

An aerial photograph of a wide, sandy beach meeting the ocean. The water is a vibrant blue, with white foam from waves washing onto the shore. Several people are visible on the beach, some walking and some standing. The sky is clear and blue.

Setting a New Course for the Coast

FINAL REPORT OF THE
COUNCIL ON COASTAL FUTURES

MAY 30, 2004



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The South Carolina DHEC OCRM is indebted to the nineteen members of the Council for their hard work, vision and commitment. Everyone who enjoys the coast of South Carolina and appreciates its treasures and uniqueness will benefit from their dedication to improving the coast and protecting its special qualities. The leadership provided by Council Chairman William W. (Wes) Jones, Jr. and Vice Chairman Jesse C. Dove are also greatly appreciated.

Lastly, acknowledgement and appreciation are expressed to the entire staff of DHEC OCRM for their many contributions and support to the Council and to this final report. Their contributions were essential to the success of this program review.

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Preamble

The coast of South Carolina is extraordinary and highly valued. It is charming, complex, sensitive, resilient and dynamic. The eight coastal counties are a significant economic driver for all of South Carolina. Our coast requires attention and care, and it needs priority attention by its government and citizenry.

The Council on Coastal Futures is composed of a diverse membership representing a range of environmental, scientific, government and business interests. We met with the citizenry and deliberated over issues directly related to the health of the coast. Our Council believes it necessary to state our support for the recommendations contained within this report. However, the recommendations provided are only a blueprint for continued deliberations. Stakeholders need to be involved to design strategic and science-based plans for most recommendations outlined within this report.

This report is a vitally important step in educating the public that we can maintain and improve the quality of life and the environment along the coast. Throughout our deliberations, presentations and discussions, the most important common thread was the importance of prevention and effective, timely and comprehensive planning. Additionally, our discussions highlighted the critical need for objectively evaluated scientific information to inform management of the coast. Better planning and better science serve as the foundation for most of our recommendations.

Successful planning models reviewed from other states depended upon a tremendous collective effort from the public, business, industry and government. The long-term sustainable health of the coast can only be achieved by full commitment from all segments of the community.

Sustainable development, and a balanced approach to protection of property rights and environmental habitats, is fundamental to our future vision of the coast. The simultaneous pursuit of economic prosperity and environmental stewardship are not contradictory or mutually exclusive. This common vision will need enlightened leadership from across the political spectrum to realize the vision of coastal growth and stewardship.

As this process of deliberation and coastal visioning concludes, we, as a Council, have looked beyond our individual concerns and looked collectively at the future of South Carolina's coast. A major lesson learned from similar visioning efforts in other states is that success will not come quickly. It will depend upon a collective and comprehensive commitment from our government, our businesses, our scientific and conservation communities, along with the public sector. We have deliberated in good faith and outlined a series of recommendations. We strongly encourage the State Legislature, and the DHEC Board to continue oversight and in-depth analysis to fully implement these recommendations. Everyone must accept this call to action in order to achieve our vision. It has been a privilege to participate in this most worthy effort.

The following report is respectfully submitted on behalf of the nineteen members of the Council on Coastal Futures.

William W. Jones, Jr.
Chairman

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Acronyms

BMP	Best management practice	MOA	Memorandum of Agreement
CORPS	U.S. Army Corps of Engineers	MS4s	Municipal Separate Storm Sewer Systems
CZM	Coastal Zone Management	NOAA	National Oceanic and Atmospheric Administration
DAH	Department of Archives and History	NPDES	National Pollution Discharge Elimination System
DHEC	Department of Health and Environmental Control	PRT	SC Department of Parks, Recreation and Tourism
DHEC-EQC	DHEC Environmental Quality Control	SAMP	Special Area Management Plan
DHEC-OCRM	DHEC Office of Ocean and Coastal Resource Management	SCORP	State Comprehensive Outdoor Recreation Plan
DNR	Department of Natural Resources	USFWS	U.S. Fish and Wildlife Service
DOT	Department of Transportation	USGS	United States Geological Survey
EPA	Environmental Protection Agency		



Executive Summary

Introduction

The eight counties that comprise the coastal zone of South Carolina are home to 1 million residents, are visited by 14 million tourists annually, contain 65 percent of the state's 456,000 acres of isolated wetlands and all of the state's salt marsh and shellfish grounds, produced \$40 billion in economic output in 2000, house nationally and internationally important cultural resources, and are bounded by 180 miles of beautiful beaches. Its people and its ecology are diverse. The area's contributions to South Carolina's economy and quality of life are considerable.

The purpose of this report is to recommend ways to preserve what is valued on the coast through recommending improvements to the state agency charged:

“to protect the quality of the coastal environment and to promote the economic and social improvement of the coastal zone and of all the people of the State.” SC Code of Laws Section 48-39-30(A)

The South Carolina Council on Coastal Futures submits this report as the result of eighteen months of in-depth discussion and dialogue among the 19 members of the council and many coastal citizens and leaders. The council is greatly pleased to present its recommendations to all who view South Carolina's coast as a treasured place worthy of special attention and management. This report contains a balanced vision for our coastal environment, economy and communities. This vision is underscored by the following statement of values that has guided the council throughout this challenging process:

“To have an inviting coast that ensures a high quality of life, environmental stewardship, and sustainable economic growth.”

Background

The twenty-fifth anniversary of the South Carolina coastal management program is serving as an opportunity to evaluate the progress made and lessons learned in managing South Carolina's coastal resources since enactment of the 1977 Coastal Tidelands and Wetlands Act. This act established the South Carolina coastal management program, originally the SC Coastal Council, and now the DHEC Office of Ocean and Coastal Resource Management (DHEC-OCRM).

In November 2002, the Board of the Department of Health and Environmental Control appointed the 19 members of the Council on Coastal Futures as an ad hoc advisory committee. The Board charged the council as follows:

After carefully considering the views and comments of the public, the Council shall present a report to the DHEC Board by no later than May 1, 2004, which:

- (1) Documents priority issues and concerns relating to coastal zone management in South Carolina that were identified by the public;*
- (2) Recommends actions, programs and measures to meet the goals and objectives of the South Carolina Coastal Zone Management Act and to improve the effectiveness of the South Carolina Coastal Zone Management Program within the existing organizational structure of the Department.*

Executive Summary



In keeping with its mission, the council employed a very public process, conducting all its business in well-attended meetings that were open to the public. The council's recommendations for assuring the continued effectiveness of coastal management in South Carolina's rapidly changing coastal counties are summarized on page 6 and described in detail in Chapter 2. Included with the recommendations are suggested timelines for implementation, all of which are dependant on DHEC Board endorsement. Some recommendations should be implemented within 12 months. These are identified as having a short-term implementation timeline. Mid- and long-term designations represent 12- to 24-month and more than 24-month timelines. Chapter 2 presents each recommendation with supporting information describing the issues underlying the recommendation, the council's discussion of the issue and the steps required for implementation.

Gathering Input and Information

The council convened fifteen times between December 2002 and April 2004. This report and appendices include the agendas and minutes of these meetings, the results of public and stakeholder surveys, as well as a listing of all the individuals and their comments, both oral and written, who addressed the council at these meetings.

Three separate assessments were conducted between July 2002 and January 2003 to provide a starting point for council deliberations. These efforts surveyed (a) stakeholders representing a broad range of interests, (b) those with particular knowledge of the coastal program, and (c) the general public. This input provided welcome and needed direction and perspective. With a strong voice, those contacted indicated a consensus for three important priority issues:

- the need for development and growth management, particularly in assisting local governments and coastal communities
- the need for habitat and wetlands protection and management
- the need for water quality and stormwater management.

Beginning with the second meeting of the council in January 2003, the council involved the public and stakeholders to the maximum extent possible in their work. The agenda of the council was largely established by addressing those issues and concerns that the public, coastal residents, community leaders and stakeholders believed to be most important for the future of the coast. Utilizing this input as direction, the council established a schedule and agenda for its work that focused on three broad areas of consideration, in the following order: regulatory processes, assistance to local governments, and coastal resource management issues.

Executive Summary

Coastal Economic Contributions

As additional input for the council, DHEC-OCRM partnered with the South Carolina Sea Grant Consortium to commission a study on the contribution of the coast to the South Carolina economy. Dr. Mark S. Henry and Dr. David L. Barkley with the Clemson University Regional Economic Development Research Laboratory completed their study on September 30, 2002. This work provided the following key findings for the eight coastal counties for 1990 to 2000:

- 28 percent population growth
- \$40 billion in total economic output in 2000, 22 percent of the SC total
- 25 percent of all state employment growth
- 33 percent of all new private sector jobs in the state
- 25 percent of new jobs in fast growth industries (services, trade & finance, insurance & real estate)

The rapid growth in the coastal economy occurred at a time of very significant federal and military employment declines since 1990 due to base closures in Charleston and Myrtle Beach. Total government employment had a net loss of nearly 19,000 in the eight coastal counties while the 38 non-coastal counties saw a net increase of over 41,000 jobs. Federal, civilian and military job losses due to two base closures took nearly 36,000 jobs from 1990 to 2000. Despite these losses, coastal employment growth still rose nearly 25 percent from 1990 to 2000 compared to 19% for the non-coastal counties.



Labor force growth rates in the eight coastal counties were 25 percent higher than the rest of the state. The number of households in the coastal counties increased at a rate of 33 percent higher than the rest of the state. Retirees and their service needs contributed much to these differences. The coast has a significant competitive advantage in the in-migration of retirees and in service sectors such as trade, insurance, banking, communications, finance and real estate. The report concludes: *“the growth in the coastal economy dominated the State through the 1990s and will continue to do so through the current decade. Even though the coast dominated the State in most leading economic measures, these shares of aggregate economic activity may actually understate the importance of the eight coastal counties to the state.”*

Key Priorities

Contained within this report is a full discussion of 18 recommendations, including steps required for implementation and a suggested schedule. The council views as important every recommendation contained within this report and summarized below. The following recommendations are the council's highest priorities:

- Implement a mandatory mediation process for appeals
- Improve coordination within DHEC for coastal regulatory processes
- Build capacity within DHEC-OCRM to serve as a center of expertise and to provide technical assistance to local governments on coastal resource and environmental planning issues
- Provide guidance for managing and protecting freshwater wetlands
- Improve local and state stormwater management
- Maintain and enhance the quality of coastal beaches, waters and habitats and public access to them
- Improve decision-making by accessing and applying the best available scientific information

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Implementing Change

The Council on Coastal Futures recognizes that implementing the recommendations contained in this report will require a significant commitment of resources, time and energy on the part of all concerned to achieve the vision of “an inviting coast that ensures a high quality of life, environmental stewardship, and sustainable economic growth.” The endorsement and leadership of the DHEC Board, Governor, and General Assembly will significantly enhance the quality of outcomes from these recommendations.

This commitment must also be shared, supported and understood by every citizen and resident who appreciates the quality of life and clean environment of our coast. Success cannot be realized without a similar commitment to educate our citizens on the importance of coastal stewardship to our state's future. The council believes that the coast can not sustain economic growth and progress without a strong commitment to environmental protection and improvement, preservation of the coastal landscape, and careful planning for continued public and private investment on the coast. Research has convincingly documented the lead role that the coast had in sustaining the state's economy in the 1990's. This same research predicts an even stronger leading role for the decades ahead. The decisions that we make today for the management of our coast will determine if the coast's future is one of sustained economic and environmental health and well-being or one of diminished quality of life and unrealized potential.





Chapter 1: Council on Coastal Futures

Establishing the Council

After receiving a recommendation from DHEC-OCRM regarding the need for a public and independent review of the state's 25-year-old coastal zone management program, the DHEC Board developed a mission statement and appointed the council. The Council on Coastal Futures was established as an ad hoc advisory body to the DHEC Board pursuant to S.C. Code of Laws Section 1-30-10(D). The mission statement adopted by the board for the council is as follows:

The Council shall determine the number and location of its meetings. All meetings shall be open to the public, and the proceedings shall be documented in summary form. After carefully considering the views and comments of the public, the Council shall present a report to the DHEC Board by no later than May 1, 2004, which:

(1) Documents priority issues and concerns relating to coastal zone management in South Carolina that were identified by the public;

(2) Recommends actions, programs and measures to meet the goals and objectives of the South Carolina Coastal Zone Management Act and to improve the effectiveness of the South Carolina Coastal Zone Management Program within the existing organizational structure of the Department.

Prior to submitting the final report to the DHEC Board, the Council shall provide a draft of the report to the South Carolina Coastal Zone Management Appellate Panel for review. After carefully considering the comments of the Appellate Panel, the Council shall make such changes to the report as it deems appropriate.

The DHEC Board will appoint the members of the Council after consultation with the Department, the Appellate Panel and other interested parties.



DHEC-OCRM solicited nominations from a broad range of interest groups for membership on the council. The DHEC Board appointed 19 council members from a list of nominees that represented balance, from both a geographic and stakeholder perspective. The following stakeholder groups are represented on the council:

Agriculture	Business/development	Conservation
Forestry	General Assembly	Industry
Local Government	Science/resource management	

A list of members is contained in this report, and brief biographical sketches are included in Appendix A. The board appointed Mr. William W. (Wes) Jones as chairman. Chairman Jones asked Mr. Jesse Dove to serve as vice-chairman, with the concurrence of the council.

A Collaborative Public Process

The services of an independent expert facilitator, with proven experience in leading the type of collaborative process envisioned by DHEC for this effort, were needed. Representatives from two stakeholder groups were included on the selection committee. After following state procurement code procedures, the services of David McNair and the McNair Group were retained.

The council established and publicized a monthly meeting schedule. This schedule allowed for meetings in all areas of the coast (Charleston, Moncks Corner, Myrtle Beach, Litchfield Beach, Hilton Head and Beaufort). Each meeting began with an opportunity for public comment from anyone in attendance. Speakers representing specific viewpoints or issues were invited to address the council throughout the process. No individual was denied access. The council maintained a mailing list for provision of council materials including meeting notices, agendas and minutes. Additionally, meeting schedules, agendas, minutes and other council related material were posted on the web at www.scdhec.net/ocrm/HTML/CCF.htm. All council agendas and minutes are also included as Appendix B of this report.

Council meetings were preceded by press releases in compliance with the SC Freedom of Information Act. Robert's Rules of Order generally governed council procedures. The council agreed that a super majority of 75 percent of the council membership was required to act on substantive issues. These included all the votes on recommendations included in this report. In most cases, the vote on each of the recommendations herein was unanimous.

The council heard from approximately 55 individuals, experts and stakeholder representatives. This does not include the many DHEC-OCRM staff that contributed information to the council process. A chart listing all the issues the council was asked to consider, as well as the source of the recommendation, and any council action on the issue was maintained and updated for each meeting. The complete Considerations Chart is included as Appendix C. In addition to the Considerations Chart, a summary of the comments of all the individuals that appeared before the council is included in Appendix D, and copies of all the written comments provided to the council are provided in Appendix E.

Invited stakeholder representatives, experts and members of the public all provided issues for the consideration of the council. The council reviewed the considerations, requested additional information as necessary, heard from experts and those with opposing viewpoints, and voted on those considerations that warranted action. Only those recommendations requiring a change or action and supported by 75 percent of the members present are described as recommendations in Chapter 2.



Our Vision for Coastal South Carolina

After much deliberation, the council adopted the following statement of vision, supported by eight goals and suggested tactics for supporting the goals. The vision stresses balance and is three-pronged, focusing on our coastal environment, economy and community:

To have an inviting coast that ensures a high quality of life, environmental stewardship, and sustainable economic growth.

Goals:

- To identify and protect important historic, economic and environmental resources to ensure:
 - A healthy habitat for fish and wildlife.
 - Opportunities for traditional land and water-based industries.
 - Public recreation and tourism opportunities.
- To maintain and improve air and water quality, as well as efficient use of land, by employing best development practices.
- To balance private property rights with conservation goals by developing and implementing a combination of regulatory and incentive-based programs.
- To accommodate growing populations and diverse values by providing incentives for development of a wide range of housing and economic choices.
- To maximize efficiency of public and private investment by coordinating new development with existing and future infrastructure.
- To improve mobility, as well as air and water quality, by developing in patterns that maximize transportation efficiency and choices.
- To develop and update biennially an assessment of coastal programs, trends, conditions, and key indicators including preserved and threatened resources to direct future environmental programs and initiatives.
- To increase public awareness and involvement in coastal stewardship.

The Council on Coastal Futures encourages incorporation of the following tools and tactics in its operational plans to support the above goals:

- Public and leadership education
- Science on natural resource management
- Resource identification and mapping
- Comprehensive planning
- Coordinated public policies with legal and regulatory consensus
- Private sector conservation and development incentives

This vision, with its supporting goals, provides an important framework for measuring the effectiveness of our coastal management program, in cooperation with its many partners, into the future. The following chapter, which describes 18 recommendations, represents the council's suggested first steps at achieving their vision for the South Carolina coast.



Chapter 2: Recommendations

The following chapter provides detailed descriptions of the 18 recommendations endorsed by the council. The descriptions begin with a short statement of the topic and include the language adopted by the council fully describing the recommendation. Additional sections fully explain each recommendation as follows:

Issue: The first section describes the topic or issue presented for the council's consideration.

Background information relating to the problem needing attention and or the history of an issue is provided in this section.

Discussion: Included in the second section is a description of the council's deliberations of the issue. This section also includes information provided by experts or DHEC staff.

Steps Required for Implementation: The last section provides brief analysis of the actions needed to begin implementation, and who would be required to take action. A preliminary estimate of the time required to implement each recommendation is also included. Recommendations are identified as short-term, mid-term or long-term, depending on the length of time estimated to implement the recommended action:

Short-term: within 12 months,

Mid-term: between 12 and 24 months,

Long-term: more than 24 months.

The executive summary listed seven key priorities that the council endorsed as deserving the highest priority. These priorities are described by the nine recommendations listed below.

- 1 Improve internal DHEC coordination to ensure concurrent and expedited permit review
- 3 Implement a mandatory mediation program for all DHEC-OCRM permit appeals
- 6 Build capacity at DHEC-OCRM to be a center of technical expertise for local governments
- 8 Improve water quality by managing stormwater on a watershed basis
- 11 Develop statewide legislation for managing freshwater wetlands
- 14 Determine strategies and alternative funding sources for public beach access
- 15 Fund the State Beach Renourishment Trust Fund
- 16 Allow and encourage innovative stormwater BMPs and standards
- 18 Establish formal partnerships between DHEC-OCRM and state research institutions

Additionally, three other considerations discussed by the council are included in Section D of this chapter. The issues in this section did not result in any recommended change in current policies or programs; however, the issues are important and warrant attention from the reader.

A. Regulatory Processes

Topic 1: Improve internal DHEC coordination to insure concurrent and expedited permit review.

Issue: Stakeholders expressed concern regarding coordination of the water quality certification program managed by DHEC-EQC and the coastal zone consistency and permitting programs managed by DHEC-OCRM during and preceding the work of the Council on Coastal Futures. DHEC staff have recognized the continuing need to better coordinate regulatory functions to improve services to the public and make the best use of limited departmental resources. This process began after the 1994 restructuring of state government environmental and coastal regulatory authorities. The council has provided a forum and opportunity for stakeholders and DHEC staff to address this coordination issue in the context of overall operation of the coastal management program.

Discussion: DHEC-OCRM and DHEC-EQC staff held three in-depth coordination sessions between May and August 2003 to fully discuss the concerns brought by stakeholders to the council.

As suggested in item 7 below, some regulatory processes can be simplified through use of a 'general' permit approval by one division of DHEC allowing for an expedited process to be managed by another division of DHEC. Minor project construction, essentially private docks and bulkheads, in non-critical, navigable water areas of the eight coastal counties now require at least two approvals from DHEC and often a third approval from the US Army Corps of Engineers (Corps). During the public notice period for such activities, DHEC-OCRM staff visits the application site, writes a decision document, and acts on the required Coastal Zone Management (CZM) Consistency Certification. This CZM consistency certification is then forwarded to the DHEC-EQC Bureau of Water for action under the state navigable waters permit. If a Corps permit is required, the final DHEC action is then forwarded from DHEC-EQC to the Corps. A review of DHEC records indicates there have been delays of as long as two years between DHEC-OCRM certification and final DHEC action on private dock applications, and time lags of two to three months are commonplace. Project standards, such as size reductions or minimum lot widths for docks, are only mandated by DHEC-OCRM through the Coastal Zone Management Plan. Currently, DHEC-OCRM performs the only site visits and implements the only specific project standards for docks outside the critical area.

DHEC staff provided the council with the following recommended actions that can be taken administratively to improve regulatory efficiency and customer service; and which respond to the concerns identified by both staff and stakeholders:

1. assure that coastal zone permit reviews and the § 401 water quality certification reviews are coordinated and conducted concurrently, as opposed to sequentially;
2. for the management of freshwater wetlands, ensure consistent and complimentary standards of review between the wetlands master planning requirements of the coastal zone management program and §401 water quality certification program;
3. establish a regular schedule whereby § 401 staff from EQC will be available in DHEC offices in Charleston, and potentially other locations on the coast, to consultants and applicants for permit review meetings, consultation and site visits in the coastal area;
4. schedule regular coordination meetings between DHEC-OCRM and DHEC-EQC project managers to exchange information on permit review status to encourage expedited decision making;
5. identify a single point of contact for DHEC for each permit application requiring both DHEC-OCRM and DHEC-EQC review to coordinate with the applicant and the public.

process that needed attention. The original proposal to address this issue recommended that the permitting jurisdiction of DHEC-OCRM be extended to all tidal waters in the eight coastal counties, thus eliminating the need for a navigable waters permit in some areas. This action would require a statutory change. Some council members expressed concern that there might be unintended consequences from such a significant change and that more evaluation and review was needed. It was noted that the issue could be addressed more simply through administrative changes within DHEC. The council members agreed that DHEC action could be simplified by allowing DHEC-OCRM to administer the navigable waters permit in the eight coastal counties, and that the Department should evaluate the options for simplifying the regulatory review process for minor activities in coastal waters outside the critical area.

Recommendation 1A: Continue to improve internal DHEC coordination; ensure concurrent and expedited project review; and explore additional permit process efficiencies such as use of general permits or other blanket authorizations.

Timeframe: Short-term

Recommendation 1B: DHEC delegate the navigable waters program in the coastal zone to OCRM, furthermore to have the DHEC Board review the concept and implications of combining the two programs (i.e. EQC navigable waters permit and OCRM coastal zone consistency certification of same) and to seek regulatory review to simplify the regulation process.

Timeframe: Mid-term

Steps Required for Implementation: DHEC staff could largely accomplish the implementation of these recommendations administratively and portions of this process are currently underway. The DHEC Board will be kept apprised of this progress. Stakeholders will be updated on the implementation steps, schedule for implementation, and asked to provide feedback to assure that services are made more efficient and actions are consistent with this goal.

In addition to actions already being implemented as described previously, DHEC would also:

6. update the Memorandum of Agreement executed in 1994 between DHEC-EQC and DHEC-OCRM which addresses permit coordination and streamlining, describes the critical path for administration of appeals of jointly (DHEC-EQC and DHEC-OCRM) reviewed permits; (This update would include a description of the role of the Administrative Law Court in the appeals process.)
7. identify specific DHEC-EQC and DHEC-OCRM permitted activities to be considered for administration under general permits or blanket authorizations, and public notice these proposed permits as soon as practical;
8. continue the process of developing a comprehensive, consistent and effective freshwater wetlands management policy for the state; and
9. prepare an options paper for the consideration of the DHEC commissioner and the DHEC board regarding the navigable waters permit process. One option would be a general permit issued by the DHEC-EQC Bureau of Water, as is done for power utilities on upstate lakes owned by those utilities, for private docks in the coastal zone. This general permit would need to include requirements for compliance with DHEC-OCRM specified project standards. Another alternative would be to assign the navigable waters permit program in the eight coastal counties to DHEC-OCRM.

Topic 2: Improve coordination between DHEC-OCRM and other agencies.

Issue: Coordination between the coastal zone management program and other state agencies was formalized in 1977-78 through the signing of a MOA with the twelve state agencies who had responsibilities in the coastal zone.¹ In addition two agencies had special responsibilities: The SC State Ports Authority was required to submit a port management plan for approval by DHEC-OCRM. The S.C. Department of Archives and History (DAH) was required to consult with DHEC-OCRM in actions involving sites eligible for or on the National Register of Historic Sites, so a later MOA was developed to accomplish this. Although a few of these MOAs have been updated since the original signings, 25 years and circumstances (state reorganization, changing laws and regulations, new and different concerns, etc.) warrant a complete overview and updating of the agreements.

Stakeholders have expressed to the Council on Coastal Futures a lack of understanding and a need for clarification of the coordination processes and mechanisms that the MOAs established. Stakeholders have asked for a clarification of the final decision authority of DHEC-OCRM in instances where commenting agencies have voiced objection or requested substantial modification to proposed permit activities. Stakeholders have also asked that DHEC-OCRM and other involved agencies work to make these processes and authorities better known and understood by the public and the regulated community.

DHEC-OCRM also has MOAs addressing regulatory review procedures with three federal agencies to assure coordination and efficiency. These include: (a) the Charleston District of the US Army Corps of Engineers, which primarily address activities that impact wetlands and coastal waters, (b) the US Fish and Wildlife Service for the review and consideration of environmental impacts; and (c) the National Marine Fisheries Service, NOAA, for review and consideration of impacts to commercial and recreational fisheries.

Discussion: The 1977 SC Coastal Management Act provides the [Department of Health and Environmental Control] the “authority to review all state and federal permit applications in the coastal zone, and to certify that these do not contravene the [coastal] management plan” (Section 8.(b)(11)) and directs the [Department] to develop a system by which to accomplish this. The Act further states “all other state and local agencies and commissions shall cooperate with the [Department] in the administration of enforcement of this Act. All agencies currently exercising regulatory authority in the coastal zone shall administer such authority in accordance with the provisions of this Act and rules and regulations promulgated there under” [(Section 7.(A)]. Many of the MOAs drafted to accomplish these objectives are woefully out-of-date, although a few have been updated on an irregular basis, most notably, ones with Department of Archives and History, the State Ports Authority, Department of Transportation (currently in the process of being updated), and between DHEC-OCRM and DHEC-EQC, which addresses internal department permitting and appeals administration.

Some concerns raised by stakeholders were directed at coordination with the Department of Archives and History. As a result, DHEC-OCRM made a specific recommendation to amend that MOA as reflected in Recommendation 2B. DHEC-OCRM staff will continue to place great reliance upon the expert professional recommendations and comments of the reviewing agencies: Final permits and certifications issued by DHEC-OCRM will be consistent to the extent feasible with the recommendations of commenting agencies. This is particularly true where DHEC-OCRM lacks the specific technical expertise of the commenting agency. However, the SC Coastal Management and Tidelands Act, as amended, and regulations thereto provide DHEC with the final authority in all decisions. The council has endorsed this clarification.

¹ The original signing agencies were: S.C. Aeronautics Commission; S.C. Budget and Control Board; S.C. Development Board; S.C. Forestry Commission; S.C. Department of Health and Environmental Control; S.C. Department of Highways and Public Transportation; Institute of Archeology and Anthropology, University of South Carolina; S.C. Land Resources Conservation Commission; S.C. Department of Parks, Recreation and Tourism; S.C. Public Service Authority (Santee Cooper); S.C. Public Service Commission; and S.C. Wildlife and Marine Resources Commission.

Coordination regarding transportation projects was also an issue addressed by the council. John Walsh, Deputy State Highway Engineer, in a letter to DHEC-OCRM dated December 4, 2003, expressed support for improving coordination and suggested that the appropriate mechanism would be through interaction with the Metropolitan Planning Organizations and the Councils of Government during development of their Transportation Improvement Programs.

See Recommendation 1 for a discussion of the revisions to the intra-department MOA between DHEC-OCRM and DHEC-EQC.

Recommendation 2A. DHEC should examine and update all of the cooperative agreements with other agencies.

Timeline: Mid-term

Recommendation 2B: Amend DHEC-OCRM's MOA with the DAH to explicitly state: i) DHEC-OCRM management authority and responsibility, ii) permit approval would be granted upon execution of an MOA between the permittee, DHEC-OCRM and DAH, not at the time of final report approval, and iii) that DHEC-OCRM would be the permitting authority.

Timeline: Short-term

Recommendation 2C: Update and revise the 1978 SC Coastal Council and SC Department of Highways and Public Transportation MOA to specify a Department of Transportation (DOT) and DHEC highway construction project coordination process through which DHEC and other resource agencies can work cooperatively to minimize environmental impacts from highway construction via a process of early planning and coordination beginning with project conception at the pre-engineering and design stage.

Timeline: Short-term

Steps Required for Implementation: The authority to develop and update these MOAs (or other tools which accomplish the desired results) currently exists in the coastal zone management enabling legislation. It is recommended that these MOAs be revisited and revised as needed within 18 months of the approval of these recommendations.

Topic 3: Improve the legal process for resolving DHEC-OCRM permit disputes.

Issue: In 2002 47 DHEC-OCRM permits were appealed; 83 percent of those cases were related to dock issues. Often these appeals deal with disputes between neighbors about aesthetic impacts, or disagreements between DHEC-OCRM and the applicant about the size and location of a permitted structure. Considerable time and money on the part of the permittee and DHEC-OCRM permitting and legal staff are involved in preparing for and litigating the appeal, on what often are issues that have been decided in similar cases. DHEC-OCRM staff strongly supports developing alternative methods of resolving these disputes that are less demanding of agency and public resources.

Discussion: Raphe Jones, Managing Director of the South Carolina Council for Conflict Resolution, provided information to the council on the various types of alternative dispute resolution. The information and discussion addressed the pros and cons of arbitration and mediation, and different variations of those two dispute resolution methods. The arbitration process involves having a neutral third party determine the resolution of a conflict after hearing from the parties. During mediation, the conflicting parties craft a resolution to the dispute with the help of a neutral facilitator. Binding, non-binding, mandatory and voluntary variations of these processes exist.

DHEC-OCRM implemented a voluntary mediation pilot program in June 2002. DHEC-OCRM fully supports a recommendation for mandatory mediation believing it would benefit all parties involved, saving time and already-minimal resources for the state, while possibly shortcutting the process and reducing the costs to the private parties. The staff recommended mandatory mediation for most appealed critical area permits. The issues surrounding these permits (of which most are private, recreational docks) are of a type most likely to be resolved using this process. The council expanded on the staff recommendation to include all DHEC-OCRM permits. There will be scenarios where mediation is not appropriate, where to grant a permit in any form would be a violation of the regulations. A possible solution to this would be to have a list of exemptions, as in Circuit Court. The parties would certify in a form submitted to either DHEC-OCRM or the Administrative Law Court that the case is not suitable for mediation and state which exemption applies.

In no case should the mediation be used as a mechanism to lengthen the appeal process. The voluntary mediation process is designed so that the window of opportunity to try mediation is inserted after the notice of appeal is filed and before the case is scheduled in the Administrative Law Court. Thus the length of time to proceed through the appeal process is not affected if the mediation is not successful.

Recommendation 3: Implement a mandatory mediation program for all types of DHEC-OCRM permit appeals.

Timeline: Long-term

Steps Required for Implementation: The implementation of such a program would involve taking several legislative steps, as evidenced by another, similar state program. By way of example, mandatory mediation has already been implemented in the state employee grievance context. See 23A S.C. Code Ann. Regs. 19-718 et seq. (Supp. 2002). The statute enables such a program to exist, but the detailed procedure is set forth in the regulations. The grievances brought by employees as a result of disciplinary actions are categorized into lower-level grievances, such as a two-day suspension, and higher-level grievances, such as termination. For the lower-level grievances, mediation is required. In the event that the mediation is unsuccessful, the matter goes to binding arbitration, from which there is no appeal. For the higher-level grievances, mediation is required. However, if the mediation is unsuccessful, the matter goes to a full hearing before the State Employee Grievance Committee and, thereafter, can be appealed.

State-employed mediators conduct these mediations. The State Budget and Control Board has their own corps of mediators, who handle these proceedings for various state agencies. It might be possible to draw from that state-funded pool. In that case, the only expenses to implementing a mandatory mediation process for DHEC-OCRM appeals that would be incurred would be travel for the mediator, should all of the parties be located on the coast. Additionally, charging a mediation fee could be evaluated.

It is likely that in order to effect such a change in the process, the Coastal Tidelands and Wetlands Act would have to be amended to include some enabling language. The details of the program could be set forth in the regulations.

Whether or not the Administrative Procedures Act would need to be amended would depend on the timing of the mediation. Currently, when an appeal is received, the agency has five days in which to transmit the appeal to the Administrative Law Court. In order to avoid burdening the court with having to take an appeal that might be resolved via mediation and to prevent the party from paying the \$100.00 filing fee, DHEC-OCRM would recommend that the mediation take place prior to its transmittal to the court and not after. However, it may not be feasible to schedule a mediation in such a short period of time, due to the schedules of the parties and the possibility that they would want to retain counsel. DHEC-OCRM would propose a change to allow for 30 days from the date the appeal is received by the agency in which to mediate. If the mediation were unsuccessful, the agency would transmit to the court and require the party requesting the hearing to pay the filing fee. This would require a change to the DHEC-

OCRM regulations. See 23A S.C. Code Ann. Regs. 30-6 (B). One possible complication, however, is that the Administrative Law Court rules state that a party must send the appeal to the court, along with the fee, at the same time that the agency receives a copy. There may have to be a change to the court rules in order to resolve this conflict.

All of the specific details of the process should be made clearer once the voluntary pilot project has been evaluated.

Topic 4: Improve DHEC-OCRM public notices.

Issue: The public notice information provided on projects requiring stormwater permits provides only a brief description including the name of the project and its address. Some individuals, as well as environmental groups, expressed concerns that this was not providing enough information to make constructive responses and comments on the public notices, especially when freshwater wetland impacts were involved.

Discussion: Council members and DHEC-OCRM staff agreed with the issues raised and endorsed changes to the public notice process as described in Recommendation 4.

Recommendation 4: Recommend that DHEC-OCRM include in their mailed and web page stormwater public notices: a copy of the application form, the site plan showing wetland impacts (if applicable), and a copy of the location map.

Timeline: Completed

Steps Required for Implementation: Beginning in July of 2003, whenever there are freshwater wetland impacts proposed for a project, the public notice includes a copy of the US Geologic Survey quadrangle map and an overall master plan showing all wetland impacts, as well as proposed preservation, buffering and mitigation. This has provided the commenting agencies and individuals with much more useful information to utilize in responding to the public notices. In addition, the DHEC-OCRM now requires a digital electronic submittal of the project boundaries for all stormwater permit applications. This digital file can be e-mailed to the DAH, DNR, USFWS and other agencies in order to get the most detailed information on any potential impacts to archaeological resources, endangered species, or geographic areas of particular concern.

Topic 5: Clarify that conditions on DHEC-OCRM critical area permits continue for the life of the permit.

Issue: The issuance of DHEC-OCRM critical area permits can be controversial. Various parties, in addition to the permit applicant, can request that conditions be included as part of the permit to address concerns raised during the permit review process. The inclusion of these conditions can often eliminate an appeal of the permit decision. It is the policy of DHEC-OCRM that conditions included in a permit continue for the life of a project, provided the permittee commences with the permitted activity during the five year life of the permit. A stakeholder indicated that this policy was not well understood, and that a situation had occurred where a permittee requested that some of the conditions be eliminated even though work had been completed under the permit.

Discussion: In addition to the issues raised above, DHEC-OCRM staff pointed out that the policy also does not require a permittee to comply with the conditions in a permit if the activities allowed under a permit are never initiated. Therefore, if a permit expires and no work is completed, the conditions at-

tached to the permit also expire. Any new permit application would initiate a new permit review process, and inclusion of the conditions on the previous permit would not be assured. Interested parties do, however, have the same opportunities as they did when the initial permit was issued to make their concerns known and suggest permit conditions to address those concerns. DHEC-OCRM agreed that it was important to ensure all parties had a clear understanding of the agency's policy and agreed to include new language on all critical area permits to address the issue.

Recommendation 5: Affirm existing DHEC-OCRM policy that conditions included in a DHEC-OCRM critical area permit for construction activities continue for the life of a project, provided work commences during the life of the permit.

Timeline: Completed

Steps Required for Implementation: Adding language to the critical area permit as recommended by the council during their discussions is an administrative action. DHEC-OCRM began including the following new language on all critical area permits in July, 2003: All listed special and general conditions will remain in effect for the life of the project if work commences during the life of the permit. This applies to both permittee and/or future property owners and permit assignees.

B. Assistance to Local Government

Topic 6: Build capacity at DHEC-OCRM to be a center of technical expertise for local governments.

Issue: Even though there are state and federal agencies charged with protecting the coastal environment, decisions made by local governments are some of the greatest impacts to these resources. Land use is the exclusive domain of local governments (Home Rule). Land use ordinances at the local level determine the location and layout of development. State and federal agencies can do very little to control sprawl, impervious surface coverage, and the development of uplands adjacent to sensitive coastal environments. Educating local government representatives about the impacts of improperly sited or designed development will result in improved protection of these resources.

Land development can have a significant impact on coastal resources, since it usually changes the hydrology of the impacted area. Improperly sited development directly affects water quality by adding sediment, nutrients and other pollutants directly into coastal waters. In addition, urban sprawl changes the landscape by using up available land at four to six times the rate of population growth. Sprawl also results in greater use of automobiles. Between 1983 and 1990 the total amount of vehicle miles traveled increased 42 percent while the population increased 7 percent. Many times opportunities to develop land in a more sensitive fashion are stymied by inflexible local ordinances that dictate the separation of residential and commercial developments, mandate overly wide side streets, and generally do not allow for alternative designs outside of the standard strip commercial developments and large lot subdivisions. Minimum lot sizes, minimum street and side setbacks, and other such well-meaning but often damaging restrictions result in "more of the same" for regional development, despite the fact that many of these practices are widely known to create the environmental and social conditions that are not generally favored.

Local governments are required by the 1994 SC Comprehensive Planning Act to develop comprehensive plans if their communities have zoning requirements. Council members and several stakeholders had noted that since land use decisions are made by local governments, actions to improve support and encourage the incorporation of natural resource considerations into local planning should be pursued.

sources. One source was the four council representatives from local governments and their staff, the second was a training needs assessment of local decision-makers conducted by the North Inlet Winyah Bay National Estuarine Research Reserve, and the third was a survey conducted by DHEC-OCRM in 2000 of all the local governments in the coastal zone. The consensus from these assessments is that local governments would like more technical assistance from DHEC-OCRM in the areas of beachfront, stormwater, and wetland management.

DHEC-OCRM staff already frequently interact with local governments on these issues. Through special area management plans (SAMPs), DHEC-OCRM has previously and will continue to work closely with local governments on the coast. SAMPs address such issues as land use impacts, dock proliferation in proximity to historic sites, and waterfront redevelopment. They develop measures to protect water quality, such as models and other forecasting tools, and conduct assessments of natural and anthropogenic resources. Staff also serve on a number of local committees along with local government personnel. In addition, workshops have been hosted by DHEC-OCRM, with local governments as part of the target audience, on better stormwater techniques and alternative development design. In 2001, DHEC-OCRM established a web-based information clearinghouse that was to be used as an information dissemination tool. Lack of funding has hampered this effort and it has not been kept up to date.

As one mechanism to provide technical assistance to local governments, the council endorsed developing model natural resource and capitol improvement chapters for local comprehensive plans. When the Comprehensive Planning Act was originally enacted, the Municipal Association, Association of Counties and others collaborated to provide local governments with guidance on how to prepare a local comprehensive plan that complied with the requirements of the new law. The law included a deadline requiring communities to adopt comprehensive plans by 1999 and to update and revise these plans every ten years thereafter. By providing improved resource documents, such as model natural resources and capitol investment chapters, with information addressing advances in planning methods, new natural resource data and maps, as well as technologies such as geographic information systems that support improved planning, local plans could become more useful and effective in addressing coastal resource issues.

Recommendation 6A: Build capacity at DHEC-OCRM to be a center of technical expertise for local governments on beachfront management, stormwater management, wetland management, and other coastal natural resource issues. This expertise should be provided via increased personal interactions with local government staff, through maintenance of a web-based clearinghouse, and through technical workshops.

Timeline: Long-term

Recommendation 6B: DHEC-OCRM should participate in developing model natural resources and capitol investment chapters for local comprehensive plans.

Timeline: Short-term

Recommendation 6C: DHEC should continue to study the benefits of alternative development design standards in the coastal zone and to encourage public awareness as appropriate.

Timeline: Mid-term

Steps required for implementation: In addition to continuing the work described above, DHEC-OCRM should fund a position to oversee their web page. This person could be instructed to develop a plan to ensure that agency publications and data are placed on the web once they become available. Likewise, links to other relevant web-based information would be established. Additionally, a position

should be established that would be responsible for working with local governments to secure grants in order to carry out innovative planning techniques that would be protective of the coastal environment. DHEC-OCRM should assume a role in the annual Municipal Association meetings and the Association of Counties meetings in an effort to make local governments more aware of their role in protecting coastal resources.

Development of model chapters as a tool and resource for local governments to utilize would require resources and cooperation to complete. DHEC, in cooperation with other agencies such as DNR and DOT, and interest groups, could produce the model chapters.

Department staff have already developed a fact sheet listing alternative development practices that can address many of the current problems with land use in the coastal zone. The document was organized around four topics: traffic, mixed land use/clustering, preserving open space/habitat, and reducing imperviousness. All of these development practices are controlled at the local level. Local governments will have to decide to implement them through changes in their existing land use ordinances. DHEC-OCRM could help to educate local officials on the advantages of adopting these revised ordinances and the steps they could take to lessen the impact of development on the environment.

Topic 7: Continue DHEC implementation of the state stormwater permitting program as part of Phase II of the NPDES program.

Issue: Since passage of the SC Stormwater Management and Sediment Reduction Act in 1991, DHEC and its predecessor agencies have issued stormwater permits for land disturbance activities. Local governments have the option of being delegated this authority, but none in the coastal zone have implemented this option. As part of the Clean Water Act administered by EPA and DHEC-EQC, certain local governments in urbanized areas, called MS4 communities, are now required to establish their own permitting programs to address pollution from land disturbing activities. These local governments are also required to implement a number of additional elements of this federal program, called NPDES Phase II, related to managing pollution from rainfall runoff. The affected local governments have requested that DHEC continue to implement the state stormwater permit program so their limited resources can be focused on the other elements of the federal program that the state has no history of implementing.

Discussion: The current requirements related to implementation of the state stormwater program as proposed by DHEC-EQC are as follows: DHEC-EQC will issue the Municipal Separate Storm Sewer Systems (MS4s) NPDES general permit with the requirement that on or before July 1, 2005, the owners (local governments) of all MS4s must implement the NPDES Phase II Program requirements related to construction site and post-construction runoff control. In the interim period, DHEC-OCRM and DHEC-EQC will continue to administer the state stormwater program throughout the state.

This delegation of state stormwater program implementation to all MS4 designated local governments is one of several requirements that are part of the Draft MS4 NPDES general permit that has been appealed by a number of the effected MS4 communities. Resolution of the issue of whether DHEC or MS4 designated local governments issue stormwater permits will likely occur either as a result of negotiations prior to an administrative law judge hearing or be determined by the appeals process.

Recommendation 7: DHEC should coordinate and implement the state stormwater program under Phase II of the NPDES program.

Timeline: Mid-term

Steps Required for Implementation: To implement the recommendation adopted by the council, DHEC would need to changes its current position and agree to continue managing the state stormwater

permit program as a part of the NPDES Phase II program requirements as opposed to requiring local governments to issue these permits.

Topic 8: Improve water quality by managing stormwater on a watershed basis.

Issue: A number of stakeholders raised the issue of watershed management and the need to address water pollution issues holistically via watershed planning efforts. Watershed boundaries do not conform to political boundaries, nor are solutions for addressing water quality problems likely to be found within one agency's regulatory authority. Much scientific literature, as well as more practical resource documents, endorse the need for watershed management as the framework for correcting what are often long-standing and complex water quality and habitat degradation problems. DHEC and other resource management agencies employ a watershed approach in the design of most of their monitoring and regulatory programs. However, consideration of larger watershed impacts is not always incorporated in individual permitting decisions. Likewise, most local governments, which are responsible for land use decisions, rarely consider watershed impacts.

Discussion: The council considered several separate recommendations. These recommendations encouraged management of stormwater on a watershed basis in cooperation with local governments, and supported a regional approach to stormwater management as well as the establishment of stormwater utilities. The discussion focused on how DHEC-OCRM could provide technical assistance to local governments during their comprehensive planning process to better address stormwater management issues. By mapping sub-basins, or stormwater management units, the process of watershed planning begins by raising awareness of the connection between specific land areas and adjoining waters and habitats.

DHEC-OCRM staff have been involved with local governments to achieve this goal in some areas, but have not accomplished this effort throughout the coastal zone. The Beaufort County SAMP incorporates watershed planning concepts as will the ongoing Murrells Inlet SAMP. In addition, DHEC-OCRM has recently advertised for a position that includes as part of the job description providing professional and advisory services to local governments to include watershed planning, watershed protection and restoration strategies.

Recommendation 8: The council recommends the DHEC-OCRM review and assess in conjunction with local communities, through the comprehensive master planning process, to classify the watersheds into stormwater management units.

Timeline: Long-term

Steps Required for Implementation: DHEC-OCRM would need to reallocate existing resources or find additional funding in order to make significant progress on this recommendation. The addition of one new staff person who could devote part of their time to this effort would be a start. Additionally, local governments would have to want to coordinate with DHEC to incorporate watershed planning into their comprehensive plans.

C. Coastal Resource Management Issues

Topic 9: Encourage construction of community docks in lieu of multiple private docks.

Issue: Current DHEC-OCRM and EQC regulations determine whether a community dock is classified as a dock, regulated by dock standards, or a marina, regulated by significantly more restrictive marina standards. DHEC-OCRM's regulations define docks having 200 linear feet or more of docking space as mari-

nas. DHEC-EQC's definition of a marina, mandated by regulations administered by the Food and Drug Administration, is a structure that has the ability to moor 10 or more boats. Additionally, DHEC regulations prohibit new marinas in waters classified for shellfish harvesting. Since many coastal waters are classified this way, the places where marinas and community docks with 200 feet of docking space can be permitted are limited. These limitations on marinas and community docks are related to protecting public health. Boats can discharge bacteria, which can accumulate in oysters, which are often eaten raw. Eating bacteria-laden oysters can make people very sick.

In conflict with these rigid standards to protect public health, which limit considerably where community docks can be built, is a desire by some stakeholders and DHEC-OCRM to encourage community docks as an alternative to multiple individual docks.

Discussion: The council was briefed on previous efforts to address the conflicts created by community dock and marina definitions. Additionally, DHEC-OCRM staff provided information on agency efforts to encourage community docks and limit the number of private, residential docks in new developments through dock master planning. Community docks, because of the marina definition, are limited in size to a 100-foot float (200 feet of dockage space) in most coastal waters. This size is often not large enough to address the expected demand for water access in a development or to encourage the developer to significantly limit the number of individual docks. Since the value of a lot increases by approximately 30 percent if it includes a dock, development interests have historically not supported limiting opportunities for private docks.

The council formed a small subcommittee to draft a policy statement. The council adopted this policy statement as Recommendation 9.

Recommendation 9: DHEC should evaluate community dock and marina definitions and policies with a goal of establishing best management and development practices for protection and access to the resource by providing DHEC-OCRM with the flexibility and mandate to allow private docks to be traded for community dock float lengths beyond the current limit of 200 feet, at an appropriate ratio.

Timeline: Mid-term

Steps Required for Implementation: DHEC-OCRM and EQC would have to cooperatively develop a strategy to allow larger community docks in exchange for private docks. Part of the strategy would likely require changing the definitions, establishing appropriate ratios of community for private dockage, and maintaining protection of shellfish resources and public health.

Topic 10: Encourage voluntary dock planning by cooperating land owners.

Issue: The increasing number of docks in South Carolina's coastal zone is a growing concern for some stakeholders. On average 750 dock permits are issued each year by DHEC-OCRM. While SCDHEC-OCRM requires a dock master plan as part of its regulatory review process for new subdivisions, individual landowners must voluntarily choose to utilize lower impact alternatives, such as community and shared docks. Landowners who are at the permitting stage usually have financial expectations linked to obtaining as many dock permits as possible. This is a difficult stage at which to encourage voluntary reductions in dock numbers.

Discussion: Council members discussed a more proactive approach, which resulted in Recommendation 10. One strategy for increased voluntary implementation of these alternatives would be a cooperative effort between DHEC-OCRM, landowners, and non-governmental organizations to reduce dock prolifera-

tion through conservation easements. While landowners can currently self-impose a dock master plan on their property, a broader approach using conservation easements would be preferable to ensure consistent, effective implementation. DHEC-OCRM could work with non-governmental organizations and groups of landowners to achieve a master plan for an entire area. Landowners could place voluntary easements on a portion of the waterfront, creating a waterfront buffer zone with restrictions on the number, size, and structural elements of allowable docks. Another option would be the placement of a voluntary conservation easement on the entire property, which would further restrict future subdivisions, structures, and subsequent docks allowed on the property. The conservation of view corridors and the potential tax deduction resulting from an easement would prove to be a substantial incentive to encourage voluntary landowner participation.

Recommendation 10: DHEC-OCRM should encourage opportunities for voluntary dock planning efforts by cooperating landowners. When such efforts develop, DHEC-OCRM should participate as a technical advisor and facilitator.

Timeline: Mid-term

Steps Required for Implementation: The success of this concept would depend largely on landowner education and successful cooperative efforts between DHEC-OCRM, non-governmental organizations and local landowners. Education would play a crucial role, since many property owners are unaware of the potential for dock sprawl in their area and are equally unaware of the possible use and benefits of conservation easements for mitigation against future impacts. Using maps and images of current and potential dock construction allowed under DHEC-OCRM regulations, landowners would see the visual changes to their waterfront areas that could result without concerted planning efforts. This incentive-based effort would allow for continued private ownership and traditional uses of property, while benefiting the landowner, DHEC-OCRM, and the community without the need for regulatory requirements. DHEC-OCRM must initiate contact with local non-governmental organizations to introduce this concept and gain support. These organizations in turn would have contacts in local communities and could be most capable of involving local landowners in this process.

DHEC-OCRM would have to devote resources to this effort through allocation of staff time, and potentially production of materials for use in this initiative. A small steering committee composed of DHEC, other resource agencies and local land trusts would be required to develop materials and plan an outreach strategy.

Topic 11: Develop statewide legislation for managing freshwater wetlands.

Issue: The protection and sound management of freshwater wetland resources has been an important element of the state's coastal zone management program since its beginning in 1977. This element of the coastal program is implemented in coordination with the Corps, which has direct permitting authority. A process of joint public notice and permit review was developed between the Corps, DHEC-EQC and DHEC-OCRM. This process has evolved over time to include policies for wetland master planning, project review, standards for acceptable mitigation, and a mitigation banking system. This program effectively provided a system of public notice, coordination with resource agencies, and permit processing. In January 2001 the United States Supreme Court issued a decision that significantly impacted the 15-year-old permitting process.

This decision is known as the SWANCC decision or Solid Waste Authority of Northern Cook County versus the US Army Corps of Engineers. Although arguments continue as to what the decision actually said, the practical result is that most isolated freshwater wetlands are no longer federally regulated. Through policies included in the coastal zone management program, DHEC-OCRM continues to provide some protection of isolated wetlands via review of state permits that also include impacts to wetlands, but this has

only been partially effective, as many activities require no state permit. As a result of the change in federal policies, the regulated community is uncertain of how the rules apply and what permits are required for impacts to different types of wetlands, and the state continues to lose important wetlands without adequate permitting review or mitigation.

Discussion: During the course of their deliberations the council heard 16 different speakers addressing the wetlands regulation issue. These included people representing the property rights community, different development interests, noted wetland scientists and researchers, national experts on wetland law, other states active in wetland management and several environmental leaders. The discussions took place at five separate meetings, with most of the discussions occurring at the April 2003 meeting in Myrtle Beach and the October 2003 meeting at Moncks Corner. The entire agenda for the October meeting was devoted to the isolated wetlands issue. At this meeting four presentations were made followed by a panel discussion of issues raised by council members. The council initially focused on ranking of wetlands as an element that should be included in the state program, but the panelist with experience in wetland ranking did not encourage this. Providing incentives for property owners to protect wetlands was an element strongly endorsed by council members, as was the process of wetland master planning and requiring mitigation for wetland impacts. At the conclusion of the discussion, the Council on Coastal Futures voted in the affirmative to support a recommendation to develop statewide wetland legislation.

Recommendation 11: Develop statewide comprehensive legislation that codifies historical freshwater wetland management standard operating procedures including wetland master planning, incentives and mitigation.

Timeline: Short-term

Steps Required for Implementation: DHEC has promulgated and submitted regulations to the legislature amending R. 61-101, the state's water quality regulations, to require permits for the filling of isolated wetlands. In addition, the South Carolina Association of Realtors has submitted a wetland bill to manage the filling of isolated wetlands. Both the regulations and the bill are being debated in the 2004 session of the General Assembly.

Topic 12: Identify marina dredging issues and problems, evaluate technologies and recommend preferred alternatives for spoil disposal.

Issue: The South Carolina coastal zone contains 74 marinas. A large number of these marinas predate DHEC-OCRM regulations that require newly constructed or expanded marinas to have an approved, deed-restricted upland spoil site or to demonstrate permanent access to such a site for the disposal of dredge spoil material. Nearly all marinas require periodic dredging to maintain adequate depths of water for boat moorage. Since many marinas predate DHEC's and other resource agencies' operational requirements and environmental safeguards, some of these marinas could also have issues with contaminated sediments due to fueling operations, boat maintenance or upland runoff. Contaminated sediments must be disposed of in an approved upland site. Clean sediment however, can be deposited offshore in a designated site approved by EPA. The cost of offshore disposal can make this alternative infeasible for some marinas. Near shore disposal is not allowed. The marina basin can become unusable over time if maintenance cannot be performed. These facilities are important to the tourism industry, provide water access and are generally valued by the communities they serve.

Discussion: The precise number of marinas, and their locations in the coastal zone, that lack an economically feasible spoil disposal option is currently unknown. In order to formulate an appropriate management strategy, the scope of the problem as well as solution options will have to be evaluated.

collecting a significant amount of water with the unwanted sediment. This mix of water and sediment created in the dredging process is called dredge slurry. The last few years has seen experimentation, research and limited application of new technologies to separate the solid material from the water in the dredge slurry. Water makes up 80 to 90 percent of the dredged slurry. Hydrologic dredging methods utilize suction and pump systems that combine the solid material with water. This method creates a significant disposal problem due to the very large volumes of water involved. Clamshell dredging methods using either land-based or barge platform-based equipment can be utilized in some cases, but are not adaptable or feasible for some marina settings. Experiments involving pumping dredge slurry into large fine membrane geo-textile bags have been conducted. The porous bag material allows the water to drain from the bags leaving the solid material in the bag for upland disposal. This process has had very mixed results but merits further efforts to increase effectiveness. Other experimentation has focused on a dewatering process using equipment adapted from white clay mining. This process utilizes a vortex-design centrifuge process for separating solids from water. DHEC-OCRM encourages a pilot project to test this process both for dredging and for beach renourishment applications. Questions remain regarding the ability of this process to meet state water quality standards for the discharged water. Other technologies are likely to exist and should be explored.

Recommendation 12: Marina Spoil Management (A) DHEC should request from the S.C. Marine Association and others a projection for the marina dredge spoil needs in the coastal zone, ideally with a five, 10, and 20 year planning horizon. (B) Communities and the marine industry should be actively involved in planning for and overseeing the long-term needs of marinas. (C) DHEC should utilize this information to (i) identify dredging issues and problems encountered by marinas, (ii) evaluate traditional and new technologies for dredging and disposal, and (iii) identify preferred alternatives for spoil disposal and marina siting to ensure that adequate alternatives are available.

Timeline: Long-term

Steps Required for Implementation: As a first step, DHEC, the S.C. Marine Association and communities would need to secure and allocate funds to survey coastal marinas and assess dredge maintenance needs, with a particular focus on older marinas that lack disposal sites. Once the needs were identified, options for addressing the needs could be evaluated. These options would include researching available spoil sites and evaluating disposal technologies. Additional funds would be required to evaluate traditional and alternative technologies for application to dredge maintenance and disposal in coastal South Carolina waters consistent with state and federal environmental regulations. This information would be collected in a report and made widely available. The work would take six to 12 months to complete, once funds were made available.

DHEC should discuss the findings and implications of the above survey and report with the marine industry, tourism representatives and all other interested parties, as well as with community officials where these facilities are located.

Topic 13: Review DHEC's septic tank policy.

Issue: Development pressures on the coast are resulting in an increased use of marginal lands for new residences, many of which rely on septic systems. Some of these new residences are being permitted for septic systems even though sewer may be available. The issue of "availability" is often a contentious one.

In addition, redevelopment of existing, smaller beachfront homes into much larger, mega homes is occurring up and down the coast. With no state requirement for an evaluation of the existing system, these redeveloped homes are often upgraded with little or no regard to the capacity of the existing septic system

to handle the increased water usage, even when redeveloped as rental property.

Many of these coastal properties can be characterized by small lot size, sandy soils with high seasonal water tables, and occupants that have little or no knowledge about septic system operation and maintenance. When some of these older, conventional septic systems fail, repairs are often done in the municipal right-of-ways because there is no requirement for a suitable replacement area to be set aside within the property boundary. With no state requirement for inspection and maintenance, new technologies that can provide improved treatment of effluent, yet require routine maintenance, are not being utilized due to their propensity for failure without maintenance. Therefore, with limited space for repairs, no requirements for preventative maintenance, little to no education on proper operation and maintenance, and a reliance on conventional gravity-fed septic systems, the future of our coast's reliance on septic systems for approximately 40 percent of all new homes rests solely in the hands of homeowners and occupants.

Discussion: Local governments along the coast are looking into ways to address the limitations of state regulations. For example, DHEC regulations do not require evaluation of the size or condition of the septic system when smaller homes are torn down and replaced with much larger houses intended for more inhabitants. Because of this relatively common practice, the Isle of Palms passed an ordinance in June 2003 that requires owners of such houses to tie into the sewer system if it runs in front of the property. If no sewer is available, the Isle of Palms ordinance requires the owner to bring the septic system up to the minimum DHEC standards. The City of Folly Beach is in the process of developing a septic system management ordinance that will mandate an inspection of all systems every five years, and will require existing systems to be evaluated by DHEC when residences are being rebuilt larger or changed from residential to rental property. The efforts by a small minority of local governments are a piece-meal approach to patching the various holes in a statewide program that currently cannot serve all the needs in the coastal zone.

Recommendation 13: DHEC should conduct a review of its entire septic system policy that addresses new technology, siting standards, system maintenance, and consideration of proximity and access to public utilities.

Timeline: Long-term

Steps Required for Implementation: A lot of work has already been done that could be compiled in a comprehensive report on the DHEC onsite septic system program. Previous efforts to address some of the issues raised during the council's discussion have been met with major opposition in the General Assembly. While some of the proposed siting standards are seen as an inhibitor to development, a more comprehensive approach (e.g., newer technologies with mandated maintenance) could be viewed as facilitating more sustainable growth while at the same time being more protective of human and environmental health.

In order for any significant changes to occur in the existing program, funding to implement change and agreement among interested stakeholders would be required. Completing a report could set the stage for a stakeholder group, which would include interested legislative members if possible, to recommend changes to the current DHEC program.

Topic 14: Determine strategies and alternative funding sources for public beach access.

Issue: Coastal tourism is one of South Carolina's major economic engines. South Carolina beaches provide not only job opportunities for state residents but also revenue for the State and local communities. Beaches also provide state residents with a variety of recreational opportunities and enhance their quality of life. According to the South Carolina Department of Parks, Recreation and Tourism (PRT), recreational

activities associated with beach access show high levels of participation. Statewide resident participation in walking for pleasure/exercise grew from 80.2 percent in 1994 to 82.8 percent in 1999 and beach swimming/sunbathing increased from 59.5 percent to 63.1 percent during the same period. Other beach related activities had significant statewide usage in 1999 such as picnicking (55.7 percent), bicycling (38.8 percent), watching wildlife (36.5 percent), jogging/running (25.2 percent), camping (24.7 percent), and salt-water fishing (18.1 percent).

The 2002 South Carolina State Comprehensive Outdoor Recreation Plan (SCORP) identified “increase public beach access” as one of its priority issues. Previous SCORPs, at least since the early 1980s, have identified public beach access as a priority. The South Carolina State Park Service’s Vision for the 21st Century identifies the need to protect for the future a park site on the South Carolina coast. It notes that rapid development of the coast has greatly diminished public beach access, leading to over-use of South Carolina’s four coastal state parks. Protection of such an asset would help preserve this unique aspect of South Carolina, expand public beach access, and relieve some of the burden on fragile resources at today’s coastal parks.

Over the last 30 years, PRT has had some opportunities to acquire land for coastal state parks. However, there were no funds available at the time and each opportunity was lost. No coastal state park has been added since 1960. Three other coastal state parks were donated in the 1930s. Many local governments have been diligent in establishing beach access at “street ends” and other small parks as resources have allowed. However, little funding has been available to provide public beach access. Coastal populations continue to grow; tourism (especially coastal tourism) remains one of the state’s most important industries, and demand to visit the coast from the rest of the state’s residents remains strong. There is a need to accommodate this growth.

Discussion: Opportunities to fund future beach access are currently limited as follows:

Grant	SC Funds	Limitations
Parks and Recreation Development Fund (PARF) – State of SC by PRT	~ \$1.8 mil. (2004) statewide (coastal counties range \$24,000 - \$90,000)	New and enhanced recreation projects; Non-competitive program for local governments
Coastal Resources Access Fund administered by DHEC-OCRM	~\$90,000 annually from DHEC-OCRM permit fees available to local governments as competitive grants for projects in the coastal zone	Not limited to the beachfront; \$25,000 maximum grant; 50-50 match
Recreation Land Trust Fund (RELT) – State of SC by PRT	~\$350,000 annually statewide	Acquisition only, state and local projects; Annual competitive grants; 50-50 match
Land and Water Conservation Fund (LWCF) – National Park Service by PRT	~ \$1.4 mil. (2003-04) statewide	Land acquisition or facility development for outdoor recreation, government entities; Annual competitive grants; 50-50 match
State Conservation Bank	\$10 million in 2004 SC State Budget Bill	Purchase of significant conservation projects (fee simple or easement)
State and Local Bonds	Sporadic	Not stable funding source, political, must be repaid

The council discussed beach access at the August 1, 2003 meeting. After discussing the need for more research on the issue and clarifying the need to develop funding alternatives and strategies, the recommendation passed unanimously.

Recommendation 14: The Council on Coastal Futures recommends that strategies and alternative funding sources be determined to dedicate to public beach access improvements and acquisition to meet the increasing demand for beach access.

Timeline: Long-term

Steps Required for Implementation: Implementation of this recommendation would require cooperation among DHEC, PRT, beach communities, representatives of the tourism industry and other interested stakeholders. Funding is scarce, and a dedicated initiative with a high level of support from within state government would be required. As an initial first step, funding should be identified to complete a report that quantitatively defines the needs for beach access, estimates the costs of meeting those needs, and evaluates various funding mechanisms and alternatives available for addressing the needs.

Topic 15: Fund the State Beach Renourishment Trust Fund.

Issue: The General Assembly recognized the need to provide annual state funding for beach renourishment and for emergency response following storms with the establishment of the State Beach Renourishment Trust Fund in 2000. However, funds have not been appropriated to capitalize this trust fund. Meanwhile, state public recreational beaches are diminishing in width and recreational value, eroding their ability to support tourism and provide for storm damage reduction. Since 1999, the number of beach areas characterized as being healthy based upon sand volume and width has declined, and the number of beach areas identified as being at risk has increased due to lack of maintenance.

Discussion: DHEC-OCRM conducts annual beach monitoring for all beach areas to collect data necessary to evaluate the health of the state's beaches. These measurements provide an accurate assessment of the health of each beach area in terms of sand volume, beach width and dune accumulation. These measurements allow for comparative analysis between beaches to determine which areas are most at risk from flooding and storm impacts and which areas can be characterized as having a healthy beach dune system capable of providing for recreation and storm damage reduction. The March 2003 State of the Beaches Report indicates that the commitment to renourishment and maintenance projects in the 1980s and 1990s resulted in over 85 percent of our States beaches in 1999 being defined as healthy. Criteria provided in Regulation 30-18 for evaluating beach renourishment needs in the administration of the trust fund defines a healthy beach as having at least 25 feet of dry sand between the seaward toe of the sand dune and the high-tide wave up-rush line. The March 2004 report indicates that the percentage of beach areas defined as healthy has declined to 78 percent due to a lack of maintenance and continued erosion. South Carolina's beaches experience erosion at a higher rate than the average for the eastern seaboard. High-density development along nearly all of the state's non-protected, non-publicly owned shorelines will require a continual maintenance effort.

South Carolina beachfront communities that are fully accessible to the public look to the state to assist in cost sharing for beach maintenance. Economic benefits to the state from coastal tourism justify this support. Like maintenance of other state infrastructure, beach maintenance is a long-term commitment requiring planned, cyclical activity and annual funding commitments. The state's absence in this process since 1999 has resulted in disruption and modifications to this financial planning process by local governments that will only produce higher costs in the future. Up until 1999, an average of \$2.5 million was expended annually from all sources and little has been spent since that date. The priority needs identified in the 2004 State of the Beaches Report are for badly needed maintenance renourishment at Hunting Island State Park, the Town of Edisto Beach and Edisto Beach State Park, and Folly Beach.

Recommendation 15: The state should capitalize and adequately fund the State Beach Renourishment Trust Fund, whose purpose is to provide state matching funds for priority public beach renourishment projects and to provide for emergency response needs to repair beaches after storms.

Timeline: Long term

Steps Required for Implementation: The Council on Coastal Futures supports dedicated annual state funding for beach maintenance, to be cost-shared with local governments for projects that are identified as priorities under Regulation 30-18 and for emergency response needs. Leadership and commitment from coastal communities, the Governor's Office and the General Assembly would be required to find the funding necessary to implement this recommendation.

Topic 16: Allow and encourage innovative stormwater best management practices (BMPs) and standards.

Issue: Many stakeholders, some of whom are scientists with expert knowledge of coastal ecology, as well as the DHEC-OCRM staff, noted the significant impact that rainfall runoff has on the quality of coastal waters and habitats such as tidal creeks. This runoff, also called stormwater, is the leading cause of water quality impairment in coastal areas. As in most fields of study, both the research focused on the effects of stormwater pollutants on coastal ecology and the engineering design of BMPs are constantly evolving. Recommendation 16 highlights the need to ensure the state's stormwater permitting program in the coast is utilizing and requiring, to the extent feasible, the most recent best available technology and management practices for treating stormwater.

The current DHEC-OCRM stormwater regulations vary depending on the size of the land disturbance and the development type. In general, DHEC-OCRM regulations require storage of one-half inch to 1 inch of rainfall through the use of retention, detention, or infiltration systems depending on the distance to the receiving waterbody and the classification of the receiving waterbody. Sediment and erosion control regulations require a removal efficiency of 80 percent of the settleable solids. The regulations were developed to deal with the volume or quantity reaching the receiving stream and, to a lesser extent, the quality based upon the assumption that removal of solids will lead to removal of pollutants since a number of pollutants bind to sediments. The technology of stormwater management has evolved to include numerous design options; however, there is currently a lack of research in determining the efficiencies of the different technologies to remove a variety of pollutants including fecal coliforms and nutrients. Currently, most of the state's impaired waterbodies do not meet water quality standards due to too much fecal coliform bacteria in the water.

Discussion: The council devoted most of their September 2003 meeting to the discussion of stormwater issues. A panel of experts provided background information on the status of the current state stormwater permitting program in the coast, the impacts of stormwater on South Carolina coastal ecosystems, research linking land use to the environmental quality of tidal creeks, and the need to educate the public, local officials and many others on the issue. As the recommendations indicate, the council strongly endorsed the need to address the significant impact of stormwater on coastal resources.

A number of stormwater best management options have been proposed to reduce pollutant removal. Some of the recent research on methods to reduce the pollutants in rainfall runoff has highlighted the value of utilizing vegetation as part of the stormwater management system. Vegetation can absorb nutrients and other dissolved pollutants that do not settle out with sediment. Additionally, vegetation slows the velocity of runoff to allow for more settlement and to prevent slope erosion. Current DHEC standards do not require that all detention ponds, which are a stormwater BMP, be designed with vegetative areas.

On a case-by-case basis DHEC-OCRM staff do require that vegetated areas be included on the perimeter of wet detention ponds when and if a proposed project has to meet anti-degradation requirements (i.e., in-stream water quality standards must be met in the post-development runoff for pollutants of concern). This applies to development projects with more than 25 acres of disturbed land that have stormwater discharges directly into an impaired waterbody. In particular, the vegetated areas have proven to be an effective method to address fecal coliform bacteria problems. Research has shown that utilization of the areas around the wet detention basins adds an extra level of pollutant uptake by the soils and vegetation. Additionally, research has shown that these areas act as a deterrent to waterfowl (i.e. ducks, geese, etc.) because they provide an area where natural predators can hide. Since waterfowl produce waste with a very high fecal coliform bacterial density, reducing the potential contributions of this type of wildlife into the stormwater management systems helps reduce potential downstream bacteria problems. A change in regulations would be needed to require all new ponds to include vegetated shelves or some other innovative BMP.

The DHEC-OCRM staff has begun the process of collecting and evaluating information on pollutant removal efficiency standards. The concern is that current state and federal stormwater regulations coupled with standard engineered BMPs, which target control of runoff volume and rate, are not adequate to control the broad range of pollutants found in stormwater. A pollutant removal efficiency standard would require developers and their engineers to demonstrate that their stormwater management system would remove a specified percentage of the pollutants of concern. Meeting specific pollutant removal efficiencies for bacteria and nutrients requires a more complicated evaluation and design process. DHEC-OCRM is committed to researching the issue and the economic and engineering feasibility of implementing a new standard by the end of 2004.

DHEC-OCRM staff has routinely allowed installation of innovative stormwater devices if the engineer and manufacturer can produce appropriate research information that indicates that these devices will meet specific water quality standards. In some of these cases the devices will be monitored to confirm that they are performing to the appropriate level of pollutant removal. In addition, DHEC-OCRM is working with Clemson University, the DOT and Greenville County (a NPDES Phase I MS4 community) in analyzing and monitoring innovative stormwater devices including three different manufactured catch basins designed to remove high levels of hydrocarbons and other pollutants of concern. This work will result in a database of monitoring information to aid DHEC-OCRM in making future decisions on the adequacy of these devices in meeting water quality requirements.

Recommendation 16A: Provide allowances for innovative stormwater approaches beyond the stated performance standards.

Timeline: Short and mid-term

Recommendation 16B: Provide for the use of advanced technology, which may allow for cleaning stormwater runoff in more advanced ways than the current use of detention ponds. Funding of these innovations should be provided in part by the state because of the contribution of tourism to the state economy.

Timeline: Short and mid-term

Recommendation 16C: Develop a process to encourage the installation of new innovative BMPs as well as research into their efficacy.

Timeline: Mid-term

Recommendation 16D: In order to minimize stormwater infrastructure installation and repair costs, encourage vegetative options for conveyance and treatment where possible.

Timeline: Mid-term

Recommendation 16E: DHEC-OCRM should require new detention ponds to be designed and constructed with vegetated areas unless other non-vegetative methods prove to be more effective at removing pollutants.

Timeline: Long-term

Recommendation 16F: DHEC-OCRM should research the current use, feasibility, economic impact and projected effectiveness of implementing a pollutant (i.e. nutrients, bacteria) removal efficiency standard for new stormwater management systems. A final report and recommendation would be presented to the OCRM Appellate Panel by December 15, 2004.

Timeline: Short-term

Steps Required for Implementation: DHEC and its partners need to collaborate to address the many components of this issue. One of the first steps would be a compilation of the relevant scientific and engineering results related to stormwater control. This would need to include both white and gray literature since both the research and engineering communities may have information. A list of research still necessary should also be developed during the review of methods and technologies. Limited funding is currently available to begin this first series of steps and to develop a report to outline the best management options.

The report outlining potential options would serve as a starting point for convening a stakeholders group to make recommendations to the DHEC Board regarding the state's stormwater regulations. The stakeholder group would be comprised of regulators, engineers, developers, scientists, environmental groups, local officials, DOT and others. An updated BMP manual for use by practitioners and local governments could then be developed based on the best available information.

Resources for conducting the necessary evaluations of methods and technologies for assuring stormwater management systems remove pollutants of concern have been obtained. These evaluations will be completed in the next nine to 12 months. Once the options report was completed, the stakeholder group would need to meet for six to nine months to develop a series of recommendations. Development of a BMP manual would require six to 12 months and should follow the options report and completion of the stakeholder recommendations. Resources for conducting the stakeholders group and development of the BMP manual would be necessary.

Topic 17: Develop a strategy for maintaining and inspecting stormwater BMPs.

Issue: Even the best-engineered management practices will fail if they are not constructed and maintained properly. Several stakeholders raised the issue of a lack of DHEC resources to enforce the state's current stormwater requirements. The lack of enforcement capability can quickly result in lax implementation of required BMPs and associated maintenance.

Discussion: As part of a NOAA fellowship project, DHEC-OCRM has recently completed a Stormwater Management System Inspection Program. This program established a DHEC-OCRM protocol and database to make long-term maintenance responsibilities more effective and efficient. To establish stormwater BMP condition and permit compliance, a baseline inspection of previously permitted BMPs throughout

the coastal zone was conducted. Historical stormwater permitting information was organized in hard copy files and the DHEC-OCRM's permit tracking system. In addition, the project included outreach to communities, design professionals, and others to show the importance of maintaining and inspecting stormwater BMPs.

The DHEC-OCRM staff has also required water quality monitoring to be performed on some specific projects as part of meeting the anti-degradation requirements referenced in Recommendation 16. There has been an aggressive enforcement program implemented by DHEC-OCRM to address any violations of stormwater management and sediment control regulations. Finally, the DHEC-OCRM staff has conducted numerous educational workshops related to stormwater management that include statewide Clearwater Contractor Certification courses, stormwater BMP workshops, and stormwater BMP manual and computer models workshops. There is a plan in place to continue stormwater educational workshops and conferences in the future as well.

Recommendation 17: Develop a strategy and guidance that include monitoring, enforcement and education for maintaining and inspecting stormwater BMPs.

Timeline: Long-term

Steps Required for Implementation: To insure stormwater management systems are built and maintained as required, inspections must be made by qualified personnel. In addition, capability and resources to follow-up with landowners and require any necessary corrections would be needed. Funding would be required to implement this recommendation and hire more stormwater inspectors in the coastal zone. Additionally, DHEC-OCRM should continue its education efforts to insure understanding of the maintenance requirements, and the reasons for the requirements, among the regulated community.

Topic 18: Establish formal partnerships between DHEC-OCRM and state research institutions.

Issue: A major theme that emerged from the deliberations of the Council on Coastal Futures is that decisions associated with the use and management of coastal resources are complex and must be based upon sound, region-specific science. DHEC-OCRM must actively participate in establishing the scientific agenda and leverage the scientific community to conduct the research that is needed.

Participation in defining the scientific agenda will require DHEC-OCRM to: (1) know what research is being conducted in the region and understand the strengths and limitations of that research; (2) develop a list of coastal management issues that require region-specific research information and provide it to the regional research community for comment and action; and (3) establish communication and information exchange mechanisms (i.e., formal relationships) with the research community. The Biennial Request for Proposals from the SC Sea Grant Consortium recently exemplified the lack of communication and a formal partnership with the research community. State research institutions submitted over 30 proposals. Many of the proposals submitted addressed important coastal management issues (e.g., effectiveness of BMPs to control storm water runoff, and effects of land development on salt marsh ecological condition). As a part of the proposal process, Sea Grant required the researchers to identify the agency or agencies that could use the information resulting from the research and describe what specific benefit the proposed project could provide. Not a single applicant contacted DHEC-OCRM staff prior to submitting their proposals and many of the proposals were rejected during the review process because the researcher did not understand the issue from the perspective of the coastal management community. The active participation of a regulator in the design, implementation, and analysis of a research project increases the likelihood that the results of the research can actually be applied.

Discussion: The original recommendation was written as “Establish a Science Advisory Board for DHEC-OCRM”; however, after discussion by the council, the proposal was changed to the current recommendation, which was passed on February 5, 2004.

Recommendation 18: In order to develop new and innovative solutions, DHEC-OCRM should establish formal partnerships with state research institutions that focus on solutions and prioritization of research efforts.

Timeline: Mid-term

Steps Required for Implementation: The following text describes the steps that would need to be taken to implement this recommendation. Action to implement some of these steps has already been taken by staff. The advantage of forming the partnerships identified below would benefit both the research community and coastal environmental managers. The researchers would have the capacity to perform research that would influence priority management actions and, by working with DHEC-OCRM, would gain a competitive advantage during the research review process. DHEC-OCRM would gain the research information they need in a timely manner and, because they participated in the process, it is more likely to be directly applicable to their specific needs. DHEC-OCRM staff could largely accomplish the implementation of this recommendation administratively. A commitment of staff time would be required.

Local and state agencies as well as academic institutions currently do not have a good understanding of: (1) DHEC-OCRM's mission and programs, (2) the strengths and limitations of existing regulations, (3) the regulatory process, and (4) the research needs of DHEC-OCRM to achieve its mission. To overcome these deficiencies, DHEC-OCRM staff should regularly present seminars at academic institutions and governmental agencies describing the DHEC-OCRM mission, programs and regulatory process. During these seminars DHEC-OCRM should present a prioritized list of its short- and long-term research needs.

DHEC-OCRM needs to biennially develop a list of high priority coastal environmental management issues that require additional science for the agency to address pending environmental concerns. DHEC-OCRM also would need to develop a list of emerging concerns that are not a high priority at the present time but are likely to become a major concern in the next decade. A recent survey by the Coastal States Organization (CSO) of coastal zone managers regarding their research needs would be a perfect place to start identifying which research areas should be targeted. This survey is currently in draft form and under review. Staff would also need to identify information that is currently available through a series of literature searches as well as discussions with research agencies.

DHEC-OCRM should annually or biennially sponsor a workshop with regional research organizations including academic institutions, and local, state, and federal agencies to identify and discuss high priority coastal management issues, identify emerging issues and research needs, and identify any relevant ongoing research being conducted.

Selected DHEC-OCRM staff should be encouraged to participate in mission-orientated research projects. The DHEC-OCRM staff would not need to be the scientific lead in these projects, but it is essential that they be actively involved in scientific and engineering research so that they would have a good understanding of the strengths and limitations of the findings. By participating in the research, DHEC-OCRM staff would have the opportunity to ensure the research addresses their specific needs and does not become so abstract that it would be of little value.

Staff should be encouraged to become actively involved with academic institutions, particularly graduate student research. This action would foster better relationships with academic institutions and student research programs and provide a good opportunity to leverage mission-orientated research. Most importantly, the graduate students themselves represent the next generation of scientists, and, if they understand the value of sound science to the coastal management and decision making process from the beginning

of their professional career, they would be more likely to make long term contributions to the process. In addition, many of these graduate students could be the next generation of DHEC-OCRM employees.

DHEC-OCRM should recognize major contributions of researchers that address mission orientated research needs to the state through the existing Palmetto Award programs.

D. Other Considerations

This section describes three other issues addressed by the council that warrant discussion in this report. Many considerations and issues were presented for review by the council during its 18 month tenure. A complete listing of these considerations is included in Appendix C. The ones addressed in this section, while not resulting in a recommended change or action, are important and received attention from the council.

Topic 19: Existing legal standard for “Standing”

Issue: Some stakeholders suggested that parties with no real stake or interest in a project could misuse the current administrative and legal processes and, expending hardly any resources, could delay a project by filing an appeal. However, other stakeholders contended that the current process is balanced and insures all citizens equal opportunity to protect their interests.

Standing is a legal term referring to whether a party has a ‘real stake in the outcome’ of any matter being litigated. Standing has to be proved at every stage of the legal process; it is a continuing obligation. Judges determine standing on a case-by-case basis. Previous attempts to establish objective standards for determining standing have failed.

Discussion: Stakeholders with opposing positions on this issue provided information to the council. One stakeholder recommended that appellants be required to demonstrate standing, and if shown, that a judge should determine whether the appellant should be required to post bond to pay for expenses or damages that agencies or the permittee may incur as the result of an unsuccessful appeal. Another stakeholder provided information opposing the need for any administrative change or legislative rule making to alter the current standing standard. The following is an excerpt from a May 30, 2003, memorandum from Bob Guild, Attorney at Law, to the Council on Coastal Futures:

This standard is a highly evolved, case-specific, factual inquiry that has developed over 21 years of high court rulings. The South Carolina Supreme Court has adopted the federal standing requirements. Energy Research Foundation v. Waddell, 367 S.E.2d 149 (1988) ruled that a mere interest is not enough - there must be an individualized injury. See also, SC Wildlife Federation v. SC Coastal Council, 371 S.E.2d 521 (1988). In Sea Pines v. SC Department of Natural Resources, 550 S.E.2d 287 (2001), the Supreme Court reiterated that standing requires 1) an “injury in fact” that is concrete and particularized, not conjectural or hypothetical; 2) a causal connection between the alleged injury and the challenged action; and 3) a likelihood that the injury will be redressed by a favorable decision. In two of these three cases, the court found that the environmental plaintiffs did not have standing.

The South Carolina Administrative Law Judge Division has strictly interpreted the rules for standing. Since the inception of the Administrative Law Judge Division, standing has been challenged in at least 38 environmental permitting decisions. Of these challenges, 8 times the ALJ found standing and 30 times the ALJ held that the appealing parties did not have standing. Sometimes these decisions are made without a hearing very early on in the case on motions to dismiss.

DHEC legal staff also did not support the need for any change in the standing standard. After discussion, the council recommended that no changes be recommended on this issue.

Recommendation 19: Affirm the existing legal standard for standing.

Topic 20: Regulatory application processing times

Issue: Members of the regulated community strongly advocated for consistency and timeliness in the permitting process. Comments from representatives of this stakeholder group to the council encouraged review of the processing times for the various permits and certifications issued by DHEC-OCRM.

Discussion: DHEC-OCRM staff presented information on the processing times for two of the division's major regulatory programs. Over 80 percent of all critical area permits issued in 2002 took less than 60 days to process. Coastal zone consistency certifications, which generally address freshwater wetland and cultural resource issues, take longer with approximately 60 percent being completed within 90 days. Data was not available for stormwater permits, however, they are required by statute to be processed within 20 working days.

After review of the regulatory requirements for public notice and completion of DHEC-OCRM review, the council endorsed the current timeframes for processing DHEC-OCRM permits and certifications.

Recommendation 20: Maintain existing permit and certification processing times.

Topic 21: Requirement for an Automatic Stay when a DHEC permit is appealed

Issue: Currently, when an appeal of a DHEC permit is filed, an automatic stay is imposed, preventing the permittee from proceeding with any actions allowed under the permit. Opponents of the stay argue that this delay results in significant costs to permittees. These opponents additionally suggest that appellants incur no significant costs themselves and should be required by the courts to post bond to provide compensation to permittees for the costs associated with inordinate delays and damages suffered because of non-meritorious challenges. Supporters of the automatic stay cite potential irreversible losses to the environment, important habitats and/or cultural resources from construction activities that the courts might find to be unlawful. These supporters cite existing legal remedies which can lift the stay, and the necessity to preserve the authority and interest of the DHEC Board and the Administrative Law Court to hear cases without permittees proceeding with construction prior to or during an administrative appeal proceeding. Supporters of the stay provision expressed concerns that the public protections provided by the current appeals process and accessibility of this process to all citizens would be eliminated if the automatic stay were not in place, and appellants were required to post a bond in order to stop construction.

Discussion: Council discussion of the issue identified two key underlying problems driving the debate of the automatic stay:

1. the appeal process is very time consuming and, therefore, very expensive,
2. the current notice provided to the general public by DHEC does not always allow adequate opportunity for affected parties to make their concerns known to DHEC staff in advance of a permit being issued.

The Council on Coastal Futures devoted significant time to discussion of this issue. Stakeholders presented expert testimony and arguments enabling the council to fully consider the issue in a balanced and constructive manner. However, the council could not reach consensus.



Chapter 3: Conclusions and Next Steps

The council has committed significant time and effort to the completion of the mission entrusted to them by the DHEC Board. The responsibility now resides with the DHEC Board, and others they may designate, to implement those recommendations that reflect the board's vision for our coast.

The council recommends that the board consider the following three next steps:

- A.** Authorize DHEC-OCRM's development of a budget estimate of the costs of implementing approved recommendations
- B.** Authorize DHEC-OCRM to develop mechanisms to measure and report progress
- C.** Designate an outside oversight group to monitor implementation and next steps

The implementation of the recommendations endorsed by the board will require resources and commitment. Without funding and staff dedicated to continuing this effort, the changes - recommended not just by the council members, but also by many members of the public and interested stakeholders - will not occur. This report contains no estimate of the funding required to address the recommendations. An important next step is developing a budget that estimates the cost of implementing the recommendations endorsed by the DHEC Board.

The second major next step supported by the council is development of mechanisms to measure progress



on the recommendations that are adopted. At a minimum, and as identified in one of the goals of the council's vision statement, a biennial report on the status of the coastal program and the resources it manages must be completed. This report should also document the progress made on implementing council and board recommendations.

Other successful visioning efforts reviewed by the council all included oversight by a diverse group of interested stakeholders. In order to fulfill the promise of this report in achieving our vision for the coast, some group needs to be designated to oversee the next phase of this effort. If asked, many members of the Council on Coastal Futures would be willing to serve in the role of overseeing the next steps. The process we have undertaken during the 18 months of our tenure has educated a large audience, ourselves included, on the strengths, weaknesses, needs and capabilities of the coastal zone management program. Making use of the corporate knowledge of the existing council members might be advantageous to the DHEC Board. However, council members strongly recommend that the designation of any continuing oversight group include a sunset provision.

In conclusion, the Council on Coastal Futures recognizes that implementing the recommendations contained in this report would require a significant commitment of resources, time and energy on the part of all concerned to achieve the vision of *"an inviting coast that ensures a high quality of life, environmental stewardship, and sustainable economic growth."*

The endorsement and leadership of the DHEC Board, Governor, and General Assembly will significantly enhance the quality of outcomes from these recommendations.

This commitment must also be shared, supported and understood by every citizen and resident who appreciates the quality of life and clean environment of our coast. Success cannot be realized without a similar commitment to educate our citizens on the importance of coastal stewardship to our state's future. It is the belief of the members of the council that the coast can not sustain economic growth and progress without a strong commitment to environmental protection and improvement, preservation of the coastal landscape, and careful planning for continued public and private investment on the coast. Research has convincingly documented the lead role that the coast has taken in sustaining the state's economy in the 1990s. This same research predicts an even stronger leading role for the decades ahead. The decisions that we make today for the management of our coast will determine if the coast's future is one of sustained economic and environmental health and well-being or one of diminished quality of life and unrealized potential.





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