

Phase IA Archaeological Sensitivity Assessment, Proposed Bunker Pond Dam Removal, Epping, New Hampshire

Report Prepared for Wright-Pierce

By Alexandra Chan, Ph.D., Karen Hutchins, and Robert G. Goodby, Ph.D.

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MONADNOCK

ARCHAEOLOGICAL CONSULTING, LLC

116 FOX HILL ROAD • STODDARD, NH 03464

WWW.MONADARCH.COM

Abstract

At the request of the New Hampshire Department of Environmental Services, a Phase IA Archaeological Sensitivity Assessment was completed for the proposed removal of the Bunker Pond Dam in Epping, New Hampshire. Background research and visual inspection of the project area were completed in November and December, 2010. No Native American archaeological sites or areas of archaeological sensitivity were identified in the study area. While there is a complex industrial history and a number of archaeological features associated with the dams, this study determined that there are no archaeological resources in the Area of Potential Effect for this project. Consequently, no further study is recommended.

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INTRODUCTION

At the request of the New Hampshire Department of Environmental Services (NHDES), and in partnership with Wright-Pierce, Monadnock Archaeological Consulting, LLC (MAC) has completed a Phase IA archaeological sensitivity assessment for the Bunker Pond Dam Removal Project in Epping, Rockingham County, New Hampshire (Figures 1-3). The reasons for removing the dam are manifold and include:

- reducing the financial liability to the town for reconstructing the dam to current safety specifications;
- promoting the long-term missions of various agencies interested in river and fisheries restoration (Department of Environmental Services, New Hampshire Fish & Game, U.S. Fish & Wildlife, and Lamprey River Restoration Association);
- and redressing the issue of the dam's incapacity to handle flood conditions, which has resulted in the development of a number of sinkholes on the downstream embankment.

The work is authorized under Section 106 of the Historic Preservation Act of 1966 (P.L. 89-665), as amended, and as implemented by regulations of the Advisory Council of Historic Preservation (36 CFR Part 800). The project is funded by the New Hampshire Department of Environmental Services (DES), will be executed by environmental engineers, Wright-Pierce, and will include the removal of the 1967 concrete spillway. Abutments will be left in place.

The project area is located on the Lamprey River, and includes, in addition to the dam structure itself, the ruins of two dry-laid granite flumes (one on the north side and one on the south) and four unidentified stone foundations (three on the north side and one on the south). Architectural historians at Preservation Company do not find the area eligible for historic district listing because the dam (built 1967) is too recent for historical evaluation, and the archaeological resources are well away from the Area of Potential Effect (APE) (Preservation Company, Memo 2010).

Removal of the dam will eliminate the pond upstream and may lower water levels in the area by as much as nine feet (Finemore 2009:2). A coffer dam will be constructed on the upstream side of the north abutment to create a staging area for heavy equipment to begin the dismantling process (Grace Levergood, DES Dam Bureau, personal communication, November 2010; see Plate 3). These are the extent of the expected impacts.

A dam has existed at this location on the Lamprey River since ca. 1746, when an impoundment was created to power a grist mill, and later, ca. 1876, the Folsom sawmill and box factory, which might have been located on both sides of the dam at different points in time (DES maintains that it was on the south side of the dam, and records from the 1930s and 1940s do corroborate that, but more historical records also talk about its being on the north/west side of the dam). A shoe factory existed in the mid- to late 19th century on the north side of the dam (Figures 4, 5).

The historical dam components were built of granite, earth, and timber cribbing, but the earthen dam was removed in 1934 by the New Hampshire Department of Transportation (NHDOT), and

Fish & Game rebuilt the current spillway with concrete in 1966-1967 (Finemore 2009:1-2). Nothing remains of the earlier, granite, earth, and timber structures.

Whatever remains of the Folsom mill and box factory foundations is buried under the south dam abutment. The headworks to the sluiceway are also buried there, where a granite slab can be seen at the surface. Ruins of the dry-laid granite sluiceway can be observed further east of the dam, along the southern bank of the river, and run past dry-laid granite ruins of an unidentified, mill-related structure there as well. The dates of these resources are unknown.

The three foundations located just east and downstream of the north abutment may belong to the Shoe Shops, shown on Hurd's 1892 map of the area (Figure 5). There is also a partially earth-plugged sluiceway that runs from the west side of the north abutment, where the old inlet is still visible, past the first stone foundation, and east again, back toward the river beyond the other two foundations (Plate 3).

The sensitivity assessment was completed through a review of known archaeological resources as inventoried in the New Hampshire Division of Historic Resources (NHDHR) site files in Concord; cartographic analysis of landform, topography, soils, and proximity to water as well as a number of secondary resources and 19th- and 20th-century maps (Figures 4-7; Walling 1858; Hurd 1892; DES Dam Bureau 1935, 1942, 1949).

Archaeologists also performed a walkover survey of the main project area, which included the banks of the river down to the water's edge, both north and south of the dam, and an assessment of both prehistoric and historical sensitivity of the area. Extant archaeological features were photographed, drawn, and mapped into existing engineering plans of the APE provided by the engineers at Wright-Pierce (see Figures 8, 9, 10).

Although the general area of the project can be considered to have high sensitivity for 18th and 19th-century Euroamerican archaeological resources, most of the project impacts are designed to take place upstream of the dam, and consist predominantly of water levels getting lower. In this regard, the current project promises to protect archaeological resources more than hurt them. We do not find the historical resources identified in the field to be at risk of any adverse impact.

Dr. Alexandra Chan and Dr. Robert Goodby served as Co-Principal Investigators for the project, and assisting in field work was Project Archaeologist Karen Hutchins. Tracy Botting served as Technical Editor. A number of people contributed to this study, including Edna Feighner and Tanya Krajcik of NHDHR, Kent Finemore and Grace Levergood. NHDES, Lynne Monroe of the Preservation Company, and Jason Wise of Wright-Pierce. Additional information on the historic context for the project area will be provided in a report by the Preservation Company.