THOMAS B. NEILSON, L.G.

SME
SEVEE & MAHER
ENGINEERS
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EDUCATION

M.S. – Geology, University of Vermont, 2015
B.A. – Geology, Colorado College, 2010

PROFESSIONAL REGISTRATIONS AND CERTIFICATIONS

Licensed Geologist – Maine #626
40-Hour OSHA HAZWOPER Certification

AFFILIATIONS

Geological Society of Maine
National Groundwater Association

EMPLOYMENT HISTORY

2022 to present – Sevee & Maher Engineers, Inc., Cumberland, Maine, Senior Geologist
2015 to 2021 – Ransom Consulting, Portland, Maine, Project Manager/Geologist
2015 – Governor's Institute of Vermont, Burlington, Vermont, Assistant Faculty
2011 to 2012 – Sea Education Association, Woods Hole, Massachusetts, Assistant Scientist

PROFESSIONAL EXPERIENCE AND REPRESENTATIVE PROJECTS

Mr. Neilson is a Maine Licensed Geologist with over 13 years of experience in consulting and geologic field work supported by a strong background in hydrogeology, geology, and related geologic sciences. His broad expertise includes exploration, testing, and monitoring for large-scale water supply development; delineation and remediation of chlorinated solvent and petroleum contaminant plumes in bedrock and overburden, designing and executing marine and oceanographic sampling programs, including designing and building oceanographic data collection moorings; and managing solar development projects and associated permitting.

Mr. Neilson has extensive experience conducting hydrogeologic assessments for commercial development, bottled water purveyors, and industrial water users. He is a skilled project manager, as demonstrated in diverse projects assignments such as the following:

- **Hydrogeologic Evaluation, Calais Water Department, Calais, ME, 2023-present** – Evaluate existing public supply wells for City of Calais and develop recommendations for testing program to build new source of supply to replace failing wells.
- **Hydrogeologic Evaluation, Stonington Water Company, Stonington, ME, 2022-present** – Evaluate existing wells, operational data, and historical information to provide actionable recommendations to increase well yield, reduce operational complexity and cost, and site new public bedrock water supply wells for Stoning Water Company.
- **Various Projects, American Water Works, Eastern U.S., 2022-present** – Provide hydrogeologic services for various American Water subsidiaries in New Jersey, Pennsylvania, and on Military Installations. Projects include:

    - Well yield evaluation and operational recommendations for over 150 public water supply wells in New Jersey and Pennsylvania.
    - Exploration, design, construction, and permitting for new bedrock and gravel public water supply wells, typically producing more than 1 million gallons per day.
    - Design and execute wellfield testing programs to optimize large wellfield production by minimizing well interference.
    - Technical consulting and support to evaluate and resolve contaminant issues for public supply wells.

- **Closed-Pen Atlantic Salmon Farm Siting, American Aquafarms, Gouldsboro, ME, 2020-2022** – Technical lead for site selection process for proposed sea and land-based operations for 30,000 metric ton project, including detailed marine surveying and sampling; evaluation of existing bedrock water supply well system for land-based facility; development of initial engineering design basis for facility discharge pipeline.
- **Water Resources Monitoring, Poland Spring, Hollis, Rumford, and Lincoln, ME, 2016-2022** – Technical lead for monthly compliance monitoring for permitted groundwater withdrawal from three spring water source sites, including water production, groundwater, surface water, and streamflow monitoring.
- **Site Selection, Hydrogeologic Investigation, and Permitting, Nordic Aquafarms, Belfast, ME, 2017-2021** – Led site-wide hydrogeologic investigation to identify ~1,200 gpm groundwater and surface water resources for 33,000 metric ton land-based Atlantic Salmon facility. Investigation included geophysical investigation, test well drilling, 4 pumping tests, analysis of impacts to neighboring water users, stream monitoring, monitoring of two surface water reservoirs, and analysis of data, reporting, and testifying before Maine Board of Environmental Protection during permitting.
- **Spring Search and Hydrogeologic Investigations, Poland Spring, Northern and Western ME, 2016-2021** – Completed numerous spring water source reconnaissance efforts, followed by hydrogeologic analysis, test well drilling, hydraulic testing, monitoring, and design and construction of production boreholes throughout western Maine and the northern Penobscot Valley.
- **New Well Siting, Testing, and Permitting, Maine DOT, Belgrade, ME, 2019** – Completed hydrogeologic investigation and testing to site new bedrock water supply well at Maine DOT Belgrade camp. Oversaw pumping test for new bedrock water supply well at Maine DOT Belgrade lot for future connection to neighborhood domestic wells impacted by salt contamination.
- **Aquifer Testing and Yield Evaluation, American Unagi, Waldoboro, ME, 2019** – Designed and executed aquifer testing program to assess yield of existing unused water supply well to support land-based American eel aquaculture facility with 90 gpm of groundwater.
- **Site Selection and Hydrogeologic Due Diligence, Zeeland Kingfish, Jonesport, ME, 2019** – Led effort to site proposed 10,000 metric ton land-based yellowtail kingfish farm, including identifying site and completing preliminary hydrogeologic and marine investigations to assess viability.