North Creek Condition Report for 2025

CAUTION

CHL N P DO

0 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**.

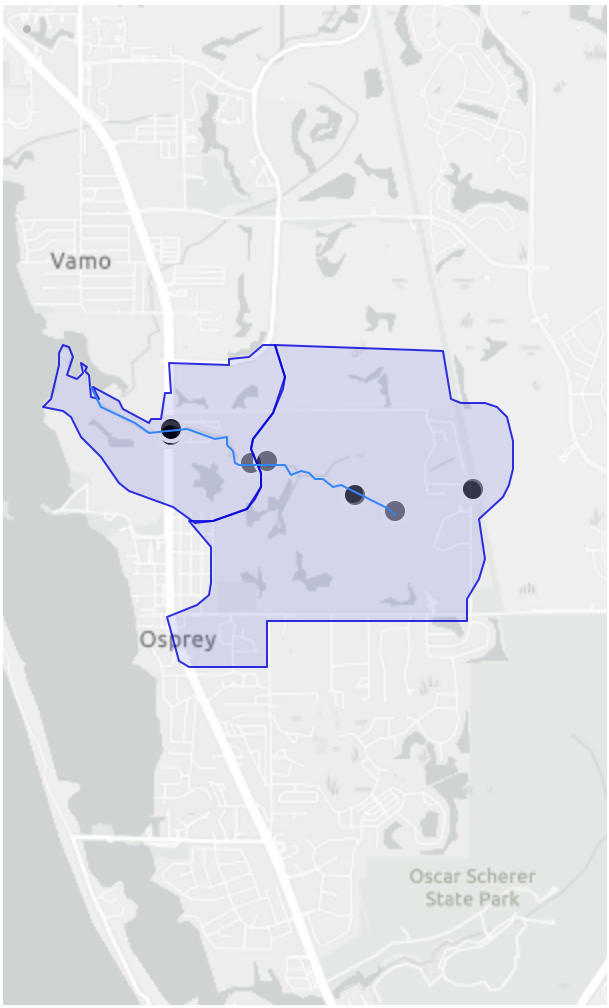
Greyed out values indicate no data for the report year.

Size: 2,327 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 »

North 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

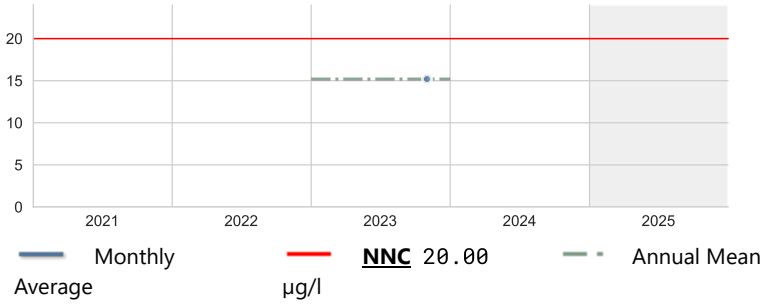
- **Monthly Average**
- **Threshold**
- **Annual Mean**

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

Freshwater Portion of the Creek

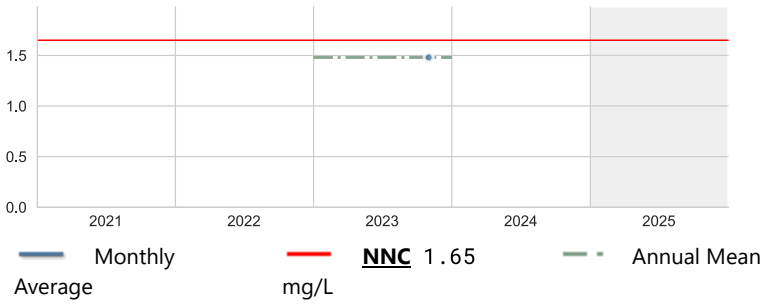
Chlorophyll a

Units: µg/l	Year 2025	Historical period of record
High		32.00
Mean		3.1997
Low		0.73
No. of Samples	0	43



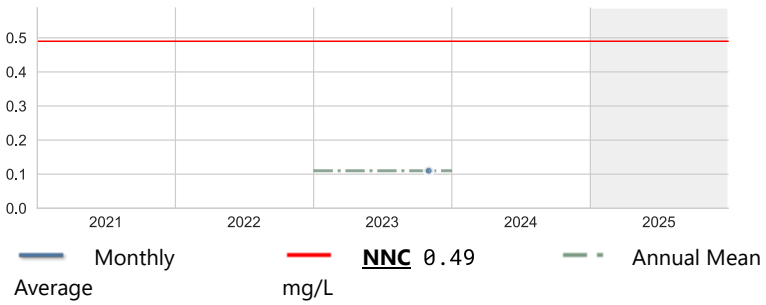
Nitrogen, Total

Units: mg/L	Year 2025	Historical period of record
High		3.71
Mean		1.4619
Low		1.08
No. of Samples	0	26



Phosphorus, Total

Units: mg/L	Year 2025	Historical period of record
High		2.70
Mean		0.1655
Low		0.041
No. of Samples	0	30

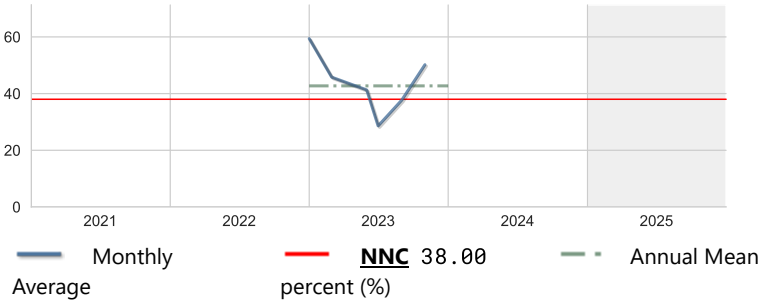


© Sarasota County Water Atlas - sarasota.wateratlas.org

Dissolved Oxygen Saturation

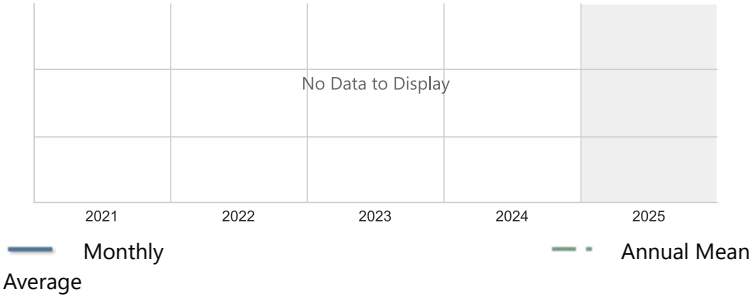
Note: Dissolved oxygen saturation percentages above the regulatory threshold meet established water quality targets.

Units: percent (%)	Year 2025	Historical period of record
High		117.00
Mean		44.19
Low		10.70
No. of Samples	0	62



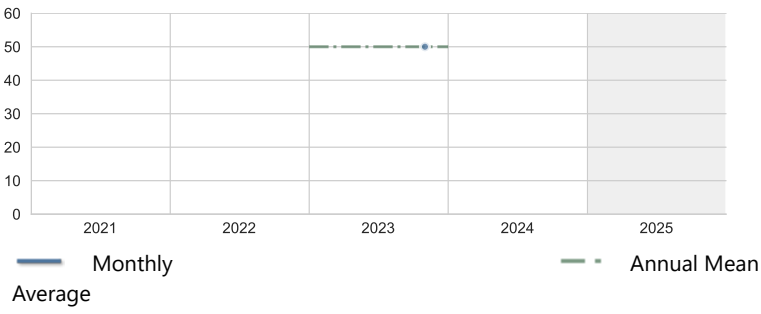
BOD, Biochemical oxygen demand

Units: mg/l	Year 2025	Historical period of record
High		1.70
Mean		1.54
Low		1.40
No. of Samples	0	2



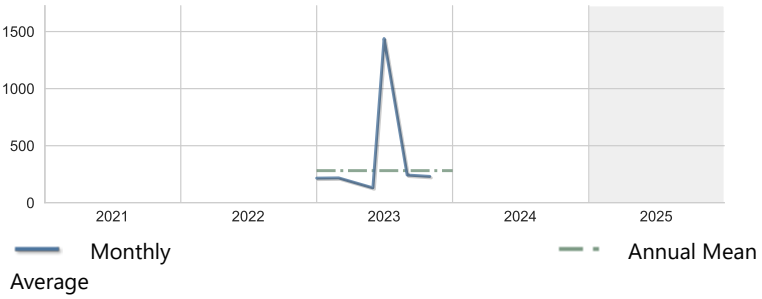
Color

Units: PCU	Year 2025	Historical period of record
High		250.00
Mean		84.57
Low		38.00
No. of Samples	0	27



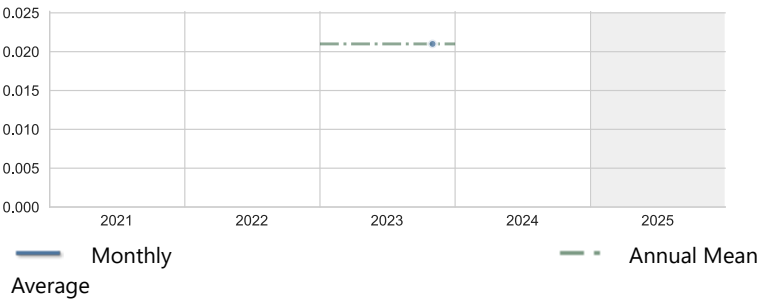
Escherichia coli

Units: MPN/100ml	Year 2025	Historical period of record
High		1439.00
Mean		218.1
Low		74.00
No. of Samples	0	19



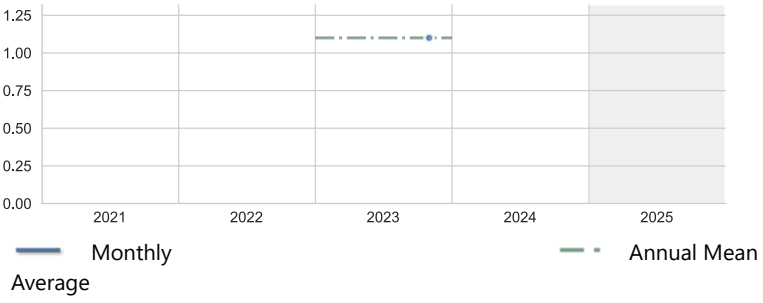
Nitrogen, Ammonia + Ammonium as N

Units: mg/L	Year 2025	Historical period of record
High		0.46
Mean		0.07
Low		0.018
No. of Samples	0	27



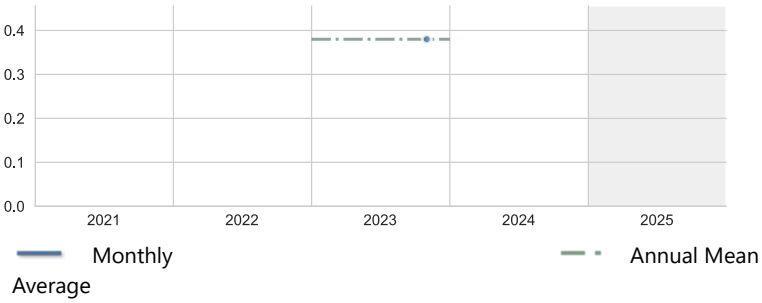
Nitrogen, Kjeldahl

Units: mg/L	Year 2025	Historical period of record
High		27.00
Mean		1.36
Low		0.89
No. of Samples	0	27



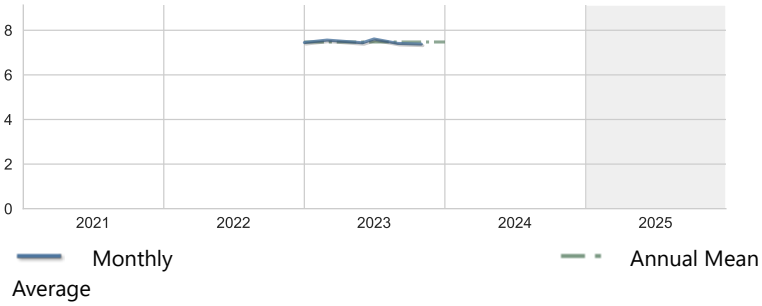
Nitrogen, Nitrite + Nitrate as N

Units: mg/L	Year 2025	Historical period of record
High		0.52
Mean		0.11
Low		0.004
No. of Samples	0	27



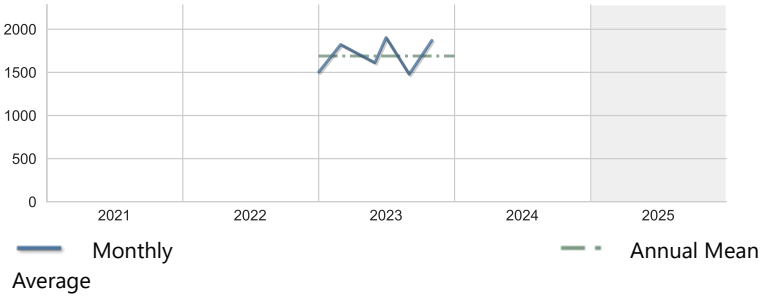
pH

Units: None	Year 2025	Historical period of record
High		7.72
Mean		7.31
Low		6.80
No. of Samples	0	62



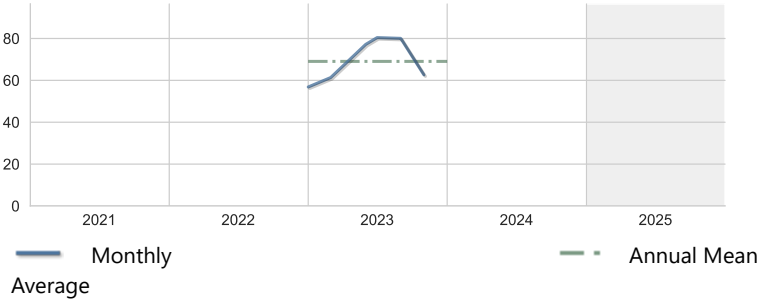
Specific conductance

Units: µmho	Year 2025	Historical period of record
High		24590.00
Mean		1340.62
Low		328.00
No. of Samples	0	62



Temperature, water

Units: °F	Year 2025	Historical period of record
High		85.028
Mean		74.87
Low		55.94
No. of Samples	0	62

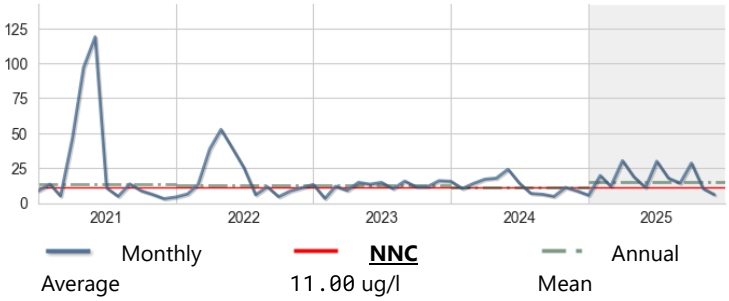


Tidal Portion of the Creek

Chlorophyll a

Score: Caution

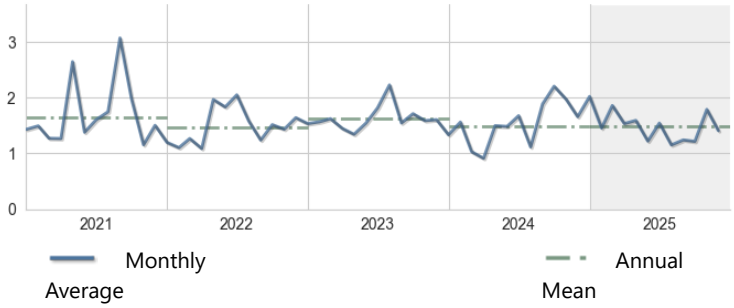
Units: µg/l	Year 2025	Historical period of record
High	30.3	163.0
Mean	14.8573	11.8747
Low	5.61	0.90
No. of Samples	12	373



Nitrogen, Total

Score: Pass

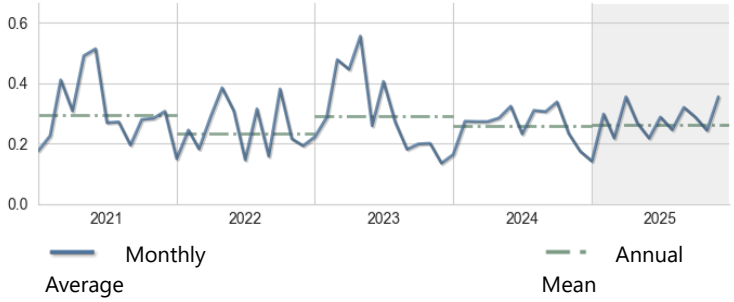
Units: mg/L	Year 2025	Historical period of record
High	2.0	4.0
Mean	1.478	1.3631
Low	1.15	0.002
No. of Samples	12	303



Phosphorus, Total

Score: Pass

Units: mg/L	Year 2025	Historical period of record
High	0.4	0.9
Mean	0.2617	0.2786
Low	0.141	0.08
No. of Samples	12	400

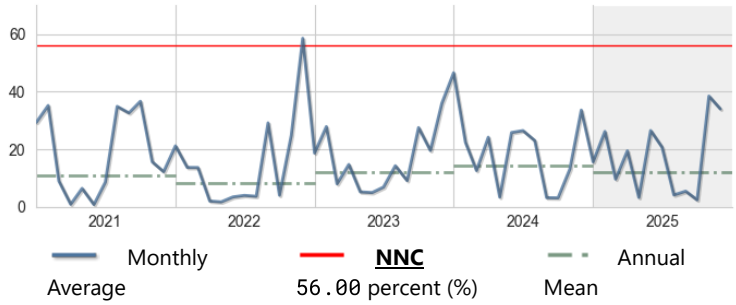


Dissolved Oxygen Saturation

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

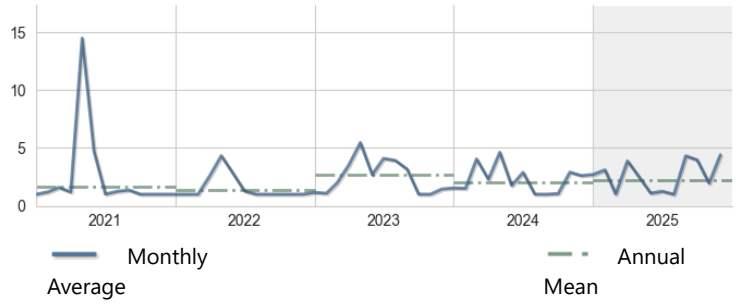
Score: Caution

Units: percent (%)	Year 2025	Historical period of record
High	38.4	157.4
Mean	11.96	25.38
Low	2.34	0.70
No. of Samples	12	458



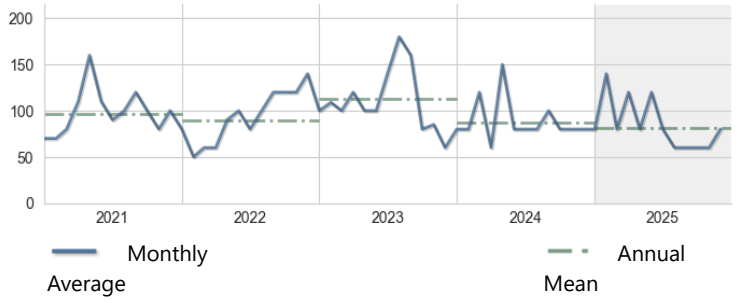
BOD, Biochemical oxygen demand

Units: mg/l	Year 2025	Historical period of record
High	4.4	14.5
Mean	2.25	1.75
Low	1.00	0.50
No. of Samples	12	342



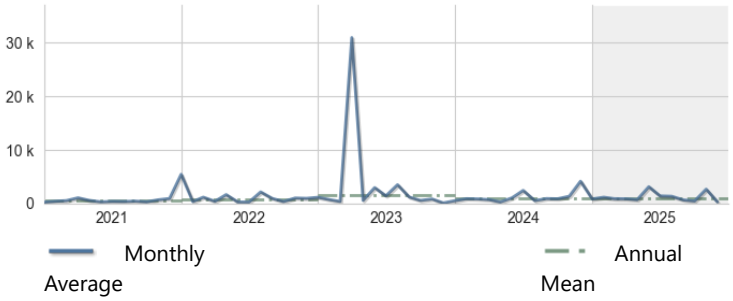
Color

Units: PCU	Year 2025	Historical period of record
High	140.0	300.0
Mean	81.48	81.81
Low	60.00	5.00
No. of Samples	12	429



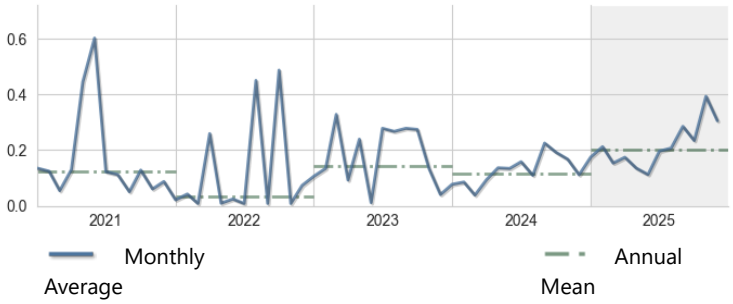
Enterococcus Group Bacteria

Units: MPN/100ml	Year 2025	Historical period of record
High	3,076.0	31,000.0
Mean	902.14	909.3
Low	226.00	40.00
No. of Samples	12	189



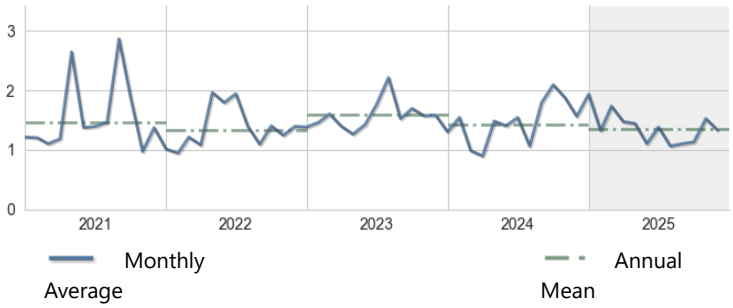
Nitrogen, Ammonia + Ammonium as N

Units: mg/L	Year 2025	Historical period of record
High	0.4	0.6
Mean	0.2	0.03
Low	0.112	0.00
No. of Samples	12	463



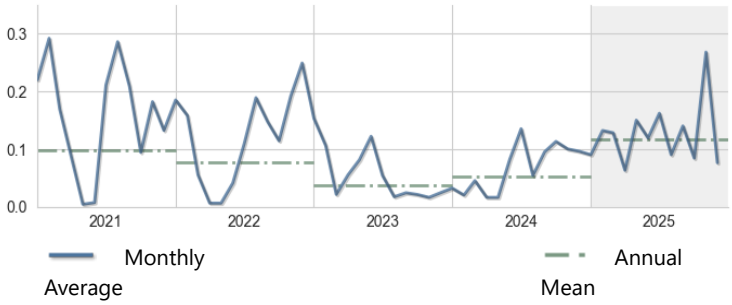
Nitrogen, Kjeldahl

Units: mg/L	Year 2025	Historical period of record
High	1.9	2.9
Mean	1.35	1.22
Low	1.06	0.05
No. of Samples	12	443



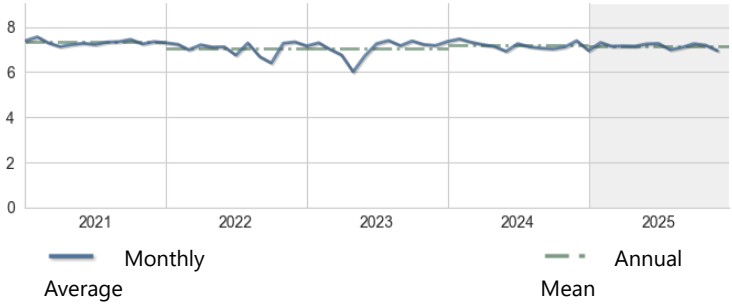
Nitrogen, Nitrite + Nitrate as N

Units: mg/L	Year 2025	Historical period of record
High	0.3	2.4
Mean	0.12	0.1
Low	0.063	0.00
No. of Samples	12	405



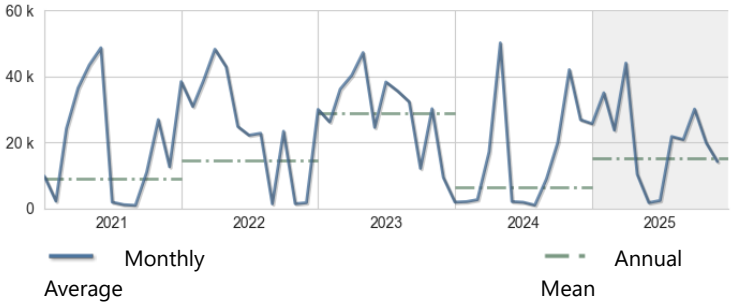
pH

Units: None	Year 2025	Historical period of record
High	7.3	8.8
Mean	7.14	7.38
Low	6.95	5.40
No. of Samples	12	517



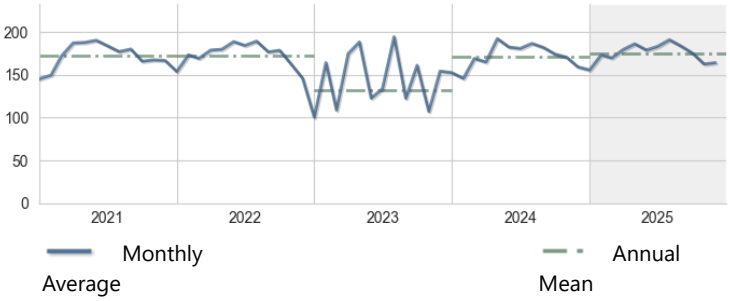
Specific conductance

Units: µmho	Year 2025	Historical period of record
High	43,973.1	650,900.0
Mean	15104.8	11809.54
Low	1671.00	25.058
No. of Samples	12	544



Temperature, water

Units: °F	Year 2025	Historical period of record
High	190.7	194.2
Mean	174.77	88.79
Low	155.4692	48.56
No. of Samples	12	421

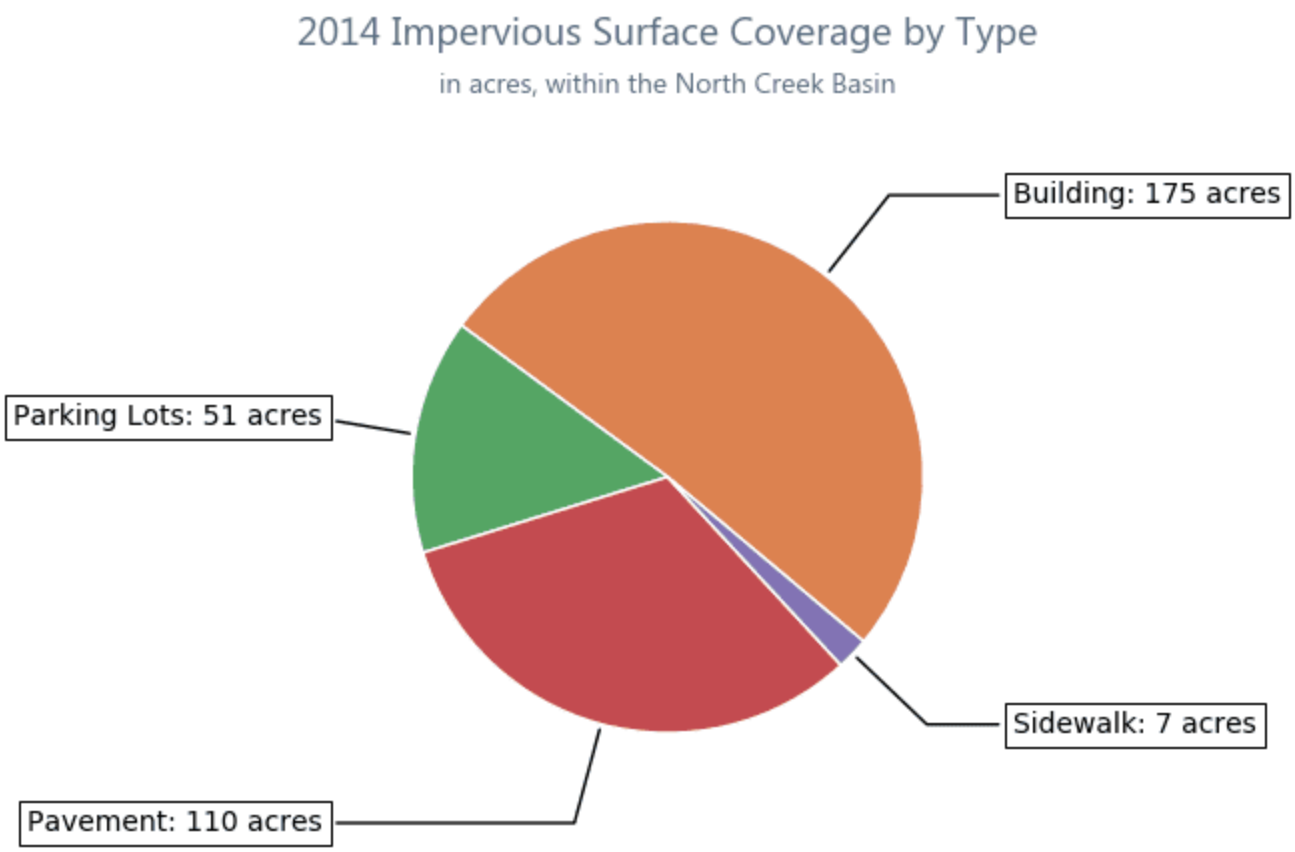


Impervious Features

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.



15% of the land area within the **North Creek Basin** is covered by impervious surfaces

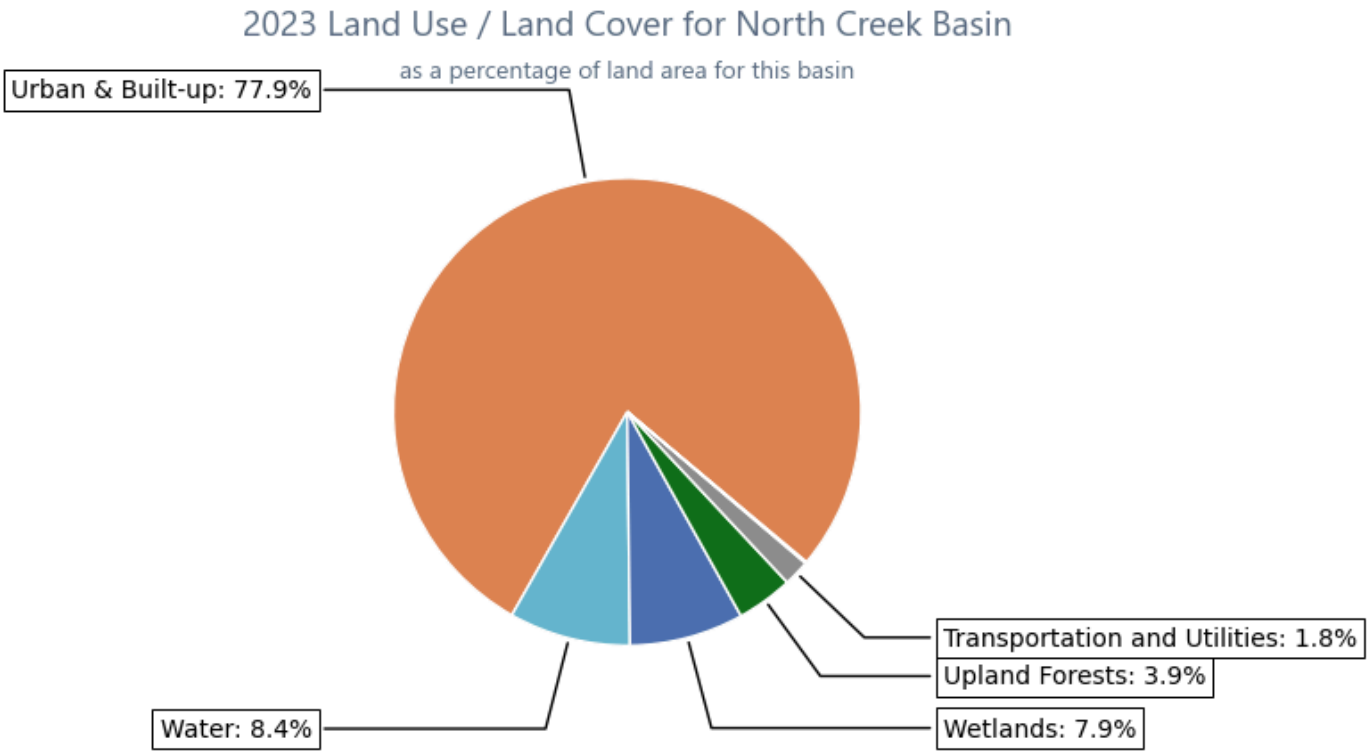


Land Use / Land Cover

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 North Creek Basin

Land Use Classification	1990	1995	1999	2005	2011	2014	2017	2020	2023	Trend
Urban & Built-up	*1,074* ***46.2%***	*1,584* ***68.1%***	*1,652* ***71%***	*1,702* ***73.2%***	*1,699* ***73%***	*1,679* ***72.2%***	*1,795* ***77.1%***	*1,809* ***77.8%***	*1,811* ***77.9%***	
Agriculture	*79* ***3.4%***	*86* ***3.7%***	*18* ***0.8%***	*9* ***0.4%***	*4* ***0.2%***	*122* ***5.2%***	*4* ***0.2%***	*4* ***0.2%***	*2* ***0.1%***	
Rangeland	*0* ***0%***	*0* ***0%***	*0* ***0%***	*75* ***3.2%***	*74* ***3.2%***	*20* ***0.9%***	*30* ***1.3%***	*0* ***0%***	*0* ***0%***	
Upland Forests	*845* ***36.3%***	*275* ***11.8%***	*277* ***11.9%***	*142* ***6.1%***	*141* ***6.1%***	*97* ***4.2%***	*94* ***4.1%***	*90* ***3.9%***	*90* ***3.9%***	
Water	*77* ***3.3%***	*161* ***6.9%***	*180* ***7.8%***	*180* ***7.7%***	*177* ***7.6%***	*177* ***7.6%***	*182* ***7.8%***	*197* ***8.5%***	*196* ***8.4%***	
Wetlands	*216* ***9.3%***	*201* ***8.6%***	*179* ***7.7%***	*178* ***7.7%***	*191* ***8.2%***	*191* ***8.2%***	*182* ***7.8%***	*184* ***7.9%***	*185* ***7.9%***	
Barren Land	*17* ***0.7%***	*0* ***0%***	*0* ***0%***	*0* ***0%***	*1* ***0%***	*0* ***0%***	*0* ***0%***	*0* ***0%***	*0* ***0%***	
Transportation and Utilities	*18* ***0.8%***	*20* ***0.8%***	*20* ***0.8%***	*40* ***1.7%***	*40* ***1.7%***	*40* ***1.7%***	*40* ***1.7%***	*43* ***1.8%***	*42* ***1.8%***	


2023 Land Use / Land Cover for North Creek Basin
as a percentage of land area for this basin
Urban & Built-up: 77.9%
Transportation and Utilities: 1.8%
Upland Forests: 3.9%
Wetlands: 7.9%
Water: 8.4%