	1.1
402	Canfield (1981)	7510	Disston	Flagler	29 17 02	81 23 31	5.3	3.1	52	11	832	1.6	383	0.4
403	Regions	7510	Doctors Inlet	Duval	30 08 04	81 44 01	7.8	48.7	853	88	1307	58.0	132	0.5
404	LW(6/96)	7510	Dolores	St Lucie	27 32 14	80 24 05	-	-	-	17	933	3.3	-	2.0
405	Canfield (1981)	7510	Dorr	Lake	29 00 05	81 37 16	5.3	1.9	44	20	369	4.2	92	1.2
406	LW(6/96)	7510	Forest	Brevard	28 21 23	80 48 07	-	-	-	18	749	6.7	-	2.3
407	LW 93	7510	Fox	Brevard	28 35 32	80 52 04	7.4	56.7	908	52	1493	36.4	128	-
408	LW(6/96)	7510	Gemini Springs	Volusia	28 51 44	81 18 39	-	-	-	57	737	1.0	-	-
409	LW(6/96)	7510	George	Putnam	29 18 21	81 35 36	-	-	-	58	1233	43.1	-	0.7
410	Regions	7510	George	Volusia	29 18 34	81 35 43	7.8	47.0	484	79	1393	18.2	226	0.5
411	Greis (1985)	7510	Gobbler	Lake	29 09 45	81 36 36	4.1	0.0	53	10	1210	2.6	405	0.5
412	Regions	7510	Goodson Prairie	Putnam	29 44 22	81 56 12	5.8	0.7	50	18	717	21.9	30	1.4
413	LW(6/96)	7510	Gore	Flagler	29 27 40	81 13 07	-	-	-	12	659	1.8	-	0.7
414	1-QAQC	7510	Grandin	Putnam	29 40 33	81 52 51	5.5	0.4	54	47	715	31.0	35	0.7
415	Regions	7510	Harney	Seminole	28 45 13	81 03 53	7.4	45.0	365	40	1027	1.7	106	0.7
416	Canfield (1981)	7510	Harney	Volusia	28 45 16	81 03 06	7.6	47.3	1111	99	1057	11.8	103	0.8
417	LW(6/96)	7510	Harriet	St Lucie	27 32 38	80 23 36	-	-	-	37	683	5.9	-	1.2
418	Regions	7510	Horseshoe	Seminole	28 37 53	81 08 03	4.5	0.0	76	19	723	12.3	350	0.5
419	LW(6/96)	7510	Jean	St Lucie	27 32 29	80 23 30	-	-	-	12	578	3.2	-	2.2
420	LW(6/96)	7510	Jeffery	St Lucie	27 32 54	80 23 43	-	-	-	18	689	6.1	-	1.6
421	Regions	7510	Jessup	Seminole	28 43 27	81 12 53	7.5	55.7	412	143	1590	84.8	68	0.4



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm@25C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
422	LW(6/96)	7510	Karen	St Lucie	27 33 19	80 23 27	-	-	-	23	801	12.0	-	1.3
423	LW(6/96)	7510	Laguna	St Lucie	27 32 58	80 24 28	-	-	-	46	1545	48.0	-	0.7
424	Regions	7510	Lulu	Lake	28 59 17	81 31 51	5.1	0.0	76	8	890	10.2	200	0.8
425	Canfield (1981)	7510	Margaret	Putnam	29 26 29	81 36 42	4.6	0.3	59	20	714	7.2	65	0.7
426	LW(6/96)	7510	Margaret	St Lucie	27 32 58	80 24 18	-	-	-	13	461	4.3	-	2.1
427	LW(6/96)	7510	Mc Kenzie	Volusia	29 00 07	81 01 14	-	-	-	25	762	21.0	-	2.2
428	Regions	7510	Mills	Seminole	28 38 07	81 06 60	6.2	2.9	115	21	620	5.8	100	1.0
429	Canfield (1981)	7510	Monroe	Seminole	28 49 55	81 16 21	7.7	44.6	907	91	1257	37.4	89	0.5
430	Regions	7510	Monroe	Volusia	28 50 34	81 16 19	7.5	43.0	406	54	1093	5.4	124	0.5
431	Regions	7510	Mud	Putnam	29 36 54	81 42 19	6.0	3.4	117	14	1163	5.6	141	1.0
432	LW(6/96)	7510	North Talmadge	Volusia	29 02 50	81 15 57	-	-	-	22	1010	17.7	-	1.3
433	LW(6/96)	7510	Parkview Stream	Flagler	29 33 02	81 14 44	-	-	-	68	1130	18.8	-	0.5
434	LW(6/96)	7510	Patricia	St Lucie	27 32 20	80 23 38	-	-	-	10	657	4.7	-	2.4
435	LW(6/96)	7510	Phyllis	St Lucie	27 32 26	80 24 03	-	-	-	14	432	1.5	-	-
436	Regions	7510	Pierson	Volusia	29 13 59	81 28 24	4.9	0.0	89	42	1033	1.6	421	0.6
437	Canfield (1981)	7510	Poinsett	Brevard	28 20 24	80 50 10	7.7	57.8	842	49	1137	9.5	94	0.6
438	LW(6/96)	7510	Ribbon North	Flagler	29 33 33	81 13 09	-	-	-	18	584	6.2	-	1.8
439	LW(6/96)	7510	Rippling	Flagler	29 30 05	81 14 24	-	-	-	33	866	11.1	-	0.5
440	LW(6/96)	7510	Rose	St Lucie	27 33 04	80 24 28	-	-	-	54	712	12.9	-	1.1
441	LW(6/96)	7510	Ruce	St Lucie	27 32 03	80 23 42	-	-	-	26	591	9.7	-	1.4
442	LW(6/96)	7510	Ryan	Clay	30 03 41	81 49 36	-	-	-	10	371	4.0	-	2.0
443	LW(6/96)	7510	Sharon	St Lucie	27 32 44	80 24 19	-	-	-	40	945	21.8	-	1.1
444	LW(6/96)	7510	Shaw	Volusia	29 13 54	81 26 23	-	-	-	44	1493	46.2	-	0.4
445	LW 93	7510	Silver	Putnam	29 26 37	81 34 23	6.1	1.2	102	11	887	15.6	30	-
446	LW(6/96)	7510	Silver Glenn	Marion	29 14 42	81 38 36	-	-	-	23	101	1.0	-	-
447	LW 93	7510	South Lake	Brevard	28 37 12	80 52 12	8.5	74.3	613	38	1720	32.0	27	-
448	LW(6/96)	7510	South Talmadge	Volusia	29 02 20	81 15 52	-	-	-	25	1204	24.3	-	1.3
449	LW 93	7510	Spring Garden	Volusia	29 07 24	81 22 21	8.4	120.0	763	39	710	5.7	5	-
450	LW(6/96)	7510	Spruce Creek	Volusia	29 04 24	81 04 10	-	-	-	165	1102	8.3	-	-
451	Canfield&Hoyer1991	7510	Suggs	Putnam	29 41 19	82 01 20	5.0	2.0	60	66	1249	4.0	400	0.5
452	LW(6/96)	7510	Tucker	Putnam	29 43 23	81 58 15	-	-	-	33	1742	17.1	-	0.3
453	Canfield (1981)	7510	Washington	Brevard	28 09 07	80 44 35	7.8	62.1	428	31	1056	3.4	92	0.8
454	LW(6/96)	7510	Wynnfield	Flagler	29 32 10	81 15 12	-	-	-	28	668	12.1	-	1.0
455	LW(6/96)	7510	Yancey	Brevard	28 21 47	80 46 58	-	-	-	25	780	12.3	-	3.9
456	Regions	7510	Yankee	Seminole	28 48 58	81 23 27	5.0	0.0	86	20	1067	20.8	211	0.6
457	EPA-ELS 1984	7511	(NO NAME)	3B3-082	29 27 33	81 31 54	7.5	15.4	148	24	-	-	85	2.0
458	LW(6/96)	7511	Banana	Putnam	29 27 50	81 35 28	-	-	-	9	451	4.5	-	1.4
459	LW(6/96)	7511	Bell	Putnam	29 25 44	81 32 18	-	-	-	12	573	4.6	-	1.8
460	Regions	7511	Big	Volusia	28 52 06	81 12 52	6.7	12.3	163	15	637	4.9	105	1.5
461	LW(6/96)	7511	Bingham	Seminole	28 44 24	81 18 33	-	-	-	12	886	4.8	-	1.9
462	LW(6/96)	7511	Broken Arrow	Volusia	28 51 56	81 13 24	-	-	-	5	227	1.7	-	-
463	Canfield (1981)	7511	Broward	Putnam	29 30 33	81 35 33	5.5	1.4	71	4	172	1.5	4	5.7

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity ( $\mu\text{S}/\text{cm}@25^\circ\text{C}$ )	Total Phosphorus ( $\mu\text{g}/\text{l}$ )	Total Nitrogen ( $\mu\text{g}/\text{l}$ )	Chlorophyll_a ( $\mu\text{g}/\text{l}$ )	Color (pcu)	Secchi (m)
464	Regions	7511	Butler	Volusia	28 52 16	81 10 50	5.1	0.0	69	5	700	3.9	63	1.8
465	LW(6/96)	7511	Charles	Volusia	29 02 00	81 15 10	-	-	-	6	233	2.6	-	4.0
466	Regions	7511	Charm	Seminole	28 40 46	81 11 48	7.3	31.3	298	14	667	1.8	31	-
467	Regions	7511	Chuluota	Seminole	28 38 30	81 07 35	7.2	29.0	254	7	540	4.9	22	3.2
468	1-QAQC	7511	Clear	Putnam	29 25 20	81 33 16	4.2	0.0	144	0	118	1.0	1	-
469	Regions	7511	Colby	Volusia	28 57 52	81 13 55	6.8	11.0	88	20	857	15.2	117	1.1
470	LW(6/96)	7511	Como	Putnam	29 28 10	81 34 59	-	-	-	5	162	2.1	-	3.0
471	Regions	7511	Crystal	Seminole	28 45 45	81 19 49	7.1	13.0	143	7	720	4.5	30	2.3
472	EPA-ELS 1984	7511	DOYLE	3B1-073	28 51 43	81 11 39	4.6	0.0	65	9	-	-	25	2.8
473	Summer '96	7511	DuPont	Volusia	28 55 34	81 12 26	6.5	2.7	62	-	-	-	-	-
474	LW(6/96)	7511	East Crystal	Seminole	28 46 02	81 18 54	-	-	-	12	745	5.1	-	2.4
475	LW(6/96)	7511	East Twin	Seminole	28 47 25	81 20 05	-	-	-	16	1061	7.0	-	-
476	LW(6/96)	7511	Emma	Seminole	28 45 38	81 21 04	-	-	-	8	1001	3.0	-	-
477	LW(6/96)	7511	Emporia	Volusia	29 11 40	81 28 16	-	-	-	12	747	4.0	-	2.4
478	1-QAQC	7511	English	Putnam	29 25 31	81 31 57	7.7	40.8	349	18	810	10.5	17	1.6
479	LW(6/96)	7511	Gem	Seminole	28 38 45	81 12 23	-	-	-	6	241	2.2	-	2.7
480	Regions	7511	Geneva	Seminole	28 44 40	81 06 35	6.6	5.3	87	9	880	8.6	54	1.8
481	Regions	7511	Gliddings	Volusia	28 57 54	81 13 31	5.9	1.6	52	7	913	7.5	42	1.7
482	Regions	7511	Gleason	Volusia	28 53 37	81 15 57	7.2	38.3	157	13	1013	4.0	33	2.4
483	Regions	7511	Golden	Seminole	28 46 10	81 14 30	7.4	13.0	167	124	1300	3.9	27	1.6
484	LW(6/96)	7511	Harney	Volusia	28 45 16	81 03 06	-	-	-	44	1224	13.9	-	0.9
485	LW(6/96)	7511	Hayes	Seminole	28 37 58	81 12 37	-	-	-	34	692	31.5	-	1.5
486	Regions	7511	Helen	Volusia	28 59 06	81 13 48	6.9	13.0	165	25	830	9.8	14	1.5
487	Regions	7511	Horseshoe	Volusia	29 05 32	81 17 58	5.7	0.5	74	5	277	2.0	30	3.2
488	Regions	7511	Hutchenson	Volusia	28 50 54	81 11 05	5.2	0.1	70	4	500	1.9	52	2.5
489	LW(6/96)	7511	Lindley	Volusia	29 02 57	81 16 59	-	-	-	14	569	5.4	-	2.7
490	LW(6/96)	7511	Little Mary	Seminole	28 44 54	81 18 54	-	-	-	10	508	3.3	-	3.2
491	LW(6/96)	7511	Long	Seminole	28 39 42	81 11 20	-	-	-	19	628	8.9	-	2.2
492	Regions	7511	Lower Louise	Volusia	29 19 57	81 30 12	6.8	8.9	166	13	623	2.9	26	3.3
493	LW(6/96)	7511	Marie	Volusia	28 53 07	81 18 41	-	-	-	55	1217	33.1	-	1.2
494	LW(6/96)	7511	Mary	Seminole	28 45 14	81 18 54	-	-	-	9	500	2.9	-	3.0
495	Regions	7511	Minnie	Seminole	28 45 14	81 17 29	7.1	39.0	159	13	387	3.8	296	0.4
496	LW 93	7511	North Estella	Putnam	29 25 45	81 36 19	6.7	3.5	138	5	280	2.7	7	-
497	LW(6/96)	7511	Odom	Volusia	29 09 25	81 21 07	-	-	-	11	780	5.5	-	2.2
498	1-QAQC	7511	Omega	Putnam	29 26 51	81 31 56	7.8	16.7	301	25	1250	38.2	12	0.7
499	Regions	7511	Rice	Seminole	28 45 03	81 22 37	6.9	20.7	114	20	1053	8.5	52	1.6
500	LW(6/96)	7511	Rock	Seminole	28 42 14	81 22 05	-	-	-	9	487	4.5	-	3.6
501	LW(6/96)	7511	Round	Putnam	29 37 30	81 42 08	-	-	-	13	408	6.3	-	2.5
502	Regions	7511	Round	Seminole	28 40 18	81 11 31	6.9	21.0	174	12	513	9.0	60	1.8
503	LW(6/96)	7511	South Estella	Putnam	29 25 23	81 36 22	-	-	-	7	406	3.2	-	2.4
504	Canfield (1981)	7511	Stella	Putnam	29 25 47	81 31 07	7.1	15.7	239	13	458	2.7	12	4.1
505	Regions	7511	Sylvan	Seminole	28 48 17	81 22 49	5.6	0.7	117	7	737	4.6	43	2.6



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25°C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
506	LW(6/96)	7511	Tedder	Volusia	29 08 52	81 21 07	-	-	-	19	787	7.4	-	0.7
507	Summer '96	7511	Three Island	Volusia	28 56 20	81 12 37	5.7	1.3	64	-	650	5.7	82	1.9
508	LW(6/96)	7511	West Crystal	Seminole	28 45 41	81 19 45	-	-	-	13	542	5.0	-	2.2
509	1-QAQC	7511	Winnemissett	Volusia	29 01 27	81 15 00	5.8	0.4	185	10	418	1.2	5	2.1
510	EPA-ELS 1984	7512	(NO NAME)	3B3-109	28 48 19	82 17 07	8.5	185.1	314	9	-	-	30	1.2
511	Summer '96	7512	Bellamy	Citrus	28 55 55	82 22 23	7.4	34.0	113	-	-	2.6	31	2.4
512	LW(6/96)	7512	Blue Cove	Marion	29 03 04	82 27 24	-	-	-	168	1763	47.8	-	1.4
513	LW 93	7512	Croft	Citrus	28 52 59	82 19 46	7.6	36.0	115	9	600	2.2	19	-
514	Summer '96	7512	Dodd	Citrus	28 56 24	82 22 26	7.2	34.3	113	12	-	6.0	29	2.7
515	Summer '96	7512	Floral City	Citrus	28 45 31	82 16 60	7.5	47.2	143	54	1155	34.3	152	0.9
516	Regions	7512	Fort Cooper	Citrus	28 48 18	82 18 16	7.7	92.7	257	19	1380	2.5	34	-
517	Regions	7512	Fred's	Citrus	28 51 22	82 18 30	7.9	97.7	275	8	1000	0.9	17	-
518	Summer '96	7512	Hampton	Citrus	28 46 57	82 17 04	7.3	46.2	134	39	-	29.4	121	1.0
519	Summer '96	7512	Henderson	Citrus	28 50 20	82 19 04	7.6	47.0	141	35	1083	21.0	107	1.2
520	Summer '96	7512	Hernando	Citrus	28 54 22	82 22 12	7.7	41.7	130	-	-	7.0	39	2.5
521	LW(6/96)	7512	Little Henderson	Citrus	28 50 54	82 19 46	-	-	-	17	978	10.1	-	1.4
522	Regions	7512	Magnolia	Citrus	28 46 44	82 17 60	7.8	183.0	376	17	687	1.6	30	-
523	EPA-ELS 1984	7512	MOON	3B3-023	28 42 55	82 16 33	8.0	49.5	121	22	-	-	50	1.6
524	Summer '96	7512	Spivey	Citrus	28 49 54	82 18 01	7.2	41.7	131	35	1240	37.3	172	0.9
525	Summer '96	7512	Todd	Citrus	28 56 31	82 22 18	7.1	38.7	119	-	-	5.6	40	-
526	LW(6/96)	7512	Tsala Apopka	Citrus	28 51 04	82 17 53	-	-	-	22	1118	10.5	-	1.2
527	Summer '96	7512	Tsala Apopka South	Citrus	28 46 10	82 16 60	7.6	46.7	138	42	-	30.0	127	0.7
528	LW(6/96)	7512	Tussock	Citrus	28 47 18	82 16 38	-	-	-	34	986	16.7	-	0.9
529	LW 93	7512	Van Ness	Citrus	28 53 22	82 19 15	7.5	45.7	134	8	613	2.1	24	-
530	Regions	7513	Blanton	Pasco	28 24 10	82 14 48	6.9	16.0	125	63	1277	47.9	162	1.0
531	Regions	7513	Bonnie	Hernando	28 32 21	82 24 55	7.3	38.0	96	105	1290	12.5	106	0.5
532	Canfield&Hoyer1991	7513	Clear(Pasco)	Pasco	28 20 29	82 15 49	8.6	44.9	195	21	761	21.0	13	1.3
533	Regions	7513	Dowling	Pasco	28 26 11	82 14 57	6.7	7.2	106	35	960	31.0	60	1.3
534	Regions	7513	Geneva	Hernando	28 30 10	82 10 59	7.1	29.0	114	35	1470	7.4	198	0.8
535	Regions	7513	Iola	Pasco	28 23 40	82 17 55	8.2	7.1	145	26	737	19.2	9	1.8
536	Regions	7513	Keyhole	Pasco	28 21 32	82 10 41	8.4	123.3	463	1221	1443	93.5	31	0.8
537	Canfield&Hoyer1991	7513	Lindsey	Hernando	28 37 50	82 21 59	6.9	10.2	33	19	636	6.0	37	1.9
538	Regions	7513	May Prairie	Hernando	28 37 27	82 21 15	4.6	0.0	36	8	1417	3.4	94	-
539	Regions	7513	McKethan	Hernando	28 38 48	82 20 16	6.5	12.3	49	61	1100	17.4	112	1.3
540	Regions	7513	Middle	Pasco	28 25 17	82 18 55	7.3	25.0	148	80	1123	36.1	58	0.8
541	EPA-ELS 1984	7513	MOODY	3B3-116	28 24 28	82 17 45	8.1	34.9	168	26	-	-	65	2.6
542	Canfield&Hoyer1991	7513	Mountain(Hernando)	Hernando	28 28 48	82 18 46	7.3	25.6	113	37	813	10.0	39	1.7
543	Regions	7513	Neff	Hernando	28 28 40	82 19 30	6.5	11.3	92	109	1417	5.1	204	0.8
544	Canfield&Hoyer1991	7513	Pasadena	Pasco	28 19 04	82 13 08	7.8	20.4	131	15	702	3.0	19	2.2
545	Regions	7513	Rush	Citrus	29 02 10	82 28 23	5.7	0.7	36	9	447	2.6	24	2.2
546	Canfield&Hoyer1991	7513	West Moody	Pasco	28 24 44	82 18 07	8.1	30.6	127	14	584	2.0	20	2.8
547	Regions	7513	Willow Prairie	Hernando	28 37 11	82 24 31	6.5	9.8	48	17	1110	6.4	86	1.2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity ( $\mu$ S/cm @ 25C)	Total Phosphorus ( $\mu$ g/l)	Total Nitrogen ( $\mu$ g/l)	Chlorophyll_a ( $\mu$ g/l)	Color (pcu)	Secchi (m)
548	EPA-ELS 1984	7514	(NO NAME)	3B1-058	28 59 56	81 52 35	7.7	17.9	113	5	-	-	15	3.7
549	EPA-ELS 1984	7514	(NO NAME)	3B1-083	28 58 35	81 51 48	7.9	18.7	141	19	-	-	45	1.5
550	LW(6/96)	7514	Bowers	Marion	29 02 42	81 57 18	-	-	-	10	407	1.6	-	3.0
551	Regions	7514	Crystal	Lake	28 51 04	81 55 12	7.1	11.0	118	11	1080	5.5	15	-
552	1-QAQC	7514	Lady	Lake	28 55 01	81 53 53	5.3	0.3	133	10	553	2.3	7	0.8
553	1-QAQC	7514	Little Weir	Marion	29 01 05	81 58 39	6.6	4.3	153	10	903	8.8	9	2.1
554	1-QAQC	7514	Mathews	Lake	28 53 03	81 52 55	7.3	38.3	167	12	1135	6.5	11	1.4
555	Regions	7514	Myrtle	Lake	28 50 31	81 55 31	7.3	14.7	149	7	403	1.1	8	3.8
556	EPA-ELS 1984	7514	PECAN	3B1-041	29 02 12	81 53 38	5.2	0.0	37	5	-	-	10	4.6
557	Regions	7514	R. N. Spring	Lake	28 51 55	81 55 09	6.1	2.1	76	10	1503	3.9	68	1.3
558	1-QAQC	7514	Smith	Marion	29 03 31	81 59 31	6.1	1.2	84	8	435	2.3	9	1.2
559	LW(6/96)	7514	Sunset	Lake	28 51 37	81 55 05	-	-	-	25	1522	2.5	-	3.6
560	1-QAQC	7514	Sunset Harbor	Marion	28 59 39	81 58 31	7.1	12.5	162	10	845	11.8	5	1.6
561	LW(6/96)	7514	Sunshine	Lake	28 55 34	81 55 21	-	-	-	22	763	1.7	-	0.3
562	Regions	7514	Tigerhead	Marion	28 58 01	81 52 43	7.1	21.0	178	15	1063	5.4	15	2.0
563	Canfield (1981)	7514	Weir	Marion	29 01 05	81 56 12	7.1	12.0	136	12	641	7.4	3	2.3
564	LW(6/96)	7514	Zephyr	Lake	28 52 31	81 54 11	-	-	-	12	533	3.7	-	3.4
565	EPA-ELS 1984	7515	(NO NAME)	3B1-065	28 57 30	81 38 48	7.4	9.4	161	9	-	-	20	3.2
566	EPA-ELS 1984	7515	(NO NAME)	3B1-116	28 58 28	81 40 15	8.4	32.4	333	15	-	-	25	1.6
567	Regions	7515	Dalhousie	Lake	28 54 07	81 37 25	6.9	8.5	181	5	523	3.5	8	2.8
568	1-QAQC	7515	East Crooked	Lake	28 50 00	81 39 56	7.6	48.0	334	10	790	4.7	4	3.2
569	1-QAQC	7515	Eldorado	Lake	28 52 59	81 37 29	7.8	37.7	449	10	565	2.7	9	1.6
570	Regions	7515	Frances(Juniata)	Lake	28 48 12	81 43 03	8.5	58.0	240	46	983	19.6	15	0.7
571	1-QAQC	7515	Gertrude	Lake	28 48 48	81 39 14	7.6	31.2	254	10	492	3.2	5	4.5
572	Regions	7515	Island	Lake	28 57 07	81 41 05	7.8	45.0	334	6	497	2.6	11	4.4
573	LW(6/96)	7515	Joanna	Lake	28 50 21	81 38 31	-	-	-	7	433	2.4	-	3.9
574	Regions	7515	Minneola	Lake	28 57 31	81 38 50	7.1	16.0	197	7	470	1.5	14	-
575	LW(6/96)	7515	Nettie	Lake	28 50 21	81 39 42	-	-	-	13	480	4.4	-	2.9
576	LW(6/96)	7515	North Twin	Lake	28 57 30	81 39 52	-	-	-	7	437	5.0	-	-
577	LW(6/96)	7515	Peanut Pond	Lake	28 55 42	81 38 46	-	-	-	25	724	24.7	-	1.8
578	Regions	7515	Pearl	Lake	28 56 32	81 39 34	7.7	41.3	320	6	550	5.2	4	3.3
579	Regions	7515	Saunders	Lake	28 48 46	81 41 42	7.3	16.0	193	5	483	0.8	15	4.9
580	1-QAQC	7515	South Twin	Lake	28 57 14	81 39 47	7.5	32.0	291	10	990	6.7	4	1.9
581	Regions	7515	Tower	Lake	28 57 25	81 39 24	7.0	12.0	179	235	563	1.9	26	3.4
582	1-QAQC	7515	Woodward	Lake	28 49 22	81 40 33	7.0	18.8	178	10	525	3.2	7	2.8
583	EPA-ELS 1984	7516	(NO NAME)	3B1-007	28 29 22	81 35 24	8.5	83.9	543	30	-	-	45	0.8
584	EPA-ELS 1984	7516	(NO NAME)	3B1-059	28 29 04	81 34 15	8.6	68.9	399	12	-	-	20	1.8
585	EPA-ELS 1984	7516	(NO NAME)	3B1-068	28 29 15	81 35 35	8.5	75.1	497	28	-	-	40	1.5
586	EPA-ELS 1984	7516	(NO NAME)	3B3-054	28 47 11	81 31 27	8.6	125.4	432	42	-	-	50	0.5
587	LW(6/96)	7516	Angelina	Orange	28 45 49	81 38 16	-	-	-	34	822	19.6	-	1.9
588	Regions	7516	Bear	Seminole	28 39 10	81 26 55	7.0	6.4	138	11	347	4.1	15	-
589	LW(6/96)	7516	Bennett	Orange	28 33 13	81 32 04	-	-	-	20	637	7.5	-	2.4



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25°C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
590	Regions	7516	Bracy	Lake	28 53 42	81 40 26	6.7	6.2	127	10	693	2.3	60	1.8
591	Regions	7516	Brantley	Seminole	28 41 33	81 25 14	6.0	1.3	109	13	453	1.5	27	2.8
592	Regions	7516	Carter	Orange	28 38 11	81 32 22	7.1	38.0	208	131	1363	3.7	108	1.2
593	Regions	7516	Cedar	Lake	28 56 18	81 41 09	7.1	17.0	154	8	917	2.3	38	2.0
594	Regions	7516	Clear Water	Orange	28 40 31	81 33 04	7.5	67.3	263	33	1417	14.2	58	1.6
595	Regions	7516	Crooked	Orange	28 38 40	81 28 44	7.4	39.0	133	39	980	6.0	81	1.4
596	Regions	7516	Cypress	Orange	28 28 47	81 33 59	7.6	39.7	291	16	730	13.5	21	1.7
597	LW(6/96)	7516	Dream	Orange	28 41 03	81 30 42	-	-	-	17	741	20.4	-	1.5
598	Regions	7516	Ella	Lake	28 57 29	81 42 39	7.2	23.7	173	13	1047	3.3	97	1.2
599	Regions	7516	Enola	Lake	28 55 27	81 40 26	7.7	41.0	215	4	953	19.1	21	1.2
600	1-QAQC	7516	Hiawassee	Orange	28 31 39	81 29 03	7.4	33.0	273	20	593	8.3	26	2.7
601	Regions	7516	Holly	Lake	28 56 27	81 43 04	6.8	9.9	198	17	1020	7.1	75	1.3
602	EPA-ELS 1984	7516	HOLLY	3B1-044	28 56 26	81 43 00	8.0	20.5	187	12	-	-	55	2.0
603	EPA-ELS 1984	7516	HOLTS	3B3-024	28 41 11	81 33 23	8.7	105.2	309	58	-	-	55	1.1
604	LW(6/96)	7516	Hope	Orange	28 38 19	81 22 22	-	-	-	16	493	5.3	-	2.1
605	LW(6/96)	7516	Horseshoe	Orange	28 35 47	81 28 16	-	-	-	59	1153	40.8	-	0.7
606	Regions	7516	Idamere	Lake	28 45 60	81 44 49	6.8	6.3	272	9	613	4.2	11	1.5
607	Regions	7516	Jem	Lake	28 44 48	81 39 54	7.2	16.0	243	8	463	2.6	10	2.3
608	1-QAQC	7516	John's	Orange	28 31 35	81 40 30	7.0	19.8	259	43	1110	5.8	86	1.2
609	Canfield (1981)	7516	Johns	Lake	28 31 35	81 40 30	6.5	4.8	210	27	579	7.2	18	1.0
610	Regions	7516	Lawne	Orange	28 33 54	81 26 14	7.6	63.0	233	76	1340	11.4	115	0.8
611	Regions	7516	Lena	Lake	28 44 21	81 40 09	6.7	6.2	108	8	330	2.5	17	2.6
612	LW(6/96)	7516	Little Bear	Seminole	28 38 42	81 26 41	-	-	-	15	519	5.6	-	2.8
613	1-QAQC	7516	Little Mary	Lake	29 00 10	81 38 44	6.6	5.7	110	12	673	6.8	8	2.4
614	LW(6/96)	7516	Lucien	Orange	28 37 36	81 23 30	-	-	-	9	480	1.0	-	5.8
615	LW(6/96)	7516	Lucy	Orange	28 34 23	81 29 45	-	-	-	20	1151	7.1	-	1.7
616	Regions	7516	Maggiore	Orange	28 44 11	81 36 19	7.2	17.0	246	11	783	2.3	14	2.2
617	EPA-ELS 1984	7516	MARY	3B1-045	28 55 29	81 40 41	8.3	48.9	330	43	-	-	50	0.8
618	1-QAQC	7516	May	Lake	28 52 24	81 38 09	7.2	32.2	307	20	1087	8.2	25	1.6
619	LW(6/96)	7516	Metro West	Orange	28 31 52	81 28 14	-	-	-	16	618	6.9	-	2.3
620	LW(6/96)	7516	Mirror	Seminole	28 40 01	81 26 21	-	-	-	20	797	16.3	-	1.4
621	LW(6/96)	7516	Moxie	Orange	28 34 53	81 32 08	-	-	-	11	633	7.5	-	2.6
622	LW(6/96)	7516	North Lotta	Orange	28 33 03	81 30 33	-	-	-	71	927	22.5	-	1.2
623	1-QAQC	7516	Ola	Orange	28 45 14	81 38 05	7.1	21.7	298	10	530	1.5	7	3.7
624	LW(6/96)	7516	Olivia	Orange	28 31 16	81 31 05	-	-	-	71	1135	54.5	-	1.3
625	LW(6/96)	7516	Olympia	Orange	28 34 07	81 31 25	-	-	-	10	683	6.4	-	2.7
626	1-QAQC	7516	Orlando	Orange	28 35 40	81 25 57	7.7	52.2	176	68	1292	56.3	56	0.8
627	LW(6/96)	7516	Peach	Orange	28 35 01	81 31 54	-	-	-	20	971	15.9	-	2.2
628	EPA-ELS 1984	7516	PRAIRIE	3B3-077	28 35 35	81 30 30	7.9	12.4	107	13	-	-	60	2.5
629	LW(6/96)	7516	Primavista	Orange	28 33 52	81 32 15	-	-	-	36	1457	32.9	-	1.0
630	Regions	7516	Roberts	Orange	28 31 03	81 34 16	6.8	20.0	174	68	1177	21.1	183	1.0
631	1-QAQC	7516	Rose	Orange	28 32 16	81 30 20	7.9	55.7	241	57	2433	62.2	44	0.6

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25°C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
632	Regions	7516	Sawyer	Orange	28 28 09	81 34 05	7.7	46.0	289	19	1253	29.0	20	1.0
633	1-QAQC	7516	Seminary	Seminole	28 38 31	81 21 37	6.3	2.3	186	10	368	2.3	4	5.2
634	Regions	7516	Seneca	Lake	28 52 12	81 35 26	6.7	7.3	122	33	773	6.3	84	1.3
635	Regions	7516	Sherwood	Orange	28 33 14	81 29 48	7.2	48.0	191	92	720	4.7	51	2.6
636	Regions	7516	Smith	Lake	28 54 01	81 40 57	7.5	49.0	253	37	1283	28.3	38	1.1
637	LW(6/96)	7516	South Lotta	Orange	28 33 04	81 30 43	-	-	-	82	906	20.3	-	1.2
638	LW(6/96)	7516	Spring 2	Orange	28 34 54	81 31 13	-	-	-	8	643	3.5	-	4.0
639	EPA-ELS 1984	7516	STANDISH	3B3-074	28 42 02	81 33 08	7.9	23.3	141	18	-	-	105	1.4
640	Regions	7516	Stanley	Orange	28 34 55	81 30 00	9.0	48.0	202	48	1047	29.1	34	1.0
641	LW(6/96)	7516	Starke	Orange	28 34 06	81 32 08	-	-	-	30	1057	26.7	-	1.0
642	Regions	7516	Susanne (San Susan)	Orange	28 32 24	81 27 56	7.7	71.0	214	12	603	8.5	22	2.5
643	LW 93	7516	Swatara	Lake	28 51 57	81 38 37	8.4	20.0	179	10	630	21.6	20	-
644	Regions	7516	Three Corners	Marion	28 57 49	81 40 49	7.2	22.0	132	18	1090	11.0	45	1.5
645	Regions	7516	Turkey	Orange	28 30 07	81 28 14	7.1	20.0	139	16	580	6.2	54	2.1
646	Regions	7516	Umatilla	Lake	28 55 14	81 39 57	7.6	43.0	231	24	657	11.4	21	2.0
647	Regions	7516	Wekiva	Orange	28 35 50	81 25 55	8.4	59.0	198	90	1773	55.2	80	0.6
648	Summer '96	7516	Wekiva	Seminole	28 40 60	81 27 22	7.8	39.3	160	-	633	7.4	23	2.7
649	LW(6/96)	7516	Yvonne	Seminole	28 40 24	81 26 02	-	-	-	59	923	42.2	-	1.2
650	LW(6/96)	7517	Christina	Pasco	28 18 46	82 40 38	-	-	-	37	538	20.4	-	1.6
651	Canfield (1981)	7517	Crews	Pasco	28 23 28	82 30 41	7.2	21.3	76	13	714	3.6	45	1.5
652	Regions	7517	Green	Pasco	28 18 58	82 30 11	6.7	5.5	102	16	937	6.8	26	1.6
653	LW(6/96)	7517	Hunter	Hernando	28 26 26	82 37 20	-	-	-	14	849	4.0	-	2.0
654	Regions	7517	Moon	Pasco	28 17 06	82 36 39	7.2	14.0	131	17	893	8.9	15	1.3
655	Regions	7517	Pierce	Pasco	28 19 15	82 30 45	6.1	2.1	57	7	657	2.5	25	-
656	Regions	7517	Sugar Mill	Hernando	28 33 11	82 33 39	7.6	48.3	192	9	1623	1.1	41	-
657	Regions	7517	Tooke	Hernando	28 34 09	82 33 09	6.4	1.1	108	8	440	1.6	8	-
658	Regions	7518	Big Gant	Sumter	28 34 38	82 05 06	7.6	149.0	351	46	773	10.5	42	1.7
659	1-QAQC	7518	Bugg Springs	Lake	28 45 13	81 54 16	7.6	121.5	271	83	670	2.8	3	3.4
660	Regions	7518	Indian Prairie	Hernando	28 32 28	82 08 55	6.1	5.9	59	11	2520	11.2	170	0.9
661	EPA-ELS 1984	7519	(NO NAME)	3B1-052	28 38 19	81 52 39	6.4	0.8	115	28	-	-	45	0.5
662	Regions	7519	8-Ball	Lake	28 36 05	81 45 59	6.8	14.0	121	11	1083	5.5	40	-
663	Regions	7519	Avalon	Orange	28 30 38	81 38 39	6.4	3.9	129	9	920	3.3	42	1.7
664	Regions	7519	Big Merritt	Lake	28 38 03	81 42 19	6.7	5.3	135	20	1107	10.6	90	0.7
665	EPA-ELS 1984	7519	BOGGY MARSH	3B1-087	28 23 15	81 42 02	5.4	0.3	77	11	-	-	250	0.4
666	1-QAQC	7519	Cherry	Lake	28 35 56	81 48 56	6.3	2.3	100	10	572	2.7	17	2.7
667	Regions	7519	Church	Lake	28 38 47	81 50 36	5.9	0.9	171	5	347	2.0	8	-
668	EPA-ELS 1984	7519	COOK	3B1-088	28 35 27	81 48 30	6.8	3.4	95	16	-	-	100	1.8
669	LW(6/96)	7519	CR Big	Lake	28 30 18	81 44 50	-	-	-	13	620	7.3	-	1.6
670	LW(6/96)	7519	CR Small	Lake	28 30 29	81 44 58	-	-	-	17	1048	14.8	-	0.9
671	Canfield (1981)	7519	Crescent	Lake	28 30 20	81 46 26	6.4	4.4	81	14	412	2.9	15	3.0
672	Regions	7519	David	Lake	28 33 27	81 51 90	7.2	34.0	137	23	840	9.7	34	2.2
673	Canfield&Hoyer1991	7519	Douglas	Lake	28 33 14	81 48 38	7.2	27.1	245	11	1122	2.0	30	1.5



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1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25°C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
674	1-QAQC	7519	Emma	Lake	28 36 55	81 51 08	6.6	3.7	101	7	527	2.0	15	3.7
675	Regions	7519	Florence	Lake	28 35 50	81 40 56	8.5	68.0	265	24	1087	17.7	12	1.5
676	EPA-ELS 1984	7519	GLONA	3B1-079	28 28 57	81 47 22	6.7	3.9	103	14	-	-	105	1.5
677	Regions	7519	Grassy	Lake	28 35 43	81 44 38	6.8	6.3	220	6	480	2.2	15	-
678	Regions	7519	Hancock	Orange	28 27 27	81 36 45	7.1	14.0	168	10	1090	3.6	56	2.4
679	LW(6/96)	7519	Hickorynut	Orange	28 25 38	81 38 32	-	-	-	7	987	1.9	-	4.0
680	LW(6/96)	7519	Hickorynut South	Orange	28 24 49	81 38 17	-	-	-	12	850	3.5	-	1.1
681	1-QAQC	7519	Kirkland	Lake	28 26 46	81 48 23	6.4	2.0	151	10	418	1.3	7	1.2
682	LW(6/96)	7519	Little Hickorynut	Orange	28 25 54	81 38 57	-	-	-	7	562	1.7	-	3.9
683	Regions	7519	Live Oak	Lake	28 25 24	81 46 21	7.6	37.3	174	24	1160	20.7	52	1.0
684	Regions	7519	Long	Orange	28 26 41	81 36 41	7.0	22.0	191	13	1043	5.1	69	1.7
685	Regions	7519	Louisa	Lake	28 28 45	81 44 14	4.7	0.0	99	22	1557	4.8	447	0.3
686	Regions	7519	Lucy	Lake	28 36 04	81 51 05	6.4	4.3	112	10	840	2.3	95	1.3
687	Regions	7519	Minnehaha	Lake	28 31 59	81 45 56	5.4	1.0	108	17	1047	5.0	204	0.8
688	Regions	7519	Minneola	Lake	28 34 37	81 46 01	6.7	5.2	122	14	750	9.2	50	1.3
689	Regions	7519	Needham	Lake	28 26 45	81 39 27	6.6	6.1	84	11	983	2.2	88	1.8
690	Regions	7519	North Merritt	Lake	28 38 05	81 42 34	6.8	11.0	133	16	997	3.5	52	1.0
691	EPA-ELS 1984	7519	OSAGE	3B1-013	28 21 05	81 38 11	5.6	0.0	49	17	-	-	50	1.9
692	Regions	7519	Rabbit	Orange	28 25 32	81 37 21	6.6	10.0	154	8	757	3.2	50	2.4
693	1-QAQC	7519	Spencer	Lake	28 37 09	81 50 08	5.7	0.4	175	10	648	2.7	5	0.5
694	EPA-ELS 1984	7519	SQUARE	3B1-010	28 25 31	81 42 03	7.9	14.6	150	15	-	-	150	1.1
695	Regions	7519	Susan	Lake	28 31 03	81 45 30	4.8	0.0	99	21	1537	3.8	471	0.3
696	Regions	7519	Trout	Lake	28 26 54	81 42 42	8.0	77.0	268	6	793	1.7	9	4.6
697	Regions	7519	Turkey	Lake	28 42 05	81 51 01	6.2	2.6	122	10	1360	2.2	78	1.9
698	EPA-ELS 1984	7519	WILMA (EAST)	3B1-051	28 32 21	81 43 49	7.3	7.3	107	12	-	-	20	3.4
699	LW(6/96)	7519	Winona	Lake	28 32 51	81 45 57	-	-	-	11	560	3.9	-	3.3
700	LW(6/96)	7520	Bessie	Orange	28 29 15	81 31 36	-	-	-	6	386	1.6	-	5.2
701	Regions	7520	Blanche	Orange	28 28 52	81 30 59	7.5	27.0	206	6	380	2.6	15	3.6
702	Regions	7520	Butler	Orange	28 29 25	81 33 15	8.4	26.3	266	6	517	2.8	7	3.5
703	Regions	7520	Chase	Orange	28 28 30	81 31 13	7.2	15.3	195	7	483	3.1	18	3.1
704	Regions	7520	Down	Orange	28 30 16	81 31 40	7.1	12.3	255	7	363	2.9	8	3.5
705	LW(6/96)	7520	Floy	Orange	28 29 03	81 28 54	-	-	-	243	1735	66.6	-	1.2
706	Regions	7520	Isleworth	Orange	28 28 19	81 31 46	7.2	17.0	217	10	510	4.2	20	2.4
707	Regions	7520	Little Down	Orange	28 30 31	81 32 24	7.1	14.7	255	13	487	6.6	16	2.2
708	LW(6/96)	7520	Little Wauseon Bay	Orange	28 30 10	81 32 26	-	-	-	11	535	4.0	-	3.6
709	Regions	7520	Louise	Orange	28 28 39	81 32 06	7.3	24.0	249	11	567	6.8	16	2.1
710	LW 93	7520	Marsha	Orange	28 28 42	81 28 58	6.9	12.0	129	-	-	3.4	13	-
711	LW(6/96)	7520	Pocket	Orange	28 25 14	81 30 48	-	-	-	13	530	5.8	-	2.5
712	LW(6/96)	7520	Sheen	Orange	28 25 54	81 31 14	-	-	-	10	464	2.3	-	2.6
713	Regions	7520	Tibet	Orange	28 27 15	81 31 28	7.2	14.3	194	7	483	2.4	17	3.2
714	LW(6/96)	7520	Wauseon Bay	Orange	28 30 08	81 32 44	-	-	-	9	516	3.4	-	4.7
715	LW(6/96)	7520	Willis	Orange	28 23 54	81 28 42	-	-	-	10	501	2.8	-	3.3

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1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @25C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
716	LW(6/96)	7521	Adair	Orange	28 33 36	81 23 29	-	-	-	121	1121	62.1	-	0.8
717	LW(6/96)	7521	Adelaide	Seminole	28 40 00	81 21 56	-	-	-	54	1234	57.8	-	1.0
718	1-QAQC	7521	Arnold	Orange	28 31 51	81 20 29	8.1	16.3	191	25	733	21.2	8	1.8
719	Canfield&Hoyer1991	7521	Baldwin	Orange	28 34 20	81 19 20	8.1	63.1	179	21	530	18.3	12	1.6
720	LW(6/96)	7521	Barton	Orange	28 33 04	81 18 57	-	-	-	20	541	14.8	-	2.0
721	1-QAQC	7521	Bay	Orange	28 27 34	81 22 17	8.0	50.2	227	27	962	16.8	19	1.6
722	LW(6/96)	7521	Bell	Orange	28 36 39	81 22 43	-	-	-	21	664	14.5	-	1.7
723	LW(6/96)	7521	Burkett	Orange	28 36 36	81 16 06	-	-	-	24	741	23.1	-	1.3
724	1-QAQC	7521	C	Orange	28 31 52	81 19 10	7.0	45.0	215	40	855	19.3	28	1.5
725	1-QAQC	7521	Cay Dee	Orange	28 33 43	81 20 44	7.7	36.5	136	25	860	13.8	18	1.3
726	LW(6/96)	7521	Cherokee	Orange	28 32 02	81 22 18	-	-	-	64	1011	47.3	-	0.8
727	1-QAQC	7521	Clear	Orange	28 31 09	81 24 37	8.0	70.0	206	40	1200	38.2	18	1.0
728	1-QAQC	7521	Concord	Orange	28 33 24	81 23 07	7.9	50.8	183	35	745	30.0	11	1.3
729	Canfield (1981)	7521	Conway	Orange	28 28 12	81 20 58	7.6	29.2	193	13	401	4.4	3	3.7
730	LW(6/96)	7521	Cranes Roost	Seminole	28 40 02	81 23 08	-	-	-	33	498	5.5	-	2.0
731	Canfield (1981)	7521	Crystal	Orange	28 30 58	81 21 27	5.7	1.6	13	6	118	0.5	0	8.1
732	1-QAQC	7521	Daniel	Orange	28 34 56	81 24 04	7.8	48.2	195	35	755	17.5	14	1.2
733	LW(6/96)	7521	Davis	Orange	28 31 54	81 22 01	-	-	-	164	2177	116.5	-	0.4
734	LW(6/96)	7521	Dot	Orange	28 33 08	81 23 13	-	-	-	26	754	15.9	-	1.8
735	LW(6/96)	7521	Druid	Orange	28 33 38	81 20 59	-	-	-	39	968	16.9	-	1.3
736	1-QAQC	7521	Eola	Orange	28 32 39	81 22 24	8.4	88.7	258	40	730	37.0	13	1.3
737	1-QAQC	7521	Estelle	Orange	28 34 30	81 21 60	8.5	47.7	167	35	687	32.2	21	1.4
738	LW(6/96)	7521	Eulalia	Orange	28 37 08	81 22 21	-	-	-	17	627	4.0	-	2.7
739	Canfield (1981)	7521	Fairview	Orange	28 35 34	81 24 13	8.1	52.2	173	14	446	2.4	5	4.8
740	1-QAQC	7521	Farrah	Orange	28 30 30	81 19 16	7.9	29.0	267	22	835	13.7	10	1.6
741	LW(6/96)	7521	Florida	Seminole	28 40 28	81 21 51	-	-	-	71	965	36.6	-	1.3
742	LW(6/96)	7521	Formosa	Orange	28 34 07	81 22 09	-	-	-	38	761	32.7	-	1.0
743	LW 93	7521	Fredrica	Orange	28 30 29	81 18 26	7.6	26.0	178	9	350	2.7	7	-
744	LW(6/96)	7521	Fruitwood	Seminole	28 40 55	81 18 27	-	-	-	71	1075	115.8	-	1.0
745	LW(6/96)	7521	Gatlin	Orange	28 29 30	81 22 07	-	-	-	21	1054	27.6	-	1.0
746	LW(6/96)	7521	Gem	Orange	28 36 48	81 22 07	-	-	-	51	873	29.7	-	1.3
747	LW(6/96)	7521	George(Barber)	Orange	28 30 03	81 19 11	-	-	-	15	732	8.2	-	2.2
748	1-QAQC	7521	Georgia	Orange	28 36 23	81 14 47	6.3	2.3	191	18	800	12.3	15	1.8
749	1-QAQC	7521	Giles	Orange	28 31 49	81 20 04	8.4	33.7	195	30	723	24.3	14	1.3
750	LW(6/96)	7521	Griffin	Seminole	28 40 47	81 20 28	-	-	-	179	1343	36.0	-	1.4
751	1-QAQC	7521	Highland	Orange	28 33 36	81 22 15	8.0	30.0	138	37	592	17.8	14	1.9
752	1-QAQC	7521	Holden	Orange	28 30 12	81 23 04	8.4	75.5	256	45	1550	66.5	15	0.6
753	LW(6/96)	7521	Hourglass	Orange	28 31 20	81 21 25	-	-	-	75	1442	85.8	-	0.6
754	LW(6/96)	7521	Howell	Seminole	28 38 21	81 18 36	-	-	-	47	914	40.6	-	1.0
755	LW(6/96)	7521	Irma	Orange	28 35 26	81 16 01	-	-	-	35	655	3.8	-	1.2
756	LW 93	7521	Ivanhoe East	Orange	28 33 48	81 22 33	9.1	61.0	184	23	857	25.4	14	-
757	LW 93	7521	Ivanhoe Middle	Orange	28 33 48	81 22 49	7.8	53.0	176	31	650	21.6	15	-



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758	LW 93	7521	Ivanhoe West	Orange	28 33 55	81 22 57	7.7	51.0	176	31	667	19.3	15	-
759	LW(6/96)	7521	Jackson	Orange	28 37 14	81 22 53	-	-	-	17	302	2.2	-	3.4
760	Canfield (1981)	7521	Jessamine	Orange	28 28 52	81 23 10	7.8	43.6	184	16	612	4.9	5	3.4
761	LW(6/96)	7521	Jessamine North	Orange	28 29 18	81 22 51	-	-	-	23	1120	28.3	-	0.9
762	LW(6/96)	7521	Jessamine South	Orange	28 28 32	81 23 25	-	-	-	23	781	15.7	-	1.5
763	Canfield&Hoyer1991	7521	Killamey	Orange	28 35 57	81 22 30	8.4	65.4	193	21	603	22.0	19	1.0
764	1-QAQC	7521	La Grange	Orange	28 30 29	81 20 33	7.8	29.0	250	23	1190	16.8	15	1.1
765	LW(6/96)	7521	Lancaster	Orange	28 31 22	81 21 59	-	-	-	55	916	35.2	-	1.1
766	LW(6/96)	7521	Lawsona	Orange	28 32 28	81 21 51	-	-	-	110	1199	38.5	-	0.9
767	LW(6/96)	7521	Little Conway	Orange	28 29 28	81 21 15	-	-	-	11	436	4.6	-	4.1
768	1-QAQC	7521	Little Fairview	Orange	28 35 20	81 23 17	7.7	30.0	136	20	663	17.3	13	1.0
769	LW(6/96)	7521	Loma Doone	Orange	28 32 30	81 24 12	-	-	-	49	810	38.7	-	1.0
770	1-QAQC	7521	Luma	Orange	28 31 23	81 22 27	8.0	64.0	211	78	667	35.5	19	1.0
771	Canfield (1981)	7521	Maitland	Orange	28 36 51	81 21 05	7.7	68.7	205	28	597	9.6	4	1.9
772	LW(6/96)	7521	Mann	Orange	28 32 12	81 25 27	-	-	-	35	778	17.3	-	1.2
773	LW(6/96)	7521	Martha	Orange	28 36 30	81 16 22	-	-	-	24	594	14.7	-	1.7
774	LW(6/96)	7521	Minnehaha	Orange	28 37 48	81 21 18	-	-	-	34	761	27.0	-	1.2
775	LW(6/96)	7521	Nan	Orange	28 36 27	81 16 51	-	-	-	17	447	10.2	-	1.9
776	LW(6/96)	7521	Noname	Seminole	28 37 42	81 15 53	-	-	-	11	458	3.6	-	2.9
777	Canfield&Hoyer1991	7521	Oriente	Seminole	28 39 14	81 22 39	6.8	6.6	114	25	448	9.0	17	2.2
778	LW(6/96)	7521	Park	Orange	28 36 56	81 22 15	-	-	-	50	654	28.0	-	1.2
779	Canfield&Hoyer1991	7521	Pearl	Orange	28 36 16	81 15 54	7.4	18.8	118	28	819	21.7	68	0.9
780	1-QAQC	7521	Pineloch	Orange	28 30 29	81 22 02	7.8	53.5	216	32	940	33.0	14	1.0
781	LW(6/96)	7521	Porter	Orange	28 30 43	81 19 24	-	-	-	14	485	7.4	-	2.6
782	LW(6/96)	7521	Prairie	Seminole	28 39 29	81 21 08	-	-	-	21	729	10.3	-	1.9
783	1-QAQC	7521	Rabama	Orange	28 31 15	81 19 44	7.8	56.5	215	52	983	29.8	26	1.2
784	LW(6/96)	7521	Red Bug	Seminole	28 39 04	81 17 28	-	-	-	25	664	6.8	-	1.8
785	LW(6/96)	7521	Richmond	Orange	28 31 39	81 22 29	-	-	-	53	1408	50.0	-	0.6
786	1-QAQC	7521	Rock	Orange	28 32 43	81 24 06	9.3	45.3	148	22	735	21.8	10	2.4
787	1-QAQC	7521	Rowena	Orange	28 34 15	81 21 37	8.2	48.8	173	40	822	30.5	15	1.2
788	LW(6/96)	7521	Santiago	Orange	28 31 46	81 22 45	-	-	-	42	809	42.0	-	0.9
789	LW(6/96)	7521	Sarah	Orange	28 35 07	81 24 09	-	-	-	24	721	17.2	-	1.3
790	1-QAQC	7521	Shannon	Orange	28 33 53	81 20 29	7.2	28.7	170	17	710	4.7	10	2.4
791	1-QAQC	7521	Silver	Orange	28 34 42	81 23 46	8.6	48.2	187	15	537	20.3	11	2.4
792	LW(6/96)	7521	Spring	Orange	28 33 25	81 23 56	-	-	-	68	1126	53.1	-	0.9
793	LW(6/96)	7521	Spring	Seminole	28 39 02	81 23 50	-	-	-	43	1666	66.2	-	0.6
794	1-QAQC	7521	Susannah	Orange	28 33 45	81 19 23	7.8	30.5	133	20	748	13.7	13	2.2
795	LW(6/96)	7521	Sybelia	Orange	28 37 39	81 22 16	-	-	-	30	897	21.8	-	1.4
796	LW(6/96)	7521	Tennessee	Orange	28 30 37	81 19 57	-	-	-	67	836	17.9	-	1.2
797	Canfield (1981)	7521	Underhill	Orange	28 32 16	81 20 10	7.8	58.4	183	51	777	38.2	10	0.8
798	Canfield (1981)	7521	Virginia	Orange	28 35 20	81 20 40	8.1	56.8	177	30	519	17.3	3	1.6
799	LW(6/96)	7521	Wade	Orange	28 30 58	81 22 04	-	-	-	108	1228	57.0	-	1.1

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25°C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
800	LW(6/96)	7521	Waunatta	Orange	28 36 09	81 16 44	-	-	-	20	434	3.0	-	2.8
801	LW(6/96)	7521	Weldona	Orange	28 31 46	81 21 39	-	-	-	70	947	31.3	-	1.0
802	LW(6/96)	7521	Willisaria	Orange	28 30 29	81 21 40	-	-	-	45	820	33.2	-	1.1
803	1-QAQC	7521	Winyah	Orange	28 34 40	81 22 04	8.5	48.0	163	70	908	68.5	26	1.3
804	LW(6/96)	7521	Woods	Seminole	28 38 39	81 20 60	-	-	-	42	852	42.0	-	1.1
805	EPA-ELS 1984	7522	(NO NAME)	3B3-169	28 26 10	82 23 15	6.6	3.5	39	136	-	-	80	0.4
806	1-QAQC	7522	Armistead	Hillsborough	28 06 05	82 33 36	6.7	6.4	120	25	812	16.3	87	1.3
807	EPA-ELS 1984	7522	CLEAR	3B3-173	28 21 45	82 28 45	7.8	28.0	92	14	-	-	60	1.9
808	LW(6/96)	7522	Dosson	Hillsborough	28 07 22	82 31 32	-	-	-	38	1319	43.5	-	0.8
809	EPA-ELS 1984	7522	GOOSE	3B3-032	28 21 23	82 28 08	6.8	3.5	39	11	-	-	45	2.0
810	LW(6/96)	7522	Pretty	Hillsborough	28 06 28	82 34 08	-	-	-	29	807	8.7	-	1.3
811	Canfield (1981)	7522	Tarpon	Pinellas	28 06 28	82 43 31	6.9	15.8	596	39	635	3.8	50	1.5
812	Regions	7522	Worrell	Pasco	28 17 02	82 40 08	7.6	69.3	231	24	1450	9.0	174	0.9
813	1-QAQC	7523	Alice	Hillsborough	28 07 56	82 36 07	4.6	0.0	137	3	135	1.0	2	-
814	1-QAQC	7523	Bass	Pasco	28 10 59	82 35 18	6.4	7.3	115	22	817	10.8	27	1.6
815	LW(6/96)	7523	Calm	Hillsborough	28 08 32	82 34 54	-	-	-	6	221	1.5	-	3.2
816	1-QAQC	7523	Church	Hillsborough	28 06 12	82 35 59	6.8	6.7	182	13	627	3.2	13	0.7
817	Regions	7523	Crescent	Hillsborough	28 09 26	82 35 28	5.1	0.0	174	10	500	1.6	39	2.5
818	LW 93	7523	Dead Lady	Hillsborough	28 09 12	82 34 30	6.9	10.0	133	27	937	20.7	75	-
819	LW(6/96)	7523	Echo	Hillsborough	28 06 25	82 36 14	-	-	-	18	1078	5.7	-	-
820	LW(6/96)	7523	Elizabeth	Hillsborough	28 09 26	82 34 22	-	-	-	19	793	9.7	-	1.4
821	LW(6/96)	7523	Garden	Hillsborough	28 07 53	82 37 57	-	-	-	14	494	4.7	-	2.0
822	1-QAQC	7523	Geneva	Pasco	28 11 16	82 34 23	6.7	16.0	162	20	833	11.5	38	1.9
823	1-QAQC	7523	Grace	Hillsborough	28 05 49	82 35 15	6.2	2.3	165	10	483	6.3	9	0.8
824	LW 93	7523	Halfmoon	Hillsborough	28 05 47	82 32 51	6.7	2.4	169	13	540	8.4	9	-
825	1-QAQC	7523	Hiawatha	Hillsborough	28 10 07	82 34 22	6.4	2.5	100	20	598	14.7	26	2.3
826	1-QAQC	7523	Holiday	Pasco	28 10 36	82 35 20	6.7	10.2	136	15	1010	19.7	24	1.3
827	Regions	7523	Island Ford	Hillsborough	28 09 10	82 36 04	6.3	0.9	122	7	403	3.2	12	2.3
828	LW(6/96)	7523	Jackson	Hillsborough	28 08 16	82 37 48	-	-	-	11	568	4.1	-	3.0
829	LW(6/96)	7523	James	Hillsborough	28 07 05	82 34 30	-	-	-	18	754	12.8	-	2.5
830	LW(6/96)	7523	Jewel	Hillsborough	28 06 59	82 35 08	-	-	-	5	103	1.0	-	-
831	LW(6/96)	7523	Juanita	Hillsborough	28 06 59	82 35 18	-	-	-	11	500	2.3	-	2.9
832	1-QAQC	7523	Keystone	Hillsborough	28 08 03	82 35 23	6.3	2.3	100	12	488	6.7	30	2.4
833	Summer '96	7523	Little Halfmoon	Hillsborough	28 06 09	82 32 54	6.8	8.1	248	16	693	4.6	44	-
834	LW(6/96)	7523	Little Moon	Hillsborough	28 06 46	82 36 04	-	-	-	9	388	1.2	-	3.6
835	1-QAQC	7523	Maurine	Hillsborough	28 05 20	82 35 06	7.6	11.8	175	20	648	4.5	30	-
836	1-QAQC	7523	Minneola	Pasco	28 11 03	82 34 28	6.7	16.0	162	20	692	6.0	26	1.7
837	LW(6/96)	7523	Mound	Hillsborough	28 08 50	82 34 19	-	-	-	7	345	1.9	-	4.5
838	Regions	7523	Osceola	Hillsborough	28 10 13	82 35 10	5.9	0.7	224	5	413	0.6	7	-
839	1-QAQC	7523	Parker	Pasco	28 10 41	82 34 54	6.7	9.0	139	15	680	9.7	15	1.7
840	LW(6/96)	7523	Rainbow	Hillsborough	28 06 56	82 35 38	-	-	-	7	312	1.9	-	2.6
841	Summer '96	7523	Seminole	Pasco	28 10 41	82 34 29	7.1	7.6	139	-	633	-	35	1.8



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842	Regions	7523	Sunset	Hillsborough	28 08 09	82 37 31	7.4	34.0	203	13	660	9.2	33	1.5
843	LW(6/96)	7523	Taylor	Hillsborough	28 08 04	82 36 45	-	-	-	14	656	9.9	-	1.7
844	LW(6/96)	7523	Wastena	Hillsborough	28 09 47	82 35 28	-	-	-	12	500	2.7	-	3.7
845	LW(6/96)	7523	Wood	Hillsborough	28 09 14	82 34 40	-	-	-	8	305	1.6	-	4.2
846	Canfield&Hoyer1991	7524	Bell(Pasco)	Pasco	28 13 19	82 27 13	7.6	13.3	116	17	641	20.0	21	1.5
847	1-QAQC	7524	Brant	Hillsborough	28 07 35	82 28 17	7.0	23.0	168	25	917	15.3	24	1.5
848	LW(6/96)	7524	Carroll	Hillsborough	28 03 04	82 29 14	-	-	-	10	427	3.0	-	3.7
849	LW(6/96)	7524	Carroll Cove	Hillsborough	28 02 41	82 29 06	-	-	-	13	487	3.0	-	3.5
850	Regions	7524	Catfish	Pasco	28 11 19	82 26 37	7.0	16.7	197	25	930	7.6	35	1.9
851	LW(6/96)	7524	Chapman	Hillsborough	28 06 18	82 27 48	-	-	-	26	1103	10.3	-	1.5
852	1-QAQC	7524	Crenshaw	Hillsborough	28 07 24	82 29 46	6.6	6.5	56	23	885	26.2	58	1.1
853	LW(6/96)	7524	Deer	Hillsborough	28 10 03	82 27 36	-	-	-	11	613	6.4	-	2.1
854	Regions	7524	Dog Leg	Pasco	28 15 25	82 28 11	6.1	2.1	104	9	737	4.2	93	1.3
855	LW(6/96)	7524	East	Pasco	28 12 34	82 26 27	-	-	-	21	739	10.3	-	1.9
856	LW 93	7524	Egypt	Hillsborough	28 00 40	82 29 31	7.6	62.7	257	21	780	18.1	12	-
857	1-QAQC	7524	Floyd	Pasco	28 11 05	82 27 44	6.9	29.5	158	12	922	2.2	26	0.9
858	Regions	7524	Gass	Hillsborough	28 05 35	82 27 46	7.3	30.0	126	6	557	2.6	19	3.4
859	LW(6/96)	7524	Hobbs	Hillsborough	28 09 33	82 28 09	-	-	-	6	260	1.3	-	4.0
860	LW(6/96)	7524	Joyce	Pasco	28 12 41	82 26 52	-	-	-	19	746	6.1	-	2.3
861	LW(6/96)	7524	Keene	Hillsborough	28 08 40	82 26 45	-	-	-	40	1355	26.6	-	1.1
862	LW(6/96)	7524	King	Pasco	28 13 49	82 27 04	-	-	-	12	948	6.0	-	-
863	Regions	7524	Linda	Pasco	28 11 21	82 28 43	7.6	34.7	209	11	973	4.8	19	3.9
864	LW(6/96)	7524	Little East	Pasco	28 12 45	82 26 33	-	-	-	21	773	12.5	-	1.8
865	1-QAQC	7524	Little Moss	Pasco	28 10 57	82 28 31	6.3	4.2	150	35	1177	13.2	77	1.3
866	LW(6/96)	7524	Little Vienna	Pasco	28 12 16	82 27 56	-	-	-	13	725	5.3	-	2.3
867	LW(6/96)	7524	Magdalene	Hillsborough	28 04 52	82 28 56	-	-	-	11	643	3.7	-	3.3
868	Regions	7524	Margarine	Pasco	28 13 38	82 27 36	7.3	22.7	187	19	763	12.0	21	1.5
869	Regions	7524	North Crystal	Hillsborough	28 08 21	82 28 32	7.9	60.7	234	6	470	1.3	12	-
870	Canfield (1981)	7524	Padgett North	Pasco	28 12 32	82 27 25	7.4	23.0	134	14	531	2.4	15	3.6
871	LW(6/96)	7524	Padgett South	Pasco	28 11 54	82 27 37	-	-	-	18	731	5.3	-	2.6
872	Regions	7524	Platt	Hillsborough	28 05 40	82 28 44	7.4	20.0	112	9	497	2.0	32	3.5
873	LW 93	7524	Saddleback North	Hillsborough	28 07 19	82 29 45	8.1	93.7	218	14	483	6.3	14	-
874	LW 93	7524	Saddleback South	Hillsborough	28 07 09	82 29 40	8.4	84.7	201	12	477	6.0	12	-
875	LW(6/96)	7524	Saddleback South	Hillsborough	28 07 09	82 29 40	-	-	-	12	483	6.0	-	-
876	LW(6/96)	7524	Saxon North	Pasco	28 12 01	82 27 15	-	-	-	14	617	3.0	-	4.0
877	LW(6/96)	7524	Saxon South	Pasco	28 11 51	82 26 50	-	-	-	15	635	4.3	-	3.4
878	LW(6/96)	7524	Snake	Hillsborough	28 06 49	82 29 42	-	-	-	10	714	1.9	-	-
879	Regions	7524	Stemper	Hillsborough	28 08 00	82 27 26	7.5	29.0	194	42	1960	35.0	18	0.5
880	EPA-ELS 1984	7524	THOMAS	3B3-162	28 08 47	82 29 15	6.8	3.5	126	15	-	-	20	2.9
881	LW(6/96)	7524	Treasure	Pasco	28 14 50	82 27 42	-	-	-	7	497	2.3	-	3.9
882	Regions	7524	Twin	Pasco	28 11 17	82 25 11	7.2	56.3	248	28	1123	19.5	46	-
883	Regions	7524	Virginia	Hillsborough	28 09 42	82 29 20	7.0	9.2	231	33	1533	26.0	28	0.8

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1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
884	LW(6/96)	7524	Wilson	Hillsborough	28 04 21	82 30 04	-	-	-	13	764	9.1	-	2.6
885	EPA-ELS 1984	7525	(NO NAME)	3B3-157	28 17 03	82 19 07	7.1	7.1	91	29	-	-	105	1.3
886	LW(6/96)	7525	Ten Mile	Hillsborough	27 56 25	82 18 56	-	-	-	40	1094	42.6	-	0.9
887	Canfield (1981)	7525	Thonotosassa	Hillsborough	28 03 51	82 16 53	8.3	47.9	214	834	1452	66.8	82	0.7
888	LW(6/96)	7526	Mill Stream Swamp	Lake	28 31 13	81 52 13	-	-	-	46	1346	33.2	-	-
889	Canfield (1981)	7527	Alligator	Osceola	28 12 38	81 12 04	5.8	2.2	105	15	570	4.0	47	1.6
890	LW(6/96)	7527	Brick	Osceola	28 09 57	81 11 40	-	-	-	16	933	5.6	-	0.6
891	EPA-ELS 1984	7527	BULLOCK	3B1-067	28 18 10	81 10 25	4.5	0.0	81	14	-	-	300	0.4
892	LW(6/96)	7527	Cecile	Osceola	28 19 39	81 28 42	-	-	-	15	513	8.6	-	2.0
893	LW 93	7527	Center	Osceola	28 16 44	81 11 25	5.6	1.2	116	84	1280	11.4	289	-
894	LW 93	7527	Coon	Osceola	28 15 54	81 10 51	5.8	1.6	101	63	1110	11.3	217	-
895	Summer '96	7527	Davenport-North	Polk	28 19 60	81 39 32	6.8	7.4	90	-	930	8.2	-	-
896	Canfield (1981)	7527	East Tohopekaliga	Osceola	28 17 42	81 17 14	6.1	3.1	96	24	643	8.6	32	1.5
897	Regions	7527	Gentry	Osceola	28 08 32	81 14 24	6.5	2.7	146	18	620	4.5	65	1.1
898	Regions	7527	Hancock	Lake	28 22 41	81 39 44	5.0	0.0	60	14	833	6.4	120	1.1
899	Canfield (1981)	7527	Hart	Orange	28 22 46	81 12 41	5.9	4.1	90	19	1112	4.2	183	0.6
900	Regions	7527	Huckleberry	Orange	28 26 05	81 36 45	6.3	2.5	152	11	860	1.6	61	2.0
901	EPA-ELS 1984	7527	LITTLE FISH	3B1-091	28 24 05	81 30 47	5.1	0.0	139	17	-	-	150	0.7
902	Canfield&Hoyer1991	7527	Live oak	Osceola	28 13 54	81 14 02	7.1	11.5	132	13	389	9.0	22	2.6
903	I-QAQC	7527	Lizzie	Osceola	28 14 36	81 11 05	6.1	2.0	106	17	827	4.2	106	1.4
904	Canfield (1981)	7527	Mary Jane	Orange	28 22 26	81 10 44	5.6	3.2	84	18	1250	9.2	225	0.5
905	Regions	7527	Oliver	Orange	28 22 02	81 38 57	4.7	0.0	56	10	647	4.9	139	1.0
906	EPA-ELS 1984	7527	REEDY	3B1-093	28 24 55	81 36 48	5.6	0.5	110	57	-	-	225	0.3
907	LW 93	7527	Trout	Osceola	28 15 24	81 10 05	6.1	2.3	88	26	943	10.8	132	-
908	LW(6/96)	7528	Cliff Stephens Park	Pinellas	27 58 26	82 43 17	-	-	-	101	896	44.4	-	1.3
909	LW(6/96)	7528	Harbor	Pinellas	27 59 46	82 44 57	-	-	-	14	545	4.3	-	3.2
910	LW(6/96)	7528	Loch Haven	Pinellas	28 07 57	82 46 12	-	-	-	89	1709	50.0	-	1.0
911	Canfield (1981)	7528	Maggiore	Pinellas	27 44 20	82 39 18	8.6	109.9	1008	76	2330	66.7	32	0.3
912	LW(6/96)	7528	Mocassin	Pinellas	27 58 35	82 43 45	-	-	-	85	1032	48.2	-	0.8
913	Canfield (1981)	7528	Seminole(Pinnellas)	Pinellas	27 51 27	82 47 05	8.8	90.4	404	122	1880	64.9	27	0.3
914	Regions	7530	Banana	Polk	27 58 42	81 54 12	8.5	62.0	178	639	1593	89.4	34	0.6
915	Regions	7530	Banana Pit	Polk	27 58 35	81 54 51	7.3	66.0	197	674	1783	76.7	37	1.0
916	LW 93	7530	Big Bass	Polk	27 52 35	81 51 16	9.7	23.0	160	442	2465	136.0	35	-
917	LW 93	7530	Boca Cove	Polk	27 52 26	81 51 10	9.3	23.0	152	449	2807	252.0	24	-
918	Canfield&Hoyer1991	7530	Bonny	Polk	28 02 16	81 55 36	7.8	53.2	255	59	1858	40.0	33	0.6
919	Regions	7530	Bonny	Polk	28 02 16	81 55 36	7.4	36.0	121	99	1783	90.7	32	0.6
920	Regions	7530	Christina Pit	Polk	27 57 05	81 58 02	8.0	68.3	250	130	1537	80.4	15	0.8
921	LW(6/96)	7530	Fauna	Polk	27 52 39	81 51 14	-	-	-	94	1277	54.9	-	1.0
922	LW 93	7530	Flora	Polk	27 52 27	81 50 60	9.1	24.0	151	331	2117	102.8	23	-
923	Regions	7530	Fl. Meade Pit	Polk	27 45 41	81 48 17	7.8	92.0	170	357	1847	78.9	18	1.0
924	LW 93	7530	Gaskin's Cut	Polk	27 52 26	81 51 16	9.8	22.7	162	379	2233	110.4	29	-
925	Canfield&Hoyer1991	7530	Hollingsworth	Polk	28 01 24	81 56 45	8.8	50.8	163	113	2517	135.0	16	0.3



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25°C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
926	Regions	7530	Homeland Pit	Polk	27 48 55	81 49 45	8.0	143.7	408	965	4493	149.5	16	0.5
927	Regions	7530	Hunter	Polk	28 01 55	81 57 59	7.5	33.0	101	117	1843	86.5	17	0.7
928	LW 93	7530	Little Bass	Polk	27 52 33	81 51 09	9.7	23.0	160	552	3260	242.0	40	-
929	Regions	7530	Mulberry Pit	Polk	27 55 20	81 58 14	7.4	67.3	263	954	1540	41.5	30	1.0
930	Regions	7530	Parker	Polk	28 03 54	81 55 52	7.7	38.0	142	170	2283	137.9	27	0.5
931	Regions	7530	Saddle Creek	Polk	28 03 24	81 52 53	7.5	53.3	175	143	1677	91.5	28	0.8
932	Regions	7531	Agnes	Polk	28 10 06	81 49 06	6.6	3.2	178	38	703	22.9	24	0.9
933	Regions	7531	Alfred	Polk	28 05 57	81 44 33	7.4	63.0	356	28	1923	40.2	27	0.7
934	Regions	7531	Ariana	Polk	28 04 58	81 47 59	7.8	34.0	260	22	860	31.1	10	1.0
935	Canfield (1981)	7531	Arietta	Polk	28 06 12	81 48 17	7.0	6.3	199	16	358	7.6	8	2.9
936	Regions	7531	Bess	Polk	27 58 01	81 39 13	7.7	33.0	368	15	597	7.1	16	1.8
937	LW(6/96)	7531	Blue 2	Polk	28 02 50	81 46 25	-	-	-	84	1728	55.5	-	0.6
938	Regions	7531	Buckeye	Polk	28 02 23	81 42 22	8.7	73.3	331	30	727	23.9	11	0.9
939	LW(6/96)	7531	Cannon	Polk	28 02 16	81 45 09	-	-	-	51	1148	41.7	-	0.8
940	1-QAQC	7531	Conine	Polk	28 03 35	81 43 31	8.6	65.8	331	470	1900	85.8	47	0.5
941	Regions	7531	Deer	Polk	28 01 29	81 45 47	8.0	40.3	191	40	1857	63.1	19	0.6
942	LW(6/96)	7531	Dexter	Polk	27 59 23	81 40 53	-	-	-	8	458	2.7	-	3.7
943	Regions	7531	Eagle	Polk	27 58 59	81 45 57	7.5	28.0	296	11	640	7.2	10	2.0
944	LW 93	7531	Elbert	Polk	28 01 35	81 42 33	7.9	33.0	182	12	553	3.0	9	-
945	LW(6/96)	7531	Eloise	Polk	27 58 55	81 42 12	-	-	-	36	1283	42.9	-	0.9
946	1-QAQC	7531	Fannie	Polk	28 03 42	81 41 27	7.8	34.2	383	67	1327	25.8	57	0.4
947	Canfield&Hoyer1991	7531	Hartridge	Polk	28 03 18	81 44 34	7.8	37.6	217	11	485	4.0	12	2.3
948	EPA-ELS 1984	7531	HELENE	3B3-052	28 10 24	81 48 13	7.5	13.1	174	13	-	-	20	2.5
949	Regions	7531	Henry	Polk	27 46 43	81 42 60	7.8	87.0	346	22	927	9.0	23	1.8
950	Canfield (1981)	7531	Howard	Polk	28 01 22	81 44 34	9.0	41.2	164	52	1997	104.6	27	0.3
951	LW(6/96)	7531	Idylwild	Polk	28 03 00	81 45 24	-	-	-	30	961	33.3	-	1.1
952	LW(6/96)	7531	Jessie	Polk	28 03 25	81 45 49	-	-	-	79	1182	36.4	-	0.8
953	LW(6/96)	7531	Link	Polk	28 01 04	81 42 21	-	-	-	26	688	21.8	-	1.4
954	LW(6/96)	7531	Little Elbert	Polk	28 01 21	81 42 55	-	-	-	25	978	32.4	-	1.1
955	LW(6/96)	7531	Little Otis	Polk	28 00 34	81 42 35	-	-	-	19	710	15.1	-	1.7
956	LW 93	7531	Little Spirit	Polk	27 59 43	81 46 53	7.3	31.0	297	23	703	4.6	27	-
957	LW(6/96)	7531	Little Winterset	Polk	27 57 47	81 40 52	-	-	-	20	867	18.7	-	1.2
958	1-QAQC	7531	Lucerne	Polk	28 04 46	81 41 04	6.9	9.6	192	10	437	1.5	12	1.6
959	LW 93	7531	Lulu	Polk	27 59 43	81 43 13	8.8	61.0	260	54	1260	32.0	22	-
960	Canfield&Hoyer1991	7531	Marianna	Polk	28 04 33	81 45 55	7.9	59.4	299	26	1054	21.0	16	1.3
961	LW(6/96)	7531	Maude	Polk	28 02 20	81 43 16	-	-	-	39	658	12.8	-	2.0
962	LW(6/96)	7531	May	Polk	28 00 44	81 44 14	-	-	-	70	1602	54.1	-	0.8
963	LW(6/96)	7531	Mirror	Polk	28 02 13	81 44 26	-	-	-	34	1297	39.4	-	0.8
964	LW(6/96)	7531	Otis	Polk	28 00 56	81 42 39	-	-	-	26	593	16.6	-	2.8
965	LW 93	7531	Pansy	Polk	28 04 05	81 44 34	7.9	22.0	147	27	870	23.2	49	-
966	LW(6/96)	7531	Roy	Polk	28 00 09	81 42 25	-	-	-	22	787	14.7	-	1.6
967	Regions	7531	Ruby	Polk	27 58 14	81 39 45	8.1	49.7	417	23	1907	60.3	12	0.4

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chlorophyll_a (µg/l)	Color (pcu)	Secchi (m)
968	LW(6/96)	7531	Shipp	Polk	28 00 10	81 44 29	-	-	-	61	1713	68.2	-	0.6
969	LW(6/96)	7531	Silver	Polk	28 01 53	81 43 41	-	-	-	19	740	21.8	-	1.6
970	1-QAQC	7531	Smart	Polk	28 03 28	81 42 40	8.7	77.7	369	173	1950	63.5	37	0.4
971	LW 93	7531	Spirit	Polk	27 59 53	81 46 38	7.8	32.0	307	22	620	12.6	8	-
972	LW(6/96)	7531	Spring	Polk	28 02 18	81 44 05	-	-	-	29	716	15.2	-	1.8
973	Regions	7531	Star	Polk	27 52 34	81 42 58	##	-	-	-	-	26.2	22	1.1
974	LW(6/96)	7531	Summit	Polk	27 59 53	81 41 47	-	-	-	36	947	26.5	-	1.1
975	Regions	7531	Tennessee	Polk	28 08 44	81 48 47	7.7	41.0	275	32	1593	55.4	18	0.6
976	Canfield&Hoyer1991	7531	Thomas	Polk	28 00 39	81 46 55	7.6	46.6	169	22	759	10.0	23	1.8
977	EPA-ELS 1984	7532	(NO NAME)	3B3-148	28 15 51	81 35 43	6.0	0.2	79	13	-	-	40	1.8
978	LW(6/96)	7532	Annie	Polk	27 59 26	81 36 29	-	-	-	22	1258	17.0	-	1.4
979	Summer '96	7532	Clinch	Polk	27 44 37	81 32 55	6.9	3.9	139	19	517	7.4	24	2.4
980	Regions	7532	Crooked	Polk	27 48 27	81 34 42	6.5	1.3	94	7	367	6.0	11	2.1
981	Summer '96	7532	Davenport	Polk	28 09 42	81 36 40	6.3	13.7	111	39	1085	4.4	97	-
982	Canfield&Hoyer1991	7532	Gate Lake	Polk	27 56 11	81 35 43	8.2	130.6	282	28	407	20.0	6	1.1
983	Regions	7532	Ida	Polk	27 45 44	81 31 14	8.9	35.0	301	10	5503	14.8	7	-
984	Regions	7532	Little Gum	Polk	27 55 15	81 28 52	7.9	46.0	356	5	5970	2.8	6	3.1
985	LW(6/96)	7532	Little Hamilton	Polk	28 04 19	81 38 12	-	-	-	32	660	19.2	-	1.0
986	LW(6/96)	7532	Mabel	Polk	27 58 14	81 35 20	-	-	-	17	983	26.0	-	0.9
987	Regions	7532	Moody	Polk	27 46 49	81 31 55	8.5	70.0	425	16	2140	52.3	9	0.5
988	Canfield&Hoyer1991	7532	Mountain(Polk)	Polk	27 56 08	81 35 20	7.9	82.3	201	17	331	2.0	7	2.4
989	LW(6/96)	7532	North Blue	Polk	27 51 20	81 34 52	-	-	-	3	4301	1.5	-	7.5
990	Regions	7532	Parks	Polk	27 54 56	81 28 09	7.6	25.0	192	5	623	3.7	16	-
991	Regions	7532	Reedy	Polk	27 44 31	81 29 58	7.9	46.0	237	15	1047	29.7	8	0.9
992	EPA-ELS 1984	7532	SADDLEBAG	3B3-132	27 53 52	81 27 52	7.7	16.8	132	8	-	-	15	3.4
993	Regions	7532	Silver	Polk	27 43 26	81 32 13	8.7	50.0	380	21	1830	13.0	7	-
994	LW(6/96)	7532	South Blue	Polk	27 51 05	81 34 41	-	-	-	5	1552	2.7	-	5.2
995	Regions	7532	Tracy	Polk	28 06 41	81 38 04	7.5	63.0	190	23	740	8.9	18	2.1
996	Canfield&Hoyer1991	7532	Wales	Polk	27 54 02	81 34 20	8.7	25.6	118	27	899	42.0	10	0.8
997	EPA-ELS 1984	7533	ANGELO	3B2-020	27 35 09	81 28 00	5.8	0.0	197	7	-	-	5	3.4
998	Summer '96	7533	Annie	Highlands	27 12 25	81 21 04	6.3	0.0	42	4	315	-	9	-
999	EPA-ELS 1984	7533	ANOKA	3B2-106	27 34 50	81 30 45	8.2	26.2	138	6	-	-	10	5.0
1000	LW(6/96)	7533	August	Highlands	27 16 32	81 24 45	-	-	-	126	961	2.8	-	0.8
1001	EPA-ELS 1984	7533	BASKET	3B2-024	27 31 43	81 26 38	7.7	22.8	333	3	-	-	5	5.8
1002	LW(6/96)	7533	Blue	Highlands	27 26 07	81 30 42	-	-	-	11	596	4.8	-	3.1
1003	EPA-ELS 1984	7533	BRENTWOOD	3B2-015	27 37 17	81 30 43	7.7	18.2	260	6	-	-	10	5.6
1004	Summer '96	7533	Byrd	Highlands	27 37 19	81 31 04	7.2	9.2	276	3	4803	1.1	6	5.6
1005	EPA-ELS 1984	7533	CENTER NELLIE	3B2-091	27 21 08	81 22 45	8.1	26.1	318	8	-	-	15	1.6
1006	LW(6/96)	7533	Chilton	Highlands	27 37 54	81 33 24	-	-	-	21	580	7.6	-	2.0
1007	Regions	7533	Clay	Highlands	27 18 40	81 20 54	7.0	4.7	164	9	377	3.9	8	3.0
1008	EPA-ELS 1984	7533	DAMON	3B2-062	27 38 00	81 30 35	5.7	0.0	223	9	-	-	10	2.9
1009	EPA-ELS 1984	7533	DEER	3B2-096	27 36 34	81 28 30	7.8	23.6	158	12	-	-	20	3.4



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1010	LW(6/96)	7533	Denton	Highlands	27 33 24	81 29 22	-	-	-	4	3502	1.8	-	7.2
1011	Canfield (1981)	7533	Dinner	Highlands	27 30 57	81 26 49	8.2	37.1	175	9	456	4.1	3	2.9
1012	LW(6/96)	7533	Eagle Pond	Highlands	27 37 41	81 31 39	-	-	-	7	943	4.8	-	2.0
1013	Summer '96	7533	Francis	Highlands	27 20 33	81 24 33	6.3	1.9	151	-	477	6.9	5	1.8
1014	Regions	7533	Grassy	Highlands	27 15 14	81 20 06	7.3	15.0	152	6	550	2.5	9	2.7
1015	Summer '96	7533	Henry	Highlands	27 19 24	81 23 00	6.9	4.6	148	-	437	4.7	13	-
1016	Summer '96	7533	Hill	Highlands	27 20 59	81 26 18	5.6	0.3	50	-	383	5.5	13	1.6
1017	Regions	7533	Huntley	Highlands	27 17 32	81 20 44	6.2	1.3	154	19	427	6.9	16	1.7
1018	LW(6/96)	7533	Isis	Highlands	27 36 44	81 30 38	-	-	-	8	3583	2.0	-	6.9
1019	Canfield (1981)	7533	Jackson	Highlands	27 29 05	81 27 52	6.0	3.4	87	14	271	2.6	6	2.8
1020	Summer '96	7533	June	Highlands	27 18 16	81 24 14	7.0	5.6	161	17	567	10.7	9	-
1021	LW(6/96)	7533	Lillian	Highlands	27 37 50	81 31 21	-	-	-	9	512	5.7	-	3.1
1022	Canfield (1981)	7533	Lotela	Highlands	27 34 46	81 29 12	7.3	14.3	97	17	334	2.5	6	2.6
1023	Summer '96	7533	McCoy	Highlands	27 17 03	81 21 15	7.8	22.0	193	6	1023	1.6	2	5.3
1024	Summer '96	7533	Mirror	Highlands	27 16 31	81 21 38	5.9	0.5	100	7	387	-	6	5.7
1025	EPA-ELS 1984	7533	NORTHWEST NELLIE	3B2-032	27 21 13	81 23 01	7.6	22.4	309	8	-	-	10	2.0
1026	LW(6/96)	7533	Olivia	Highlands	27 37 56	81 32 51	-	-	-	11	481	3.6	-	3.1
1027	LW(6/96)	7533	Pearl	Highlands	27 16 58	81 21 39	-	-	-	4	746	1.6	-	6.2
1028	EPA-ELS 1984	7533	PIONEER	3B2-067	27 37 20	81 29 40	7.4	11.2	244	5	-	-	10	3.7
1029	Canfield (1981)	7533	Placid	Highlands	27 14 33	81 21 57	6.6	4.0	58	13	544	6.2	7	2.2
1030	EPA-ELS 1984	7533	PYTHIAS	3B2-014	27 38 09	81 29 50	5.7	0.0	168	14	-	-	15	1.7
1031	Summer '96	7533	Rachard	Highlands	27 18 15	81 22 09	9.4	36.8	211	25	820	23.0	7	1.2
1032	Regions	7533	Saddlebags	Highlands	27 17 41	81 21 16	7.4	22.0	351	6	1133	2.8	5	-
1033	EPA-ELS 1984	7533	SILVER	3B2-107	27 33 58	81 31 25	5.0	0.0	36	4	-	-	5	4.9
1034	EPA-ELS 1984	7533	SIMMONS	3B2-105	27 20 18	81 22 33	8.2	27.6	367	2	-	-	5	5.8
1035	LW(6/96)	7533	Sirena	Highlands	27 17 00	81 22 10	-	-	-	5	500	3.6	-	4.0
1036	EPA-ELS 1984	7533	SOUTHEAST NELLIE	3B2-033	27 20 53	81 22 33	8.3	27.8	367	5	-	-	15	1.8
1037	Summer '96	7533	Trout	Highlands	27 38 49	81 30 28	6.3	1.9	128	12	517	3.3	14	3.1
1038	Regions	7533	Tulane	Highlands	27 35 09	81 30 13	7.4	21.7	135	5	410	2.6	4	4.1
1039	Regions	7533	Verona	Highlands	27 35 52	81 29 49	7.7	27.0	109	8	233	2.0	9	4.0
1040	EPA-ELS 1984	7533	VIOLA	3B2-016	27 36 45	81 29 45	8.1	22.5	217	5	-	-	10	3.7
1041	EPA-ELS 1984	7534	(NO NAME)	3B2-085	27 25 55	81 30 00	4.4	0.0	56	0	-	-	5	3.4
1042	LW(6/96)	7534	Adelaide	Highlands	27 38 23	81 31 54	-	-	-	11	517	5.3	-	1.9
1043	LW(6/96)	7534	Apthorpe	Highlands	27 20 41	81 21 50	-	-	-	10	1662	10.2	-	2.0
1044	EPA-ELS 1984	7534	BLUE	3B2-080	27 26 06	81 30 45	5.7	0.0	82	8	-	-	30	1.4
1045	EPA-ELS 1984	7534	BONNET	3B2-023	27 32 38	81 26 28	7.8	22.5	245	40	-	-	40	0.8
1046	Regions	7534	Buffum	Polk	27 47 54	81 40 00	5.7	0.4	174	26	413	10.9	21	1.0
1047	Summer '96	7534	Carie	Highlands	27 20 15	81 25 39	8.9	10.7	79	-	703	15.1	112	0.9
1048	Summer '96	7534	Charlotte	Highlands	27 25 58	81 27 02	5.2	0.0	73	-	377	5.7	43	1.3
1049	LW(6/96)	7534	Crews	Highlands	27 17 47	81 26 11	-	-	-	15	423	4.6	-	1.6
1050	Summer '96	7534	Diane	Highlands	27 14 26	81 23 50	6.4	7.5	65	-	-	-	188	-
1051	Regions	7534	Glenada	Highlands	27 33 53	81 30 28	8.2	34.0	206	100	1067	45.2	51	0.9

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1052	LW(6/96)	7534	Hill	Highlands	27 20 59	81 26 18	-	-	-	8	280	4.4	-	2.2
1053	EPA-ELS 1984	7534	HOG	3B2-101	27 31 47	81 31 05	8.6	96.0	215	14	-	-	45	1.1
1054	Summer '96	7534	Huckleberry	Highlands	27 27 10	81 27 48	6.6	4.1	88	-	-	-	115	-
1055	Canfield (1981)	7534	Josephine	Highlands	27 23 41	81 26 33	5.6	2.6	83	24	518	10.8	52	0.8
1056	Regions	7534	Josephine East	Highlands	27 23 37	81 26 24	6.6	3.1	98	43	890	29.6	58	0.8
1057	Regions	7534	Josephine Middle	Highlands	27 23 50	81 25 37	6.8	5.1	82	46	857	22.7	75	0.9
1058	Regions	7534	Josephine West	Highlands	27 24 10	81 27 07	6.4	4.7	83	66	893	22.8	108	0.9
1059	Regions	7534	Lelia	Highlands	27 34 24	81 30 15	7.9	26.0	184	16	810	20.1	17	1.0
1060	EPA-ELS 1984	7534	LETTA	3B2-021	27 33 38	81 27 45	6.8	2.8	166	19	-	-	15	1.1
1061	Regions	7534	Little Bonnet	Highlands	27 33 40	81 28 34	7.6	26.0	245	17	1770	34.5	23	0.6
1062	Summer '96	7533	Little Jackson	Highlands	27 28 02	81 27 46	7.2	14.3	148	38	1120	34.8	28	0.9
1063	Canfield (1981)	7534	Little Redwater	Highlands	27 32 07	81 28 18	5.8	2.0	50	34	474	16.3	28	0.7
1064	Regions	7534	Lizzie	Polk	27 49 04	81 40 16	6.6	5.8	120	16	723	7.2	25	1.7
1065	Regions	7534	Marion	Polk	28 04 48	81 31 59	7.8	34.7	160	14	803	6.1	57	-
1066	Regions	7534	Patrick	Polk	27 47 45	81 30 45	7.8	38.7	325	7	2893	4.4	11	2.4
1067	Summer '96	7534	Persimmon	Highlands	27 21 16	81 24 27	8.9	36.3	346	-	2940	75.3	21	0.2
1068	Regions	7534	Pierce	Polk	27 58 29	81 31 17	7.6	32.0	152	31	960	18.2	38	1.3
1069	Canfield (1981)	7534	Red Beach	Highlands	27 25 55	81 24 20	6.7	4.6	59	16	448	9.9	31	1.1
1070	Summer '96	7534	Redwater	Highlands	27 20 52	81 23 57	8.7	28.3	261	-	910	28.0	13	0.5
1071	EPA-ELS 1984	7534	RUTH	3B2-113	27 25 45	81 27 30	5.0	0.0	50	35	-	-	65	1.6
1072	Canfield (1981)	7534	Sebring	Highlands	27 31 38	81 29 09	5.8	2.4	54	112	690	5.9	133	0.4
1073	Regions	7534	Wolf	Highlands	27 25 20	81 28 26	5.2	0.3	77	148	977	11.3	250	0.6
1074	Canfield (1981)	7535	Arbuckle	Polk	27 41 51	81 24 01	7.0	10.2	108	49	847	19.0	112	0.8
1075	Regions	7535	Cypress	Osceola	28 04 40	81 19 36	7.2	17.7	120	48	1230	11.8	191	0.6
1076	Canfield&Hoyer1991	7535	Fish	Osceola	28 16 12	81 20 43	7.6	25.9	187	25	935	18.0	43	1.0
1077	Regions	7535	Hatchineha	Osceola	28 01 13	81 24 42	7.8	31.0	126	17	1087	1.6	216	0.7
1078	Regions	7535	Istokpoga	Highlands	27 21 07	81 17 02	6.9	9.9	118	57	1063	5.7	193	0.6
1079	Regions	7535	Jackson	Osceola	27 54 36	81 09 50	7.0	21.7	101	120	1063	10.3	91	1.0
1080	Canfield (1981)	7535	Kissimmee	Osceola	27 56 10	81 17 26	8.5	22.4	118	42	1276	29.2	53	0.7
1081	Regions	7535	Marian	Osceola	27 52 44	81 06 21	7.3	21.0	102	146	1263	43.9	93	0.6
1082	Canfield (1981)	7535	Okeechobee	Okeechobee	26 56 15	80 48 46	8.5	100.3	443	105	1111	14.8	47	0.5
1083	Regions	7535	Rosalie	Polk	27 56 04	81 24 18	7.2	14.7	111	38	783	13.6	78	1.2
1084	Canfield (1981)	7535	Tiger	Polk	27 53 34	81 21 21	8.4	32.6	84	43	796	16.1	67	0.6
1085	Regions	7535	Toho	Osceola	28 12 60	81 23 25	7.4	24.7	127	34	983	17.1	116	0.8
1086	Canfield (1981)	7535	Weohyakapka	Polk	27 49 06	81 24 49	7.0	8.4	76	28	455	5.1	42	1.0
1087	Summer '96	7536	Crystal	Polk	28 09 38	81 38 32	7.1	13.0	257	37	1090	6.2	23	-
1088	LW(6/96)	7536	Dunes	Lee	26 27 15	82 03 15	-	-	-	564	3686	41.5	-	1.2
1089	LW(6/96)	7536	East Rocks	Lee	26 26 20	82 06 46	-	-	-	50	2501	47.9	-	0.6
1090	LW(6/96)	7536	East Rocks West	Lee	26 26 07	82 06 56	-	-	-	53	1898	24.4	-	1.6
1091	Regions	7536	Garfield	Polk	27 54 14	81 43 56	6.6	4.8	126	81	1240	42.7	120	0.4
1092	Canfield (1981)	7536	Gibson	Polk	28 06 33	81 57 46	6.7	10.2	105	269	691	5.9	69	0.8
1093	LW(6/96)	7536	Gulf Pines	Lee	26 26 40	82 07 49	-	-	-	74	1701	19.8	-	1.4



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Study	Region	Lake	County	Latitude DMS	Longitude DMS	pH	Total Alkalinity (mg/l)	Conductivity (µS/cm @ 25°C)	Total Phosphorus (µg/l)	Total Nitrogen (µg/l)	Chloro- phyll_a (µg/l)	Color (pcu)	Secchi (m)
1094	LW(6/96)	7536	Gulf Shores	Lee	26 26 41	82 08 01	-	-	-	68	1971	42.5	-	1.2
1095	LW(6/96)	7536	Gulf Shores West	Lee	26 26 48	82 08 05	-	-	-	181	3185	128.2	-	0.6
1096	LW(6/96)	7536	Gumbo Limbo	Lee	26 26 41	82 03 49	-	-	-	75	1260	10.2	-	2.8
1097	1-QAQC	7536	Haines	Polk	28 05 31	81 42 25	6.2	76.0	319	122	1817	76.7	45	0.2
1098	LW 93	7536	Hamilton	Polk	28 02 44	81 39 18	7.3	12.0	269	112	1090	14.4	62	-
1099	Regions	7536	Hancock	Polk	27 58 23	81 50 15	7.4	52.0	189	427	2463	119.7	83	0.5
1100	1-QAQC	7536	Henry	Polk	28 05 38	81 40 11	5.9	2.1	196	97	1183	8.2	167	0.4
1101	LW(6/96)	7536	Lady Finger	Lee	26 27 57	82 09 18	-	-	-	38	2625	9.1	-	1.4
1102	LW(6/96)	7536	Lake 1	Charlotte	26 53 15	81 01 47	-	-	-	393	2703	190.3	-	0.3
1103	LW(6/96)	7536	Lake 2	Charlotte	26 53 08	82 01 47	-	-	-	331	2517	121.5	-	0.4
1104	LW(6/96)	7536	Lake 3	Charlotte	26 53 11	82 01 54	-	-	-	412	1902	63.9	-	0.5
1105	LW(6/96)	7536	Lake 4	Charlotte	26 53 37	82 02 01	-	-	-	65	-	16.2	-	0.7
1106	LW(6/96)	7536	Lake 5	Charlotte	26 53 32	82 02 06	-	-	-	181	1965	48.0	-	0.5
1107	LW(6/96)	7536	Lake 6	Charlotte	26 53 44	82 02 01	-	-	-	130	1717	86.7	-	0.4
1108	LW(6/96)	7536	Lake 7	Charlotte	26 53 33	82 02 52	-	-	-	93	1552	42.5	-	0.6
1109	Canfield (1981)	7536	Little Crooked	Polk	27 46 10	81 35 03	5.4	1.8	82	54	1032	11.4	138	0.3
1110	LW(6/96)	7536	Little Murex	Lee	26 25 59	82 06 01	-	-	-	27	2509	12.0	-	0.9
1111	LW(6/96)	7536	Little Portion	Lee	26 25 31	81 54 22	-	-	-	30	1382	47.2	-	0.9
1112	Regions	7536	Livingston	Polk	27 41 03	81 31 12	6.6	8.9	131	290	1527	3.5	390	0.3
1113	Regions	7536	Lowery	Polk	28 07 45	81 40 53	6.6	5.0	174	18	1343	23.2	44	1.2
1114	Canfield (1981)	7536	Manatee	Manatee	27 29 03	82 19 58	6.9	30.3	134	163	618	7.3	101	1.2
1115	LW(6/96)	7536	Murex	Lee	26 25 52	82 06 02	-	-	-	367	2315	37.7	-	0.7
1116	LW(6/96)	7536	Pond 1	Charlotte	26 53 15	81 01 47	-	-	-	202	1943	-	-	-
1117	LW(6/96)	7536	Pond 2	Charlotte	26 53 08	82 01 47	-	-	-	282	-	158.7	-	0.3
1118	LW(6/96)	7536	Pond 3	Charlotte	26 53 11	82 01 54	-	-	-	296	1907	-	-	-
1119	LW(6/96)	7536	Pond 6	Charlotte	26 53 44	82 02 01	-	-	-	104	2288	-	-	-
1120	LW(6/96)	7536	Pond 7	Charlotte	26 53 33	82 02 52	-	-	-	70	1544	-	-	-
1121	1-QAQC	7536	Rochelle	Polk	28 04 19	81 43 21	7.8	37.7	283	175	1283	33.7	55	0.4
1122	LW(6/96)	7536	Roseate	Lee	26 26 11	82 03 56	-	-	-	64	2101	44.6	-	0.7
1123	LW(6/96)	7536	Sanibel River	Lee	26 25 38	82 05 17	-	-	-	257	2209	56.1	-	0.6
1124	Regions	7536	South Crooked	Polk	27 46 12	81 34 52	6.4	2.9	121	38	917	20.8	100	0.8
1125	Summer '96	7536	St. Charles	Polk	28 10 19	81 38 50	6.6	12.0	112	16	940	-	-	-
1126	LW(6/96)	7536	St. Kilda	Lee	26 25 44	82 06 04	-	-	-	48	1391	22.2	-	1.3
1127	Regions	7536	Streety	Polk	27 40 48	81 34 19	6.0	2.1	115	142	817	8.1	230	0.8
1128	Regions	7536	Surveyors	Polk	27 50 11	81 41 38	7.1	6.8	167	76	1367	88.9	68	0.5
1129	Canfield (1981)	7536	Upper Myakka	Sarasota	27 16 26	82 17 13	8.6	41.2	201	206	863	6.7	99	1.3
1130	LW(6/96)	7536	West Rocks	Lee	26 26 09	82 07 03	-	-	-	33	1623	8.2	-	1.7
1131	Canfield (1981)	7537	Trafford	Collier	26 25 30	81 29 38	8.5	110.8	225	65	1270	27.7	48	1.0
1132	Canfield (1981)	7603	Osborne	Palm Beach	26 35 38	80 04 47	8.2	203.8	477	138	1168	39.9	60	1.0
1133	Canfield (1981)	7603	Tigertail	Broward	26 03 03	80 09 30	8.9	66.1	166	14	607	2.5	4	-