

Eau Gallie Muck Dredging Project

Frequently Asked Questions



What is the composition of muck?

Muck mainly consists of fine-grained sediments (silt and clay) and organic material with smaller quantities of sand.

Does muck pose a health risk?

During the permitting process, the muck in the Eau Gallie River was tested for hazardous materials and poses no health risk to the community.

Why is muck undesirable in the Eau Gallie River?

- Wind, boat traffic and heavy flows suspend muck in the water, resulting in reduced water clarity and water quality within the Eau Gallie River system.
- Nutrients in muck can fuel algal blooms.
- Muck sediment on the lagoon bottom impacts animal and plant communities (which serve as the basis of the aquatic ecosystem food chain).
- Muck damages boat motor cooling systems.

How much nitrogen and phosphorus will be removed from the Eau Gallie River?

The 632,000 cubic yards of muck soils to be removed by the total project are estimated to contain approximately 1,200 tons of total nitrogen and 260 tons of total phosphorous, which will be completely removed from the estuarine system.

Where will dredging occur?

Dredging will occur from the confluence of the Eau Gallie River with the Indian River Lagoon to the Eau Gallie River Control Dam to the west. Also in Elbow Creek from the confluence with the Eau Gallie River to the Magnolia Avenue Bridge and the Laurie Street Bridge.

How much muck will be dredged?

The St. Johns River Water Management District plans to dredge approximately 632,000 cubic yards of muck sediment from 2.58 miles (roughly 14,600 ft.) of the Eau Gallie River and Elbow Creek.

How thick is the muck?

Muck thickness ranges from 2 to 12 feet in the Eau Gallie River.

Will dredging impact manatees?

Dedicated manatee observers must be on site during all dredging and in-water construction activities, and must advise personnel to cease operation upon sighting a manatee within 50 feet of any in-water activity. Additionally, restricted portions of the estuary — where manatees could become trapped — are closed to dredging from November 1 through May 31. Finally, no dredging will occur within the Eau Gallie River or Elbow Creek from March 1 through April 30.

When is dredging expected to begin?

Dredging began in January 2017 and is expected to be completed by the end of 2018.

How often should dredging occur?

Conservative shoaling estimates in the 2013 feasibility study indicate that muck deposits will take a minimum of 40 years to return to existing levels if no maintenance dredging is done. The feasibility study recommends periodic maintenance dredging, as well as upstream erosion and sedimentation control improvements, to prevent shoaling.

What is the estimated cost for the entire dredging project?

Total project cost is approximately \$24 million.

What is the plan for storing, dewatering and disposing of the material that is dredged?

Dredged material will be dewatered on property owned by Brevard County adjacent to the Sarno Road landfill, then transported (off-road) directly to the landfill property for disposal.