

Technical Specification: NGS Discharge Flume Dredging

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DATE: 5/19/26

1.0 Work Scope

JEA is seeking a qualified contractor to remove silt and organic material from Northside Generating Station's discharge flume with a combination of clamshell and/or hydraulic dredging. The flume, outlined in red in the below aerial view, is a structure approximately 650 ft long, 45 ft wide and 30 ft deep, outlined on the river bottom with concrete and steel sheet piling creating the vertical sides.



Over the last decade material from the river has been accumulating in the discharge basin, settling in the structure from the river water used for cooling. A hydrographic survey completed in December of 2024 showed many areas of accumulated material reducing the depth of the discharge basin to as little as 15 in some areas. The survey approximates the total volume within the basin as around 10,264 cubic yards at time of measurement.

JEA would like the level of material brought to the invert of the discharge pipe at elevation -28 ft to prevent damage to the support pilings.

JEA would like a hydrographic survey performed at the end of work to establish the base profile of the basin after dredging.

A portion of the removed material can be disposed of in the gaps between the discharge basin and inlet flume, outlined in yellow in the above aerial view. These 3 areas we estimate as being able to contain roughly 3,200 cubic yards. The remainder of the

removed silt will need to be disposed of offsite. JEA can provide a layup area of 2,500 square yards in the tank farm containment for dewatering bags to the east of the riverfront structures as shown below.

Environmental limitations on this area do require drained water to be returned to the discharge flume, over the road that runs along the intake structure, and to not disrupt the surface of the containment field.

Any chemicals added to the discharge water will need to be submitted and approved by JEA.



2.0 Attachments

2-1 Hydrographic Survey from December 5, 2024

2-2 General Arrangement Drawings of Discharge Basin