## Manager Report

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## **ENVIRONMENTAL BENEFITS OF DREDGING**

Dredging allows businesses to work with waterways to create better and healthier aquatic ecosystems. One of the largest benefits of dredging waterways is helping to reduce eutrophication, which is an excessive amount of nutrients in a water body typically caused by water runoff from the surrounding land. Eutrophication can lead to an overabundance of plant growth that results in oxygen deprivation and can cause the death of aquatic wildlife. In some cases, dredging may be the most viable remediation option when eutrophication occurs.

However, dredging offers many environmental benefits, including:

- **Restore environments:** Sediment removal can help to restore a shoreline or beachfront to its original condition by reversing the effects of soil erosion.
- Cleaning ecosystems: Dredging can clean up a waterway after a toxic material spill or via the removal of trash, debris, decaying vegetation, sludge or other materials that can contaminate water and soil.
- **Preserving aquatic life:** Dredging can produce a healthier aquatic ecosystem that can result in a more suitable habitat for fish and other wildlife. It can also be used for trash and debris removal to support eco-friendly waterways.
- Removing general pollutants: Water bodies located near urban areas and industrial complexes can quickly become a receptacle for various pollutants. Sediment removal can prevent the accumulation of pollutants and keep the waterways and their wildlife clean and healthy.
- Reduce flood risk: Because the dredging process removes excess sediment along the bottom and sides of waterways, rain and connecting bodies of water can better flow together with less risk of floods. Waterways can better accommodate the natural level of water coming through their watershed system, so they can move and hold water and prevent spilling over the banks and onto the land.

## **RPBCWD**

Lobbyist: Some other Water Management Organizations have a Lobbyist that help them to get grants to pay for dredging, restorations, and conservation. Many RPBCWD lakes have frequent winter kill resulting in the need to aerate the lakes in winter and restock the lakes in the spring. Including Rice Marsh Lake, Lake Lucy, Staring Lake, Red rock Lake, Mitchel Lake, and Purgitory Creek Recreation Area. Other Water Management Organizations take core samples to verify the sediment is not toxic and identify the dredging locations that would result in removing the most phosphorous. Also, they pump the dredged material to dewatering locations in the same sub watershed which results in the water returning to the lake. Some lakes may have properity owners willing to accept the dredged material. For example, the City of EP may accept adding

material to the walking path that crosses the Purgatory Rec Area and along the south side of Duck Lake Trail in order to make room for a sidewalk.

RPBCWD could partner with other Water Management Organizations and apply for grants to remove decades of sediment that is building up in lakes and other water bodies.

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