

Triadelphia Reservoir Sediment Removal

Presented by WSSC Water



- Project team introductions
- Background & purpose of the reservoir
- Reservoir sediment removal and sediment placement plan
- Description of operations
- DNR Forest Conservation Compliance and Protection of Environmental Resource
- Project schedule
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Project Team Introduction



- EDWIN A. & JOHN O. CRANDELL, INC. INCORPORATED 1948 MMCLB No: 011(E) / MHIC NO: 24468 WWW.eajocrandell.com
- Karen Wright

• John Kasprzak

• Eddie Franceschi

- David Harris, II
- Subra Das

• Donna An



- Chris Overcash
- Nikki Wildart

WSSCWATER DELIVERING THE ESSENTIAL

Background/Purpose of the Reservoir

General Location



Triadelphia Reservoir Background

- Drinking water reservoir that holds 7.2 billion gallons of water via Brighton Dam
- Supplies 30% of drinking water to Howard, Prince George's, and Montgomery County residents
- Built: 1943
- Public amenity use of water and surrounding land





Reservoir Sediment Removal and Sediment Placement Plan

Sedimentation

- Reservoir storage reduced from 7.2 to 6.4 billion gallons
- At Brighton Dam up to 6 feet of sediment has deposited in areas
- Brighton Dam intake tower lower sluice gates have restricted use due to sediment build up





Sediment Removal and Placement Locations





Description of Operations

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Project Components

Physical removal of sediment from bottom of reservoir

• Remove from surface of the water by dredging vessel

Transport of sediment

• Haul material by truck

Dewatering

• Stockpile wet sediment and allow to drain/dry naturally

Beneficial Use of Sediment

- May include use at nearby properties as a soil amendment;
- or use at construction projects;
- or use at landfills for daily cover;
- or blend with organic material for re-use as topsoil



Sediment Removal

Sediment will be removed north of Brighton Dam

• Approximately 18,500 CY

Cranes and/or excavators on barges will remove sediment

 Accessed through Greenbridge boat ramp









Sediment Transport

Greenbridge Boat Ramp to Pig Tail Recreation Area

1,850 truck loads overall

- 10 cy / truck
- 15-25 round trips per day
- 7am-5pm Monday through Friday
- Some weekend work may occur if it's been raining during the week





Dewatering





DNR Forest Conservation Compliance and Protection of Environmental Resources

Forests

- No existing forests are proposed to be impacted
 WSSC Water will place
- WSSC Water will place property into a long-term protective DNR forest conservation easement

Fish

 No in-water work during sensitive spawning March I to May 3 I

Water Quality

- No wetland or stream loss
- No creation of impervious surface
- Erosion and sediment controls will be in place



Project Schedule

Tentative Schedule

- Schedule is subject to change and will be dependent upon availability of funding, permits, weather and other potential factors
- Final permitting July to December 2022
- Construction 4 to 5 months after acquisition of final permits

Closures during Project

- All boat ramps will be closed, and no boating allowed
- Shore fishing will be allowed within the reservoir property, except at the Greenbridge and Pig Tail Recreation Areas



Project Updates

- Updates related to this project will be shared via:
 - WSSC Water Watershed Recreation Facebook Page
 - Outdoor Recreation Email Newsletter
 - Website <u>https://www.wsscwater.com/triadelphia</u>



