



# Agenda Report

2725 Judge Fran Jamieson  
Way  
Viera, FL 32940

## Consent

---

F.2.

8/6/2024

---

### Subject:

Scope of Work and Budget Allocation for the Eau Gallie Northeast Muck Removal Project

### Fiscal Impact:

No net increase - Project funding was previously approved in the annually updated Save Our Indian River Lagoon Project Plan (Fund 1260)

### Dept/Office:

Natural Resources Management Department

### Requested Action:

It is requested that the Board of County Commissioners 1) approve amending the scope of work for the Eau Gallie Northeast Muck Removal Project to focus on removing muck from areas with the highest nutrient flux, using Save Our Indian River Lagoon Trust Funds allocated for both muck removal and interstitial treatment to bid dredging without interstitial treatment, 2) authorize staff to negotiate and the County Manager to execute change orders to remove more muck and/or add interstitial treatment to the contract if the negotiated cost is reasonable and sufficient funds are available or become available, and 3) extend this same flexibility and approach to all muck removal projects approved in the Save Our Indian River Lagoon (SOIRL) Project Plan, as necessary, so projects can move forward within their allocated budgets.

### Summary Explanation and Background:

Muck removal in the Eau Gallie area of the Indian River was included in the original 2016 SOIRL Project Plan with an allocation of \$26,250,000 to remove 750,000 cubic yards from 692 acres. Through the process of annual plan updates, this muck removal project was refined and downsized to approximately one-third its original scope. Funding was reduced to \$8,750,000 to remove approximately 250,000 cubic yards (CY) from 73 acres located Northeast of the Eau Gallie causeway. When treatment of interstitial water was added to the SOIRL Project Plan as a project type, \$1,270,487 was allocated to scrub dissolved nutrients from the water extracted from muck dredged from the Eau Gallie Northeast area.

The 2024 Plan Update allocated the contingency for inflation to individual projects, which increased the Trust Funds available for this project to \$10,452,405 for dredging and \$1,517,674 for interstitial treatment. The 2024 plan also updated the volume and flux rate of muck in the Northeast area but did not increase funding to address the increased volume. Two State Legislative Appropriations have been awarded and contracted for this project: LPA 0474 for \$5,010,244 and LPA 0146 for \$2,500,000. After design and permitting, the available budget from grants plus SOIRL funds for the Eau Gallie Northeast project is about \$19.2 million.

When the project was in design and permitting, it was unknown how much grant funding might be secured

for this area. To use all awarded funding to maximize pollution removal, an area and volume of muck larger than what was funded in the Plan, was included in the permit applications for the project and in recently advertised bid documents. The bid documents were structured with a base bid and four optional areas that added up to 488,057 cubic yards, to allow the County to award areas and volumes that maximized pollution removal using the available budget. However, the price sheet submitted by the sole bidder did not contain a combination of options that met the pollution reduction goals and fit within the available budget, therefore the Board rejected the bid on May 21<sup>st</sup>.

In response to the higher than anticipated costs, staff re-evaluated the project scope by considering recent contractor bid feedback and flux data collected from the lagoon. A questionnaire was sent to the 11 contractors who attended the pre-bid construction meeting. Questions were aimed at how to increase competition, decrease contractor risk, decrease overall costs, and maximize project benefits. According to vendor responses, the performance payment terms for interstitial treatment was a deterrent, multi-year projects need a price escalation clause, bidders need more time to secure beneficial use/disposal agreements with local landowners, as well as avoiding clay and short-face cut areas (thin muck) would improve efficiency and reduce hauling costs.

Additional flux data was collected from the lagoon to identify the areas of highest flux. Using this latest data, the project area can be refined to target approximately 230,000 cubic yards of muck covering 81.7 acres that releases 10,575 pounds of Total Nitrogen per year. This would target removal of 92% of the 250,000 cubic yard planned volume and exceed the associated 10,476-pound nitrogen flux reduction target.

By focusing on removal of muck that has the highest nutrient flux, the refined 230,000 cubic yard project will have greater pollution reduction efficiency than the previously approved project. The proposed refinement will remove about 1,270,338 pounds of nitrogen from the lagoon and reduce annual nitrogen flux by approximately 10,525 pounds per year.

On July 19, 2024, the Citizen's Oversight Committee recommended downscaling the project volume up to 10%, keeping the flux reduction target and fund allocation as is, adding a fuel price escalation/de-escalation clause to the bid, avoiding clay, focusing on sufficiently deep muck with the highest flux, and bidding without interstitial treatment. The purpose of bidding without interstitial treatment is to increase competition and maximize muck removal benefits using all revenues currently assigned to this project. If adequate funds become available after the bid, the Committee is in favor of trying to negotiate adding interstitial treatment to the project with a change order.

The impact of construction inflation rates exceeding SOIRL revenue growth rates, and the desire to stimulate competitive bidding, requires flexibility. The approach of fine-tuning the project area and dredge volume as described herein and reallocating interstitial treatment funds to dredging, could benefit all muck removal projects funded in the approved SOIRL Plan.

### **Clerk to the Board Instructions:**

Return a Clerk's memo to the Natural Resources Management Department.



Kimberly Powell, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001  
Fax: (321) 264-6972  
Kimberly.Powell@brevardclerk.us

August 7, 2024

**M E M O R A N D U M**

TO: Virginia Barker, Natural Resources Management Director

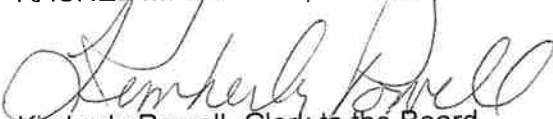
RE: Item F.2., Scope of Work and Budget Allocation for the Eau Gallie Northeast Muck Removal Project

The Board of County Commissioners, in regular session on August 6, 2024, approved amending the scope of work for the Eau Gallie Northeast Muck Removal Project to focus on removing muck from areas with the highest nutrient flux, using Save Our Indian River Lagoon (SOIRL) Trust Funds allocated for both muck removal and interstitial treatment to bid dredging without interstitial treatment; authorized staff to negotiate and the County Manager to execute change orders to remove more muck and/or add interstitial treatment to the contract if the negotiated cost is reasonable and sufficient funds are available or become available; and extended the same flexibility and approach to all muck removal projects approved in the SOIRL Project Plan, as necessary, so projects can move forward within their allocated budgets.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS  
RACHEL M. SADOFF, CLERK

  
Kimberly Powell, Clerk to the Board

/sm

cc: Finance  
Budget