

Evaluation Findings
North Carolina Coastal Management Program
April 2003 - February 2006



Office of Ocean and Coastal Resource Management
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TABLE OF CONTENTS

I.	Executive Summary.....	p. 4
II.	Program Review Procedures.....	p. 5
	A. Overview	
	B. Document Review and Priority Issues	
	C. Site Visit to North Carolina	
III.	North Carolina Coastal Management Program Description.....	p. 7
IV.	Review Findings, Accomplishments, and Recommendations.....	p. 8
	A. Operations and Management	
	1. Program Administration and Staffing	
	2. Effectiveness of CAMA	
	3. NC National Estuarine Research Reserve	
	4. Use of Technology in Permit Tracking	
	B. Public Access	
	C. Coastal Habitat	
	1. Coastal Habitat Protection Plan	
	2. Wetlands Management	
	3. Wetlands Data	
	4. Ecosystem Enhancement Program	
	5. Coastal Reserves	
	D. Water Quality	
	1. Cumulative and Secondary Impacts	
	2. Coastal Nonpoint Pollution Control Program	
	3. Partnerships	
	E. Coastal Hazards	
	1. Coastal Hazards Mapping	
	2. Inlet and Ocean Hazard Areas	
	3. Beach Nourishment Projects	
	F. Coastal Dependent Uses and Community Development	
	1. Land Use Planning	
	2. Redevelopment Policies	
	G. Government Coordination and Decision-Making	
	1. Expedited and Coordinated Government Decision-making	
	2. Coordination and Federal Agencies	

V. Conclusion.....p. 23

VI. Appendices.....p. 24

Appendix A. Summary of Accomplishments and Recommendations

Appendix B. Response to 2004 Evaluations Findings

Appendix C. Persons and Institutions Contacted

Appendix D. Persons Attending the Public Meeting

Appendix E. NOAA’s Response to Written Comments

I. Executive Summary

Section 312 of the Coastal Zone Management Act (CZMA) of 1972, as amended, requires NOAA's Office of Ocean and Coastal Resource Management (OCRM) to conduct periodic evaluations of the performance of states and territories with federally-approved coastal management programs. This review examined the operation and management of the North Carolina Coastal Management Program (NCCMP) by the NC Department of Environment and Natural Resources (DENR), Division of Coastal Management (DCM), the designated lead agency, for the period from April 2003 through February 2006.

This document describes the evaluation findings of the Director of NOAA's OCRM with respect to the NCCMP during the review period. These evaluation findings include discussions of major accomplishments as well as recommendations for program improvement. The evaluation concludes that DCM is successfully implementing and enforcing its federally-approved coastal management program, adhering to the terms of the Federal financial assistance awards, and addressing the coastal management needs identified in section 303(2)(A)-(K) of the CZMA.

The evaluation team documented a number of NCCMP accomplishments during this review period. DCM continues to play a key role in important state initiatives such as the Coastal Habitat Protection Plan, to create resourceful partnerships to address coastal water quality and other coastal issues, and to successfully implement new programs such as express permitting despite numerous challenges. In its mission to continually improve management of the state's coastal resources, DCM has worked closely with the Coastal Resource Commission to integrate sound science into management and policy decisions. DCM has also created innovative technologies, such as a searchable database to track the impacts of permitted activities and a coastal hazards GIS tool to provide information to coastal property owners about hazard areas.

The evaluation team also identified areas where the NCCMP could be strengthened. While CAMA has served as a solid guide for coastal management in the state for over 30 years, DCM should consider an effectiveness assessment to evaluate existing laws governing coastal management and to devise creative options for strengthening CAMA to better address existing and emerging coastal issues. To better target limited resources and address the needs of local communities, DCM is also encouraged to assess high priority areas for public access and for beach renourishment. DCM has made much progress in improving the identification of cumulative and secondary impacts of development and should continue to work with partner agencies to improve the regulatory process to consistently consider these impacts in permitting decisions. While DCM continues to provide expert technical assistance to local communities, DCM should consider how to expand that assistance to communities not previously faced with high development pressures to ensure that impacts to coastal resources and community character are understood and addressed in the local land use plans. DCM should also seek innovative funding or partnership opportunities to assist with implementation of the local land use plans. In addition, DCM is encouraged to explore options for increasing state support for the Coastal Reserve Program, including the NC National Estuarine Research Reserve.

II. PROGRAM REVIEW PROCEDURES

A. OVERVIEW

The National Oceanic and Atmospheric Administration (NOAA) began its review of the NCCMP in November 2005. The §312 evaluation process involves four distinct components:

- An initial document review and identification of specific issues of particular concern;
- A site visit to North Carolina, including interviews and public meetings;
- Development of draft evaluation findings; and
- Preparation of the final evaluation findings, partly based on comments from the state regarding the content and timetables of recommendations specified in the draft document.

The recommendations made by this evaluation appear in boxes and bold type and follow the findings section where facts relevant to the recommendation are discussed. A complete summary of accomplishments and recommendations are outlined in Appendix A. The recommendations may be of two types:

Necessary Actions address programmatic requirements of the CZMA's implementing regulations and of the NCCMP approved by NOAA. These must be carried out by the date(s) specified;

Program Suggestions denote actions that the OCRM believes would improve the program, but which are not mandatory at this time. If no dates are indicated, the state is expected to have considered these Program Suggestions by the time of the next CZMA §312 evaluation.

Failure to address Necessary Actions may result in future finding of non-adherence and the invoking of interim sanctions, as specified in CZMA §312(c). Program Suggestions that are reiterated in consecutive evaluations to address continuing problems may be elevated to Necessary Actions. The findings in this evaluation document will be considered by NOAA in making future financial award decisions relative to the NCCMP.

B. DOCUMENT REVIEW AND PRIORITY ISSUES

The evaluation team reviewed a wide variety of documents prior to the site visit, including: (1) 2004 §312 evaluation findings; (2) federally approved Environmental Impact Statement and program documents; (3) financial assistance awards and work products; (4) semi-annual performance reports; (5) official correspondence; and (6) relevant publications on natural resource management issues in North Carolina.

Based on this review and on discussions with NOAA's Office of Ocean and Coastal Resource Management (OCRM), the evaluation team identified the following priority issues:

- Program accomplishments since the last evaluation;
- The effectiveness of the state in implementing, monitoring, and enforcing the core authorities that form the legal basis for the NCCMP;
- The manner in which DCM provides technical assistance to local governments on coastal issues;
- Coordination efforts with the North Carolina National Estuarine Research Reserve and management of the Coastal Reserves;
- The manner in which DCM coordinates with other federal, state, and local agencies and programs; and
- The manner in which DCM has addressed the recommendations contained in the §312 evaluation findings released in 2004. DCM's assessment of how it has responded to each of the recommendations in the 2004 evaluation findings is located in Appendix B.

C. SITE VISIT TO NORTH CAROLINA

Notification of the scheduled evaluation was sent to the NC DENR, DCM, relevant environmental agencies, members of North Carolina's congressional delegation, and regional newspapers. In addition, a notice of NOAA's "Intent to Evaluate" was published in the *Federal Register* on December 23, 2005.

The site visit to North Carolina was conducted on February 6-10, 2006. The evaluation team consisted of Ralph Cantral (evaluation team lead), Elizabeth Mills and Meredith Mendelson, OCRM National Policy and Evaluation Division; Elisabeth Morgan, OCRM Coastal Programs Division; and Debbie Danford, Texas Coastal Management Program.

During the site visit, the evaluation team met with representatives from the NC Sea Grant, NC Department of Transportation, NOAA National Marine Fisheries Service, U.S. Army Corps of Engineers district office, NC Division of Marine Fisheries, NC Division of Conservation and Community Affairs, NC National Estuarine Research Reserve, NC Ports Authority, Wilmington/Cape Fear Home Builders Association, NC Coastal Federation, planners from Wilmington and New Hanover County, and town managers from Manteo and Emerald Isle. Appendix C lists people and institutions contacted during this review.

NOAA held three advertised public meetings during the site visit: Monday, February 6, 2006 at 6:00 p.m. at the N.C. Department of Environment and Natural Resources Wilmington Regional Office, Room 200, 127 Cardinal Drive Extension, Wilmington, NC; Tuesday, February 7, 2006 at 6:00 p.m. at the Carteret County Courthouse, Commissioners Boardroom, One Courthouse Square, Beaufort, NC; and, Wednesday, February 8, 2006 at 6:00 p.m. at the Dare County Commissioners Office, 204 Ananias Dare Street, Manteo, NC. The public meetings gave members of the general public the opportunity to express their opinions about the overall operation and management of NCCMP. Appendix D lists individuals who registered at each meeting. NOAA's response to written comments submitted during this review is summarized in Appendix E.

The DCM staff was instrumental in setting up meetings and arranging logistics for the site visit. OCRM gratefully acknowledges their support.

III. COASTAL MANAGEMENT PROGRAM DESCRIPTION

NOAA's Office of Ocean and Coastal Resource Management approved the NCCMP in September 1978, four years after the NC General Assembly passed the Coastal Area Management Act (CAMA) to establish the Coastal Resources Commission (CRC), require local land use planning in 20 coastal counties, and provide for a program to regulate development. The NCCMP is administered by the Division of Coastal Management (DCM) in the NC Department of Environment and Natural Resources (DENR). DCM works to protect, conserve, and manage North Carolina's coastal resources through an integrated program of planning, permitting, education, and research. DCM carries out CAMA, the Dredge and Fill Law, and the federal CZMA in the coastal zone, using rules and policies of the CRC.

North Carolina's coastal area consists of 20 coastal counties, covering 3,371 miles and populated by more than 700,000 residents. The NCCMP employs a two-tier approach to manage the state's coastal resources within this area. The critical resource areas, designated as Areas of Environmental Concern (AECs), comprise the first tier. DCM regulates activities in these areas through CAMA permits. The designated AECs include public trust areas and estuarine waters, saltwater wetlands, beaches, primary dunes, primary nursery areas, frontal dunes, ocean erosion areas, inlet lands, small surface water supply watersheds, public water supply well fields, coastal and estuarine shorelines, and certain fragile natural resource areas. Areas within the 20 coastal counties comprise the second tier. These areas are managed through a coordinated effort of other state laws, local land use plans, and Executive Order 15, which requires state agency actions to be consistent with the local land use plans.

The NCCMP consists of resource management laws and regulations; state policies concerning coastal management established by statutes or other authorities; the Governor's Executive Order Numbers 15, 57, 95 and 120; and CAMA, which provides a cohesive bond with existing statutes to provide a broad system of coastal management complete with guidelines, regulations, standards, procedures, and local land use plans. DCM is responsible for program implementation through activities such as CAMA and state dredge and fill permitting and enforcement, state consistency reviews, CAMA land use planning, public beach and coastal waterfront access, and North Carolina Coastal Reserves. The CRC, a 15-member regional resource management body appointed by the Governor, is responsible for the development of policies and state guidelines for the designation and regulation of AECs, the establishment of state guidelines for local land use planning in the coastal area, and the initiation of action on new coastal resource management issues. The 45-member Coastal Resources Advisory Council (CRAC) is composed of representatives of local government and state agencies and provides input to the CRC deliberations.

VI. REVIEW FINDINGS, ACCOMPLISHMENTS AND RECOMMENDATIONS

A. OPERATIONS AND MANAGEMENT

1. Program Administration and Staffing

DCM has nine offices located in the state capital and along the coast, including the headquarters office, four DCM regional offices, and four Coastal Reserve offices. DCM headquarters office is located in Morehead City, after being relocated from Raleigh in 2005. A Program Suggestion in the 2004 evaluation findings expressed concern about how the relocation of DCM leadership from the state capital to the coast would potentially reduce the ability of DCM to collaborate with other state agencies responsible for natural resource protection. During the review period, DCM successfully transitioned to its new headquarters in Morehead City with the move of the DCM Director, Major Permits staff, and one Policy and Planning position. Despite a significant staff loss with the move, after two years, most vacant positions have been filled with well-qualified individuals. The Major Permits staff, which reviews projects for federal consistency, lost all staff except one with the move but has now replaced staff and expects review time to be reduced in the near future. A new building was constructed to accommodate the relocated headquarters staff and existing Morehead City field staff. No additional transferring of the Raleigh staff to the Morehead City office is planned.

Under the new organization, the Morehead City office processes major development permits and federal consistency reviews while the Raleigh office houses the administration, policy analysis, strategic planning, and public information sections. DCM also has four offices along the coast in Elizabeth City, Washington, Morehead City, and Wilmington. Staff in these offices are responsible for permitting and enforcement. Each field office also includes a planner who provides assistance to local governments in the development of local land use plans and public access sites. Four additional Coastal Reserve offices oversee the management of the 10 reserve sites, including four designated as part of the NC National Estuarine Research Reserve.

Due to its large presence along the coasts and in Raleigh, and despite the disruption of the move, DCM continues to successfully coordinate with other programs both within DENR as well as with federal, state, local, academic, commercial, and private organizations. The evaluation team heard numerous compliments on the responsiveness and accountability of DCM staff at the field and headquarters level. The accessibility of staff was continually praised though many expressed concerns that DCM is understaffed and that current staff do not have sufficient resources to adequately do their jobs, specifically as related to permitting and enforcement.

While the NC state legislature approved a 12% pay increase for DCM staff in 2005, not enough funds were provided to the program to implement this raise for State-funded positions, and no funds were provided for Federally-funded positions. DCM was required to use grant funds or other existing funding pools to cover the raises for its staff. OCRM acknowledges that DCM

staff deserve the pay increase but urges the replacement of lost funding and the use of state funds for further increases so that core program funding can continue to be used for necessary program activities.

ACCOMPLISHMENT: DCM successfully completed the transition of DCM headquarters from Raleigh to Morehead City and its coordination with resource management agencies and other partners remain strong. Staff vacancies resulting from the relocation are now filled.

2. Effectiveness of CAMA

CAMA has guided coastal management in North Carolina for more than 30 years, with additional rules added over time as new issues arose. Several people interviewed as part of the evaluation mentioned that CAMA may need to be updated to be a more effective law for the future by minimizing redundant rules and incorporating emerging issues. Over the years, many additional state regulations have been incorporated, with some overlapping or even conflicting with other existing regulations. These additional rules sometimes lack implementation funding, which requires DCM to further stretch limited staff and financial resources. In addition, when conflicting regulations exist, DCM faces more appeals and disputes that not only require resources to reach resolution but also open opportunities to challenge the foundation of CAMA.

These concerns may point to a need for DCM to consider an effectiveness assessment of CAMA, including a policy analysis of existing rules and their potential for conflicting intents, needs assessments for high priority issues, and an evaluation of emerging issues and lessons learned. This assessment of CAMA may lead to the creation of a new program document to better reflect the current pressures on the coast and the evolved state of the NCCMP.

PROGRAM SUGGESTION: DCM should consider undertaking a periodic effectiveness assessment of CAMA to evaluate the existing laws and regulations governing coastal management in the state, prioritize issues facing the coastal zone, and to incorporate emerging issues and lessons learned.

3. NC National Estuarine Research Reserve (NCNERR)

Note: Although the NCNERR is evaluated separately under Section 315 of the CZMA, joint management issues have been reviewed as part of this evaluation.

The NC National Estuarine Research Reserve (NCNERR) is the North Carolina component of the National Estuarine Research Reserve System, a network of 27 estuarine areas protected for long-term research, education, and stewardship. The NCNERR includes the four sites of Currituck Banks, Rachel Carson, Masonboro Island, and Zeke's Island. The NCNERR sites are part of the state Coastal Reserve Program, which includes a total of 10 sites along the coast. DCM administers the Coastal Reserve Program and the NCNERR, which receives part of its funding from NOAA.

The four NCNERR sites make up approximately 10,000 acres of the total 41,000 acres in the Coastal Reserve Program and staff, paid in full or in part by NERR funding, are responsible for the management of all reserve sites. As discussed in the 2005 NCNERR evaluation, since NOAA funds can only legitimately be used on the four NERR sites, staff continues to struggle with managing the approximately 31,000 acres in the other six coastal reserve sites with a limited amount of state funds and state-supported staff. DCM should work to identify state sources of financial support for all non-NERR coastal reserves. The lack of state support also causes NCNERR to struggle to meet its state match for NOAA federal grants since only two positions are funded by the state and other state contributions are limited. DCM should continue to work to determine how to improve management of the NERR and coastal reserve sites and to promote state support for the programs.

NCNERR staff turnover has been high over the last three years, with five staff members leaving the reserve, primarily due to decisions fueled by a lack of communication and coordination between the NCCMP and the NCNERR. A new manager was hired and other vacant positions have been filled. To rebuild their working relationship, NCCMP and NCNERR staff have taken steps to improve communication within the Division and to engage in immediate strategic and long-term planning. This has been assisted by a facilitated meeting to discuss program needs and coordination strategies and by the establishment of regular quarterly meetings for NCNERR staff to share information. The NCNERR staff is now working with DCM policy and planning staff to develop research priorities that integrate current management issues, and NCCMP and NERR education staff often partner on outreach and training programs. The DCM public information officer also assists NCNERR with publications and press releases.

While DCM has taken solid steps to improve internal communication and coordination, they should continue to strengthen their partnership. With the relocation of DCM headquarters closer to the NERR office in Beaufort, DCM should take advantage of the close proximity to promote more direct communication between the NERR manager and DCM director. DCM should also explore opportunities for participation by NERR staff in relevant NCCMP management activities, such as including the NERR research coordinator on the CRC Science Panel and other subcommittees.

PROGRAM SUGGESTION: DCM should continue to work with the NCNERR staff to enhance communication and identify opportunities for further cooperation on education, research, and stewardship activities that support DCM management needs and NERR objectives. DCM should also explore options for increasing state support of the NERR and non-NERR coastal reserve sites.

4. Use of Technology in Permit Tracking

Since the 2004 evaluation, DCM has finished development of and began implementation of the Coastal Development Activity and Impact Tracking System (C-DAITS), a searchable electronic database that tracks development activities and their impacts through permits. By collecting information on impacts using a standard format, C-DAITS information can be compiled to reveal trends in development activities, assess new development in comparison to redevelopment, and

capture cumulative and secondary impacts of development. Since C-DAITS links development activities to a GPS location, the database can also highlight spatial trends in development near specific estuarine or coastal areas, identify areas prone to cumulative impacts, and track permit violations. By integrating digital photos, field staff can more easily follow up on what was actually built on the ground and improve enforcement abilities. With these capabilities to more accurately capture resource impacts, DCM intends to use C-DAITS to inform planning and permitting decisions and to better respond to internal and public inquiries.

Over the past several years, historic general permits have been entered into C-DAITS and new general permits are now being managed with this database. The system currently holds about 36,000 records of historic and current general permits. DCM is now beginning to incorporate a system to enter major permits. Through this in-house effort to compile and manage permits in a more comprehensive manner, DCM has vastly improved the standardization of information collected through permit applications, the efficiency in tracking permitted resource impacts, and the understanding of cumulative and secondary impacts in the coastal counties.

ACCOMPLISHMENT: DCM has improved its ability to track permitted development activities and their impacts by finalizing development and beginning implementation of the Coastal Development Activity and Impact Tracking System. DCM is encouraged to finish data entry and to begin using C-DAITS to its full capacity.

B. PUBLIC ACCESS

The Public Beach and Coastal Waterfront Access Program was established under CAMA in 1981 to provide matching grants to local governments for oceanfront beach access areas and later expanded to include estuarine beaches and waterways. The program has funded more than 280 public access sites since its establishment, and from 2003-2005, DCM awarded \$4.7 million in grants to 55 local communities for public access projects. In addition, DCM partnered with the N.C. Shore and Beach Preservation Association in 2003 to map the state's locally funded ocean beach public accessways. This tool is now available to the public via the internet to assist in locating local and state-funded accessways and obtaining information about parking, restrooms, and other facilities.

While DCM supports multiple local public access projects each year, loss of traditional access due to coastal development remains a concern. Increasing numbers of public marinas and boat launches are being converted to private uses, and working waterfronts are being lost when boat launches and fish houses are bought out for redevelopment and privatization. This change in waterfront use has the potential to cause significant economic impacts. Historic piers are also being sold to private developers or dismantled or not replaced after storm damage. This loss of traditional access sites, coupled with a growth in the coastal population and tourism, is leading to a greater demand for additional public access sites.

To address the growing need for public access, DCM should continue to coordinate with state agencies that have an impact on access to ensure protection of existing sites and to add sites

where needed and available. A specific concern highlighted during the site visit is the loss of traditional access points to rivers and streams when bridges are renovated or replaced. NC Department of Transportation (DOT) cites safety issues as the reason for not re-establishing access ways when bridge renovation occurs. DCM recognizes this issue and has met with DOT to suggest proactive approaches to maintaining established access ways along DOT right-of-ways. DCM permitting staff who handle DOT projects also elevate the permit application to provide an opportunity for public comment on the proposed project if public access is an issue.

DCM has made great strides in increasing public access in estuarine areas, though additional access is needed in these areas and should be more proactively sought out. In some cases, communities on the estuarine side are not able to find matching funds so do not apply for state access grants. While access in some areas is not necessarily in high demand currently, there may be a need to buy land now since land prices are continuing to rise. To evaluate the need for additional oceanfront and estuarine access sites, DCM should pursue a needs assessment to determine access gaps and priorities to improve public access.

PROGRAM SUGGESTION: DCM is encouraged to work proactively to ensure that existing public access sites are maintained with new developments or redevelopments and that a focus remains on improving access to the estuarine environments. DCM should move forward with the development of a needs assessment to determine access gaps and priorities to effectively improve public access.

C. COASTAL HABITAT

1. Coastal Habitat Protection Plan (CHPP)

The Coastal Habitat Protection Plan (CHPP) was established as part of the Fisheries Reform Act of 1997. The Act required the Coastal Resources, Marine Fisheries, and Environmental Management Commissions to approve plans to help protect and restore resources critical to NC's commercial and recreational fisheries. DCM spent the past few years assisting with the development of the CHPP, which focuses on fish habitats including wetlands, shell bottom, soft bottom, hard bottom, submerged aquatic vegetation, and the water column.

The process of developing the CHPP has improved communication and coordination between the three Commissions and between involved agencies. CHPP has resulted in new state resources for a variety of activities, including the protection of shellfish waters and the promotion of improved enforcement of environmental regulations. CHPP has also increased the awareness by the public of the importance of habitat protection, particularly as it relates to protecting water resources.

The CRC recently adopted the state's CHPP plan and approved DCM's implementation plan. DCM participation in the CHPP development process was praised by multiple partner agencies and the CRC, and its plan for continued involvement in implementation shows a strong commitment to protecting important coastal resources. Specifically, DCM is partnering with

other DENR divisions to address the educational components of implementation, which could prove to be a key aspect in improving the public's stewardship of the resources. Implementation of the plan will require a continued focus on CHPP by the state and adequate funding by the legislature if the desired results are to be achieved.

ACCOMPLISHMENT: DCM is commended for its contribution to the development and adoption of the state's Coastal Habitat Protection Plan (CHPP).

2. Wetlands Management

Wetlands are a high priority for the NCCMP, and DCM relies on the North Carolina Coastal Region Evaluation of Wetland Significance (NC-CREWS) for information about the ecological importance of individual wetlands for use in planning, permitting, and management decisions. NC-CREWS is a watershed-based wetlands functional assessment model that uses geographic information systems (GIS) software and data to assess the level of water quality, wildlife habitat, and hydrologic functions of wetlands.

DCM uses NC-CREWS for determining impacts and mitigation requirements for permitted activities. To expand acreage impacts to also include functional impacts, DCM staff are working with the U.S. Army Corps of Engineers, Environmental Protection Agency, and other partners to develop a rapid assessment to predict functional changes in water quality, habitat, and hydrology in addition to acreage. They have completed the development of field-based methodology and are now determining how to incorporate this methodology into U.S. Army Corps of Engineers and NC Division of Water Quality permitting processes.

3. Wetland Data

NC currently uses National Wetlands Inventory data from the late 1980s and is exploring options for updating the state wetlands maps for more accurate use in decision-making. An update of the wetlands maps would require time-intensive manipulation of remotely sensed data, but DCM is looking to partner with other state efforts to map wetlands so that a consistent method is applied and a useful product emerges for multiple state needs. DCM is requesting support from the U.S. Fish and Wildlife Service National Wetlands Inventory for these much-needed updated maps.

4. Ecosystem Enhancement Program

The NC's Ecosystem Enhancement Program (EEP), a partnership program established state-wide in 2003, is a multi-agency initiative between DENR, NC DOT, and the U.S. Army Corps of Engineers that works to compensate for unavoidable environmental impacts associated with transportation infrastructure and economic development. DCM participates in the EEP, and NC-CREWS provides the coastal information for the EEP.

The EEP was established to develop a more comprehensive approach to compensatory mitigation of wetlands impacted by state road projects. DOT's past project-by-project approach was delaying transportation projects since it required upfront mitigation and the demand for highway projects was outpacing DOT's ability to do mitigation projects. The EEP will develop mitigation

plans by watersheds to determine priority areas for mitigation and protection and to plan holistically for what the ecosystem needs. This allows for greater flexibility in determining what mitigation techniques are most needed and what priority areas in the watershed should be acquired to protect ecological functions. This proves especially important in the coastal zone where the volume of development continues to increase and numerous wetland systems are being impacted.

5. Coastal Reserves

DCM manages the NC Coastal Reserve Program, which preserves more than 40,000 acres of maritime forests, marshes, and other coastal habitats for education, research, and traditional recreational uses. The state has 10 coastal reserve sites, including 4 sites that are designated components of the National Estuarine Research Reserve (NERR). The NERR sites include Currituck Banks, Rachel Carson, Masonboro Island, and Zeke's Island. The other coastal reserve sites are Kitty Hawk Woods, Emily and Richardson Preyer Buckridge, Buxton Woods, Permuda Island, Bald Head Woods, and Bird Island. Section A above outlines operational issues of the NERR and Coastal Reserve Program.

Over the past three years, DCM has been fighting an invasive reed known as phragmites in the Kitty Hawk Woods Coastal Reserve. DCM reserve staff and other researchers are trying various methods to control the phragmites and sharing results by partnering with the Dare County Cooperative Extension Service to offer workshops to land managers facing this problem. Elizabeth City State University assisted by mapping areas invaded by phragmites and provided field help to remove phragmites in the control test plots. The Nature Conservancy and the NOAA Center for Coastal Fisheries and Habitat Research in Beaufort, NC, provided technical assistance on phragmites species identification and removal techniques.”

DCM has also recently partnered with the U.S. Geological Survey U.S. to determine how ditches and roads in the Buckridge Coastal Reserve are affecting salinity and hydrology in the area, home to the largest Atlantic white cedar stand in the state. Knowing the impacts of salinity and hydrological changes will allow DCM to apply for a further grant from the Clean Water Management Trust Fund to implement the 5-year restoration plan developed as part of the aforementioned grants

D. WATER QUALITY

1. Cumulative and secondary impacts

Cumulative and secondary impacts of permitted activities continue to be an issue for DCM, especially as related to docks, piers, and bulkheads and their impacts on aquatic vegetation and shellfish. Cumulative and secondary impacts include the collective effects of individual uses and activities related to growth and development in coastal areas. DCM has accomplished much in mitigating site-specific impacts through the permitting process for individual development projects, but the cumulative and secondary impacts of numerous relatively small projects have become significant over time.

DCM has some key tools for moving forward on improved management of cumulative and secondary impacts. Through CAMA, DCM has the legislative authority to address cumulative impacts. For projects within an AEC that require a permit, CAMA allows the denial of an application for the permit if the proposed development would contribute to cumulative effects that would be inconsistent with existing guidelines. While this authority exists through CAMA, there are obstacles to using the permitting process to identify and manage these complicated impacts. Such obstacles include a lack of guidance to permitting staff on how to determine if an individual project will significantly contribute to or increase cumulative or secondary impacts on regional resources and a lack of scientific studies to justify potential permitting decisions. In addition, developers sometimes apply for permits in a piecemeal fashion, thereby limiting comprehensive evaluation of the complete project. As they move forward, DCM may find it helpful to explore what other states are doing to address cumulative and secondary impacts through their permitting process.

Another tool exists with the new CAMA guidelines for land use plans allow communities to set goals for environmental sustainability and incorporate cumulative impact trends. These guidelines, which include an analysis of land suitability, natural systems constraints and availability of infrastructure and capacity, encourage local governments to create an informed vision for a sustainable community with less impact on coastal resources and their functions. With the recent implementation of C-DAITS, DCM also now has a database of permitted activities to assist in assessing and managing the cumulative impacts of development in the twenty coastal counties. This tool, covered more thoroughly in Section A, allows DCM to track and map permitted activities to better understand and display cumulative and secondary impacts in the coastal zone.

PROGRAM SUGGESTION: DCM should continue to improve the identification and management of cumulative and secondary impacts, and to work with partner agencies to improve and clarify the regulatory process so that cumulative and secondary impacts are consistently considered in permitting decisions.

2. Coastal Nonpoint Pollution Control Program

Section 6217 of the Coastal Zone Management Act requires that states with federally approved Coastal Management Programs develop Coastal Nonpoint Source Pollution Control Programs. North Carolina's program was developed by DCM in cooperation with the Division of Water Quality through an effort to catalog existing programs that control nonpoint source pollution in the coastal area, determine if they meet requirements of the federal Coastal Nonpoint Source Pollution Control Program, and identify new or modified management measures needed for an approvable program. The state's original program was submitted to EPA and NOAA in 1995, and received conditional approval in 1998 with specific conditions that needed to be met for full approval. Over the next five years, DCM and the Division of Water Quality worked to address the specific conditions, including expanding the coastal nonpoint program boundary, adding required management measures, and improving management mechanisms and policies. In June 2003, NC's Coastal Nonpoint Source Pollution Program received full approval from EPA and NOAA.

ACCOMPLISHMENT: Through its work with partners to meet program requirements and specific conditions, OCRM commends DCM for its role in attaining full approval for the state's Coastal Nonpoint Source Pollution Program.

3. Partnerships

DCM partnered with NC Sea Grant and the Division of Water Quality to fund a temporary position with Coastal Nonpoint Program funds. This staff person reviewed the water quality sections of local land use plans to assess and promote incorporation of water quality concerns into the plans. DCM is also working with NC Sea Grant and the Division of Water Quality to compile a report on the current management of community docks with fewer than 10 slips, which do not receive as extensive an environmental review as facilities with greater than 10 slips, which are classified as marinas. The report will make recommendations on how these facilities can be better managed to reduce water quality impacts. Funded by Coastal Nonpoint Program monies, this report may serve as a good springboard for an analysis of the current marina and pier policy as recommended in the recently adopted Coastal Habitat Protection Plan. In addition, NC produced a publication for marinas on best management practices for stormwater runoff, which resulted from a partnership effort between DCM, NOAA, NC Sea Grant, NC Cooperative Extension, and NC State University. OCRM commends DCM for its strong partnerships with other state agencies and universities that promote innovative projects to reduce water quality degradation through the sharing of staff and financial resources.

E. COASTAL HAZARDS

1. Coastal Hazard Mapping

DCM is using innovative technologies to address coastal hazards. They have developed a coastal hazards GIS to map hazardous areas through an interactive internet tool that shows shoreline position, erosion rates, setback lines, flood zones, and inlet and ocean hazard areas. This is in part a response to proposed state legislation during the 2005 Session of the NC General Assembly that would have provided for disclosure of coastal natural hazards to purchasers of coastal properties with designated ocean hazard areas of environmental concern. While the disclosure bill was not passed, the coastal hazards GIS allows current and prospective homeowners to assess physical threats to their homes. DCM is developing accompanying educational pieces that will provide information about types of hazards and issues with coastal home ownership.

ACCOMPLISHMENT: DCM is commended for developing a coastal hazards GIS internet tool to provide information to property owners about coastal hazards areas, including shoreline position, erosion rates, setback lines, flood zones, and inlet and ocean hazard areas.

2. Inlet and Ocean Hazard Areas

North Carolina's ocean shoreline contains 21 inlets, most of which gradually migrate with normal coastal processes or dramatically change location during hurricanes. The original inlet hazard areas, established by regulations under CAMA in 1978, are now out of date. A number of inlets have migrated in such a way that they are no longer aligned with the hazard area delineations, and thus all inlets are being evaluated for updating. DCM is working with the CRC Science Panel to develop a new technique to redefine inlet hazard areas using a justifiable methodology in order to update the inlet and ocean hazard areas. This process presents a challenge in that many aerial photos are needed over time to determine change to the degree that is necessary to defensibly adjust the inlet hazard area delineation. Currently, approximately 10 inlets have been mapped using the new methodology, with plans to complete all 21 inlets.

3. Beach Nourishment Projects

Intense erosion of NC's ocean shorelines during hazard events threatens oceanfront properties and sandy beaches that attract tourists to the area. To rebuild eroded beaches, multiple communities turn to beach renourishment projects. Such extensive efforts have implications in terms of the adequacy and availability of sand resources, appropriate and equitable financing, and biological and physical impacts of sand dredging and sand placement.

During the review period, DCM worked with the CRC Science Panel to develop recommendations for standards of sand materials used for beach renourishment. After the final recommendations were presented to the CRC in January 2005, DCM and the U.S. Army Corps evaluated the standards against past renourishment projects in the state. The recommendations are expected to be adopted in mid-2006. The Coastal Habitat Protection Plan, approved in late 2004, also recommends that DCM develop an overall beach and inlet management plan. This plan is expected to address beach renourishment issues such as regional sand management, monitoring, and mitigation and to promote action to fill current management capacity gaps. Coordination between DCM, the U.S. Army Corps of Engineers, and other agencies has improved to address the increasing number of requests for beach nourishment and dredging projects. Existing complications such as finding suitable sand resources, establishing funding options, and determining resource impacts present a concern that warrants continued coordination and strategic prioritization of renourishment needs. OCRM supports the strategy to assess and prioritize renourishment needs as proposed by DCM as part of their next Section 309 Strategy and Assessment (2006-2010).

PROGRAM SUGGESTION: While DCM has made progress in determining sand compatibility criteria and is considering development of a beach and inlet management plan, DCM is encouraged to work with appropriate partners to assess renourishment needs and priority areas on the coast to promote proactive coordination with local communities, to determine feasible funding scenarios, and to maintain adequate and suitable sand supplies.

The Science Panel, an advisory body to the CRC, has been a great asset to understanding the science of particular issues to inform management decisions. The CRC convened the Science

Panel to assist staff in evaluating the issues posed by hurricanes and the need for shoreline management as related to hazards planning. The panel consists of 10-12 volunteer members, mostly academics and scientists. To date, it has primarily focused on coastal hazards and beach management. For example, as detailed above, the Panel developed recommendations for sediment criteria for beach nourishment projects, which were recently codified by the CRC. The Panel is currently working on developing methodologies for updating the state inlet and ocean hazard areas.

ACCOMPLISHMENT: The CRC Science Panel is applauded for providing sound science to inform management and policy decisions by DCM and the CRC.

Due the success of the Science Panel in providing the CRC with sound scientific advice for use in decision-making on hazard related issues, the CRC should consider broadening the mandate of the Science Panel to include a more diverse array of expertise to improve its ability to address emerging issues on a broader variety of topics. Alternatively, the CRC could consider convening additional panels composed of topic-specific scientific experts to address particular emerging issues.

PROGRAM SUGGESTION: The CRC should consider broadening the Science Panel to include a more diverse array of expertise to improve its ability to address additional emerging issues.

F. COASTAL DEPENDENT USES AND COMMUNITY DEVELOPMENT

The continued high population growth in NC's coastal counties and its associated building boom has resulted in an increase in CAMA permit requests, along with variance requests and appeals. This increase in development activity is taxing available infrastructure and community services and is impacting natural resources, most notably water quality. DCM and the CRC continue to struggle with the need to balance development with preserving the coastal environment and community character.

1. Land Use Planning

The NC coast continues to experience increased pressures of new development in traditional, less developed communities as well as redevelopment pressures in highly developed areas. The land use plans required by CAMA are one tool that DCM and local communities use to promote more sustainable development patterns and to protect natural resources. CAMA requires each of the 20 coastal counties to have a local land use plan in accordance with guidelines established by the CRC. These guidelines provide a common format for each plan and a set of issues that must be considered in the planning process. The role of the CRC is limited to determining if the plans have been properly prepared according to the guidelines. The policies included in the plan are determined by the local government, not the CRC, though policies on particular issues must be

addressed as a requirement. Once a land use plan is approved by the CRC, the DCM uses the plan in making CAMA permit decisions and federal consistency determinations.

In August 2002, new guidelines for land use plans went into effect. These revised guidelines encourage communities to guide development based on an analysis of land suitability, natural systems constraints, and availability of infrastructure and capacity. The idea is that the community's goals would be based on its unique resources and management needs and will translate into a better-planned and sustainable community with less impact on coastal resources. As of early 2006, seven land use plans have been completed under the new guidelines, with 33 in progress, eight recently initiated, and nine more starting later in the year.

DCM plays a role in the land use planning process by providing grants and technical assistance in the development of the plans. To reduce confusion about the revised land use planning guidelines, DCM held three workshops to educate communities about the guidelines and available tools and partnered with NC Sea Grant and the NC Division of Water Quality to host a CAMA kickoff workshop in the fall of 2005. This inaugural kickoff workshop was intended to help communities entering the initial phase of the land use planning process understand the CAMA guidelines and provide information about ways to protect coastal resources, with a focus on water quality. DCM is also developing a technical manual to clarify the new guidelines. Several county and city planners interviewed during the site visit noted that DCM district staff do a great job in assisting counties with land use plans.

While DCM staff provides assistance to communities for the development of local land use plans, funding is no longer available for creating implementation tools, such as ordinances or zoning, needed to carry out the vision of the plan. Without implementation funds and tools, the land use plans have reduced effectiveness in shaping the local landscape in the way envisioned by the local community, especially in communities without planning staff.

PROGRAM SUGGESTION: DCM is encouraged to seek out additional funding sources or partnership opportunities to assist communities with implementation of their local land use plans.

DCM should consider providing more in-depth technical assistance for land use plans to assess the impacts of development in rural areas or areas not previously faced with high development pressures and to ensure the concerns of the local citizens are addressed in the resulting plan. DCM also may need to provide more extensive technical assistance to communities facing impacts from types of development not addressed in their land use plan. An example of a community that could benefit from such assistance from DCM is Carteret County, which had recently submitted their land use plan to DCM for approval at the time of site visit. A large number of citizens turned out for the public meeting to express their concerns to DCM and the evaluation team about changes to the land use plan that would allow for permitting of large developments and marinas, and how these developments could impact local resources and community character.

PROGRAM SUGGESTION: While DCM staff provide basic technical assistance to local communities in developing land use plans, DCM should consider more in-depth assistance to rural communities that lack local planning capacity or communities not previously faced with high development pressures to ensure that the impacts to coastal resources and to the community character are adequately addressed in local land use plans.

2. Redevelopment Policies

The redevelopment of previously developed coastal areas at a greater density constitutes a growing pressure on coastal North Carolina. An increasingly common trend is for existing structures to be bought, torn down, and replaced with multiple story structures. This change in ownership often also leads to adjoining piers and slips being converted from public to private use. While DCM and the CRC has focused on new development along the coast, the redevelopment trend may soon require them to rethink redevelopment policies as existing regulations were not developed for the types of large structures now being built. This assessment should consider if existing state standards are sufficient for the large developments now commonly proposed, if local governments are adequately prepared to address redevelopment, and how to incorporate cumulative and secondary impacts from these larger development into the permitting process.

PROGRAM SUGGESTION: DCM is encouraged to study existing state standards to determine whether they are sufficient for the types of large development more commonly proposed and to develop a plan for incorporation of cumulative and secondary impacts from the developments into the permitting process.

G. GOVERNMENT COORDINATION AND DECISION-MAKING

1. Expedited and Coordinated Government Decision-making

a. Express Permitting

Express permitting has been fully implemented throughout the state to allow permit applicants that are willing to pay higher application fees to receive coordinated, expedited review. Two new DCM staff positions were created to review express permit applications for CAMA, storm water, and sedimentation and erosion permits. These positions are funded by express permit fees. The average review time for erosion and sedimentation control plans was cut from 20 days to two days and the average review time for storm water permits was reduced from 70 days to nine days. The review of CAMA major permits takes an average of 33 days with express permitting in comparison to 95 days through the regular permitting process.

The express permitting process does not affect environmental review requirements. CAMA permits that go through the express permit program must meet the same statutory and regulatory

requirements that apply in a normal CAMA permit review. Most CAMA projects reviewed through the express permit program require only approval under another state permit or, if a federal permit is also required, fall under the nationwide or general permit from the U.S. Army Corps of Engineers.

The user community applauds the express permitting process due to the expediency and the improved assistance with applications. Each applicant is required to do a pre-application consultation with DCM to determine which permits are required, what potential issues may arise with the project, and whether the express permit process is appropriate for the project. While this new permitting mechanism is moving forward and express permitting is decreasing the workload for general permit staff, it is also decreasing the budget for the general permit process since express permit fees are dedicated to that program. While fee increases are being considered for general permits, the state should review all fees collectively so that the benefits of each process can be fully realized.

ACCOMPLISHMENT: DCM has successfully implemented express permitting with no discernible effect on the quality of the environmental review and with much praise from the user community. DCM is encouraged to explore options to increase the cap on permitting fees to more equitably reflect costs versus benefits of the various permitting

b. Variance Requests

In 2000, DCM updated and strengthened its rules for shoreline areas by establishing a 30-foot buffer for new development along any navigable waterway in the 20 coastal counties, excluding oceanfront (which already has a setback requirement). This buffer rule was designed primarily to address the increase of nonpoint source pollution in coastal waters. Under the rule, only structures with water-dependent uses (e.g. docks, boat ramps, etc.) can be built inside the buffer although other exceptions are outlined in the rule.

Since its adoption, conflicts over the suitability of the estuarine buffer rule as a blanket policy has lead to an increased number of requests for variances from the CRC. The variance requests take up a great deal of time at CRC meetings. This hinders proactive and comprehensive discussions about emerging issues and needs. DCM and the CRC should assess the buffer rule to develop a consistent approach to granting variances to reduce the time spent on individual requests or should consider appointing a subcommittee to address variance requests outside of CRC quarterly meetings. DCM is also encouraged to work with OCRM to explore how other states with blanket buffer policies address specific circumstances.

PROGRAM SUGGESTION: DCM should work with the CRC to evaluate the estuarine buffer rule and determine a planned approach for granting variances instead of on a case-by-case basis. DCM and the CRC should also consider appointing a subcommittee to make decisions on variances in order to allow more time for CRC discussions about emerging issues and management needs.

2. Coordination and Federal Agencies

a. Coordination with U.S. Army Corps of Engineers

DCM's working relationship with the U.S. Army Corps of Engineers (USACE) Wilmington District Office is an incredible asset for both parties. For major CAMA permits, DCM's close coordination with USACE creates a more streamlined and efficient review process. The USACE also works with DCM on express permits and is involved in the pre-application consultation. This allows the USACE to inform the applicant up front of likely complications in the nationwide or general permit process that may preclude the applicant from being eligible for the express permit. This coordination allows permit problems to be discussed early in the process so developers understand the issues and the revised proposal details a better project. The USACE also relies heavily on expertise of DCM field staff for opinions on proposed projects and enforcement of permitted projects.

The USACE also contributed to the sediment criteria study by the CRC Science Panel by reviewing federal beach renourishment projects to determine if they would meet the sediment criteria. They also reviewed the sediment criteria rule before adoption by the CRC. As federal funds for beach renourishment projects decrease and towns and counties begin doing their own renourishment projects, the permitting process will become the key mechanism through which the state and federal agencies will have a role in ensuring established regulations are upheld. To meet this emerging issue, DCM and the USACE plan to continue to coordinate on educating permit applicants about the permitting process and on reviewing permit applications to ensure that only quality projects move forward.

b. Coordination with National Marine Fisheries Service

DCM has a good working relationship with the NOAA National Marine Fisheries Service (NMFS) Habitat Conservation Division staff. NMFS commended DCM for its high number of field staff along the coast, and noted that their expertise and credibility allows NMFS to rely on reports from DCM field staff when reviewing complex projects. For such projects, DCM works with NMFS and USACE in the pre-application phase, coordinating the application review, and monitoring the projects after permits are granted. NMFS expressed an appreciation for the willingness of DCM to bring NMFS staff into the review process early for proposed projects that may impact essential fish habitat. As development increases along the coast, the number of these projects will only increase and NMFS commends DCM for serving as a coordinator between state and federal agencies that need to work together on such emerging issues.

V. CONCLUSION

For the reasons stated herein, I find that North Carolina is adhering to the programmatic requirements in the operation of its approved North Carolina Coastal Management Program (NCCMP).

NCCMP has made notable progress in the following areas: improved tracking of impacts from permitted development activities in the coastal zone, development and adoption of a state plan to protect coastal habitats, partnerships to address coastal water quality issues, development of an innovative tool for coastal hazards management, integration of sound science into management decisions, and implementation of a state-wide initiative to allow permit applicants that are willing to pay higher application fees to receive coordinated, expedited review for certain types of projects.

These evaluation findings also contain ten recommendations. The recommendations are in the form of zero (0) Necessary Actions and ten (10) Program Suggestions. The Program Suggestions should be addressed before the next regularly-scheduled program evaluation, but they are not mandatory at this time. Program Suggestions that must be repeated in subsequent evaluations may be elevated to Necessary Actions. Summary tables of program accomplishments and recommendations are provided in section VI.

This is a programmatic evaluation of NCCMP that may have implications regarding the state's financial assistance awards. However, it does not make any judgment on or replace any financial audits.

(signed: David M. Kennedy)

(August 22, 2006)

David M. Kennedy
Director, Office of Ocean and Coastal
Resource Management

Date

VI. APPENDICES

Appendix A. Summary of Accomplishments and Recommendations

The evaluation team documented a number of the Division of Coastal Management accomplishments during the review period. These include:

Issue Area	Accomplishment
Operations & Management	DCM successfully completed the transition of DCM headquarters from Raleigh to Morehead City and its coordination with resource management agencies and other partners remain strong. Staff vacancies resulting from the relocation are now filled.
	DCM has improved its ability to track permitted development activities and their impacts by finalizing development and beginning implementation of the Coastal Development Activity and Impact Tracking System. DCM is encouraged to finish data entry and to begin using C-DAITS to its full capacity.
Coastal Habitat	DCM is commended for its contribution to the development and adoption of the state's Coastal Habitat Protection Plan (CHPP).
Coastal Water Quality	Through its work with partners to meet program requirements and specific conditions, OCRM applauds DCM for its role in attaining full approval for the state's Coastal Nonpoint Source Pollution Program.
Coastal Hazards	DCM is commended for developing a coastal hazards GIS internet tool to provide information to property owners about coastal hazards areas, including shoreline position, erosion rates, setback lines, flood zones, and inlet and ocean hazard areas.
	The CRC Science Panel is applauded for providing sound science to inform management and policy decisions by DCM and the CRC.
Government Coordination & Decision-Making	DCM has successfully implemented express permitting with no discernible effect on the quality of the environmental review and with much praise from the user community. DCM is encouraged to explore options to increase the cap on permitting fees to more equitably reflect costs versus benefits of the various permitting processes.

In addition to the accomplishments listed above, the evaluation team identified several areas where the program could be strengthened. Recommendations are in the forms of Program Suggestions (PS) and Necessary Actions (NA). Areas for improvement include:

Issue Area	Recommendation
Operations & Management	<i>PS:</i> DCM should consider undertaking an effectiveness assessment of CAMA to evaluate the existing laws and regulations governing coastal management in the state, prioritize issues facing the coastal zone, and to incorporate emerging issues and lessons learned.

	<i>PS:</i> DCM should continue to work with the NCNERR staff to enhance communication and identify opportunities for further cooperation on education, research, and stewardship activities that support DCM management needs and NERR objectives. DCM should also explore options for increasing state support of the NERR and non-NERR coastal reserve sites.
Public Access	<i>PS:</i> DCM is encouraged to work proactively to ensure that existing public access sites are maintained with new developments or redevelopments and that a focus remains on improving access to the estuarine environments. DCM should move forward with the development of a needs assessment to determine access gaps and priorities to effectively improve public access.
Coastal Water Quality	<i>PS:</i> DCM should continue to improve the identification and management of cumulative and secondary impacts, and to work with partner agencies to improve and clarify the regulatory process so that cumulative and secondary impacts are consistently considered in permitting decisions.
Coastal Hazards	<i>PS:</i> While DCM has made progress in determining sand compatibility criteria and is considering development of a beach and inlet management plan, DCM is encouraged to work with appropriate partners to assess renourishment needs and priority areas on the coast to promote proactive coordination with local communities, to determine feasible funding scenarios, and to maintain adequate and suitable sand supplies.
	<i>PS:</i> The CRC should consider broadening the Science Panel to include a more diverse array of expertise to improve its ability to address additional emerging issues.
Coastal Dependent Uses & Community Development	<i>PS:</i> DCM is encouraged to seek out additional funding sources or partnership opportunities to assist communities with implementation of their local land use plans.
	<i>PS:</i> While DCM staff do a great job in providing technical assistance to local communities in developing land use plans, DCM should consider more in-depth assistance to rural communities that lack local planning capacity or communities not previously faced with high development pressures to ensure that the impacts to coastal resources and to the community character are adequately addressed in local land use plans.
	<i>PS:</i> DCM is encouraged to assess if the existing state standards are sufficient for the types of large development more commonly proposed and to develop a plan for incorporation of cumulative and secondary impacts from the developments into the permitting process.
Government Coordination & Decision-Making	<i>PS:</i> DCM should work with the CRC to evaluate the estuarine buffer rule and determine a planned approach for granting variances instead of on a case-by-case basis. DCM and the CRC should also consider appointing a subcommittee to make decisions on variances in order to allow more time for CRC discussions about emerging issues and management needs.

Appendix B. Response to 2004 Evaluation Findings

1. Program Suggestion: The current structure of DCM – administration, policy analysis, strategic planning and GIS sections located in Raleigh and field offices, or coastal offices of DCM, located in Elizabeth City, Washington, Morehead City, and Wilmington – present effective, well-coordinated and responsive NCCMP. The relocation of DCM leadership to the coast or field office could disrupt DCM’s operations and create barriers that will inhibit effective communication and coordination for the protection of natural resources in the State of North Carolina, particularly with other major state programs and agencies, headquartered in Raleigh. Therefore, NOAA strongly recommends that advantages and disadvantages that may be associated with any future reorganization of DENR be given careful consideration. In particular, when evaluating a move, DENR should consider how coordination functions will be maintained.

Response: DCM Headquarters is now officially located in Morehead City. The Director of DCM, the Major Permits staff (3 positions), and one Policy and Planning position were moved from Raleigh to the Morehead City Office. A new building has been constructed to accommodate existing MHC staff. A total of 16 positions remain in the Raleigh Office, and no further reorganization of the Raleigh Office to the MHC Office is planned.

2. Program Suggestion: NOAA encourages DCM and DENR to continue to support positions that sustain NCCMP planning, permitting and enforcement tasks. These positions – minor permit program coordinator and compliance and enforcement coordinator, senior and district planner – are essential to the implementation of the NCCMP at both the local and state level.

Response: DCM has continued commitment to support positions that sustain NCCMP planning, permitting and enforcement tasks. These are the core functions of CAMA and will continue to be a priority for our program.

Since April 2003, DCM has added two new DOT positions (1 in Elizabeth City and 1 in Raleigh). The regulatory program is close to being fully staffed as we have been during the past 2-3 years. DCM has also created two new positions to handle express permits (one in Washington and one in Wilmington).

3. Program Suggestion: DCM is encouraged to seek out mechanisms to better coordinate with other state and federal agencies that issue or review permits affecting the coast. It is recommended that quarterly meetings be an avenue for initial coordination and collaboration.

Response: One recommendation from the Coastal Habitat Protection Plan (CHPP) is to enhance enforcement of (and compliance with) CRC, EMC and MFC rules and permit conditions. DCM staff have participated in four DENR-level meetings regarding proposed projects and enforcement cases that are or may be subject to the permitting or enforcement jurisdiction of more than one agency – including SEPA/NEPA coordination. Quarterly meetings have been scheduled.

Represented at these meetings have been members of the Division of Coastal Management, Division of Water Quality, Division of Marine Fisheries, Wildlife Resources Commission,

Shellfish Sanitation Branch, Division of Land Quality, US Army Corps of Engineers, and the National Marine Fisheries Service.

DCM's Assistant Director for Permitting is a member of a multi-slip docking facility working group (with other review agency personnel) that are looking at some specific issues relating to multi-slip facilities and how to provide better information to our review agencies.

4. Program Suggestion: While the express permitting process does not affect environmental review requirements, this enhanced program may qualify as a routine program change to the NCCMP federally approved program. DCM is encouraged to submit information about the express permitting process to OCRM for discussion and review.

Response: DCM believes that this does not qualify as a routine program change as the program did not change any review requirements, just the timeline. Also, the increase fee for express permitting was set up by legislation outside of CAMA, and, as such, was not considered a part of the coastal management program.

5. Program Suggestion: As funding permits, DCM is encouraged to restore financial assistance under the CAMA Local Planning and Management Grants Program to allow local governments to support the review and update of land use plans under the new Land use Plan Guidelines. DCM is also encouraged to identify additional sources of funding to help support plan revisions and implementation.

Response: DCM has recently changed how we fund land use plans to local governments. Funding and development of land use plans has historically started at the beginning of the state fiscal year (July 1). Beginning 2005, we have changed the Phase I start date of land use plans so that some may start at the state fiscal year while others may start beginning with the calendar year of January 1. One of the benefits of varying the start dates is that it enhances the review process by DCM and CRC and more importantly has allowed us to increase the funding to local governments by as much as 15% without additional funds.

Utilizing Section 310 funds, the Coastal Nonpoint Source Pollution Control Program will be contracting with local governments to enhance the planning and design of coastal stormwater projects. It intends to utilize DCM's Local Planning and Management Grants Program to facilitate the process.

6. Program Suggestion: DCM should continue current efforts to evaluate the impacts and the State's management of beach nourishment projects to ensure a comprehensive approach to beach management. DCM may wish to consider the development of standards for sand materials, policies for dredging sand from inlets and assessment of available sand sources, among other issues.

Response: DCM worked with the CRC's Science Panel to develop recommendations regarding standards of sand materials used for beach nourishment (sediment compatibility). Final recommendations were presented to CRC in January 2005. DCM and US Army Corps evaluated

these standards with past beach nourishment projects in North Carolina. These recommendations are expected to be adopted sometime in mid-2006.

The State's Coastal Habitat Protection Plan (CHPP) approved in December 2004 has recommended the development of an overall beach and inlet management plan by the Division of Coastal Management. Once developed, this beach and inlet management plan is expected address beach nourishment issues such as regional sand management, monitoring and mitigation thereby filling future management capability gaps as they are identified.

DCM is participating in a Regional Sediment Management Plan being coordinated by the US Army Corps of Engineers (USACE). We are working with the USACE and Carteret County on a pilot project in the Bogue Banks area of the North Carolina coast.

7. Program Suggestion: Once the Inlet Hazard AEC study is completed, DCM should present the new maps and AEC delineations to the CRC for consideration and adoption. Assuming the process works as intended, efforts should be undertaken to complete similar work for the remaining 14 inlets. DCM should also evaluate the adequacy and effectiveness of the existing AEC rules, taking into account recommendations of the Science Committee, the CRC and others, and develop and propose new rules as appropriate.

Response: Early in 2004, the CRC Science Panel on Coastal Hazards developed a methodology for determining the extent of inlet influence along the oceanfront shoreline. The statistical analyses were based primarily on historical shoreline analysis around seven inlets for which multiple years of digital orthophotos existed. Data are currently being gathered to address the remaining 12 inlets during the upcoming year. DCM, in conjunction with the Science Panel, intends to continue analyzing historic shoreline data to determine how the rest of an inlet hazard area should be defined as well as what should potential development restrictions be placed for these areas (e.g., size restriction, setback restriction, etc.).

An important component of this re-delineation will be an analysis of regulatory policy regarding development activities within inlet hazard areas. This analysis will explore innovated strategies to control both the types and scale of development activities within inlet hazards areas such as the use of "hot" and "warm" zones in which development is allowed in proportion to the hazard risk present. Moreover, through a fellowship funded by the Division of Coastal Management, the University of North Carolina at Chapel Hill Department of City and Regional Planning has produced a draft document entitled "The Handbook of Tools and Techniques for Barrier Island Inlet Management." Multiple students collaborated to identify four general strategies that include twenty specific tools for dealing with inlets and adjacent properties. Many of these strategies and tools include and, in some cases, specifically address the 19 inlets presently open along the North Carolina coast.

8. Program Suggestion: NOAA recommends that DCM continue to increase its focus on estuarine planning and management.

Response: Early efforts by NC Sea Grant Fellow provided DCM with a process for development of appropriate estuarine shoreline protection related to the shoreline type. The

Fellow left after the first year of a two year long project work; however, a lot of the methodology and process for completion was in place when she left. DCM hired a coastal engineer to, among other things, resume this important work on October 17, 2005.

DCM participates as Technical Advisory Committee member in NOAA's new research-sponsored program "Ecological Effects of Sea Level Rise" to develop information/tools to better forecast and manage landscape responses of critical natural resources relative to sea level rise.

9. Necessary Action: DCM, working with OCRM, must develop a schedule for submitting outstanding program changes, including updated land use plans, to OCRM for incorporation into the NCCMP within 90 days of receipt of final findings.

Response: DCM staff developed a schedule to submit all delinquent Routine Program Changes (RPC) within 18 months. The schedule was rejected by OCRM citing time constraints in reviewing the draft submittals. Since the Land Use Planning Guidelines had undergone a wholesale change, DCM focused on NCAC 7B as the first draft submittal along with several other recent changes. Draft Routine Program Changes were submitted for review to OCRM for the following: NCAC 7B Land Use Planning Guidelines, 7L Local Planning and Management Grants; 7H .0104, .0304, .0306 regarding adoption of new oceanfront erosion rates; 7H .2600 General Permit For Construction of Wetland, Stream and Buffer Mitigation Sites by The NC Ecosystem Enhancement Program or the NC Wetlands Restoration Program; 7K .0209 Exemption/Accessory Uses/Maintenance Repair/Replacement; and amendments to the state Dredge and Fill Law. These drafts were submitted for review in February/March 2005.

OCRM did not respond to the draft RPC until September 29, 2005 requesting that the RPC be re-written according to the comments contained within the reply. DCM will be submitting a formal request based on these comments in January 2006.

10. Necessary Action: DCM must submit the description of its public participation process, consistent with guidance published at 59 Federal Register 30339. This must be submitted with the first performance report following receipt of final findings.

Response: Section 306(d)(14) of the Coastal Zone Management Act of 1972, as amended, requires that the State of North Carolina have a public participation program that informs the public of projects being reviewed by the Division of Coastal Management (DCM) for conformance with the State's coastal management program. This provides the public with an opportunity to be involved in the decision making process. Guidance on the content of a State's public participation program was issued by the NOAA Office of Ocean and Coastal Resource Management (OCRM) on June 13, 1994. This guidance has been codified into Sections 930.2, 930.42, and 930.61 of 15 CFR 930. The State's public participation program fully implements these regulations.

OCRM's guidance requires that the "*States must provide timely public notice*" and that "*A public comment period must be provided.*" DCM, upon the receipt of a project for consistency review, initiates the process of informing the public that the proposed project has been submitted for review. This is accomplished, in part, by placing a legal notice in a local paper. Additionally, a

notice is sent to a variety of local governments and State Agencies. Both the newspaper legal notice and the notice to the local governments and State agencies are generally issued within a week of the project being submitted as complete to DCM. To allow the public to have adequate time for review and comment, the public comment period is usually established at three weeks. Comments received after the deadline are considered if a final decision by DCM is still pending at the time of receipt. The State has also worked with the Army Corps of Engineers to include in the Corps public notice (for Section 404 and Section 10 Individual Permits), an informative statement that advises the public that the proposed project would involve review by DCM either through the CAMA permit process or consistency review process. The combination of these procedures assures that the public has sufficient opportunity and time to provide meaningful comments to DCM. To further enhance the public participation program, DCM intends to develop a webpage that will provide the public with a listing of projects currently under review.

OCRM's guidance requires that public participation "*must consist of written notice and solicitation of public comments.*" DCM distributed written notices for soliciting public comments which specify that the proposed activity will be reviewed by DCM for consistency with the State's coastal management program, provides details on the proposed development, specifies the source for additional information, and specifies the contact information for submitting comments to DCM. DCM, upon written request, will also provide to a commenter a letter notifying them of any final action taken.

OCRM's guidance requires that public participation "*be provided in the area(s) of the coastal zone likely to be affected by the activity.*" To comply with this goal DCM, utilizes "*North Carolina, Department of Transportation Media Directory*" to identify the local paper in which to publish the legal notice. DCM has also developed a mailing list of all the twenty coastal counties, some coastal cities, and State agencies. This list is used to select those counties, cities, and State agencies that are to be notified of the project being reviewed by DCM for consistency with the State's coastal program. Through these procedures, DCM is effectively notifying the public in the local area of the proposed project.

In conclusion, DCM is providing the public with effective means (in compliance with the guidance provided by OCRM) to comment on proposed development projects being reviewed by DCM for consistency with the State's coastal management program.

Appendix C. Persons and Institutions Contacted

Name	Affiliation
State of NC Congressional Delegation	
Pricey Harrison	NC House of Representatives
NC Department of Environment and Natural Resources	
Ed Beck	NC Division of Water Quality
Edith McKinney	DENR Express Permitting Program
Richard Rogers	Director of Division of Conservation and Community Affairs
Bill Ross	Secretary of DENR
Preston Pate	Director of NC Division of Marine Fisheries
Mike Street	NC Division of Marine Fisheries
NC Division of Coastal Management	
Roy Brownlow	Compliance Coordinator
Melissa Carle	Wetlands Specialist
Rebecca Ellin	Coastal Reserve and NERR Manager
Doug Huggett	Major Permits and Federal Consistency
Charles Jones	DCM Director
Ken Richardson	GIS Analyst
Josh Shepherd	MIS Manager
John Thayer	Land Use Planning and Public Access
Ted Tyndall	DCM Assistant Director for Permits and Enforcement
Steve Underwood	DCM Assistant Director for Policy and Planning
Michele Walker	DCM Public Information Officer
	DCM Wilmington Office staff
Coastal Resource Commission	
Renee Cahoon	Mayor of Nags Head and CRC member
Courtney Hackney	CRC Chairman
Doug Langford	CRC Vice Chairman
Other NC State Agencies	
Roy Shelton	NC Department of Transportation
Leyton Bedsole	NC Ports Authority
Bill Gilmore	Ecosystem Enhancement Program
Federal Agency Representatives	
Raleigh Bland	US Army Corps of Engineers, Wilmington District
Ken Jolly	US Army Corps of Engineers, Wilmington District
Scott Jones	US Army Corps of Engineers, Wilmington District
Scott McLandon	US Army Corps of Engineers, Wilmington District
Ron Sechler	National Marine Fisheries Service, Habitat Conservation Division
Henry Wicker	US Army Corps of Engineers, Wilmington District
Academic Representatives	
Walter Clark	NC Sea Grant

Spencer Rogers	NC Sea Grant
Nongovernmental Organization Representatives	
Donna Girardot	Executive Director of Wilmington/Cape Fear Home Builders Association
Lauren Kolodij	NC Coastal Federation
Local Government Representatives	
Webb Fuller	Former Nags Head Town Manager
Chris O'Keefe	New Hanover County planner
Phil Prete	Wilmington planner
Bobby Robertson	City of Washington Community Development Director
Frank Rush	Emerald Isle Town Manager
Kermitt Skinner	Town of Manteo Manager
Ray Sturza	Dare County Planner
John Wilson	Mayor of Town of Manteo

Appendix D. Persons Attending the Public Meeting

Wilmington, NC

Name	Affiliation
Layton Bedsole	NC Ports
Mary E. Simon	Office of NC Congressman McIntyre

Beaufort, NC

Name	Affiliation
Ernie Hussey	Realtor
Danielle Taylor	Realtor
Worth Mason	Down East Tomorrow
Laura Southwood	Down East Tomorrow
Dan Morris	Public
Connie Asero	Public
Carolyn Mason	Down East Tomorrow
Karen Amspacher	Public
Linda Clay	Carteret County Commissioner
Chuck Bissette	Coastal Resources Commission member; Carteret County Planning
Sandra Gaskill	Commercial fisherman
Ellen Cloud	Down East Tomorrow
Nancy Garne	Marshallberg Community Club
Pam Morris	Commercial fisherman
Margery Misenheimer	Down East resident

Approximately 25 additional people attended this public meeting but did not sign in.

Manteo, NC

Name	Affiliation
Sybil Ross	Coastal Resource Commission representative from Town of Manteo
Jan DeBlieu	NC Coastal Federation
Seth Lawless	Town of Nags Head
Frank Jennings	Division of Coastal Management - Elizabeth City
Charlan Owens	Division of Coastal Management - Elizabeth City
Peregrine White	Public

Appendix E. NOAA’s Response to Written Comments

NOAA received a number of written comments regarding the NCCMP. Comments are summarized below and followed by NOAA’s response.

I. Connie J. Asero Pine Knoll Shores, North Carolina

Comment: Ms. Asero writes of her concern that bridge replacements by the NC Department of Transportation (NCDOT) fail to consider traditional access points and inhibit future access at bridge right-of-ways. She notes that each bridge replacement requires a CAMA permit and some are issues despite public protest against the loss of access.

NOAA’s Response: OCRM and DCM share the concerns about the loss of public access, as detailed in Section B. DCM has met with NCDOT to discuss the issue and made some suggestions about how to address public trust issues. DCM permitting staff that handle NCDOT project reviews have been instructed to elevate the permit application so that access issues are addressed, which includes providing public notice in local newspapers and inviting comments to DCM. DCM also remains committed to providing funds to local governments to acquire sites and develop amenities for public access through the Public Access and Coastal Waterfront Access Program.

II. Don E. Morris Newport, North Carolina

Comment: Mr. Morris expresses his concern of the lack of specific land use suitability analysis in the Carteret County land use plan to address the unique character of Carteret County, military presence, and population density. He notes that “the DCM guidelines for land suitability used as a model for the plan are minimum requirements that will do little to protect local water quality and the local economy.” He expresses concern that the land use plan has not been implemented and recommends that it is revisited and improved through incorporation of a land use suitability assessment. He also asserts that part of the plan, if implemented, could address the multiple concerns of the citizens of the Down East.

NOAA’s Response: As noted in Section F, OCRM commends DCM on the expert technical assistance they provide to local communities for developing land use plans but encourages DCM to explore options for assisting communities in devising and implementing the tools necessary to move toward the intent of the plan. OCRM recognizes that DCM is working with limited funds and appreciates their continued persistence in local land use planning despite limited funding.

Comment: Mr. Morris believes that since the passage of the CAMA, “rapid development along ocean beaches and public trust waters has continues with very little adherence to the goals of the CZMA.” He specifically believes that the CAMA and federal government have failed to follow national policy to “minimize the loss of life and property caused by improper development in

flood prone, storm surge, geological hazard, and in areas likely affected by or vulnerable to sea level rise.”

NOAA’s Response: OCRM fully supports DCM’s continued implementation of the federally-approved NCCMP, which is based on CAMA. Through periodic performance reviews and evaluation, a required by the CMZA, OCRM has found the NCCMP to be in compliance with the CZMA and CAMA. DCM and OCRM do recognize that development and other pressures will continue to affect the coast. OCRM commends the CRC and DCM for playing a leadership role and taking the necessary steps that address resource management needs through rule updates, guidelines, and employing experts in science to advise in the development of policy and regulations.

Comment: Mr. Morris expresses his concern that beach renourishment projects are poorly managed, including the monitoring of the quality of sand being used in these projects. He further believes that these projects discourage retreat as an option for property owners.

NOAA’s response: As noted in Section B, it is clear to both the evaluation team and DCM that beach renourishment projects need appropriate management as well as coordination in terms of sand resources. For the past several years, DCM has worked with the CRC Science Panel to develop recommendations for standards of sand materials used for beach renourishment and adoption of the standards is expected in mid-2006. The Coastal Habitat Protection Plan, approved in late 2004, also recommended that DCM develop an overall beach and inlet management plan. This plan is expected to address beach renourishment issues such as regional sand management, monitoring, and mitigation and promote action to fill current management capacity gaps. In a Program Suggestion, OCRM encourages DCM to work with appropriate partners to assess renourishment needs and priority areas on the coast to promote more proactive coordination with local communities, to determine feasible funding scenarios, and to maintain adequate and suitable sand supplies.

Comment: Mr. Morris writes of his concern that, under CAMA, the public rights to public trust waters and beaches have steadily declined. He notes that while DCM highlights the number of new access sites, most of them are partially private for owners of nearby structures.

NOAA’s response: From 2003 to 2005, DCM awarded \$4.7 million in matching grants to local governments for projects to improve pedestrian access to the state’s beaches and waterways. From 2003-2006, 55 local communities received grants from DCM through the Public Beach and Coastal Waterfront Access Program. In Section B, OCRM includes a Program Suggestion which encourages DCM to work proactively to ensure that existing public access sites are maintained with new developments or redevelopments, and that a focus remains on improving access to the estuarine environments. OCRM also encourages DCM should move forward with the development of a needs assessment to determine access gaps and priorities to effectively improve public access.

III. Michael W. Street
North Carolina Department of Environment and Natural Resources
Division of Marine Fisheries

Comment: Mr. Street expresses his concern that the CAMA definition of “coastal wetlands” is too limiting because it fails to include non-coastal wetlands contiguous with coastal wetlands that play an important role in the health of coastal fish species. He reports that several CAMA major permits are granted annually that allow bulkheads at the waterward edge of non-coastal wetlands and result in filling of these non-coastal wetlands. He suggests that the contiguous non-coastal wetlands should be accorded protection equal to that of coastal wetlands.

NOAA’s Response: OCRM acknowledges the concern and will provide these comments to DCM for action if warranted.

Comment: Mr. Street reports that 11% of the state’s estuarine shoreline is hardened with bulkheads and riprap. He suggests that DCM and the CRC should take advantage of research showing the negative effects of such structures and make significant changes in policies, procedures, and rules to more effectively manage estuarine shorelines.

NOAA’s Response: OCRM acknowledges the concern and will provide these comments to DCM for action if warranted.

Comment: Mr. Street writes that the CRC jurisdiction over only the Areas of Environmental Concern is too limiting. To improve management of riparian lands and adjacent surface waters, Mr. Street suggests that the CRC jurisdiction should be extended farther upstream as well as farther laterally from the shoreline.

NOAA’s Response: OCRM acknowledges the concern and will provide these comments to DCM for action if warranted.

Comment: Mr. Street expresses concern over the loss of public access, especially for launching boats, canoes, and kayaks as traditional access sites are intentionally converted or lost with road and bridge replacements. He suggests that DCM and the CRC should work aggressively to preserve and enhance access to estuarine waters.

NOAA’s Response: OCRM and DCM share the concerns about the loss of public access, as detailed in Section B. DCM has met with NCDOT to discuss the loss of access sites with bridge replacements and made some suggestions about how to address public trust issues. DCM permitting staff that handle NCDOT project reviews have been instructed to elevate the permit application so that access issues are addressed, which includes providing public notice in local newspapers and inviting comments to DCM. DCM also remains committed to providing funds to local governments to acquire sites and develop amenities for public access through the Public Access and Coastal Waterfront Access Program.

Comment: Mr. Street reports that the rate of violations found during on-site inspections of permitted coastal area stormwater management projects is high. He points to this as an

indication that CRC rules are not protecting coastal water quality even though they state that development is not to cause more than minimal harm to coastal resources and existing uses. He notes that although the CRC requires a 30 foot buffer along waters, these buffers are often just lawns with little impact on controlling nutrient and sediment runoff. Mr. Street suggests that a 50 foot buffer of woody vegetation and limiting the impervious surface to 10-12% coverage should be required for new development and that strategies be developed to retrofit existing development with effective stormwater controls.

NOAA's Response: OCRM acknowledges the concern and will provide these comments to DCM for action if warranted.

**IV. Irving Hooper
Carteret County Crossroads
Beaufort, North Carolina**

Comments: Mr. Hooper remarks that DCM is prevented from effectively implementing the coastal management program because it is understaffed and underfunded.

NOAA's Response: OCRM acknowledges the concern.

Comments: Mr. Hooper expresses concern that the land use plan requirements are too weak to encourage local governments to adequately protect coastal waters.

NOAA's Response: OCRM acknowledges the concern and will provide these comments to DCM for action if warranted.