

What's Happening with the Dam?

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ENGINEERS' ASSESSMENT AND RECOMMENDATIONS

Borton-Lawson, the engineering firm hired by the Borough to assess the deficiencies at the dam and to provide possible solutions to address those deficiencies, provided its report to the Borough on July 31. That report and assessment was also sent to the Pennsylvania Department of Environmental Protection (DEP.) Here are the “take-aways” from that report:

1. **Penn Lake Dam is 115 years old.** It is not engineered in accordance with modern engineering standards so uncontrolled and unfiltered seepage comes through the dam. This can cause the dam to fail due to internal erosion. The upstream valve which would be used to lower the lake during an emergency is stuck in the closed position. The existing spillway is not large enough to pass the amount of water that could occur in a severe storm.
2. **Penn Lake Dam is classified by the DEP as a “High Hazard Dam”** because there are numerous homes that would be at risk downstream if the dam failed.
3. **Least expensive alternative to address the dam's deficiencies is estimated to cost \$1.9 million.** This alternative would widen the spillway, modify the dam embankment, insert a new pipe through the dam and construct a modern filtered seepage collection system. The spillway capacity would be increased by removing the existing arch culverts under the bridge, removing the roadway and widening the spillway.
4. **Temporary draining of the lake will be required** to perform the necessary repairs.

MEETING WITH PA DEP

The dam advisory committee, several Borough council members and several of the engineers who prepared the dam assessment and recommendations met virtually with members of the Pennsylvania DEP on Wednesday, August 19.

The purpose of the meeting was to present the findings and alternatives outlined in the engineers' report and to get a sense from the DEP whether

1. the \$1.9 million solution is acceptable to the Department; and
2. the DEP would require the lake to be drained until the dam deficiencies have been addressed.

Fortunately, the DEP has no concerns with the \$1.9 million solution and is not requiring us to drain the lake prior to the commencement of dam construction. This is great news! The other alternatives outlined by the engineers were considerably more expensive (\$7 to \$10 million) and we will be able to maintain the lake until construction begins.

What about a coffer dam? Penn Lake is as healthy as it has ever been (due in large part to the sewers that were installed a few years ago) and many members of the community would like to find a way to make the necessary repairs to the dam without draining the lake and losing all the fish and other wild life. The possibility of a coffer dam was also discussed with the DEP. A coffer dam is a temporary dam that is constructed to allow the necessary repairs to be made without draining the lake. Unfortunately the DEP was not receptive to construction of a coffer dam because of the high risk that such a dam would breach during construction.

NEXT STEPS/REVISED TIMELINE

While this may certainly change, the likely timeline for the project now appears to be the following:

Consent Agreement – September 2020 to December 2020

The DEP will now draft a consent agreement that Borough Council, as owners of the dam, will be required to sign. That consent agreement will outline a timeline for certain activities to be completed and will describe the consequences if they are not.

One primary purpose of the consent agreement is to document exactly what was agreed to by both the Borough and the DEP. This project is likely to take several years to complete. Current borough council members may no longer be serving and DEP personnel may change. Having the consent agreement in place assures that the requirements will not change if personnel on either side changes.

Engineering Design – September 2020 to June 2021

Submit Permit Application with Design Specifications to DEP – June 2021

DEP Review and Approval – June 2021 to June 2022

Advertisement, Bidding and Award – June 2022 to September 2022

Construction – October 2022 to May 2023

(Every effort will be made to avoid draining the lake during the summer.)

BOROUGH COUNCIL RESOLUTION

The Borough Council cannot incur debt over a certain amount without the approval of the community. So, on August 13 the Borough Council passed a resolution to place the following question on the ballot for the November 3, 2020 election:

Shall debt in the sum of up to \$3 million dollars for the purpose of constructing and maintaining a dam to control and conserve Penn Lake be authorized to be incurred as debt approved by the electors of the Penn Lake Park Borough?

While the engineers' estimate for dam and spillway repairs is \$1.9 million, members of the dam advisory committee recommended and the members of Borough Council determined that a \$3 million authorization makes sense for several reasons. Bids from contractors may be higher than the engineers are estimating. It is impossible to predict cost overruns. There will be other expenses incurred that are not included in the \$1.9 million, such as legal fees, easements, land acquisition, finance costs, and additional consulting arrangements. It also does not include the cost of a road or bridge over the new spillway. (Road replacement is not a settled issue. The Borough Council and dam advisory committee will be seeking community input when we have more information on costs and alternatives.)

This does not mean the Borough Council will incur \$3 million in debt. The Council is committed to only incurring the debt necessary and to pursuing grants. But, as stated in the previous newsletter, a loan will be required and a tax increase will be necessary to make loan payments. The new millage rate has not yet been determined. A "worst case" situation in which no grants are received and a full debt load is needed to fund repairs would likely raise the municipal rate by approximately 4 mils.

This referendum must pass in November for the Borough Council to address the dam deficiencies. Failure to pass the referendum would put the Borough in the position of being unable to secure financing, violating the consent agreement with the DEP and could result in the permanent draining of the lake.

CAN WE GET GRANT FUNDING?

The dam advisory committee and Borough Council members have been searching for grants for which our project might be eligible. We are already a subapplicant with the DEP for a FEMA grant. Another FEMA program, called the BRIC grant program, also seems to be applicable to our situation. Applications for grants under the BRIC program may be submitted between September 30, 2020 and January 29, 2021. We are researching the requirements for the BRIC program and will provide additional information as we have it.

Another possibility is a grant under the H2O PA Act which provides grants to municipalities for High Hazard Unsafe Dams like ours. While it is a nice fit for our project, an administrator for the H2O grant has informed us that it is presently closed and probably will not be funded again until 2022.

Even if we are successful in obtaining grant funding, those grants will not pay for the entire dam project. All of the grant programs require applicants to share in the costs of their projects. A loan will be necessary.

IMPROVED LAKE ACCESS

Although not directly a part of the dam project, there is a lot of interest in improving lake access for non-lake-front property owners. Several suggestions have been made, such as installing a boat docking area at the pagoda and boat racks at Carter Beach. The dam advisory committee and the Borough Council appreciate those concerns and are considering what options might be feasible.