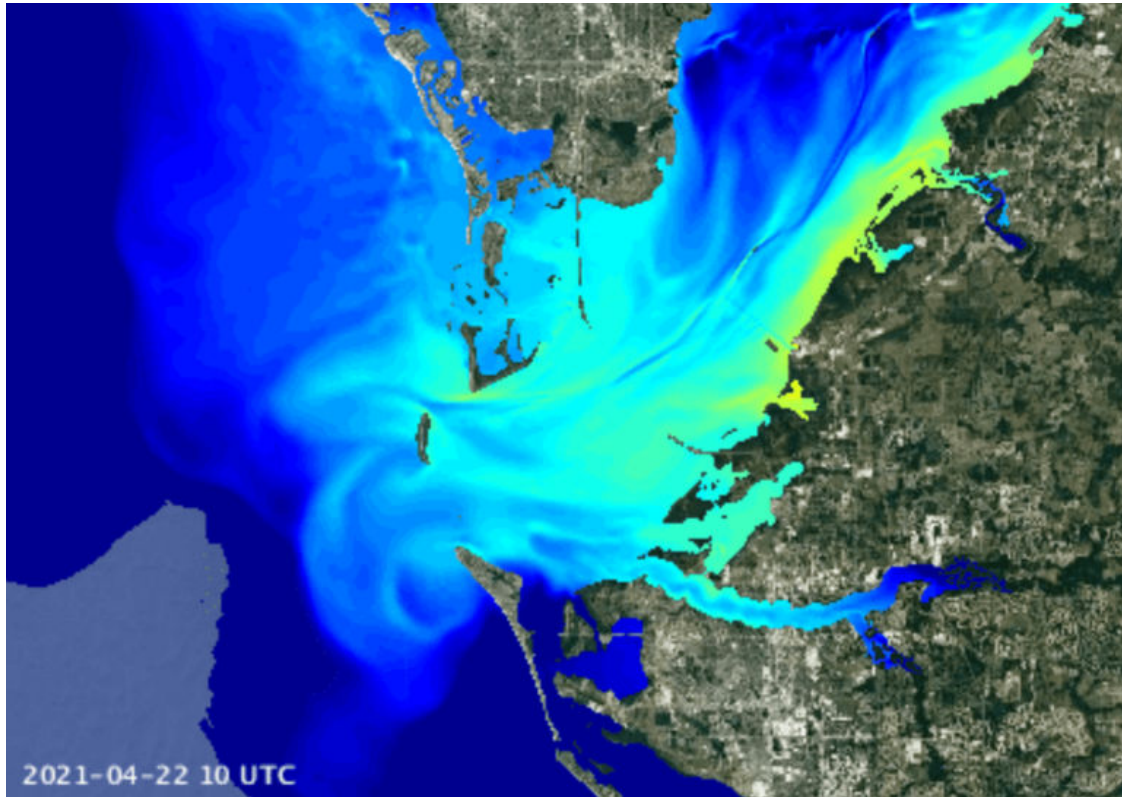


Piney Point wastewater spreading

By **Cindy Lane** - April 19, 2021



This forecast shows where the plume of wastewater released from the Piney Point plant is expected to be on April 22. Orange and yellow indicate the highest levels of pollution. - University of South Florida College of Marine Science Ocean Circulation Lab | Submitted

PALMETTO – About half the wastewater in a leaking retention pond built into a gyp stack at the idled Piney Point phosphate plant has been pumped into Tampa Bay at Port Manatee, and the 215 million gallons are spreading.

Officials initiated the controlled emergency discharge in March to take pressure off the compromised gyp stack and avoid an accidental spill of even more of its contents after a leak was detected on March 26.

The discharge ended April 8, leaving a pollutant plume containing what the Florida Department of Environmental Protection (DEP) calls “mixed sea water.” The acidic blend of saltwater and debris from a Port Manatee dredge project, stormwater runoff and rainfall also contains “legacy process water” – wastewater from phosphate processing that carries nutrients such as phosphorus and nitrogen that can feed toxic red tide algae blooms.

Sensitive environmental areas in Tampa Bay, the Gulf of Mexico, the Manatee River, the Little Manatee River, Bishop Harbor and Terra Ceia Bay are impacted so far, according to Dr. Robert H. Weisberg, distinguished professor of physical oceanography at the University of South Florida’s College of Marine Science in St. Petersburg.

“We see obvious visible impacts of plant growth. You see water that looks rather brown, instead of water that’s normally green,” he said in a video conference, adding that it’s likely to adversely affect fish and marine plants.



A team of scientists is tracking where the plume will go, how it dilutes over time and what its effects will be, he said.

The wastewater is “sloshing back and forth” with the tides, currents and winds, causing the plume to disperse more widely, he said.

Dilution is a slow process, Weisberg said, estimating that there will be low concentrations in Tampa Bay and the Gulf as it disperses over the coming months.

The process is likely to continue until strong winds flush it out of the bay, he added.

“This time of year, we really don’t get those big (wind) events that will flush the system out, so it’s going to be with us for a while,” he said. “At least so far, we don’t see any indication of anything toxic. But when you feed a lot of nutrients, plant growth takes off, just like in your garden.”

Multiple educational institutions, governmental agencies and environmental organizations are collecting water, fish, seagrass and other samples to assess acidity, oxygen, salinity, temperature, carbon, bacteria, phytoplankton, nutrients and trace metals in the wake of the discharge. Results will not be immediate.

Water quality reports

Meanwhile, longstanding water quality reports continue. So far, the Florida Department of Health in Manatee County reports good water quality at the five Anna Maria Island beaches it monitors.

Likewise, no red tide has appeared in Manatee County, according to the Florida Fish and Wildlife Conservation Commission (FWC), but Sarasota County, well south of the plume, has moderate levels.

Red tide produces a neurotoxin called brevetoxin, which can cause respiratory irritation, coughing, and more serious illness for people with severe or chronic respiratory conditions such as emphysema or asthma. It can also cause neurotoxic shellfish poisoning if consumed in oysters and clams, according to the FWC.

If the plume of wastewater from the Piney Point discharge reaches the red tide in Sarasota, “... it’s like adding gasoline to a fire,” Sarasota Bay Estuary Program Executive Director Dave Tomasko said.

Algae was detected in 12 water samples taken in Tampa Bay from April 8-14 in response to the wastewater discharge, according to DEP’s latest blue-green algae report.

Identification of the algae is pending. Prior samples have contained trace levels of cyanotoxins, neurotoxins that are produced by blue-green algae. Exposure to cyanotoxins can cause hay fever-like symptoms, skin rashes, respiratory and gastrointestinal distress, and, if consumed, liver and kidney damage, according to the U.S. Environmental Protection Agency.



The closest sample to Anna Maria Island was taken northwest of Emerson Point Preserve in Palmetto. Bloom conditions continue to be monitored.

On April 13, another leak developed at the Piney Point gyp stack and is being remediated without further wastewater discharge.

– *Joe Hendricks contributed to this report*

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