



COUNTY OF ERIE

OFFICE OF THE COUNTY EXECUTIVE

Kathy Dahlkemper,
County Executive

October 30, 2020

Mr. Matt Brookhart
Eastern Regional Director
Office of National Marine Sanctuaries
National Oceanic and Atmospheric Administration
United States Department of Commerce
8601 Georgia Avenue, Suite 504
Silver Springs, MD 20910

Re: National Marine Sanctuary Nomination Five-year Update/Reaffirmation

Dear Mr. Brookhart:

On behalf of Erie County, I would like to reaffirm our commitment to achieving National Marine Sanctuary designation for the Lake Erie Quadrangle. Preparation of the original nomination took two years and involved a dedicated team of community leaders and organizational partners. We were (and remain) excited that the Lake Erie Quadrangle National Marine Sanctuary nomination was added to NOAA's Office of National Marine Sanctuaries inventory of candidate sites on February 22, 2016, and, although the nomination is approaching its five-year mark, it remains a relevant and important priority for the County to see designation approved.

As evidence of our region's prioritization of the Lake Erie Quadrangle National Marine Sanctuary, we would like to share with you information on efforts that have been completed or initiated since the County's nomination was submitted. The Lake Erie Quadrangle National Marine Sanctuary has been included in several key planning documents, including the Erie County Cultural Heritage Plan (2017) and the Erie County Parks, Trails + Recreation Plan (2020). The Cultural Heritage Plan for the County presents a strategy that will support countywide historic and cultural preservation efforts over five to seven years. The focus of the Plan is to better ensure that assets targeted for preservation in Erie County are considered equitably and with an eye for the future. The ultimate goal is for the County's collection of historic and cultural resources to remain relevant and become long-term economic and quality-of-life assets. The Plan identifies the Lake Erie Quadrangle National Marine Sanctuary as a significant and unique historic regional asset. The Erie County Parks, Trails + Recreation Plan sets new direction for the involvement of Erie County government in the planning and support of parks, trails, and recreational resources throughout the County. Specific actions relate to improving the health and well-being of residents and the overall economy of the County. One of the tasks identified in the Plan is pursuing designation of the Lake Erie Quadrangle as a National Marine Sanctuary as a prioritized project of regional significance. Both of these plans were adopted by Erie County Council as components of the County's comprehensive plan.

The Regional Science Consortium (RSC) has continued to support the effort outlined in the Lake Erie Quadrangle application for designation of a National Marine Sanctuary. The RSC continues to manage the RSC Pennsylvania Archaeology Shipwreck Survey Team (PASST) working group, which typically meets 2-3 times annually. Meetings were delayed in 2020 due to the COVID-19 pandemic. This group continued to acquire information and data related to the shipwrecks in the Pennsylvanian waters of Lake Erie, including historical accounts from various archives, surveys, and inventories of known shipwrecks, video documentation, and 2D and 3D photomosaics. Historical data continues to be accumulated. Shipwreck surveys and inventories are currently being conducted on the *Gerkin* and *S.K. Martin*. A scaled sketch was created using the measurements from the *Albion* shipwreck. A series of photographs from the *Albion* and *Indiana* were stitched together to create a 3D photomosaic computerized image. During the 2020 season, no PASST wreck surveys were able to be conducted; however, photographic and video documentation was collected. In addition, the PA DEP has contributed sidescan sonar images and videos. All information and data has been updated to the RSC PASST webpage (<https://www.regsciconsort.com/lake-erie-shipwrecks/>).

PASST has begun the process of preparing a National Register of Historic Places nomination for *Dean Richmond*. The group is currently working on an expanded PA Archaeological Site Survey (PASS) form that will allow PA State Historic Preservation Office to make a determination of eligibility for the site.

Dean Richmond was a large (238-foot) propeller steamer launched in 1864. After a career of mishaps and repairs it was lost in a storm in 1893, drowning 17 of its 18 crew. The wreck was rediscovered in 1983 and partially salvaged due to local legend that it carried a more valuable cargo than the zinc ingots in its hull. These actions contributed to Pennsylvania's support of the Abandoned Shipwreck Act. This shipwreck represents an otherwise undocumented record of ship modification and repair during the late 19th century and is likely eligible for the NRHP under Criteria D and C. The ship was in and out of many of the dry docks and shipyards on the Great Lakes, mostly because the captains seemed to have a hard time controlling it. These repairs and modification techniques are not likely well documented but should be evident on the hull.

The PASST Survey I course was offered through the RSC and Diver's World, and instructed by Marine Archaeologist Ben Ford, 2015-2019. The course could not be offered in 2020. In 2017, a PASST Survey II course was also developed and offered. The course providing training in dive survey leadership and survey data processing. It is anticipated that both of these courses will resume 2021.

The RSC, in collaboration with Indiana University of PA, Florida State University, and the Seneca Nation of Indians, submitted a grant proposal to NOAA's Office of Ocean Exploration and Research (Funding Opportunity Number: NOAA-OAR-OER-2021-2006431) for the project Lake Erie Submerged Landscape Exploration. The primary goal of the proposed research is to explore the Lake Erie Quadrangle bottom for the presence of preserved formerly terrestrial landscapes that may contain archaeological sites. This archaeological goal is coupled with geoscientific and biological data collection to better understand the geological history and benthic habitats of Lake Erie. The research also proposes to integrate these data into a holistic analysis of the lake bottom that may lead to new ways to identify inundated landscapes.

The RSC continues to operate two weather stations and four buoys in Lake Erie, providing real-time data on weather, water quality, and wave conditions. The weather stations are operational year-round and the buoys

continue to be deployed in May and retrieved in October each year. The RSC maintains and operates two large buoys in the open waters of the nearshore (within five nautical miles of the coastline) and two smaller buoys at Beach 2 and Beach 6 at Presque Isle State Park. The website with the buoy data receives over 270,000 visits during their May-October deployment period, reflecting the use of over 14,000 unique users (Google Analytics). These totals do not include users that access this information through the smartphone app.

In 2018, in collaboration with the NOAA – National Weather Service (Cleveland), the RSC received a NOAA Heritage Program – Preserve America Grant for the project *Depicting the Power of Weather on Lake Erie Ships - Preserving, protecting, and enhancing Pennsylvania’s shipwrecks*. This project included the development of a wave tank and signage of historical shipwrecks. Students learned about the historical significance of Port Erie, the weather conditions that occur on Lake Erie, boat building and engineering, and then have the opportunity to test their boats in the wave tank conditions. Part of the lesson associated with this project focuses on the National Marine Sanctuary program.

In January 2019, the RSC received a NOAA B-WET grant that enabled the organization to provide educational opportunities to more than 800 students and 15 teachers. This project focused on the Great Lakes Literacy Principles, including weather and climate, and how this impacted the current and historical ships on the Great Lakes. As part of these lessons, students also learned about the National Marine Sanctuary program, the Thunder Bay National Marine Sanctuary (guest speaker Sarah Waters), and the current Lake Erie Quadrangle National Marine Sanctuary (NMA) application. Students started their lessons by a visit to the Erie Maritime Museum, a tour of the US Brig *Niagara*, and a sail on the *Howard G. Lettie* tall ship. As part of this project, the RSC produced a tall ships tour of several ships that participated in Tall Ships Erie in August 2019 (<https://www.regsciconsort.com/lake-erie-shipwrecks/>). A group of 125 fourth grade students, directed by Ms. Susan Timon, selected the NMS community support, education, and awareness to be part of their stewardship action project. This was put on hold due to the COVID-19 pandemic and schools closing in March 2020.

The RSC continues to contribute to the K-12 learning landscape by providing opportunities to participate in a lab experience during field trips, job shadow a scientist, internships, and service-learning projects. The RSC educates over 2,500 students annually, and this number increases each year. Additionally, the RSC continues to offer summer field course opportunities to its member organizations. Courses have included Field Ichthyology, Wetland Ecology, Submerged Aquatic Plant ID, Electrofishing, and many others.

Additional contributions to the preservation of Erie County’s maritime heritage and the County’s maritime-related tourism sector have come from other community partners. The Presque Isle Lighthouse, which is located on Presque Isle State Park, became a publicly accessible historic site managed by a new nonprofit in 2014. Today, the organization has a paid staff of three and annually sees 45,000 visitors. A new welcome center opened in 2019. The Presque Isle Lighthouse Interpretive Plan, which includes the shipwrecks of the Lake Erie Quadrangle as a key interpretive theme, was also developed in 2019, and restoration of the National Register listed resource is well-underway.

The Bayfront Maritime Center, an organization focused on maritime education, has worked with more than 20,000 students to build 95 boats since its inception in 1998. Projects range from building wooden canoes to building a replica of the 29-foot *Erie Boat*, a cat-ketch rigged fishing boat that was used when Erie, PA was the “freshwater

fishing capital of the world," 1885-1915. The Center's most ambitious project to-date, the rebuilding of the US Navy Gunboat Schooner *Porcupine*, remains ongoing. Prior to the public health emergency, students enrolled in Erie's Public Schools magnet program created in 2017, the Erie High School Maritime Program, which is housed at the Bayfront Maritime Center, worked with the *Porcupine* project crew to install the ship's wheel, a skylight hatch, bulwarks, spindles, and cap rails, and sanded and sealed all decks. Once complete, the *Porcupine* will operate as a schoolship for Presque Isle Bay, an environmental science lab and research vessel, and a historic attraction, interpreting her important part in the War of 1812, sailing for the US Coastal Survey Office, being a United States Revenue Cutter, and carrying cargo as the merchant schooner *Caroline* until 1873. In addition to working on the reconstruction of the *Porcupine*, students enrolled in the Erie High School Maritime Program to study navigation (chart reading, plotting a course, and using navigational tools), arts of the sailor (knot tying, splicing rope, vessel lore, and maritime customs), sailing (parts of the boat and rigging, sailing theory, and on-the-water instruction), maintenance (basic skills of building and maintaining a vessel), and maritime careers.

In 2018, the Flagship Niagara League, the "friends" group of the Pennsylvania Historical and Museum Commission-owned Erie Maritime Museum / US Brig *Niagara*, initiated a multi-year agreement with the South Street Seaport Museum to host the Schooner *Lettie G. Howard* during the summer months. The *Lettie G. Howard* (1893) is the sole surviving example of a Georges Bank fishing schooner. A Fredonia-model fishing schooner built in Essex, Massachusetts, she exemplifies the type of craft used widely along the Eastern seaboard of the United States from Maine to the Gulf Coast. While the vessel is in Erie, the museum offers 90-minute day sails daily and offers sail training through a week-long youth Tall Ship Summer Camp. Although the *Lettie G. Howard* was unable to visit Erie in 2020 due to the public health crisis, the relationship between the Flagship Niagara League and the South Street Seaport Museum will resume when possible.

The Flagship Niagara League and Erie Maritime Museum / US Brig *Niagara* also coordinated the 2019 Tall Ships Erie. The three-day maritime celebration featured 14 tall ships, a full schedule of day sails, live music and entertainment, children's activities, a festival marketplace, food vendors, a beer garden, and much more. Other Tall Ships Erie Festivals, which are events with multi-million-dollar impacts on the local economy, have been held in 2010, 2013, and 2016. Attendance and local economic impact figures have ranged from 35,000 - 90,000 attendees and \$3.5M - \$8M, respectively. Tall Ships Erie is an important event for our community, and its success is reliant on corporate support, participation from numerous organizations and businesses, buy-in from the County's school districts who send thousands of school children to experience the festival first-hand during a students-only day, contributions of time and expertise from the US Coast Guard and other law enforcement and emergency services agencies, marketing support from VisitErie who promotes the festival in a tri-state region, and thousands of community volunteers.

Erie County and our community partners remain committed to working towards the original goals in the national marine sanctuary nomination for the Lake Erie Quadrangle, which include protecting the cultural and historical artifacts, expanding the maritime campus that has been developing on the Pennsylvania shores of Lake Erie for decades, and enhancing and expanding the County's tourism industry. National marine sanctuary designation will stimulate renewed interest in Pennsylvania's only Great Lakes port, broaden opportunities for partnerships, and encourage state and local prioritization of endeavors to locate, identify, interpret, and preserve the 196 shipwrecks reported to have been lost in the Lake Erie Quadrangle.

As a final note to our update, we do feel it important to mention the record-setting high water levels of Lake Erie over the last two years. The 2019 Lake Erie water levels reached new monthly records May through September, according to the US Army Corps data. Previous record highs were set in the 1980s. Lake Erie experienced several record high monthly mean water levels in both 2019 and 2020, but the US Army Corps of Engineers Detroit District office projections indicate that the lake is not expected to reach any more records for at least the rest of 2020. Climate change is being credited to an increase in rain and snow the last two years in the upper Great Lakes, contributing to the high water levels and more intense storms seen on Lake Erie. As a result, communities along the lake have become more susceptible to coastal erosion. Public and private property owners have lost docks, stairs, beach access, and structures built to combat erosion. Presque Isle State Park has been significantly impacted. Record-high water levels have inundated portions of the peninsula, heavily eroded beaches and areas of vital infrastructure, and led to the disruption of plant and animal habitat.

While the historic wrecks of the Lake Erie Quadrangle have yet to be seriously impacted by the high water levels (some wrecks in shallow water may actually be better protected with the high water), we are aware that the high water has dislodged shipwrecks in other Great Lakes, caused historical artifacts and remnants to wash ashore, and led to the discovery of new wrecks. This is an environmental condition with the potential to impact the historic and natural resources of the Lake Erie Quadrangle that the community continues to monitor.

We appreciate this opportunity to update the NOAA Office of National Marine Sanctuaries of our region's progress and reaffirm our prioritization of achieving national marine sanctuary designation. Should you have any follow-up questions, please contact me.

Sincerely,



Kathy Dahlkemper
County Executive

cc: Ellen Brody, Great Lakes Regional Coordinator – NOAA Office of National Marine Sanctuaries
Honey Stempka, Director – Erie County Department of Planning & Community Development