

# Will Nitrates Undo Weeki Wachee Springs Restoration?

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Continue reading for the article by Dan DeWitt in the Tampa Bay Times. The original article can be seen [HERE](#) in the Tampa Bay Times on Sunday, April 12, 2009.

## Let's hope nitrates don't undo Weeki Wachee Springs restoration



RON THOMPSON | Times

*Andres Andres plants eelgrass along the shoreline at the headwaters of the Weeki Wachee River on Thursday as part of a \$645,000 restoration of the basin's natural vegetation.*

*Eight-year-old Samar Perez-Bouktab walked over a slight rise in the sidewalk at Buccaneer Bay on Thursday morning and caught her first view of the famous pool of sun-soaked, blue water.*

*“There’s the spring,” said Samar, of Tampa. “Sweet!”*

*Weeki Wachee Springs still has that effect on people, still has the power to dazzle. And a few feet farther down the walk, Samar saw workers trying to make the spring basin look even better.*

*On Thursday, a crew planted 3,000 sprigs of eelgrass – and will eventually plant 100,000 – as part of the Southwest Florida Water Management District’s \$645,000 restoration of the basin’s natural vegetation.*

*If you visit Buccaneer Bay water park, which recently reopened for the year, you will notice that workers have also cleared much of the tangled algae that covered the spring’s bed.*

*They have cut away exotic bamboo and elephant ears from the attraction’s high ground, allowing native palmettos to sprout in their place.*

*All along the waterline, they have planted neat rows of saw grass and bulrushes; they have pumped away tons of channel-clogging sand, some of which was imported over the years to refresh the attraction’s artificial beach.*

*A year from now, the view should be even better, said Veronica Craw, an environmental manager for the water district.*

*“Hopefully you’ll see lush beds of eelgrass and a substantial amount of shoreline vegetation,” she said.*

*And hopefully this won’t all turn out to be a big waste of time and money.*

*I hate be a pessimist because this is necessary work, as was a previous project to capture runoff that once flowed from U.S. 19 directly into the spring.*

*The attraction is now a state park. The district owns the land. Even though the spring is within exhaust-sniffing distance of U.S. 19 and its most famous life form is young women in waterproof makeup and fabric tails, the district has a duty keep the park as natural as possible.*

*But this isn't as easy as clearing away algae, which is merely (if I can use that word for such an eyesore and environmental scourge) a symptom.*

*The root cause is almost certainly nitrate contamination, said Bob Knight, an aquatic scientist from Gainesville. And if it is, he said, "then I'd have to say, yes, (the restoration) is probably futile."*

*In more than 30 years of studying Florida springs, including for his doctoral degree from the University of Florida, Knight has seen algae advance at about the same rate that nitrate levels have climbed.*

*Without controlling the source of nitrates – primarily fertilizer – the algae will, once again, crowd out the eelgrass.*

*Partly because this gracefully undulating vegetation is a favorite food of manatees and fish, the number and variety of aquatic wildlife has plummeted in the past 50 years, which his 2006 study of Silver Springs proved conclusively.*

*Tragic, yes. Terribly so. But there may be an even greater problem coming down the pike. As nitrate concentrations approach or exceed 1 part per million in spring water (the*

level is about 0.8 parts in Weeki Wachee) hot spots of contamination in the aquifer may reach 10 parts per billion, Knight said.

At that level, according to the federal Environmental Protection Agency, nitrates become toxic to humans.

Okay, we're not there yet in Hernando County. But levels of nitrogen pollution in the aquifer are steadily climbing throughout northern Florida.

"This is an incredibly widespread problem," Knight said.

Is it Swiftmud's problem? Well, protecting water quality is primarily the responsibility of the state Department of Environmental Protection. But since the water management district sounded one of the first alarms about nitrate pollution with a study of coastal springs 12 years ago, I think it could make more of a fuss. So could the DEP.

Of course, staffers tend not to last long if they advocate policy without the support of elected officials. So, let's put the pressure where it counts – on Hernando County commissioners, who will be considering a fertilizer ordinance in the coming months, and on state legislators, who have the power to pass a very strong springs protection bill.

Let's watch to see what they do. The dazzle of Weeki Wachee is in their hands.