Piney Point Key Messages

April 2021

- As of April 6th, an estimated ~180 million gallons of water have been released into Tampa Bay. Approximately 300 million gallons of water remains in the south pond.
- Because the south pond liner is failing, parts of the holding wall are beginning to erode-- making a total collapse possible. Total collapse has the potential to take out the other ponds onsite (3 total), which contain water with additional contaminants of concern (mostly heavy metals and more acidic water). By discharging directly to Tampa Bay, officials are trying to minimize effects to people/property and prevent the release of even worse contaminants into the environment.
- The current discharge rate is ~22,000 gallons per minute. If additional pumps are brought online, this may increase to ~28,500 gallons per minute. The Tampa Bay Estuary Program does not want any controlled discharges to sensitive areas like Bishop Harbor via Piney Creek. Necessary discharges should be directed to less vulnerable areas at Port Manatee.
- The primary pollutants of concern for this discharge are phosphorus and nitrogen (primarily ammonia nitrogen, to which fish and wildlife are particularly sensitive).
- The estimated nutrient load from the south pond is about what we would expect to see in the bay segment for an entire year, delivered over the course of one or two weeks. (Or ~200,000 bags of fertilizer.)
- Nutrient pollution is the primary threat to Tampa Bay. The Tampa Bay Estuary Program is committed to reducing nutrient pollution, no matter the source. This is done through a voluntary public-private partnership called the Tampa Bay Nitrogen Management Consortium.
- Nutrients fuel algae growth. Too much algae in the water can cause shading and die-offs of seagrass. We manage water quality for the benefit of seagrass, because seagrass is the foundation of a healthy bay.
- While red tide may be top of mind for many Floridians, bay managers are also concerned about the potential for macroalgae blooms, like those that occurred during a previous spill in 2011 at Bishop Harbor. Think large marine plants such as tissue paper-like Ulva, stringy mats of Cladophora , or red seaweed-like algae.
- The Tampa Bay Estuary Program is coordinating with our partners to provide comprehensive monitoring to document the effects of the Piney Point discharge. While the initial priority has been to collect water quality samples, teams are now beginning to conduct benthic (bay bottom sediment), seagrass/macroalgae, and fisheries assessments.
- TBEP is also coordinating with the University of South Florida College of Marine Science to forecast circulation patterns within Tampa Bay. Managers are particularly concerned about the shallow backbays of the southeastern shore, from Cockroach Bay south toward Sunshine Skyway Causeway near the mouth of the Manatee River.
- Historically, this portion of the bay has excellent water quality that supports healthy seagrass beds and sensitive hard bottom habitat (including soft corals and sponges). Seagrass beds are nursery habitats for juvenile fish and bay hard bottom serves as a stopover point for commercially and recreationally important reef fish before they head into deeper Gulf waters.
- People also rely on these habitats and clean waters, not only for fun, but also for how they make a living. We have a robust commercial and recreational fishing economy, nature-based tourism, and oyster and shellfish aquaculture operations in this part of the bay.
- Ecological effects are not expected immediately, changes will be documented over the course of the coming weeks and months. Additionally, it takes time for labs to process samples and assure data quality. All information will be shared transparently on tbep.org as it becomes available.
- An algal response to these nutrient loads may not manifest until the weeks to months ahead. It will be highly dependent upon how much nutrients are retained and recycled in the bay. Therefore, understanding where the plume of the discharge is being circulated and diluted in the bay is crucial. The USF Ocean Circulation Lab is working on forecasts to further aid our efforts and understanding in this regard.
- Tampa Bay is resilient. It was declared “dead” once before, but the community demanded action and elected officials demonstrated the political will to improve the bay. We’ve seen that proper management can bring the bay back- Tampa Bay is known as an international success story for environmental recovery - we don’t want to see these efforts squandered. The community must continue to invest in the protection and restoration of Tampa Bay, including properly treating the remaining water onsite and fully closing the Piney Point facility so that we aren’t dealing with this issue again in another 20 years.