



The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**



**Robert R. Scott, Commissioner**

Mr. Christopher Brown  
Town of Northwood  
P.O. Box 4125  
Northwood, NH 03261

January 21, 2020  
**Notice of Inspection**  
DAM #D183010

RE: Harvey Lake Dam #D183010, Northwood  
Hazard Classification: Non-menace

Dear Mr. Brown:

The New Hampshire Department of Environmental Services, Dam Bureau (NHDES) is the agency responsible for monitoring the safety of dams located in New Hampshire. This letter is being sent to notify you of the results of a November 19, 2018 inspection of the above referenced dam.

Based on the results of the inspection the NHDES suggests that you consider performing the following:

1. Ownership and access rights are unclear. Per file review NHDES presumes that the Town of Northwood is the dam owner; however, it is recommended that the Town of Northwood or other interested party complete a fully boundary survey to determine the ownership rights, access rights of various parties interested in the dam, and responsibilities of each party.
2. NHDES recommends that once maintenance responsibilities have been established that the dam owner and/or operator complete an Operation, Maintenance and Response plan (OMR) and submit to NHDES. This document should clearly delineate the dam's operational procedures and maintenance items. Further, if collaboration between the dam owner and other parties is to occur, it may provide a description of parties responsible for maintenance items. A link to the template may be found on NHDES's website on the Dam Bureau page <http://des.nh.gov/organization/divisions/water/dam/index.htm>.
3. NHDES observed an approximately 6' wide breach that had been plugged up with sandbags on the left side of the dam located approximately 10' left of the concrete spillway (Photo 2392) – See sketch attached. Given that the sandbags appear to have been in-place for considerable time, NHDES will not require them to be removed; however, placement of further sandbags will constitute a wetlands violation and any further attempts to repair/reconstruct the breached area will require permits from both NHDES's Dam Safety and Wetlands programs. Dam reconstruction is defined in RSA 482:2X which has been reproduced below. Please note, that per the RSA definition, other modifications to the dam could also require a Reconstruction permit.
4. Some submerged sandbags were observed approximately 15' upstream of the concrete portion of the dam when it appears that someone has attempted to construct a sandbag dam (Photo 2390) – See sketch attached. Similar to the comment above, given that the sandbags appear to have been in-place for considerable time, NHDES will not require them to be removed; however, placement of further sandbags will constitute a wetlands violation; and

5. Significant trees, brush, debris and topographical undulations (IE unlevelled ground) within 15' of the dam. Trees and brush can detrimentally impact the structure in several ways, including uprooting of trees and subsequent displacement of embankment material, water infiltration and seepage through root spread, and hindrance of visual inspection. It is recommended that you consider removing trees and brush on or within 15' of the dam, and evaluate suitable surface protections such as hardy grass or more durable material. For your reference I have attached a NHDES fact sheet providing additional information WD-DB-8 Tree Growth On and Adjacent to Dams.

Detailed assessments related to the design storm event applicable to the dam and the hydraulic adequacy of the dam's outlet works to pass the runoff generated by this event were not completed as part of the recent inspection. In addition, NHDES did not perform an in-depth hazard classification review of the dam in regard to potentially affected areas downstream that could be impacted by a breach of your dam. These analyses are performed less frequently and on as-needed basis, and may be conducted as part of a future inspection of your dam. The findings related to these more detailed analyses could result in the need to complete additional and/or more extensive repairs than those identified above.

Should you consider performing modifications to spillways or other outlet works, or work that otherwise meets the definition of "reconstruction" (see below), then a more in-depth analysis of the dam related to its watershed, structural characteristics and hazard classification must be completed to assure that modifications are made that meet the design requirements consistent with an up to date hazard assessment.

RSA 482:2X. "Reconstruction" means:

- (a) A change in the height, length, or discharge capacity of the structure;
- (b) Restoring a breached dam or one in ruins;
- (c) Modification of flashboards which either increases their height or increases the headwater elevation at which the flashboards will fail; or
- (d) A change in the structural configuration of a dam

This notice is provided for your information only, as NHDES does not have the jurisdiction to require repairs or modifications to non-menace structures such as the subject dam. We strongly recommend, however, that you consider addressing the items noted above to insure the continuing safe operation of the dam. The purpose of this letter is to make you aware of our ongoing commitment to dam safety and to urge voluntary regular monitoring and maintenance of your site. Enclosed is a sampling of information relating to the operation and maintenance of dams. Additional information specific to dam-related issues may be viewed at: [www.des.nh.gov/organization/commissioner/pip/factsheets/db/index.htm](http://www.des.nh.gov/organization/commissioner/pip/factsheets/db/index.htm).

If you have any questions or comments, please contact me at 271-7507 or write to the Water Division at the address listed on the bottom of the previous page.

Sincerely,



Jonathan Findon-Henry, P.E.  
Dam Safety Engineer  
Dam Safety & Inspection Section

D183010 Harvey Lake Dam, Northwood, NH - Inspected October 22, 2019  
DSCN2388



DSCN2389



DSCN2390



DSCN2391



D183010 Harvey Lake Dam, Northwood, NH - Inspected October 22, 2019  
DSCN2392



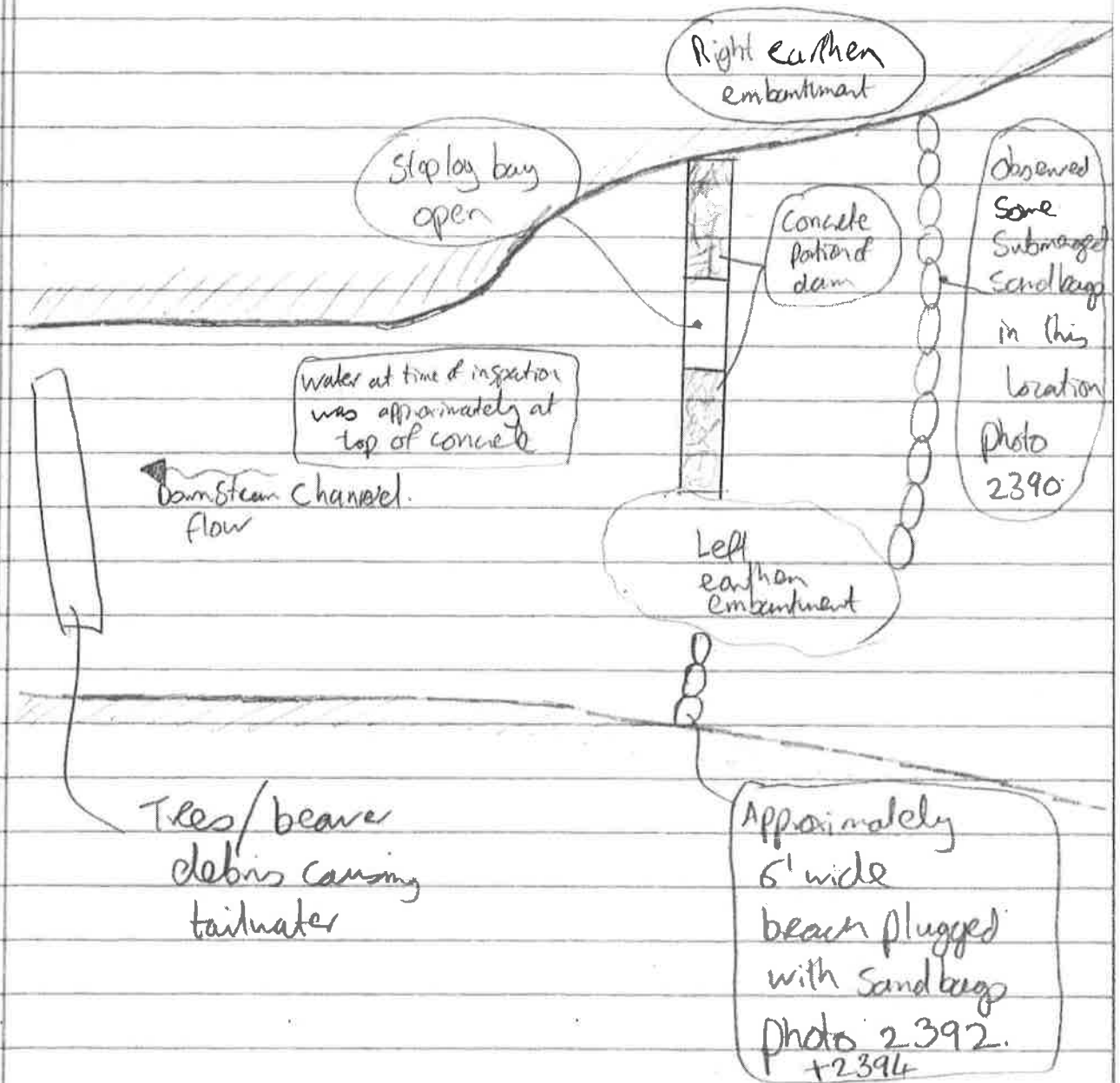
DSCN2393



DSCN2394



Harvey Lake Dam field sketch JDF 10/22/19.



o Typical orientation is left and right as facing dam stream