LAKEWATCH Report for Alligator Harbor-1 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor Alligator Harbor
Using Data Downloaded 12/9/2020

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	Franklin
Name	Alligator Harbor-1
GNIS Number	308389
Water Body Type	Estuary
Period of Record (years, range)	14 (2001 to 2020)
Latitude	29.9217
Longitude	-84.4158

Long-Term Data for Estuaries: Definitions

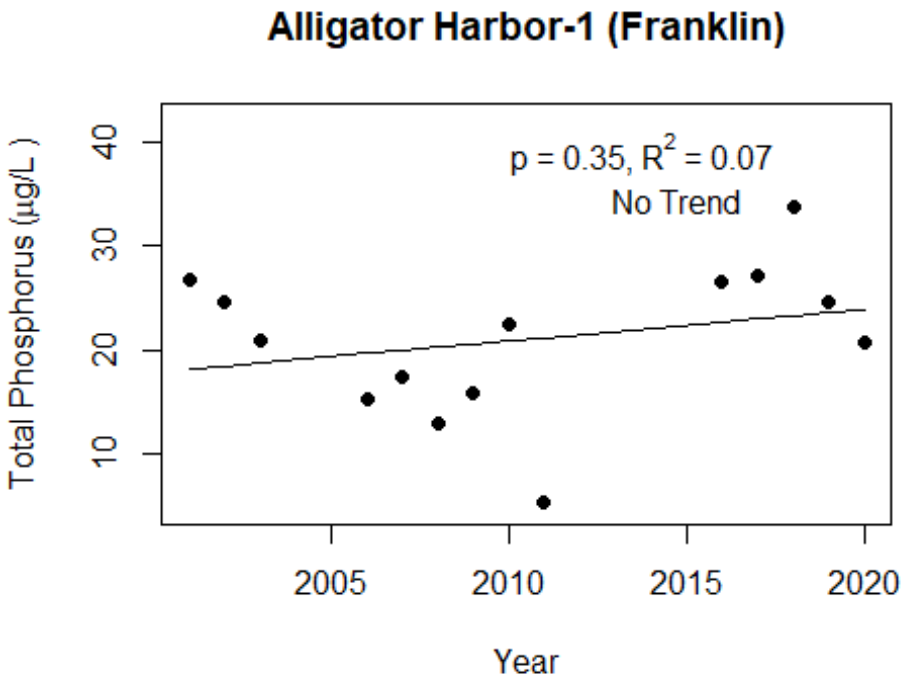
The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **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)	5 - 2020	19 (14)
Total Nitrogen (µg/L)	154 - 456	300 (14)
Chlorophyll- uncorrected (µg/L)	0 - 9	4 (14)
Secchi (ft)	2.3 - 5.4	3.8 (13.0)
Secchi (m)	0.7 - 1.7	1.2 (13.0)
Color (Pt-Co Units)	3 - 39	8 (14)
Specific Conductance (µS/cm@25 C)	16432 - 49993	38014 (14)
Salinity (ppt)	10 - 31	24 (14)

Figure 1 and Figure 2. Trend plots of annual average total phosphorus and annual average total nitrogen versus year. 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). Trend status are reported on plots.



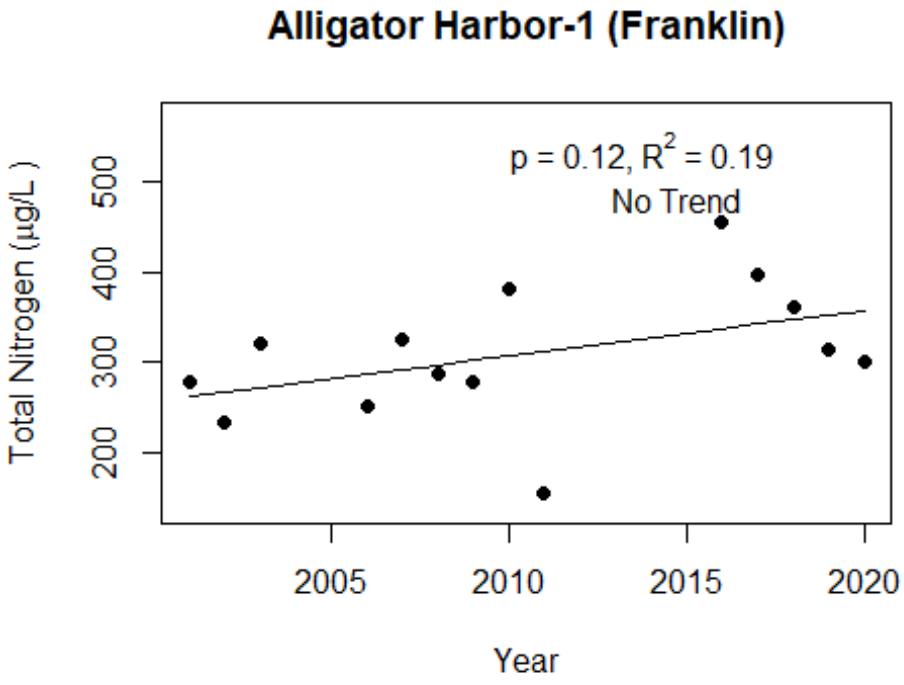
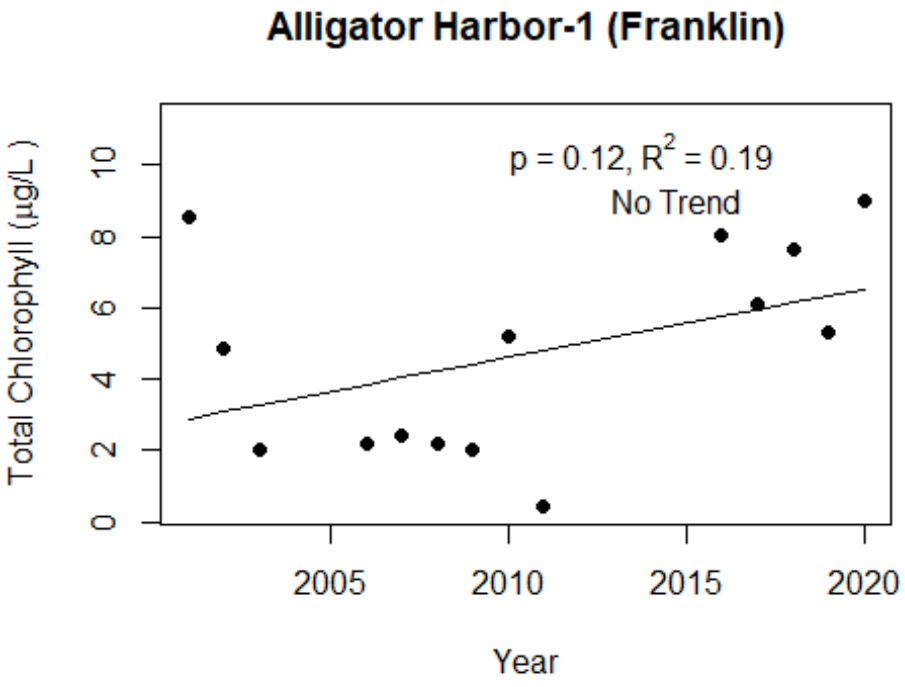
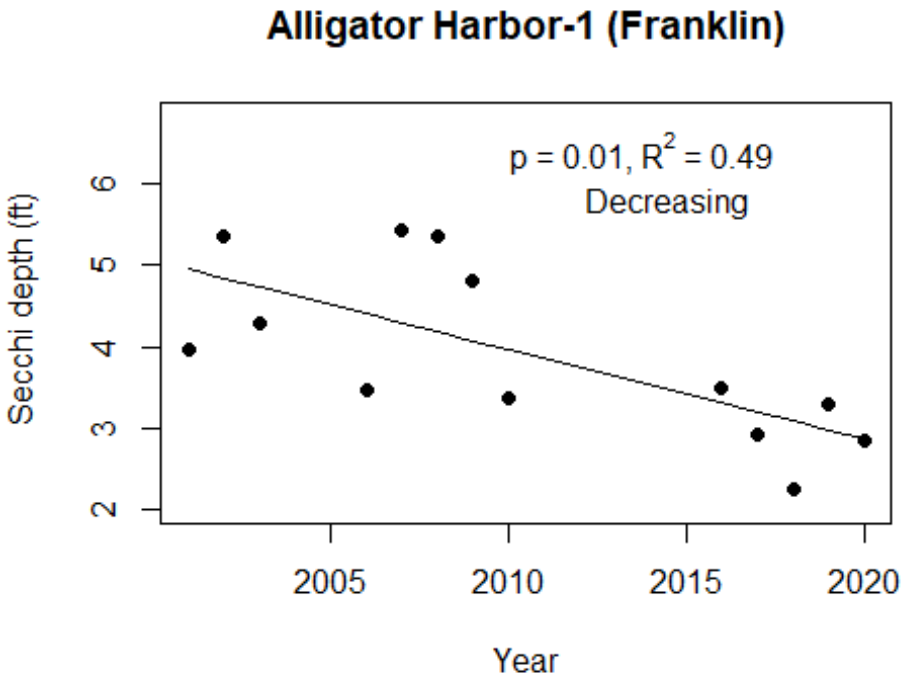


Figure 3 and Figure 4. Trend plots of annual average chlorophyll and annual average Secchi versus year. The R^2 value indicates the strength of the relations (ranges from 0.0 to 1.0; higher the R^2 the stronger the relations and the p value indicates if the relation is significant ($p < 0.05$ is significant). Trend status are reported on plots.





LAKEWATCH Report for Alligator Harbor-2 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor Alligator Harbor
Using Data Downloaded 12/9/2020

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	Franklin
Name	Alligator Harbor-2
GNIS Number	308389
Water Body Type	Estuary
Period of Record (years, range)	14 (2001 to 2020)
Latitude	29.9197
Longitude	-84.4418

Long-Term Data for Estuaries: Definitions

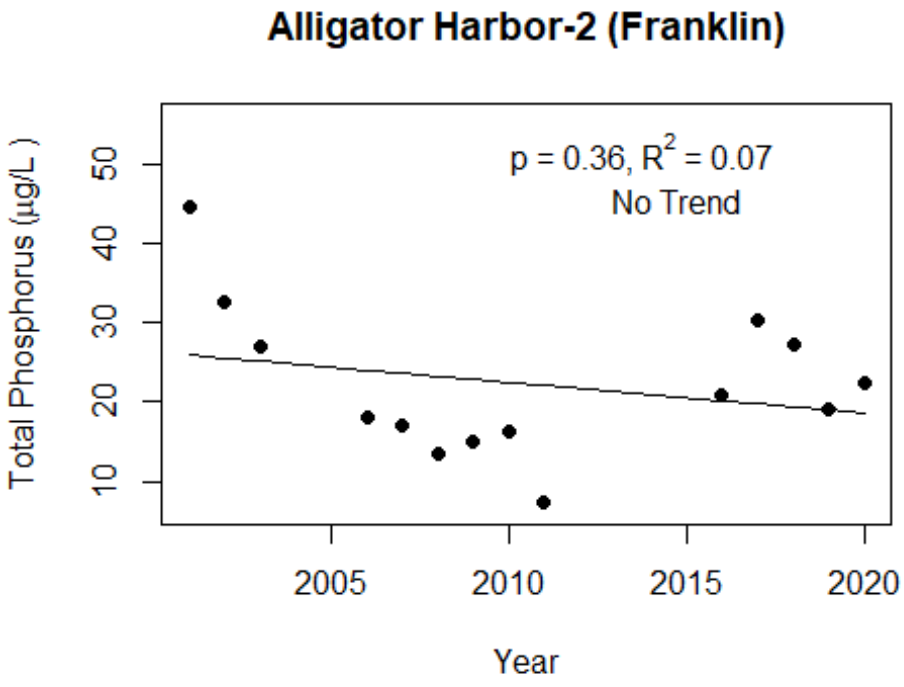
The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **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)	7 - 2020	20 (14)
Total Nitrogen (µg/L)	167 - 534	293 (14)
Chlorophyll- uncorrected (µg/L)	0 - 12	4 (14)
Secchi (ft)	2.6 - 5.0	3.8 (13.0)
Secchi (m)	0.8 - 1.5	1.2 (13.0)
Color (Pt-Co Units)	3 - 26	7 (14)
Specific Conductance (µS/cm@25 C)	25495 - 49304	39902 (14)
Salinity (ppt)	16 - 31	25 (14)

Figure 1 and Figure 2. Trend plots of annual average total phosphorus and annual average total nitrogen versus year. 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). Trend status are reported on plots.



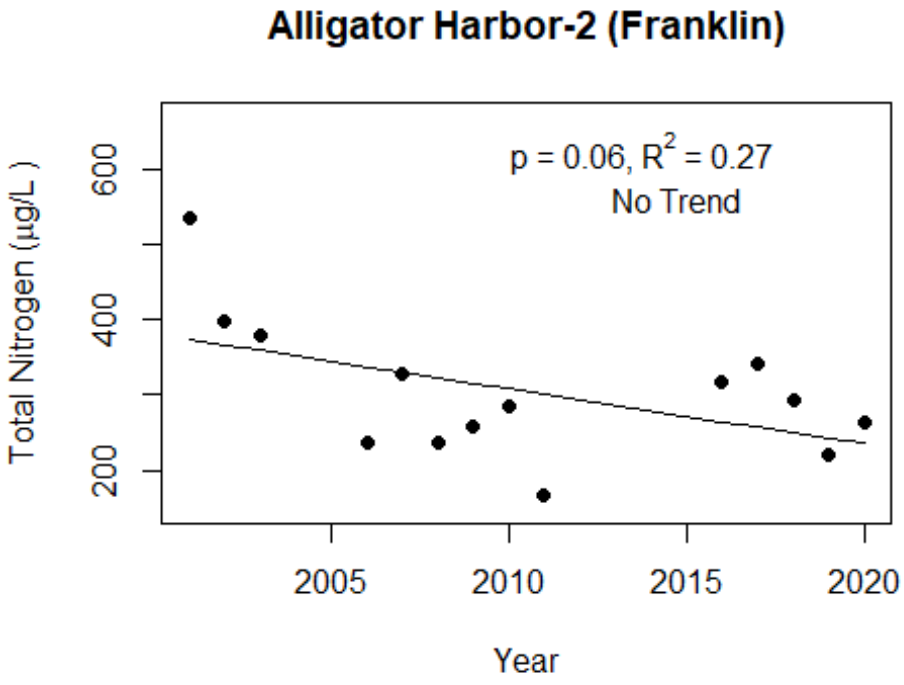
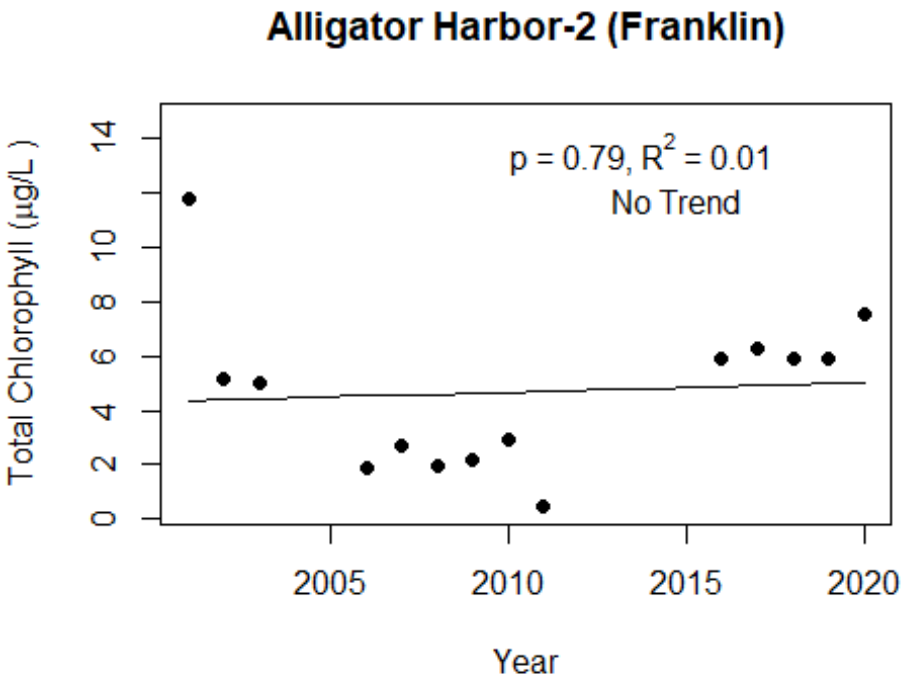
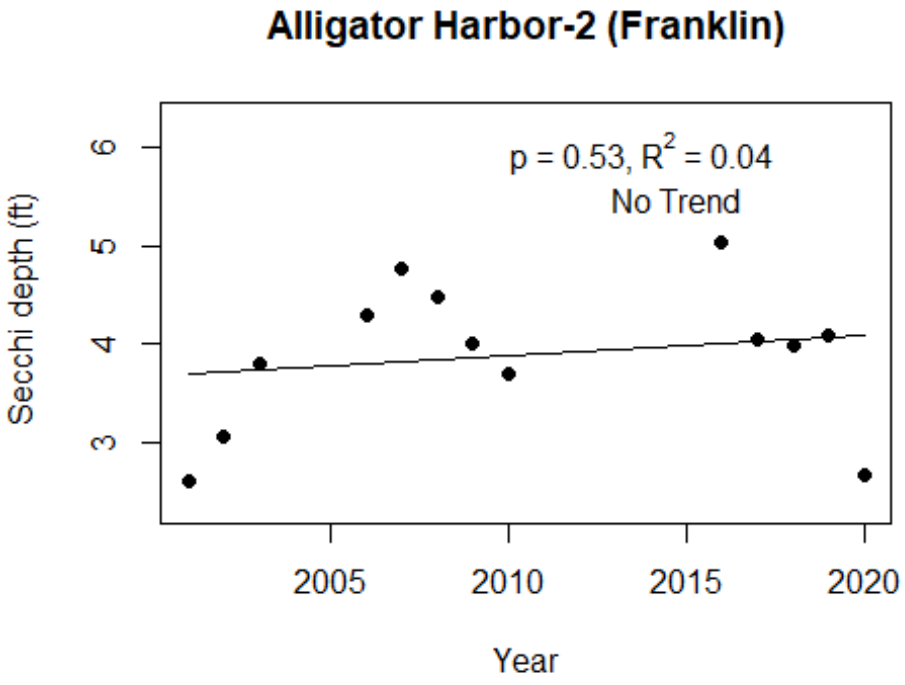


Figure 3 and Figure 4. Trend plots of annual average chlorophyll and annual average Secchi versus year. The R^2 value indicates the strength of the relations (ranges from 0.0 to 1.0; higher the R^2 the stronger the relations and the p value indicates if the relation is significant ($p < 0.05$ is significant). Trend status are reported on plots.





LAKEWATCH Report for Alligator Harbor-3 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor Alligator Harbor
Using Data Downloaded 12/9/2020

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	Franklin
Name	Alligator Harbor-3
GNIS Number	308389
Water Body Type	Estuary
Period of Record (years, range)	14 (2001 to 2020)
Latitude	29.9193
Longitude	-84.4052

Long-Term Data for Estuaries: Definitions

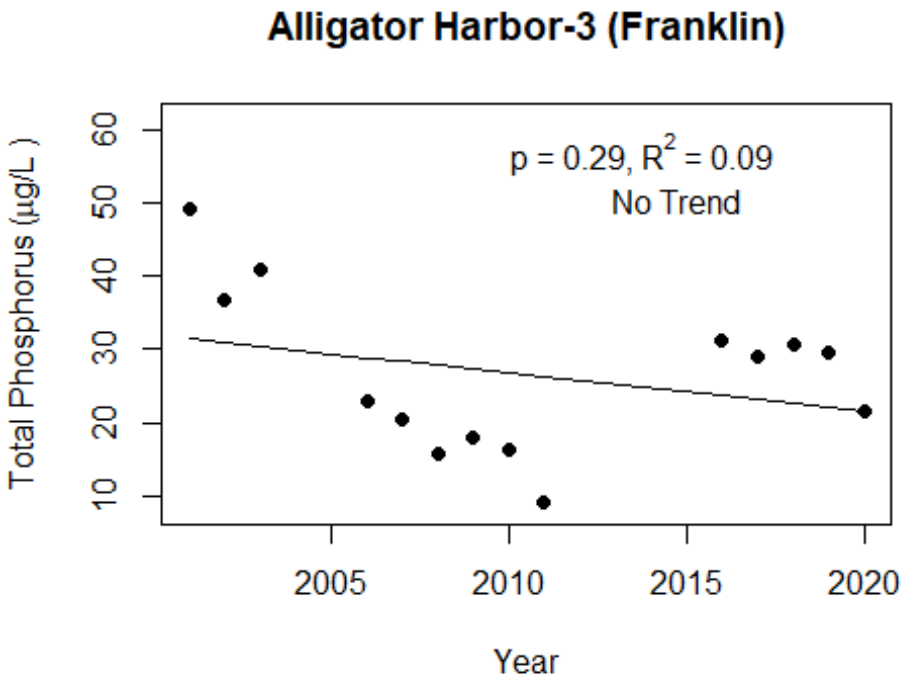
The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **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 - 2020	24 (14)
Total Nitrogen (µg/L)	173 - 603	346 (14)
Chlorophyll- uncorrected (µg/L)	1 - 13	5 (14)
Secchi (ft)	2.2 - 4.6	3.2 (14.0)
Secchi (m)	0.7 - 1.4	1.0 (14.0)
Color (Pt-Co Units)	2 - 24	7 (14)
Specific Conductance (µS/cm@25 C)	22450 - 49304	38662 (14)
Salinity (ppt)	14 - 31	24 (14)

Figure 1 and Figure 2. Trend plots of annual average total phosphorus and annual average total nitrogen versus year. 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). Trend status are reported on plots.



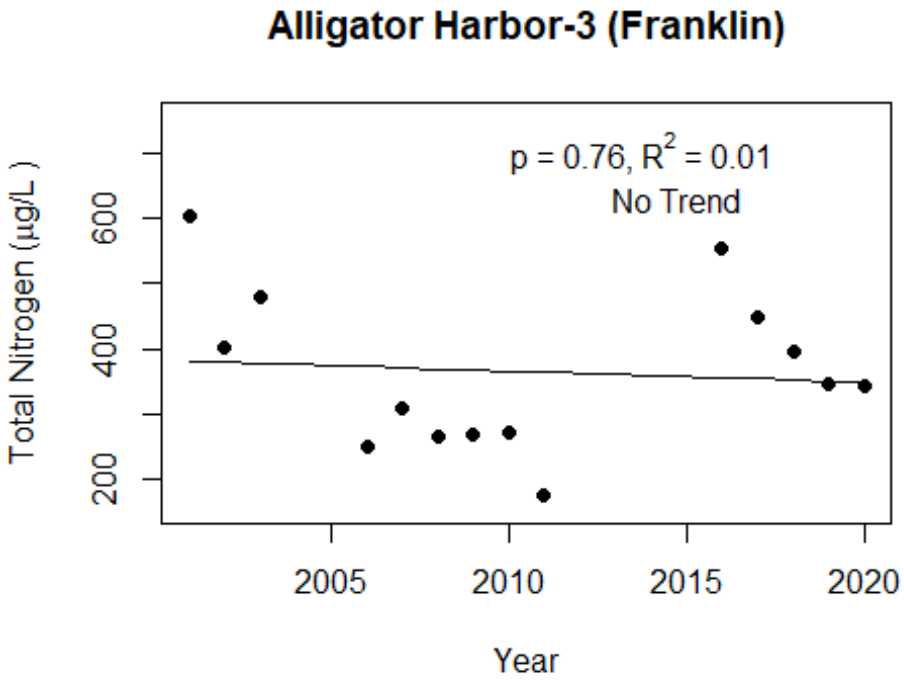
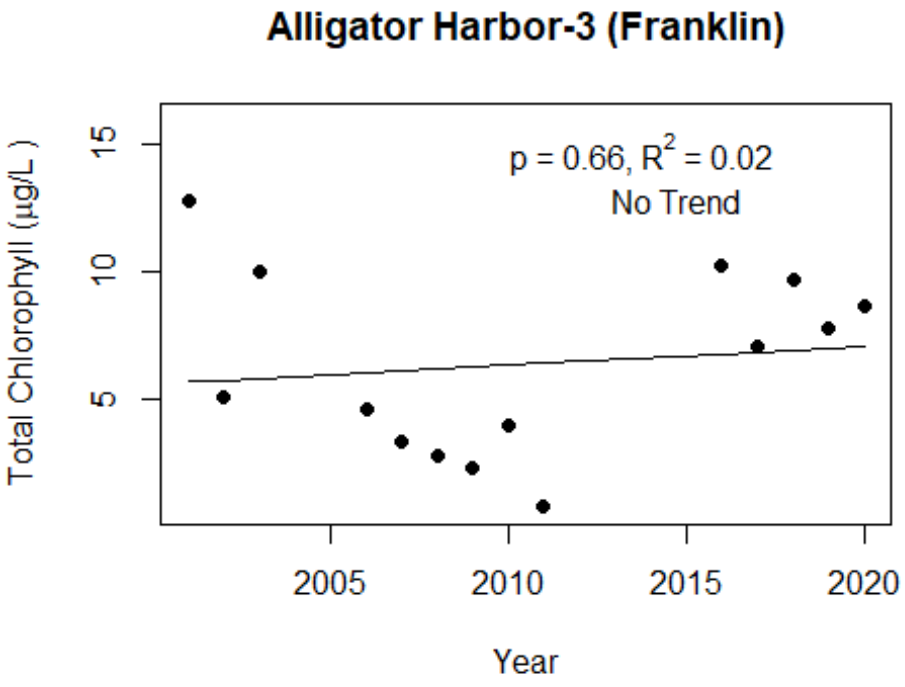
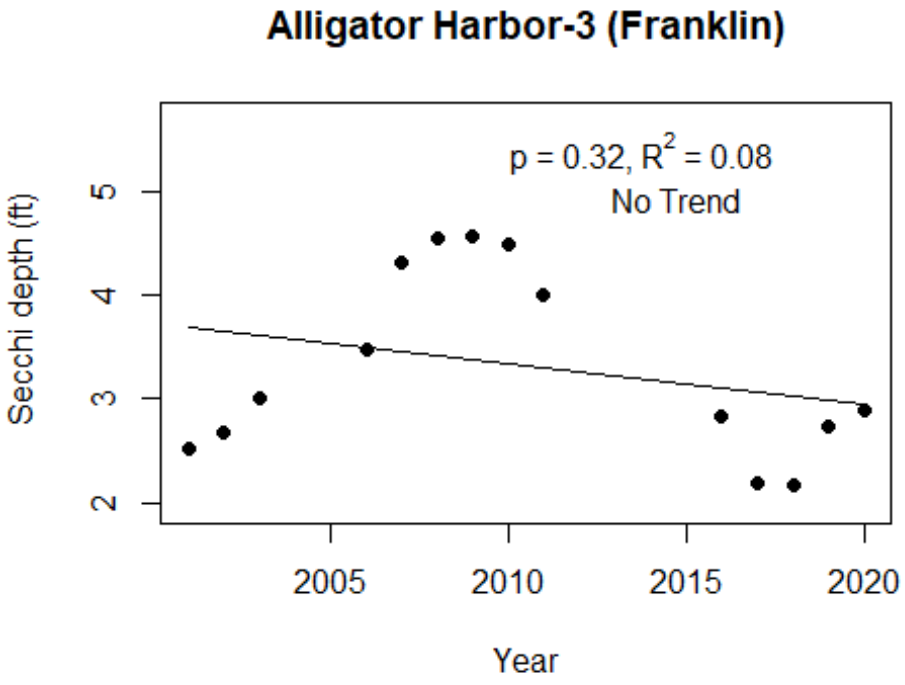


Figure 3 and Figure 4. Trend plots of annual average chlorophyll and annual average Secchi versus year. The R^2 value indicates the strength of the relations (ranges from 0.0 to 1.0; higher the R^2 the stronger the relations and the p value indicates if the relation is significant ($p < 0.05$ is significant). Trend status are reported on plots.





LAKEWATCH Report for Alligator Harbor-4 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor Alligator Harbor
Using Data Downloaded 12/9/2020

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	Franklin
Name	Alligator Harbor-4
GNIS Number	308389
Water Body Type	Estuary
Period of Record (years, range)	14 (2001 to 2020)
Latitude	29.9040
Longitude	-84.3715

Long-Term Data for Estuaries: Definitions

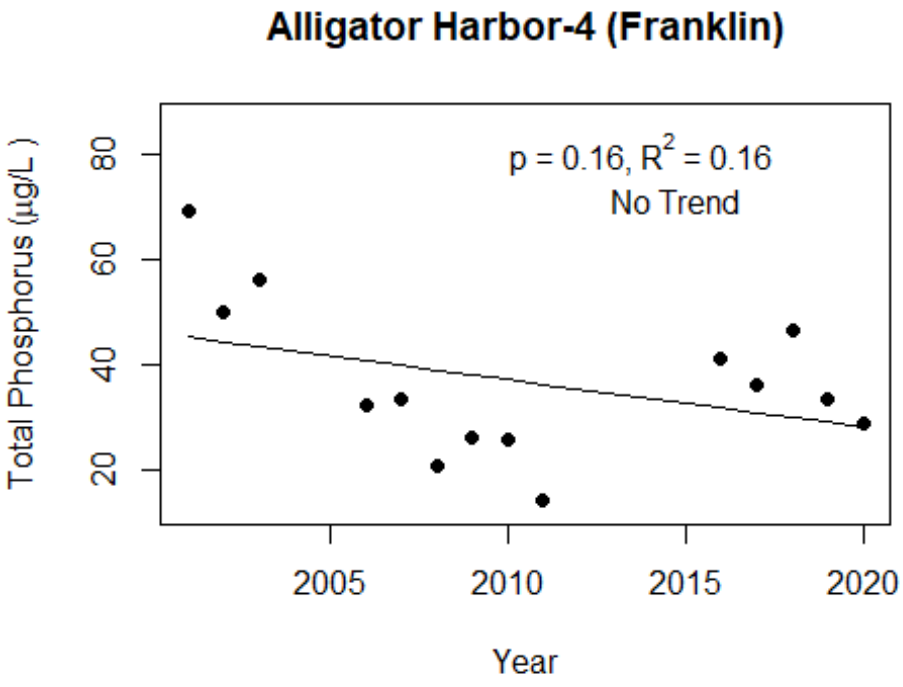
The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **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)	14 - 2020	34 (14)
Total Nitrogen (µg/L)	258 - 822	465 (14)
Chlorophyll- uncorrected (µg/L)	1 - 20	7 (14)
Secchi (ft)	1.5 - 2.9	2.2 (14.0)
Secchi (m)	0.5 - 0.9	0.7 (14.0)
Color (Pt-Co Units)	3 - 16	9 (14)
Specific Conductance (µS/cm@25 C)	31464 - 48581	39499 (14)
Salinity (ppt)	19 - 30	25 (14)

Figure 1 and Figure 2. Trend plots of annual average total phosphorus and annual average total nitrogen versus year. 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). Trend status are reported on plots.



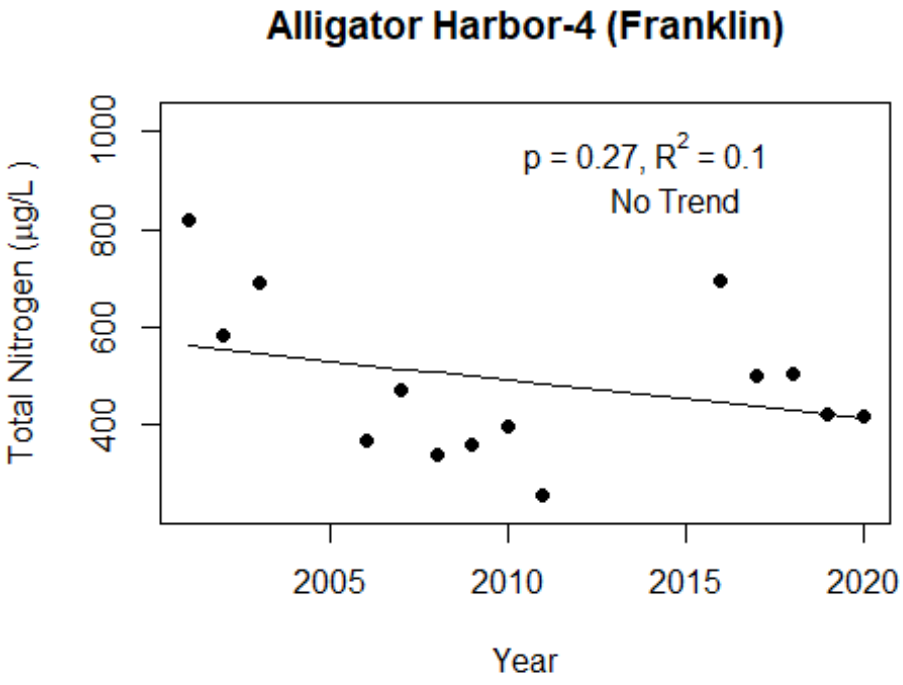
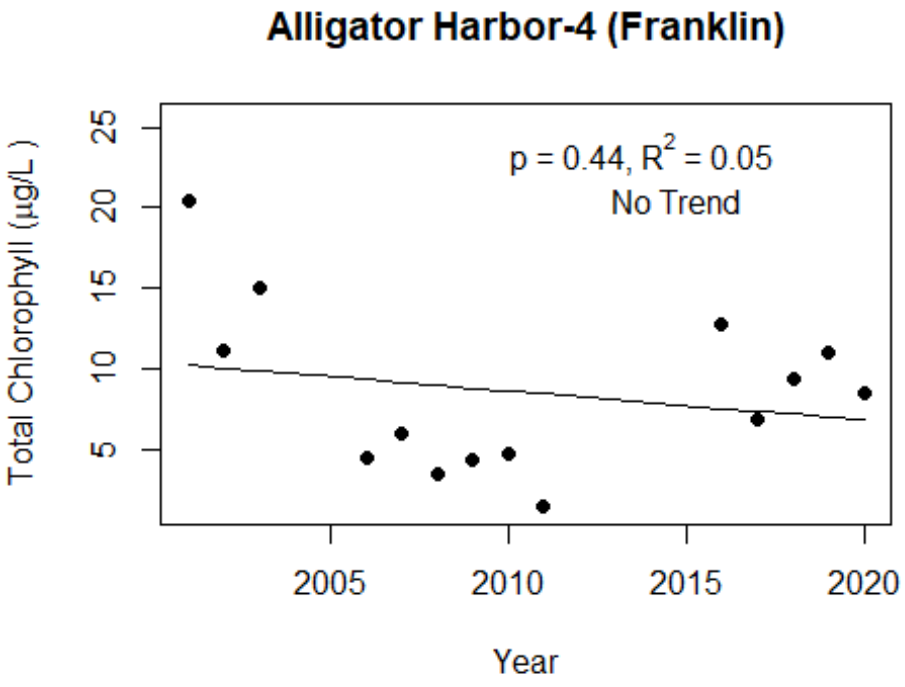
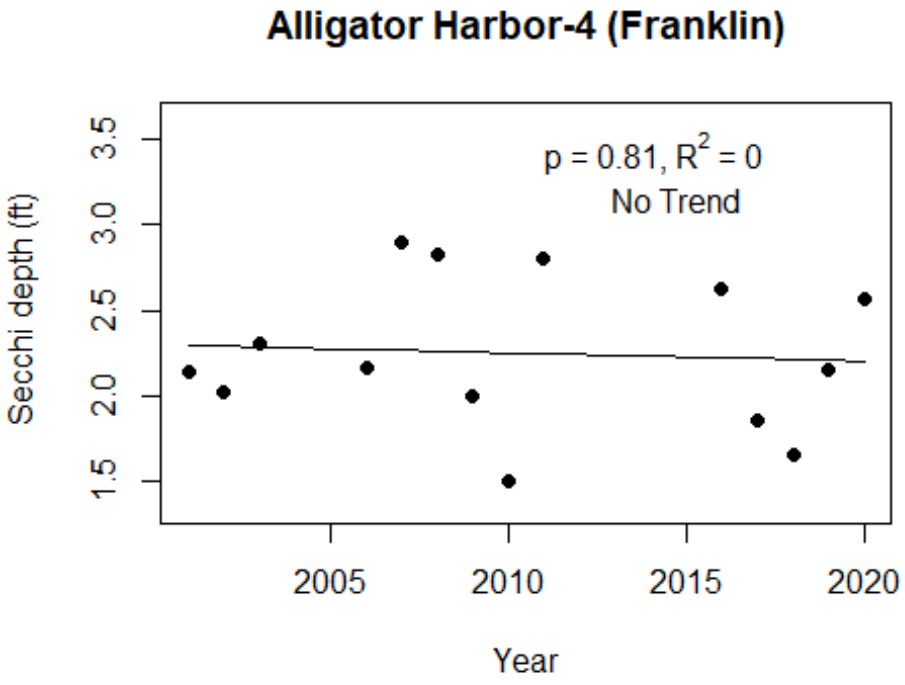


Figure 3 and Figure 4. Trend plots of annual average chlorophyll and annual average Secchi versus year. The R^2 value indicates the strength of the relations (ranges from 0.0 to 1.0; higher the R^2 the stronger the relations and the p value indicates if the relation is significant ($p < 0.05$ is significant). Trend status are reported on plots.





LAKEWATCH Report for Alligator Harbor-5 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor Alligator Harbor
Using Data Downloaded 12/9/2020

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	Franklin
Name	Alligator Harbor-5
GNIS Number	308389
Water Body Type	Estuary
Period of Record (years, range)	14 (2001 to 2020)
Latitude	29.9063
Longitude	-84.4180

Long-Term Data for Estuaries: Definitions

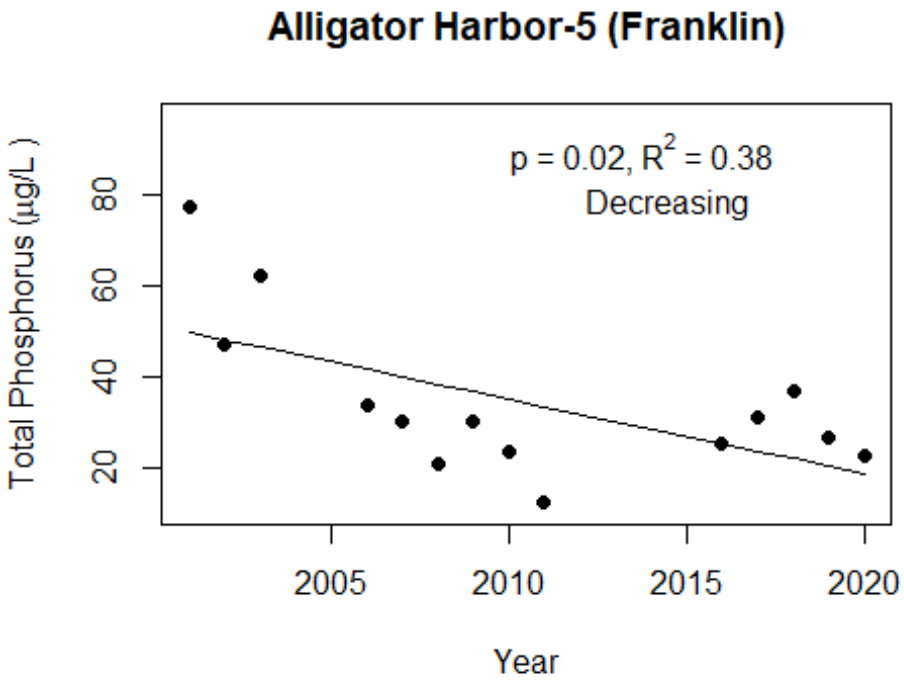
The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **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)	13 - 2020	31 (14)
Total Nitrogen (µg/L)	255 - 872	398 (14)
Chlorophyll- uncorrected (µg/L)	2 - 21	7 (14)
Secchi (ft)	1.7 - 3.8	2.8 (14.0)
Secchi (m)	0.5 - 1.2	0.8 (14.0)
Color (Pt-Co Units)	3 - 21	8 (14)
Specific Conductance (µS/cm@25 C)	18735 - 48581	38363 (14)
Salinity (ppt)	11 - 30	24 (14)

Figure 1 and Figure 2. Trend plots of annual average total phosphorus and annual average total nitrogen versus year. 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). Trend status are reported on plots.



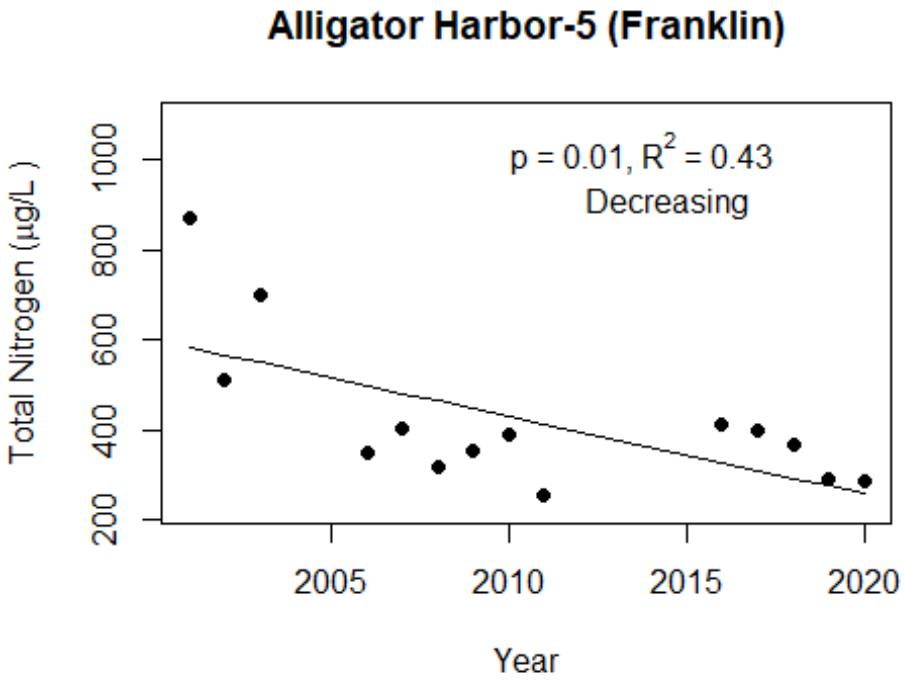
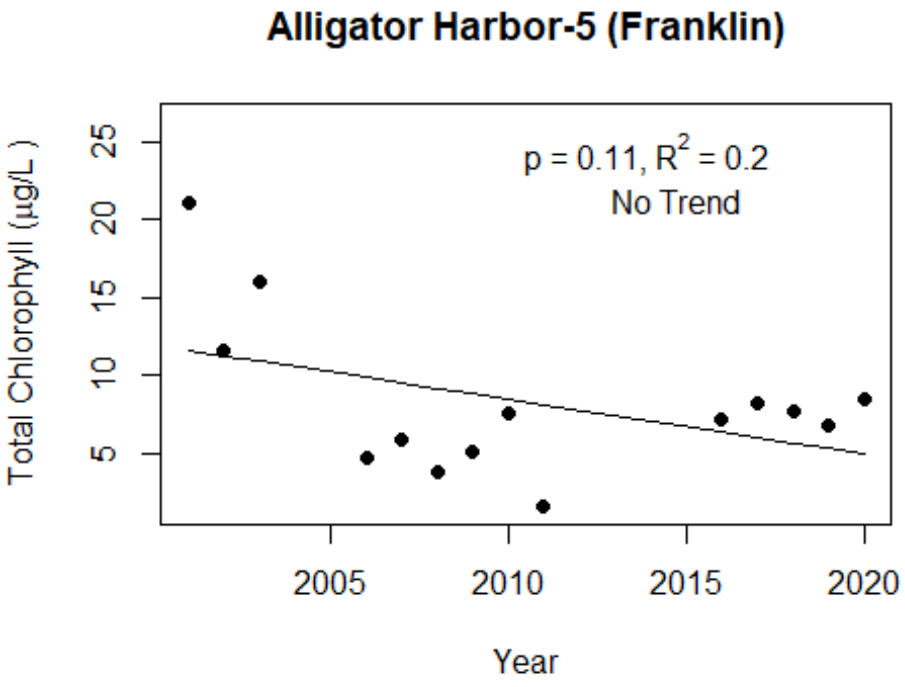
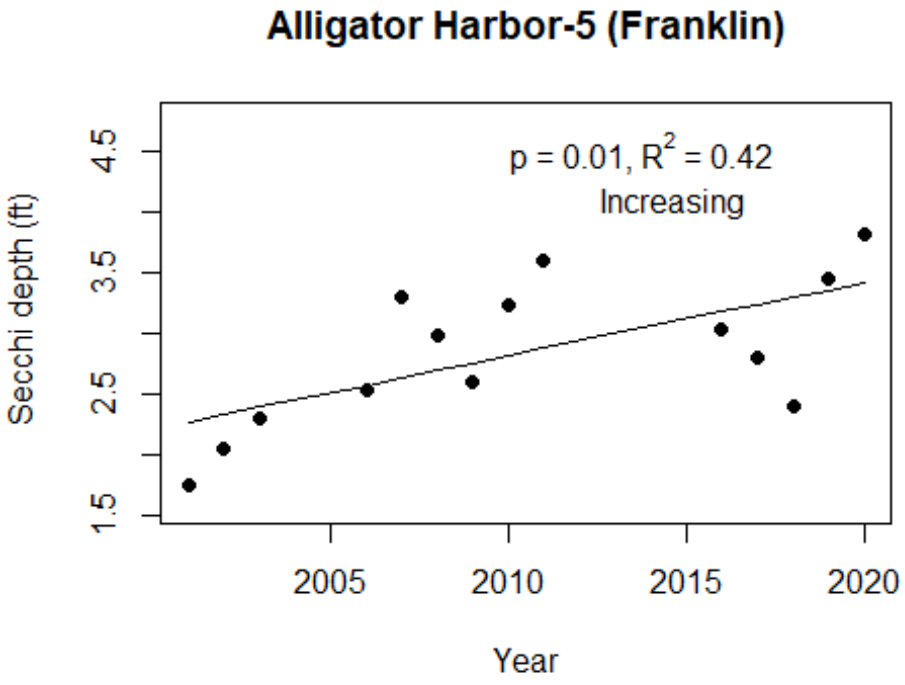


Figure 3 and Figure 4. Trend plots of annual average chlorophyll and annual average Secchi versus year. The R^2 value indicates the strength of the relations (ranges from 0.0 to 1.0; higher the R^2 the stronger the relations and the p value indicates if the relation is significant ($p < 0.05$ is significant). Trend status are reported on plots.





LAKEWATCH Report for Alligator Harbor-6 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor Alligator Harbor
Using Data Downloaded 12/9/2020

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	Franklin
Name	Alligator Harbor-6
GNIS Number	308389
Water Body Type	Estuary
Period of Record (years, range)	14 (2001 to 2020)
Latitude	29.8982
Longitude	-84.3777

Long-Term Data for Estuaries: Definitions

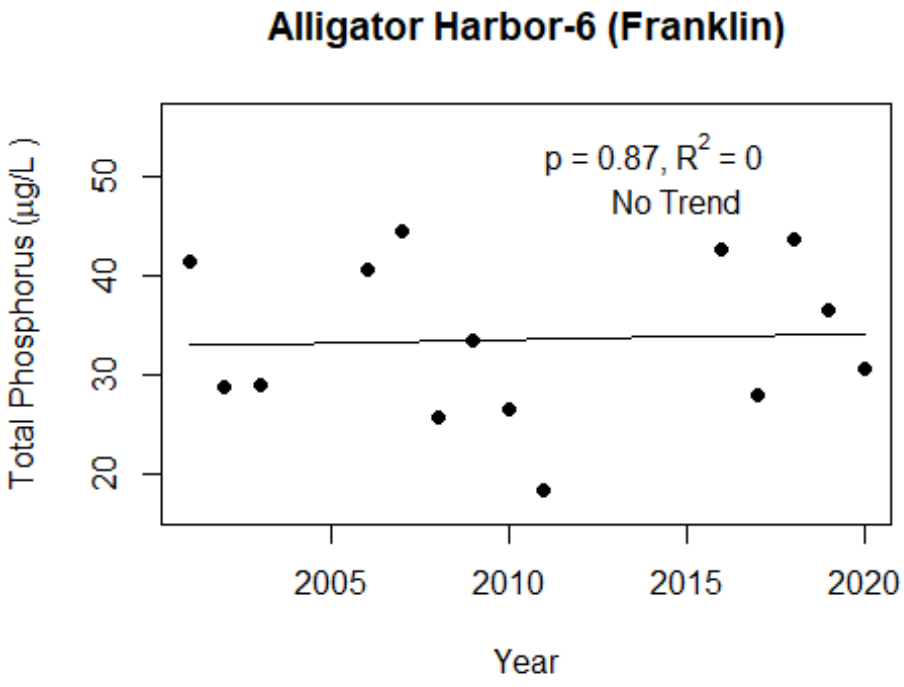
The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **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)	18 - 2020	33 (14)
Total Nitrogen (µg/L)	305 - 761	450 (14)
Chlorophyll- uncorrected (µg/L)	2 - 15	7 (14)
Secchi (ft)	1.3 - 3.4	2.2 (13.0)
Secchi (m)	0.4 - 1.0	0.7 (13.0)
Color (Pt-Co Units)	4 - 23	10 (14)
Specific Conductance (µS/cm@25 C)	26870 - 49651	38864 (14)
Salinity (ppt)	17 - 31	24 (14)

Figure 1 and Figure 2. Trend plots of annual average total phosphorus and annual average total nitrogen versus year. 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). Trend status are reported on plots.



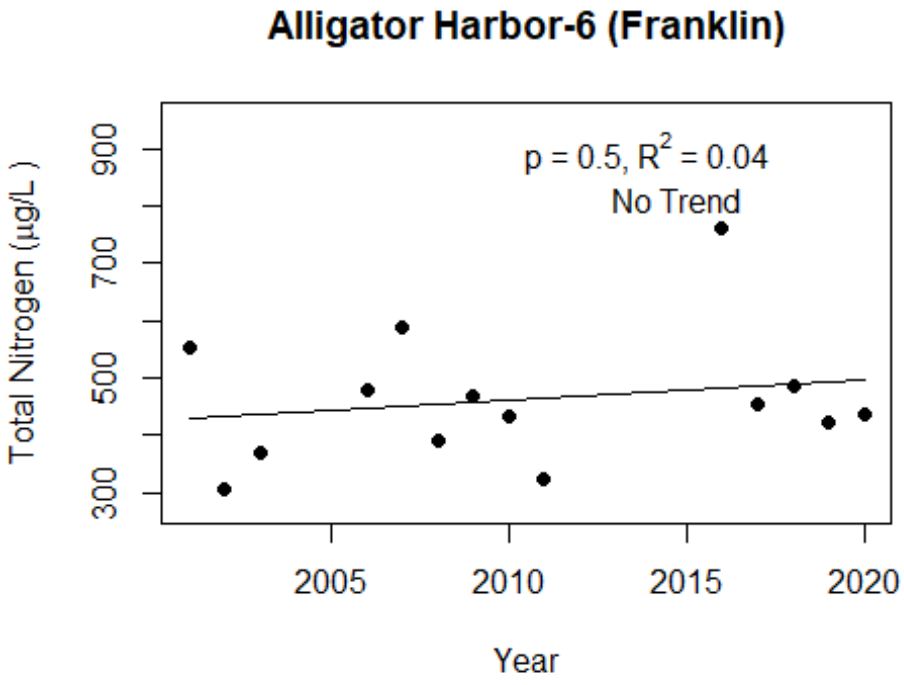
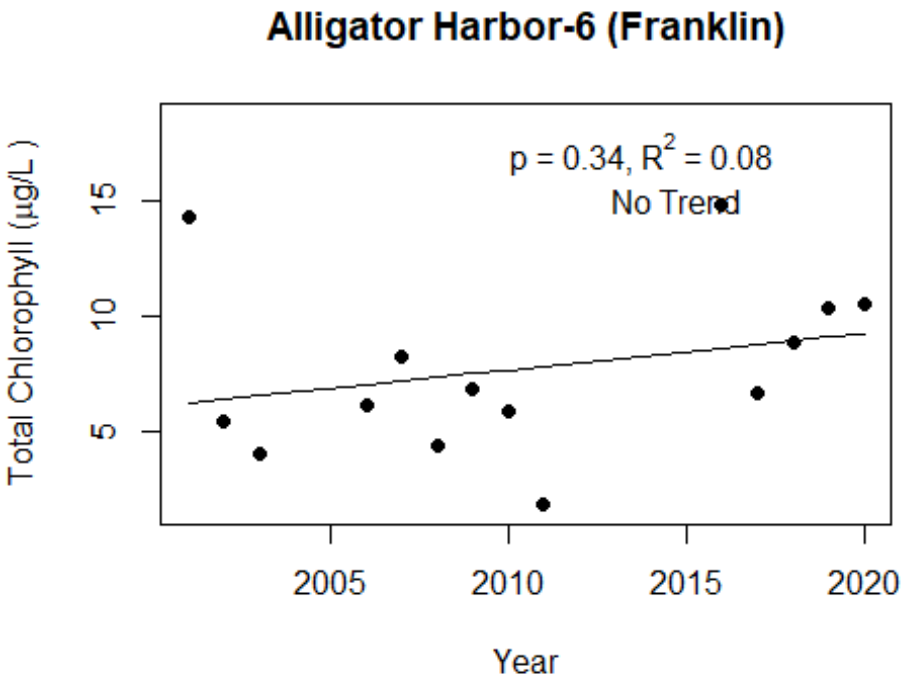
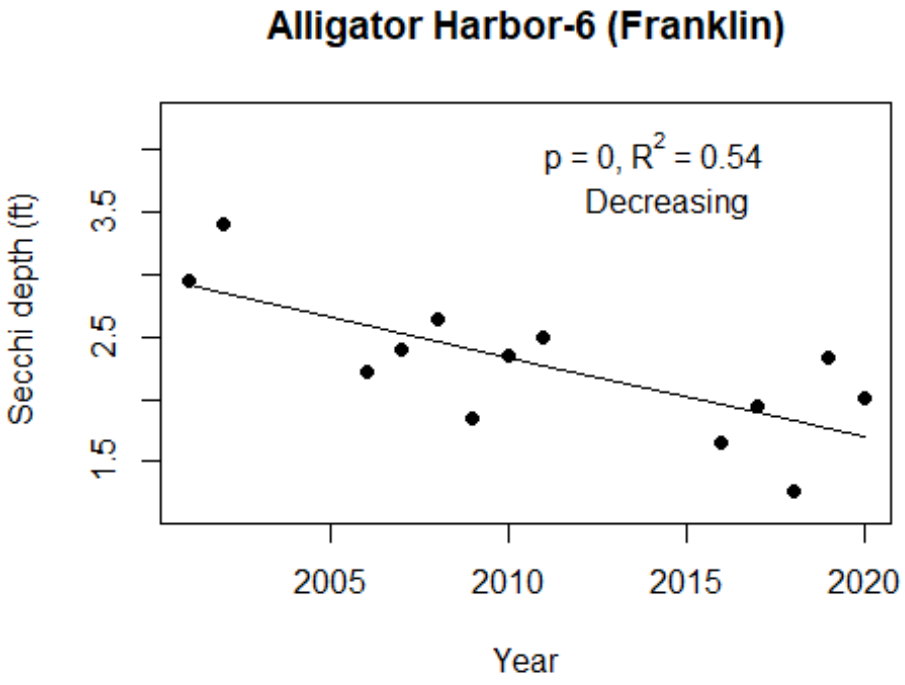


Figure 3 and Figure 4. Trend plots of annual average chlorophyll and annual average Secchi versus year. The R^2 value indicates the strength of the relations (ranges from 0.0 to 1.0; higher the R^2 the stronger the relations and the p value indicates if the relation is significant ($p < 0.05$ is significant). Trend status are reported on plots.





LAKEWATCH Report for Alligator Harbor-7 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor Alligator Harbor
Using Data Downloaded 12/9/2020

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	Franklin
Name	Alligator Harbor-7
GNIS Number	308389
Water Body Type	Estuary
Period of Record (years, range)	11 (2006 to 2020)
Latitude	29.9257
Longitude	-84.4508

Long-Term Data for Estuaries: Definitions

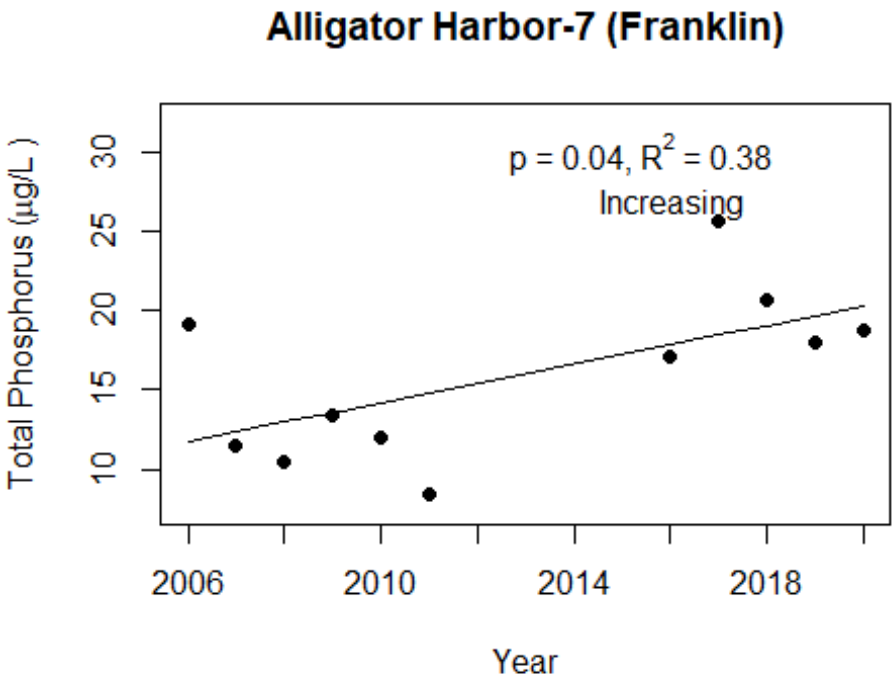
The following long-term data are the primary trophic state parameters collected by LAKEWATCH volunteers and classification variables color and specific conductance (LAKEWATCH recently began analyzing samples quarterly for color and specific conductance):

- **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)	8 - 2020	15 (11)
Total Nitrogen (µg/L)	186 - 321	238 (11)
Chlorophyll- uncorrected (µg/L)	0 - 6	3 (11)
Secchi (ft)	3.9 - 9.4	5.8 (11.0)
Secchi (m)	1.2 - 2.9	1.8 (11.0)
Color (Pt-Co Units)	3 - 13	7 (11)
Specific Conductance (µS/cm@25 C)	30397 - 47000	39524 (11)
Salinity (ppt)	19 - 29	25 (11)

Figure 1 and Figure 2. Trend plots of annual average total phosphorus and annual average total nitrogen versus year. 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). Trend status are reported on plots.



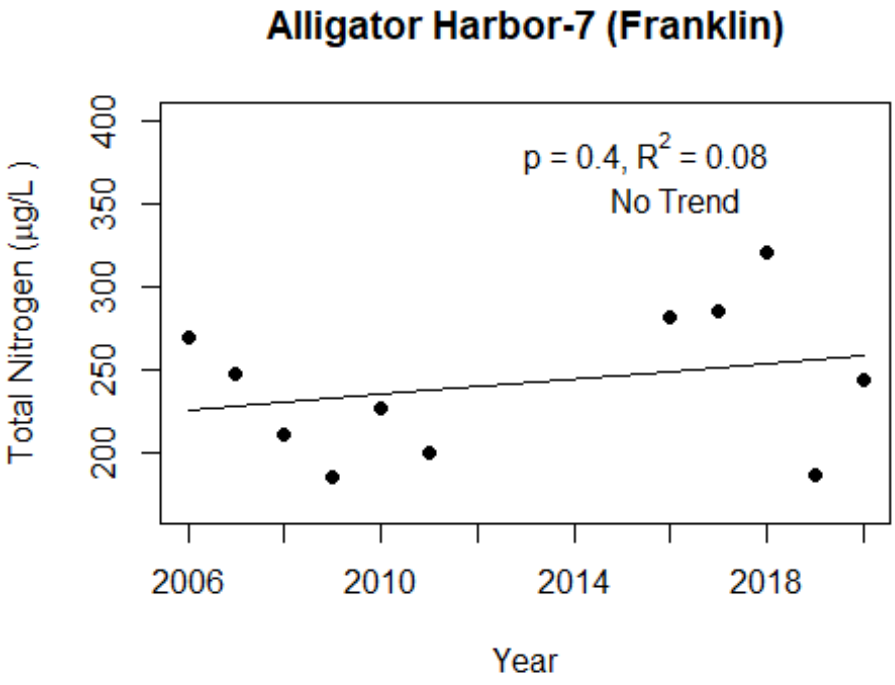
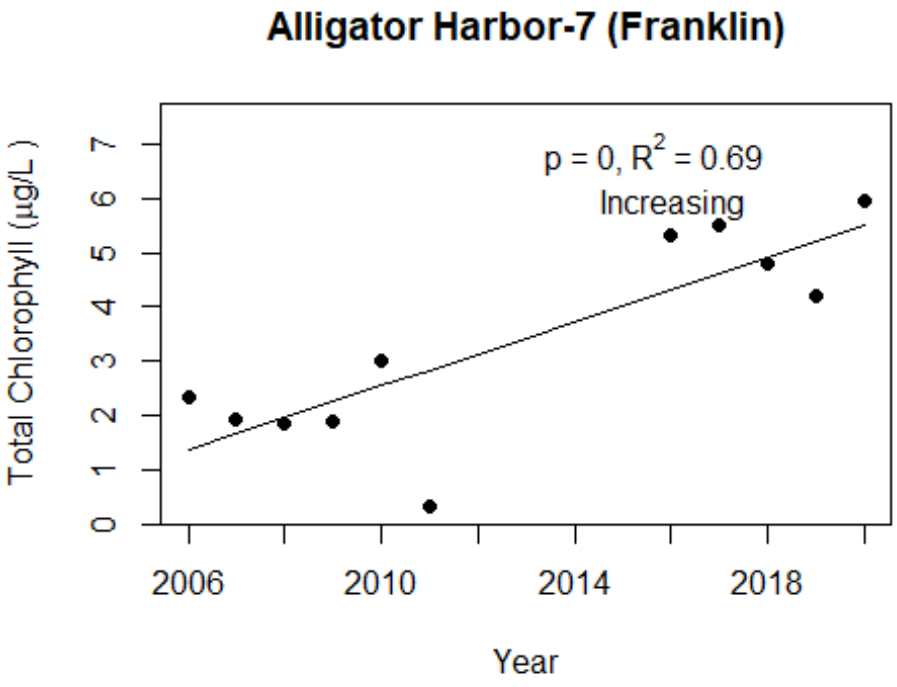
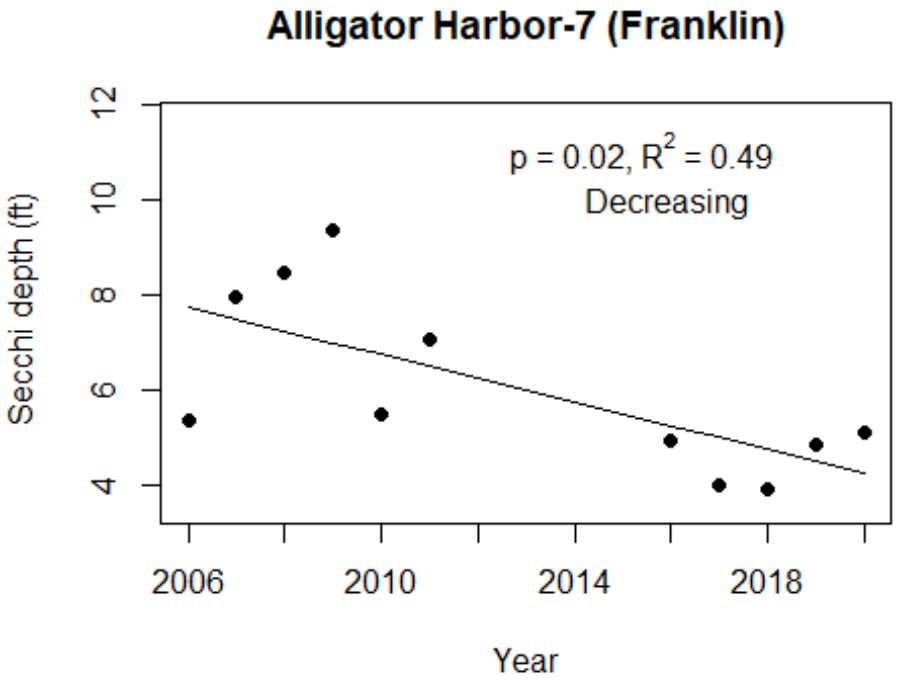


Figure 3 and Figure 4. Trend plots of annual average chlorophyll and annual average Secchi versus year. The R^2 value indicates the strength of the relations (ranges from 0.0 to 1.0; higher the R^2 the stronger the relations and the p value indicates if the relation is significant ($p < 0.05$ is significant). Trend status are reported on plots.





LAKEWATCH Report for Apalachicola Bay-1 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor Apalachicola Bay
Using Data Downloaded 12/9/2020

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	Franklin
Name	Apalachicola Bay-1
GNIS Number	277921
Water Body Type	Estuary
Period of Record (years, range)	2 (2007 to 2008)
Latitude	29.7102
Longitude	-85.0125

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)	26 - 2008	31 (2)
Total Nitrogen (µg/L)	381 - 419	400 (2)
Chlorophyll- uncorrected (µg/L)	8 - 10	9 (2)
Secchi (ft)	2.2 - 2.3	2.2 (2.0)
Secchi (m)	0.7 - 0.7	0.7 (2.0)
Color (Pt-Co Units)	6 - 7	7 (2)
Specific Conductance (µS/cm@25 C)	19000 - 29394	23632 (2)
Salinity (ppt)	12 - 18	15 (2)

LAKEWATCH Report for Apalachicola Bay-2 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor Apalachicola Bay
Using Data Downloaded 12/9/2020

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	Franklin
Name	Apalachicola Bay-2
GNIS Number	277921
Water Body Type	Estuary
Period of Record (years, range)	2 (2007 to 2008)
Latitude	29.6711
Longitude	-84.8707

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)	19 - 2008	19 (2)
Total Nitrogen (µg/L)	280 - 308	294 (2)
Chlorophyll- uncorrected (µg/L)	3 - 4	4 (2)
Secchi (ft)	3.5 - 4.7	4.1 (2.0)
Secchi (m)	1.1 - 1.4	1.2 (2.0)
Color (Pt-Co Units)	4 - 8	6 (2)
Specific Conductance (µS/cm@25 C)	13000 - 26514	18566 (2)
Salinity (ppt)	8 - 16	11 (2)

LAKEWATCH Report for Apalachicola Bay-3 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor St. George Sound
Using Data Downloaded 12/9/2020

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	Franklin
Name	Apalachicola Bay-3
GNIS Number	277921
Water Body Type	Estuary
Period of Record (years, range)	2 (2007 to 2008)
Latitude	29.6903
Longitude	-84.7999

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)	19 - 2008	20 (2)
Total Nitrogen (µg/L)	294 - 304	299 (2)
Chlorophyll- uncorrected (µg/L)	5 - 5	5 (2)
Secchi (ft)	3.8 - 4.3	4.1 (2.0)
Secchi (m)	1.2 - 1.3	1.2 (2.0)
Color (Pt-Co Units)	5 - 8	6 (2)
Specific Conductance (µS/cm@25 C)	25788 - 26000	25894 (2)
Salinity (ppt)	16 - 16	16 (2)

LAKEWATCH Report for Apalachicola Bay-4 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor St. George Sound
Using Data Downloaded 12/9/2020

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	Franklin
Name	Apalachicola Bay-4
GNIS Number	277921
Water Body Type	Estuary
Period of Record (years, range)	2 (2007 to 2008)
Latitude	29.7387
Longitude	-84.8731

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)	31 - 2008	31 (2)
Total Nitrogen (µg/L)	356 - 393	374 (2)
Chlorophyll- uncorrected (µg/L)	4 - 5	4 (2)
Secchi (ft)	2.1 - 2.6	2.4 (2.0)
Secchi (m)	0.6 - 0.8	0.7 (2.0)
Color (Pt-Co Units)	5 - 10	7 (2)
Specific Conductance (µS/cm@25 C)	17146 - 36000	24845 (2)
Salinity (ppt)	10 - 22	15 (2)

LAKEWATCH Report for Apalachicola Bay-5 in Franklin County
Estuary and Estuary Segment: Apalachicola Bay and Alligator Harbor East Bay
Using Data Downloaded 12/9/2020

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	Franklin
Name	Apalachicola Bay-5
GNIS Number	277921
Water Body Type	Estuary
Period of Record (years, range)	2 (2007 to 2008)
Latitude	29.7400
Longitude	-84.9040

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)	26 - 2008	27 (2)
Total Nitrogen (µg/L)	347 - 400	373 (2)
Chlorophyll- uncorrected (µg/L)	7 - 8	7 (2)
Secchi (ft)	2.1 - 2.5	2.3 (2.0)
Secchi (m)	0.6 - 0.8	0.7 (2.0)
Color (Pt-Co Units)	4 - 13	8 (2)
Specific Conductance (µS/cm@25 C)	6910 - 20000	11756 (2)
Salinity (ppt)	4 - 12	7 (2)

LAKEWATCH Report for Turtle Harbor-1 in Franklin County
Estuary and Estuary Segment:
Using Data Downloaded 12/9/2020

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	Franklin
Name	Turtle Harbor-1
GNIS Number	292576
Water Body Type	Estuary
Period of Record (years, range)	2 (2016 to 2017)
Latitude	29.7369
Longitude	-85.0056

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)	35 - 2017	37 (2)
Total Nitrogen (µg/L)	430 - 539	482 (2)
Chlorophyll- uncorrected (µg/L)	14 - 14	14 (2)
Secchi (ft)	2.0 - 2.2	2.1 (2.0)
Secchi (m)	0.6 - 0.7	0.6 (2.0)
Color (Pt-Co Units)	16 - 22	19 (2)
Specific Conductance (µS/cm@25 C)	729 - 2222	1273 (2)
Salinity (ppt)	0 - 4	1 (2)

LAKEWATCH Report for Turtle Harbor-2 in Franklin County
Estuary and Estuary Segment:
Using Data Downloaded 12/9/2020

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	Franklin
Name	Turtle Harbor-2
GNIS Number	292576
Water Body Type	Estuary
Period of Record (years, range)	2 (2016 to 2017)
Latitude	29.7370
Longitude	-85.0046

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)	36 - 2017	36 (2)
Total Nitrogen (µg/L)	468 - 494	481 (2)
Chlorophyll- uncorrected (µg/L)	11 - 13	12 (2)
Secchi (ft)	2.0 - 2.6	2.3 (2.0)
Secchi (m)	0.6 - 0.8	0.7 (2.0)
Color (Pt-Co Units)	16 - 33	23 (2)
Specific Conductance (µS/cm@25 C)	700 - 1153	898 (2)
Salinity (ppt)	0 - 1	0 (2)

LAKEWATCH Report for Turtle Harbor-3 in Franklin County
Estuary and Estuary Segment:
Using Data Downloaded 12/9/2020

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	Franklin
Name	Turtle Harbor-3
GNIS Number	292576
Water Body Type	Estuary
Period of Record (years, range)	2 (2016 to 2017)
Latitude	29.7370
Longitude	-85.0032

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)	33 - 2017	35 (2)
Total Nitrogen (µg/L)	459 - 582	517 (2)
Chlorophyll- uncorrected (µg/L)	14 - 15	14 (2)
Secchi (ft)	2.2 - 2.3	2.2 (2.0)
Secchi (m)	0.7 - 0.7	0.7 (2.0)
Color (Pt-Co Units)	19 - 30	24 (2)
Specific Conductance (µS/cm@25 C)	949 - 1178	1057 (2)
Salinity (ppt)	0 - 1	1 (2)

LAKEWATCH Report for Turtle Harbor-4 in Franklin County
Estuary and Estuary Segment:
Using Data Downloaded 12/9/2020

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	Franklin
Name	Turtle Harbor-4
GNIS Number	292576
Water Body Type	Estuary
Period of Record (years, range)	1 (2017 to 2017)
Latitude	29.7370
Longitude	-85.0030

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)	37 - 2017	37 (1)
Total Nitrogen (µg/L)	1070 - 1070	1070 (1)
Chlorophyll- uncorrected (µg/L)	15 - 15	15 (1)
Secchi (ft)	2.5 - 2.5	2.5 (1.0)
Secchi (m)	0.8 - 0.8	0.8 (1.0)
Color (Pt-Co Units)	45 - 45	45 (1)
Specific Conductance (µS/cm@25 C)	1713 - 1713	1713 (1)
Salinity (ppt)	1 - 1	1 (1)