

# INTRODUCTION

In 1986, at the request of the House Interior Committee and its Subcommittee on Public Lands the Office of Technology Assessment (OTA) completed a report on *Technologies for Re-historic and Historic Reservation*.<sup>2</sup> The report assesses the use of technologies for locating, analyzing, and protecting elements of the Nation's prehistoric and historic heritage, and reviews the legislative basis for historic preservation in the United States.

Because submerged and maritime resources are among the most neglected of U.S. cultural resources, and the United States lacks an effective national policy for protecting them, the House Interior Committee and Public Lands Subcommittee asked that OTA develop this background paper, extending the report's analysis of technologies for underwater archaeology and maritime preservation.<sup>3</sup> Information contained in this background paper derives primarily from a workshop convened by OTA, February 20, 1986, in which participants met to discuss issues concerning the preservation of underwater archaeological and maritime historical resources. OTA also obtained additional material from staff research, personal interviews with underwater archaeologists and preservation professionals, and from an informal meeting on underwater archaeology and maritime preservation held at OTA, November 3, 1986.

The National Historic Preservation Act (16 U.S.C. 470 et seq.) acknowledges the diversity of America's cultural heritage. The Congress of the United States has declared, through this legislation that:

<sup>1</sup> OTA conducted its assessment in part by convening a series of workshops that addressed issues surrounding the uses of technologies for dry-land archaeology, underwater archaeology, prehistoric and historic structures, and prehistoric and historic landscapes. A fifth workshop focused on problems relating to the physical protection of all classes of cultural resources.

<sup>2</sup> U. S. Congress, Office of Technology Assessment, *Technologies for Prehistoric and Historic Preservation*, OTA-E-319 (Washington, DC: U.S. Government Printing Office, Sept. 1986).

<sup>3</sup> The term, preservation technologies, refers broadly to any equipment, methods, and techniques that can be applied to the discovery; analysis; interpretation; restoration; conservation; protection; and management of prehistoric and historic sites, structures, and landscapes.

<sup>4</sup> Letter of Oct. 8, 1986, signed by Representatives Morris K. Udall and John F. Seiberling.

... the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans.<sup>5</sup>

Underwater archaeological and maritime resources constitute a significant part of that cultural diversity, comprising structures, objects, and sites,

Underwater archaeology refers to the study of the remains of prehistoric and historic human activities found underwater. These remains generally include the following:

- **Shipwrecks**, both scattered and intact, in deep or shallow water, within coral line formations, and on or near shore, when, for example, they are found within landfills or isolated as hulks by uplift, lowered water levels, or changes in river channels. Shipwrecks and their cargoes reveal life at the moment of each sinking, and can provide otherwise unavailable information on marine technology, shipbuilding, navigation, and warfare. Many ships served as homes at sea. Study of historic shipwrecks can therefore provide valuable insights into trade, shipboard life, and the interaction between the Old and New Worlds in the exploration and settlement of this country.
- **Lost objects**, such as the contents of early traders' canoes lost in rivers and lakes. They often provide useful information on trade routes, life in the period of exploration, and early settlement patterns.
- **Submerged prehistoric sites**, including those of relatively recent periods that have subsided near shore or been flooded by reservoirs, and those on the Outer Continental Shelf that have been inundated by rising sea levels. The latter, whose existence is only now being demonstrated, are especially important because they illustrate human adaptations to coastal environments during the earliest phases of North American prehistory.

<sup>5</sup> National Historic Preservation Act, Sec. 1 (b) (Purpose of the Act), para. 4.

Submerged remains encompass sites that functioned as work areas, dwellings, or debris deposits. They vary widely and may consist of such remains as farms, warehouses, piers, middens, wells, villages, towns, even cities.

Maritime preservation encompasses underwater archaeology but extends to a wide variety of maritime-related historic cultural resources such as ships and other vessels still afloat or dry-berthed; shore installations such as lighthouses, shipyards, drydocks, and coastal defense systems; settlements dependent on shipping, canals, locks and levees; documents, works of art, and archives pertinent to maritime activities; and, finally, to intangible cultural resources such as skills in boat-building and navigation.

Publicity surrounding the recovery of artifacts from several well-known historic shipwrecks, as well as the development of technologies for locating and preserving historic shipwrecks, have focused greater attention on underwater cultural resources. This background paper attempts to articulate the most important policy issues related to the preservation of underwater archaeology and maritime cultural resources. Some of the information in this background paper appeared in *Technologies for Prehistoric and Historic Preservation* in different form and organization. We refer the reader to it for an overview of the issues common to all disciplines within the preservation field.