



Assawompset Pond Complex Floodwater Management Program 2020

ASSAWOMPSET POND DAM REPAIR AND REPLACEMENT

Priority Action Next Steps Summary

Where: Assawompset Pond Dam in Lakeville

What's the problem: The dam was built in 1904 and is in somewhat poor condition. It allows for fish passage via a Denil fish ladder, which has a low but constant capacity for herring runs when pond levels are low. The dam structure itself allows migrating herring passage when pond levels are high. It is owned by the Cities of New Bedford and Taunton. The dam is a granite structure with wooden boards, and it has a 43'x 4' spillway. Due to the dam's age and design, it is dangerous to add or remove the wooden boards, making operation of the dam a liability

The dam was constructed primarily for water supply purposes (currently serving all or portions of 13 cities and towns) and not as a flood control or fish passage structure. Sand has flowed from the pond, over the dam as a result of natural circulation processes, which become exacerbated during heavy storm events, causing siltation, channel clogging, resulting in an adverse impact to the herring fishery. Sedimentation has also caused problems maintaining pond levels adequate for water supply and stream flow, as well as retaining enough storage capacity for heavy storm impacts.



Assawompset Pond Dam

What's the solution: Pending results of feasibility study and evaluation of water supply and ecological needs, repair and replace the dam in a manner that balances these competing interests and simplifies pond water level management. A reconstructed dam should allow for improved herring passage under variable water level conditions.



Who: The Division of Ecological Restoration (DER), DEP, City of New Bedford, City of Taunton, the Middleboro-Lakeville Herring Fisheries Commission, the APC Management Team, environmental non-profits, and civil engineers.

Steps to complete work:

1. Scope the boundaries of types of data that are currently available, from all sources, that may impact the project feasibility and next steps.
2. Conduct a Feasibility Study for the dam repair and replacement
3. Evaluate dam repair and replacement design options based upon ecological and water supply needs
4. Conduct assessment and field work to determine design specifications
5. Preliminary/conceptual engineering and design
6. 75% design and permitting
7. Final design. Bid package, and bidding
8. Dam construction
9. Monitoring and O&M Plan

Permits required: Environmental permitting and coordination may include: NOI (Mass DEP, Lakeville, Middleborough), MESA Coordination, Mass DMF review (comment under MEPA and NOI), Mass DEP Ch. 91, ACOE Ch. 404, Water Quality Certification from DEP Ch. 401, Sect. 106 Massachusetts Historical Commission Coordination, Massachusetts Environmental Policy Act

Assets and barriers: Assets include willing participants, the APC Management Team Committee, and consistency with local planning, legislative awareness. Barriers include lack of available funding.

When would we see results: approximately three-five years following hydrological study

How much (ballpark costs):

- Initial Phase (field data collection and analysis, engineering, permitting) - **\$300,000**
- Construction Phase - **\$1,000,000-3,000,000**

Funding sources: USFWS, NOAA, DER, EEA Dam and Seawall Repair or Removal Program, MVP Action Grant, NFWF

Similar Example: Lake Sabbatia, on Bay Street in Taunton; Reservoir Dam, Scituate, MA