



Dear Friend of LAKEWATCH,

January 14, 2011

Florida LAKEWATCH records show that **Constance in Pinellas County has been sampled by LAKEWATCH volunteers for a total of 10 months**. The raw data are enclosed in this Data Report as tables and graphs. As you look through the Data Report, you may ask “What do these numbers mean?” or “How can this information be useful to me?” We’ve provided you with the following summaries that describe two common ways in which your LAKEWATCH data can be used.

The first summary, the Trophic State Summary describes how and why Constance is classified into one of four categories called Trophic States. The second summary, Florida Lake Regions Summary, places Constance into one of forty-seven Florida Lake Regions.

In addition to these summaries the following handouts are available upon request or can be downloaded from our web page if you would like more information about how to interpret the data, trophic states or lake regions:

- □ *Explanation of the Florida LAKEWATCH Data Packet* — leads you through the tables and graphs and shows you how to spot trends and patterns;
- □ *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife*— explains the four trophic states used by the Florida LAKEWATCH program ;
- □ *Florida Lake Regions: A Classification System* — explains the development of 47 Florida Lake Regions and discusses why it’s important for you to know which Lake Region your lake is in.

We realize that this is a lot of reading material. However, being familiar with this information can help you become more effective in the water management arena. For example, you can communicate more effectively with water management professionals; develop management goals for your water body; establish a baseline of water chemistry for future reference; or document changes that might be occurring.

We encourage you to share information from your data packet with others so they can become better informed. We can provide data in printed form, on computer disk, or via e-mail. Please don’t hesitate to call us with your questions or comments.

Sincerely,

Daniel J. Willis
Florida LAKEWATCH Regional Coordinator

Enclosures

Trophic State* Summary

Constance has been sampled in the Florida LAKEWATCH program for a total of **10** months. To determine the trophic state classification for **Constance** we calculated averages from **December 3, 2008** to **February 26, 2010** for each of the four LAKEWATCH water chemistry parameters (total chlorophyll, total phosphorus, total nitrogen, and water clarity) and compared those averages with the four Trophic State ranges*. The results are as follows:

- total chlorophyll for Constance is 109 $\mu\text{g/L}$ which falls in the **hypereutrophic** range.
- total phosphorus for Constance is 171 $\mu\text{g/L}$ which falls in the **hypereutrophic** range.
- total nitrogen for Constance is 1601 $\mu\text{g/L}$ which falls in the **hypereutrophic** range.
- water clarity for Constance is 3.7 feet which falls in the **eutrophic** range.

How LAKEWATCH Determines Your Waterbody's Trophic Classification

It's possible that one or more of the four water chemistry parameters used above fell into different trophic ranges. (For example, a waterbody may have water clarity in the *oligotrophic* range, and its total nitrogen levels may be in the *eutrophic* range.) When one or more of the four LAKEWATCH parameters falls into different trophic ranges, **LAKEWATCH uses the total chlorophyll averages to determine the overall trophic state**. Since the total chlorophyll measurement indicates how much algae is actually being produced in a waterbody, it's the most direct indicator of biological productivity. The other three parameters are more limited in that they only provide information about the *potential* for biological productivity.

Don't be alarmed if LAKEWATCH parameters for your waterbody fall into different trophic ranges. If this happens, it simply suggests that you might want to take a closer look to determine why. Feel free to talk with the LAKEWATCH staff to see if there is cause for concern or if perhaps further study is warranted.

*** These criteria were developed by two lake scientists, Forsberg and Ryding in 1980. For more information, see the *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife* *handout* .**

Florida Lake Regions* Summary

Which Lake Region is Constance in?

Constance is located in the Pinellas Peninsula Region which is described as:

The coastal geology changes in this region from the exposed limestone to the north to deeply weathered sand hills to sand and shells. Besides the coastal strand, the natural vegetation consisted of longleaf pine/xerophytic oak on the north and west, and pine flatwoods on the southeast. The dominant characteristic of the region now is Clearwater/St. Petersburg urbanization. Several small lakes are found in this region. They are high nutrient lakes. This may be a result of naturally occurring phosphoritic pebbles in the geology, as well as anthropogenic impacts.

How does Constance compare to other lakes in its region?

Constance has been sampled by LAKEWATCH volunteers from **December 3, 2008 to February 26, 2010** for a total of **10** months. An average has been calculated for each parameter sampled (total phosphorus, total nitrogen, total chlorophyll, and water clarity or “Secchi Depth” and is referred to in the table below as the “Average for Constance”. Averages were also calculated for other lakes in the Pinellas Peninsula Region. These averages have been grouped into ranges from low to high and are shown in the table below. Using the table, you can see how Constance compares to other water bodies in this region.

Pinellas Peninsula Region				
	Total Phosphorus (µg/L)	Total Nitrogen (µg/L)	Total Chlorophyll (µg/L)	Secchi Depth (ft)
Average for Constance	171	1601	109	3.7
Low Range ¹	14 - 78	545 - 930	4 - 45	1 - 1.3
Low to Middle Range ²	78 - 87	930 - 1370	45 - 49	1.3 - 3
Middle to High Range ³	87 - 98	1370 - 1837	49 - 61	3 - 3.9
High Range ⁴	98 - 122	1837 - 2330	61 - 67	3.9 - 10.5
Number of lakes used to define each range	6	6	6	6

Keep in mind that if the number of lakes that were used to define each range (shown in the bottom row of the table) is small, the range of water chemistry conditions listed may not present an accurate picture of your Lake Region's typical characteristics. Don't be alarmed if Constance is at one end of the spectrum (High Range or Low Range) or perhaps outside the range altogether. The existence of an extremely high or low value merely indicates there are factors you might want to take a closer look at in order to identify the cause. If you have a concern, we encourage you to talk with the LAKEWATCH staff about it.

¹Low range represents the minimum value to 25th percentile. This means that 75% of the lakes sampled in this study have values higher than Constance.

²Low to middle range represents the 25th to 50th percentile. This means that 50% of the lakes sampled in this study have values higher than Constance, and at least 25% of the lakes sampled have values lower.

³Middle to high range represents the 50th to 75th percentile. This means that 25% of the lakes sampled in this study have values higher than Constance, and at least 50% of the lakes sampled have values lower.

⁴High range represents the 75th to maximum value. This means that at least 75% of the lakes sampled in this study have values lower than Constance.

* This classification system was created by grouping lakes based on similarities in physiography, geology, soils, hydrology, water chemistry, vegetation, and climate. This project resulted in the definition of 47 regions, which are described in a final report Lake Regions of Florida (Griffith, G.E., et al. 1997), published by the U.S. EPA (EPA/R-97/127). For more information see the Florida Lake Regions Classification System handout.



Dear Friend of LAKEWATCH,

January 14, 2011

Florida LAKEWATCH records show that **Egret in Pinellas County has been sampled by LAKEWATCH volunteers for a total of 13 months**. The raw data are enclosed in this Data Report as tables and graphs. As you look through the Data Report, you may ask “What do these numbers mean?” or “How can this information be useful to me?” We’ve provided you with the following summaries that describe two common ways in which your LAKEWATCH data can be used.

The first summary, the Trophic State Summary describes how and why Egret is classified into one of four categories called Trophic States. The second summary, Florida Lake Regions Summary, places Egret into one of forty-seven Florida Lake Regions.

In addition to these summaries the following handouts are available upon request or can be downloaded from our web page if you would like more information about how to interpret the data, trophic states or lake regions:

- □ *Explanation of the Florida LAKEWATCH Data Packet* — leads you through the tables and graphs and shows you how to spot trends and patterns;
- □ *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife*— explains the four trophic states used by the Florida LAKEWATCH program ;
- □ *Florida Lake Regions: A Classification System* — explains the development of 47 Florida Lake Regions and discusses why it’s important for you to know which Lake Region your lake is in.

We realize that this is a lot of reading material. However, being familiar with this information can help you become more effective in the water management arena. For example, you can communicate more effectively with water management professionals; develop management goals for your water body; establish a baseline of water chemistry for future reference; or document changes that might be occurring.

We encourage you to share information from your data packet with others so they can become better informed. We can provide data in printed form, on computer disk, or via e-mail. Please don’t hesitate to call us with your questions or comments.

Sincerely,

Daniel J. Willis
Florida LAKEWATCH Regional Coordinator

Enclosures

Trophic State* Summary

Egret has been sampled in the Florida LAKEWATCH program for a total of **13** months. To determine the trophic state classification for **Egret** we calculated averages from **May 14, 2007** to **June 14, 2008** for each of the four LAKEWATCH water chemistry parameters (total chlorophyll, total phosphorus, total nitrogen, and water clarity) and compared those averages with the four Trophic State ranges*. The results are as follows:

- total chlorophyll for Egret is 25 $\mu\text{g/L}$ which falls in the **eutrophic** range.
- total phosphorus for Egret is 551 $\mu\text{g/L}$ which falls in the **hypereutrophic** range.
- total nitrogen for Egret is 1967 $\mu\text{g/L}$ which falls in the **hypereutrophic** range.
- water clarity for Egret is 2.7 feet which falls in the **hypereutrophic** range.

How LAKEWATCH Determines Your Waterbody's Trophic Classification

It's possible that one or more of the four water chemistry parameters used above fell into different trophic ranges. (For example, a waterbody may have water clarity in the *oligotrophic* range, and its total nitrogen levels may be in the *eutrophic* range.) When one or more of the four LAKEWATCH parameters falls into different trophic ranges, **LAKEWATCH uses the total chlorophyll averages to determine the overall trophic state**. Since the total chlorophyll measurement indicates how much algae is actually being produced in a waterbody, it's the most direct indicator of biological productivity. The other three parameters are more limited in that they only provide information about the *potential* for biological productivity.

Don't be alarmed if LAKEWATCH parameters for your waterbody fall into different trophic ranges. If this happens, it simply suggests that you might want to take a closer look to determine why. Feel free to talk with the LAKEWATCH staff to see if there is cause for concern or if perhaps further study is warranted.

**** These criteria were developed by two lake scientists, Forsberg and Ryding in 1980. For more information, see the Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife handout .***

Florida Lake Regions* Summary

Which Lake Region is Egret in?

Egret is located in the Pinellas Peninsula Region which is described as:

The coastal geology changes in this region from the exposed limestone to the north to deeply weathered sand hills to sand and shells. Besides the coastal strand, the natural vegetation consisted of longleaf pine/xerophytic oak on the north and west, and pine flatwoods on the southeast. The dominant characteristic of the region now is Clearwater/St. Petersburg urbanization. Several small lakes are found in this region. They are high nutrient lakes. This may be a result of naturally occurring phosphoritic pebbles in the geology, as well as anthropogenic impacts.

How does Egret compare to other lakes in its region?

Egret has been sampled by LAKEWATCH volunteers from **May 14, 2007 to June 14, 2008** for a total of **13** months. An average has been calculated for each parameter sampled (total phosphorus, total nitrogen, total chlorophyll, and water clarity or “Secchi Depth” and is referred to in the table below as the “Average for Egret”. Averages were also calculated for other lakes in the Pinellas Peninsula Region. These averages have been grouped into ranges from low to high and are shown in the table below. Using the table, you can see how Egret compares to other water bodies in this region.

Pinellas Peninsula Region				
	Total Phosphorus ($\mu\text{g/L}$)	Total Nitrogen ($\mu\text{g/L}$)	Total Chlorophyll ($\mu\text{g/L}$)	Secchi Depth (ft)
Average for Egret	551	1967	25	2.7
Low Range ¹	14 - 78	545 - 930	4 - 45	1 - 1.3
Low to Middle Range ²	78 - 87	930 - 1370	45 - 49	1.3 - 3
Middle to High Range ³	87 - 98	1370 - 1837	49 - 61	3 - 3.9
High Range ⁴	98 - 122	1837 - 2330	61 - 67	3.9 - 10.5
Number of lakes used to define each range	6	6	6	6

Keep in mind that if the number of lakes that were used to define each range (shown in the bottom row of the table) is small, the range of water chemistry conditions listed may not present an accurate picture of your Lake Region's typical characteristics. Don't be alarmed if Egret is at one end of the spectrum (High Range or Low Range) or perhaps outside the range altogether. The existence of an extremely high or low value merely indicates there are factors you might want to take a closer look at in order to identify the cause. If you have a concern, we encourage you to talk with the LAKEWATCH staff about it.

¹Low range represents the minimum value to 25th percentile. This means that 75% of the lakes sampled in this study have values higher than Egret.

²Low to middle range represents the 25th to 50th percentile. This means that 50% of the lakes sampled in this study have values higher than Egret, and at least 25% of the lakes sampled have values lower.

³Middle to high range represents the 50th to 75th percentile. This means that 25% of the lakes sampled in this study have values higher than Egret, and at least 50% of the lakes sampled have values lower.

⁴High range represents the 75th to maximum value. This means that at least 75% of the lakes sampled in this study have values lower than Egret.

* This classification system was created by grouping lakes based on similarities in physiography, geology, soils, hydrology, water chemistry, vegetation, and climate. This project resulted in the definition of 47 regions, which are described in a final report Lake Regions of Florida (Griffith, G.E., et al. 1997), published by the U.S. EPA (EPA/R-97/127). For more information see the Florida Lake Regions Classification System handout.



Dear Friend of LAKEWATCH,

January 14, 2011

Florida LAKEWATCH records show that **Flamingo in Pinellas County has been sampled by LAKEWATCH volunteers for a total of 9 months**. The raw data are enclosed in this Data Report as tables and graphs. As you look through the Data Report, you may ask “What do these numbers mean?” or “How can this information be useful to me?” We’ve provided you with the following summaries that describe two common ways in which your LAKEWATCH data can be used.

The first summary, the Trophic State Summary describes how and why Flamingo is classified into one of four categories called Trophic States. The second summary, Florida Lake Regions Summary, places Flamingo into one of forty-seven Florida Lake Regions.

In addition to these summaries the following handouts are available upon request or can be downloaded from our web page if you would like more information about how to interpret the data, trophic states or lake regions:

- □ *Explanation of the Florida LAKEWATCH Data Packet* — leads you through the tables and graphs and shows you how to spot trends and patterns;
- □ *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife*— explains the four trophic states used by the Florida LAKEWATCH program ;
- □ *Florida Lake Regions: A Classification System* — explains the development of 47 Florida Lake Regions and discusses why it’s important for you to know which Lake Region your lake is in.

We realize that this is a lot of reading material. However, being familiar with this information can help you become more effective in the water management arena. For example, you can communicate more effectively with water management professionals; develop management goals for your water body; establish a baseline of water chemistry for future reference; or document changes that might be occurring.

We encourage you to share information from your data packet with others so they can become better informed. We can provide data in printed form, on computer disk, or via e-mail. Please don’t hesitate to call us with your questions or comments.

Sincerely,

Daniel J. Willis
Florida LAKEWATCH Regional Coordinator

Enclosures

Trophic State* Summary

Flamingo has been sampled in the Florida LAKEWATCH program for a total of **9** months. To determine the trophic state classification for **Flamingo** we calculated averages from **December 5, 2008** to **January 22, 2010** for each of the four LAKEWATCH water chemistry parameters (total chlorophyll, total phosphorus, total nitrogen, and water clarity) and compared those averages with the four Trophic State ranges*. The results are as follows:

- total chlorophyll for Flamingo is 18 $\mu\text{g/L}$ which falls in the **eutrophic** range.
- total phosphorus for Flamingo is 424 $\mu\text{g/L}$ which falls in the **hypereutrophic** range.
- total nitrogen for Flamingo is 1383 $\mu\text{g/L}$ which falls in the **eutrophic** range.
- water clarity for Flamingo is 5.0 feet which falls in the **eutrophic** range.

How LAKEWATCH Determines Your Waterbody's Trophic Classification

It's possible that one or more of the four water chemistry parameters used above fell into different trophic ranges. (For example, a waterbody may have water clarity in the *oligotrophic* range, and its total nitrogen levels may be in the *eutrophic* range.) When one or more of the four LAKEWATCH parameters falls into different trophic ranges, **LAKEWATCH uses the total chlorophyll averages to determine the overall trophic state**. Since the total chlorophyll measurement indicates how much algae is actually being produced in a waterbody, it's the most direct indicator of biological productivity. The other three parameters are more limited in that they only provide information about the *potential* for biological productivity.

Don't be alarmed if LAKEWATCH parameters for your waterbody fall into different trophic ranges. If this happens, it simply suggests that you might want to take a closer look to determine why. Feel free to talk with the LAKEWATCH staff to see if there is cause for concern or if perhaps further study is warranted.

*** These criteria were developed by two lake scientists, Forsberg and Ryding in 1980. For more information, see the *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife* *handout* .**

Florida Lake Regions* Summary

Which Lake Region is Flamingo in?

Flamingo is located in the Pinellas Peninsula Region which is described as:

The coastal geology changes in this region from the exposed limestone to the north to deeply weathered sand hills to sand and shells. Besides the coastal strand, the natural vegetation consisted of longleaf pine/xerophytic oak on the north and west, and pine flatwoods on the southeast. The dominant characteristic of the region now is Clearwater/St. Petersburg urbanization. Several small lakes are found in this region. They are high nutrient lakes. This may be a result of naturally occurring phosphoritic pebbles in the geology, as well as anthropogenic impacts.

How does Flamingo compare to other lakes in its region?

Flamingo has been sampled by LAKEWATCH volunteers from **December 5, 2008 to January 22, 2010** for a total of **9** months. An average has been calculated for each parameter sampled (total phosphorus, total nitrogen, total chlorophyll, and water clarity or “Secchi Depth” and is referred to in the table below as the “Average for Flamingo”. Averages were also calculated for other lakes in the Pinellas Peninsula Region. These averages have been grouped into ranges from low to high and are shown in the table below. Using the table, you can see how Flamingo compares to other water bodies in this region.

Pinellas Peninsula Region				
	Total Phosphorus (µg/L)	Total Nitrogen (µg/L)	Total Chlorophyll (µg/L)	Secchi Depth (ft)
Average for Flamingo	424	1383	18	5.0
Low Range ¹	14 - 78	545 - 930	4 - 45	1 - 1.3
Low to Middle Range ²	78 - 87	930 - 1370	45 - 49	1.3 - 3
Middle to High Range ³	87 - 98	1370 - 1837	49 - 61	3 - 3.9
High Range ⁴	98 - 122	1837 - 2330	61 - 67	3.9 - 10.5
Number of lakes used to define each range	6	6	6	6

Keep in mind that if the number of lakes that were used to define each range (shown in the bottom row of the table) is small, the range of water chemistry conditions listed may not present an accurate picture of your Lake Region's typical characteristics. Don't be alarmed if Flamingo is at one end of the spectrum (High Range or Low Range) or perhaps outside the range altogether. The existence of an extremely high or low value merely indicates there are factors you might want to take a closer look at in order to identify the cause. If you have a concern, we encourage you to talk with the LAKEWATCH staff about it.

¹Low range represents the minimum value to 25th percentile. This means that 75% of the lakes sampled in this study have values higher than Flamingo.

²Low to middle range represents the 25th to 50th percentile. This means that 50% of the lakes sampled in this study have values higher than Flamingo, and at least 25% of the lakes sampled have values lower.

³Middle to high range represents the 50th to 75th percentile. This means that 25% of the lakes sampled in this study have values higher than Flamingo, and at least 50% of the lakes sampled have values lower.

⁴High range represents the 75th to maximum value. This means that at least 75% of the lakes sampled in this study have values lower than Flamingo.

* This classification system was created by grouping lakes based on similarities in physiography, geology, soils, hydrology, water chemistry, vegetation, and climate. This project resulted in the definition of 47 regions, which are described in a final report Lake Regions of Florida (Griffith, G.E., et al. 1997), published by the U.S. EPA (EPA/R-97/127). For more information see the Florida Lake Regions Classification System handout.



Dear Friend of LAKEWATCH,

January 14, 2011

Florida LAKEWATCH records show that **Heron in Pinellas County has been sampled by LAKEWATCH volunteers for a total of 9 months**. The raw data are enclosed in this Data Report as tables and graphs. As you look through the Data Report, you may ask “What do these numbers mean?” or “How can this information be useful to me?” We’ve provided you with the following summaries that describe two common ways in which your LAKEWATCH data can be used.

The first summary, the Trophic State Summary describes how and why Heron is classified into one of four categories called Trophic States. The second summary, Florida Lake Regions Summary, places Heron into one of forty-seven Florida Lake Regions.

In addition to these summaries the following handouts are available upon request or can be downloaded from our web page if you would like more information about how to interpret the data, trophic states or lake regions:

- □ *Explanation of the Florida LAKEWATCH Data Packet* — leads you through the tables and graphs and shows you how to spot trends and patterns;
- □ *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife*— explains the four trophic states used by the Florida LAKEWATCH program ;
- □ *Florida Lake Regions: A Classification System* — explains the development of 47 Florida Lake Regions and discusses why it’s important for you to know which Lake Region your lake is in.

We realize that this is a lot of reading material. However, being familiar with this information can help you become more effective in the water management arena. For example, you can communicate more effectively with water management professionals; develop management goals for your water body; establish a baseline of water chemistry for future reference; or document changes that might be occurring.

We encourage you to share information from your data packet with others so they can become better informed. We can provide data in printed form, on computer disk, or via e-mail. Please don’t hesitate to call us with your questions or comments.

Sincerely,

Daniel J. Willis
Florida LAKEWATCH Regional Coordinator

Enclosures

Trophic State* Summary

Heron has been sampled in the Florida LAKEWATCH program for a total of **9** months. To determine the trophic state classification for **Heron** we calculated averages from **December 4, 2008 to January 22, 2010** for each of the four LAKEWATCH water chemistry parameters (total chlorophyll, total phosphorus, total nitrogen, and water clarity) and compared those averages with the four Trophic State ranges*. The results are as follows:

- total chlorophyll for Heron is 32 $\mu\text{g/L}$ which falls in the **eutrophic** range.
- total phosphorus for Heron is 696 $\mu\text{g/L}$ which falls in the **hypereutrophic** range.
- total nitrogen for Heron is 1331 $\mu\text{g/L}$ which falls in the **eutrophic** range.
- water clarity for Heron is 4.0 feet which falls in the **eutrophic** range.

How LAKEWATCH Determines Your Waterbody's Trophic Classification

It's possible that one or more of the four water chemistry parameters used above fell into different trophic ranges. (For example, a waterbody may have water clarity in the *oligotrophic* range, and its total nitrogen levels may be in the *eutrophic* range.) When one or more of the four LAKEWATCH parameters falls into different trophic ranges, **LAKEWATCH uses the total chlorophyll averages to determine the overall trophic state**. Since the total chlorophyll measurement indicates how much algae is actually being produced in a waterbody, it's the most direct indicator of biological productivity. The other three parameters are more limited in that they only provide information about the *potential* for biological productivity.

Don't be alarmed if LAKEWATCH parameters for your waterbody fall into different trophic ranges. If this happens, it simply suggests that you might want to take a closer look to determine why. Feel free to talk with the LAKEWATCH staff to see if there is cause for concern or if perhaps further study is warranted.

*** These criteria were developed by two lake scientists, Forsberg and Ryding in 1980. For more information, see the *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife* *handout* .**

Florida Lake Regions* Summary

Which Lake Region is Heron in?

Heron is located in the Pinellas Peninsula Region which is described as:

The coastal geology changes in this region from the exposed limestone to the north to deeply weathered sand hills to sand and shells. Besides the coastal strand, the natural vegetation consisted of longleaf pine/xerophytic oak on the north and west, and pine flatwoods on the southeast. The dominant characteristic of the region now is Clearwater/St. Petersburg urbanization. Several small lakes are found in this region. They are high nutrient lakes. This may be a result of naturally occurring phosphoritic pebbles in the geology, as well as anthropogenic impacts.

How does Heron compare to other lakes in its region?

Heron has been sampled by LAKEWATCH volunteers from **December 4, 2008 to January 22, 2010** for a total of **9** months. An average has been calculated for each parameter sampled (total phosphorus, total nitrogen, total chlorophyll, and water clarity or “Secchi Depth” and is referred to in the table below as the “Average for Heron”. Averages were also calculated for other lakes in the Pinellas Peninsula Region. These averages have been grouped into ranges from low to high and are shown in the table below. Using the table, you can see how Heron compares to other water bodies in this region.

Pinellas Peninsula Region				
	Total Phosphorus (µg/L)	Total Nitrogen (µg/L)	Total Chlorophyll (µg/L)	Secchi Depth (ft)
Average for Heron	696	1331	32	4.0
Low Range ¹	14 - 78	545 - 930	4 - 45	1 - 1.3
Low to Middle Range ²	78 - 87	930 - 1370	45 - 49	1.3 - 3
Middle to High Range ³	87 - 98	1370 - 1837	49 - 61	3 - 3.9
High Range ⁴	98 - 122	1837 - 2330	61 - 67	3.9 - 10.5
Number of lakes used to define each range	6	6	6	6

Keep in mind that if the number of lakes that were used to define each range (shown in the bottom row of the table) is small, the range of water chemistry conditions listed may not present an accurate picture of your Lake Region's typical characteristics. Don't be alarmed if Heron is at one end of the spectrum (High Range or Low Range) or perhaps outside the range altogether. The existence of an extremely high or low value merely indicates there are factors you might want to take a closer look at in order to identify the cause. If you have a concern, we encourage you to talk with the LAKEWATCH staff about it.

¹Low range represents the minimum value to 25th percentile. This means that 75% of the lakes sampled in this study have values higher than Heron.

²Low to middle range represents the 25th to 50th percentile. This means that 50% of the lakes sampled in this study have values higher than Heron, and at least 25% of the lakes sampled have values lower.

³Middle to high range represents the 50th to 75th percentile. This means that 25% of the lakes sampled in this study have values higher than Heron, and at least 50% of the lakes sampled have values lower.

⁴High range represents the 75th to maximum value. This means that at least 75% of the lakes sampled in this study have values lower than Heron.

* This classification system was created by grouping lakes based on similarities in physiography, geology, soils, hydrology, water chemistry, vegetation, and climate. This project resulted in the definition of 47 regions, which are described in a final report Lake Regions of Florida (Griffith, G.E., et al. 1997), published by the U.S. EPA (EPA/R-97/127). For more information see the Florida Lake Regions Classification System handout.



Dear Friend of LAKEWATCH,

January 14, 2011

Florida LAKEWATCH records show that **Lucerne in Pinellas County has been sampled by LAKEWATCH volunteers for a total of 9 months**. The raw data are enclosed in this Data Report as tables and graphs. As you look through the Data Report, you may ask “What do these numbers mean?” or “How can this information be useful to me?” We’ve provided you with the following summaries that describe two common ways in which your LAKEWATCH data can be used.

The first summary, the Trophic State Summary describes how and why Lucerne is classified into one of four categories called Trophic States. The second summary, Florida Lake Regions Summary, places Lucerne into one of forty-seven Florida Lake Regions.

In addition to these summaries the following handouts are available upon request or can be downloaded from our web page if you would like more information about how to interpret the data, trophic states or lake regions:

- □ *Explanation of the Florida LAKEWATCH Data Packet* — leads you through the tables and graphs and shows you how to spot trends and patterns;
- □ *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife*— explains the four trophic states used by the Florida LAKEWATCH program ;
- □ *Florida Lake Regions: A Classification System* — explains the development of 47 Florida Lake Regions and discusses why it’s important for you to know which Lake Region your lake is in.

We realize that this is a lot of reading material. However, being familiar with this information can help you become more effective in the water management arena. For example, you can communicate more effectively with water management professionals; develop management goals for your water body; establish a baseline of water chemistry for future reference; or document changes that might be occurring.

We encourage you to share information from your data packet with others so they can become better informed. We can provide data in printed form, on computer disk, or via e-mail. Please don’t hesitate to call us with your questions or comments.

Sincerely,

Daniel J. Willis
Florida LAKEWATCH Regional Coordinator

Enclosures

Trophic State* Summary

Lucerne has been sampled in the Florida LAKEWATCH program for a total of **9** months. To determine the trophic state classification for **Lucerne** we calculated averages from **December 4, 2008** to **January 22, 2010** for each of the four LAKEWATCH water chemistry parameters (total chlorophyll, total phosphorus, total nitrogen, and water clarity) and compared those averages with the four Trophic State ranges*. The results are as follows:

- total chlorophyll for Lucerne is 28 $\mu\text{g/L}$ which falls in the **eutrophic** range.
- total phosphorus for Lucerne is 369 $\mu\text{g/L}$ which falls in the **hypereutrophic** range.
- total nitrogen for Lucerne is 1174 $\mu\text{g/L}$ which falls in the **eutrophic** range.
- water clarity for Lucerne is 5.8 feet which falls in the **eutrophic** range.

How LAKEWATCH Determines Your Waterbody's Trophic Classification

It's possible that one or more of the four water chemistry parameters used above fell into different trophic ranges. (For example, a waterbody may have water clarity in the *oligotrophic* range, and its total nitrogen levels may be in the *eutrophic* range.) When one or more of the four LAKEWATCH parameters falls into different trophic ranges, **LAKEWATCH uses the total chlorophyll averages to determine the overall trophic state**. Since the total chlorophyll measurement indicates how much algae is actually being produced in a waterbody, it's the most direct indicator of biological productivity. The other three parameters are more limited in that they only provide information about the *potential* for biological productivity.

Don't be alarmed if LAKEWATCH parameters for your waterbody fall into different trophic ranges. If this happens, it simply suggests that you might want to take a closer look to determine why. Feel free to talk with the LAKEWATCH staff to see if there is cause for concern or if perhaps further study is warranted.

*** These criteria were developed by two lake scientists, Forsberg and Ryding in 1980. For more information, see the *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife* *handout* .**

Florida Lake Regions* Summary

Which Lake Region is Lucerne in?

Lucerne is located in the Pinellas Peninsula Region which is described as:

The coastal geology changes in this region from the exposed limestone to the north to deeply weathered sand hills to sand and shells. Besides the coastal strand, the natural vegetation consisted of longleaf pine/xerophytic oak on the north and west, and pine flatwoods on the southeast. The dominant characteristic of the region now is Clearwater/St. Petersburg urbanization. Several small lakes are found in this region. They are high nutrient lakes. This may be a result of naturally occurring phosphoritic pebbles in the geology, as well as anthropogenic impacts.

How does Lucerne compare to other lakes in its region?

Lucerne has been sampled by LAKEWATCH volunteers from **December 4, 2008 to January 22, 2010** for a total of **9** months. An average has been calculated for each parameter sampled (total phosphorus, total nitrogen, total chlorophyll, and water clarity or “Secchi Depth” and is referred to in the table below as the “Average for Lucerne”. Averages were also calculated for other lakes in the Pinellas Peninsula Region. These averages have been grouped into ranges from low to high and are shown in the table below. Using the table, you can see how Lucerne compares to other water bodies in this region.

Pinellas Peninsula Region				
	Total Phosphorus (µg/L)	Total Nitrogen (µg/L)	Total Chlorophyll (µg/L)	Secchi Depth (ft)
Average for Lucerne	369	1174	28	5.8
Low Range ¹	14 - 78	545 - 930	4 - 45	1 - 1.3
Low to Middle Range ²	78 - 87	930 - 1370	45 - 49	1.3 - 3
Middle to High Range ³	87 - 98	1370 - 1837	49 - 61	3 - 3.9
High Range ⁴	98 - 122	1837 - 2330	61 - 67	3.9 - 10.5
Number of lakes used to define each range	6	6	6	6

Keep in mind that if the number of lakes that were used to define each range (shown in the bottom row of the table) is small, the range of water chemistry conditions listed may not present an accurate picture of your Lake Region's typical characteristics. Don't be alarmed if Lucerne is at one end of the spectrum (High Range or Low Range) or perhaps outside the range altogether. The existence of an extremely high or low value merely indicates there are factors you might want to take a closer look at in order to identify the cause. If you have a concern, we encourage you to talk with the LAKEWATCH staff about it.

¹Low range represents the minimum value to 25th percentile. This means that 75% of the lakes sampled in this study have values higher than Lucerne.

²Low to middle range represents the 25th to 50th percentile. This means that 50% of the lakes sampled in this study have values higher than Lucerne, and at least 25% of the lakes sampled have values lower.

³Middle to high range represents the 50th to 75th percentile. This means that 25% of the lakes sampled in this study have values higher than Lucerne, and at least 50% of the lakes sampled have values lower.

⁴High range represents the 75th to maximum value. This means that at least 75% of the lakes sampled in this study have values lower than Lucerne.

* This classification system was created by grouping lakes based on similarities in physiography, geology, soils, hydrology, water chemistry, vegetation, and climate. This project resulted in the definition of 47 regions, which are described in a final report Lake Regions of Florida (Griffith, G.E., et al. 1997), published by the U.S. EPA (EPA/R-97/127). For more information see the Florida Lake Regions Classification System handout.



Dear Friend of LAKEWATCH,

January 14, 2011

Florida LAKEWATCH records show that **Placido in Pinellas County has been sampled by LAKEWATCH volunteers for a total of 10 months**. The raw data are enclosed in this Data Report as tables and graphs. As you look through the Data Report, you may ask “What do these numbers mean?” or “How can this information be useful to me?” We’ve provided you with the following summaries that describe two common ways in which your LAKEWATCH data can be used.

The first summary, the Trophic State Summary describes how and why Placido is classified into one of four categories called Trophic States. The second summary, Florida Lake Regions Summary, places Placido into one of forty-seven Florida Lake Regions.

In addition to these summaries the following handouts are available upon request or can be downloaded from our web page if you would like more information about how to interpret the data, trophic states or lake regions:

- □ *Explanation of the Florida LAKEWATCH Data Packet* — leads you through the tables and graphs and shows you how to spot trends and patterns;
- □ *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife*— explains the four trophic states used by the Florida LAKEWATCH program ;
- □ *Florida Lake Regions: A Classification System* — explains the development of 47 Florida Lake Regions and discusses why it’s important for you to know which Lake Region your lake is in.

We realize that this is a lot of reading material. However, being familiar with this information can help you become more effective in the water management arena. For example, you can communicate more effectively with water management professionals; develop management goals for your water body; establish a baseline of water chemistry for future reference; or document changes that might be occurring.

We encourage you to share information from your data packet with others so they can become better informed. We can provide data in printed form, on computer disk, or via e-mail. Please don’t hesitate to call us with your questions or comments.

Sincerely,

Daniel J. Willis
Florida LAKEWATCH Regional Coordinator

Enclosures

Trophic State* Summary

Placido has been sampled in the Florida LAKEWATCH program for a total of **10** months. To determine the trophic state classification for **Placido** we calculated averages from **December 4, 2008** to **March 8, 2010** for each of the four LAKEWATCH water chemistry parameters (total chlorophyll, total phosphorus, total nitrogen, and water clarity) and compared those averages with the four Trophic State ranges*. The results are as follows:

- total chlorophyll for Placido is 30 $\mu\text{g/L}$ which falls in the **eutrophic** range.
- total phosphorus for Placido is 692 $\mu\text{g/L}$ which falls in the **hypereutrophic** range.
- total nitrogen for Placido is 1456 $\mu\text{g/L}$ which falls in the **eutrophic** range.
- water clarity for Placido is 5.2 feet which falls in the **eutrophic** range.

How LAKEWATCH Determines Your Waterbody's Trophic Classification

It's possible that one or more of the four water chemistry parameters used above fell into different trophic ranges. (For example, a waterbody may have water clarity in the *oligotrophic* range, and its total nitrogen levels may be in the *eutrophic* range.) When one or more of the four LAKEWATCH parameters falls into different trophic ranges, **LAKEWATCH uses the total chlorophyll averages to determine the overall trophic state**. Since the total chlorophyll measurement indicates how much algae is actually being produced in a waterbody, it's the most direct indicator of biological productivity. The other three parameters are more limited in that they only provide information about the *potential* for biological productivity.

Don't be alarmed if LAKEWATCH parameters for your waterbody fall into different trophic ranges. If this happens, it simply suggests that you might want to take a closer look to determine why. Feel free to talk with the LAKEWATCH staff to see if there is cause for concern or if perhaps further study is warranted.

*** These criteria were developed by two lake scientists, Forsberg and Ryding in 1980. For more information, see the *Trophic State: A Waterbody's Ability to Support Plants, Fish, and Wildlife* *handout* .**

Florida Lake Regions* Summary

Which Lake Region is Placido in?

Placido is located in the Pinellas Peninsula Region which is described as:

The coastal geology changes in this region from the exposed limestone to the north to deeply weathered sand hills to sand and shells. Besides the coastal strand, the natural vegetation consisted of longleaf pine/xerophytic oak on the north and west, and pine flatwoods on the southeast. The dominant characteristic of the region now is Clearwater/St. Petersburg urbanization. Several small lakes are found in this region. They are high nutrient lakes. This may be a result of naturally occurring phosphoritic pebbles in the geology, as well as anthropogenic impacts.

How does Placido compare to other lakes in its region?

Placido has been sampled by LAKEWATCH volunteers from **December 4, 2008 to March 8, 2010** for a total of **10** months. An average has been calculated for each parameter sampled (total phosphorus, total nitrogen, total chlorophyll, and water clarity or “Secchi Depth” and is referred to in the table below as the “Average for Placido”. Averages were also calculated for other lakes in the Pinellas Peninsula Region. These averages have been grouped into ranges from low to high and are shown in the table below. Using the table, you can see how Placido compares to other water bodies in this region.

Pinellas Peninsula Region				
	Total Phosphorus ($\mu\text{g/L}$)	Total Nitrogen ($\mu\text{g/L}$)	Total Chlorophyll ($\mu\text{g/L}$)	Secchi Depth (ft)
Average for Placido	692	1456	30	5.2
Low Range ¹	14 - 78	545 - 930	4 - 45	1 - 1.3
Low to Middle Range ²	78 - 87	930 - 1370	45 - 49	1.3 - 3
Middle to High Range ³	87 - 98	1370 - 1837	49 - 61	3 - 3.9
High Range ⁴	98 - 122	1837 - 2330	61 - 67	3.9 - 10.5
Number of lakes used to define each range	6	6	6	6

Keep in mind that if the number of lakes that were used to define each range (shown in the bottom row of the table) is small, the range of water chemistry conditions listed may not present an accurate picture of your Lake Region's typical characteristics. Don't be alarmed if Placido is at one end of the spectrum (High Range or Low Range) or perhaps outside the range altogether. The existence of an extremely high or low value merely indicates there are factors you might want to take a closer look at in order to identify the cause. If you have a concern, we encourage you to talk with the LAKEWATCH staff about it.

¹Low range represents the minimum value to 25th percentile. This means that 75% of the lakes sampled in this study have values higher than Placido.

²Low to middle range represents the 25th to 50th percentile. This means that 50% of the lakes sampled in this study have values higher than Placido, and at least 25% of the lakes sampled have values lower.

³Middle to high range represents the 50th to 75th percentile. This means that 25% of the lakes sampled in this study have values higher than Placido, and at least 50% of the lakes sampled have values lower.

⁴High range represents the 75th to maximum value. This means that at least 75% of the lakes sampled in this study have values lower than Placido.

* This classification system was created by grouping lakes based on similarities in physiography, geology, soils, hydrology, water chemistry, vegetation, and climate. This project resulted in the definition of 47 regions, which are described in a final report Lake Regions of Florida (Griffith, G.E., et al. 1997), published by the U.S. EPA (EPA/R-97/127). For more information see the Florida Lake Regions Classification System handout.



Fisheries
& Aquatic Sciences



Florida LAKEWATCH

Fisheries and Aquatic Sciences

7922 NW 71st Street Gainesville, FL 32653

Phone: 1-800-525-3928 or 352-392-4817 Fax: 352-392-4902

E-mail: fl-lakewatch@ufl.edu

Website: <http://lakewatch.ifas.ufl.edu>