



Supporting Economic Information for the Notice of Proposed Rulemaking Regarding Lake Ontario National Marine Sanctuary

This document includes a Regulatory Impact Review analysis to satisfy the National Oceanic and Atmospheric Administration's (NOAA) obligations under Executive Order (E.O.) 12866. The White House Office of Management and Budget's Office of Information and Regulatory Affairs determined that the proposed rule *Proposed Lake Ontario National Marine Sanctuary; Notice of Proposed Rulemaking* is a significant regulatory action as defined by E.O. 12866 because the Office of Information and Regulatory Affairs believes it raises novel legal or policy issues arising out of legal mandates, the president's priorities, or the principles set forth in E.O. 12866. Therefore, in accordance with section 6(a)(3)(B) of E.O. 12866, this document provides a description of the need for the proposed rule and an assessment of the potential costs and benefits of the proposed rule.


NOAA also published a [study area profile](#)¹ for the proposed sanctuary in Lake Ontario in 2021. Study area profiles provide information on the local community and economy of national marine sanctuaries. The majority of the data was sourced from the U.S. Census Bureau, U.S. Bureau of Labor Statistics, and other federal and state agency data sets, such as the National Park Service and state natural resource agencies. These reports are used to understand the communities that are closest to sanctuaries, identify how they may depend on marine resources, and determine who may be impacted by a new sanctuary or regulatory changes. Information in the study area profile includes population, population density, population growth, other socio-demographic data, unemployment rates, income by place of work/residence, visitation to existing parks and facilities (e.g., museums, lighthouses, and aquariums), and data on marine recreation businesses. This information is not repeated here but is incorporated by reference.

Need for the Proposed Rule

The need for the proposed rule is to protect and preserve nationally significant underwater cultural and historical resources in eastern Lake Ontario. The underwater cultural and historical resources within the proposed sanctuary require long-term protection and management to reduce threats that would adversely affect their historical, cultural, archaeological, recreational, and educational value. Many of the shipwrecks in the proposed sanctuary have a high level of structural integrity due to the preservative properties of the cold, fresh water in which they are submerged, as well as the great depth at which several of them lie.

Threats to these nationally significant sites include both natural processes and human activities. Threats from 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

¹ Shea, R., Schwarzmann, D. (2021). Proposed Lake Ontario National Marine Sanctuary Study Area Profile. National Marine Sanctuaries Conservation Series ONMS-21-04. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. Available at: <https://sanctuaries.noaa.gov/lake-ontario>.



Ontario shipwrecks. Human threats include anchor damage from dive boats, damage due to poorly attached mooring lines, artifact removal, artifacts being moved within a shipwreck site, remotely operated vehicle tethers entangled within a shipwreck, and fishing gear entangled within a shipwreck.


These natural processes and human activities are common threats to shipwrecks worldwide, including in the Great Lakes (Stewart, 1999; Hester, 2018; Gregory et al., 2022). Together, these processes threaten the long-term sustainability of underwater cultural and historical resources and negatively impact their recreational and archaeological value. NOAA research divers have documented mussel coverage on several wrecks in Lake Ontario. NOAA has also received reports, videos, and photographs of mussel coverage on wrecks at both shallow and deep depths from local divers and shipwreck explorers in Lake Ontario (NOAA Office of National Marine Sanctuaries, 2021; O’Neill and Dextrase, 1994; Shipwreck World, n.d.). NOAA has documented damage from the listed threats at other shipwreck sites it manages in Great Lakes national marine sanctuaries and across the entire National Marine Sanctuary System (NOAA Office of Ocean and Coastal Resource Management, 1999; NOAA Office of National Marine Sanctuaries, 2020; NOAA office of National Marine Sanctuaries, 2013; NOAA Office of National Marine Sanctuaries, n.d.).

The proposed sanctuary would address the failure of the private markets to comprehensively manage this area of the marine environment in eastern Lake Ontario for the public benefit, including for the purposes of protecting underwater historical and cultural resources, regulating human use of these resources, and conducting research and monitoring, education, and enforcement. To address the market failure and natural and human threats to underwater historical and cultural resources in eastern Lake Ontario, NOAA is proposing to designate the area as a national marine sanctuary.

When Congress amended the National Marine Sanctuaries Act (NMSA) in 1984, it recognized that while there were numerous statutes that managed specific natural and historical resources, there were no statutes that took a holistic approach to managing multiple resources in marine areas. Therefore, Congress clarified that one purpose of the NMSA is to provide coordinated and comprehensive management of special areas of the marine environment that would complement other existing resource protection laws (Pub. L. 98-498, 98 Stat. 2296 (1984)). The NMSA emphasizes active management of discrete areas of the marine environment and focuses on resource protection, scientific research, education, and management of compatible uses.

The proposed designation of a national marine sanctuary in eastern Lake Ontario would fulfill the purposes and policies of the NMSA, including:

- (1) “to provide authority for comprehensive and coordinated conservation and management of these marine areas, and activities affecting them, in a manner which complements existing regulatory authorities” (16 U.S.C. 1431(b)(2));
- (2) “to enhance public awareness, understanding, appreciation, and wise and sustainable use of the marine environment, and the . . . historical, cultural, and archaeological resources of the National Marine Sanctuary System” (16 U.S.C. 1431(b)(4));

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- (3) “to support, promote, and coordinate scientific research on, and long-term monitoring of, the resources of these marine areas” (16 U.S.C. 1431 (b)(5));
 - (4) “to facilitate to the extent compatible with the primary objective of resource protection, all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities” (16 U.S.C. 1431(b)(6)); and
 - (5) “to develop and implement coordinated plans for the protection and management of these areas with appropriate Federal agencies, State and local governments, Native American tribes and organizations, international organizations, and other public and private interests concerned with the continuing health and resilience of these marine areas” (16 U.S.C. 1431(b)(7)).

The [nomination](#)² submitted by Cayuga County, Jefferson County, Wayne County, Oswego County, and the city of Oswego, with support from New York state, also highlights how the proposed sanctuary would meet the purposes and policies of the NMSA. The nomination included over 125 letters of support from a wide range of stakeholders.

In addition to fulfilling the purposes and policies of the NMSA, the proposed sanctuary furthers the president’s priorities. The proposed rule to designate Lake Ontario National Marine Sanctuary is consistent with the Biden-Harris Administration’s America the Beautiful initiative. Specifically, the proposed sanctuary designation advances the goals and recommendations in the Conserving and Restoring America the Beautiful report, which recommends expanding the National Marine Sanctuary System, as well as supporting locally led conservation.

NOAA therefore proposes to designate a national marine sanctuary in eastern Lake Ontario to address the threats identified above and to provide a national stage for promoting heritage tourism and recreation to connect more Americans with this special place. NOAA would set a boundary to delineate the borders of the sanctuary; manage the site as a part of the national marine sanctuary system under the National Marine Sanctuaries Act; establish site-specific regulations to protect underwater cultural and historical resources; and implement a management plan to provide a comprehensive, long-term plan to manage the sanctuary and interpret the significance of the resources and surrounding area to the public.

Baseline

If NOAA does not designate a sanctuary in Lake Ontario through this proposed rulemaking, NOAA would not manage the site as a part of the National Marine Sanctuary System under the National Marine Sanctuaries Act; promulgate regulations under the National Marine Sanctuaries Act; implement a management plan to protect and manage underwater cultural resources in the area; provide resources for research and monitoring, enforcement, education, or outreach; or otherwise maintain a presence in eastern Lake Ontario.

² Proposal to the National Oceanic and Atmospheric Administration's Marine Sanctuary Program 2017. (2017). Nominations. Available at: https://nmsnominate.blob.core.windows.net/nominate-prod/media/documents/lake_ontario_nms_nomination.

Cost-Benefit Analysis

This section provides an analysis of the potential costs and benefits of the proposed rule as required by section 6(a)(3)(B) of Executive Order (E.O.) 12866. The analysis serves as the basis for determining whether the proposed regulations are a “significant regulatory action” under criteria provided within E.O. 12866.

I. General Effects of the Proposed Rule

A. Benefits


Increased Maritime Heritage Tourism and Improved Recreational Experiences

Tourism and economic development are important aspects of the proposed sanctuary. The communities that nominated the area to become a sanctuary (four counties and the city of Oswego) cited economic development in the bordering communities to the sanctuary as one of their primary goals for submitting the [nomination](#). The Lake Ontario Sanctuary Advisory Council, a council made up of local community members advising NOAA throughout the designation process, has four out of 15 seats dedicated to tourism and economic development. NOAA’s [draft management plan](#)³ that would be implemented if the sanctuary is designated through the proposed rule, contains several strategies and objectives that focus on promoting the sanctuary to the public and improving recreational experiences within the sanctuary. NOAA also has a Business Advisory Council (BAC) that provides guidance to NOAA on engaging the recreation and tourism sectors across the entire National Marine Sanctuary System and on leveraging the recreational, cultural, and aesthetic values of national marine sanctuaries to build strong local economies and engaged communities. If the sanctuary is designated through the proposed rule, NOAA would utilize the BAC to increase public awareness of the new sanctuary.

NOAA also has a robust communications and education program that focuses on educating the country about national marine sanctuaries, as well as encouraging the public to visit and use sanctuaries in a responsible manner. NOAA’s promotion of the new sanctuary would likely attract more tourists to the area, such as divers interested in viewing shipwrecks and tourists interested in maritime history.

Upon sanctuary designation through the proposed rule, NOAA would implement research, education, interpretation, and outreach activities associated with the proposed sanctuary. NOAA anticipates that these activities would have a positive impact on tourism by heightening public awareness of, and interest in, the underwater cultural and historical resources found in Lake Ontario. NOAA would use its own resources and assets, as well as partnerships with other organizations, to fill gaps in archaeological knowledge and historical context of these wrecks, as well as discover new resources. These activities often receive local and national news coverage, which raises national awareness about national marine sanctuaries and the resources within them. NOAA’s education staff would implement education and outreach programs for K–12

³ Proposed Lake Ontario National Marine Sanctuary Management Plan. Available at: <https://nmssanctuaries.blob.core.windows.net/sanctuaries-prod/media/docs/20210701-proposed-lake-ontario-draft-management-plan.pdf>.



schools, post-graduate programs, and the general public, which would also increase the public's awareness of the new sanctuary. For example, NOAA runs the Ocean Guardian School Program and the NOAA Bay Watershed Education and Training (B-WET) program, which teach children in coastal states and territories about their local watersheds and the ocean and Great Lakes environments, conservation, and the National Marine Sanctuary System. If Lake Ontario National Marine Sanctuary is designated through the proposed rule, information about Lake Ontario and the nationally significant underwater cultural and historical resources in the sanctuary would be added to these types of programs.

As part of the management plan that NOAA would implement if Lake Ontario National Marine Sanctuary is designated through this proposed rule, NOAA would work with state and local partners to create public exhibits, improve outreach, and raise awareness and knowledge to enhance the visitor experience. For example, designating the sanctuary would complement and enhance existing maritime heritage initiatives locally, at the state level, and regionally. This increased coordination and potential exposure of the site may attract and encourage divers, snorkelers, boaters, and maritime enthusiasts to visit maritime resources while following best management practices to reduce adverse impacts. While the specific efforts and partners would be determined as part of the implementation of the sanctuary management plan, NOAA's top priority would be creating opportunities for people to learn about and visit the proposed sanctuary. NOAA would likely partner with existing institutions, such as area maritime museums, among others, to develop exhibits and programs.

NOAA anticipates that sanctuary designation would increase visitation to and appreciation for the historical and cultural resources within the proposed sanctuary. For instance, if NOAA designates the sanctuary through this proposed rule, NOAA would be able to distribute maps to help users understand the location and layout of shipwreck sites and to implement a mooring buoy program to make shipwrecks more accessible. Mooring buoys would make it easier for divers to locate wrecks by marking their specific locations, and they would provide a sturdy means of descent and ascent for divers. As appropriate, NOAA would update the maps as new shipwreck sites are found, thus increasing the number of known sites for divers to visit.

The Canadian side of Lake Ontario currently has many more mooring buoys and other infrastructure conducive to diving than the U.S. side (Save Ontario Shipwrecks, n.d.). Therefore, some divers interested in Lake Ontario and Thousand Islands shipwreck sites choose to spend their money in Canada as opposed to the area proposed for sanctuary designation through the proposed rule, which is located in the U.S. Designating a sanctuary in Lake Ontario has the potential to attract more recreational divers to the U.S. side of Lake Ontario by making it easier to access the shipwrecks. NOAA would also add interpretive materials on the Lake Ontario shoreline to highlight shipwrecks located offshore, which would enhance the experience for visitors who do not dive but wish to learn about the maritime history of the area.

Based on the anticipated increase in tourism driven by a) the name recognition associated with the significance of becoming a national marine sanctuary, b) the research, education, and outreach programming that NOAA would undertake after designation, and c) improved recreational experiences for visitors to the area, it is expected that the sanctuary designation would have positive effects on the region. However, given the absence of more detailed baseline

data specific to the Lake Ontario proposed rule, NOAA is unable to state the degree of effects with certainty. Without a sanctuary, NOAA would not dedicate resources or create the programs described above to promote eastern Lake Ontario.


Transfers and Positive Economic Contributions from Increased Recreation and Tourism Spending in the Local Economy

The natural, recreational, and underwater cultural resources located along New York's Lake Ontario coastline support a vibrant quality of life, create a unique sense of place, and are integral to the region's economy. An increase in tourism to the proposed sanctuary could benefit the local economy in many ways. The increase in tourism could result in an associated increase in revenue since tourists tend to stay at hotels, eat at restaurants, purchase supplies from dive shops, and visit other local businesses. Increased visitation and demand for recreational experiences may result in newly established or expanded business.

The communities adjacent to Thunder Bay National Marine Sanctuary (TBNMS) in Michigan are similar to the communities bordering the proposed Lake Ontario National Marine Sanctuary in New York. They can all be described as historical Great Lakes port cities that have experienced a transition from industry to tourism opportunities that promote the enhanced quality of the Great Lakes. In addition, TBNMS is another sanctuary that is focused solely on protecting and managing underwater cultural resources. In fact, the proposed Lake Ontario sanctuary nomination noted the success of TBNMS in Alpena as a reason for pursuing a sanctuary in Lake Ontario ("Proposal to the National Oceanic and Atmospheric Administration's Marine Sanctuary Program 2017", 2017). A study completed for TBNMS by the National Marine Sanctuary Foundation found that 48% of all visitors to the area reported that the NOAA Great Lakes Maritime Heritage Center (the NOAA visitor center in Alpena, MI) and/or the Alpena Shipwreck Tours had a lot of influence on their decision to visit the area. Further, 56% of visitors stated it was the first time they visited the area (Schwarzmann et al., 2020a). Using TBNMS as an example, NOAA determined that the proposed sanctuary in Lake Ontario would result in economic transfers due to the potential increase in revenue and contributions to the local economy from higher tourism spending. Based on NOAA's experience implementing sanctuaries in other Great Lakes communities, NOAA expects that these positive transfers may occur in eastern Lake Ontario because of local users providing new or increased support to businesses within the study area that rely on or utilize sanctuary resources.

Additionally, economic effects are expected as a result of new users entering the study area to utilize the sanctuary and/or businesses that rely on sanctuary resources. When users from outside the study area visit the region and spend money, this is 'new' money entering the study area economy. Further, it is possible that some locals may now decide to stay within the study area, recreate, and frequent businesses that use or rely on sanctuary resources. If people decide to stay within the study area for tourism and recreation rather than leave for experiences elsewhere, there would be a positive effect on the local economy as more spending is retained within the region.

Although it is expected that the sanctuary designation will have positive effects for the local economy, NOAA is unable to state the economic effects with certainty given the absence of baseline data specific to the Lake Ontario proposed rule. However, the similar heritage-based



sanctuary TBNMS has been shown to support economic activity. A 2018 study in TBNMS (referenced above) found that spending in the study area by those who used the Great Lakes Maritime Heritage Center and Alpena Shipwreck Tours totaled \$32.4 million and supported nearly 500 jobs and \$40.0 million in output. Visitors to the region accounted for 88% of the total spending (Schwarzmann et al., 2020b). NOAA expects a sanctuary designation to not only support existing and new economic activity in the local area, but also to create positive effects for the region and nation through building increased awareness of the area and improving the recreational experience for visitors.

Increased Value from Sanctuary Designation

Many of the goods and services provided by cultural and heritage resources are challenging to estimate economically as they are not bought and traded in the market to yield benefits. These benefits are split into two types: use value and non-use value. Willingness to pay is mathematically defined as the area below the demand curve for a good or service and includes both use and non-use value. Use value can be estimated using several methods, including the travel cost method. Use value may be impacted by the number of shipwrecks protected and the level of investment in museum exhibits, maritime heritage trails (including virtual trails using video and mobile phone technology), and educational workshops on maritime heritage and training in maritime archaeology.

While use value comes from the direct enjoyment of resources, non-use value is comprised of option value (the value people place on the option to use the resource in the future), existence value (the value of knowing a resource or place exists) and bequest value (the value of knowing that the resource will be available to future generations). Non-use value is typically estimated using stated preference surveys that elicit willingness to pay. Even if a person must spend money to access the resource, such as an entrance fee to a park, the price of admission does not reflect their true value. The difference between the price a person pays and the most they would be willing to pay for the good or service is what economists refer to as consumer surplus. This consumer surplus is a person's non-market value and does not require a person to actually use the resource.

Although no studies have been conducted to estimate the use or non-use value of shipwrecks in the proposed sanctuary, there is evidence that both users and non-users have willingness to pay for the protection of underwater historical and cultural resources, such as shipwrecks (White and Finney, 2003; Mires, 2014). Further, a study published in 2016 found that households have a marginal value per history-focused national parks of \$3.87.⁴ When aggregated across all households within the U.S., the marginal value per historic site is hundreds of millions of dollars (Haefele et al., 2016). It is reasonable to assume that the members of the public, both users and non-users, similarly value protecting cultural and historical resources throughout the country, including in national marine sanctuaries.

⁴ The \$3.87 figure is in 2016 dollars.

B. Costs

Operating Budget

The potential operating budget below is an estimate to show options for activities that can be implemented at varying levels of Congressional appropriations. These scenarios envision the reality of NOAA and its partners increasing sanctuary activities over time; however, NOAA cannot guarantee either of these funding scenarios given the federal appropriations process. The budget for the sanctuary will be contingent on several factors, including the overall operational and construction budgets for NOAA's Office of National Marine Sanctuaries (ONMS) as determined by Congress, and spending priorities determined by ONMS and NOAA.

\$250,000 to \$500,000 annually: NOAA would establish an administrative office, hire a sanctuary superintendent, and support the operation of the Lake Ontario Sanctuary Advisory Council. NOAA would provide staff to support programmatic priorities, which may include new hires. The first hires would likely be staff to manage sanctuary operations, develop public outreach and education programs, and conduct maritime archaeology documentation. NOAA would work with partners to develop a strategic plan for creating a NOAA presence that could include exhibits, education, and outreach. NOAA would start implementing the highest priority elements of the resource protection, education, and research programs as identified in this management plan, focusing on identifying partnerships and evaluating opportunities. NOAA would facilitate the establishment of a local sanctuary foundation or "friends" group. NOAA would evaluate the specifications for a sanctuary research vessel and options for how to acquire such a vessel.

\$600,000 to \$1 million annually: At a higher level of funding, NOAA expects to have core staff in place but may need to hire or bring in additional staff to support programmatic priorities. NOAA would expand the research program with additional mapping, characterization, archaeological documentation of known shipwrecks and searching for potential shipwrecks, and enhancing Geographic Information System capabilities. NOAA would continue to implement the interpretation, recreation, and tourism aspects of the management plan. For the education and outreach program, NOAA and its partners would create more programming for partner venues and pursue science, technology, engineering, art, mathematics, and social studies and Marine Advanced Technology Education (MATE) remotely operated vehicle initiatives. NOAA would expand resource protection by installing additional moorings and access as well as establishing a monitoring program. NOAA would initiate a review of the management plan with partners, community, and Lake Ontario Sanctuary Advisory Council and begin the sanctuary condition report. As indicated in the sanctuary nomination, the counties, the state of New York, and a number of local and regional partners demonstrated their interest in contributing to the sanctuary reaching its full potential. Areas of collaboration that will supplement and complement federal funding include research, resource protection, law enforcement, cowriting and obtaining grant funding, marketing, and tourism.

C. Net Effects

Although the benefits cannot be monetized at this point, net positive effects are expected as a result of increased maritime heritage tourism, improved recreational experiences, and increased non-market economic value from protection and management of sanctuary resources.

II. Regulation-Specific Effects of the Proposed Rule

By designating this area as a national marine sanctuary, NOAA would administer the new sanctuary under the National Marine Sanctuaries Act; implement site-specific regulations; and implement a permit program to protect and manage underwater cultural and historical resources in accordance with 16 U.S.C. 1431(b) and 1433(a). NOAA is proposing to prohibit damage to underwater cultural and historical resources; to prohibit possessing, transporting, or selling sanctuary resources; prohibiting grappling into or anchoring on shipwreck sites; and prohibiting the use of tethered underwater mobile systems at shipwreck sites in the sanctuary without a NOAA permit. The proposed sanctuary would not only enhance existing protections and programs for underwater cultural and historical resources, it would also include additional management and enforcement mechanisms focused specifically on preserving nationally significant marine environments. The proposed rule would add additional levels of protection through increased enforcement, the ability to add stipulations to permits, and consequences of violating the law.


Prohibit damage to sanctuary resources. NOAA is proposing to prohibit the following activities: moving, removing, recovering, altering, destroying, possessing, or injuring sanctuary resources.

NOAA is proposing to prohibit the following activities: moving, removing, recovering, altering, destroying, possessing, or injuring sanctuary resources, or attempting to do the same. This prohibition aims to reduce the risk of harm to sanctuary resources. NOAA has implemented similar regulations at other national marine sanctuaries and has determined that it effectively protects underwater cultural and historical resources while allowing for compatible uses within the sanctuary.

A. Benefits

This proposed sanctuary prohibition would complement Section 233 of the New York State Education Law, which makes it unlawful for any person to “investigate, excavate, remove, injure, appropriate or destroy any object of archaeological, historical, cultural, social, scientific or paleontological interest situated on, in or under lands owned by the state of New York without written permission of the commissioner of education” (N.Y. Educ. Law 233(4)). This state statute currently only applies to certain objects “situated on, in or under lands owned by the state of New York.” (N.Y. Educ. Law 233(4)). The state law is focused on the New York State Museum and its collections procedures; it authorizes the issuance of permits to excavate and gather cultural and historical objects upon the authorization of the New York state commissioner of education. Cultural and historical objects salvaged pursuant to such permits become part of the collections of the State Museum.

Section 233(4) of New York’s Education Law contains a criminal prohibition aimed at ensuring the appropriate acquisition of cultural and historical objects for the State Museum’s archiving purposes referenced above. By contrast, the proposed sanctuary provision would establish a civil administrative prohibition aimed at encouraging the preservation *in situ* of historic and culturally significant areas within the marine environment. Section 233 of the N.Y. Education Law, as a state museum inventory and collections statute, focuses its prohibitory language on



activities that cause direct harm to objects under its purview. The proposed sanctuary regulations would cast a wider and more protective regulatory net by proactively prohibiting certain conduct, or attempted conduct, that may lead to damaging sanctuary resources.

B. Costs

Costs include the federal staff and resources necessary to implement this regulation, as well as new administrative costs that would be incurred by NOAA due to enforcement actions that the agency may take under the proposed regulation in the new sanctuary. NOAA has included these costs in the estimated operating budget for the proposed sanctuary, provided above.

NOAA has determined that costs to potential sanctuary users, such as fishermen, divers, and tourists, would be negligible, since New York state law has a similar provision prohibiting injury to cultural resources and such users should be complying with existing state law. For example, fishermen are unlikely to be affected since they are likely to actively avoid known shipwrecks when using gear that would become entangled or damaged by shipwrecks.

C. Net Effects

The benefits from protection and conservation of underwater cultural and historical resources due to implementing this proposed regulation is expected to exceed total costs.

Prohibit grappling into or anchoring on shipwreck sites.

To preserve the integrity of shipwreck sites in the proposed sanctuary, NOAA is proposing to prohibit grappling into or anchoring on shipwreck sites. NOAA consulted with the state of New York, specifically the New York State Office of Parks, Recreation and Historic Preservation, New York State Museum, and New York Department of State, and each of these state agencies noted the importance of preventing anchor and grappling hook damage to shipwreck sites. In addition, the Lake Ontario Sanctuary Advisory Council subcommittee on resource protection noted that anchor damage exists at some shipwreck sites (NOAA Office of National Marine Sanctuaries, 2021).

A. Benefits

This proposed regulation would support small businesses, such as scuba diving operators, by proactively preserving the condition of sanctuary resources and by providing continued access to these dive and snorkeling sites.

The proposed regulation would complement New York state's existing prohibition against damaging cultural resources by proactively deterring damage or disturbance of these nationally significant sites from vessels grappling into or anchoring on shipwreck sites. Section 233 of the New York Education Law would require proof of injury or destruction to the resource as a result of grappling or anchoring activities to successfully prosecute a violation. By contrast, the NMSA is a strict liability statute that prohibits the violation of any regulation issued pursuant to its authority. *See* 16 U.S.C. § 1436(4). Accordingly, NOAA would be able to prevent destruction of nationally significant shipwreck sites by proactively targeting the unauthorized use of grappling hooks and anchors and focusing on noncompliance with the regulation itself in addition to any harm that may result. The proposed sanctuary prohibition thereby provides an additional deterrence mechanism against potentially harmful conduct.

If the sanctuary is designated through the proposed rule, NOAA would implement a management plan to manage the sanctuary. To facilitate sustainable recreational access to shipwrecks, NOAA would develop a mooring program to install and maintain mooring buoys at popular dive sites. These moorings would include buoys and other types of access infrastructure for sites where buoy placement is not practical. Moorings would provide secure and convenient anchoring points for users, facilitate public access and safer diving by providing a sturdy means of descent and ascent for divers, and proactively prevent damage from grappling or anchoring. NOAA would also publish guidelines on best practices for anchoring near shipwreck sites to facilitate compliance with the proposed rule.

B. Costs

Costs of the proposed regulation include: the federal staff time and resources necessary to implement this regulation; new administrative costs that would be incurred by NOAA due to enforcement actions that the agency may take under the proposed regulation in the new sanctuary; and the cost of installing and maintaining mooring buoys to accommodate existing and future vessels utilizing the shipwreck sites. NOAA estimates that the costs of installing mooring buoys at recreational diving depth in the sanctuary would be roughly \$5,500 per buoy, including hardware and labor. Additionally, there are staff costs associated with the time and effort to collect and compile the needed information from different user groups to understand how many buoys of each size are needed and where. NOAA has included these costs in the estimated operating budget for the proposed sanctuary, provided above.

C. Net Effects

The benefits from protection and conservation of underwater cultural and historical resources due to implementing this proposed regulation is expected to exceed total costs.

Prohibit the use of underwater mobile tethered systems at shipwreck sites. NOAA is proposing to manage operation of tethered systems at shipwreck sites by implementing a permit system for such operations.

Tethered underwater mobile instruments, such as remotely operated vehicles (ROVs), are widely used in underwater survey and site exploration activities, as they enable access to underwater cultural resources at depths beyond recreational and technical diving limits. As tethered instrument use has continued to increase in the scientific, commercial, and recreational user communities, there is a heightened threat of damage to submerged cultural resources by these systems (EdgeTech, 2016; NOAA Office of National Marine Sanctuaries, 2017; Parkinson, 2001). NOAA is proposing to manage operation of tethered systems at shipwreck sites by implementing a permit system for such operations. NOAA would review project proposals to ensure that operators are adequately prepared to access sanctuary resources in a responsible manner and that they would adhere to best management practices when exploring and documenting shipwreck sites.

A. Benefits

This proposed sanctuary prohibition makes it unlawful for any person to deploy a tethered underwater mobile system at a shipwreck site without a permit, so NOAA can target the unauthorized use of such systems at shipwreck sites before harm occurs. With this proposed prohibition, deploying a tethered underwater mobile system at a shipwreck site without a permit would be sufficient to establish a violation, even if no injury or destruction to a sanctuary resource occurred on that particular instance. Unlike New York state law, this proposed sanctuary prohibition would help deter conduct that has the potential to harm sanctuary resources rather than only provide an enforcement hook once harm has already occurred.

This proposed regulation would help deter conduct that results in actual harm to sanctuary resources, as well as conduct that has considerable potential to result in such harm. The proposed regulation would protect shipwrecks from potential damage from tethered systems, including from potential impact and entanglement. As indicated above, the public derives value from the protection and conservation of shipwrecks. Additionally, through education and outreach, the proposed rule would increase information and knowledge about safely exploring sites using tethered systems.

B. Costs

Costs include the federal staff and resources necessary to implement this proposed regulation, as well as new administrative costs that would be incurred by NOAA due to enforcement actions that the agency may take under the proposed regulation in the new sanctuary. NOAA has included these costs in the estimated operating budget for the proposed sanctuary, provided above.

The sanctuary permit for this activity does not have a fee. However, there is a cost associated with the applicant's time to apply for a sanctuary permit and NOAA staff time to review the permit application. NOAA has a valid Office of Management and Budget (OMB) control number (0648-0141) for the collection of public information related to the processing of ONMS permits across the National Marine Sanctuary System. There is an annual cost of \$1,362.00 to the public in record-keeping and reporting costs. The public reporting burden for general permits is estimated to average three responses with an average of 1.5 hours per response, to include application submission, a cruise or flight log (or some other form of activity report), and a final summary report after the activity is complete. NOAA's proposal to create a national marine sanctuary in Lake Ontario would likely result in a minimal increase of 4-5 permit requests per year to conduct activities within the new sanctuary. Staff time to review and approve permits and monitor compliance is captured in the operating budget above.

C. Net Effects

The benefits from protection and conservation of underwater cultural and historical resources due to implementing this proposed regulation is expected to exceed total costs.

Prohibit possessing, selling, purchasing, transporting, importing, or exporting any sanctuary resource within or outside of the sanctuary.

NOAA is proposing a regulation to prohibit possessing, selling, purchasing, transporting, importing, or exporting any sanctuary resource within or outside of the sanctuary. This prohibition is intended to deter looting and sale of sanctuary resources. These activities are not currently prohibited by the New York State Education law, which makes it unlawful for any person to “investigate, excavate, remove, injure, appropriate or destroy any object of archaeological, historical, cultural, social, scientific, or paleontological interest situated on, in or under lands owned by the state of New York without written permission of the commissioner of education” (NY Educ. L. 233.4). Unlike the New York State Education Law, the NMSA makes it unlawful for any person to “possess, sell, offer for sale, purchase, import, export, deliver, carry, transport, or ship by any means any sanctuary resource” taken in violation of the statute. 16 U.S.C. 1436. As noted, the listed activities would be prohibited both within and outside of the sanctuary.

A. Benefits

The proposed rule would protect significant cultural and historic resources by providing new enforcement authorities and capabilities to pursue the trafficking and sale of sanctuary resources, which would provide additional deterrence for looting and salvage of sanctuary resources. This proposed sanctuary prohibition provides greater civil administrative liability to culpable persons than what is currently provided by section 233 of the New York Education Law. For example, a person might unlawfully remove a sanctuary resource, but then attempt to illicitly profit from their illegal enterprise by selling the sanctuary resource to another person. Relatedly, a different person might wish to refrain from personally undertaking the unlawful removal of the sanctuary resource, but, nevertheless, desire to purchase the sanctuary resource (for their own benefit or for resale) from another who has already done so. The former individual’s subsequent acts to unlawfully bring the sanctuary resource into commerce and the latter individual’s transactions within commerce would all be prohibited by this proposed provision. As a result, the proposed sanctuary prohibition expels the economic stimuli to undertake actions that would directly injure sanctuary resources, further deterring such illicit conduct, by expressly outlawing the exchange of unlawfully taken sanctuary resources.

B. Costs

Costs include the federal staff and resources necessary to implement this regulation, as well as new administrative costs that would be incurred due to enforcement actions NOAA may take under the proposed regulation. NOAA has included these costs in the estimated operating budget for the proposed sanctuary, provided above.

Resources already extracted from the area before designation would not be affected by this regulation. Therefore, there would be no costs to those who already are in possession of these resources.

C. Net Effects

The benefits from protection and conservation of underwater cultural and historical resources due to implementing this proposed regulation is expected to exceed total costs.

Additional Enforcement Authorities

Sanctuary designation in the proposed area in Lake Ontario would provide additional enforcement authorities and capabilities to protect significant cultural and historic resources. NOAA would also be able to use fines collected for restoration projects in the sanctuary system.

A. Benefits

Ability to Impose Civil Penalties

Under existing state law, a violation of section 233 of the New York Education Law is classified as a Class A misdemeanor, which is a criminal offense. Successful criminal prosecutions must satisfy additional and more stringent procedures applicable during criminal proceedings. Whereas a criminal prosecutor may review the relevant evidence and exercise their discretion by declining to initiate a criminal action, a civil prosecutor might find the same evidence sufficient for purposes of commencing a civil action. Generally speaking, developing a criminal case requires law enforcement personnel to commit more time and resources when compared to a civil administrative action.

NMSA authorizes the assessment of civil administrative penalties, which can provide a more efficient and expeditious deterrent mechanism than criminal sanctions. Furthermore, as a strict liability statute, NMSA does not require proof of a particular culpable mental state to impose an appropriate civil penalty.

Ability to Enter into Joint Enforcement Agreements

Section 1437 of the NMSA authorizes NOAA to enforce provisions of the NMSA and, in conducting such enforcement, NOAA may utilize the personnel, services, and facilities of state departments, agencies, and instrumentalities on a reimbursable or non-reimbursable basis. *See* 16 U.S.C. § 1437(h). NOAA has already entered into a cooperative enforcement agreement (CEA) with the New York State Department of Environmental Conservation (NYSDEC) that federally deputizes DEC officers as authorized officers to perform certain marine conservation law enforcement activities on behalf of NOAA. In addition, NOAA has also already entered into a joint enforcement agreement (JEA) with NYSDEC that, among other things, outlines and effectuates the authority to enforce applicable federal marine conservation laws consistent with the CEA, specifies NYSDEC's commitment to provide resources under the agreement, identifies federal enforcement priorities, and provides for NOAA's funding for enforcement personnel, services, and facilities provided by NYSDEC.

At present, the JEA does not authorize NYSDEC to use any of the funding currently provided under the agreement to enforce the NMSA because no national marine sanctuary has yet been designated within New York. The Lake Ontario National Marine Sanctuary proposed rule would enable NOAA to work with NYSDEC to amend the existing JEA to describe the personnel, services, and facilities that federally deputized NYSDEC officers would provide, and that NOAA would reimburse, pursuant to the authority at 16 U.S.C. § 1437(h).

Following sanctuary designation, a CEA/JEA arrangement would provide a substantial benefit to both NOAA and NYSDEC because federally deputized NYSDEC officers are authorized to utilize the robust enforcement authorities set forth at 16 U.S.C. § 1437(b). Therefore, in addition

to federal law enforcement personnel employed by NOAA's Office of Law Enforcement, federally deputized NYSDEC officers would be authorized to conduct investigative activity and develop case referrals for violations of NMSA, its implementing regulations, and permits issued by NOAA's Office of National Marine Sanctuaries.

State law found at section 233 of the New York Education Law is absent similar enforcement authority as that provided at 16 U.S.C. § 1437(b). Accordingly, federally deputized NYSDEC officers would be granted additional investigatory authority to protect culturally, historically, archaeologically, recreationally, educationally, and scientifically valuable resources than that which is currently available under section 233 of the New York Education Law. Furthermore, when NYSDEC officers act as federally deputized authorized officers under the CEA/JEA arrangement, their enforcement activity is funded by NOAA and prioritized to achieve the goals and objectives of the stated marine conservation laws. As a result, a NOAA/NYSDEC joint enforcement partnership under NMSA would assemble more personnel, resources, and mechanisms to successfully discover and prosecute violations than either NOAA or NYSDEC could achieve independently under existing circumstances.

Prioritized Use of Enforcement Monies

The NMSA sets forth NOAA's authority to assess and collect civil penalties, *see* 16 U.S.C. § 1437(d)(1), (5), receive proceeds from forfeiture actions, *see* 16 U.S.C. § 1437(e)(1), (3), and recover reasonable costs incurred in the storage, care, and maintenance of any sanctuary resource or other property seized in connection with a violation, *see* 16 U.S.C. § 1437(f)(2). Forfeiture proceeds received under 16 U.S.C. § 1437(e) and costs imposed under 16 U.S.C. § 1437(f)(2) are first used to pay costs incurred by NOAA in providing temporary storage, care, maintenance, and disposal of any sanctuary resource or other property seized in connection with the violation. *See* 16 U.S.C. § 1437(f)(1)(B). However, all civil penalties received pursuant to 16 U.S.C. § 1437(d) as well as any remaining forfeiture proceeds and costs are prioritized, in the following order, for use to: (1) manage and improve the sanctuary harmed by the violation; (2) encourage the use of information-gathering techniques by rewarding any person who provides information leading to a civil penalty assessment or the forfeiture of property; and (3) manage and improve any other sanctuary within the National Marine Sanctuary System. *See* 16 U.S.C. § 1437(f)(C).

Because this prioritization is mandatory, the use of civil penalties and any remaining forfeiture proceeds and costs is tied to the management, conservation, and protection of resources of special national significance, including the underwater cultural and historical resources to be protected by the proposed Lake Ontario National Marine Sanctuary. By comparison, section 233 of the New York Education Law is absent any provision setting a similar prioritization for penalties obtained after prosecution of a violation under its purview. Because section 233 of the New York Education Law does not require any state fines collected to be used in managing and conserving cultural or historical resources of significance or in the exercise of information gathering-strategies toward investigating violations, the designation of the proposed Lake Ontario National Marine Sanctuary provides an additional tool for improving the conservation of these resources beyond what is provided under existing state law.



B. Costs

Short-term costs would include costs associated with NOAA providing temporary storage, care, maintenance, and disposal of any sanctuary resource or other property seized in connection with the violation. Additional costs would include those associated with implementing a joint enforcement agreement to pay for enforcement officer time on the water, as well as NOAA staff time associated with pursuing violations. NOAA has included these costs in the estimated operating budget for the proposed sanctuary, provided above.

C. Net Effects

Net benefits are expected due to improvements in enforcement, which would result in long-term protection of sanctuary resources from loss or injury.

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