

## Florida Department of Environmental Protection (FDEP) Innovative Technology Grant Summary: Passive Phosphorus Treatment of Two Bear Gully Lake Inlets

The FDEP Innovative Technology grant is available to local governments and nonstate entities for projects that evaluate and implement innovative technologies and short-term solutions to combat harmful algal blooms and nutrient enrichment, restore and preserve Florida's fresh waterbodies and implement certain water quality treatment technologies. Grant applications are due September 1, 2025, with notice of award typically occurring in May 2026. There is no required funding match for this grant.

This pilot project proposes to use innovative technology by EutroPHIX for phosphorus removal from stormwater runoff. The proposed project targets phosphorus removal from the two major stormwater inflows to Bear Gully Lake, which is impaired for nutrients, has an existing Total Maximum Daily Load (TMDL) established by FDEP, and is part of the Jesup Basin Management Action Plan (BMAP).

The Seminole County FDEP grant proposal involves the following approach:

- Treat two Bear Gully lake inflows with EutroSORB F filter media for passive phosphorus removal from flowing water in the Dodd Road Culvert and Bear Gully Creek, aka Goldenrod Road Ditch (Figures 1 and 2 below). Both locations are part of the County's stormwater infrastructure.
  - The plan and budget would be created using historical phosphorus and flow data from the 2022 ERD Bear Gully Lake Hydrologic and Nutrient Management Plan
- Project performance will be demonstrated by monitoring nutrient baseline and post-treatment performance with grab samples and coupled with GreenEyes NuLAB continuous nutrient monitoring systems that allow for collection of real-time phosphorus data (Figure 3).
- Watershed staff currently conducts field visits to calibrate equipment and perform inspections. Staff will incorporate project site inspections into their ongoing schedules. No additional resources will be needed, just an adjustment to work priorities and schedules.

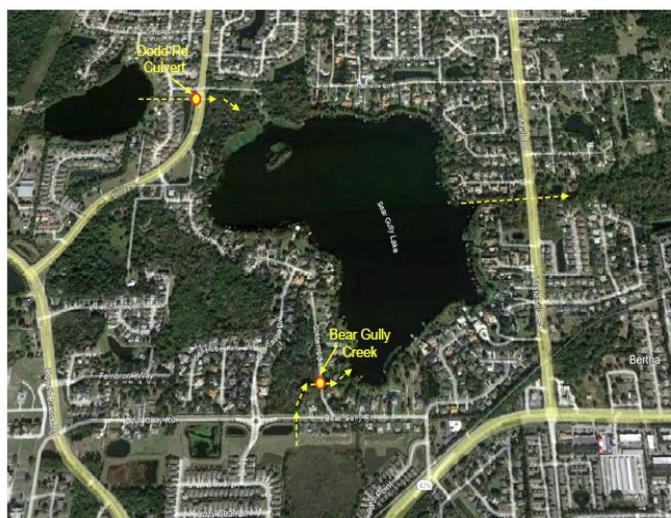
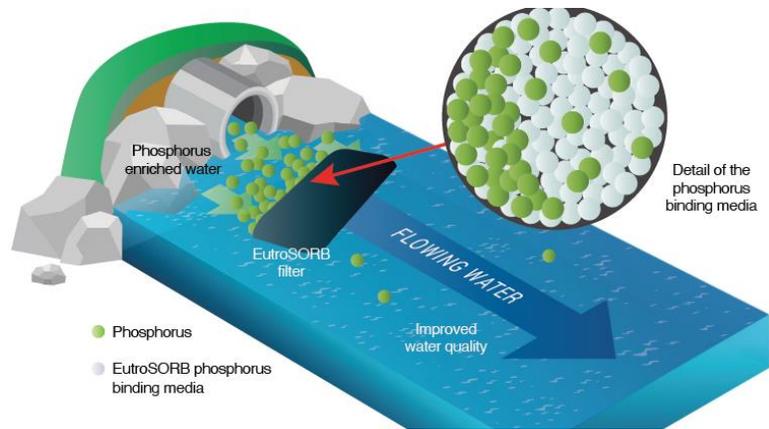


Figure 1. Map of Bear Gully Lake with Dodd Road Culvert and Bear Gully Creek Locations



**Figure 2. EutroSORB F Filter Bag Conceptual Model**



**Figure 3. NuLAB System with Field Enclosure Kit**

The estimated budget for the project is \$650,000 (no required match). This pilot project is estimated to run for 18 months.

This project aims to reduce nutrient input to Bear Gully Lake while also offering a potential best management practice for stormwater runoff. This innovative technology could potentially be another water quality improvement option that is lower in cost, easier to install, and requires less maintenance for nutrient removal.