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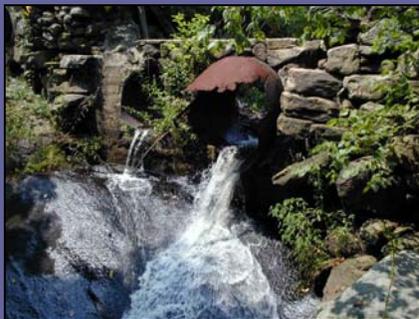
## *Final Report*

# Blackstone River Feasibility Study Task B Volume I

Submitted to:  
Department of the Army,  
U.S. Army Corps of Engineers  
North Atlantic Division,  
New England District

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EPSILON ASSOCIATES, INC.

Prepared for:  
BATTELLE DUXBURY  
OPERATIONS



**BLACKSTONE RIVER FEASIBILITY STUDY  
TASK B  
FINAL REPORT  
  
VOLUME I**

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# BLACKSTONE RIVER FEASIBILITY STUDY

## TASK B FINAL REPORT

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### 1.0 Introduction and Purpose

The US Army Corps of Engineers, New England District (USACE/NAE) is conducting a multi-year feasibility study to identify watershed restoration opportunities in the Blackstone River Basin in Massachusetts. The goals of this study are to identify environmental restoration needs and opportunities in the basin, develop plans and cost estimates for restoration projects, assess benefits and costs of alternative restoration plans, select a recommended watershed restoration plan, and prepare appropriate NEPA documentation.

Epsilon Associates, Inc. has been subcontracted by Battelle to perform Task B as identified in the Scope of Work (SOW) for the Blackstone River Feasibility Study (USACE/NAE July 20, 1999). As defined by USACE/NAE, Task B includes a comprehensive inventory of impoundments to assess existing habitat and recreational value of each identified impoundment. Task B also qualitatively ranks the restoration opportunity at each of the identified impoundments within the Blackstone Basin.

### 2.0 Study Area

The geographic scope of Task B includes the entire Blackstone River Watershed located in Massachusetts. This study area encompasses 382 square miles in all or portions of 30 towns.

### 3.0 Site Selection Criteria

Under Task B, all impoundments on perennial tributaries within the Massachusetts portion of the Blackstone River Watershed were identified. Impoundments associated with the following areas were excluded from the inventory as directed by USACE/NAE:

- ◆ Impounded public water supplies identified in the Massachusetts Surface Water Quality Standards (314 CMR 4.06),
- ◆ Impoundments on the mainstem of the Blackstone River,
- ◆ USACE/NAE Flood Control Projects (West Hill Flood Control Project in Uxbridge).

## 4.0 Methodology

In identifying and prioritizing impoundments as potential restoration sites in the Blackstone River Basin, a four phased approach has been used. The first phase involved the procurement of existing information from a variety of sources. The second phase involved analyzing this information to confirm impoundments as potential restoration sites in accordance with the criteria outlined in Section 3.0. The third phase focused on field visits to each site for the purpose of collecting additional information and evaluating the site as a restoration opportunity. The final phase involved ranking each site based on site characteristics. The activities included in these four work phases are described below.

### 4.1 Information Procurement

Phase I is the information procurement phase. In this initial phase of the study, existing information on the Blackstone River Basin that is applicable to this project was collected and catalogued. Government agencies, academic institutions and non-profit organizations were contacted to identify information sources for the project, such as resource maps, watershed studies, aerial photography and other ongoing studies and projects. Some of the information sources used on the project include the following:

- ◆ Massachusetts Executive Office of Environmental Affairs, Blackstone Basin Team
- ◆ Blackstone River Watershed Association
- ◆ Massachusetts GIS Program
- ◆ Massachusetts Department of Environmental Management, Dam Safety Program
- ◆ Massachusetts Department of Environmental Protection (DEP) Bureau of Waste Site Cleanup
- ◆ Massachusetts DEP Wetlands and Waterways Program
- ◆ Massachusetts Division of Fisheries and Wildlife (MDFW) Riverways Program
- ◆ Massachusetts Historic Commission
- ◆ Massachusetts Natural Heritage and Endangered Species Program (MNHESP)
- ◆ Massachusetts Wetlands Restoration and Banking Program
- ◆ National Park Service (NPS) Blackstone National Heritage Corridor
- ◆ U.S. Army Corps of Engineers (USACE/NAE)

- ◆ U.S. Environmental Protection Agency (EPA), Blackstone River Initiative
- ◆ U.S. Fish and Wildlife Service (USFWS)
- ◆ University of Massachusetts Earth Science Information Office
- ◆ USDA Natural Resource Conservation Service (NRCS)
- ◆ U.S. Geological Survey (USGS)

Refer to Attachment A for a primary list of reference information used in identifying potential restoration sites for this project.

In addition to the sources described above, color infrared aerial photographs (1:40,000 scale) shot in the spring of 1991 and 1992, were obtained for use on this project. These photographs, which provide stereoscope coverage of the entire Blackstone River Basin, were used in conjunction with USGS Maps, NRCS county soil surveys, and other resource maps and reports to identify impoundments in the Blackstone River Watershed. The use of a stereoscope provided important information on topography and other physiographic features within the river basin study area. Acetate covers were overlaid on each photograph to facilitate the labeling of information directly onto the photo. The proposed labeling scheme included an abbreviation of the site type (I for impoundment) followed by a simple numbering sequence. (i.e., I-1, I-2 etc.).

#### ***4.2 Information Interpretation and Analysis***

The second phase of the project involved the synthesis and interpretation of the data collected in the first phase (Section 4.1) for the purpose of identifying potential restoration opportunities as defined in Section 3.0. Once potential impoundment sites were identified, their locations were plotted on a base map comprised of USGS topographic quadrangles. This base map included all identified potential restoration sites.

During the data interpretation phase, field packets were also assembled for use by field staff. Each field packet contained information that assisted field scientists in locating, assessing and ranking identified impoundment restoration opportunities. Information was included in each packet to allow for 3 to 5 days of field investigations. Each field packet contained: USGS maps and aerial photographs with potential restoration sites identified; blank field forms; copies of road maps; and an assortment of natural resource information including fisheries, freshwater mussels and rare species information.

### 4.3 Site Evaluation

The information interpretation phase (Phase II) occurred sequentially with the site evaluation phase (Phase III) of the project. That is, as information interpretation was completed for each USGS Quadrangle study unit, the site evaluation for that unit commenced. This process was continued until the entire study area was covered.

Site evaluations were attempted at each identified impoundment by a two-person field team. The field staff completed an evaluation by filling out a field data form for each impoundment visited. The field form was developed for the project and requires the completion of data fields for including general site characteristics, surrounding land use, wildlife and fisheries habitat, and recreational and historic features. The field team spent approximately 45 minutes to 1 hour at each site and visited 6 to 8 sites per day. While conducting field evaluations of the predetermined restoration sites, other potential restoration sites were discovered that were not identified during the first two phases. These sites were included in the inventory if they met the criteria for site selection.

Field equipment used by field personnel included a global positioning system (GPS) receiver, field manuals, and a digital camera. The GPS equipment used on the project includes a Garmin GPS 12XL unit that provides at least 10-meter accuracy. Once on site, the field data forms were completed, a GPS point recorded, and photographs taken. The GPS information was used to produce geographic information system (GIS) maps showing each restoration site in the Blackstone River Basin. Photographs were taken from the GPS location and the direction of the photograph noted on the field form.

When it was not possible for the field team to directly access a site, observations were recorded from a distance to the extent possible. A group of sites were completely inaccessible due to the distance from between the site and a public road. Attempts were made to contact nearby landowners to obtain legal access. For a group of sites, the team was unable to secure legal access. For these sites, field forms were completed in the office using existing information including *An Inventory of the Ponds, Lakes, and Reservoirs of Massachusetts – Worcester County*. These sites are presented in this report as the inaccessible sites and were not included in the ranking.

#### ***4.4 Site Ranking Methodology***

To assess the current habitat and recreational value of each impoundment, a scoring and ranking methodology was developed. This methodology was developed using other wildlife, fisheries, and water habitat assessment techniques and methods (see reference list in Attachment A).

The ranking process was developed for three identified functional attributes potentially important at each impoundment: wildlife, aquatics/fisheries, and recreational/historic. A three tiered ranking system was employed to rank the existing value of each attribute: high, medium, and low. For example, a site that scored and ranked high for wildlife had good habitat value, while a site that scored and ranked low for wildlife had low habitat quality.

For each attribute, a number of factors were identified as important indicators that contribute to the value of the attribute. For example, wildlife factors included habitat types, shoreline characteristics, and mean depth. To develop an attribute rank, each factor was scored on a point system that included a score of 3 for high, 2 for medium, and 1 for low. These individual factor scores were then added together to provide a total score for the attribute. The attribute score was then ranked as providing high, medium or low value based on the range of potential scores.

Using the scores obtained for each functional attribute, a total score was developed for the purpose of quantitatively ranking each impoundment's restoration potential. The total score for each impoundment was calculated by adding the three scores developed for wildlife, aquatics/fisheries, and recreational/historic values. Each total score was then ranked as providing high, medium or low restoration potential based on the potential range of total scores. As described above, a high score represented high qualities (wildlife, fishery, and recreational/historic) for the site while a low score represented low qualities for the site. Therefore, to appropriately rank the potential for restoration of a site, the ranking system was applied as the inverse of the total score. For example, a site that scored high in wildlife, fisheries, and recreational/historic quality was ranked low as a potential restoration site. Conversely, a site that scored low in wildlife, fisheries, and recreational/historic quality was ranked high as a potential restoration site.

## **5.0 Discussion and Results**

Field work for Task B was initiated in the beginning of August of 2000 and was completed at the end of September 2000. As part of the initial identification of impoundments in the Blackstone Basin in Massachusetts, 124 impoundments were identified. Of this amount, 111 could be visited and evaluated. Information collected for the 111 sites is summarized in the final site list provided in Attachment B. Locations of these sites are identified on the orthophoto base GIS maps provided in Attachment C. Photographs of each site are included in Attachment D. Other potential restoration sites that have been identified, but could not be accessed, are identified on a list provided in Attachment E. These sites are located on a USGS base provided in Attachment F. A blank field form is provided as Attachment H of companion Volume II. Completed field forms for the 111 impoundments that have been field evaluated are provided in

Attachment I of Volume II. Partially completed field forms for inaccessible sites are located in Attachment J of Volume II.

Upon completion of all field work and site ranking, it was necessary to modify the ranking system. Because the ranking methodology was originally based on potentially observed scores and not on observed scores, a disproportionate number of sites ranked as medium on a low, medium and high scale. The primary reason for this is that the actual observed scores do not exhibit the range of potential scores and are more central to that range. To correct this problem a modification to the scoring/ranking system has been made. This modification ranked scores using a system based on actual scores rather than potential or hypothetical scores. Details of the modified scoring/ranking system are provided in Attachment G included in Volume II.

**Table B-1  
Blackstone Feasibility Study  
Task B - Final Site List**

Site #	Impoundments		Name of Stream	Acres	Owner Type	Impounding Structure	Height	Impact Type	Fix Type	Rare Species Habitat	Mussels	Coldwater Fishery	Coldwater Upstream or Downstream	Cover Evaluation	Stocked Waters	Boat Ramp	Degree of Use	Invasive Species	Dominant Invasive	Adjacent Land Uses	Wildlife [score]	Aquatic/ Fishery [score]	Recreation/ Historic [score]	Total Score	Comments
	Site Name	Town																							
I-1	Waite Pond	Leicester	Kettle Brook	54	PRIV	Rock, Wood Concrete,	7'	INV SP	FP	Yes	No	No	No	Moderate	No	No	Medium	Yes	Loostrife	High	L (13)	M (13)	M (10)	M (36)	
I-2	City Pond	Leicester	Kettle Brook	5	PRIV	Earth	20'	INV SP	Dam Removal, Treat INV	No	Yes	No	No	Moderate	No	No	Low	Yes	Milfoil	Medium	L (14)	M (11)	M (8)	M (33)	
I-3	Smiths Pond	Leicester	Kettle Brook	15	PRIV	Rock, Earth, Concrete	4'	INV SP, SPT	None	No	No	No	No	Moderate	No	No	Medium	Yes	Loostrife	High	M (19)	H (15)	M (8)	M (42)	Dam Partially Removed
I-4	Cook Pond Patch	Worcester	Tatnuck Brook	20	PRIV	Rock, Earth, Concrete	12'	INV SP	Treat	No	No	No	No	Moderate	No	No	Medium	Yes	Milfoil	Medium	H (21)	H (14)	M (9)	L (44)	
I-5	Reservoir	Worcester	Tatnuck Brook	31	PUB	Rock, Earth	6'	NP, SD	None	No	No	No	No	Good	No	No	High	No	N/A	High	M (18)	M (13)	M (10)	M (41)	Adjacent to Conservation Land
I-6	Smith Pond	Worcester	Tatnuck Brook	1	PRIV	Concrete	4'	INV SP, NP	NP Control	No	No	No	No	Poor	No	No	Low	Yes	Loostrife	High	M (16)	L (7)	L (5)	H (28)	
I-7	Williams Mill Pond	Worcester	Tatnuck Brook	4	PRIV	Rock, Earth	5'	INV SP, NP	Sediment Removal	No	No	No	No	Poor	No	No	Low	Yes	Loostrife	High	L (14)	L (8)	M (9)	H (31)	Former Pond Silted in
I-8	Indian Lake Salisbury	Worcester	Unnamed Stream	190	PRIV	Concrete	?	NP	NP Control	No	No	No	Upstream	Good	Yes	Yes	High	No	N/A	High	L (14)	H (15)	M (9)	M (38)	No Direct Access to Dam
I-9	Pond	Worcester	Chaffins Brook	13	PUB	Concrete	8'	INV SP, NP	NP Control	No	No	No	No	Poor	No	No	High	Yes	Loostrife	High	L (13)	L (8)	M (8)	H (29)	City Park
I-10	Green Hill Pond	Worcester	Unnamed	26	PUB	Rock	5'	NP	NP Control	No	No	No	No	Poor	No	No	High	No	N/A	High	L (14)	L (9)	H (11)	M (34)	
I-11	Lake Quinsigamond	Worcester/ Shrewsbury	Quinsigamond River	803	PUB/ PRIV	Concrete	25'	INV SP, NP, SD, OF	Mitigation, NP Control	No	Yes	No	No	Moderate	Yes	Yes	High	Yes	Fanwort	High	M (17)	M (10)	M (9)	M (36)	
I-12	Reservoir	Worcester	Beaver Brook	86	PUB/ PRIV	Rock, Earth, Concrete	20'	INV SP, NP	NP Control	No	No	No	No	Poor	No	No	High	Yes	Milfoil	High	M (17)	M (11)	M (10)	M (38)	
I-13	Coes Pond	Worcester	Middle River	6	PRIV	Rock	10'	INV SP	None	No	No	No	No	Moderate	No	No	Low	Yes	Loostrife	High	M (16)	M (12)	L (6)	M (34)	Urba Oasis
I-14	Curtis Pond	Worcester	Kettle Brook	36	PRIV	Rock, Earth, Concrete	8'	INV SP, SED, OF	Treat INV,	No	No	No	No	Moderate	No	No	Low	Yes	Milfoil	High	M (16)	M (10)	M (8)	M (34)	Access Difficult
I-16	Newton Pond	Boylston, Shrewsbury	Sewall Brook	48	PRIV	Concrete	6'	INV SP	Treat INV SP	Yes	Yes	No	Upstream (not direct)	Good	No	No	Moderate	Yes	Milfoil	High	M (18)	L (9)	M (10)	M (37)	Canoers Observed
I-17	Mud Pond	Shrewsbury	Sewall Brook	2	PRIV	Rock, Earth, Concrete	8'	Eutrophication	Remove Dam	No	Yes	No	No	Moderate	No	No	Low	Yes	Fanwort, Milfoil	High	L (15)	M (10)	L (6)	H (31)	Dam partially breached
I-18	Unnamed Impoundment	Shrewsbury	Sewall Brook	2	PRIV	Rock	2'	Eutrophication	Remove Dam	No	No	No	No	Good	No	No	Low	Yes	Fanwort, Milfoil	High	L (15)	M (11)	L (5)	H (31)	
I-20	Mill Pond	Shrewsbury	West Brook	16	UNK	Concrete	12'	INV SP, NP	Treat INV, Dam Removal	No	No	No	Upstream	Poor	No	No	Low	Yes	Fanwort	High	M (18)	M (13)	L (6)	M (37)	
I-23	Windle Pond	Shrewsbury	Big Butler Brook	5	PRIV	Rock, Earth	8'	INV SP, NP	NP Control	No	No	No	No	Good	No	No	Low	Yes	Milfoil	Medium	H (21)	H (15)	L (6)	M (42)	Historic Dam
I-24	Pratts Pond	Grafton	Brook	6	PRIV	Rock	8'	INV SP	Treat INV SP	No	No	No	No	Moderate	No	No	Low	Yes	Milfoil	High	M (18)	M (10)	M (8)	M (36)	
I-27	Lake Ripple	Grafton	Quinsigamond River	63	PRIV	Concrete	12'	INV SP	Treat INV	Yes	Yes	No	No	Moderate	No	No	Medium	Yes	Fanwort	High	M (18)	H (15)	H (12)	L (45)	Conservation Land
I-28	Silver Lake	Grafton	Miscoe Brook	23	PUB	Concrete	15'	INV SP, NP	Treat INV, NP Control	Yes	No	No	Upstream	Moderate	No	No	High	Yes	Milfoil, Loostrife	High	M (17)	M (10)	H (11)	M (38)	Public Beach
I-29	Dorothy Pond	Millbury	Broad Meadow Brook	141	PRIV	Rock, Earth, Concrete	8'	INV SP, SD, NP	Treat INV SP, NP Control	No	No	No	No	Moderate	No	Yes	High	Yes	Milfoil	High	M (17)	H (14)	M (10)	M (41)	
I-30	Lower Dorothy Pond	Millbury	Dorothy Brook	7.5	PRIV	Rock, Wood, Concrete	2'	none	none	No	No	No	No	Good	No	No	Low	none	N/A	High	H (22)	M (11)	M (10)	M (43)	
I-31	Unnamed Impoundment	Millbury	Dorothy Brook	2	PRIV	Rock Concrete, Earth	8'	NP	NP Control	No	No	No	No	Good	No	No	Low	none	N/A	High	M (18)	M (13)	M (8)	M (39)	Possible Dam Breach
I-33	Howe Pond	Millbury	Unnamed	6	PRIV	Earth, Rock	2'	INV SP	Dam Removal	No	No	No	No	Good	No	No	Low	Yes	Milfoil	Low	H (22)	M (12)	M (8)	M (42)	Possible Dam Breach Water Co. owned, but not surface water
I-33A	Woolshop Pond	Millbury	Dorothy Brook	3	PRIV	Concrete	8'	INV SP, SE	Treat, INV SP	No	No	No	No	Moderate	No	No	Low	Yes	Milfoil	High	M (19)	M (13)	M (9)	M (41)	Old Mill
I-34B	RR-122A	Millbury	Unnamed	1	PRIV	Earth	15'	Eutrophication	Treat INV	No	No	No	No	Moderate	No	No	Low	Yes	Fanwort	High	M (16)	L (9)	L (6)	H (31)	
I-35A	Brierly Pond	Millbury	Singletary Brook	17	PRIV	Concrete, Earth	3'	NP	Deter Geese, NP Control	No	No	No	No	Moderate	No	No	Medium	Yes	Loostrife	High	M (17)	M (15)	M (8)	M (40)	
I-35B	W. Main St. Mill	Millbury	Singletary Brook	2	PRIV	Rock, Concrete	15'	INV SP, NP, Eutrophication	Dam Removal	No	No	No	No	Poor	No	No	Low	Yes	Milfoil	High	L (12)	L (7)	L (5)	H (24)	
I-36	Ramshorn Pond	Sutton, Millbury	Ramshorn Brook	116	PRIV	Concrete, Earth	6'	NP, SD	none	No	No	No	No	Poor	No	No	High	Yes	Loostrife	High	L (13)	M (10)	M (8)	H (31)	
I-36A	Garden Mill	Millbury	Ramshorn Brook	1	PRIV	Rock, Earth, Concrete	10'	INV SP	Dam Removal or Treat	No	No	No	No	Good	No	No	Low	Yes	Milfoil	Medium	H (21)	H (14)	L (6)	M (41)	
I-37	Leesville Pond	Worcester	Kettle Brook	96	PRIV	Rock, Concrete	10'	INV SP	Treat INV SP	No	No	No	No	Moderate	No	No	Low	Yes	Milfoil, Fanwort	High	M (16)	M (12)	L (6)	M (34)	
I-38	Stoneville Pond	Auburn	Kettle Brook	43	PUB	Concrete	8'	NP Outfall	NP Control	No	No	No	No	Good	No	No	Medium	No	N/A	High	M (19)	H (16)	M (10)	L (45)	
I-40	Reservoir	Auburn	Kinnear Brook	61	PRIV	Rock, Earth, Concrete	15'	INV SP, NP	Treat INV SP, NP Control	Yes	No	No	No	Moderate	No	No	High	Yes	Milfoil, Loostrife	High	M (17)	M (13)	M (8)	M (38)	
I-41	Dark Brook Reservoir	Auburn	Dark Brook	386	PRIV	Earth	8'	INV SP	Treat INV SP	No	No	No	No	Moderate	No	No	Medium	Yes	Milfoil, Loostrife	Low	H (21)	M (12)	M (10)	M (43)	
I-42	Pondville Pond	Auburn/ Millbury	Ramshorn Brook	37	PRIV	Concrete, Earth	6'	INV SP, NP	Treat INV SP, NP Control	No	No	No	No	Moderate	No	No	Medium	Yes	Fanwort, Loostrife	High	M (20)	M (12)	M (7)	M (39)	
I-43	Eddy Pond	Auburn	Dark Brook	138	PRIV	Rock, Earth, Concrete	20'	INV SP	Treat INV SP	Yes	No	No	No	Moderate	No	Yes	Medium	Yes	Milfoil	Medium	H (21)	M (13)	M (9)	M (43)	

**Table B-1**  
**Blackstone Feasibility Study**  
**Task B - Final Site List**

Site #	Site Name	Town	Name of Stream	Acres	Owner Type	Impounding Structure	Height	Impact Type	Fix Type	Rare Species Habitat	Mussels	Coldwater Fishery	Coldwater Upstream or Downstream	Cover Evaluation	Stocked Waters	Boat Ramp	Degree of Use	Invasive Species	Dominant Invasive	Adjacent Land Uses	Wildlife [score]	Aquatic/Fishery [score]	Recreation/Historic [score]	Total Score	Comments
I-46	Slaughterhouse Pond	Millbury/ Sutton	Unnamed	12	PRIV	Earth, Concrete	2'	INV SP	Treat INV SP	No	No	No	No	Moderate	No	No	Low	Yes	Milfoil	Medium	M (17)	M (12)	M (7)	M (36)	
I-47	Reservoir	Auburn	Unnamed	24	PRIV	Earth, Rock	15'	INV SP	Treat INV SP	No	No	No	No	Poor	No	No	Low	Yes	Phragmites, Loostrife	Low	M (20)	L (9)	M (8)	M (37)	Dam breached, now an emergent wetland
I-48	Marble Pond	Sutton	Unnamed	7	PRIV	Earth, Rock	3'	Eutrophication	Dredging	No	No	No	No	Poor	No	No	Low	Yes	Milfoil	High	M (17)	L (9)	L (5)	H (31)	Might consider for Dam Removal
I-48a	Aldrich Pond	Sutton	Unnamed	1.5	PRIV	Rock, Earth, Concrete	2'	INV SP, SE, Eutrophication	Remove Dam or Dredging	No	No	No	No	Moderate	No	No	Low	Yes	Milfoil, Fanwort, Loostrife	High	L (15)	L (8)	L (5)	H (28)	
I-49	Woodbury Pond	Sutton	Cold Spring Brook	4	PUB	Rock, Concrete	8'	Eutrophication, NP	Dredging, or other treatment	No	No	No	No	Good	No	No	Medium	Yes	Fanwort, Milfoil	High	L (14)	M (10)	M (7)	H (31)	
I-50	Singletary Pond	Millbury/ Sutton	Singletary Brook	330	PRIV	Earth	15'	NP	NP Control	No	No	Yes	No	Good	Yes	Yes	High	No	N/A	High	L (14)	M (10)	M (9)	M (33)	DEM Boat Ramp
I-51	Welsh Pond	Sutton	Singletary Brook	7	PUB	Rock, wood, Concrete, Earth	6'	INV SP, NP	Treat INV SP, NP Control	Yes	No	No	No	Good	No	No	Low	Yes	Milfoil, Loostrife	Medium	M (19)	M (12)	M (9)	M (40)	
I-52	Putnam Pond	Sutton	Singletary Brook	10	PUB	Concrete, Earth	1'	INV SP	Treat INV SP	Yes	No	No	No	Poor	No	No	Low	Yes	Phragmites, Loostrife	Low	M (20)	L (9)	H (11)	M (40)	Dam Partially Breached, WMA
I-53	Schoolhouse Pond	Sutton	Singletary Brook	6	PUB	Concrete	1'	INV SP	Treat INV, Dam Removal	Yes	No	No	No	Good	No	No	Medium	Yes	Milfoil, Loostrife	Medium	M (20)	M (10)	H (11)	M (41)	Dam Breached, WMA
I-54	Adams Pond	Sutton	Singletary Brook	10	PUB	Concrete, Earth	4'	INV SP	Treat INV, Dam Removal	Yes	No	No	No	Moderate	No	No	Medium	Yes	Milfoil	Medium	H (21)	M (11)	H (12)	L (44)	Dam Partially Breached, WMA
I-55	Arnold Pond	Sutton	Singletary Brook	6	PUB	Rock, wood, Earth, Concrete	1'	Milfoil	Dam Removal	Yes	No	No	No	Moderate	No	No	Medium	Yes	Milfoil, Loostrife	Medium	H (22)	M (12)	M (10)	L (44)	Dam Partially breached, WMA
I-56	Town Farm Pond	Sutton	Singletary Brook	5	PUB	Wood, Earth, Concrete	1'	none	none	No	No	No	No	Good	No	No	Low	No	N/A	Low	H (24)	H (16)	H (12)	L (52)	Pristine, WMA
I-56B	Thompson Pond	Sutton	Singletary Brook	1	PUB	Rock, wood, Earth, Concrete	1'	none	none	No	No	No	No	Poor	No	No	Low	No	N/A	Low	M (19)	L (8)	H (11)	M (38)	Dam breached, now emergent wetland in WMA
I-57	No. 1 Pond	Sutton	Unnamed	7	PUB	Rock, Concrete	6'	NP	NP Control	No	No	No	No	Moderate	No	No	Low	No	N/A	High	M (16)	M (10)	M (9)	M (35)	
I-58a	Douglas Road Pond	Sutton	Unnamed	1	PRIV	Earth	1'	NP, SD, Eutrophication	Vegetate Shoreline	No	No	No	No	Poor	No	No	Low	No	N/A	High	L (13)	L (8)	M (7)	H (28)	
I-59	Sutton Falls Pond	Sutton	Unnamed	6	PRIV	Concrete	6'	INV SP, NP	Treat INV SP	Yes	No	No	No	Moderate	No	No	High	Yes	Milfoil	High	L(13)	M (11)	M (8)	H (32)	Campground surrounds, much of the pond
I-60	Tuckers Pond	Sutton	Dark Brook	20	PRIV	Earth, Rock	10'	INV SP	Treat INV SP	No	No	No	No	Moderate	No	No	High	Yes	Milfoil	High	L (13)	M (10)	M (9)	H (32)	
I-64	Manchaug Pond	Sutton/ Douglas	Mumford River	360	PRIV	Concrete, Rock, Earth	20'	INV SP, SD, NP	Treat INV SP, NP Control	No	No	No	No	Good	No	Yes	High	Yes	Fanwort	High	L (15)	M (11)	H (11)	M (37)	DEM Boat Ramp
I-65	Stevens Pond	Sutton	Mumford River	84	PUB	Concrete	20'	SD, NP	NP Control	No	No	No	No	Moderate	No	No	High	No	N/A	High	M (16)	M (12)	M (9)	M (37)	Access Difficult
I-65A	Manchaug Mills	Sutton	Mumford River	1	PUB	Rock	15'	INV SP, Eutrophication, NP	Dredging, or other treatment	No	No	No	No	Moderate	No	No	Medium	Yes	Milfoil	High	L (15)	M (10)	M (9)	M (34)	Public Park
I-66	Clark Reservoir	Sutton	Cold Spring Brook	32	PRIV	Rock, Earth	5'	none	none	No	No	No	No	Moderate	No	No	Low	No	N/A	Medium	M (19)	H (14)	M (8)	M (41)	No Direct Access to Dam
I-66A	Coogan Pond	Sutton	Cold Spring Brook	1.5	PRIV	Rock, Earth	20'	INV SP	Treat INV SP	No	No	No	No	Good	No	No	Low	Yes	Milfoil	Medium	H (21)	H (14)	M (9)	L (44)	Beautiful Dam
I-66B	Armsby Cemetery	Sutton	Unnamed Stream	1	PUB	Roadway	1'	NP	NP Control	No	No	No	No	Moderate	No	No	Low	No	N/A	High	M (18)	L (9)	L (6)	M (33)	
I-68	Dean Pond	Upton	Center Brook	7	PUB	Rock, Earth	3'	none	none	No	No	No	No	Good	No	No	Low	No	N/A	Low	H (21)	H (14)	M (10)	L (45)	Part of Upton State Forest
I-69	Wildwood	Upton	Miscoe Brook	42	PUB	Concrete	12'	INV SP	Treat INV SP	No	No	No	No	Moderate	No	No	High	Yes	Fanwort	Medium	M (20)	H (15)	M (11)	L (46)	
I-70	Unnamed Pond	Upton	Miscoe Brook	1.5	PRIV	Rock, Concrete	20'	INV SP, NP	Remove Remainder of Dam	No	No	No	No	Moderate	No	No	Low	Yes	Milfoil, Loostrife	High	M (18)	M (10)	L (6)	M (34)	Dam already partially breached
I-71	Pratt Pond	Upton	Center Brook	43	PUB	Concrete	4'	INV SP, NP	NP Control	Yes	No	Yes	No	Good	Yes	Yes	High	Yes	Fanwort	High	M (19)	H (16)	M (8)	M (43)	
I-71A	Lower Pratt Pond	Upton	Center Brook	10	PRIV	Concrete	8'	INV SP, Eutrophication	Treat INV SP, Dredge vegetation	No	No	No	Upstream	Good	No	No	Medium	Yes	Fanwort	High	M (16)	M (13)	M (7)	M (36)	
I-72	Fiske Millpond	Upton/ Milford	Mill River	20	PRIV	Concrete, Wood	5'	INV SP, NP, SE	NP Control	No	No	No	No	Moderate	No	No	Medium	Yes	Loostrife	High	H (21)	M (12)	M (7)	M (40)	
I-73	Mill Pond	Hopedale/ Milford	Mill River	23	PRIV	Concrete, Rock	8'	INV SP, Eutrophication	Treat INV SP	Yes	No	No	No	Good	No	No	Low	Yes	Loostrife	Medium	M (20)	M (13)	M (8)	M (41)	
I-74	Taft Pond	Upton	Pond Brook	10	PRIV	Concrete, Earth, Rock	6'	SPT	Title 5	No	No	No	No	Moderate	No	No	High	No	N/A	High	L (15)	M (10)	M (8)	M (33)	No Direct Access to Dam
I-74B	WW II Pond	Northbridge	Stream	1	PUB	Concrete	4'	none	none	No	No	No	No	Moderate	No	No	High	N	N/A	Low	M (17)	M (11)	M (9)	M (37)	Public Park - could use some sprucing
I-75	North Pond	Hopkinton/ Milford/ Upton	Mill River	230	PUB	Rock, Concrete	15'	INV SP, SD, NP	NP Control	No	No	No	No	Good	No	Yes	High	Yes	Milfoil	High	L (15)	L (9)	H (11)	M (35)	
I-76	Hopedale Pond	Hopedale	Mill River	93	PUB	Concrete	10'	INV SP, NP	Treat INV SP, NP Control	Yes	No	No	No	Moderate	No	No	High	Yes	Milfoil	High	M (19)	M (12)	H (11)	M (42)	Public Beach
I-77	Spindleville Pond	Hopedale	Mill River	2	PUB	Concrete, Wood	4'	INV SP, NP	Treat INV SP, Mitigate Outfall	No	No	No	No	Moderate	No	No	Medium	Yes	Loostrife	High	M (17)	M (12)	M (9)	M (38)	
I-78	Swans Pond	Northbridge/ Sutton	Unnamed	31	PRIV	Rock, Earth	8'	INV SP, Eutrophication, NP	Treat INV SP	No	No	No	No	Moderate	No	No	Medium	Yes	Milfoil	High	M (19)	L (8)	L (6)	M (33)	







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