

**ENVIRONMENTAL INSPECTION REPORT
(ELECTRONICALLY SUBMITTED)
FEDERAL ENERGY REGULATORY COMMISSION**

New York Region

Date of Inspection May 5, 2004

Name Gardners Falls Project **Project No.** 2334-MA

Licensee Consolidated Edison Energy Massachusetts, Inc. **License Type** Major

License Issued April 4, 1997 **License Expires** March 31, 2037

Location Deerfield River N/A
(Waterway) (Reservation)

Franklin Massachusetts
(County) (State)

Inspector John Mark

Licensee Representatives Kim Marsili, Station Manager, Charles E. Molongoski, Senior
Station Engineer and Alan J. Douglass, Environmental Manager

Other Participants N/A

Summary of Findings

The Gardners Falls Project is located on the Deerfield River in between two developments of the Deerfield River Project (P-2323-Vermont/Massachusetts). The Gardners Falls Project is about one mile downstream of the No. 3 Development and about 2.5 miles upstream of the No. 2 Development.

Based on a file review and field observations, the licensee appears to be in compliance with all license requirements.

Submitted October 26, 2004

John Mark
Environmental Protection Specialist

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A. Inspection Findings

REQUIREMENTS	DATE OF REQUIREMENT	FOLLOW-UP NEEDED	PHOTO NO(s).
CULTURAL RESOURCES			
Article 408 requires the licensee to implement the provisions of the Programmatic Agreement and Cultural Resources Management Plan c-201/C-184	O: April 4, 1997 AO: Nov 17, 1998	No	1- 2
FISH AND WILDLIFE RESOURCES			
Standard Article 15 requires the licensee to construct, maintain and operate or arrange for facilities for the conservation and development of fish and wildlife resources	O: April 4, 1997	No	
Standard Article 16 requires the licensee to permit the United States to construct or improve fish and wildlife facilities	O: April 4, 1997	No	
Article 401 requires the licensee to release a minimum flow of 150 cfs for the protection and enhancement of fish resources c-089	O: April 4, 1997	No	3
Article 402 requires the licensee to file a plan for monitoring the minimum flow release requirement c-091	O: April 4, 1997 AO: May 4, 1998	No	4 – 6
Article 403 requires the licensee to file design drawings and a plan and schedule to construct and install downstream fish passage facilities c-018/C-071	O: April 4, 1997 AO: Nov 12, 1997 AO: May 4, 1998 AO: Jan. 21, 1999	No	7 – 8
Article 404 requires the licensee to file a plan to monitor the effectiveness of the downstream fish passage facilities c-027	O: April 4, 1997 AO: May 4, 1998 AO: June 14, 2001	No	
Article 405 reserves authority to the Commission to require the licensee to construct, operate and maintain or provide for fishways c-072	O: April 4, 1997	No	
PUBLIC SAFETY			
Public Safety Device Installation – Public Safety Plan 18CFR	March 10, 2003	No	9 – 13
RECREATION RESOURCES			
Standard Article 13 requires the licensee to permit reasonable use of project lands and waters	O: April 4, 1997	No	

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Standard Article 17 requires the licensee to construct, maintain and operate or arrange for recreational facilities	O: April 4, 1997	No	
Standard Article 18 requires the licensee to allow free public access to project lands and waters	O: April 4, 1997	No	
Article 406 requires the licensee to file a Recreation Plan c-113	O: April 4, 1997	No	14 – 15
Revised Recreation Plan c-113	AO: Apr. 18, 2001 AO: Oct. 18, 2001		16 – 17
OTHER ENVIRONMENTAL RESOURCES			
Standard Article 8 requires the licensee to install and maintain gages and stream-gaging stations to determine the stage and flow	O: April 4, 1997	No	
Standard Article 19 requires the licensee to prevent soil erosion, sedimentation and any form of water or air pollution	O: April 4, 1997	No	
Standard Article 20 requires the licensee to clear and dispose of temporary structures, unused timber, brush, refuse and other materials in accordance with Federal, State and local statutes and regulations	O: April 4, 1997	No	
Article 407 requires the licensee to file a Recreational Use Erosion and Sediment Control Plan c-120	O: April 4, 1997 AO: Aug. 3, 1998	No	18

O=Order AO=Approval Order C=OEP-IT Code 18CFR=Title 18 Code of Federal Regulations

Comments and Follow-up Action

Cultural Resources: The Gardners Falls Project, constructed in 1904, was the first major hydroelectric power plant constructed on the Deerfield River. The Gardners Falls Project dam, power canal and powerhouse and its appurtenant buildings and structures were deemed eligible for listing in the National Register of Historic Places by the Massachusetts State Historic Preservation Officer in 1990. By the approved Cultural Resources Management Plan¹, filed April 3, 1998, the licensee established guidelines and procedures for the mitigation of project operations and routine maintenance activities and their impacts on historic structures. The Cultural Resources Management Plan also identified two archaeologically significant sites - one prehistoric and one historic. The potentially prehistoric site is a cave-like structure of glacially-deposited boulders which form an overhang (Photo No. 1). The historic site is the stone foundation of a temporary structure built to house workers during the construction of the Boston and Maine Railroad (Photo No. 2). The licensee monitors the two sites annually to determine the presence of any adverse impacts due to project operations, looting or vandalism and files a report of its findings,

¹ Order Approving Cultural Resources Management Plan issued November 17, 1998 (85 FERC ¶ 62,110)

pursuant to the Cultural Resources Management Plan and Stipulation II.D. of the Programmatic Agreement. By letter filed April 16, 2004, Kleinschmidt Consultants, on behalf of the licensee, submitted the annual monitoring report and photographs of the two sites. The report stated that there were no adverse impacts due to project operations on the two sites. The licensee appears to be in compliance with its requirements with regards to cultural resources.

Fish and Wildlife Resources: The licensee releases a minimum flow of 150 cfs into the bypass reach of the Deerfield River for the protection and enhancement of fish resources. The 150 cfs minimum flow is released through the minimum flow gate on the crest of the dam which also acts as the downstream fish passage facility (Photo No. 3). The gate is designed to maintain the minimum flow as pond elevation rises and falls within the drawdown limit of 1.8 feet. Operation of the gate is controlled by the Programmable Logic Controller located in the powerhouse. The Programmable Logic Controller monitors the pond level periodically and adjusts the gate opening to maintain the minimum flow release (Photo Nos. 4 through 6). The Programmable Logic Controller can store generation and elevation data and minimum flow records for verification of compliance to license requirements. The downstream fish passage facility for salmon smolts consists of close-spaced trashracks at the entrance to the power canal, a floating louvers system, fish ramp and plunge pool (Photo Nos. 7 and 8). The facility appeared to be well maintained and in good operating condition for the downstream passage of salmon smolts. The licensee appears to be in compliance with its requirements with regards to fish and wildlife resources.

Public Safety: The licensee maintains fences, gates, guardrails, lights, sirens and signs to warn and protect the public of the hazards of project operations and to restrict the public from project structures. All project structures are fenced with locked gates and posted with "No Trespassing" and signs warning of sudden rises in water levels (Photo Nos. 9 through 11). The licensee installs a boat restraining barrier seasonally, approximately 50 to 75 feet upstream of the dam and spillway. The boat barrier was not in place on the day of the inspection but the licensee's representative stated that barrier would be installed by May 15 in accordance with the boat barrier installation/removal schedule. However, signs warning of the dam ahead are mounted year-round on the left and right abutments of the dam (Photo Nos. 12 and 13). The licensee appears to be in compliance with its responsibilities with regards to public safety.

Recreation Resources: The licensee provides recreational facilities in accordance with Order Approving Recreation Plan Under Article 406². The licensee allows free public access to the project area along the Deerfield River for hand-carried canoes and kayaks and fishermen (Photo No. 14). The licensee provides ample parking areas at the headgate area and picnic area along the access road. The picnic area contains tables and benches, grills, garbage containers and toilet facilities. There is a nature trail along the west bank of the power canal that passes through wooded areas and crosses over numerous rustic brooks and streams (Photo No. 15) and loops around the powerhouse. The nature trail was in good condition and well maintained and provides an attractive bucolic amenity for the region.

² Issued April 18, 2001 (95 FERC ¶ 62,060)

Pursuant to ordering paragraph (B) of Order Approving Recreation Plan Under Article 406, the licensee filed a revised recreation plan on June 1, 2001 for modifications to the Wilcox Hollow Recreation Facility. The improvements to the Wilcox Hollow facility included a redesigned entrance from Route 2, additional parking, a turn-around area for cars and trailers, and enhancements to the boat launch and angler fishing area (Photo Nos. 16 through 18). The Wilcox Hollow facility was in excellent condition and was being utilized by boaters and fishermen at the time of this inspection.

Other Environmental Resources: By Order Approving Recreational Use Erosion and Sediment Control Plan³, the Commission approved the licensee's plan, filed on April 6, 1998, for implementing measures to control soil erosion and sedimentation during the construction and operation of all recreational facilities. The plan provides for the periodic monitoring of all recreational facilities to identify any erosion or sedimentation problems as a result of recreational use. The licensee has a program in place to inspect all recreation facilities on a regular basis and provide any maintenance measures immediately. The licensee implemented its erosion and sediment control measures during the construction of enhancements and improvements to the Wilcox Hollow Recreation Facility (see Photo No. 18). The licensee appears to be in compliance with its requirements with regards to all other environmental resources.

B. Exhibits and Photographs

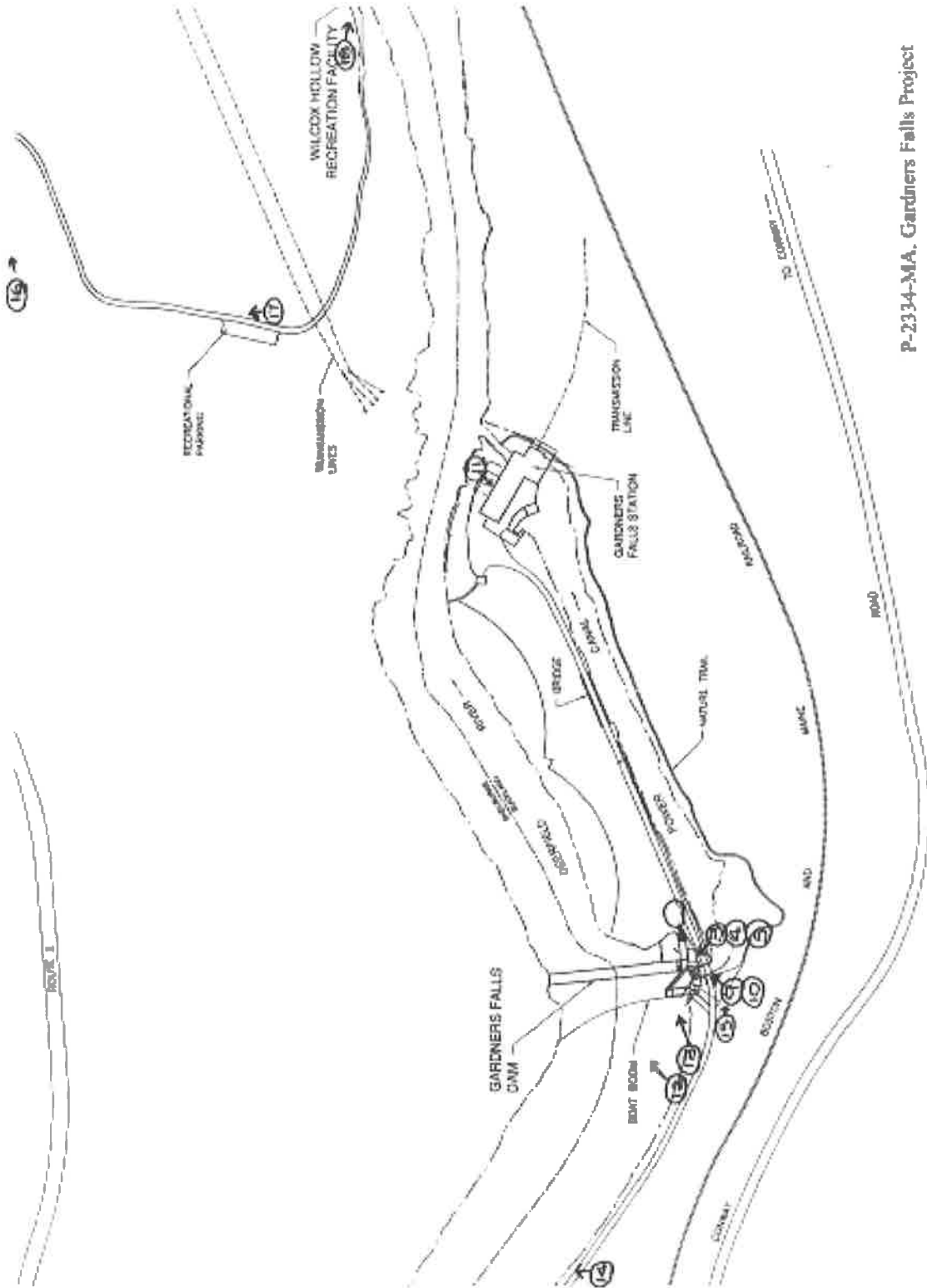
The following are provided to show the location of the project and to illustrate project features: One Photo Location Map and 18 Photographs.

OEP/DHAC Mark, J:jm October 26, 2004
NYRO DHAC DOCKETS MARK

³ Issued August 3, 1998 (84 FERC ¶ 62,101)

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P-2334-MA, Gardner's Falls Project

Photo Location Map

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Photo No. 1 – View of the location of the prehistoric rock shelter on the left bank of the Deerfield River upstream of the dam. (Not shown on Photo Location Map)



Photo No. 2 – View of the stone foundation of the historic temporary shelter for railroad workers. (Not shown on Photo Location Map)

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Photo No. 3 – View of the minimum flow release gate at the right side of the dam crest.

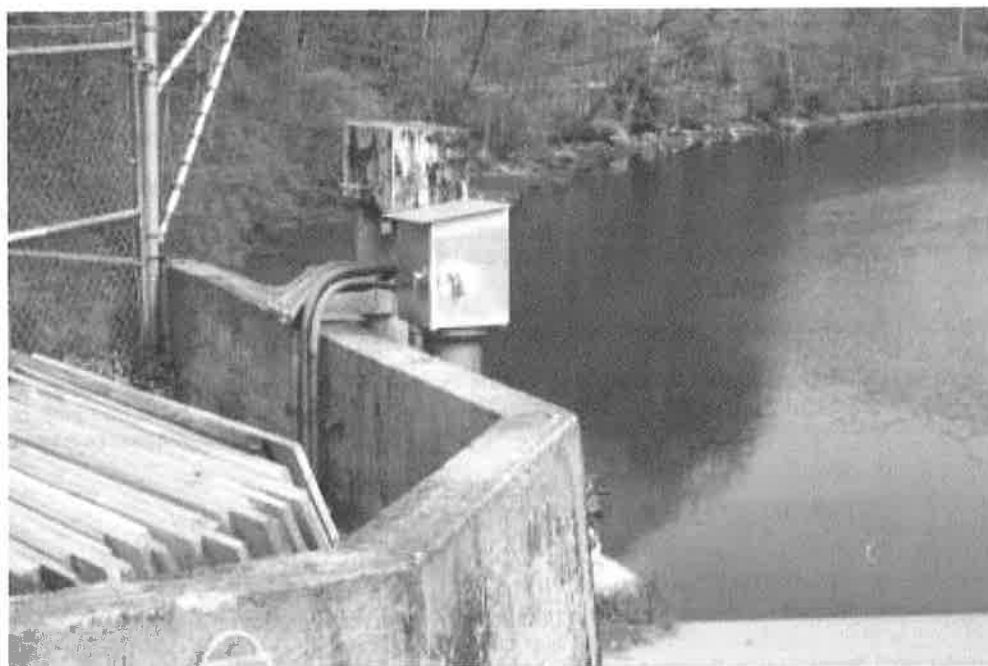


Photo No. 4 – View of the transducer to monitor the headpond elevation at the intake to the power canal.

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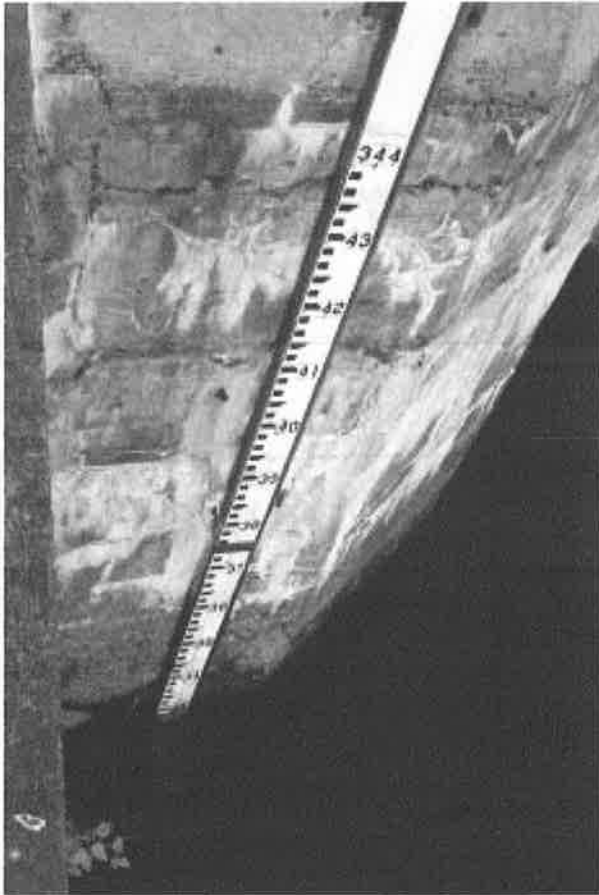


Photo No. 5 – View of the staff gage mounted on a wall in the headpond.



Photo No. 6 – View of the control panel in the powerhouse. The digital readout displays the headpond elevation which corresponds to the staff gage. (Not shown on Photo Location Map)

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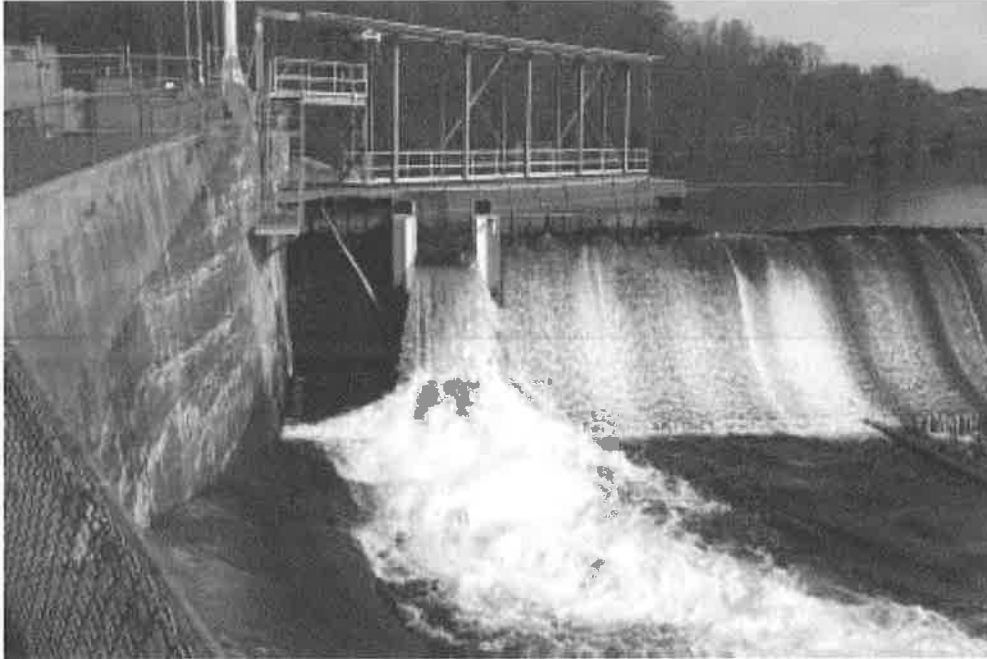


Photo No. 7 – View of the downstream fish passage facility. Note the trashracks in place at the entrance to the power canal (arrow).



Photo No. 8 – View of the plunge pool for the downstream fish passage facility.

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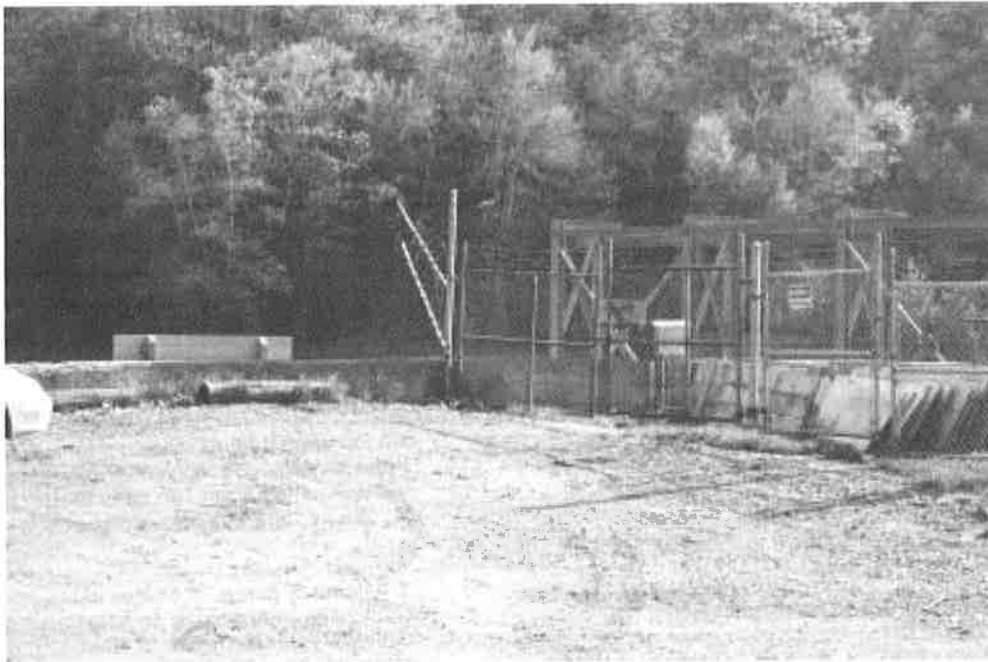


Photo No. 9 – View of the fencing and locked gate with “No Trespassing” signs posted around the intake area structures.



Photo No. 10 – View of sign warning of sudden rising waters due to project operations posted at the dam and intake area. The licensee allows access to fishermen along this stretch of the Deerfield River.

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Photo No. 11 – View of the fence surrounding the powerhouse. Note “No Trespassing” sign posted along fence and more prominent sign warning of project flow releases.



Photo No. 12 – View of the “Danger Dam Ahead” sign posted on the left abutment of the dam.

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Photo No. 13 – View of the “Danger Dam Ahead” sign posted on the right abutment of the dam.

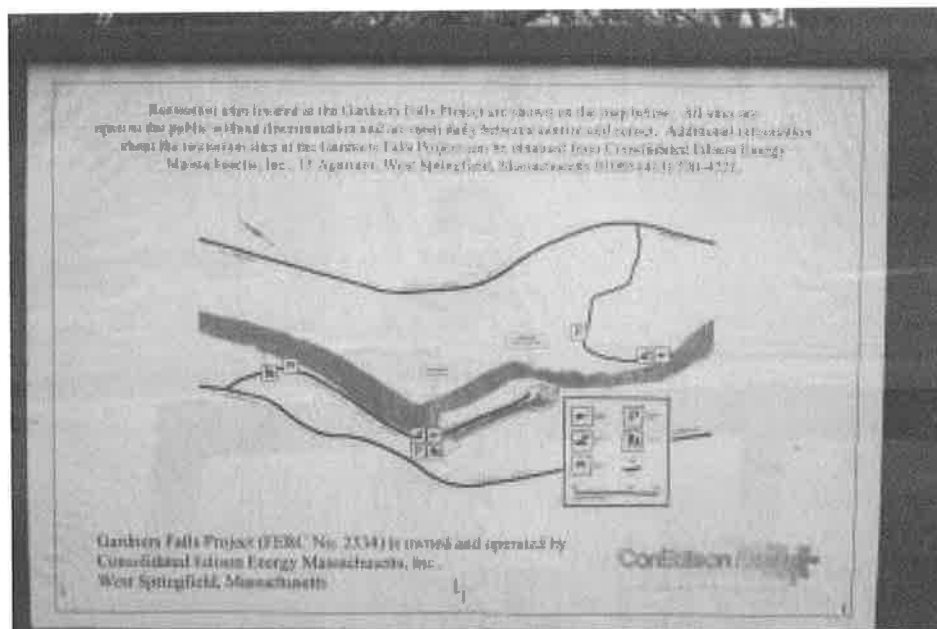


Photo No. 14 – View of sign with map at the picnic area along the access road to the project showing the location of recreational facilities. The sign is in compliance with Part 8 of the Commission’s regulations.

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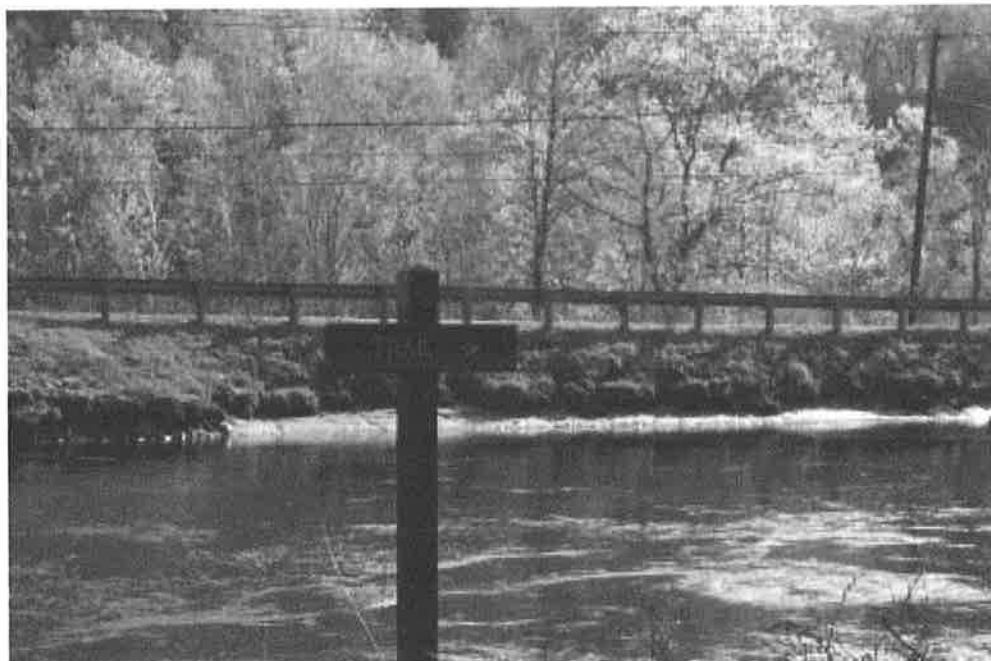


Photo No. 15 – View of a sign denoting the start of the nature trail along the west bank of the power canal.



Photo No. 16 – View of the sign along Route 2 denoting the entrance to Wilcox Hollow.

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Photo No. 17 – View of the parking area along the access road to Wilcox Hollow.



Photo No. 18 – View of the car-top boat launch at Wilcox Hollow. Note large boulders to prevent cars and/or trailers from approaching shoreline. Also note placement of riprap along shoreline for soil erosion remediation.