

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: *14198*
 MEPA Analyst: *Briony Angus*
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ENF Environmental Notification Form

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Ashmere Lake Dam Remedial Repairs		
Street: Ashmere Lake State Park (off Smith Road)		
Municipality: Hinsdale	Watershed: Housatonic	
Universal Transverse Mercator Coordinates: 18T 657681m E 4699924m N	Latitude: 42° 26' 9" N Longitude: 73° 4' 59" W	
Estimated commencement date: Summer 2008	Estimated completion date: Fall 2009	
Approximate cost: \$1.6 million	Status of project design: 75 %complete	
Proponent: Massachusetts Department of Conservation and Recreation, Attn: Jason Benoit		
Street: 251 Causeway Street, Suite 600		
Municipality: Boston	State: MA	Zip Code: 02114-2119
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Gregory Sampson		
Firm/Agency: BSC Group, Inc	Street: 15 Elkins Street	
Municipality: Boston	State: MA	Zip Code: 02127
Phone: (617) 896-4300	Fax: (617) 896-4301	E-mail: gsampson@bscgroup.com

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No
- Has any project on this site been filed with MEPA before?
 Yes (EOEA No. _____) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8)) Yes No
 - a Special Review Procedure? (see 301 CMR 11.09) Yes No
 - a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No
 - a Phase I Waiver? (see 301 CMR 11.11) Yes No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): **The project will be funded by the Massachusetts Department of Conservation and Recreation.**

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals:
Orders of Conditions – Town of Hinsdale Conservation Commission; Town of Peru Conservation Commission
Section 404 Permit – US Army Corps of Engineers (New England District)
Coverage under NPDES Construction General Permit – EPA

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands (ENF) |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input checked="" type="checkbox"/> ACEC – Hinsdale Flats
Watershed ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological
Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> MA DCR Office of Dam Safety: Chapter 253 Dam Safety Permit
Total site acreage	±371			
New acres of land altered		±3.0		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		46,880		
Square feet of new other wetland alteration		±54,000		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	0	0	0	
Number of housing units	0	0	0	
Maximum height (in feet)	0	0	0	
TRANSPORTATION				
Vehicle trips per day	0	0	0	
Parking spaces	0	0	0	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0	0	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0	0	

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify Estimated Habitat & Priority Sites are located on a section of the lake) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify Hinsdale Flats Watershed) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

Ashmere Lake (the lake) is located in Berkshire County, Massachusetts, predominantly within the Town of Hinsdale. A portion of the lake also exists within the Town of Peru. The 300-acre lake was artificially impounded with an earthen dam (the Ashmere Lake Dam) around 1875 by the Crane Paper Company to facilitate manufacturing activities. In 1969, ownership of the dam was transferred from the Crane Paper Company to the Commonwealth of Massachusetts. The Commonwealth of Massachusetts is the current owner of the Dam, although DCR currently manages the property. Following ownership transfer to the Commonwealth of Massachusetts, several inspections and modifications of the Ashmere Lake Dam have been performed. The most recent investigation (December 2005) was performed by GEI Consultants, Inc. (GEI), the designers of the modifications described herein. GEI performed a Phase II Inspection and issued a report to the DCR Office of Dam Safety. GEI evaluated Ashmere Lake Dam as being in poor condition due to a number of deficiencies. The dam has since been classified by current dam safety regulations (302 CMR 10.06) as a large (greater than 1,000 acre-feet of storage or greater than 40-feet in height), Class I, High Hazard potential dam. Class I-High Hazard potential dams are classified as such because failure of the dam will likely cause loss of life and serious damage to homes(s), industrial or commercial facilities, important public utilities, main highway(s) or railroad(s). The High-Hazard potential classification does not describe the condition of the dam nor does it describe the potential for failure of the dam. Rather, the hazard potential classification only describes the potential risk should the dam fail.

The following list summarizes the dam deficiencies:

- The existing spillway does not safely pass half of the Probable Maximum Flood (PMF), which is the Spillway Design Flood (SDF) required by 302 CMR 10.00, without overtopping of the embankment. It is estimated that the ½ PMF would overtop the embankment by up to about 1 foot for about 7 hours. Overtopping the Ashmere Lake Dam embankment is likely to cause significant erosion that could lead to a breach failure of the dam.
- Due to loose zones in the embankment and seepage in the downstream slope, the embankment may become unstable at high pool impoundments.
- As noted above, the embankment may be susceptible to a downstream slope failure during a seismic event because of the steep slope and loose embankment zones.
- The embankment is relatively homogenous and does not have a system to safely collect, filter, and channel seepage that passes through parts of the dam and foundation. As a result, the dam has a potential for internal erosion due to seepage.
- The left and right abutments, the embankment left of the spillway, and the area along the downstream toe are heavily wooded. Large trees could be uprooted during a storm event leaving cavities in the slope. These potential cavities and potential cavities from tree roots can provide shortened flow paths for embankment seepage that create the potential to cause internal

erosion and embankment failure.

- The upstream slope contains large scarps over most of the embankment length. Continued erosion of the upstream embankment can result in shortened seepage paths that may cause increased seepage in the downstream slope. These factors could decrease embankment stability and increase the potential for internal erosion.
- The downstream slope is relatively steep at 2H:1V and difficult to maintain. Based on reports by others, undesirable vegetation has previously been observed growing on the downstream slope of the dam. Difficulty of maintaining the steep downstream slope is known to contribute to reduced maintenance.

Current conditions remain consistent with the GEI 2005 report.

The proposed remedial repairs to Ashmere Lake Dam will provide significant benefits to the surrounding area, including:

- Complying with the regulations set forth by the DCR Office of Dam Safety set forth under 302 CMR 10.00.
- Restoring normal pool elevation to historic levels, resulting in an overall improvement to the surrounding wetland resource areas.
- Improving the recreational function of Ashmere Lake.

In addition, the overall economic value of the properties associated with the lake will be directly and positively impacted.

Project Site

The Ashmere Lake Dam impounds Ashmere Lake on the south end of the lake. The dam is a 1,525-foot long, 32-foot high earthen embankment structure with an uncontrolled spillway channel 270-feet from the left abutment. The alignment of the dam includes a 45-degree angle point 700-feet from the right abutment and a low-level outlet 520-feet from the right abutment. A detailed description of the dam and the surrounding site conditions is contained in Attachment B.

Alternatives Analysis

The alternatives to the proposed project include a no-build, an extended drawdown, and the preferred alternative (repair). A number of construction period and mitigation alternatives have been considered as well. For a detailed discussion of all alternatives evaluated for the project, please refer to Attachment B.

Mitigation Measures

During planning and local permitting of the project, the applicant, designers, state regulatory agencies and other interested parties evaluated a number of mitigation strategies and alternatives. For a detailed discussion of all alternatives evaluated for the project, please refer to Attachment B.