

**Thunder Bay National Marine Sanctuary
Advisory Council
-March 10, 2020 Meeting Minutes-**

Date: March 10, 2020

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, Stephanie Gandulla, Jeff Gray, Phil Hartmeyer,
Jean Prevo, Sarah Waters, Katie Wolf

State of Michigan: Wayne Lusardi

NEMI/GLSI: n/a

SAC Members: Roger Baumgardner, Jim Dessenberg, Nancy Kinney, Bill LaMarre,
Don MacMaster, Don Newport, Tom Rayburn, Ann-Marie Ruder, Chuck Wiesen,

SAC Alternates: Michael Beaulac, Robert Doyle, Pat Labadie, RC Laugal, Timothy Lee,
Merl Melton, Ron Meneghel, Melissa Olsen, Beach Hall

Media: N/A

Guests: John Caplis, Michelle Cornish, Tori Eller, Connor Caplis

WELCOME AND ACTION ITEMS

Roger Baumgardner, Vice-chair, called the meeting to order. The council reviewed and approved the minutes from the December 17, 2019 council meeting.

Jeff Gray gave an overview of the steps Thunder Bay NMS is taking to prevent the spread of the COVID-19 virus (see attached.) The Office of National Marine Sanctuaries are preparing guidance for building closures, if necessary, and will be conducting a program-wide telework test on Thursday this week.

ALPENA HIGH SCHOOL *SCIENCE IN THE SANCTUARY*

Alpena High School instructors John Caplis and Michelle Cornish, along with students Tori Eller and Connor Caplis presented on the project-based learning class *Science in the Sanctuary*.

Project-based learning is:

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

Connections

Relationships

Learning never ends

The class's first project was "Say No to NOAA." The class is broken into groups of 3-4 students. Each group needed to research and decide if NOAA's Thunder Bay NMS was a benefit to the community. They presented their outcomes with podcasts, speeches and/or videos. An example of a podcast that was created can be found at <https://anchor.fm/sam-cook311/episodes/Science-in-the-Sanctuary-Student-Podcast-e82sdp/a-au5g86>.

The second project was creating a film for the Thunder Bay International Film Festival student competition. The students showed the following films during the meeting:

Our Sanctuary, Thunder Bay National Marine Sanctuary

<https://www.youtube.com/watch?v=3pthiGM9v9w>

The Mystery of the Besser Bell Wreck by Connor Caplis and River Servia

<https://www.youtube.com/watch?v=BF53V9f16AI>

Their current project is "Get Into Your Sanctuary." Groups will create short stories, along with trading cards, dive slates, water bottles and other items that will potentially be sold in local businesses including the Sanctuary Store. Money from the products will go to their class to help with field trip costs and getting students into the sanctuary. Field trips planned for this year are the glass bottom boat, an ROV build and learning to scuba at the Plaza Pool.

Doing a Project v. Project-based Learning

The students spoke about the difference between just doing a project and engaging in project based learning.

Projects:

- Can be done alone
- About the product
- Teacher-directed
- Lack real-world context
- Occur after the “real” learning
- All projects have the same goal

Project-Based:

- Requires collaboration & teacher guidance
- About the process
- Student-directed
- Based on real-world experiences/problems
- Real learning occurs throughout the project
- Student choices to determine the outcome

The students feel that project-based learning engages more, gives a deeper understanding of the project being researched and as a result they learn more than in a traditional classroom. The project is set up so they are working toward an actual goal, like a real world setting as opposed to just taking a test.

The students are learning collaboration, communication, public speaking and conflict resolution, preparing them for the workforce. They are also using these skills for working as a team in other classes, extracurricular activities and groups. It has helped them learn how to have other people’s perspectives in mind when working together.

As a citizen, Tori says it taught her how much NOAA and the sanctuary have done for the Alpena community. Connor was able to experience a dive on the *Portland* wreck site, an opportunity he may not have otherwise had. He is also more aware of climate change and other things within NOAA’s mission. The class has helped them become stewards and feel more connected to the community. They both agreed that a regular class wouldn’t give him that kind of local connection.

UNITED STATES COAST GUARD (USCG) –BMC Tyler Benson and Tom Swanson

BMC Tyler Benson is stationed at USCG St. Ignace station. Their area of responsibility covers 700 miles of coastline which includes Lake Michigan and Lake Huron, as well as the Mackinac Bridge, Mackinac Island, \$10 billion in cargo, 900,000 ferry passengers and 45,000 bridge walkers. The Alpena USCG Station covers Stoneport to Sturgeon Point.

USCG Station St. Ignace and USCG Station Alpena currently have a 45’ response boat and a 29’ response boat. Other assets available to them are the Coast Guard Cutters *Biscayne Bay* and *Mackinaw* and the HH-60 helicopter out of Traverse City, Michigan.

There are three bordering stations Sector Sault Ste. Marie, Station Charlevoix and Station Tawas.

Their missions are law enforcement, search and rescue, active ice rescue, including training area fire and law enforcement agencies in ice rescue, and drug interdiction. Their overall main goal is ensuring public safety.

USCG Alpena Station will be manned every weekend May through October and on and off through weekdays. They will avoid creating a weekday pattern so boaters don't become accustomed to when there is a USCG presence in the area. They are also looking into the possibility of using reservists to staff the Alpena Station. The USCG Auxiliary will continue to help out as well.

Area of Interest:

Thunder Bay National Marine Sanctuary – The possession of any marine artifact in this area is prohibited. Crew trained to make sure no artifacts on their boats. Educating law enforcement officers, not just standard boarding also doing spot checks for artifacts.

Other Areas of Interest:

Bombing Range – possibility of unexploded ordinance in this area – No Anchoring

Lake Trout Refuge –

Refuge area closed to Lake Trout harvest

Recreational fishing in this area should be reported

Take note of position, time, vessel description, etc.

Event of Interest:

Annual Brown Trout Festival – fisherman possibly encroach on lake trout refuge

USCG St. Ignace and Alpena Stations work with the following partners:

CRTC Air National Guard Base Combat Readiness Training Center Alpena

NOAA/Thunder Bay NMS

Michigan State Police – Alpena Office, D/Sgt. Steve Harshberger

Counties – Presque Isle, Alpena, Alcona

Michigan DNR Conservation Officers and Special Investigations Detective

Sault Tribe

Tom Swanson Special Agent for the USCG Investigative Service spoke about his position as an “intel guy.” His goal is to make contact with partners and find out what is important. He meets once a month with local law enforcement. Last summer he worked with Jeff and sanctuary staff to conduct a dry run in the sanctuary.

Tom feels that the sanctuary advisory council is a great wealth of knowledge, great stewards of the sanctuary and would be happy to hear from any of you. He is concerned with anything you are concerned with. (Tom's business card is attached.)

The SAC had a discussion with the USCG representatives about the procedures/protocols of what happens when they board a boat and find artifacts. Chief Benson said they stay with the boat and notify Sault Ste. Marie, then they contact the special agents and local agents who will assist on the scene. The diver could be subject to fines down the road or may even be arrested on the spot. It could also result in confiscation of dive gear, boat, etc., depending on the value of the artifact. Tim Donovan Assistant Director from NOAA's Northeast Enforcement division will also be notified.

FRIENDS OF THUNDER BAY NATIONAL MARINE SANCTUARY (FTBNMS)

***Lady Michigan* Update – Andrew Augustyn**

The boat has been fixed and the 2020 season will begin May 22 and run through October 4. Tickets are on sale now.

Grants Update – Katie Wolf

Pending Grants:

Michigan Humanities Council: To support TBNMS 20th Anniversary and Maritime Festival - \$15,000

Awards to be announced in early June

Lake Huron Forever – GLOW Grant:

To expand Green Roof Deck and Stormwater Management - \$25,000

Awards announced soon

Expanding the roof deck will double the space for having events and education programs.

Total project is \$170k – already have funding for much of the project.

Waterfront Project Update:

| | |
|------------------------------------|-----------|
| MATCHING FUNDS GOAL: | \$433,380 |
| Besser Foundation | \$200,000 |
| City of Alpena (in kind) | 75,000 |
| Rotary Club of Alpena | 50,000 |
| First Federal of NE MI Legacy Fund | 33,000 |
| Alpena Youth & Rec | 57,040 |
| MidMichigan Health | 5,000 |
| Bruce Dietz | 5,000 |
| Mike Kelly | 1,000 |
| Lake Carrier's Association | 1,000 |
| TOTAL TO DATE: | \$427,040 |

Important dates:

Presque Isle Wooden Boat Show – June 20

Battle of the Paddles – July 3

Maritime Festival – July 4

Get Into Your Sanctuary Weekend & Surf's Up – July 31-August 1

Recent events:

The Friends of TBNMS Board participated in the Alpena Business Expo. During the expo they were able to recruit new Friends' members.

The Friends of TBNMS along with Thunder Bay NMS staff participated in Alpena Rotary's "Brew on the Bay." Funds raised at this event will support the waterfront project and the city lighting on the boardwalk.

Jeff Gray, Katie Wolf and Stephanie Gandulla met with US Senator Stabenow.

SANCUTARY UDPATE**Education Update – Sarah Waters****New Thunder Bay NMS curriculum materials to be available this year:**

6-8 grade (middle school/junior high) virtual reality curriculum from the Office of National Marine Sanctuaries (ONMS): official launch on April 21, 2020. There are five lessons and they cover the following regions: Florida Keys, Channel Islands, Hawaiian Islands, Thunder Bay (shipwreck *D.M. Wilson* featured) and the entire National Marine Sanctuary System. There was an opportunity for teachers to pilot the curriculum that was sent out to Thunder Bay NMS networks.

PADI dive training for 8-12 year olds - ONMS has established a relationship with PADI organization (Professional Association of Diving Instructors) to create "modules" that align with the PADI curriculum for student dive training and feature national marine sanctuary sites. Thunder Bay NMS has provided final edits to the ONMS for the Thunder Bay NMS module.

Great Lakes Bay Watershed Education Training (B-WET):

Sarah Waters is now a federal program officer for the Great Lakes B-WET program (grants.)

NOAA announced \$866,487 in funding for 11 projects under the Great Lakes B-WET program. Great Lakes B-WET is funded by the Great Lakes Restoration Initiative.

The 11 funded projects throughout the Great Lakes basin are:

- City of Chicago Board of Education: *Calumet Is My Back Yard: Burnham Park Expansion*
- Eastern Michigan University: *Stormwater Stewards, Youth-Led Responses to Community Watershed Challenges*
- Flint River Watershed Coalition: *Flint River Bridges, Year Two*
- Friends of the Rouge: *The Rouge Education Project*

- Grand Valley State University: *Deer Creek GEEKS*
- Hope College: *K-12 Students Jump into West Michigan Watershed*
- Huron Pines: *Terrestrial Systems Today for Healthy Waters Tomorrow*
- Lake Superior State University: *Developing Great Lakes Stewards through Place-making in Urban and Rural Classrooms*
- Muskegon Area Independent School District: *The Power of Place: Connecting Students to Their Watershed*
- St. John Fisher College: *Our Lakes, Streams, and Rivers: Experiential Education and Stewardship in the Lake Ontario Watershed*
- University of Toledo: *Great Lakes Student Research Campaign: Engaging Students and Teachers in Authentic Watershed Studies*

The NOAA B-WET program offers competitive grants to support existing environmental education programs, foster the growth of new programs, and encourage development of partnerships among environmental education programs within watershed systems. The criteria for these awards emphasize Meaningful Watershed Educational Experiences (MWEEs): sustained, hands-on, environmental activities that are aligned with academic learning standards.

The Notice of Funding Opportunity for FY21 Great Lakes B-WET grants will be released in April. For more information, including previous years grantees, visit <https://sanctuaries.noaa.gov/bwet/greatlakes/>.

Higher Education update:

Student projects ending since the December SAC meeting: GIS (Geographic Information System) mapping internship with Southeast Community College wrapped up. Alpena student Ben Kurtz put in 180 hours over 16 weeks to fulfill his internship requirements for SECC by creating an ArcGIS storymap for Thunder Bay NMS using the recent trails project sites/signage. His storymap will be used on the homepage of our new Thunder Bay NMS website to help visitors navigate along the coast. Each map point where a trail sign is located also links to the shipwreck profiles and the US23 Heritage Route trip-building website. Here is an example of what the storymap looks like:



Current student projects (ends April 2020): University of Michigan students Mark Ramirez, Masters Student, School of Information and Cait Dyche, Doctoral Student, Department of Communications & Media are working on a University of Michigan Museum Studies Program capstone class project for Thunder Bay NMS Great Lakes Maritime Heritage Center. They are developing an exhibit proposal for the visitor center. More about the U of M museum studies program and the MSP19 class can be found at <http://ummsp.rackham.umich.edu/>.

Future student projects (summer 2020 and fall 2020): Thunder Bay NMS will welcome back Indiana University's Field School in Underwater Science. Registration is live on the IU website here:

<https://underwaterscience.indiana.edu/Upcoming%20Field%20Projects/Thunder%20Bay%20National%20Marine%20Sanctuary.html>

In the fall Thunder Bay NMS expects to continue the longstanding partnership with Alpena Community College's Industrial Technology program, by hosting their Marine Technology/ROV Piloting class as they perform tank inspections on the Thunder Bay NMS campus and provide an ROV cruise aboard the *Lady Michigan*.

NOAA Office of Coast Survey (OCS) Basic Hydrographic Training Course 2020

Phil Hartmeyer attended OCS training for hydrographic survey. Thunder Bay NMS and OCS use similar equipment to image the seafloor, but with different objectives. OCS conducts marine remote sensing projects all over the country primarily to update nautical charts. Tangentially, OCS has supported other NOAA science offices in their own utilizations of remote sensing equipment, including Thunder Bay NMS. This partnership has brought OCS and Thunder Bay NMS close over the last 10 years, and in 2020, OCS invited Phil Hartmeyer to attend their hydrographic training to better support Thunder Bay NMS in-house survey operations. Mastery of workflows, software packages and hardware systems is critical for Thunder Bay NMS to take full advantage of recent equipment acquisitions, and provide an on-site expert in-survey planning, data acquisition, post processing and sharing. With the training in hand, Thunder Bay NMS is able to submit chart-standard bathymetry data back to OCS, which they will use to update chart soundings and better serve our boaters, sailors and other sanctuary users. With this training, Phil will be able to teach other members of the research team and make improvements to Thunder Bay NMS survey capacity beginning this field season.

Central Michigan University's Conference on Underwater Cultural Heritage

Jeff Gray, Wayne Lusardi and Phil Hartmeyer attended a three-day conference organized by CMU that brought together regional and state submerged cultural resource management leaders. Attendees included Michigan State Historic Preservation Office, DNR Office of Law Enforcement, Michigan Underwater Preserve Council, Michigan History Center, Wisconsin Historical Society, Michigan State University, MTU and others. Jeff, Wayne and Phil participated on panels, gave presentations and participated in discussions surrounding the future of Michigan's submerged cultural resources.

RV Storm Repower

Thunder Bay NMS's primary research platform, RV *Storm*, is in Cleveland getting two new engines. The original Detroit 8V92s are long past their reliable use life and have been rebuilt several times. *Storm* should be returning to Alpena after sea trials in July. This upgrade was not possible without the partnership and collaboration between NOAA, the Great Lakes Environmental Research Lab and Thunder Bay NMS.

Thunder Bay International Film Festival – Stephanie Gandulla

Thunder Bay International Film Festival was held January 22-26, 2020. It was another successful year, filling over 1,000 seats during 18 different sessions throughout the weekend.

The festival included the premier of the Stand Up for Great Lakes film *Crossing Lake Erie*. The Stand Up for Great Lakes crew will be back at the festival in 2021 to premier their next film *Crossing Lake Ontario*.

The festival also showcased the latest film from NOAA to highlight their 50th anniversary and the new virtual reality theater. If you are interested in trying out the virtual reality theater contact Stephanie Gandulla.

The film festival has helped grow a relationship with Detroit Public Television and the *Great Lakes Now* programming. Visitors to the Great Lakes Maritime Heritage Center will be able to view new episodes of *Great Lakes Now*. Starting in February, the GLMHC will begin free showings of each half-hour show. Launched in April 2019, the *Great Lakes Now* program is produced in collaboration with public television stations and other media outlets. (For more information see attached press release.)

Thunder Bay NMS staff traveled to local schools for festival sneak peeks and reached over 700 students. This year students were offered free tickets to attend the festival.

For more information about the Thunder Bay International Film Festival contact steph.gandulla@noaa.gov.

Thunder Bay NMS Research – Stephanie Gandulla

Thunder Bay NMS Research season is about to kick off.

Ramping up our in-house capabilities while still partnering with other entities for mapping the lake bottom.

Ocean Exploration Trust will be coming back in May. There will be telepresence opportunities while they are working in the sanctuary.

2020 in the Field:

- Dr. Ballard's Ocean Exploration Trust
- United States Coast Guard
- National Centers for Coastal Ocean Science
- NOAA Office of Ocean Exploration & Research
- NOAA's National Weather Service

University of Michigan
Grand Valley State University
Max Planck Society for the Advancement of Science
Department of Defense
East Carolina University
Indiana State University

Upcoming Events:

3/12/20 – Sanctuary Lecture Series: Wayne Lusardi - *Inner Space to Outer Space: The Great Lakes' Contribution to Space Exploration & Research*

Presented by State of Michigan Maritime Archaeologist Wayne Lusardi, he will highlight an assortment of objects, both human-made and natural, that have fallen from space into the Great Lakes. The Great Lakes have served as a training ground throughout the history of aviation. Nineteenth-century balloon ascensions, early military and civilian aircraft development, the quest to break the sound barrier, and rocket launches all occurred on the lakes. Join us to hear some of the stories of how the inland seas relate to outer space!

3/19/20 – Art & Artifacts at Art in the Loft

Archaeologists use traditional illustration as a documentation technique and to bring artifacts to life for those who can't see them firsthand. Join archaeologists from Thunder Bay National Marine Sanctuary and art instructors from Art in the Loft in an exciting new interactive experience! Participants will learn about historic shipwreck artifacts and then learn the specialized techniques to illustrate them. (\$50/person)

4/9/20 – Sanctuary Lecture Series: Dr. John Jensen – *Stories from the Wreckage: A Great Lakes Maritime History Inspired by Shipwrecks*

4/16/20 – Sanctuary Lecture Series: MSU Night at the Museum - Earth Is Blue

Thunder Bay National Marine Sanctuary will showcase a collection of “Earth Is Blue” short videos that bring ocean and Great Lakes treasures to the big screen. These striking videos serve as a tangible reminder that no matter where you are, the ocean and Great Lakes are in your hands. These images will inspire you to help care for our ocean and to spread the word that Earth isn't green -- it's blue.

5/14/20 – Sanctuary Lecture Series: Tirrea Billings, Project Shiphunt!

The Friends of TBNMS website www.thunderbayfriends.org has the up-to-date list of events.

PUBLIC COMMENT:

Robert Doyle was just on vacation in Quintana Roo, Mexico and they have outlawed single-use plastic bags in their stores. Nancy Kinney noted that India has also outlawed single-use plastic bags.

Tom Rayburn mentioned that Jeff Gray recently presented at the Lake Carriers Association annual captains meeting.

ADJOURN:

The meeting was adjourned at 8:25pm.

2020 TBNMS Advisory Council Schedule of Upcoming Meetings:

April 21, 2020

June 16, 2020

August 18, 2020

October 20, 2020

December 15, 2020

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

BASIC HYGIENE NOTICE

PROTECTING YOURSELF AND OTHERS AGAINST RESPIRATORY ILLNESS

- ❖ **HANDWASHING** IS THE MOST IMPORTANT THING YOU CAN DO TO PROTECT YOURSELF
- ❖ Cover your nose and mouth when coughing or sneezing
 - Use a tissue and dispose of this once used in the waste
 - Always wash hands after coughing and sneezing or disposing of tissues.
- ❖ Keep your hands away from your mouth, nose and eyes.
- ❖ Avoid contact with individuals at risk (e.g. small children or those with underlying or chronic illnesses such as immune suppression or lung disease) until influenza-like symptoms have resolved.
- ❖ Avoid contact with people who have influenza-like symptoms.
- ❖ Ask people to use a tissue and cover their nose and mouth when coughing or sneezing and to wash their hands afterwards.

U.S. Department of
Homeland Security

United States
Coast Guard



Coast Guard
Investigative Service

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Screenings at the Sanctuary: *Great Lakes Now* program to have ongoing showings at Thunder Bay National Marine Sanctuary

Visitors to the Great Lakes Maritime Heritage Center will be able to view new episodes of *Great Lakes Now* under a new partnership between the Detroit Public Television initiative and the Thunder Bay National Marine Sanctuary.

Starting in February, the Sanctuary Visitor's Center will begin free showings of each half-hour show. Launched in April 2019, the *Great Lakes Now* program is produced in collaboration with public television stations and other media outlets.

The program, like the website, covers recreational, scientific, political, economic, and cultural issues and aspects of the Great Lakes and water quality topics. The program has aired on several PBS affiliates in 20 cities around the region.

“This new partnership connects the sanctuary to the broader Great Lakes,” said Jeff Gray, the sanctuary superintendent. “It’s a perfect opportunity to bring the integrity and quality programming of public broadcasting to sanctuary visitors and Alpena residents.”

The Sanctuary and *Great Lakes Now* staff announced the partnership during the Thunder Bay International Film Festival, which included several *Great Lakes Now* productions in the lineup. “As a public broadcasting initiative, part of our *Great Lakes Now* mission is to share our work with audiences and partners,” said *Great Lakes Now* Program Director Sandra Svoboda. “Thunder Bay National Marine Sanctuary is a great site for our work. Visitors are interested in the lakes, and our program will always give them new information and a new perspective on the issues related to the waters.”

Great Lakes Now contributing producers Zachary Irving, of Alpena, and David Ruck, of Muskegon, also spoke to festival audiences, and Michigan state Rep. Sue Allor (R-Wolverine) joined Svoboda for an audience discussion about “The Forever Chemicals,” the *Great Lakes Now* documentary about the ongoing effects of PFAS contamination in a west Michigan community.

Link to this story: <https://www.greatlakesnow.org/2020/01/thunder-bay-national-marine-sanctuary-show-screenings/>

