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FSU researchers concerned about reduced Apalachicola River flow and impacts on marine life

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Reducing the flow of the Apalachicola River could have detrimental effects on marine ecosystems, including fish populations, according to a recent study by researchers at Florida State University.

The findings relate to the two-decade "water war" between Florida, Georgia and Alabama, said Dr. Steven Morey, a research scientist with FSU's Center for Ocean-Atmospheric Prediction Studies.

"(The study) raises more questions that need to be answered before management policies are enacted that could potentially have much further-reaching impacts than previously considered," Morey said.

The three states have fought over water rights since the early 1990s, and the political battle has become more intense in recent years because of drought conditions.

Earlier this month, Florida lawmakers urged the U.S. Army Corps of Engineers not to go through with a plan that could further restrict water flowing to Florida from federal reservoirs in Georgia.

Morey, along with Dmitry Dukhovskoy, COAPS research scientist, and Mark Bourassa, associate professor of meteorology, studied the effects of seasonal and year-to-year variations of the river flow — caused by changes in precipitation — on the western Florida continental shelf. Morey said previous studies of the low-flow conditions focused primarily on the Apalachicola River and the Apalachicola Bay.

"We were interested to see what the greater influence would be over the wider area of the continental shelf, particularly in regions of importance to fisheries," Morey said.

Using satellite ocean color data and an ocean model, the study found that years with low-river flow showed a lesser concentration of phytoplankton, a microscopic plant-like organism that serves as food for bigger organisms, Morey said.

The affected areas included a region used as spawning grounds for important reef fish, such as grouper, and other marine life. Morey said a lack of food available to marine life could lead to a

reduction in fish stock.
