

Withlacoochee River Watershed Initiative

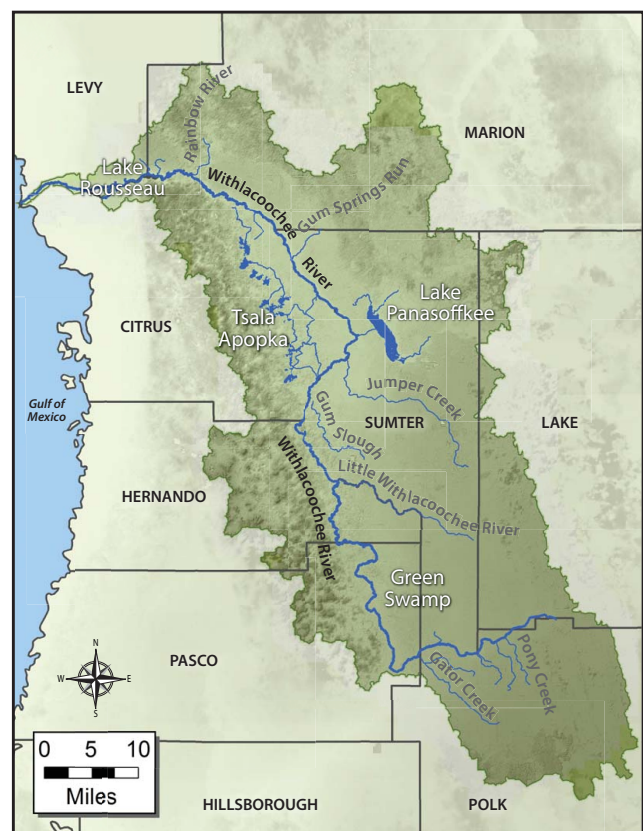
The initiative was designed to better understand the dynamics of the river and watershed, identify how alterations have affected the system, and evaluate alternatives to better manage the water resources.

Project Overview

The District is studying the Withlacoochee River and its surrounding watershed from the Green Swamp to the Gulf of Mexico. This watershed contains a variety of natural environments and man-made alterations which affect the behavior of the river. In addition, the river system has experienced extreme high and low conditions in recent decades due to fluctuations in rainfall.

As part of this initiative, staff have performed hydrology and hydraulics studies, field investigations and engineering analyses to evaluate how the river system functions. This includes the development of a comprehensive computer model of the entire Withlacoochee River, which has been calibrated using in-depth field surveys and published gauge data. The next step is to run different model scenarios and analyze how the scenarios will affect each other and the overall dynamics of the river and watershed. The model results will help staff evaluate alternatives to better manage the water resources. The system is interconnected, so making one change in an area will likely affect other areas of the watershed.

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River Model Scenarios

Nineteen scenarios have been identified through years of meetings and workshops with external stakeholders, special interest groups and residents. These scenarios are being tested by the model to show how historical alterations have affected the river and watershed. They include:

- Five scenarios in the Green Swamp related to berms, ditches, bridge pilings and historical rock formations
- Six scenarios in the Tsala Apopka Chain-of-Lakes related to flooding, low water levels, structure operations and pre-settlement conditions
- Two scenarios in the Lake Rousseau area related to conveyance of water through the Bypass Spillway to the lower Withlacoochee River
- Six scenarios at various locations along the river related to flooding, low water levels and structure operations
- The river is designated an Outstanding Florida Water by the Florida Department of Environmental Protection.
- Approximately 80 percent of the Green Swamp, a designated Area of Critical State Concern because of its ecological and hydrological importance, lies within the headwaters of the watershed.
- Historical alterations due to navigation, logging, mining and ranching have occurred as far back as the 1800s in the watershed. In addition to these alterations, the system has experienced extreme high and low conditions in recent decades due to natural fluctuations in rainfall and groundwater levels.

Facts about the Withlacoochee River and Watershed

- The Withlacoochee River watershed covers approximately 2,100 square miles in parts of Citrus, Hernando, Lake, Levy, Marion, Pasco, Polk and Sumter counties.
- The Withlacoochee River is approximately 160 miles long and originates in the Green Swamp extending northward through eight counties before eventually discharging into the Gulf of Mexico near Yankeetown, Florida.

Outreach Activities

Staff have been meeting with elected officials, special interest groups and residents to communicate project status and solicit feedback regarding model scenarios. Once the model scenarios are complete, staff plans to provide the model results for review and comment through public workshops during the Spring of 2015. Visit **WaterMatters.org/Withlacoochee** for a list of the model scenarios and additional information.

Southwest Florida
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For more information, contact **Mark Fulkerson, Ph.D., P.E.**, senior professional engineer, at **1-800-423-1476** (FL only), ext **4410**.