

Georgia's 2018

# CLEAN WATER HEROES

University of Georgia, Warnell School  
of Forestry and Natural Resources

## MIDDLE OCONEE RIVER

Dam Removal Opens Up River for Fish and Boaters

### INTRODUCTION:

In July, students and faculty at the University of Georgia's Warnell School of Forestry and Natural Resources witnessed the demolition of a long-standing and iconic structure in the midst of their 840-acre Whitehall Forest outdoor classroom and research area...all in the name of restoring a river. With assistance from multiple partners, the Warnell School oversaw the modification of White Dam, an obsolete hydro-power dam built in 1911, that is expected to improve habitat for the river's fish and other aquatic creatures while also opening up the river for canoeists, kayakers and paddleboarders.

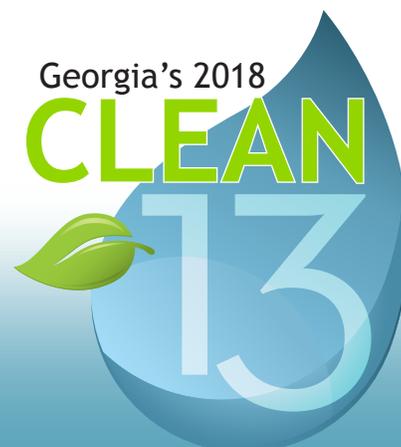
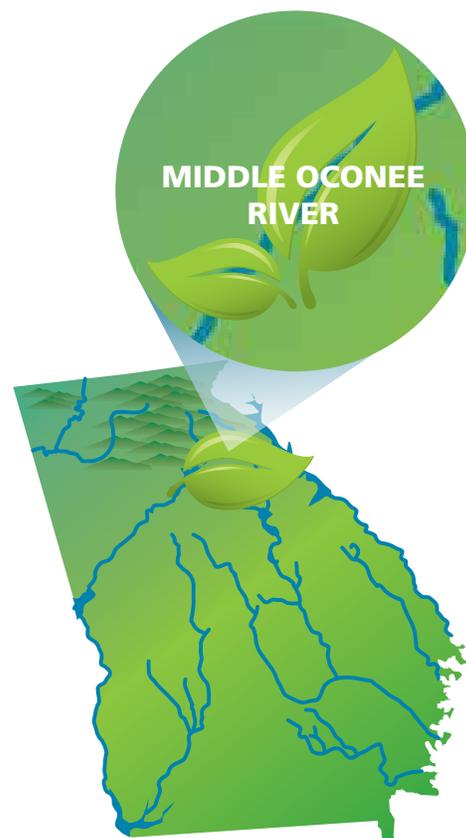
### THE WATER BODY:

Part of the larger Altamaha River system, the 39-mile Middle Oconee River cuts a winding path through Jackson, Barrow, Clarke and Oconee counties before meeting the North Oconee just south of Athens to create the 220-mile Oconee River. The Oconee and Ocmulgee meet in South Georgia near Lumber City to form the Altamaha. The Middle Oconee serves as a primary drinking water source for Athens-Clarke County as well Barrow, Jackson and Oconee counties. Its water also feeds lakes Oconee and Sinclair, helping create a resort and recreation destination that's come to be known as "Georgia's Lake Country." The river also is home to Ocmulgee and Altamaha shiners, fish that are found in the upper Altamaha River basin and nowhere else in the world.

### THE CLEAN:

In a town infused with 37,000 college students, it's no surprise that the genesis of the removal of White Dam had its origins with one of those students. In 2016, a group of students that included Warnell's Justin Vining wrote a paper along with Drs. Jay Shelton and Laurie Fowler that highlighted the benefits to fish and recreation that would result from making the Middle Oconee flow freely once again.

When Vining presented his findings to the Upper Oconee Watershed Network, the *Athens Banner-Herald* was on hand to report on it. The headline: "Removing UGA dam would help river, but won't happen soon" prompted Warnell School leaders to take up the cause. As it turned out, it happened sooner, rather than later.





Through partnerships with U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Geological Survey, The Nature Conservancy, Southeast Aquatic Resources Partnership, American Rivers and other UGA units including the Odum School of Ecology and the College of Engineering, the school worked with remarkable speed to complete the project in less than two years.

In fact, this was the first dam removal project in Georgia permitted by the U.S. Army Corps of Engineers under a special program that simplifies and speeds the dam removal process. Equally important, while the bulk of the dam was removed, the historic power house and other significant components were preserved.

UGA faculty, staff and students completed much of the planning and paperwork necessary to qualify for the program. If privately financed, such a project might have cost as much as \$800,000, but by leveraging their partnerships, the Warnell School's contribution was around \$30,000.

The project creates some 22 miles of free-flowing river between the Tallassee Dam upstream on the Middle Oconee and Barnett Shoals Dam downstream on the Oconee River, eliminating an obstacle to movement of fishes like the Altamaha and Ocmulgee shiners that has existed for more than a century.

Dams are considered one of the primary threats to the survival of fish that thrive in free-flowing streams. Over the past 200 years, they have seen their home range chopped up by some 5,400 dams built on rivers and creeks in the upper Oconee River system, leading Georgia wildlife authorities to list the Altamaha shiner as a threatened species.

“People understand habitat fragmentation on land, but it is just as critical in aquatic systems,” said Dr. Shelton, who believes that the removal might be the first of many around the state authorized with the primary goal being habitat restoration and enhancement.

The removal is also expected to be a boon for recreational boaters and anglers who previously avoided this section of river because of the navigational hazard created by the dam and the difficulty of portaging around it.



*Top: Heavy equipment operators work to remove portions of the White Dam on the Middle Oconee River. Above: Aerial photographs show the dam before and after partial removal. The project creates 22 miles of free-flowing river between upstream and downstream impoundments. The removal is expected to improve habitat for Altamaha and Ocmulgee shiners, fish that are found in the Altamaha River basin and nowhere else on Earth.*



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