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## BRAINERD LAKE DREDGING PROJECT CRANBURY TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY

### FREQUENTLY ASKED QUESTIONS

Initial publication: June 8, 2021

First revision: August 31, 2021 (items 13 through 15)

Second revision: October 8, 2021 (new items 16 through 19)

To Residents:

The Township is moving forward with dredging of Brainerd Lake. The following list of Frequently Asked Questions (FAQs) is intended to provide you with the most up-to-date information available. The FAQ list will be revised and updated as necessary (please refer to the revision date noted above).

If you have additional questions not addressed on this FAQ, please contact us at the email address listed below. We will do our best to answer your questions and update the FAQ list accordingly.

Thank you for your patience as we progress with this critical project.

Thomas R. Decker, P.E., P.P., C.M.E.  
Cranbury Township Engineer  
[tdecker@vancleefengineering.com](mailto:tdecker@vancleefengineering.com)

#### 1. Why are we dredging the lake?

Occasional removal of accumulated sediment is necessary to maintain the lake's physical features and ecological health. Brainerd Lake was last dredged in the 1970s. As you are aware, sediment accumulation has once again reached a level that poses a threat to water quality, aquatic vegetation, and recreational activity. The upcoming dredging project will restore these features and protect our community's important asset.

#### 2. What is the anticipated timeframe for construction activities?

- Lowering of lake waters is expected to begin between September 15, 2021 and September 30, 2021.
- Pre-construction activities on the lake or in Village Park may occur prior to September 15, 2021.
- Construction is expected to progress through late December 2021 or early January 2022.

4822.01 Brainerd Lake FAQ 211008.docx

[VanCleefEngineering.com](http://VanCleefEngineering.com)

Please Reply To:

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### **3. Is it possible that construction will start before September 15, 2021?**

No. The earliest date allowed by the New Jersey Department of Environmental Protection (NJDEP) for the start of lake lowering is September 15. In addition, NJDEP requires that lake waters be lowered no later than November 1.

### **4. What will happen during construction?**

The general construction sequence will include:

1. Lake Lowering – Lake water will be drained through the dam. Fish and aquatic life will be protected through the proper NJDEP Division of Fish and Wildlife salvage protocols. Stream flow through Cranbury Brook will be safely maintained for the duration of the project using excavated channels in the lakebed and supplemental pumping equipment.
2. Sediment Removal – Excavators and trucks will remove sediment, which will be hauled away to licensed disposal sites. Construction traffic will be directed to and from Route 130 via Maplewood Avenue.
3. Lake Restoration – The lake will be filled via natural stream flow to its pre-construction level, and fish and aquatic life will be restored.

### **5. What are the construction hours?**

Construction work will take place Monday through Friday during business hours. Construction may also be necessary on Saturdays and/or at other times as may be authorized by the Township. Pumping equipment will be operating continuously during construction.

### **6. Will Village Park be open during construction?**

Yes. However, it is critical that residents and Village Park visitors keep the following safety measures in mind during construction:

- The entire lake bed and a portion of the Village Park parking area will be considered active construction zones. Residents should follow all construction signage and must not enter any fenced areas.
- Do not enter the lake bed at any time. Licensed contractors may access the lake bed if necessary for certain waterfront maintenance activities (see below) and must not interfere with dredging operations.
- Muddy conditions and the presence of large construction equipment will create a hazardous environment. Please exercise caution.
- The gravel parking lot in Village Park will be utilized as a staging area by the contractor. Access to some areas of the park will be restricted during this time.

### **7. How should lakeshore residents prepare for construction?**

All seasonal dock structures and watercraft should be removed from the lake by September 12, 2021. These items must be stored out of the lake bed for the duration of construction.

### **8. Can lakeshore residents perform maintenance during construction?**

Yes. While the lake is lowered, there will be an opportunity for lakeshore residents to perform waterfront maintenance activities. This includes small projects that may be permitted under NJDEP Permit-By-Rule

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regulations outlined in N.J.A.C. 7:13. Your contractor must obtain and adhere to any necessary permits required by state and local agencies. **Residential maintenance activities must not impede dredging construction operations, and all access for residential work is to be from the subject residential property.**

**9. Will lakeshore residents have access to a construction project manager for questions regarding residential maintenance projects?**

Please direct questions to the Township Engineer, Tom Decker, at [tdecker@vancleefengineering.com](mailto:tdecker@vancleefengineering.com)

**10. How will lakeshore residents be kept updated on the project timeline?**

Dates and timeframes provided on this FAQ sheet will be kept up-to-date and posted. The Township will maintain a registry of email addresses for interested lakeshore residents. To be included in emailed FAQ updates, please submit the property location (Block and Lot number), contact person, and email address to Tom Decker, at [tdecker@vancleefengineering.com](mailto:tdecker@vancleefengineering.com).

**11. Do you know when the contractor will be dredging in specific areas of the lake?**

Not at this time. The contractor is not required to provide dates for work in specific lake locations. More specific information will be provided if it becomes available.

**12. Will the dredging contractor need access or an easement from private property owners?**

No. All contractor access for dredging activities will be through Village Park.

**13. Will lake lowering result in downstream flooding of Cranbury Brook?**

No. The lake will be lowered at a rate that will not result in flooding, erosion, or sedimentation of downstream waters. An NJDEP permit is required for lowering of lake waters. Conditions and requirements of the permit specify the acceptable lake lowering rate. The lake will be lowered at a rate of approximately one (1) foot per day and will take about seven (7) days to reach the maximum extent of lowering. The dredging contractor has obtained the required NJDEP water lowering permit and will abide by all conditions and regulations.

**14. Will the dam breach that occurred during Tropical Storm Henri impact the dredging operations and/or project schedule?**

No. Flood waters from T.S. Henri have receded, and it is anticipated that the project will continue as scheduled.

**15. Residents and pedestrians please note:**

The sidewalk on North Main St adjacent to the dam may be closed on a temporary basis during construction. For your safety, please abide by all sidewalk closure signage.

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**New Items as of October 8, 2021. Items 1 through 15 above remain applicable.**

**16. Please explain the odor noted during lake lowering.**

As the lake is lowered, residents and park visitors may notice an unpleasant odor due to exposure of dead algae and other decaying matter. The intensity of the odor will vary depending on prevailing winds. The odor intensity will also increase as dredging activities disturb and remove the underlying sediment layers. The article at the following link explains various odors that might be observed:

<http://nec-nalms.org/index.php/2017/04/06/odor-in-lakes/>

**17. Were fish successfully relocated?**

The fish salvage and relocation efforts were conducted on Monday October 4, 2021 by a licensed aquatic specialist. Native fish species (such as trout) were relocated downstream to Mill Pond in Plainsboro Township, and invasive fish species (such as carp and koi) were humanely destroyed. All activities were conducted according to NJDEP Division of Fish and Wildlife permit requirements.

**18. Will the Village Park rain garden be protected during construction?**

The rain garden and swale installed on the north bank of Brainerd Lake will be protected by the contractor. The contractor intends to remove the rain garden sign and replace it after construction is complete. Once dredging activities have concluded, any damage to the rain garden and swale will be restored by the contractor to pre-construction conditions. Lake access for dredging activities is only possible in the area adjacent to the rain garden. The rain garden and required protection are clearly indicated on the project plans, and the contractor is aware of the need to maintain and protect the site.

**19. What is the current schedule for dredging?**

The Lake Dredging contractor has provided the following estimated schedule for upcoming construction activities:

- October 8<sup>th</sup> through October 15<sup>th</sup> – period of lake water drawdown
- Week of October 18<sup>th</sup> – begin dredging activities