Forked Creek Condition Report for 2022

CAUTION

Chl-a N P DO

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

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

Size: 5,863 acres
Location: South Sarasota County
Discharges into: Lemon Bay

For more information, please see: **Forked Creek Drainage Improvements, Preliminary Report Phase I (2000)**

View county-wide water quality trends »

Forked Creek



Water Chemistry Ratings | Freshwater Portion of the Creek

Creek Conditions Ratings are based on comparing nitrogen, phosphorus, chlorophyll and dissolved oxygen to water quality guidelines or regulations. Florida law defines a maximum allowable concentration of nitrogen, phosphorus, and chlorophyll *a*, and a minimum allowable concentration of dissolved oxygen in these streams.

Water quality data are not available for the freshwater portion of this creek.

Water Chemistry Ratings | Tidal Portion of the Creek

Creek Conditions Ratings are based on comparing nitrogen, phosphorus, chlorophyll and dissolved oxygen to water quality guidelines or regulations. Florida law defines a maximum allowable concentration of chlorophyll *a* and a minimum allowable

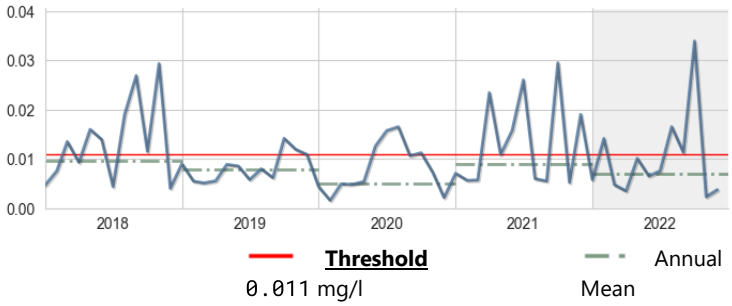
concentration of dissolved oxygen in these streams. Florida has no regulatory thresholds for nitrogen or phosphorus in tidal creeks so trends are used to rate the creeks.

Chlorophyll a

Score: Pass

Units: mg/l	Year 2022	Historical period of record
High	0.0	0.2
Mean	0.007	0.0133
Low	0.0012	0.0003
No. of Samples	33	1,132

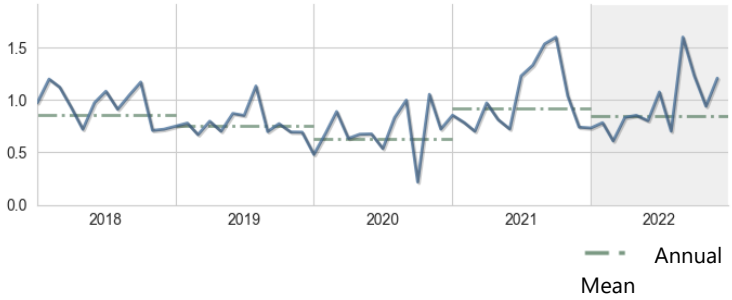
Five-year Rolling Average



Nitrogen, Total

Units: mg/l	Year 2022	Historical period of record
High	2.0	8.1
Mean	0.8494	1.0443
Low	0.279	0.00
No. of Samples	26	808

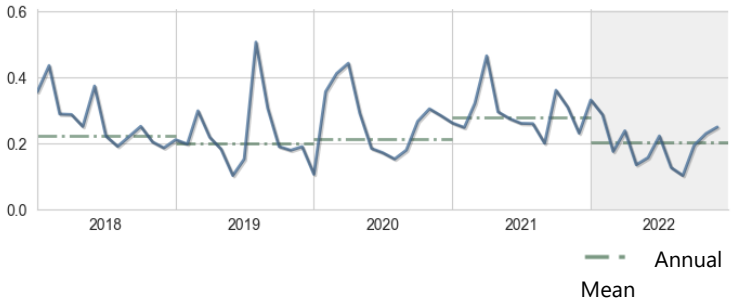
Five-year Rolling Average



Phosphorus, Total

Units: mg/l	Year 2022	Historical period of record
High	0.4	3.8
Mean	0.201	0.2645
Low	0.093	0.004
No. of Samples	26	1,161

Five-year Rolling Average



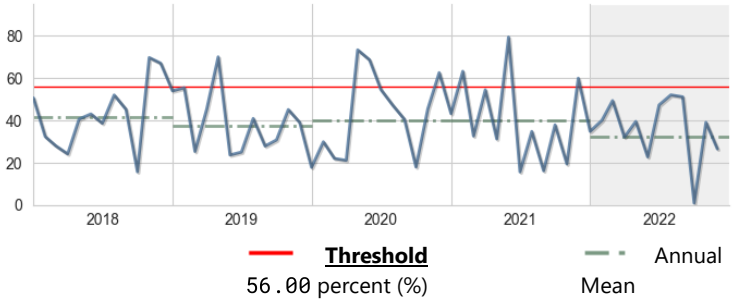
Dissolved Oxygen Saturation

Note: Low DO saturation also may be naturally influenced by inflows from nearby wetlands or groundwater sources

Score: Caution

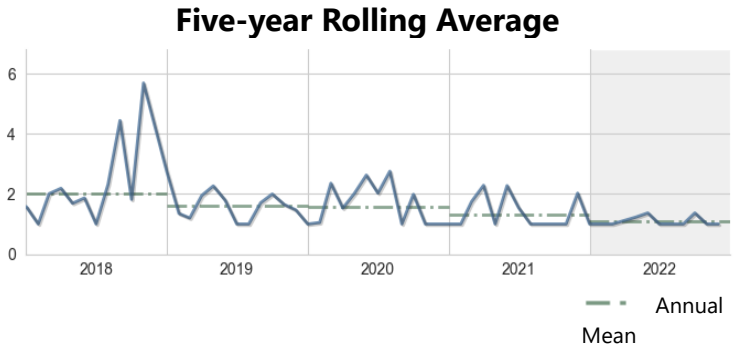
Units: percent (%)	Year 2022	Historical period of record
High	78.8	169.7
Mean	32.31	60.19
Low	0.7886	0.70
No. of Samples	26	874

Five-year Rolling Average



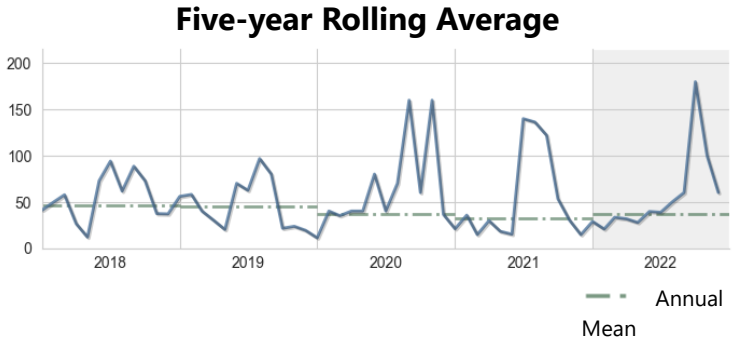
BOD, Biochemical oxygen demand

Units: mg/l	Year 2022	Historical period of record
High	1.4	16.7
Mean	1.08	2.21
Low	1.00	0.50
No. of Samples	11	332



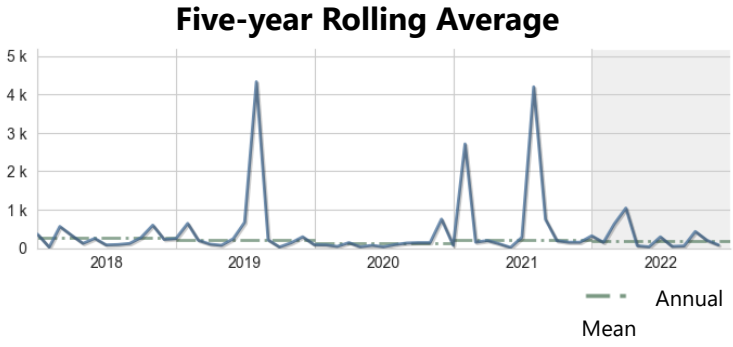
Color

Units: PCU	Year 2022	Historical period of record
High	180.0	400.0
Mean	36.96	48.19
Low	12.00	2.50
No. of Samples	26	1,287



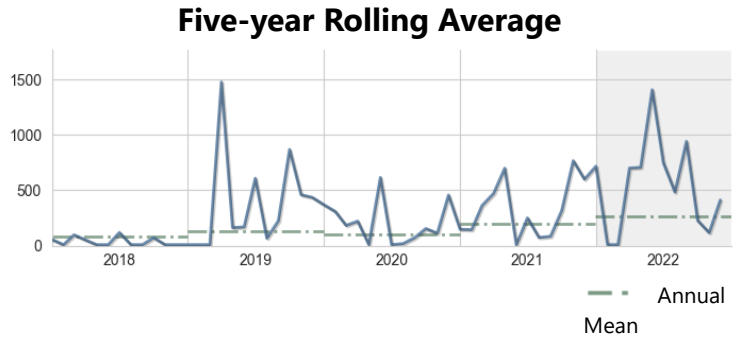
Enterococcus Group Bacteria

Units: cfu/100ml	Year 2022	Historical period of record
High	6,020.0	17,300.0
Mean	180.32	166.27
Low	20.00	10.00
No. of Samples	26	185



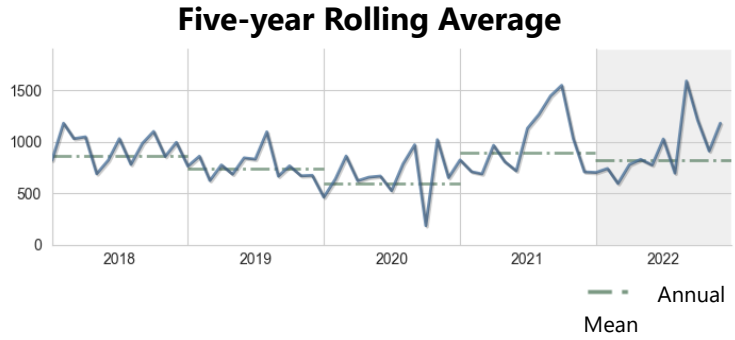
Nitrogen, Ammonia + Ammonium as N

Units: ug/l	Year 2022	Historical period of record
High	1,410.0	1,480.0
Mean	265.06	16.56
Low	8.00	0.00
No. of Samples	12	507



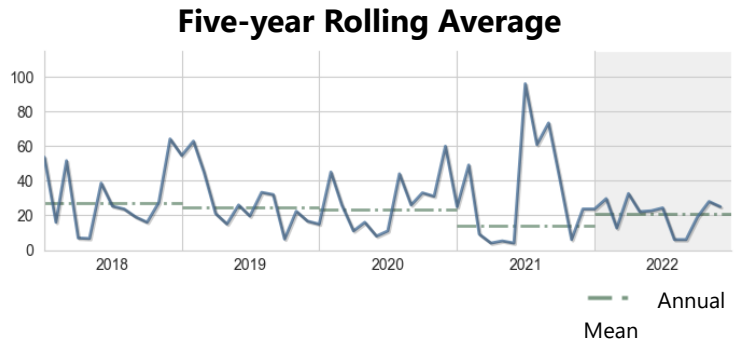
Nitrogen, Kjeldahl

Units: ug/l	Year 2022	Historical period of record
High	2,030.0	4,340.0
Mean	819.05	1041.32
Low	270.00	50.00
No. of Samples	26	1,224



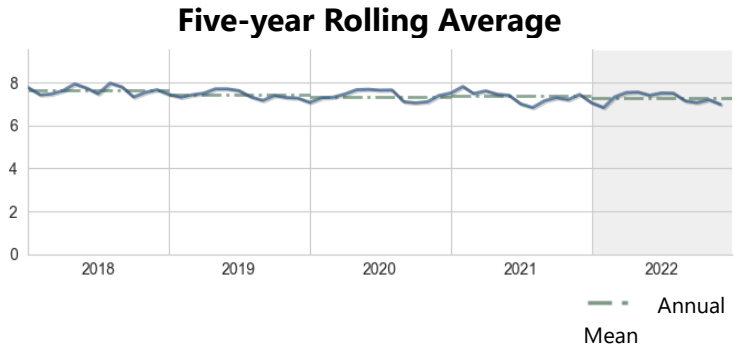
Nitrogen, Nitrite + Nitrate as N

Units: ug/l	Year 2022	Historical period of record
High	76.0	882.0
Mean	20.9	16.73
Low	6.00	0.00
No. of Samples	26	946



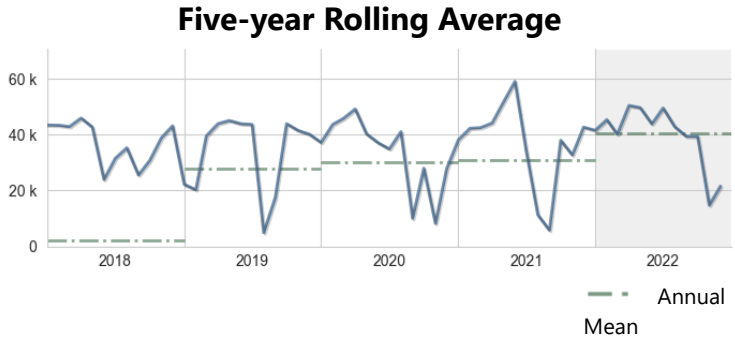
pH

Units: None	Year 2022	Historical period of record
High	7.6	9.3
Mean	7.28	7.73
Low	6.54	4.90
No. of Samples	26	1,873



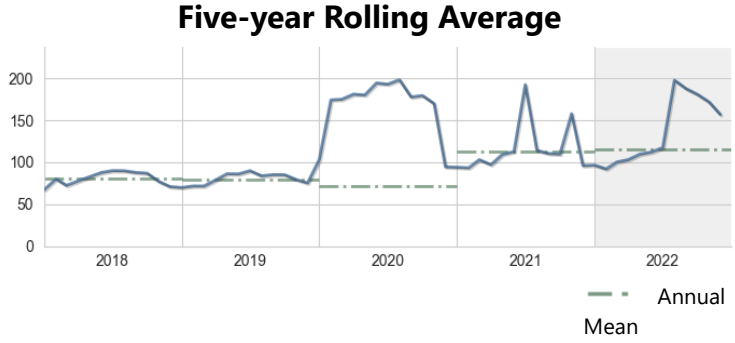
Specific conductance

Units: umho	Year 2022	Historical period of record
High	52,648.7	63,471.0
Mean	40554.28	20609.09
Low	14714.40	0.941
No. of Samples	19	772



Temperature, water

Units: deg F	Year 2022	Historical period of record
High	197.4	197.9
Mean	115.2	77.98
Low	68.00	50.00
No. of Samples	26	1,574

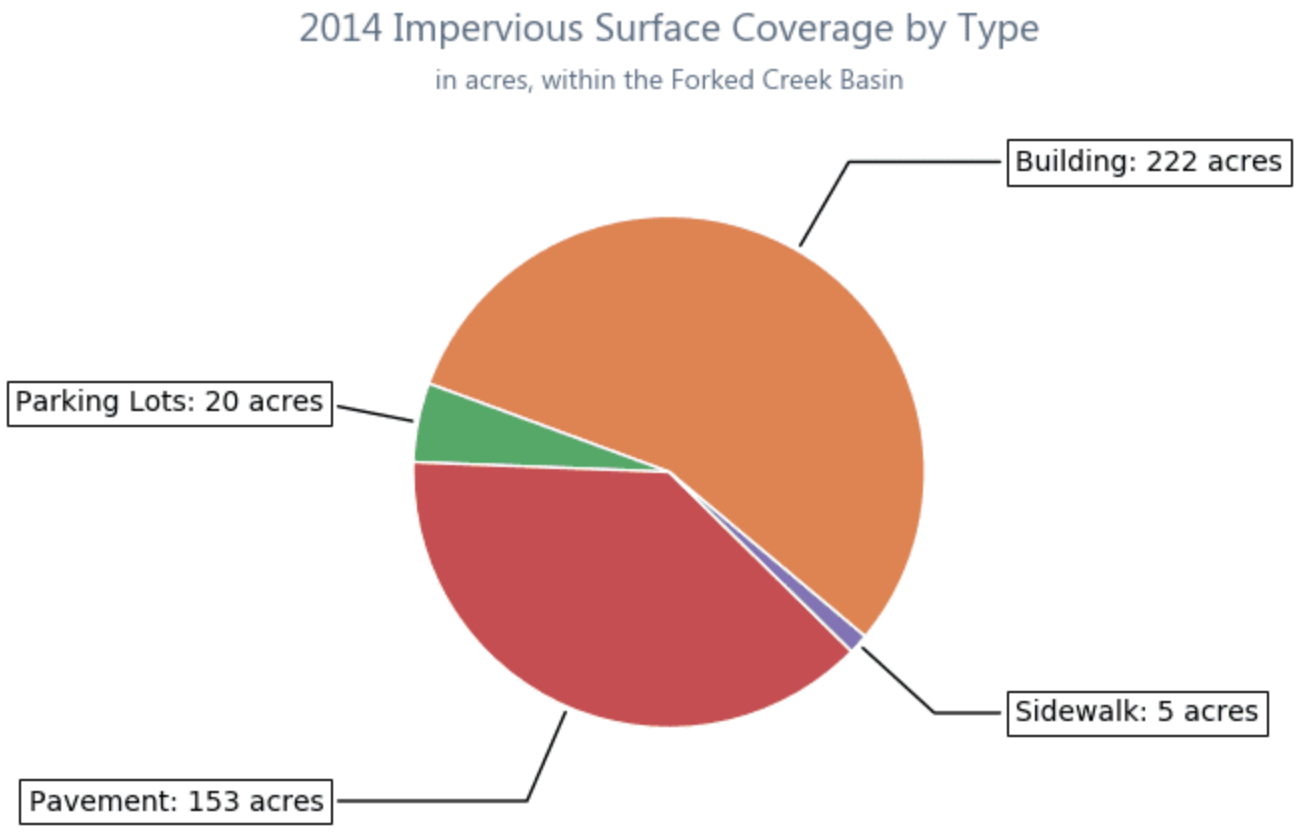


Impervious Features

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.



7% of the land area within the **Forked 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 Forked Creek Basin

Land Use Classification	1990	1995	1999	2005	2011	2014	2017	2020	Trend
Urban & Built-up	1,394 23.8%	1,570 26.8%	1,888 32.2%	1,859 31.7%	2,154 36.7%	2,154 36.7%	2,393 40.8%	2,418 41.3%	
Agriculture	1,055 18%	1,081 18.4%	1,064 18.2%	988 16.8%	619 10.6%	619 10.6%	533 9.1%	513 8.7%	
Rangeland	232 4%	688 11.7%	395 6.7%	552 9.4%	726 12.4%	726 12.4%	587 10%	515 8.8%	
Upland Forests	2,059 35.1%	1,322 22.5%	1,313 22.4%	1,187 20.3%	1,031 17.6%	1,031 17.6%	982 16.7%	935 15.9%	
Water	139 2.4%	390 6.7%	237 4%	229 3.9%	276 4.7%	276 4.7%	318 5.4%	375 6.4%	
Wetlands	905 15.4%	743 12.7%	904 15.4%	944 16.1%	948 16.2%	948 16.2%	943 16.1%	939 16%	
Barren Land	1 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	6 0.1%	
Transportation and Utilities	78 1.3%	68 1.2%	61 1%	103 1.8%	107 1.8%	107 1.8%	108 1.8%	161 2.8%	

2020 Land Use / Land Cover for Forked Creek Basin

as a percentage of land area for this basin

