Agenda

11/19/2024

Subject

Approve Standard Grant Agreement #INV51 with the State of Florida - Department of Environmental Protection (FDEP) to provide funding for the project: "Advanced Algae Cultivation Technology for Nutrient Removal from Florida Surface Waters" (\$2,300,000 one-time revenue).

Description

Through Polk County's water quality sampling program, we have identified numerous waterbodies in need of improvement. In some cases, we have identified treatment projects to restore or improve water quality, and in others we are evaluating new innovative technologies. The nutrient levels in Lake Hancock and contributing streams are above the Florida Department of Environmental Protection's water quality standards. Upper Saddle Creek is the primary nutrient loading source to Lake Hancock. This project sets out to test a new algae harvesting technique to remove nutrients in Upper Saddle Creek waters before they flow into Lake Hancock. Polk County submitted an application, "Advanced Algae Cultivation Technology for Nutrient Removal from Florida Surface Waters" to the State's Innovative Technology Grants program in 2023. Polk County was awarded this competitive grant to implement this project and produce a report detailing the results of the study. Through this agreement, FDEP will award Polk County with \$2,300,000 towards testing this innovative technology and producing a summary report. This project requires no match funding.

Approval of this grant agreement is the next step towards moving this innovative technology project forward to evaluate this technique which then could be applied on a larger scale or on similar waterbodies in Polk County.

This project has been approved by the Stormwater Technical Advisory Committee (STAC).

Recommendation

Approve Standard Grant Agreement #INV51 with the State of Florida - Department of Environmental Protection (FDEP) to provide funding for the project: "Advanced Algae Cultivation Technology for Nutrient Removal from Florida Surface Waters" (\$2,300,000 one-time revenue).

Fiscal Impact

Project costs (\$2,300,000) were budgeted in the FY 24/25 CIP.

Contact Information

Greg Knothe, Water Resources Project Manager Parks and Natural Resources Division (863) 534-7377 gregknothe@polk-county.net

Tabitha Biehl, Land and Water Natural Areas Manager Parks and Natural Resources Division (863) 534-7377 tabithabiehl@polk-county.net

Gaye Sharpe, Director
Parks and Natural Resources Division
(863) 534-7377
gayesharpe@polk-county.net