

**State of North Carolina
Department of Environment and Natural Resources
NC Division of Water Resources
NC Division of Coastal Management**

REQUEST FOR QUALIFICATIONS

Project: Development of a Beach and Inlet Management Plan (BIMP) for the State of North Carolina

TABLE OF CONTENTS

1. Introduction
2. Background
3. Timetable
4. Qualification Requirements
5. Scope of Services
6. Format and Content of the Submittal
7. Qualification Evaluation

1. INTRODUCTION

The Department of Environment and Natural Resources (DENR) is committed to the long-term conservation and management of the State's beaches and inlets. In an effort to achieve this goal, DENR is developing a comprehensive management plan for the State's 328 miles of oceanfront beaches and, at present, 19 active tidal inlets. To expand its resources in achieving this goal, DENR is seeking the assistance of a qualified firm experienced in the management and investigation of beaches, inlets, and coastal processes in general. The purpose of this Request for Qualifications (RFQ) is to identify a contractor to assist DENR in the development of a comprehensive beach and inlet management plan (BIMP) for the State of North Carolina. The qualification process will consist of the following steps:

- 1) Firms will submit the materials prescribed in this solicitation to document their ability to provide the services listed in section 5 of this RFQ.
- 2) A DENR Review Committee, composed of representatives from the Divisions of Coastal management, Water Resources, and Purchase and Services, will evaluate and score the materials in each submittal package.
- 3) A maximum of four firms submitting packages, that meet the minimum requirements, will be scheduled to make a 30-minute oral presentation to the Review Committee.
- 4) Based on the initial evaluations and follow-up oral presentations, the Review Committee will select a primary and a secondary firm.

The primary firm will to be offered a Request for Delivery Order Proposal (RDOP). The Department will review the proposal and, if acceptable, commence contract negotiations with the primary firm. If the proposal is not acceptable, the RDOP will be offered to the secondary firm. The Department will review the secondary proposal and, if acceptable, commence contract negotiations with the secondary firm. If an acceptable contract cannot be established with the secondary firm, this RFQ process will be terminated.

2. **BACKGROUND**

Management of the State's beaches and inlets presently is achieved through multiple projects managed by DENR and its divisions. The Division of Water Resources (DWR) maintains a six-year plan for water resource development projects in North Carolina. This plan includes historical information, the current status, and future cost projections for beach and inlet projects along the coast. The Division of Coastal Management (DCM) maintains a database of historical digital shorelines that are used to establish oceanfront erosion rates and inlet processes. The Coastal Resources Commission (CRC) currently is considering for adoption a rule defining sediment criteria for beach fill projects along oceanfront beaches developed by the CRC Science Panel on Coastal Hazards and DCM staff. A collaborative effort between DWR and DCM will catalog, archive, and make available relevant coastal information (e.g., maps, reports, scientific monitoring data) to create a resource that will facilitate beach and inlet management and the development of a BIMP. In addition to DENR and its divisions, three major legislative initiatives have been established by the NC General Assembly and are described below.

A. Beach Management and Restoration Strategy:

Section 13.9c of House Bill (HB) 1840 (known as "The Current Operations and Capital Improvements Appropriations Act of 2000") requires DENR to develop a multiyear beach management and restoration strategy and plan. The Plan, revised every two years and presented to the General Assembly no later than March 1 of each odd-numbered year, shall be as complete as resources and available information allow (§13d). The Plan shall do the following:

1. Utilize the data and expertise available in the Division of Water Resources, Coastal Management, and Land Resources;
2. Identify the erosion rate at each beach community and estimate the degree of vulnerability to storm and hurricane damage;
3. Use the best available geological and geographical information to determine the need for, and probable effectiveness of, beach nourishment;
4. Provide for coordination with the US Army Corps of Engineers (USACE), the NC Department of Transportation (DOT), the NC Division of Emergency Management (DEM), and other State and federal agencies concerned with beach management issues;
5. Provide a status report on all USACE beach protection projects in the planning, construction, or operational stages;
6. Make maximum feasible use of suitable sand dredged from navigation channels for beach nourishment to avoid the loss of this resource and to reduce equipment mobilization costs;
7. Promote inlet sand bypassing where needed to replicate the natural flow of sand interrupted by inlets;
8. Provide for geological and environmental assessments to locate suitable material for beach nourishment;
9. Consider the regional context of beach communities to determine the most cost-effective approach to beach nourishment;
10. Provide for and require adequate public beach access, including handicapped access;
11. Recommend priorities for State funding for beach nourishment projects, based on the amount of erosion occurring, the potential damage to property and to the economy, the benefits for recreation and tourism, the adequacy of project engineering, the cost-effectiveness of the project, and the environmental impacts;
12. Include recommendations on obtaining the maximum federal financial assistance for beach nourishment; and
13. Be subject to a public hearing to receive citizen input.

B. Coastal Habitat Protection Strategy:

In the Fisheries Reform Act of 1997 (HB 1097), the NC General Assembly required the Environmental Management, Coastal Resources, and Marine Fisheries Commissions to approve plans to help protect and restore resources critical to the State's commercial and recreational fisheries. Additional guidelines for

DRAFT RFQ / SCOPE OF WORK

the development and approval of plans for coastal habitat protection is provided in amendments to the Executive Organization Act of 1973 (specifically §279.8 of GS 143B). DENR staff oversaw the development of the State's comprehensive Coastal Habitat Protection Plan (CHPP), which was approved by the three commissions in December 2004. Recommendation 3.2 of the DENR CHPP addresses the preparation and implementation of a comprehensive beach and inlet management plan that addresses ecologically based guidelines, socio-economic concerns, and fish habitat. To date these plan tasks have been undertaken:

1. Developed of sediment criteria for beach fill projects (public hearing for rule language scheduled for September 21, 2006)
2. Convened stakeholder group to identify data gaps, funding needs, and framework and develop a timeline for plan development (ongoing)
3. Provided CRC with the results of beach nourishment monitoring project data (ongoing)
4. Strategy to develop a beach fill database, including monitoring data has been addressed in DCM's five-year FY 2006-2010 strategy submitted to the National Oceanic and Atmospheric Administration as part of the Coastal Zone Enhancement Grants Program provided in §309 of the US Coastal Zone Management Act of 1972
5. A coastal engineer has been employed DCM (completed in October 2005)

C. Inlet Navigation Dredging Strategy:

In the summer of 2005, the N.C. General Assembly commissioned a study of the shallow draft navigation inlets along the North Carolina coast. The study examined the cost, benefits, and management issues related to maintaining North Carolina's shallow draft navigation channels. The final report includes eight sections:

1. Historical project inventory
2. Dredged material management plan
3. Economic Impacts analysis
4. Safety issues
5. Financing options
6. Equipment and Operating Costs
7. Contracting Alternatives
8. Regulatory Cost

3. TIMETABLE

A. Submission Deadlines:

Respondents shall deliver 1 original and 3 copies of their submittal in a sealed package on or before 4:00 PM on: [REDACTED], 2006.

Submittals shall be clearly marked with the RFQ number and "Statement of Qualifications" on the exterior of the envelope or other packaging. Submittals received after the due time prescribed in the RFQ will not be accepted.

To expedite the review and selection process, the submittal document shall not exceed 25 pages (double-sided), including appendices. The Department of Administration, Office of State Construction must receive the submittal document post-marked no later than [REDACTED], 2006.

Mail to:
North Carolina Department of Administration

DRAFT RFQ / SCOPE OF WORK

Office of State Construction
RFQ# [REDACTED]
Attn: _____
1307 Mail Service Center
Raleigh, NC 27699-1307

NOTE: Respondents are held responsible for ensuring that the RFQ Submittal is received by the Office of State Construction by the deadline.

B. Inquiries

In the event a Submitter desires any explanation regarding the meaning or interpretation of this RFQ, such explanation must be requested in writing, no later than 10 business days prior to the submission date prescribed in the RFQ. In the event the Division of Water Resources (DWR) determines that it is necessary to respond to the inquiry in writing, such response will be furnished as an addendum to the RFQ to all potential Submitters and posted at the Office of State Construction website <http://www.nc-sco.com>. All inquiries must be directed ONLY to the contact person listed above.

C. Addenda

Receipt of an addendum to this RFQ by a Submitter must be acknowledged by attaching an original signed copy of the addendum to the submittal. All addenda shall become a part of the requirements for this RFQ.

4. QUALIFICATION REQUIREMENTS

- A. The firm shall have been in business a minimum of five (5) years or the responsible principal shall have had equivalent experience as a co-principal/partner/senior associate in another office for a minimum of five years.
- B. The firm or team shall have successfully completed at least two projects having similar scope or complexity in the past five (5) years.
- C. For each service (see section 5), the firm shall have expertise and demonstrate experience within the following areas:
 - Strategic Planning and Management of Beaches and Inlets
 -
 - Coastal Engineering
 - Coastal Science (e.g., geology, oceanography, marine biology)
 - Economic Analysis (e.g., water resource projects, coastal development, tourism, conservation, recreation, public access)
 - Coastal Development and Land Use
 - Dredging (navigation and placement of beach fill)
 -
 - Beach Fill Planning and Construction
 - Environmental Assessments and Impact Studies of Dredging and Beach Fill (nourishment)
 - Data Management (e.g., data acquisition and digitization, database architecture, geographic information systems or GIS, and network-based data delivery)

Experience of sub contractors, if any, may be considered as part of the team's qualifications. However, it is expressly understood that any sub consultant included in the RFQ must also be included on the team response to the "Request for Delivery Order Proposal".

5. SCOPE OF SERVICE

The project scope will be to develop a comprehensive statewide beach and inlet management plan (BIMP) for North Carolina. In order to fulfill DENR's various legislative requirements (listed above), and build on many of the requirements that are fully and partially completed, the selected contractor will provide the following services:

- Service 1: Data identification and acquisition
- Service 2: Define beach and inlet management regions
- Service 3: Identify stakeholder groups and facilitate stakeholder meetings
- Service 4: Develop draft management strategies
- Service 5: Produce final Beach and Inlet Management Plan report

The contract will last for a period of 18 months from the date of the agreement. The Program Manager will provide monthly progress reports to DWR through the duration of this agreement.

Description of General Services to be Provided:

Service 1: Data identification and acquisition

Identify, collect, digitize (where necessary and/or applicable) and organize existing datasets pertinent to beach and inlet management (e.g., geologic and oceanographic conditions, beach fill data, fish habitat data, etc.). During this process, identify data gaps that should be addressed by future investigations. A primary list of agencies and institutions to be contacted include, but are not limited to, DWR, DCM, NC Geological Survey (NCGS), US Geological Survey (USGS), Division of Marine Fisheries (DMF), US Fish and Wildlife Service (USFWS), National Marine Fisheries, US Army Corps of Engineers (USACE) Wilmington District, NC State University (NCSU), East Carolina University (ECU), University of North Carolina at Chapel Hill (UNCCH), University of North Carolina at Wilmington (UNCW), and Duke University. Efforts should also be made to include pertinent technical and engineering projects done for the State and its counties and municipalities by private firms.

Contractor will accomplish the following:

- Create general description (e.g., geologic, oceanographic, geographic, socioeconomic) of beaches and inlets to be managed.
- Describe natural processes (e.g., geologic, oceanographic, meteorologic) that affect beaches and inlets to be managed.
- Develop a catalog, including location and volume, of known beach-compatible sand resources (upland and submarine) already identified by other agencies and institutions (e.g., NCGS, USGS, NCSU, ECU, UNCCH, UNCW, Duke).
- Develop a spatial database of critical coastal fish habitats (i.e., water column, shell bottom, submerged aquatic vegetation, wetlands, soft bottom, and ocean hard bottom) that may be affected by beach and inlet management operations.
- Develop a database of historical beach fill projects (location, dates, linear reach, volume, cost, sponsor, cost-share ratio, digitized copies of pertinent permits and reports, etc.). This database shall also include pertinent information regarding the type (grain size data) and source of beach

DRAFT RFQ / SCOPE OF WORK

fill sediment (e.g., dredged material disposal from navigation channel maintenance; offshore and upland borrow sites for beach nourishment, storm protection, and/or habitat restoration; beach bulldozing). Portions of this dataset have already been compiled by, and may be obtained from, the Program for the Study of Developed Shorelines at Duke University, NC Sea Grant, DWR, DCM, and the US Army Corps of Engineers.

- Develop a database of historical inlet projects (maintenance dredging, structure placement, channel relocation, pertinent monitoring data, digital orthophotos, digitized copies of pertinent permits and reports, etc.)
- Include other pertinent technical data for inclusion into digital database (e.g., geophysical data such as swath bathymetry, seismic, and SONAR; oceanographic data such as magnitude and direction of waves, tides, and currents; meteorological data related to storms such as date, location of landfall, path of storm, magnitude and duration).
- Where it is not practical to digitize and/or acquire the aforementioned data, a descriptive catalog will be created that references data specifics (e.g., type of data, geospatial and chronological coordinates, acquisition entity, data format, location of data).
- Develop a database of references for all information considered during the development of theBIMP (include digital copies of reference where allowable by file size and copyright).

All data shall be compatible with DCM and DWR database protocols (e.g., geospatial data shall use NAD 83 as the horizontal datum and NAVD 88 as the vertical datum).

Service 2: Define beach and inlet management regions

Define sediment management regions, based on coastal physiography and natural processes, such as erosion rates and inlet migration. Data identified and acquired from Service 1 can be used for data analysis and modeling to identify appropriate management regions (e.g., South Carolina to Cape Fear, Cape Fear to Cape Lookout, Cape Lookout to Cape Hatteras, Cape Hatteras to Virginia).

Service 3: Identify stakeholder groups and facilitate stakeholder meetings

After the completion of services 1 and 2, assist DWR and DCM in the identification of appropriate stakeholders and facilitate stakeholder meetings to introduce the draft strategies and help identify additional beach and inlet issues to refine the draft management strategies. DENR will identify the members of the stakeholder group. The stakeholder group is for information/idea/feedback gathering purposes, they are not a decision-making entity.

Service 4: Develop recommendations for beach and inlet management strategies

Use data from Service 1, data analysis and modeling efforts from Service 2, and the stakeholder input from Service 3 to initiate development of management strategies for the beach and inlet management areas defined in Service 2.

For each management region, develop the following:

1. Area description
2. Detailed list of previous actions
3. List of available resources and opportunities, including relocation.
4. A preliminary strategy for managing the sub-regions inlets and beaches
 - a. Short-term
 - b. Long-term
5. A funding strategy

DRAFT RFQ / SCOPE OF WORK

- a. Annual cost estimate for region management plan
 - b. Economic impact of beaches and beach-related activities for cost-benefit analysis of future management operations
 - c. Identify funding opportunities / develop strategies for securing funding
6. List of references

Service 5: Prepare final Beach and Inlet Management Plan report

1. Using results of service 1 through 4, refine the draft management strategies into a final recommended plan. The comprehensive study report on the proposed Beach and Inlet Management Plan, shall contain at a minimum:
 - Description of study elements and process
 - Executive summary
 - Stakeholder process summary
 - Proposed Management Plan by Sub-region
 - Area description
 - List of available resources and opportunities
 - Identification and description of pertinent data acquired in database, description pertinent data not included in database, technical overview of data synthesis (analyses, statistics, modeling), and data gaps needing to be filled
 - A preliminary strategy for managing the sub-regions inlets and beaches
 - Short-term
 - Long-term
 - Potential funding strategies needed to implement recommendations
 - Annual cost estimate for sub-region management plan
 - Economic impact of beaches and beach-related activities for cost-benefit analysis of future management operations
 - Identify funding opportunities / develop strategies for securing funding
 - List of references
 - Appendices
 - Database catalog
 - Stakeholder meeting minutes
 - Maps, Charts, Figures, etc

6. Format and Content of the Submittal

The following items must be included in the submittal:

- A. A narrative describing the firm's experience, with an emphasis on the services similar or related to those required by the Scope of Service (see Section 5). Examples of a minimum of two previous related projects must be included in the narrative, including references.
- B. A narrative describing the firm's strategy for addressing each service listed in Section 5 and how they would execute that strategy.
- C. An organization outline, including project manager/lead, designation of personnel responsible for coordination between staff members, along with name and area of expertise of each staff member.

DRAFT RFQ / SCOPE OF WORK

- D. A resume or summary of qualification of the staff that will be providing services in order to demonstrate that the firm's staff meets the minimum qualifications prescribe in section 4 of this RFQ.

7. Qualification Evaluation

A DENR Review Committee will assess and score all submittals pursuant to the following criteria:

1. Demonstrated experience and expertise of the Firm and key personnel with respect to services outlined in Scope of Services section (up to 50 points).
2. Demonstrated capacity to deliver in a timely manner the services outlined in Scope of Services section (up to 30 points).
3. Experience in completing projects involving review, permitting and/or consensus by numerous public agencies (up to 20 points).

This evaluation will determine each submittal's score. Submittals will be ranked in accordance with their scores, with a minimum score of 70 points out of a total possible score of 100 points being required in order for a submittal to be eligible for further consideration. At a maximum, the top four scoring firms (with minimum passing scores) will be invited to make 30 minute presentations to the committee.

The DENR Review committee will select a primary contractor and a secondary contractor based on the submittal assessments and oral presentations.