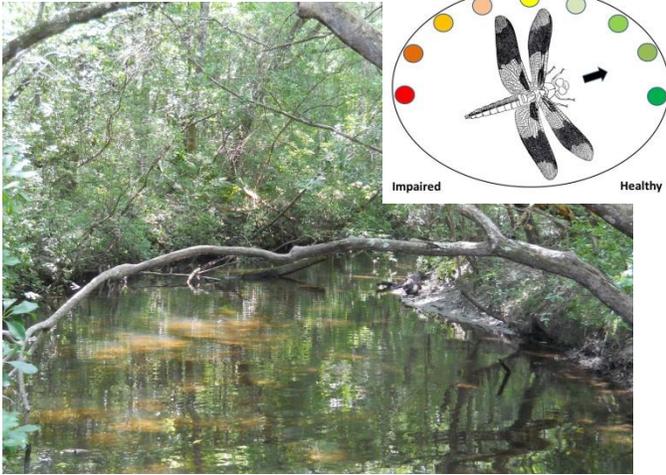


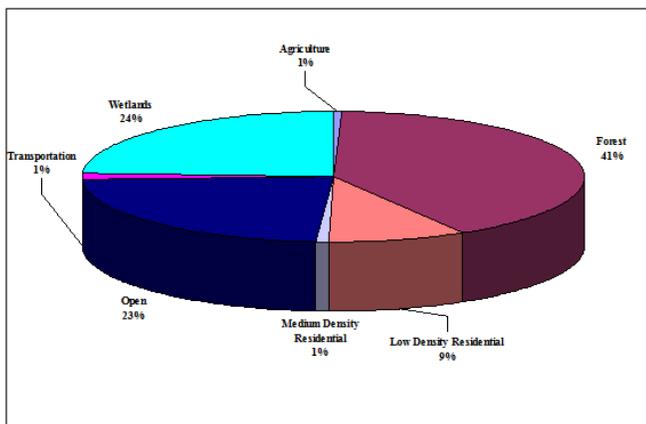
## Waterbody: Harvey Creek



## Basin: Ochlockonee River

Harvey Creek is a tannic, slightly acidic, phosphorus-limited stream that flows into Lake Talquin and is located in western Leon County.

While the following pie chart shows the majority of the 5,679 acre watershed is relatively undeveloped, residential, agricultural, and transportation land uses make up approximately 12% 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 Harvey 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. The State criteria were not exceeded for either parameter.

**Table 1.** FDEP's total nitrogen and phosphorus criteria for streams applied to Harvey Creek.

Harvey Creek	Total Nitrogen Threshold 1.03 mg/L	Total Phosphorus Threshold 0.18 mg/L
2006	0.11	0.00
2007	0.17	0.00
2008	0.15	0.00
2009	0.15	0.00
2010	0.33	0.00

Harvey Creek	Total Nitrogen Threshold 1.03 mg/L	Total Phosphorus Threshold 0.18 mg/L
2011	0.43	0.01
2012	0.39	0.00
2013	0.21	0.00
2014	0.35	0.00

[Click here for map of watershed – Sample site 39.](#)

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### *Fecal Coliforms*

As Figure 1 shows, fecal coliform levels exceeded the Class III water quality standard daily limit (400/100 mL in at least 10% of the samples) 50% of the time over the sampling period. There were no exceedances in 2014. Since the watershed is relatively undeveloped, elevated fecal levels are probably the result of wildlife in the area. FDEP is currently in the process of revising their bacterial standards and it is hoped that the proposed indicator organism (*E. coli*), as well as microbial source tracking, can give staff a more reliable indicator and help to determine the source of the fecal coliform bacteria.

### **Conclusions**

Based on ongoing sampling, Harvey Creek met the nutrient thresholds for the Big Bend Bioregion. There have been past issues with fecal coliforms exceedances but there were no exceedances in 2014. Other water quality parameters appear to be normal.

Thank you for your interest in maintaining the quality of Leon County’s water 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 2014.](#)

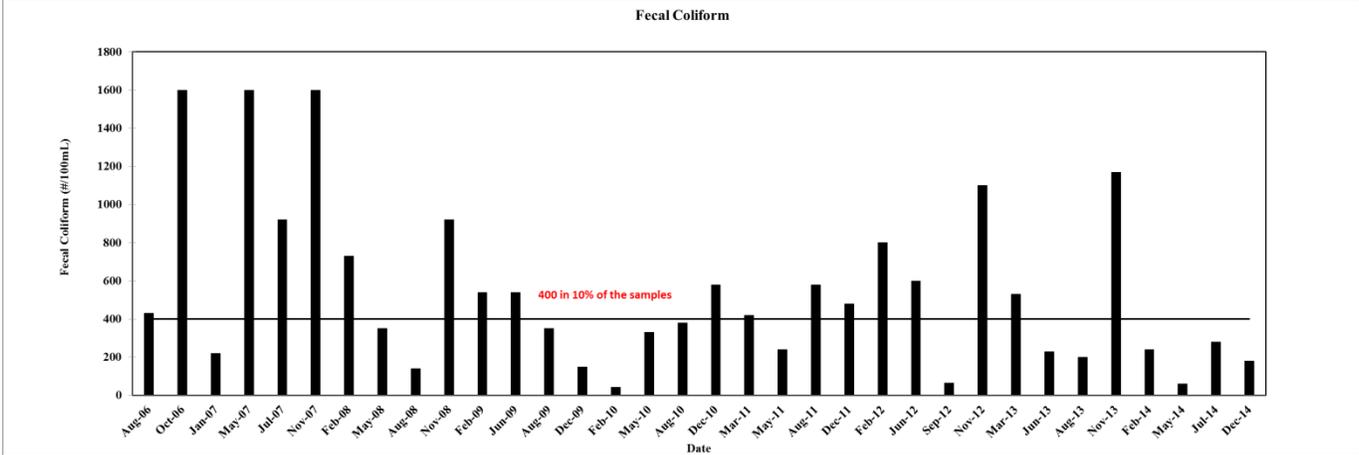


Figure 1. Fecal coliform levels (2006-2014).