Clower Creek Condition Report for 2025

CAUTION

CHL N P DO

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**.

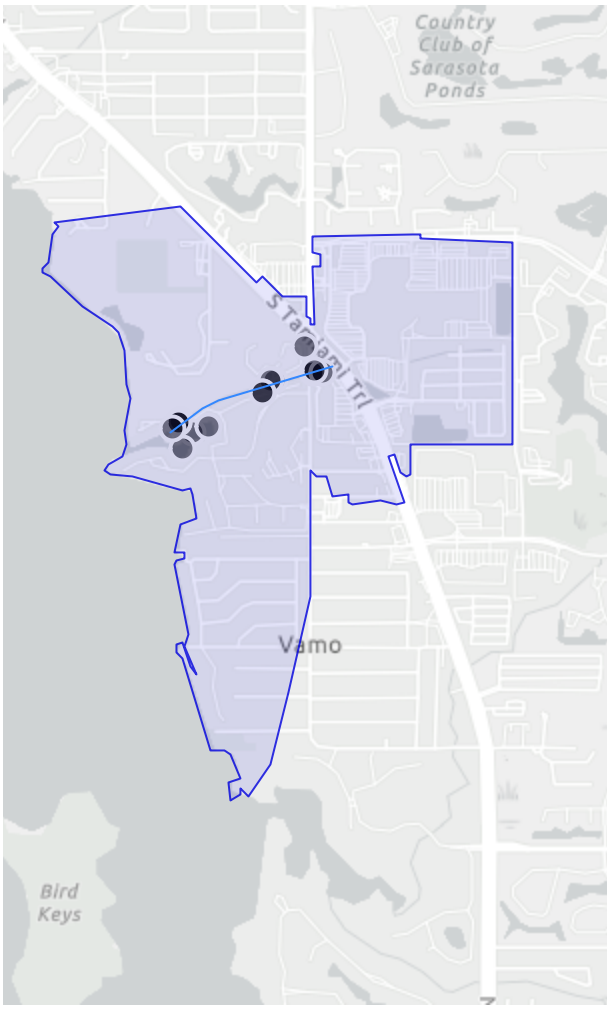
Greyed out values indicate no data for the report year.

Size: 284 acres
Location: Central Sarasota County
Discharges into: Little Sarasota Bay

For more information, please see: **Little Sarasota Bay Water Quality Management Plan (2012)**

View county-wide water quality trends »

Clower Creek



Water Chemistry Ratings

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.

Chart Legend

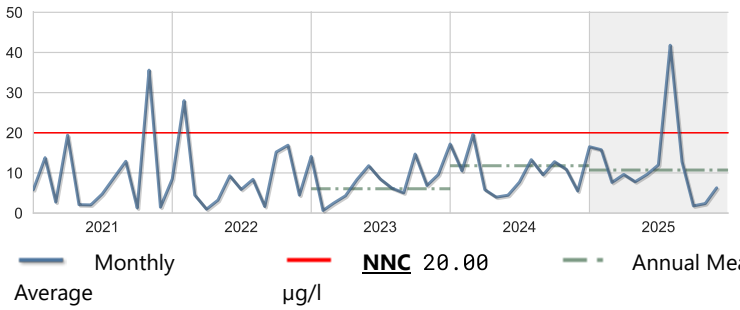
- **Monthly Average**
- **Threshold**
- **Annual Mean**

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

Freshwater Portion of the Creek

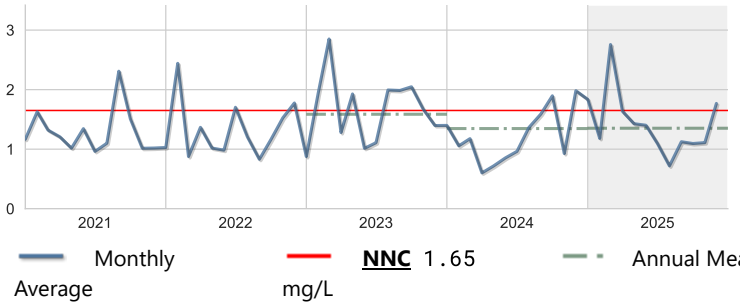
Chlorophyll a

Units: µg/l	Year 2025	Historical period of record
High	41.80	150.00
Mean	10.7166	4.6793
Low	1.79	0.10
No. of Samples	36	561



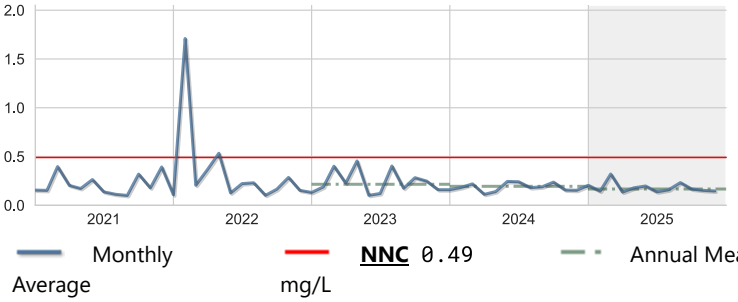
Nitrogen, Total

Units: mg/L	Year 2025	Historical period of record
High	2.758	14.051
Mean	1.3517	1.2844
Low	0.719	0.0022
No. of Samples	12	411



Phosphorus, Total

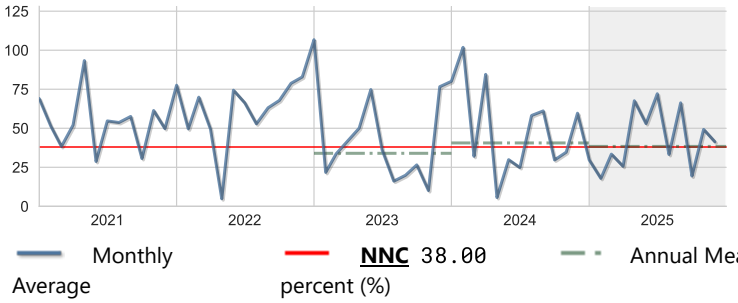
Units: mg/L	Year 2025	Historical period of record
High	0.321	3.093
Mean	0.1668	0.2764
Low	0.084	0.039
No. of Samples	15	530



Dissolved Oxygen Saturation

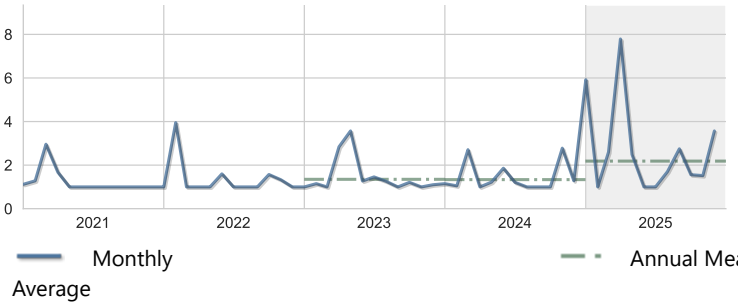
Note: Dissolved oxygen saturation percentages above the regulatory threshold meet established water quality targets.

Units: percent (%)	Year 2025	Historical period of record
High	72.13	150.548
Mean	38.38	40.49
Low	17.88	2.20
No. of Samples	12	568



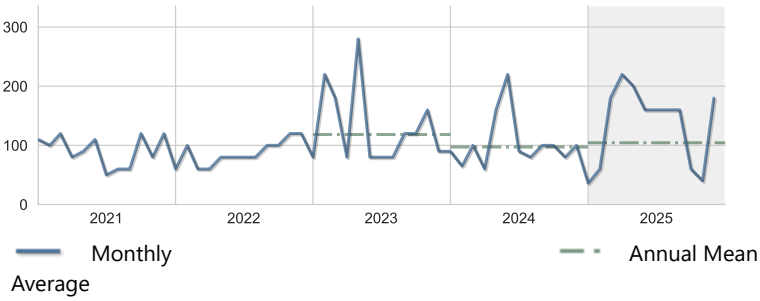
BOD, Biochemical oxygen demand

Units: mg/l	Year 2025	Historical period of record
High	7.79	7.79
Mean	2.18	1.18
Low	1.00	0.23
No. of Samples	12	425



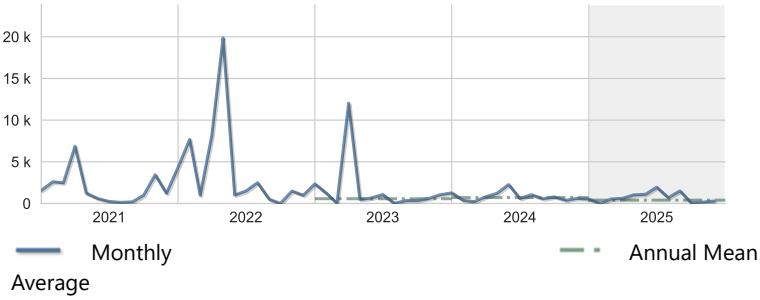
Color

Units: PCU	Year 2025	Historical period of record
High	220.00	300.00
Mean	104.39	88.77
Low	13.00	10.00
No. of Samples	13	552



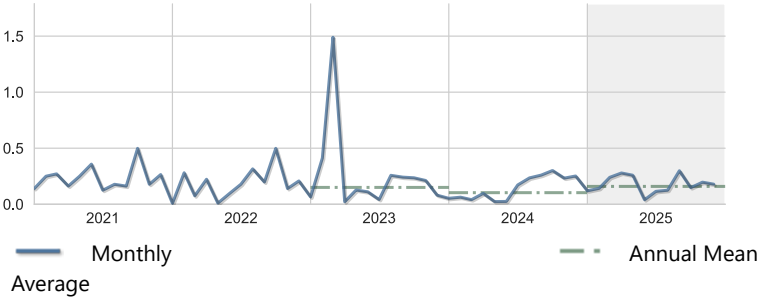
Escherichia coli

Units: MPN/100ml	Year 2025	Historical period of record
High	1956.00	19863.00
Mean	404.03	710.1
Low	10.00	10.00
No. of Samples	12	156



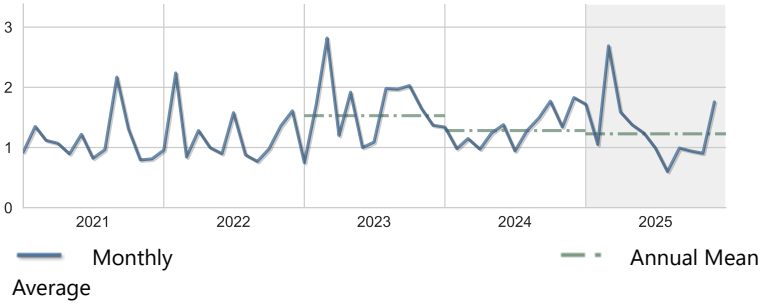
Nitrogen, Ammonia + Ammonium as N

Units: mg/L	Year 2025	Historical period of record
High	0.299	7.00
Mean	0.16	0.09
Low	0.04	0.00
No. of Samples	12	596



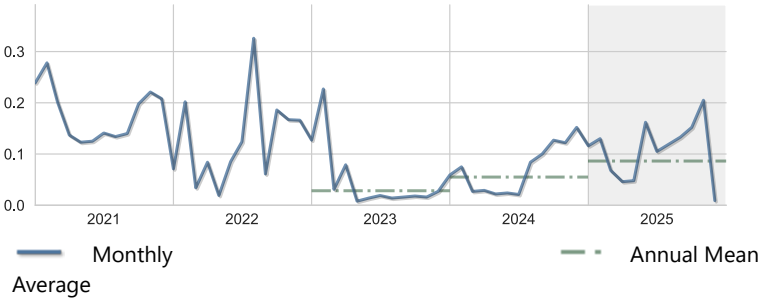
Nitrogen, Kjeldahl

Units: mg/L	Year 2025	Historical period of record
High	2.69	14.00
Mean	1.23	1.12
Low	0.60	0.17
No. of Samples	12	567



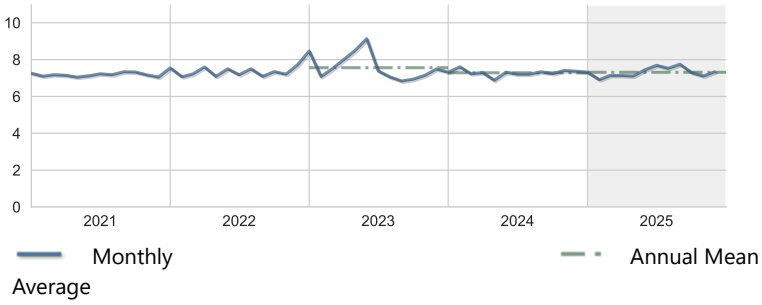
Nitrogen, Nitrite + Nitrate as N

Units: mg/L	Year 2025	Historical period of record
High	0.205	2.90
Mean	0.09	0.13
Low	0.009	0.00
No. of Samples	12	527



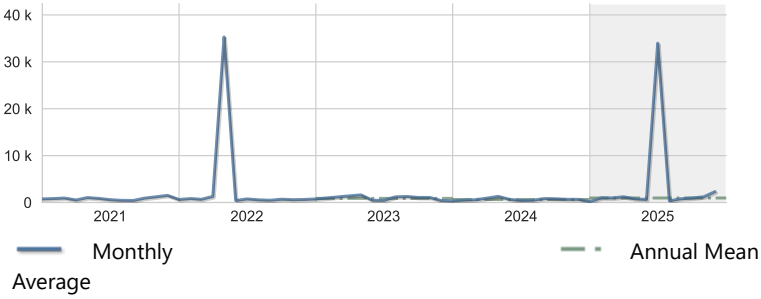
pH

Units: None	Year 2025	Historical period of record
High	7.75	9.14
Mean	7.31	7.2
Low	6.91	4.70
No. of Samples	12	630



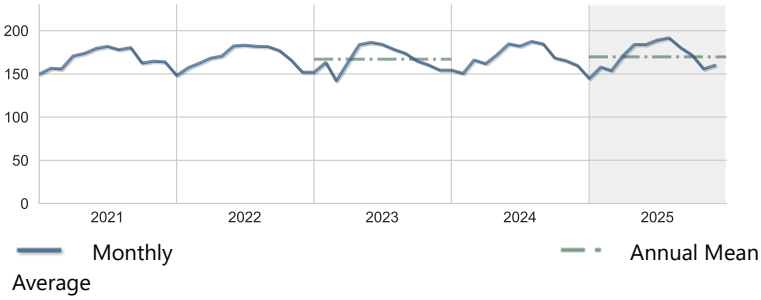
Specific conductance

Units: µmho	Year 2025	Historical period of record
High	33982.70	52344.00
Mean	965.07	1235.12
Low	48.00	0.342
No. of Samples	13	649



Temperature, water

Units: °F	Year 2025	Historical period of record
High	191.6924	191.6924
Mean	169.72	84.34
Low	144.7448	49.784
No. of Samples	12	510

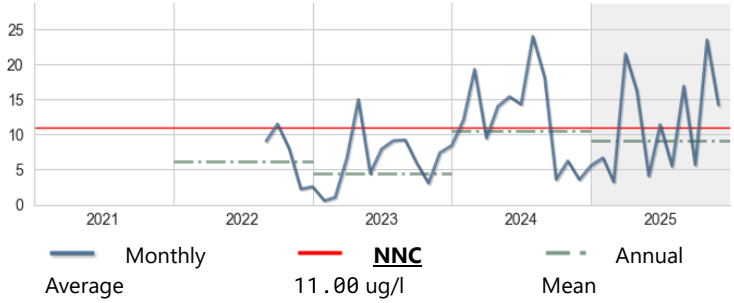


Tidal Portion of the Creek

Chlorophyll a

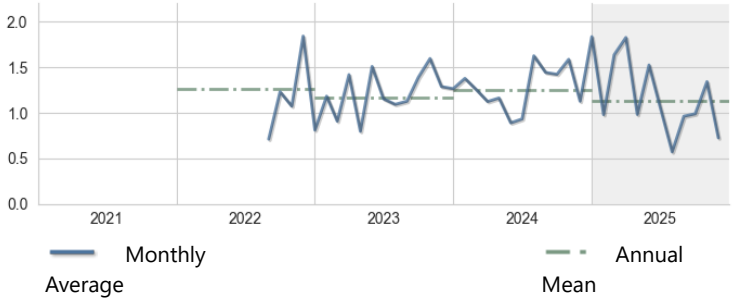
Score: Pass

Units: µg/l	Year 2025	Historical period of record
High	23.5	24.0
Mean	9.1542	7.4513
Low	3.25	0.565
No. of Samples	12	40



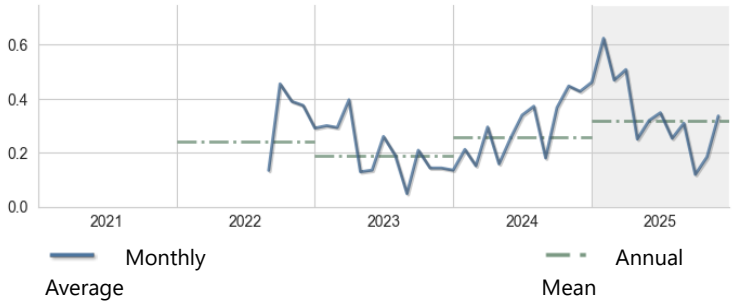
Nitrogen, Total

Units: mg/L	Year 2025	Historical period of record
High	1.8	1.8
Mean	1.1305	1.1735
Low	0.569	0.569
No. of Samples	12	40



Phosphorus, Total

Units: mg/L	Year 2025	Historical period of record
High	0.6	0.6
Mean	0.3186	0.2534
Low	0.119	0.048
No. of Samples	12	40

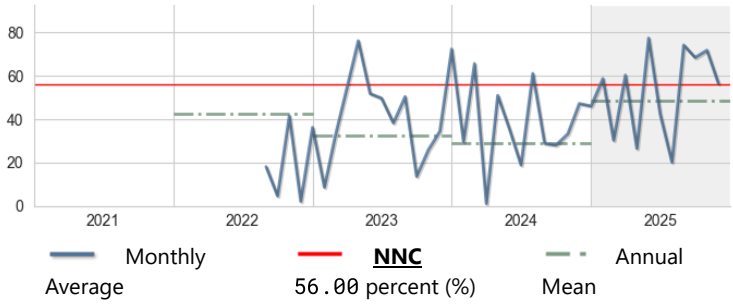


Dissolved Oxygen Saturation

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

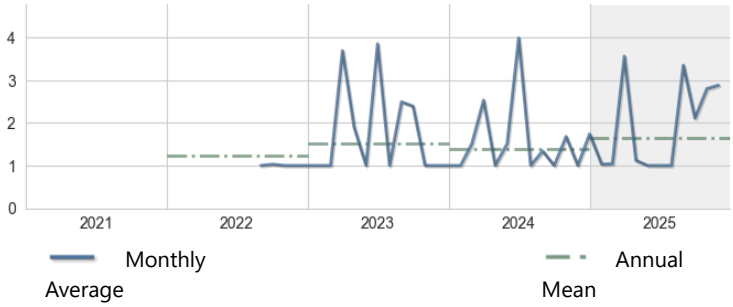
Score: Caution

Units: percent (%)	Year 2025	Historical period of record
High	77.3	77.3
Mean	48.63	31.17
Low	20.09	0.97
No. of Samples	12	39



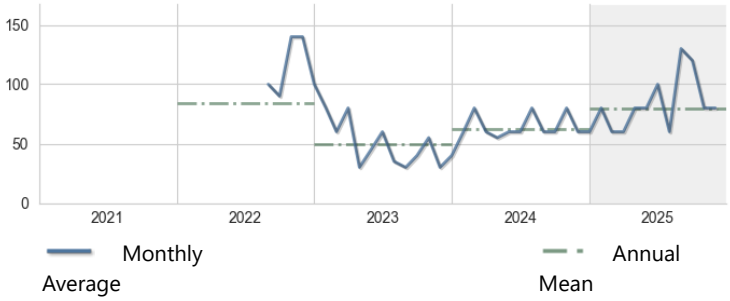
BOD, Biochemical oxygen demand

Units: mg/l	Year 2025	Historical period of record
High	3.6	4.0
Mean	1.66	1.46
Low	1.00	1.00
No. of Samples	12	40



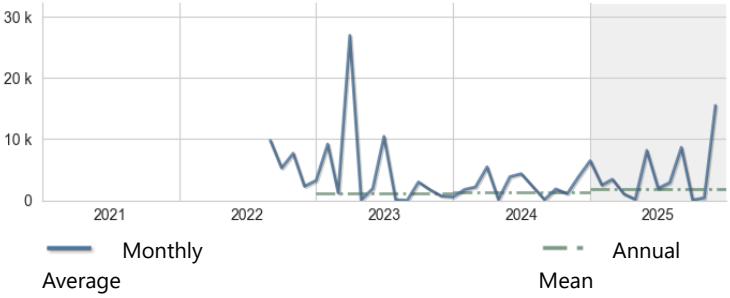
Color

Units: PCU	Year 2025	Historical period of record
High	130.0	140.0
Mean	79.76	66.45
Low	60.00	30.00
No. of Samples	12	40



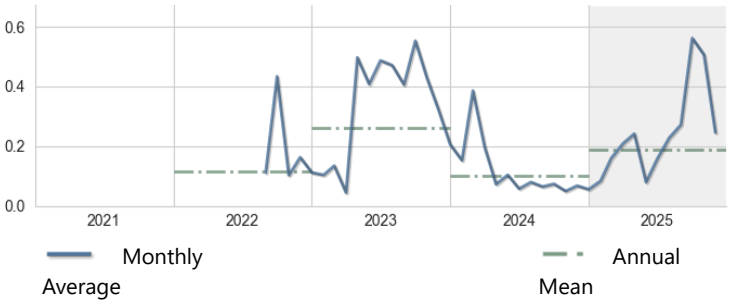
Enterococcus Group Bacteria

Units: MPN/100ml	Year 2025	Historical period of record
High	15,531.0	27,000.0
Mean	1789.25	1611.85
Low	41.00	10.00
No. of Samples	12	39



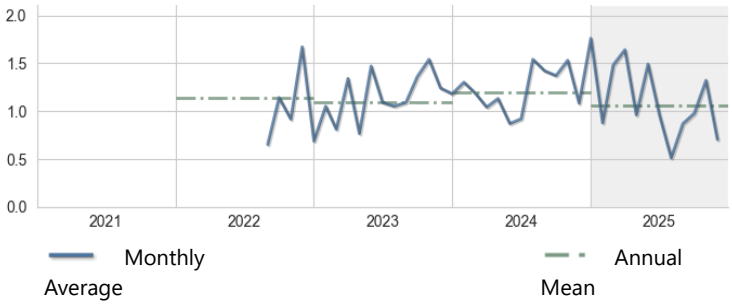
Nitrogen, Ammonia + Ammonium as N

Units: mg/L	Year 2025	Historical period of record
High	0.6	0.6
Mean	0.19	0.17
Low	0.055	0.044
No. of Samples	12	40



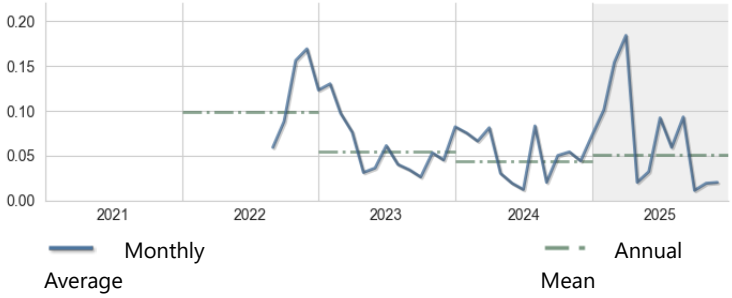
Nitrogen, Kjeldahl

Units: mg/L	Year 2025	Historical period of record
High	1.8	1.8
Mean	1.06	1.11
Low	0.51	0.51
No. of Samples	12	40



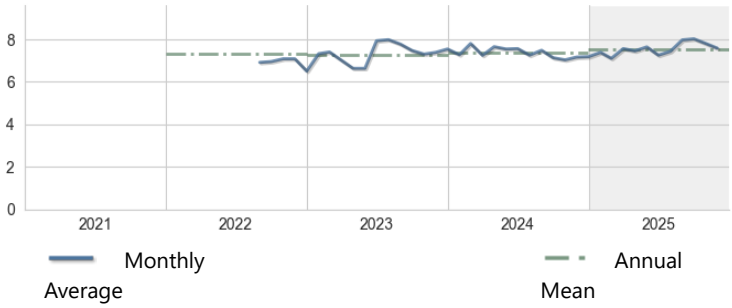
Nitrogen, Nitrite + Nitrate as N

Units: mg/L	Year 2025	Historical period of record
High	0.2	0.2
Mean	0.05	0.05
Low	0.011	0.011
No. of Samples	12	40



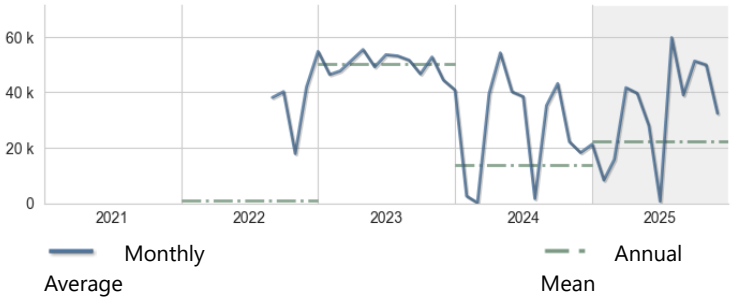
pH

Units: None	Year 2025	Historical period of record
High	8.0	8.0
Mean	7.52	7.36
Low	7.10	6.4967
No. of Samples	12	39



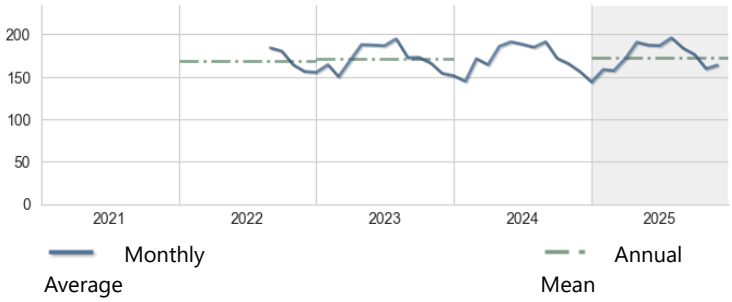
Specific conductance

Units: µmho	Year 2025	Historical period of record
High	59,774.4	59,774.4
Mean	22442.0	25308.74
Low	654.62	156.563
No. of Samples	12	39



Temperature, water

Units: °F	Year 2025	Historical period of record
High	196.1	196.1
Mean	172.41	171.8
Low	143.9996	143.9996
No. of Samples	12	39



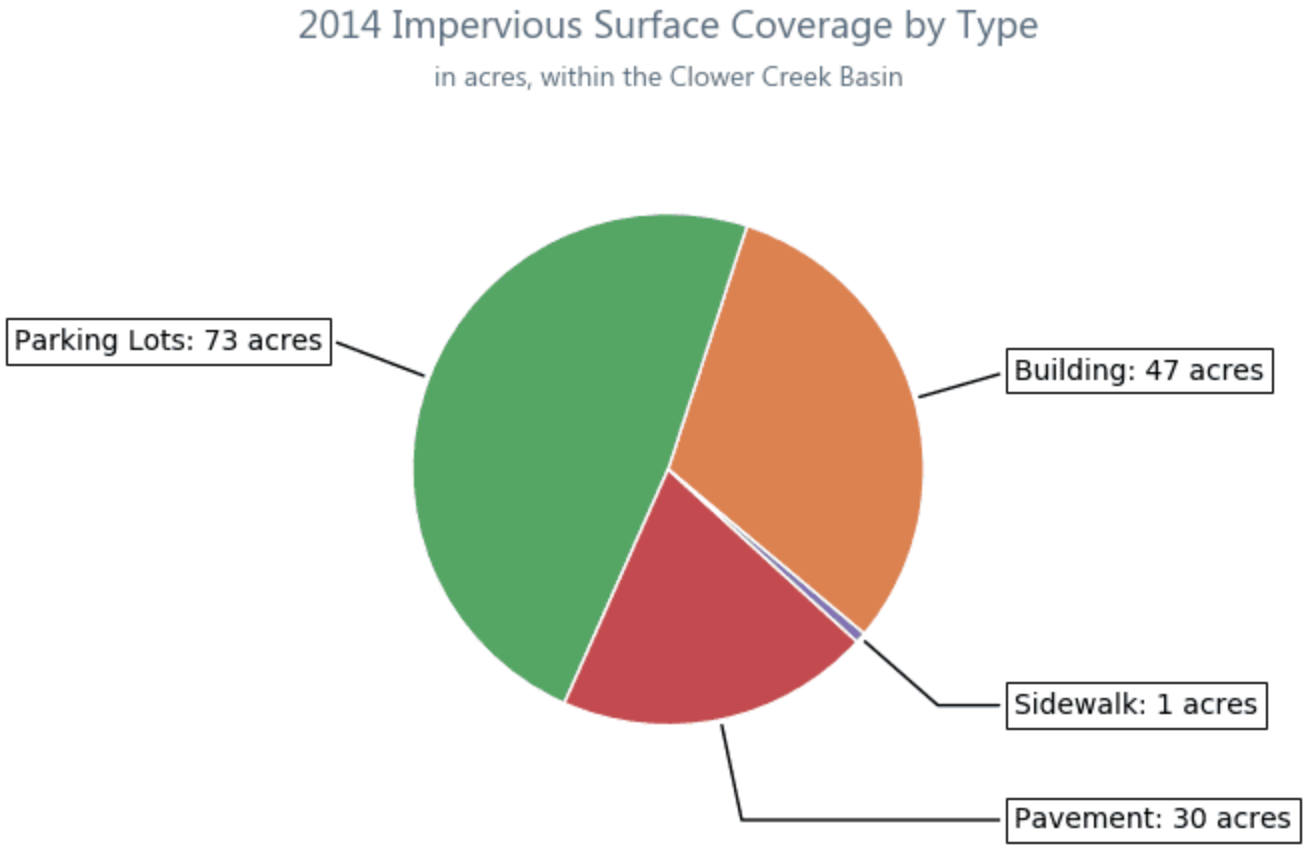
Impervious Features

Rain that falls on land that is in a natural state is absorbed and filtered by soils and vegetation as it makes it way into underground aquifers. However, in developed areas, "impervious surfaces" impede this process and contribute to polluted urban runoff entering surface waters. These surfaces include human infrastructure like roads, sidewalks, driveways and parking lots that are covered by impenetrable materials such as asphalt, concrete, brick and stone, as well as buildings and other permanent structures. Soils that have been disturbed and compacted by urban development are often impervious as well.

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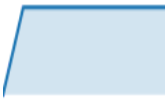
53% of the land area within the **Clower Creek Basin** is covered by impervious surfaces

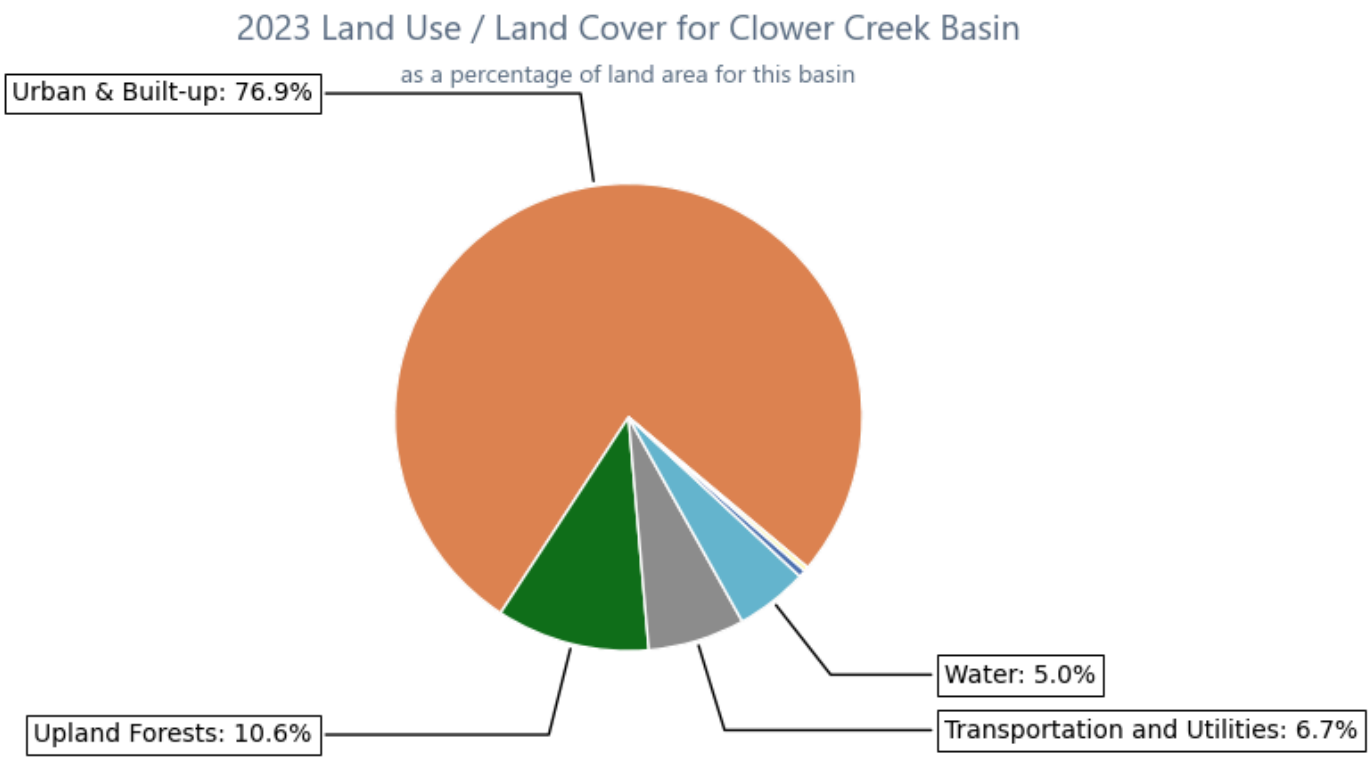


Land Use / Land Cover

Land use within a creek's watershed has a major effect on its water quality. In general, less development means better water quality. Land Cover/Land Use classifications categorize land in terms of its observed physical surface characteristics (e.g. upland or wetland), and also reflect the types of activity that are taking place on it (agriculture, urban/built-up, utilities, etc.). Florida uses as its standard a set of statewide classifications which were developed by the Florida Department of Transportation.

Acreage and Percentage within each Land Use / Land Cover Category for Clower Creek Basin

Land Use Classification	1990	1995	1999	2005	2011	2014	2017	2020	2023	Trend
Urban & Built-up	*222* **78%**	*221* **77.8%**	*220* **77.4%**	*219* **76.9%**	*219* **76.9%**	*219* **76.9%**	*219* **76.9%**	*219* **76.9%**	*219* **76.9%**	
Rangeland	*0* **0%**	*1* **0.3%**	*1* **0.3%**	*1* **0.3%**	*1* **0.3%**	*1* **0.3%**	*1* **0.3%**	*1* **0.3%**	*1* **0.3%**	
Upland Forests	*30* **10.6%**	*30* **10.6%**	*30* **10.6%**	*30* **10.6%**	*30* **10.6%**	*30* **10.6%**	*30* **10.6%**	*30* **10.6%**	*30* **10.6%**	
Water	*13* **4.4%**	*15* **5.1%**	*14* **5%**	*14* **5%**	*14* **5%**	*14* **5%**	*14* **5%**	*14* **5%**	*14* **5%**	
Wetlands	*1* **0.2%**	*0* **0%**	*1* **0.5%**	*1* **0.5%**	*1* **0.5%**	*1* **0.5%**	*1* **0.5%**	*1* **0.5%**	*1* **0.5%**	
Barren Land	*5* **1.6%**	*0* **0%**	*0* **0%**	*0* **0%**	*0* **0%**	*0* **0%**	*0* **0%**	*0* **0%**	*0* **0%**	
Transportation and Utilities	*15* **5.2%**	*17* **6.1%**	*17* **6.1%**	*19* **6.7%**	*19* **6.7%**	*19* **6.7%**	*19* **6.7%**	*19* **6.7%**	*19* **6.7%**	


2023 Land Use / Land Cover for Clower Creek Basin
as a percentage of land area for this basin
Urban & Built-up: 76.9%
Water: 5.0%
Transportation and Utilities: 6.7%
Upland Forests: 10.6%