

Water managers want to try different type of Lake Okeechobee release
Stuart News
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April 14, 2006

At the urging of St. Lucie River activists, federal water managers are considering a proposal to change the way they discharge excess water from Lake Okeechobee. Biologists with the U.S. Army Corps of Engineers are evaluating an experiment that would have relatively small volumes of lake water flow into the estuary at a constant rate in an effort to stabilize the river's salty conditions during the spawning season.

The idea was proposed by members of the Rivers Coalition, who believe the small releases would be a way to lower the lake without further degrading the health of the estuary. "If they need to move water out, the best way to do it is at a very low rate so they won't affect the salinity profile," said Mark Perry, the executive director of the Florida Oceanographic Society. "If we're trying to save the lake and the estuary at the same time, it's a balancing act."

While corps officials have yet to decide whether to begin another 10-day round of releases, Lake Okeechobee is still 2.4 inches above the goal of 14 feet above sea level by May 1.

Corps engineer Andrew Geller said the proposed discharges would be equivalent to half the volume of a normal low-level, "pulse-style" release, except the water would flow at the constant rate of 2,842 gallons a second.

Peter Doering, an estuarine biologist with the South Florida Water Management District, said state scientists never studied the idea of constant low releases in the St. Lucie River.

But in the Caloosahatchee River, where they release fresh water from the lake to stop saltwater intrusion, constant low-level releases have been found to create a freshwater "lens" on top of the water, stopping oxygen from reaching the saltwater layer underneath.

"Scientifically, an experiment is a good idea," he said. "But you want to achieve scientific rigor and a good level of confidence in the results. Mixing is a big concern."

Doering said he'd also want to see how the estuary responds throughout the year.

Kevin Henderson, the executive director of the St. Lucie River Initiative, said it was especially important during the dry season - when very little rain would run off naturally into the river and fish and oyster spawning begins.

"It doesn't rain like that in the spring," he said. "This could mimic the dry season better."

DIFFERING DISCHARGES

"Pulse-style": Low-level releases from Lake Okeechobee average 5,464 gallons a second, but flow into the estuary at rates varying from zero to 11,968 gallons a second over 10 days.

Proposed: Discharges will be 2,842 gallons a second over the entire 10-day cycle.