

Locks Are Key to Fish Migration on the Alabama River

The Alabama River drains the eastern half of the Mobile River Basin and serves as a vital corridor between the Gulf of Mexico and hundreds of miles of interior rivers. In the late 1960's and early 1970's the U.S. Army Corps of Engineers (Corps) constructed Claiborne and Millers Ferry Locks and Dams on the Alabama River for the purposes of navigation, recreation, water quality and hydroelectric power generation. The dams were constructed without fish ladders or other modifications specifically intended to allow the movement of fish between marine and freshwater environments or make long migratory swims through the area. In the 1990's discussions between the Corps and state and federal agencies and other interested parties resulted in several scenarios to improve fish passage at the lowermost structure but the solutions were deemed cost-prohibitive and difficult to implement. In 2008 and 2009, a fish passage working group composed of scientists from Alabama Department of Conservation and Natural Resources, Geological Survey of Alabama, United States Fish and Wildlife Service, Auburn University, Alabama Power Company, the Corps, and The Nature Conservancy developed a low cost scenario for fish passage that included utilizing existing navigation locks at the two dams. During the months of April and May 2009, the Corps implemented the plan and opened and closed the lock chambers with the specific intent to allow fish to swim into the lock and then exit upstream or downstream on their own accord. Tracking the movements of fish and the testing the effectiveness of these efforts in 2009 was minimal. Initial observations justify the need for more in-depth studies to test the ability of fish to pass the manmade barriers and return to their historic spawning and feeding grounds in the Alabama River and beyond.

Presenters and co-authors:

Chuck Sumner¹ and Paul Freeman²

lewis.c.sumner@usace.army.mil

pfreeman@tnc.org

¹U.S. Army Corps of Engineers, Mobile District

²The Nature Conservancy