Woodmere Creek Condition Report for 2020

PASS

Chl-a N P DO

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

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

Woodmere Creek



Size: 1,475 acres
Location: South Sarasota County
Discharges into: Lemon Bay

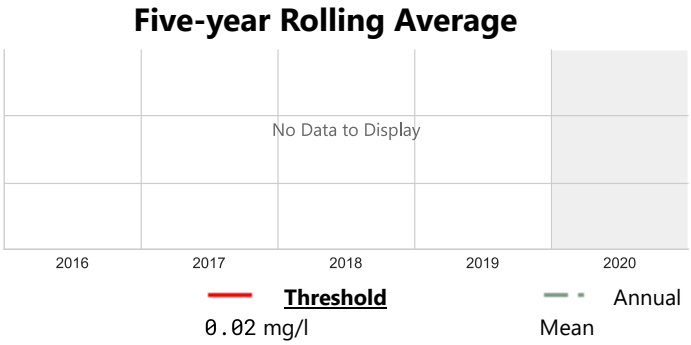
Woodmere Creek consists of a network of man-made canals and lakes that discharge to the Intracoastal Waterway at the northern limits of Lemon Bay. The entirety of Woodmere Creek is predominantly marine. Most of the area in the Woodmere Creek Basin has been developed. It includes the Hourglass Lake Estates and Circlewood Condominiums, as well a large portion of the Gulfview Estates residential communities. The creek's discharge point is located just south of the Lemon Bay Drive and Palmetto Road intersection. *For basin details see:* ***Woodmere Creek Basin Master Plan (1999)***

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.

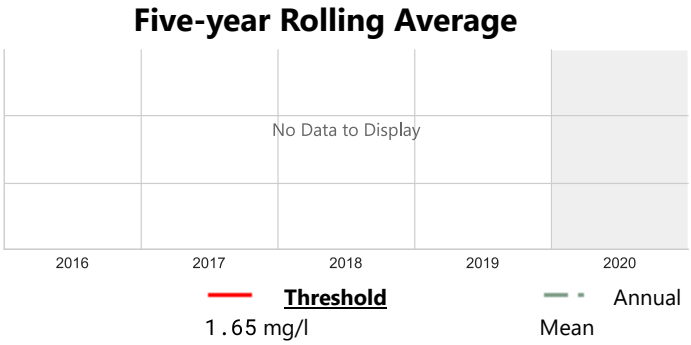
Chlorophyll a

Units: mg/l	Year 2020	Historical period of record
High		0.0429
Mean		0.0071
Low		0.0021
No. of Samples	0	22



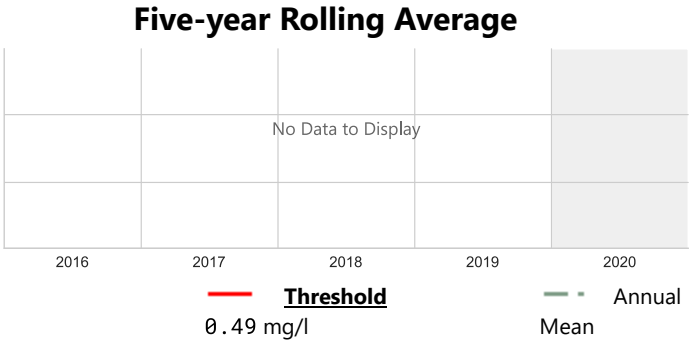
Nitrogen, Total

Units: mg/l	Year 2020	Historical period of record
High		3.599
Mean		1.4489
Low		1.052
No. of Samples	0	20



Phosphorus, Total

Units: mg/l	Year 2020	Historical period of record
High		1.37
Mean		0.3941
Low		0.179
No. of Samples	0	22

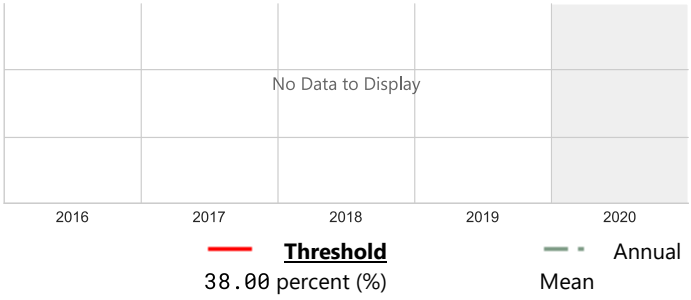


Dissolved Oxygen Saturation

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

Units: percent (%)	Year 2020	Historical period of record
High		122.80
Mean		66.7
Low		9.10
No. of Samples	0	23

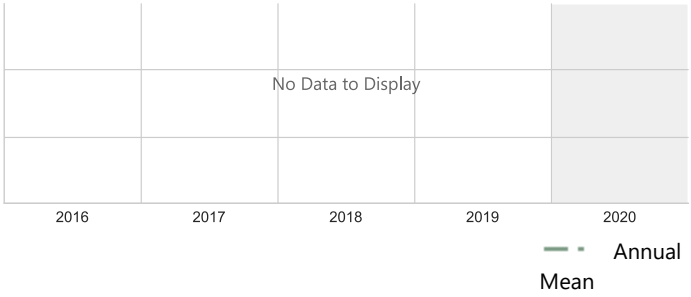
Five-year Rolling Average



BOD, Biochemical oxygen demand

Units: mg/l	Year 2020	Historical period of record
High		6.30
Mean		1.45
Low		0.721
No. of Samples	0	22

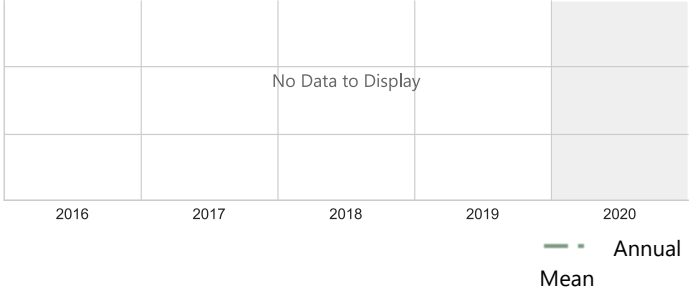
Five-year Rolling Average



Color

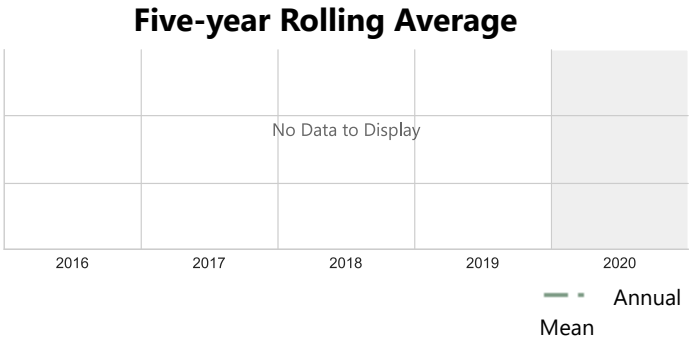
Units: PCU	Year 2020	Historical period of record
High		180.00
Mean		98.38
Low		50.00
No. of Samples	0	22

Five-year Rolling Average



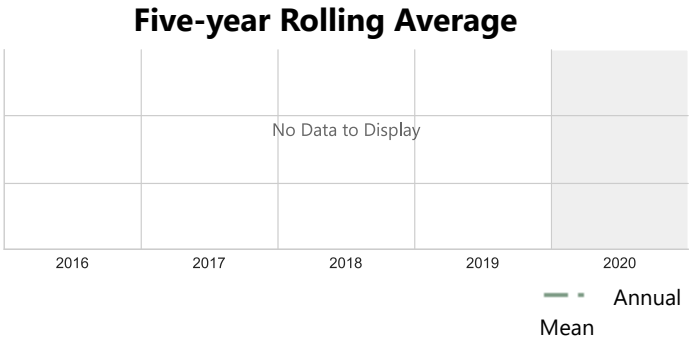
Nitrogen, Ammonia + Ammonium as N

Units: ug/l	Year 2020	Historical period of record
High		575.00
Mean		14.69
Low		0.053
No. of Samples	0	29



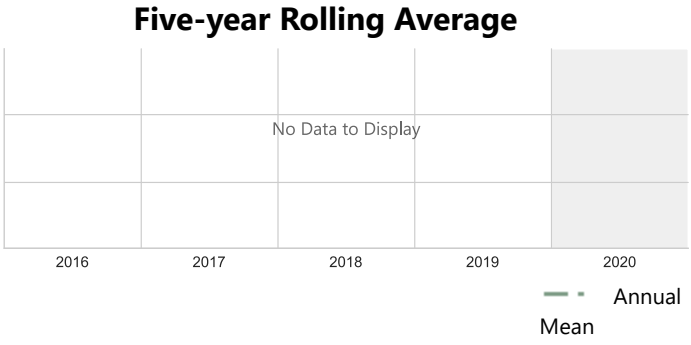
Nitrogen, Kjeldahl

Units: ug/l	Year 2020	Historical period of record
High		3530.00
Mean		1351.98
Low		1020.00
No. of Samples	0	22



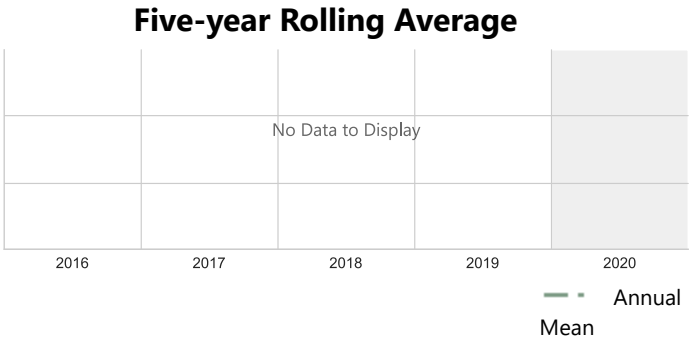
Nitrogen, Nitrite + Nitrate as N

Units: ug/l	Year 2020	Historical period of record
High		172.00
Mean		38.24
Low		4.00
No. of Samples	0	22



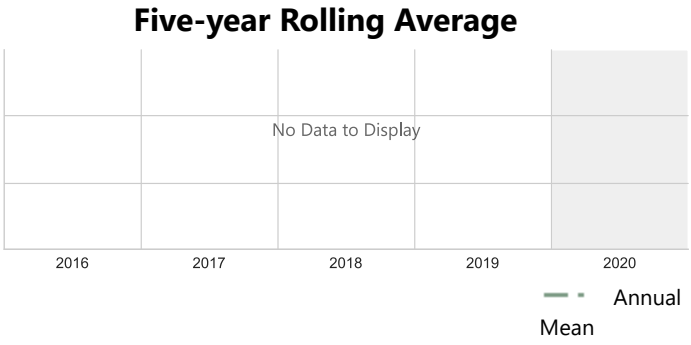
pH

Units: None	Year 2020	Historical period of record
High		7.72
Mean		7.4
Low		7.01
No. of Samples	0	27



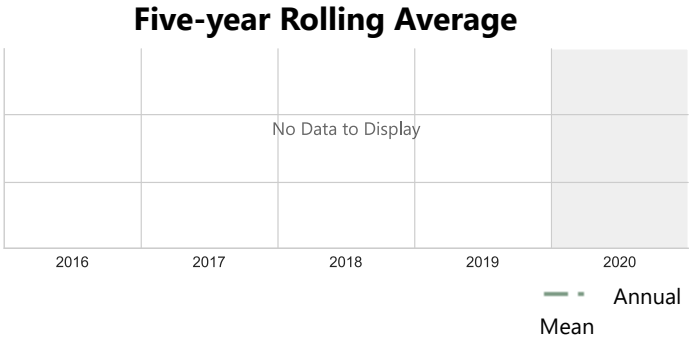
Specific conductance

Units: umho	Year 2020	Historical period of record
High		892.00
Mean		634.13
Low		376.00
No. of Samples	0	20



Temperature, water

Units: deg F	Year 2020	Historical period of record
High		89.24
Mean		75.69
Low		51.026
No. of Samples	0	22



Water Chemistry Ratings | Tidal Portion of the Creek

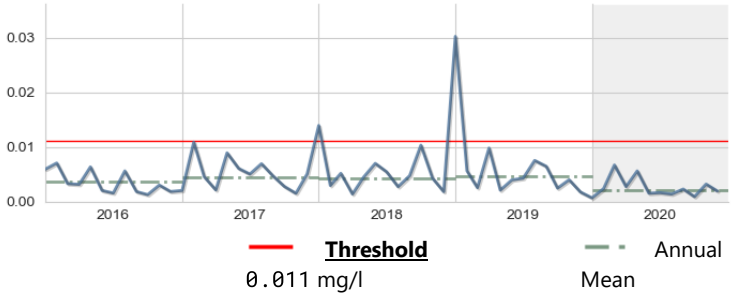
Creek Conditions Ratings are based on comparing nitrogen, phosphorus, chlorophyll and dissolved oxygen to water quality guidelines or regulations. Florida law defines a maximum allowable concentration of chlorophyll *a* and a minimum allowable concentration of dissolved oxygen in these streams. Florida 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 2020	Historical period of record
High	0.0	0.1
Mean	0.0021	0.0044
Low	0.0007	0.0003
No. of Samples	12	592

Five-year Rolling Average



Nitrogen, Total

Score: Pass

Units: mg/l	Year 2020	Historical period of record
High	1.9	7.4
Mean	1.1491	1.309
Low	0.752	0.437
No. of Samples	12	535

Five-year Rolling Average

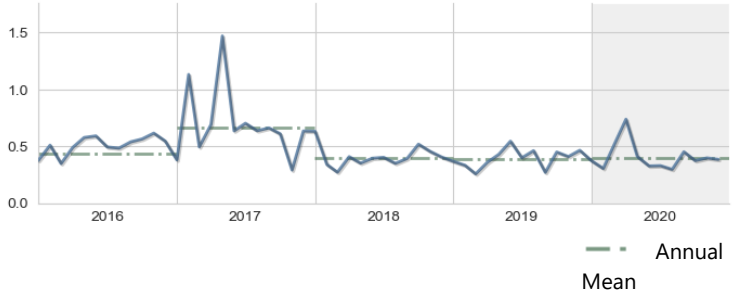


P Phosphorus, Total

Score: Pass

Units: mg/l	Year 2020	Historical period of record
High	0.7	3.4
Mean	0.3947	0.5522
Low	0.296	0.18
No. of Samples	12	597

Five-year Rolling Average



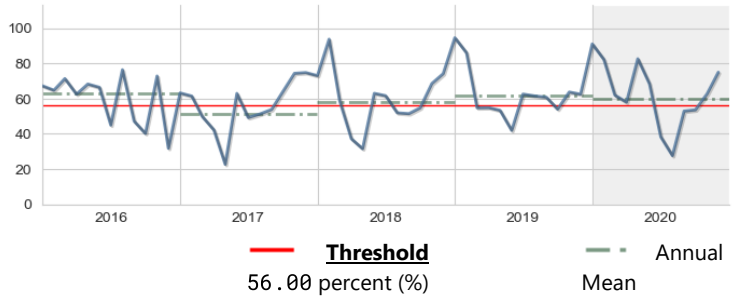
DO Dissolved Oxygen Saturation

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

Score: Pass

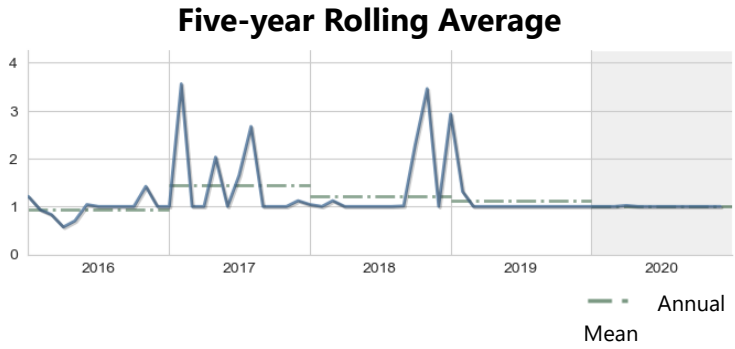
Units: percent (%)	Year 2020	Historical period of record
High	91.0	226.0
Mean	59.88	50.81
Low	27.5222	4.90
No. of Samples	12	549

Five-year Rolling Average



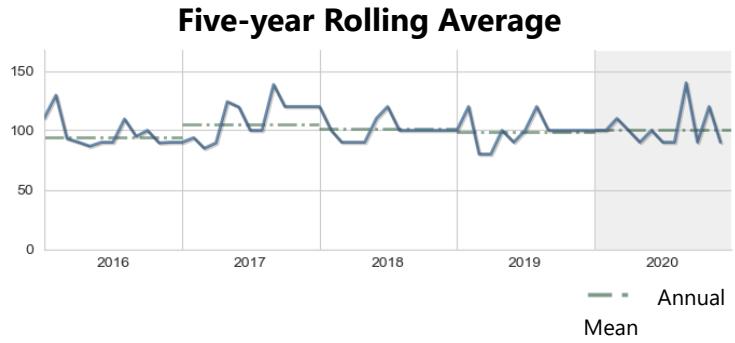
BOD, Biochemical oxygen demand

Units: mg/l	Year 2020	Historical period of record
High	1.0	19.5
Mean	1.0	1.06
Low	1.00	0.50
No. of Samples	12	597



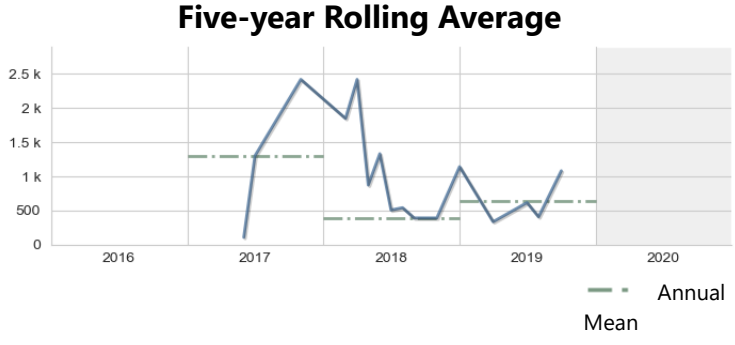
Color

Units: PCU	Year 2020	Historical period of record
High	140.0	400.0
Mean	100.73	95.87
Low	90.00	5.00
No. of Samples	12	596



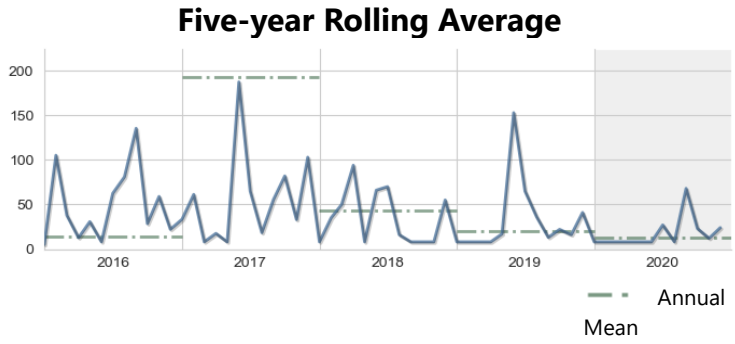
Enterococcus Group Bacteria

Units: cfu/100ml	Year 2020	Historical period of record
High		2,420.0
Mean		766.76
Low		103.00
No. of Samples	0	19



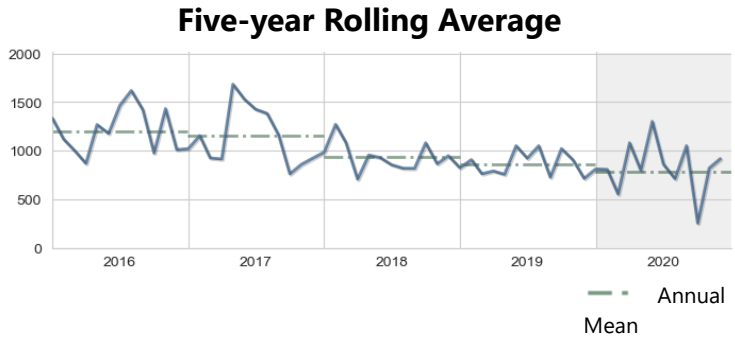
Nitrogen, Ammonia + Ammonium as N

Units: ug/l	Year 2020	Historical period of record
High	68.0	1,350.0
Mean	13.1	25.81
Low	8.00	0.008
No. of Samples	12	649



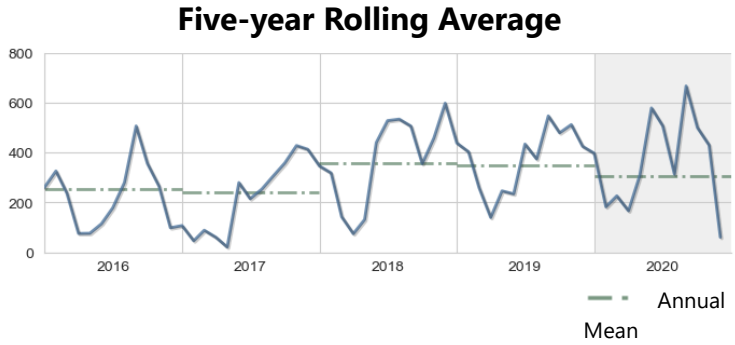
Nitrogen, Kjeldahl

Units: ug/l	Year 2020	Historical period of record
High	1,300.0	7,340.0
Mean	777.85	1062.89
Low	252.00	50.00
No. of Samples	12	597



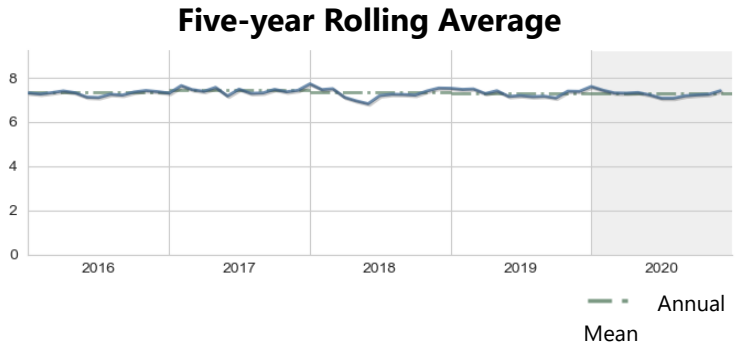
Nitrogen, Nitrite + Nitrate as N

Units: ug/l	Year 2020	Historical period of record
High	667.0	1,150.0
Mean	305.47	129.54
Low	60.00	4.00
No. of Samples	12	595



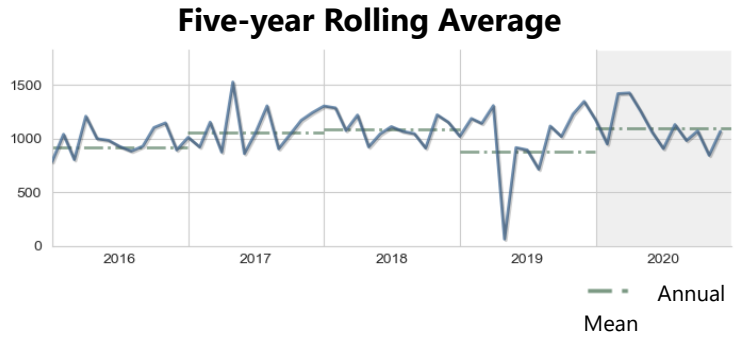
pH

Units: None	Year 2020	Historical period of record
High	7.6	8.1
Mean	7.27	7.34
Low	7.06	6.40
No. of Samples	12	627



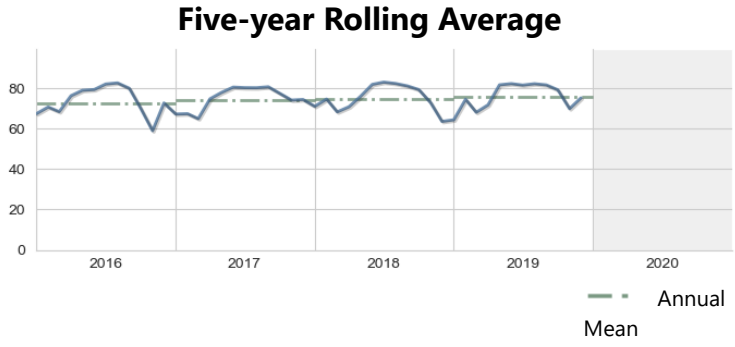
Specific conductance

Units: umho	Year 2020	Historical period of record
High	1,424.4	44,845.0
Mean	1091.7	1003.18
Low	842.394	0.882
No. of Samples	12	536



Temperature, water

Units: deg F	Year 2020	Historical period of record
High		86.6
Mean		73.23
Low		52.052
No. of Samples	0	534

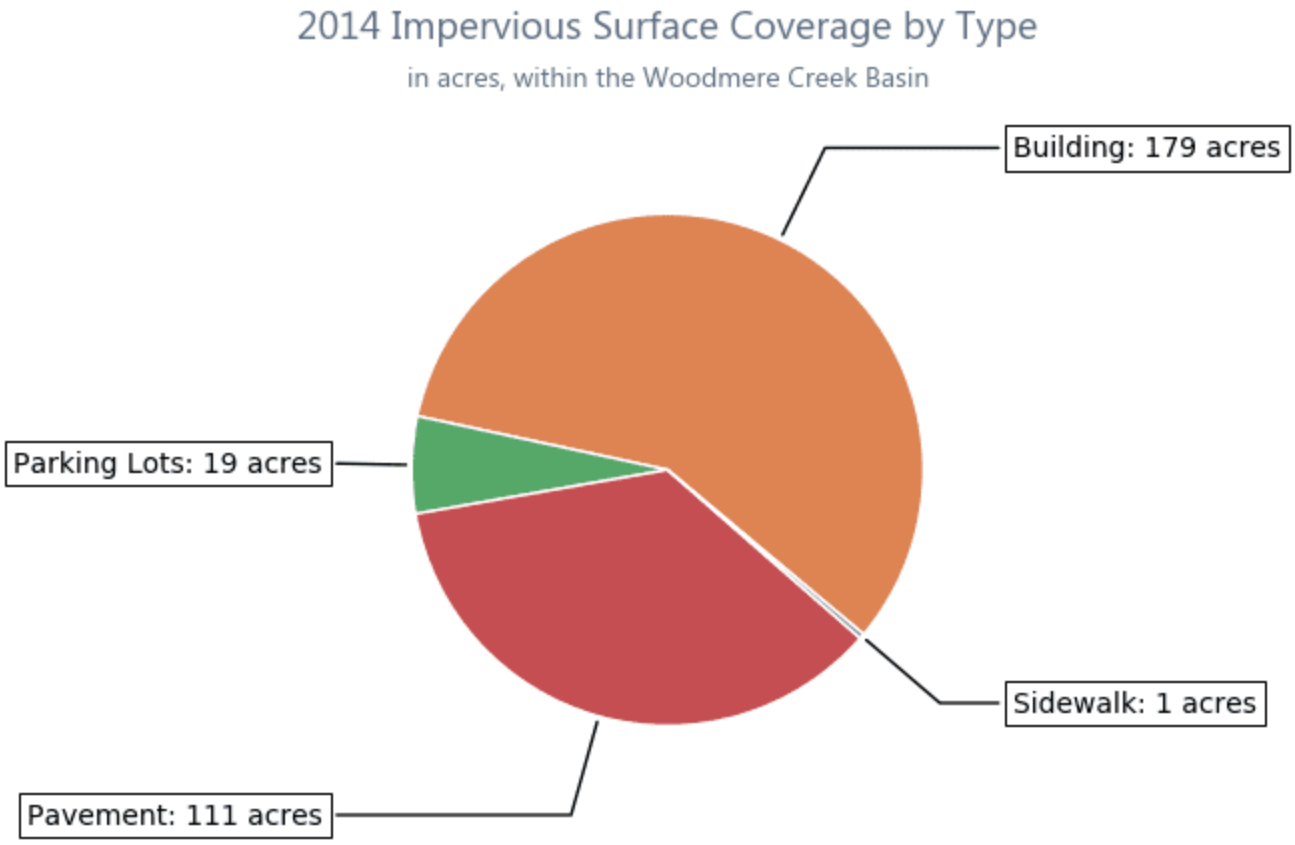


Impervious Features

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.



21% of the land area within the **Woodmere Creek Basin** is covered by impervious surfaces

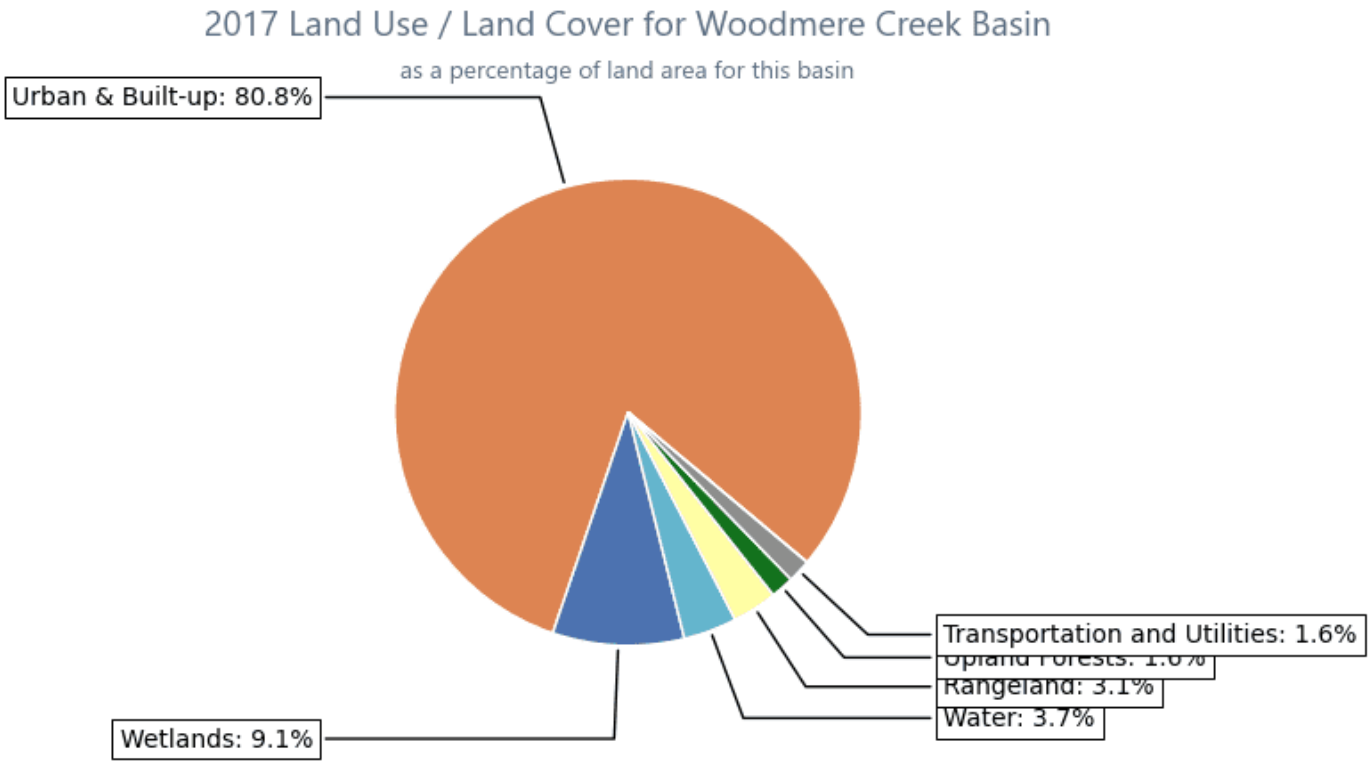


Land Use / Land Cover

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 Woodmere Creek Basin

Land Use Classification	1990	1995	1999	2005	2011	2014	2017	Trend
Urban & Built-up	986 66.8%	1,058 71.7%	1,081 73.3%	1,180 80%	1,195 81%	1,195 81%	1,192 80.8%	
Agriculture	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	
Rangeland	62 4.2%	25 1.7%	10 0.7%	33 2.2%	46 3.1%	46 3.1%	46 3.1%	
Upland Forests	207 14%	196 13.3%	183 12.4%	54 3.6%	24 1.6%	24 1.6%	24 1.6%	
Water	34 2.3%	44 3%	47 3.2%	42 2.9%	52 3.5%	52 3.5%	55 3.7%	
Wetlands	187 12.6%	151 10.3%	151 10.3%	143 9.7%	135 9.1%	135 9.1%	135 9.1%	
Transportation and Utilities	0 0%	1 0%	2 0.2%	24 1.6%	24 1.6%	24 1.6%	24 1.6%	


2017 Land Use / Land Cover for Woodmere Creek Basin
as a percentage of land area for this basin
Urban & Built-up: 80.8%
Wetlands: 9.1%
Water: 3.7%
Rangeland: 3.1%
Transportation and Utilities: 1.6%