



2015 NOAA *Preserve America Initiative* Internal Funding Program Recipients

Weathermen at War

\$12,000

*Project Lead: Captain Jeremy Adams, Washington, DC
NOAA Office of Marine and Aviation Operations*

This project preserves and promotes the history and heritage of the joint service of four U.S. Weather Bureau personnel, Luther H. Brady, Lester S. Fodor, George F. Kubach and Edward Weber, aboard the Coast Guard Cutter *Muskeget* during World War II. These civilian members served as meteorologists aboard the *Muskeget*, which was sunk with all officers and crew lost to enemy action. The military members aboard *Muskeget* were awarded the Purple Heart Medal for their sacrifice, but the civilian Weather Bureau personnel did not receive the medal, even though they were eligible for the award. This project complements an endeavor currently underway to award the Purple Heart Medal posthumously at an appropriate joint NOAA & USCG recognition ceremony with next-of-kin recipients. An interpretive display, called *Weathermen at War*, will be constructed to highlight the service and personal sacrifice of these men who provided scientific support to the war effort. The display will be included as part of the *Treasures of NOAA's Ark* traveling exhibit but can also stand alone for display at appropriate NOAA/USCG venues.

Working the Waters after Sandy: Connecting Fishermen and Students around Lifeways, Climate Change and Community

\$7,200

*Project Lead: Patricia Clay, Office of Science and Technology, Silver Spring, MD
NOAA Fisheries*

This project builds on an existing maritime education program in the Freeport, New York, School District established by the non-profit Long Island Traditions to include information on fishermen's perceptions of climate change in the aftermath of Hurricane/Post Tropical Cyclone Sandy. The current program introduces students to folklore concepts and the working life of recreational and commercial fishermen on Long Island, NY, and will be augmented to explore how fishermen, their fishing behavior, their traditional lifeways and their views on climate change were impacted by the storm. Additionally, scientific information and data from NOAA's National Weather Service will be included to connect the storm-related impacts to fishery life experiences. The project will develop students' awareness of cultural traditions through field-based interviews with fishermen and their families and through observation in their community. Students will document fishermen's struggles with and adaptation to climate change with a video documentary, recorded interviews, a podcast, an art exhibit, a website and/or essays and poems.

A New View of the Blizzard of 1993**\$7,000**

*Project Lead: Jason Cooper, National Centers for Environmental Information, Asheville, NC
NOAA Satellite and Information Service*

The Blizzard of 1993 was a historic storm that affected millions of people in the eastern United States from Florida to Maine and into the Midwest. Digital satellite images show a large, dynamic storm, and surface observations reflect the strong winds and heavy precipitation that fell over a wide area. The blizzard occurred before NEXRAD radar data was available, and only archived images on 35-millimeter microfilm exist. Funds will be used to convert radar images, currently in microfilm format, to digital to create a composite of the storm throughout its movement from the Gulf Coast to off the Eastern Seaboard. A web page outlining the storm, include existing satellite imagery, surface observations and the new radar loop of the blizzard will be created. Information from this storm can assist NOAA's National Weather Service and U.S. Army Corps of Engineers with assessing the impacts of today's storms on flood control and mitigation.

Tide Predictions Machine #2, Preservation Improvements**\$9,000**

*Project Lead: Todd Ehret, Center for Operational Oceanographic Products and Services
(CO-OPS), Silver Spring, MD
NOAA National Ocean Service*

The Tide Predictions Machine #2, on display in the NOAA Science Center, was used to provide tide predictions for the U.S. coastline from 1912 to 1965, when it was replaced by computers. The machine is functional and has been on display within NOAA facilities since the early 1970s. CO-OPS is frequently called upon to interpret and demonstrate the machine for public NOAA Open House events, requests from NOAA staff, dignitary visits, and meetings of scientific organizations. This historic machine, a NOAA heritage asset, is showing signs of wear and deterioration. A conservator from the Smithsonian was consulted and provided an assessment of the machine's condition and recommendations on steps required to preserve the machine. Funds will assist with hiring a conservationist to address maintenance and other preservation issues that have been identified.

Shifting Shoreline:**\$10,700****An Interactive Exhibit on Coastal Change in Muskegon Lake from the Lumber Mills to Modern Restoration**

*Project Lead: Terry Heatlie, Great Lakes Environmental Research Laboratory, Ann Arbor, MI
NOAA Fisheries, NOAA National Ocean Service and NOAA Research*

In partnership with the Lakeshore Museum Center in Muskegon, the NOAA Restoration Center and partners will design and develop an in-museum exhibit, a traveling exhibit and permanent shoreline waysides that feature historic NOAA assets and mill debris restoration efforts in Muskegon Lake and along its shoreline. The "Shifting Shoreline" exhibit will be an interactive exhibit exploring the changing shoreline of Muskegon Lake from the lumbering era through the present. The exhibit will explore the mills, their debris legacy, and the impact of subsequent restoration efforts on the lake and its shoreline. Dramatic shoreline changes will be displayed as a series of maps from the 1880s to the present. Artifacts such as logs, slag and other large-

scale debris will be used to show how the lake and its usage have changed over time. Visitors will be able to view how NOAA has studied and removed mill debris from the lake.

NOAA's Presence on the Gulf Coast **\$12,000**

*Project Lead: Karen Mitchell, Southeast Fisheries Science Center, Mississippi Laboratory, Pascagoula, MS
NOAA Fisheries*

NOAA has maintained a presence on the Gulf Coast for 64 years. NOAA research vessels have been built in the region and are used nationwide. Pascagoula citizens are working to establish the Mississippi Maritime Museum (MMM) and purchased two buildings that will house the museum that is expected to open to the public in 2016. This museum offers a unique opportunity to recognize NOAA's contribution to the maritime history of the Gulf Coast. Funds will support the design and fabrication of a permanent and a portable NOAA display for the MMM including photos, a model of the NOAA Ship *Oregon II* and video kiosks. The display will educate our youth and general public on both NOAA's mission and its six decades of marine research in the Gulf of Mexico.

***Ho'oku'i (To Join Together):
Exploring the Scientific Value and the Hawaiian Cultural Significance of Pacific Marine Sanctuaries*** **\$12,000**

*Project Lead: Jeremy Potter, Office of Ocean Exploration and Research, Silver Spring, MD
NOAA Research*

In 2015, NOAA Ship *Okeanos Explorer* will use multibeam sonar and a remotely-operated vehicle to collect baseline information about marine monuments and sanctuary sites around Hawai'i. This includes the Papahānaumokuākea Marine National Monument and the Hawaiian Islands Humpback Whale National Marine Sanctuary, focusing on areas that are not easily accessible. Funds will produce a short film following our exploration of these sites, partnering with Honolulu's Bishop Museum to provide cultural context through traditional Hawaiian stories of fishing and canoe voyaging in these areas. NOAA offices and researchers will provide scientific context by showing the ecological and environmental value. This film will be distributed through the internet, screened in exhibits at partner sites, and can be used more broadly as an educational tool to increase public awareness and appreciation for the importance of marine sanctuaries.

**Whales in the Heart of the Sea:
Our Heritage, Culture and Changing Values over Time** **\$12,000**

*Project Lead: Allison Rosner, NOAA Fisheries Greater Atlantic Regional Office, Gloucester, MA
NOAA Fisheries*

In the Heart of the Sea, the award-winning, true story of the whaling ship *Essex*, brings to life our relationship with whales, the sea and each other during a time when resource conservation was heretical. Scheduled to be released as a major motion picture in 2015, this harrowing tale provides the perfect platform to engage the public about our changing relationship with whales over time. Funds will be used to develop a lecture series with accompanying videos and curriculum, bringing to life the evolution of culture and conservation from the perspective of both humans and whales. The thematic fight for survival of the ship's crew as they face unforeseen

threats will not only be juxtaposed against ongoing battles mariners and whales currently face, but will bring to life how our cultural values on whales have shifted from those of consumption to conservation and aesthetic appreciation. Opportunities for how the public can become involved in helping to conserve our cultural connection with these large endangered species will also be highlighted. These lectures will be recorded and showcased online and at local naturalist workshops, with materials distributed to regional environmental education venues such as museums and whale watches.

Celebrating and Preserving 50 Years of History and Accomplishments of the Southeast Fisheries Science Center (SEFSC) Miami Laboratory **\$10,737**

Project Lead: Jennifer Schull, Southeast Fisheries Science Center, Miami Laboratory Miami, FL NOAA Fisheries

The Miami Laboratory of the Southeast Fisheries Science Center (Miami Lab), originally dedicated in 1965 as the Tropical Atlantic Biological Laboratory, will reach its 50th anniversary in 2015. This milestone provides a unique opportunity to commemorate NOAA's heritage and accomplishments. This project will celebrate 50 years of science, service and stewardship on Virginia Key, Florida, through a series of events and activities designed to capture SEFSC's unique contributions, history and culture. The SEFSC will host an open house event where school children and the general public will learn about the Center's history and scientific contributions. A new introductory video prepared by the NOAA Media Center will premiere during the open house in addition to a lecture series that showcases the longitudinal history of fisheries science past, present and future. Historical preservation and display of historical images, video and artifacts that will capture the first 40 years of science at the SEFSC's Miami Lab will be completed. Web and social media will be used to share facts and stories about 50 years of science at SEFSC.

Shore Whaling Exhibit and Education Program at Monterey Bay National Marine Sanctuary Coastal Discovery Center **\$8,000**

Project Lead: Carolyn Skinder, Monterey Bay National Marine Sanctuary, San Simeon Bay, CA National Ocean Service

Monterey Bay National Marine Sanctuary (MBNMS), with the help of California State Parks, will create an outdoor shore-whaling exhibit adjacent to MBNMS' Coastal Discovery Center in Hearst San Simeon State Park. The exhibit will educate the public about how whales were used in the 19th century compared to their status today and will greatly enhance the existing program on the history of old San Simeon. As a popular whale-watching site, San Simeon Bay was also home to one of seventeen shore whaling stations along the California coast during the mid-1800s. Whalebones still wash up on the beach today. The exhibit will allow the public to see and interact with one of the original try pots used to render whale blubber. This exhibit will improve upon the park's overall interpretive value while highlighting NOAA's role in both resource protection and maritime heritage.

Ka Wā Ma Mua, Ka Wā Ma Hope, Using the Past to Inform the Future: **\$9,000**
English Translation of Hawaiian Language Newspaper Accounts of Unusual Weather Events

*Project Lead: Allen Tom, Pacific Islands Region, Office of National Marine Sanctuaries, Kihei, HI
NOAA National Ocean Service*

Prior to modern instrumentation, observations of wind, sea states, cloud patterns, the appearance and movement of celestial bodies, smells, and animal behavior as indicators of current and approaching weather were recorded in Hawaiian newspapers. These historical newspaper articles about unusual weather could provide early signs of climate change and reveal adaptations people had to make when their environment changed. Between 1834 and 1948, more than 100 newspapers were published in the Hawaiian language where nearly 4,000 weather events were detailed. Previous work has translated less than ten percent into English. Continuing these translations by our partner Awaiaulu would add to our understanding of the climate story and how a changing environment impacted lives a century ago. These translations will be used by NOAA's National Weather Service, University of Hawaii Sea Grant, Joint Institute for Marine and Atmospheric Research and local universities to understand the climatic record and help with planning of adaptation strategies via correlations to climate patterns such as El Niño and La Niña. The resulting information will be used to develop a searchable database, a new website and an outreach publication.

Bache Baseline Preservation at Botany Bay Wildlife Management Area, SC **\$6,265**

*Project Lead: Kyle Ward, Office of Coast Survey, Charleston, SC
NOAA National Ocean Service*

Professor Alexander Dallas Bache, the second superintendent of the U.S. Coast and Geodetic Survey, was the great grandson of Benjamin Franklin, West Point roommate of Jefferson Davis and inventor of the Bar of Invariable Length. In January 1850, Bache and his assistants established a highly accurate survey baseline on Edisto Island, South Carolina, using the Bar of Invariable Length to establish the geodetic framework required to create accurate nautical charts. Prior to Bache's work, navigation charts to the ports of Charleston and Savannah were inaccurate, incomplete and often led mariners into deadly danger. This project will continue preservation efforts started at the West Base mark in Edisto State Beach Park by removing debris and adding interpretive and roadside/path signs around the East Base monument located in the Botany Bay Wildlife Management Area. Printed outreach material will be developed and made available to the public at the Edisto Beach Interpretive Center to guide visitors. A website will be developed to highlight Bache's work and NOAA's rich history of surveying and charting.

TOTAL: \$115,902