MANAGEMENT PLAN FOR
FLORIDA'S SUBMERGED CULTURAL RESOURCES

A Report by
Florida Department of State, Division of Historical Resources,
Bureau of Archaeological Research

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EXECUTIVE SUMMARY

Florida contains a vast number of submerged cultural resources, which include all types of archaeological and historical sites--from prehistoric occupational zones to historic shipwrecks--all representing tangible but irreplaceable elements of the State's past. They are fragile and finite, since, unlike natural resources, they cannot be regenerated once they are disturbed or destroyed. Today, many of these sites are being impacted statewide by beach erosion, coastal development, dredging, illegal collecting, salvage activities, and other impacts.

Until now, Florida lacked a comprehensive management strategy and plan for its submerged cultural resources. The State's ability to protect, preserve, and promote these unique state-owned resources for the public benefit and public good can be improved by better regional and site-specific data, better site inventories, increased interagency coordination, and better management policies. At present, information about Florida's submerged cultural resources is limited, and the public lacks knowledge of, and appreciation for, its underwater heritage.

In 1993, the Bureau of Archaeological Research received a grant of federal funds administered by the Florida Department of Community Affairs, Coastal Management Program, to develop a comprehensive management plan for Florida's submerged cultural resources. The plan closely follows a key piece of federal legislation, the Abandoned Shipwreck Act of 1987. This Act assigned states jurisdiction over historical shipwrecks in their waters, and mandated the Secretary of the Interior to develop guidelines for states to implement the Act. The guidelines, issued by the National Park Service in 1990, were specifically intended to encompass historic shipwrecks. For the purposes of this management plan the guidelines have been applied other types of underwater sites as well.

Major Goals of Florida's Submerged Cultural Resources Management Plan

(1) To manage state owned submerged cultural resources consistent with the principles of stewardship and public benefit.

(2) To manage state owned historic shipwreck sites consistent with the Abandoned Shipwreck Act Guidelines.

(3) To improve the rules and management procedures regarding submerged cultural resources so they are afforded the same level of protection as terrestrial sites.

(4) To develop and implement management tools necessary to accomplish the above goals.

Major Concerns of Florida's Submerged Cultural Resources Management Plan

(1) Submerged cultural resources represent unique and valuable, publicly owned resources that have the potential to provide sustained cultural, recreational, and economic values and benefits.

(2) Submerged cultural resources represent significant archaeological and historical values that are not renewable.

(3) Submerged cultural resources are resources which are subject to continuous deterioration from human and natural activities.

(4) Public knowledge of submerged cultural resources and the values and benefits they represent should be increased.

(5) Florida's management system for submerged cultural resources has developed over time in response to particular problems or issues rather than having the benefit of comprehensive planning.

(6) Human and financial resources available for management of state owned submerged cultural resources should be increased to meet current and future needs.

(7) Opportunities for public outreach and volunteer programs must be developed to improve management of submerged cultural resources.

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ABBREVIATIONS

There are a number of abbreviations (acronyms) used throughout this plan. Some of the more common ones used are (listed in alphabetic order):

ASA	Federal Abandoned Shipwreck Act of 1987
BAR	Florida Department of State, Division of Historical Resources, Bureau of Archaeological Research
DEP	Florida Department of Environmental Protection
DHR	Florida Department of State, Division of Historical Resources
Division	Florida Department of State, Division of Historical Resources
NOAA	National Oceanic and Atmospheric Administration
SCR	Submerged Cultural Resources (the equivalent of "underwater cultural resources", "underwater historic resources", "underwater heritage resources", "underwater archaeological resources", "underwater sites", etc.)

CHAPTER ONE

INTRODUCTION

The peninsula of Florida, bounded on three sides by water with an extensive network of rivers, streams, and lakes, contains a broad range of submerged archaeological and historical sites dating from ancient times to the present. People are represented in the archaeological record of Florida for at least 12,000 years. Then, as now, human settlement and commerce favored coastal areas of the Florida peninsula, at the land-water interface that supports sustenance, commerce, communication, and transportation. Prehistoric sites include coastal village camps and middens, ceremonial complexes, hunting and fishing camps, and quarries. Many early Florida settlements located near water have since become submerged due to the gradual rise in sea levels since the end of the last ice age. Drowned terrestrial sites are only just beginning to be discovered in many nearshore areas along rivers, in streams, in the Atlantic Ocean, and in the Gulf of Mexico.

The remains of European and Early American coastal settlements and industrial areas are located along the shores and bays of the Florida coast with concentrations in Pensacola, Apalachicola, Tampa, St. Marks, Key West, and St. Augustine. Sites in these areas range from colonial outposts and fishing communities to early port towns and maritime facilities. Florida's waters contain a large number of historic shipwrecks of many nationalities and periods. As a result of human error, storms, or warfare, the remains of historic watercraft are found all over the state. Due to the protective properties of water such as lower oxygen content and reduced exposure to human activities, some watercraft are surprisingly well-preserved. Other wrecks have deteriorated over time. Many have yet to be discovered and identified.

Since the advent of scuba diving in the late 1940s, Florida has come to rank as the number one dive destination in the United States. The majority of Florida's sport divers do not usually disturb underwater archaeological sites or remove artifacts. With increased human accessibility, however, Florida's underwater sites have inevitably come under pressure from collecting activities. Some sport divers routinely collect prehistoric artifacts and fossils from Florida's river bottoms. When isolated or separate from their original archaeological deposit, such items have limited archaeological value, but continuous collecting can also impact important archaeological sites where the original location and association of artifacts are still preserved.

What began decades ago as chance discoveries of colonial Spanish shipwrecks in shallow water off East Coast beaches and in the Florida Keys, has gradually become a well organized treasure hunting business, both authorized and unauthorized. Florida, like most states, assumes title to both terrestrial and submerged archaeological sites on state lands, and has, since the 1930s, permitted shipwrecks to be commercially explored and salvaged under

agreements with the state. State-sanctioned salvage activities have provided artifacts and some information to the public, but have also resulted in the consumption of an important part of Florida's maritime heritage. Many of Florida's underwater sites have been impacted by beach erosion, dredging, and coastal development over the decades.

With the passage of the National Historic Preservation Act of 1966, the State of Florida was assigned a role in the federal historic preservation system. In 1967, the Florida Archives and History Act created the Division of Archives, History and Records Management (since reorganized as the Division of Historical Resources) and directed that agency to establish programs to protect and preserve these resources. The Act provided for the recovery of historic shipwrecks by private contractors through the issuance of exploration and salvage contracts. Over the years, this activity remained the focus of the state's marine archaeological program, and there was no formal plan for the active management of the vast remainder of the submerged historical resources under its jurisdiction.

The absence of a comprehensive management plan for submerged cultural resources in Florida has also been partly due to limited staff and lack of ability to survey, identify, and assess the resources. While the Bureau of Archaeological Research has identified areas considered likely to contain as yet unidentified inundated sites, and has received reports of submerged sites from sport divers, treasure hunters, and fishermen, site investigations have been conducted on an occasional and informal basis. More regional and site-specific data, more complete inventories, better management policies, and increased inter-agency coordination would improve the State's ability to promote its unique cultural resources for the public benefit. Meanwhile, a growing awareness of the significance of these resources has resulted in increasing concern for their protection and preservation.

The field of underwater archaeology has gradually developed over the past thirty years and a conservation ethic for resources of this type has emerged throughout much of the world. In most countries submerged cultural resources are in the public trust and managed as such. Congress took an important step in this direction in 1987 with the passage of the Abandoned Shipwreck Act, which reaffirmed states' title to certain historic shipwrecks and encouraged the development of long-term management programs by the states. Guidelines for the Act, which were issued by the National Park Service in 1990, specifically address the components of state and federal management programs. The Florida Division of Historical Resources has begun to focus on inventory, evaluation, protection, and interpretation of historic shipwreck sites. Greater attention to other types of submerged cultural resources is now also a priority. New initiatives are being developed to educate the public about the value of these resources and encourage greater public involvement in their management and enjoyment.

In 1990 and 1991, the Division of Historical Resources was awarded coastal zone grants to develop a regional model for resource management based on a survey and inventory of sites in Pensacola Bay. The project was to be a pilot study leading eventually toward development of a comprehensive management plan by undertaking an inventory and assessment of underwater sites in a key area of the

state known to contain a cross section of significant resources. Pensacola Bay was chosen as an ideal location for the development and testing of this model, since it contains an abundance of sites of differing ages in fresh and salt water, in riverine and estuarine waters, as well as in near shore and offshore locations. The project was designed as a pilot program in which resource strategies for the compilation of resource data, and management tools for resource protection and interpretation, could be developed and tested at the regional level, and then applied as a model to other locations in Florida. The proposal was submitted to the Florida Department of Environmental Regulation, Office of Coastal Zone Management, and a research grant was awarded with funds made available through the National Oceanic and Atmospheric Administration (NOAA).

The Pensacola Shipwreck Survey, as the project has come to be known, has recorded and assessed over forty significant underwater archaeological sites in the Pensacola Bay area so far, including two 18th-century British cutters or sloops, and the remains of a 16th-century Spanish ship, now called the *Emanuel Point Wreck*, which is believed to be Florida's oldest shipwreck. A classification scheme for the Pensacola Bay shipwrecks was developed based on type, condition, location, age, and significance of sites. These factors help determine which management policies were best suited to particular sites. Coordination with federal and state agencies helped to identify specific resource needs and how they could be met through public-oriented programs. Programs that were tested in Pensacola included public conferences and lectures, sport diver workshops, museum and university involvement, as well as the establishment of a shipwreck park by a local support group in response to local nominations. Additionally, coordination with the local media proved invaluable in promoting public interest and support of the project. The Pensacola model was successfully applied in Broward County during the same year in response to the nomination for another park in 1993. The results of the Pensacola experiment were favourable. The test of the model indicated that the development of a statewide management plan, based on hard data and field trials, was the next stage.

Building on the Pensacola project, a statewide compilation of environmental, archaeological, and historical data about Florida's submerged cultural resources was analyzed and presented in a *Maritime Atlas of Florida* soon to be published. As a tool for understanding the breadth and scope of the State's resources, the *Atlas* was used to identify other regions of Florida in which to apply the Pensacola model on a smaller scale to determine its usefulness in the creation of a comprehensive statewide management plan.

Following the development and testing of the Pensacola model, the need for an explicit and comprehensive statewide management plan was acknowledged as the next step in improving Florida's ability to protect and preserve its submerged cultural resources. In early 1994, an additional grant of NOAA funds was made available through the Florida Coastal Management Program of the Department of Community Affairs to prepare the plan contained in this document. The statewide management plan is intended to extend the lessons of the Pensacola model across the state, and is to be both a policy document as well as an action plan. It presents the legal context of submerged cultural resources in Florida, including federal, state, and local laws and regulations that affect such resources in terms of ownership, jurisdiction, regulation and management. The plan presents the guiding principles of submerged cultural resource management in

the Florida context to set the broad goals of an effective statewide state program. The plan identifies key agencies and organizations and specifies necessary types of coordination. It documents coordination with these entities to establish links in planning and regulation during the period of the grant activities. The plan presents the model tools for site protection and interpretation based on government agency and private sector actions in a public context incorporating education and direct participation. The plan concludes by identifying recommendations for improved resource management over the long term and suggests implementation measures for the future. As an additional product, portions of the management plan effort provided the basis for a *Submerged Cultural Resource Handbook* to be made available to a broad audience to improve public understanding and cooperation. The handbook will be circulated to management agencies for review, and will then be adapted for public distribution.

The preparation of the management plan included the following objectives and tasks:

(1) To assemble and assess existing federal, state, and local laws and rules affecting submerged cultural resources.

(2) To gather examples of submerged cultural resource management plans from Federal and State sources, as well as other countries to assess potential policies applicable to Florida.

(3) To assess common impacts to resources.

(4) To prepare a draft of statewide management strategies incorporating policy and procedural changes.

(5) To prepare an implementation plan identifying how, when, and by whom the management plan will be implemented including how to accomplish recommended changes to state statutes, rules, and procedures.

(6) To prepare a public resource handbook to be circulated among appropriate agencies and organizations as well as the public at large.

Much of the work that went into developing the management plan is not directly evident in the body of the report. The first objectives involved correspondence, phone interviews and library research to obtain and review laws, rules, plans and policies from other states and countries. The particular organizations and people who supplied information are listed in the acknowledgments. Useful components of other programs are incorporated in the discussions and recommendations of this plan, but the details of these programs are presented Appendices 1 through 3.

Finally, it is important to note that the development of this management plan has been based largely on an assessment of current practices by other governments. Any agency with management responsibility for underwater archaeological resources approaches its task in a unique context. In each case, the legal frameworks are different, the resources are different and the interests of

the public are different. This management plan is a first step in improving Florida's management scheme. The product of the plan is a series of recommendations that remain to be implemented. They require public review and discussion and are subject to continuing revision as they are assessed by organizations and individuals with an interest in Florida's underwater archaeological resources. It has been the Bureau's intent in developing the plan to arrive eventually at management practices which represent broad public agreement and support based on solutions that have proved workable elsewhere. These management practices should also provide the maximum public good or public benefit as recommended in the Abandoned Shipwreck Act Guidelines. The following discussion and recommendations are offered as the beginning of the process.

CHAPTER TWO

FLORIDA'S SUBMERGED AND COASTAL CULTURAL RESOURCES

Florida contains more submerged cultural resources than any other part of the United States. With approximately 8,500 miles of coastline that includes rivers, streams and lakes, no part of Florida is far from water. Drowned prehistoric sites have been discovered in Florida's rivers, sinkholes, underwater caves and lake bottoms as well as offshore in the Atlantic Ocean and Gulf of Mexico. Many of these locations were once dry land during times of lower sea levels. Sites created by people living in these lands are now underwater. The inundation of the land began about 19,000 years ago with the rising of global sea levels due to melting of the glaciers at the end of the last Ice Age. Even today, sea level continues to rise and many coastal archaeological sites are being covered slowly but surely by water.

Submerged archaeological sites in Florida span thousands of years and represent many different cultures and activities. Submerged archaeological sites in Florida suggest that prehistoric populations utilized coastal zones to a great extent and that relatively large populations occupied former coastlines now drowned by rising sea levels. The use of Florida's waters for transportation, recreation, commerce and subsistence has always been, and will continue to be, an important part of Florida's heritage.

In the modern era, Florida's unique and diverse natural and cultural resources are becoming more accessible for recreational and educational purposes. Divers from around the world come to Florida to enjoy such natural wonders as the Florida Keys and the State's extensive system of springs and sinkholes. The state's underwater natural and cultural resources are often interrelated, as in the case of coral reefs in the Keys, where many of the earliest shipwrecks in the New World blend with the grasses and corals beneath the clear waters. Similarly, the springs, that were so often visited by Florida's Indians throughout the millennia, are also attractive to divers for their unique settings. But, as underwater sites become more accessible, they may also become increasingly impacted. At the same time, underwater sites are more difficult to manage than land sites because they are less visible and not so well understood. It is the challenge of a management plan likes this one to take advantage of increased accessibility and increased public interest in underwater sites to promote protection and stewardship.

I. TYPES OF UNDERWATER SITES

Florida's diverse submerged cultural resources are often classified in the following five categories.

1) Drowned Prehistoric Sites

Many prehistoric human habitation and special-use sites have been inundated by rising sea levels or the corresponding rising of the water tables on land. Most inundated sites in Florida are over 6,000 years old. These represent some of Florida's most unique and significant archaeological resources. Because of the unique chemical and physical characteristics of underwater environments that prevent decay of organic remains, the best preserved evidence of aboriginal peoples and their way of life is often found in such submerged sites.

Many prehistoric sites under water have remained relatively undisturbed over the centuries, while others have become eroded and scattered by tidal and river actions. A good example of a well preserved prehistoric site in Florida is Little Salt Spring, a natural limestone well in Sarasota County. Little Salt Spring has produced evidence of a Paleo-Indian site more than 12,000 years old, and an Archaic period village with associated cemetery dating to about 7,000 to 9,000 years ago. Another site where important prehistoric archaeological and faunal remains have been preserved and excavated is Warm Mineral Springs in Sarasota County.

A number of Florida's river systems also contain evidence of prehistoric Indian artifacts. Many early sites have been reported and recorded in the Aucilla, Ichetucknee, Santa Fe, Oklawaha, Wacissa, Wakulla, St. Marks and Chipola Rivers. In the Aucilla River, archaeological deposits 9,500 to 12,300 years old have been found. Offshore investigations are being conducted in the Gulf of Mexico, where relict river basins are now under water. Shell midden sites, or debris dumps, such as the Shell Bluff Landing site have been found throughout Florida; some are underwater along the Gulf coast and among the Ten Thousand Islands in the southwestern part of the state. These submerged prehistoric sites provide important information about past environments and the people and animals that coexisted in them.

2) Wrecked or Abandoned Vessels

With Florida's extensive maritime history and abundant coastline, shipwrecks are an important component of the state's underwater heritage. The vast majority of shipwrecks in Florida's water do not contain gold, silver, jewelry, or other precious metals. So-called "treasure" galleons that wrecked in Florida were salvaged soon after the event whenever possible, since economic effects of so great a loss were profoundly felt throughout Europe. More than two thousand ships are recorded as lost in Florida's waters; only a minute proportion of these ever carried treasure.

The real treasure of shipwrecks is their potential to help us reconstruct a picture of the past. They represent time capsules left to us by the people who designed, built, loaded, and sailed the vessels. Shipwreck sites, in contrast to most archaeological sites on land, often reflect the results of sudden cataclysmic events. They exist by themselves, isolated in time and space, providing what archaeologists call a "closed context" view of the past.

The conditions of sunken vessels vary, depending on their age and environment. In Florida, there are a wide range of sites, from relatively intact wooden vessels in freshwater bayous, to widely scattered and encrusted wreckage with little or no wood remains. Among the oldest vessels are more than one hundred dugout canoes that have been found preserved in Florida's wet environments. All watercraft found in Florida reflect the history of the state and, quite often, its relationships with other countries of the world. Each has a particular story to add to our knowledge of Florida's history.

"Historic" shipwrecks are generally considered to be those which meet the criteria of age and importance for listing in the National Register of Historic Places. "Non-historic" shipwrecks generally are modern or otherwise not considered historically significant. Some examples of historic shipwrecks in Florida are: the *Urca de Lima*, one of the ships in a Spanish fleet that perished in a hurricane in 1715; the *San Pedro*, a ship from a Spanish fleet disaster in 1733; the *City of Hawkinsville*, the largest steamboat to sail the Suwannee River; the USS *Massachusetts*, the nation's oldest battleship; and, the *Copenhagen,* a British steamship which wrecked in shallow water off Pompano Beach in 1900. All of these vessels are a part of Florida's Shipwreck Preserve system. Located near Jacksonville, the *Maple Leaf,* a Federal Army transport which sank in the St. Johns River in 1864, is a true treasure trove of Union army and personal artifacts from the Civil War. This nationally significant shipwreck site now being excavated and interpreted is providing a new understanding of the Civil War and the campaign in northern Florida by Union troops.

3) Underwater Refuse Sites

Sites in this category represent accumulations of refuse associated with prehistoric or historic waterfront cultural activities. Discarded materials from coastal or riverine settlements, commerce areas, or anchorages, were lost or thrown into the water and subsequently settled on the bottom and became buried over time. Many of these sites contain links to maritime trade. For example, Fort San Marcos on the St. Marks River has underwater refuse components that reflect its importance as a major port in North Florida from the 1600s onward. Many of Florida's harbors, such as Pensacola Bay contain anchorage middens of marine debris that were deposited by ships anchored in the same areas over hundreds of years.

The Hontoon Island and Ponce DeLeon Springs sites along the St. Johns River represent excellent examples of prehistoric underwater refuse dumps. Both have produced well-preserved stone, bone, shell and wood artifacts as well as the preserved remains of edible plants and other material indicators of prehistoric human diets. The information gathered from such sites often provides important clues about historic and prehistoric lifeways.

4) Displaced or Eroded Sites

Displaced artifacts eroded from their original archaeological context are the most common type of underwater site remains. In fact, the sheer quantity of artifacts from such sites has helped bring much of the underwater resource base to the attention of the scientific community. Displaced artifacts are most often found in rivers, spring runs and other areas of flowing water where erosion cuts into artifact-bearing sediments and leaves deflated accumulations of rubble behind. Similar erosive mechanisms such as wave action and storm surge affect cultural deposits in coastal and marine settings.

Some displaced site remains may be highly scattered while others may be concentrated. In some instances, past erosive events have deflated site components which were subsequently reburied once the underwater environmental conditions stabilized. A typical accumulation of re-deposited artifacts might include yesterday's soda bottle beside a 5,000 year old spear point and under a 12,000 year old fossil bone.

Deposits of eroded artifacts do not usually have great scientific potential compared to the other types of underwater sites. However, the occurrence of such artifact accumulations may be indicative of nearby *in situ* (in place) site components which have significant potential for archaeological research. Therefore, it is important to document these types of sites.

5) Sites Constructed in Water

Many different types of structures are normally built in the water, such as weirs, wharves, docks, and other harbor installations. These sites are constructed partially or entirely underwater and represent the only type of site deliberately built to function in water or underwater. One example of a site constructed in water is a prehistoric fish weir recently discovered in the Santa Fe River. The weir, radiocarbon dated at over 2,000 years of age, was used by native people to trap fish for food. The Windover archaeological site was discovered in a muck pond during construction of a housing development near Titusville, Florida. This site was constructed near the prehistoric Atlantic shoreline of 8,000 years ago and contains extremely well-preserved human remains which were intentionally staked down on the bottom of a fresh water pond in a burial ceremony. Another example of a site constructed in water is found at the San Marcos de Apalachee State Historic Site, at the confluence of the St. Marks and Wakulla Rivers. The site has wharf structures dating from the 17th-century.

Historic navigational aids such as light towers, lighthouses, and communication platforms, are sometimes constructed in or near water. Such structures may become inundated or collapse into the water. For example, several lighthouses have been constructed off the shore of Cape San Blas. The shoreline of the Cape has always been subject to extensive erosion and thus structures built on or near the shoreline ultimately collapse, or are destroyed in storms. The first lighthouse lasted from 1847-1851. The next collapsed in 1859, the year it was built. A third lighthouse constructed the same year was built

about one quarter mile off the Cape. This light was damaged during the Civil War and then was then in use again from 1865 until its collapse into the Gulf of Mexico in July 1882. The base of this lighthouse still stands intact in twenty feet of water with the remains of the iron steps lying close by. The remains of the two earlier lighthouses are also nearby under the waters of the Gulf.

II. POTENTIAL IMPACTS TO SUBMERGED CULTURAL RESOURCES

Florida's submerged cultural resources, like its natural resources, are composed of an assortment of accessible but fragile assets. However, unlike living plant and animal resources, Florida's cultural resources are non-renewable. Once damaged or destroyed, they are gone forever and any information that may have been learned from them is lost. As Florida's rapid growth increasingly impacts the natural and cultural resources of the state, resource management and preservation assume greater importance.

There are many ways in which underwater sites may be impacted. Some of these causes are natural, like storms and erosion. Others are related to human activities and are potentially controllable. Of these human impacts, many are unintentional or inadvertent. Potentially damaging activities such as dredging, boating and beach renourishment reflect the many demands placed on Florida's finite resources. Some human impacts, however, are more deliberate. It is necessary to understand the many different ways sites may be affected before we can understand what management tools to apply. With this knowledge, future management efforts can be more successful in ensuring that future generations of Floridians may appreciate and enjoy the State's underwater heritage. The impacts discussed below have been classified as natural and human impacts.

1. NATURAL IMPACTS TO SUBMERGED CULTURAL RESOURCES

(A) Hurricanes

Hurricanes affect all types of underwater sites. Their occurrence is difficult to predict, and it is even more difficult to protect against their possible impacts. Each storm has its own individual characteristics and can cause great damage to submerged sites or none at all. Even the most massive shipwrecks of modern steel hulled vessels can be turned, twisted or broken in two. Wooden hulled vessels may be splintered by crashing waves or submarine currents and scattered for miles along the bottom. Protective vegetation can be pulled away. Hurricanes can fill the water with debris and pummel sites into pieces. They can pull up mountains of sand in one place and redeposit it in another, exposing and burying sites. Eroding and other low-lying coastal archaeological sites are equally vulnerable to storm surge, shoreline wave action and high winds.

In the past, little information was available about the effects of hurricanes on Florida's submerged cultural resources. It was apparent that storms were scattering shipwreck sites as evidenced by coins and artifacts from galleon wrecks washing up on the beach, or previously covered hull timbers left jutting out of the sand. In large part, though, people were more concerned with damage to their homes and businesses than to underwater sites.

Hurricane Andrew in August, 1992, changed all that. The storm affected sites all along the South Florida coast. Wrecks that had become familiar to thousands of divers could now be evaluated for storm effects. Sport divers and archaeologist could pull out their photographs and maps made prior to the storm and gauge what the storm had done to these sites, both submerged and coastal. The results were dramatic. At least nine major artificial reef sites in Broward County were destroyed or severely damaged as a result of the hurricane. The *J. Dorman*, located near Ft. Lauderdale in eighty feet of water, was "ripped in half" by the storm. The *Mercedes I*, was "twisted apart" by Andrew and is reportedly continuing to deteriorate in her greatly weakened condition. The *Jim Atria*, sunk near Ft. Lauderdale, was moved by Andrew from a depth of 117 feet to a new location 135 feet deep. In Dade County, at least twenty-one major artificial reef sites were destroyed or severely damaged as a result of the hurricane. Interestingly, shallow water archaeological sites were not, on the whole, damaged to the same degree as the deeper artificial reef sites. In general, water quality in the Miami area was affected by the hurricane for some time and the sand bottom significantly altered. Shoreline sites also experienced major erosion and damage from uprooted trees.

As part of the follow-up to Hurricane Andrew, the National Park Service conducted a major study of the effects of the storm on well documented terrestrial and underwater archaeological sites in Big Cypress National Preserve, Biscayne National Park and Everglades National Park. These three areas lay almost directly in the path of Andrew. A number of known shipwreck sites were examined. The *Safety Valve Barge*, a shallow water site, was exposed to the most surge and subsequently broken up. The *Brick Wreck* site demonstrated concreted site features being displaced. The *Pillar Dollar* site had depressions on the wreckage. One of the more interesting observations was that on all shipwreck

sites examined, except one, damage caused by human actions prior to the storm increased the rate of site deterioration from storm impacts. Shoreline and other low-lying coastal sites were damaged mainly though tree uprooting.

On the whole, the National Park Service study provides significant insight into how storms affect submerged and coastal cultural resources, and pointed towards useful models for future storms. One important observation and recommendation made in the report was that incomplete baseline information on underwater sites presents serious management problems in situations such as Hurricane Andrew because only known sites can be evaluated. The report estimated that hundreds of submerged sites remain to be located and evaluated in the three Parks alone. In addition to storm damage from tree uprooting and wave action, the use of heavy machinery during post-hurricane cleanup caused additional damage to known archaeological sites.

(B) Lesser Storms

Lesser storms such as typical winter "north-easters," cause erosion and may uncover submerged sites. Once sites are exposed, collecting activity and site disturbance often begins or increases. These same sites may later become reburied by further storm activity. The 1984 Thanksgiving storm on the Atlantic coast of Florida, and the March 1993 storm on the Gulf coast impacted sites to varying degrees.

(C) Natural Deterioration Processes

These affect all kinds of submerged cultural resources. The organic remains of prehistoric archaeological sites like leather, natural fiber cloths, and wood, are nearly always decomposed by microscopic organisms over time. Wooden hulls of shipwrecks also deteriorate through natural processes, including the actions of organisms such as the shipworm, *Teredo navalis*. Metal objects may rust or corrode, especially in salt water environments, but lithic and ceramic materials generally survive with much greater integrity. Artifacts buried in sediments like mud that are low in oxygen suffer less chemical and biological decomposition than those which are exposed on the surface where oxidation can occur.

Once man-made objects have become stabilized over time in an underwater or saturated environment, a relatively stable chemical balance is established. In most cases, artifacts from sites that have been under water a long time are better preserved in the site. The argument that sites need to be salvaged or excavated in order to prevent them from deteriorating is not supported by the archaeological record. Once removed from their stable environment, the objects immediately begin to deteriorate. Without complicated and expensive stabilization treatments, virtually all organic, and most metal, artifacts will be destroyed when exposed to air.

(D) Natural Erosion Processes

Natural erosion of the deposits in which submerged cultural and shoreline resources are found may occur through the regular processes of nature. River and estuarine channels periodically shift, beaches drift and redeposit themselves and tidal flows pull sediments along the bottom. In all these cases, underwater sites may be affected to varying degrees. Within the past few years, archaeologists have begun to assess the impacts of major flood events. Entire sites may be lost to riverbank cutting. Similarly, sea level is rising on a global scale and coastal archaeological sites are slowly becoming submerged. Of course, the advance of the shoreline is an erosive, dynamic, process rather than a simple change in water level, and intact archaeological deposits are usually eroded, mixed, and re deposited as the coasts advance.

2. HUMAN IMPACTS TO SUBMERGED CULTURAL RESOURCES

(A) Dredging and Beach Renourishment

Dredging and beach renourishment activities have been an integral part of Florida's development since the state was first opened up to tourism and settlement in the late nineteenth century. In the second half of the twentieth century, Florida's population has increased at a dramatic pace. This growth has come with a price. Development along the State's coasts and numerous waterways has been accompanied by a tremendous amount of dredging, filling and channelization. These activities have drastically altered the flow of water in and around the state. In the process, many coastal and submerged archaeological sites were either filled over or dug away.

A good measure of the magnitude of these development activities comes from the records of the Historic Preservation Compliance Review Section of the Bureau of Historic Preservation. That office reviews development and construction projects of all types to ensure that they comply with state and federal historic preservation laws. New dredging, maintenance dredging and beach renourishment are among the most common projects submitted for review. The review and compliance procedures that implement state and federal law usually result in remote sensing surveys to identify potential shipwreck sites. When such locations are identified, they are usually avoided during excavation. However, sites can be impacted adversely, particularly those having little or no ferrous metal.

Sand dredging is a technique used to secure materials for beach renourishment, a process used to stabilize eroding beachlines (beaches which in Florida, are of immense economic value). During renourishment activities, hydraulic sand and gravel dredging systems are used to dredge bottomlands offshore from "borrow" sites, and then pump this material on shore for fill on the beach. The deposit material is generally obtained anywhere from one to two, or sometimes up to five miles offshore. Submerged cultural resources which may be located in these "borrow" sites are thus at risk. In 1986, the Department of Environmental Protection (DEP), Division of Beaches and Shores, Beach Management Program, was established to examine the issues and develop long-

term management plans. Their studies determined that of Florida's 850 miles of beach shoreline, about 229 miles are critically eroding. Thus, activities associated with sand dredging will continue to potentially impact submerged cultural resources.

In addition to dredging, certain types of construction can result in changes to sedimentation patterns or hasten erosion processes. One example is the Bob Sikes Cut made by the Army Corps of Engineers through St. George's Island, Franklin County. This project resulted in a change in tidal flow around the island leading to the accelerated shoreline erosion of an extensive Indian village archaeological site.

The draining of wetlands for development may also lead to the detrimental exposure of submerged cultural resources. The preservation abilities of water and sediment are well known, and cultural resources that have remained well preserved in the water for hundreds of years may begin to rapidly decay on exposure to air and sunlight. A good example of this are the prehistoric masks and paintings recovered from the mud and tidal flats during excavations at Key Marco, Collier County, in the 1890s, and how quickly they shriveled and cracked after recovery.

(B) Construction and Waterfront Development

Waterfront development in Florida used to mean vast dredging and filling operations that turned wetlands into canals and building lots separated by seawalls. Such activities are no longer permitted, but the pace of development along the coast continues and increases. Projects that require state and federal permission for dredging and filling, and that includes most projects that have the potential to disturb submerged lands that might contain cultural resources, are reviewed by the Division's Bureau of Historic Preservation.

The review and compliance process depends on a reasonable understanding of where cultural resources are known or likely to occur. This reasonable standards is frequently not met for underwater sites, and projects may well proceed in the belief that no adverse impact to submerged sites will occur. Rarely, however, are means available to actually examine shoreline construction areas in advance of work that might damage shipwrecks or other sites. These underwater sites are less visible and less well understood than land sites. Improved ability to conduct surveys and inventories in all coastal locales will help.

(C) Commercial and Sport Fishing

Certain technologies employed by commercial and sport fishermen can potentially impact submerged cultural resources. For the better part of a century, commercial and sport fishermen have worked in Florida's waters, bringing forth an abundant harvest. In the process, techniques evolved to make the search more efficient, and the catch larger. Through accidental net snagging, Florida's commercial fishing industry has contributed greatly toward increasing the knowledge base of Florida's submerged cultural resources. Recommendations for working with the fishing community are made in Chapter Five.

The open-ocean shrimp trawler, which uses weighted nets to ensure the nets pass closely to the bottom and maximize the number of shrimp taken has great potential to snag shipwreck sites. In 1965, for example, a shrimp trawler working about 20 miles south of the Dry Tortugas caught its nets on a wreck in 1,200 feet of water and accidentally recovered several artifacts including three intact Spanish olive jars dating to about 1600. The site was subsequently investigated for several successive seasons by a commercial salvage company beginning in the late 1980s.

The snagging of wrecks by shrimpers, however, is never intended. The costs of a lost net are enough to convince most shrimpers to exercise care. For this reason, most shrimping boats will log "snag" sites as areas to avoid. This information is then shared with others. Shrimp nets may actually pass over certain shipwrecks repeatedly without incident if the sites are buried deep enough beneath bottom sediments. At the 16th-century *Emanuel Point* shipwreck in Pensacola, nets glided over the site for years without snagging it, such that the site wasn't discovered until 1992 during a magnetometer survey. During subsequent investigation of the site as part of the Pensacola Shipwreck Survey, archaeological datum points, installed on the bottom for mapping purposes, were dislodged by shrimp nets and pulled out. In 1993 a 17th-century anchor, possibly of Spanish origin, was reportedly snagged by a shrimper's net off Port St. Joe.

Nets used to ensnare fish can also impact underwater sites, and it is known that several historic shipwreck sites have been located by commercial fishermen over the years. Like shrimpers, however, fishermen also avoid the risk of losing nets on snags. Since the start of the Pensacola Shipwreck Survey, a number of commercial fishermen have provided information to the research team concerning locations where their nets have become snagged. Several of these areas were subsequently investigated and found to contain historic shipwreck sites.

Lobstering can also impact shipwreck sites. Lobsters are attracted to shipwrecks because they offer many places to hide. Hunting for lobsters is a popular sport for many south Florida divers. During their search, these divers occasionally disturb shipwreck sites to get at the lobsters by digging in ballast piles or moving timbers around. During the assessment of damage caused by Hurricane Andrew in Biscayne National Park, Park Service officials noted that commercial lobstering activities in the Park were incompatible with long-term site preservation and should be eliminated in shipwreck site areas.

There is a lesser impact posed by other fishing strategies such as gill net, cast net, and line fishing. In these instances, damages are related primarily to the anchoring of boats. The snagging of wrecks by fishing lines may also deter divers from appreciating the wrecks. Not only do tangles of monofilament line present an eyesore, but they can pose a danger to divers in the form of entanglements. As a result, some areas where artificial reef diving is popular have developed cooperative agreements between diving and fishing organizations so that excessive entanglements on the wrecks can be avoided.

(D) Erosion Caused By Recreational And Commercial Boating

With the tremendous growth of Florida's population has come a corresponding increase in the number of recreational pleasure boats. These boats may impact submerged sites through the erosion processes of waves caused by their passage, and through activities such as the dropping of anchors. Shorelines were major places of habitation and used by both prehistoric and historic cultures, and many sites are exposed along Florida's coastal and inland shorelines.

On any given weekend in Florida, thousands of boats fill the waterways with pleasure boaters. They may be on the water to sightsee, water ski, fish, or simply relax. While no harm to underwater sites may be intended, the passage of these boats can have a cumulative effect on eroding shorelines. In some places, boat traffic is so heavy that shoreline sites can be exposed to the wakes of two or three hundred boats a day. Additionally, this erosion is affected by tidal fluctuations, wind and wave action, and to a certain degree, the continuing rise in sea level.

One example of erosion caused by boats is the Shell Bluff Landing Site (8SJ32) in St. Johns County, Florida. This prehistoric coastal habitation site is on the eastern bank of the Tolomato River, part of the Intercoastal Waterway, approximately eight miles north of St. Augustine. It consists of a shell midden extending about 200 meters along the river bank. First recorded in 1950, the site was studied without excavation. Even at that time, erosion had sorted and deposited shell and artifacts along the beach. Subsequent to the study, increased boat traffic along the Intracoastal Waterway accelerated the rate of erosion. By the early 1980s, large sections of the site had eroded into the water. During the winter of 1984-85, a wooden bulkhead was constructed by the Florida Division of Recreation and Parks in an attempt to slow the loss. This bulkhead has nonetheless continued to be damaged by wave action. In recent years further attempts have been made to shore up this site. Whether they will be successful is not known. Barges and larger vessels appear to cause the greatest erosion problems from the swells.

(E) Oil And Gas Exploration & Extraction

The search for oil and natural gas off the Florida coastline can impact submerged cultural resources. The building of structures on the sea bottom and subsequent use of heavy equipment may damage or destroy submerged sites. There are also potential impacts associated with ship traffic, transportation pipelines, and spills. When these factors are brought into consideration, it must be acknowledged that activities associated with oil and gas exploration can affect all types of underwater sites.

Leases for drilling have been let since the early 1940s. Twenty-nine wells were drilled in Florida's territorial waters between 1954 and 1989; all were non-producing. The Department of the Interior, Minerals Management Service is responsible for managing oil and gas leases both in state and federal waters and has developed procedures to protect archaeological resources during exploration and extraction activities. Officials with the Florida Geological Survey have

suggested that the lack of success in exploration, coupled with modern political opposition to drilling inshore and the immense economic value placed on scenic beaches, leaves the prospect of future exploration in Florida waters fairly limited.

(F) Treasure Hunting and Commercial Salvage:

More than any other state in the nation, Florida is recognized as a place to hunt for treasure. As early as the 1930s, Florida granted permission to private parties to salvage material from shipwrecks on state lands. By the middle 1960s when the major shipwrecks of the 1715 and 1733 Spanish plate fleets had been discovered and placed under salvage contract, a small group of archaeologists and historians petitioned the Governor and Cabinet, who granted such leases, to protect the archaeological values of these shipwrecks during salvage. Since that time, archaeological requirements of one form or another have been part of exploration and salvage contracts between the state and salvors.

The Bureau receives and reviews applications for exploration and salvage activities in accordance with Rule 1A-31, Florida Administrative Code. The rule specifies the scope of permitted activities as well as the criteria for approving or denying applications. In general, these concern ability to carry out the tasks required to be performed under the contract such as ability to collect archaeological information, to diligently conduct activities, to care for artifacts, to protect archaeological materials, to obtain necessary archaeological skills and to prepare a final report of results.

According to the terms of the contracts for exploration a comprehensive remote sensing survey conducted similar in scope to those required for federally involved undertakings is required to be completed before any excavations are permitted. Such excavations are also subject to state and federal dredge and fill permitting requirements. Once the remote sensing survey report is reviewed by an independent archaeologist and the Bureau, the exploration contract may be modified to allow digging as necessary to determine the nature of buried anomalies. Often, these are determined to be modern ferrous debris not related to historic shipwrecks. As much as possible, the exploration contract is intended to yield reliable, repeatable results about what might be buried within the contract area. Whereas exploration activities in the past consisted mainly of random digging of holes based on rumors and hunches, it is now customary for contractors as well as environmental review agencies to understand why excavations are proposed and what their scope will be far in advance of actual digging. This basis for exploration activities results in a more realistic assessment and understanding of the extremely low probability of actually discovering previously unknown shipwreck remains that may contain treasure.

Contracts for salvage, unlike those for exploration, involve recovery of shipwreck material with the understanding that ownership of artifacts will be granted to the contractor at the end of the contract. Like exploration contracts, salvage contracts are accompanied by archaeological guidelines specifying the details of data recording, artifact care, project supervision, maintenance of daily logs, and reporting of results. Very few exploration contracts lead to salvage contracts; in fact, of the last 45 exploration contracts approved and carried out to at least some level of completion, no new shipwreck sites with the potential to

contain treasure have been located. Most salvage contracts now in effect have been carried forward from the out of court settlement agreement between Salvors, Inc., and the State of Florida in 1983, and all of these continue under the jurisdiction of the federal admiralty court.

Minimizing disturbance to historic shipwreck sites resulting from exploration and salvage activities will depend on two factors: the extent to which shipwrecks are impacted by the digging phase of exploration activities and the extent to which salvage activities fail to meet archaeological standards comparable to those that would be expected in a research project. The procedures for reviewing applications for exploration and salvage and the requirements of such projects when they are approved were established prior to the passage of the Abandoned Shipwreck and the promulgation of its Guidelines. Within the context of the Guidelines, the exploration and salvage program should be publicly reviewed to address such issues as criteria for approving or denying applications, criteria for renewing contracts based on past performance, archaeological participation throughout the contract period, completion of reports by contractors, and improving the overall public benefit of the program.

(G) Amateur Collecting:

Florida is one of the most popular dive destinations in the world. More than a million divers per year enjoy Florida's inland and coastal waters which offer a wide variety of underwater attractions, not the least of which are archaeological and historical sites. The most popular diving activities that can have an impact on submerged cultural resources are wreck diving and river diving.

Many of the more popular shipwreck dives are on modern vessels intentionally sunk for artificial reefs and dive charters. These are seldom of historical interest. More important, however, are the many earlier shipwrecks, of which there are estimated to be more than 1000, that may have archaeological and historical value. It is the state's policy that the public should have free access to shipwreck sites, but it is also a violation of state law to remove artifacts from such sites on state lands without the permission of the Division of Historical Resources.

Many of Florida's rivers, especially in the north central part of the state, have long been known for their fossil and artifact deposits; these have been collected by river divers since the 1950s. There are intact and stratified archaeological deposits in such rivers, especially along eroding banks and in once-dry sinkholes within the channel. Most artifacts and fossils from rivers, however, are recovered from depressions and cracks in the limestone bedrock where they have been trapped after eroding from their original archaeological location. Such secondary deposits usually provide a mix of fossils and artifacts from different geological and cultural periods.

Artifact collecting from archaeological sites over the long term can have a significant impact. While a few artifacts here and there may not seem important, the cumulative effect of repeated collecting over years and decades can greatly diminish the archaeological potential of a site for both scientific and recreational uses. Reducing the impact of collecting depends on educating the diving

community about the importance and value of submerged cultural resources. In some states this is already being accomplished by building cooperative relationships with sport divers through such activities as volunteer projects, training workshops, newsletters, improved communication, and establishment of underwater archaeological preserves. These issues are developed more fully as recommendations in Chapter Five.

The impacts in this chapter are important issues to be addressed in the development of a management plan for Florida's submerged and coastal cultural resources. Just as we must preserve our living resources, our non-living resources deserve the same attention, requiring an understanding of the scope, variety, and significance of archaeological sites in Florida. To effectively protect and manage the diversity of Florida's submerged and coastal cultural resources, it is essential to educate the public to recognize the presence of these cultural resources and the need to protect them from all possible impacts both human and natural. Chapter Three of this management plan will address Florida's present management program for its submerged and coastal cultural resources and federal and state laws which pertain to the program.

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CHAPTER THREE

FLORIDA'S PRESENT MANAGEMENT PROGRAM

Numerous statutory changes over roughly the past fifteen years have improved the management of many types of cultural resources in Florida. For example, there have been numerous advancements in the management of upland and wetland resources. However, Florida's management strategies and policies regarding shipwrecks, as well as other types of submerged sites, were slow to change since the 1960s. The last decade has seen an increasing awareness of the importance of submerged cultural resources. Florida is now actively focused on preserving the state's historical and archaeological resource base. This chapter outlines the laws, both state and federal, that pertain to Florida's management of its submerged cultural resources. It also reviews Florida's history of dealing with underwater heritage issues, and presents an overview of several of the more important underwater site programs.

HISTORY OF UNDERWATER SITE MANAGEMENT IN FLORIDA

The evolution of Florida's management of underwater sites has been shaped by issues surrounding historic shipwreck sites, especially the so-called "treasure" wrecks, rather than being guided by long-term management strategies. To gain a complete understanding of the present state of affairs, though, it is useful to first examine some of the major events in Florida's history of underwater site management. These are described below, organized into five different periods reflecting various changes in the law or managing agency.

Period One: Pre - 1967

Since early colonial times numerous vessels were wrecked in Florida's waters and off Florida's coasts. At least three major Spanish "treasure" fleets, which were transporting precious metals and other valuables from the New World to Spain, were wrecked in 1622, 1715, and 1733. The Spanish government spent years salvaging bullion and other goods from their wrecked ships, beginning immediately after each after each of the fleet disasters. While their methods might seem crude by today's standards, because material from recently sunken vessels generally was still in unbroken sacks and chests, they were often able to make significant recoveries from wreck sites. Those wrecks that went largely unsalvaged usually were inaccessible owing to deep water or other environmental factors that exceeded current technology to salvage them. There is evidence that

native peoples also salvaged materials from Spanish wrecks. Some artifacts associated with shipwrecks have been found as grave goods in burial mounds.

The first recorded modern salvage of a shipwreck in Florida took place in 1928. The salvor, William J. Beach, used hard hat diving equipment and a metal detector to locate the site of the *Urca de Lima*, part of the 1715 Spanish fleet. He managed to raise at least sixteen cannons and four anchors from the site. They were given to Ft. Pierce officials. Because the iron cannons were not treated to remove salts from the metal, however, these artifacts have largely been lost to corrosion.

In 1932, the first state lease for underwater salvage work was granted by the Florida Governor and Cabinet acting as Trustees of the Internal Improvement Trust Fund. The lease was granted for the site of one of the 1715 shipwrecks. The Internal Improvement Trust Fund was originally established in the 19th-century to make recommendations on the disposition of state lands. The Trust Fund also made decisions about a wide range of other state-owned resources including oil, gravel and oyster beds. Many of the responsibilities of the Trust Fund were eventually assumed by specific agencies within state government.

Beginning in 1959, more of the 1715 Spanish fleet shipwrecks were discovered off Sebastian Inlet. The Trust Fund began granting salvage permits for work in this area. The first of these permits was for a fifty square mile area and was the beginning of what has been termed the Florida "gold rush." In 1964, an advisory committee recommended that Florida begin a program of underwater investigations and archaeological research on shipwrecks in public waters. That same year, the Trust Fund hired the State's first underwater archaeologist to oversee the salvage activities conducted by lease.

Period Two: 1967 - 1979

In 1967, the Florida Legislature passed the Florida Archives and History Act. The Board of Antiquities was renamed the Board of Archives and History, and was organized into four bureaus, including the Bureau of Historic Sites and Properties within the Division of Archives, History and Records Management. An Underwater Archaeological Research Section, was established within the Bureau of Historic Sites and Properties, and the State Underwater Archaeologist was transferred from the Trust Fund to the Division. The Division was assigned the responsibility of carrying out the public policy of protecting and preserving Florida's cultural heritage. The Division assumed the Board of Antiquities' title to all cultural heritage property located on state owned lands, both terrestrial and submerged. Henceforth, rights to shipwreck exploration and salvage were no longer granted under lease from the Trustees, but rather by contract with the Division. This practice continues today. The State Archaeologist and the Underwater Archaeological Research Section were responsible for monitoring treasure hunting activities. The state employed at times up to a dozen Exploration and Salvage field agents who were assigned to the salvage boats to ensure that state laws were observed.

In 1968, the Governor and Cabinet, at the request of the Department of State, passed a resolution which established four underwater reserve areas. The

intention was to preserve a cross-sectional and representative sample of underwater cultural resources. These specific areas were selected because archival and other evidence indicated that there was a high probability that significant historical shipwreck sites were located within those boundaries. No exploration or salvage contracts were to be granted in these areas, although several permits have been issued for research work since that time.

In 1969, the State Reorganization Act was passed. The Board of Archives and History became the Division of Archives, History and Records Management within the Department of State.

In 1974, Albert B. Maris, a Special Master appointed by the U.S. Supreme Court, prepared the *Maris Report.*, which dealt primarily with natural resource control, particularly oil and gas. The Report redefined Florida's territorial boundary, determining that the Straits of Florida was part of the Atlantic Ocean, rather than the Gulf of Mexico. This new definition of Florida's territorial boundaries had the side effect of placing the *Atocha,* a shipwreck of the famed 1622 fleet, in Federal waters. With the changed boundary, the company salvaging the *Atocha* filed a court case claiming the state contract was invalid, and demanding return of the artifacts retained by the State to date. Eventually, the Supreme Court upheld the salvor's rights to the *Atocha* site and artifacts.

In July 1977, the Division began issuing antiquities permits for underwater research. The first of these was issued to the Broward County Historical Commission and Board of County Commissioners. This was the first instance in which a Florida locality embarked upon a full-scale underwater research project of its own with only advice and assistance provided by the State.

Period Three: 1979 - 1983

Shipwreck salvors, capitalizing on a Supreme Court decision recognizing federal admiralty arrests as taking precedence over State's titles to wrecks within their waters, moved to invalidate their contracts with the state. Beginning in 1979, the first Admiralty arrests were filed on shipwrecks in Florida waters by salvors seeking title to these wrecks. The arrests were filed primarily on shipwrecks from the 1715 Spanish Plate Fleet. One result of this litigation was that from 1979 to 1983, the Division of Historical Resources imposed a moratorium on the exploration and salvage of all historic shipwrecks in Florida, pending final results of ongoing litigation concerning validity of the state's ownership and authority to enter into such agreements. The Exploration and Salvage Program was largely dismantled during this period.

Period Four: 1983 - 1988

In May 1983, the Bureau of Historic Sites and Properties was reorganized into the Bureau of Historic Preservation and the Bureau of Archaeological Research, within the Division of Archives, History and Records Management. The State Underwater Archaeologist position was abolished as a result of the inactivity of the underwater program during continued Admiralty litigation.

In the spring of 1983, the Half-Mile Rise Archaeological Project began with sponsorship of the Bureau of Archaeological Research, the Florida Museum of Natural History, Florida State University, and (since 1987) the National Geographic Society.

In June 1983, there was an out of court settlement between a major Florida salvage firm and the Florida Department of State. Archaeological guidelines for recovery projects were henceforth to be drafted jointly by the salvage firm and the State. During the period 1983 to 1987, the Federal Government continued to award title of underwater finds from shipwreck sites in state waters to treasure salvage companies.

In July 1986, the Division of Archives, History and Records Management was reorganized as the Division of Historical Resources. The new Florida Historical Resources Act, which was revised at this time, broadened historic preservation responsibilities of state agencies within the Executive Branch. These responsibilities paralleled the provisions of Sections 106 and 110 of the National Historic Preservation Act of 1966. In addition, the state statute established an increased partnership role with the public in historic preservation activities.

In 1987, a new State Underwater Archaeologist was hired to oversee the State's underwater program. The Bureau's underwater archaeology program began a new focus on inventory, evaluation, protection, and interpretation of underwater sites. In December of that same year, the Federal Abandoned Shipwreck Act was passed by Congress. The Act gave states legal title to historic shipwrecks in their waters and removed these wrecks from Admiralty jurisdiction. The National Park Service began drafting guidelines to the Act to help states develop management policies for historic shipwrecks in their waters.

Period Five: 1989 - Present

In 1989, the Bureau of Archaeological Research began investigation of sites in Pensacola Bay, in conjunction with the University of West Florida and the City of Gulf Breeze. In 1990, the National Park Service issued its final guidelines to the Abandoned Shipwreck Act to help states develop management policies for their historic shipwrecks. That same year, the Bureau received a Coastal Zone Management Grant to develop a regional model for resource management based on a survey and inventory of sites in Pensacola Bay. In 1991 the Pensacola Shipwreck Survey (PSS) was initiated, and in 1992, the Pensacola model was successfully tested in Broward County.

Early in 1994, the Bureau was awarded a Coastal Zone Management grant to develop a comprehensive plan for the management of Florida's underwater and coastal sites. In September, 1994, the draft version of this management plan was submitted to the Department of Community Affairs, Office of Coastal Zone Management.

FLORIDA'S PRESENT MANAGEMENT STRATEGIES

Chapter 267 of the Florida Statutes asserts the state's title to abandoned historic sites and objects on state lands and vests that title in the Division of Historical Resources for purposes of administration and protection. From this statutory authority, the Division derives its ability and responsibility to manage historic shipwrecks and other archaeological sites on state lands, including sovereignty submerged lands. Two administrative rules set forth the Division's policies and procedures for implementing the law. These rules are Chapter 1A-31, F.A.C., Procedures for Conducting Exploration and Salvage of Historic Shipwreck Sites, and Chapter 1A-32, F.A.C., Archaeological Research. Other important non-regulatory aspects of Florida's management program include Underwater Archaeological Preserves, the Pensacola shipwreck survey project, the Emanuel Point Shipwreck Excavation project, the Maple Leaf shipwreck project, the Half-Mile Rise archaeological project, federal management of state-owned submerged cultural resources, and state management of federally owned shipwrecks.

CHAPTER 1A-31, F.A.C., PROCEDURES FOR CONDUCTING EXPLORATION AND SALVAGE OF HISTORIC SHIPWRECK SITES

Chapter 1A-31, F.A.C., establishes procedures for the exploration and salvage of historic shipwreck sites by private parties under contract with the Division. The rule provides that no person may conduct operations to explore, excavate, or salvage archaeological materials from shipwrecks without a written agreement with the Division of Historical Resources. The Division may not enter into such an agreement unless it determines that the applicant is professionally qualified through demonstration of archaeological ability to conduct such salvage activities and has the necessary professional archaeological expertise to perform proper field research, analysis, interpretation, conservation, and reporting.

Chapter 1A-31, F.A.C., also reaffirms the provisions of F.S. 267.061(1)(b) that material salvaged is the property of the Division. The Division may pay for the salvage in accordance with the terms of the contract. Generally, the terms have permitted salvors to retain 80 percent of the artifacts salvaged. The Division is also required to supervise the salvage through proper documentation of all salvaged artifacts. To protect the interests of the state, the Division must limit the number of contracts for salvage to a number which the Division can properly supervise.

The Archaeological Field Supervisor, located in the Bureau of Archaeological Research, in Tallahassee, is responsible for supervising the daily operation of the exploration and salvage program. Among the duties of the Archaeological Field Supervisor are the annual production of salvors compliance documentation, processing applications and contract documents, maintaining records on the program, and organizing annual meetings with contractors to exchange information about exploration and salvage activities.

The Archaeological Field Supervisor is assisted by two Archaeological Field Assistants, one located in Ft. Pierce, where most of the salvage occurs, and one in Tallahassee. The Field Assistant in Ft. Pierce is responsible for direct field supervision of salvage activities. These duties include monitoring contractors for compliance with contract conditions and guidelines. Both Field Assistants assist the Archaeological Field Supervisor with the organization of the annual meetings.

CHAPTER 1A-32, F.A.C., ARCHAEOLOGICAL RESEARCH

Chapter 1A-32, F.A.C. provides procedures for permitting archaeological research on state-owned or state-controlled lands. Permits normally are issued to archaeologists, scientific and educational institutions such as museums, universities, and colleges, or to reputable organizations such as historical or archaeological societies. The permit requires that the permittee have the necessary professional archaeological expertise to perform proper field research, analysis, interpretation, conservation, and reporting. All materials collected under a research permit remain public property to be administered for the state by the Division, but may be placed on temporary or long-term loan to the permitted organization or institution for the purpose of further study, curation, or display. All permit holders are required to prepare reports on the results of their research.

FLORIDA'S UNDERWATER ARCHAEOLOGICAL PRESERVE SYSTEM

Florida's system of underwater archaeological preserves, which was initiated in 1987, stands as one of the more successful programs for furthering the protection and enjoyment of Florida's historic shipwrecks. With an emphasis on public involvement, the preserve program seeks to bring together archaeologists, divers and waterfront operators in the common goal of encouraging awareness, appreciation, and responsible use of these historical resources.

Several management philosophies guide the archaeological preserve system. The first is that publicly owned shipwreck sites should be accessible to the public. The second principle is that public access and interpretation will improve site protection and conservation as local divers and visitors develop an understanding and appreciation for these unique resources. Finally, local communities enjoy the economic benefits from underwater preserves resulting from increased dive tourism. The preserve system stands in direct contrast to a restrictive regulatory form of management. Sites are protected by inviting rather than discouraging visitation and local businesses and civic leaders are quick to support the establishment and operation of preserves.

The present designation mechanism is that underwater sites of historic importance are nominated by a local individual or group of citizens, and are then investigated by the State. If the site proves to have good access, dive conditions, and is of historical merit, it is designated as a preserve through a cooperative project between government and the public. The State provides expertise in the form of underwater archaeologists who can visit the site and help the local nominating group assess the site by generating a map and conducting

background research into its history. They also assist the group in preparing the necessary forms and in printing informational brochures and laminated (underwater) visitor guides for the new preserve. The local community, especially the dive shops and dive charter operators, become, stewards of the preserves as they regularly visit them and derive part of their business from visitors to the preserve.

To date, Florida's underwater preserve system includes five shipwrecks. The *Urca de Lima*, wrecked in 1715 off Ft. Pierce, was designated as the first preserve in 1987. The site was nominated by the St. Lucie County Historical Commission. The *San Pedro*, a Spanish shipwreck from the 1733 fleet, was chosen to become the second Underwater Archaeological Preserve. Working in conjunction with Indiana University and Florida State University field schools, the Bureau surveyed the wreck, which lies in 18 ft. of water off Islamorada in the Keys. A proposal was then circulated throughout the Keys waterfront organizations outlining the establishment of the *San Pedro* as a preserve. Positive public support was quickly converted into the creation of the *San Pedro* Trust, a non-profit organization entrusted with making the preserve a reality. The preserve was formally established in 1989.

In an effort to expand the archaeological preserve system, the Bureau distributed flyers throughout the state soliciting nominations for possible candidates for the next preserve. One promising candidate was the wreck of a Suwannee River steamboat, *City of Hawkinsville*, sunk sometime during the 1920s. With the aid of high school students and local divers, the wreck was mapped and researched, resulting in a proposal to make it the third Underwater Archaeological Preserve. Community involvement and state assistance turned an old relic of Florida's maritime past into a preserve in July 1992.

The fourth site to become a preserve was USS *Massachusetts* , commissioned in 1896. Sunk just outside the entrance to Pensacola Bay, this 350-foot long battleship is one of the oldest existing American battleships. The *Massachusetts* never saw action and was scuttled in 1921 to serve as a Navy target. In 1956, title to the *Massachusetts* was transferred from the Navy to the State of Florida following a Florida Supreme Court decision in a case where the state opposed commercial salvage of the vessel for scrap metal. The ship was investigated in 1991 by the Pensacola Shipwreck Survey to assess its suitability as a preserve. Following a favorable review and preliminary historical research, the Friends of the Massachusetts, a non-profit community support organization, was quickly organized to carry out the various tasks necessary to make the hulk a preserve. This included efforts to raise funds, primarily to pay for the expense of an underwater bronze plaque designating the special status of the old battleship. The *Massachusetts* was successfully dedicated as the fourth Underwater Archaeological Preserve in June 1993, through the efforts of the Friends of the Massachusetts and the Bureau.

The most recent addition to the preserve system is the SS *Copenhagen* which ran aground off Lauderdale-By-The-Sea in 1900 and was abandoned. The *Copenhagen* eventually become a popular dive site. Research by the Marine Archaeological Council of Broward County reestablished the ship's identity and history. The *Copenhagen* was nominated by a local dive boat captain and was dedicated as Florida's fifth Underwater Archaeological Preserve on June 4, 1994.

The *Copenhagen* Preserve is managed by the Broward County Marine Resources Department, the first joint agreement between the Bureau of Archaeological Research and a county government.

The Division's long term goal is to establish a number of Underwater Archaeological Preserves throughout the state representing a broad range of archaeological sites which encompass both the prehistoric and historic periods. Divers and others are encouraged to continue to nominate sites for consideration as potential Underwater Archaeological Preserves. By placing underwater resources in the public trust, and by explaining their archaeological and historical value to visitors, these sites become important for everyone to preserve. Visitation of the preserves by tourist divers has significant economic benefits for the local communities. At present, only six other states, California, Maryland, Michigan, North Carolina, New York, and Vermont, have similar programs, but other state governments and those of other countries are beginning to follow this example of "education through recreation." Recommendations for Underwater Archaeological Preserves are made in Chapter Five.

PENSACOLA SHIPWRECK SURVEY

The main stimulus for the Pensacola Shipwreck Survey, begun in 1991, was the goal of the Bureau of Archaeological Research to collect basic data on a cross-section of Florida underwater sites and then assemble a long-term management plan for those resources. Pensacola Bay was chosen as an ideal location for the development and testing of a statewide model on a regional basis. A survey staff was assembled combining paid employees and student interns. Funds were made available under a research grant from the Florida Department of Community Affairs, Coastal Management Program.

The Pensacola Shipwreck Survey's research design or "model" calls for a public-oriented program with a broad scope of work that includes the following components:

1. Collection of archival and oral information on potential sites;
2. Underwater field investigations in conjunction with local divers and fishermen;
3. Deployment of electronic remote sensing equipment to detect previously unknown sites, and development of a computer-based inventory of targets and verified sites;
4. Assessments, evaluations, and recommendations for individual sites;
5. Establishment of a classification scheme of sites according to age, integrity, and environment; and
6. Development of appropriate management options for different types of sites.

To date the survey has recorded over 40 significant underwater archaeological sites, including two 18th-century British cutters or sloops, as well as the remains of a 16th-century Spanish vessel, the *Emanuel Point Wreck*, which is believed to be Florida's oldest shipwreck. The Pensacola projects represent a cooperative effort between the Bureau of Archaeological Research and the University of West Florida (UWF), especially in the organization of archaeological field schools. As

a result, UWF is now one of the few institutions in the country where practical, graduate level experience in underwater archaeology may be obtained. Public support for the Pensacola Shipwreck Survey has been most gratifying. The Survey also works in close cooperation with the Historic Pensacola Preservation Board, the West Florida Archaeology Institute, other Pensacola institutions, and historical and archaeological societies.

The success of the Pensacola model will ultimately depend on the ability of all the parties to achieve public access, interpretation, stewardship and protection for the historical sites located there. What the program has demonstrated is that a concerted effort combining state, academic, and private sector organizations may effectively identify and raise awareness of historic underwater resources in a given area. It is likely, based on the progress in Pensacola, that similar resource management surveys will be conducted in other parts of the state in the future.

MAPLE LEAF SHIPWRECK ARCHAEOLOGICAL PROJECT

Another important project in which the Division of Historical Resources is involved is the Maple Leaf Shipwreck Project. The *Maple Leaf* was a supply vessel for the Union Navy in Florida during the Civil War. In 1864, while sailing north from Palatka to Jacksonville, the ship struck a Confederate mine and sank. Union forces were only able to salvage a small amount of the *Maple Leaf* 's extensive cargo and then abandoned the ship. In the late nineteenth century the wreck was partially blasted as a navigation hazard, and then forgotten. In 1984, the site of the *Maple Leaf* was rediscovered by a Jacksonville dentist who had researched the history of the ship and searched extensively for it. He subsequently formed Saint Johns Archaeological Expeditions Inc., a non-profit research group, which received an Archaeological Research Permit (1A-32) from the Bureau to conduct limited archaeological excavation of the site. Beginning in 1987, the project was awarded state and federal grants. The archaeological excavations have shown that the site is of national historical significance as the vessel was loaded with some 400 tons of military and personal artifacts of the Civil War period. As of the 1994 archaeological season only about one percent of the ship's hull has been excavated. The project directors have halted further excavations until 1996 in order to complete necessary artifact conservation work. They have developed an outstanding archaeological conservation laboratory and museum exhibits in Jacksonville and Tallahassee. They have also developed a traveling exhibit for educational purposes.

The Maple Leaf is outstanding an example of a government supported, nationally significant project involving a non-profit organization, a volunteer base, university cooperation, museum exhibits, book and report publications, and no sale of artifacts for commercial gain. The Bureau of Archaeological Research has provided technical assistance and has guided the development of the project since the beginning. This type of project will serve as a model for future public/private projects in Florida which maximize the public benefit.

HALF-MILE RISE ARCHAEOLOGICAL PROJECT

In the spring of 1983, the Half-Mile Rise Archaeological Project began with sponsorship of the Florida Division of Historical Resources, the Florida Museum of Natural History, Florida State University, and (since 1987) the National Geographic Society. The Project consists of archaeological excavations in a small section of the Aucilla River southeast of Tallahassee. First investigated by divers in the early 1960s, the area has yielded numerous Pleistocene fossil remains, as well as prehistoric artifacts of Archaic and Paleoindian age. These sites are important, partly because they contain deposits that are well stratified and not dispersed.

There are a total of about 45 known sites in the Aucilla and Wacissa Rivers, as well as offshore in Apalachee Bay. As part of the search for intact Paleoindian cultural remains, three Aucilla River sites have been the subject of small test excavations, and a fourth, the Page-Ladson site, has been the subject of larger, formal excavation. Two of these sites have produced artifacts and mega-fauna remains from *in situ*, contemporary levels. The Aucilla River sites have taken on important national and international significance. In October 1993, a seven and a half foot mastodon tusk, showing six cut marks caused by stone tools, was excavated from sediments at a depth of 30 feet. The tusk was carbon-dated to 12,200 years BP by associated organic remains, which suggests that this may the oldest known butchering site in North America. This discovery is causing scientists to rethink existing theories about the migration patterns of early man in North America. The Half-Mile Rise Project has proven to be a successful model of cooperation between private landowners, amateur and professional archaeologists, and sport divers, in the investigation of this unique archaeological resource.

FEDERAL MANAGEMENT OF STATE-OWNED SUBMERGED CULTURAL RESOURCES

The federal government is responsible for managing state-owned submerged cultural resources located in units of the national park system, the national wildlife refuge system, and the national marine sanctuaries system in Florida. There are several types of arrangements which exist between the federal government and the state regarding ownership of these lands and management of natural and cultural resources found on them.

The Bureau has worked closely with NOAA in developing a plan for managing submerged cultural resources situated in the Florida Keys National Marine Sanctuary (FKNMS), as part of a larger resources management plan for the Sanctuary. The Bureau has also cooperated with units of the National Park Service in Canaveral and Gulf Islands National Seashores. Recommendations for further cooperation between the State of Florida and the Federal Government are made in Chapter Five.

STATE MANAGEMENT OF FEDERALLY OWNED SHIPWRECKS

The federal government maintains ownership of U.S. and Confederate warships located in Florida waters. In addition, under international common law and on behalf of other sovereigns, the federal government is responsible for protecting foreign flag warships and other foreign flag vessels entitled to sovereign immunity located in Florida's waters. The complexities of joint jurisdiction over these resources require frequent communication and inter-agency cooperation, especially in regard to resource protection, law enforcement, interpretation, and public access. Recommendations for further cooperation of the State of Florida with the Federal Government are made in Chapter Five.

The Legacy Resource Management Program (RMP) was established by Congress through the Department of Defense (DOD) Appropriations Act, Section 8120 of 1991, to help the Department of Defense enhance its cultural and natural resource stewardship of more than 25 million acres of land under its jurisdiction. Legacy activities integrate the management of these resources with the DOD mission and the public interest. The mandate of the Legacy Resource Management Program includes working with state agencies to protect both natural and cultural resources. Archaeological resource protection (both on land and underwater), conservation, and management are all important elements of this program. Defense Departments concerned are: Air Force, Army, Army Corps of Engineers, Marines, and Navy.

States are permitted to apply for Legacy funding to develop natural and cultural resource management plans. In Florida waters there are a number of shipwrecks owned by the US Navy, General Services Administration (GSA), foreign governments, and private parties. In August 1994, the Division of Historical Resources submitted a proposal and an application for a Legacy Grant to work with the US Navy to develop management plans for Navy wrecks in Florida waters, including archival and other research work, survey, inventory, and assessment. Should the application be approved, the project will be coordinated with the Naval Historical Center in Washington DC.

FLORIDA LAWS AND RULES CONCERNING SUBMERGED CULTURAL RESOURCES

The most important state law concerning management and protection of archaeological and historic sites is the Florida Historical Resources Act.

FLORIDA HISTORICAL RESOURCES ACT, CHAPTER 267, FLORIDA STATUTES

The Florida Historical Resources Act, Chapter 267, Florida Statutes, declares that it is State policy to (1) provide leadership in the preservation of the state's historic resources; (2) administer state-owned or state-controlled historic resources in a spirit of stewardship or trusteeship; (3) contribute to the preservation of non-state-owned historic resources and to give encouragement to organizations and individuals undertaking preservation by private means; (4) foster conditions, using measures that include financial and technical assistance, for a harmonious coexistance of society and state historic resources; (5) encourage the public and private preservation and utilization of elements of the state's historically built environment; and (6) assist local governments to expand and accelerate their historic preservation programs and activities.

The Act states that all treasure trove, artifacts, and such objects having historical or archaeological value which have been abandoned on state-owned submerged lands belong to the state, with management responsibility and title assigned to the Division of Historical Resources. Generally encompassed in the definition of state-owned submerged lands are the unconveyed bottoms of navigable streams and rivers, lakes, bays, and the adjacent bottoms of the Gulf of Mexico and the Atlantic Ocean. Florida's waters extend from the shoreline 3 marine leagues (approximately 10 geographical miles) in the Gulf of Mexico and 3 geographical miles in the Atlantic Ocean.

The Act covers a wide range of responsibilities pertaining to archaeology and historic preservation, including providing the basis for archaeological and architectural surveys, encouraging rehabilitation of existing historic structures for use by public agencies, encouraging private stewardship of archaeological and historical resources by easements, tax credits and other means, developing comprehensive statewide historic preservation plans, identifying and nominating eligible properties to the National Register of Historic Places, and establishing programs and policies to encourage preservation of historic resources for the public welfare. The Act provides for the creation of a Museum of Florida History. This Museum in Tallahassee attracts some 150,000 visitors each year from across the State and country. The Act also promotes historic preservation through public grants. Since 1987, grants have been provided for underwater archaeological projects, as well as the more traditional uplands archaeological and architectural projects.

The Act also provides for penalties for disturbing archaeological sites without authorization. In 1993, the penalty section was amended following a legislative

review of historic preservation laws and policies in Florida by the Florida Senate Committee on Governmental Operations in 1991. The 1993 amendments increased penalties generally, including making disturbance of historical resources by means of unauthorized excavations a felony of the third degree. In recognition of the limited archaeological significance of certain artifacts compared to the severity of penalties for their unauthorized collection, the Division is developing a program to allow recovery of isolated artifacts from river bottoms. This issue is addressed in the recommendations in Chapter Five.

FOSSIL PERMITS, CHAPTER 240, FLORIDA STATUTES

Chapter 240, Florida Statutes, establishes procedures for scientific study of fossil remains in Florida. In order to protect and preserve vertebrate fossils and paleontology sites, the State of Florida has declared that all vertebrate fossils found on state-owned land belong to the state with title vested in the Florida Museum of Natural History. Field investigations of vertebrate fossils on land or under water may be conducted after obtaining a permit issued by the Museum's Program of Vertebrate Paleontology. The statute and permit cover all vertebrate fossils, including bones, teeth, natural casts, molds, impressions, and other remains of prehistoric fauna. Fossil sharks teeth are specifically excluded from these regulations, as are fossil plants and invertebrates, including shells. A permit is not required for happenstance or casual retrieval of fossils, but the law is intended to regulate the buying, selling or trading of vertebrate fossils found on state-owned land, or systematic and continued collection from a paleontological site.

FEDERAL LAWS CONCERNING SUBMERGED CULTURAL RESOURCES

There are a number of laws with provisions for protection of archaeological and historic sites on federal lands. One of the most important of these pertaining to underwater sites in Florida is the Abandoned Shipwreck Act of 1987 along with its implementing Abandoned Shipwreck Act Guidelines issued in 1990. Chapter Four is devoted to this important law and its Guidelines. Some other important federal laws are discussed here.

Submerged Lands Act, 1953 (43 U.S.C. 1301 ET SEQ). (P.L. 83-31)

This Act conferred ownership on U.S. States of all lands beneath navigable waters in the state. This included lakes and other navigable bodies of water within state boundaries. In general this jurisdiction extended three miles out from the coast, except for the Gulf coast states of Texas and Florida and surrounding Puerto Rico. The Act was intended to protect natural resources and did not mention cultural resources. This omission notwithstanding, beginning in 1963, a total of thirty states and trust territories enacted antiquities legislation which asserted title to, and regulatory control over submerged cultural resources in their waters.

In 1979 the first use was made by treasure hunters (in Florida) of the mechanism of "admiralty arrests" under federal common law principles to claim ownership of shipwrecks for salvage. In cases in several states, Federal courts ruled that the Submerged Lands Act did not specifically assert U.S. title to shipwrecks and transfer that title to the States. Not until the Abandoned Shipwreck Act became law in 1988 was title to shipwrecks explicitly conveyed by the U.S. to the States. This issue is discussed more fully in Chapter Four.

National Historic Preservation Act, 1966 as amended (P.L. 96-515 1980, 16 U.S.C. 470a et seq).

The National Historic Preservation Act is the basic federal law for identification, designation, and protection of historical resources. The Act establishes as Federal policy the protection of historic sites and values in cooperation with other nations, States, and local governments. The Act establishes the National Register of Historic Places (NRHP) and the National Historic Landmark (NHL) program. The Act establishes a program of grants-in-aid to states for historic preservation activities and establishes the Historic Preservation Fund to carry out the provisions of the Act. Subsequent amendments designated the State Historic Preservation Officer (SHPO) as the individual responsible for administering programs in the States. The Act also created the President's Advisory Council on Historic Preservation. Federal agencies are required to consider the effects of their undertakings on historic resources, and to give the Advisory Council a reasonable opportunity to comment

on those undertakings. The Act also authorizes the Secretary of the Interior to expand and maintain a National Register of Historic Places.

Section 106 of the Act establishes procedures to protect important historical sites from adverse impact during federally involved undertakings. Section 110 concerns the responsibilities of federal agencies to locate, inventory, and nominate eligible sites to the National Register. Shipwrecks can benefit from these and other provisions of the Act.

Coastal Zone Management Act, 1972
(P.L. 92-583, as amended; 86 Stat. 1280; 16 U.S.C. 1455, U.S.C. 1456 et seq).

The federal Coastal Zone Management Act was passed by Congress in 1972, "to preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation's coastal zone for this and succeeding generations." It was recognized that there was a need to protect and manage the natural and cultural resources of the 35 coastal states and territories of the USA. Since passage of the Act, almost all of these states and territories have developed a network of agencies to work toward common goals of conservation. Experience has shown that no one agency or level of government can effectively deal with all of the issues of coastal management. In recent years, coastal and submerged cultural resources have been given greater consideration in coastal management by both federal and state authorities.

The State of Florida has participated in the federal coastal management program since its inception, and has developed and designed state programs to protect the State's environmental resources and manage the development of the coasts and interior. Development of a formal coastal management program for Florida began with state legislation in 1978. In 1992, Florida law was changed such that the Florida's Coastal Management Program was relocated to the Department of Community Affairs. The main goal of this move was to provide the Coastal Resources Interagency Management Committee (IMC) with the authority and resources to serve as a central, coordinating, policy setting, and conflict resolution body for statewide coastal issues. The IMC is made up of eleven state agencies, including the Department of State. The IMC works to provide coordination through the eleven regional planning councils. The five water management districts are being given increasing authority to manage development in sensitive coastal areas.

A Florida Coastal Action Plan has been prepared and adjusted to guide state agencies in working together to resolve coastal issues. Section 306 of the Federal Coastal Zone Management Act provides for the granting of federal funds to state agencies engaged in coastal management studies. The Department of Community Affairs makes these funds available to Florida agencies to implement statewide policies and to resolve coastal issues. The current action plan of the Florida Coastal Management Program promotes management of coastal resources by encouraging grant applications for coastal heritage projects.

Marine Protection, Research and Sanctuaries Act (MPRSA), 1972

This Act establishes the National Marine Sanctuary Program under the National Oceanic and Atmospheric Administration (NOAA). The Act makes provision for the protection of submerged cultural resources within national marine sanctuaries. The marine sanctuaries sections of the law (Title III of the Act) were a product of concerns to protect specific coastal regions. The principal purpose of the legislation was identified as protection of threatened coastal and marine resources. The mission of the National Marine Sanctuary Program is to "identify, designate and manage areas of the marine environment of special national significance due to their conservation, recreational, ecological, historical, research, educational, or esthetic qualities."

The Act and its amendments (1984) authorize the Secretary of Commerce to designate discrete areas as national marine sanctuaries to promote comprehensive management of their special ecological, historical, recreational and esthetic resources. National Marine Sanctuaries may be designated in coastal and ocean waters, in submerged lands and in the Great Lakes and their connecting waters.

It is NOAA policy that management of historical and cultural resources, including the identification, evaluation, registration, interpretation and treatment of historical and cultural resources, shall be consistent with the declared national policy for the protection and preservation of the resources as stated in the National Historic Preservation Act of 1966 (NHPA), and the Archaeological Resources Protection Act.

In 1975 Key Largo NMS was established in the Florida Keys followed by Looe Key NMS in 1981. Looe Key was named after the wreck of HMS *Looe (1744)*, a British frigate which lies in the Sanctuary. In 1990, Congress established the Florida Keys National Marine Sanctuary (FKNMS), incorporating the entire sweep of the Florida Keys, from Biscayne Bay to the Dry Tortugas (and including the Key Largo and Looe Key Sanctuaries in its boundaries). There are known to be significant submerged cultural resources located in the FKNMS. As part of the development process for a management plan for The Florida Keys National Marine Sanctuary there have been a number of public forums. The final plan is expected before the end of 1994. The submerged cultural resources found in the FKNMS will be managed in the conjunction with the federal government according to the Guidelines of the Abandoned Shipwreck Act.

One of the largest prosecutions anywhere of sport divers taking archaeological objects from protected areas occurred in Channel Islands NMS and Channel Islands National Park, in the Farallon Islands, off the coast of California. In October 1987, twenty divers were cited by federal and California law enforcement officials for illegal removal of artifacts from two 19th Century shipwrecks located in these federally protected areas. Several hundred objects were confiscated as evidence from one dive charter boat which had returned from a three day dive cruise. The case resulted in several convictions and approximately $100,000 in total fines.

Archaeological and Historic Preservation Act of 1974, as amended. (Also known as, Moss-Bennett Act; Archaeological Recovery Act; P.L. 93-291; Reservoir Salvage Act, 1960 amended.)

Congress amended the Reservoir Salvage Act to extend the provisions of the Act to all Federal construction activities and all Federally licensed or assisted activities that will cause loss of scientific, prehistoric, or archaeological data. It requires the Secretary of the Interior to coordinate this effort, and to report annually to the Congress on the program. It permits agencies either to undertake necessary protection activities on their own or to transfer to the Secretary of the Interior up to 1% of the total authorized for expenditure on a Federal or Federally assisted or licensed project to enable the Secretary to undertake the necessary protection activities.

National Environmental Policy Act, 1969 (P.L. 91-190)

The National Environmental Protection Act (NEPA) is the basic national charter for protection of the environment. The Act requires Federal agencies to prepare an Environmental Impact Statement (EIS) for every major federal action that affects the quality of the human environment, including both natural and cultural resources. This included archaeological sites. The National Environmental Protection Act effectively incorporated archaeology into the federal planning process.

National Parks Act, 1976 (P.L. 91-190)

The National Parks Act, 1976 is administered by the National Park Service, a branch of the Department of the Interior. The NPS has developed a number of cultural resource management plans for individual units of the Park system. Units of the NPS in Florida include National Historic Sites, National Parks, National Memorials, and National Monuments.

In 1980 the NPS established a Submerged Cultural Resources Unit based in Santa Fe, New Mexico. The Unit has surveyed and inventoried submerged cultural resources on federal lands in the continental U.S. and in offshore territories, especially in units of the National Park system. Since 1980 they have done extensive work ranging from the Great Lakes, to the Aleutian Islands off Alaska, to Bikini Lagoon in the Federated States of Micronesia. Perhaps the most important survey conducted by the unit in Florida waters took place in 1983 in Key Biscayne National Park. The unit was requested to conduct the survey as part of the investigation surrounding an admiralty arrest on a shipwreck made in 1979 by a sport diver. The site was determine to most likely be that of the HMS *Fowey* (1748).

The National Park Service has emphasized protection of submerged cultural resources as well as recreational diving in at least two National Parks. These are Isle Royale National Park in Michigan and Key Biscayne National Park in Florida. Maritime history is an important interpretation theme at Isle Royale National Park. There are a number of shipwrecks of passenger/package freighters which lie within park boundaries. Sport diving is permitted through

the services of licensed concessionaires. The Park provides information for divers on the importance of protecting sites and also on the dangers of diving in the cold waters of Lake Superior. The Park Service operates patrol boats that routinely check out dive boats. Approximately 22,640 acres of Key Biscayne National Park have been designated as a National Park Archaeological District. There are known to be at least 43 shipwrecks within this District ranging in age from the eighteenth to the twentieth centuries. In 1989 the NPS initiated the Fort Jefferson Archaeological Project under the direction of the Submerged Cultural Resources Unit. The project accepts a number of volunteer and student divers and is expected to continue until at least the mid 1990s. A number of shipwreck sites in the park have been mapped. The National Park Service also administers the National Seashore System. Canaveral National Seashore and the Gulf Islands National Seashore are the units in the State of Florida.

Archaeological Resources Protection Act of 1979 (ARPA)

This Act supplements the provisions of the Antiquities Act of 1906, finding that previously existing Federal laws at that time did not provide adequate protection to prevent loss and destruction. The Act defines the term "archaeological resource" and determines the age at which an item can be termed an archaeological resource as being at least 100 years of age. The Act makes it illegal to excavate or remove from Federal or Indian lands any archaeological resources, or to attempt to commit these acts, without a permit from the land manager. Permits may be issued only to educational or scientific institutions, and only if the resulting activities will increase knowledge about archaeological resources. Major penalties for violating the law are included. The Act authorizes the Secretary of the Interior to promulgate regulations for the ultimate disposition of materials recovered as a result of permitted activities. Permits for archaeological work on tribal lands cannot be issued without the consent of the Indian Tribe. The Act includes all portions of shipwrecks including, but not limited to, armaments, apparel, tackle, and cargo.

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CHAPTER FOUR

FLORIDA'S MANAGEMENT STRATEGIES AND THE ABANDONED SHIPWRECK ACT GUIDELINES

This chapter discusses one of the most important pieces of Federal legislation pertaining to Florida's submerged cultural resources, the Abandoned Shipwreck Act of 1987. It also examines the Abandoned Shipwreck Act Guidelines issued by the National Park Service, with attention to their applicability for Florida's management program.

BACKGROUND

Florida, like most other states, claims title to abandoned shipwrecks on its sovereignty submerged lands. Beginning in 1979, in a series of precedent setting cases in Florida, a federal district court found the state's authority in conflict with federal admiralty law. While the Submerged Lands Act of 1953 had clearly established states' ownership of natural resources within their sovereignty lands, no explicit assignment of cultural resources had been made. The Southern District Court asserted its jurisdiction over a series of shipwrecks of the 1715 fleet that were arrested in admiralty, declaring the state's title and management scheme void.

Florida appealed the court's decision, then later dropped the appeal in an out-of-court settlement agreement executed in June of 1983. In the agreement, the Florida Department of State recognized the court's jurisdiction over those shipwreck sites that were the subject of admiralty arrest. The salvors agreed to enter into salvage contracts with the state following guidelines to be jointly developed by the state and the salvor. The court adopted the settlement agreement, the contract arrangement, and the guidelines as a means of administering the salvage activity under its jurisdiction, and the arrangement continues unchanged more than eleven years later.

The implications of the settlement were far reaching. Once the jurisdiction of federal admiralty court was established to be superior to state laws concerning ownership or historic preservation, it became possible for virtually any claim to be recognized by any district court. From 1983, when the settlement agreement was executed, to 1988, when the Abandoned Shipwreck Act became law, more than fifty federal admiralty claims were filed in Florida federal district courts. Other coastal and Great Lakes states also found their ownership of shipwreck sites on their submerged lands to be challenged. Each case represented a new interpretation of the admiralty court's control over historic shipwreck sites and archaeological controls, often in the absence of any experience or expertise in

such matters. Archaeologists, historic preservationists, state governments, and others began quickly to prepare legislation to resolve the conflict in jurisdiction and to stem the loss of historic shipwreck sites to commercial salvage. Nearly five years after the Florida federal court successfully asserted its jurisdiction in state waters, the Abandoned Shipwreck Act finally became law.

THE ABANDONED SHIPWRECK ACT (P.L. 100-298; 43 U.S.C. 2101-2106)

The Abandoned Shipwreck Act of 1987, which went into affect April 28, 1988, asserted federal title to abandoned shipwrecks located in or on submerged lands of a state and meeting certain criteria of embededness and historical significance. The Act then transferred that title and ownership from the federal government to the states. Exceptions were shipwrecks located in or on the public lands of the United States (which remain the property of the Federal Government), and shipwrecks on Indian lands (which are the property of the Indian tribe owning such lands). States are charged with managing shipwrecks in ways that protect natural resources and habitat areas, guarantee recreational exploration, and allow for public and private sector recovery that is consistent with historical values and environmental integrity.

Shipwrecks that fall under the Abandoned Shipwreck Act are those that are embedded in the submerged lands of a state, or embedded in coralline formations protected by a state; or those on submerged lands of a state and included in or determined eligible for inclusion in the National Register of Historic Places. A shipwreck can be eligible for the National Register if it is associated with events or persons significant to U.S. history; or if it represents distinctive characteristics of a type, period, or method of construction; or if it has yielded, or is likely to yield, information important in prehistory or history.

The ASA provides a number of definitions, including: *shipwreck*, *abandoned shipwreck*, *historic shipwreck* and *non-historic shipwreck*. A *shipwreck* means a vessel or wreck, its cargo, and other contents. The vessel or wreck may be intact or broken into pieces scattered on or embedded in the submerged lands or in coralline formations. Isolated artifacts and materials not in association with a wrecked vessel, whether intact or broken or scattered or embedded, do not fit the definition of a shipwreck. An *abandoned shipwreck* is one to which title has voluntarily been give up by the owner with the intent of never claiming the right or interest in the future and without vesting ownership in anyone. When the owner of a sunken vessel is paid the full value of the vessel (for example by an insurance underwriter) the shipwreck is not considered to be abandoned. In such cases, title to the wrecked vessel is passed to the party who paid the owner. Sunken warships or other vessels are not abandoned by the flag nation, but instead are entitled to sovereign immunity. An *historic shipwreck* is one that is listed in or eligible for listing in the National Register of Historic Places. A *non-historic shipwreck* is one that is neither listed in nor eligible for listing in the National Register of Historic Places.

Section 2 of the Act recognizes that states have the responsibility to manage "a broad range of living and non-living resources" in state waters and submerged lands. This includes certain abandoned shipwrecks, which have been deserted

and to which the owner has relinquished ownership rights with no retention. The States are encouraged to create underwater parks or areas to provide additional protection for such resources. Funding to support such management strategy is authorized through the Historic Preservation Fund established by the National Historic Preservation Act of 1966. The Abandoned Shipwreck Act did not affect admiralty claims filed prior to its enactment. Several major challenges to the Abandoned Shipwreck Act have been filed in Federal courts since 1988, however, none has been successful.

THE ABANDONED SHIPWRECK ACT GUIDELINES (1990)

Section 5 of the Act instructs the National Park Service to prepare and publish guidelines in the Federal Register to encourage states in the development of underwater parks and the development of management programs for their historic shipwrecks. The Park Service issued its Guidelines for the Abandoned Shipwreck Act in 1990 (Federal Register, vol. 55, no. 233, pages 50116-50145). The Guidelines are quite comprehensive. They provide advice to the states and to federal agencies on how to effectively manage shipwrecks in waters under their ownership or control.

An important concept used throughout the Guidelines, is that of public benefit or public good (the terms are synonymous). These terms include such concepts as long-term protection of submerged cultural resources for future generations, creation of public exhibits and museum displays of artifacts recovered from shipwrecks, popular publications on shipwreck sites, and other benefits which will accrue to the general public. The public benefit or public good are important when applied to issues pertaining to private sector recovery of shipwrecks (elaborated further in Chapter Five of this management plan). For example, the guidelines recommend that all applicants for salvage contracts be required to state precisely what they are looking for and why, and what benefits will accrue to the public. Applicants should be required to develop an argument for research, including excavation of a site, and discuss the positive and negative results of doing the work.

A table was developed which compared the major recommendations of the Guidelines with Florida's existing management policies. The Guidelines are oriented specifically toward shipwrecks. However, for the purposes of this management plan, the concept of the Guidelines has been extended to all types of underwater sites and the language of the Guidelines in the following section has been changed to reflect this. The term "underwater sites" is equivalent to several other terms in common usage such as "underwater cultural resources", "underwater heritage resources", "underwater archaeological resources", "submerged cultural resources", etc. Consideration of issues pertaining to "modern" (defined as being less than fifty years of age) abandoned vessels or non-historically significant shipwrecks have been omitted because these are outside the scope of Florida's management program.

Part I of the Abandoned Shipwreck Act Guidelines

Part I of the Guidelines establishes the basic components or goals of an underwater sites management plan:

1. Locate and identify shipwrecks (underwater sites).

2. Determine which shipwrecks are abandoned and meet the criteria for assuming title under the Abandoned Shipwreck Act.

3. Determine which shipwrecks (underwater sites) are historic.

4. Identify recreational and other values that a shipwrecks (underwater site) may possess and its current and potential uses.

5. Provide for the long-term protection of historic shipwrecks (underwater sites).

6. Protect the rights of owners of non-abandoned shipwrecks.

7. Consult and maintain a cooperative relationship with the various shipwreck and (underwater site) interest groups.

8. Cooperate with state and federal agencies and sovereign nations having an interest in shipwreck management (and the management of underwater sites).

9. Provide sport divers with reasonable access to explore shipwrecks (and other underwater sites).

10. Provide for public appreciation, understanding, and enjoyment of shipwrecks, maritime history, (and Native American sites).

11. Conduct archaeological research on shipwrecks (underwater sites) where research will yield information important to understanding the past.

12. Provide for private sector participation in shipwreck (underwater site) research projects.

13. Provide for commercial salvage and other private sector recovery of shipwrecks when such activities are in the public interest.

All of these components are included at least to some extent in Florida's management program. The following section summarizes how Florida has attempted to address each issue. Recommendations for improvement are discussed in Chapter Five. 'Bureau' refers to the Bureau of Archaeological Research.

1. Locate and identify shipwrecks (underwater sites).

The Bureau responds to occasional reports of site discoveries received from the public and government agencies. However, ability to respond is limited by a lack of staff and other resources. The Bureau works in conjunction with the Bureau of Historic Preservation to provide grant program support for surveys and inventories and cooperates in design and review of inventories conducted in accordance with Section 106 of the National Historic Preservation Act and other mandates. Previously unknown shipwrecks are sometimes discovered by private contractors conducting exploration and salvage activities and these are added to site inventories. The Bureau has conducted survey and inventory activities in conjunction with establishing Underwater Archaeological Preserves at the *San Pedro* and *City of Hawkinsville* shipwrecks. The Bureau does not conduct survey and inventory activities on a routine basis and only a small proportion of the state's submerged sites are known. The Bureau maintains underwater site records in the Florida Site File. The Pensacola Shipwreck Survey, initiated in 1991, is the most important initiative of the Bureau in developing techniques for locating and identifying shipwrecks in a limited geographic area.

2. Determine which shipwrecks are abandoned and meet the criteria for assuming title under the Abandoned Shipwreck Act.

Few of the shipwrecks known as underwater sites are positively identified as to name, generally a necessary condition for determining ownership. The ownership of military vessels is usually clear, although in the case of the *Maple Leaf*, for example, this matter was taken up by the Federal Admiralty court. While it was clear that the vessel was not abandoned, the rightful owner was in question. The Bureau also consults with the Florida Division of State Lands regarding state ownership of submerged lands.

3. Determine which shipwrecks (underwater sites) are historic.

Most sites that appear to be more than fifty years of age are assumed to be historic. The Bureau can occasionally assist others with nominations to the National Register of Historic Places, but the large majority of shipwreck sites fall into the "eligible" rather than the "listed" category.

4. Identify recreational and other values that a shipwreck (underwater site) may possess and the underwater site's current and potential uses.

The Bureau has conducted a limited campaign to solicit nominations for prospective sites to add to the State's Underwater Archaeological Preserves System. The Bureau, as part of this effort, has begun to coordinate underwater site recreational programs with other state and local agencies.

5. Provide for the long-term protection of historic (and prehistoric) shipwrecks (underwater sites).

The Bureau presently uses several mechanisms to protect underwater sites. Chapter 267 F.S. makes it illegal to disturb or remove material from state-owned sites without the Division's permission. The Bureau endeavors to use other local, state and federal legislation as appropriate. The Bureau's Underwater Archaeological Preserves system encourages public participation in management and protection of sites. The Bureau works in conjunction with other governmental agencies to manage Underwater Archaeological Preserves. The responsibility for managing Florida's exploration and salvage program provides

challenging issues for the Bureau for the long-term protection of historic shipwrecks.

6. Protect the rights of owners of non-abandoned shipwrecks.

The owners of non-abandoned shipwrecks in Florida's waters include the United States Federal Government, foreign governments, and private parties. The mandate of the U.S. Department of Defense's Legacy Resource Management Program, begun in 1991, includes working with State agencies to protect both natural and cultural resources. As of September 1994, the Bureau has completed a proposal for a Legacy Grant to work with the US Navy to develop management plans for Navy wrecks in Florida waters. The Bureau's responsibilities would include, archival and other research work, survey, inventory, and assessment. Recommendations for further cooperation with the U.S. Navy and foreign governments are made in Chapter Five.

7. Consult and maintain a cooperative relationship with the various shipwreck and (underwater site) interest groups.

The Bureau conducts a limited public relations (outreach) campaign, as part of its efforts to develop working relationships with citizens, support organizations for preserves, waterfront businesses, and sport diving training organizations. The Bureau has, for example, worked with two archaeological site diving interest groups, the Florida based Paleontological and Archaeological Research Team (PART) and Marine Archaeological Diving Association (MADA), in survey efforts to locate and map prehistoric sites in rivers and on nearshore submerged lands in the Gulf of Mexico. However, Both PART and MADA have since disbanded. The Bureau has successfully organized one workshop for sport divers, and has developed a sport diver training course manual after review and approval by national training organizations. The Bureau has limited resources in all these areas, however. The Bureau coordinated several seasons of field work by the Underwater Science and Educational Research Program of Indiana University. The Bureau has also worked with the Maritime Historical and Archaeological Society (MAHS) on projects in the Florida Keys, in conjunction with the National Park Service.

8. Cooperate with state and federal agencies and sovereign nations having an interest in shipwreck management (and the management of underwater sites).

The Bureau routinely cooperates with state agencies, including the Division of State Lands; Division of Recreation and Parks; Division of Law Enforcement; Florida Marine Patrol; the Florida Game and Freshwater Fish Commission (GFC); the State Comptrollers Office, Division of Banking and Finance; and the Department of Law Enforcement.

The Bureau also cooperates with federal agencies including the National Oceanic and Atmospheric Administration (NOAA), Marine Sanctuaries and Estuaries Division; Department of Interior, National Park Service (NPS); Bureau of Land Management (BLM), Minerals Management Service (MMS); Department of Defense, U.S. Army Corps of Engineers, Center for Military History; U.S. Naval Historical Center; and the Department of Transportation, U.S. Coast Guard.

Although no claims of historic shipwrecks have been made by sovereign nations to date, the Bureau has occasionally supplied information on underwater

sites to individuals and governments of other countries upon request. The Bureau is in contact with the Interagency Task Force on Underwater Cultural Heritage of the Oceans Affairs Division, Marine Law and Policy Section, U.S. Department of State in Washington, D.C. This Task Force was recently established to coordinate negotiations which might arise from any claims made by foreign nations on shipwrecks found in U.S. waters.

9. Provide sport divers with reasonable access to explore shipwrecks and other underwater sites.

Access to shipwreck sites and other historic sites by sport divers is not restricted by the State of Florida. While there may be unusual circumstances under which access would be temporarily limited, the Bureau's policy is to encourage public access especially in ways that enhance protection and interpretation, as in Underwater Archaeological Preserves.

10. Provide for public appreciation, understanding, and enjoyment of shipwrecks, maritime history, (and Native American sites).

The Bureau conducts a modest public relations (outreach) campaign; gives public lectures throughout the State; provides articles for professional and popular publications, issues news releases and responds to frequent media inquiries. In addition, the Bureau makes loans of artifacts from underwater sites to private and public museums throughout the state. The Bureau assists in the development of museum exhibits concerning shipwreck themes. The Division of Historical Resources, of which the Bureau is a part, has, since 1987, awarded substantial grants for shipwreck research, interpretation, and exhibits to the *Maple Leaf* Project. The Bureau has prepared and is publishing *An Atlas of Maritime Florida* for students and interested readers. Finally, the Bureau cooperates with several university programs to promote shipwrecks and underwater studies and programs.

11. Conduct archaeological research on shipwrecks (underwater sites) where research will yield information important to understanding the past.

An important initiative of the Bureau has been the Pensacola Shipwreck Survey begun in 1991. There have been several limited shipwreck excavation projects conducted in the Pensacola area since 1989. One of the most important of these has been the 16th-century Emanuel Point Shipwreck, which is possibly one of the earliest known shipwrecks in the United States. The Bureau has also contributed to the excavation of the *Maple Leaf* by advising on the nature and scope of grant-funded activities, and by providing technical assistance. Whenever possible, the Bureau conducts research of underwater sites, including survey, assessment, mitigation and limited excavation.

12. Provide for private sector participation in shipwreck (underwater site) research projects.

The Bureau encourages and supports participation by private sector organizations in its underwater sites research projects. Several non-profit and educational institutions have participated in underwater sites research projects. These include PART, MADA, local dive clubs and university students. Through the Division's historic preservation grant program, private sector organizations, like St. Johns Archaeological Expeditions, Inc., can receive state grant funds to participate in and carry out research projects.

13. Provide for commercial salvage and other private sector recovery of shipwrecks when such activities are in the public interest.

The State of Florida has entered into contracts for exploration and salvage of shipwrecks by private sector organizations since 1932. Such contracts continue at present under strict guidelines, although these are sometimes difficult to enforce. Since 1967, Florida has entered into more than 120 contracts for exploration and 36 contracts for salvage, many of which were several years or more in duration.

Part II of the Abandoned Shipwreck Act Guidelines

This section provides advice on how to accomplish the thirteen basic components or goals of a shipwreck (underwater site) management plan. The Abandoned Shipwreck Act Guidelines outline ten specific guidelines that states can use in the management of shipwrecks (underwater sites) in their waters. The guidelines as they relate to Florida are:

(A) Establishing State Shipwreck (Underwater Site) Management Programs

The Bureau of Archaeological Research works with various interest groups, statewide and nationwide to seek input regarding underwater programs. The Bureau cooperates with the Division's Bureau of Historic Preservation, Review and Compliance Section, regarding review of state and federally involved projects. The Bureau of Archaeological Research also cooperates with the Bureau of Historic Preservation regarding nominations of underwater sites to the National Register. The Bureau's existing personnel, facilities, equipment, and budget are inadequate to develop programs to adequately survey and assess the State's numerous offshore and inland underwater sites and develop long-term management strategies for them.

(B) Establishing Federal Shipwreck (Underwater Site) Management Programs

The Bureau of Archaeological Research cooperates with the Federal Government to the greatest extent possible in establishing policies and management strategies for the protection of all sites located in or on state submerged lands located within areas under Federal statute, order or regulation (i.e. national park units, national wildlife refuges, and national marine sanctuaries).

The Bureau also works closely with the Army Corps of Engineers to protect submerged and coastal cultural resources which might be impacted by dredging or other development activities.

(C) Funding Shipwreck (Underwater Site) Programs and Projects

The Bureau of Historic Preservation has provided some grant funding for underwater projects. Other, specific, projects have been funded through the Coastal Zone Program and the legislative appropriation procedures. There is no permanent budget, however, for such activities. The Exploration and Salvage Field Program is funded annually.

(D) Surveying and Identifying Shipwrecks (Underwater Sites)

The Bureau of Historic Preservation has provided some grant funding for underwater site survey projects, such as to the Historic Pensacola Preservation Board for underwater survey in Pensacola Bay. Coastal Zone funds have also

supported such work. However, there is no permanent budget for underwater survey.

(E) Documenting and Evaluating Shipwrecks (Underwater Sites)

The Bureau of Archaeological Research operates with a high level of archaeological standards on the underwater sites it examines. Resources for this work are extremely limited, however. The multi-year Half-Mile Rise Aucilla River Project, the Pensacola Shipwreck Survey, and a few other projects have thus far been the only systematic program of documenting and evaluating underwater sites which has taken place in Florida.

(F) Providing for Public & Private Sector Recovery of Shipwrecks

Congress directed the states to allow appropriate public and private sector recovery of shipwrecks consistent with the protection of historical values and environmental integrity. This is one of the most important guidelines as it relates to Florida's Exploration and Salvage Program. The State of Florida has a long history of private sector recovery, but this program was established prior to the issuing of the Abandoned Shipwreck Act Guidelines. Because this Guideline is so important for Florida's Exploration and Salvage Program, it will be more fully presented here than the other guidelines.

Guideline F. - Providing for Public and Private Sector Recovery of Shipwrecks

Guideline 1:
Establish policies, criteria and procedures for appropriate public and private sector recovery of State-owed shipwrecks.

The State should establish:

(a) Policies of public and private sector recovery activities (that) would and would not be in the public interest;

(b) Procedures to apply for permits;

(c) Criteria and procedures to evaluate applications and issue or deny permits,
(2) permit(s) should ensure that the recovery activity is in the public interest;

(d) Procedures for the State to monitor permitted work;
(1) State officials should be given authority to suspend any permit that appears not to be in compliance with the permit;
(2) Work should not resume until the State has conducted a thorough review;

(e) Procedures for the transfer of title to artifacts.

Guideline 2:
Authorize only those recovery activities at State-owned shipwrecks that are in the public interest.

To help determine the best interests of the public, the State should consider the following:

(a) Is the subject shipwreck, in fact State owned?

(b) What are the shipwreck's current and potential future values and uses? Is the proposed recovery consistent with those values and uses? Will the proposed recovery enhance any of those values and uses? Will it irrevocably damage or destroy any of those values and uses?

(c) Is the shipwreck listed in, or determined eligible for inclusion in the National Register of Historic Places? Is it a National Historic Landmark?

(d) Will the proposed recovery result in a nomination to list the shipwreck in the National Register of Historic Places or to be designated as a National Historic Landmark?

(e) Where the shipwreck is (or may be) historic:
(2) Is the proposed recovery consistent with the State's comprehensive historic preservation plan? Will the proposed recovery...
(3) result in the acquisition of new information or verify historical documentation?
(4) be conducted in a professional manner to preserve the shipwreck's historic information?
(5) result in the private ownership or sale of any of the artifacts and other materials recovered? If so, will those items be properly conserved and studied and be made available for public exhibition and interpretation?

(f) Is the shipwreck located in a State underwater park or preserve? If so, is the recovery consistent with the unit's management plans?

(g) Is the shipwreck located within a unit of the national park system, the national wildlife refuge system, the national forest system, or the national marine sanctuary system? If so, is the proposed recovery consistent with the unit's management plans, the written agreement between the state and the Federal land manager, and applicable Federal statutes, regulations, policies, and standards?

(h) Is the shipwreck located in any other area protected under Federal or State statute, order or regulation? If so, is the proposed recovery consistent with the area's management plans and applicable statutes, orders, and regulations?

(i) Is the shipwreck currently being damaged or destroyed by natural processes , by an approved State or Federal undertaking or by other human activity? Is it threatened by imminent and unavoidable damage or destruction?

(j) Where the proposed recovery will damage or destroy the environment surrounding the shipwreck, will the area be restored to its original condition?

(k) Will the proposed recovery impede navigation?

(l) Has the applicant obtained other necessary State or Federal permits?

Guideline 3:
Protect particular State-owned shipwrecks from commercial salvage, treasure hunting, and private collecting activities.

Any State-owned shipwreck that meets any of the following criteria should not be available for commercial salvage, treasure hunting or personal collecting.

(a) Shipwrecks designated as National Historic Landmarks;

(b) Shipwrecks located in state underwater parks or preserves;

(c) Shipwrecks located within a unit of the national park system, the national wildlife system, the national forest system, or the national marine sanctuary system

(d) Shipwrecks located in other areas protected under Federal statute, order or regulation.

Guideline 4:
Require any recovery at State-owned historic underwater sites to be done in a professional manner.

The recovery operation (whether it is public or private) should be consistent with the "Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation" (48 FR 44716; Sept. 29, 1983) and other applicable historic preservation standards and guidelines. At a minimum, any permit, should contain the following terms and conditions:

(a) The permittee has secured other necessary State or Federal permits;

(b) A professional underwater archaeologist is in charge of planning, conducting and supervising the field operations, laboratory analysis, and report preparation;

(c) A conservation laboratory is in place prior to commencement of field operations and a professional nautical conservator is in charge of planning, conducting and supervising the conservation on any artifacts and other materials recovered from the site;

(d) Field operations, laboratory analyses, and conservation treatments use appropriate scientific methods and techniques and are as non-destructive and non-disturbing as possible;

(e) The shipwreck site is fully documented;

(f) A professional final report is prepared (and approved by the State);

(g) Copies of all data and records derived from the recovery and analysis are deposited, stored, and maintained in the repository named in the permit;

(j) Transferring ownership to any artifacts to a commercial salvor or treasure hunter...:
(1) only after field operations and laboratory analysis are completed, the recovered items are conserved, and the final report is approved by the State;
(2) To the extent possible, the items transferred are preserved and maintained as an intact collection and are made available for future study, public interpretation and exhibition;

(k) the salvor or treasure hunter posts a performance (surety) bond to cover costs associated with the recovery (to ensure that sufficient funds would be available to the State to complete the recovery according to the terms and conditions of the permit; and

(l) Information (is) disseminated to the scientific community and to the public.

Guideline 5:
Allow public and private recovery activities at non-historic shipwrecks without archaeological conditions.

Guideline 6:
As appropriate, transfer title to artifacts and other materials recovered from State-owned underwater sites by the private sector to private parties.

In general, the States should:

(a) Not transfer title until the authorized recovery activity is completed, the items are properly conserved and analyzed, and any required final report is completed and approved by the State;

(d) Retain title to items that are unique, exceptionally valuable historically or representative of the items recovered, or are recovered illegally.

Guideline 7:
Disseminate information on public and private sector recovery activities to the public and to the scientific community.

Appropriate methods would include, but not be limited to, pamphlets, books, and articles in popular specialty magazines; lectures, video tapes and slide shows, underwater trails; and exhibiting artifacts, preparing a final report (this always should be done), publishing in scientific journals, and presenting papers at professional meetings.

Guideline 8:
Discourage the recovery and display of intact underwater sites.

Recovering intact shipwrecks should be discouraged unless they are historic and in danger of imminent and unavoidable destruction, and it is determined to be in the best interest interests of the public. However, no such shipwreck should be

recovered unless sufficient public and/or private funds are made available to document and recover it archaeologically and to properly conserve, maintain, exhibit, and interpret it for the public.

(G) Providing Public Access to Shipwrecks (Underwater Sites)

The Bureau encourages public access to underwater sites throughout the State. To date, five underwater archaeological preserve sites, complete with interpretive material, have been established in the State. The Division's participation in developing Florida's Coastal Management Action Plan has expanded the scope of that program to include grants to local governments for interpreting coastal heritage sites like shipwrecks. That plan component is intended to increase the number of shipwrecks and other submerged coastal sites actively managed and interpreted for public access. It is Florida's long-term goal to establish a broad network of several dozen underwater preserves of all types around the state.

(H) Interpreting Shipwrecks (Underwater Sites)

Opportunities for interpretation of shipwrecks and other underwater sites range from the brochures, guides, and plaques prepared for underwater archaeological preserves, to museum exhibits, to publications for specialist and general audiences. The Bureau's efforts have mainly been focused on developing the preserve system, however, other interpretive projects have included, for example, technical and conservation assistance for the *Maple Leaf* Project and preparation of *An Atlas of Maritime Florida*, among other projects.

(I) Establishing Volunteer Programs

The Bureau of Archaeological Research does occasional underwater work with volunteers. PART and MADA assisted the Bureau with prehistoric site identification before they disbanded. Various other volunteer groups have assisted with shipwreck identification and establishment of underwater archaeological preserves.

(J) Creating and Operating Underwater Parks or Preserves

The Bureau of Archaeological Research has thus far established five underwater archaeological preserves, all of which are shipwreck sites. The Bureau intends to expand the number and scope of underwater archaeological preserves.

SOURCES:

Abandoned Shipwreck Act (1987) (P.L. 100-298; 43 U.S.C. 2101-2106).

Department of the Interior, National Park Service.
1989 Abandoned Shipwreck Act Guidelines; Proposed Guidelines; Notice. *Federal Register, volume* 54, number 63, pages 13642-13658.

Department of the Interior, National Park Service.
1990 The Abandoned Shipwreck Act Guidelines. *Federal Register, Vol. 55, No. 233,* pages 50116-50145.

CHAPTER FIVE

RECOMMENDATIONS FOR MANAGING FLORIDA'S SUBMERGED CULTURAL RESOURCES

This section presents recommendations for improved long-term management of Florida's submerged cultural resources. The plan so far has followed a method intended to identify the range of resources and the various ways they are impacted. It has discussed Florida's present management scheme to explain the legal and institutional framework already available, then compared Florida's existing program with the broad suggestions of the Abandoned Shipwreck Act Guidelines.

The recommendations that follow have been based on a variety of sources.

- review of other management programs throughout the United States and in other countries.
- interviews with resource managers and agency officials in many states and some countries.
- interviews with private and public interest groups who are concerned with shipwrecks, sport diving, fishing, and other relevant maritime related activities.
- written reviews of an earlier draft of the plan prepared by outside consultants with experience in the management of cultural resources.
- experience of the Florida program staff involved in such activities as the Exploration and Salvage Program, the Pensacola Shipwreck Survey, the Historic Preservation Grant Program, and Underwater Archaeological Preserves.

The following discussions are recommendations only. They represent potential improvements to Florida's scheme of management based on our present interpretation of problems and assessment of alternative solutions. These are places to continue public involvement and review as existing programs are proposed for revision and new programs are proposed for implementation. No plan can be a final statement of an agency's future. Rather, every plan must be a step in a continuing adaptation to changes in society and government, informed by public discussions and review. The following recommendations are offered in this spirit as a statement of our efforts to analyze, understand and improve the management of submerged cultural resources and as a step in building public support for specific management strategies.

UNDERWATER SITE SURVEY AND INVENTORY

Recommendation:

Improve the ability of the Bureau of Archaeological Research and public/private interest groups to survey unknown areas for new underwater sites and to inventory, record, and assess known underwater sites.

Under Chapter 267 F.S., it is the responsibility of the Division of Historical Resources to "locate, inventory and evaluate historic properties. . ." and "to conduct a comprehensive statewide survey of historic resources." The survey and assessment of underwater sites has not been a traditional activity of the Bureau; with some exceptions, only since about 1988 have limited personnel and equipment for this task been available for work in specific areas. Effective survey in the future will depend upon developing within the Bureau, as well as in public and private groups in Florida, the skills, equipment and resources necessary to accomplish competent surveys throughout the state as needs and opportunities arise.

Personnel, facilities, equipment, and budget must be developed for survey programs, to develop long-term management strategies for the sites, to provide a measure of on-site management and to respond to periodic requests by the public for survey of sites. The Pensacola Shipwreck Survey has demonstrated the effectiveness of a systematic research program of a geographic area. A comprehensive program of underwater site survey and assessment will also further the underwater archaeological preserve system.

To increase the capability for underwater site survey and inventory, state field personnel should be assigned to work with local diving groups on underwater sites. The Bureau should encourage local groups to complete grant proposals for site surveys. This will be a cost-effective way of obtaining further survey data and will help foster public involvement in the management of underwater sites. The Bureau should also sponsor research projects involving volunteer archaeological workers such as the U.S. Forest Service's "Passport in Time" (PIT) Program. The PIT Program works by advertising archaeological projects through a national newsletter, and encouraging applicants to sign up as volunteers assisting professional archaeologists.

One useful model for in-house archaeological survey is provided by the Florida Conservation and Recreation Lands (CARL) Archaeological Survey. The CARL Program was established in 1979, using state and federal matching funds to acquire conservation lands relating to various criteria such as ecological diversity, historical importance, and including archaeological resources. The CARL Archaeological Survey consists of two full-time field archaeologists charged with surveying lands purchased or proposed for purchase through the CARL Program. They submit survey reports to the appropriate managing agency as well as providing a copy to the Florida Site File. The goals of the team are prioritized towards work on lands where archaeological sites are in critical

danger of being lost, i.e. through erosion or site looting. Other priorities include work on lands which have not previously benefited from professional surveys or otherwise have good potential for providing archaeological data. As part of their duties, the CARL Survey also publishes articles on their work, nominates appropriate sites to the National Register of Historic Places, and meets with state land managers to discuss options for managing sites on their property. An underwater archaeology survey program could be organized along similar lines as the CARL Survey following the same general prioritization. One significant difference between underwater archaeological survey and archaeological survey on land is that nearly all underwater lands are already in state ownership.

Another partial model for in-house archaeological survey is provided by the Archaeological Diving Unit (ADU) of the Ministry of Transport in the United Kingdom. The ADU was established in 1986 by the Transport Marine Directorate and the Advisory Committee to investigate underwater sites. The Unit, which is funded by the Department of Transport, carries out a program of visits to designated sites and sites proposed for designation, and gathers information from licence holders to assist the Transport Marine Directorate and the Advisory Committee to make decisions. The Unit also provides an educational function by providing advice to license holders. The Advisory Committee has been successful in getting the general public and sport divers to protect the underwater cultural heritage through cooperation and education.

Finally, it is important for the Division and the Bureau seek the support of, and rely on, non-profit organizations to assist with survey and assessment activities. To meet this goal the Bureau should encourage submission of grant proposals for underwater survey and assessment projects by organizations. Existing mechanisms for grant funding include federal and state historic preservation grants in support of sites survey, excavation, and interpretation projects. Other potential funding sources include the Florida Coastal Management Program for interpretation of coastal heritage sites, Florida Sea Grant Program for assistance in local projects, scientific research grants, and corporate or non-profit granting organizations.

Key Players:

- Florida Marine Patrol • Florida Game and Freshwater Fish Commission • Florida Association of Dive Operators (FADO) • Keys Association of Dive Operators (KADO) • Professional diving training organizations • Other major dive training organizations • State fishing organizations • Friends of Underwater Archaeological Preserves organizations • Florida Scuba News • Underwater USA • Dive shops and clubs • Treasure hunters

Recommended Tasks:

1. Develop a state underwater survey team to respond to requests and needs on a statewide basis. Develop a formal budget outlining personnel and equipment needs, and seek funding sources outside the Division.

2. Develop relationships with local diving groups, commercial and sport fishermen, and other relevant waterfront organizations to learn of new sites and to initiate survey and inventory projects.

3. Encourage an increase in the number of grant proposals for underwater activities. Cooperate with the Bureau of Historic Preservation to discuss strategies to encourage grant proposals for underwater activities.

4. Work with local project leaders to ensure their results are incorporated in the Florida Site File and available to the public.

5. Establish and implement minimal standards for underwater surveys and ensure that all results contribute to the statewide database and are available to be included in predictive site models.

6. Develop an effective system to respond to reports and requests from the public regarding submerged cultural resources.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Increase public outreach programs
Coordinate with grant programs
Develop statewide survey team
Develop and implement a survey program
Implement minimal survey standards

UNDERWATER PROGRAM STAFF AND SUPPORT

Recommendation:

Develop additional professional staff and support to carry out the tasks recommended in this management plan.

The underwater program staff of the Bureau presently consists of four career service positions: one Archaeologist, one Archaeological Field Supervisor, and two Archaeological Field Assistants. The Field Supervisor and one of the Archaeological Field Assistants are assigned full time responsibility for the Exploration and Salvage Program.

To adequately develop programs to survey and assess the State's numerous offshore and inland underwater sites, to develop long-term management strategies for these sites, and to implement other recommendations in this management plan, additional staff are necessary. Funding should be sought for two full-time staff with responsibility to manage underwater resources continuously in all parts of the state. Funding for this program should be sought outside the Division.

Recommended Tasks:

1. Define position requirements for one staff person (Archaeologist I classification) and abilities consistent with specific tasks recommended in this management plan.

2. Seek funding for one archaeologist with responsibility to manage underwater resources continuously in all parts of the state.

3. Organize and train new staff members in field response and public education.

4. Monitor staff activities regularly to ensure broad range of tasks and responsibilities consistent with recommendations in this management plan.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Hire additional staff to perform a range of functions proposed by this management plan, i.e., survey, public outreach, administration of underwater archaeological preserves and underwater historic marker programs, isolated finds program, submerged cultural resources stewardship program, and inter-agency cooperation.

EXPLORATION AND SALVAGE PROGRAM

Recommendation:

Reconvene the Reserve Area Task Force to conclude its review and develop its recommendations in the context of the Abandoned Shipwreck Act Guidelines.

In response to the filing of two federal admiralty arrests in parts of state waters that had been established as shipwreck reserve areas, the Division organized a task force to seek a resolution to this issue. The Reserve Area Task Force met three times between March 1990 and April 1991 and discussed a broad range of issues concerning exploration and salvage in state waters, recognizing that reserve areas could not be considered in isolation. Between the second and third meetings of the Task Force, the National Park Service published the Final Abandoned Shipwreck Act Guidelines in the National Register. These guidelines did not, however, have much influence on the continuing discussions of the Task Force.

Because the two specific admiralty arrest conflicts had been settled, and in the face of other competing obligations, the Bureau failed to schedule a fourth meeting of the Reserve Area Task Force. The Task Force fairly represents the broad range of interests involved in exploration and salvage activities in Florida waters, and it should be reconvened to continue its discussions. Since the Task Force last met, Florida and other states have begun to shape their underwater programs in the context of the Abandoned Shipwreck Act Guidelines, developing projects that focus on public benefit. This principle was also recognized by the Reserve Area Task Force as a way of assessing proposed exploration and salvage projects and determining whether they should be approved or not.

The Reserve Area Task Force should be reconvened to continue its discussions and formulate its recommendations concerning reserve areas and other relevant issues of exploration and salvage in state waters.

Key Players:

Treasure hunters and salvors • Florida Department of Environmental Protection

Recommended Tasks:

1. Prepare a summary and position paper of Reserve Area Task Force deliberations to date

2. Schedule a fourth meeting of the Reserve Area Task Force

3. Provide each member in advance a copy of the position paper, the Abandoned Shipwreck Act Guidelines, and this management plan

4. Address individually the Abandoned Shipwreck Act Guidelines sections relating to private sector recovery

5. Assist the Task Force in preparing its final recommendations.

Recommended Changes to Statutes:
None

Recommended Changes to Rules:
None

Recommended Changes to Procedures:
None

PUBLIC RELATIONS (OUTREACH)

Recommendation:

Improve public knowledge, appreciation and involvement with underwater archaeological sites. Improve working relationships with a variety of key players through outreach programs, workshops, and other initiatives.

An important component in sport diver participation is the development of a network of trained and enthusiastic surveyors and mappers. An organized group, trained in the basic non-disturbance methodology of recording and reporting, could greatly enlarge the inventory of underwater resources, as well as raise public awareness about issues of protection and preservation. As part of any outreach program, the Bureau should develop a workshop in basic underwater archaeological recording and reporting to be conducted in cooperation with local Florida based sport diving clubs and dive shops. The Bureau should maintain contact with major dive training agencies such as NAUI and PADI and work to have them include archaelogical site sensitivity into their basic training courses.

The Bureau should also hold periodic conferences in popular dive areas to accomplish several goals. These may include inviting underwater collectors to bring in their finds in an "amnesty" program for identification. At the same time, these divers may learn about the prehistory and history of their area, as well as archaeological ethics and relevant laws. Bureau staff should follow up on interesting finds, and record information gained from divers. The Bureau has, in the past, held a few such conferences which were regarded as very successful.

One particularly important diving group which needs to be considered are Florida's "river" divers. Many of these divers have been diving in Florida's rivers for decades and have amassed a large body of valuable and unique information about Florida paleontology and archaeology. These divers also have large collections which should be documented. This should be complemented by oral history interviews with some of the older divers who were active in the beginnings of Florida river diving in the 1950s and 1960s. One successful conference specifically for river divers was held in the mid 1980s at White Springs Florida. Over the years, the Bureau has developed good working and personal relationships with many of these divers who have provided site information and made their collections available for study.

To improve the public knowledge and appreciation for Florida's underwater archaeological sites, a *Submerged Cultural Resources Booklet* is being developed for distribution at dive shops, marinas, state parks, museums, and other locations. The *Booklet* will use non-technical language and will include important submerged cultural resources information such as a description of the types of underwater sites in Florida and a list of the applicable laws pertaining to submerged cultural resources. The *Booklet* will also explain the process for recording sites by including a sample site form. Further, the *Booklet* will include

contact numbers for the Bureau, law enforcement agencies and underwater site managers.

Development of other public outreach products such as posters, brochures, and videos for wide public distribution will also be undertaken by the Bureau. This may be done in conjunction with "Florida Archaeology Week" activities or as part of a newsletter. A statewide, bi-annual underwater cultural resources newsletter should also be developed. This newsletter would cover the major issues pertaining to submerged cultural resources in Florida. It can be mailed by sport diver organizations to their own members and be distributed by the Bureau to a variety of interested organizations. The newsletter will contain contributions from divers, researchers, and consultants on review and compliance projects, as well as staff reports and updates. The newsletter would be a good forum for providing information on the isolated finds program. Information on the progress of developing this management plan can also be included.

Another increasingly important vehicle for communicating information and ideas and for providing forums for discussion are the computer "newsgroups" found on the Internet system, local bulletin boards, commercial services, and public information services such as the Coastal Information Exchange System (CIES), and the Florida Information Resources Network (FIRN). There are several newsgroups which deal with subjects such as scuba diving, "eco-diving," anthropology, prehistoric and historic archaeology, museums, heritage interpretation, maritime history, education, coastal management, environmental protection, and others. There are extensive discussions of Florida scuba diving issues, and even Florida's Exploration and Salvage Program, on these networks. The Bureau should monitor and participate in these discussions. The Coastal Information Exchange System (CIES) receives input from a number of key agencies such as the Florida Department of State, the National Park Service, the National Oceanic and the Atmospheric Administration (NOAA). The opportunities for public outreach and education benefit through these services, at minimal cost, will be considerable. The Tallahassee Freenet, which provides access to many Internet services, is free of charge to both individuals and organizations. The CIES is also free of charge and accessed through an 800 number.

Key Players:

- Law enforcement officials • Private/public groups • Florida based sport diving clubs and dive shops • Major dive training agencies (NAUI, PADI, etc). • Sport divers, Florida river divers, dive clubs, dive shops, dive charters • Academic researchers • Outside consultants

Recommended Tasks:

1. Produce and distribute a handbook (resource guide) for the public, for government site managers, and for law enforcement personnel about the nature and management of submerged cultural resources, information on Florida's laws and how to report underwater sites to the Bureau.

2. Cooperate with relevant agencies to develop public outreach products such as public service announcements, posters, brochures, and videos for wide public distribution.

3. Cooperate with public and private organizations to develop training programs for sport divers and others to teach basic skills in underwater archaeology and historic preservation. Make sure that dive instructors are aware of existing state and federal laws. Consider developing a certification program such as that which Arkansas has developed for terrestrial archaeology; or a para-professional program modeled after that of the U.S. Forest Service which uses key personnel located in different regions.

4. Use additional survey and inventory staff to sponsor underwater workshops around the state in conjunction with national dive training and dive industry representatives.

5. Develop a statewide, bi-annual underwater cultural resources newsletter for distribution by sport diver organizations to their own memberships, and by the Bureau to a variety of interested organizations. Seek specific funding for production and distribution of this newsletter.

5. Improve public communication about underwater archaeology through existing electronic network opportunities.

7. Include underwater components in the annual Florida Archaeology Week.

8. Develop a public relations (outreach) campaign to encourage reports of historical and archaeological finds on private lands, and stewardship of those resources.

9. Use outreach programs and workshops as a mechanism for obtaining information and support from various dive groups, including Florida's river divers, and seek their trust to be able to document their collections and obtain site information.

10. Work with major dive training agencies to build a conservation ethic into dive instruction.

Recommended Changes to Statutes:
None

Recommended Changes to Rules:
None

Recommended Changes to Procedures:
Increase the Bureau's participation in public education outreach responsibilities.

INSTITUTIONS OF HIGHER LEARNING

Recommendation:

Assist Florida's public and private colleges and universities in training and conducting research in underwater archaeology.

At present, undergraduate classes in underwater archaeology are taught occasionally at Florida State University, University of West Florida, and University of Miami. Graduate courses are sporadically taught at the latter two universities, but there are no formal programs in underwater archaeology at any institution in Florida. Field school opportunities for students have been limited to occasional summer projects where the Bureau has invited university students to participate, and academic credit was given by the state underwater archaeologist on an adjunct faculty basis. Of Florida's public universities, the University of West Florida has expressed an interest in developing a staffed program to train students in underwater research. Interaction between the Bureau's Pensacola Shipwreck Survey and the UWF administration, faculty and students, has demonstrated the potential for developing an academic program in underwater archaeology at a Florida institution of higher learning.

The Bureau should continue to develop its relationships with private and public colleges and universities throughout Florida to encourage training and research in this field for the future protection, interpretation, and preservation of the State's submerged cultural resources. The Bureau should also seek productive relationships with out-of-state institutions that wish to conduct research in Florida and to accomplish projects for the public benefit.

Key Players:

- Public and private institutions of higher learning in Florida and elsewhere.

Recommended Tasks:

1. Continue to develop a working relationship between the Bureau and Florida universities and colleges for combined survey and research programs.

2. Encourage applications from appropriate Florida and out-of-state universities and colleges for archaeological research permits to conduct survey and inventory work on submerged sites.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Increase liaison between the Bureau and academic institutions.

UNDERWATER ARCHAEOLOGICAL PRESERVES

Recommendation:

Expand the existing system of Underwater Archaeological Preserves in number and scope.

Florida's sport diving community has become an important factor in managing publicly owned shipwreck sites, and wants to ensure continued access to interesting sites. At the same time, sport divers are beginning to recognize that, like natural resources, historic shipwreck sites can best be enjoyed by protection and preservation. In the past decade shipwreck management has increasingly evolved beyond simple protection to include interpretation and improved public access to underwater sites in the form of underwater shipwreck preserves. Florida has established five such preserves since 1987. These preserves are nominated by local supporters, and established through a partnership between government and the private sector.

Florida's Underwater Archaeological Preserve system presently encompasses only historic shipwrecks. Future potential preserves should be selected to sample a wider range of sites. For example, underwater caves and springs often contain important flooded prehistoric sites. Designations of future, non-shipwreck preserves will further the goal of recognizing the importance of all kinds of underwater sites, as well as providing the public with another perspective on the history of the state.

To increase public participation, a stewardship program should be developed with local dive shops, dive charters, diving groups, existing Friends of Underwater Archaeological Preserves groups, commercial fishermen, fishing organizations, and other interested waterfront organizations. In such a program, an amateur organization or team will "adopt" a site, and under a research permit, can inventory, document, and monitor the site. These organizations could also sponsor tours, write articles for newspapers and newsletters, and participate in the annual Florida Archaeology Week by presenting their work to the public.

Since recreation is an important component of Florida's underwater archaeological preserves, the Bureau of Archaeological Research should work closely with the Florida Department of Environmental Protection, Division of State Lands, and Division of Recreation and Parks. Consideration should be given as to how park benefits can be extended to non-diving publics (e.g., swimming, watersports, aquatic nature study, heritage tourism, etc.). For example, at least one resort and marina operator has purchased a glass bottom boat to offer tours on one of the underwater archaeological preserves (the *San Pedro*) since it was dedicated.

Key Players:

• Department of Environmental Protection, Division of State Lands • Existing Friends of Underwater Archaeological Preserves groups • Local dive shops • Local diving groups • Dive charters • Commercial fishermen • Fishing organizations • Other interested waterfront organizations • Florida Department of Environmental Protection, Division of State Lands, and Division of Recreation and Parks • U.S. Coast Guard

Recommended Tasks:

1. Expand the underwater archaeological preserve system to include other types of sites such as prehistoric remains, and historic structures.

2. Develop additional funding or outside grant support for expanded preserve system.

3. Encourage local sponsors to cooperate with the Bureau to submit Coastal Zone Program grant proposals for establishment of new preserves.

4. Establish procedures and standards for protection and on-site management of preserves.

5. Create a maritime heritage trail system consisting of underwater archaeological preserves, underwater historical markers, and other significant underwater sites.

6. Develop a stewardship program in cooperation with local diving groups, dive charters, existing Friends groups, commercial fishermen, and fishing organizations.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Develop standard operational procedures for establishing and maintaining underwater archaeological preserves, including formal written agreements.

UNDERWATER HISTORICAL MARKERS

Recommendation:

Incorporate underwater archaeological sites within the developing Florida Historical Marker Program of the Division of Historical Resources.

Historic marker status should be considered as an option for underwater sites that have been identified as being of local, state or national historic significance, but which do not warrant the expense and resources required to develop and maintain an underwater archaeological preserve. The Florida Historic Marker Program is being developed to recognize and identify people, events, and places including archaeological sites of historic significance or relating to Florida's history, cultural and ethnic heritage. Assigning marker status to certain shipwreck sites will bring increased awareness of regional history, a broader appreciation for underwater sites, and an opportunity for local people and organizations to participate in the preservation of their underwater sites.

There are many prospects for shipwreck sites which could receive consideration for state historic markers. In 1990, the Historic Palm Beach County Preservation Board placed a bronze and stone state historic marker on the shore near the site of the *Inchulva ("Delray Wreck"*) wrecked in 1903 near Delray Beach, Florida. This was an example of an underwater site which did not qualify as an underwater archaeological preserve, but which local authorities felt should receive some recognition as being of local historical significance. Another application for the marker program might encompass heritage trails, for example, a "Suwanee River Steamboat Trail." There are at least nine known shipwreck sites in the Suwanee River from the Suwannee State Park to the mouth of the river. These wrecks are visited by small numbers of divers and are well known by the local communities. Markers could be established above and below water, as many of the sites are partially out of water during dry periods. Such markers could then be read by canoers and other boaters.

Several underwater markers have been placed on underwater sites in federal waters off Florida's coasts by non-profit groups. The National Center for Shipwreck Research, Ltd. in Islamorada placed an underwater marker on the site of the USS *Alligator* (1822), a US Navy schooner sent to Florida to suppress piracy and help escort convoys. In May 1993, the National Association of Black Scuba Divers (NABSD) based in Washington DC, placed a one ton concrete and bronze monument on the site of the *Henrietta Marie*, an English slave ship which sank in 1702, roughly 34 miles off Key West (outside of Florida waters).

Key Players:

- Bureau of Historic Preservation
- Trail organizations

Recommended Tasks:

1. Create a maritime heritage trail system consisting of underwater archaeological preserves, underwater historical markers, and other significant underwater sites.

2. Coordinate with Florida Historic Marker Program staff to identify criteria and procedures for designating significant sites.

3. Identify appropriate sites on statewide basis for nomination to state marker program.

4. Cooperate with local support groups and marker program staff to facilitate designation and marking of underwater sites.

5. Cooperate to ensure inclusion of underwater marker sites in guidebooks and brochures.

6. Establish a maintenance plan for ensuring markers are kept free of algae, coral, other marine growth and graffiti, etc.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Develop procedures for establishing and maintaining underwater historical markers, including formal written agreements.

ISOLATED FINDS

Recommendation:

Develop and implement a program of isolated finds reporting for artifacts from state-owned or state-controlled bottom-lands.

Background:

Because virtually all submerged lands in Florida are owned by the state, nearly all underwater archaeological remains are subject to the provisions of Chapter 267, Florida Statutes, including the penalty provisions for unauthorized collection. Over the past several decades, divers have routinely found projectile points and other artifacts in Florida waters, and have freely shared information about their collections with archaeologists around the state and within the Bureau. This no longer happens due to fear of arrest and conviction for violation of Chapter 267, and it is necessary to refine the system to more realistically account for isolated artifacts that are routinely found by divers in rivers.

The Bureau has worked with river divers around the state to develop a program of isolated finds reporting that allows collection and ownership of isolated artifacts under limited conditions. The Bureau should continue the rulemaking process in coordination with interested individuals and groups to develop and implement an isolated finds program. The planning and implementation of the program should ensure maximum reporting of isolated finds information to the Bureau and should lead to more extensive cooperative efforts once positive relationships are established.

The isolated finds program should be consistent with the principles of the following proposal.

PERMISSION TO COLLECT ISOLATED FINDS IN FLORIDA RIVERS: OUTLINE OF A PROPOSAL

Florida Division of Historical Resources, Bureau of Archaeological Research

June 1994

The purpose is to provide a specific and limited exemption to the permitting and penalty provisions of Chapter 267 F.S. and Rule 1A-32 so that certain types of artifact collecting in state owned rivers and other inland waters is not a violation of the statute.

The justification is that the law as written prohibits all collection of all artifacts regardless of their archaeological significance (or lack thereof) from all state owned or controlled lands including state owned sovereignty submerged lands.

The principal of providing an exemption is that certain archaeological remains from submerged lands not associated with archaeological sites are of little significance, and can be collected with no great loss to the archaeological record, provided the information they represent as to location and type is provided to the Division.

The procedure is to develop a new rule to allow recovery of artifacts under the following specific conditions without obtaining a permit from the Division. Once these conditions are met, title to the artifact is automatically granted to the collector. If the conditions are not met, the artifact remains state owned.

Conditions for recovering and owning isolated finds

1. An isolated find is an artifact that is not part of a larger archaeological site; it has no archaeological association with other artifacts; it is unlikely to have historical significance as an object. It is relatively small in size like an arrowhead, coin, bullet or bottle. Items like single cannons or anchors are not isolated finds within this meaning.

2. Permission to recover isolated finds is limited to state owned bottoms of rivers and other inland fresh water bodies. It does not apply to adjacent upland property owned by the state above the mean water line.

3. Permission to recover isolated finds is limited to collection by hand only; no tools usable for digging, dredging, or excavating can be used to recover isolated finds.

4. Permission to recover isolated finds does not extend to state parks or other actively managed protection or recreation areas unless specifically so designated by the relevant land managing agency.

5. Permission to recover isolated finds does not extend to recorded or known archaeological sites where multiple artifacts exist in an intact archaeological deposit. Any such intact site containing associated artifacts shall be marked to show that permission to recover isolated finds does not apply within the limited area so marked.

6. Permission is limited to amateur, non-commercial collectors and does not extend to those involved in commercial exchange or sale of artifacts.

7. Within 30 days of recovering an isolated find, the collector must mail to the Division the collector's name, address and phone number, a clear photograph or photocopy of the artifact including a scale, and a map showing where the artifact was found in sufficient detail to enable the site to be visited.

8. Within 30 days of receiving a report of an isolated find, the Division shall have an opportunity to examine the artifact to collect additional information or to determine if the artifact is of such archaeological or historical significance as to be outside the definition of an isolated find. During such period the artifact shall not be removed from the state and the collector shall provide reasonable opportunity for access by the Division. Such determination is not based on monetary value, but rather on factors as uniqueness, size, type of artifact, association with significant archaeological or historical cultures or events, among others.

9. In the event the Division does not contact the finder within 90 days of receiving the report, or does contact the finder and does not determine that the artifact is outside the definition of isolated find, title to the artifact is automatically granted to the finder.

An isolated finds reporting system will be included in a broader public outreach program. Long-term implementation of an isolated finds program for Florida could eventually incorporate a network of other organizations statewide such as university anthropology departments, museums, units of the state park system, members of the Florida Archaeological Council (FAC), and the informal network of river divers. An amnesty period should be advertised and collectors urged to come forward with their collections.

Key Players:

• Florida Game and Fresh Water Fish Commission • Florida Anthropological Society • Florida Archaeological Council • Sport divers • Informal network of "river" divers

(The following might be added to the above list gradually)
• University anthropology departments • Museums (public and private) • Units of the Florida State Park system

Recommended Tasks:

1. Communicate with key players listed above to solicit their opinions and advice.

2. Proceed with rulemaking process to prepare and adopt necessary regulations.

3. Begin public outreach component immediately.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

Draft and adopt new rule which provides permission for recovery of isolated finds under Chapter 267 F.S.

Recommended Changes to Procedures:

Develop and implement new procedures consistent with new rule.

INTER-AGENCY COOPERATION

Recommendation:

Improve cooperation between the Division of Historical Resources and other governmental agencies having management responsibility related to underwater archaeological resources in Florida.

STATE

Florida Department of Environmental Protection (DEP)

The Division of Historical Resources should continue to work in conjunction with the Department of Environmental Protection (DEP) in several areas. The first important area of cooperation concerns the issuing of dredge and fill permits. Such permits are necessary for all excavation activities on state owned bottomlands. The second important area of cooperation concerns the management and protection of submerged cultural resources within the aquatic preserves managed by DEP's Division of State Lands, Bureau of Submerged Lands and Preserves, and state recreation areas. The third important area of cooperation is for management agreements for underwater archaeological preserves that are leased to the Division of Historical Resources.

The Bureau has worked with the DEP's Division of Recreation and Parks in a number of coastal and inland park units, conducting and facilitating underwater sites surveys. This cooperative effort should be continued. Inter-agency cooperation with the Florida Marine Patrol and the Game and Fresh Water Fish Commission is detailed in Recommendation XIV (Law Enforcement).

Florida Sea Grant Program

The Florida Sea Grant Program, established in 1972, represents a statewide research and education partnership of universities, citizens and government agencies working in a number of program areas including marine resources and ecosystem research and conservation. In addition, the Florida Sea Grant Program has demonstrated its concern for the long-term preservation of Florida's submerged cultural resources. There are fourteen institutions of higher learning which participate in the Program. The central office for the Program is at the University of Florida in Gainesville.

At present, the Florida Sea Grant Program has worked with the Bureau on an occasional and informal basis, with discussions aimed at future joint activities between the two agencies. This liaison should be further developed and formalized to further the understanding and protection of underwater sites by cooperative efforts.

FEDERAL

US Army Corps of Engineers (COE)

The U.S. Army Corps of Engineers is responsible for maintaining navigation channels in federal waterways, and also permitting for dredge and fill activities. The Bureau should continue to work closely with the Corps of Engineers and the Bureau of Historic Preservation, Review and Compliance Section, to minimize impacts to submerged cultural resources by way of the Section 106 process already in place.

National Oceanic and Atmospheric Administration (NOAA)

The Marine Protection, Research and Sanctuaries Act of 1972 identified the purpose and mission of NOAA's National Marine Sanctuary Program as "to identify, designate and manage areas of the marine environment of special national significance due to their conservation, recreational, ecological, historical, research, educational, or aesthetic qualities." In 1986, NOAA published proposed regulations for continued implementation of the National Marine Sanctuary Program. In these regulations, NOAA's use of the term "historical" is consistent with the Marine Protection, Research and Sanctuaries Act in encompassing cultural, archaeological, and paleontological elements.

The Bureau should continue to cooperate with NOAA to ensure that state-owned shipwrecks and other historic resources found within National Marine Sanctuary units in Florida are managed according to federal and state requirements.

National Park Service

Protection and management of historical and archaeological resources found within national parks are governed by a range of federal laws, including the Abandoned Shipwreck Act of 1987, and the Archaeological Resources Protection Act (ARPA). Each of the national park and national seashore units located in Florida has some requirement for managing underwater sites whether offshore or inland. The National Park Service and the Division of Historical Resources have cooperated in providing information and developing resource management plans jointly. The Bureau has already worked with the National Park Service in conducting and facilitating underwater site surveys in park units. This relationship should continue with written agreements to ensure that submerged cultural resources are maintained and protected for long-term public use and enjoyment.

US Department of the Navy

The mandate of the US Department of Defense Legacy Resource Management Program, begun in 1991, includes working with State agencies to protect both natural and cultural resources. The US Navy has an extensive list of shipwrecks

in Florida waters for which they are responsible. The Bureau of Archaeological Research has developed a multi-phase proposal for a Legacy Grant to work with the US Navy to develop management plans for Navy shipwrecks in Florida waters. If funded, the project would include archival and other research work, survey, inventory, assessment, and advice on establishing interpretive programs.

Government Services Administration (GSA)

The GSA is the federal agency responsible for a wide range of federal property. Under federal law, the GSA has responsibility for shipwrecks that belonged to the Confederate States Navy during the American Civil War. Confederate Navy wrecks are still considered to be federal property unless they have been sold for salvage. The GSA and the US Navy cooperate in the management of such vessels, and this issue is included in the Bureau's Legacy Resource Management Program grant proposal.

US Department of State

Under international law, including the United Nations Conference on the Law of the Sea (UNCLOS), the United States guarantees sovereign immunity to foreign warships located in US waters. The US Department of State is responsible for coordinating shipwreck sovereign immunity issues with other nations, and has thus established an Interagency Task Force on Underwater Cultural Heritage in its Oceans Affairs Division, Marine Law and Policy Section. The US Department of State generally does not become involved in issues involving shipwrecks in US state waters unless a claim is made by a foreign nation. For example, the British Government has approached the US State Department about protecting Royal Navy warships sunk in US waters, the majority of which date from the Revolutionary War period. There have also been diplomatic discussions of shipwreck sovereign immunity issues with several other countries including Canada (concerning the protection of historic shipwrecks in the Great Lakes from unauthorized salvage activities); Mexico (concerning the USS *Somers* sunk in 1846 off the Port of Veracruz); France (the CSS *Alabama* sunk in 1864 off the Port of Cherbourg), Germany (German World War II U-Boats in US waters); and Japan (World War II mini submarines off Hawaii).

The State of Florida should cooperate with the US State Department and be prepared to work closely with them in the event a foreign government were to claim a shipwreck located in or on Florida's submerged sovereignty lands. Although no claims of historic shipwrecks have been made by sovereign nations to date, the Bureau of Archaeological Research has occasionally supplied information on underwater sites to individuals and governments of other countries upon request. There are known to be historic naval vessels of Spanish, British, and French origin, as well as those of other countries, sunk in Florida's waters.

US Fish and Wildlife Service

The US Fish and Wildlife Service manages a number of National Wildlife Refuges along Florida's coasts. The Bureau should cooperate with the US Fish and Wildlife Service for the protection of state-owned shipwrecks and other submerged cultural resources located in units of the National Wildlife Refuge system in Florida.

Key Players:

State of Florida

- Florida Department of Environmental Protection • Florida Marine Patrol
- Florida Game and Fresh Water Fish Commission • Florida Sea Grant Program

Federal Government

- U.S. Army Corps of Engineers • National Oceanic and Atmospheric Administration • National Park Service • US Department of the Navy • Government Services Administration • US Department of State • U.S. Fish and Wildlife Service • U.S. Forest Service

Recommended Tasks:

1. Continue to develop cooperative relationships with state and federal agencies in the management of underwater sites.

2. Conduct cooperative underwater survey and research programs with state and federal agencies.

3. Distribute information on Florida's historic preservation laws and policies to federal agencies in Florida that have management responsibilities over state lands and resources.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Continue to develop strategies to improve the Bureau's ability to interact and cooperate with other governmental agencies having management responsibility for underwater archaeological resources in Florida.

LAW ENFORCEMENT

Recommendation:

Improve the enforcement of laws concerning underwater and other archaeological sites by a program of law enforcement training as well as more effective interaction between the Bureau and law enforcement agencies.

Law enforcement was one of the issues examined by the 1991 Florida Senate Committee on Governmental Operations review of Florida's historic preservation program. The Committee concluded that looting of archaeological sites was a serious threat and that laws were not well enforced. Law enforcement agencies were not widely aware of the value of archaeological sites, or of the laws enacted to protect them. The Committee staff recommended that the Florida Department of Law Enforcement (FDLE) incorporate a training program for law enforcement personnel in conjunction with the Division of Historical Resources, the Department of Environmental Protection, and the Game and Fresh Water Fish Commission.

The Committee recommended that the Department of Law Enforcement consult with these state agencies to determine if other measures might be taken to enforce laws against looting of archaeological sites on public property and state sovereignty submerged lands. Since the 1991 review, action has been taken on all these recommendations. The basic law enforcement training course presently includes two hours training in archaeological site protection for all trainees. FDLE has also developed an advanced training course for law enforcement personnel with greater responsibility or concern for archaeological resources. This course will need to be revised as regulations and policies change in the future.

The Bureau already conducts training sessions at the law enforcement academies for the Florida Marine Patrol, and the Florida Game and Freshwater Fish Commission. In addition, the Bureau is involved in Florida Park Service training in the academy as well as in more advanced workshops for park service staff and managers. Aside from the training of recruits, law enforcement officers in the field could benefit from direct exposure to state historic preservation policies. The Pensacola example of interaction between the Marine Patrol and archaeologists points to the need for similar interaction elsewhere in the state. At a regional level, a simple workshop might be conducted at District Patrol offices to inform both administrative and field personnel of current state laws and policies regarding historical and archaeological sites. Another method of improving cooperation will be developing information such as a brochure or pamphlet on state historic preservation laws and policies that could be distributed to the relevant law enforcement agencies.

Key Players:

• Florida Department of Law Enforcement • Florida Game and Fresh Water Fish Commission • Florida Marine Patrol • US National Park Service • US Coast Guard • Other law enforcement agencies

Recommended Tasks:

1. Incorporate submerged cultural resources in training courses for law enforcement recruits concerning archaeological and historical resources.

2. Develop workshops for law enforcement officers in the field.

3. Develop a brochure or pamphlet on state historic preservation laws for distribution to concerned state and federal agencies, including law enforcement agencies. Request law enforcement agencies to review drafts of the brochure for comment and revision.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Further Bureau coordination with agencies listed above

AMATEUR ARCHAEOLOGICAL ORGANIZATION RESEARCH PERMITS

Recommendation:

Develop and implement a research permit system for amateur archaeological organizations to conduct archaeological activities on state owned underwater sites.

Participation of amateur historical and archaeological organizations in conducting non-consumptive research on Florida's submerged cultural resources is limited. The constructive participation of such organizations in studying Florida's submerged cultural resources must be an important goal of the Bureau. The diving public, in the form of research groups, could provide significant assistance in developing a growing inventory of underwater sites. There is also a need to encourage and supervise the organization and coordination of divers who want to participate in archaeological research.

The Bureau should sponsor a series of workshops to encourage the formation of amateur groups with education and preservation goals and well developed codes of ethics for their members. Such workshops might be held through Florida dive shops or community colleges. The workshops should consist of classroom as well as field training activities, and upon completion, participants should be encouraged to join an existing preservation-oriented organization. The Bureau could offer courses and bi-annual conferences.

One way to involve amateur groups in researching Florida's underwater prehistory and history is through the development of an amateur research permit. The current rule governing archaeological permits restricts application to reputable museums, universities, colleges, or other historical, scientific or educational institutions or societies. A new rule for amateur permits would be developed for non-profit organizations. The permit would be issued to legitimate groups rather than individuals.

The application form for such a permit should include the goals of the group; whether group members are required to sign a statement of ethics; a detailed research plan or proposal; whether there will be any resulting publications from the work; and a statement regarding the lasting benefit of any underwater recovery. Project applications will also take into account adherence to the current standards of underwater archaeology including methodology, reporting, analysis and conservation.

Permit activities may include underwater site analysis and reporting, surveying, sampling, and mapping of underwater sites. Permits will limit archaeological work to documentation projects only without recovery except in special cases with the participation of qualified underwater archaeologists. Any artifacts recovered during the research project will remain the property of the

State of Florida, but may be placed on long-term loan to appropriate agencies and institutions for public educational displays.

The formation of amateur groups in Florida might be based on the model provided by The Maritime Archaeological and Historical Society (MAHS) based in Washington, DC. The MAHS work closely with the State of Maryland in conducting research on, and helping to manage, Maryland's submerged cultural resources. The Society has a written statement of ethics which all members must sign. The MAHS bylaw and statement of ethics could serve as a model for Florida based organizations. Amateur organizations such as this will serve to foster a greater sense of resource stewardship and appreciation among Florida's avocational divers, and help to discourage undesirable activities on shipwreck sites. In recent years, MAHS members have worked with the Bureau of Archaeological Research and the National Park Service as volunteers assisting with survey and mapping projects at Biscayne National Park and Fort Jefferson National Park.

Another model for amateur groups is provided by the Nautical Archaeology Society (NAS) in the United Kingdom. The NAS was founded in 1981 to further public involvement in underwater archaeology. Approximately one third of its members are from countries other than the UK. The Society seeks to involve persons who have an interest in archaeology on land or underwater, both amateurs and professionals, diver or non-diver. The NAS offers Class I, II, and III levels of certification. The latter Class includes the preparation and presentation of a written report concerning participation on an archaeological project. The NAS is active in the US and there have been some discussions concerning the formation of a Florida chapter of the NAS.

The Bureau should encourage Florida organizations to obtain training in archaeological standards and to apply for permits. The Bureau often receives requests from non-Florida based organizations for information and assistance in organizing research trips. Two previously existing Florida based organizations were involved in amateur archaeological research projects in Florida. These were the Paleontological and Archaeological Research Team (PART) and Marine Archaeological Diving Association (MADA). These organizations were involved in a number of historical and prehistoric research projects including locating and mapping prehistoric sites in rivers and in the Gulf of Mexico, and shipwreck mapping. Both organizations worked closely with the Bureau in their research projects. Both operated without formal permits as there was no legal mechanism to accommodate them. Both organizations participated in isolated finds collecting and more formalized research work such of the type contemplated in the permit system being proposed here. Although PART and MADA have disbanded, new Florida based organizations will probably arise to replace them. Such organizations, once formed, may then benefit from a minimum amount of archaeological instruction provided by Bureau staff. Such instruction would include basic techniques in underwater mapping, survey techniques, completion of archaeological site forms, and a discussion of archaeological ethics. These training courses would also afford an opportunity to discuss research options, or otherwise assist the groups in finding useful projects in which to participate

Key Players:

• Florida Anthropological Society • Florida Archaeological Council • Dive shops • Dive organizations • Non-profit research dive organizations

Recommended Tasks:

1. Improve cooperation between the Bureau of Archaeological Research and local diving groups.

2. Develop a permitting system for amateur groups that will allow them to participate in non-consumptive archaeological research.

3. Sponsor volunteer research projects.

4. Develop a training program for sport divers and others to teach basic skills in underwater archaeology and historic preservation.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

Develop a rule for amateur permits

Recommended Changes to Procedures:

Develop procedures for amateur permits

UNDERWATER ARCHAEOLOGICAL SITE FORM

Recommendation:

Develop a new archaeological site form to be used by the public to report underwater sites.

The Florida Site File within the Bureau of Archaeological Research is the public repository for information on all recorded archaeological and historic sites in Florida. The Site File currently uses several different forms for various types of sites. For example, there are archaeological site forms, historic structure forms, historic bridge forms; and historic cemetery forms. The forms request information such as location, age, condition, local environment and potential threats. A management information system should be developed which describes at a minimum, what information should be collected, why that information is important, and how that information will be used in decision-making. A site form should be designed to fit these information needs to specifically address underwater sites. It should be user-friendly and require minimum expertise to complete. Information collected should be evaluated to ensure that it meets the needs of management decision-making and the technical requirements of the database.

One example of a user-friendly form is the *Dive into History* survey form produced jointly by The Royal Commission on the Historical Monuments of England and the Nautical Archaeology Society of England. It is printed on a large fold out piece of paper with sections for information on site location, dive details, site description, site plan and artifact drawings and site environment. This form has been adapted by the National Monuments Council of South Africa into a folded site information mailer that is completed by the diver and mailed to the national shipwreck database.

Key Players:

- Sport divers
- Nautical historians

Recommended Tasks:

1. Develop a user-friendly site information form for use by divers and others in the field to report underwater sites.

2. Develop a procedure to acknowledge the efforts of those who complete and submit site forms.

3. Encourage reporting of wrecks and other sites buried or partially exposed in beaches.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:
None

Recommended Changes to Procedures:
Develop a new archaeological site reporting form for underwater sites.

FLORIDA MASTER SITE FILE

Recommendation:

Improve the Florida Master Site File to provide more current information on submerged cultural resources.

The Review and Compliance Section of the Bureau of Historic Preservation is responsible for ensuring that potential impacts to submerged cultural resources on state owned lands are considered in review and approval of development projects on those lands. To do this, the Review and Compliance Section obtains information from a variety of sources, including the Florida Site File.

The Florida Site File should maintain current copies of all navigational charts for the state showing the locations of known underwater sites, artificial reefs, previous Army Corps of Engineers permitted sites (including beach re-nourishment "borrow" areas), and areas in which surveys have been conducted. The Florida Site File should incorporate data from the National Oceanic and Atmospheric Administration's *Automated Wreck and Obstruction Information System*, and from the U.S. Coast Guard databases on shipwrecks and navigational obstructions.

Key Players:

• Bureau of Archaeological Research, Florida Site File • National Oceanic and Atmospheric Administration • US Coast Guard • US Army Corps of Engineers

Recommended Tasks:

1. The Bureau should obtain current copies of all navigational charts for the State.

2. The Bureau should obtain current data from the NOAA *Automated Wreck and Obstruction Information System*, and U.S. Coast Guard data bases on shipwrecks and navigational obstructions.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Improve information maintained by the Bureau of Archaeological Research that is used by the Review and Compliance Section of the Bureau of Historic Preservation to assess potential impacts of projects to submerged cultural resources.

DREDGE AND FILL ACTIVITIES

Recommendation:

Continue to cooperate with state and federal review agencies for projects requiring dredge and fill permits.

The Bureau of Archaeological Research should continue to work closely with the Review and Compliance Section of the Bureau of Historic Preservation in review of projects involving dredge and fill permits. Virtually all such projects are federal undertakings by virtue of US Army Corps of Engineers permitting, and Section 106 procedures are required to be followed. The Bureau of Archaeological Research should assist in review of permit applications as appropriate and provide expertise concerning submerged cultural resources when needed.

Key Players:

• Bureau of Historic Preservation • US Army Corps of Engineers • Florida Department of Environmental Protection

Recommended Tasks:

1. Identify sites located in and near areas of project construction. Ensure that thorough background research and pre-dredging surveys prior to dredging activities are recommended to applicants when appropriate.

2. Review standards for underwater survey to ensure maximum identification of, and minimal disturbance to, submerged cultural resources.

3. Develop closer working relationships with other local, state and federal agencies that perform dredge and fill operations.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Implement Recommended Tasks as per above.

OIL AND GAS EXPLORATION AND EXTRACTION

Recommendation:

Cooperate with state and federal agencies to ensure that submerged cultural resources are considered in offshore oil and gas activities.

Although oil and gas activities occur in the Gulf of Mexico off the Florida coast, these are far from the state's ten mile territorial boundary at present. Such activities have no state involvement; consideration of submerged cultural resources in these federal waters is the responsibility of Minerals Management Service of the US Department of Interior. Should oil and gas activities in the future be permitted within the state boundary on state submerged lands, Florida will develop a regulatory and permitting process consistent with state and federal laws that apply to such activities. The context for consideration of cultural resources will continue to be the federal Section 106 process as already followed in federal waters, supplemented by any additional mandated state procedures. The Division should participate in the development of any oil and gas regulatory and permitting program for state waters to ensure that cultural resources are adequately considered.

Key Players:

- Bureau of Historic Preservation • US Department of Interior, Minerals Management Service • Florida Geological Survey, Oil and Gas Section
- Florida Department of Environmental Protection

Recommended Tasks:

1. Identify sites located in, and near, areas of proposed exploration.

2. Develop standards for survey, assessment, avoidance, and mitigation in cooperation with other local, state and federal agencies.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Implement Recommended Tasks as per above.

BOATING ACTIVITIES

Recommendation:

Evaluate and address impacts to shoreline and submerged archaeological sites by boat wakes or propellers.

The potential impact to underwater and shoreline cultural resources from boat wakes and propellers is not well understood. Many factors contribute to the erosion of coastal and river shores and it is difficult to isolate from these multiple causes the degree of erosion that could be prevented by addressing boating activities. A series of submerged and shoreline archaeological sites should be monitored to record rates and causes of erosion as a means of determining losses due to storms, meandering, or general sea level rise. If boats are determined to be an important cause of erosion, solutions should be sought in cooperation with local and statewide boating organizations as well as agencies with experience and authority in the issue.

The Bureau should, as recommended elsewhere, cooperate with sport divers and other interested participants to identify, inventory, and record cultural resources that are subject to erosion damage, regardless of the cause. Once a broader experience of site type and vulnerability to erosion is obtained on a regional or statewide basis, it may be possible to design more appropriate protection or mitigation solutions.

Key Players:

- Florida Department of Environmental Protection
- Florida Marine Patrol
- Florida Game and Freshwater Fish Commission

Recommended Tasks:

1. Identify and record sites in order to mitigate erosion.

2. Establish reference markers to use as a base for monitoring site changes.

3. Monitor selected sites to document impacts from boat wakes, navigational improvements, dredging, propellor wash, site visitation, storms, and other and natural factors.

4. Develop long-term management plans based on an assessment of the results of the above listed activities.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Implement Recommended Tasks as per above.

FISHING ACTIVITIES

Recommendation:

Develop increased communication and cooperation with commercial and sport fishermen to learn more about submerged cultural resources and their conditions.

One of the most important source of information about potential shipwreck sites is commercial shrimpers and fishermen. Besides having local, personal knowledge of maritime history, they also maintain records of locations where nets have snagged or artifacts have been pulled up. Traditionally, boat captains log location records of snags as areas to avoid so as not to foul or lose expensive nets and equipment. Many such locations are shipwrecks.

The Bureau has had some success in establishing personal relationships with some commercial fishermen. Efforts to establish personal as well as organizational relationships with the commercial fishing industry and its local members should be continued and expanded. Experience has shown that fishermen have an abiding interest in their region's maritime history and are often willing to cooperate in shipwreck surveys by supplying information once a trusting relationship has been established.

Key Players:

- Fishing organizations
- Commercial fishermen
- Florida Marine Patrol

Recommended Tasks:

1. Continue to develop and build new relationships with commercial fishermen and fishing organizations to learn of new sites, and to enlist the help of fishermen in decreasing the impact on cultural resources.

2. Work with commercial fishermen and organizations to develop a comprehensive map, showing coordinates of "snag" sites and areas of particular sensitivity.

3. encourage improved communication about shipwrecks and cultural resources in appropriate newsletter and established industry publications.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Implement Recommended Tasks as per above.

NATURAL IMPACTS

Recommendation:

Review and assess site deterioration as part of the survey and inventory process and implement measures to protect sites from erosion or mitigate loss.

There are a broad range of natural factors that can impact submerged cultural sites. The most dramatic are hurricanes and major storms, but less intensive persistent factors can also take a toll. In these cases, protective solutions are those that address the resource rather than the cause, as most natural forces cannot be effectively diminished.

Approaches to protecting sites or mitigating loss should begin with collection of reliable survey and assessment information. On a statewide basis this can only be accomplished in cooperation with public groups that are interested and willing to assist. Sites subjected to continuing and persistent deterioration from natural forces should be addressed prior to sites that are stable. Accurate and comprehensive recording and monitoring can indicate which sites are most in need of attention. In some cases, protective measures may be shown to be ineffective and data recovery may be necessary in the face of further deterioration. Such projects must also depend on volunteer and public cooperation.

Following major storms, floods, or other damaging events, affected sites should be surveyed and recorded to document the degree and type of damage. Repair of structures or replacement of protective sediments may be in order so as to recreate a previous stable state.

Key Players:

- Florida Department of Environmental Protection
- Florida Marine Patrol
- Florida Game and Freshwater Fish Commission
- National Park Service
- National Oceanic and Atmospheric Administration

Recommended Tasks:

1. Sponsor monitoring of sites by volunteer dive organizations.

2. Monitor sites before and after storms.

3. Assess damage and effect of various protective measures to improve future strategies.

Recommended Changes to Statutes:

None

Recommended Changes to Rules:

None

Recommended Changes to Procedures:

Implement Recommended Tasks as per above.

APPENDIX ONE:

National and International Submerged Cultural Resources Comparative Matrix Table

I INTRODUCTION

The assessment of the current state of submerged cultural resource management both in the United States and abroad was an important step in preparing a management plan for Florida's underwater cultural resources. Management of submerged cultural resources has changed significantly over the past few decades, and it was thought that an overview of current legislation would allow Florida to examine some of the latest and most creative initiatives taken by other jurisdictions.

Given the tremendous amount of material, it was necessary to make certain decisions regarding what types of data would be solicited, and from where. Generally, research focused on those issues which reflect circumstances in Florida. In large part, the research was conducted by telephone interviews with the appropriate officials charged with handling questions of submerged cultural resource management. Often, a copy of that state's pertinent legislation was solicited along with any other relevant materials. Additionally, information was extracted from various publications relating to submerged cultural resources management. This information was used to update existing sources.

The following written sources were used along with telephone and written communications:

Department of the Interior, National Park Service.
1989 Abandoned Shipwreck Act Guidelines; Proposed Guidelines; Notice. *Federal Register, volume* 54, number 63, pages 13642-13658.

Department of the Interior, National Park Service.
1990 The Abandoned Shipwreck Act Guidelines. *Federal Register, Vol. 55, No. 233,* pages 50116-50145.

Murphy, Joy Waldron (ed.)
1988 Appendix D - "Overview of Existing State Legislation, and Programs", pp. D1-D9, in *National Trust for Historic Preservation. Historic Shipwrecks: Issues in Management.* Washington, D.C.: Partners for Liveable Places.

The Ontario Heritage Foundation
1992 *Preserving Great Lakes Underwater Heritage: A Review of Regulation and Policy.* Minutes of a Meeting Held in Windsor, Ontario, Canada, February 15-16, 1992. Toronto: The Ontario Heritage Foundation.

Sea Grant.
1982 *Sportdiver's Handbook for Historic Shipwrecks: Tools and Techniques.* Durham, N.H.: Northeast Marine Advisory Council, pp. 6-8.

Vrana, Kenneth J. and Edward Mahoney, (ed.)
1993 *Great Lakes Underwater Cultural Resources: Important Information For Shaping Our Future, Proceedings of the Great Lakes Regional Conference on Underwater Cultural Resource Policy, February 3-4, 1993, Michigan State University.* Department of Park and Recreation Resources, East Lansing.

Vrana, Kenneth J. and Edward Mahoney (ed.).
1993 *Proceedings of the Great Lakes Regional Conference on Underwater Cultural Resource Policy February 3-4, 1993, Michigan State University* East Lansing, Michigan: The Department of Parks and Recreation Resources.

The information was organized in the following table so that an overview of the states' programs could be readily available. Using this comparative method, those programs were identified which might possible be relevant to Florida. The best or most useful of these programs are summarized in the following pages.

Table Categories:

Specific Underwater Heritage Legislation

While all U.S. States, Territories and countries maintain sovereignty over their submerged lands, few make specific provisions for submerged cultural resources. The purpose of this category was to ascertain which states have developed legislation explicitly defining submerged cultural resources on their bottomlands, and outlined provisions for their protection or management.

Specific Marine Archaeology Program

Most U.S. States assign their State Historic Preservation Officers (SHPO's) to handle management considerations for their submerged resources. In many cases, however, this assignment is only one of many duties the SHPO's must perform. For the purposes of this table, only those states are included which have established programs (i.e., office space and a budget) to deal specifically with underwater archaeology and/or maritime heritage.

Underwater Archaeological Preserves

The concept of shipwreck preserves as a vehicle for underwater recreation and education is a relatively new one. Nevertheless, several states have already designated sites on their submerged lands as off-limits to salvage or collecting in hopes of fostering an appreciation of maritime history and encouraging underwater tourism. In some cases these preserves are in name only, and offer little in the way of interpretation or facilities. Regardless of program

development, this category includes states which have or are in the process of developing underwater preserves.

State Interaction with Amateur Underwater Archaeological Societies

Organized underwater historical societies often play an important part in furthering states' interests in submerged cultural resources. Though many smaller organizations probably went unrecognized during this survey, as many as possible have been named.

Amateur Sport Diving Collecting

Here the chart is intended to show which states will allow divers to collect artifacts from their bottomlands, and under what circumstances. In areas where recreational diving is a rarity, such as the western U.S., the issue of collecting is often not considered in legislation.

Marine Salvage Regulated

This category shows which states have administrative mechanisms to grant or deny permits for salvage of their submerged cultural resources. Here, questions of historic vs. non-historic objects were not addressed--only whether the states had sought to regulate salvage in general. Many of the western or inland U.S. states have never issued a permit, though technically a person seeking to remove or alter objects on their bottomlands would have to seek approval from the appropriate government agency. Further, most large water bodies in the western United States are in the form of reservoirs or are otherwise under federal jurisdiction.

Scientific Research Regulated

While some of the coastal U.S. states do make a distinction in requirements for scientific vs. salvage permits, this category sought only to confirm whether or not the states would issue permits for research on their submerged lands.

Abbreviations:

The table contains several abbreviations, here they are written out in full:

ASA: Abandoned Shipwreck Act
COE: Army Corps of Engineers
DHR: Division of Historical Resources
DNR: Department of Natural Resources (the name of the department used by many U.S. States)
NOAA: National Oceanic and Atmospheric Administration
NPS: National Park Service
SCR: Submerged Cultural Resources

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
U.S.A.:							
Alabama	legislation proposed in response to passage of Abandoned Shipwreck Act	Alabama Department of Conservation			sport divers can take isolated finds Alabama issues a recreational collecting (Search & Identification) permit	Salvage permit requires posting a surety bond state places limits on commercial salvage of historic shipwrecks	Y - state places limits on scientific research
Alaska							
Arizona			1987 survey by the NPS of an inundated mining operation and paddle wheeler		not an issue	most waters under federal control	federal waters
Arkansas	in the process of developing standards		plans to raise a Civil War gunboat for a park were abandoned			Y - no restrictions on commercial salvage of historic wrecks	Y - no restrictions on scientific investigations of historic wrecks
California	Y	Y, State Lands Commission administers the Shipwreck & Maritime Resources Program	established one underwater archaeological preserve in Lake Tahoe 9/94		permits may be issued allowing the use of hand tools (recreational permit)	commercial permit	scientific permit
Colorado						*no history of salvage*	*not considered an issue*
Connecticut						not an issue, as N.Y. controls most bottomlands	
Delaware	basing draft legislation on ASA		the mishandling of the 1986 *De Braak* recovery has led to discussion of issue		collecting is not regulated	through DNR- DHR acts as advisory board	through the DNR

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
U.S.A.:							
Florida	Florida Historical Resources Act in the process of developing a management plan (994)	Y, Underwater Archaeology Section/ Bureau of Archaeological Research	established five archaeological preserves since 1987	Marine Archaeological Divers Assoc. & the Paleontological & Archaeological Research Team (both currently inactive)		Y	Y
Georgia	Y	Georgia Department of Natural Resources, Parks, Recreation and Historic sites Division				Y	Applicant must be a scientific or educational institution
Hawaii	only a general antiquities law		some survey work by SCR Unit of the NPS			Y	Y
Idaho						Y	Y
Illinois				Chicago Underwater Arch. Society -used volunteers in recording project- for NR nomination forms		Y	Y
Indiana	have a quasi-official plan-not implemented		interested in creating a preserve in Lake Michigan			through DNR Division of Water	Also through DNR
Iowa	historic preservation plan accommodates historic shipwrecks	some research into site potential (no formal program)	there may be hundreds of sunken steamboats in Iowa's rivers		collecting is unregulated	question has never arisen	no history of applications
Kansas			have several steamboat wrecks, in accreted lands, no plans for preserves		not a problem	most water bodies managed by the Army COE, salvage is not much of an issue	few applications
Kentucky		State Historic Preservation Office wishes to establish shipwreck management program			unregulated	has never been an issue	no applications

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
U.S.A.:							
Louisiana	management plan prepared 1990 - not yet implemented	Division of Archaeology has established shipwreck management program		traveling exhibit on the excavation of the *El Constante* (1766) (excavated 1980-1981) (project funded jointly by the State and treasure salvers)		Land and Underwater Treasure Permit may be issued under certain conditions (applicant must be bonded)	Scientific Research Permit
Maine	An Act to Preserve Maine's Archaeological Heritage (1981). Submerged Archaeological Historic Property Act of 1988. Draft shipwreck management plan, 1989/1990 prepared by Maine Historic Preservation Commission.	Maine State Museum. Maine Historic Preservation Commission.	no preserves, exhibit for the brigantine *Defence* (excavated from 1975-1981)	Maritime Archaeological & Historical Research Institute works with the Maine State Museum		Maine *prohibits* the commercial salvage of historic shipwrecks Maine retains ownership of all objects recovered on its submerged lands	Y
Maryland	An Act Concerning Submerged Archaeological Historic Property	Y- Maryland Maritime Archaeology Program administered by the Maryland Historic Trust	1 dive preserve- WW II German U-1105 to open in Fall '94	Underwater Archaeological Society of Maryland	5 artifacts from any one site may obtained with hand tools without a permit	Y - requires a performance bond	Y - Archaeological Research Permit. Archaeological Excavation Permit.

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
U.S.A.:							
Massachusetts	Y	Y, the Massachusetts Board of Underwater Archaeological Resources	have a list of over 40 "exempted ship-wrecks" to protect them from salvage permits	Y (Narragansett Bay Underwater Arch. Project 1993/94)	only with permit- the majority are for reconnaissance permits	Excavation permits required for destructive activities from test excavations to mitigation. Reconnaissance permits for sport divers, commercial ventures, and museums	Y - List of Shipwrecks which are exempt from commercial salvage activities is maintained by the Board
Michigan	Y	Y, administered by the Bureau of History	9 Underwater Preserves to date	The Michigan Underwater Preserves Council, Inc.	legal outside of preserves & not attached or on a wreck- and by hand	Y	Y
Minnesota	currently have a draft management plan	4 year study of Minnesota's Lake Superior shipwrecks (1990-1994)	none formal, but publicize wrecks in L. Superior			Y	Y
Mississippi	1992 plan for the preservation of underwater resources				silty water conditions discourage diving	Y, though none issued last few years	Y
Missouri	Y		have an inundated lead mine as a state historic site		most shipwrecks in accreted lands	most waters federally controlled	Y
Montana					covered by general antiquities laws but do have some looting problems	on state lands may issue permit- but most waters are federally controlled	possible, but rarely used

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
U.S.A.:							
Nebraska			steamship in the Missouri, *the Bertrand* (1855) declared State Archaeological Site, located in DeSoto National Wildlife Reserve. - no preserves		unrestricted on unrecognized sites	not a issue	no history of applications
New Hampshire	Y - management plan prepared in 1990	Division of Historic Resources	considering program similar to that of Vermont		isolated finds may be kept after reported them to DHR	Y	Y
New Jersey	Historical and archaeological resources are protected under the NJ Environmental Regulation Land Use Program, rules on coastal zone management.	Office of New Jersey Heritage is coordinating with Department of Environmental Protection and the State Museum				Y	Y
New Mexico					not a problem	most waters under COE jurisdiction	no history of applications
New York	underwater archaeological sites protected by State Education Law	abandoned shipwreck management program established under Education Law Sec. 233	3 Submerged Heritage Preserves established in Lake George	Bateaux Below Inc. Lake George Regional Nautical History and Archaeology		Y	Y
North Carolina	Y, State (N.C.) Laws Relating to Cultural Resources	Underwater Archaeology Archaeological Unit	U.S.S. *Huron* (1877) Shipwreck Preserve		short-term Sport and Hobby Exploration Permit	permits for exploration, recovery, salvage and underwater archaeology	Y
Ohio	Y, passed in 1993	Submerged Lands Advisory Committee	have authority to create, none designated yet		no permit required to recover isolated finds	Y, Salvage allowed if outside of a Lake Erie Submerged Lands Preserve	Y

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
U.S.A.:							
Oklahoma			have some sunken river ferries, no plans for preserves		illegal under antiquities law, some problems with site looting	most waters are federally managed salvage is almost unknown	can issue permits, rarely have occasion to
Oregon	part of Oregon Coastal Management Plan. Oregon Territorial Sea Management Study/Plan.		natural underwater parks only		isolated finds may be kept for "objects exposed by the forces of nature"	Y - few applications	Y
Pennsylvania	no legislation but have survey and sensitivity studies		may try to work with several wreck sites in Lake Erie			Y, though have never issued a permit	Y
Rhode Island	Y	Rhode Island Underwater Program administered by the Rhode Island Historic Preservation Commission				Y, though have never issued a permit	Y - permits issued for archaeological field investigations
South Carolina	Y - The South Carolina Antiquities Act of 1991	Y, Underwater Arch. Division of the SC Institute of Arch. and Anthropology		have a training program for dive instructors	issue a hobby diving license - no use of tools allowed	Y - SCIAA issues commercial data recovery license	Y - SCIAA issues non-commercial data recovery license
South Dakota					not an issue	most waters federal	most waters federal
Tennessee			working towards district nomination for Civil War gunboats		T.V.A. initiated action against the illegal salvage of an anchor	no history of applications	Y, first permit issued in summer of '93 for studies on sunken gunboats

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
U.S.A.:							
Texas	Y - The Antiquities Code of Texas (1983)	Y, Texas Historical Commission (formerly the Texas Antiquities Committee)		Archaeological Stewardship Program		Y - The Antiquities Code of Texas (1983) eliminates provisions for commercial treasure hunting, replaces with provisions for scientific investigations	Y - Antiquities Permits
Utah					not an issue	no history of applications for permit	rarely needed
Vermont	Y - Vermont Historic Preservation Act (1975)	Division of Historic Preservation, Agency of Development & Community Affairs handle responsibility	3 - the *Phoenix*, *General Butler* & the *Coal Barge*	Champlain Maritime Society	isolated finds - no permit required (divers are encouraged to report finds "honor system")	Y	Y - permits issued for reconnaissance activities. Artifact recovery permitted from "non-significant" shipwrecks
Virginia	Y	funding for underwater archaeology program was discontinued in 1992	no preserves, the Yorktown Shipwreck Project examined several sites			Y	Y
Washington	Y - rules regarding permitting revised in 1989		collecting is not allowed without permit in three specific areas: Lake Washington, Elliot Bay, or Columbia River Bar (where there are known historic or prehistoric archaeological sites)		recreational artifact collecting is not regulated except in the three specific areas described (where there are known historic or prehistoric archaeological sites)	Y - for salvaging historic shipwrecks contracts shall provide for fair compensation to a salvor. Historic aircraft may be recovered if they are to be restored for a museum, historical society, non-profit organization or government entity.	Y - Underwater field archaeology permits for survey and recovery activities

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
U.S.A.:							
West Virginia	some discussion - no immediate plans		eligible sites likely, but no plans to develop preserves		not an issue	salvage is rare	rarely applied for
Wisconsin	Y	Y, State Historical Society Underwater Archaeology Advisory Committee (since 1988)	considering a modified version of Michigan's preserve system	Wisconsin Underwater Archaeological Society	issue an Isolated Finds Recovery Permit	Y	Y - Survey/Excavation Permit
Wyoming						not considered an issue, permit technically possible	no applications for permit

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
US Territories:							
American Samoa	N	N	N	N	N	N	N
Guam	Y	Y (Guam Office of Historic Pres. ran a training school in SCRM for SHPO reps from several Micronesian Islands in 1987) (USN and SCRU of NPS conducted SCR research in 1987)					
Pacific US Trust Territories, etc.: Federated States of Micronesia (FSM), Caroline & Marshall Islands Bikini Atoll (Lagoon); Rota; Palau		? (surveys conducted by the SCR Unit of the NPS on many US Trust Territory islands)	Y (Truk Lagoon, Caroline Islands) (1946 atomic bomb test: sunken fleet in Bikini Atoll-Lagoon in Marshall Islands being considered as an underwater shipwreck preserve similar to Truk Lagoon) Other W.W.II sites?)				
Puerto Rico	Y	Y (Council of Underwater Archaeology, Institute of Puerto Rican Culture)	N (1991/92 proposal for the establishment of an underwater preserve not passed)	N (educational and outreach programs under consideration in 1990 as part of larger management plan)	??	Y	Y
US Virgin Islands	N	N	N	N	Y	Y (only 1 underwater permit applied for - refused)	Y (no permits yet applied for)

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
Canada (Provinces):							
Alberta	Y	Y	N	Y [Underwater Archaeology Society of Alberta]		Y	Y
British Columbia	Y	Y	Y (several marine parks 3 protected wreck sites)	Y [Underwater Archaeology Society of BC (UASBC)]		Y	Y
Newfoundland	Y	Y	N	Y [Newfoundland Marine Archaeology society (NMAS)]		Y	Y
Nova Scotia	Y (Special Places Protection Act)	Y	N	Y [Underwater Archaeology Society of Nova Scotia (UASNS)]		Y	Y
Ontario	Y	Y	1 (Fathom Five - now a National Marine Park)	Y (Save Ontario Wrecks (SOS); Preserve Ontario Wrecks (POW)]		Y	Y

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
Other Countries:							
Australia	Y	Y (Western Australian Maritime Museum)	Y (protected wreck sites and "wreck trails")	Y		Y	Y
Bahamas	Y (legislation presently being revised)	Y/N (Receiver of Wreck)				Y	Y
Bermuda	Y	Y/N (Receiver of Wreck Bermuda Maritime Museum) Active program of shipwreck inventory, conservation, display	(-several natural marine parks -no specifically protected shipwreck sites)	Y (Bermuda Maritime Museum invites numerous scientific institutions and amateur divers from many countries to participate in field operations)		Y	Y
Denmark	Y	Y (Center for Maritime Archaeology at the Institute of Maritime Archaeology, National Museum, Roskilde				Y	Y
France	Y	Y (French Ministry of Culture and two govt. underwater archaeology units: DRASM, CNRS)		Y (close relations with the French sport diving federation - FFESSM)		Y	Y
Israel	Y	Y (Israel Antiquities Committee and the Center for Maritime Studies at the University of Haifa)	Y (Underwater archaeological tourist park at the site of Caesarea Maritima with underwater "heritage trails")	Israeli Diving Federation		Y	Y
Italy	Y	Y (STAS - government office for maritime affairs and underwater archaeology; Italian Cultural Institute)	Y (Island of Utisca near Sicily - underwater archaeological park)				

U.S. STATE or COUNTRY	SPECIFIC UNDERWATER HERITAGE LEGISLATION	SPECIFIC MARINE ARCHAEOLOGY PROGRAM	UNDERWATER ARCHAEOLOG. PRESERVES: SHIPWRECKS, PREHISTORIC & HISTORIC SITES	GOVERNMENT INTERACTION WITH AMATEUR UNDERWATER ARCHAEOLOGY SOCIETIES	AMATEUR SPORT DIVER COLLECTING:	MARINE SALVAGE REGULATED	MARINE SCIENTIFIC RESEARCH REGULATED
Other Countries:							
Mexico	Y	Y (Underwater Arch. Board reviews licence applications)				Y	Y
Netherlands	Y	Y (Department of Underwater Arch.)				Y	Y
South Africa	Y	Y (South African National Monuments Council)and the Department of Archaeology) Institute of Maritime Arch. at the South African Maritime Museum, Cape Town				Y	Y
Sweden	Y	Swedish National Maritime Museum, Stockholm; the Dept. of Archaeology at Stockholm Univ.; Marine Archaeological Education Centre, Nynäshamn, Sweden		good working relationship developed between government, universities and sport diving community		Y	Y
Thailand	Y	Y (SPAFA organization has conducted training programs in maritime archaeology in conjunction with the several ASEAN countries and the Western Australia Museum)				Y	Y

Turkey	Y	Y (cooperation with Texas A&M University and the Bodrum Museum)		sport diving not permitted by law except in certain designated "non-shipwreck" areas		Y	Y
United Kingdom	Y	Y	Protection of Wrecks Act (1973) ("War Graves" sites - e.g. HMS *Royal Oak* in Scapa Flow) recent underwater preserves initiatives ('Marine Protected Areas' legislation being developed since 1992)	Y		Y	Y

APPENDIX TWO:

LAWS, RULES AND MANAGEMENT STRATEGIES FOR SUBMERGED CULTURAL RESOURCES OF SELECTED U.S. STATES AND TERRITORIES.

I INTRODUCTION

The assessment of the current state of submerged cultural resource management both in the United States and abroad was an important step in preparing a management plan for Florida's underwater cultural resources. Management of submerged cultural resources has changed significantly over the past few decades, and it was throught that an overview of current legislation would allow Florida to examine some of the latest and most creative initiatives taken by other jurisdictions.

Given the tremendous amount of material, it was necessary to make certain decisions regarding what types of data would be solicited, and from where. Generally, research focused on those issues which reflect circumstances in Florida. In large part, the research was conducted by telephone interviews with the appropriate officials charged with handling questions of submerged cultural resource management. Often, a copy of that state's pertinent legislation was solicited along with any other relevant materials. Additionally, information was extracted from various publications relating to submerged cultural resources management. This information was used to update existing sources.

The information was organized in the table in Appendix One so that an overview of the states' programs could be readily available. Using this comparative method, those programs were identified which might possible be relevant to Florida. The best or most useful of these programs are summarized in the following pages. Much of the following discussion is also taken directly from or adapted from the following sources:

Department of the Interior, National Park Service.
1989 Abandoned Shipwreck Act Guidelines; Proposed Guidelines; Notice. *Federal Register, volume* 54, number 63, pages 13642-13658.

Department of the Interior, National Park Service.
1990 The Abandoned Shipwreck Act Guidelines. *Federal Register, Vol. 55, No. 233,* pages 50116-50145.

Murphy, Joy Waldron (ed.)
1988 Appendix D - "Overview of Existing State Legislation, and Programs", pp. D1-D9, in *National Trust for Historic Preservation. Historic Shipwrecks: Issues in Management*. Washington, D.C.: Partners for Liveable Places.

The Ontario Heritage Foundation
1992 *Preserving Great Lakes Underwater Heritage: A Review of Regulation and Policy*. Minutes of a Meeting Held in Windsor, Ontario, Canada, February 15-16, 1992. Toronto: The Ontario Heritage Foundation.

Sea Grant.
1982 *Sportdiver's Handbook for Historic Shipwrecks: Tools and Techniques*. Durham, N.H.: Northeast Marine Advisory Council, pp. 6-8.

Vrana, Kenneth J. and Edward Mahoney, (ed.)
1993 *Great Lakes Underwater Cultural Resources: Important Information For Shaping Our Future, Proceedings of the Great Lakes Regional Conference on Underwater Cultural Resource Policy, February 3-4, 1993, Michigan State University*. Department of Park and Recreation Resources, East Lansing.

Vrana, Kenneth J. and Edward Mahoney (ed.).
1993 *Proceedings of the Great Lakes Regional Conference on Underwater Cultural Resource Policy February 3-4, 1993, Michigan State University* East Lansing, Michigan: The Department of Parks and Recreation Resources.

Because there was no reason to duplicate work which had been done previously, the information from the above source has been updated somewhat, and supplemented with other sources and interviews with agency managers. A brief listing of some major sources used to compile the information is included after the discussion for each state or other jurisdiction. Specific legislation isn't included, however, due to the large volume of material.

The discussion of each state is divided into two parts; (1) laws and rules and (2) management strategies. The legislative section seeks to identify the law(s) governing underwater resources and, if possible, a discussion of their history as it relates to the development of submerged resource management in that state. The management strategy section is a synopsis of the state's program with special attention to features that seem useful in preparing Florida's management plan.

In some instances, the features identified will be "negative" ones, pitfalls Florida may wish to avoid.

From the table, it is apparent that a number of U.S. states and nations have underwater heritage programs that might provide elements useful for Florida's plan. The programs of interest had several characteristics: a system of underwater preserves; comprehensive legislation; some attention to collecting by sport divers, and outreach programs about underwater heritage. Active state efforts to survey and identify wrecks in their coastal waters also drew closer inspection.

The programs of eight U.S. states and two countries stood out. Listed in alphabetic order these states are Louisiana, Maryland, Michigan, North Carolina, South Carolina, Texas, Vermont and Wisconsin. Australia and Canada were the two nations judged to be in the forefront of underwater resource management. Additionally, the programs of nine other U.S. States (Alabama, California, Illinois, Maine, Massachusetts, New Hampshire, New York, Ohio, and Washington), two U.S. territories [Puerto Rico, and the Trust Territories of the Pacific including Guam, Federated States of Micronesia (FSM), Caroline and Marshall Islands, Rota, and Palau], and six nations (Bahamas, Mexico, South Africa, Thailand, Turkey, and the United Kingdom) have been reviewed in some detail.

The discussion of each state is divided into two parts; (1) legislation and (2) management strategies. The legislative section seeks to identify the law(s) governing underwater resources and, if possible, a discussion of their history as it relates to the development of submerged resource management in that state. The management strategy section is a synopsis of the state's program with special attention to features that seem useful in preparing Florida's management plan. In some instances, the features identified will be "negative" ones, pitfalls Florida may wish to avoid.

II LAWS, RULES AND MANAGEMENT STRATEGIES OF U.S. STATES AND TERRITORIES WHICH HAVE ASPECTS OF SUBMERGED CULTURAL RESOURCES MANAGEMENT OF INTEREST TO FLORIDA

LOUISIANA

While Louisiana is tone of the few states with a fully developed, published, underwater resource management plan, which was prepared in 1990, a lack of funds has prevented the state from implementing its program. In terms of active resource management, Louisiana would not have been included in this section save for the comprehensiveness (on paper) of their plan.

Laws and Rules:

Louisiana has established a program to manage abandoned shipwrecks through its Division of Archaeology (under LA. R.S. 41: 1601, 1605, 1606, and 1609 and LA. Adm. Code Vol. 7, Title 25, Sec. 177181). The state's management program differentiates between historic and non historic shipwrecks; its law does not define historic, except for "relating to the history and culture of the state." Funds can be made available for the location, evaluation and protection of historic shipwrecks. Louisiana regulates both the scientific investigation and commercial salvage of historic shipwrecks through a permitting system. Requirements for commercial salvors include, (1) preparing research designs and professional reports, (2) applying archaeological methods, (3) employing qualified underwater archaeologists and conservators, and (4) preserving artifacts and materials recovered. The state owns all artifacts and materials but can compensate commercial salvors by a percentage of the value of the wreck and, in part, with artifacts themselves as stipulated under permit; the state can negotiate the percentage of recovered objects it retains. The state provides no access for sport divers to abandoned shipwreck sites for exploration or recreation and forbids the removal of any materials from historic shipwreck sites. It advocates the inclusion of volunteer sport divers on archaeological projects but provides them no training in scientific study or excavation methods. In terms of public education, Louisiana has produced one booklet and a traveling slide show explaining the cultural values associated with the wrecks in its waters.

Submerged Cultural Resources Management Plans and Strategies:

The State Department of Culture, Recreation and Tourism, Office of Cultural Development, Division of Archaeology, developed a comprehensive submerged cultural resources management plan in 1990. The plan was developed with a grant provided by the Louisiana Department of Natural Resources, Coastal Zone Management Division. The basis for the plan was the passage of the Abandoned Shipwreck Act of 1987. The stated goals of the plan were to develop a philosophy for interpreting submerged archaeological sites, and to develop specific steps to implement an underwater archaeology and submerged cultual resource management program. The plan was divided into four major sections: (1) Geomorphology, (2) Prehistoric Louisiana, (3) Louisiana's Maritime Resources, and (4) Management of the Underwater Resource. To this date the plan has not been implemented by the state.

Sources:

Byrd, Kathleen
1987 Correspondence with Florida Bureau of Archaeological Research, regarding: Louisiana's rules and Regulations on underwater archaeology. May 5.

Partners for Livable Places and the National Trust for Historic Preservation
1988 *Historic Shipwrecks: Issues in Management.* Partners for Livable Places, Washington, D.C.

Terrell, Bruce
1990 *Louisiana Submerged Cultural Resource Management Plan.* Division of Archaeology, Office of Cultural Development, Department of Culture, Recreation, and Tourism, Baton Rouge.

MARYLAND

Laws and Rules:

The Maryland Maritime Archaeology Program (MMAP) was established by the Maryland Historical Trust, an agency of the Maryland Division of Historical and Cultural Programs, in response to Chapter 503 of the Acts of the General Assembly of 1988 known as the Submerged Archaeological Property Act and codified within Article 83B, Title 5, Subtitle 6, Annotated Code of Maryland. The Maryland Maritime Archaeology Program is responsible for the issuance and administration of permits for certain activities relating to submerged archaeological historic property. Maryland employs three full-time underwater archaeologists.

The Act applies to sites embedded in submerged lands and unclaimed for 100 years or longer. Further, salvage permits are not issued, and collecting is not allowed on sites if they are: included or determined eligible for the National Register; designated or eligible for National Historic Landmark status; or entered on the state list of historic trust sites.

Permittees must notify the State Underwater Archaeologist before any raising or recovering of artifacts and a monitoring archaeologist must be present at the time of recovery. Permittees are restricted in the number of artifacts (no more than 25) they may recover. Additionally, the artifacts must be of a diagnostic nature that will be useful in dating the site or in determining its significance. The state retains title to all artifacts recovered, although it may release title to any artifacts recovered that are not considered to be of significant archaeological or historical value. The Act calls for the establishment of a State Submerged Artifact Register for the registration and recording of artifacts recovered from the state's submerged lands. The Register will be available to the public. Violation of any part of the Act or its regulations is a misdemeanor.

Submerged Cultural Resources Management Plans and Strategies:

A person may not excavate, destroy, or substantively injure submerged archaeological historic property without a permit from the Trust. There are two kinds of permits issued: an intensive survey permit and a data recovery permit. The intensive survey permit allows the permit holder only to delineate or confirm the boundaries of a location where the resources are believed to be. A person must complete an detailed application for a survey and data recovery permit. Bruce Thompson, the Assistant State Underwater Archaeologist, reported the requirements of fulfilling an intensive survey permit were usually enough to

discourage unqualified or frivolous applicants. In addition, Mr. Thompson said that once a wreck was found and identified the state has the option of nominating it to the Trust's list (although it would have to be of extreme significance to prevent the salvor from receiving a permit for data recovery).

Additionally, the state allows for limited collection of artifacts without a permit. A person without a permit may collect from any one site *not more than five individual artifacts*. Artifacts may not be recovered from a site unless they can be obtained by hand or through the use of screwdrivers, wrenches, or pliers. The person is required by law to report to the Trust within 30 days of collection, a list of the objects and a description of the places from which the objects were recovered. Mr. Thompson reported this departure from otherwise firm rules was a concession to the sport diving community. He added that this provision is meant for more recent wrecks and that he tries to impress upon divers they are destroying future recreational resources piece by piece.

As Maryland experiences a relatively slight amount of salvage activity (only one intensive survey permit has been issued to date), Mr. Thompson is able to actively lecture on Maryland's underwater program. He has successfully recruited "around 300 volunteers" of which approximately 20% are divers. With these volunteers he is working on a statewide inventory of wrecks in state waters and expects to have it completed by 1996.

In 1994, the Maryland Historical Trust/Maryland Maritime Archaeology Program entered into a Memorandum of Understanding with the U.S. Navy to create Maryland's first underwater dive preserve at the site of the sunken World War II German U-Boat, *U1105*. The dive preserve is intended to provide sport divers an opportunity to explore the virtually intact remains of a unique World War II German U-Boat. The *U1105* was captured at the close of World War II as a war pize. The submarine was sunk and then raised a number of times beginning in 1948, by the U.S. Navy, during munitions testing. In the final test, in September 1949, an explosive charge was set off underneath the hull which was so strong it broke the submarine in two. The exact location of the*U1105* was made by a diver in 1985. The Memorandum of Understanding establishes a federal-state partnership with the goals of preserving the historic vessel, creating a dive preserve accessible to appropriately qualified and experienced divers, and interpreting the site through research and public exhibits. To provide regional support for the preserve, the Maryland Historical Trust has entered into discussions with the local county Museum Division concerning establishment of an interpretative center at the county's lighthouse museum. The *U1105* remains the property of the U.S. Navy. Federal law prohibits the disturbance, damage, or removal of objects from the vessel. To prevent unauthorized disturbance of the wreck, the site is being monitored by the U.S. Coast Guard and the Maryland Department of Natural Resources Marine Police. Divers were requested not to visit the site prior to the projected Fall 1994 opening of the dive preserve, because

neither mooring facilities nor information and safety briefing materials will be available until that time. The Trust has sought public input for the development and use of the dive preserve in a public meeting and workshop.

Sources:

Maritime Archaeological and Historical Society
1994 A German Stealth Submarine in the Potomac, *MAHS News* . Washington, D.C.., pp. 11-12, July-August.

Maryland Department of Housing and Community Development
1994 Public Information Announcement, *Maryland to create first State Underwater Archaeological Dive Preserve*. Division of Historical and Cultural Programs.

Thompson, Bruce
1994 Personal communication, Assistant Underwater Archaeologist, State of Maryland, March 1.

MICHIGAN

Many states of the Great Lakes region have established very strong programs in submerged cultural resource management. A number of conferences were held specifically to address the issues of submerged cultural resources management, including some held in conjunction with representatives of he Province of Ontario and the Canadian Federal Government.

Laws and Rules:

The primary laws governing the use of submerged cultural resources in Michigan are found in 173 P.A. 1929, MCL 299.51 *et seq* - the Aboriginal Records and Antiquities Act. The Act was originally drafted and passed in 1929, but it has been substantially amended through the years to reflect the need to protect submerged cultural resources on Michigan's bottomlands. Amendments in 1980 (Public Act 184) established a framework for the establishment of underwater preserves and offers designation guidelines. The Act guarantees recreational access to all shipwrecks with some unspecified exceptions. The new laws also established a salvage permit system and restricted salvage under certain conditions.

Michigan's Department of State and Department of Natural Resources are the two state agencies most concerned with shipwreck protection. The passage of Public Act 184 of 1980 gave both departments responsibilities and authorities in the area of bottomland cultural resource management. Public Act 452, passed by the legislature in 1988, cleared up ambiguities in the 1980 law. It clarified language regarding recovery without a permit, stating that all forms of mechanical or other help are illegal in recovering loose artifacts from the bottom. It also created the "Underwater Salvage and Preserve Committee", defined the committee's functions and broadened its membership to include a representative from the Department of Commerce (which houses the state's tourist bureau) and four private citizens.

The law clarified the permit application process for the DNR and DOS. The law also requires the permit holder to submit a specific removal plan prior to beginning salvage. It increased penalties for unauthorized removal of shipwreck artifacts making such acts felonies. It also states that confiscation, condemnation and sale of any apparatus used in the violation of this act or any rule issued under it may occur. It is interesting to note that Michigan does not require a permit for archaeology on state-owned land except for the exploration for or excavation of aboriginal remains.

Public Act 452 of 1988 raised the amount of bottomland potentially available for preserves from 5 to 10 percent or 3,850 square miles. To date, Michigan has established ten underwater preserves containing historic shipwreck materials. The Act made it a felony to recover or destroy abandoned property with a fair market value of $100 or more. Confiscation of equipment used in violation of this act may occur. A clause was also added which protected the state from liability in the event of diving accidents. The state opposes sinking ships in the preserves (to enhance diving possibilities) because of the liability involved.

The state reserves the right to regulate exploration, surveying, and excavation on state land that contains historical or recreational sites. The state claims title to all abandoned property on Great Lakes bottomlands. It is important to note that the sport diving community of Michigan played a pivotal role in the proposed changes to the Aboriginal Records and Antiquities Act.

Submerged Cultural Resources Management Plans and Strategies:

The DNR is responsible for managing submerged lands and the DOS is responsible for managing historical cultural resources. Personnel from both departments consult on salvage permit applications, establishment of underwater preserves, and other issues. Michigan has no full-time positions dedicated to submerged resources management. DNR and DOS staff have added such duties to regular assignments.

David Cooper of the State Underwater Archaeology Program in Wisconsin expressed serious concern about this lack of funding in a draft statement on the future management of Wisconsin's underwater resources. While noting that Michigan's preserves were succeeding in attracting tourism dollars to local communities, he went on to add:

> "Unfortunately, because it has provided no funding, Michigan has been forced to conduct only *ad hoc* efforts to survey, develop, and protect these preserves, which are treated as state wilderness areas (designated protected areas with little or no state efforts at facilities development for visitors). The National Park Service has pointed out that simple designation of preserve areas without follow-up on-site management is of dubious benefit. As testimony to this Michigan has experienced a good deal of vandalism and destruction of her bottomland resources even within the preserves."

Michigan's preserve system itself is noteworthy because, instead of targeting individual ships for preserves, the state declares large areas of bottomland (100+ square miles) and all *historic* wrecks contained thereon as off-limits to

commercial salvage.

The state encourages the participation of sport divers in archaeological projects but provides no training in scientific, investigative methods for them. It provides access for sport divers to abandoned shipwrecks for recreation and study, and prohibits the removal of any artifacts from historic sites.

Recently, one of the local preserves initiated an amateur diver training program in underwater archaeological survey and recording techniques. The results of this program were reproduced in a booklet entitled *Diving into St. Ignace Past; An Underwater Investigation of East Moran Bay.* The publication of the booklet was made possible by cooperation between the Sea Grant Program at Michigan State University, the State Archaeologist's Office, and the Michigan Underwater Preserve Council.

The state has also carried out public educational initiatives; DNR has published *The Great Lakes Bottomland Resources*, outlining the law and salvage permitting process, and books on famous ships and lighthouses. DOS has circulated posters warning against illegal salvage.

The Michigan Underwater Preserve Council (MUPC), Inc., a private, non-profit, Michigan corporation not affiliated with any state agency, coordinates promotions of underwater preserves on regional and national levels. The MUPC created a uniform buoy and mooring system for all preserves. The MUPC also publishes literature about the preserves and assists in the organization of underwater archaeology courses for sport divers.

The brochures publicizing Michigan's program are easily the most attractive of any of the states. The 1993 MUPC booklet, *Diving Michigan's Underwater Preserves,* offers maps of nine of the ten state underwater preserves including locations for major wrecks along with addresses of dive shops and the local chambers of commerce. There is a listing of major underwater events held that year, as well as a hotline number to report thefts of shipwreck artifacts. The cost of the booklet was offset by allowing the local dive shops, charter operators, and motels serving the preserves to advertise in the brochure. These ads leave the impression that a potential underwater tourist will find plenty of support services if he chooses to dive in Michigan's preserves.

The state also has produced a handsome, glossy booklet entitled *Beneath the Inland Seas, Michigan's Underwater Archaeological Heritage* (1990). The publication contains a history of seafaring activities in the Great Lakes from pre-Colombian times to the present, as well as many full-page color photos and illustrations of ships, shipwrecks, and underwater archaeology. There is a discussion of Michigan's underwater laws, shipwreck management program and of general underwater preservation ethics. Taken together, the two

publications offer a potential diver easily digestible references for recreation and appreciation of Michigan's bottomland resources.

Lastly, Michigan has advertised the studies of two major research projects, the *Rockaway,* and the research and salvage on the *Regina* (sunk in 1913 in Lake Huron) which was rediscovered in 1986. In addition the Shipwreck Memorial Museum at Whitefish Point on Lake Superior was opened.

Sources:

Cooper, David
1989 *Memorandum: Underwater Abandoned Property and Submerged Cultural Resources Management in Wisconsin, November 27, 1989.* Underwater Archaeology Program, State of Wisconsin.

Cooper, David
1994 Personal communication, April 11.

Halsey, John R.
1990 *Beneath The Inland Seas: Michigan's Underwater Archaeological Heritage.* Bureau of History, Michigan Department of State, Lansing.

1994 Personal communication, April 10.

Michigan Underwater Preserve Council, Inc.
1993 *Diving Michigan's Underwater Preserves 1993.* Maritime Press, St. Ignace.

The Ontario Heritage Foundation
1992 *Preserving Great Lakes Underwater Heritage: A Review of Regulation and Policy.* Minutes of a Meeting Held in Windsor, Ontario, Canada, February 15-16, 1992. Toronto: The Ontario Heritage Foundation.

Partners for Livable Places and the National Trust for Historic Preservation
1988 *Historic Shipwrecks: Issues in Management.* Partners for Livable Places, Washington, D.C.

Vrana, Kenneth J. and Edward Mahoney, (ed.)
1993 *Great Lakes Underwater Cultural Resources: Important Information For Shaping Our Future, Proceedings of the Great Lakes Regional Conference on Underwater Cultural Resource Policy, February 3-4, 1993, Michigan State University.* Department of Park and Recreation Resources, East Lansing.

Vrana, Kenneth J. and Edward Mahoney (ed.).
1993 *Proceedings of the Great Lakes Regional Conference on Underwater Cultural Resource Policy February 3-4, 1993, Michigan State University* East Lansing, Michigan: The Department of Parks and Recreation Resources.

NORTH CAROLINA

Laws and Rules:

North Carolina has instituted an abandoned shipwreck management program within the state Department of Cultural Resources, Division of Archives and History under the authority of North Carolina General Statute 121, Article 3, Exploration and Salvage Rules and Regulations. The state claims ownership of all shipwrecks and submerged archaeological sites abandoned in state waters for more than 10 years. The state has the option (under Section 1009 of Statute 121) to designate "certain abandoned shipwrecks...as areas of primary scientific, archaeological or historical value to be excluded from commercial salvage."

The state regulates commercial salvage of abandoned shipwrecks and archaeological investigation and commercial salvage at historic shipwreck sites by means of an Underwater Archaeology Permit. Such permits require: 1) the preparation of research designs and professional reports, 2) application of archaeological methods, 3) access to the site for sport divers, 4) employment of qualified underwater archaeologists and conservators, and 5) the protection of the environment. Currently the state has two active salvage permits. The state allows sport divers unrestricted visitation to sites but prohibits the removal of artifacts without a permit. Artifacts recovered under permit may be granted, in part, to the permittee as proper compensation for his efforts in recovering such objects. The title to and ownership of these objects then is transferred to that permittee. The proportion is usually 75% to the salvor and 25% to the state.

Section 1010 of Chapter 121 Article 3 designates certain limited areas for the exclusive purpose of sport and hobby permit exploration and recovery under a short-term sport and hobby permit if deemed to be in the best interest of the state. Commercial salvagers, firms, corporations, and individuals seeking to recover and sell underwater archaeological materials, or otherwise make monetary profit with them shall not be issued a short-term sport and hobby permit. All or any part of the materials recovered under the short-term sport and hobby permit may be awarded by the department to the finder after inspection and study by the Archaeology Branch. In correspondence with the state it was learned that the hobby permits were last used in the late 1960's. Richard Lawrence of the N.C. Underwater Archaeology Unit, felt that the permit would only be issued today for things such as collecting bottles on the Cape Fear waterfront.

Submerged Cultural Resources Management Plans and Strategies:

The state has instituted an Underwater Archaeology Unit, (created by the General Assembly in 1967), with a permanent staff of 5 full time employees authorized to "conduct or supervise the surveillance, protection, preservation, survey and systematic underwater archaeological recovery of underwater materials."

The key to North Carolina's program is the State's ability to declare sites of primary archaeological or historical value off-limits to salvage. Research on these sites may be conducted with a permit, but all recovered artifacts must be "kept as an intact collection in an appropriate repository." So far, only one wreck, the USS *Huron*, has been designated of primary value. It is also the state's sole historic shipwreck preserve. However, ships deemed of primary historic value are not necessarily developed as preserves. The state has printed a small brochure for the Huron giving brief details of her design, career, and sinking. There is a map of the wreck's current location and condition, as well as directions to the buoys that mark the site.

During the mid-1980's, the state also named the Cape Fear Civil War Shipwreck District to the National Register. Mr. Lawrence stated it is an unwritten rule that wrecks on the National Register be afforded the status of primary archaeological value.

North Carolina has no diver training programs but has developed an eighth grade level educational program which begins with videos on maritime history and underwater archaeology and advances to maritime quiz bowls, reports on state shipwrecks, and even a project to identify a model mystery wreck.

The state currently has two salvage contracts in effect (the salvors with these permits have not yet found the wrecks they are looking for.) When asked how this wreck will be treated if and when it is located, Mr. Lawrence said his Department could not make a determination on whether it was a shipwreck of primary significance because no one has seen it. If it is found it will probably be salvaged. However, were it a blockade runner or other such obviously important wreck in terms of state and national history, they might effectively block its salvage by decree of the Secretary of Cultural Resources who oversees their program. He feels the language of their act gives the secretary a certain amount of leeway, and that it would stand legally were they to challenge a salvor in excavating a site that would "not be in the best interests of the state." The state issues, on average, two to three research permits a year.

Sources:

Lawrence, Richard
1994 Personal communication, N.C. Underwater Archaeology Unit, February 16.

North Carolina Department of Cultural Resources
1981 *Underwater Archaeology in North Carolina.* (brochure). North Carolina Department of Cultural Resources, Kure Beach.

1987 *USS Huron Historic Shipwreck Preserve.* (brochure). North Carolina Department of Cultural Resources, Kure Beach.

Partners for Livable Places and the National Trust for Historic Preservation
1988 *Historic Shipwrecks: Issues in Management.* Partners for Livable Places, Washington, D.C.

SOUTH CAROLINA

Laws and Rules:

It is the intent of the South Carolina Underwater Antiquities Act of 1991 (Article 5, Chapter 7, Title 54, Code of Laws of South Carolina, 1976) to "preserve and encourage the scientific and recreational values inherent in submerged archaeological historic properties and paleontological properties for the benefit of the people of the state." The act declares all submerged historic property that has remained unclaimed for fifty years or more, and paleontological property located or recovered from submerged lands, as property of the state. The South Carolina Institute of Archaeology and Anthropology is the custodian of archaeological materials and the South Carolina Museum Commission is the custodian of fossils. Any person desiring to remove or displace submerged archaeological historic property must apply for a license of which there are two types: 1) an Intensive Survey license to allow for survey of a specific area and 2) a Data Recovery license which permits excavation and data recovery (a data recovery permit is only issued after a successful Intensive Survey Permit). These licenses are subject to the standard criteria of scope, planning, competence, funding, etc.

South Carolina also issues a Hobby license for persons wishing to conduct "temporary, intermittent, recreational, small-scale search and recovery. Recovery must be by hand and must not involve mechanical devices or excavation. A hobby license holder is obligated to report all finds to the appropriate agency. No more than 10 artifacts a day may be collected from a shipwreck site. The hobby licenses are issued at $5.00 for 6 months, or $18.00 for two years. Out of state applicants pay slightly more.

Submerged Cultural Resources Management Strategies:

South Carolina employs a full time staff to administer its program in underwater archaeology. It has an active outreach program for sport divers with field training courses in underwater archaeology held every second month. Their department publishes a quarterly newsletter, *The Goody Bag,* which discusses recent finds and excavations, articles on shipbuilding, and identification of artifacts. It also advertises activities and programs put on by the Department. The most notable aspect of South Carolina's program, however, is its hobby diver permit.

While other states (e.g., California, Alabama) may issue hobby-type permits for recovery on specific sites, South Carolina is the sole state issuing a "blanket

permit" for hobby collectors which can be used anywhere in the state. In its inception, the program was designed as a way to enlist the sport diving community as collectors of useful archaeological data. Divers were supposed to record their finds with the Underwater Archaeology Division's Sport Diver Archaeology Management Program. This would not only establish a working relationship between the state and recreational divers, but also ostensibly foster a greater awareness of archaeological resources on state lands. However, a recent internal review of this program has raised questions about its viability, especially for Florida.

Deputy State Archaeologist, Christopher Amer, in a letter dated 2/11/94, summarized the program review of South Carolina's Sport Diver Archaeology Management Program (prepared by Robin L. Denson in January 1994). He reported that, despite recent improvements in their diver outreach program, approximately 60% of hobby licensed divers in South Carolina "never filed quarterly reports on their diving and collecting activities." Furthermore, "less than 10% of licensed divers have reporting records of 80% or higher," and only 6% provided adequate locations of where they made their finds. He said these statistics evidenced a need to "balance the education and inducements like working on state-run projects or educated divers running their own projects... with enforcement and penalties." He added, "those who comply with our law and have been through our training program are annoyed we are not busting those that disobey the law" for abusing that privilege.

Amer's letter additionally addressed underwater resource issues in Florida directly:

> "A program that works in South Carolina with a relatively small staff may not work in Florida unless it is drastically modified to take into account such factors as distance and size of staff....I am not convinced that a licensing program is the way to go....The ultimate goal of our program is to have enough of a constituency of licensed hobby divers to support abolishing licensed collecting in the state. You may well consider not licensing collecting but concentrate instead on an aggressive education program and voluntary compliance with the law with staff responding and visiting reported sites with, and naming sites after, the persons who report them. It's a lot easier on the administrators and the resources to start with no collecting than to try and change from licensed collecting which will be perceived as constitutional right once it is in a law."

He adds, " Our goal is to have all licensed hobby divers go through our program courses in the next few years. In those courses we discourage collecting and encourage acquisition and dissemination of information. "

Sources:

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1994a Deputy State Archaeologist for Underwater, South Carolina Institute of Archaeology and Anthropology, letter to Bureau of Archaeological Research, February 11, 1994, regarding: Sport Diver Archaeology Management Program (SDAMP).

1994b Personal Communication, March 16.

Denson, Robin L.
1994 *Final Report on Program Review of the [South Carolina] Sport Diver Archaeology Management Program.* Institute of Archaeology and Anthropology, Columbia.

South Carolina
Help Preserve South Carolina's Underwater Heritage (brochure), Institute of Archaeology and Anthropology.

TEXAS

Laws and Rules:

The Antiquities Code of Texas (Title 9, Chapter 191 of the Texas Natural Resource Code) and regulations in the Texas Administrative Code, Title 13, Cultural Resources, Part IV, Texas Antiquities Committee (recently renamed the Texas Historical Commission) Chapters 41 and 45 authorize the management of abandoned shipwrecks within a formally established program of the Texas Antiquities Commission. State law defines historic shipwrecks as "all pre-twentieth century shipwrecks." Historic Preservation Funds are available for the identification, evaluation and protection of historic shipwrecks. The Commission employs underwater archaeologists and uses its own research vessel and magnetometer in the field.

Submerged Cultural Resources Management Plans and Strategies:

The passage of the Antiquities Code of Texas and the formation of the Texas Antiquities Committee occurred in 1969 as a response to the discovery and unauthorized salvage in 1967 by an Indiana salvage company of three Spanish ships which had sunk in the Gulf of Mexico off the coast of Padre Island in 1554. Beginning in the early 1970s the Texas Antiquities Committee (recently renamed the Texas Historical Commission) began its own scientific excavations at the site. The site is now protected as part of the Padre Island National Seashore. In May, 1990, a major permanent exhibit about the shipwreck, sponsored by The Texas Antiquities Committee, opened at the Corpus Christi Museum. The Museum is about 75 miles from where the shipwrecks were excavated. The exhibit had been in the planning stages since 1981. At least three traveling exhibits preceded it beginning in 1977. The Texas Antiquities Committee sponsored the permanent exhibit which has since become a popular attraction and includes a special children's "discovery room" component.

Since the formation of the Texas Antiquities Committee (Texas Historical Commission) the State has regulated the commercial salvage of abandoned shipwrecks and prohibits commercial salvage on any historic shipwrecks. It regulates the scientific investigation of historic shipwrecks through the issuance of Antiquities Permits and approval of research designs. Only scientific archaeological projects are authorized. The state has access to conservation and curatorial facilities and to qualified materials conservators. It encourages the participation of sport divers during archaeological investigation but does not provide special training courses. The state provides access to sport divers to abandoned shipwrecks and places some restrictions on their activities at historic sites, forbidding any collecting of materials and unauthorized visitation at sites

undergoing permitted investigation. In terms of public education and outreach, Texas produces publications, slides, films and traveling exhibits focusing on maritime heritage and the cultural values associated with the state's historic shipwrecks.

The Texas Historical Commission has been very active in its exploration and shipwreck inventory program, using some of the most sophisticated technologies available to locate sites. The state has established no underwater archaeological preserves.

Sources:

Arnold, J. Barto, III, and B. Alsup
1992 A Children's Museum exhibit on the 1554 flota wrecks. *The International Journal of Nautical Archaeology*, 21(4):350-352.

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1992 Shipwreck! - the 1554 *flota* exhibit. *The International Journal of Nautical Archaeology,* 21(4):343-449.

Partners for Livable Places and the National Trust for Historic Preservation
1988 *Historic Shipwrecks: Issues in Management.* Partners for Livable Places, Washington, D.C.

Texas Historical Commission
1990 *Handbook for Archaeological Stewards.*

VERMONT

Laws and Rules:

Vermont has managed abandoned shipwrecks through the Division of Historic Preservation under its 1975 Vermont Historic Preservation Act, and using its directive guide, *Underwater Historic Preservation, A Guide to State Law and Permit Procedures for Divers in Vermont* (1983). The Vermont State Legislature placed title to all underwater historic properties with the State through passage of the Vermont Historic Preservation Act (Title 22 Vermont Statutes Annotated Chapter 14). This law also established the Division of Historic Preservation as the custodian of underwater historic properties. The law states that all underwater historic properties in Vermont waters belong to the State and that no one can conduct underwater field investigations without a permit from the Division for Historic Preservation. A permit must be obtained from the Division prior to any type of exploration or recovery operations that may remove, displace or destroy an underwater historic property and that superior title to all objects recovered shall be retained by the State unless and until they are released to the permit holder.

Historic Preservation Funds are available for the identification, evaluation and protection of historic shipwrecks, and the state employs on its staff underwater archaeologists to conduct locate, evaluate, inventory, interpret and otherwise protect historic wrecks. The state regulates commercial salvage of abandoned shipwrecks and the conduct of commercial salvage and archaeological investigation at historic sites. Through a two-tiered permitting system it conducts oversight of 1) reconnaissance activities and 2) data recovery. The state does not have access to conservation and curatorial facilities and thus avoids artifact retrieval whenever possible. Vermont encourages sport divers to take part in the scientific investigation of historic sites and restricts their activity at historic sites by prohibiting the collecting of any artifacts. The state discourages sport diver visitation at fragile wrecks. It credits sport divers with site discoveries in an effort to encourage them to report new findings and will begin developing programs to train them in archaeological techniques. The state engages in public education initiatives on the cultural values of historic shipwrecks through publications, lectures and exhibits.

Lands Lying Under Public Waters (Chapter 11, T. 29 § 403 - 407): Section 403-404, holds that state lands lying underwater may not be altered without prior application and approval. Board of Historic Sites (Chapter 7, T. 22 § 341 - 349), Section 341, affirms the board of historic sites will designate as an historical artifact any object of historical, archaeological, or paleontological interest found in, upon or under state lands or waters. Section 348 declares that removal of, or digging with the purpose of removing, an artifact designated historical is punishable by a fine of up to $1,000 and/or 2 years imprisonment.

Submerged Cultural Resources Management Plans and Strategies:

The 1975 legislation to preserve, protect and interpret the state's underwater historic resources did not include personnel or a budget. State-sport diver cooperation has been developed and the Champlain Maritime Society was founded in 1980. The Champlain Maritime Society is a not-for-profit, tax-exempt corporation, and has, in cooperation with the Division of Historic Preservation, carried out the underwater research program of the state of Vermont.

According to Giovanna Peebles, State Archaeologist, the Champlain Maritime Society is the "saving grace" of their program. She also cites the recently formed Underwater Historic Preservation Advisory Committee (an *ad hoc* group composed of dive shop owners, charter boat captains, city recreational staff and the City of Burlington's harbor master) as lending valuable support to their program. She stated attendance at the committee's meetings was good and that they were currently "making goal statements and writing grants."

In July, 1985 the Vermont Division of Historic Preservation established the Vermont Underwater Historic Preserves, a program designed to protect Lake Champlain's historic shipwrecks and enhance their educational and interpretative values. Three preserves have been designated, all within several miles of Burlington, Vermont: the *Phoenix,* the *General Butler*, and a coal barge believed to be the *A.R. Noyes.* A new preserve is scheduled for 1995. Individual brochures for each Preserve site are available from dive shops and other locations. The brochures provide historic information on the wrecks and on the Preserve system and offer diving and safety guidelines.

The Vermont Underwater Historic Preserves are not broad areas of protected bottomland that encompasses a number of shipwrecks, like those in Michigan. The Preserves are not legislatively mandated and there are no formal regulations.

Vermont attempts to educate its diving community about archaeological sensitivity by holding informal dive instructor classes at the four major dive shops in the state. The state archaeologist considers public education as a top priority of the program and efforts to expand the diver outreach are planned.

The Lake Champlain Maritime Museum has conducted extensive underwater archaeological surveys since the 1980s. Some of their funding is from the Vermont State Legislature.

The state of Vermont recently concluded a successful prosecution of an Indiana diver collecting artifacts from the site of a Revolutionary War wreck. The diver had originally represented himself as an interested maritime historian and had been provided maps of the wreck from state files. Peebles stated the diver tried to fight the legal action by claiming the artifacts were "isolated finds." However, establishing the diver's prior knowledge of the site was instrumental in convincing the judge to agree with the prosecution. The judge imposed a $2,500 fine for restitution and a $1,000 criminal fine. The state law did not allow for confiscation of his property.

Sources:

Partners for Livable Places and the National Trust for Historic Preservation
1988 *Historic Shipwrecks: Issues in Management*. Partners for Livable Places, Washington, D.C.

Peebles, Giovanna N.
1994 Personal communication, March 29.

Vermont Department of State
1982 *Vermont Underwater Historic Preservation: A guide to the state law and permit procedures for Divers in Vermont*. Agency of Development and Community Affairs.

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1987 *An introduction and resource guide to underwater archaeology in Vermont*. Division of Historic Preservation.

WISCONSIN

Laws and Rules:

In 1988, the Wisconsin State Historical Society started a state underwater archaeology program as part of new state and federal efforts to protect and manage submerged cultural resources in Wisconsin. Wisconsin Statutes, 44.47 *et seq.*, 15.707, 29.05 (1d) creates a program for the preservation, management, and use of submerged cultural resources. The bill authorizes the Wisconsin Historical Society and Department of Natural Resources (DNR) to designate certain areas as bottomland preserves and regulate the management, preservation, recreational development, access and use of such preserves. The historical society and DNR may also promulgate rules for the protection of submerged cultural resources and objects removed from underwater archaeological sites. The state law creates stricter penalties for those who damage or destroy underwater archaeological and historical sites on state-owned lands (including the bottoms of the Great Lakes).

The law created a 16 member submerged cultural resources council to advise the Historical Society and DNR on the submerged cultural resources program, make recommendations on the creation and management of bottomland preserves and, upon request, review certain application for archaeological permits.

In 1990, a Draft Policy was prepared for administering Section 44.47 as it relates to underwater sites. The purpose was to help administer the act, and to make special provisions for underwater archaeological resources and the people who use them. The draft policy addresses issuance of underwater field archaeology permits and the custody of artifacts from underwater archaeological sites on public lands. Permits are issued by the State Historical Society. The permit system enables the state to monitor archaeological activities. The State issues three types of permits: (1) Survey/Excavation permits - issued to qualified individuals for the conduct of field archaeology; (2) Recovery permits - issued only in situations of non-archaeological recovery of artifacts from an archaeological site. This may include removal of artifacts by sport divers, amateur archaeologists, commercial salvors, dredgers, or construction contractors; and (3) Isolated Finds Recovery permits - to recover an artifact not part of an archaeological site, which would include isolated ship's anchors, disarticulated structural members (scattered timber) or isolated artifacts. The state reserves to itself the title to all objects found and data gathered in field archaeology on state sites. A permit may name a custodian other than the historical society but the title is reserved to the historical society as trustee for the state.

Act 269 of the 1991 Assembly provided for the creation of a preserve system based loosely on Michigan's program. It established a Preserves Council consisting of representatives from the State Historical Society, DNR, and Sea Grant, as well as sport divers, museum staff and four legislators (one from each side of the aisle from both the State House and Senate) to advise on management issues. The inclusion of members of the legislature appears to be unique to Wisconsin. David Cooper, of the Underwater Archaeology Program, said that through their participation, the legislators have become knowledgeable on the issues and are able to lend political weight to their program. The members were chosen on the basis of their representing an area having many submerged cultural resources, or of their sitting on a committee involved in oversight of the state's program.

The most recent legislative addition, Assembly Bill 91, was passed in 1994. This bill addresses underwater preserve management by creating several administrative positions including; a preserves coordinator, law enforcement personnel (marine police), and a grant program to fund shipwreck surveys.

Submerged Cultural Resources Management Plans and Strategies:

Wisconsin employs a full-time underwater archaeologist. This archaeologist is required to conduct field work and publish the results annually. He has trained a cadre of sport divers as volunteer technicians who assist him in the fieldwork. The information from the fieldwork is shared with sport divers through publications. The Wisconsin Historical Society, the official historic preservation agency of the state, works to inform sport divers of state laws that protect submerged cultural resources. Wisconsin Department of Natural Resources (WDNR), responsible for the management of state bottomlands, and Wisconsin Underwater Archaeology Association (WUAA), a private, non-profit organization of sport divers and maritime historians, are currently working together to develop a management strategy to protect submerged cultural resources.

Though they are authorized to do so, Wisconsin has not yet created any underwater preserves. Instead, they have concentrated on creating a management infrastructure to ensure that any preserves, when created, will benefit from professional oversight and on-site enforcement of their regulations. Wisconsin is particularly concerned with avoiding the types of problems Michigan experiences in its preserves. Before the passage of Assembly Bill 91, Mr. Cooper had pointed out (memo dated 11/89) that neighboring Michigan was experiencing a good deal of vandalism inside their preserves for lack of management ability. He concluded, "clearly there is a need for improved on-site management in these areas, as well as a need for a campaign of public education coupled with increased law enforcement. "

Mr. Cooper stated that the creation of their state underwater preserves will have to hinge upon National Register quality surveys. Additionally, while there are already several candidate areas in mind, he was unsure whether the preserves will be for individual wreck sites or for groupings of wrecks. He added that the preserves would probably follow the lead of Florida and Vermont in placing buoys on the ships and providing brochures and underwater guides for interpreting the wreck site. The treatment of the preserves on land will have to depend on extant facilities. Preserve exhibits might be placed in a local museum and information displayed in local dive shops.

Wisconsin is also concerned with the potential effects of trying to balance salvage and recreational diving. According to Cooper "any permitting of commercial salvage of abandoned property without due concern for its recreational value can undermine and discredit the state's broader efforts at preserving bottomland resources."

Wisconsin has considered a policy allowing for an isolated finds permit. However, Cooper expresses reservations about such a system as it creates problems in identifying what exactly constitutes a site (some of which are scattered but definitely part of a single entity), and that excluding tools will not prevent serious damage to sites. He feels the ability to salvage an artifact solely by hand is "hardly a definition of archaeological non-significance."

In 1988, nearly 700 shipwrecks in state waters were inventoried through literature research, and twelve of these were subsequently verified by field survey.

Sources:

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Cooper, David
1994 Personal Communication, April 8.

Partners for LivablePlaces and the National Trust for Historic Preservation
1988 *Historic Shipwrecks: Issues in Management.* Partners for Livable Places, Washington, D.C.

The Ontario Heritage Foundation
1992 *Preserving Great Lakes Underwater Heritage: A Review of Regulation and Policy.* Minutes of a Meeting Held in Windsor, Ontario, Canada, February 15-16, 1992. Toronto: The Ontario Heritage Foundation.

Vrana, Kenneth J. and Edward Mahoney (ed.).
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1993 *Great Lakes Underwater Cultural Resources: Important Information for Shaping Our Future.* Proceedings of the Great Lakes Regional Conference on Underwater Cultural Resource Policy, February 3-4, 1993, Michigan State University.

OTHER U.S. STATES WITH LEGISLATION OR MANAGEMENT STRATEGIES USEFUL FOR FLORIDA

The U.S. states previously summarized were all considered to be in the forefront of submerged cultural resources management. The following U.S. states, while not leaders in underwater resource planning, have program components that would be relevant for drafting Florida's plan.

ALABAMA

Laws and Rules:

There are five pieces of legislation which pertain directly or indirectly to Alabama's management of submerged cultural resources. These are: Maritime Legislation (proposed as of March 1994), the Alabama Antiquities Act, the Alabama Burial Act, and the Maritime Search and Identification Permit.

Under current law, artifacts from shipwrecks are considered property of the state and are managed and preserved under the jurisdiction of the Alabama Historical Commission. The proposed Maritime Law would clarify current law and practice by providing that artifacts, treasure troves, and articles contained in waters or submerged lands of the state would be declared as "state cultural resources" and would be regulated and protected by the Alabama Historical Commission. The Commission would be designated as the official custodian of those resources and would be required to develop a management plan for them.

The Department of Conservation has charge of other matters related to state bottom lands. Act 85-53 "authorizes the State Commission to contract for the excavation of sunken ships lying within navigable waterways of the State." These contracts allow "fair compensation to the salvager, and owner of the private land

where applicable, in terms of a percentage of the reasonable cash value of the objects recovered, or, at the discretion of the Commission, a fair share of the objects recovered." The state not only places limits on commercial salvage of historic shipwrecks but on scientific research as well. Sport divers are prohibited from removing any materials from historic shipwreck sites, but can take isolated finds. The state asserts ownership of 100 percent of all artifacts and 50 percent of all gold and silver.

Submerged Cultural Resources Management Plans and Strategies:

Should the proposed Maritime Legislation become law, the Alabama Historical Commission would be designated as the official custodian of those resources and would be required to develop a management plan for them.

Alabama's Underwater Cultural Resources Act authorizes the Alabama Historical Commission to restrict commercial fishing in the immediate vicinity of submerged cultural resources. It is well known that snagged nets can, and often do, damage wreck sites. Alabama appears to be the only state with such a provision in its law.

Sources:

Partners for Livable Places and the National Trust for Historic Preservation
1988 *Historic Shipwrecks: Issues in Management.* Partners for Livable Places, Washington, D.C.

Rhinehart, Greg
1994 Personal Communication, Alabama Historical Commission, February 24.

CALIFORNIA

Laws and Rules:

The State Lands Commission is the California agency entrusted with the responsibility for the preservation, protection and management of the State's 3.5 million acres of submerged lands. The Commission administers the California Shipwreck and Historic Maritime Resources Program under Chapter 732 of 1989, (Public Resources Code Sections 6309, 6313, 6314). These guidelines describe the Program's permitting process for conducting salvage or research activities on both historic and non-historic shipwrecks. Permits granted under these authorities are subject to the California Environmental Quality Act. Removal by sport divers of objects associated with abandoned shipwrecks from the seabed is subject to penalty. Recreational permits for activities using small hand tools on "non-significant sites" may be issued by the Commission. The Commission does not include historic shipwrecks within its comprehensive historic preservation plan.

Submerged Cultural Resources Management Plans and Strategies:

To implement the law, the Commission's Executive Officer established the Submerged Cultural Resources Unit. Its initial tasks were to develop a Policy Statement and formulate Guidelines for applications for both commercial and scientific permits. The Unit has compiled an inventory of California shipwrecks, and has written a guide for sport divers, entitled "Historic Shipwrecks in California Waters." It outlines the goals of the shipwreck program, provides an overview of California shipwreck law, advises how to report an accidental discovery of a shipwreck, and encourages sport divers to locate and report shipwrecks. To educate sport divers about the need to protect and conserve archaeological and historic sites, the Unit regularly talks to dive clubs, participates in diver education programs, and writes articles for and letters to dive publications.

The person in charge of the Submerged Cultural Resources Unit at present is Peter Pelkofer, Senior Counsel, State Lands Commission. He is a lawyer and a diver. He was solely responsible for drafting Senate Bill 1453. He stated that there was no serious opposition to the bill because few people are very interested in this issue in the State. Pelkofer met with sport divers and persuaded them of the need for the bill. There is also legislation which protects wrecks by keeping their locations confidential as a matter of public interest. Other state agencies which deal with archaeology have the same provisions. Normally site information would have to be disclosed under the provisions of The Public Records Act and Disclosure Acts but archaeological site locations are exempt.

The Submerged Cultural Resources Unit has no operating budget for a program. Three people, including Pelkhofer, are involved with these issues: one in Environmental Planning who is an amateur historian and another in the same office who is a trained archaeologist. Six or seven people in the State Lands Commission are certified divers, including Pelkofer.

The Submerged Cultural Resources Unit follows the guidelines set down by the Abandoned Shipwreck Act. There are 1,600-1,700 shipwrecks listed in the State's inventory, although many of these aren't of historical interest. The Submerged Cultural Resources Unit has a boat and diving equipment.

Over the past few years the state has had a jurisdictional dispute with the Federal Government over territorial waters. A number of these issues arose as a result of a salvor's application for a license to search for one or more historic wrecks located in Drake's Bay.

In September 1994, the State opened its first underwater shipwreck park, "The Historic Barges of Emerald Bay", in Lake Tahoe. The park is the result of a cooperative venture between the California Department of Parks & Recreation, the City of Los Angeles Department of Recreation & Parks, and the Los Angeles Maritime Museum. There are also many natural underwater parks operated by the Department of Parks and Recreation. The cultural resources found in such parks are all protected by state law. The Submerged Cultural Resources Unit maintains a close working relationship with the Head of the Cultural Resource Section in the Parks.

Sources:

California Department of Parks & Recreation, the City of Los Angeles Department of Recreation & Parks, and the Los Angeles Maritime Museum. *Invitation to the opening of The Historic Barges of Emerald Bay, California's First Underwater Shipwreck Park", Friday September 23, 1994.*

California State Lands Commission *Historic Shipwrecks in California Waters: including navigable rivers, lakes and coastal waters to the three-mile limit and surrounding offshore islands. A Guide for Sport divers.* (brochure) Submerged Cultural Resources Unit, Sacramento.

California State Lands Commission *California State Lands Commission Policy for The Management of Submerged Cultural Resources.* Submerged Cultural Resources Unit,

Sacramento.

California State Lands Commission
1992a *General Application Guidelines for Marine Salvage Permits*. Submerged Cultural Resources Unit, Sacramento.

1992b *Discovery and Removal of Historically Significant Objects and Materials from State Submerged Lands*. Submerged Cultural Resources Unit, Sacramento.

Pelkofer, Peter
1994 Personal communication, Senior Counsel, State Lands Commission, March 25.

ILLINOIS

Laws and Rules:

Illinois' Department of Transportation controls commercial salvage on state lakes and the Illinois State Museum grants archaeological permits. Neither agency has issued permits for shipwrecks. The Aboriginal Records Act (IL. Rev. Stat. 1979; Ch. 127, Sec. 133c et seq.) and the Canals and Waterways Act (IL. Rev. Stat. 1979; Ch. 19, Sec. 52 et seq.) authorize the management of Illinois' abandoned shipwrecks. The state's approach has been consistent with its philosophy of uniform policy for all historic resources.

The state has additional statutes intended primarily for cultural resources found on land, but which might be also applied to underwater sites. These are: Archaeological and Paleontological Resources Protection Act (Act 3435), Historic Resources Preservation Act (Act 3420), the Human Skeletal Remains Protection Act (Act 3440), and the Historical Sites Listing Act (Act 3415).

The Archaeological and Paleontological Resources Protection Act (Act 3435) is the key regulatory framework for submerged cultural resources protection in the State. The Act specifically includes shipwrecks and grants the state the right to regulate activities that may affect those resources. The act also enables the state to establish a permit system for exploration and excavation of archaeological sites. Certain state agencies and activities are exempt from permit requirements.

Sport divers are allowed unrestricted access to abandoned shipwreck sites but are not permitted to remove any items. In theory, the state retains ownership of excavated materials.

Submerged Cultural Resources Management Plans and Strategies:

The state cooperates with volunteer groups such as the Chicago Underwater Archaeological Society (CUAS) which has made tremendous contributions to the protection of shipwrecks on Illinois bottomlands. This non-profit organization managed by volunteers has documented several important sites and created site plans for diver orientation. CUAS also monitors sites and reports vandalism and thefts. In general, the State hopes to emulate Michigan's system of underwater parks and its excellent guidebooks. There has been at least one specific proposal to establish an underwater archaeological preserve near the city of Chicago. To date no underwater parks proposal have been created.

Illinois has some unique submerged cultural resources. In 1919/20 following the end of World War One, the *UC-97*, a German U-Boat captured as a war prize, was taken on a tour of the Great Lakes by the U.S. Navy. At the completion of the tour the submarine was deliberately sunk by the Navy in accordance with an agreement among the Allies. The submarine was relocated, by divers in the late 1980s, off Chicago, and found to be relatively intact, in deep water. This submarine is one of the few surviving World War One German U boats.

Illinois is state in which the first constitutional challenges to the Abandoned Shipwreck Act of 1987 were mounted. The cases, which began in 1989, are the *Seabird* and *Lady Elgin* salvage litigations. These two shipwreck sites are near Chicago. As part of the defense, the National Trust for Historic Preservation prepared an *amicus curiae* brief which argued in support of the constitutionality of the Abandoned Shipwreck Act. A number of national archaeological societies "signed on" to the National Trust's brief, thus demonstrating the commitment of archaeologists and historic preservationists to fight to preserve gains obtained by the Act. In 1993 the Abandoned Shipwreck Act was found to be constitutional by Judge Illona D. Rovner in a ruling on the *Seabird* case.

Sources:

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1994 Personal Communication, Chief Archaeologist, February 25.

Halsey, John R.
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MAINE

Laws and Rules:

State-owned Objects and Specimens (S.P. 489 - L.D. 1573 - Chapter 13 of Title 27; Subchapter II, 1969), Section 371-373 grants title to the Maine State Museum in Augusta, as trustee for the state, to all archaeological sites and objects found in or under state lands and waters. Permits are required to alter any historic site or remove objects from it. Section 374 authorizes the state to issue permits and sets forth requirements and limitations regarding excavation of any site. Unauthorized removal is punishable by a fine up to $500 for each item. .

The State Museum and Historic Preservation Commission have jurisdiction over the management of shipwrecks under Maine's Archaeological Heritage Preserve Act, enacted in 1981.

Submerged Cultural Resources Management Plans and Strategies:

Historic Preservation Funds can be made available for the discovery, analysis and protection of historic shipwrecks, and the state employs underwater archaeologists on its cultural conservation staff to conduct these activities. The state regulates commercial salvage of abandoned shipwrecks and the scientific investigation of historic shipwrecks through an excavation permitting process. Maine prohibits the commercial salvage of historic shipwrecks and retains ownership of all recovered objects. The state has access to conservation and curatorial services with qualified staff. The state does not provide access for sport divers to abandoned shipwrecks for recreational exploration and forbids the taking of any historical materials. Maine encourages the inclusion of volunteer sport divers on archaeological projects, but provides them no training in scientific study or excavation methods.

The state's greatest difficulty lies in determining site eligibility for the National Register. Most of the 500 shipwreck sites on the inventory were listed on the basis of archival research, not inspection. Maine is well-positioned to predict the location of shipwrecks along its 3,000-mile coastline, but lacks the resources to mount expensive remote-sensing surveys.

Sources:

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Bradley, Robert
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Maritime Archaeological and Historical Research Institute (MAHRI)
1985 *MAHRI Newsletter* 2(1):1-3.

Partners for Livable Places and the National Trust for Historic Preservation
1988 *Historic Shipwrecks: Issues in Management.* Partners for Livable Places, Washington, D.C.

MASSACHUSETTS

Laws and Rules:

In 1973, the Massachusetts Board of Underwater Archaeological Resources was established under Massachusetts General Law Chapter 6, sections 179-180, and Chapter 91, Section 63. The Board is charged with the responsibility of encouraging the discovery and reporting, as well as the preservation and protection, of underwater archaeological resources. Generally, those resources are defined as abandoned property, artifacts, treasure trove, and shipwrecks. The State holds title to these resources and retains regulatory authority over their use. The Board may however waive its rights to jurisdiction over isolated finds. The isolated finds shall be reported to the Board, and if the isolated find is not of major historical value, the Board may relinquish all right, title and interest in the find. The Board's jurisdiction extends over the land and coastal waters of the state.

The Board has the authority to issue permits. Two types of permits are issued: 1) Reconnaissance permits - for the non-destructive inspection and identification of underwater archaeological resources with minimum site disturbance; and 2) Excavation permits - to uncover or remove underwater archaeological resources through the use of disruptive investigation techniques. Permittees range from individual sport divers to corporate ventures to museums.

In Section 180 of Chapter 6, the Board issues permits to qualified persons for exploration, recovery and salvage of underwater objects, with the condition that the board supervise the investigation, excavation and preservation. Under permit, a site is protected from unauthorized removal or salvage of material by anyone other than the permittee or his representatives. The permittee is entitled to 75% of the recovered material; the remaining 25% belongs to the state. The Board may, however, exempt an underwater archaeological resource from the permit process because of it location, condition, history, or resource value. The intent of creating an exempt shipwreck site is to preserve such sites for the continued enjoyment of the recreational diving community. There are currently 40 exempted shipwrecks in Massachusetts.

Submerged Cultural Resources Management Plans and Strategies:

The Massachusetts Board of Underwater Archaeological Resources is the trustee of the Commonwealth's underwater heritage, promoting and protecting the public's interest in these resources for recreational, economic, environmental and historical purposes. The Board currently has funding for one position, a (Director), with limited state and federal (CZM grant) support for travel. There is no funding for additional staff, Board Member expenses, contractors, consultants, paid interns, or equipment. At one time, the Board had a contracted on-site archaeological field observer but this position no longer exists.

Sources:

Massachusetts
List of Exempted Shipwrecks. Executive Office of Environmental Affairs, Board of Underwater Archaeological Resources.

Mastone, Victor T.
1994 *Profile: Board of Underwater Archaeological Resources.* Letter from the Director, Commonwealth of Massachusetts, Executive Office of Environmental Affairs, Bureau of Underwater Archaeological Research, March 16.

NEW HAMPSHIRE

Laws and Rules:

Since 1981 the laws of New Hampshire (Revised Statutes Annotated or RSA 227-C:7-8) have contained provisions for the management of artifacts on state lands and beneath state waters.

In RSA 227-C:7, the state asserts its obligation to protect historical remains on state property. The state may grant permits for the study or recovery of discovered remains according to standards set by the Division of Historical Resources (DHR). The exclusive right to apply for a permit to investigate a previously unrecorded historical resource belongs to the discoverer until he or she waives that right. A permitted investigation requires specifically trained personnel, but they may be team members other than the permit holder.

RSA 227-C:8 concerns the custody of historical resources recovered from state property. A discoverer may keep isolated finds when those finds are reported to the DHR. A discoverer of a previously unrecorded historical resource is entitled to at least 25% of the material recovered from that resource when he or she participates in a permitted investigation. The custodian of such materials must preserve, conserve, restore, catalogue, and record them according to DHR standards; and can dispose of them only with written approval from the DHR. Violations of these statutes is a misdemeanor.

Submerged Cultural Resources Management Plans and Strategies:

In July, 1990, a planning document called a "historic context" was written as the blueprint for shipwreck preservation in New Hampshire. Goals and priorities for this historic context include: (1) the establishment of a system of underwater preserves; (2) the implementation of an evaluative survey and inventory of shipwreck sites under state waters; (3) the creation of a system for inventorying and evaluating isolated finds already recovered from beneath state waters; (4) a system for reporting future isolated finds and (5) re-institution of the contractual agreement between the DHR and the Institute for New Hampshire Studies at Plymouth State College which allows for, among other things, a timely response to fishermen and others who discover or accidentally recover underwater historical resources.

Sources:

New Hampshire Division of Historical Resources
Preserving Abandoned Shipwrecks in New Hampshire Waters. (brochure). New Hampshire Division of Historical Resources, Concord.

Potter, Jr., Parker B. and David Switzer
1990 *Historic Context 65: Shipwrecks in New Hampshire Waters, 1620-1940.* Technical Paper in Historic Preservation, Number 1.

Potter, Parker
1994 Personal Communication, Division of Historical Resources, February 22.

NEW YORK

Laws and Rules:

New York has enacted laws and regulations and has formally established an abandoned shipwreck management program under Education Law Section 233 (1947, amended 1958). The law asserts that the New York State Museum is the official custodian of underwater properties not placed in other public jurisdiction. The Office of General Services has jurisdiction over submerged state lands. New York prohibits commercial salvage at historic sites, sanctioning only scientific investigation. State law requires that a permit be approved and issued by the Education Department for research on any state lands. The Office of Parks, Recreation and Historic Preservation assumes an advisory role in the review of federal and state actions with potential impact on cultural resources.

Section 233 Permits for underwater archaeological excavations must be obtained from the N.Y. State Education Department with approval from the Commissioner of General Services whose office is with the Executive Department, Albany. The State holds title to all artifacts and property, and determines the final disposition of all artifacts.

The state retains ownership of all archaeological materials brought up in the course of scientific studies on historic shipwrecks. The state allows sport divers access to abandoned wrecks, restricts their access at sites being studied under scientific research permits unless they are approved participants, and forbids collecting of artifacts at historic sites. Permitted research and excavation at historic shipwreck sites requires 1) the preparation of research designs and professional reports, 2) the application of archaeological methods, 3) the employment of qualified underwater archaeologists (the state does not retain one on its staff), and materials conservators, and 4) the preservation of artifacts and materials recovered. The state retains ownership of all such materials. New York conducts public education and outreach on underwater archaeological projects through the State Museum. Museum staff hold and attend workshops dealing with maritime heritage and archaeological values associated with historic wrecks. Its anthropology unit publishes informational literature on the state's underwater research permitting system and emphasizes technical and scientific findings.

Submerged Cultural Resources Management Plans and Strategies:

Because of its importance in American colonial history, Lake George has been a focal point for underwater amateur archaeology for many years. The most successful non-profit organization involved in underwater research in the state is Bateaux Below Inc.. In September 1993, two Submerged Heritage Preserves were opened in Lake George (The *Forward* and the *Wiawaka Bateaux Cluster* site). The *Wiawaka* site consists of seven bateaux (small boats) shipwrecks which date from the Seven Years War (1756-63). The sites are jointly managed by a number of state and private organizations. A campaign was begun to educate divers about the sensitivity of the sites through the distribution of pamphlets in area dive shops. In 1993, the *Wiawaka Bateaux Cluster* site was listed on the New York Register of Historic Places. In August 1994, a third Submerged Heritage Preserve was opened in Lake George. This site is the well preserved remains of a Radeau ("Land Tortoise") a uniquely designed warship which was deliberately scuttled by the British in 1758.

Submerged cultural resource activity in New York state is concentrated in the Lake George area. There has been some limited research conducted in Lake Ontario, and significantly less in Lake Erie and the Atlantic coast region. The organized effort of groups such as Bateaux Below Inc. have had the most effect in the State.

Sources:

Education Law Sec. 233 (1947, amended 1958)

Partners for Livable Places and the National Trust for Historic Preservation
1988 *Historic Shipwrecks: Issues in Management.* Partners for Livable Places, Washington, D.C.

The Ontario Heritage Foundation
1992 *Preserving Great Lakes Underwater Heritage: A Review of Regulation and Policy.* Minutes of a Meeting Held in Windsor, Ontario, Canada, February 15-16, 1992. Toronto: The Ontario Heritage Foundation.

Vrana, Kenneth J. and Edward Mahoney (ed.).
1993 *Proceedings of the Great Lakes Regional Conference on Underwater Cultural Resource Policy February 3-4, 1993, Michigan State University* East Lansing, Michigan: The Department of Parks and Recreation Resources.

Vrana, Kenneth J. and Edward Mahoney, (eds.)

1993 *Great Lakes Underwater Cultural Resources: Important Information For Shaping Our Future, Proceedings of the Great Lakes Regional conference on Underwater Cultural Resource Policy, February 3-4, 1993, Michigan State University.* Department of Park and Recreation Resources, East Lansing.

OHIO

Laws and Rules:

Ohio has passed laws to address the issues of the Abandoned Shipwreck Act. In December 1991, House Bill 264 was passed to establish a method of managing underwater cultural resources in the Ohio waters of Lake Erie. The law recognizes State responsibility for abandoned shipwreck and aircraft sites in the Ohio waters of Lake Erie. The Ohio Department of Natural Resources (DNR) is the agency charged with implementing the provisions of the bill, but the Ohio Historical Society (OHS) is responsible for evaluation of the historical and archaeological value of submerged resources.

The Act authorizes the Director of the Department of Natural Resources, with the approval of the Director of the Ohio Historical Society, to adopt rules establishing Lake Erie Submerged Lands Preserves for any areas of submerged lands in Ohio's portion of Lake Erie that contain a single watercraft or aircraft constituting abandoned property, or other features of archaeological, historical, recreational, ecological, environmental, educational, scientific, or geological value.

Submerged Cultural Resources Management Plans and Strategies:

Part of the management program of Ohio consists of establishing Submerged Land Preserves wherein the recovery of objects will be prohibited, except for archaeological research. The Preserves can be no larger that 300 square miles and their combined area cannot exceed ten percent of Ohio's total underwater land area. When proposing a preserve, the DNR and OHS must consider such criteria as whether creating the preserve is necessary to protect abandoned property or significant underwater features having archaeological, historical, recreational, educational or scientific value.

The move to establish one or more underwater preserves in Ohio began with a study done in 1987 which identified at least thirty-three shipwrecks in an area extending between Cleveland and Vermilion, Ohio, and extending north to the international boundary with Canada. Subsequent field surveys determined that shipwrecks in these boundaries were worthy of protection as important historical artifacts.

The law encourages public participation in the decision making process by creating a seven member Submerged Lands Advisory Committee made up of representatives of the DNR, Historical Society, recreational diving groups, commercial salvors, historians, archaeologists, and other interested parties. The

Advisory Committee may recommend action in determining the boundaries of preserve areas, the issuing of salvage permits, and the creation of policies and rules needed to implement the provisions of the bill.

The Act requires any person proposing to recover, alter, salvage, or destroy any abandoned property located on, in, or in the immediate vicinity of and associated with a submerged watercraft or aircraft in Ohio's portion of Lake Erie to obtain a permit from the DNR Director, with the approval of the OHS Director. No permit may be approved in a Lake Erie Submerged Lands Preserve unless the operation is for historical or scientific purposes or will not adversely affect the historical, cultural, recreational, or ecological integrity of the preserve as a whole. A permit is not required to recover, alter, salvage, or destroy abandoned property located outside the Lake Erie Submerged Lands Preserve. The state owns all abandoned property that is submerged in Ohio's portion of Lake Erie with a few exception.

The Act provides for penalties related to the illegal removal of objects. On a third offense, the conviction requires the seizure and sale of all dive gear, boats, or any other tools or equipment used in the illegal removal of artifacts. Funds from the sale of equipment confiscated from illegal recovery operations will be credited to the Lake Erie Submerged Lands Preserves Fund. These funds are to be used to enhance the effectiveness of the management program and to assist in the establishment and maintenance of preserves. Emphasis is on educational programs, better recreational access to dive sites, the development of archaeological and historical research projects, and the support of volunteer efforts to document Ohio shipwrecks.

The Ohio program follows the Michigan example by encouraging the participation of recreational divers in the location and non-destructive documentation of historic shipwrecks, and in the establishment and management of underwater preserves. Ohio recognizes the right or privilege to engage in recreational diving. Through cooperative regional educational efforts, such as the *Association for Great Lakes Maritime History Diver Manual*, Ohio encourages divers to take a non-destructive approach to historic shipwrecks.

Sources:

Runyan, Timothy J.
1990 Shipwreck Legislation and the Preservation of Submerged Artifacts. *Case Western Reserve Journal of International Law* 22(1):31-45.

The Ontario Heritage Foundation
1992 *Preserving Great Lakes Underwater Heritage: A Review of Regulation and Policy*. Minutes of a Meeting Held in Windsor, Ontario, Canada, February

15-16, 1992. Toronto: The Ontario Heritage Foundation.

Sea Grant.
1982 *Sportdiver's Handbook for Historic Shipwrecks: Tools and Techniques*. Durham, N.H.: Northeast Marine Advisory Council,, pp. 6-8.

Vrana, Kenneth J. and Edward Mahoney (ed.).
1993 *Proceedings of the Great Lakes Regional Conference on Underwater Cultural Resource Policy February 3-4, 1993, Michigan State University* East Lansing, Michigan: The Department of Parks and Recreation Resources.

Vrana, Kenneth J. and Edward Mahoney, (eds.)
1993 *Great Lakes Underwater Cultural Resources: Important Information For Shaping Our Future, Proceedings of the Great Lakes Regional conference on Underwater Cultural Resource Policy, February 3-4, 1993, Michigan State University.* Department of Park and Recreation Resources, East Lansing.

U.S. TERRITORIES:

PUERTO RICO

Laws and Rules:

Act No. 10 concerning the management of submerged cultural resources was passed in 1987. The Act did several things. First, it declared all underwater archaeological sites and resources in the inland and coastal waters under the jurisdiction of the Commonwealth of Puerto Rico as places of public interest. Second, it created the Council for the Conservation and Study of Underwater Archaeological Sites and Resources (the Council of Underwater Archaeology), attached to the Institute of Puerto Rican Culture. Third, it regulated the procedures to be used in executing an operation for the study, exploration, excavation, recovery or salvage of an underwater archaeological site or resource, and to fix penalties and appropriate funds.

Submerged Cultural Resources Management Plans and Strategies:

A small laboratory for the conservation and restoration of artifacts has been developed. There has been ongoing development of an inventory of submerged cultural resources and plans have been made to further survey the main island and the waters around other smaller neighboring islands. There have been a series of ongoing administrative problems at the Institute of Puerto Rican Culture which have prevented the Council of Underwater Archaeology from functioning adequately to further develop management strategies.

The Council of Underwater Archaeology has considered declaring at least one historic shipwreck as a "National Underwater Park" and eligible for the National Register. They are interested in developing a model similar to that of Florida's underwater archaeological preserves. This has not yet occurred, however. Educational and outreach programs which were under consideration as part of a larger management plan also remain unimplemented.

Sources:

Bonet, Walter A. Cardona
1990 Letter to Roger Smith, May 28.

Bonet, Walter A. Cardona
1991 Letter to Roger Smith, December 2.

TRUST TERRITORIES OF THE PACIFIC (AND FORMER TRUST TERRITORIES): Guam, Federated States of Micronesia (FSM), Caroline and Marshall Islands, Rota, Palau

The Federated States of Micronesia consist of approximately 2,1000 island groups. Some of the better known island groups include Truk, Yap, Pohnpei, and Palau.

Laws and Rules:

Heritage protection legislation in these jurisdictions varies. There is little specific legislation to protect submerged cultural resources. There are State Historic Preservation Officers (SHPOs) located on several jurisdictions in Micronesia.

Submerged Cultural Resources Management Plans and Strategies:

Chuuk (formerly known as Truk Lagoon)

One of the largest, single concentrations of historic shipwrecks in the Pacific Region from World War II is located at Truk Lagoon on the Truk Atoll in the Caroline Islands, in the Federated States of Micronesia. The Lagoon, forty miles in diameter, was a major naval port for the Japanese Imperial Pacific Fleet during World War Two and was known as the "Gibraltar of the Pacific." Beginning in February, 1944, the US Navy staged a series of air raids from aircraft carriers which sank most of the military and commercial vessels in the harbor. The exact number is unknown but it is at least sixty. There are many types of vessels sunk in the Lagoon, including at least one submarine and several aircraft. Since the late 1960s, Truk Lagoon has become one of the most popular dive destinations for international divers. The Trukese Government recognized the long-term importance of the underwater site for the local tourist economy and took steps to protect it as an underwater archaeological preserve. The site was listed on the National Register of Historic Places in 1976. The site encompassing the historic vessels is listed as being 524 acres in size. The entire Lagoon is about 820 acres.

Despite attempts to protect submerged cultural resources in the Lagoon, many artifacts, including human remains, have been looted by divers over the years. Before its designation as an underwater archaeological preserve local fisherman removed large amounts of explosives from the wrecks which they used to catch fish. This destructive practice has since been curtailed. None of the sites are buoyed because the native Trukese guides know the site locations so well. The lack of buoys protects these guides from losing their relatively exclusive status.

The sunken ships contain large numbers of remains of Japanese military personnel. In recent years delegations from Japan have systematically removed many of these remains under an agreement with the Truk Government. A number of these remains have been cremated in Shinto religious ceremonies held on Truk. The wrecks in the Lagoon act as artificial reefs and have greatly enhanced the sea life in the Lagoon. Truk Lagoon is a good example of a park that combines elements of natural resource parks as well as archaeological preserves.

Bikini Lagoon

Another Pacific site which has potential for development as an unique underwater archaeological preserve is Bikini Lagoon on the Bikini Atoll in the Marshall Islands. Bikini Lagoon holds the remains of a World War II fleet of a least twelve major warships that were sunk at Bikini during a series of atomic and hydrogen bomb tests, named Operation Crossroads, which began in 1946. The twelve vessels assembled for the test were captured German and Japanese ships, including the *Nagato*, the largest Japanese battleship to survive the war, as well as several US Navy vessels, including the aircraft carrier, *Saratoga*, and the battleship *Arkansas*. Each ship was loaded with a complete set of munitions to simulate actual wartime exercises. The *Saratoga* was even loaded with a complete set of fully armed fighter planes. The atomic and hydrogen bombs tested were all placed on the floor of the Lagoon. When they exploded they left an enormous crater. The *Saratoga* listed and burned for several days prior to sinking during one test. In the same test the *Nagato* was lifted right out of the water vertically before plunging to the bottom of the Lagoon!

Unsafe levels of radioactivity precluded diving in the Lagoon until the 1970s when the site was first visited by research divers who made a television documentary. Radiation levels are now considered safe, and in recent years the people of Bikini who were forced to move to neighboring islands for the tests have begun returning to their native island. Beginning in 1989 the Submerged Cultural Resources Unit of the National Park Service, working in conjunction with the US Navy, surveyed extensively the remains of the sunken fleet. Bikini Lagoon is now being considered by the Bikini Council and the Department of the Environment as the site of an underwater archaeological preserve similar to that at Truk Lagoon. The NPS was asked to evaluate the significance of the ships historically and their potential use in a park setting. The NPS believes that the ships are important and would be popular among sport divers, although the sites are in relatively deep water. The US Navy might be involved in the future to neutralize live ordinance and make the site safer for sport divers.

Guam

The Guam Office of Historic Preservation has run at least one training school in submerged cultural resources issues for SHPOs from several Micronesian Islands. Since the late 1980s there have been experiments in the development of a government and private sector partnership on issues of marine archaeology and cultural tourism.

Sources:

Carell, Toni

1988 Underwater News - Government of Guam, Rota, Palau. *Society for Historical Archaeology Newsletter* 21(2):43.

1989 Underwater News - Marshall Islands - Bikini Atoll. *Society for Historical Archaeology Newsletter* 22(4):26-27.

Matthewson, R. Duncan III and John Bent

1991 *Marine Archaeology and Cultural Tourism in Guam: A Case Study in the Development of a Government-Private Sector Partnership.* Third Global International Congress of Heritage Interpretation, Honolulu.

APPENDIX THREE:

INTERNATIONAL LAWS, RULES, CONVENTIONS AND MANAGEMENT STRATEGIES FOR SUBMERGED CULTURAL RESOURCES OF OTHER NATIONS

BRIEF OVERVIEW OF INTERNATIONAL LAWS, CONVENTIONS, RESOLUTIONS, AND ADMINISTRATIVE BODIES

There are a number of international conventions and recommendations which relate to the protection of submerged cultural resources. A brief listing and discussion of these follows. Acroynms, conferences, conventions, resolutions, and administrative bodies are given in **boldface**.

The U.S. is a signatory to most of the following, although the U.S. is not presently a formal member of UNESCO since the Reagan Administration withdrew from the organization in 1984 citing political reasons. In recent years the U.S. has been conducting audits of UNESCO with a view to rejoining the organization. It seems probable that this will happen eventually. Many U.S. governmental organizations have continued to maintain informal links with UNESCO since 1984 with the long-term view that the U.S. would one day rejoin the organization.

Administrative Bodies:

UNESCO is the United Nations Education Scientific and Cultural Organization. Heritage issues generally fall under the jurisdiction of UNESCO.

ICOMOS (International Council on Monuments and Sites - a division of UNESCO) Charter for the Protection and Management of the Archaeological Heritage, 1990.

ICAHM (ICOMOS International Committee on Archaeological Heritage Management) Charter includes a discussion of maritime archaeology issues.

ICOM is the International Council on Museums. There is an ICOM Code of Professional Ethics regarding collecting policy for museums and other issues. Sections 3.1 and 3.2 of this Code concern the collecting policies of museums.

ICMM is the International Congress of Maritime Museums. The ICMM has 323 members in 37 countries and is the peak international organization representing maritime museums. There is an ICMM Code of Ethics regarding collecting policy for museums and other issues. The current President of ICMM

is Richard Foster, Director of the National Museums and Galleries in Merseyside, Liverpool, England. The Underwater Archaeology Sub-Committee was formed in 1987 and is chaired by Graeme Henderson, Head of the Division of Human Studies at the Western Australia Museum, in Perth. The Committee recently completed an international survey of existing museum acquisition practices as they apply to underwater cultural material; and the setting of ICMM official policy on such acquisitions. ("The Acquisition of Objects from Underwater Archaeological Sites: Draft Policy Statement and Report of the Sub-Committee on Maritime Archaeology to the ICMM", 28 December 1990).

On 10 September 1993, the ICMM announced its adoption of new standards encompassing the exploration of underwater cultural sites and the acquisition, preservation and exhibition of artifacts recovered from shipwrecks and other sites. This new Policy is a powerful tool for the protection of underwater sites.

CAMM is the Council of American Maritime Museums, a subgroup of ICMM. CAMM policy states that member museums should ". . . not knowingly acquire or exhibit artifacts which have been stolen, illegally exported from their country of origin, illegally salvaged or removed from commercially exploited archaeological or historic sites in recent times" (i.e., since the 1990 full congress of ICMM).

Conventions, Conferences, Resolutions:

The **Geneva Convention on the Continental Shelf, Article 2(1), 1958** makes some references to submerged cultural resources.

The Resolution of the **First International Congress of Maritime Museums of the Atlantic Basin** concerned submerged cultural resources issues. This Conference took place in London in October 1972.

The **UN Convention for the Protection of the World Cultural and Natural Heritage (World Heritage Convention), 1972** was a result of the UNESCO Recommendations Concerning the Protection, at National Level, of the Cultural and Natural Heritage, Paris, 1972. The **ICOMOS Underwater Cultural Heritage Committee** is presently investigating the possibility of using the Convention as a further tool to protect the underwater cultural heritage and to develop a **Convention on the Underwater Cultural Heritage**. At present there are no underwater sites on the World Heritage list.

The **International Committee on Underwater Cultural Heritage** was created by **ICOMOS** to promote international cooperation in the identification, protection, conservation of underwater cultural heritage sites, and to advise ICOMOS on the development and implementation of programs in this field. The committee is based at the Western Australian Maritime Museum and is chaired by Dr. Graeme Henderson. The Committee has representatives from sixteen countries, including the USA. One of its present tasks is the development of the **Convention on the Underwater Cultural Heritage**. This would be an "underwater" parallel the existing World Heritage Convention.

The Resolution of the **Stavenger Maritime Museum Conference** concerned

submerged cultural resources issues. This Conference took place in Stavenger Norway in March 1973.

The **San Salvador Convention on the Protection of the Archaeological, Historical and Artistic Heritage, 1978** is a Treaty adhered to by members of the Organization of American States, including the USA.

The Council of Europe, **Report on The Underwater Cultural Heritage** was produced by the Committee on Culture and Education in Strasbourg in 1978. The report attempted to address a wide range of issues concerning submerged cultural resources.

The **UN Convention on the Law of the Sea (UNCLOS), 1982** makes some reference to the duty of countries to protect archaeological objects found at sea and in their territorial waters.

The Council of Europe, **Draft Convention on the Underwater Cultural Heritage,** 1985 was a result of the 1978 report. Although the Draft Convention was developed by most European nations it was never adopted by the Council of Europe mainly due to perceived problems of national sovereignty.

The **European Convention on the Protection of the Archaeological Heritage** (revised), **European Treaty Series 143**, was adopted at Valletta Italy, 1992. This revision of the Convention was a result of the Third European Conference of Ministers responsible for the cultural heritage, held at Malta, January 16-17, 1992. This convention has been revised several times since its inception in 1969. In the recent amendments, special attention has been given to the issues of the protection of submerged cultural resources. ICOMOS are presently working on a Charter of good underwater archaeological practice to serve as an annex to the draft Convention.

The **Draft International Convention on the Underwater Cultural Heritage** is presently being developed by the International Committee on Cultural Heritage Law of the **International Law Association (ILA)** for submission to the general conference of UNESCO in 1994 or 1995. This Convention aims to provide at least a minimum of protection for the underwater cultural heritage situated beyond the territorial sea of the States' party to the Convention.

Sources:

Alexander, Bruce E.
1989 Treasure Salvage Beyond the Territorial Sea: An Assessment and Recommendations. *Journal of Maritime Law and Commerce* 20(1):1-19.

Blake, Janet
1994 Correspondence from, Programme Advisor, Council of Europe, March 30, 1994, September 20, 1994, regarding recent, and on-going, developments in international submerged cultural resources protection legislation.

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1986 *Maritime Archaeology in Australia.* University of Western Australia Press, Nedlands.

1994 *Current International Initiatives in Protecting Underwater Cultural Resources.* Unpublished paper on the ICMM policy.

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1993 Treasure Salvage, Archaeological Ethics and Maritime Museums. *International Journal of Nautical Archaeology* 22(1):53-60.

Langley, Susan B.M. and Richard W. Unger
1984 Nautical Archaeology: Progress and Public Responsibility. *B.A.R. International Series 220.* B.A.R., Oxford.

Nelson, Robert H.
1989 Guiding the Ocean Search Process: Applying Public Land Experience to the Design of Leasing and Permitting Systems for Ocean Mining and Ocean Shipwrecks. *Ocean Development and International Law* 20(6):577-600.

O'Connell, D.P.

1984 Salvage. In *The International Law of the Sea. Volume II.* Clarendon Press, Oxford.

O'Keefe, P.J. and Prott, L.V.
1984 *Law and the Cultural Heritage. Volume 1: Discovery and Excavation.* Professional Books, Ltd., Abingdon, Oxon, England.

Runyan, Timothy J.
1990 Shipwreck Legislation and the Preservation of Submerged Artifacts. *Case Western Reserve Journal of International Law* 22(1):31-45.

UNESCO
1981 *Protection of the Underwater Heritage.* UNESCO, Paris.

There have been several list of heritage laws of nations compiled in the past. Some of the most significant of these are:

Council of Europe
1978 *The Underwater Cultural Heritage.* Report of the Committee on Culture and Education, Strasbourg.
[Appendix III, "Analysis of Legislation in Individual Countries" was written by P.J. O'Keefe, and L.V. Prott.]

O'Keefe, P.J. and Prott, L.V.
1984 *Law and the Cultural Heritage. Volume 1: Discovery and Excavation.* Professional Books, Ltd., Abingdon, Oxon, England.
[Appendix I is a list of national heritage legislation, but it isn't specific to submerged cultural resources. The authors are reportedly updating their information, however, it wasn't able for this coastal zone management project.]

UNESCO
1981 *Protection of the Underwater Heritage.* UNESCO, Paris.
[The Chapter, "Law and the Underwater Heritage" was written by P.J. O'Keefe, and L.V. Prott.]

Although the coastal zone management project attempted to update the lists from all the above sources and others, especially for laws pertaining to submerged cultural resources, it was decided not to include the lists in these appendices as these would be incomplete.

DISCUSSION OF LAWS, RULES, AND MANAGEMENT STRATEGIES FOR SUBMERGED CULTURAL RESOURCES OF SELECTED COUNTRIES.

The assessment of the current state of submerged cultural resource management both in the United States and abroad was an important stage in preparing a management plan for Florida's underwater cultural resources. Management of submerged cultural resources has changed drastically over the past decade, and it was hoped that an overview of current laws and rules would allow Florida to take advantage of the latest and most creative initiatives.

Given the tremendous amount of material, it was necessary to make certain decisions regarding what types of data would be solicited, and from where. Generally, research focused on those issues which reflect circumstances in Florida. Information was extracted from various publications relating to submerged cultural resources management, supplemented with several over the phone interviews with appropriate agency officials or other knowledgeable persons.

The information was organized in the table in Appendix One so that an overview of the states' programs could be available at a glance. Using this comparative method, those programs could be identified which might possibly be relevant to Florida. The programs which were considered worth summarizing are listed in the following pages.

AUSTRALIA

Laws and Rules:

Australia is notable among the international community for having taken very strong action to protect its submerged cultural resources. In 1972 Australia and the Netherlands signed The Agreement Between the Netherlands and Australia Concerning Old Dutch Shipwrecks, 1972. This Act recognized the importance of protecting the extensive numbers of Dutch ships which were wrecked on the western coast of Australia since the 17th Century.

In 1976, The Australian Commonwealth government passed the Historic Shipwrecks Act, 1976. The Act was amended in 1980. One of the requirements of the law is that persons are obligated to notify the Commonwealth Minister for the Arts and Administrative Services if: 1) they have found the remains of any ship or an article associated with a ships in waters under Commonwealth jurisdiction; and 2) if they have come into possession, custody, or control of an article from a shipwreck or associated with a ship which has been declared historic under the Act. Persons may dive on a site so long as their activities do not disturb the material remains of the wreck and the vicinity of the wreck.

There have been several significant amendments to the Historic Shipwrecks Act since 1980. Following extensive discussions between the State Governments and the Federal Government the Act was amended in February 1993 such that protection was afforded to all shipwrecks sites at least 50 years old. Prior to this time each site had to be formally declared as protected by the Minister. On April 1, 1993 the protection of shipwrecks and articles under Commonwealth jurisdiction was expanded from 153 specific wreck sites to include all wrecks or associated articles in Australian waters 75 years old or older. As a result a period of "amnesty" was granted from May 1, 1993 to March 31, 1994, whereby persons with information on the location of shipwrecks or in the possession of artifacts from shipwrecks in Australian waters could come forward to give information without fear of prosecution.

Certain administrative powers affecting wrecks in Australian waters have been delegated to the relevant authority of the adjacent state or territory (the delegate). There are delegates for Queensland, New South Wales, Victoria, Tasmania, South Australia, Western Australia, and the Northern Territory. Shipwrecks located in State and Northern Territory waters are also protected under their laws and rules. The delegate for Western Australia, for example, is the Western Australia Maritime Museum, which is probably the most active organization involved with submerged cultural resources management in the country.

The Commonwealth Government assists State and Territorial Governments with initiatives such as The National Historic Shipwrecks Program which has four major objectives: 1) to conserve and protect historic shipwreck sites and associated material as a cultural resource of the nation; 2) to develop a comprehensive register of historic shipwrecks and associated material; 3) to obtain the support of an informed public for historic shipwrecks as a cultural

resource; 4) to promote the commitment by government authorities to the protection and preservation of historic shipwrecks and associated material.

Submerged Cultural Resources Management Plans and Strategies:

The Western Australia Maritime Museum has an active shipwreck research program. They have located, surveyed and excavated a number of shipwrecks along the western coast of Australia. Since 1980 they have developed "wreck trails" or "underwater display cases" as a means of bringing historic wrecks to the public and preserving them. They have also produced brochures and maps for sport divers. The hull of the wreck of the *Batavia* (1629), a Dutch East India Company merchantman, has been systematically excavated by the Museum since the 1970s. An entire gallery of the Museum has been devoted to displaying and interpreting this vessel. During the *Batavia* archaeological project, a large amount of building materials that the ship had been carrying were recovered during excavations by the Museum. The building materials have now been reassembled as part of the exhibit and are on display with other artifacts recovered from the *Batavia*. Since the early 1990s the Institute of Maritime Archaeology at the Western Australia Museum has been developing a National Shipwreck Database with a grant from the Federal Government Department of Arts, Sport, the Environment and Trade. One of the goals of the project is to enable modem access to the Database by each State.

The Maritime Archaeology Section of the Queensland Museum is also very active. The Museum has conducted extensive surveys of the outer Great Barrier Reef in the Raine Island area. Perhaps the Museum's most significant and well known project since the early 1980s has been the excavation of the HMS *Pandora* (1791). The *Pandora* was transporting some mutineers from HMS *Bounty* who had been captured in the Fiji Islands. The *Pandora* was enroute to England to have these men tried when she sank. The Queensland Museum has conducted the *Pandora* excavation project using both professionals and amateurs. The sport diving community was encouraged to participate and has been actively involved.

One relatively unique mechanism used to protect a threatened shipwreck at the State level in Australia occurred in 1977 when the State of Tasmania declared a historic shipwreck site, the *Sydney Cove* (1797), a conservation area and state reserve under the terms of the National Parks and Wildlife Act, 1970. The site had been discovered in 1977 and was facing threat of looting by sport divers. In 1991 a program of systematic excavation of the *Sydney Cove* site was begun by the Tasmanian Department of Parks, Wildlife and Heritage.

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CANADA

Federal Laws and Rules:

As part of the British Commonwealth, Canada has developed the system of managing shipwrecks through the Ministry of Transport acting through the Receiver of Wreck. The Canada Shipping Act is the principal federal law governing submerged cultural resources. The Act is administered by the Canadian Coast Guard for the Ministry of Transport. According to the terms of the Act, any object recovered from a shipwreck must be turned over to the Receiver of Wreck until ownership can be determined. There are large fines for failing to do so. Wrecks of known historic or archaeological value are singled out as types of sites which should not be disturbed. In 1981, the Maritime Code, which has provisions for protecting historic shipwrecks, replaced the Canada Shipping Act. The Code limits or prohibits commercial salvage in sensitive areas. The Code enables the designation of historic districts or areas underwater. A good example of the application of this has been in Louisbourg Harbour (see a discussion below). Only historic shipwrecks are protected by the Code. No other submerged cultural resources are covered.

The issues of the management of submerged cultural resources nationally in Canada came to the forefront in 1965 with the location by sport divers of the wreck of *Le Chameau* (1725), a French transport ship that sank off the coast of Cape Breton Island, Nova Scotia near Louisbourg with payroll for French troops on board. The divers partially salvaged the wreck and found about $700,000 in gold coins. Before the salvor, Alex Storm, recovered the coins the Federal Government had given him "ministerial exemption" from any claim the Federal Government might have had to the wreck. The reason for this somewhat unusual action was that divers had been exploring the remains of *Le Chameau* since the late 1950s and nothing had been found. The Federal Government therefore assumed that the payroll did not exist and subsequently gave Storm 'carte blanche' to the wreck. After Storm found the gold coins in 1965, five years of litigation between Storm and the Federal Government ensued. Finally 25% of the treasure was awarded to earlier partners of Storm. At this time there were no provincial laws in Nova Scotia which could govern the activities of the salvors. Their finds and subsequent salvage work on the wreck site attracted extensive national media coverage. This incident was one factor which led to the development of Nova Scotia's laws regarding heritage protection.

Canadian Park Service, Marine Archaeology Unit:

In the early 1960s the Canadian Federal government, acting through the Canadian Park Service, Department of the Environment, initiated one of the world's largest historical reconstruction projects at the site of Louisbourg on Cape Breton Island. The city had been established in the 1720s as a naval base and trading port for the French in the New World. The entire city was destroyed by a large British naval force in 1759 during the Seven Years War. The Canadian Government's project at Louisbourg was part of a large scale public works project

to re-employ unemployed coal miners on Cape Breton Island, one of the more impoverished regions of the country. A number of French ships had been sunk in Louisbourg in 1758 to prevent the British Navy from entering. As part of the Louisbourg project the Canadian Park Service decided to establish a Marine Archaeology Unit to explore these and other wrecks in federal waters. The Unit is almost directly analogous to the Submerged Cultural Resources Unit of the U.S. National Park Service based in Santa Fe New Mexico, which was established in 1980. The submerged cultural resources of Louisbourg Harbour which were subsequently located by the Marine Archaeology Unit were considered valuable and thus the Harbour was designated under the terms of the Maritime Code.

Since its inception, the Marine Archaeology Unit has done scientific work in almost every Province and territory and assisted a number of amateur archaeological societies with their projects. The Unit has published extensively and maintains a close working relationship with the Canadian Conservation Institute in Ottawa.

One of the Unit's first major surveys took place from 1967 to 1969 on the wreck of the 18th Century French ship *Le Machault*, which was sunk by the British in Chaleur Bay in New Brunswick in 1760 during the Battle of the Restigouche River. The Marine Archaeology Unit subsequently excavated the site from 1969 to 1972. A Canadian Parks Service Interpretive Centre has been established at Pointe-a-la-Croix, Quebec near the site.

In the early 1970s the wreck of the *Auguste* (1761) was found off Dingwall, Nova Scotia by some of the same Nova Scotia divers who had earlier found *Le Chameau*. The salvors reported the location of the site to the Receiver of Wreck and it was assigned status as an historical wreck by the Federal Maritime Division in 1973. In 1977-1978 the Parks Canada Marine Archaeology Unit worked with the Nova Scotia divers in excavating the site during the period to ensure that the maximum archaeological information was obtained from the site. This project was a good example of the early cooperation of the Federal government with sport divers.

One of the most important projects conducted by the unit has been the excavation of one or more mid-16th Century Basque whaling vessels which sank at the Basque whaling station in Red Bay Labrador. The project attracted international intention as it was evidence that Europeans had been living and working in North America early in the 16th century. This underwater excavation project began in 1978 and continued through 1985. The entire hull of the Basque whaler *San Juan* (1565) was excavated and has since been conserved and reconstructed as part of a major exhibit on the finds at Red Bay at the Canadian Museum of Civilization which opened in 1988 in Ottawa.

Canadian Park Service, National Marine Parks:

Beginning in the late 1970s the Canadian Park Service initiated a long-term plan to develop a series of national marine parks (similar to NOAA's National Marine Sanctuaries). In 1979 the Canadian Park Service began developing its first marine park model. They recognized that although there were complex

federal/provincial and other jurisdictional problems associated with establishing marine parks, a long-term program of establishing such parks should be initiated. Cooperative arrangements with appropriate governments were envisioned as the primary means of managing natural and cultural resources in the parks. In 1983 the first National Marine Parks Draft Policy was produced. The plan includes a section on preserving and interpreting historical and cultural resources. Red Bay, Labrador is one of the sites which is presently being evaluated for designation as a National Marine Park.

In 1987, the Canadian government finalized an agreement with the Province of Ontario to obtain title to Fathom Five Provincial Park, located at Tobermory, Ontario on Lake Huron, thereby establishing Canada's first National Marine Park, (renamed Fathom Five National Marine Park). Fathom Five had been established in 1972 by the Province of Ontario primarily to protect the numerous 19th and 20th Century shipwrecks found in the park (at least twenty one or more). Responsibility for the operation of the park was assigned to the Ontario Ministry of Natural Resources who is the agency responsible for the management of parks. Since the establishment of Fathom Five, Park staff have conducted numerous scientific studies on the Park's shipwrecks. A number of sites have been surveyed and mapped by diving teams. A number of previously unknown wrecks have been discovered and subsequently surveyed by Park diving teams.

Fathom Five has become an important dive destination, especially for American divers from the Great Lakes states. The local economy has benefited greatly from "cultural dive tourism." As part of the management plan all divers must register with the park prior to diving and are issued a number tag which they must attach to their equipment so the tag is visible at all times. Several dive charter boats, and glass bottom boats for non-divers, operate under licence with the Park. Park ranger patrol boats routinely check diving boats for violations and to provide various kinds of information and assistance. A system of mooring buoys is located at each of the shipwreck sites and is maintained by the Park. Divers are prohibited from tampering with any natural or archaeological resources found above or below water in the park. There is an interpretive center and a hyperbaric chamber system. The hyperbaric chamber system located in the park has been responsible for saving many lives and minimizing injury in decompression diving accidents.

Important innovations in the physical strengthening of shipwreck hulls, which have shown signs of deterioration, have been made at Fathom Five. Techniques for strengthening of shipwreck hulls have proven very successful at at least one site. Since the transfer of jurisdiction in 1987 of the Park from the Province of Ontario to the Federal Government, the Canadian Parks Service began developing a management plan for Fathom Five. They have encouraged input by the public, and have taken the needs of the local residents into consideration. The Canadian Park Service has detailed policies on the management of natural and cultural resources found in all terrestrial and marine parks, including the protection of shipwrecks.

Beginning in 1988, the Canadian Federal Government has been drafting legislation to protect all types of archaeological resources found on federal lands and under federal waters. The Liberal Government elected in the fall of 1993, has

formed a new Department of National Heritage to asume the mandates of several other previously existing federal departments. It will be some time before all the implications of this action are clear.

Provincial Laws and Rules:

Similar to the U.S.A., Canada has divided its jurisdictions into those which are federal and those which are provincial. Under the terms of the British North American Act (B.N.A. Act) of 1867, which established Canada as a sovereign nation within the British Commonwealth, the ten provinces were assigned jurisdiction over all their bottom lands. Jurisdiction for waters above the submerged lands was retained by the Federal Government. Each of Canada's ten provinces and two territories has enacted some type of heritage laws and rules similar to the antiquities acts of U.S. States. The six most important provinces which merit further discussion are Newfoundland, Nova Scotia, Quebec, Ontario, Alberta and British Columbia (listed geographically from east to west). Each shall be considered here briefly.

Newfoundland:

The province has enacted the Historic Objects, Sites and Records Act (Revised Statutes of Newfoundland 1979 Chapter 46), which makes specific provision for the protection of underwater sites.

In 1977, an amateur archaeology group, the Newfoundland Marine Archaeology Society (NMAS) was formed in response to the destructive salvage of HMS *Sapphire* a British warship sunk in 1696 in Bay Bulls. Since their formation the NMAS has developed a close working relationship with the Provincial Government. Under a special federal/provincial agreement The Parks Canada Marine Archaeology unit subsequently assisted the NMAS in excavating the HMS *Sapphire*. Since their formation the NMAS has conducted surveys in many parts of the Province and excavated a number of historic shipwreck sites under license, in one instance at the special invitation of the Provincial Government (1983).

Nova Scotia:

In 1980 the Province enacted the Special Places Protection Act (Chapter 438 of the Revised Statutes, 1989, as amended 1990, C. 45). It is administered by the Curator of Special Places at the Nova Scotia Museum of Natural History. The Museum is the official repository for the Province. All archaeological and historical remains are protected under this act including shipwrecks and other submerged cultural resources. Under the terms of the Act a person must obtain a "Heritage Research Permit" issued by the Nova Scotia Museum before disturbing any place where historical artifacts are found, including underwater sites. Applicants must demonstrate a level of skill in archaeology.

The Province also has the Treasure Trove Act (Chapter T-18, cited as R.S.N.S., 1967, Chapter 314) which has some relevance to submerged cultural resources. Under the terms of the Act a person must obtain a "Treasure Trove"

licence issued by the Provincial Department of Mines and Energy. A person holding such a license is still bound by the Special Places Protection Act. There are no underwater preserves in Nova Scotia.

The Provincial Department of Education has produced a brochure entitled *Protecting Nova Scotia's Shipwrecks: Special Places,* which explains the Special Places Protection Act, Treasure Trove Act, and Canada Shipping Act.

In 1979 an active amateur underwater archaeology group, the Underwater Archaeology Society of Nova Scotia (UASNS) was formed. It was partially modeled on the NMAS in Newfoundland. The UASNS have conducted a number of major underwater surveys along Nova Scotia's coasts and in inland lakes. One of their major survey and excavations has been on the Terence Bay Wreck, found near Terence Bay, Nova Scotia.

Quebec:

The Quebec Ministry of Cultural Property has often extrapolated from the Quebec Cultural Property Act in order to protect cultural remains that are found underwater in the Province. Quebec also has Law 969, which is based on environmental impact studies that must be made prior to any construction on land or underwater.

In 1978 the Committee of Underwater Archaeology and History of Quebec was formed. As in Newfoundland and Nova Scotia this amateur underwater archaeology society has been an important force in studying and protecting that Province's underwater cultural heritage. The Committee work closely with the Quebec Ministry of Cultural Property.

Ontario:

The principal law addressing marine heritage is the Ontario Heritage Act. The Act includes protection for historic shipwrecks in Provincial waters. A revised Ontario Heritage Act is anticipated in 1994 or 1995. The proposed changes to the Act includes provisions which will strengthen the Province's control over historic shipwrecks. Shipwrecks will be a classified type of site. The Privince also has the Beds of Navigable Waters Act. The Ontario Ministry of Citizenship and Culture, the agency responsible for archaeology, has a marine heritage unit based in Ottawa. The Ministry has a small field team which works throughout the Province. This unit works closely on field projects with amateur sport diving groups in Ontario, principally Save Ontario Ships (SOS) and Protect Ontario Wrecks (POW). The Ministry also assists amateur groups in obtaining grants for research work and in shipwreck conservation promotional activities.

The Province also funds the Ontario Underwater Council (OUC) as part of the Province's overall package of sports. The OUC provides a variety of services for Ontario's sport diving population. The OUC promotes a strong conservation ethic as regards both natural and cultural underwater resources.

Perhaps some of the most unique submerged cultural resources to be found anywhere in the world are the remains of the schooners *Hamilton* and *Scourge*.

These two vessels of the U.S. Navy sank during a storm in 1813 in Lake Ontario during the War of 1812 between the U.S. and Great Britain. The schooners now lie in pristine condition in over 300 feet of water in Canadian (Ontario) waters. They were rediscovered in the early 1970s using remote technology. A complex series of negotiations then ensued between the U.S. Navy (acting through Congress), the Canadian Federal Government and the Province of Ontario. The U.S. Navy has now transferred official title of these vessels to the City of Hamilton, Ontario (the closest major city to the present site). Should they be raised at some point in the future, the remains of the crew would be transferred to the U.S. for official burial as military personnel.

Alberta:

The principal law is the **Alberta Historical Resources Act** (1972, amended 1980) which covers all archaeological, paleontological, and natural objects found in the Province. The Alberta Underwater Archaeology Society was founded in the early 1980s and closely interacts with the provincial government and the Alberta Museum. The majority of their work has been done primarily in National Parks located in the Province. One important project has been the archaeological study of land to be flooded by the construction of the Oldman River Dam. There is a proposal to study the effects of inundation on known sites. There have been no historical designations of underwater archaeological sites.

British Columbia:

The principal law is the British Columbia Heritage Conservation Act. There is presently proposed legislation which will create an amendment to the existing Act. In B.C., wreck sites have automatic protection under the law. Sites can be specifically designated by an Order-In-Council. The Provincial Heritage Department works closely with the Receiver of Wreck. A "heritage wreck" is one which is at least two years old. Thus far, eight shipwrecks have been designated as heritage sites through the mechanism of designating them under Order-in-Council.

The Underwater Archaeology Society of British Columbia (UASBC) was formed in 1975 and has been very active since that time. They have been involved in lobbying for designations for historic wreck sites, survey, excavation, placing plaques on wrecks, and in the establishment of at least four artificial reefs (to date) for sport diving attractions.

Tourism is an important industry in British Columbia and the province is extremely interested in the tourist benefits of underwater archaeological preserves and artificial reefs. For this reason, they are considering implementing a program of markers and mooring buoys. In February 1986, a resource management policy analysis for the management of submerged cultural resources was submitted by the Ministry of Small Business, Tourism and Culture, Heritage Conservation Branch, of the B.C. government. The document has been partially revised since that time but it hasn't been officially implemented. An important discussion paper on underwater parks for B.C. was written by the Planning and Design Branch of the Parks and Outdoor Recreation

Division in 1980. Shipwreck parks were included as one category of underwater park.

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UNITED KINGDOM

Laws and Rules and Management Strategies:

The Protection of Wrecks Act, (1973), a national law, is the only statutory law specifically designed for the protection of wrecks of historical importance in the United Kingdom. The Act was passed to attempt to solve the shortcomings of using the Merchant Shipping Act, (1894), which did not anticipate questions of submerged cultural resources protection. The Act is administered by the Secretary of State. Under British law, shipwrecks fall under the jurisdiction of the Department of Transport through the Receiver of Wreck system (similar to other British Commonwealth countries). The law of salvage is administered by the Admiralty Division of the High Court. With the passage of the Protection of Wrecks Act, (1973) the issue of historic shipwrecks was effectively removed from general maritime law.

An important requirement of The Protection of Wrecks Act is that the Secretary of State must consult with knowledgeable persons prior to making any Orders. This led to the formation of an Advisory Committee (sometimes referred to as the 'Runciman Committee' after its first chairman). The Committee's role has evolved and they now perform the following roles: (1) determine the importance or eligibility of wrecks proposed for designation as historic sites; (2) determine the suitability of applicants for archaeological research licenses; (3) set standards for archaeological work carried out on sites; (4) review the reports filed by licence holders; (5) determine the state of designated sites; and (6) make Designation Orders in emergencies to protect sites.

Beginning in 1986 the Committee developed the skills to form its own Archaeological Diving Unit to investigate sites. The Unit, which is funded by the Department of Transport, carries out a program of visits to designated sites and sites proposed for designation, and gathers information from licence holders to assist the Transport Marine Directorate and the Advisory committee to make decisions. The Unit also provides an educational function by providing advice to license holders. The Advisory Committee has been successful in getting the general public and sport divers to protect the underwater cultural heritage through consent and education as opposed to coercion. The Committee has also published a book entitled *Guidelines for Acceptable Standards in Underwater Archaeology*. This book has been readily accepted by the sport diving community. The Nautical Archaeology Society, an amateur body which provides training and sets standards for sport divers, works closely with the Committee.

On the advice of the Advisory Committee, The Secretary of State has designated more than 30 wrecks as historic sites since 1973. These sites range in from the Bronze Age (1100 B.C.) to the 19th Century AD.

The National Monuments Record, which contains about 150,000 records of antiquities in the U.K., holds records on about 180 sites which could be considered maritime. Since the late 1980s there has been ongoing discussion as to the

prospect of extending the record to national maritime sites in the sea. A National Maritime Monuments Record has been proposed.

One continuing problem not addressed by The Protection of Wrecks Act, 1973, is the disposal of archaeological finds. At present the Advisory Committee has no authority in this matter, nor does it have any authority with the Receiver of Wreck, both of which are subject to the provisions of the Merchant Shipping Act, 1894.

In a review of the functioning of The Protection of Wrecks Act carried out in 1988, one proposal was made to have the Archaeological Diving Unit turn over its role regarding the protecting of historic wrecks to the Department of the Environment, which is advised by English Heritage.

In 1979 The Ancient Monuments and Archaeological Areas Act was passed. For the first time shipwrecks became eligible to be scheduled as ancient monuments. There is an Ancient Monuments Section of the Department of Environment.

There have also been recent initiatives to protect underwater sites using the mechanism of establishing marine reserves. The Royal Navy Base at Scapa Flow in Scotland where the Imperial German Navy scuttled its captured ships after World War I is treated as a preserve.

Another important law is the Protection of Military Remains Act, (1986). This law was passed as a result of allegations that human remains had been disturbed during the recovery of gold bullion from the wreck of the HMS *Edinburgh* (1942) during salvage operations on that site in 1981. The Act allows the Secretary of State to designate any British vessel or aircraft wrecked while engaged in military service on or after 4 August 1914 (the outbreak of World War One). One example of this is the HMS *Royal Oak*, which sank at her dock at Scapa Flow in Scotland with large numbers of men onboard after being torpedoed by a German U-Boat in 1939. No sport diving is permitted on the site. Every anniversary of her sinking Royal Navy divers hoist the White Ensign underwater and a wreath is placed in the water over the site after a religious dedication. Similar protection and dedications are afforded the sites of HMS *Repulse* and HMS *Prince of Wales* which were sunk off the coast of Malaysia in 1941.

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The following countries, while not considered in the forefront of submerged cultural resources *management planning, nevertheless provide interesting and diverse examples of the treatment of underwater cultural resources.*

BAHAMAS

Laws and Rules:

One of the most unique features of the Bahamas' system is that although a permit is required for salvage operations, no permission is required to search for shipwrecks. The Ministry of Transportation in Nassau, acting through the Receiver of Wreck, is the body which controls the issuing of scientific and commercial salvage permits. This mechanism is similar to many other British Commonwealth countries and jurisdictions such as the United Kingdom, Canada, Australia, South Africa, and Bermuda. Salvage permits are valid for five years and are relatively easy to obtain. The permits are granted for an exclusive area, sometimes as large as 100 miles. The Salvor is entitled to retain 75% of all finds. In some instances the salvors are asked to market the Government's 25% of artifacts or treasure and use the proceeds to pay the Government in cash for its share. Small, accidental, or incidental finds go under the "honor system". At one time in recent years the Bahamas Government offered $50 for every cannon or anchor located, thus contributing to the stripping of wreck sites.

The new Government elected in 1993 has been reviewing submerged cultural resources legislation and is considering major changes. Recent initiatives are perhaps a reaction to commercial salvage efforts by companies such as the American based MAREX Inc. which located and salvaged the wreck of the Spanish ship, *Maravillas* (1656), beginning in 1984. Under the terms of their agreement with the Bahamas, MAREX were legally able to raise money for their project by selling artifacts from the site at Christies Auction House in London. There have recently been a series of meetings on marine archaeology legislation for the Bahamas. As a result, laws governing wrecks and salvage will be likely be amended in the near future. It is anticipated that a bill will be passed possibly as early 1994. The new law will reportedly affect such ministries as: transport, fisheries, local government, finance, and treasury.

Submerged Cultural Resources Management Plans and Strategies:

Several nationalities of salvors have been "wrecking" (salvaging shipwrecks)s in the Bahamas since the Seventeenth century when Bermudan wreckers established bases throughout the Bahamas. Merchants from throughout the Caribbean eastern North America traveled to these bases to purchase goods salvaged from Spanish shipwrecks. Wrecking became an important part of the Bahamian economy. Major treasure finds were made beginning in the 1930s. With the advent of scuba diving in the 1950s a series of major historical and "treasure" wrecks were located and salvaged under license.

The Bahamian Government has prosecuted divers for unauthorized removal of artifacts and salvage. Sport diving tourism has become an important industry. Beginning in the 1980s bonafide archaeological work has been conducted by organizations such the Institute of Nautical Archaeology (INA) located at Texas A&M University. The INA conducted archaeological work on several shipwrecks which had been previously salvaged in recent decades. The Bahamas Government has taken no initiatives to establish underwater archaeological shipwreck preserves.

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SOUTH AFRICA

Laws and Rules:

The principal law is the National Monuments Act, 1979. The Act was amended in 1981 and 1986 to strengthen its provisions. The Act is administered by the South African National Monuments Council and the Department of Archaeology. The main objectives of the National Monuments Council are to monitor the way in which the South African cultural heritage is managed, to protect that heritage, to promote conservation, and to co-ordinate all activities in connection with monuments and cultural treasures.

Submerged Cultural Resources Management Plans and Strategies:

South Africa has been concerned with treasure shipwreck issues since the 1960s, but its evolution of dealing with submerged cultural resource issues has been slow. Over the past 30 years, a number of historic shipwrecks have been salvaged, leading museums and archaeologists to repeatedly register their concern with the national government. One result of this was the passage of the National Monuments Act in 1979.

In 1987, the Institute of Maritime Archaeology was established at the South African Maritime Museum, Cape Town. The Institute has worked closely with the National Monuments Council. The Department of Archaeology at the University of Cape Town has also worked closely with the National Monuments Council. In 1988 a lecturer in maritime archaeology was appointed. This subject area has since been integrated into both the undergraduate and graduate curriculum. In 1990, the Department of Archaeology and the National Monuments Council published as copy of their revised *Instructions for Applicants for Historical Shipwreck Salvage Permits,* in the *International Journal of Nautical Archaeology.* They invited comments and input from their colleagues.

Several specific submerged cultural resources projects in South Africa since the late 1980s deserve comment. In 1988, three sport divers reported finding the remains of the *Oosterland* (1697), a Dutch East India Company merchantman. This led to the first scientific excavation of a shipwreck in South Africa. The partnership of the Department of Archaeology at the University of Cape Town, the National Monuments Council and the sport diving community proved to be highly successful.

A second noteworthy project was the survey and assessment of the waters surrounding Robben Island for submerged cultural resources. The Island was the location of South Africa's maximum security prison which formerly housed political prisoners, including Nelson Mandela. With the new political climate the last prisoner was released in 1991, and the prison closed. The scenic island is now threatened with development. As a result the National Monuments Council conducted a historical survey on terrestrial archaeological sites and architectural structures. The underwater component, named Operation Sea Eagle, took place

from February 1991 to May 1992, and included both archival work and field operations. Operation Sea Eagle was the first major project in South Africa devoted to studying the underwater cultural heritage. A proposal is now being considered to establish an underwater archaeological reserve around the island. Such a reserve would enhance the educational, recreational, cultural and scientific values of shipwreck sites. The development of a museum to house artifacts from both terrestrial and underwater sites is also under consideration. Such a museum would offer a holistic presentation of the island's history, natural environment and cultural remains.

There has been some recent efforts at establishing underwater archaeological preserves by non-governmental organizations. Divers belonging to the Scylla Diving Club in the Kynsna are developing a preserve on the wreck of the *Paquita* (1895). The club sponsored the erection of information signs at a local marina. The signs also warned that the removal of artifacts from the site is illegal. Underwater trail maps for the site are available.

The recent political developments in South Africa have led the Government to consider the importance of preserving South Africa's underwater cultural heritage for the economic benefits of international diving tourism which could potentially grow now that international travel and trade sanctions against the country have been relaxed. The South African National Monuments Council recently completed an exchange program with the State of South Carolina. The head of South Carolina's Sport Diver Archaeology Program spent one year with the Council helping to establish a sport diver education program and shipwreck database. She helped organize workshops and certification courses. These courses were attended by members of the general public a well as local professionals, archaeologists and curators. Recreational pre-disturbance projects were initiated on several sites.

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TURKEY

Laws and Rules:

Turkish antiquities laws make no distinction between terrestrial and submerged sites. Their antiquities laws are understood to cover both types of sites. In general, the government has established three types of preservation zoning relating to archaeological and natural beauty. Zone 1, where no development whatsoever may take place, consists of ancient cities. Zone 2 refers to archaeologically significant areas where mild tourism and development is allowed. Zone 3 allows an even greater level of development. All decisions on where to build are subject to the review of local museums, of which there are about 150 in Turkey. These museums are government funded and staffed by archaeologists. They are also often at odds with municipalities over restrictions.

Cultural Heritage in Turkey is deemed the property of the people. Artifacts of antiquity cannot be used for personal gain. The Turkish government is active in trying to prevent trade in antiquities. It will therefore purchase artifact discoveries made by villagers and the like. While these artifacts are usually preserved in the local museum, this had the defacto effect of encouraging people to go out and find such things for money.

In order to conduct research one must apply for a government permit subject to the familiar restrictions of: having a research plan and the funds to carry it through. You must be "known" in your field and be backed by an institution, such as a university. It is also the duty of the excavator to conserve the artifacts, which are then turned over to the state. No reproductions may be made for commercial returns. The final report on archaeological projects must be filed within five years of completing the fieldwork.

Submerged Cultural Resources Management Plans and Strategies:

Perhaps the most important aspect to underwater archaeological work in Turkey is the ongoing relationship between the government and the Institute of Nautical Archaeology (INA) at Texas A&M University. Since the early 1960s, a Crusader Castle located at the coastal town of Bodrum has been the home of an underwater archaeology museum for Turkey. Beginning in the 1970s the Museum became the headquarters for the INA which maintains a full-time staff and conducts extensive field research.

Turkey has not established individual sites as underwater archaeological preserves. Rather, the government has placed restrictions on diving in certain areas. More specifically, beginning in about 1988 the government responded to pressure from the tourist industry to open up areas to sport diving. In conjunction with a Texas A&M University survey, certain areas were designated where recreational diving would be allowed (based on negative survey results). Before then, however, large areas of coastline, particularly in the South, were closed altogether. This was a result of restrictions placed during the 1974 war with Greece over Cyprus which were subsequently never lifted.

All diving must be conducted within designated areas. All foreigners must dive with a government licensed diver. Turkish nationals, however, are not so restricted. The purpose of this is to increase revues from diving tourists. Competition among dive shops for business has led them to offer the added attraction of being able to dive on wrecks without proper authorization. The Turkish government is very aware that most tourists visit to view historical and archaeological attractions. They have therefore placed a high value on trying to preserve sites. Most penalties consist of fines and confiscation of equipment. The Turks are also very sensitive about artifacts leaving the country and will often detain people at customs who are believed to be carrying antiquities. Often, a traveler so detained must wait until a representative from the local museum makes a determination on the age of an artifact.

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