

**Thunder Bay National Marine Sanctuary  
Great Lakes Maritime Heritage Center  
Draft Interpretive Plan**

**Version 5.26.2006**

## INTRODUCTION

The remains of nearly 200 historic shipwrecks lay submerged in the vicinity of the Thunder Bay National Marine Sanctuary. The Sanctuary was designated to help protect these irreplaceable cultural treasures from looting, unrestrained development, and emerging natural threats. Protecting shipwrecks, however, requires more than state and federal laws and the committed efforts of archeologists, historians, and historic preservation professionals. It requires the willingness of citizens to embrace and value public cultural resources that relatively few people can ever touch.

People value resources that contribute to their lives in tangible ways. The Great Lakes Maritime Heritage Center offers a unique opportunity to visibly align improvements in the quality of life for a broad and growing cross-section of the public with the preservation of historic shipwrecks. This public value of shipwrecks as expressed and experienced through GLMHC can come in many forms: as an excellent place to spend a Saturday afternoon with your grandchildren, moments of quiet contemplation examining shipwreck mosaic, a chance to explore the mysterious deep through film, or an exciting but safe overnight spent in the dark setting of a recreated shipwreck. These are a just a few of the uncounted possibilities for fostering and harvesting sustainable public benefits from the historic shipwrecks of Thunder Bay. By visibly contributing to an improving quality of life in Alpena and Northeastern Michigan shipwrecks will “earn” the public care that historical significance already warrants and that state and federal laws require, but cannot guarantee. The ideas presented in this draft plan represent a studied, if exploratory and evolving, effort to connect the protection and interpretation of historic shipwrecks in the Sanctuary with the promotion of successful and sustainable communities in Northeastern Michigan and beyond.

The Great Lakes Maritime Heritage Center links maritime heritage and shipwreck preservation with education, leisure, tourism, and community development in the isolated and underserved region of Northeastern Michigan. The plans that follow are part of a continuously evolving Sanctuary headquarters that serves as:

- An innovative community center
- A catalyst for new educational and cultural programming
- An instrument for attracting and promoting quality heritage tourism
- A source of local and regional pride and community identification
- A model of successful and entrepreneurial collaboration between government entities, private sector and non-profit organizations, and a wide range of individuals.

The proposed exhibits described below are part of an evolving Sanctuary campus plan designed to achieve these goals.

This document provides a conceptual blueprint for interpretive programming and exhibits at the Thunder Bay National Marine Sanctuary. The plan presented reflects the collaborative efforts of a wide range of individuals and organizations. It is the result of several team meetings held on site. This is a continually evolving document.

## ***A. INTERPRETIVE GOALS***

The GLMHC's exhibits are but one element in an evolving plan of interpretation and programming at Thunder Bay. To further that end, the team developed a one sentence interpretive goal for exhibits and programming at the Great Lakes Maritime Heritage Center. This statement distills the essence of the interpretive mission and is not presented as a formal vision or mission statement.

***Help visitors to develop an appreciation of the critical role of the Great Lakes in American history and encourage the preservation and conservation of historic shipwrecks and the Great Lakes.***

In addition, the group identified a series of goals that match up the Thunder Bay National Maritime Sanctuary's unique local, regional, and national missions and collection of resources.

- Foster community building and the Sanctuary mission by encouraging strong local and regional identification with the Sanctuary and with the Great Lakes-past, present, and future.
- Make the Thunder Bay National Marine Sanctuary the hub for connecting people with Great Lakes heritage in region.
- Encourage people to visit other regional maritime sites and to take an active next step and explore the sanctuary by boat, kayak, or diving.
- Promote innovation in historic preservation and in natural and cultural heritage outreach and education.

## ***B. UNIFYING CONCEPT: EXPLORING THE SHIPWRECK CENTURY***

The Sanctuary's complex mission and ambitious goals requires a strong conceptual focus that captures the essence of the Thunder Bay/Great Lakes story as reflected in or inspired by the area's historic shipwrecks. We have identified this unifying concept as the Shipwreck Century. The following sample introductory panel captures the "big idea".

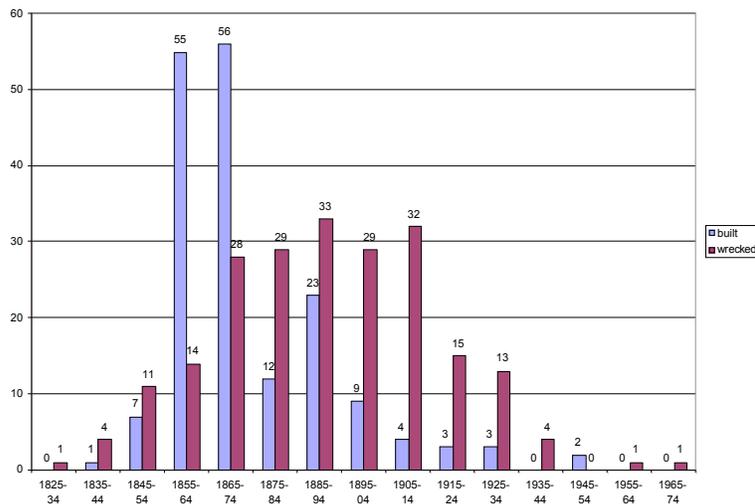
***For thousands of years people have journeyed across the Great Lakes. But in just one century, maritime travel on the lakes changed from small sailing vessels to giant steel steamships. These ships carried regional growth and increasing prosperity. But growth and change brought pain along with progress. On the Lakes they brought on a century of shipwrecks.***

***Between 1825 and 1925 boats and ships made millions of trips across the Great Lakes. A small percentage of the trips, however, ended in disaster. During this time the Great Lakes claimed thousands of ships. Nearly two hundred wrecked near Thunder Bay alone. Containing pioneer steamboats, sailing schooners, wooden steam bulk freighters, and steel ore carriers, the Thunder Bay wrecks represent the Great Lakes during its greatest period of growth and maritime activity. They also tell the story of their most dangerous century.***

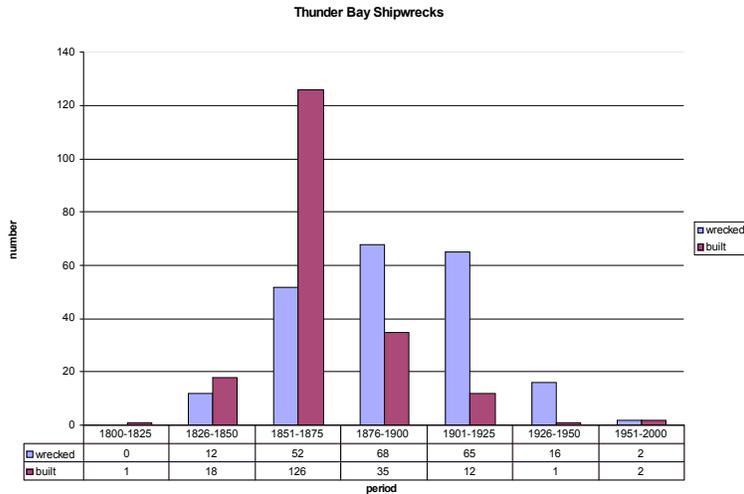
*The Thunder Bay National Marine Sanctuary protects a collection of nationally significant shipwrecks and encourages visitors to visit these resources. However, through the sanctuary’s research, without getting wet, you can still explore, enjoy, and learn about Great Lakes wrecks and the rich stories that they tell. Dive into the past.*

The Shipwreck Century concept provides a tight focus for exhibit and concentrates the sanctuary message in ways that directly reflect the composition of the wrecks in the sanctuary. It uses the mystery, tragedy, and narrative power of shipwrecks to engage visitors, but also clearly articulates the power and success of the Great Lakes as a transportation system. In essence, the visitor is drawn in by the Shipwreck Century, but comes to realize that it was the “maritime century” as well, and that the shipwrecks are our most tangible and fragile connection to it. It is through the work of the sanctuary that these connections are made.

An examination of Thunder Bay area shipwreck tables below provides a graphic view of the Shipwreck Century. These charts represent, in very simple terms, the “bulge” of activity that resulted in the construction and loss of thousands of vessels across the Great Lakes. They also provide an interpretive and intellectual foundation for understanding and exploring Thunder Bay shipwrecks. When broken down by vessel sizes and types, the bulge will become a powerful indicator of the broad range of activities and historical processes on the Great Lakes. When compressed into 25-year periods, the Shipwreck Century picture appears even more pronounced.



**Table 1:** Thunder Bay Build and Wreck Dates by Decade



**Table 2:** Thunder Bay Build and Wreck Dates by Quarter Century

## **PLANNED INTEGRATION OF EXHIBITS, PROGRAMS, AND CURRICULA**

*Exploring the Shipwreck Century* is also the curriculum guide and school book under development through a partnership with the Michigan Department of History, Arts, and Libraries and the Wisconsin Historical Society. The book will support the study of Great Lakes maritime history and preservation across the region and provide a strong foundation for on site and outreach programming. The exhibit, classroom curriculum content, and in-house education programs will all overlap and allow the exhibits to be used as an exciting three-dimensional classroom. This integrated approach has helped to focus the exhibit and will provide enhanced opportunities for visiting school groups and individuals.

## **THE MANY ROLES OF THE GREAT LAKES MARITIME HERITAGE CENTER**

The Great Lake Maritime Heritage Center is truly a multiple use/multi generational learning space and visitor information center with a distinct mission. This is reflected building’s many different spaces, and in the diverse range of people that it is intended to serve. Although embracing many museum elements, the GLMHC is also a visitor center, one located at a strategic point in the redeveloping city of Alpena. It is the headquarters for the only freshwater marine sanctuary in the nation, and currently one of finest and best appointed public spaces in the region. The draft exhibit plans should be read against this backdrop.

The Shipwreck Century exhibit consists of three broad but overlapping areas defined by their general function:

- Visitor Information and Orientation Components
- Mobile Present Day Science Center Type Exhibits

- Shipwreck Century Proper

The GLMHC is a multiple purpose community and education space that allows visitors to experience shipwrecks, Great Lakes history, and the Thunder Bay National Marine Sanctuary from several different perspectives and at different levels. The stories and experiences included are those that convey core meanings of Thunder Bay's shipwrecks as identified in the Shipwreck Century concept, integrate directly with Sanctuary curricula and programs, and translate effectively to a museum setting.

The larger exhibit components described below represent a long term investment in an interpretive infrastructure that will support creative programs now and in the future. They will accommodate additional layers of interpretation and the installation of new technologies and exhibit enhancements. As our understanding of Thunder Bay Shipwrecks and our visitors grow, so too will our ability to provide excellent interpretation and education.

## **EXPLORING THE SHIPWRECK CENTURY EXHIBIT GOALS**

### ***A. BROAD GOALS***

- Showcase the Thunder Bay Sanctuary's nationally significant collection of shipwrecks
- Foster historic preservation and marine conservation ethos among all visitors including members of the scuba diving public.
- Introduce concepts and describe sanctuary research in maritime archaeology and shipwreck preservation
- Introduce visitors to selected major themes in Great Lakes geography and history
- Connect visitors to the Great Lakes people of the past
- Encourage people to value shipwrecks by appealing and stimulating emotional, aesthetic, physical, and cognitive processes
- Serve as a three-dimensional classroom that directly supports innovative education, outreach, and community programs
- engage learners of different ages, backgrounds and learning styles
- Encourage and sustain interest across multiple visits
- Establish a physical and intellectual foundation for shipwrecks that encourages free choice learning and readily accommodate new layers of interpretation and research
- Provide genuine access for the largest spectrum of the population possible
- Act as a hub for regional maritime heritage tourism
- Readily support to community events

### ***B. ADDITIONAL DESIGN GOALS***

- Function well as a self-guided exhibit
- Recognize the limited personnel and budget available for exhibit operation, maintenance, and renewal
- Accommodate wide seasonal visitation patterns
- Incorporate cultural diversity

- Conform, if possible, to LEED ([www.usgbc.org](http://www.usgbc.org)) or other appropriate sustainable building standards
- Retain a flexible space for temporary exhibits and public events in the main gallery
- Accommodate moderate sized overnight programs
- Generate revenue through programs, donations, and retail

## ***EXPLORING THE SHIPWRECK CENTURY DRAFT EXHIBIT PLAN***

The plan presented below represent a “big picture” conception and a series of specific exhibit elements and messages that reflect the Shipwreck Century concept and a well developed understanding of the GLMHC space and complex mission. This plan should be used by the exhibit design firm in developing proposals for the final exhibit. It should be read as a informational document that articulates well established messages and suggests appropriate methods for articulated them within the GLMHC environment. It should not, however, be read as a plan cast in stone. Meshing this ambitious plan with the physical space and GLMHC fiscal resources will be an important aspect of the exhibit firm’s challenge.

### ***PART I. ENTRANCE, ORIENTATION, AND VISITOR INFORMATION***

The Great Lakes Maritime Heritage Center is the coordination point for all Thunder Bay Sanctuary activities. Although not strictly or exclusively an exhibit component, the panels and signs outside the building and in the north and south entries must provide an immediate orientation to the Sanctuary and available activities, including the exhibit. The GLMHC will function either officially, or as a de facto, tourist and visitor information center for Alpena and the surrounding region.

#### **A. MESSAGES/OBJECTIVES**

A major objective is to convey immediately and unambiguously that visitors have reached the headquarters of the Thunder Bay National Marine Sanctuary. Although the name of the building is the Great Lakes Maritime Heritage Center, the term “Sanctuary” more succinctly conveys the building’s function, and for the present, better reflects local branding. People looking for the Sanctuary headquarters and/or the visitor center should know instantly that they have reached their destination.

Upon entering the building from either entrance, the first official message indicating that they visitors arrived at their destination is a tall curved panel, which will include: *Thunder Bay National Marine Sanctuary Great Lakes Maritime Heritage Center . Public Welcome.* . The panel also briefly identifies what the Sanctuary is, indicates that it protects a world-class collection of shipwrecks, and is a place of exploration, learning, and science.

#### **B. INFORMATION STATION**

Visitors entering via the north side will have an opportunity to hang up their coats and gain immediate access to an *information station* (with a large sign “information”) at the

desk of the retail shop. This human interaction, when it takes place, is important and sets the tone for the visitor experience. Volunteer and staff training in visitor services will be essential for this to work smoothly and consistently.

From the information station visitors will have nearly a nearly unobstructed view across the gallery to the riverfront entrance. The spaces in the riverfront foyer: Theater, Education Room, Men's and Women's restrooms will be clearly marked on signs that project out from the walls at a perpendicular angle.

#### C. ORIENTATION MODULES (one located in the riverfront foyer, one strategically located in the gallery near the north entrance)

The orientation module is a highly stylized cabinet with an angled top that can be easily read from a distance. The semi-circular panel has three segments. One sector describes the Sanctuary, its history and purpose in slightly more depth. (All you need to know and no more) The second is a large colored diagram of the Sanctuary building and campus with the major areas of activity clearly marked: Shipwreck Century Exhibit, Thunder Bay Theater, Education Room, River Front Walk, River Observation Deck, and Conservation Laboratory.... A third panel presents "**Things you can do here.**" This panel is color coded to match the Campus map. An addition to "Things you can do" is a flat screen monitor presenting "Today at the Sanctuary" that provides real time information about programming and events.

#### D. DONATION STATIONS

The donation stations are also part of the orientation and are strategically located near both entrances.<sup>1</sup>

#### E. ENHANCED THUNDER BAY REGIONAL MAP (replaces existing shipwreck map/same location)

##### **Goals:**

- Support both the visitor information and education aspects of Center activities
- Convey the richness and texture of Thunder Bay's Maritime Resources.
- Provide links to other maritime heritage sites.

##### **Messages:**

Display the locations of:

- Thunder Bay Wrecks
- Area Lighthouses
- Lifesaving Stations
- Commercial Fishing Stations
- Other Maritime Landscape Features (TBD)

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<sup>1</sup> Possible Message: "Send a message of Support" The Visitor's Center exhibits are free to the public. But the exhibits and Visitor's Center are home to many educational programs. We serve all ages, from toddlers to retired people. Please consider a donation to help keep our exhibits in top form and our education programs strong. Method: This is an opportunity to create clever exhibit element that provides a little more return for the visitor's dollar. One possibility might be a "message in a bottle" fountain or other interactive giving station. (This issue requires additional discussion and thought, we need to incorporate ways to track ideas in this area.)

Project Digital Imagery:

- Multi-beam map/ Sanctuary flyover
- Satellite Photography
- Ariel Photography

*(Probably digital so can link to computer for more information and constantly update.)*

## ***PART II. "SCIENCE CENTER"***

A series of interpretive stations and exhibits are located in an approximately 20-foot wide by 35-foot long space that extends from the end of the riverfront foyer into the center of the gallery. These islands are used to convey primarily present-oriented messages, including the story of national marine sanctuaries, state/fed partnership, interpreting weather data through the storm of 1913, real time transmission from data buoys, shipwrecks as environmental sites, and possibly other things as well.

### **A. POSSIBLE EXHIBIT STATIONS**

- **"Take the Next Step and Dive In"** provides encourages people to visit the Sanctuary and related regional resources. Go Boating, Kayaking, Diving, Hiking, Means: Simple touch screen kiosk.
- **"The Weather today is...?"** provides real time weather information, connects to the Sanctuary buoy cam and data stream, and explains local weather phenomena, especially as they relate to shipwrecks. The Thunder of Thunder Bay, big storm phenomena (e.g. the storm of 1913, Fog. Snow and Ice.)  
*Means:* Larger multi-station kiosk, possible equipped with Hi-def plasma screen.
  - Predicting the Weather in 1913
  - Storm tracking today.
  - NOAA's role

All of these stations are mounted on hidden lockable casters. They plug into the floor power and data ports and can be moved safely, easily, and quickly to make room for special events or to reconfigure the gallery for a temporary exhibit. This mobility may also prove useful by allowing the transfer of stations into the education room to support special programming during slow visitation periods, and to create space for temporary exhibits. **(The specific content of this area requires more development. The essential elements articulated here are that these are generally more present-oriented science/Sanctuary exhibits and that they are mobile.)**

### **B. CONSERVATION AND PRESERVATION**

***Purpose/message:***

- Introduce the work done by the conservation lab
- Interpret the view of lab visible through the windows
- Establish the message that divers should not remove artifacts from wrecks
- Explain the unique freshwater environment has made Great Lakes shipwrecks among the best preserved in the world

***Introductory Panel:***

***Most of the artifacts are here from wrecks that occurred during the Shipwreck Century—although some come from modern vessels including international freighters.***

***Divers collected the majority of these artifacts. In the process, they damaged many important shipwreck sites and the artifacts as well. Today artifacts in Michigan waters can only be removed with a special permit and archaeological oversight.***

***Location/Mean:***

This space is to the west of the mobile exhibit lane and will incorporate the area below the west stair landing and the space in front of the conservation lab windows. Mounted against the wall below the window of the conservation lab is an angled interpretive panel the focuses on preservation, conservation processes, and the fact that we house the state's collection of materials removed from shipwrecks. There are stools for people to sit, rest, read the panels, and gaze through the windows into the lab.

Woven into the conservation interpretation are touchable objects and hands-on activities. PEG treated wood (if it dries it dies), example of untreated wood, zebra mussels, possibly a hands-on electrolytic station. **(This component also requires further content thought—it has untapped potential.)**

Other ideas

- You try it. Hands on station
- Interact with the lab. 2-way radio, (We will have an intern working in the Lab this summer, and hopefully in the future.)
- TBNMS research on deterioration of artifacts underwater. Compare archaeological recovery and immediate conservation to what we are doing now

C. SCIENCE ON A SPHERE

***Message/Purpose:***

- Provide means for presenting global issues in the history, geography, and that environment
- Support Shipwreck Century message by presenting segments on Great Lakes geography and history
- Take advantage of new programming opportunities and offerings by drawing upon broader NOAA partnerships

***Sample Potential Messages:***

- A giant inland sea, the Great Lakes reach into the heart of North America
- The Great Lakes are an international waterway
- From the time of French exploration to the present, the Great Lakes have been part of a great Atlantic World
- The Great Lakes provided the means for bringing together rich array of agricultural, timber, industrial, and human resources that made the United States an international economic and military superpower in the 20<sup>th</sup> Century
- Glacial formation of the Great Lakes

***Location/Use:***

Science on a sphere could be located in the corner of the building near the north staircase and passageway to the Sanctuary offices. In order to accommodate and hide one the four projectors and the SOS systems computers, a recreation of a lighthouse or other exhibits could be used to hide the hardware. This will provide an excellent opportunity to seamlessly integrate this topic into the exhibit. SOS will be installed in temporary location in July 2006. This will allow GLMHC to observe and determine a final play for its installation and use.

SOS is a powerful projection system that will serve many purposes. This cutting edge technology will support directly support the Shipwreck Century experience through a play list of relatively short animated programs that covers the place of the Great Lakes in the nation and the world, glacial formation, early settlement and exploration, and storms. Each two minute clip culminates may end with an invitation to ascend to the Mezzanine Level to begin learning about the Shipwreck Century.

Additional interpretation will be provided through a series of overlooking panels adjacent to the Sphere that convey important geographic elements that set up the Shipwreck Century, in the event that other programs are dominating the area, or if there are issues with equipment. These also describe the SOS technology and why/how NOAA partnered to develop it.

Notes:

- Great potential as a “classroom” for College and high school for geography and earth science.
- Illustrate shipwrecks world wide and the maritime nature of the world.
- This can be the “One NOAA” section of the exhibit.
- Currently 80 data sets available
- Positions GLMHC at the cutting edge as the first to address historic/cultural issues with the system

***PART III. EXPLORING THE SHIPWRECK CENTURY—THE CORE EXHIBIT EXPERIENCE***

**A. INTRODUCTION**

The core Shipwreck Century exhibit begins with a small but VERY WELL SIGNED area of the main floor gallery below the north staircase, extends up those stairs, and includes the entire mezzanine, roughly a third of the east side of the main gallery, the entire black box room, and visible storage. The major segments include:

- Making the Great Lakes (introduction/convergence)
- Thunder Bay Shipwreck Gallery
- Schooner in Distress
- Rescue from the Shore
- Archaeological Shipwreck
- Great Lakes People
- Visible Storage (Artifacts and Stories)

The different sectors of the exhibit have distinct characteristics and differ significantly in the complexity of the message conveyed and in methods of transmission. The greatest contrast is between the segments of the exhibit on the mezzanine level, and those on the east end of the main gallery and the black box. The mezzanine sections, “Making the Great Lakes” and the “Thunder Bay Shipwreck Gallery” are more traditional historical museum exhibits, albeit with some interesting interpretive and interactive twists. Three of the main floor segments, “Schooner in Trouble” “Rescue” and “Archaeological Shipwreck” offer experiential as well as object- and text-based learning. The concluding segments of the main floor exhibit, “Great Lakes People” and the “Visible Storage” area turn more toward connections based on observation, reflection, and emotion. **(Note—Visible Storage could be much more than a series of drawers—it can build directly upon Great Lakes People to interpret artifacts and stories with a strong preservation message.)**

#### B. BROAD GOALS OF THE MAKING THE GREAT LAKES/THUNDER BAY SHIPWRECK GALLERY LOCATIONS:

- Maintain the current clean art gallery aesthetic of the mezzanine.
- “Frontloads” and concentrates the “big picture” historical content at the beginning phases of the exhibit. This is will be useful for in-house programming and sets the context for understanding the wrecks.

#### C. MAKING THE GREAT LAKES

This section of the exhibit focuses on how people used and modified the Great Lakes after 1825 in ways that set up and created the Shipwreck Century. It displays the dynamic processes that represent that purpose and magnitude of Great Lakes commerce as well as the responses to danger. It also reveals the convergence of doomed vessels at Thunder Bay.

##### **Part I. Pre-1825:**

This area introduces the power/physical properties of water as a transport medium, the natural barriers between the individual lakes and between the Great Lakes as whole and the ocean, introduces the natural riches of the region, and covers a few selected historical events leading up 1825. These are not in-depth history lessons, but concise points that provide the foundation for appreciating the magnitude of what occurred during the shipwreck century.

##### ***Goals/messages:***

- Introduce the shipwreck century “bulge”
- Provide in series of snapshots a thumbnail historical and geographical context for the Great Lakes up to 1825 and the beginning of the Shipwreck Century
- Display the region’s rich array of natural resources
- Briefly represent pre-contact and early European activity
- Explain wonders of water as a transportation media
- Set up convergence map and Thunder Bay Shipwreck Gallery

##### ***Method:***

A large panel with the shipwreck century bulge graphic, followed by standard panels, supplemented by appropriate artifacts (if available). Note: the historical background segments are relatively restrained and serve to set up the shipwreck century.

*(Future Enhancements not necessarily located in this space*

- *Birch Bark and Dugout Canoes*
- *Enough information here to connect to special programming. War of 1812 (Battle of Lake Erie and Hamilton and Scourge) and Fur Trade (Voyageurs and Griffon) are cool topics we can address in video clips or special programming. )*

## **Part II. Artifact Analysis and Convergence Map**

### ***Location:***

East wall and the large area above the gift shop.

### ***Goal/Message:***

Presents selected elements of the larger regional picture and the deposition of wrecks at Thunder Bay. The major contribution and climax of this section is the linking of specific objects and artifacts (the real things) to geographically displayed places and processes through a series of approximately 5 independent artifact interpretation stations tied to a wall-mounted 7 by 21-foot interactive convergence map that displays the entire Great Lakes system.

Each interpretation station contains a display case with an artifact or artifacts that in themselves can tell a story, but that also represent an important way in which people altered or used the Great Lakes during the Shipwreck Century. There are at three distinct levels of interpretation for each station:

- Artifact (possibly tied to local examples)
- Thematic
- Geographic

This is a powerful concept, but space and visitor attention clearly limit how many stations and concepts we can display. A few possible interpretation options are described below, but final decisions will reflect the availability of compelling artifacts and the extent to which geographical presentation adds to the learning and museum experience. As with the entire exhibit, this segment should not try to tell the entire Great Lakes story—but it can introduce key changes and processes. The map can provide a broad common space for visualizing geographic information. The map and the artifact stations should be harnessed to a computer that will allow Sanctuary education professionals and/or volunteer staff to control the map and use the multiple stations to create and present “Making the Great Lakes” programs for school groups.

### ***Making the Great Lakes Artifact/Convergence Examples***

#### ***Example One: Making One Great Lake***

Describes where and why people constructed canals that allowed navigation between all of the lakes and to the ocean, thus stimulating commerce and shipbuilding. The focus here is more on what canals did rather than how they were built.

#### Means: Interpretation Station

Contains a compelling canal related artifact. Ideally, a object commemorating the opening of the Erie Canal. Many of these have strong symbolism about linking the Great Lakes and the Atlantic. The object-related text would identify the object and decode its specific messages.

*E.g., people saw the canal as a marriage between the freshwater seas and the Atlantic Ocean. And many more were started to connect inland areas to the Great Lakes. The Erie Canal was a long shallow-water canal and not meant for large lake vessels. The canals that connected the lakes were short deep-water canals. In less than thirty years, canal builders turned the five Great Lakes into one Inland Sea. By the 1850s you could even sail from Chicago to Liverpool England, and many vessels did.*

Where are the canals? Push this button to see. (The results are displayed on the map).

#### (Future Enhancement on Canals

- Water activity station in the workshop or outside)

#### *Example 2. Making the Great Lakes Safer.*

After 1825 Great Lakes ships began to grow in number and in size. With more ships came shipwrecks and the Great Lakes developed a reputation as a treacherous waterway. One way people tried to prevent shipwrecks was to have the government build lighthouses. The artifact case will contain an evocative lighthouse artifact that will be interpreted, and which will be used to explain, **very basically**, what lighthouses do from the mariner's perspective. By 1850, there were X lighthouses on the Great Lakes, in 1900 there were X more. Activating the button will display all of the lighthouses in order of their establishment.

Despite lighthouses at points like Thunder Bay Island, ships continued to sink in large numbers for many years to come. Why?

#### (Possible lighthouse enhancements

- Can make connection to Life Saving in exhibit and the recreate
- Possible use of TB River lens
- Live Cams at various Lighthouses
- General Note: Use GLMHC exhibits to promote other attractions)

#### *Other Examples:*

##### Great Lakes Trade Options.

1. Early Steamboat/Emigrant Traffic. Focus on the Buffalo to Lake Michigan run.
2. Grain Trade Artifact Station linked to the interactive map.
3. Lumber Artifact Station linked to the interactive map (perhaps a general cargo section might be one station?)
4. Iron Ore and Coal Artifact Station—illustrate the synergy between industrial raw materials and industrial energy sources. Interactive map shows the transportation of coal from the East and Iron Ore from the Northwest to major

industrial cities, most of which passed by Thunder Bay. **This one is especially powerful as it shows dynamic traffic flows, the centrality of Thunder Bay, and the critical convergence of raw materials, transportation, and people, needed to support modern heavy industry.**

5. Making Great Lakes Ships and Wrecks—A combined interpretation station that addresses shipbuilding and shipwrecking as reflected in Thunder Bay’s shipwreck Century Bulge, and it illustrates the diffusion and later concentration of Great Lakes shipbuilding. It also demonstrates the convergence of wrecked vessels at Thunder Bay.

Interpretive ideas:

Shipbuilding:

- ◆ What big things did you need to build a wooden schooner?
  - A patch of ground along a river front
  - Wood
  - Hand tools
  - Artisan shipbuilding skills
  
- ◆ Where did people build them? (Activating the button will display the broadly diffused locations across the Great Lakes where all of the great lakes wooden ships sunk at Thunder Bay where built)
- ◆ What did you need to build a large bulk carrier on the Great Lakes?
  - A large industrial shipbuilding plant
  - A large industrial workforce
  - Access to steel and machinery
- ◆ Where were large bulk carrier wrecked in Thunder Bay built? (Map will display far fewer points, and these will be more geographically concentrated.)
- ◆

#### 6. Convergence Climax—Shipwrecks: Making Great Lakes Memories

Today Shipwrecks are helping us to remember and understand the people, ships, and the importance of the Great Lakes in history. Nearly two hundred lay in or near Thunder Bay National Marine Sanctuary waters. Button push will trigger the map to represent the nearly 200 journeys from the dozens of places across the lake where ships were built, to their final stop at Thunder Bay. View on top of the selected Great Lakes trades, this final segment dynamically shows *convergence* at Thunder Bay and sets up the next exhibit component, Thunder Bay Shipwreck Gallery.

(Possible enhancement/additions

- Weather convergence
- Population change in the Shipwreck Century and everybody lives by the water.)

#### D. REST AND REFLECTION STATION

The objective here is to provide a natural physical and mental resting point for people to sit, admire the view of the lower gallery. It can also provide a transition point from *Making the Great Lakes* to the *Thunder Bay Shipwreck Gallery*.

**Means:**

Benches, reproduction or current Great Lakes focused periodicals, possibly a donation station, or other “commercial” message about Sanctuary activities.

**E. THUNDER BAY SHIPWRECK GALLERY.****Objectives:**

- Showcase selected Thunder Bay Shipwrecks
- Meaningfully display and interpret shipwreck and shipwreck-related artifacts and objects
- Encourage visitors to intuitively value shipwrecks
- Convey significant but bite-sized pieces of Great Lakes History.
- Define major Great Lakes ship types and provide some sense of historical progression

**Primary Messages:**

- “Nearly 200 hundred ships wrecked in or near Thunder Bay, most during the shipwreck century.” That represent the full spectrum of GL MH
- “Shipwrecks are fascinating, strangely beautiful, and worth preserving”

**Method:**

Six or seven matched pairs of large format historic and underwater photos of individual vessels accompanied by an assortment of carefully chosen individual artifacts, visual art, models, and underwater video related to the vessels. Brief labels accompany each photo. Slightly more in-depth text accompanies the artifacts. This is, in essence, a careful elaboration of the existing mezzanine exhibit. **One of the advantages is that the gallery can be renewed gradually, and at very modest cost. Possible use of Pod casts to enhance.**

**AREA I. Main Floor: Danger, Rescue, and Wreck: an integrated activity landscape and exhibit zone*****The Schooner as center***

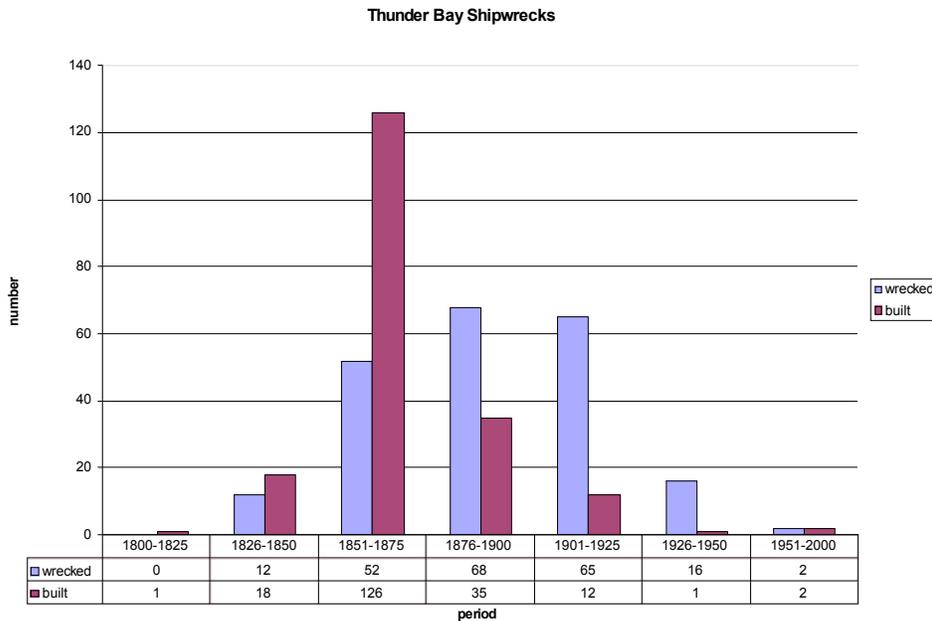
The heart of Shipwreck Century is an intense cluster of recreated maritime stage sets through which visitors can experience maritime life in the age of sail, struggle for survival during bad weather, experience rescue from the shore, and explore the wreckage of a historic sunken schooner. These highly accurate multi-dimensional recreations and exhibit spaces offer an integrated experience that is historical, experiential, and archaeological.

The schooner in distress, rescue, and submerged shipwreck are independent exhibit elements and yet are connected parts of the larger shipwreck story. Some vessels sank in deeper water, sometimes they grounded near shore. Often the crews were rescued—other times not. The connected nature of these outcomes is evoked in part by a network of discovery tubes that allow younger visitors and the occasional adventurous adult to move from the schooner in distress to either the submerged shipwreck or the rescue segments. The tube network is most fully developed as part of the submerged wreck where tubes will allow visitors to “swim” over the upper deck of the wreck and down to the lower

level. The tubes provide tangible connections between larger parts of the historical shipwreck experience and recreate the three dimension feeling of exploring a wreck underwater. The installation of an “ROV” on a track equipped with a camera will provide additional access to the upper deck for those unwilling or not able to enter the tube network. The tube network may be augmented by discovery portals and the addition of an underwater soundscape.

Visitors will encounter the recreation of the full or near full-scale stern section of a veteran lakes schooner. It will appear to be sailing into the black box room. A significant list, a tattered sail animated by fans and with working rigging, provide the vessel with a living quality. The representation of water coming in over the floorboards in the lower edge of the cabin floor indicate that things are difficult. The sense of being down below may be enhanced by self contained flows of chilled water, heat emanating from the stove, and stuffy ship smells. The sense of danger might be increased by the use of a screen mural that suggests that vessel is sailing into a fog bank, with bells and fog horns on a sound track.

The recreated schooner section is based on a combination of historical and archaeological information and altered to accommodate programmatic and code requirements. As a stage set, the vessel represented is a schooner, built about the 1860-plus or minus a few years-and that has had a significant career. The time period of the storm event represented is roughly, between 1878 and 1885.



**Table 3:** Rough Estimate of Build and Loss Periods for Thunder Bay Vessels

There are excellent historical, archaeological, and interpretive reasons to go with this vessel and scenario. Over half of the vessels lost in or near the Sanctuary were built between 1855 and 1874. A majority of these were schooners. This is the most broadly representative vessel for the Sanctuary and the Great Lakes. We have the archeological

and visual data needed to design a compelling and accurate representation of a section of a schooner that fits this profile. The late 1870s to the 1880s is well into the “bulge” of the shipwreck century. Schooners were still numerous, but they were getting older and working hard. Many also were lost.

By Great Lakes standards, we have an extraordinary level of data about the people, shipboard life, and the dialing material culture that existed aboard these vessels. We have an excellent sense of labor, wages, ethnicities, gender and race, and age. The possibilities for historically meaningful and accurate interpretation are virtually unlimited. (Similarly, the visual, material, and human sources for lifesaving are rich for this period.)

Collectively, this recreated vessel and operational dates provides supports a series of experiences that represent the Great Lakes maritime economic and cultural system during a critical time. It also represents in myriad ways a large number of vessels wrecked or nearly wrecked at Thunder Bay, and by extension, other places on the lakes.

***The Schooner in heavy weather:***

*Message:*

Great Lakes mariners faced the prospect of shipwreck every working day. They spent lots of time trying to avoid wrecking and had many close calls. For every wreck in the Sanctuary, many more ships battled back from the brink. But the outcome of safety or loss often remained in doubt for long periods. What would you do when facing a possible shipwreck? Some of your decisions would depend on your position: Sailor, cook (women, African Americans—this is important), captain, or even child.

*Objectives:*

- Empathize and identify with those who faced the dangers of the lakes
- Introduce visitors to the difficult choices Great Lakes mariners routinely faced
- Provide visitors with a physical sense of living and working on a Great Lakes vessel
- Introduce a variety of difference classes of people into the Great Lakes storyline in a genuine manner (social history of Great Lakes people)
- Explore the decision making on the part of captains. Every decision carries a promise of relief and possible consequences. What would I do?

*Examples—Simplified*

**Owner**

Repair/maintain vessel  
Fails to maintain

**Captain’s Actions**

Take in the Sails  
Run for shelter  
Beach the vessel  
Abandon Ship  
Don’t abandon ship

**Negative Consequence**

loses money  
vessel takes on water

Can’t run for shelter  
Land is dangerous hit shoals/rocks  
No one to rescue you from the surf  
Small boats often founder  
Go down with the Ship

Jettison Cargo

Loss of profits/ or reputation

*Sailor Actions*

- Must batten things down
- Keep the Water Out--Pump that Bilge
- Help steer the ship
- Climb the rigging

*Cook's Actions*

- Try to feed the crew—pour hot coffee, make food
- Keep warm
- Secure the galley

*Child's Actions*

- Try and stay warm
- How do you deal with fear?

Tying all of the crew together is their common humanity, their connection to each other in the face of danger, and especially their mutual concern and desire for home and family

Physical Structure—the stern section of a schooner approximately 24 feet wide across the transom and 20 to 25 feet long (classic canal size). The vessel represented is currently taking on more water than she can pump out. It is listing to port several degrees and settling by the stern. Water is just visible above the floorboards on the aft section of the port side. There is a table, bunks, stove, crockery, foul weather gear, and personal belongings. A variety of sensory enhancements make the cabin more physically real—perceived dampness, hot and cold, and smells. The starboard side is partially cut away to allow unfettered access to the deckhouse. This cutaway and the angle of the vessel should leave ample room for people to pass by the wreck, or to gather in a tight group and watch the action.

On the quarter deck aft of the deckhouse is the binnacle and compass. Forward of the house, the mizzen mast is stepped through the deck, but the topmast has carried away. Part of the boom has broken away as well. The sails are patched and stained, but the running rigging for raising and lowering the sail functions. The boom will be of a light, head-safe material and remain at an appropriate level above the deck. The sail will go up and down. Two hidden fans activated by port and starboard turns on the ship's wheel will make the sails billow and swing (safely) the boom from one side to another. Adjacent to the mizzen mast is a working bilge pump that conveys the sense of moving water and either gaining or losing ground—a near universal experience across time in the maritime world. A jolly boat is hanging on davits from the vessel's transom and presents a potential avenue for escape.

Access to the upper deck will require a wheel chair lift and the ship's spaces will be altered to provide space for activities, access, and reflection. It will look “authentic” but, as with all Great Lakes vessels, it is designed for a specific trade—in this case education.

A variation on this structure is a schooner whose entire hull structure is recreated. This would make for a much taller structure and makes a more dynamic visual statement. This version calls for accessing and exiting the structure from two points on the mezzanine level. This version would be impressive but may impact the feel of the mezzanine galleries and possibly create more separation between the schooner in trouble and the black box exhibits. Working to make the schooner in trouble visually compelling and impressive is a desirable outcome irrespective of its configuration.<sup>2</sup>

Note: The Schooner in Distress experience is not linear and the eventual outcome is not clear. Most vessels in this situation survived, some sank, some wrecked on beaches, and others collided with another vessel in similar distress. Exhibits in the Black Box room examine possible results of the distress scenario—rescue by the people from the Lifesaving Station and the deposition of the schooner as an underwater archaeological site.

## **AREA II. Lifesaving Service Rescue, Rescue Component**

### ***Message:***

Many people survived shipwrecks. Often this was due to the U.S. Lifesaving Service, which had stations at strategic points across the Great Lakes. In 1876, a lifeboat station was established at Thunder Bay Island. Being a lifesaver took lots of practice, teamwork, a great deal of stamina, and bravery.

### ***Objectives:***

- Allow visitors to identify with shipwreck survivors
- Offer experiences that are both tactile and introspective
- Introduce shipwreck experience from the land point of view (good linkage to Thunder Bay Island and other lifesaving stations)
- Visitors will learn that during the Shipwreck Century that the number of Lifesaving stations went from zero to over sixty and will experience with two methods of lifesaving that saved hundreds of lives and thousands of dollars of property

### ***Means:***

A scaled down lifeboat with room for 3 sets of sweeps and a rudder. We may want to have a side that opens up to allow wheel chair access. At minimum, the boat should be cresting up on a wave. Visitors can choose to don foul weather gear and period life-vests. They will be able to get in the boat and row, trying, when in a group, to row together. Placing this boat on gimbals may be a way of adding a controlled level of movement.

The on-shore component will include a mockup of cross trees with rigged breeches buoy. Visitors would climb into the breach buoy, reflecting carefully upon the raging waters they are crossing and the distance they are dropping.

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<sup>2</sup> This multi-level platform supports a variety of interpretive activities. One that comes to mind is the message in a bottle, where people will be asked to contemplate who they would write to and what they would say if facing a possible wreck. Plastic bottles, paper, and pencils would be supplied. We can also offer to send a message of elaboration home for you. A Thunder Bay Schooner Post Card with postage paid will provide people the ability to send messages. We would collect these in a drop box and then, after looking at them for feedback, deposit them in a mail box.

Panel, photos, video and text that can be more or less elaborate. Enough material must be presented to convey basic elements in these rescue techniques but not to compromise the experience of being a rescuer in a storm-tossed boat or a person needing rescue contemplating stepping into the breeches buoy and taking the step into air thin with too many ancillary historic messages.

(Enhancement/change: If space does not allow, a more full scale lifesaving elements outside of the building)

### **AREA III. Shipwreck/Underwater Archaeology Section and Shipwreck Transition Gallery**

#### ***Goals/Objectives:***

- Provide visitors with a three dimensional shipwreck experience
- Build upon the interpretive framework established by the “wreck in distress” exhibit
- Create the feeling of visiting a wreck underwater
- Introduce visitors to basic issues in Great Lakes Nautical Archaeology
- Present the message that “in situ” preservation is currently the best option.
- Provide a stage for visitor to try out basic underwater archaeological techniques
  - ◆ Mapping
  - ◆ Identifying artifacts (What is it? flip book perhaps)
  - ◆ ROV manipulation
- Provide a backdrop for exploring ship construction
- Reinforce lessons about the function of Great Lakes vessels.
- Explain the standard causes of shipwrecks at Thunder Bay
- Display artifacts in an appropriate context
- Encourage people to want to go diving
- Provide a space that can be used for sleepover programs
- Provide a multi-level physical experience where school age kids can climb, scoot, and discover

### **AREA IV. Shipwreck Transition Gallery**

The shipwreck transition gallery carries most adult visitors from the schooner in distress to the underwater shipwreck landscape. It explores the different kinds of shipwrecks at Thunder Bay, including what caused them and what they look like today. Some visitors will experience this gallery on the way to the submerged shipwreck exhibit, others will do so after exploring the wreck—either way works. (This may be more directly integrated into the final design of the underwater landscape area.)

#### ***Message:***

***Years of work take a toll on ships. Ice, fresh water, harsh cargo, groundings, minor collisions, and frequent encounters with bad weather, over time, damages on ships, especially those made of wood. By the 1870s and 1880s, the Great Lakes had a large fleet of aging schooners trying to remain profitable in an increasingly competitive world of steam bulk freighters. The freighters themselves were growing in size and shifting in construction from wood to iron and finally steel. Larger, more efficient,***

*and stronger, these newer ships proved safer but not immune to the dangerous Great Lakes.*

#### **AREA V. Submerged landscape area**

Once inside the submerged wreck landscape, visitors will encounter the following elements. On the ceiling of the room, there is a “watery” treatment to represent of the lake surface. The wreck itself will have some zebra mussel encrustation and other materials of depicting what a Great Lakes schooner wreck, lost in the in late 1870s or early 1880s, would look like today.

The wreck will include one intact side of the mid-ship section of a schooner. This section will include the centerboard trunk, mostly intact ceiling planking, some knees, and deck beams. Some of the deck planking will be in place, other sections will be open. Deck fixtures such as centerboard lifting gear, a bilge pump, and a stump of a mast will be in place. Hovering above the deck is the discovery tube, tracks for an ROV camera, and a grid or other mapping apparatus.

The area down below will function as a discovery gallery with compelling evidence of how the vessel might have been used. There is also evidence of multiple repairs and various tools, marine hardware, and cargo remnants are visible in pockets and discovery cases. In appropriate places the “wreck” will include genuine structural elements from wrecks.

Located just off the main wreck will be one or two pockets of debris that might include a windlass with working parts, a steering quadrant, a disarticulated stove, and crockery. Some of these will be reproduction, with genuine materials in discovery cases.

A wireless audio guide (available for the entire exhibit) or podcast will help visitors explore this under-lake landscape, as will flip books or other graphic guide.

Use of remote sensing and diving technologies will be conducted from wheelchair-accessible booths or nooks; some of these might be located in the entrance portal. ROV—station, combined sidescan sonar/magnetometer, and diving kiosk.

#### ***Underwater Experience Add-in (Suit up and Explore)***

Immersion Experience using high-def or 3-d imagery in the vein of the flight simulator at the Henry Ford, produced by Academy Studios of Novanto, California and Washington D.C. This could be done through Virtual Reality experience possibly, or at least 3-d capable headsets with stereo underwater sounds of breathing, gurgling, the sound of vessels passing close overhead.

#### *Flow:*

Visitors will choose which of the wreck galleries they wish to visit first. But ultimately both galleries funnel people back and forth, and both converge on the Great Lakes People Gallery.

#### **F. GREAT LAKES PEOPLE GALLERY**

Shipwrecks and shipwreck artifacts are powerful ways for us to connect with the people of the past. Sometimes a single simple artifact such as a button may be the last physical link to a person who lived, and possibly even died on the Great Lakes many years ago. Each artifact is part of a story, and sometimes many stories. Archaeologists and historians work to recover and preserve these stories and physical pieces from the past. This gallery reminds us that behind every ship, shipwreck, voyage, and Great Lakes dream were men women and children.

The gallery is framed by the adapted façade of the *Pewabic*. Entering through the gangway visitors encounter a gallery consisting of large and small images, some on panels, some projected on screens or through scrim. This might be done in a couple of different “rooms.” There will be letters to spouses and children, an occasional personal artifact in a case (this is probably the place for the toy pitcher), and perhaps reproductions of early Great Lakes magazines and newspapers. Part of this space might become an area to rest. It is certainly an area for reflection. We might consider soundproofing the remaining *Pewabic* façade to provide a more intimate and controlled space.

The People gallery funnels directly into the visible storage area.

***Message: The Sanctuary and the Shipwreck Century are really about people.***

***Objectives***

- Set up visitor so that they can connect the shipwrecks in the Sanctuary, and more specifically, the artifacts in the visible storage room, with real people. Artifacts are not just neat things, they belonged to people and they are worthy of respect and preservation.
- Provide a good place to incorporate more Great Lakes voices.

**G. VISIBLE STORAGE/ PRESERVATION**

***Goals/Objectives:***

- Provide public access to collection
- Demonstrate “responsible” care of artifacts
- Re-enforce the preservation message
- Present artifact-based stories in an organized and concise manner (e.g) *Pewabic*
- Differentiate between Salvage and Archaeology?
- Make the Case for In Situ Preservation and Interpretation

Visible Storage then leads back out to the main gallery near retail space.

**Appendix I: Exhibit Components (The square footage that appear below are very rough relative allocations and include access areas and buffers—bidders are encouraged to adjust these allocations based upon their own assessment of the space and exhibit components).**

North and South Entryways  
Gift Store/Information Zone 200 sf  
Printed Information Kiosk  
Facility Orientation Panels  
Thunder Bay Interactive Regional Map  
Science on a Sphere 1200 sf  
Conservation Station 200 sf  
Present day/Science Station/Sanctuary Information Kiosk Lane 900-1000 sf  
Making the Great Lakes Gallery 800-900 sf  
Rest/Reflection Station 1200 sf  
Thunder Bay Shipwreck Gallery 1200 sf  
Building Transformation/LEEDS panel (not described in the plan)  
Schooner in Distress exhibit and learning landscape 1500 sf footprint including passage ways plus second deck of 600-700 sf (structure is 24 wide by 20-25 feet long)  
Discovery tube network  
Transition Gallery from Schooner in Distress to Wreck 200 sf  
Rescued from the Storm Lifesaving exhibit 200 sf  
Underwater Archaeology set and learning landscape 1000 sf  
Great Lakes People Gallery 600 sf  
Visible Storage/Preservation Gallery

Interpretive opportunities outside of the gallery  
Observation Deck  
Thunder Bay Theater  
Education Room  
Interpretive River Walk  
Area Lighthouses  
Jessie Besser Museum  
Special Programs