Alligator Creek Condition Report for 2023

FAIL

CHL N P B SCI

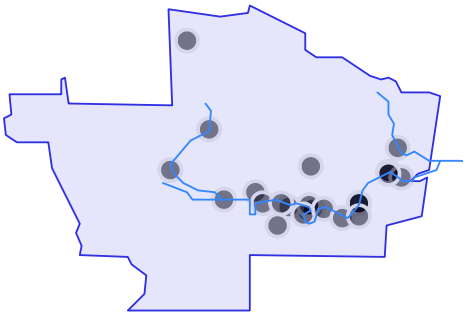
3 out of 4 primary indicators were rated as **PASS**.

"Primary" are nutrient related (Chl, N, P) and bacteria (B) parameters.

All four indicators must pass for the creek to be rated as **PASS**.

Greyed out values indicate no data for the report year.

Alligator Creek



Summary

Most of the watersheds in Pinellas County contain at least one fixed monitoring station near the final discharge point of the tributary or watershed, just upstream of tidal influence. Some watersheds have a monitoring station located in a tidally influenced area, and samples are collected at the lowest outgoing tide condition for these sites. Stream water quality monitoring occurs eight times throughout the year during four dry season periods, October through early June, and four wet season periods, June through September. Biological monitoring, indicated by Stream Condition Index (SCI), occurs only at certain locations, with data collected twice a year every other year. The SCI is determined by monitoring the macroinvertebrate community living in a stream and assessing habitat quality in and along the stream.

Dive Deeper!

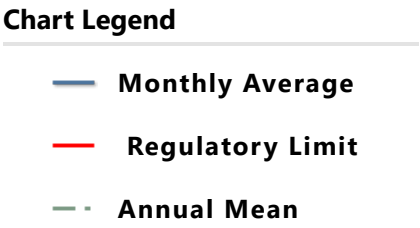
- **Explore Water Quality Trends**
- **Water Quality Contour Maps**

Water Quality Results

Monitoring data is analyzed to determine stream health based on State water quality standards. Official determination of impairment or attainment of the water quality standards is performed by FDEP and is based on at least three years and up to seven and a half years of data. Information on approximately 17 different parameters are collected at stream sites, but only total nitrogen, total phosphorus, chlorophyll *a*, dissolved oxygen (percent saturation), and bacteria are assessed according to established water quality criteria mandated by the Clean Water Act. Additionally, the floral and faunal communities (SCI) are assessed at some sites to determine whether waters support a healthy aquatic community.

The "pass/fail" conditions presented here do not indicate impairment as determined by the official **Florida Department of Environmental Protection** Impaired Waters Rule assessment but, rather, give an indication of stream condition in a particular year in relation to the set regulatory numeric limits. Streams receive an annual "PASS" rating for each parameter if the mean value is below the regulatory value and a "FAIL" rating if the mean value exceeds the regulatory value. Not all water quality parameters have an established numeric criterion, so only some of the graphs below show the regulatory limit, represented by a horizontal red line.

The graphs here illustrate results over the past five years. Data from sites monitored within a single waterbody identification basin (WBID) are combined to determine water quality status for each WBID, and the annual geometric mean of sample results is indicated on the graph for the most recent year. The table to the left of the graph gives the annual and historic range of values for the indicator.

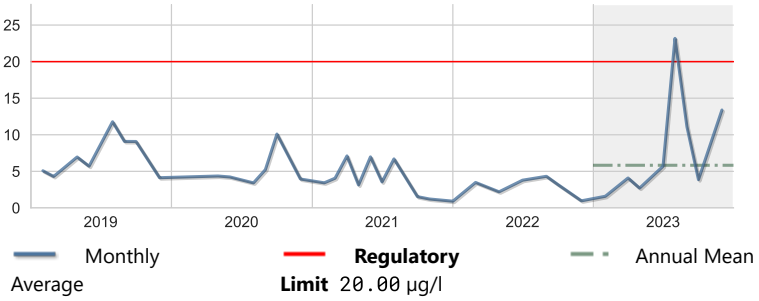


Click the graph to view a larger image and to download the full dataset.

Freshwater Portion of the Stream

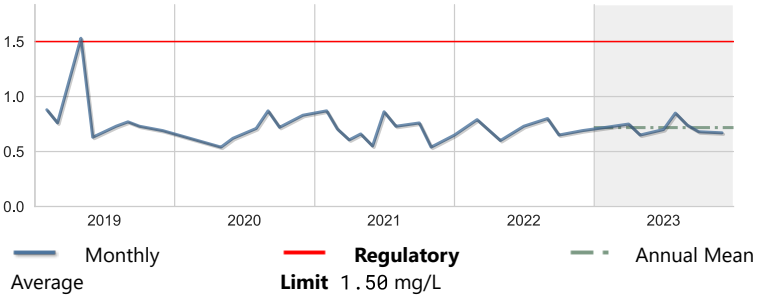
Chlorophyll a

Units: µg/l	Year 2023	Historical period of record
High	25.70	314.00
Mean	5.83	15.04
Low	1.20	0.00
No. of Samples	16	769



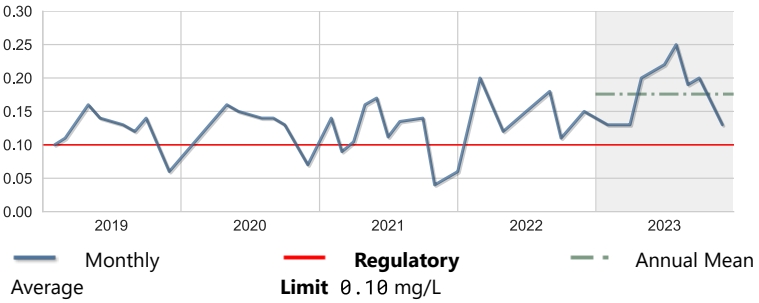
Nitrogen, Total

Units: mg/L	Year 2023	Historical period of record
High	0.85	36.00
Mean	0.72	1.48
Low	0.65	0.11
No. of Samples	8	1,222



Phosphorus, Total

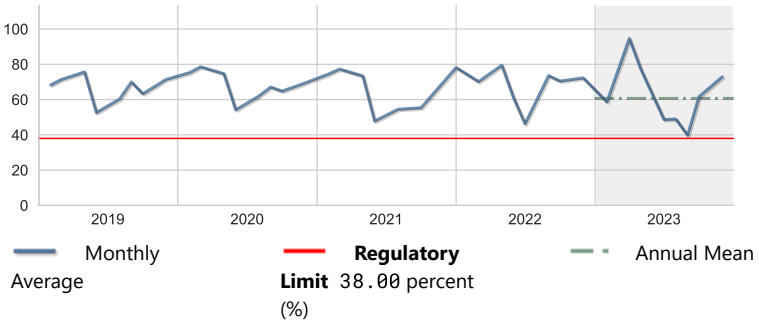
Units: mg/L	Year 2023	Historical period of record
High	0.25	7.67
Mean	0.18	0.21
Low	0.13	0.018
No. of Samples	8	1,251



Dissolved Oxygen Saturation

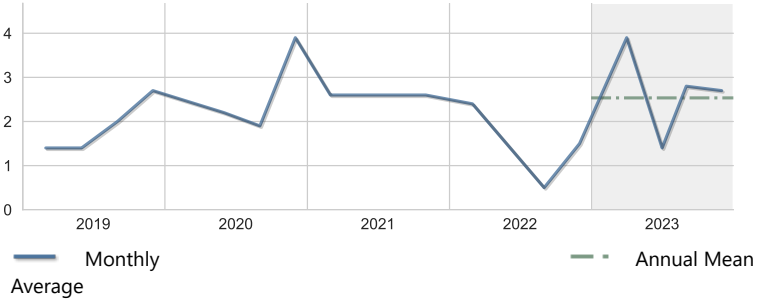
Note: Dissolved oxygen saturation percentages above the regulatory threshold meet established water quality targets.

Units: percent (%)	Year 2023	Historical period of record
High	94.70	109.00
Mean	60.67	68.18
Low	39.80	18.00
No. of Samples	8	164



BOD, Biochemical oxygen demand

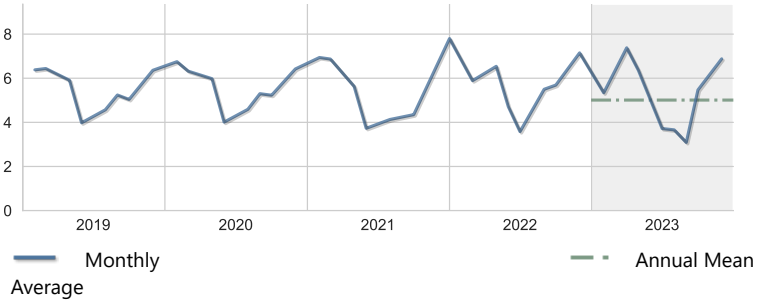
Units: mg/l	Year 2023	Historical period of record
High	3.90	14.00
Mean	2.53	2.01
Low	1.40	0.10
No. of Samples	4	335



Dissolved oxygen (DO)

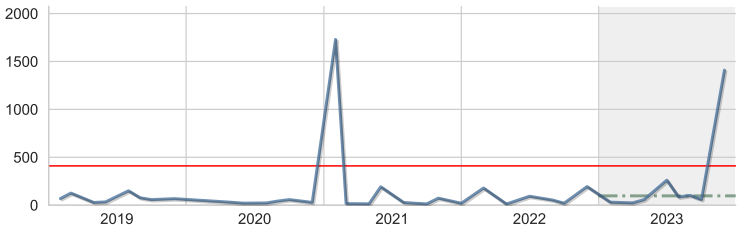
Note: Dissolved oxygen (DO) measurements above the regulatory threshold meet established water quality targets and/or "low" DO results do not meet regulatory requirements.

Units: mg/l	Year 2023	Historical period of record
High	7.38	13.60
Mean	5.01	5.09
Low	3.09	0.61
No. of Samples	8	487



Escherichia coli

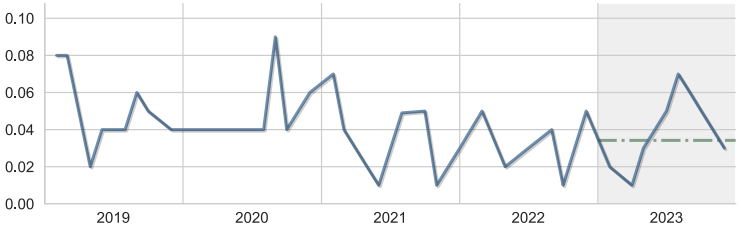
Units: MPN/100ml	Year 2023	Historical period of record
High	1410.00	3400.00
Mean	97.16	57.34
Low	24.00	1.00
No. of Samples	8	70



Monthly Average | **Regulatory Limit** 410.00 MPN/100ml | Annual Mean

Nitrogen, ammonia as N

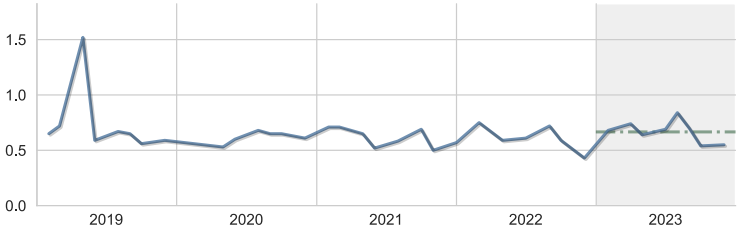
Units: mg/L	Year 2023	Historical period of record
High	0.07	1.50
Mean	0.03	0.1
Low	0.01	0.01
No. of Samples	8	306



Monthly Average | Annual Mean

Nitrogen, Kjeldahl

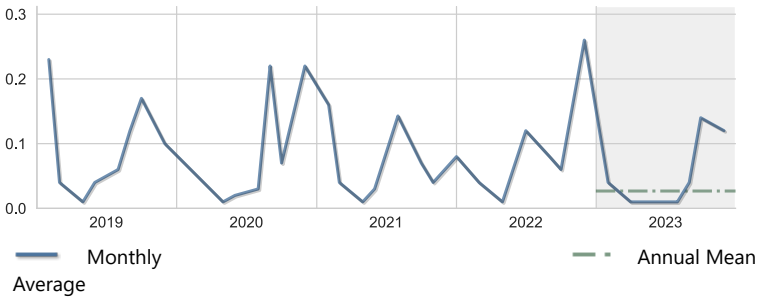
Units: mg/L	Year 2023	Historical period of record
High	0.84	7.80
Mean	0.67	0.82
Low	0.54	0.01
No. of Samples	8	748



Monthly Average | Annual Mean

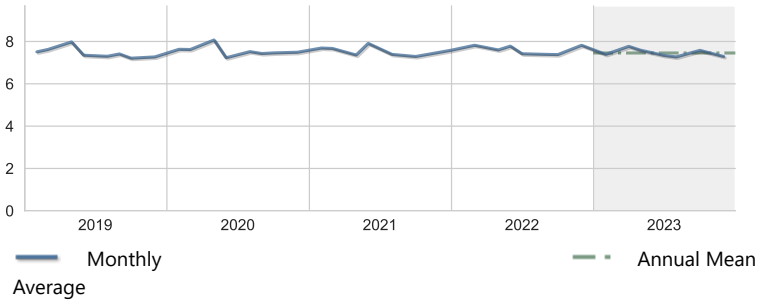
Nitrogen, Nitrite + Nitrate as N

Units: mg/L	Year 2023	Historical period of record
High	0.14	1.50
Mean	0.03	0.14
Low	0.01	0.01
No. of Samples	8	528



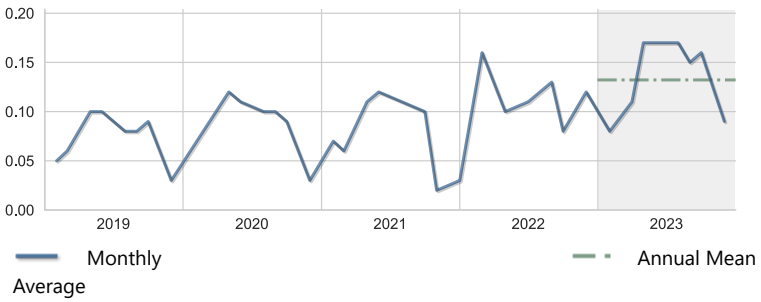
pH

Units: None	Year 2023	Historical period of record
High	7.77	8.60
Mean	7.46	7.39
Low	7.27	5.80
No. of Samples	8	517



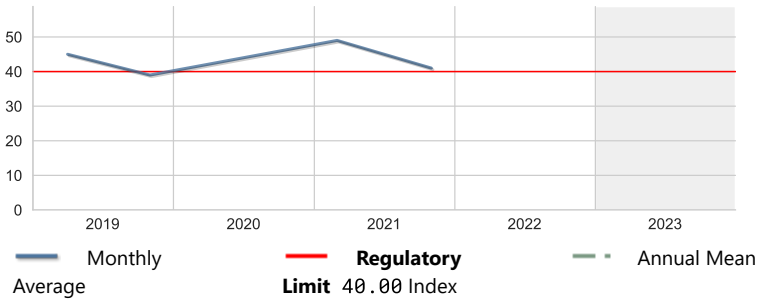
Phosphorus, orthophosphate as P

Units: mg/l	Year 2023	Historical period of record
High	0.17	3.10
Mean	0.13	0.07
Low	0.08	0.01
No. of Samples	8	282



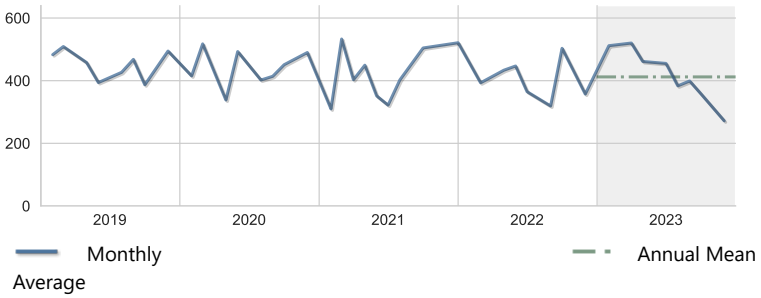
SCI Score

Units: Index	Year 2023	Historical period of record
High		63.00
Mean		48.29
Low		39.00
No. of Samples	0	8



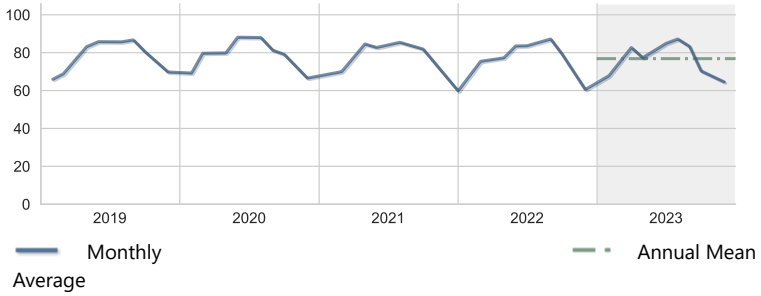
Specific Conductance

Units: µmho	Year 2023	Historical period of record
High	520.20	5030.00
Mean	412.07	320.2
Low	271.80	0.00
No. of Samples	8	703



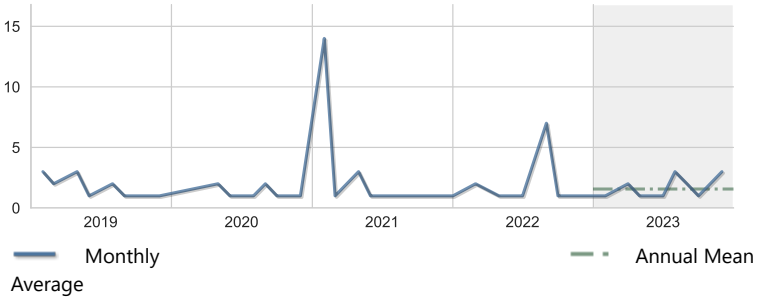
Temperature, water

Units: °F	Year 2023	Historical period of record
High	87.224	93.848
Mean	76.84	75.38
Low	64.58	55.40
No. of Samples	8	482



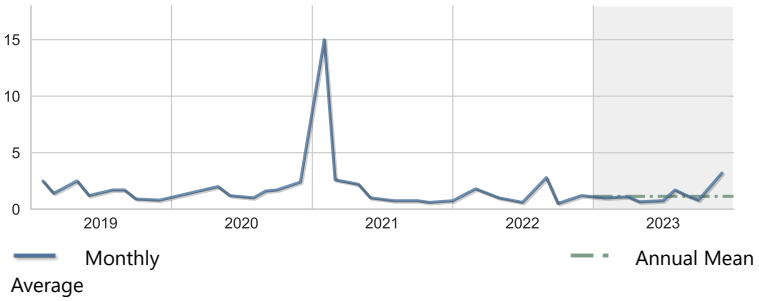
Total Suspended Solids (TSS)

Units: mg/l	Year 2023	Historical period of record
High	3.00	115.00
Mean	1.57	3.01
Low	1.00	1.00
No. of Samples	8	269



Turbidity

Units: NTU	Year 2023	Historical period of record
High	3.20	51.00
Mean	1.14	2.29
Low	0.65	0.30
No. of Samples	8	279



Tidal Portion of the Stream

There are no tidal areas in this stream, or water quality data is not currently collected in the tidal portion.