

# MEMORANDUM

**TO:** Theresa Perron, Town Administrator – Town of Glover, Vermont

**FROM:** Tom Strike, Team Leader – Weston & Sampson Engineers, Inc.

**DATE:** February 12, 2025

**SUBJECT:** **Wetland and Survey Services Summary – Shadow Lake Dam (State ID No. 81.02)  
Shadow Lake Dam Alternatives Analyses Study  
Glover, Vermont**

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Weston & Sampson Engineers, Inc. (Weston & Sampson) subconsultants have completed wetland delineation and topographic survey services for the Shadow Lake Dam Alternatives Analyses Study (the Project). Information collected from these services will be used to evaluate feasible and cost-effective rehabilitation alternatives to bring Shadow Lake Dam into compliance with current Vermont Dam Safety Program (DSP) regulations. Summaries of the services completed as of the date of this memorandum are presented below.

## Wetland Delineation

Wheeler Environmental Services, LLC (WES) of Barre, Vermont completed a preliminary wetland assessment at Shadow Lake Dam on December 13, 2024 to generally define wetland extent at the dam. The presence of more than 12-inches of snow cover at the dam limited site and vegetation observations, but hand excavations into site soils and evaluation of soil characteristics were possible since the soils were not frozen. Locations where hydric (H) and wetland (W) soils were found in the excavations, which are indicators of wetland extent, are shown on the attached Shadow Lake Dam Outlet Area Sketch.

A final wetland delineation at the dam will be completed by WES in accordance with Vermont Agency of Natural Resources (ANR) requirements in Spring 2025 in absence of snow cover.

## Topographic Survey

Latitudes Land Surveying, LLC (LLS) of Burlington, Vermont completed a topographic survey at Shadow Lake Dam on January 6, 2025. The survey included the dam embankment, primary and auxiliary spillways and related apparatuses, the lake bottom extending 25 feet upstream of the dam, dam discharge channels, and the dam downstream area. Information collected from the survey will be used to create a base plan with 1-foot interval contours. Two survey control points were installed at the time of the survey that will be used to establish vertical and horizontal control during rehabilitation construction. The horizontal datum is VT State Plane, and the vertical datum is NAVD88.

Please contact the authors with any questions.

Attachment: Shadow Lake Dam Outlet Area Sketch



### LEGEND

#### Stream

- Stream
- Intermittent Stream

#### Roads

- Interstate
- US Highway; 1
- State Highway
- Town Highway (Class 1)
- Town Highway (Class 2,3)
- Town Highway (Class 4)
- State Forest Trail
- National Forest Trail
- Legal Trail
- Private Road/Driveway
- Proposed Roads

- Town Boundary

1: 1,217

December 13, 2024



62.0 0 31.00 62.0 Meters

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere

1" = 101 Ft. 1cm = 12 Meters

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### NOTES

Map created using ANR's Natural Resources Atlas