

**COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
FINAL MINUTES OF PUBLIC MEETING – March 31, 2022**

MEMBERS PRESENT (ROLL CALL):

Jack Chapin (Designee of the Director of Environmental Law Enforcement)
Michael Driscoll (Designee, Director of DCR Division of Waterways)
Vin Malkoski (Dive Community Representative [Organization])
Mark McClanan (Dive Community Representative [At-Large])
Graham McKay (Marine Archaeologist)
Dan Sampson (Designee of Lisa Berry Engler, Director of Coastal Zone Management)
John Warner (State Archivist)

David Robinson, Director (Staff for the Board)

MEMBERS ABSENT:

Brona Simon (State Archaeologist)
VACANT (Designee of Brona Simon, Executive Director of the Massachusetts Historical Commission)

PROCEEDINGS:

This virtual public meeting of the Massachusetts Board of Underwater Archaeological Resources (or the Board or BUAR) was convened by its Director, David Robinson (Dave R), with the assistance of co-host and the Board's Deputy Director and the Massachusetts Coastal Zone Management (MCZM) Director's designee, Dan Sampson, at 12:31 PM on March 31, 2022, with a quorum of seven (7) current members of the Board in attendance.

The purpose of this regularly-scheduled public meeting was to conduct the BUAR's business that requires the involvement of the full Board.

Items on the agenda included:

- approval of the January 27, 2022 Board meeting's minutes
- the Director's report
- Board Member reports
- a summary of the Board's Public Engagement Activities
- Old Business, and
- New Business.

Dave R explained that the BUAR's staff, who had worked remotely between March 2020 and January 2022 due to the COVID-19 pandemic, were now working in-person at the office one day per week as part of the Executive Office of Energy & Environmental Affairs' (EEA's) hybrid "Future-of-Work" schedule. All BUAR business and communications continue to be conducted primarily via email, supplemented by virtual meetings, limited phone calls, hard-copy mailings, and weekly transmittals of BUAR mail from MCZM's Boston office to BUAR's off-site telework location. Holding BUAR's meetings virtually through publicly-available, internet-based, remote-access "Zoom" technology as an alternative means of meeting was authorized initially by Governor Baker's Executive Order of March 12, 2020 (MGL c. 30A, s. 20), and then extended on June 16, 2021 with the Governor's signing into law "An Act Relative to Extending Certain COVID-19 Measures Adopted During the State of Emergency" (MGL c. 20, s. 20). The Board voted at its January 27, 2022 meeting to continue holding its public meetings via remote access for the remainder of this year (2022). The Board will consider and vote on the future format of its public meetings in 2023 and beyond at its December 1, 2022 meeting. Board votes during this meeting were taken through a roll call, as is required by MGL c. 30A, ss. 18-25. Virtual meeting ground-rules and security precautions were reviewed by Dave R, and Board members, permittees, and members of the public were welcomed to the meeting.

**COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
FINAL MINUTES OF PUBLIC MEETING – March 31, 2022**

1. MINUTES

A. Minutes of the January 27, 2022 Meeting of the Board

Dave R asked if the Board had any comments or corrections to the draft minutes of the Board's January 27, 2022 public meeting. There were no comments or corrections to the minutes.

Vin Malkoski moved to accept the minutes of the Board's January 27, 2022 public meeting as written. Graham McKay seconded. Unanimous in favor by a roll-call vote. So voted.

*****Change in the Order of Business**

Due to the full agenda for the meeting, Dave R as Chair changed the order of business to move directly to the agenda's Old Business and New Business action items. These agenda items were then followed by the Director's Report, Board Member Reports, and a summary of the Board's Public Engagement Activities since its January 27, 2022 meeting.

3. OLD BUSINESS

A. Bassing Cove Maritime Association

Bassing Cove Maritime Association's (BCMA) Excavation Permit (91-001) for their Scituate site was up for renewal. The Board granted the BCMA a permit extension at its last meeting. The BCMA has been coordinating with the Board's staff re: submitting a renewal application and scheduling a site visit by BUAR staff to review with the BCMA their goals for completing the project and the Board's requirements for closing out the permit at a future date. The BCMA plans to renew, but had not yet submitted their application. The BCMA's permit would expire unless its expiration date was extended by the Board a second (and final) time to the Board's next regularly-scheduled public meeting on May 26, 2022. It has been the Board's practice to grant up to two extensions in a permit year under these circumstances. This would be the permit's second (and final) extension. Neither Tom Mulloy, Debra Jackson, nor Hank Lynch was present to represent the Bassing Cove Maritime Association's permit. There was no further discussion.

John Warner moved to grant an extension of the expiration date of the Bassing Cove Maritime Association's Excavation Permit (91-001) for their Scituate site, with all the standard and special conditions in effect, until the Board's next scheduled meeting on May 26, 2022. Vin Malkoski seconded. Unanimous in favor by a roll-call vote. So voted.

B. Raymond Hayes

Dr. Raymond Hayes's Reconnaissance Permit (07-001) for his Great Harbor (Woods Hole) site was up for renewal. Dr. Hayes submitted a complete renewal application, fee, and annual report in accordance with the Board's regulations. Dave R acknowledged Dr. Hayes for the high quality and thoroughness of his annual report. Dr. Hayes was not in attendance to represent his permit. There was no further discussion.

Jack Chapin moved to renew Raymond Hayes's Reconnaissance Permit (07-001) for his Great Harbor Site in Woods Hole, with all the standard and special conditions in effect for the period of one year with the permit's new expiration set as March 31, 2023. Mike Driscoll seconded. Unanimous in favor by a roll-call vote. So voted.

C. James M. Karos

James M. Karos's Reconnaissance Permit (06-001) for his Chelsea Creek Site in Boston, Chelsea, and Revere was up for renewal. The Board granted Mr. Karos a permit extension at its last meeting. Mr. Karos submitted a completed renewal application, fee, and annual report in accordance with

**COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
FINAL MINUTES OF PUBLIC MEETING – March 31, 2022**

the Board's regulations. Mr. Karos was not in attendance to represent his permit, although he had been in contact with the Board's staff the morning of this meeting. There was no further discussion.

Mike Driscoll moved to renew Mr. Karos's Reconnaissance Permit (06-001) for his Chelsea Creek Site in Boston, Chelsea, and Revere with all its standard and special conditions in effect for the period of one year, retroactive to its original expiration date of January 27, 2022, with the permit's new expiration set as January 27, 2023. Vin Malkoski seconded. Unanimous in favor by a roll-call vote. So voted.

D. Kenneth J. Medeiros

Kenneth J. Medeiros's Reconnaissance Permit (07-003) for his Duxbury site was up for renewal. The Board granted Mr. Medeiros a second (and final) permit extension at its last meeting. Mr. Medeiros submitted a completed renewal application, fee, and annual report in accordance with the Board's regulations. Mr. Medeiros was in attendance to represent his permit. He reported that he had some health issues the previous year, but was feeling better and looking forward to being back in MA soon. He hoped to get out on the site again this summer. There was no further discussion.

Vin Malkoski moved to renew Mr. Medeiros's Reconnaissance Permit (07-003) for his Duxbury site, with all standard and special conditions in effect, for the period of one year, retroactive to its original expiration date of December 5, 2021, with the permit's new expiration set as December 5, 2022. Jack Chapin seconded. Unanimous in favor by a roll-call vote. So voted.

E. The Public Archaeology Laboratory, Inc.

The Public Archaeology Laboratory, Inc.'s (PAL's) Special Use Permit (21-001) was up for renewal. PAL submitted a complete application and annual report in accordance with the Board's regulations. Ms. Suzanne Cherau from PAL was in attendance to represent PAL's permit. Ms. Cherau reported that fieldwork was held up last year, but was anticipated to start in early Fall of this year and that there were no changes to the work plan or sequence of work from what PAL had proposed originally. There was no further discussion.

Vin Malkoski moved to renew PAL's Special Use Permit (21-001) for their Monatikquot River Restoration, Armstrong and Ames Pond Dam Removal Project area in Braintree, with all the standard and special conditions in effect, for the period of one year with the new expiration date set as March 31, 2023. Graham McKay seconded. Unanimous in favor by a roll-call vote. So voted.

F. SEARCH, Inc.

On March 1, 2022, the Board's staff was contacted by Dr. Barry Bleichner, SEARCH, Inc.'s Principal Investigator on BUAR Special Use Permit (19-004) for the Amitie Subsea Cable System Project, to inform the Board that he was leaving SEARCH, Inc. for a position with the US Navy and that SEARCH, Inc.'s Dr. Michael Brennan would be the new Principal Investigator/Point of Contact for SEARCH, Inc. on the permit. Dr. Brennan was included with Dr. Bleichner on the permit and had previously served as the Project Archaeologist. The change was acknowledged by the Board. There was no further discussion.

4. NEW BUSINESS

A. R. Christopher Goodwin & Associates, Inc.

On March 3, 2022, R. Christopher Goodwin & Associates, Inc. (RCG&A) submitted a Special Use Permit Application to the Board to conduct marine archaeological reconnaissance survey of the Massachusetts state waters portion of the Vineyard Northeast Project's Offshore Export Cable Corridor (or OECC) in Buzzards Bay and the North Atlantic Ocean, extending to Westport, MA. A revised application was submitted to the Board on March 11, 2022, in response to the Board staff's comments on the initial application. On March 15, 2022, the Board's Director reviewed, approved, and issued

**COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
FINAL MINUTES OF PUBLIC MEETING – March 31, 2022**

provisional Special Use Permit 22-002 to RCG&A with the special condition that RCG&A provide for the full Board's review a revised proposal document that would include:

- 1) the name(s) and resume(s) of the RCG&A team's qualified geomorphologist/geo-archaeologist(s) knowledgeable about and experienced in analyzing and interpreting high-resolution geophysical and geotechnical survey data from the southern New England region;
- 2) the additional statement that: "All high resolution geophysical and geotechnical marine archaeological survey work performed in state waters for the project will be conducted under a MBUAR Special Use Permit, in conformance with Massachusetts General Law Chapter 6, sections 179-180, and Chapter 91, section 63, and MBUAR Regulations (312 CMR 2.0), and will meet the minimum geophysical and geotechnical survey requirements specified in MBUAR's published "Policy Guidance on Archaeological Investigations and Related Survey Standards for the Discovery of Underwater Archaeological Resources" in the proposal's Introduction section;
- 3) the additional statements that: "All coring performed for geoarchaeological assessment purposes in state waters for the project will be conducting at the minimum sample spacing of one sample per 1,000 feet, as specified in MBUAR's published Policy Guidance on Archaeological Investigations and Related Survey Standards for the Discovery of Underwater Archaeological Resources," and "Additional cores will be taken as needed to adequately characterize and further define the limits of identified paleolandscape features for archaeological assessment and site identification purposes" in the proposal's Shallow Geotechnical Investigation section;
- 4) a brief explanation of how benthic sampling and high-definition video data collected for the project's environmental surveys would be utilized by RCG&A for the archaeological survey (or eliminate the proposal's Environmental Surveys section if these data were not going to be used by RCG&A as part of their archaeological survey); and
- 5) a copy of the RCG&A's "Unanticipated Discovery Plan" for BUAR to review and comment on, if such a plan was going to be implemented as part of the proposed survey activities.

RCG&A submitted a second revised work plan to the Board on March 17, 2022 with the requested information and revisions, thus meeting the provisional permit's special condition for the Board to review and consider its permit application for formal approval. Mr. Tyler McClellan and Ms. Ashley Himmelstein from RCG&A were in attendance to represent RCG&A's permit. Dave R extended the Board's heartfelt condolences to Mr. McClellan and Ms. Himmelstein on the passing in February of RCG&A's founder, president, and CEO, Dr. R. Christopher Goodwin, one of the nation's leading experts in cultural resources management. There was no further discussion.

Dan Sampson moved to approve for the period of one year, effective March 31, 2022, R. Christopher Goodwin & Associates, Inc.'s Special Use Permit (22-002) for the Massachusetts state waters portion of the Vineyard Northeast Project's OECC's area of potential effect in Buzzards Bay and the North Atlantic Ocean, extending to Westport, as detailed in the work plan and maps accompanying the application, with all the standard and special conditions in effect. For projects subject to review under Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), permittees are directed to consult with, provide their proposed research design and methodology to, and obtain the approval of, the State Historic Preservation Office/Massachusetts Historical Commission and the lead federal agency, in accordance with 36 CFR 800.4, prior to conducting the field investigation. This permit does not relieve the permittee or any other person of the necessity of complying with all other federal, state and local statutes, regulations, by-laws and ordinances. Jack Chapin seconded. Unanimous in favor by a roll-call vote. So voted.

**COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
FINAL MINUTES OF PUBLIC MEETING – March 31, 2022**

B. Commonwealth Heritage Group, Inc.

On March 8, 2022, Commonwealth Heritage Group, Inc. (or CHG) submitted a Special Use Permit Application to the Board to conduct archaeological monitoring and documentation, as well as the recovery of artifacts, prior to and during construction activities associated with the Lowell Area Gas Modernization Project within two canal crossing areas (in “Wetland W-2” and near “Wetland W-5”) of the Middlesex Canal in Lowell, Massachusetts, as described in the application and detailed in its attached Figures 1 and 2. On March 25, 2022, the Board’s Director reviewed, approved, and issued provisional Special Use Permit 22-003 to CHG. Mr. Martin Dudek from CHG was in attendance to represent CHG’s permit. Mr. Dudek noted that as part of CHG’s MHC permit for the project, CHG was directed by MHC to contact the Middlesex Canal Commission and Lowell Historic Board in the event that any intact elements of the canal were encountered during excavation. Dave R asked Mr. Dudek if he was aware that any underwater archaeological resources encountered during the project are the property of the Commonwealth; Mr. Dudek responded in the affirmative. Dave R noted that the provisional permit was granted, and the formal permit, if granted, would be with the expectations that CHG: a) comply with the Board’s published *Policy Guidance for the Discovery of Unanticipated Underwater Archaeological Resources*; and b) coordinate with the Board and provide for its review and concurrence archaeological conservation and curation plans for any waterlogged artifacts that may be recovered from submerged contexts within the project area requiring specialized conservation treatment by an archaeological conservator qualified and experienced in the stabilization of waterlogged materials. Mr. Dudek confirmed that he understood these requirements of the permit. He also noted that he had previous experience storing and conserving waterlogged artifacts as a director of the archaeological work that was done for the “Big Dig” Central Artery Project in Boston, and that CHG would consult with his CHG colleague and underwater archaeologist, Mr. Steven R. James, Jr., formerly of PanAmerican Consultants, Inc. (a previous BUAR permittee), and the Conservation Research Laboratory at Texas A&M University, for any waterlogged artifacts with specialized conservation needs. Graham McKay, asked if there were any existing utilities corridors in the project area that were considered for use in order to minimize further disturbances to the canal. Mr. Dudek responded that there were existing utilities and that the modernization project would be passing through disturbed and truncated areas (e.g., in the parking lot portion of the Wetland W-5 crossing area). There was no further discussion.

Graham McKay moved to approve for the period of one year, effective March 31, 2022, Commonwealth Heritage Group, Inc.’s Special Use Permit (22-003) to conduct archaeological monitoring and documentation, as well as the recovery of artifacts, prior to and during construction activities associated with the Lowell Area Gas Modernization Project within two canal crossing areas (in Wetland W-2 and near Wetland W-5) of the Middlesex Canal in Lowell, as detailed in the work plan and maps accompanying the application, with all the standard and special conditions in effect, including compliance with the Board’s published *Policy Guidance for the Discovery of Unanticipated Underwater Archaeological Resources*. Further, the motion to grant the permit was made with the expectation that CHG will coordinate with the Board and provide the Board for its review and concurrence archaeological conservation and curation plans for any waterlogged artifacts that may be recovered from submerged contexts within the project area that require specialized conservation treatment by an archaeological conservator qualified and experienced in the stabilization of waterlogged materials. For projects subject to review under Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), the permittee is directed to consult with, provide their proposed research design and methodology to, and obtain the approval of, the State Historic Preservation Office/Massachusetts Historical Commission and the lead federal agency, in accordance with 36 CFR 800.4, prior to conducting the field investigation. This permit does not relieve the permittee or any other person of the necessity of complying with all other federal, state and local statutes, regulations, by-laws and ordinances. Mike Driscoll seconded. Unanimous in favor by a roll-call vote. So voted.

*****Change in the Order of Business**

The Chair again changed the order of business and moved to the Director’s Report, Board Member Reports, and a summary of the Board’s Public Engagement Activities since its January 27, 2022 meeting.

**COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
FINAL MINUTES OF PUBLIC MEETING – March 31, 2022**

2. DIRECTOR'S REPORT

A. Bay State Council of Divers Meeting

Dave R reported that on February 2, 2022, the Board's staff attended a remote-access meeting of the Bay State Council of Divers. Topics of discussion during the meeting included: the "Rockport Lawsuit," which seems to be winding down and doesn't sound like it will result in any new restrictions to shoreline access for the recreational diving community in Rockport; a fund-raising initiative for the walking-ramp replacement at Old Garden Beach in Rockport; and a preview of the Bay State Council of Divers' planned activities for 2022. BUAR staff reported on their recent collaboration in public education programming with the Trustees of Reservations staff at their Castle Hill/Crane Estate property in Ipswich focusing on the *Ada K. Damon* shipwreck site, and the growing two-pronged threat to MA's coastal maritime heritage resources from erosion caused by sea level rise and from the impacts of constructing coastal resiliency projects to address threats to coastal life and property from sea level rise.

B. MAS Board of Trustees Meeting

Dave R reported that on January 15, 2022, the Board's staff attended (in-person) the monthly Board of Trustees meeting of the Massachusetts Archaeological Society (or MAS) at the Robbins Museum in Middleboro. General business of the MAS was discussed and it was noted that there is an important upcoming panel discussion on "Indigenous Perspectives on Archaeology" by fellow MAS Trustee and Wampanoag Tribe of Gay Head (Aquinnah) author and historian, Linda Coombs, Mashpee Wampanoag THPO, David Weeden, and Public Archaeology Laboratory, Inc. Archaeologist, Eric Lott. The panel discussion is being hosted by the Cape Ann Museum in Gloucester on April 16, 2022. Registration at the museum's website (<https://www.capeannmuseum.org>) is required.

C. Fieldwork

Sweet Knoll State Park Rail Trail and Canoe Access Project Area Site Visit, Dighton

Dave R reported that on February 11, 2022, the Board's staff participated in the in-person site visit of the Sweet Knoll State Park Rail Trail and Canoe Access Project area situated along the shores of the Taunton River in Dighton. Of particular interest was an historical, earth-filled, stone-bulkheaded, pier likely to be associated with the river's early history of shipping and waterborne trade. The pier extends into the river and is adjacent to the proposed Canoe Access portion of the Project area. The Board's staff looks forward to reviewing and commenting on this project in the near future.

Conomo Point Shipwreck, Essex

Dave R reported that on March 11, 2022, the Board's staff, joined by former Director of the Board, Victor Mastone, conducted fieldwork in response to a report BUAR received from archaeologist, Dr. Dianna Doucette, a Principal Investigator with PAL (The Public Archaeology Laboratory, Inc.), in Pawtucket, RI. Dr. Doucette reported observing wooden timbers that she thought could be part of a shipwreck protruding several inches above the intertidal sands of the Essex River off of Conomo Point in Essex. The identification of the timbers as belonging to a shipwreck was confirmed by the Board's staff during their site visit. The finished (4.5-x-4.5 in) heads of the futtocks of five frames (doubled to create 9 in-sided frames) from one side of the ship's hull, and 1-in thick hull planking visible extending above the sands, were measured and photo-documented by the Board's staff. Exposure of the port and starboard sides of one of the frames allowed for a measurement of the wreck's preserved width (15 ft, 6 in). A sixth, disarticulated, frame was also observed protruding at approximately a right-angle from the last of the five frames that were visible on one side of the hull. GPS coordinates were recorded for the approximate center of the site. The observed condition of the shipwreck's wooden remains suggests an early-to-middle nineteenth century age for the wreck, based on the wood's observed condition relative to other dated shipwrecks BUAR staff has investigated in Massachusetts waters. A single, banded, whiteware ceramic sherd found and recovered by BUAR staff within 2 to 3 m of the wreck has a date range extending from as early as ca. 1820. Its banded decoration was popular in the middle-1800s. Initial archival research by

**COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
FINAL MINUTES OF PUBLIC MEETING – March 31, 2022**

BUAR's staff has thus far produced no previous record of, or identity for, the vessel. Long-time local resident, Steve Cuthbertson, noted that over the course of his 50-plus year lifetime, he'd seen the location of the river channel migrate landward – towards the Point and wreck site. It seems likely that this observed migration of the river channel may have had something to do with the recent exposure of these hull remains. Dr. Doucette has agreed to monitor the site periodically and to report to BUAR any significant changes in the site that she sees.

Ebenezer Burnham Shipyard, Water Street, Essex

Dave R reported that on March 11, 2022, the Board's staff and Mr. Mastone also inspected the end of Water Street in Essex, former location of the shipyard of Ebenezer Burnham, builder of the 1875 fishing schooner, *Ada K. Damon*. The only remaining vestiges likely associated with the shipyard that the Board's staff observed were a cut-out of the natural marsh margin along the river and part of what appeared to be a stone retaining wall where Mr. Mastone hypothesized the yard's ways for side-launching vessels into the river may have been located.

D. Massachusetts-Related Archaeology in the News

Timbers from the Seventeenth-Century Cape Cod Shipwreck “Sparrow-Hawk” Dated

Dave R reported that results of a recently completed, international, multiyear, scientific study of the remains of shipwreck timbers found more than 150 years ago have provided the best evidence to-date that they belonged to an ill-fated, unknown named, early-seventeenth century vessel that foundered in a storm and wrecked on Cape Cod in 1626, and later became known as “*Sparrow-Hawk*.” Led by BUAR research partner and frequent volunteer and Woods Hole Oceanographic maritime archaeologist and researcher, Dr. Calvin Mires, who was assisted by former BUAR Director, Victor Mastone, and others, the study's results were published this month in the “*Journal of Archaeological Science: Reports*.”

The writings of the Plymouth Colony's Governor, William Bradford, tell us that a small ship bound for Jamestown, Virginia with a pair of English merchants and several Irish servants on board (reported to be the first documented Irish colonists in New England) was driven ashore by a storm in 1626 in what is today the town of Orleans. The crew and passengers on the vessel were aided by the local Indigenous population (English-speaking members of the Nauset Tribe) and the Pilgrims from nearby Plymouth. The unrepairable vessel was abandoned and soon became buried by the Cape's infamous shifting sands. The wreck remained hidden until 1863 when a storm uncovered its remarkably well-preserved remains, presumed at the time to be those of the same ship described by Bradford, based on its location. Considered the oldest known shipwreck of English colonial America, there had always been some uncertainty if the ship remains were actually those of an early seventeenth-century vessel that could possibly be *Sparrow-Hawk*.

Using a method known as “wigggle-match dating,” a form of radiocarbon analysis, and dendrochronology, Dr. Mires and his colleagues, Dr. Aiofe Daly, an associate professor at the Saxo Institute at the University of Copenhagen, DK, and Dr. Fred Hocker, Director of Research at the *Vasa* Museum in Stockholm, SE, were able to narrow down roughly when *Sparrow-Hawk* was built. The wigggle-match dating indicated that the wood used to make the boat was harvested between 1556 and 1646. Given that tree-rings are like fingerprints and reflect the regional climate of where the tree grew, tree-ring patterns in *Sparrow-Hawk*'s hull timbers matched those of trees harvested in southern England in the seventeenth-century. Further, the oak and elm that were used, according to the *Vasa* Museum's Dr. Hocker, who specializes in the research of wooden shipbuilding, represented a “traditional combination of materials in shipbuilding in England in that era.” Although they have been exhibited publicly in the past, *Sparrow-Hawk*'s remains are currently in storage at the Plymouth Museum. More scientific study is planned, as is digital modeling to construct a 3D model of the shipwreck, with the goal of putting it back on public display in 2026, the 400th anniversary of the wreck.

**COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
FINAL MINUTES OF PUBLIC MEETING – March 31, 2022**

Westport Whaling Ship, *Industry*, Identified in the Gulf of Mexico

Dave R reported that on February 25, 2022, the wreck of the 207-year-old, Westport-built, whaling ship, *Industry*, was investigated by a team of archaeologists from the Bureau of Ocean Energy Management (or BOEM), the private archaeology firm (and current BUAR permittee) SEARCH, Inc., and the National Oceanic and Atmospheric Administration (NOAA). Discovered by an energy company in 2011 and viewed briefly during a 2017 survey conducted with an autonomous underwater vehicle (or AUV), the wreck lies at the bottom of the Gulf of Mexico, approximately 72 miles off the coast of Pascagoula, Mississippi, in over 5,000 feet of water. Built in 1815, the two-masted, 64-ft, wooden brig was employed in the whaling industry and hunted sperm whales across the Atlantic Ocean, the Caribbean, and the Gulf of Mexico until it was lost at sea after being damaged in a storm in May of 1836. *Industry's* crew and officers included Native American, black, white, and multiracial mariners. Incredibly, *Industry's* officers and crew survived the sinking and were picked up by another Westport-based whaling ship, *Elizabeth*, which returned them safely home to Westport. According to NOAA researchers working on the project, *Industry* was connected to Paul Cuffe, a Cuttyhunk Island-born mariner, entrepreneur, abolitionist, and philanthropist whose father was a freed slave and whose mother was Wampanoag. Cuffe's son, William, was a navigator on *Industry*, and Pardon Cook, Cuffe's son-in-law, was an officer on the brig. Cook is thought to have made the most whaling voyages of any black person in American history. No artifacts were removed from the wreck site as part of the most recent expedition and NOAA plans to leave the site untouched.

Erosion Unearths Grave of Indigenous Person on the Cape Cod National Seashore

Dave R reported that on March 22, 2022 the *Cape Cod Times* reported on the erosion and disturbance of ancient Indigenous human remains estimated to be 1,000 years old on the outer Cape within the Cape Cod National Seashore. Like the destruction of the *Ada K. Damon's* formerly intact wreck site in the Fall of 2020, this most recent incident is yet another example of the increasing and very real threat that MA's coastal heritage resources, and its ancient Indigenous cultural sites and burials along the shore, face from coastal erosion caused by climate-change-induced sea level rise.

The extent of this threat is further indicated by the February 2022 NOAA report entitled: *Global and Regional Sea Level Rise Scenarios for the United States: Updated Mean Projections and Extreme Water Level Probabilities Along U.S. Coastlines*. The report provides: 1) sea level rise scenarios to 2150 by decade that include estimates of vertical land motion; 2) a set of extreme water level probabilities for various heights along the U.S. coastline; and 3) estimates of flood exposure using contemporary U.S. coastal flood-severity thresholds for current conditions (e.g., sea levels and infrastructure footprint) and for the next 30 years (out to year 2050), assuming no additional risk reduction measures are enacted. Significantly for us in the Northeast, the report states that:

a) "Relative sea level along the contiguous continental U.S. coastline is expected to rise on average as much over the next 30 years (0.25–0.30 m over 2020–2050) as it has over the last 100 years (1920–2020), and;

b) "Due to processes driving regional changes in sea level, there are regional differences in both the modeled scenarios and observation-based extrapolations, with higher Relative Sea Level rise along the East Coast predicted to be 0–5 cm higher on average than the rest of the continental US coast.

As noted in the recent *Historical Archaeology* journal article that the Board's staff co-authored with Dr. Mires and Mr. Mastone:

Rather than waiting until the destruction of a site occurs and managers are required to react and triage the damages to the resource with little or no detailed guidance about the appropriate steps to follow, as was the case for the Ada K. Damon site, efforts and funding must be devoted to integrating cultural resource management within coastal resiliency planning to identify, monitor, and document sites at risk from sea level rise and from our management responses to it. While partnerships and collaborative efforts

**COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
FINAL MINUTES OF PUBLIC MEETING – March 31, 2022**

between private organizations (such as the Trustees of Reservations), academic programs, and government agencies tend to concentrate efforts on single sites, agencies such as MBUAR, must be provided with adequate resources to lead these efforts and accomplish these tasks at a statewide level in partnership with other state, federal, and tribal agencies.

The Board's staff sees the threat posed by sea level rise as the greatest preservation challenge that the Board currently faces and thinks that it is actually a two-pronged threat – there is the environmental threat from sea level rise-related erosion, but there is also the threat from the coastal resiliency responses to protect life and property from that erosion, which can also have significant impacts. The Board's staff is currently working with CZM to develop a project team and proposal for beginning to address the threat of sea level rise and to develop a statewide response to it. Dave R asked if there was any interest among the Board's members in working with the Board's staff on the proposal and in focusing the Board's attention on the issue? The Board members attending the meeting were unanimous in their affirmative reply for supporting involvement in both opportunities.

3. BOARD MEMBER REPORTS

There were no Board member reports.

4. PUBLIC ENGAGEMENT ACTIVITIES

A. "Shipwreck Scholars" Winter 2022 Program

Dave R reported that the Board's staff and the Trustees of Reservations' Educators and Activity Manager at the Trustees' Castle Hill/Crane Beach property in Ipswich continued delivering the "Shipwreck Scholars" interactive public educational programming to children ages 5-12 and their families through the Winter of 2022 with four sold out programs run (sometimes in the snow!) on February 13th and 24th, and on March 26th. Based on the program's popularity, the Trustees have scheduled four more dates for the program this Spring (April 10 and 22, May 21, and June 19).

B. Northshore Frogmen Dive Club Presentation

Dave R reported that on March 10, 2022, the Board's staff gave the invited Zoom presentation "*Ipswich's Twice-Wrecked 1875 Schooner Ada K. Damon; a "Canary-in-the-Coal-Mine" for the Future of Massachusetts's Coastal Maritime Heritage Sites,*" to the North Shore Frogmen Scuba Diving Club.

C. Dedham Retired Men's Club In-Person Presentation

Dave R reported that on April 8, 2022, the Board's staff will be giving its third invited presentation on Massachusetts underwater archaeology topics to the membership of the Dedham Retired Men's Club. This Spring's topic will focus on submerged paleocultural landscapes archaeology and the BUAR-permitted project, "*Project Mishoon*" in Lake Quinsigamond.

D. Boston Harbor Now Presentation

Dave R reported that on April 13, 2022, from 7-8 pm, the Board's staff will be giving the invited (remote access) presentation, "*Revolutionary Harbor: The Underwater Archaeology of Boston Harbor,*" as part of Boston Harbor Now's Revolutionary Harbor Lecture Series. Registration for this free public lecture is required; see the Boston Harbor Now website's events page for more information (<https://www.bostonharbornow.org/events/>).

E. Munson Institute at Mystic Seaport Lecture

Dave R reported that on July 26, 2022, the Board's staff will be giving an invited lecture at the Munson Institute at Mystic Seaport. The Institute is said to be the leading, and often sole, center for the

**COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
FINAL MINUTES OF PUBLIC MEETING – March 31, 2022**

teaching of maritime history in the United States. Its faculty includes top maritime historians from across the country. The invited lecture will be given as part of an enhanced session the Institute is offering its undergraduate and graduate students this summer as part of the multi-institutional, Andrew W. Mellon Foundation-funded project, entitled, "*Reimagining New England: Historical Injustice, Sovereignty and Freedom*," that will expand the Institute's cadre of scholars to include specialists from collaborating institutions and representatives from the region's Native communities. The Munson Institute, Mystic Seaport, the Center for the Study of Slavery & Justice at Brown University, and Williams College are participating institutions. Topics to be explored as part of the summer program include: the history and legacies of settler colonialism, racial slavery, servitude, dispossession, Indigenous resistance, African-American strategies for fashioning pursuits of freedom, and persistence and presence of Indigenous communities on the contemporary landscape. A distinctive feature of this summer's program will be the framing of these topics within the context of the Dawnland's (i.e., New England's) maritime setting, an environment that fostered interaction, mobility, and exploitation. The program will coincide with Mystic Seaport's "Reimagining New England Histories" exhibition entitled: "Entwined: The Sea, Sovereignty and Freedom." The Board's staff will be speaking on the day that the program explores the area of "Underwater Archaeology," and will be talking with the Senior Curator of Maritime Social History and Director of the Munson Institute, Dr. Akeia de Barros Gomes, next week to decide on the specific aspect of underwater archaeology on which to focus the talk.

The next regularly scheduled public meeting of the Board will be held via remote-access at 12:30 pm on May 26, 2022. Permittees and interested members of the public are encouraged to monitor the BUAR webpage's Public Meetings Information section for updates, meeting agendas, remote-access meeting log-in instructions, and the Board-approved minutes from past meetings.

Dave R thanked everyone for their attendance and participation in the public meeting of the Board, and extended special thanks to Dan Sampson for co-hosting, and to the Board and its permittees for their continued effort, cooperation, and patience during these challenging times. He wished everyone continued good health and safety.

John Warner moved to adjourn the meeting at 1:31 pm. Mike Driscoll seconded. Unanimous in favor by a roll-call vote. So voted.

Respectfully submitted,

David S. Robinson
Director