

Hiding Piney Point toxic waste underground may give us a taste of super-nasty water

April 16, 2021



toxic process water atop gypstack. Photo by Jim Tatum

Much has been written about the Piney Point fiasco lately because of the recent pollution allowed by the DEP, but Craig Pittman puts a new spin on the antics of the Manatee County Commission our very own DEP. He also explains why deep well injection is a crazy and dangerous idea

Read the original article here in [the Florida Phoenix](#).

Comments by OSFR historian Jim Tatum.

jim.tatum@oursantaferiver.org

– A river is like a life: once taken,

Hiding Piney Point toxic waste underground may give us a taste of super-nasty water

By [Craig Pittman](#)

April 15, 2021

Ninous Isom, a farmer in Manatee County, tends to his irrigation system in April 2021. He worries a plan to inject polluted water from the Piney Point fertilizer plant into the aquifer could harm his crops. Credit: Craig Pittman

On Tuesday, Gov. Ron DeSantis held a press conference at Piney Point, the old phosphate processing plant near Tampa Bay.

Only a week earlier, Piney Point was making international headlines for being the source of a potential toxic waste disaster – not for the first time. Now the crisis had been averted, and DeSantis didn't want a repeat.

“We want this to be the last chapter of the Piney Point story,” [the governor said](#), vowing to shut the site down for good.

What the governor didn't mention was what would happen to the millions of gallons of pollution at the old plant, all sitting atop the towering phosphogypsum waste stacks that the processing plant left behind.

But don't worry. The Manatee County Commission has a plan. And I

am certain it will benefit us all.

You see, because I have kids, I have seen lots of movies and TV shows about superheroes and supervillains. If there's one thing I've learned from all these flicks, it's that anytime normal humans come into contact with toxic waste, they wind up becoming waaaay smarter and lots more powerful. Sometimes they even develop superpowers.

I bring this up because last week the Manatee County Commission decided the right place to get rid of those millions of gallons of toxic waste from Piney Point is down in the aquifer under our feet. You know, the place where we get our drinking water.

County commissioners voted unanimously to pursue a plan to shoot it down 3,500 feet beneath the surface. They want to put it down in the brackish part of the aquifer – not the freshwater part that provides us with life-giving, thirst-quenching drinking supplies.

But hey, stuff has been known to move around down there. Keep your fingers crossed that it oozes into the wrong aquifer, because then we're likely to all wind up with the ability to fly like Superman and see through walls! Yay!



Gov. Ron DeSantis announces the “last chapter” for the Piney Point fertilizer plant on April 12, 2021. Source: Screenshot/Florida Channel

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I interviewed some of them. To my surprise, they were not that keen on the prospect of wearing spandex outfits and zooming around their fields zapping the pests threatening their squash and tomatoes by shooting laser beams from their eye sockets.

Ninous Isom, a Palmetto native, told me he'd been growing vegetables for the past three years on a 17-acre parcel about a mile from Piney Point. He was trying to adjust an irrigation sprayer when we talked.

"If you put that stuff underground, it would affect our aquifer," Isom told me. "This is a big farming area. I don't think you want to upset the farmers."

Florida already has more than 260 such wells in operation, more than any other state. Maybe instead of "the Sunshine State," we should call ourselves the "Out of Sight, Out of Mind State"

because that seems to be the reasoning behind parking millions of gallons of various kinds of pollution underground and hoping it doesn't get loose.

Some of these wells have been in use since the 1960s, which, you may recall, was a stellar decade for the nation's environment. The things we did to our planet in the 1960s led to 20 million people turning out for the first nationwide Earth Day protests against pollution on April 22, 1970 – just 51 years ago, if you can believe that.

Those 260 wells are being used “for a broad range of wastes,” according to Michael Sukop, a hydrology professor at Florida International University. “It's a lot of quite nasty stuff that people put down there.”

But there are limits. St. Petersburg spent [nearly five decades](#) injecting partly treated sewage underground. Then the U.S. Environmental Protection Agency banned the practice in 2005 over concerns it would wind up tainting the aquifer.

Injecting the Piney Point waste down deep in the ground “may be the lesser of two evils in terms of disposing of this stuff,” Sukop told me, noting concern that dumping the waste into Tampa Bay could cause toxic algae blooms. Still, he added, “It's difficult to track it in much detail once it goes down there.”

Here's the thing, though. Right now, not one of those 260 deep wells is being used to dispose of phosphate processing waste.

If the EPA and state Department of Environmental Protection allow it, Piney Point would be the first – but probably not the last. There are two dozen other phosphogypsum stacks scattered across Florida, all with similar waste ponds on top of them.

“If they put this one in,” warned Linda Young, a longtime

activist with the Clean Water Network in Florida, “then they’re going to be putting them in for all of them.”

Not for phosphate waste – yet

Out of curiosity, I called the Florida Industrial and Phosphate Research Institute to ask why the innovative technique of hiding liquid icky stuff underground has never been tried with their somewhat acidic, polluting, heavy-metal carrying waste.

In response, the Bartow-based institute sent me a 2019 study on that very subject. The study noted that all the waste held atop those two dozen Florida gyp stacks totals about 60 billion gallons. That amount has been projected to increase by 2 billion gallons a year, so there’s plenty of the stuff to go around.

The report said that, in an experiment, half of the tests of putting it underground “indicate a favorable potential for using a deep injection well for disposal of these waters,” and the other half did not.

It should tell you something that the same engineering company that wrote the 2019 report, Ardaman & Associates, did a similar study in 2001 specifically looking into whether the Piney Point waste could be disposed of that way. State officials chose not to use it then.

I also checked with the biggest phosphate company, Mosaic. Company spokeswoman Jackie Barron told me two Mosaic phosphate facilities in Louisiana use deep-well injection to dispose of waste. Those wells, installed in 2014, “are operating well and are a key part of our multi-faceted approach to managing water at the site.”

But so far, the company is not pushing to try that here, she told me. She didn’t say why, but I can guess.

Deep-well injection, as you may have figured out by now, is not a foolproof disposal method in Florida because of our Swiss cheese underground geology. Liquid tends to move very quickly through our hole-filled limestone formations, Sukop said, and you can't control where it moves.

Case in point: Pinellas County used to inject 20 million gallons of wastewater into a deep well every single day. But in 1998, county officials revealed that for the past seven years, some of that stuff had been leaking back to the surface.

It had spread more than a mile from the place it had been stored and begun creeping into private wells in the area. The county abandoned its deep-well injection entirely and spent \$100 million on doing something safer.

Such stories are the reason why deep-well injection has a really bad reputation – so bad that it's about as popular as a YouTube executive at one of the governor's "health expert" roundtables.

For instance, in 2017, when the garbage giant Waste Management proposed using deep-well injection to send polluted wastewater from a Panhandle landfill 4,000 feet underground, the county commissions in Walton and Jackson counties, as well as elected officials in all three municipalities in Walton County – Freeport, Paxton, and DeFuniak Springs – passed resolutions opposing it..

In the face of such opposition, Waste Management [backed off](#), withdrawing its permit application last year.

As with the Panhandle landfill proposal, Young and other environmental activists say they worry about where the Piney Point waste may eventually wind up.

"Once that toxic poison is down there, you don't get it out

again,” Young said. “It’s just a rat hole.”

Take a sip, wait for your superpower

Manatee County officials said they’re planning to treat the waste before dropping it down into the well. But they have yet to spell out how much treatment they expect to pay for and what standards they expect the waste to meet before they inject it into the ground.

Young contends that Florida’s water quality standards and enforcement are so lax that any treatment would still be inadequate to clean the waste before it’s injected underground.

The county’s emergency approval of deep-well injection last week was not the first time the local government has turned to such an unproven method of hiding – excuse me, burying – its Piney Point problem.

In 2013, the county commissioners voted to try using deep-well injection on Piney Point. They got right up to the point of getting permit approval from the DEP before they abruptly withdrew the application. Extremely vocal opposition from the voters, particularly the farmers, persuaded them to change their minds.

I talked to Manatee County Administrator Scott Hopes, and somehow resisted the urge to ask him if he wasn’t getting everyone’s Hopes up. He said the opposition to deep-well injection last time had been fed by “an unclear understanding” of the proposal among the public, and a fear that the set-up put control of the well into the hands of a private company.

This new proposal, he said, benefits from the earlier proposal’s engineering work, but it’s different because “the county owns the land and the well and has control over its use and the pre-

treatment.”

When I pointed out that it still involves shooting toxic waste into the aquifer, he said, “Is there some risk? Possibly. But this is not new technology.” And he told me that the state Department of Environmental Protection “is committed to expediting the permit and getting the funding for this. We wouldn’t do this if DEP wasn’t on board.”

According to Glenn Compton of the small but feisty environmental group ManaSota-88, Manatee County officials should expect uproar just like last time, only the opposition won’t come just from local groups. Now that Piney Point is an international scandal, opponents are likely to weigh in from all over the country, he told me.

Don’t those tree-huggers realize what they’re doing? If they succeed in stopping the use of deep-well injection to dispose of phosphate plant waste, then we’re unlikely to ever get that toxic stuff in our drinking water. And then how are we supposed to get any superpowers?...

That’s the only way we’ll really write the last chapter of this very Florida story.