
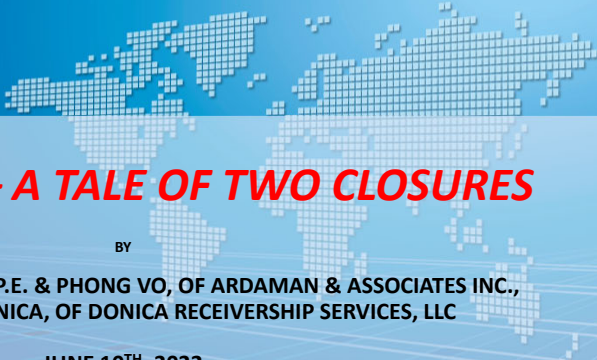


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PINEY POINT – A TALE OF TWO CLOSURES

BY

**MOHAMAD AL-HAWAREE, P.E. & PHONG VO, OF ARDAMAN & ASSOCIATES INC.,
AND HERBERT R. DONICA, OF DONICA RECEIVERSHIP SERVICES, LLC**

JUNE 10TH, 2022

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INTRODUCTIONS

DONICA RECEIVERSHIP SERVICES, LLC



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DONICA RECEIVERSHIP SERVICES, LLC

- **Mr. Herb Donica:** On August 25, 2021, the Manatee Circuit Court entered an Order appointing Mr. Donica as a Receiver to take control of the Piney Point Facility in Manatee County, Florida and oversee its permanent closure.

ARDAMAN & ASSOCIATES Inc. (AAI)

- Design, construction QA, permitting, operations , and closure for more than **106** Phosphogypsum stacks worldwide
- Mr. Mohamad Al-hawaree, P.E. President
- Mr. Phong Vo, Senior Consultant



PINEY POINT – A TALE OF TWO CLOSURES

- 1. First Closure - Mr. Mohamad Al-hawaree, P.E.**
- 2. The Piney Point Saga – Mr. Herb Donica**
- 3. Second (Final) Closure - Mr. Phong Vo**

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THE FIRST CLOSURE
MR. MOHAMAD AL-HAWAREE, P.E.

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**THE STORY STARTS ON
JANUARY 30, 2001**

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WATER MANAGEMENT CHALLENGE

- 600 MGal of Pondered Process Water
- 600 MGal of Drainable Pore Water
- 160 MGal Added Each Year (Assuming Normal Rainfall)

The diagram illustrates a cross-section of a facility with a central pond. A cloud above the pond indicates a net addition of 160 MGal/yr. A box above the pond shows 600 MGal + Pondered Process Water. A box below the pond shows 600 MGal + Drainable Pore Water. Arrows indicate the flow of water into and out of the pond.

- Extra 12.5 MGal Added for Each Inch of Rain Above Normal

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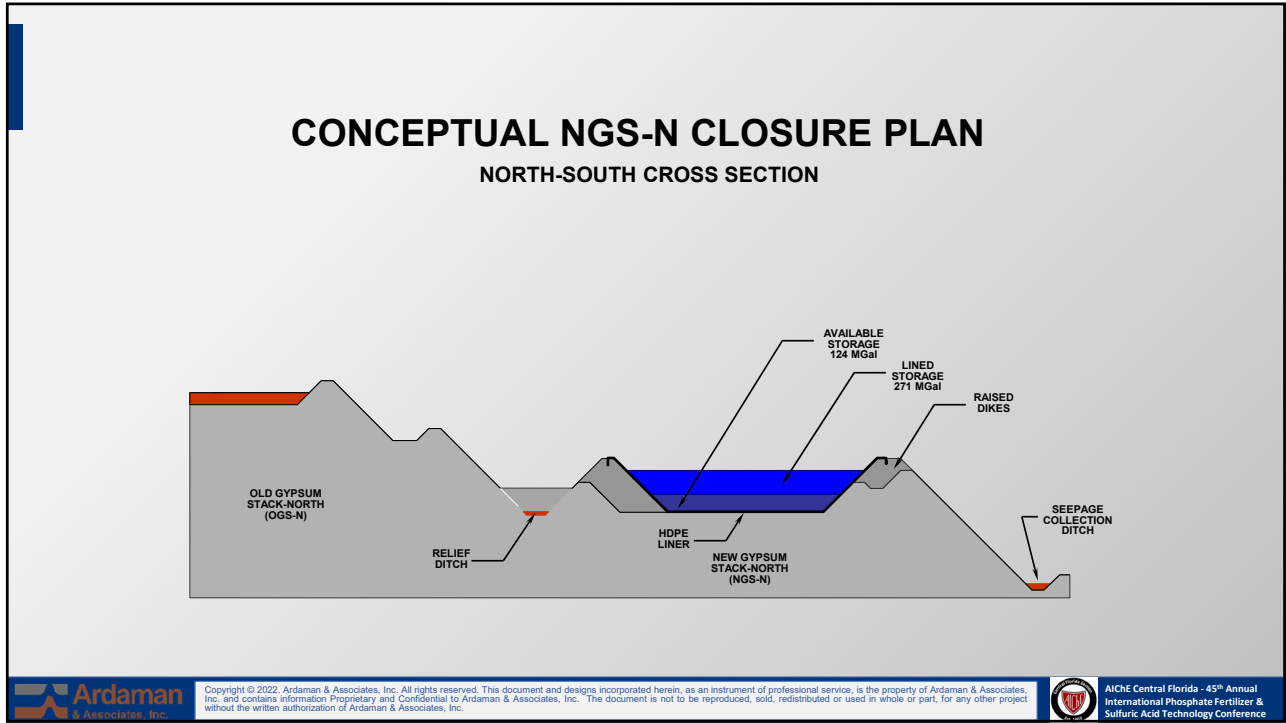
2001 HURRICANE/TROPICAL STORM GABRIELLE

A large yellow dump truck is shown on a flooded road. The water is murky and reflects the sky. The truck is partially submerged, with its front end on the road. A person is visible in the background on the right side of the road.

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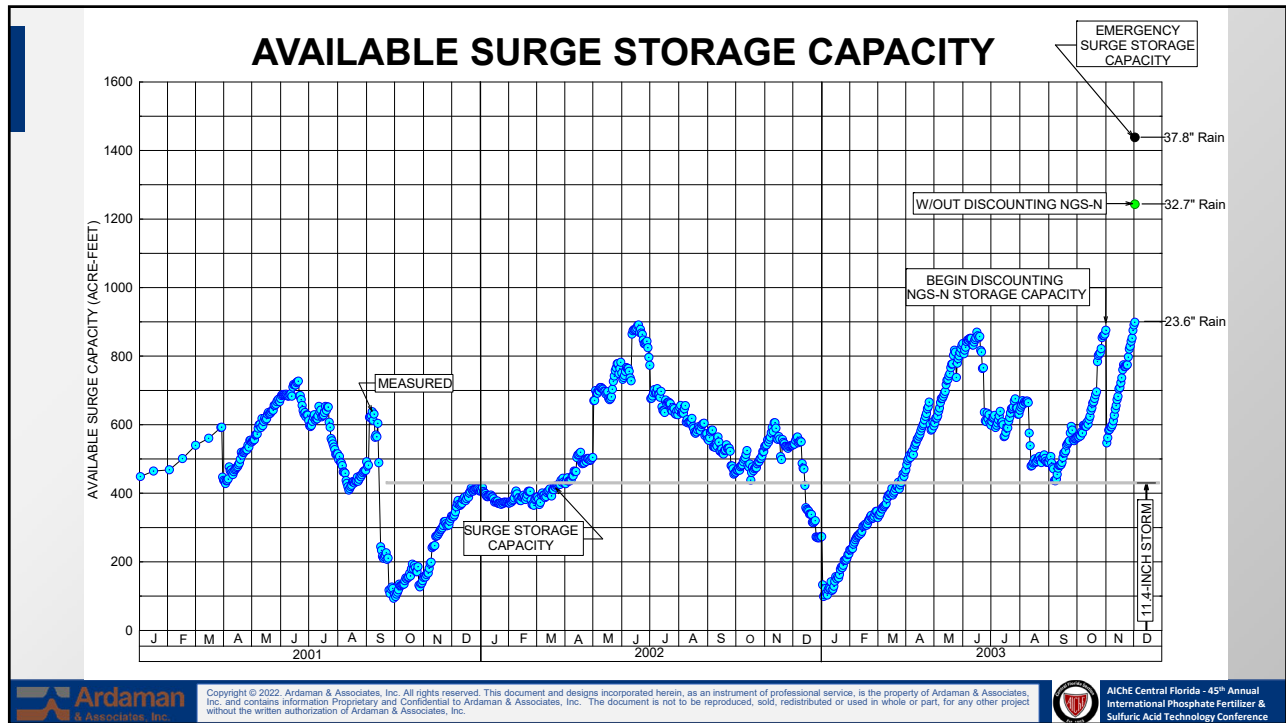
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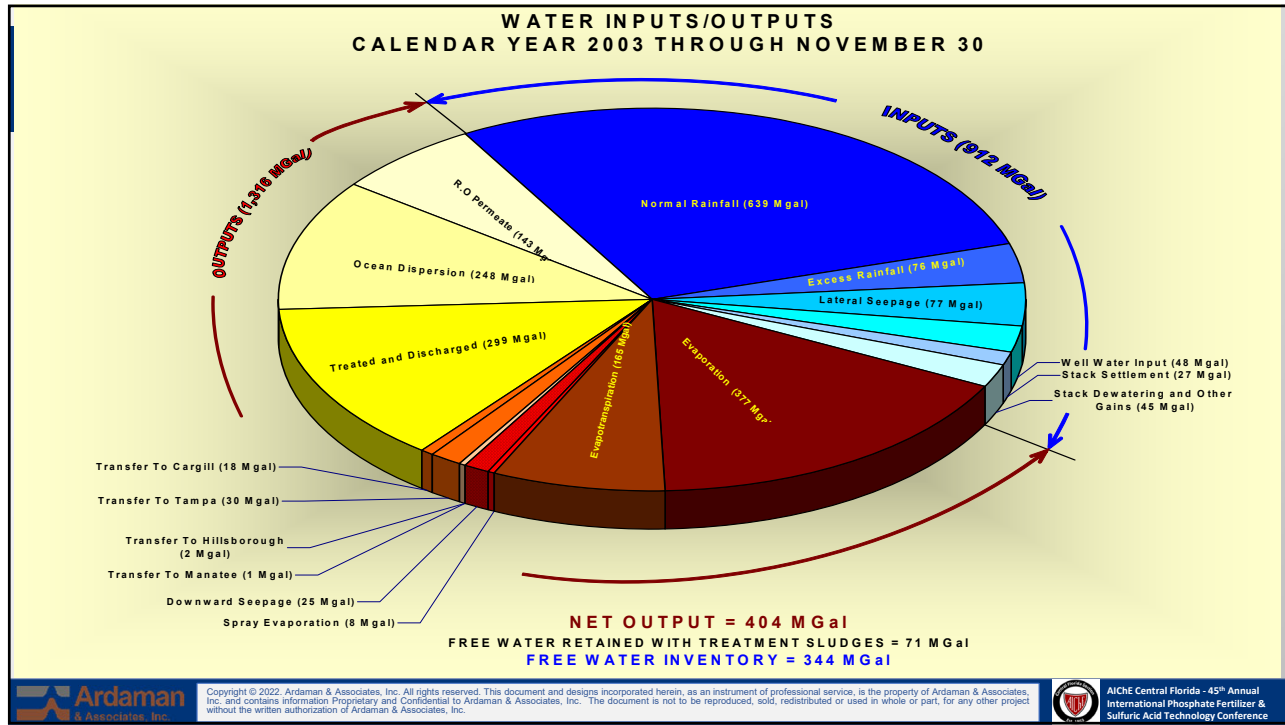
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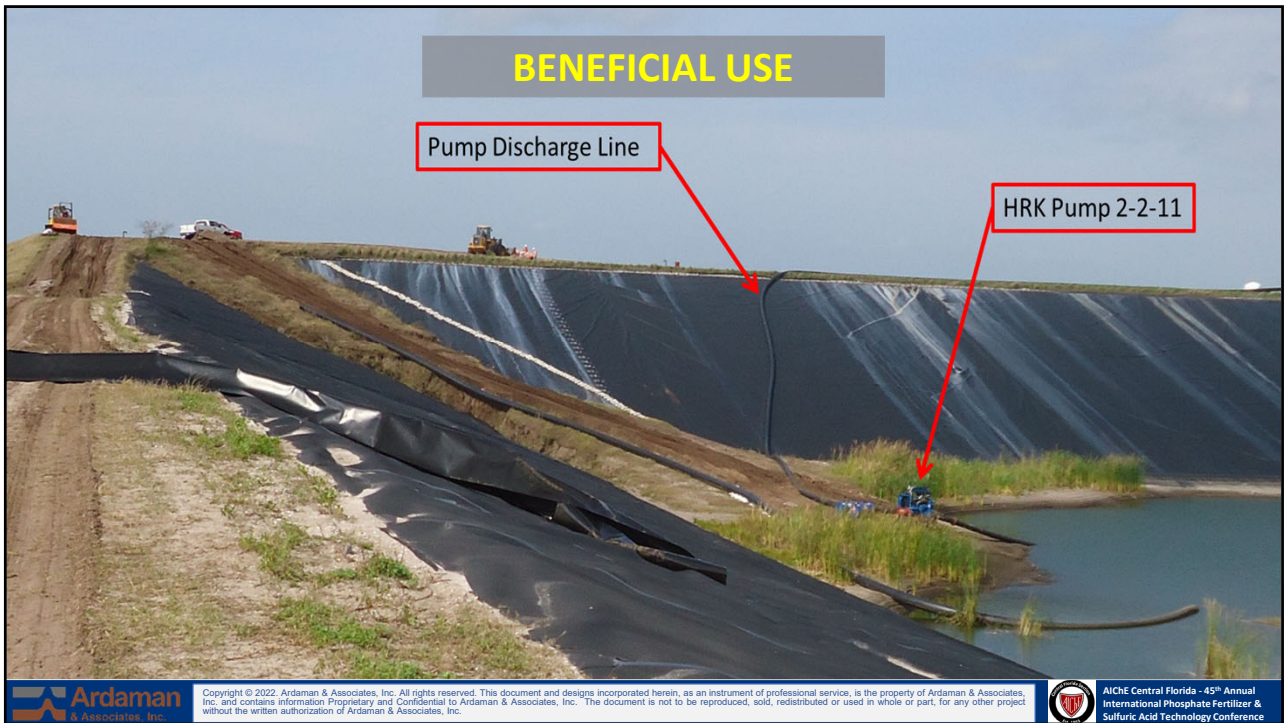
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INVENTORY

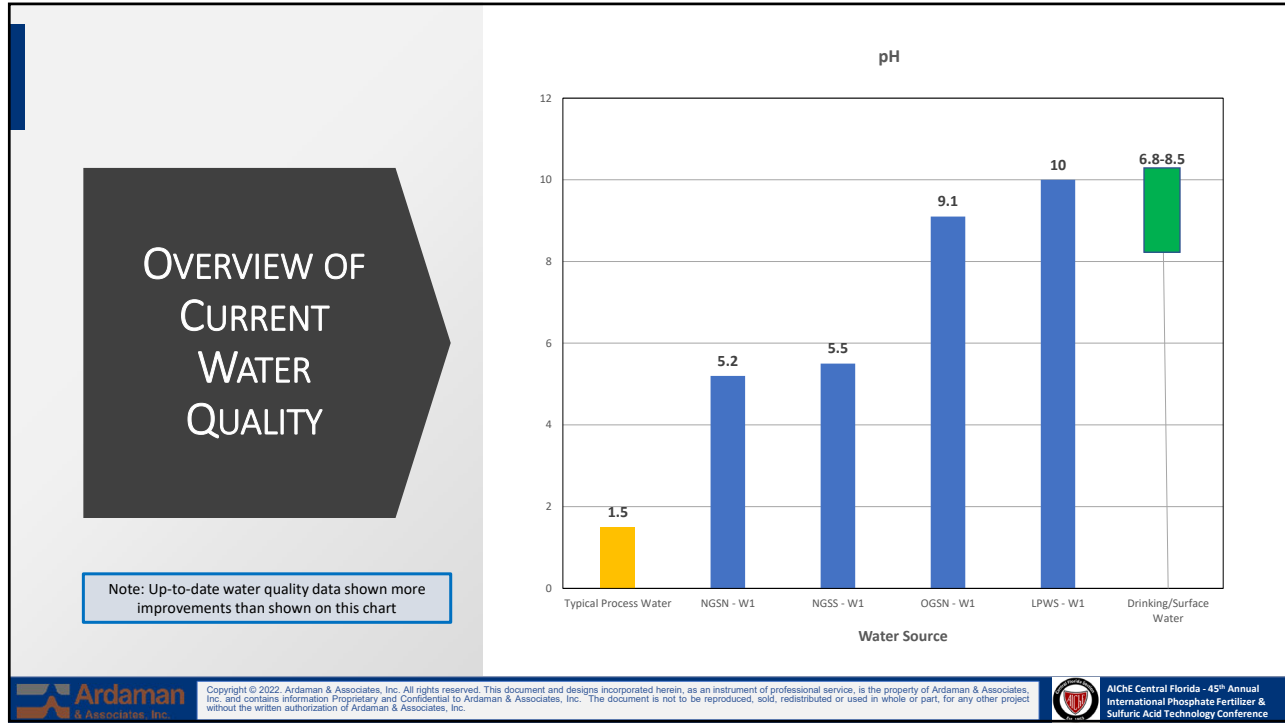
Pond	Water Volume (Mgal)
NGS-N	230
NGS-S	152
OGS-N	46
LPWS	15
TOTAL	443

**May 2022 Pond Inventory
Approximately 369 Mgals**

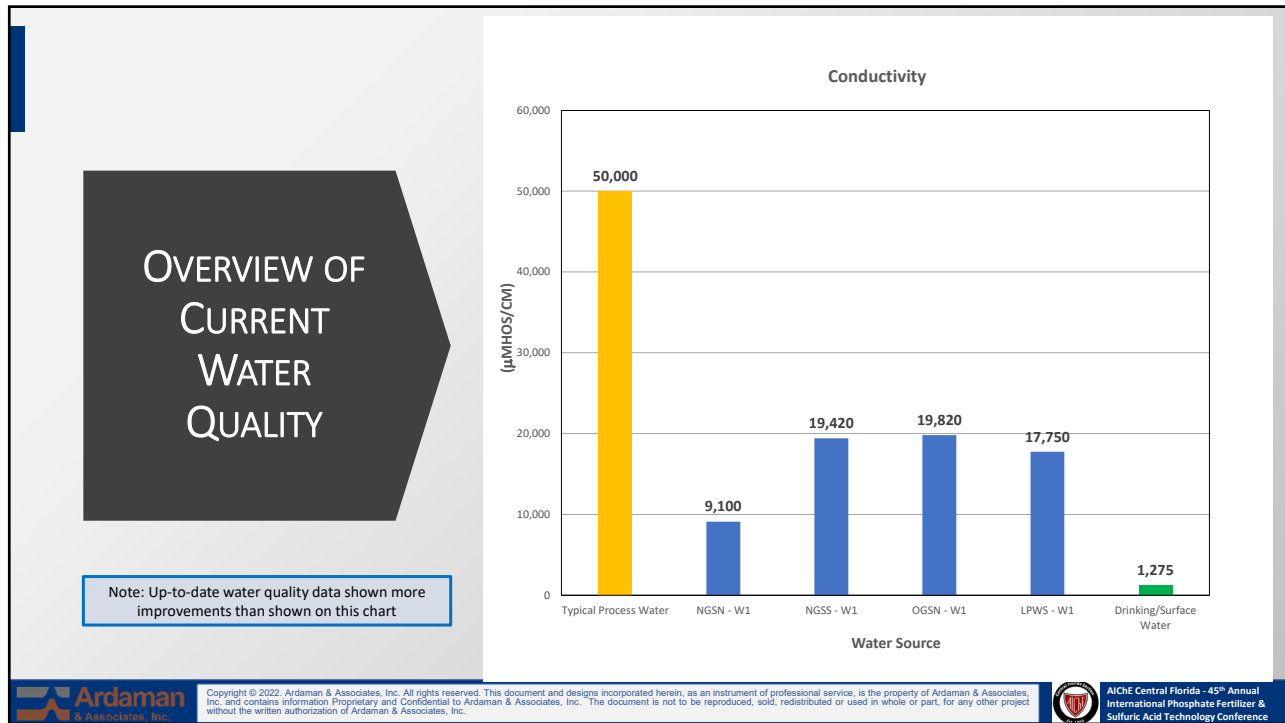
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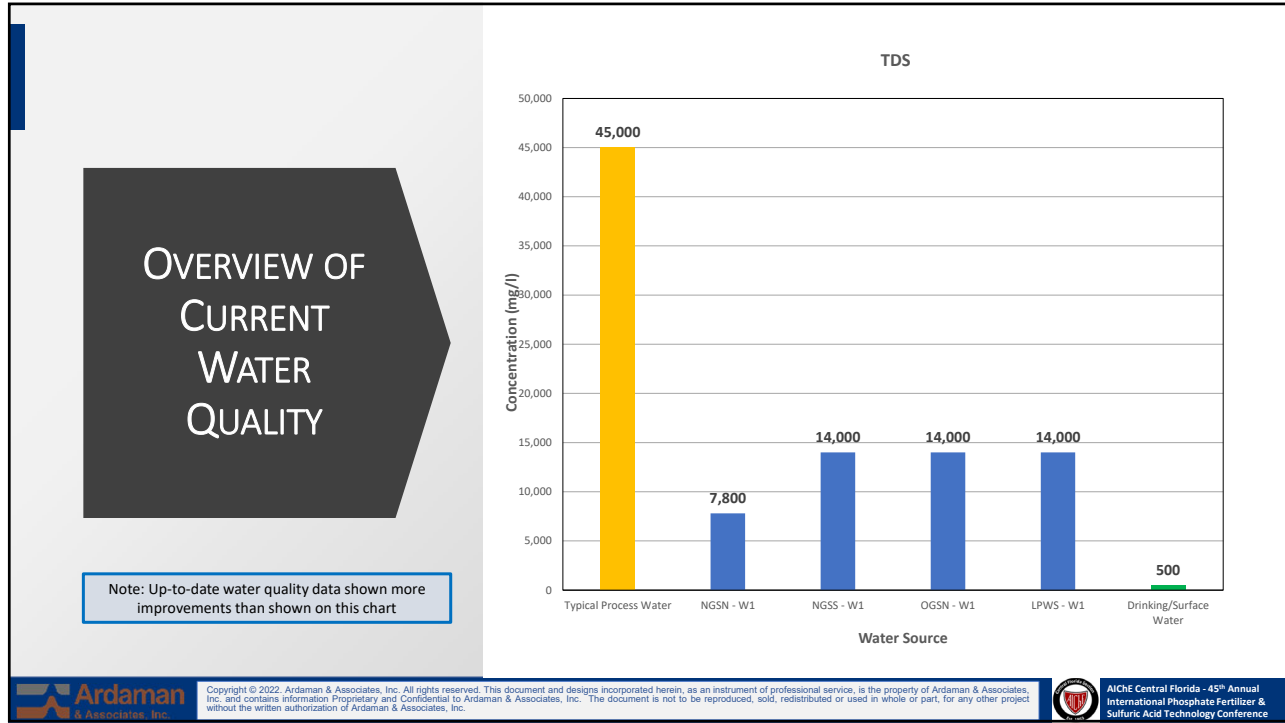
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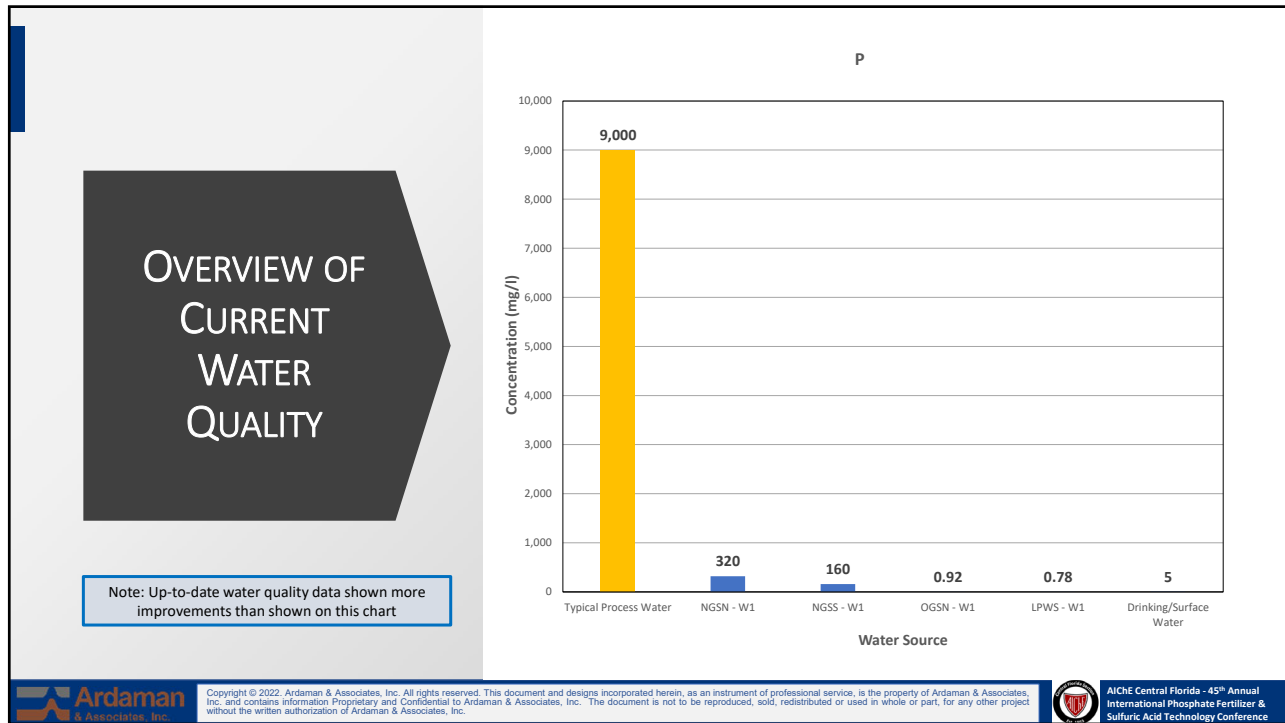
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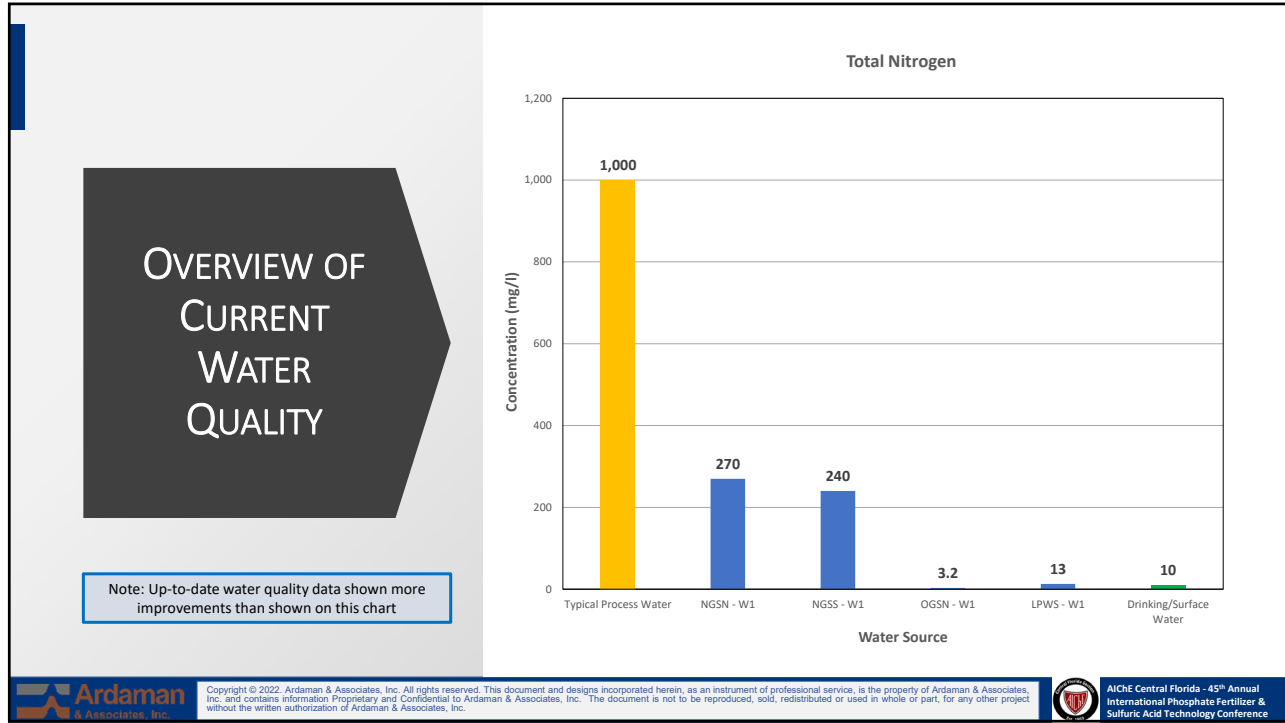
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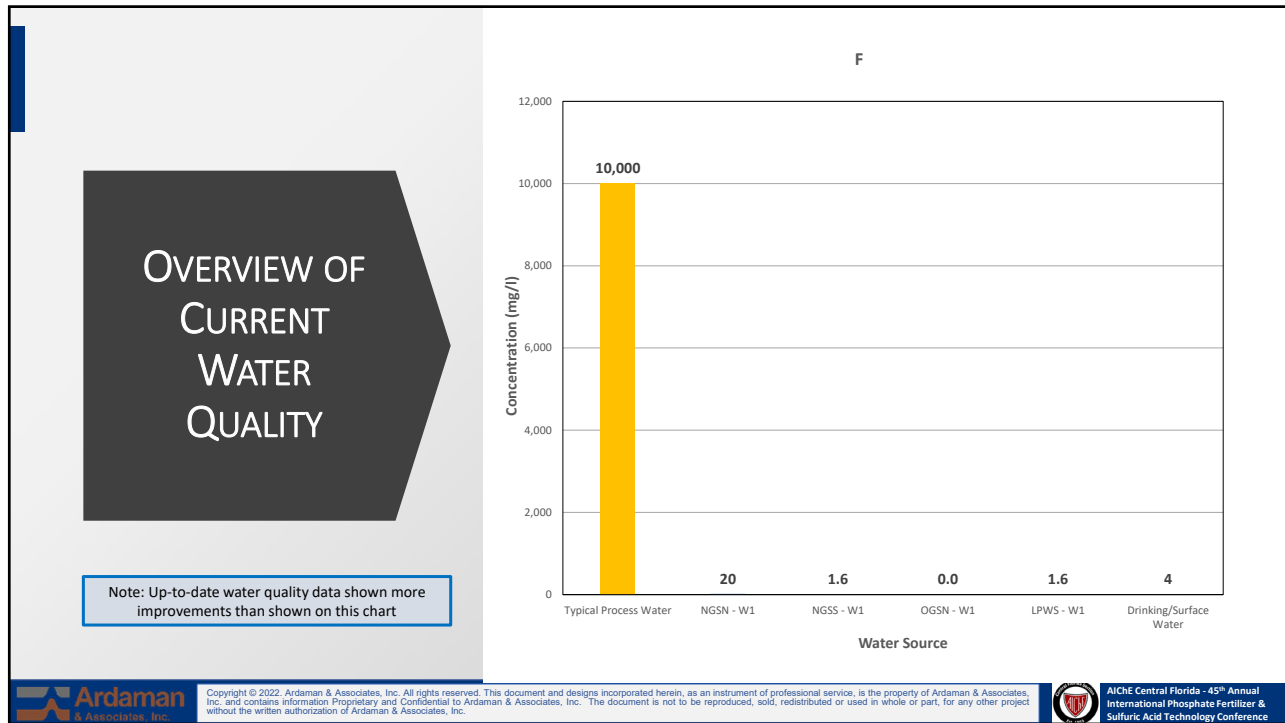
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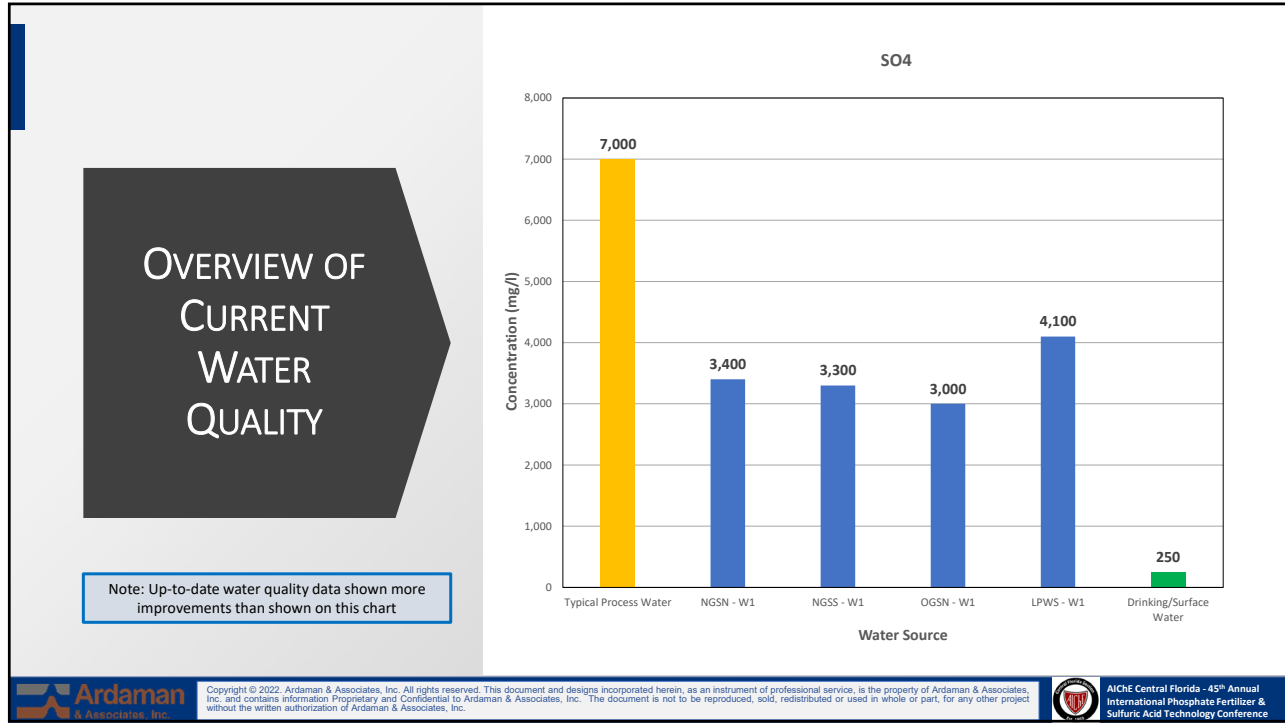
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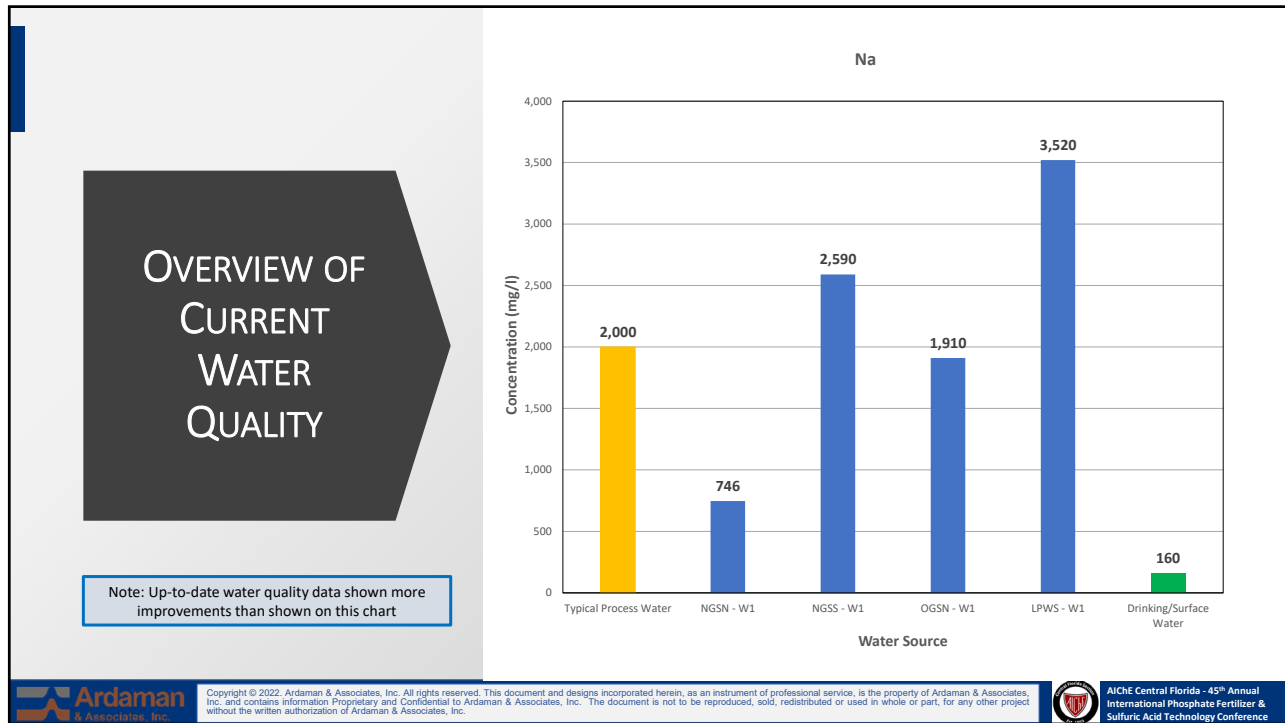
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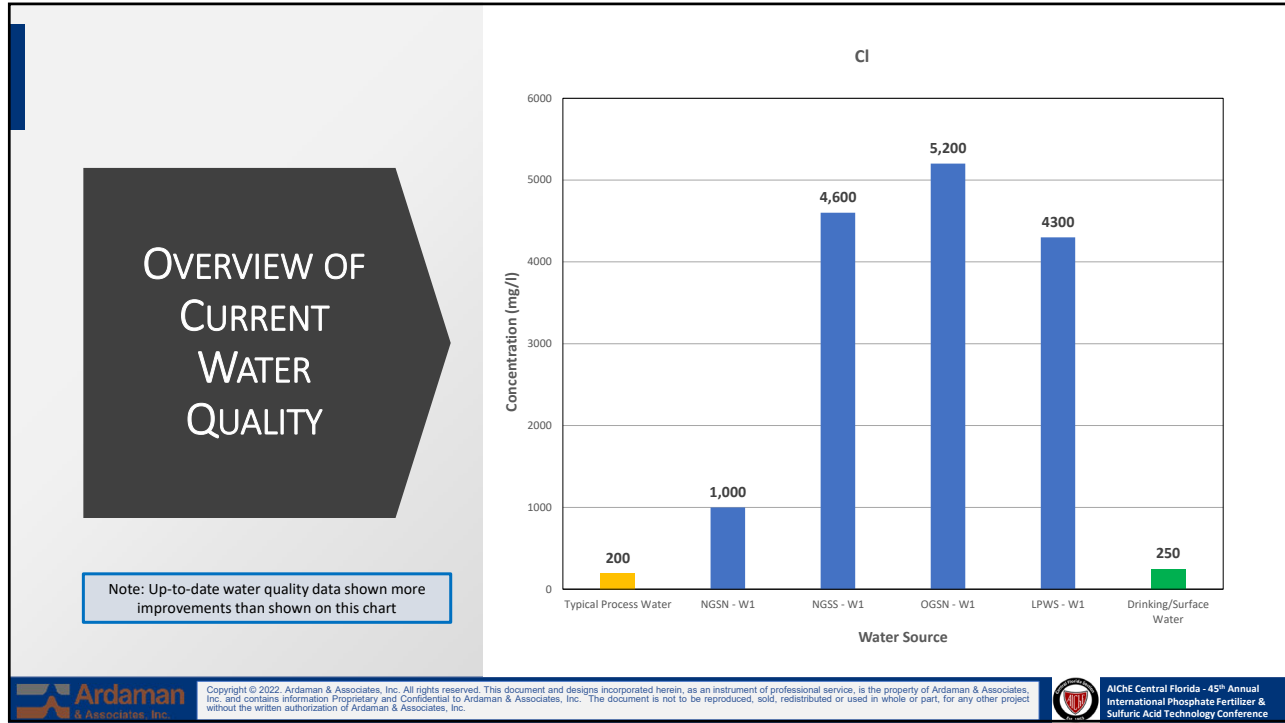
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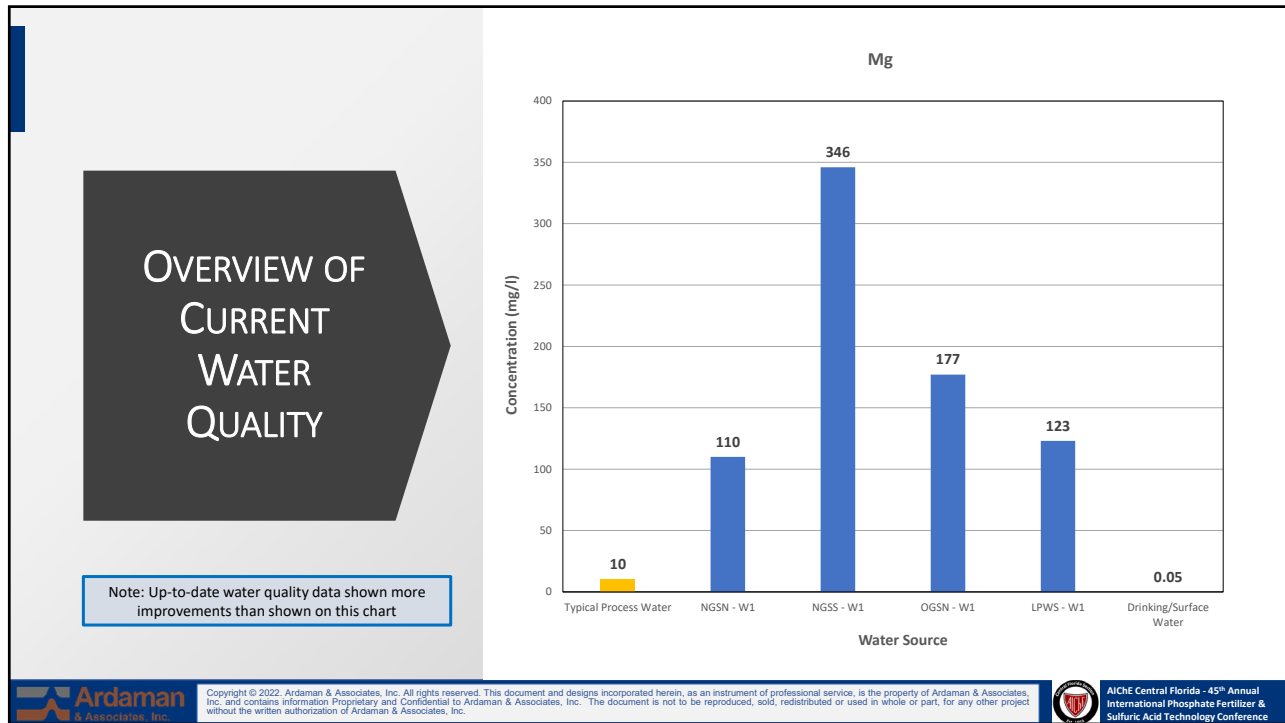
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THE PINEY POINT SAGA
MR. HERB DONICA

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THE PINEY POINT TIMELINE


- 1965 - Borden Chemical Company acquires land and constructs Piney Point phosphate plant.
- Ownership of Piney Point changes five times between 1980 and 2006.
- Various owners of Piney Point went through three bankruptcies between 1993 and 2012.
- 2001-2011 – An approximately \$140+ million spent for closure of the Piney Point gypsum stack system. The ponds were lined with 80 mil (2.03 millimeter) high-density polyethylene (HDPE) liner to provide excess storage capacity for process wastewater during the closure and for potential future “beneficial uses” at the site. Ultimately, Port Manatee and HRK entered into an agreement to use three of the compartments as part of the Ports effort to construct Berth 12 expand by dredging to provide a new berth that would accommodate larger vessels. The dredged material was dumped into three lined ponds (OGS-N, OGS-S, and NGS-S) of the Piney Point gypsum stack system.
- 2006 – Piney Point’s Chapter 7 Bankruptcy Trustee sells the Piney Point land to HRK Holdings, LLC.
- May 11, 2011- Leaks from ruptures in the lined stack were discovered where the dredged material was placed.

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PINEY POINT TIMELINE, CONT'D


- Nov. 2020 – Fortress 2020 Landco, LLC, the mortgage holder, filed a foreclosure lawsuit against HRK.
- March 25, 2021 - Leaks were discovered in the south wall of the New Gyp Stack South, a 67-acre pond that held nearly 400 million gallons of primary seawater and remnant process water mixture. The leak worsened over the following days.
- Florida Governor Ron DeSantis declared a state of emergency for the county and residents in the area were ordered to evacuate on April 1, 2021. An estimated 316 households were within the evacuation zone. Water was discharged into Bishop Harbor at the rate of 22,000 gallons per minute to prevent the collapse of the reservoir. Approximately 215 million gallons were discharged into the bay.
- In May 2021, the Florida legislature appropriated a \$100,000,000 fund for the permanent closure of Piney Point. The Florida Department of Environmental Protection is administering the fund.

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PINEY POINT TIMELINE, CONT'D


- August 2021 - FDEP filed a motion to appoint a receiver in the foreclosure proceeding. All parties stipulated to the relief requested and on August 25, 2021, the Court appointed Herb Donica as receiver for the Piney Point facility. The receivership activities are funded by the legislative appropriation.
- Over the life of Piney Point, several leaks have caused area residents to be concerned.
- The only viable solution is final closure of the lined ponds which involve removing the existing pond inventory and re-configure the dike system so that it does not retain large volume of stormwater except for attenuation during excessive storm events.

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WHAT'S NEXT?


- Three bankruptcies, a mortgage foreclosure proceeding, and a receivership. Is this the end of Piney Point?
- Why the bankruptcies did not work:
- **Chapter 11 Reorganization:** Filed to manage or reduce debt. The bankruptcy stay might permit the owner time to sell the property, but any buyer would have to fund the closure of the stack system. At this point, Piney Point has negative value. Key Point: While a Chapter 11 can be used to compromise **existing** debt, stack closure responsibilities are **future liabilities** not subject to reduction or compromise in a bankruptcy.
- **Chapter 7 Liquidation:** Chapter 7 Trustees are charged with protecting assets of the bankruptcy estate while liquidating the assets for the benefit of creditors. Chapter 7 Trustees generally are not permitted to operate a business.
- A Chapter 7 Trustee would abandon the property because it is burdensome to the bankruptcy estate. Retention of property that is burdensome negatively affects creditors.

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RECEIVERSHIP


- 403.4154 Phosphogypsum management program.—
- (3) ABATEMENT OF IMMINENT HAZARD.—
- (a) The department may take action to abate or substantially reduce any imminent hazard caused by the physical condition, maintenance, operation, or closure of a phosphogypsum stack system.
-
- (e) To abate or substantially reduce an imminent hazard, the department may take any appropriate action, including, but not limited to, using employees of the department or contracting with other state or federal agencies, with private third-party contractors, or with the owner or operator of the stack system, or financing, compensating, or **funding a receiver**, trustee, or owner of the stack system, to perform all or part of the work. (*Emphasis added.*)
- In addition to the specific statutory authority, courts have inherent equity power to appoint a receiver as an ancillary remedy to enforce state laws to protect human health or the environment.

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THE RECEIVERSHIP ORDER


- The receivership order defines powers and responsibilities of the receiver. Courts have wide discretion in determining the extent of a receiver's powers and responsibilities. A receiver has exclusive jurisdiction over the property that is the subject of the receivership.
- Because receivers are officers of the court, they are provided with a form of judicial immunity.
- A receivership is one of the most flexible legal vehicles. The court can grant a receiver the powers necessary to accomplish to goals of the receivership.
- No other party, creditor, or the property's owner can compel or interfere with the receiver's activities.

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FUNDING THE RECEIVERSHIP

- Owners of environmentally impacted properties are required to fund cleanup and remediation.
- The owners may lack the capital needed to bring the property into compliance. In some cases, the properties are abandoned.
- Without viable ownership, regulators cannot enforce compliance. State and federal laws permit regulators to take over environmentally impacted properties if they are unable to enforce compliance. However, regulatory bodies are not set up to conduct remediation activities. Further, a logical conundrum arises: remediation activities require permits; how can a regulatory agency issue a permit to itself?
- Regulatory agencies have access to funding and legislative action to appropriate funds. When a private owner entity has become insolvent, government funding may be the only way to achieve public safety.

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EPILOGUE

- Phosphogypsum is radioactive waste generated from processing phosphate ore into phosphoric acid which is used to manufacture fertilizer. In addition to radioactive materials, phosphogypsum and process wastewater can also contain toxic heavy metals. More than 1 billion tons of phosphogypsum are stored in 25 stack systems in Florida along with billions of gallons of process water. Eventually, these stack systems must be dewatered, lined, and then permanently closed. In some cases, the owner of a gyp stack property may not have sufficient financial resources to fund closure of a gyp stack. In those cases, the EPA or FDEP may be compelled to assume closure responsibilities.
- However, these agencies are regulatory bodies, not operators. The receivership vehicle may be the key to a positive outcome. The regulators can raise funds needed to remediate the properties by a receivership while maintaining their role in regulatory oversight.
- Without phosphate-based fertilizer, the volume of food production would be severely impacted. It is important for all private and governmental factions to work together to protect the environment while maintaining production of fertilizer.

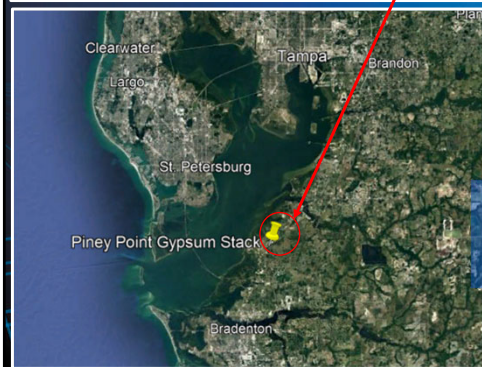
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THE SECOND (FINAL) CLOSURE

MR. PHONG VO

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THE FINAL CLOSURE

Pond Inventory/Watershed Management Challenges

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Pond Inventory/Watershed Management Challenges

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Pond Inventory/Watershed Management Challenges



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Piney Point Gypsum Stack - System Pond Inventory Projection

(Structure 1 Seepage Rate @ 128.4 GPM & DWI Op. on 11/1/22)

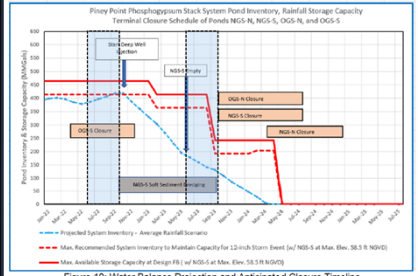
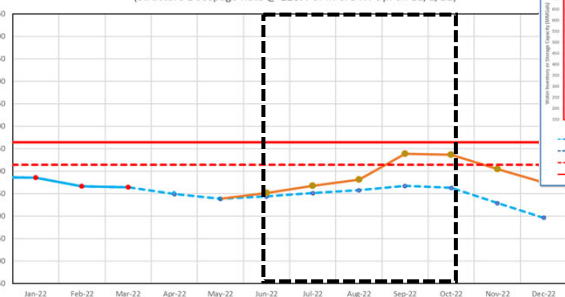
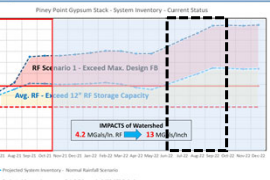


Figure 10: Water Balance Projection and Anticipated Closure Timeline



Piney Point Gypsum Stack - System Pond Inventory Projection
(Structure 1 Seepage Rate @ 128.4 GPM & DWI Op. on 11/1/22)


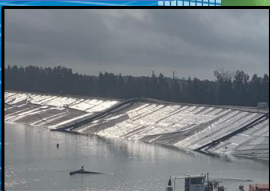

Legend:
 - Projected System Inventory - Average Rainfall Scenario
 - Projected System Inventory - Scenario 1 Rainfall beginning June 22
 - Max. Recommended System Inventory to Maintain Capacity for 12-inch Storm Event (w/ NGS-S at Max. Elev. at 58.5 ft NGVD)
 - Max. Available Storage Capacity at Design FB (w/ NGS-S at Max. Elev. at 58.5 ft NGVD)



IMPACTS of Watershed
4.2 MG/yr, 10.5 MG/yr, 11 MG/yr


Main Focuses:

- Water Management:**
 - Rainy Season Preparedness Plans DURING Closure
 - Pond inventory reduction (Trucking, Spray Evaporation, Deep Well Injection, Dripping, & Other technologies etc..)
- Anomaly issues in NGS
- Marine sediments: to be entombed (HDPE Liner cover)
 - LARGE volume of unconsolidated fine marine sediments in OGSN, OGS, & NGS (800,000 yd³)

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Main Focuses:


1. Water Management:
 - Rainy Season Preparedness Plans DURING Closure
 - Pond inventory reduction (Trucking, Spray Evaporation, Deep Well Injection, Dripping, & Other technologies etc..)
2. Anomaly issues in NGSS
3. Marine sediments: To be entombed (HDPE Liner cover)
 - LARGE volume of unconsolidated fine marine sediments in OGSN, OGS5, & NGSS (800,000 yds in NGSS)





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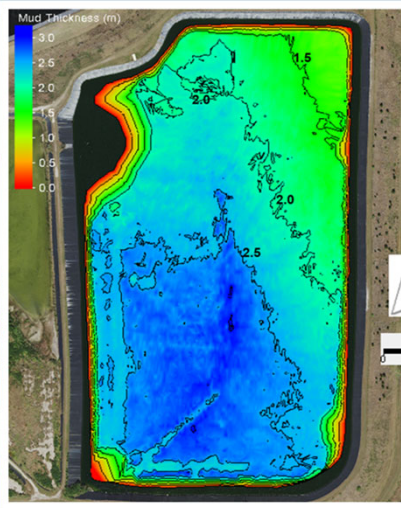
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 - LARGE volume of unconsolidated fine marine sediments in OGSN, OGS5, & NGSS (800,000 yds in NGSS)




Figure 7. Thickness of the soft mud. Aerial photo was obtained from FDOT, 1 m = 3.28 ft.

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THE FINAL CLOSURE

FOR IMMEDIATE RELEASE: March 31, 2022

CONTACT: DEP Press Office, 850-245-2112, DEPNews@FloridaDEP.gov

State Takes Milestone Step Toward Final Closure of the Former Piney Point Facility

- Conceptual closure plan lays framework for ensuring the site's potential threat to the environment and surrounding community is eliminated permanently -

Figure 10: Water Balance Projection and Anticipated Closure Timeline

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QUESTIONS

COMMENTS

CONCERNS

THANK YOU !

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