



December 13, 2023

Christine Jacek
Senior Project Manager
Regulatory Division
696 Virginia Road
Concord, MA 01742-2751

Re: File No. NAE-2022 -01622 Becker Pond Dam Removal Project

Dear Christine,

This letter provides a narrative response to the request for additional information that your office issued on November 15, 2023. Please find the requested plan revisions attached to this letter.

QUESTION 1.

Question: *Please provide updated plans showing proposed temporary construction impacts including areas of dewatering/coffer dam placement. USACE regulates the discharge of fill below the ordinary high water mark or within wetlands. Discharges of fill include temporary dewatering of areas. At this time the plans provided only indicate 70 sq. ft. of permanent fill impacts and no indication of area of temporary impacts are shown on project plans.*

Response: The project contractor will be responsible for the means and methods for water, sediment, and erosion control at the project site during the construction period. At this time, the Becker Pond Dam Removal project has not yet entered the bid phase.

In response to this question, Inter-Fluve, the project engineer, has prepared a revised plan sheet (Sheet 3) to acknowledge temporary fill activities including a coffer dam (upstream) and a sediment trap/erosion control structure (downstream).

It is our intention that the footprints and volumes indicated on the revised plan will give the contractor sufficient allowance for their proposed preferred water, sediment, and erosion control measures.

Project specifications will require the contractor to submit a Water Control Plan and a Sediment and Erosion Control Plan to be reviewed and accepted by the engineer prior to the start of work. The plan submittals are required to include provisions for monitoring and maintenance of sediment and erosion control structures in accordance with permit conditions (including, but not limited to the EPA NPDES Construction General Permit, for example).

Table 1 summarizes an estimated footprint and volume of fill associated with temporary water, sediment, and erosion control measures.

Table 1. Temporary Fill Impacts Associated with Water, Sediment, and Erosion Control Measures

Feature	Dimensions	Estimated Footprint (square feet)	Estimated Volume (cubic yards)
Coffer dam (upstream)	Length: 60 feet Width: 4 feet Height (average): 2 feet Crest elevation: 1620 feet NAVD88	240	20
Sediment Trap & Erosion Control Feature (downstream)	Length of feature: 25 feet Width of feature: 25 feet Width of retaining/filter structure: 3 feet Height of retaining/filter structure (average): 3 feet	625	10
Total Impacts		865	30

The footprint of the Sediment Trap and Erosion Control Feature presented Table 1 intends to represent both the footprint of the sediment sump and the fill retaining/filter structure used to create the sediment sump. The project does not intend to excavate native streambed material to deepen the sump; the existing streambed is to remain intact in place. The estimated volume (10 cy) assumes a retaining/filter structure approximately 3 feet wide, 3 feet high, and 25 feet in length (across the stream) commensurate with one row of bulk bags, for example.

QUESTION 2.

Question: *Please clarify impacts associated with the project. It appears that project plans indicate 70 sq. ft. of permanent fill impacts but the fill impacts are not mentioned within the project narrative. Please also confirm that the temporary construction impacts totaling 25,500 sq. ft. as stated within the narrative are accurate.*

2.1 Response: With respect to temporary and permanent impacts to Land Under Water **within** the project Limit of Disturbance:

The applicant confirms that the **permanent fill impact** to Land Under Water, represented on the plan, is consistent with the project intent. For reference: See sheet 3 of 6, 70 square feet, 0.2 cubic yards. The small fill area is necessary to stabilize slopes and beds following removal of concrete features.

The applicant confirms that the **temporary construction impact** to Land Under Water, represented on the plan (Sheet 6), is consistent with the project intent.

The **temporary construction impact** to Land Under Water is approximately 25,500 square feet. This represents the area where the **Limits of Disturbance** overlap the **Existing Land Under Water**. In Figure 1, the red dotted line represents the boundary of the 25,500 square foot footprint. A polygon representing this footprint has been added to the revised sheet 3 of 6.

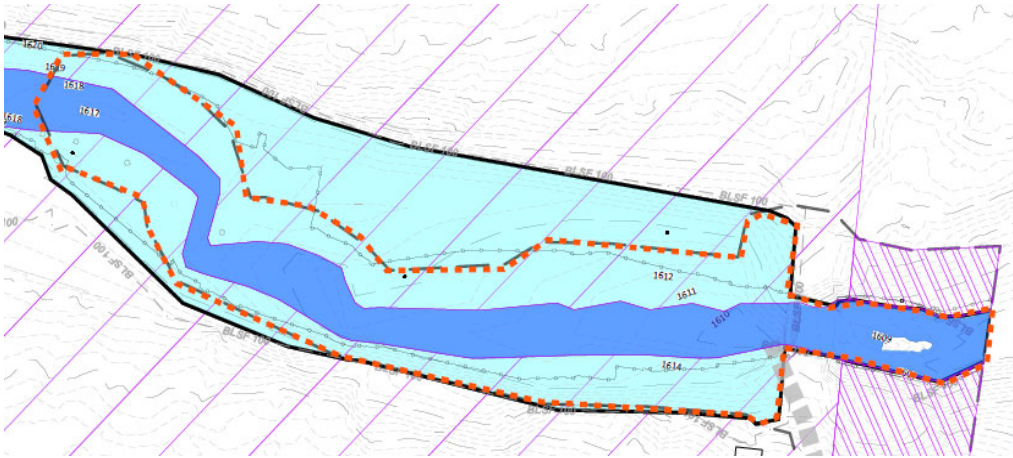


Figure 1. Construction-period disturbance within the Existing Land Under Water

2.2 Response: With respect to temporary and permanent impacts to Land Under Water **outside** the Limit of Disturbance:

With respect to Figure 1 (above), the light blue/cyan shaded area outside of the Limits of Disturbance represents the footprint of permanent indirect impact associated with removing the dam and reverting to the historical Ordinary High Water level. The indirect impact will result in a conversion of the present day Land Under Water area to upland and floodplain.

There is no indirect temporary or permanent dredge or discharge of material anticipated outside of the Limit of Disturbance.

In 2020, Inter-Fluve prepared a Sediment Management Plan for the Becker Pond Dam Removal project. The Sediment Management plan indicates:

- The total volume of sediment within the Becker Pond Impoundment is approximately 1,500 cubic yards.
- The total volume of sediment within the impoundment that is expected to mobilize (without active sediment management) following dam removal is approximately 550 cubic yards.
- The MEPA review process resulted in a project condition to dredge and remove a portion of the total sediment to prevent depositional impacts to resources downstream.
- The dredge volume (see Sheet 3 of 6) is approximately 644 cubic yards.

The dredge volume will be greater than the estimated mobile volume. Dredging the material will prevent discharge of material to points downstream in

accordance with other agency permit requirements. The applicant anticipates that, following removal of the dredge volume, short- and long-term release of sediment to points downstream will be commensurate with natural sediment transport processes within the subject reach.

>> Continued >>

Question 3:

Question: Please provide the estimated area of tree cutting/clearing associated with the entire project, not just the area of waters where impacts are proposed. USACE requires this information to perform endangered species act (ESA) consultation with U.S. Fish & Wildlife Service for impacts to the ESA-listed northern long-eared bat.

Response: The estimated area of tree cutting is limited to three zones:

1. the alternative access route area,
2. the staging area adjacent to the dam, and
3. the borrow pit.

Refer to Table 2 and Figure 2 for a detailed summary of the areas. The location of the alternative access route was chosen to prioritize avoiding mature trees; however, some clearing of mature trees will be required.

Table 2. Summary of Tree Clearing Zones

Zone	Footprint (square feet)
1. Alternative Access Route	10,820
2. Staging Area	3,300
3. Borrow Pit	1,800
Total	15,920

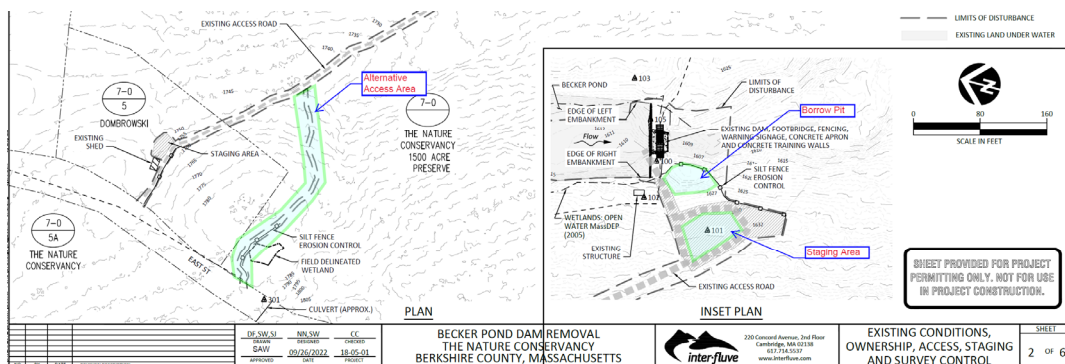


Figure 2. Excerpt of Sheet 2, annotated with specific tree-clearing areas.

Please don't hesitate to reach out if you have additional questions or require additional materials. We will be happy to provide responses and clarifications as needed.

Sincerely,

Sarah A. Widing, PE

cc: Karen Lombard, TNC; Eric Ford, MassDER