



Proposed Lake Ontario National Marine Sanctuary

Draft Environmental Impact Statement Executive Summary

Introduction

An intriguing window into history lies on the bottom of Lake Ontario and the St. Lawrence River. Forgotten shipwrecks, hidden in these cold fresh waters, are among the best preserved in the world, offering a chance to learn, share, and connect to the past. As the gateway between the Great Lakes and the ocean, the maritime landscape of this area represents connections between diverse cultures, between a nascent nation and the frontier, and of commerce, opportunity, and ingenuity. The cultural legacy of people who lived along its shores and journeyed across its waters is showcased by the remains left behind and the stories passed down.



Figure E.1. Queen of the Lakes remains upright and intact with all three masts still standing after sinking with a cargo of coal in 1906. Photo: Jill Heinerth

To help preserve and interpret this rich legacy, the National Oceanic and Atmospheric Administration's (NOAA's) Office of National Marine Sanctuaries (ONMS) proposes to designate a national marine sanctuary in New York's eastern Lake Ontario and the Thousand Islands region of the St. Lawrence River. The proposed sanctuary would manage a collection of nationally significant maritime heritage resources, including historic shipwrecks. Research, education, and community involvement are hallmarks of ONMS. Through co-management with the state of New York, NOAA would work to ensure future generations can learn about and explore these underwater treasures above and beneath the waves. In partnership with local communities, NOAA would provide a national stage for promoting heritage tourism and recreation to connect more Americans with this special place.

Sanctuary Nomination

On January 17, 2017, leaders of four counties (Oswego, Jefferson, Cayuga, and Wayne) and the city of Oswego, with support from Governor Andrew Cuomo, submitted a nomination to NOAA asking NOAA to consider designating an area in eastern Lake Ontario waters as a national marine sanctuary. The nomination focused on protecting and interpreting a nationally significant collection of 21 historic shipwrecks and one aircraft in a 1,746 square mile area in

eastern Lake Ontario. According to the nomination, archival research indicated that an additional 47 shipwrecks and two historic aircraft could be found within the nominated area.

Vessels that historically plied Lake Ontario's waters often met with treacherous conditions, which resulted in numerous shipwrecks. The lake's cold, fresh water preserves these shipwrecks well, creating a "submerged museum" of historic sites with exceptional archaeological, historical, and recreational value. This collection includes one shipwreck, *St. Peter*, which is listed on the National Register of Historic Places (NRHP), as well as a 19th century Great Lakes cargo vessel, *David Mills*, which is a New York State Submerged Cultural Preserve and Dive Site.

Need for a Sanctuary

This collection of nationally significant, historic, underwater cultural resources would benefit from the long-term protection and management afforded by the National Marine Sanctuaries Act (NMSA) by reducing threats to the resources that could adversely affect their historical, archeological, recreational, and educational value. Threats to these nationally significant sites include both natural processes and human activities. Natural processes include the damaging impacts of wind, waves, currents, storms, ice, and invasive species, such as zebra and quagga mussels, which currently cover many Lake Ontario shipwrecks. Human threats include anchor damage, damage due to poorly attached mooring lines, artifact removal, artifacts being moved within a shipwreck site, and remotely operated vehicle tethers or fishing gear becoming entangled on a shipwreck. Together, these processes threaten the longterm sustainability of historic shipwrecks and negatively impact their recreational and archaeological value.



Figure E.2. Photograph of Hartford, ca. 1890, taken above Blake's Point, Lake Ontario. Credit: Thousand Islands Museum.

To address these threats, NOAA would implement a management plan with regulatory and non-regulatory activities to reduce threats. For example, NOAA would install mooring buoys and other access points to provide safe access to shipwrecks. NOAA would also develop site-specific regulations to complement and supplement existing federal and state statutes and enforcement efforts designed to protect underwater cultural resources.

Public Involvement

An important component of the sanctuary designation and environmental review process includes public involvement. NOAA hosted four public meetings during the initial scoping period to solicit public comment related to the scale and scope of the proposed sanctuary.

NOAA also established a Sanctuary Advisory Council to bring members of the local community together to provide advice to NOAA, to serve as a liaison with the nominating community, and to assist in guiding NOAA through the designation process. The council consists of 15 members representing the following



Figure E.3. People sit at a public scoping meeting in Watertown, New York. Photo: NOAA

seats: citizens-at-large, divers/dive clubs/shipwreck explorers, maritime history, education, tourism, economic development, recreational fishing, and shoreline property owners. In addition, representatives of the four counties, the city of Oswego, the U.S. Coast Guard, the Port of Oswego Authority, New York Sea Grant, and the state of New York are non-voting members.

Proposed Action

Based upon the state's nomination and with input from the public; federal, state, and local agencies; and Indigenous nations and tribes, NOAA proposes to establish a national marine sanctuary in eastern Lake Ontario and the Thousand Islands region of the St. Lawrence River. In establishing the proposed sanctuary, NOAA would:

- Set a boundary to identify these nationally significant shipwrecks and other underwater cultural resources and to interpret the maritime cultural landscape that surrounds them;
- Develop and implement a management plan to provide a comprehensive, long-term plan to manage the sanctuary; and
- Create and implement regulations to protect underwater cultural resources.

NOAA prepared this draft environmental impact statement (DEIS) based on the requirements of Section 304(a)(4) of the National Marine Sanctuaries Act and in accordance with the National Environmental Policy Act. This document describes the affected environment, the proposed action and alternatives, and the environmental consequences to the human and natural environment of each of the alternatives.

Alternatives

NOAA is evaluating a No Action Alternative and two action alternatives. Under the No Action Alternative, NOAA would not move forward with the designation of the Lake Ontario National Marine Sanctuary.

The two action alternatives include three components: (1) a boundary component, (2) a regulatory component, and (3) a management plan component. NOAA is proposing the same regulatory concepts and management plan to manage the sanctuary under both alternatives 1

and 2. NOAA is considering two possible boundaries for the proposed sanctuary. Alternative 1's boundary encompasses a portion of eastern Lake Ontario and a segment of the Thousand Islands region of the St. Lawrence River, while Alternative 2 only encompasses the same portion of eastern Lake Ontario. The same proposed management plan and regulations would apply to both alternatives. NOAA has not selected a preferred alternative and is requesting public comment on a boundary for the proposed sanctuary.

Boundaries

Under Alternative 1, the proposed sanctuary boundary would include 1,786 square miles in eastern Lake Ontario and the Thousands Islands region of the St. Lawrence River. More specifically, the sanctuary would incorporate 1,724 square miles of eastern Lake Ontario waters and 62 square miles of the St. Lawrence River from the mouth of the river to Chippewa Bay. The sanctuary would border the counties of Wayne, Cayuga, Oswego, and Jefferson and a portion of St. Lawrence County (Figure E.4). Alternative 1 would include a total of one aircraft and 64 known shipwrecks, including one shipwreck, *St. Peter*, that is listed on the NRHP (Table E.1). Additional underwater cultural resources that may be within this area include archaeological features other than shipwrecks, such as remnants of shipwrecks, remnants of piers, aids to navigation, and potential Indigenous artifacts. This area may include approximately 20 potential shipwreck sites (shipwrecks may exist, but additional research is needed to verify and describe these shipwrecks), three aircraft, and 12 other underwater archaeological sites.

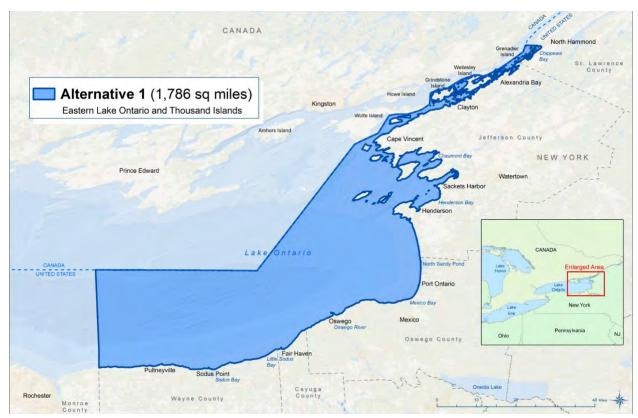


Figure E.4. Geographic boundary of Alternative 1. Image: NOAA

Under Alternative 2, the proposed sanctuary boundary would include 1,724 square miles of eastern Lake Ontario. This area includes the same underwater cultural resources included in Alternative 1 in the eastern Lake Ontario segment but would not include underwater cultural resources in the St. Lawrence River (Figure E.5). Alternative 2 would include a total of one aircraft and 43 known shipwrecks, including one shipwreck, *St. Peter*, listed on the NRHP (Table E.1). Additional potential underwater cultural resources within this area may include approximately 20 potential shipwreck sites (shipwrecks may exist, but additional research is needed to verify and describe these shipwrecks), three aircraft, and several other underwater archaeological sites.

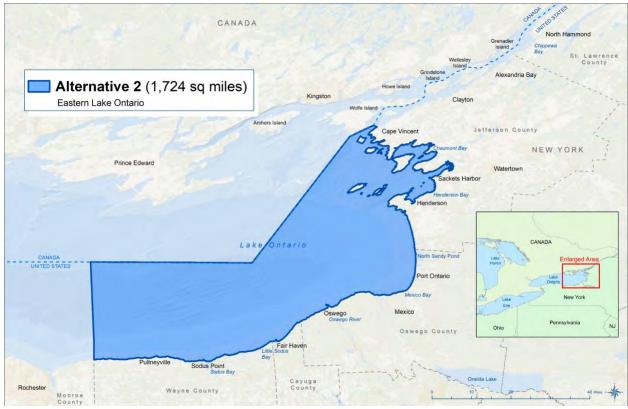


Figure E.5. Geographic boundary of Alternative 2. Image: NOAA

Table E.1. Number of known and potential shipwrecks and aircraft within the boundaries of Alternative 1 and Alternative 2, which cover part of eastern Lake Ontario and the Thousand Islands region of the St. Lawrence River.

| | Known Shipwrecks | Potential Shipwrecks | Known Aircraft | Potential Aircraft |
|--|---------------------|-------------------------|-------------------|-----------------------|
| Alternative 1 (1,786 square miles) Eastern Lake Ontario and Thousand Islands | 64 | 20 | 1 | 3 |
| Alternative 2 (1,724 square miles) Eastern Lake Ontario | 43 | 20 | 1 | 3 |

Proposed Regulatory Concepts

NOAA is proposing the following concepts for regulations under both alternatives 1 and 2 to manage and protect the underwater cultural resources in the proposed Lake Ontario National Marine Sanctuary. As identified in Chapter 2, the regulations would address threats to underwater cultural resources and would complement and supplement existing New York statutes protecting underwater cultural resources. NOAA is seeking public comment on these concepts and will consider these comments when preparing a proposed rulemaking to designate the sanctuary.

NOAA proposes the following concepts for sanctuary regulations:

- Prohibit damage to sanctuary resources
- Prohibit grappling into or anchoring on shipwreck sites
- Prohibit the use of tethered systems (such as remotely operated vehicles) without a permit
- Prohibit the possession, sale, or transport of any sanctuary resource within or outside of the sanctuary

Draft Management Plan

NOAA is proposing to implement the same draft management plan under both Alternative 1 and Alternative 2. Management plans are sanctuary specific planning and management documents used by all national marine sanctuaries. Management plans fulfill many functions, including outlining staffing and budget needs; setting priorities and performance measures for resource protection, research, and education programs; and guiding development of future budgets and management activities. This plan would chart the course for the proposed sanctuary over the next five to ten years (See Appendix A for the draft management plan).

Based on public input provided during scoping, input from the Sanctuary Advisory Council, and NOAA's expertise managing other national marine sanctuaries, the proposed management plan for Lake Ontario consists of five action plans and would be applied to either alternative:

- **Sanctuary Operations:** Create sanctuary infrastructure and program support to ensure effective implementation of the management plan.
- **Education and Outreach:** Enhance public awareness, understanding, and stewardship of the sanctuary, the Great Lakes, and the ocean.
- **Research and Monitoring:** Conduct research to support resource protection, resource management, and education initiatives.
- **Tourism and Economic Development:** Create opportunities to promote the sanctuary to enhance tourism and support the business sector.
- Resource Protection: Strengthen resource protection by conducting on-water resource protection activities, promoting responsible use of sanctuary resources, developing education initiatives for users, and enhancing enforcement efforts.

Summary of Impacts

NOAA evaluated the impacts of its alternatives on underwater cultural resources, human uses and socioeconomic resources, physical resources, and biological resources. The central underwater cultural resources analyzed in this document are historic shipwrecks. The human uses and socioeconomic resources analyzed are tourism and recreation, commercial activities, military activities, and population statistics. The major physical resources identified include geology, climate, and water quality. The major biological resources identified include aquatic species, coastal and terrestrial resources, aquatic invasive species, and protected species and their associated habitats.

NOAA's analysis of the potential environmental impacts of each alternative in this DEIS concludes that there would be no significant adverse impacts to biological and physical resources, cultural and historic resources, marine area use, recreation, or socioeconomics under any alternative. NOAA anticipates significant long-term beneficial impacts if the proposed action is implemented.



Tibbetts Point Lighthouse sits where Lake Ontario meets the St. Lawrence River. Photo: Matt McIntosh/NOAA