

Beneath the Waters of Time

Interior's Submerged Cultural Resource Programs

The name RMS *Titanic* evokes powerful images: the most magnificent luxury liner of its day, an unsinkable ship built to exacting standards; the tragic maiden voyage that ended abruptly when it scratched a behemoth iceberg on April 14, 1912, sending 1,523 people to their deaths; its amazing discovery 73 years later on the floor of the Atlantic Ocean at a depth of two-and-one-half miles beneath the surface, and the remarkable recovery of artifacts by a court-appointed salvor.

RMS *Titanic*, like other shipwrecks in international waters, is subject to the maritime laws of salvage and finds. With some exceptions, so are most shipwrecks in U.S. waters. Tens of thousands of submerged cultural resources scatter the bottomlands of U.S. waters. They include shipwrecks, aircraft, lighthouses, forts, wharves, and prehistoric sites that have become inundated due to subsidence, migration of barrier islands, and the 120-meter rise in global sea level since the height of the last ice age around 19,000 years ago.

Most of these resources are in inland waterways and near shore on state submerged lands, generally out three nautical miles from the coastline. Some are further offshore on the Outer Continental Shelf (OCS). They contain invaluable information about the nation's prehistory and history from the earliest periods of migration to and occupation by native peoples and subsequent exploration and colonization by Europeans to the present day.

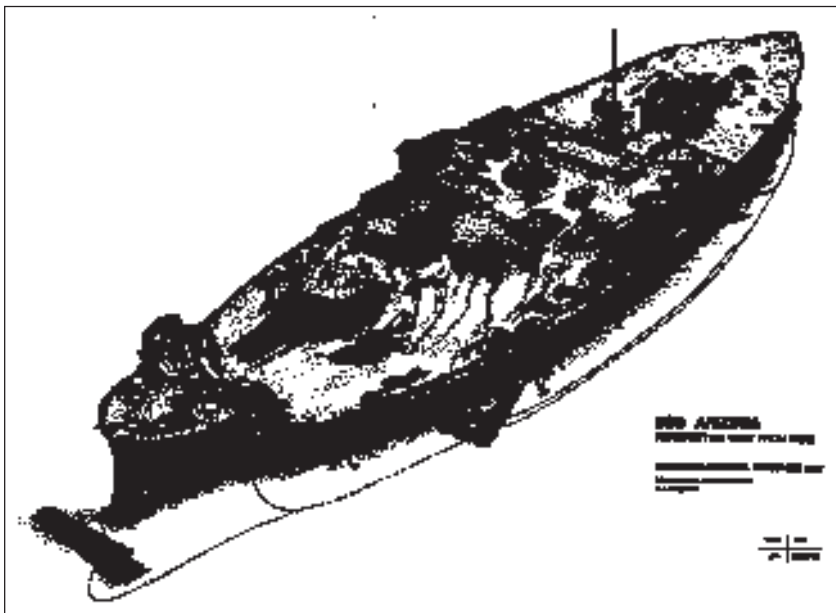
The Department of the Interior is responsible for many of these resources, be it through regulatory control, land management, program oversight, or technical assistance. This includes the Bureau of Indian Affairs, the Bureau of Land Management (BLM), the Bureau of Reclamation, the U.S. Fish and Wildlife Service, the Minerals Management Service (MMS), and the National Park Service (NPS). At a minimum, each bureau takes steps to ensure that submerged historic properties under its jurisdiction or control are identified, evaluated, and protected from impacts by its projects and programs.¹ Each land managing bureau regulates scientific research at sub-

merged archeological resources on its lands.² Two bureaus have developed programs specifically for addressing submerged cultural resources. This article describes those programs as they developed over time and describes current efforts in the Department to improve protection and preservation of historic shipwrecks inside and outside U.S. waters.

Minerals Management Service

Interior administers a program of mineral exploration and development on the OCS through leases and regulation.³ However, the OCS is not federally owned and the federal government does not claim title to cultural resources on the OCS. As a result, and as described in a series of legal opinions, beyond avoidance or mitigation of adverse impacts, Interior does not have

USS Arizona shipwreck showing intact No. 1 turret. Drawn by Jerry L. Livingston, NPS. Copyright Arizona Memorial Museum Association.



the authority to manage or regulate scientific research at cultural resources on the OCS.

Initially, the BLM was responsible for conducting cultural resource assessment studies and developing cultural resource policies and lease stipulations while the U.S. Geological Survey supervised mineral leases, making sure that lease stipulations were followed. This program approach was developed in the 1970s and, in 1982, these and other OCS mineral leasing program responsibilities were consolidated and transferred to the MMS.

The MMS ensures that its undertakings do not adversely affect potentially significant historic properties on the OCS through a multi-step process. First, archeological baseline studies of the entire OCS have been conducted to determine where known historic properties are located and identify areas where presently unknown historic properties may be located. Prior to approving any exploration or development activity on a mineral lease within an area identified as archeologically sensitive by the baseline studies, the lessee is required to conduct a marine remote sensing survey and prepare an archeological report. Often the same survey data collected for geo-hazards evaluations can be used for the archeological assessment. Since 1973, when the archeological survey requirement was initiated, about 38 million acres of the OCS have been surveyed.

If the survey indicates any evidence of a potential historic property, the lessee must either move the site of the proposed lease operations a sufficient distance to avoid the area or conduct further investigations to determine the nature and significance of the potential historic property. If it is determined that a significant historic property is within the area of proposed lease operations, Section 106 consultation procedures are followed.

In addition to the baseline studies, the MMS conducts other cultural resource studies. A sedimentary study⁴ of terrestrial prehistoric archeological sites in coastal areas of the northern Gulf of Mexico outlined for the first time workable criteria for identifying such sites that may exist on submerged relict landforms on the OCS. A follow-up study⁵ evaluated the methodology and technology for locating submerged and buried prehistoric archeological sites on the OCS. Another study is examining the effects of marine erosion and wave action on archeological site deposits.

The MMS also maintains a database of known historic shipwrecks on the OCS and makes the database available to other federal, state and local government agencies and to qualified researchers.

National Park Service

The national park system contains about 90 national seashores, lakeshores, rivers,⁶ and other units with submerged lands. Most of these units contain submerged cultural resources. The NPS conducts research to identify, evaluate, document, and nominate these resources for listing in the National Register of Historic Places and takes steps to manage, preserve, protect, and interpret them for public enjoyment and understanding.

One unit that has been the focus of such research is the USS Arizona Memorial in Honolulu, Hawaii. The Japanese bombs that fell in Pearl Harbor on December 7, 1941 transformed the USS *Arizona* from a great battleship into a war grave. Afterward dive teams salvaged most of the ship's superstructure in support of the war effort and left the rest of it in place as a memorial to the 1,000 service personnel entombed inside. In 1983, another team of divers examined the ship, this time as a submerged cultural resource. What they found was startling—the entire No. 1 turret with its 14-inch guns still in place and a profusion of live 5-inch shells. The live shells were immediately removed and the park's interpretive program was updated to incorporate the remarkable discoveries made then and in subsequent years.⁷

The NPS has, in fact, a long association⁸ with underwater archeology, undertaking its first project in the 1930s to salvage Revolutionary War artifacts from the York River at Colonial National Historical Park, Virginia. Subsequent projects were undertaken in the 1950s to search for a colonial fort at Fort Caroline National Memorial, Florida, and to raise the Civil War ironclad USS *Cairo* near Vicksburg National Military Park, Mississippi. In the 1960s, a magnetometer survey was conducted at Point Reyes National Seashore, California.

A comprehensive underwater archeological program was established in the early 1970s. Initially, the program focused on shipwrecks and later studied submerged prehistoric sites. It also studied the effects of inundation from water impoundment projects on archeological sites⁹ and developed remote sensing techniques for use on the OCS. Today, the Submerged Cultural



An archeologist studies a turret on a battleship sunk in War of the Pacific NSP. Photo by Larry Murphy, NPS.

Resources Unit (SCRU)¹⁰ coordinates the underwater archeology program; conducts studies to inventory, map, and assess submerged cultural resources; develops management, preservation, and recreational use plans; and coordinates and cooperates with other agencies and nations on projects and issues of concern.

In the 1980s, Interior supported enactment of legislation to improve protection and preservation of historic shipwrecks in U.S. waters. In 1988, the Abandoned Shipwreck Act was enacted to establish government ownership over most abandoned shipwrecks within three nautical miles of the coastline or the internal navigable waters of the United States. The Act removed the shipwrecks from federal admiralty jurisdiction and established a framework within which states and federal agencies, as the owners, now manage the shipwrecks. The NPS issued guidelines to assist agencies in carrying out their new responsibilities, and the Archeology and Ethnography Program¹¹ and the SCRU provide programmatic, policy, and technical assistance through training, publications, workshops, and interagency efforts.

The Future

Interior continues to participate in national and international efforts to improve the ways in which the nations of the world protect submerged cultural resources under their jurisdiction or control. Working through various interagency task forces, many activities are underway.

Foremost among them is the effort to protect RMS *Titanic* from further unregulated salvage through the signing of an agreement by the United Kingdom, France, Canada, and the United States. Another is the effort by the United Nations Educational, Scientific and Cultural

Organization to develop a widely accepted Convention on the Protection of Underwater Cultural Heritage. Domestically, an effort is underway to amend the Abandoned Shipwreck Act to clarify several matters and to enact new legislation to protect historic shipwrecks in U.S. waters beyond three nautical miles from shore. Another is exploring ways domestically and internationally to protect sovereign immune vessels, whether sunk in the 20th century, the 15th century, or earlier. These and related efforts hold great promise for ensuring that, on a global scale, shipwrecks like RMS *Titanic* and USS *Arizona* are preserved and protected for future generations.

Notes

- 1 Under the National Historic Preservation Act.
- 2 Under the Antiquities Act and the Archaeological Resources Protection Act.
- 3 Under the Outer Continental Shelf Lands Act.
- 4 Sherwood M. Gagliano, Charles E. Pearson, Richard A. Weinstein, Diane E. Wiseman, and Christopher M. McClendon, *Sedimentary Studies of Prehistoric Archaeological Sites: Criteria for the Identification of Submerged Archaeological Sites of the Northern Gulf of Mexico Continental Shelf* (Baton Rouge: Coastal Environments Inc., 1982).
- 5 Charles E. Pearson, David B. Kelley, Richard A. Weinstein, and Sherwood M. Gagliano, *Archaeological Investigations on the Outer Continental Shelf: A Study within the Sabine River Valley, Offshore Louisiana and Texas* (Baton Rouge: Coastal Environments Inc., 1986).
- 6 Includes national rivers and national wild and scenic rivers and riverways.
- 7 Daniel J. Lenihan (editor), *Submerged Cultural Resources Study: USS Arizona Memorial and Pearl Harbor National Historic Landmark* (Santa Fe: National Park Service, 1989).
- 8 George R. Fisher, "The History and Nature of Underwater Archeology in the National Park Service" in Daniel Lenihan (editor), *Underwater Archeology in the National Park Service* (Santa Fe: National Park Service, 1974), 3-8.
- 9 Daniel J. Lenihan, Toni L. Carrell, Stephen Fosberg, Larry Murphy, Sandra L. Rayl, and John A. Ware, *The Final Report of the National Reservoir Inundation Study, Volumes 1 and 2* (Santa Fe: National Park Service, 1981).
- 10 See <<http://www.nps.gov/scru/home.htm>>.
- 11 See <<http://www.cr.nps.gov/aad>>.

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