LEADING THE WAY FORWARD R.I. Ocean Special Area Management Plan: A National Model for the Future - YEAR ONE

In August of 2008, Rhode Island embarked on a twoyear project that has become a national focal point for both marine spatial planning and offshore wind energy development.

The R.I. Ocean Special Area Management Plan (Ocean SAMP) is now midway in its work to define how the state's ocean waters can best be utilized. The plan will serve as a coastal management and regulatory tool, based on the best available science, which promotes a balanced and comprehensive, ecosystem-based management approach to R.I.'s ocean-based resources. It is a complex process, with implications for global climate change and inter-agency coordination, and all eyes and ears are open as to how to best protect and enhance current human and natural uses, while encouraging marine-based economic development. That development must be consistent with the state's overall economic needs and goals, including offshore renewable energy.

Leading this project is the R.I. Coastal Resources Management Council (CRMC), the state's coastal



High-tech multi-beam sonar is used to evaluate the topography of the seabed, and other scientific instruments can assess the composition of the sea floor.

management agency, with strong technical support from experts at the University of Rhode Island (URI) and R.I. Sea Grant (RISG). Together, CRMC, URI and RISG pioneered the SAMP process, and have 35 years of experience together in carrying out these site-specific, ecosystem-based projects. Past local SAMPs have targeted the South County Salt Ponds and the Metro Bay (Upper Narragansett Bay) region, among others.

Research projects undertaken by top URI scientists, who have national and international reputations for their expertise, will provide the essential scientific basis for Ocean SAMP policy development. These projects assess wind speeds, appropriate technologies, marine life, fisheries activities, geology, meteorology, and more. The first year of activity on the Ocean SAMP has seen great progress by the scientists and researchers out in the field in their "living laboratories." This hands-on effort has been backed up by the churning out of maps and information to better understand this complex ecosystem. This is complemented by input from the Ocean SAMP's dynamic stakeholder group and the public, who have continually stirred the pot, pushing their heartfelt concerns and challenges into the spotlight and demanding answers, while seeking consensus solutions. They provide valuable unbiased input while engaging in a two-way learning process working alongside the SAMP team.

The Ocean SAMP is moving forward efficiently and thoroughly, but with passion and unity. Its success has resulted in further funding becoming available to address issues that have arisen from this open and free-flowing process.

For more information about the Ocean SAMP initiative, contact Grover Fugate at (401) 783-3370; e-mail: gfugate@crmc.ri.gov; Jennifer McCann (401) 874-6127, e-mail: mccann@gso.uri.edu; or visit seagrant.gso.uri.edu/oceansamp.

WHAT MAKES THE OCEAN SAMP SPECIAL? Defining Features of a Proven Process

R hode Island has a leg up on other states in developing a marine zoning plan because the CRMC, in addition to having already zoned its coastal waters more than two decades ago, is the lead agency for the state in applying that process to the nearby ocean waters. Where other states have to deal with the bureaucratic headaches of numerous, competing state agencies, the state has already been given the go-ahead to use its compact, streamlined structure that can coordinate well with all agencies and facilitate the complex Ocean SAMP process.

There are other strong, proven in practice, and very special elements of the Ocean SAMP process that make the state's initiative one of a kind in its nature and implementation:

The Living Laboratories

Ocean SAMP researchers, drawn from the Graduate School of Oceanography and the College of Environment

A YEAR OF GREAT PROGRESS

A great deal has been accomplished since the Ocean SAMP began back in August of 2008 to better understand the project's region. Key objectives and activities accomplished include:

- Mapped the commercial and recreational fishing areas in coordination with fishermen
- Mapped marine transportation paths for passenger and freight vessels
- · Completed wind farm site screening analysis
- Identified the distribution and relative abundance of marine mammals and sea turtles
- · Characterized wave and storm surge
- Reviewed the sediment, benthic habitats, and cultural resources for key areas
- Analyzed the noise and electromagnetic field conditions within the study area
- Established a strong dialogue between federal and state agencies and neighboring state agencies to ensure there is a formal mechanism to engage these entities into the SAMP effort.

Over 100 meetings were held with stakeholders to present the project and better understand their concerns and opinions, and three major conferences and six large public presentations were given to interested citizens.

and Life Sciences, among the most highly regarded in their disciplines, have been at work in the field since the beginning of the project. The ocean areas they are surveying have become their living laboratories, whether it is using high-tech measuring equipment along the Rhode Island coast, on Block Island, or aboard URI's research vessel Endeavor, donated by the university for the project, equipped with state-of-the-art scientific measuring devices and computer technology that can do everything from determine the composition of the sea floor to the circulation of the ocean currents. The Ocean SAMP's experts don't just theorize, they find what is going on where and why by reaching out to people who live on the water, such as commercial fishermen and recreational boaters, to see how areas are being utilized. Members of the Ocean SAMP team are a community of scientists created by long-term trust and collaborative work that becomes more than the sum of its parts. And they have a personal stake in the outcome-they are local residents who live and work in the place where their children are growing up.

Mapping for the Future

If you think of the process of identifying suitable uses of each part of the ocean boundary area, imagine a basic map of the Ocean SAMP focus zone, and then start laying transparencies of elements such as navigation, fishing areas, cultural sites, and similar concerns over that original area map. As you lay down one layer after another, some parts of the Ocean SAMP area of focus will soon be covered by critical uses, while some zones will have fewer visible conflicts emerge. That, simplistically, is how the use of maps in the Ocean SAMP area will attempt to identify conservation zones and eliminate non-suitable areas for certain uses, such as wind turbines, while identifying areas with the most potential. These maps will help dictate the future of Rhode Island's offshore development, and prevent current users from having to fight individual battles every time a new project is proposed in the SAMP area. The basis for sound future development will have been firmly laid.

Stakeholder Input

One of the strongest elements of SAMPs over the course of time has been engaging a broad array of people and learning from them through the use of what are called stakeholder groups. Through a series of focused and indepth meetings, a capacity for understanding and an



Researchers developed detailed mapping and analyses to show seasonal occurrence of over 30 species of marine mammals and four species of sea turtles.

avenue for providing input are created for these stakeholders and other engaged members of the public to help define and shape the final plan. The URI Coastal Resources Center (CRC) and R.I. Sea Grant (RISG) have cultivated an enormous degree of trust as a neutral facilitator, even in the most contentious of situations. This expertise and evenhandedness in dealing with a variety of concerns, with no agenda to push other than to bring people together to air their views, exchange diverse opinions and come to a consensus on the most difficult challenges, allows the focus to be on what can be achieved, rather than who is on whose side. The stakeholder element allows the Ocean SAMP team to tap local knowledge-to envelop an institutional memory drawn from the eyes, ears and experience of people who live and work in the region through a core group of town officials and organizations, people who earn their livelihood on the water, economic and environmental groups, and the corporate sector. The stakeholder group members are far from wallflowersrather, they have open access to all the science and information that is accumulated through the Ocean SAMP process, and are encouraged to be actively involved in the process of shaping a successful plan.

A Coordinated Approach

In addition to being the sole lead agency for the Ocean SAMP in state waters, where the agency works with the U.S. Army Corps of Engineers, a big advantage the CRMC and its partners in the Ocean SAMP team can boast of is their credibility with federal agencies. This is vital in the interactions required by the lead agency for U.S. waters, the Minerals Management Service. Instead of tiptoeing around the key issues, the Ocean SAMP process has actively engaged federal agencies from the beginning of the project. Years of working together and Rhode Island's recognized experience in coastal and marine zoning has shown the federal government that it can expect nothing less from the Rhode Island end than informed, high-quality results. This has resulted in increased confidence from the federal side of the project that helps to encourage buy-in to the recommendations emerging from the Ocean SAMP team of experts. For a project that reflects the mutual state and federal goals of ecosystem-based research, and an understanding of the need to evaluate social, economic and environmental impacts as a whole, working with a tried and true partner benefits all parties.

Learning from Others

Key partners on the Ocean SAMP team have been staff at URI and RISG who have 35 years-plus of working hand-inglove on coastal management and policy development. This is now augmented by legal work being done by the RISG legal team at Roger Williams University. In addition to promoting total transparency in sharing of information and in the decisionmaking process, to help educate all parties the Ocean SAMP outreach efforts have brought in experts from as far away as Denmark and the United Kingdom, and looked at the Gulf of Mexico's challenges in siting oil platforms offshore, including enhancing habitats and navigation issues. The project members and stakeholders are not only learning from experience in this emerging field, they are conducting a series of local conferences, seminars and presentations for audiences of hundreds at major statewide venues, to a few dozen in neighborhood libraries. To improve understanding and learn from a very complex issue, it has also included ongoing update and refresher briefings with the local media and the state's Congressional delegation to ensure that only the facts are making their way into the public eye and at the federal level. The Ocean SAMP isn't just a clever little project cooked up by people in tiny Rhode Island. From local levels to worldwide, marine spatial planning and combating global warming are inextricably linked.



A vessel tracking chart is laid over the SAMP base map to show where vessels over 60-feet long travel.

WHAT IS NEXT? New Research, Increased Activity and a Public Plan

As the Ocean SAMP moves into its second year in August of 2009, it is broadening its research efforts, ratcheting up the activities of the team, and concentrating on assessing the work done to date and putting pen to paper on a final plan. One of the goals is to help engage the public through educational outreach on the elements that will be featured in the final report.

In addition to the projects' original funding of \$3.2 million, an additional injection of \$660,000 from federal funds obtained through the leadership of U.S. Sen. Jack Reed and the state's Congressional delegation, and a \$2.8 million grant through the office of Governor Donald Carcieri, has allowed the Ocean SAMP team to address an expanded array of issues. That is complemented by URI/GSO's contribution of over \$1 million worth of invaluable sea time donated for its research vessel, the *Endeavor*, along with other in-kind donations of services. The goal is to expand research efforts into a crosscut of areas of concern that emerged from the open exchange of ideas among professionals and involved lay persons who used dozens of meetings to identify challenges and seek solutions.

These are the questions that will need to be answered, using the latest technology and expertise:

- What do Ocean SAMP monitoring buoys tell us about waves, currents, circulation and sound?
- What is the make-up of the seabed and subseabed?
- What is the biological productivity in the area, and what are its cycles?
- Where are the birds, whales and other marine mammals?

- How will acoustic noise and electromagnetic impacts affect local marine life?
- Where are the most productive fish habitats?
- How will wind turbine operation and construction impact marine fisheries and wildlife?
- What are the key recreational uses?
- Where are the significant historical, archaeological and tribal areas?

The Ocean SAMP team will be distilling this research and previously unknown information into a formalized management and regulatory plan for public review in 2010. The Ocean SAMP process has proved its success and value in the past, based upon the best science available, total transparency, and its encouragement of citizen participation.

By August of 2010, Rhode Island's Ocean SAMP will be a touchstone for marine spatial zoning throughout the United States.

FOCUSING THE RESEARCH

The Ocean SAMP process has cast a wide net in its research. Led by primarily by University of Rhode Island scientists, all of whom have national and international recognition and expertise, the initial areas of focus include:

- Marine Spatial Planning
- Ecology
- Fishing
- Wildlife and Habitats
- Recreation & Tourism
- Cultural & Historic Resources
- Infrastructure
- Marine Transportation
- Physical Environment
- Policy & Governance
- Global Climate Change







The Ocean SAMP Subcommittee

The R.I. Coastal Resources Management Council Ocean SAMP Subcommittee oversees the Ocean SAMP project on behalf of the full council. Members are: Michael M. Tikoian (Chair), Paul Lemont (Vice Chair), Donald Gomez, David Abedon, Robert Driscoll and Brian Goldman.