

Rare Florida jewel, Blue Cypress Lake, sickens with pollution



Lisa Rinaman
ST. JOHNS RIVERKEEPER

Blue Cypress Lake's rising pollution linked to sewage treatment.



By **Kevin Spear**
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While Florida has spoiled multitudes of lakes, Blue Cypress has been widely revered as an icon of natural enchantment, ringed by swamp trees, patrolled by ospreys and secluded seemingly from pollution.

But since last summer, authorities have documented a surprising spike in contamination at the large lake 70 miles south of Orlando that spawns Central Florida's biggest river and future water source, the St. Johns.

The suspected culprit at Blue Cypress Lake is byproducts from municipal treatment of sewage.

Pollution levels have risen sharply, said John Hendrickson, supervising scientist at the St. Johns River Water Management District. "One of the things that jumps out at you is the utilization of biosolids."

Biosolids are left over at a treatment plant after bacteria decompose human waste into sludge fertile with nitrogen and phosphorus compounds.

Rarely drawing public awareness, biosolid sludge is a costly bane of cities and counties that operate sewage plants and one of Florida's most vexing and environmental challenges.

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Most biosolid sludge – either raw or refined – is spread on farms and pastures in a state laced with wetlands, rivers and lakes.

“What is actually happening is we are using our agriculture lands as solid-waste disposal sites for sludge,” said Gary Roderick, an environmental consultant in Martin County, where he formerly was the county's head of water quality.

Echoing opponents of the practice, Roderick said farms and ranches are overdosed with sludge, accumulating a damaging source of pollution able to trigger a green invasion of harmful algae in rivers and lakes.

In a state of nearly 2,000 small and large plants treating household sewage, the city of Orlando alone pays about \$3 million annually to get rid of its sludge as a low-cost agricultural fertilizer.

Orlando is looking for more benign disposal options.

“We continue to evaluate any new technologies that could further reduce our impact to our environment through our treatment of biosolids,” city spokeswoman Cassandra Lafser said.

Environmental groups suspect the health of Blue Cypress and the dilemma of biosolids are intersecting because of events a decade ago.

At that time, the upper Everglades ecosystem along the Kissimmee River was found to be sickened by disposal of biosolid sludge on adjoining agricultural lands.

State rules were revised so that only as much fertilizer content in biosolids could be used in the Kissimmee basin as crops or pasture grass would require.

Audubon scientist Paul Gray said disposal of biosolids along the Kissimmee River decreased. But exactly where any resulting increase then occurred, including whether it was in the landscape around Blue Cypress, is hard to say.

“They have the data to say where it’s going,” Gray said of state authorities. “But they won’t add it up, and a lot of people have asked them to.”

The Florida Department of Environmental Protection said in a statement there isn’t enough evidence to blame biosolids for the surge in Blue Cypress pollution.

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Blue Cypress is little more than an hour south of Orlando, east of an outpost called Yeehaw Junction, and of its 13 miles of shoreline curtained by cypress trees, there is just a speck of human intrusion: a fish camp and cottages.

The lake is regularly described as an uncommon treasure.

“It is one of the most pristine in Florida,” said Lisa Rinaman, who leads the environmental group, St. Johns Riverkeeper, and is pressing state officials for answers about Blue Cypress.

Rinaman pointed out that Blue Cypress is the first lake along the St. Johns River, which winds more than 300 miles from near Vero Beach, through Central Florida and then Jacksonville to the Atlantic Ocean.

Though controversial, the upper St. Johns River – spawned by outflow from Blue Cypress – is to be tapped by Central Florida for drinking water to supply its growing population.

That water supply was significantly protected by a \$250 million restoration of the river’s headwaters, an operation in recent decades that the St. Johns River Water Management District regards as one of its crowning achievements.

But the headwaters’ jewel, Blue Cypress, is more distressed than is readily apparent.

The lake is naturally dark, stained like tea by decomposing vegetation in adjoining wetlands.

If the lake were less inky and allowed more penetration of sunlight, Blue Cypress likely would blossom with the vivid color of unwanted algae feasting on pollution.

“It would be very green,” said Hendrickson, the district’s scientist.

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