

# Relicensing Study 3.7.1

## PHASE IA (RECONNAISSANCE) ARCHAEOLOGICAL SURVEY

### Updated Study Report Summary

Northfield Mountain Pumped Storage Project (No. 2485)  
and Turners Falls Hydroelectric Project (No. 1889)

*Prepared for:*



*Prepared by:*



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## 1.1 Study Summary

The goal of the study is to assist FERC in meeting its compliance requirements under Section 106 of the NHPA, as amended, by determining if licensing of the Project will have an adverse effect on historic properties. The objective of the study is to identify known archaeological resources within the Project Area of Potential Effects (APE), identify areas sensitive for archaeological resources, and identify areas for future Phase IB (Intensive) archaeological surveys. Two study reports were generated from the study: one report combined both the Vermont and New Hampshire portions of the Project; a separate report focused on the Massachusetts portion of the Project (Phase IA (Reconnaissance) Reports). Field reconnaissance was conducted in July 2014 and Project archaeologists also participated in the Full River Reconnaissance in November 2013. The Phase IA (Reconnaissance) Reports were issued to the Massachusetts, Vermont, and New Hampshire SHPOs and filed with FERC in December 2014 (Sara et al. 2015a and 2015b).

In New Hampshire and Vermont, background research identified four archaeological sites that had been previously recorded within or directly adjacent to the Project APE. The field investigations segregated the Project APE into 17 survey segments based on geomorphic and topographic features, consisting of floodplains, older river terraces, islands, and glacial and/or early postglacial landforms. No additional archaeological sites were recorded during the archaeological reconnaissance. Portions of all 17 survey segments were found to be sensitive for archaeological resources and were recommended for Phase IB (Intensive) archaeological survey to determine the presence or absence of archaeological resources in the event that it is determined that any observed erosion is Project-induced, or that there are other Project-related effects.

In Massachusetts, the Project includes an approximate 17-mile stretch of the Connecticut River in Franklin County, in the Towns of Greenfield, Montague, Erving, Gill, and Northfield. The background research identified 56 previously recorded precontact-period and seven historic-period archaeological sites within the Project APE. The field investigations segregated the Project APE into 48 segments based on geomorphic and topographic differences, consisting of floodplains, older river terraces, islands, and glacial and/or early postglacial landforms. Four additional archaeological sites were recorded as a result of reconnaissance survey in the Project APE. Portions of all 48 segments were found to be sensitive for archaeological resources and were recommended for Phase IB (Intensive) archaeological survey to determine the presence or absence of archaeological resources in the event that it is determined that the observed erosion is Project-induced, or that there are other Project-related effects. In addition to the 48 segments evaluated during the study, a separate archaeological sensitivity analysis was conducted for the Fuller Farm property, and was recommended for Phase IB (Intensive) archaeological survey.

## 1.2 Study Progress Summary

### Task 1 – Meeting with the Massachusetts, Vermont, and New Hampshire SHPOs and the Narragansett THPO

Consultation with the Massachusetts, Vermont, and New Hampshire SHPOs and the Narragansett THPO regarding the Project Area of Potential Effects (APE) occurred in 2013 and results were reported in the Initial Study Report (ISR) filed in September 2014.

### Task 2: Background Research

FirstLight examined archaeological site files, cultural resources reports, and archives located at the Massachusetts, Vermont, and New Hampshire SHPOs, and other local and regional repositories, and conducted interviews with persons knowledgeable of the cultural history of the area. Included in these consultations were local historical commissions, historical societies, the libraries of the towns of Erving,

Gill, Greenfield, Montague, and Northfield, the Massachusetts Archaeological Society (MAS), the Pocumtuck Valley Memorial Association, and the Springfield Museums. Also contacted were the Institute for American Indian Studies (IAIS), the Massachusetts Commission on Indian Affairs (MCIA), as well as the Tribal Historic Preservation Officers of the Mashpee Wampanoag Tribe, the Stockbridge-Munsee Band of Mohican Indians, and the Wampanoag Tribe of Gay Head (Aquinnah) of Massachusetts, the Narragansett Indian Tribe, and the Nolumbeka Project, the Great Falls Discovery Center in Turners Falls and the Pocumtuck Valley Memorial Association in Deerfield. Background research was completed in 2014 and results of the background research were reported in the Phase IA (Reconnaissance) reports (Sara et al. 2015a and 2015b).

### Task 3: Development of a Sensitivity Model

FirstLight developed a sensitivity model, based on its consultation with the SHPOs and background research to identify areas within the APE that are likely to contain archaeological resources. The model was based on analysis of environmental attributes associated with previously recorded archaeological site locations within one-mile of the Project APE and is intended to predict where precontact-period archaeological resources may be located. The model concluded that modern floodplains and early Holocene river terraces in the northern half of the Project APE are considered to have the greatest sensitivity for precontact-period archaeological resources with no preference for secondary tributaries of the Connecticut River. In the southern half of the Project APE, these landforms, where present, are considered sensitive, but precontact-period archaeological resources are more likely to be found in upland contexts, particularly in the vicinity of the Montague Delta and Turners Falls area.

### Task 4: Field Reconnaissance

FirstLight conducted archaeological field reconnaissance of the Project APE in July 2014 to confirm the sensitivity model and eliminate areas from further study as warranted. The field reconnaissance was conducted by boat and pedestrian survey and consisted of visual examination of selected portions of the Project APE, focusing primarily on landforms that have the greatest potential to contain archaeological resources, as well as confirming areas of disturbance, steep slope, and wetlands, which would have little potential to contain in situ buried archaeological resources. A limited number of soil cores were also taken to confirm soil characteristics and/or ground disturbances. Project archaeologists also participated in the Full River Reconnaissance in November 2013 and included those observations in the Phase IA reports.

### Task 5: Report Development

FirstLight developed two separate Phase IA (Reconnaissance) reports containing records of its consultation with the Massachusetts, New Hampshire, and Vermont SHPOs, the Massachusetts Commission on Indian Affairs (MCIA), the Tribal Historic Preservation Officers of the Mashpee Wampanoag Tribe, the Stockbridge-Munsee Band of Mohican Indians, and the Wampanoag Tribe of Gay Head (Aquinnah) of Massachusetts, the Narragansett Indian Tribe, and the Nolumbeka Project (Sara et al. 2015a and 2015b).<sup>1</sup> The reports included a summary of background research, precontact and historic contexts for the Project environs, a description of the sensitivity model, the methods and results of Phase IA reconnaissance survey, maps of the APE, and recommendations for future Phase IB (Intensive) archaeological surveys, in the event that it is determined that any observed erosion is Project-induced, or that there are other Project-related effects. By letter dated February 5, 2015, the New Hampshire SHPO agreed with the recommendations provided for continued Phase IB survey but commented that not many surveys have been conducted along

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<sup>1</sup> One report combined both the Vermont and New Hampshire portions of the Project and was submitted to those SHPOs. The second report examined the Massachusetts portion of the Project and was submitted to the Massachusetts SHPO. Both reports were filed with FERC as “privileged” because they contain confidential site location information. The Massachusetts SHPO requested technical revisions to the Massachusetts Phase IA (Reconnaissance) Report. The revised Report for Massachusetts was filed as “privileged” with the Massachusetts SHPO and FERC in May 2015.

the margins of the Connecticut River and cautioned that this should be taken into account when using the model's data set on informing archaeological sensitivity. By letter dated February 3, 2015, the Massachusetts SHPO commented that a Phase IB (Intensive) archaeological survey should be conducted for the survey segments in Massachusetts found to be sensitive for archaeological resources. By letter dated April 3, 2015, the Stockbridge-Munsee Tribal Historic Preservation Office commented that it wished to continue consultation and to receive future surveys.

### **1.3 Variances from Study Plan and Schedule**

No variances from the study plan or schedule have been identified since the publication of the ISR in September 2014.

### **1.4 Remaining Activities**

- Conduct possible Phase IB (Intensive) archaeological surveys, followed by possible Phase II (Site Examination) NRHP evaluation studies, as determined appropriate based on FERC and SHPO consultation and their comments on the Phase IA Reconnaissance reports.