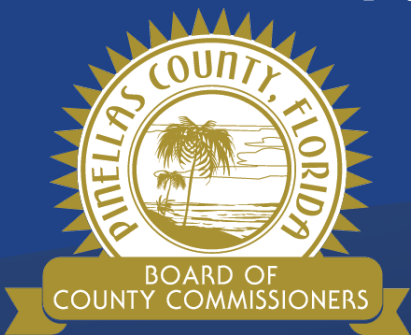


Red Tide and Piney Update



Public Works Department
Kelli Hammer Levy
Director



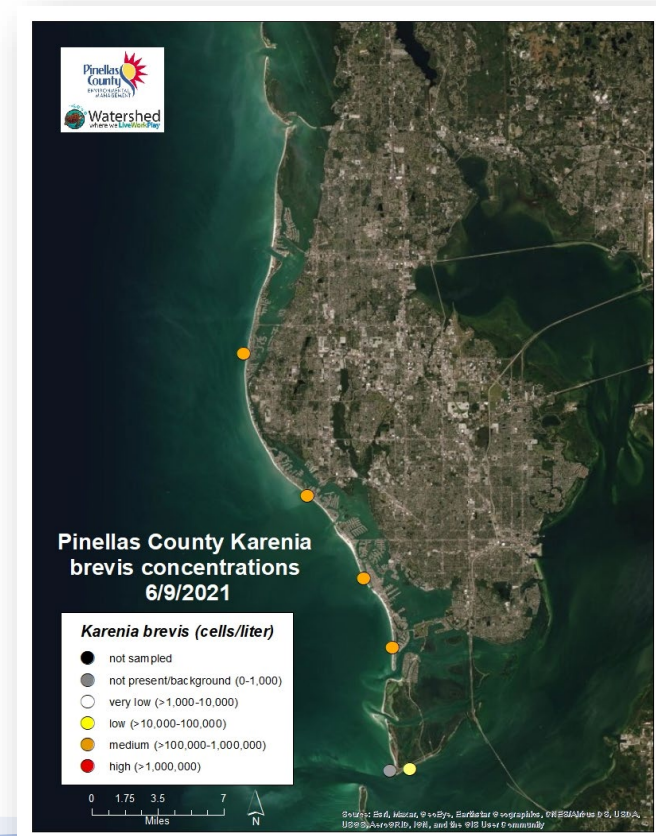
Our Vision: To Be the Standard for Public Service in America



Red Tide Planning Efforts

Red tide concentrations increased in Pinellas early June 2021

- **Coordination**
 - **Internal**
 - **Contractor preparations**
 - **Local, state and federal partners**
 - **PCSO and USCG aerial surveys**
- **Red Tide monitoring and reporting**
- **Communications**



Red Tide Response

Beach Operations



Waterway Operations



Red Tide Response: Current Status

**Tons removed: 1776 tons (as of 8/4/2021)
3,552,000 pounds**

300 FDOH red tide signs printed and distributed

FDEP Agreement: \$902,500

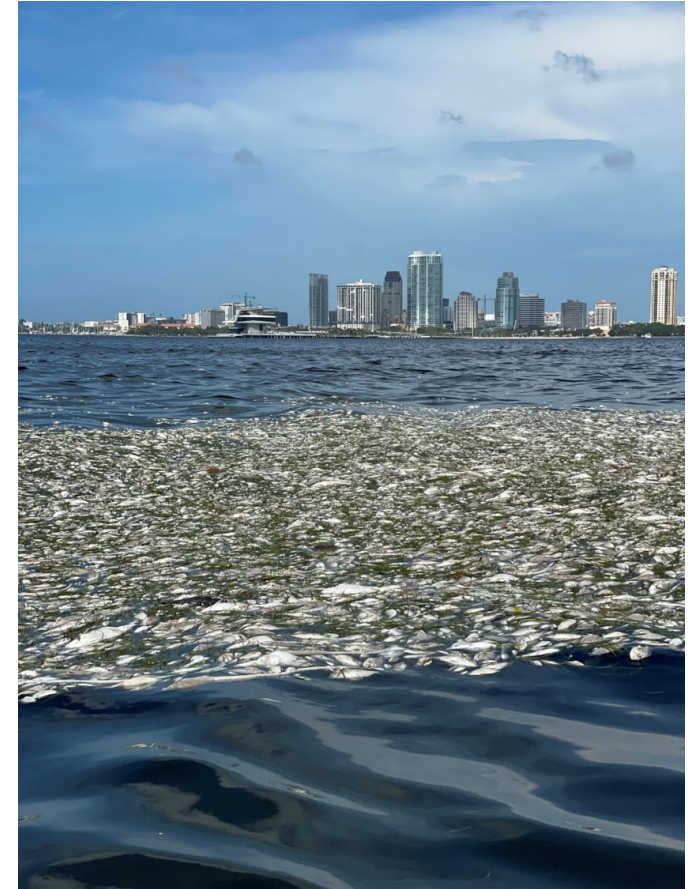
- **Invoicing in progress (~\$2.1M expended to date)**
- **Requested additional funds**

ILA with St. Petersburg: 8/24/2021 agenda

Visit St. Pete Clearwater: Hotels record reservations

Unknowns:

- **Water-based business impacts**
- **When will red tide end?**





Piney Point Update

What is Piney Point?

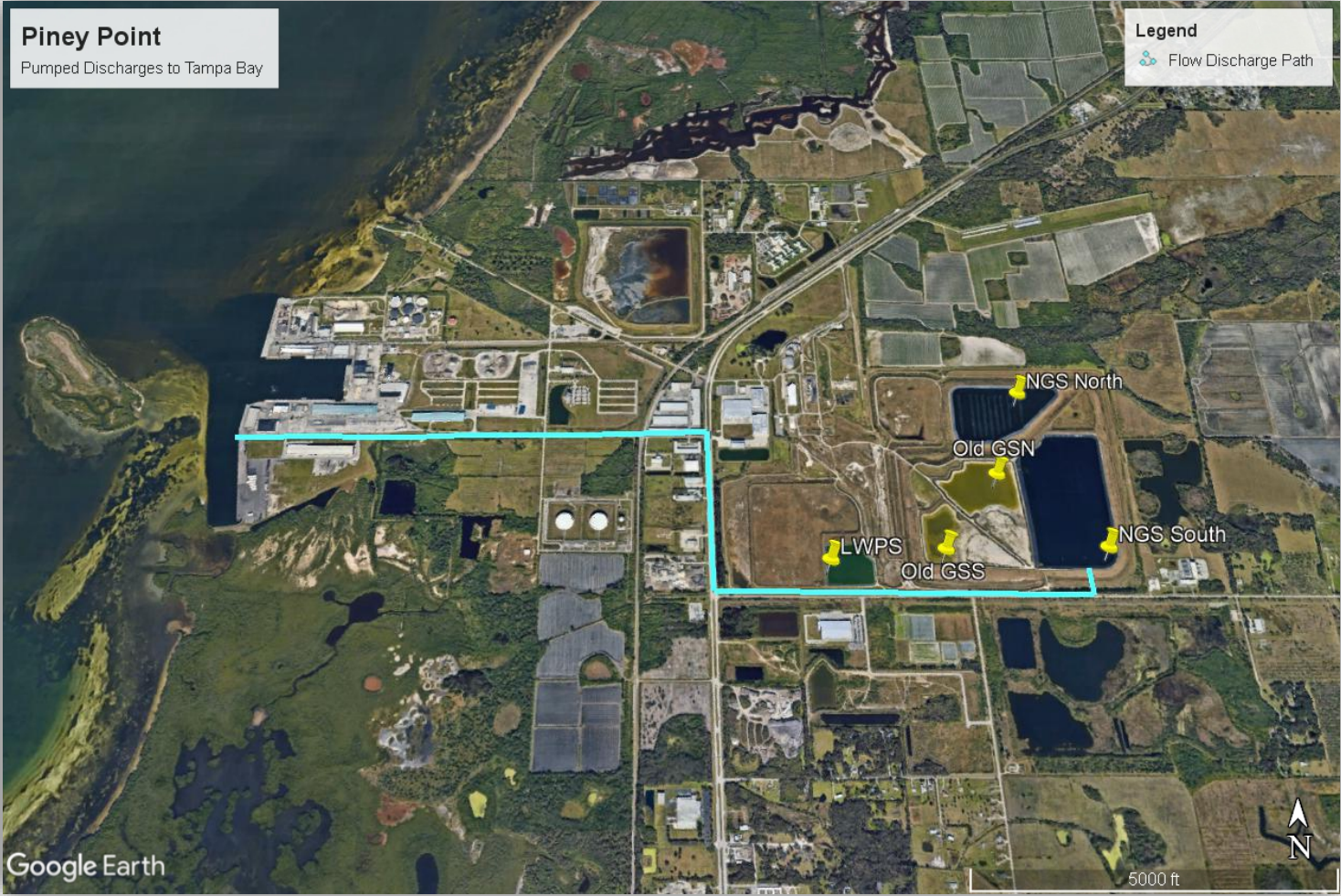
Piney Point a former phosphate processing plant located in northern Manatee County.

Built in 1966, the plant produced fertilizer until it abandoned in 2001 leaving phosphogypsum stacks holding millions of gallons of wastewater.

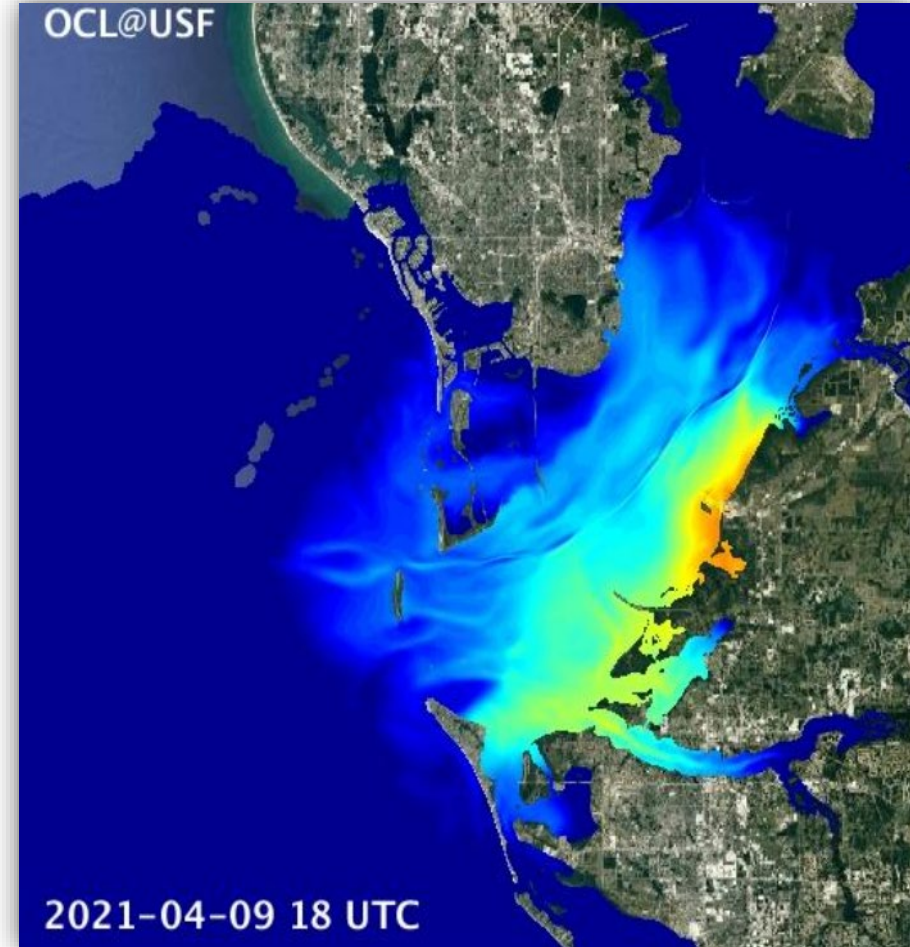
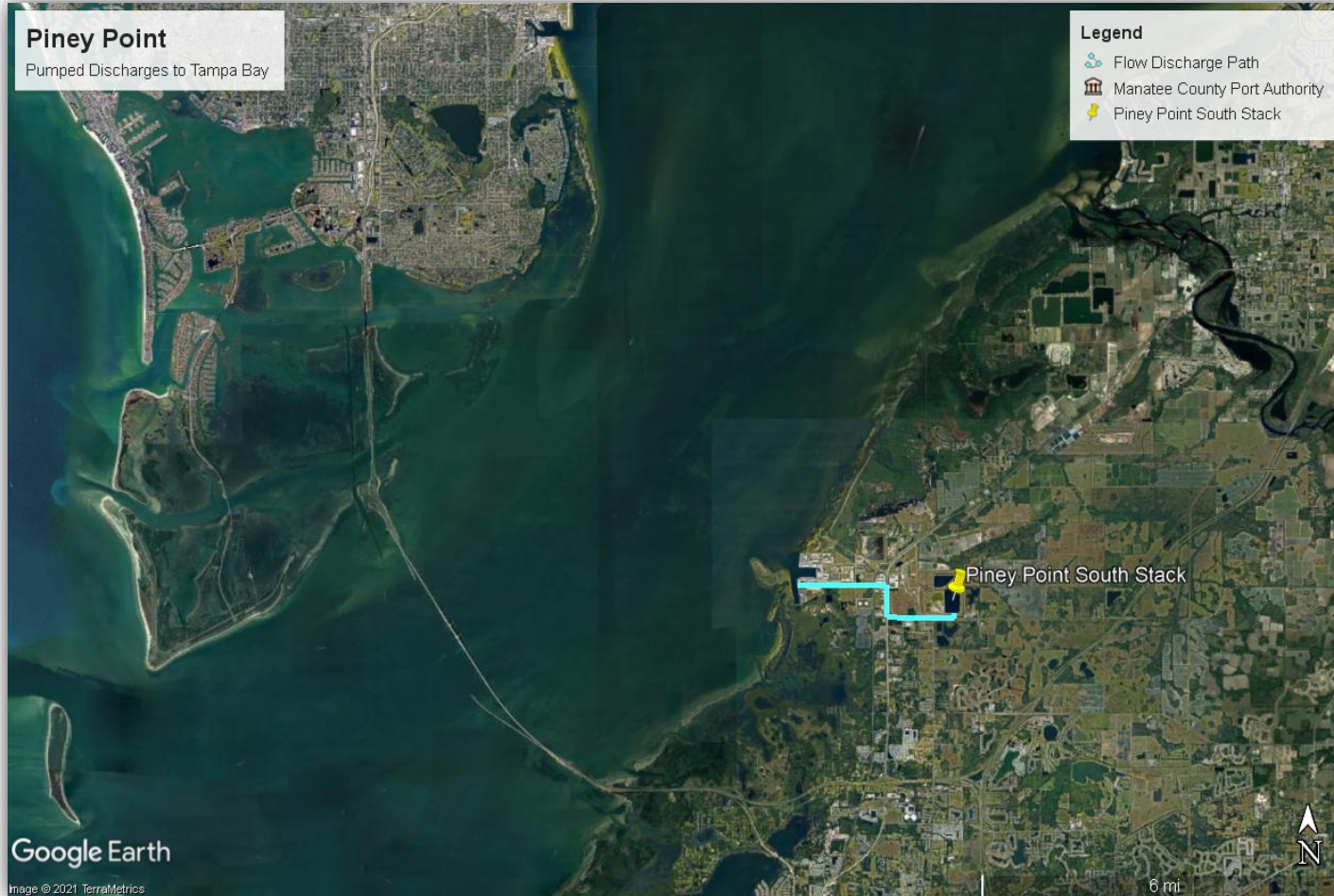
Phosphogypsum is a byproduct of the phosphate mining process and can be toxic to both humans and the environment.

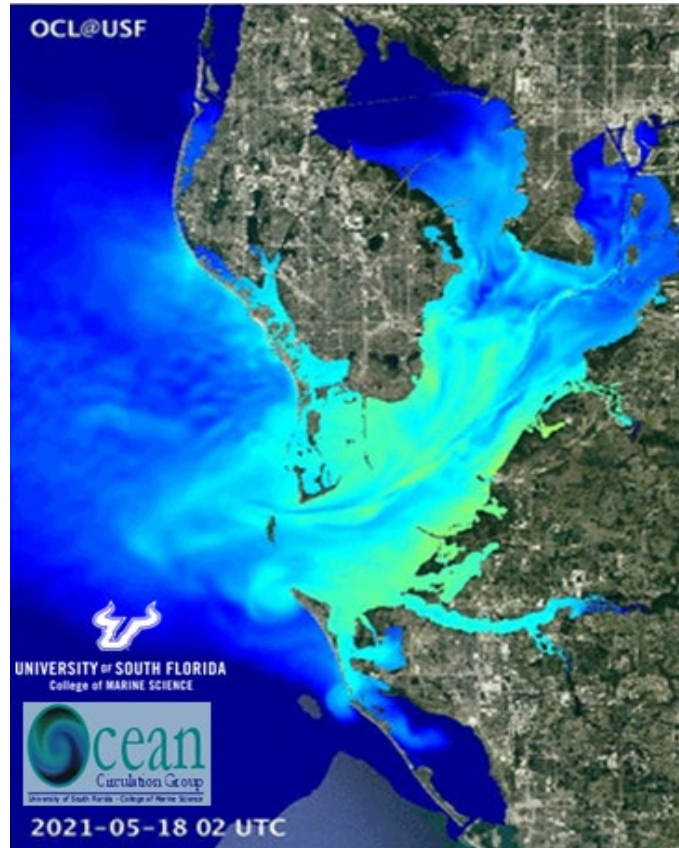
An emergency release of wastewater from the stacks into Tampa Bay has occurred numerous times over the years; most recently April 2021 when 215 million gallons was discharged.

Emergency Release: March 30 – April 9, 2021



Emergency Release: March 30 – April 9, 2021





Trichodesmium
Indian Rocks Beach 5/12/2021

Model of Piney Point
Discharge Plume

Lyngbya in Sarasota 5/27/2021

PINEY POINT, RED TIDE & TAMPA BAY

A DATA-DRIVEN TIMELINE

MARCH 31ST
PINEY POINT
DISCHARGE BEGINS

APRIL 9TH
DISCHARGE CEASES

APRIL 15TH
LOCALIZED
DIATOM BLOOM
OBSERVED

APRIL 20TH
KARENIA BREVIS FIRST
OBSERVED NEAR
ANNA MARIA ISLAND

MAY 23RD
KARENIA BREVIS
REACHES BLOOM LEVELS
IN MIDDLE TAMPA BAY

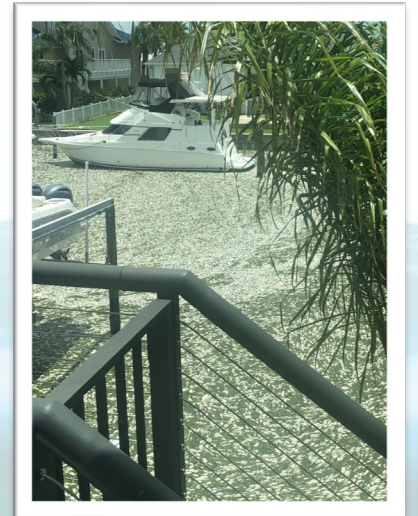
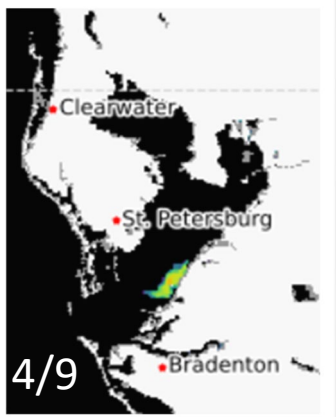
MAY - JUNE
OBSERVATIONS OF FLOATING
LYNGBYA MATS NEAR PORT MANATEE
AND ANNA MARIA SOUND

JUNE 27TH
INCREASING REPORTS
OF FISH KILLS

JULY 5TH
TROPICAL STORM ELSA
PASSES BY TAMPA BAY

JULY 8TH
KARENIA BREVIS
BLOOM PEAK

JULY 18TH
KARENIA BREVIS LEVELS
BEGIN TO DECLINE IN
TAMPA BAY



Current Status on Piney Point Closure Process

Proper closure requires treatment and disposal of wastewater

- Onsite water management is critical

FDEP is currently reviewing a UIC well permit application

- Class I Underground Injection Control (UIC) well

How is this moving so quickly?

- 2014 UIC permit application was submitted
- Public input led to withdrawal of application
- Current permit application mirrors 2014 submittal

If UIC permit is approved

- UIC well construction will take ~ 1year
- Test borings must meet approval criteria first



Closure construction design

- **Planning is in process**
- **Geotechnical and engineering assessments**

The stacks cannot impound water long-term

- **Proper closure includes creation of permitted stormwater facilities that attenuate and treat stormwater**

Future uses

- **Areas not currently in use may be redeveloped**
- **Current uses include industrial and heavy commercial**



Thank You



www.pinellascounty.org/publicworks

www.pinellascounty.org/redtide

www.pinellascounty.org/PineyPoint