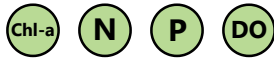


Curry Creek Condition Report for 2019



PASS



4 out of 4
indicators
were rated as
PASS.

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

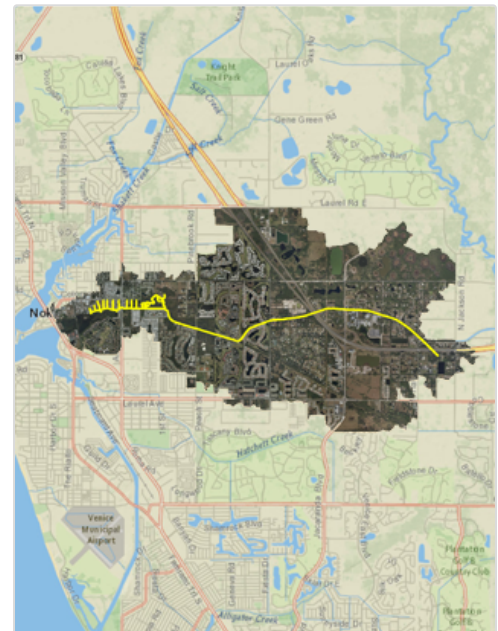
Size: 6,399 acres

Location: Central Sarasota County

Discharges into: Roberts Bay (Venice)

Major residential communities within the Curry Creek Basin include Bird Bay Golf Club, Pinebrook South, Waterford, Capri Isles, Sawgrass, Hidden Lakes, and the northern portion of Bay Indies Mobile Home Park (MHP). Rural lands encompass the extreme northeast and easterly portions of the basin. Drainage from this basin is served by three main collection and conveyance systems. Curry Creek Main accommodates the western region of the basin beginning one-half mile west of Auburn Road continuing west to the ultimate outfall into Roberts Bay. Upper Curry Creek Main (North Blackburn Canal) drains the northeast region of the basin from Jackson Road west to the confluence at Curry Creek. The remaining southeast region of the basin drains through the South Blackburn Canal Lateral from Havana Road west to the confluence at Curry Creek. *For basin details see: **Curry Creek Basin Master Plan Update, Venice County Model (2001)***

Curry 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.

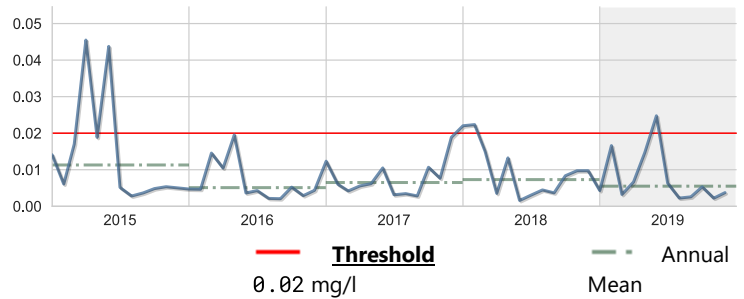


Chlorophyll a

Score: Pass

| Units: mg/l | Year 2019 | Historical period of record |
|-----------------------|-----------|-----------------------------|
| High | 0.132 | 0.132 |
| Mean | 0.0055 | 0.0081 |
| Low | 0.0016 | 0.0003 |
| No. of Samples | 60 | 770 |

Five-year Rolling Average

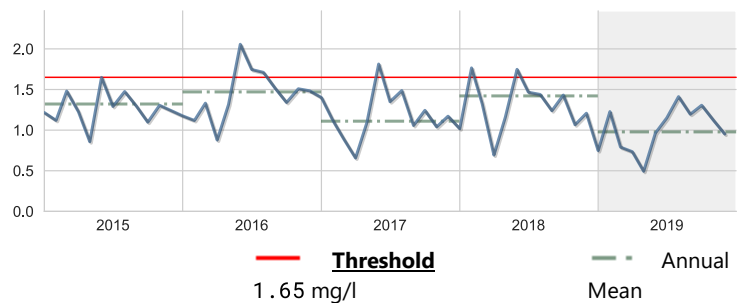


Nitrogen, Total

Score: Pass

| Units: mg/l | Year 2019 | Historical period of record |
|-----------------------|-----------|-----------------------------|
| High | 1.53 | 2.697 |
| Mean | 0.9783 | 1.1146 |
| Low | 0.487 | 0.221 |
| No. of Samples | 54 | 461 |

Five-year Rolling Average



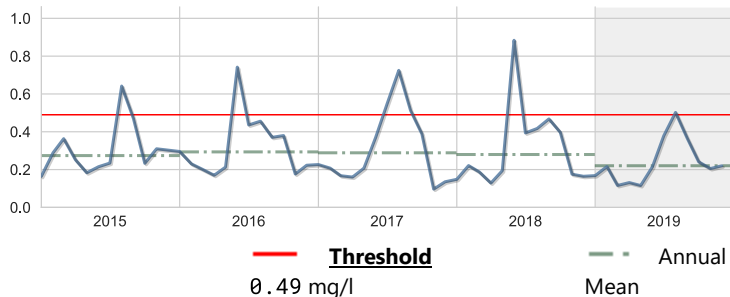
P

Phosphorus, Total

Score: Pass

| Units: mg/l | Year 2019 | Historical period of record |
|-----------------------|-----------|-----------------------------|
| High | 0.544 | 0.885 |
| Mean | 0.2203 | 0.2494 |
| Low | 0.083 | 0.043 |
| No. of Samples | 54 | 795 |

Five-year Rolling Average



DO

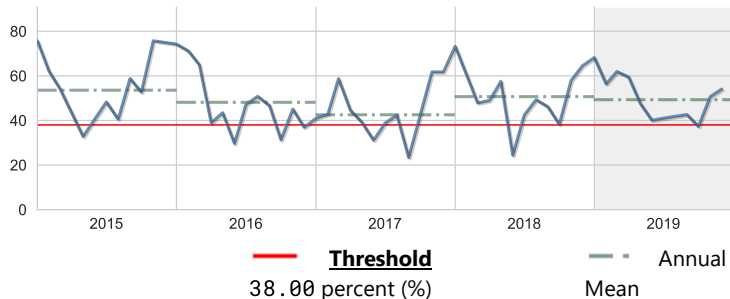
Dissolved Oxygen Saturation

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

Score: Pass

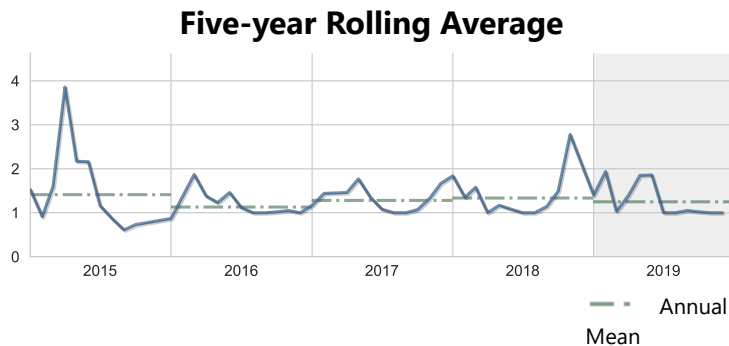
| Units: percent (%) | Year 2019 | Historical period of record |
|-----------------------|-----------|-----------------------------|
| High | 94.90 | 166.80 |
| Mean | 49.3 | 56.04 |
| Low | 21.7249 | 1.70 |
| No. of Samples | 31 | 872 |

Five-year Rolling Average



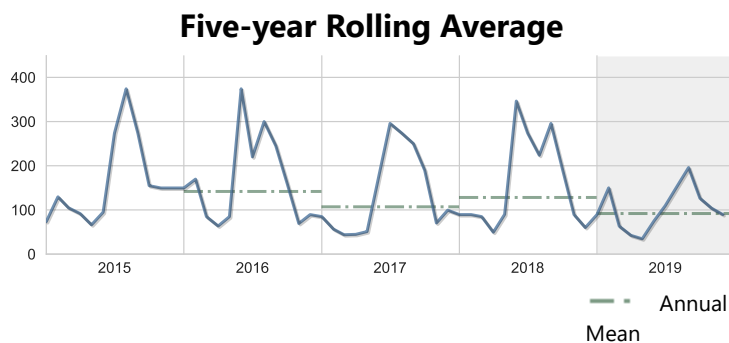
BOD, Biochemical oxygen demand

| Units: mg/l | Year 2019 | Historical period of record |
|-----------------------|-----------|-----------------------------|
| High | 3.46 | 6.58 |
| Mean | 1.25 | 1.35 |
| Low | 1.00 | 0.50 |
| No. of Samples | 48 | 720 |



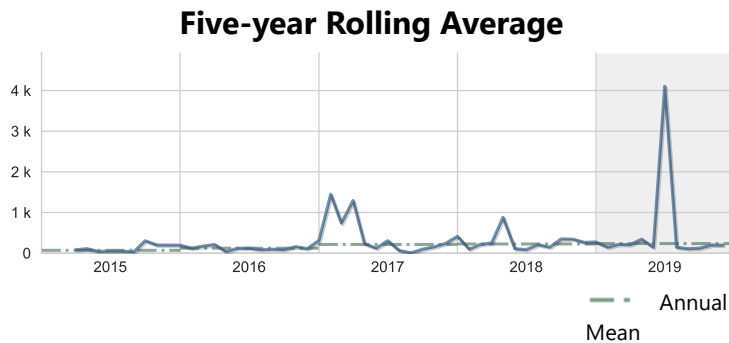
Color

| Units: PCU | Year 2019 | Historical period of record |
|-----------------------|-----------|-----------------------------|
| High | 260.00 | 420.00 |
| Mean | 91.85 | 108.5 |
| Low | 30.00 | 5.00 |
| No. of Samples | 48 | 922 |



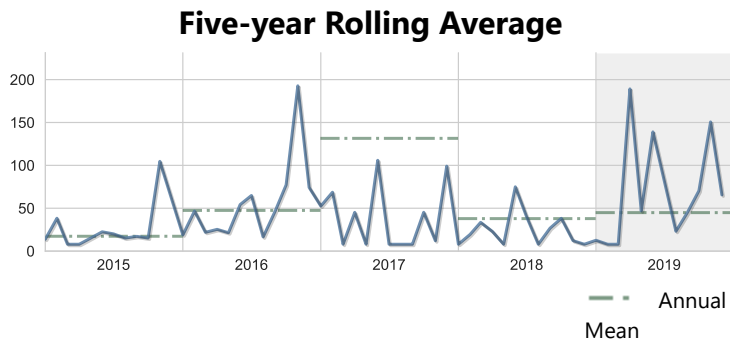
Escherichia coli

| Units: cfu/100ml | Year 2019 | Historical period of record |
|-----------------------|-----------|-----------------------------|
| High | 4106.00 | 4106.00 |
| Mean | 235.5 | 167.81 |
| Low | 109.00 | 10.00 |
| No. of Samples | 24 | 110 |



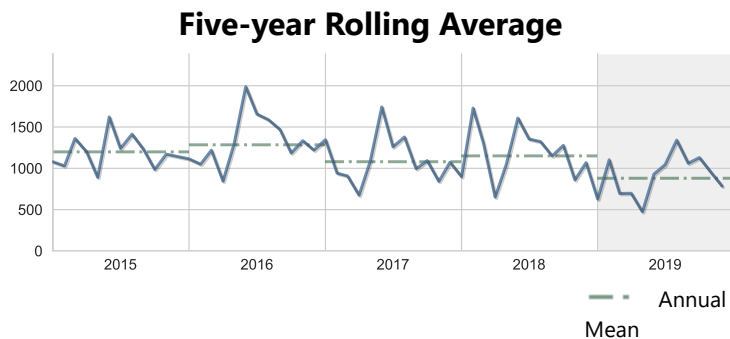
Nitrogen, Ammonia + Ammonium as N

| Units: ug/l | Year 2019 | Historical period of record |
|-----------------------|-----------|-----------------------------|
| High | 484.00 | 25570.00 |
| Mean | 44.87 | 24.82 |
| Low | 8.00 | 0.00 |
| No. of Samples | 54 | 867 |



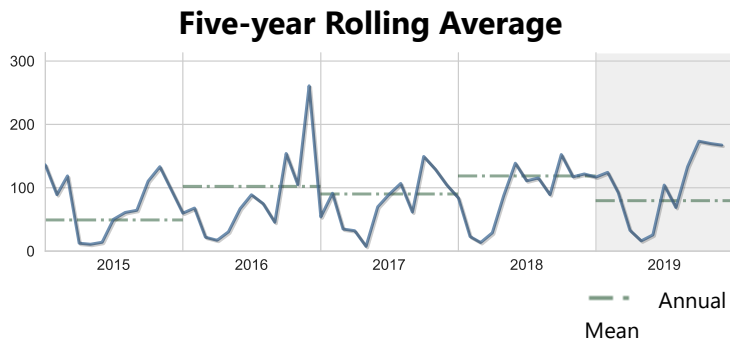
Nitrogen, Kjeldahl

| Units: ug/l | Year 2019 | Historical period of record |
|-----------------------|-----------|-----------------------------|
| High | 1470.00 | 26190.00 |
| Mean | 879.84 | 1047.56 |
| Low | 470.00 | 188.00 |
| No. of Samples | 54 | 835 |



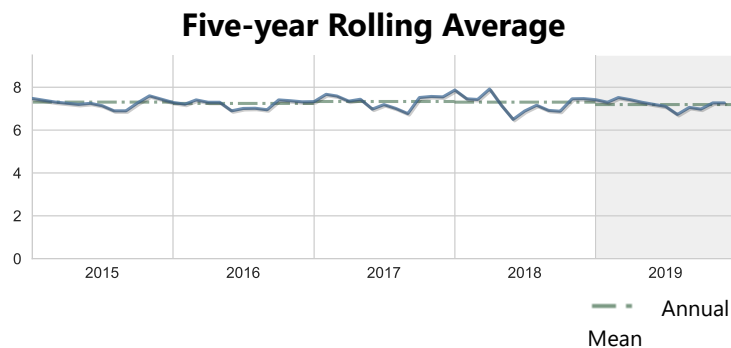
Nitrogen, Nitrite + Nitrate as N

| Units: ug/l | Year 2019 | Historical period of record |
|-----------------------|-----------|-----------------------------|
| High | 220.00 | 790.00 |
| Mean | 79.61 | 63.23 |
| Low | 7.00 | 0.00 |
| No. of Samples | 54 | 798 |



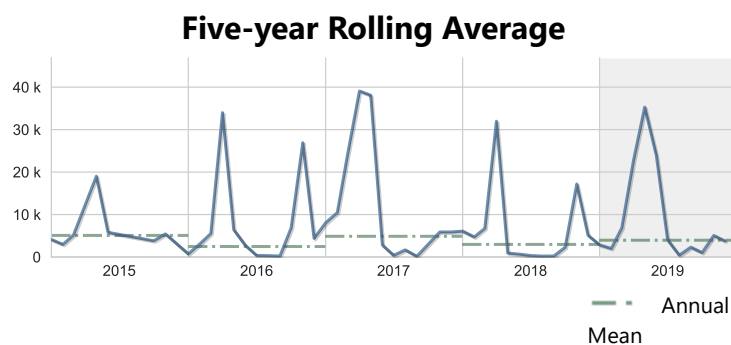
pH

| Units: None | Year 2019 | Historical period of record |
|-----------------------|--------------|--------------------------------|
| High | 7.70 | 8.90 |
| Mean | 7.19 | 7.56 |
| Low | 6.67 | 5.52 |
| No. of Samples | 31 | 4,479 |



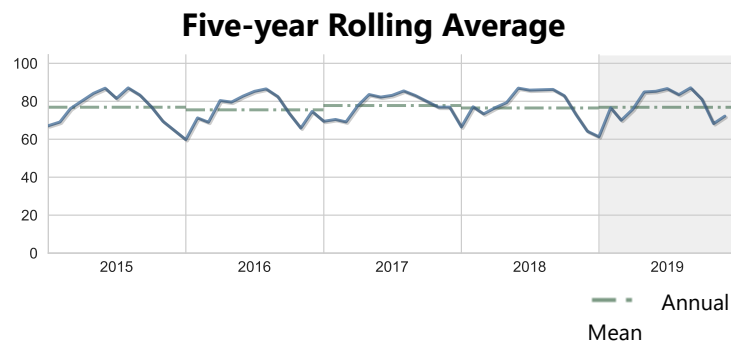
Specific conductance

| Units: umho | Year 2019 | Historical period of record |
|-----------------------|--------------|-----------------------------------|
| High | 44898.10 | 61277.60 |
| Mean | 3956.42 | 14997.87 |
| Low | 248.009 | 0.286 |
| No. of Samples | 31 | 4,464 |



Temperature, water

| Units: deg F | Year 2019 | Historical period of record |
|-----------------------|--------------|-----------------------------------|
| High | 88.9419 | 3574.40 |
| Mean | 76.84 | 74.24 |
| Low | 56.498 | 47.858 |
| No. of Samples | 31 | 4,275 |



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.

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

Impervious Features

Rain that falls on land that is in a natural state is absorbed and filtered by soils and vegetation as it makes its 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.

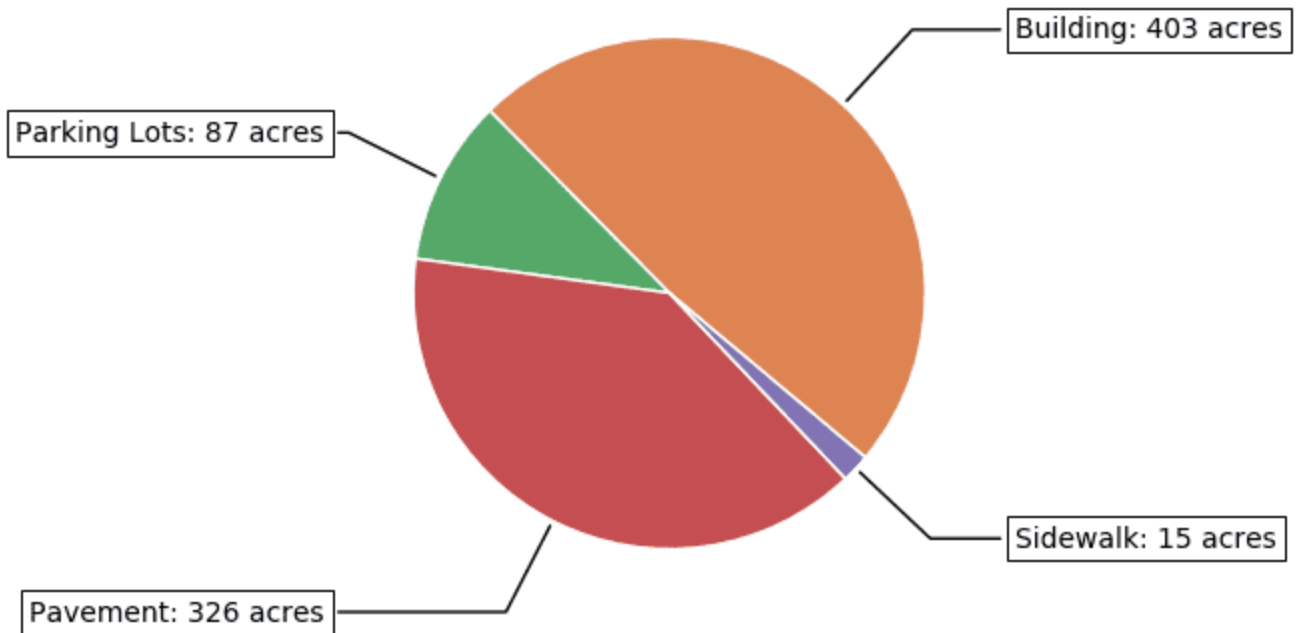


13% of the land area within the **Curry Creek Basin** is covered by impervious

surfaces

2014 Impervious Surface Coverage by Type

in acres, within the Curry Creek Basin





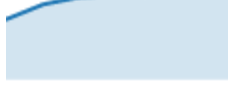
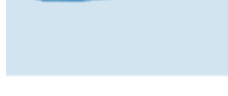

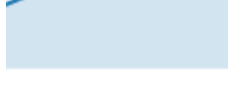


Land Use / Land Cover

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 Curry Creek Basin

2019 Creek Conditions Report for Curry Creek

| Land Use Classification | 1990 | 1995 | 1999 | 2005 | 2011 | 2014 | 2017 | Trend |
|-------------------------------------|----------------|----------------|----------------|----------------|----------------|--------------|----------------|---|
| Urban & Built-up | 2,089 32.7% | 2,331 36.4% | 2,915 45.6% | 3,504 54.8% | 3,621 56.6% | 3,519 55% | 3,825 59.8% |  |
| Agriculture | 1,532 23.9% | 1,374 21.5% | 1,201 18.8% | 736 11.5% | 385 6% | 369 5.8% | 270 4.2% |  |
| Rangeland | 174 2.7% | 212 3.3% | 188 2.9% | 75 1.2% | 317 5% | 322 5% | 214 3.3% |  |
| Upland Forests | 1,452 22.7% | 1,229 19.2% | 826 12.9% | 767 12% | 707 11.1% | 813 12.7% | 701 11% |  |
| Water | 350 5.5% | 438 6.8% | 482 7.5% | 493 7.7% | 492 7.7% | 492 7.7% | 508 7.9% |  |
| Wetlands | 526 8.2% | 463 7.2% | 461 7.2% | 483 7.6% | 522 8.2% | 522 8.2% | 519 8.1% |  |
| Barren Land | 8 0.1% | 21 0.3% | 0 0% | 0 0% | 0 0% | 0 0% | 0 0% |  |
| Transportation and Utilities | 266 4.2% | 330 5.2% | 326 5.1% | 341 5.3% | 354 5.5% | 362 5.7% | 360 5.6% |  |

2017 Land Use / Land Cover for Curry Creek Basin

as a percentage of land area for this basin

