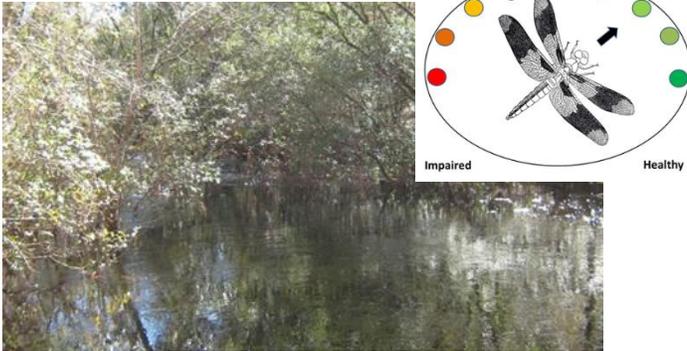


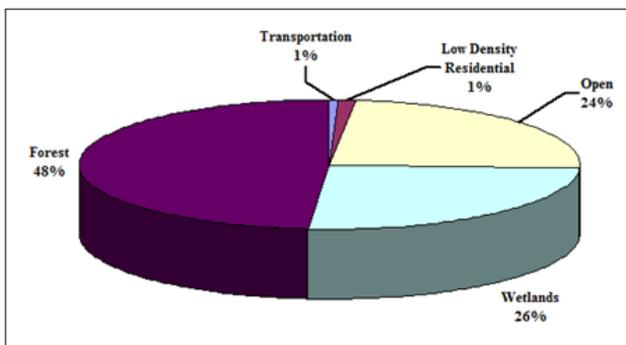
## Waterbody: Fisher Creek



## 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 20,083 acre water relatively undeveloped, residential and transportation 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 waterbody 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 (expressed as an annual geometric mean) cannot be exceeded more than once in a three year period. When data requirements were met, nutrient values were shown to not exceed the state criteria.

**Table1.** FDEP's total nitrogen and phosphorus criteria for streams applied to Fisher Creek. Due to low water levels, the numeric nutrient criteria data requirements could not be calculated for years 2007, 2011 and 2012.

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

## *Metals*

Fisher Creek's copper levels exceeded Class III water quality criteria during the 4<sup>th</sup> quarter of 2013. Prior to sampling, the area received 0.33 inches of rain that possibly allowed copper contaminated runoff to enter the creek.

[Click here for more information on metal levels in Leon County waterbodies.](#)

## *Other Parameters*

Biological Oxygen Demand (BOD) was slightly elevated (3.4 mg/L) during the 4<sup>th</sup> quarter sampling event. 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. With the exception of the elevated BOD result in the 4<sup>th</sup> quarter, 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.LeonCountyFL.gov/WaterResources](http://www.LeonCountyFL.gov/WaterResources)

[Click here to access the results for all water quality stations sampled in 2013.](#)

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