Lake Hayward Dam Repair

Overview

Request Owner	Brittany O'Mara, Lakes Association
Est. Start Date	08/01/2023
Est. Completion Date	12/31/2027
Department	Lakes Association
Form Type	Other
Request Type	Infrastructure

Details

Required lead time for the project.	12-18 months
Basis of Cost Estimate: CT Department of Administrative Services Information	Estimate is based on consulting engineer's costing of similiar projects.
Basis of Cost Estimate: Other	Consulting engineer's cost estimates. Project would be competitively bid with required specifications
Prevailing Wage: The threshold is $1,000,000 for new projects and $100,000 for renovation.	n/a
Request Information	Update to existing capital plan
Request Authorization	Yes
Estimated Useful Life of Request.	20+ years
Condition of the infrastructure to be improved or replaced.	Poor
Basis of Cost Estimate	From architectural/engineering cost estimate
Is the capital request needed to meet legal, compliance or regulatory mandates?	Yes
To what extent is the capital request aligned with the town's overall strategies?	Aligns with the Plan of Conservation and Development to develop a long-range strategy for services, programs and facilities
Does the request address a hazard to the public or employee health and safety?	Yes
Does the request reduce, stabilize or increase future operating costs?	Stabilize
Does the request change an existing level of service?	Yes, improves level of service
Project Requirements: Is the capital item needed to meet legal, compliance or regulatory mandates?	2=pending requirement
Value to Citizens: How much value wil the outcome bring to our citizens?	2=partial value
Strategic Alignment: To what extent is the project aligned with the government's strategies	3=full alignment with strategies
Recurring Capital Cost	Yes, it requires annual funding

Supplemental Attachments

(/resource/cg-prod-v2/projects/documents/ab9464f790c33cc3b10c.pdf)

Additional information regarding the condition of the infrastructure.

Lake Hayward's Dam is subject to periodic inspection every seven years as required by CT DEEP. The Association engaged a qualified engineer from DEEP's approved list of dam inspectors. The Consulting Engineer, Karl Asimovic, completed his report. The most critical finding is that significant work needs to be done to reconstruct/construct a new spillway on the eastern side of the dam. The existing eastern spillway is over 60 years old and has significantly deteriorated requiring a major rebuild of the eastern spillway. Our estimate as of January 2024 based on consulting with the DEEP, is that $200,000 will be needed to repair the dam. For FY2026 we are requesting an additional $15,000 toward that cost.

Coordination with other projects.

The inspection report contained other recommendations including the rebuild of the western spillway and the improvement of the earthen berm between the two spillways. Once the eastern spillway is reconstructed, the Association plans to undertake the reconstruction of the western spillway and the reinforcement of the earthen berm between the two spillways. This second project is estimated to cost approximately $130,000. This project would also be subject to DEEP approval and would be planned for 2-4 years after the Phase 1 project is completed. As of January 2023 the recommendation has been updated to complete this in all at once in one phase as opposed to two phases.

Cost Savings and Operational Costs: Detail

Operational Costs: There have been repairs and maintenance to both spillways over the years. These include mowing the berms, removal of vegetation from in and around both spill ways and removal of 10 or less cubic yards annually-if needed-of silt buildup in front of the berm as permitted by DEEP. In addition, the Association would have the consulting engineer inspect the dam and spillways every two years to provide professional expertise on the condition of the dam and the spillways. The operational costs will be borne by Lake Hayward.

Cost Savings: There are none. The Association recognizes that it needs professional expertise to advise its Properties Committee on the required maintenance for the dam. The periodic inspections by the consulting engineer in addition to the seven-year inspection required by DEEP will provide the technical expertise. In addition, the Association's insurance carrier is very concerned about the Association's plan for the proper maintenance and reconstruction of the dam. The dam is a major liability of the Association and the Association must provide assurances to its insurance carrier that it is being maintained properly.

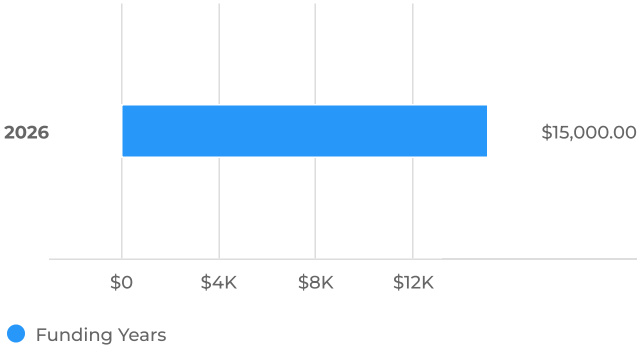
Additional Information

The source of funding for this project comes from three sources initially: Association funding, voluntary contributions from residents from the East Shore Drive property owners community ($7,385) and the Town of East Haddam's support. In FYE 2022 - 2025, the Town of East Haddam authorized $15,000 of funding for dam repairs and in FYE 2026 POALH is requesting an additional $15,000 which would make the Town's commitment $75,000 or 37.5% of the total estimated cost of $200,000. POALH and East Shore Drive residents would contribute the remainder.

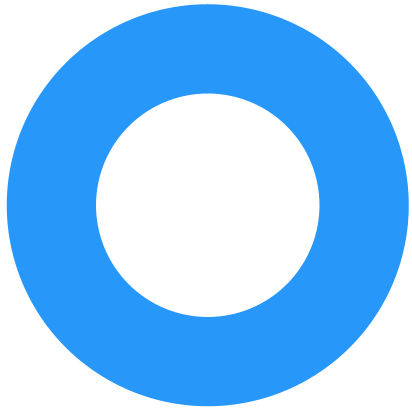
Capital Cost

Total Historical	FY2026 Budget	Total Budget (all years)	Project Total
$15,000	$15,000	$15K	$30K

Capital Cost by Year



Capital Cost for Budgeted Years



Capital Cost Breakdown

Capital Cost	Historical	FY2026	Total
Funding Years	$15,000	$15,000	$30,000
Total	**$15,000**	**$15,000**	**$30,000**