

**NORTH CAROLINA
UNDERWATER ARCHAEOLOGY BRANCH
ENVIRONMENTAL REVIEW PROCEDURES**



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PURPOSE

The State Historic Preservation Officer (SHPO) assists applicants for state or federal funding, licenses, or permits in developing projects that are environmentally sound with respect to historic, archaeological, and architectural resources by providing comments early in the project planning to help applicants avoid project delays, and by informing them of the federal and state laws requiring their compliance.

The SHPO establishes environmental review procedures pertinent to historical, archaeological (prehistoric, historic, and underwater), and architectural resources in North Carolina.

Projects are received from the State Clearinghouse and from various federal, state, municipal, and county agencies. All projects affecting the submerged lands of the State of North Carolina are reviewed by the Underwater Archaeology Branch (UAB) to determine the effect on submerged cultural resources, pursuant to Section 106 of the National Historic Preservation Act of 1966. In addition, the area is protected by North Carolina legislation (G.S. 121-22 to 28, Article 3: salvage of abandoned shipwrecks and other underwater archaeological materials on all bottoms from low water to one marine league seaward, and bottoms of other navigable waters). This law is supported by the Federal Abandoned Shipwreck Act of 1987 (P.L. 100-298).

History Note: Authority G.S. 113-229(e); 113A-4(2); 113A-107(d); 121-4(13); 121-12(a); 136-42.1; 143B-62(1) f, (3); Executive Order XVI (1976); 16 U.S.C. 470; 16 U.S.C. 1451; 42 U.S.C. 4321; 15 C.F.R. 923; 36 C.F.R. 69; 36 C.F.R. 800; Eff. February 1, 1985; Amended Eff. June 1, 1989.

INFORMATION NEEDED FOR REVIEW

Project proposals received for review by the State Historic Preservation Office shall include:

1. A description of the exact project location
2. A map clearly indicating this location
3. The size of the project area
4. A description of the action proposed
5. The applicant's name, address, and telephone number

This information should be furnished to the Environmental Review Coordinator, 4617 Mail Service Center, State Historic Preservation Office, North Carolina Department of Cultural Resources, Raleigh, NC 27699-4617. Applicants may be requested to provide information on past land uses and/or bottom disturbing activities affecting the project area.

Within the Department of Cultural Resources (DCR) a professional staff, the Underwater Archaeology Branch (UAB), has been established for the purpose of conducting and/or supervising the surveillance, protection, preservation, survey, and systematic recovery of underwater material as defined in G.S. 121-21. All projects potentially affecting submerged cultural resources are forwarded to the UAB for their review and comments. Recommended comments are then returned to the State Historic Preservation Office where they are incorporated into SHPO comments to the applicant and appropriate permitting agencies.

DETERMINATION OF POTENTIAL

The staff members of the UAB use a series of maps and research files in order to establish CULTURAL RESOURCE POTENTIAL in given areas of the state's bottom-lands. The most reliable source is the list of known archaeological sites. At this time the list of recorded sites is limited due to the very small percentage of bottom lands covered by systematic underwater archaeological surveys. Ongoing archaeological surveys and site assessments conducted by the UAB and survey of specific areas conducted for archaeological clearance of proposed construction projects will continue to add to the data base of submerged cultural resources. As individual archaeological resources are recorded in specific areas, a clearer understanding of the distribution and types of submerged cultural resources in North Carolina's waters will result.

Another source that provides some indication of abandoned and lost vessel distribution within the state is the Coast and Geodetic Survey charts and USGS topographic quad maps. Over three hundred shipwrecks are plotted on these maps and although they do not represent all the state's shipwrecks, they furnish supplemental information in determining shipwreck distribution in North Carolina waters. Many charted shipwrecks are neither historic or significant. However, they are indicative of maritime practices or natural occurrences (i.e., ship abandoning grounds, shipping lanes, hazard areas, etc.) and thus

raise the possibility of significant submerged cultural resources existing in the immediate vicinity.

Due to the limited number of known archaeological sites and charted wrecks, the UAB's historic shipwreck research files are utilized to gain insight into the potential for wrecks in state waters. These files are organized by bodies of water to facilitate the determination of cultural resource potential in given areas.

Many lost vessels, particularly small riverine and coastal craft, have gone unreported and thus do not exist in the historic shipwreck research files. To offset this lack of historical documentation, the Research Branch of the DCR furnishes overviews of specific areas focusing on local maritime activities (i.e., shipping traffic, shipbuilding enterprises, waterfront industries, wharfs) throughout the historical period. In addition, an examination of hydrographic maps may be used to determine how past bottom disturbances, either natural or man-made, may have affected intact archaeological remains.

The compilation of data from each of these sources enable the UAB to obtain the fullest understanding of both maritime activities within the state and existing bottom conditions in order to determine the potential for submerged cultural resources. Criteria used to establish HIGH, MEDIUM, and LOW POTENTIAL AREAS for cultural resources are as follows:

High Potential Area

1. A known archaeological site or charted wreck of historic age is present.

Or

2. Historical research indicates the project lies in an area with an active maritime history, documented vessel losses, or known hazards to navigation. Harbors, major shipping lanes, inlets, and shoals, for example, are likely to be classified as high potential areas.

Moderate Potential Area

1. No known archaeological sites or charted wrecks are present and documentary research indicates that only marginal maritime activities (i.e., fringe areas lying outside of shipping lanes, lightly-traveled rivers and creeks) have taken place.

Or

2. Bottom lands have been partially disturbed, lessening the likelihood that significant cultural resources exist.

Low Potential Area

1. No known archaeological sites or charted wrecks are present and documentary research indicates that little or no maritime activities have taken place.

Or

2. Bottom lands have been previously disturbed to the extent that no intact significant cultural resources are likely to exist.

Areas designated as HIGH, MEDIUM, or LOW POTENTIAL are subject to change as more archaeological data and documented research accumulates for North Carolina state bottoms. Questions or requests for information concerning submerged cultural resource potential areas should be directed to the Underwater Archaeology Branch, North Carolina Division of Historical Resources, P.O. Box 58, Kure Beach, NC 28449, phone 910-458-9042.

REVIEW OF PROJECT SPECIFICATIONS FOR SIZE AND IMPACT

Proposed project specifications are reviewed carefully and classified into two categories: MAJOR BOTTOM-DISTURBING ACTIVITIES or MINOR BOTTOM-DISTURBING ACTIVITIES. The extent of proposed bottom disturbances has a direct bearing on the type and amount of archaeological research the UAB recommends in conjunction with each project.

Major Bottom Disturbing Activities

This classification includes project construction by major land developers, power and water companies, North Carolina Department of Transportation, U.S. Army Corps of Engineers, and others, where bottom-disturbing activities are extensive in nature. This category includes but is not limited to projects that involve new dredging, extensive bulkheading, jetty or mooring construction, sub aqueous power and water line installation, bridge construction, and maintenance dredging in shifting channels.

Minor Bottom-Disturbing Activities

This classification includes project construction by private riparian landowners and others that are small in size or concern minimal bottom disturbing activity. These projects include but are not limited to private piers, bulkheads, docks, and maintenance dredging in fixed and unchanged channels.

UNDERWATER ARCHAEOLOGY BRANCH FIELD INSPECTION

In Certain cases, the UAB makes field inspections to enhance their understanding of a project area and the potential affect construction would have on submerged cultural resources. These inspections generally take place in instances where a proposed MINOR BOTTOM-DISTURBANCE is to take place in a HIGH POTENTIAL AREA or a MAJOR BOTTOM-DISTURBANCE is situated in a MODERATE POTENTIAL AREA.

Generally a field inspection is phased. The first step is an examination of the general area and interviews with locals to help the UAB staff gain an awareness of the environmental and cultural setting. If warranted a remote sensing survey is conducted to delineate potential submerged archaeological resources. This is often followed by a diving assessment of the potential targets and the overall bottom conditions. Based on these findings, recommendations concerning the need for additional archaeological investigations prior to project construction will then be made to the applicant.

RECOMMENDATIONS

Upon completion of their review, the UAB staff furnishes the SHPO's Environmental Review Coordinator, with draft recommendations based on the size of bottom disturbance of a proposed project and the cultural resource potential of the area. Official comments are compiled, and sent to the applicant and/or appropriate governmental agency(s). The following are standard UAB recommendations.

No Comment

Recommendations to conduct no archaeological investigations are made for the vast majority of projects reviewed by the UAB. These will include all MINOR BOTTOM-DISTURBING projects in LOW and MODERATE POTENTIAL AREAS. This will also apply to MINOR BOTTOM-DISTURBANCES in HIGH POTENTIAL AREAS and MAJOR BOTTOM-DISTURBANCES in MODERATE POTENTIAL AREAS where the UAB field inspection determined that no significant remains are likely to be affected.

For Your Information Comment

On construction projects where there is a minimal chance that submerged cultural remains will be affected, the applicant may be notified that the project should be undertaken with caution. These would concern MINOR BOTTOM-DISTURBANCES in a HIGH POTENTIAL AREA and MAJOR BOTTOM-DISTURBANCES in LOW or MODERATE POTENTIAL AREAS. If during construction submerged cultural materials are encountered, it is the responsibility of the applicant and the Army Corps of Engineers-Wilmington District to notify the SHPO.

Monitor Comment

On construction projects that are situated near a known archaeological site recommendations may call for certain conditions to be placed on the applicant's permit, to insure that no damage is done to the resource. These conditions will be project-specific and generally call for applicants to notify the Branch of construction schedules and for the avoidance of Branch-designated buffer zones placed around each archaeological site.

Yes Comment

Any projects that will affect known archaeological sites or are determined to be MAJOR BOTTOM-DISTURBANCES in areas holding a HIGH POTENTIAL for containing unknown archaeological resources are of utmost concern. The UAB will recommend a comprehensive survey be conducted by an experienced archaeologist to identify the presence and significance of submerged archaeological remains lying within the project boundaries. Potential affects on these resources should be assessed prior to the initiation of construction activities.

SURVEY REQUIREMENTS

Flexibility is the key to successful underwater archaeological investigations. Survey techniques include historical research, informant inquiry, remote sensing survey, diving and probing investigation, and test excavation. Underwater archaeological contractors should design their investigative methodologies based on a preliminary assessment of the physical environment and cultural history of the project area.

The scope of work for any historical research, archaeological survey and/or site assessment to be performed in conjunction with a proposed construction project should be forwarded to the SHPO for review and comment. This will insure that the survey techniques proposed by the underwater archaeological contractor are both acceptable to the UAB and are efficient and reasonable in terms of cost and time.

Once submerged archaeological sites are located, field and research investigations generally follow a phased examination. The following discussion should be used as a guide to help ensure that during each phase or level, sufficient data is gathered.

Level I

Level I documentation recorded for each submerged archaeological site, regardless of age, condition or significance is essential. Collectively, they provide the database to determine distributional and density patterns, which can lead to predicting the existence of additional, perhaps earlier, submerged remains.

1. Identification
 - a. Project site # and name
 - b. Investigator and affiliation
 - c. Date recorded
2. Location
 - a. Body of water
 - b. Closest main body of water (if different)
 - c. Mark position on map, preferable USGS Quad Map or NOAA chart
 - d. Directions to the site
3. Environment
 - a. Brief description of the marine environment (water depths, currents, bottom conditions)
 - b. Brief description of associated uplands, if appropriate
4. Description of site (the categories a through e are designed specifically for shipwrecks; on other types of submerged site similar information should be collected)
 - a. Overall measurements
 - b. Prominent features
 - c. Associated features
 - d. Associated artifacts and period
 - e. Construction materials
5. Condition and integrity of site
6. Historical research or informant information
7. Additional comments

This will generally be the extent of documentation collected on remains that are manufactured, constructed after World War II, or badly deteriorated.

Level II – Investigations

A mid-range degree of field documentation, Level II is necessary to provide the basis on which to determine whether a submerged cultural resource is eligible for listing on the National Register of Historic Places. Furthermore, it will help identify what features make it significant and guide planning for mitigative measures and management in the future.

1. Locate site precisely on the earth's surface using UTM, State Plane, or Lat/Long coordinates

2. Do a reconnaissance of the immediate area to understand the site's relationship to the surrounding environment
3. Expose the site to the extent necessary for study and the collection of associated artifacts
4. Make a sketch map of the site showing major features and overall measurements
5. Record dimensional data (*Note: This is designed specifically for shipwrecks; on other types of submerged sites similar information should be collected using related terrestrial archaeological guidelines that can be obtained at the Office of State Archaeology 919-733-7342*)
 - a. Record scantlings
 - b. Take cross-sections at critical places: mid-ship, near the bow, and near the transom
 - c. Note features such as the placement of mast-step and centerboard
 - d. Sketch details of key features
6. Take photographs whenever possible
7. Recover samples for wood and identification
8. Conduct historical research and inquiries of local people to solicit vessel identification, type, and period of use

Submerged archaeological remains that will need no further attention are those that fit into existing structural typologies but due to better preserved, existing examples, are not able to add significantly to existing knowledge. Most of these will have been built during the Industrial Period or later (after 1870). In the case of watercraft, which are mobile, remains found to have been built elsewhere and imported into the state generally will not be considered significant within the North Carolina historical contexts. However, appropriate regional maritime programs will be notified of the find and a reasonable time will be sought to allow archaeologists to record and/or recover significant features prior to destruction or disturbance by construction activities.

Level III

When submerged archaeological remains are of age, integrity, and type, either in whole or in part, to contribute new information within a historical context (i.e., typological, economical, geophysical) they are considered significant and may be eligible for listing on the National Register of Historic Places. Submerged cultural resources may also attain significance due to their association with historical events or people. In some instances, significance may not derive from a state or local level but at a national level, such as the wrecks of English blockade runners which form the Cape Fear Civil War shipwreck

district. Both the UAB staff, as well as National Register Bulletin 20, should be consulted when determining eligibility of an underwater archaeological site.

Based on information during Level II concerning the conditions of a submerged archaeological site and surrounding environment, the UAB will determine to what extent the proposed construction will damage the remains. While project avoidance is the preferred option, if this is not possible a mitigation plan will need to be developed and carried out to retrieve important information prior to destruction. Extensive archaeological research is, in itself, a destructive process and a UAB approved mitigative or research plan is required.

The mitigation plan will normally call for Level III archaeological investigation designed to thoroughly gather data on those aspects of the submerged archaeological site that make it significant. Therefore, Level III documentation is very site specific and intensive. Accepted, archaeological methods should be employed and aimed at maximizing data collection, in return for time, money, and energy expended.

REPORTING REQUIREMENTS

These guidelines are designed to ensure thorough and consistent data collection and reporting for archaeological projects conducted on the state's submerged lands. Submission of a draft report for the UAB review and comment enables the researcher to foresee and address comments prior to the completion of the final report. The researcher shall address the following areas to assure final acceptance.

1. A concise description of the goals of the study and general approach of the investigation;
2. A historical overview of the general area of the project and specific information relative to the project area;
3. A concise and specific location of the project area, to include maps that accurately indicate the boundaries of the area identifying nearby landmarks and permanent benchmarks employed in establishing positioning and survey data;
4. A brief and concise description of the project area to include environmental information such as water depth, visibility, currents, bottom composition and contours, and vegetation;
5. A complete description of the work conducted including exploration or recovery projects (research methods, data collection, techniques, etc.) and a complete description of the equipment used to conduct the investigation;
6. A description of the findings, observations, and data generated by project activities;

7. A detailed description of all submerged archaeological sites located within the boundaries of the project area. Sites should be precisely located on maps and submitted to the UAB with the draft report;
8. A comprehensive statement detailing the conclusions drawn from observations, findings, and data generated by project activities;
9. A statement of recommendations with regard to continued investigation and management of archaeological resources.

The UAB will review draft and final reports, as well as scopes of work, significance determinations, and mitigative/research plans and either accept the work or make recommendations through the SHPO's office on how it might be improved to meet acceptable standards. Consultation with the UAB staff is recommended throughout the environmental review process to ensure that adequate and necessary archaeological tasks are performed. Inquiries should be directed to the Underwater Archaeology Branch, North Carolina Division of Historical Resources, P.O. Box 58, Kure Beach, North Carolina 28449, and phone 910-458-9042.