

**Thunder Bay National Marine Sanctuary (TBNMS)  
Advisory Council  
-April 24, 2018 Meeting Minutes-**

**Date:** April 24, 2018

**Time:** 6:00 p.m.

**Location:** Great Lakes Maritime Heritage Center (GLMHC), 500 W. Fletcher Street,  
Alpena, MI 49707

**Meeting Attendees**

**NOAA:** Andrew Augustyn, Chuck Bennett, John Bright, Stephanie Gandulla, Jeff Gray, Phil Hartmeyer, Joey Jackson, Jean Prevo, Mary Tagliareni, Sarah Waters, Katie Wolf

**State of Michigan:** Wayne Lusardi

**SAC Members:** Roger Baumgardner, Nancy Kinney, John Kozlowski, Steve Kroll, Bill LaMarre, Don MacMaster, Al Moe, Carol Shafto, Charles Wiesen

**SAC Alternates:** Susie Austin, Michael Beaulac, Jim Dessenberg, Beach Hall, Merl Melton, Ron Meneghel, Don Newport, Ann-Marie Ruder

**Guests:** N/A

**Media:** Jordan Spence, *The Alpena News*

**WELCOME AND ACTION ITEMS**

Carol Shafto called the meeting to order. The council reviewed and approved minutes from the December 2017 council meeting.

SAC applications received and selected have been submitted for vetting. We are hoping to have the members approved and onboard for the June 19 meeting. We will have another round of applications in August, once those members are selected, we will hold executive committee elections (chair and vice chair) in the fall.

**2018 JOINT NATIONAL MARINE SANCTUARY ADVISORY COUNCIL AND  
MARINE PROTECTED AREAS FEDERAL ADVISORY COMMITTEE SUMMIT –  
Carol Shafto**

In January Carol Shafto and Jean Prevo attended the 2018 Joint National Marine Sanctuary Advisory Council and Marine Protected Areas Federal Advisory Committee Summit in San Francisco. The purpose and objective for the meeting was to provide National Marine Sanctuary

Advisory Council and Marine Protected Areas Federal Advisory Committee representatives an opportunity to connect, learn from one another, and identify the benefits of and emerging issues facing marine protected areas, including national marine sanctuaries, in order to prioritize potential future council actions and areas of council and committee cross-collaboration. The two groups met on the first day and then came together on the last day to discuss topics that arose over the course of the meeting.

Carol Shafto had the opportunity to present on two topics. On the first day Carol joined Jim Tobin, chair of the *Monitor's* advisory council, to present on cross collaboration among sanctuaries. This is done not only by the councils but also by staff across the nation. A few examples were Thunder Bay and *Monitor* staff working on research projects and sharing resources, staff presenting at other site's council meetings, and council's passing resolutions of support in favor of other sanctuary's expansion/designations.

The second topic Carol spoke about was "Lessons Learned and Continuous Learning: Perspectives on Visitor Use from Two Different Sanctuaries." This presentation was co-presented with Bruce Popham, chair of the Florida Keys National Marine Sanctuary. These sites are very different in that Thunder Bay really promotes people getting out and using our sanctuary and trying to drive tourism. Whereas, Florida Keys NMS has too much visitor use and has a harder time assessing the long term impacts of overuse in the sanctuary. Our sanctuary is narrowly focused so we can see any impacts much easier than those that are spread out along larger coastlines and delicate ecosystems. Carol spoke about the economic impact of having the sanctuary here.

On February 22, council members Carol Shafto and Michael Beaulac, along with Sandra Clark, director of the Michigan History Center, had the opportunity to testify before the Michigan House Tourism and Outdoor Recreation Committee in support of Michigan House Resolution (HR222), sponsored by Michigan State Rep. Sue Allor in support of Thunder Bay National Marine Sanctuary's current designation covering 4,300 square miles. The committee approved the resolution with unanimous, bipartisan support. A copy of the resolution along with a letter from the Governor Snyder is attached to these minutes.

#### **WISCONSIN SANCUTARY VISIT & UPDATE – Jeff Gray and Don MacMaster**

On February 10<sup>th</sup>, Don MacMaster gave a presentation in Port Washington, Wisconsin, on the impacts that Thunder Bay National Marine Sanctuary has had on Alpena. There were about 125 people in attendance. Dan Egan, a reporter for the Milwaukee Sentinel Journal, also spoke at the public meeting. Dan is the author of the book "*The Death and Life of the Great Lakes.*" Don highly recommends that everyone read this book.

There has been opposition from some property owners with riparian rights being a big issue and some were just concerned about federal government involvement. Several advisory council and

community members have interacted with folks in Wisconsin to help address their concerns. Chuck Wiesen has been corresponding with a business owner and Steve Kroll has also gone to meet with folks in Wisconsin.

In mid-March, the governor of Wisconsin pulled back the sanctuary nomination to the surprise of state agencies, communities, and mayors, and has halted the designation process. NOAA is continuing to work with the communities to see if there is an option to move forward. In the interim, Russ Green will stay in Wisconsin and continue to do work for the Northeast Great Lakes Region and for Thunder Bay NMS. Russ will be working with us on management plan review, economic development survey, and research planning.

### **ACC MARINE TECH PROGRAM UPDATE – Don MacMaster**

Don MacMaster gave an overview of some of Alpena Community College's (ACC) highlights of 2017-2018, including higher enrollment. Marine Tech has brought a lot of positives to our college and the community. The program has now evolved and includes a drone program.

However, the program has faced the following challenges:

- Low enrollment
- Difficult employment opportunities for graduates
- Oil and gas exploration on hold

By merging the program with the drone program they feel it will create the following opportunities:

- Local connection to First Robotics, STEM education, and APS Shipwreck Alley Class
- Articulation to pre-engineering programs at Northern Michigan University and Ferris State University
- Alignment with ACC leadership in Unmanned Systems technology

Pilot certification for operating a drone is an FAA mandate

ACC will deliver pilot certification training to International Brotherhood of Electrical Workers (IBEW) linemen. ACC has also collaborated with Thunder Bay NMS on near shore surveying projects. Negotiating to deliver drone training statewide through MAMA.

### **FRIENDS OF TBNMS UPDATE – Katie Wolf**

#### **Grant Award:**

National Marine Sanctuary Foundation - \$10,000 *Get into Your Sanctuary* promotion grant, with the following matching advertising dollars:

- Michigan Radio - \$2k match
- WCMU Radio - \$2k match
- Local Radio - \$2k match

Thunder Bay NMS's *Get into Your Sanctuary* event is May 19<sup>th</sup> & 20<sup>th</sup>. We will be offering free community cruises again this year. More details will be sent out as the date gets closer.

**Sponsorships:**

Thunder Bay Maritime Festival – Sponsorship mailing will go out this week, along with an ad in *The Alpena News* calling for sponsors to be published on April 27. Deadline for sponsors to sign up is June 1, 2018. Contact [friends@thunderbayfriends.org](mailto:friends@thunderbayfriends.org) for details or if you have ideas of area businesses that may want to be involved. Have set a goal of \$15,000.

**Grant Application Submitted:**

Michigan Humanities Council - \$15,000

Project: Song of the Lakes *Paddle to the Sea* concert and *Lady Michigan* cruise

Rogers City, Onaway and Posen schools – 5<sup>th</sup> graders

Bus transportation available through Rogers City Arts and Education Fund (Beach and Marianne Hall)

**Fundraiser:**

2 Wooden Boat Raffles

Wooden paddle board with paddle and Wooden Dory

Kick off raffles in May

Raffle drawings on Oct 8

\$5 a ticket or 5 for \$20

Goal = \$15,000

Looking for volunteers to help with the Presque Isle Wooden boat show and Soo Locks Engineering days to sell raffle tickets and work at the booth. Contact Katie at 989-884-6210 or [friends@thunderbayfriends.org](mailto:friends@thunderbayfriends.org) if you are interested in helping with these events.

**Membership Development –**

Friends of TBNMS membership cards have been mailed to all donors.

**Thunderstruck Newsletter**

Next issue is coming out this week and is distributed to approximately 4,000 people.

**Facebook Page** – The Friends of Thunder Bay NMS now has a Facebook page

<https://www.facebook.com/ThunderBayFriends/>. Posts are more focused on members, promoting Friends of TBNMS, sanctuary and local events, as well as recognizing sponsors, donor, grantors, and other partners. Please “like” and “follow” the Friends’ page to stay up-to-date and invite your friends to like it as well.

### **Friends of TBNMS Board -**

The Friends of TBNMS Board will be meeting this week. Agenda items include strategic planning and Thunder Bay NMS's 20<sup>th</sup> anniversary in 2020. The Friends Board revised the bylaws during their last meeting to better reflect the Friends' mission which has grown since the group was first established in 2010.

The Friends have entered into a partnership with The Nature Conservancy (TNC). TNC was interested in preserving one of the best bird flyways which is located on North Point. On Thursday, April 19, after 13 years of working on this transaction, TNC purchased over 1,500 acres, 4 miles of shoreline, and 200 acres of coastal wetlands on this property. TNC was able to raise over \$4 million for the purchase.

TNC is also interested in recreational aspects of the property and want to use this as a project for a new type of land conservation that can happen. TNC plans to transfer the property to the Friends for the Friends to manage the property and also start an endowment to fund the management.

Continue to have discussions with local government on how we can move forward with this project and provide access to the remote location.

We will have TNC staff give presentation at a later council meeting. We would also like to get the council out there to see the property.

Chuck Wiesen and Al Moe have really helped lead this. Chuck envisions us working with preschoolers, homeschool, postgraduate students on this 1,500-acre spectacular natural site.

A press release will be going out soon.

### **MANAGEMENT PLAN REVIEW – Mary Tagliareni**

We are doing management plan review because:

- We have community interest
- We've had boundary expansion
- Emerging technologies
- Periodic evaluation and public input is good management
- Requirements - federal law and state agreement
- Setting the course for the next 20 years

During the fall of 2017 and winter of 2018 the staff held a workshop to go over the management plan, a survey was sent out to the advisory council to gather initial input, and Thunder Bay NMS submitted a "Memo to Record" of internal assessment (attached.) In the eyes of the national marine sanctuary program we have completed our management plan review and could continue

operating under the current management plan, but we are not done. We want to take everything everyone has done and take it to the next step.

Summer 2018- Fall 2018

- Staff will draft the revised action plan
- Seek feedback on draft from the advisory council/working groups
- Submit final draft for ONMS/State of Michigan review

Winter 2018 - Spring 2019

- Publish final Management Plan

## **SANCTUARY UPDATE**

### **Education Update – Sarah Waters**

Tracey D’Augustino of NEMIGLSI was honored with the MSTA Informal Science Educator of 2018 Award.

**2018 MATE ROV Competition** - The 2018 competition is being held on Saturday, May 12 at the Great Lakes Maritime Heritage Center. There are currently 14 teams signed up from around the region including students from Utica, Petoskey, Harrisville, Alpena, Marlette, Shelby Stockbridge, and Gaylord.

For updated outreach and education programs you can visit the Friends of TBNMS website <http://thunderbayfriends.org/index.php/education>.

### **GLMHC Events through Mid-June at a glance – Andrew Augustyn**

Currently booked 21 student groups for GLMHC and 8 classroom cruises. Also hosting a Northeast Michigan Great Lakes Stewardship Initiative teacher professional day.

We have new online booking for school groups and events which can be found on the Friends’ website <http://thunderbayfriends.org/index.php/education>.

Summer programs are now open for online registration at <http://thunderbayfriends.org/index.php/summer-programs>. There are 21 different programs for ages 5-13, with some new programs this year, plus free all ages family drop in programs in July and August. See the online calendar <https://thunderbay.noaa.gov/news/calendar/welcome.html> for more details.

Sarah also mentioned partner programs with Alpena Public Library and the Besser Museum. The Library, Besser, and Thunder Bay NMS partner program will be held on July 31, 2018. The Library will host NASA programming at their facility and we will have special complementary

programming on the SOS for people to come see that day at our visitor center before or after they visit the library.

The second partner program will be a combined summer student program between Thunder Bay NMS and the Library on August 6 & 7. In the morning students age (10-12) can attend programming about "investigating the insides of planets" at the library through their NASA grant, and then after lunch they come to our visitor center for an afternoon of exploring "Goldilocks Planets" in our SOS theater.

### **Research Update – Wayne Lusardi**

2018 Ocean Exploration and Research grant requested proposals for WWII projects. Thunder Bay NMS submitted a proposal for “The Search for Tuskegee and Free French WWII Aircraft in Lake Huron.”

The proposed project will characterize unknown areas of the Great Lakes and provide initial information about World War II archaeology in Lake Huron. Although far removed from the theaters of war, Michigan and the Great Lakes contributed the personnel, raw materials and industry necessary to fight a war, as well as provided a relatively safe environment in which to train sailors and aviators. World War II resources that are potentially located within NOAA’s Thunder Bay National Marine Sanctuary have not yet been studied or fully realized. The discovery of artifacts, namely aircraft, related to World War II, will fundamentally stimulate future research in this understudied area. Methods developed during the project will contribute to the broader discipline of aviation archaeology, and inform cultural resource management on State of Michigan bottomlands and within NOAA’s Thunder Bay National Marine Sanctuary.

Thunder Bay staff will be working with the other partners including the *Pride of Michigan* for a dive platform, along with the R/V *Storm* and other sanctuary boats.

### **Thunder Bay International Film Festival Wrap Up – Stephanie Gandulla**

- Biggest turn out 1,300 tickets
- 2 World Premiers and over 50 films
- 11 student filmmakers
- 215 volunteer hours
- 3 venues (Harrisville, Rogers City, and Alpena)
- 1,000 students were able to see these films

The 4<sup>th</sup> annual student film competition theme is *#ExplorationIs*. The deadline for students to submit their films is January 4, 2019

The film *Crossing Lake Huron* was played in the theater. The film was premiered at the TBIFF in January and shows the journey of the group *Stand Up for Great Lakes* as they paddle across

Lake Huron to bring awareness to Thunder Bay NMS and raise money for the Friends of TBNMS.

**Public Comment** – Roger Baumgardner understood the cancellation of the last meeting, but would prefer to not go 4 months without meeting and hopes we can avoid that in the future.

Al Moe and Steve Kroll visited the Florida Keys National Marine Sanctuary and met with Superintendent Sarah Fangman.

**Adjourn** - The meeting was adjourned at 8:40pm.

**2018 TBNMS/SAC Schedule of Upcoming Meetings:**

June 19  
August 21  
October 16  
December 18

All meetings are 6:00-8:30p.m. at the GLMHC unless otherwise specified.



18-059998



**HOUSE OF REPRESENTATIVES**  
**STATE OF MICHIGAN**

**GARY L. RANDALL**  
CLERK OF THE HOUSE

STATE CAPITOL  
LANSING, MICHIGAN 48913  
(517) 373-0135  
FAX (517) 373-5930

February 27, 2018

President of the United States Senate  
Speaker of the United States House of Representatives  
Members of the Michigan Congressional Delegation.  
United States Secretary of Commerce

**Re: Michigan House Resolution Number 222.**

The Michigan House of Representatives has adopted the enclosed House Resolution. Per the direction of the House of Representatives, I am transmitting a copy of the resolution to you.

Sincerely,

A handwritten signature in cursive script that reads "Gary L. Randall".

Gary L. Randall, Clerk  
Michigan House of Representatives

GLR:dcs

2018 MAR -7 PM 2:55  
SOS EXECUTIVE SECRETARIAT

# STATE OF MICHIGAN



## HOUSE OF REPRESENTATIVES

### House Resolution No. 222

Offered by Representatives Allor, Crawford, Griffin, Marino, Whiteford, Garcia, Canfield, Faris, Geiss, Green, Greig, Howrylak, Hughes, Kelly, Maturen and Wittenberg

#### A RESOLUTION TO EXPRESS SUPPORT FOR THE THUNDER BAY NATIONAL MARINE SANCTUARY AND OPPOSE ANY REDUCTION IN ITS BOUNDARIES

WHEREAS, The Thunder Bay National Marine Sanctuary is one of fourteen U.S. marine protected areas and the only one located in the Great Lakes. The 4,300-square-mile sanctuary holds nearly 100 known shipwrecks—covering more than 150 years of Great Lakes commerce—remarkably preserved in Lake Huron's cold, fresh waters; and

WHEREAS, Jointly managed by the National Oceanic and Atmospheric Administration (NOAA) and the state of Michigan, the Thunder Bay National Marine Sanctuary plays an important role in preserving our nation's marine heritage and providing opportunities for future discovery, research, and education. In addition to shipwrecks, the sanctuary encompasses other important cultural and natural features related to maritime heritage including lifesaving stations, lighthouses, historic boats and ships, commercial fishing camps, and working ports. Geological evidence suggests undiscovered prehistoric archaeological sites may also exist; and

WHEREAS, The United States Secretary of Commerce is currently conducting a review of all designations and expansions of national marine sanctuaries within the last 10 years. Under Executive Order 13795, Implementing an America-First Offshore Energy Strategy, the President of the United States directed the review of the budgetary impacts of the costs of managing the sanctuary, the adequacy of consultations with affected state and tribal governments prior to designation, and opportunity costs associated with potential energy and mineral exploration; and

WHEREAS, Nearly 3,900 square miles of the Thunder Bay National Marine Sanctuary could be impacted by the federal review. Just 448 square miles when initially designated in 2000, the sanctuary was expanded in 2014 to cover 4,300 square miles. The expansion increased the number of protected shipwrecks and opened up new opportunities to study shipwreck sites and maritime history in America; and

WHEREAS, Thunder Bay National Marine Sanctuary attracts shipwreck divers and tourists and provides an economic boost to charter boat businesses, dive shops, bike rentals, outfitters, and travel and tourism companies. In past years, recreational activity associated with the sanctuary has provided \$92 million in annual sales, \$35.8 million in personal income to residents of coastal cities located near the sanctuary, and 1,704 jobs. In 2015, over 95,000 people visited the Great Lakes Maritime Heritage Center which is associated with the sanctuary; and

WHEREAS, Energy and mineral exploration is not appropriate within the sanctuary. Michigan has banned offshore drilling of oil in the Great Lakes since 1982. Congress enacted a temporary ban on offshore drilling in the Great Lakes in 2001 and made the federal ban permanent in 2005. The oil and gas drilling ban is necessary to protect this unique natural resource that provides drinking water and recreational opportunities and supports food production, business, and transportation for all U.S. citizens; and

WHEREAS, Maintaining the current boundaries of the Thunder Bay National Marine Sanctuary supports the rural coastal communities of northeast Michigan as well as protects the health and safety of millions of people who call the Great Lakes Basin home; now, therefore, be it

RESOLVED BY THE HOUSE OF REPRESENTATIVES, That we support the Thunder Bay National Marine Sanctuary and oppose any reduction in its boundaries; and be it further

RESOLVED, That copies of this resolution be transmitted to the President of the United States Senate, the Speaker of the United States House of Representatives, the members of the Michigan congressional delegation, and the United States Secretary of Commerce.

Adopted by the House of Representatives, February 27, 2018.

*Jay E. Randall*

CLERK OF THE HOUSE OF REPRESENTATIVES



18-060519



STATE OF MICHIGAN  
EXECUTIVE OFFICE  
LANSING

RICK SNYDER  
GOVERNOR

OS EXECUTIVE SECRETARIAT

2018 APR -5 AM 10:03

BRIAN CALLEY  
LT. GOVERNOR

March 26, 2018

The Honorable Wilbur Ross  
Secretary  
U.S. Department of Commerce  
1401 Constitution Ave NW  
Washington, DC 20230

Dear Secretary Ross,

I am writing to express my support for the Thunder Bay National Marine Sanctuary and to urge you to maintain its existing boundaries as you review National Marine Sanctuaries and Marine National Monuments designated or expanded since April 28, 2007 in accordance with Executive Order 13795. In 2014, this sanctuary underwent a boundary expansion which was initiated by the local communities and was strongly supported by stakeholders throughout the State of Michigan. Since the expansion, the sanctuary has positively benefited tourism, education and business growth, and has become a source of community pride and identity.

The sanctuary's protection of the world-class collection of shipwrecks found in northern Lake Huron and its celebration of the rich maritime heritage they represent continue to positively impact the economy of the surrounding communities. This is evident in expanding tourism in the Alpena area and the burgeoning cruise ship industry throughout the Great Lakes. As an avid diver, I have personally explored the cultural treasures preserved by the sanctuary and can testify firsthand to the benefit these artifacts represent not only for Michigan, but for the entirety of the Great Lakes region and North America as a whole.

When the boundary expansion was still being considered by the National Oceanic and Atmospheric Administration (NOAA) and stakeholders, my office worked with NOAA officials to address concerns that the new boundaries would impact maritime transport. NOAA was able to make accommodations relative to these concerns and as a result, my Administration supported the expansion.

I would also like to highlight the fact that your review's focus on the potential for oil and mineral production is not relevant to Thunder Bay. Michigan state law has banned oil and gas drilling in the Great Lakes since 2002, and Congress enacted legislation in 2005 that permanently prohibits the issuance of any federal or state permits for new oil and gas drilling in or under the Great Lakes.

For these reasons, I urge you to support and maintain the existing boundaries of the Thunder Bay National Marine Sanctuary.

Sincerely,

Rick Snyder  
Governor

MEMORANDUM FOR: John Armor, Director  
Office of National Marine Sanctuaries

FROM: Jeff Gray, Superintendent  
Thunder Bay National Marine Sanctuary

THROUGH: Matthew Brookhart, Acting Regional Director  
Northeast and Great Lakes Region

SUBJECT: Completion of the Evaluation of Sanctuary Management Plan

Pursuant to section 304(e) of the National Marine Sanctuaries Act (NMSA; 16 U.S.C. § 1434(e)), the National Oceanic and Atmospheric Administration (NOAA), Office of National Marine Sanctuary (ONMS) staff conducted an evaluation of the progress made toward implementing the Thunder Bay National Marine Sanctuary (TBNMS) Final Management Plan published in August 2009. Sanctuary staff also considered the prioritization of management goals. Based on this review, ONMS has determined that no urgent or immediate revisions to the management plan or the regulations are needed at this time. This evaluation demonstrates the sustained relevance of the goals, objectives, and priorities of the existing management plan.

#### Background

The 2009 TBNMS management plan represents the culmination of a multi-year process, which included extensive public involvement. The management plan is comprised of four action plans, and identifies a series of management strategies and activities under each action plan. The management plan was developed with a 5-10 year implementation horizon. NMSA section 304(e) requires NOAA to conduct a periodic review of the sanctuary management plans and goals (16 USC § 1434(e)). Specifically, NOAA must (1) evaluate the substantive progress toward implementing the management plan and goals for the sanctuary, including an evaluation of the effectiveness of site-specific management techniques and strategies; (2) include a prioritization of management objectives; and (3) revise the management plan and regulations as necessary to fulfill the purposes and policies of the NMSA.

#### Result of Internal Assessment

In fall 2017, TBNMS staff reviewed the substantive progress made toward implementing the four action plans identified in the [2009 TBNMS Management Plan](#), especially the effectiveness of site-specific management techniques and strategies. The result of this internal assessment can be found in the spreadsheet accompanying this memo and is summarized below.

The current management plan is organized into four action plans, and a series of management strategies and actions are identified under each plan (see Table 1):

1. Resource Protection
2. Education and Outreach
3. Research
4. Sanctuary Operations





Table 1: 2009 TBNMS Final Management Plan Action Plans

TBNMS Final Management Plan - Action Plans	
Resource Protection	
	RP-1. Evaluate and assess a proposed expansion of the sanctuary
	RP-2. Assess and evaluate recreational use of sanctuary resources
	RP-3. Increase compliance with sanctuary regulations and other applicable state and federal laws
	RP-4. Increase and encourage access and responsible use of sanctuary resources by fostering greater awareness among recreational user
	RP-5. Preserve and curate maritime heritage artifacts
Education and Outreach	
	ED-1. Increase awareness and knowledge of the sanctuary by developing education and outreach materials for a broader audience
	ED-2. Increase awareness and knowledge of the sanctuary through education and outreach programs
	ED-3. Enhance sanctuary communications to create greater awareness
	ED-4. Maintain and expand Thunder Bay National Marine Sanctuary community presence
	ED-5. Maximize the impact and effectiveness of education and outreach efforts, including interpretation at the Great Lakes Maritime Heritage Center and Trail, through ongoing evaluation
Research	
	R-1. Characterize the sanctuary's maritime heritage resources and landscape features
	R-2. Develop a monitoring program for sanctuary maritime heritage sites
	R-3. Continue partnership with Alpena County George N. Fletcher Public Library to manage the Thunder Bay Sanctuary Research Collection
	R-4. Develop partnerships with local, state, national, and international researchers and organizations to enhance sanctuary research programs
	R-5. Utilize volunteers, students, fellows, and interns for sanctuary characterization, research, and monitoring
Sanctuary Operations	
	SO-1. Develop infrastructure to enhance and maintain the Great Lakes Maritime Heritage Center
	SO-2. Develop infrastructure for research vessels and equipment and field operations
	SO-3. Hire staff and utilize volunteers to support existing, new, or expanded sanctuary operations, resource protection, education and outreach, and research programs
	SO-4. Develop partnerships and identify outside funding to support sanctuary operations and resource protection, education and outreach, and research programs
	SO-5. Enhance operation of the Thunder Bay Sanctuary Advisory Council
	SO-6. Develop procedures to ensure safety for staff and sanctuary visitors

Since the publication of the 2009 management plan, TBNMS has made significant progress in implementing the strategies associated with these action plans. Major accomplishments include but are not limited to:

Resource Protection Action Plan

- On September 5, 2017, the boundary of Thunder Bay National Marine Sanctuary was expanded from 448 square miles to 4,300 square miles. The new boundary includes the

waters of Lake Huron adjacent to Michigan's Alcona, Alpena and Presque Isle counties to the Canadian border. The sanctuary now protects an additional 100 known and suspected historic shipwreck sites. See Strategy RP-1.

- Installed 44 mooring buoys to provide better recreational access to shipwrecks and increase diver safety, while greatly reducing the likelihood of anchor damage. Sanctuary regulations prohibit the use of grappling hooks or other anchoring devices on maritime heritage resource sites if a mooring buoy is present. Mooring buoys are deployed seasonally to avoid ice and storm damage during winter months. See Strategy RP-4.

#### Education and Outreach Action Plan

- Since its designation, the sanctuary has become an economic driver for the city of Alpena and the Northeast Michigan region. The sanctuary's Great Lakes Maritime Heritage Center (GLMHC) attracts nearly 100,000 visitors annually, and is one of the largest attractions in the region. Since the opening of the GLMHC's permanent exhibits in 2008, the facilities and interpretation have been improved and expanded, including the addition of a green roof and a dedicated theater for the *Science on a Sphere*. *Science on a Sphere* provides STEM education through the animated images of atmospheric storms, climate change, and ocean temperature shown on the sphere, which is used to explain complex environmental processes in a simultaneously intuitive and captivating way. Additionally, the GLMHC's theater and education room received substantial technological upgrades. The exhibits, programming and interpretation at the GLMHC significantly expanded. See Strategy SO-1.
- Annually, the community is engaged in learning about the rich cultural history and importance of the ocean and Great Lakes through the Thunder Bay Maritime Festival and Thunder Bay International Film Festival, which draws over 10,000 visitors from across the United States. See Strategy ED-4.
- In addition to hosting annual Regional ROV competitions and mentoring dozens of ROV teams, Thunder Bay hosted the annual MATE (Marine Advanced Technology Education) International Student ROV Competition in 2014. The theme of the competition was "Exploring the Great Lakes: shipwrecks, science, and conservation in Thunder Bay National Marine Sanctuary." The competition brought 59 teams from 13 countries and 18 states and more than 1,000 attendees to Alpena. The competition uses underwater robotics to teach science, technology, engineering and math (STEM) and prepare students for careers in marine technology. See Strategy ED-2.

#### Research Action Plan

- Since 2009, five additional shipwrecks have been added to the National Register of Historic Places (*Pewabic, Norman, Kyle Spangler, Grecian, and Joseph S. Fay*) and another two nominations have been submitted and are under review (*Etruria and M.F. Merrick*.) The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation and provides coordination and support of public and private efforts to identify, evaluate, and protect America's historic and archeological resources. See Strategy R-1.
- With assistance from various offices within NOAA and other partners, remote sensing surveys have been undertaken within the sanctuary and surrounding waters. These surveys have included side-scan sonar, Light Detection and Ranging (LIDAR), and high-resolution aerial photogrammetry surveys. Approximately 72 % of the sanctuary's pre-expansion

boundary (320 sq. miles) and 16% of the sanctuary's expanded boundary area (706 sq. miles) have been surveyed. See Strategy R-1.

- Digitization of the Thunder Bay Sanctuary Research Collection, 15,000 files of donated Great Lakes data and maritime history documents, was completed. Housed at the Alpena County's George N. Fletcher Public Library, staff developed a searchable interface for the collection that allows users to retrieve information using the Michigan Electronic Library or internet search engines. See Strategy R-3.

#### Sanctuary Operations Action Plan

- Established in 2010 by local community leaders, the Friends of Thunder Bay National Marine Sanctuary is a nonprofit 501(c)3 that supports the sanctuary's education programs, community outreach efforts, unique museum experiences, and research. See Strategy SO-4.
- Since 2009, TBNMS has leveraged inter and intra-agency partnerships to bring \$749,750 into the sanctuary in support of research operations and resource protection. See Strategy SO-4.

Staff participated in an online survey to gather context in preparation for a 2.5-day internal workshop in December 2017 to discuss, assess, and rate the level of completion for each of the activities in the management plan, in order to evaluate the effectiveness of site-specific management strategies. Since 2009, 37 percent of all activities within the management plan (21 of 57 activities) were partially or fully completed. Most of the action plans contain activities that were not completed and would benefit from further efforts. This lack of completion does not indicate that staff directed their efforts toward other goals or that the objectives of the management plan have lost relevance. Rather, 72 percent of the plan's activities (41 of 57) are designed as ongoing functions (*e.g.*, monitoring programs, education programs, etc.), so while they are being implemented they are not considered "completed." In a few cases, some activities were rated both as completed and ongoing. For example, one activity is to *"make artifacts available to the public and to professionals via exhibits, loans, and selected access to the artifact collection (Strategy RP-5)."* This has been completed for the current artifacts but will continue to be implemented as more artifacts enter the collection. Staff also prioritized the management objectives by discussing on which activities the sanctuary should spend the most effort in the next few years and whether the current strategies were meeting the objectives laid out in the management plan. Sanctuary management intends to use the results of a survey to the Sanctuary Advisor Council (SAC) to solidify priorities in the future.

The human and environmental setting has not changed significantly since 2009, although the geographic extent of the sanctuary grew significantly in the 2014 expansion. While the sanctuary expanded, the types of activities and programs done by TBNMS have not changed focus but rather expanded geographically. Therefore, most strategies can appropriately continue to be employed as prioritized in the 2009 management plan as they are still relevant to the sanctuary's goals and objectives. The four action plans are still relevant and TBNMS will continue to direct its efforts towards these action plans and pursue strategies to address them. Therefore, the internal assessment showed that most of the action plans within the 2009 management plan accurately reflect current management priorities and resource protection issues for TBNMS and are adequate to continue guiding TBNMS operations and programs at this time. The management plan evaluation showed that all but

one1 of the strategies in the 2009 management plan accurately reflect current management priorities and resource protection issues for TBNMS, and are adequate to continue guiding TBNMS operations and programs at this time.

### Conclusion

The completion of this evaluation of the 2009 TBNMS management plan satisfies the requirements of NMSA section 304(e). Based on this review, no immediate or urgent revisions to the management plan or to the regulations are needed at this time. I will share the results of this evaluation with the SAC at its public meeting on April 24, 2018. While our team has found that the priorities laid out in the existing management plan are adequate to continue guiding TBNMS operations, we intend to begin discussions with the SAC about initiating a process and establishing a timeline to modify and potentially update the management plan.

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Approved as written \_\_\_\_\_  
Denied \_\_\_\_\_

Approved with modifications (*See below*) \_\_\_\_\_  
Request for additional information \_\_\_\_\_

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Director, Office of National Marine Sanctuaries

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Date

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<sup>1</sup> Strategy RP-1 discussed the expansion of TBNMS, which was completed in 2014 and is no longer relevant.



## THUNDER BAY NATIONAL MARINE SANCTUARY

Action Plan	Activity Implementation Status			
	Completed	Partially Completed	Ongoing	No Action
	These activities have been fully implemented as outlined in the 2009 management plan language	Sanctuary staff have started working on these activities, but they have not been fully implemented	These activities are based around the idea of maintaining a continuous or long-term action and that is being done so successfully	Sanctuary staff have not taken action towards the implementation of these activities
Resource Protection	5	2	7	1
Education & Outreach	4	1	14	0
Research	2	0	9	0
Operations	5	2	11	2
<b>Management Plan Totals</b>	<b>16</b>	<b>5</b>	<b>41</b>	<b>3</b>

**Resource Protection Action Plan**

Strategy	Activity	Implementation Status			
		Completed	Partially Completed	Ongoing	No Action
RP-1: Evaluate and assess a proposed expansion of the sanctuary to protect, manage, and interpret additional shipwrecks and other potential maritime heritage resources	Initiate a public process to consider the advisory council's recommendation to expand the sanctuary boundary	X			
	Develop an Environmental Impact Statement to meet requirements under the National Environmental Policy Act, if the analysis conducted in Activity 1.1 results in a recommendation to expand the boundary	X			
RP-2: Assess and evaluate recreational use of sanctuary resources	Monitor use of sanctuary resources by recreational users in order to better understand use patterns and the effects of use on the resources, and to better serve recreational users		X		
RP-3: Increase compliance with sanctuary regulations and other applicable state and federal laws	Ensure sufficient patrol presence in the sanctuary through partnerships and interagency coordination			X	
	Evaluate the use of technology to enhance enforcement efforts				X
	Use interpretive enforcement as a tool to inform users about sanctuary regulations			X	
RP-4: Increase and encourage access and responsible use of sanctuary resources by fostering greater awareness among recreational users	Provide practical information for users such as shipwreck locations and information, access points, regulations, and contact information			X	
	Maintain existing and install additional mooring buoys at shipwreck sites to protect shipwrecks from anchor damage and to facilitate shipwreck access			X	
	Reduce the impact of divers and snorkelers on Thunder Bay's maritime landscape by forming a partnership with commercial operators to educate their customers about maritime heritage resources, the sanctuary, and diving and snorkeling etiquette using a program similar to Florida Keys National Marine Sanctuary's Blue Star Program			X	
	Work with other agencies, local governments, and non-governmental organizations to improve recreational access along Lake Huron		X		
RP-5: Preserve and curate maritime heritage artifacts	Establish membership criteria and procedures for an accessions committee to evaluate donation criteria and artifact handling policies	X			
	Continue development of infrastructure for conservation laboratory and curation facilities for the long-term storage of artifacts	X		X	
	Make artifacts available to the public and to professionals via exhibits, loans, and selected access to the artifact collection	X		X	
<b>Action Plan Sub-Total</b>		<b>5</b>	<b>2</b>	<b>7</b>	<b>1</b>

Resource Protection Activities are COMPLETED	5
Resource Protection Activities are PARTIALLY COMPLETED	2
Resource Protection Activities are ONGOING	7
Resource Protection Activities have received NO ACTION	1

**Education & Outreach Action Plan**

Strategy	Activity	Implementation Status			
		Completed	Partially Completed	Ongoing	No Action
ED-1: Increase awareness and knowledge of the sanctuary by developing education and outreach materials for a	Develop education materials and lessons for students and educators Develop outreach materials for a wide variety of users			X X	
ED-2: Increase awareness and knowledge of the sanctuary through education and outreach programs	Expand education offerings for elementary, secondary, and higher education students and teachers, both at the GLMHC and throughout the state Provide opportunities for shipboard education in the sanctuary Bring Thunder Bay National Marine Sanctuary content to a national audience through distance learning Utilize remotely operated vehicles (ROV) and research technology in sanctuary education			X X X X	
ED-3: Enhance sanctuary communications to create greater awareness	Develop and implement a marketing plan to promote the sanctuary and the Great Lakes Maritime Heritage Center and Trail  Enhance Thunder Bay's Web site to provide quality, up-to-date information about the sanctuary, including implementing Web 2.0 components (social networking, wikis, blogs, etc.) to encourage collaboration and interaction with the public  Sponsor, organize, and participate in outreach opportunities that promote the sanctuary's mission and that allow for dissemination of sanctuary information	X  X		X  X  X	
ED-4: Maintain and expand Thunder Bay National Marine Sanctuary community presence	Continue to develop the Great Lakes Maritime Heritage Trail in Alcona, Alpena, and Presque Isle counties Provide way-finding and promotional signage for the sanctuary and the Great Lakes Maritime Heritage Center and Trail Conduct an assessment of the economic impact of the sanctuary	X	X	X  X	
ED-5: Maximize the impact and effectiveness of education and outreach efforts, including interpretation at the Great Lakes Maritime Heritage Center and Trail, through ongoing evaluation	Create a standing working group of education experts from the sanctuary advisory council, local schools, and agencies to advise on sanctuary education and outreach programs  Seek ongoing input, foster youth leadership, and encourage youth participation in sanctuary education and outreach programs through the "Sanctuary Stewards," a volunteer group comprised of local junior high, high school, and college students  Develop and implement an ongoing system to evaluate and improve education and outreach programs	X		X  X  X	
<b>Action Plan Sub-Total</b>		<b>4</b>	<b>1</b>	<b>14</b>	<b>0</b>

Resource Protection Activities are COMPLETED	4
Resource Protection Activities are PARTIALLY COMPLETED	1
Resource Protection Activities are ONGOING	14
Resource Protection Activities have received NO ACTION	0

**Research Action Plan**

Strategy	Activity	Implementation Status			
		Completed	Partially Completed	Ongoing	No Action
R-1: Characterize the sanctuary's maritime heritage resources and landscape features	Conduct historical and archival research on potential maritime heritage resources and landscape features in and around the sanctuary			X	
	Conduct systematic remote sensing and visual surveys to locate and identify maritime heritage resources and landscape features in the sanctuary			X	
	Prioritize archaeological documentation of identified maritime heritage resources to establish baseline data for long-term monitoring			X	
	Continue to develop the sanctuary's Geographical Information System (GIS) for archaeological, historical, and geographical data management and dissemination			X	
R-2: Develop a monitoring program for sanctuary maritime heritage sites	Develop and implement a long-term monitoring plan to determine the natural and human impacts on maritime heritage sites				
R-3: Continue partnership with Alpena County George N. Fletcher Public Library to manage the Thunder Bay Sanctuary Research Collection	Preserve the Thunder Bay Sanctuary Research Collection and continue to partner with the library to make it accessible to the public Evaluate opportunities to increase Thunder Bay Sanctuary Research Collection holdings	X		X	
R-4: Develop partnerships with local, state, national, and international researchers and organizations to enhance sanctuary research programs	Develop partnerships to characterize the sanctuary's maritime heritage resources			X	
	Develop partnerships with multi-disciplinary researchers and organizations to study Great Lakes ecology including the study of climate change, invasive species, lake biology, geology, and water quality. Also, continue to develop marine observation infrastructure and capabilities to serve as an ONMS Sentinel Site			X	
	Create a standing research working group of multidisciplinary researchers from the sanctuary advisory council, government agencies, academic institutions, and non-governmental organizations to provide input to further develop and implement a comprehensive sanctuary research program			X	
R-5: Utilize volunteers, students, fellows, and interns for sanctuary characterization, research, and monitoring	Recruit, train, and retain volunteers to assist sanctuary staff on various research projects and with the Thunder Bay Sanctuary Research Collection Establish partnerships with universities, colleges, and other institutions to establish a robust program for student research internships and fellowships	X		X	
<b>Action Plan Sub-Total</b>		<b>2</b>	<b>0</b>	<b>9</b>	<b>0</b>

Research Activities are COMPLETED	2
Research Activities are PARTIALLY COMPLETED	0
Research Activities are ONGOING	9
Research Activities have received NO ACTION	0

**Operations Action Plan**

Strategy	Activity	Implementation Status			
		Completed	Partially Completed	Ongoing	No Action
SO-1: Develop infrastructure to enhance and maintain the Great Lakes Maritime Heritage Center	Continue to develop facilities plans for Thunder Bay National Marine Sanctuary Continually strive to ensure that all sanctuary operations are conducted in an environmentally friendly manner as possible Continue to develop and update facilities operations manuals that include an organizational chart, staff position descriptions, Great Lakes Maritime Heritage Center operating and emergency procedures, and sanctuary office procedures		X	X X	
SO-2: Develop infrastructure for research vessels and equipment and field operations	Continue to work with NOAA's Great Lakes Environmental Research Laboratory to safely and efficiently meet Thunder Bay research vessel and research equipment needs	X		X	
SO-3: Hire staff and utilize volunteers to support existing, new, or expanded sanctuary operations, resource protection, education and outreach, and research programs	Hire a full-time education and outreach specialist to assist with expanding education and outreach programs Hire a graphic/web designer to produce sanctuary outreach materials Hire a receptionist for the sanctuary office Hire a marine operations coordinator/captain to operate and maintain sanctuary research vessels Provide staff with opportunities and resources for professional development training Attract, train, utilize, recognize, and retain volunteers to support and enhance sanctuary programs	X	X	X X	X X
SO-4: Develop partnerships and identify outside funding to support sanctuary operations and resource protection, education and outreach, and research programs	Develop, evaluate, and prioritize a list of potential sanctuary partners and ensure proper coordination and communication with new and existing intra- and interagency partners Continue to partner with the National Marine Sanctuary Foundation and local organizations to enhance the sanctuary's ability to implement this management plan	X		X X	
SO-5: Enhance operation of the Thunder Bay Sanctuary Advisory Council	Strengthen the structure of the advisory council by evaluating and amending the advisory council's charter when needed and developing strategies to enhance the council's participation and effectiveness Provide support, resources, and guidance to help the advisory council engage and educate the public about sanctuary management issues and ensure they are a respected voice in the community			X X	
SO-6: Develop procedures to ensure safety for all staff and sanctuary visitors	Continue to partner with Alpena Regional Medical Center's Center for Wound Healing and Hyperbaric Medicine to ensure access to local hyperbaric treatment for dive accidents Develop and implement procedures to ensure the safety of staff and the public Improve marine safety by providing the public with accurate and up-to-date weather conditions	X X		X X	
<b>Action Plan Sub-Total</b>		<b>5</b>	<b>2</b>	<b>11</b>	<b>2</b>

Operations Activities are COMPLETED	5
Operations Activities are PARTIALLY COMPLETED	2
Operations Activities are ONGOING	11
Operations Activities have received NO ACTION	2

**DRAFT**  
**Thunder Bay National Marine Sanctuary (TBNMS) Advisory**  
**Council**  
**-June 19, 2018 Meeting Minutes-**

**Date:** June 19, 2018

**Time:** 6:00 p.m.

**Location:** Great Lakes Maritime Heritage Center (GLMHC), 500 W. Fletcher Street, Alpena, MI 49707

**Meeting Attendees**

**NOAA:** Andrew Augustyn, Chuck Bennett, John Bright, Stephanie Gandulla, Jeff Gray, Phil Hartmeyer, Mary Tagliareni, Sarah Waters, Katie Wolf, Lina Zubieta (Hollings Intern)

**SAC Members:** Roger Baumgardner, Vera Kavanaugh, Nancy Kinney, Steve Kroll, Bill LaMarre, Al Moe, Carol Shafto, Chuck Wiesen

**SAC Alternates:** Michael Beaulac, Shari Davis, Amber Hess, Merl Melton, Ron Meneghel, Don Newport, Ann-Marie Ruder

**Guests:** N/A

**Media:** Jordan Spence, *The Alpena News*

**WELCOME AND ACTION ITEMS**

Carol Shafto called the meeting to order. The council reviewed and approved minutes from the April 2018 council meeting.

Amber Hess is the new alternate representing the Alpena City Council and is here with us tonight. Sue Nielson will become the primary member but she was not able to attend tonight. Welcome Amber!

There was an issue that came up with the processing of the Advisory Council applications. They are being processed and we will hopefully have the results at the next meeting in August. Current members in the positions being recruited will continue to serve in their current capacity until decisions are approved and announced.

After the meeting adjourns tonight, everyone is invited to tour the 55' NOAA Vessel and meet the crew. The vessel is docked behind the *Lady Michigan* behind the Great Lakes Maritime Heritage Center.

Friends of Thunder Bay NMS met with the board members of the Alpena Youth Sailing Club (AYSC), and Alpena Marc. Alpena Marc is giving the AYSC access to the riverfront so they can relocate their dock to the Great Lakes Maritime Heritage Center's side of the river. In the coming weeks, there will be some tree clearing along the river and the AYSC will move their dock and trailer to this side of the river (behind Fish and Wildlife). They are planning on starting their programs the first week of July.

## **FRIENDS OF TBNMS UPDATE – Katie Wolf**

### **Grants:**

National Marine Sanctuary Foundation - \$10,000 *Get into Your Sanctuary* promotion grant was leveraged for a total of \$26,784.

Northeast Michigan Council of Governments - \$5,000 Regional Prosperity Grant was received for social media and website strategy and promotion.

### **Grant Application Submitted:**

Alpena County Youth & Recreation Millage - \$22,000

The grant would continue the *Get Into Your Sanctuary* efforts that were started this year with the Michigan Humanities Council grant. In 2019 the focus would be on youth involvement and include six free community cruises on *Get Into Your Sanctuary* weekend, three free cruises on Memorial and Labor Days and ten Alpena youth group cruises. The public presentation to the Grant Review Committee is on July 9 at 6:50 pm.

### **Fundraiser:**

2 Wooden Boat Raffles

Wooden paddle board with paddle and Wooden Eastport Pram

Raffle drawings on October 8

\$5 a ticket or 5 for \$20

Raised \$690 in raffle ticket sales at the Presque Isle Wooden boat show and will be attending the Soo Locks Engineering days to sell raffle tickets and work at the booth. Contact Katie at 989-884-6210 if you are interested in helping with these events.

### **Sponsorships:**

Thunder Bay Maritime Festival

**Platinum Sponsor** (\$4000)- Lappan Agency, Inc. (3 years in a row!)

**Gold Sponsor:** Alpena Shipwreck Tours

**Silver Sponsors:** Michigan Radio, Alpena Agency, Inc.

**Bronze Sponsors:** Alpena Power, Goodrich Paving, Holiday Inn Express-Alpena, and MidMichigan Health, Well-Connect

**Copper Sponsors:** Alpena Community Credit Union, Bay Athletic Club, Boldrey Senchuk Rouleau & Williams CPAs, Community Foundation for Northeast Michigan, Edward Jones - Chuck Ingle, Kiwanis Club of Rogers City, Meijer, Northland Area Federal Credit Union, Plowmans Collision, Weinkauff Plumbing & Heating, Wolverine Credit Union

### **Thunder Bay Maritime Festival**

**July 4<sup>th</sup>**

10:00 am – 4:00 pm, free community outreach event

Looking for volunteers to staff the Friends booth and sell raffle tickets.

Taste the Local Difference is involved resulting in the event being certified as a Local Certified Food

Event. There will also be a pop-up Farmers Market. We will have other vendors and of course, the whitefish sandwiches from Rogers City.

There is also the Cardboard Boat Regatta starting at 2:15pm.

Thank you to the volunteers and staff for giving up their 4<sup>th</sup> of July to put on such a wonderful community event.

### **July 3<sup>rd</sup>**

Battle of the Paddles

3K Paddle board race, solo kayak & canoe – Thunder Bay River

Dork Brothers- organize and sponsor the event

Craft Beer Tasting from Austin Brothers (two specialty brews for the event) following the race at the Thunder Bay NMS Dive Tank with live music by the Wild Sullys.

### **NANCY FOSTER SCHOLARS PROGRAM – Sarah Waters**

<https://fosterscholars.noaa.gov/>

The National Oceanic and Atmospheric Administration's (NOAA) Dr. Nancy Foster Scholarship Program is administered by the Office of National Marine Sanctuaries. It recognizes outstanding scholarship and encourages independent graduate level research -- particularly by female and minority students -- in NOAA mission-related sciences of oceanography, marine biology and maritime archaeology, including all science, engineering and resource management of ocean and coastal areas. Scholarship selections are based on academic excellence, letters of recommendations, research and career goals and financial need. Scholarship includes tuition, stipend and travel to a NOAA program office to participate in research or other activities.

Thunder Bay NMS will be hosting the Foster Scholars (12-16) from August 13-16 for their orientation and a communications training. They will be staying at the Fireside Inn in Presque Isle. The scholars will be attending the August Advisory Council meeting with a social activity after the meeting for the Advisory Council members to meet the scholars. There are opportunities for the public to meet the scholars and hear about their work:

- Monday, August 13, 2-4pm, Presque Isle Library (Grand Lake)
- Tuesday, August 14 at the TBNMS Advisory Council Meeting
- Thursday, August 16 at 7pm, GLMHC theater

If anyone knows any students interested in this scholarship program please have them contact Sarah. Sarah served as a reviewer of the applications this past year and can provide some insight to interested students.

### **HOLLINGS SCHOLAR SURVEY, Lina Zubieta and Mary Tagliareni**

[www.noaa.gov/office-education/hollings-scholarship](http://www.noaa.gov/office-education/hollings-scholarship)

Lina is between her junior and senior years at the University of South Florida in St. Petersburg, Florida, and is a marine biology major with a minor in business management.

The Hollings Scholarship Program provides successful undergraduates (~120 to ~150 students) with awards that include academic assistance (up to \$9,500 per year) for two years of full-time study and a 10-week, full-time paid (\$700/week) internship including travel and housing at a NOAA facility during the summer between their junior and senior years. The students also present at the Annual Science and Education Symposium in Silver Spring, Maryland in August.

Lina is interning at Thunder Bay NMS this summer conducting research. Her research is a customer satisfaction and expenditures/economic survey of visitors to the Great Lakes Maritime Heritage Center and on the *Lady Michigan*. The survey consists of a short screener survey, for either a resident of the Alpena Region or a visitor, and a lengthier survey that can be mailed back or completed on-line. She will also be doing data entry and



analysis. The sampling plan has a goal to complete 250 screener surveys per month for 4 (four) months with a 40% return rate for the mail back/on-line survey. We may need volunteers to continue Lina's work after she leaves to meet these requirements.

Lina's study is a pilot study for a larger study that Thunder Bay NMS is hoping to have conducted next summer or the summer after that. Jeff Gray and Russ Green are having preliminary discussions with the economists at the Office of National Marine Sanctuaries, Larry Molnar from the University of Michigan, National Marine Sanctuary Foundation and other partners in the community. There are tentative plans for a kick-off planning meeting in Alpena towards the end of July. In July, we will be reaching out to many of our partners (e.g., state parks), other attractions (e.g., museums, lighthouses), facilities, the Cities, Chambers of Commerce, CVB, etc. The [Economic Impact Analysis for the NOAA Thunder Bay National Marine Sanctuary](#) study that was conducted in 2012/2013 is being looked at as a starting point for a new study. The Office of National Marine Sanctuaries is excited and very supportive of this effort. There are lots of anecdotal stories but we will be looking for hard numbers that can be used to show the success and help tell the story of Thunder Bay NMS in the Alpena Region.

There were questions and discussions about funding of the upcoming survey and Chuck Wiesen recommended contacting the Northeast Michigan Community Foundation about funding ideas.

## **SANCTUARY UPDATE**

### **Sarah Waters**

Thunder Bay NMS is refreshing many of the exhibits in the Great Lakes Maritime Heritage Center. Some are already installed while others are in the process with target completion dates this summer.

#### Boundary Expansion Exhibit

Funding provided by National Marine Sanctuary Foundation. Maps, new wrecks and text was updated. Installation is complete.

#### Partners in Preservation Exhibit

Introductory information, new language and branding information was updated. Installation is complete.

#### Map Exhibit and Shipwreck Century Gallery Exhibit (on the mezzanine)

Maps and wrecks were updated. Shipwreck Century Gallery Exhibit was updated and enlarged for easier reading. Installation is complete.

#### National Marine Sanctuaries System

New map with information on each site in the system. Panels are on-site and need to be installed.

#### New Mobile App

Funding provided by National Marine Sanctuary Foundation. In the Great Lakes Maritime Heritage Center and on the *Lady Michigan* the app provides images and text for visitors with hearing loss, or deaf visitors. Can be updated with additional information.

#### Thunder Bay Reef Restoration Project Exhibit

New exhibit with a targeted installation for this summer. Compliments existing and future planned exhibits at the Besser Museum. Features a mural, underwater photo of the reef, information on the restoration process, models of fauna, video and a model of a SCUBA diver.

#### Marine Debris Exhibit

Funding provided by NOAA's Marine Debris program. New exhibit with a targeted installation for this

summer. Features a mural, exhibit pieces (latrines) with different types of marine debris (plastics) that will be highlighted along with information on microplastics, why marine debris is a problem, how it affects wildlife both locally in the Great Lakes and in Papahānaumokuākea Marine National Monument.

#### Great Lakes Map (on curved wall)

New exhibit with a targeted installation for this summer. In addition to the map of all the Great Lakes it will provide an opportunity to feature other types of research in the Great Lakes. Designed for information to be easily updated.

#### Website Update

[www.thunderbay.noaa.gov](http://www.thunderbay.noaa.gov) is scheduled to be refreshed in 2018. It will be optimized for mobile devices. Will also be updating the Advisory Council page on the site, Jean will be requesting additional information from members over the next few months.

### ROV Competition

Great Lakes Regional Competition at Thunder Bay NMS went really smoothly.  
2018 MATE International ROV Competition, June 21-23 in Washington  
Alpena High School Team Representing the Great Lakes

### Stephanie Gandulla

#### Lecture Series

June 28, 7pm

*Maritime Archaeology in the St. Clair Flats*

Daniel Harrison

July 26, 7pm

*Historical Research in Presque Isle: Kamp Kairphree, Bell Cemetery, and Rockport Revealed*

Judith Kimball & John Porter

### Cinema Series

July 12

Paddling Film Festival - \$8.00

The Paddling Film Festival is an international adventure film tour presenting the world's best paddling films of the year – whitewater, sea kayaking, canoeing, SUP, action and lifestyle – in more than 120 cities and towns across Canada, United States and around the world. With 20 inspiring paddling films shortlisted for the World Tour, including the 10 festival category winners, audiences will see hairy whitewater action, sea kayakers exploring remote coastlines, northern river canoe expeditions, international river travel films, motivating environmental documentaries, grueling kayak fishing battles and hilarious short films capturing the lighter side of paddling life. Attracting paddlers and outdoor enthusiasts, audiences can expect a fun, social and entertaining event inspired by compelling films.

Tickets are \$8 and can be purchased online or at the door

<https://squareup.com/store/sanctuarystore/item/reel-paddling-film-festival-1>

July 21

Rogers City Theater

*Crossing Lake Huron* and *Big 5 Dive* will be shown

### Media Report

Stephanie reviewed some of the regular media shows that staff are on promoting Thunder Bay NMS and events.  
WBKB's *Live in the Morning*

True North Radio Network *Morning Mindbender*  
HITS-FM *This Week in TB* \*\*see below  
HITS-FM *Hits Happenings*

#### *On the Deck*

WBKB TV's 12 part series  
Features a different wreck each week.  
Next week is on the *Choctaw* featuring Pat Labadie

\*\* *This Week in Thunder Bay* Stories of the Shipwrecks

HITS FM 103.3 Tawas and 94.9 Alpena

Features a different shipwreck each week and is narrated by Friends of Thunder Bay NMS board members. These are also being made into podcasts. These are being aired 25 times a week.

### **Get Into Your Sanctuary**

We are working with the film and production crew at the Office of National Marine Sanctuaries to produce vignettes on specific recreational activities to *Get Into Your Sanctuary* (e.g., visiting lighthouses, paddling, diving). Stephanie showed the draft Visiting Lighthouse clip. She also showed the *Stories from the Blue* segment on Hannah MacDonald- <https://www.youtube.com/watch?v=ywpJKkkN8ug&feature=youtu.be>.

### **Great Lakes Maritime Heritage Trail Update- Jeff Gray**

This has been an ongoing project, currently working on over 100 interpretive signs that will be installed between all three counties (Presque Isle, Alpena and Alcona) with a few as far south as Tawas. The project has three purposes: 1) interpret individual sites and maritime heritage assets, 2) provide wayfinding to wrecks and lighthouses, 3) interconnectivity between resources (wrecks, lighthouses and museums.) Sign graphics will be submitted in the next few weeks with installation in the fall. We don't think of this as a project but as a program. Signage is the first step but we are looking forward to adding videos and other assets. The Trail was actually started back in 2003 with the Jennifer Granholm Cool City Grant which was used to put in signs behind our old location in the Federal Building. That was the first time we used the phrase Great Lakes Maritime Heritage Trail. We also put about 25 signs along the Thunder Bay River here in Alpena. There will be some opening celebrations as installations are complete. The partners (state parks, marinas, lighthouses, county parks, etc.) will be doing the installation of the signs on their properties.

Don Newport asked about Thunder Bay NMS, GLMHC and Alpena Shipwreck Tours info in the rest areas along the interstate. Jeff responded- Andrew Augustyn ships out Alpena Shipwreck Tours brochures to a service that distributes them. Andrew will follow up on it. We have another brochure in the works.

### **Great Lakes Maritime Heritage Center- Andrew Augustyn**

Recently hired and trained six Visitor Experience Specialists for in the store and they also serve as mates on the *Lady Michigan*. The store has been stocked for the summer season with lots of new merchandise.

#### Recent Activity in the Center

12 rentals of the facility between May and June (e.g., birthday parties, graduation parties, Leadercast, Michigan Association of Township Supervisors)

Three group tours

End of the School Year- 20 school groups consisting of 1,000 students (e.g., classroom cruises, Science on a Sphere, ROV in a Box)

Alpena High School Senior Class- Jeff Mindock worked in the middle of the night so the students could come in and do a selfie scavenger hunt at 3:00 am as part of their Grad Night "lock in." on June 2.

Summer programs start next week- <http://thunderbayfriends.org/index.php/summer-programs/>

There are a variety of programs being offered in addition to the Lecture and Cinema Series including ROV in a Box Drop Ins, July 5 Beach Clean-up.

### **PUBLIC COMMENT**

Nancy Kinney- we are in the middle of a ROV Build with 16 kids at the Presque Isle library. Tomorrow they will test their creations at the Harbor Association's pool.

Carol Shafto's grandson is signed up for 2 programs next week.

**Adjourn** - The meeting was adjourned at 8:02pm.

### **2018 TBNMS/SAC Schedule of Upcoming Meetings:**

August 14

October 16

December 18

All meetings are 6:00-8:30p.m. at the GLMHC unless otherwise specified.

**Thunder Bay National Marine Sanctuary (TBNMS)**  
**Advisory Council**  
**-August 14, 2018 Meeting Minutes-**

**Date:** August 14, 2018

**Time:** 6:00 p.m.

**Location:** Great Lakes Maritime Heritage Center (GLMHC), 500 W. Fletcher Street,  
Alpena, MI 49707

**Meeting Attendees**

**NOAA:** Rear Admiral (RDML) Timothy Gallaudet, John Armor, Matt Brookhart, Jeff Gray, Dennis Donahue, Jesse Feyen (GLERL deputy), Kate Thompson, Nick Zachar, Dayna Riganese, Liz Weinberg, Steve Gittings, Stephanie Gandulla, Chuck Bennett

**SAC Members:** Roger Baumgardner, Vera Kavanaugh, Nancy Kinney, Steve Kroll, Al Moe, Donald Newport, Tom Rayburn, Chuck Wiesen

**SAC Alternates:** Michael Beaulac, Thomas Brindley, Jim Dessenberg, Robert Doyle, Patrick Labadie, Ann-Marie Ruder

**Guests:** Nancy Foster Scholars – Richard Coleman, Sarah Kienle, Alex Avila, Jessica Hale, Andrea Kealoha, Angela Szesciorka, Samara Haver, Nissa Kreidler, Anna Robuck, Grace Casselberry, Carina Fish, Kathryn Hewett

**Media:** None

**WELCOME AND ACTION ITEMS**

Chuck Wiesen called the meeting to order. Introduction of all council members. Jeff Gray gave special welcome to Pat Labadie who is a former Thunder Bay National Marine Sanctuary staff member and is now a representative on the advisory council.

The council reviewed and approved minutes from the June 2018 meeting.

There will be orientation for new members, Jean Prevo will be contacting you

Jeff Gray introduced John Armor, Director of the Office of National Marine Sanctuaries.

## **NOAA AND ONMS LEADERSHIP**

John Armor, Director ONMS – John Armor, thank you to SAC members. You are part of an elite group of advisors; 440 dedicated women and men that sacrifice their time to give advice on how to manage our National Marine Sanctuaries.

John introduced RDML Tim Gallaudet, confirmed by Senate in 2017, and spoke about his background.

John then introduced Matt Brookhart, who has 20 years of service with the Office of National Marine Sanctuaries, currently the Director of the Eastern region.

RDML Tim Gallaudet, Ph.D., USN Ret., Assistant Secretary of Commerce for Oceans and Atmosphere and Acting Under Secretary of Commerce for Oceans and Atmosphere National Oceanic and Atmospheric Administration – The president released proclamation in June, oceans month. Great advantages that ocean, Great Lakes, and coasts provide our economy.

NOAA provides observation technology, forecasting, management

Blue Economy defined: involves the things we do to support maritime transportation, fisheries, tourism and recreation (that's our sanctuaries.)

Stats:

- Maritime activity increased around the world over 400%
- We import 90% of the seafood we consume, but we have the largest EEZ (Exclusive Economic Zone) in the world

The transformation that has occurred in Alpena is inspiring, and good things are happening, such as Mallows, Potomac, and Monitor expansion. Great opportunity for America, in terms of increasing economics, but also using our natural and cultural resources to benefit our American people.

NOAA can bring both political parties together, to benefit.

2009 study that said the Great Lakes provided to the country 62 billion in wages and over a million and a half jobs, probably double that today. We want to expand more, but in a sustainable way.

Thunder Bay NMS is a role model for how we can do all the above!

## **SANCTUARY UPDATE**

John Armor and Matt Brookhart gave an Office of the National Marine Sanctuaries update:

Recognized Dr. Steve Gittings, and Kate Thompson, Division Chief for Education and Outreach.

John Armor then discussed the Strategic Plan... not your standard government plan! What stands out is our Core Principles. Thunder Bay NMS is critical to what we do. We often use Alpena to show the value added that sanctuaries can be. Very proud of the plan. It's meant to be a five year document, taking us to our 50th anniversary.

### **Major Projects:**

-8 billion (conservative) generated in economic activity in NMS across the system. Most from recreation and tourism; these places are so special and we want people to access.

Matt Brookhart:

Updates on the idea for more national marine sanctuaries. Unprecedented time in the growth of the system.

Four major initiatives: 2 new sites, Malloes Bay/Potomac and Wisconsin and 2 major expansions, Flower Garden Banks NMS and Monitor NMS.

Merchant Marine and Navy particularly interested in Monitor. He encourages any of you to check out website and the amazing story, about the national battlefield. Finalizing the environmental documents now.

Admiral has taken his own time to talk to people regarding Malloes Bay.

Regarding Wisconsin, Walker got cold feet. Election season matters, but we remain hopeful. Open up conversation again. We still look at this as a magnificent thing... the WI communities looked at Thunder Bay NMS, and said we want one of those. We can't give enough thanks to Russ Green for all of his work

John Armor: major project Florida Keys NMS (actually designated by congress in 1990). Seven years to write Management Plan and Zoning Scheme.

Other projects include many science and monitoring projects throughout ONMS. We're really starting to look at visitor use.

The budget outlook for sanctuary system is good.

We are a very bipartisan program. Roughly \$50 million budget for the program.

Personnel updates: Armor and Brookhart fairly new to roles, new Deputy Director. Armor taking on bigger assignment as NOS Deputy.

Matt Brookhart: 4 vacancies in Superintendent roles. Stellwagen Bank NMS just hired to fill this position. Gray's Reef NMS and the Hawaiian Islands still have superintendent positions that need to be filled.

Matt Brookhart acknowledged Jeff Gray for supporting Russ Green in Wisconsin.

Don Newport asked question: how does ONMS fit into worldwide system of protecting ocean, etc.?

RDML Tim Gallaudet answered: NOAA engaged heavily internationally, fisheries, etc. a whole international affairs department in NOAA. For example, Costa Rica wants to do a sister city. John Armor added that ONMS has relations with Chile, Dominican Republic, and ONMS is part of a number of international forums. We recognize that managing these sanctuaries is not an end in of itself, but a way to a bigger end.

Matt Brookhart added, that the international connections all have some biological connections. Another idea that we're exploring is the cultural side! Battle of the Atlantic didn't stop, we're speaking with UK and Germany.

Steve Kroll added that the MPA program is involved in connecting internationally as well.

Alex Avila (Nancy Foster scholar) asked RDML Tim Gallaudet: sanctuaries program has done a great job, but not necessarily all of NOAA line offices. What is NOAA doing to strengthen connections to scientists and fisheries?

RDML Tim Gallaudet said, great question. But not true across board, especially fisheries. Good example is Alaska. Also, weather service, and forecasting. Much less loss of life last hurricane. NOS another good example of line offices working well with citizens.

Jeff Gray - thank you. We're often referred to as One NOAA. Introduced Jesse Feyen, Deputy Director of the Great Lakes Environmental Research Lab. Jeff also introduced Dennis Donahue, amazing partner, a mentor, and a big part of the green initiative.

Not time for a full sanctuary update this meeting but touched on a few highlights, including Maritime Festival.

Check out new *Earth Is Blue* magazine, article about Hannah MacDonald.



Showed the short film Hannah MacDonald *Stories from the Blue*.

Jeff Gray introduced Hannah MacDonald. She is a great representative of the sanctuary.

Hannah MacDonald: First thanks to Nick and Kate for capturing video. Thank you to Shipwreck Alley program, but before that, thank you to Steve Kroll for scuba certification and showing the importance of the Great Lakes through scuba diving. And thank you to Mr. Caplis, for connecting me to people at Thunder Bay NMS. Also thank you to Ocean for Life program, the program that connected me to ocean and ONMS system. They empowered me with the resources to become an ocean advocate.

Thank you to Thunder Bay NMS staff. Everybody here has set me on my path. And to the Hollings Scholar program at Olympic Coast. It's really great to be a youth in the system. I hope to bring more youth in.

Jeff Gray introduced Kate Thompson. She was the very first person to live and work here after the sanctuary was designated. Her fingerprints are on every program we do. Welcome home Kate!

Kate Thompson: I see so many faces that I recognize and you are awesome people. Alpena is my home. Sincerely appreciate the SAC, an amazing group of people that has molded what you see here.

Kate is here representing Dr. Nancy Foster Scholarship, diversity of people working in science.

## **NANCY FOSTER SCHOLARS PROGRAM**

Two scholar lectures:

- Flower Garden Banks NMS coral die off
- Elephant seals

**Public Comment** – None.

**Adjourn** - The meeting was adjourned and the attendees went for a sanctuary tour on board the *Lady Michigan*.

## **2018 TBNMS/SAC Schedule of Upcoming Meetings:**

- October 16

- December 18

All meetings are 6:00-8:30p.m. at the GLMHC unless otherwise specified.

**Thunder Bay National Marine Sanctuary (TBNMS)**  
**Advisory Council**  
**-December 18, 2018 Meeting Minutes-**

**Date:** December 18, 2018

**Time:** 6:00 p.m.

**Location:** Great Lakes Maritime Heritage Center (GLMHC), 500 W. Fletcher Street,  
Alpena, MI 49707

**Meeting Attendees**

**NOAA:** Andrew Augustyn, Chuck Bennett, Ellen Brody, Russell Green, Stephanie Gandulla,  
Phil Hartmeyer, Jeff Gray, Jean Prevo, Meaghan Schwartz, Sarah Waters, Katie Wolf

**State of Michigan:** None.

**SAC Members:** Roger Baumgardner, Mary Christensen-Cooper, Beach Hall, Nancy Kinney,  
John Kozlowski, Steve Kroll, Don MacMaster, Susan Nielsen, Chuck Wiesen

**SAC Alternates:** Michael Beaulac, Thomas Brindley, James Dessenberg, Robert Doyle, Pat  
Labadie, Merl Melton, Ron Meneghel, Melissa Olsen, Anne Marie Ruder

**Guests:** Michelle Cornish, John Caplis, Hunter Ballor, Gloria Kroll, Ande Fisher, Derred  
Weitting, Jada Kroll, Mark Kinney, Elaine R. Marzean, Michael Meredith, Sr.

**Media:** N/A

**WELCOME AND ACTION ITEMS**

Carol Shafto called the meeting to order. The council reviewed and approved minutes from the  
October 2018 council meeting.

The council reviewed and approved the proposed 2019 meeting dates (attached).

**ALPENA PUBLIC SCHOOLS *SCIENCE IN THE SANCTUARY* –**

***Ande Fisher, Gloria Kroll, Hunter Ballor and Derred Weitting***

Students from Alpena Public Schools *Science in the Sanctuary* class presented to the council on  
this new class that is focused on project based learning. They compared traditional classes to  
project based style of learning.

What is Project Based Learning?

Teaching that engages

Technology that enables

Culture that empowers

Outcomes that matter:

- Knowledge and thinking

- Written and oral communication

- Collaboration

- Agency

Why Project Based Learning?

- Inspires

- Exciting

- Out of the box

- Connections

- Relationships

- Prepares us for jobs that aren't even created yet

- Learning never ends

They spoke about their most recent project based on the proposed sanctuary in Wisconsin.

Twenty-three groups participated in the project and 22 of those groups felt that Wisconsin should be a sanctuary.

Next project is going to focus on the Thunder Bay Film Festival and its *Exploration* is theme.

### **FISHERIES HERITAGE GROUP – *Brandon Schroeder, Michigan Sea Grant***

Brandon Schroeder of Michigan Sea Grant spoke about the Great Lakes Fisheries Heritage Trail project and its newly launched website <http://www.miseagrant.umich.edu/explore/fisheries/great-lakes-fisheries-heritage-trail/>. The project is a network of partnerships that have been meeting annually since 2012. Their goal is to connect people to fisheries heritage. SAC member Ron Meneghel has been involved in this project. Thunder Bay National Marine Sanctuary staff has also been involved in this partnership.

### **SANCTUARY UPDATE – *Jeff Gray***

Jeff Gray touched on the potential government shutdown. If the government does shutdown the building will be closed and all of the programs scheduled will have to be canceled.

**Management Plan Review Update** – Russ Green will be working with staff on the management plan review this week. We are hoping to have a better update at the February meeting and will dig into the review at a later meeting.

Russ Green, Deputy of Thunder Bay NMS and Ellen Brody, Regional Coordinator are in Alpena this week meeting with the staff.

Russ gave a quick overview of the Wisconsin Lake Michigan project. He and Ellen had been working on it since 2015 until March 2018 when the governor of Wisconsin rescinded the project. At the moment NOAA is not taking an action on it, but they are ready to move forward if things change. Will continue to update as things progress.

Ellen Brody has been working with communities around the Great Lakes that are interested in having a sanctuary. In 2014, communities had the opportunity to submit nominations. There has been lots of interest in the lakes and Ellen gives credit to Thunder Bay National Marine Sanctuary for sparking the interest from the other communities.

**PUBLIC COMMENT** – None.

**Adjourn** - The meeting was adjourned at 7:50pm for the public Christmas Tree Ship Presentation given by Russ Green.

**2019 TBNMS/SAC Schedule of Upcoming Meetings:**

February 25 – CANCELED

April 16

June 18

August 20

October 15

December 17

All meetings are 6:00-8:30pm at the Great Lakes Maritime Heritage Center unless otherwise specified.