LAKEWATCH Report for Coffee Pot Bayou-1 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Coffee Pot Bayou-1
GNIS Number	293969
Water Body Type	Estuary
Period of Record (years, range)	4 (2018 to 2021)
Latitude	27.7921
Longitude	-82.6244

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (µS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (µg/L)	78 - 175	112 (4)
Total Nitrogen (µg/L)	346 - 666	479 (4)
Chlorophyll- uncorrected (µg/L)	7 - 11	9 (4)
Secchi (ft)	4.7 - 6.1	5.3 (4)
Secchi (m)	1.4 - 1.8	1.6 (4)
Color (Pt-Co Units)	7 - 16	11 (4)
Specific Conductance (µS/cm@25 C)	21892 - 32000	27838 (4)
Salinity (ppt)	13 - 20	17 (4)

LAKEWATCH Report for Coffee Pot Bayou-2 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Coffee Pot Bayou-2
GNIS Number	293969
Water Body Type	Estuary
Period of Record (years, range)	4 (2018 to 2021)
Latitude	27.7912
Longitude	-82.6236

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (µS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (µg/L)	67 - 173	99 (4)
Total Nitrogen (µg/L)	321 - 649	428 (4)
Chlorophyll- uncorrected (µg/L)	7 - 13	9 (4)
Secchi (ft)	4.5 - 5.3	4.9 (4)
Secchi (m)	1.4 - 1.6	1.5 (4)
Color (Pt-Co Units)	8 - 18	10 (4)
Specific Conductance (µS/cm@25 C)	24489 - 29000	27057 (4)
Salinity (ppt)	15 - 18	17 (4)

LAKEWATCH Report for Coffee Pot Bayou-3 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Coffee Pot Bayou-3
GNIS Number	293969
Water Body Type	Estuary
Period of Record (years, range)	4 (2018 to 2021)
Latitude	27.7908
Longitude	-82.6249

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by
LAKEWATCH volunteers and classification variables color and specific conductance
(LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (μg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (μg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting
  when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (μg/L)**: Chlorophyll concentrations are used to measure
  relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water
  after particles have been filtered out.
- **Specific Conductance (μS/cm@25°C), Salinity (ppt):** Measurement of the ability of
  water to conduct electricity and can be used to estimate the amount of dissolved materials
  in water.

**Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and
color and specific conductance/salinity (collected quarterly).**

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (μg/L)	69 - 161	98 (4)
Total Nitrogen (μg/L)	315 - 602	420 (4)
Chlorophyll- uncorrected (μg/L)	8 - 11	10 (4)
Secchi (ft)	4.7 - 5.6	5.3 (4)
Secchi (m)	1.4 - 1.7	1.6 (4)
Color (Pt-Co Units)	8 - 19	11 (4)
Specific Conductance (μS/cm@25 C)	25819 - 34000	29908 (4)
Salinity (ppt)	16 - 21	19 (4)

LAKEWATCH Report for Coffee Pot Bayou-4 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Coffee Pot Bayou-4
GNIS Number	293969
Water Body Type	Estuary
Period of Record (years, range)	4 (2018 to 2021)
Latitude	27.7948
Longitude	-82.6309

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (µS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (µg/L)	64 - 164	98 (4)
Total Nitrogen (µg/L)	363 - 860	515 (4)
Chlorophyll- uncorrected (µg/L)	10 - 16	12 (4)
Secchi (ft)	4.7 - 5.1	4.9 (4)
Secchi (m)	1.4 - 1.6	1.5 (4)
Color (Pt-Co Units)	9 - 22	12 (4)
Specific Conductance (µS/cm@25 C)	17685 - 29172	22683 (4)
Salinity (ppt)	11 - 18	14 (4)

LAKEWATCH Report for Coffee Pot Bayou-5 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link: https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link: https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Coffee Pot Bayou-5
GNIS Number	293969
Water Body Type	Estuary
Period of Record (years, range)	4 (2018 to 2021)
Latitude	27.7947
Longitude	-82.6298

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (µS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (µg/L)	66 - 140	89 (4)
Total Nitrogen (µg/L)	358 - 555	430 (4)
Chlorophyll- uncorrected (µg/L)	11 - 13	12 (4)
Secchi (ft)	4.7 - 4.9	4.8 (4)
Secchi (m)	1.4 - 1.5	1.5 (4)
Color (Pt-Co Units)	7 - 19	11 (4)
Specific Conductance (µS/cm@25 C)	21406 - 26833	24219 (4)
Salinity (ppt)	13 - 17	15 (4)

LAKEWATCH Report for Coffee Pot Bayou-6 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Coffee Pot Bayou-6
GNIS Number	293969
Water Body Type	Estuary
Period of Record (years, range)	4 (2018 to 2021)
Latitude	27.7955
Longitude	-82.6283

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):
- **Total Phosphorus (μg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (μg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (μg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (μS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (μg/L)	73 - 154	98 (4)
Total Nitrogen (μg/L)	391 - 634	496 (4)
Chlorophyll- uncorrected (μg/L)	13 - 25	15 (4)
Secchi (ft)	4.1 - 5.5	5.0 (4)
Secchi (m)	1.2 - 1.7	1.5 (4)
Color (Pt-Co Units)	8 - 21	13 (4)
Specific Conductance (μS/cm@25 C)	18507 - 30500	24478 (4)
Salinity (ppt)	11 - 19	15 (4)

LAKEWATCH Report for Coffee Pot Bayou-7 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Coffee Pot Bayou-7
GNIS Number	293969
Water Body Type	Estuary
Period of Record (years, range)	4 (2018 to 2021)
Latitude	27.7998
Longitude	-82.6330

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (µS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (µg/L)	80 - 171	119 (4)
Total Nitrogen (µg/L)	440 - 785	573 (4)
Chlorophyll- uncorrected (µg/L)	15 - 19	16 (4)
Secchi (ft)	3.8 - 4.6	4.2 (4)
Secchi (m)	1.2 - 1.4	1.3 (4)
Color (Pt-Co Units)	10 - 19	13 (4)
Specific Conductance (µS/cm@25 C)	24413 - 28460	26605 (4)
Salinity (ppt)	15 - 18	16 (4)

LAKEWATCH Report for Coffee Pot Bayou-8 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Coffee Pot Bayou-8
GNIS Number	293969
Water Body Type	Estuary
Period of Record (years, range)	4 (2018 to 2021)
Latitude	27.8002
Longitude	-82.6320

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (µS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (µg/L)	80 - 199	116 (4)
Total Nitrogen (µg/L)	439 - 876	564 (4)
Chlorophyll- uncorrected (µg/L)	14 - 48	23 (4)
Secchi (ft)	3.4 - 5.0	4.0 (4)
Secchi (m)	1.0 - 1.5	1.2 (4)
Color (Pt-Co Units)	11 - 18	14 (4)
Specific Conductance (µS/cm@25 C)	20565 - 26268	24007 (4)
Salinity (ppt)	13 - 16	15 (4)

LAKEWATCH Report for Coffee Pot Bayou-9 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Coffee Pot Bayou-9
GNIS Number	293969
Water Body Type	Estuary
Period of Record (years, range)	4 (2018 to 2021)
Latitude	27.8005
Longitude	-82.6303

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (μg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (μg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (μg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (μS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (μg/L)	73 - 172	103 (4)
Total Nitrogen (μg/L)	430 - 737	521 (4)
Chlorophyll- uncorrected (μg/L)	13 - 22	16 (4)
Secchi (ft)	3.5 - 5.1	4.4 (4)
Secchi (m)	1.1 - 1.6	1.4 (4)
Color (Pt-Co Units)	10 - 17	13 (4)
Specific Conductance (μS/cm@25 C)	21136 - 29500	25506 (4)
Salinity (ppt)	13 - 18	16 (4)

LAKEWATCH Report for Piney Point-1 in Pinellas County
Estuary and Estuary Segment: Clearwater Harbor/St. Joseph Sound St. Joseph Sound
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Piney Point-1
GNIS Number	
Water Body Type	Estuary
Period of Record (years, range)	9 (2001 to 2009)
Latitude	28.1634
Longitude	-82.8405

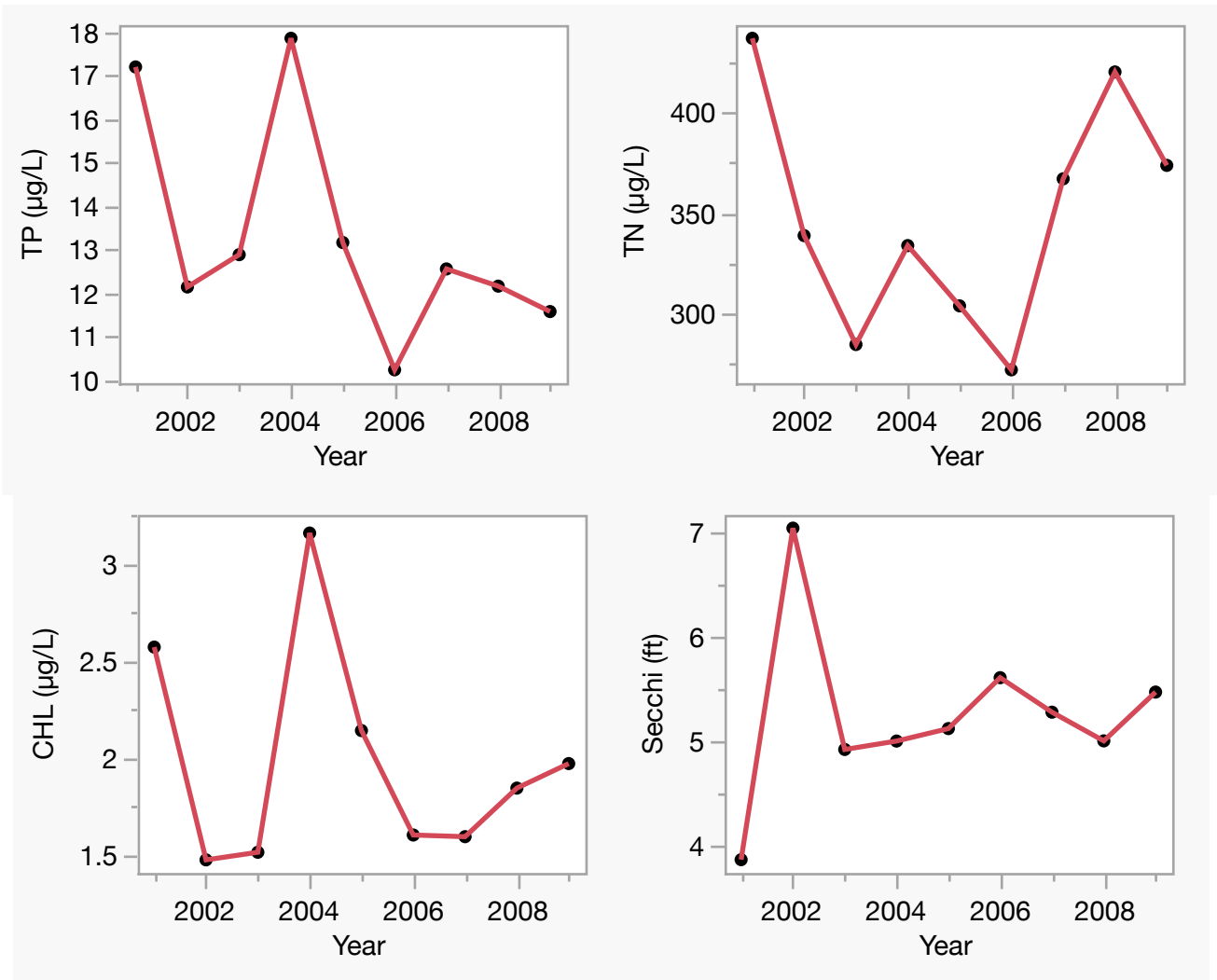**Long-Term Data for Estuaries: Definitions**

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (µS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (µg/L)	10 - 18	13 (9)
Total Nitrogen (µg/L)	272 - 437	344 (9)
Chlorophyll- uncorrected (µg/L)	1 - 3	2 (9)
Secchi (ft)	3.9 - 7.0	5.2 (9)
Secchi (m)	1.2 - 2.1	1.6 (9)
Color (Pt-Co Units)	5 - 11	7 (9)
Specific Conductance (µS/cm@25 C)	39000 - 49773	44354 (9)
Salinity (ppt)	24 - 31	28 (9)

Figure 2. Piney Point-1 trend plots of year by average. The R^2 value indicates the strength of the relations (ranges from 0.0 to 1.0; higher the R^2 the stronger the relation) and the p value indicates if the relation is significant ($p < 0.05$ is significant). Total phosphorus (TP No Trend, $R^2 = 0.30$, $p = 0.12$)**, total nitrogen** (TN No Trend, $R^2 = 0.01$, $p = 0.85$)**, chlorophyll** (CHL No Trend, $R^2 = 0.05$, $p = 0.57$) **and Secchi depth** (Secchi No Trend, $R^2 = 0.01$, $p = 0.82$)**.**

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Piney Point-2
GNIS Number	
Water Body Type	Estuary
Period of Record (years, range)	9 (2001 to 2009)
Latitude	28.1517
Longitude	-82.8308

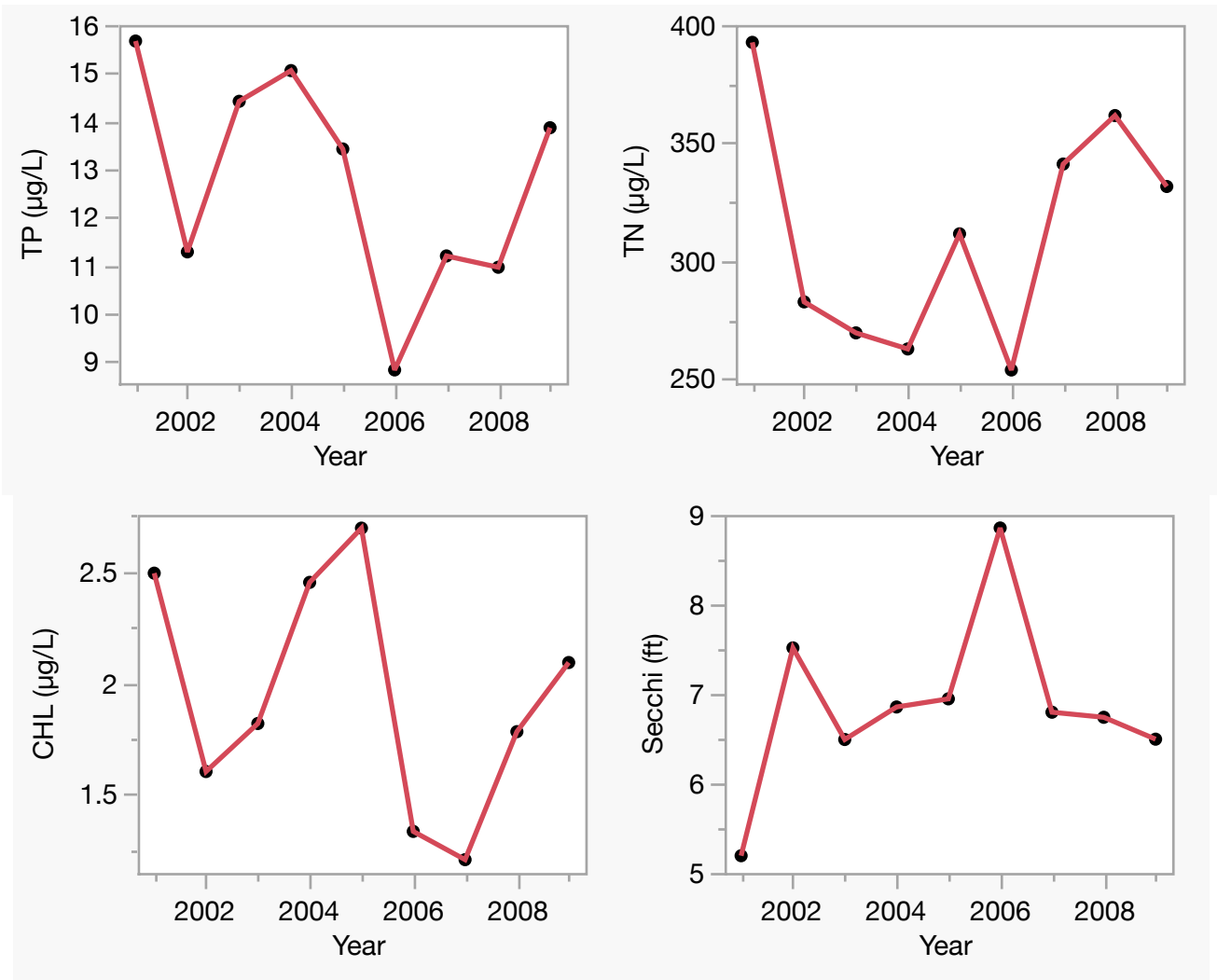**Long-Term Data for Estuaries: Definitions**

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (µS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (µg/L)	9 - 16	13 (9)
Total Nitrogen (µg/L)	254 - 393	309 (9)
Chlorophyll- uncorrected (µg/L)	1 - 3	2 (9)
Secchi (ft)	5.2 - 8.9	6.8 (9)
Secchi (m)	1.6 - 2.7	2.1 (9)
Color (Pt-Co Units)	3 - 7	6 (9)
Specific Conductance (µS/cm@25 C)	37000 - 51321	46102 (9)
Salinity (ppt)	23 - 32	29 (9)

Figure 2. Piney Point-2 trend plots of year by average. The R^2 value indicates the strength of the relations (ranges from 0.0 to 1.0; higher the R^2 the stronger the relation) and the p value indicates if the relation is significant ($p < 0.05$ is significant). Total phosphorus (TP No Trend, $R^2 = 0.17$, $p = 0.26$)**, total nitrogen** (TN No Trend, $R^2 = 0.01$, $p = 0.76$)**, chlorophyll** (CHL No Trend, $R^2 = 0.09$, $p = 0.44$) **and Secchi depth** (Secchi No Trend, $R^2 = 0.07$, $p = 0.50$)**.**

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **<u>Plots were only made for systems with five or more years of data.</u>**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link: https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link: https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Piney Point-3
GNIS Number	
Water Body Type	Estuary
Period of Record (years, range)	9 (2001 to 2009)
Latitude	28.1615
Longitude	-82.8142

**Long-Term Data for Estuaries: Definitions**

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (µS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (µg/L)	10 - 19	13 (9)
Total Nitrogen (µg/L)	274 - 449	348 (9)
Chlorophyll- uncorrected (µg/L)	1 - 3	1 (9)
Secchi (ft)	4.6 - 6.2	5.1 (5)
Secchi (m)	1.4 - 1.9	1.6 (5)
Color (Pt-Co Units)	4 - 14	7 (9)
Specific Conductance (µS/cm@25 C)	39738 - 49420	45245 (9)
Salinity (ppt)	25 - 31	28 (9)

Figure 2. Piney Point-3 trend plots of year by average. The R^2 value indicates the strength of the relations (ranges from 0.0 to 1.0; higher the R^2 the stronger the relation) and the p value indicates if the relation is significant ($p < 0.05$ is significant). Total phosphorus (TP Decreasing, $R^2 = 0.55$, $p = 0.02$)**, total nitrogen** (TN No Trend, $R^2 = 0.00$, $p = 0.95$)**, chlorophyll** (CHL Decreasing, $R^2 = 0.52$, $p = 0.03$) **and Secchi depth** (Secchi No Trend, $R^2 = 0.19$, $p = 0.47$)**.**
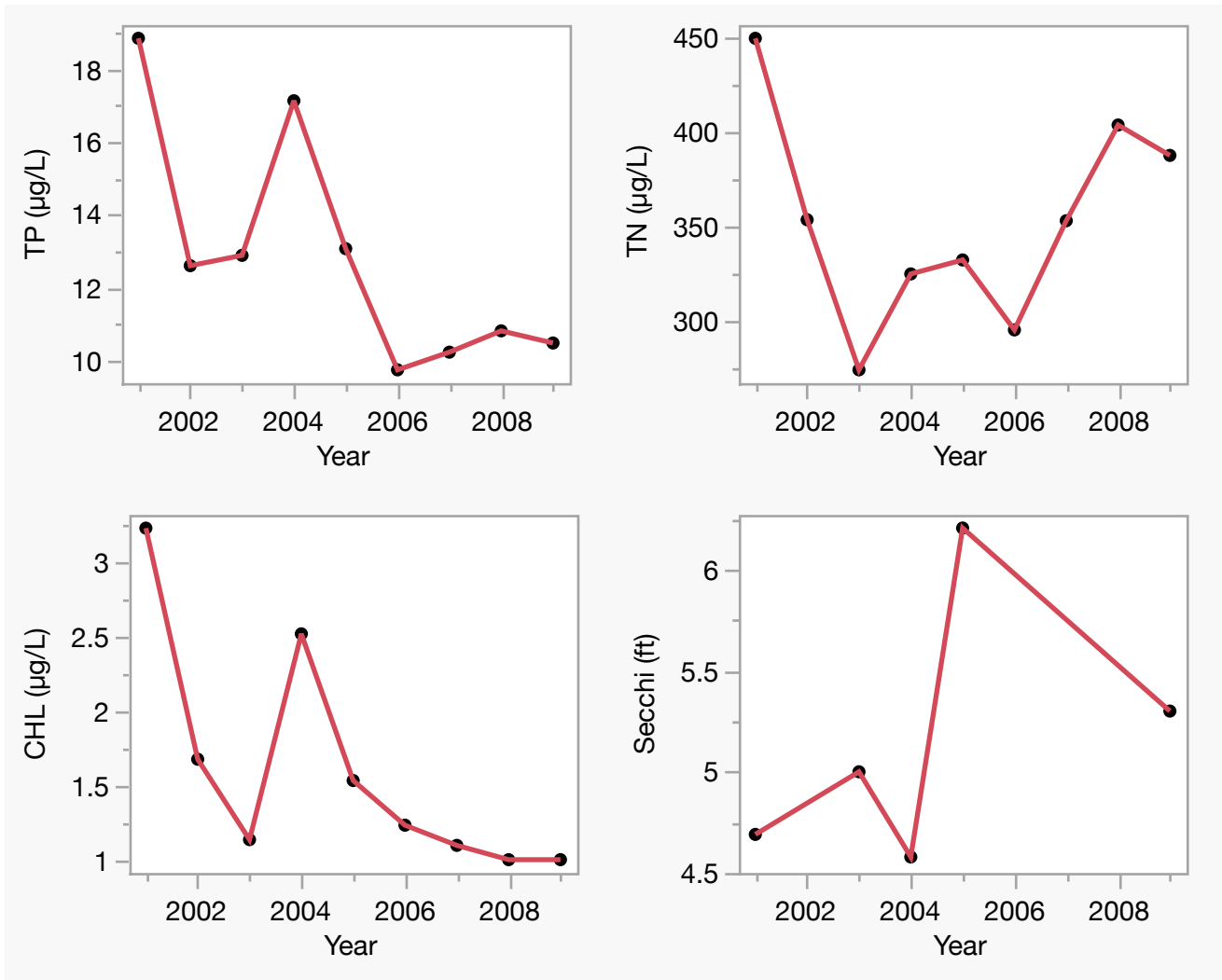
LAKEWATCH Report for Smacks Bayou-1 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **<u>Plots were only made for systems with five or more years of data.</u>**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
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- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Smacks Bayou-1
GNIS Number	
Water Body Type	Estuary
Period of Record (years, range)	2 (2020 to 2021)
Latitude	27.8048
Longitude	-82.6266

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):
- **Total Phosphorus (μg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (μg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (μg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (μS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (μg/L)	78 - 88	83 (2)
Total Nitrogen (μg/L)	399 - 448	423 (2)
Chlorophyll- uncorrected (μg/L)	10 - 12	11 (2)
Secchi (ft)	4.0 - 4.0	4.0 (2)
Secchi (m)	1.2 - 1.2	1.2 (2)
Color (Pt-Co Units)	10 - 13	11 (2)
Specific Conductance (μS/cm@25 C)	27324 - 31401	29292 (2)
Salinity (ppt)	17 - 19	18 (2)

LAKEWATCH Report for Smacks Bayou-2 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link:
https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link:
https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
- **Name**: System name that LAKEWATCH uses for the station.
- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Smacks Bayou-2
GNIS Number	
Water Body Type	Estuary
Period of Record (years, range)	2 (2020 to 2021)
Latitude	27.8002
Longitude	-82.6237

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.
- **Specific Conductance (µS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (µg/L)	110 - 129	119 (2)
Total Nitrogen (µg/L)	534 - 616	574 (2)
Chlorophyll- uncorrected (µg/L)	15 - 18	16 (2)
Secchi (ft)	2.6 - 3.1	2.9 (2)
Secchi (m)	0.8 - 1.0	0.9 (2)
Color (Pt-Co Units)	11 - 13	12 (2)
Specific Conductance (µS/cm@25 C)	22002 - 27276	24498 (2)
Salinity (ppt)	14 - 17	15 (2)

LAKEWATCH Report for Smacks Bayou-3 in Pinellas County
Estuary and Estuary Segment: Tampa Bay Middle Tampa Bay
Using Data Downloaded 12/9/2022

Introduction for Estuaries

This report summarizes data collected on systems that have been part of the LAKEWATCH program. Data are from the period of record for individual systems. The first part of this summary lists background data for each system, the second part lists the long-term data averages and ranges and the final part are trend plots for nutrients, chlorophyll, and Secchi depth. **Plots were only made for systems with five or more years of data.**

The near shore Florida coastline is separated into estuary and estuary segments within the estuary. Deeper coastal waters are separated into coastal nutrient regions and coastal nutrient

segments within the regions. Numeric nutrient criteria are established for all estuary segments, including criteria for total nitrogen, total phosphorus, and chlorophyll *a*. For open ocean coastal waters, numeric criteria are established for chlorophyll *a*, that is derived from satellite remote sensing techniques. For those locations without defined segments there are narrative nutrient criteria (e.g., Florida Keys Halo Zone).

The maps defining individual estuaries and coastal segments can be found at the following link: https://www.flrules.org/Gateway/reference.asp?No=Ref-05420

The individual nutrient criteria can be found at the following link: https://www.flrules.org/gateway/RuleNo.asp?title=SURFACE%20WATER%20QUALITY%20STANDARDS&ID=62-302.532

Base File Data for Estuaries: Definitions:

- **County**: Name of county adjacent to the system.
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- **GNIS Number**: Number created by USGS's Geographic Names Information System.
- **Water Body Type**: Four different types of systems; lakes, estuaries, river/streams and springs.
- **Period of Record (years)**: Number of years a system has been in the LAKEWATCH program.
- **Latitude and Longitude**: Coordinates identifying the exact location of station 1 for each system.

Table 1. Base File Data.

County	Pinellas
Name	Smacks Bayou-3
GNIS Number	
Water Body Type	Estuary
Period of Record (years, range)	2 (2020 to 2021)
Latitude	27.8003
Longitude	-82.6186

Long-Term Data for Estuaries: Definitions

The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **Total Phosphorus (µg/L)**: Nutrient most often limiting growth of plant/algae.
- **Total Nitrogen (µg/L)**: Nutrient needed for aquatic plant/algae growth but only limiting when nitrogen to phosphorus ratios are generally less than 10 (by mass).
- **Chlorophyll-uncorrected (µg/L)**: Chlorophyll concentrations are used to measure relative abundances of open water algae.
- **Secchi (ft), Secchi (m)**: Secchi measurements are estimates of water clarity.
- **Color (Pt-Co Units)**: LAKEWATCH measures true color, which is the color of the water after particles have been filtered out.

- **Specific Conductance (μS/cm@25°C), Salinity (ppt):** Measurement of the ability of water to conduct electricity and can be used to estimate the amount of dissolved materials in water.

Table 2. Long-term trophic state data collected monthly by LAKEWATCH volunteers and color and specific conductance/salinity (collected quarterly).

Parameter	Minimum and Maximum Annual Geometric Means	Grand Geometric Mean (Sampling years)
Total Phosphorus (μg/L)	55 - 69	62 (2)
Total Nitrogen (μg/L)	291 - 354	321 (2)
Chlorophyll- uncorrected (μg/L)	8 - 12	10 (2)
Secchi (ft)	5.1 - 6.4	5.7 (2)
Secchi (m)	1.5 - 1.9	1.7 (2)
Color (Pt-Co Units)	9 - 10	9 (2)
Specific Conductance (μS/cm@25 C)	17706 - 26833	21797 (2)
Salinity (ppt)	11 - 17	13 (2)