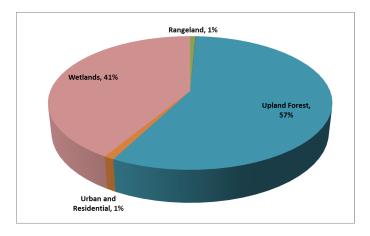
# **Waterbody: Fisher Creek**



## **Basin: Fisher Creek**

Located in the Apalachicola National Forest, Fisher Creek is a phosphorus-limited, naturally dark, tannic stream in southwestern Leon County. The stream eventually enters the Floridan aquifer via a sink located in the Leon Sinks Recreation Area. Dye trace studies have linked this sink to Wakulla Springs.

While the following pie chart shows the majority of the 17,984-acre watershed is relatively undeveloped, urban, residential, and rangeland land uses make up approximately 2% of the watershed. Increases in stormwater runoff and waterbody nutrient loads can often be attributed to these types of land uses.



## **Background**

Healthy, well-balanced stream communities may be maintained with some level of human activity, but

excessive human disturbance may result in water-body degradation. Human stressors may include increased inputs of nutrients, sediments, and/or other contaminants from watershed runoff, adverse hydrologic alterations, undesirable removal of habitat or riparian buffer vegetation, and introduction of exotic plants and animals. State water quality standards are designed to protect designated uses of the waters of the state (e.g., recreation, aquatic life, fish consumption), and exceedances of these standards are associated with interference of the designated use.

#### Methods

Surface water sampling was conducted to determine the health of Fisher Creek and met the collection and analysis requirements of the Florida Department of Environmental Protection (FDEP).

#### Results

#### **Nutrients**

The nutrient thresholds and results are found in Table 1. According to FDEP requirements, Numeric Nutrient Criteria (NNC), expressed as an annual geometric mean, cannot be exceeded more than once in a three-year period. When viewing Table 1, the absence of a number means there were not enough data collected (due to lack of water or low water levels) to calculate a result. When data requirements were met (e.g., four samples collected in a calendar year), nutrient values were shown to not exceed the state criteria. For illustrative purposes, individual data points were plotted to determine any possible trends (Figures 1 and 2). Individual values did not exceed the instream criteria for total phosphorus and rarely exceeded total nitrogen criteria.

**Table 1.** FDEP's total nitrogen and phosphorus criteria for

streams applied to Fisher Creek.

Fisher Creek	Total Nitrogen Threshold 1.03 mg/L	Total Phosphorus Threshold 0.18 mg/L
2007	-	-
2008	0.48	0.01
2009	0.44	0.01
2010	0.61	0.01
2011- 2012	-	-
2013	0.65	0.01
2014	0.75	0.01
2015	0.68	0.01
2016	-	-
2017	0.68	0.01
2018	0.79	0.01
2019	-	-
2020	0.67	0.01
2021	-	-

### Other Parameters

Other water quality parameters appear to be normal for the area and no impairments were noted.

## **Conclusions**

Based on ongoing sampling, Fisher Creek met the nutrient thresholds for the Big Bend Bioregion. All other water quality parameters appear to be normal.

Thank you for your interest in maintaining the water quality of Leon County's aquatic resources. Please feel free to contact us if you have any questions.

## **Contact and resources for more information**

www.LeonCountyWater.org

Click here to access the results for all water quality stations sampled in 2021.

<u>Click here for a map of the watershed – Sample Site 50.</u>

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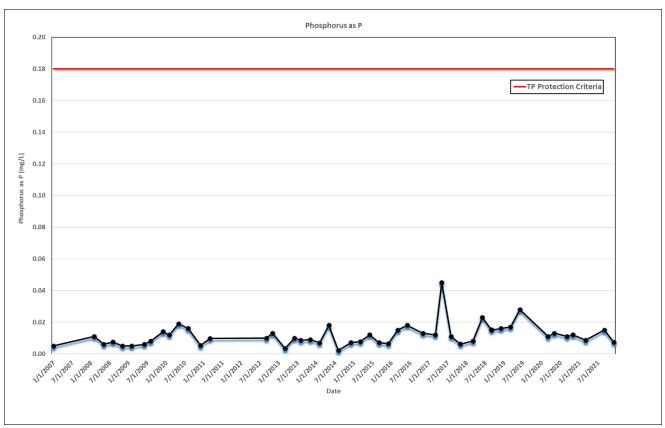


Figure 1. Total phosphorus results for Fisher Creek.

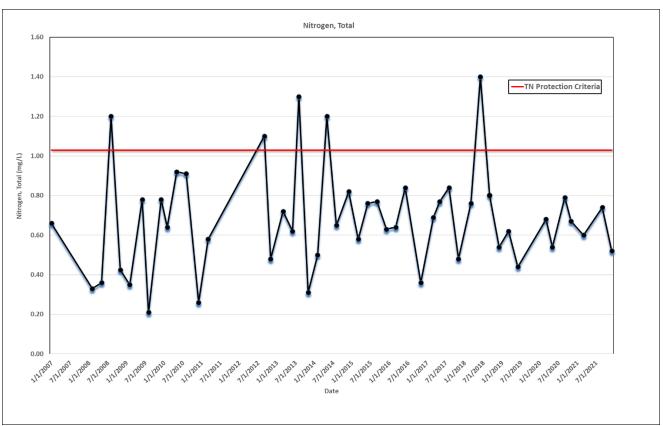


Figure 2. Total nitrogen results for Fisher Creek.