FIRST BIENNIAL ASSESSMENT OF THE RHODE ISLAND OCEAN SPECIAL AREA MANAGEMENT PLAN PROCESS

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SUMMARY

Since 2008, the Rhode Island Coastal Resources Management Council, the University of Rhode Island, and a number of engaged agencies and stakeholders have undertaken an extensive marine spatial planning process for the Rhode Island Ocean Special Area Management Plan (Ocean SAMP). This process resulted in a two-volume Ocean SAMP document that serves as a tool for Rhode Island decision makers. The Ocean SAMP document calls for regular assessment of the Ocean SAMP process and plan in order to facilitate adaptive management and informed decision making. This is the first formal assessment of the Ocean SAMP planning process. It is based on semi-structured interviews with 24 participants in the Ocean SAMP planning process, insights from the Ocean SAMP team, and a review of available literature produced through the Ocean SAMP process. Overall, this assessment identifies a number of strengths and accomplishments of the Ocean SAMP including an extensive stakeholder process that sought to better understand existing ecological and human uses of the Ocean SAMP area, recognition of the Ocean SAMP by state and federal governance, and a considerable increase in scientific knowledge about the Ocean SAMP area. Along with these accomplishments, a number of opportunities remain for improving management including the need for a more formalized monitoring and evaluation framework for the plan and its implementation, continued deliberate engagement with various stakeholder groups, and improved relationship building across some agencies.

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LIST OF ACRONYMS

AMI- Area of Mutual Interest APC- Area of Particular Concern **BOEM-Bureau of Ocean Energy Management** CRC- University of Rhode Island Coastal Resources Center CRMC- Rhode Island Coastal Resources Management Council CZMA- Coastal Zone Management Act FAB- Fishermen's Advisory Board FERC- Federal Energy Regulatory Commission GLD- Geographic Location Description HAB- Habitat Advisory Board JAWG- Joint Area Working Group NGO- Non-governmental organization NOAA-National Oceanographic and Atmospheric Administration NROC- Northeast Regional Ocean Council OSAMP- Ocean Special Area Management Plan, also referred to as Ocean SAMP **REZ-** Renewable Energy Zone SAMP- Special Area Management Plan URI- University of Rhode Island

SECTION 1. THE RHODE ISLAND OCEAN SAMP

1.1 Introduction

The Rhode Island Ocean Special Area Management Plan (Ocean SAMP) process is an ongoing research and planning process to define how Rhode Island's waters can be best utilized. The planning process began in 2008 and throughout its efforts has aimed to integrate public input and stakeholder involvement with the best available science in its decision-making processes. The planning began as an effort to proactively plan for wind farm development, but has extended well beyond that narrow focus to zone for management of the diverse activities happening within state and federal waters. It is a collaboration between the Rhode Island Coastal Resources Management Council (CRMC) and the University of Rhode Island (URI) along with numerous local, state, federal, and tribal agencies, and various stakeholder groups (see Figure 1 for the Flowchart of Ocean SAMP Methods).

In 2010, following extensive research and stakeholder engagement processes, the two volume Ocean SAMP document (CRMC, 2010a, b) was formally approved by the CRMC. The document serves as a comprehensive tool for ecosystem-based management and regulation of Rhode Island's marine resources. Through collaboration with stakeholders and a number of different agencies and organizations, the Ocean SAMP process has reached a number of significant milestones including formal adoption by the CRMC and the federal government, as well as federal consistency review over many federal activities within the Ocean SAMP area (see Figure 2 for a timeline of the Ocean SAMP process). Ongoing stakeholder meetings and research efforts continue to provide feedback to the Ocean SAMP process allowing for adaptive management of the Ocean SAMP area.



Figure 1.

The Ocean Special Area Management Plan methods process (Figure: Rhode Island Sea Grant).

2007

-The RI Renewable Energy Act is implemented, calling for 16% renewable energy by 2019. -The offshore component of the standard calls attention to the need for marine spatial planning in the waters off the RI coastline

2009

-The Ocean SAMP planning process comes into full force -Researchers begin investigations of the Ocean SAMP area

-The Project Team meets with diverse stakeholder groups to explain the Ocean SAMP, share research findings, solicit concerns and support, & to map existing uses of the SAMP area

-Draft document chapters complete the informal public review process

2011

-Recognition of the Ocean SAMP under the CZMA

-Ocean SAMP approved by NOAA as routine programmatic change

-Ocean SAMP is first formally adopted marine spatial plan at the federal level

-Lessons learned shared through marine spatial planning trainings

-Supplemental research conducted

2013

-First assessment of Ocean SAMP completed

-Ocean SAMP Practitioner's Guide released

-NROC uses Ocean SAMP process to communicate regional marine spatial planning work

-Leasing of federal blocks for offshore wind begins

2004

-The RI Renewable Energy Act is enacted

2008

-The Ocean SAMP begins as the first U.S. offshore marine spatial planning effort to cover both state and federal waters -The Governor of Rhode Island agrees to support & fund a SAMP process -Research & policy teams formed to provide technical assistance to the Ocean SAMP

2010

-CRMC formally adopts Ocean SAMP, approved by NOAA

-Baseline characterizations of the Ocean SAMP area completed & reviewed

-GLD established making Ocean SAMP applicable to many federal activities -AMI signed by MA and RI governors

2012

-Deepwater Wind applications for a proposed 5MW wind project in the Renewable Energy Zone are submitted to CRMC & the Army Corps of Engineers

-Both applications released for public comments

-Future Scientific Research Agenda is released

-Review of Fisheries Mitigation Options for the Ocean SAMP is released

Timeline of the Ocean SAMP Planning Process

Figure 2. Timeline of the Rhode Island Ocean Special Area Management Plan process.

1.2 The Ocean SAMP Area

The Ocean SAMP area extends 30 miles off the coast of Rhode Island and its approximately 1,500 square miles consists of portions of the Block Island Sound, Rhode Island Sound, and the open Atlantic Ocean. The Ocean SAMP area includes state and federal waters and abuts the state waters of Connecticut, Massachusetts, and New York (see Figure 3 for map).



Figure 3. Rhode Island Special Area Management Plan study area. The study area encompasses the culturally, economically, and ecologically significant Rhode Island and Block Island sounds and is approximately 1,500 miles². (Map: University of Rhode Island Coastal Resources Center).

1.3 Ocean SAMP Goals

The Ocean SAMP process is guided by four goals that are based on engagement between SAMP researchers and a number of stakeholders who provided valuable input on Ocean SAMP issues, policy and recommendations (see Figure 3). The degree to which the Ocean SAMP

achieves the outlined goals is the basis for determining the effectiveness of the plan and is therefore the root of this evaluation.

	GOALS FOR OCEAN SAMP
1.	Foster a properly functioning ecosystem that is both ecologically sound and economically beneficial.
2.	Promote and enhance existing uses.
3.	Encourage marine-based economic development that considers the aspirations of local communities and is consistent with and complementary to the state's overall economic development, social, and environmental needs and goals.
4.	Build a framework for coordinated decision-making between state and federal management agencies.



In Section 130.4 of the Ocean SAMP document (CRMC, 2011a), the goals are described as follows:

1. Foster a properly functioning ecosystem that is both ecologically sound and economically beneficial. Restore and maintain the ecological capacity, integrity, and resilience of the Ocean SAMP's biophysical and socio-economic systems. Conduct research to better understand the current status of the natural resources, ecosystem conditions, and the implications of various human activities. Set standards within the SAMP document to protect and where possible restore and enhance natural resources and ensure that impacts from future activities are avoided and, if they are unavoidable, are minimized and mitigated. Establish monitoring protocols to evaluate the consequences of decisions and adapt management to the monitoring results. 2. Promote and enhance existing uses. Through both scientific and anecdotal research, better understand the existing activities taking place within the Ocean SAMP study area. Work with individuals and organizations representing those uses as well as individuals from around the globe working on similar issues to identify policies and actions that can both promote and enhance existing uses while ensuring that negative and mitigated impacts from future activities are avoided and, if they are unavoidable, are minimized.

3. Encourage marine-based economic development that considers the aspirations of local communities and is consistent with and complementary to the state's overall economic development, social, and environmental needs and goals. This development should draw upon and be inspired by the beauty and quality of the environs, including the protection and enhancement of maritime activities, marine culture and a sense of place. Through the development of coastal decision-making tools, with accompanying standards and performance measures, determine appropriate and compatible roles for future activities within the study area, including offshore renewable energy infrastructure.

4. Build a framework for coordinated decision-making between state and federal management agencies. Engage federal and state agencies in all phases of the Ocean SAMP process to ensure that all appropriate regulatory requirements are integrated into the process. Ensure that neighboring states of New York, Connecticut, and Massachusetts are informed of all major actions. This coordination will allow for the sharing of technical information across all sectors, enhance management of these coastal ecosystems, and streamline the permitting process where and if appropriate.

1.4 SAMP Guiding Principles

In addition to the outlined goals, the design and implementation of the Ocean SAMP are also guided by five main principles (see Figure 4). These principles, as outlined in the Ocean SAMP document (CRMC, 2011a) are:

1. Develop the Ocean SAMP document in a transparent manner. Transparency guides the development of all documents and procedures related to the Ocean SAMP project. Project activities and phases are designed to be easily understandable to the general public. Accurate information must be made available to the public in an appropriate and timely manner. **2. Involve all stakeholders**. Targeted efforts ensure opportunity is available for all stakeholders to have access to the Ocean SAMP planning process as early as possible. Stakeholder participation ensures that a broad range of issues, concerns, and creative ideas, are heard and examined throughout the SAMP process.

3. Honor existing activities. The Ocean SAMP area is a highly used and biologically and economically valuable place, with major uses such as fishing, recreation and tourism, transportation, and military activities. These uses, along with the area's biology and habitat, must be understood, highly regarded, and respected as decisions for the incorporation of future activities are determined.

4. Base all decisions on the best available science. All management and regulatory decisions will be based on the best available science and on ecosystem based management approaches. The Ocean SAMP will require that the necessary studies be performed before a future activity is approved to better understand the impact of this activity on the ecosystem. Such necessary studies might include gathering information on baseline resource conditions, potential environmental and economic impacts, and potential mitigation measures.

5. Establish monitoring and evaluation that supports adaptive management. Incorporating monitoring and evaluation in the Ocean SAMP will contribute towards implementing a systematic process for continually improving management policies and practices in an environment exposed to constant change. The SAMP process is flexible enough to react to such changes and allow plans to be revised in due course. A strong stakeholder process, coordination among federal and state regulatory agencies, and a transparent, monitoring and evaluation mechanism ensures this activity. See Section 1130 for further discussion of implementing the Ocean SAMP through adaptive management.



Ocean SAMP Guiding Principles



SECTION 2. WHY AN ASSESSMENT?

A key component in the adaptive management of the Ocean SAMP is the need to assess the process used to create the plan, progress of the Ocean SAMP's policies and programs and to identify opportunities for improvement. Section 1130 of the Ocean SAMP, Applying Adaptive Management to Implement the Ocean SAMP, calls for a progress assessment and monitoring process to be established by the CRMC to assess progress towards achieving the Ocean SAMP goals and principles. Specifically, Section 1130 states:

A Progress Assessment and Monitoring Process by CRMC will be established with the purpose of assessing progress towards achieving the Ocean SAMP goals, objectives, and principles. This process will record decisions, capture lessons learned, note achievements, and document policy and management adaptations. This process will be ongoing, available on the project web site, and formally reported to the public on a biennial basis.

Ongoing assessments of the Ocean SAMP allow for adaptive management that can continually improve upon existing policies and practices by learning from previously employed policies and practices. Evaluations from assessments allow for the adjustment of policies and practices in order to better management. In addition to biennial progress assessments, Section 1130.5 of the Ocean SAMP (CRMC, 2010a) also calls for a major review of the Ocean SAMP document every five years after adoption. The assessment provided here represents the first biennial review of the Ocean SAMP and will serve as a foundation for the five-year assessment to be conducted in 2015. Because this is the first biennial assessment to be conducted for the Ocean SAMP, it will evaluate the process used to create the plan as well as the initial implementation of the plan. Future assessments will focus primarily on the implementation of the Ocean SAMP policies, especially as they relate to proposed offshore development projects, in order to evaluate the effectiveness of the regulatory framework contained within the SAMP document.

SECTION 3. METHODS

This assessment is a formative evaluation (Crabbé and Leroy, 2008) of the ongoing Ocean SAMP planning process and plan. Formative evaluation is utilized for investigating planning and policy processes that are ongoing in order to develop recommendations for adaptation of those processes (Crabbé and Leroy, 2008).

For this formative evaluation, a mixed-methods approach (Morse, 2003) was used that incorporated semi-structured interviews (Patton, 2002) conducted with relevant agencies, stakeholders, and researchers with a literature review of Ocean SAMP policy documents and literature produced by the University of Rhode Island Coastal Resources Center (CRC) and CRMC. Twenty-four interviews were held from May through July 2013. Two of the interviews were held in person, and the remaining 22 were conducted over the phone.

The interview participants were selected to represent major agencies/groups who participated in the Ocean SAMP process as well as through snowball sampling based on recommendations of interview participants until a selection of representatives from all key agencies/organizations/group of constituents were identified. Participants contacted included representatives from state, federal, and tribal agencies; local governments; environmental non-governmental organizations; policy, legal, fisheries, and biophysical researchers; and fishing, recreation, and marine transportation stakeholder groups. All but four of the participants contacted agreed to an interview for a participation rate of 86 percent. The remaining four Ocean SAMP participants did not respond to the two email attempts to arrange interviews.

Semi-structured interviews are useful for triangulating information across different participants as well as for acquiring in-depth insights into management and stakeholder participation (Reed et al., 2009). The use of semi-structured interviews may bias samples based on the participants engaged in the interviews (Reed et al., 2009). This research was conducted with those who actively participated in the Ocean SAMP process and therefore may reflect that

bias towards those who saw the process as valuable and worthwhile. In order to gain a broader perspective of the planning process, efforts were made to contact some participants who had voiced concerns with the process.

In order to protect the confidentiality of the interview participants, no identifying information about the individuals or the agencies/organizations represented by these participants is noted in the findings. The semi-structured questions were primarily based on the Ocean SAMP goals (see Figure 4) and guiding principles (see Figure 5) and were focused on both accomplishments of the Ocean SAMP process as well as opportunities for improvement.

SECTION 4. ASSESSMENT FINDINGS

4.1 Overall Findings

Overall, this assessment finds that the Ocean SAMP efforts to date have accomplished significant progress towards meeting the plan's goals (Figure 4) under the guidance of the Ocean SAMP principles (see Figure 5). Rhode Island's Ocean SAMP process is being considered a model for engaging in marine spatial planning efforts (Tierney, 2013) and for federal recommendations contained within the National Ocean Policy. In addition, the process developed in the Ocean SAMP is being replicated as the basis for other planning efforts in Rhode Island including the Shoreline Change Special Area Management Plan (www.beachsamp.org) and the Rhode Island Ocean Special Area Management Plan: Managing Ocean Resources Through Coastal and Marine Spatial Planning—A Practitioner's Guide, the following accomplishments of the Ocean SAMP were identified (McCann and Schumann, 2013: p. 5):

* Provide 54 percent of the study area with increased ecological protection.

* Identify a 13 square-mile renewable energy zone in state waters that directs development to a location with the least conflict between existing uses and the natural environment, while streamlining the regulatory process

* Place Rhode Island in a powerful position to determine how and where development should take place in nearby federal waters

* Provide a specific and required framework that constructively engages major stakeholders including fishermen, alternative energy proponents, environmentalists, scientists, federal and state agencies, the Narragansett Indian tribe, and concerned citizens in the implementation of the Ocean SAMP

* Streamline the regulatory process for the installation of offshore wind turbines, while minimizing the impact on natural systems and existing activities such as commercial and recreational fishing

In addition to those accomplishments identified by the Ocean SAMP team, based on the participant interviews and review of documents, this assessment finds a number of other accomplishments in reaching the Ocean SAMP goals under the guiding principles. One of the biggest accomplishments was the recognition by many of the engaged stakeholders for the hard work and leadership of the Ocean SAMP team throughout the process. Many of the interview participants recognized that developing the Ocean SAMP required a considerable amount of coordination, communication, and leadership by the Ocean SAMP team, and almost all participants were very positive about the team's efforts to coordinate a process that was fair, inclusive and transparent.

Identified efforts to maintain transparency of the Ocean SAMP include the release of each chapter for comment separately, as well as providing specific responses to each public comment. Each chapter was also reviewed separately by the CRMC Ocean SAMP Subcommittee. The development of both a Fishermen's Advisory Board and Habitat Advisory Board also facilitated transparency through continued participation by relevant stakeholders and as a mechanism for updating Ocean SAMP information.

While the Ocean SAMP represents a tremendous amount of cooperation and work by decision makers, researchers, stakeholders and others, opportunities remain for improvement to better accomplish the goals outlined in the Ocean SAMP (see Figure 4). Many of the interview participants noted that it is too early in the implementation process to know whether or not the plan and process are effective and if efforts will be sustained over the long term. Of particular concern by several interview participants and as noted by McCann and Schumann (2013) is a lack of formal commitment for funding the ongoing Ocean SAMP refinement and implementation.

Presented below is a synthesis of the feedback received during interviews and the review of literature on the accomplishments and opportunities for improvement for each of the four goals of the Ocean SAMP.

4.2 Goal 1—To Foster a Properly Functioning Ecosystem that is both Ecologically Sound and Economically Beneficial.

Interview participants identified various components of Goal 1 (see Figure 7 for complete goal and indicators) as both the strongest aspects of the Ocean SAMP process as well as the areas with the most remaining needs. In an effort to maintain the integrity of the biophysical and socio-economic systems of the Ocean SAMP, several of the participants recognized the value of protecting the identified Areas of Particular Concern (APCs) with more stringent development restrictions. The use of science and public dialogue in identifying the Renewable Energy Zone (REZ) was also recognized as important in attaining this goal.

Interview participants identified the research from the Ocean SAMP area as the strongest accomplishment in reaching Goal 1. Researchers from the University of Rhode Island and Roger Williams University School of Law as well as a number of partner organizations and stakeholders contributed a significant body of research conducted within the SAMP area that

benefits not only the use of best available science in management, but also increases understanding of Rhode Island's ocean ecosystem (see Figure 6 for a listing of some of the completed research efforts; see the Ocean SAMP Volume II (CRMC, 2010b) for a more in-depth review of research, and the Future Science Research Agenda (CRMC, 2012) for identified future research needs). Many involved with the Ocean SAMP process are extremely proud of the intensive research efforts involved and see the research as valuable baseline inventory for the use of best-available science in future management decisions. Additionally, researchers felt that all data/information collected for and provided to the Ocean SAMP team was incorporated appropriately into the Ocean SAMP document. Overall, the use of best-available science is seen as a strong indicator of ecosystem-based management for the Ocean SAMP area.

OCEAN SAMP RESEARCH

Ecology

- Spatial Distribution and Abundance and Flight Ecology of Marine and Coastal Birds off Coastal Rhode Island
- Assessing Spatial Distribution and Abundance of Waterbirds in Ocean SAMP Study Area
- Spatial Distribution and Abundance of Birds in Offshore Waters, Including Detailed Studies of Roseate Tern Use of Offshore Waters
- Spatial and Seasonal Distribution of Phytoplankton, Primary Production, and Flux of Organic Matter to Benthic Habitats in Rhode Island and Block Island Sounds

Fish and Fisheries

- Commercial and Recreational Fisheries Usage Maps
- Refined Assessment of Fisheries Activity
- Mapping and Characterizing Fish Habitat in Rhode Island's Transitional Seas
- Marine Mammals and Sea Turtles
- Marine Mammal and Sea Turtle Analysis for the Rhode Island Ocean SAMP *Recreation & Tourism*
 - Marine Recreation Use and Impact Study

Cultural & Historic Resources

- Inventory of Significant Historic Properties, Archaeological Sites, Tribal Areas of Traditional Cultural and Religious Importance, and Recreational Areas
- Regional Subsurface Geology, Surficial Sediment, Benthic Habitat Distribution, and Cultural Resources

Infrastructure

• Rhode Island Wind Farm Structures/Foundations Study: Support Structures and Foundations for Offshore Wind Turbines

Siting & Physical Environment

- Engineering Studies in Support of the Rhode Island Ocean SAMP
- Characterizing Physical Oceanography of the Rhode Island Coastal Ocean
- Air Quality and Meteorology Studies in Support of the Rhode Island Ocean SAMP
- Sediment, Benthic Habitat Distribution, and Cultural Resources
- Regional Subsurface Geology, Surficial Sediment, Benthic Habitat Distribution, and Cultural Resources
- High Resolution Screening Analysis for Block Island Site
- High Resolution Modeling of Meteorological, Hydrodynamic, Wave, and Sediment Processes in the SAMP Study Area
- Buoy-Based Oceanographic and Meteorological Observations: Block Island and Deep Water Sites
- Mooring Deployments and Vessel-Based Surveys to Characterize Currents and Hydrography
- Rhode Island Wind Farm Siting Study: Acoustic Noise and Electromagnetic Effects
- Acoustic Noise and Electromagnetic Effects

Policy & Governance

- State Policy and the Rhode Island Ocean SAMP
- Legal Aspects of the Ocean SAMP

Tools

- Ecological Service Value Index (ESVI) for the RI Ocean Special Area Management Plan: Model Development and Mapping
- Geospatial Data Support for a Revised Wind Farm Site Screening Analysis (Phase II)

Figure 6. Some of the Ocean SAMP research projects conducted to better understand Rhode Island's offshore ecosystem, existing uses and potential future uses, and its cultural significance (see Rhode Island Sea Grant, 2013 for full description of these projects).

The research and its incorporation into the Ocean SAMP document and the decisionmaking process were identified by many interview participants as strengths of the process, but several participants also noted a concern about the lack of continuation of research efforts and funding, the use of old data in the plan, the need for addressing the remaining information gaps, and the need for specific information on chosen development sites. Many of these remaining gaps are outlined in the Ocean SAMP Future Science Research Agenda (CRMC, 2012), but several interview respondents noted that the research agenda was not as comprehensive as it needs to be. Several interview participants discussed the need for future state/federal research collaboration to address those gaps. Several participants also noted a lack of social science or economic analysis with a majority of research funds used in the biophysical sciences. The Ocean SAMP team agreed that it would have been helpful to have new socioeconomic data specifically on the Ocean SAMP study area to supplement the existing data described in the document. The Future Science Research Agenda does include future studies related to recreation, tourism and fisheries (see sections 2.9-2.11 and 3.1.5 in the agenda (CRMC, 2012)). Several of the interview participants were concerned that the baseline data collected was not comprehensive enough for the specific wind development sites, which would require additional research by prospective developers. However, the Ocean SAMP team noted that the SAMP document was never meant to replace the detailed site specific studies that are necessary to understand the effects of a particular project, but rather it is intended to provide an overall description of the natural resources and human uses of the waters off Rhode Island.

In addition to the outlined gaps identified in the research agenda (CRMC, 2012), several of the researchers felt that the intensive baseline efforts should have spawned more subsequent research efforts to build upon the existing data/findings. Although a considerable amount of data was collected for the area, there also has been minimal coordination in making the data easily accessible and no comprehensive database exists because of a lack of long-term funding. A final concern identified by several interview participants was the lack of a competitive bidding process which resulted in a majority of the research being conducted by URI or research firms owned by URI faculty.

Monitoring is an important component of the adaptive management cycle because it allows for the evaluation of management effectiveness and identification of environmental impacts from development (Allen et al., 2001). Although no permitting has reached the stage necessary to test the efficacy of the provisions, the Ocean SAMP document specifically calls for monitoring (prior to, during, and post-construction) requirements to be developed by the CRMC in coordination with the Joint Agency Working Group (JAWG; see Section 1160.9 in the Ocean SAMP V.1). Additionally, this assessment, along with the enabling conditions evaluation within the Practitioner's Guide (McCann and Schumann, 2013), provides a foundation for future evaluation of the planning process and ongoing management of the Ocean SAMP area.

The first goal of the Ocean SAMP calls for monitoring and evaluation to foster a properly functioning ecosystem (see Figure 7), and many of the interview participants called for a more robust and formalized monitoring program for the Ocean SAMP area. Throughout the Ocean

SAMP document, there are several calls for ecological monitoring of the Ocean SAMP area to facilitate adaptive management and environmental protection. Thus far, the primary monitoring protocol is a call for the CRMC and the Joint Agency Working Group to determine specific biological monitoring requirements prior to, during, and post-construction (see Section 270.2.5 of the Ocean SAMP V. 1). The Ocean SAMP efforts were the basis for the National Oceanographic Partnership Program (NOPP) monitoring protocols that were developed for offshore renewable energy development (see McCann, 2012).

Related to monitoring needs, the evaluation mechanisms for feedback into adaptive management of the Ocean SAMP area remain relatively undeveloped, primarily because of the broad nature of the outlined Ocean SAMP goals. The outlined goals for the Ocean SAMP are valuable, and many participants felt that the goals capture important values and priorities for the Ocean SAMP area and the state of Rhode Island. While their broad scope was supported by several interview participants, these goals were also identified as too broad. Additionally, through an exercise conducted at a stakeholder meeting, these goals proved almost impossible to quantitatively measure. This is supported by McCann and Schumann (2013) who noted that the SAMP goals are neither time bound nor quantitative, but are under consideration for development based on the availability of adequate information. Additionally, in a review of marine spatial planning efforts that included the Ocean SAMP, Collie et al. (2013) note that all of the efforts' objectives were more conceptual than operational. The authors also noted that objectives can be made more operational through the planning process, and that they should be made more operational in order to reduce future conflicts between user groups. Biannual evaluation of the Ocean SAMP is called for in Section 1130 of the Ocean SAMP, yet no mechanisms for evaluation are outlined. While open-ended reviews of environmental policies can be valuable, this lack of outlined mechanisms, coupled with broad goals, will make regular evaluation of the Ocean SAMP inconsistent and difficult (also consistent with the findings of Collie et al., 2013).

Figure 7 outlines the accomplishments and remaining opportunities for the Ocean SAMP in meeting Goal 1. These were identified through discussions with the Ocean SAMP team and the review of Ocean SAMP documents, and they largely support the findings from the interviews.

GOAL 1-TO FOSTER A PROPERLY FUNCTIONING ECOSYSTEM THAT IS BOTH ECOLOGICALLY SOUND		
AND ECONOMICAL	LY BENEFICIAL.	
Indicator	Accomplishments by 2013	Remaining Opportunities
i. The ecological capacity, integrity, and resilience of the Ocean SAMP's biophysical and socio-economic systems is restored and maintained.	-Areas of Particular Concern (APCs) were identified for moraines due to high biodiversity and some recreation and fishing areas -Areas Designated for Preservation (ADPs) were identified to prohibit development activities in sea duck foraging habitat.	 This is a long-term indicator and the status of successful restoration of ecological capacity, integrity, and resilience within the SAMP area remains unknown. Development of a formalized, ongoing monitoring and evaluation program for biophysical and socio-economic systems within and affected by the Ocean SAMP will provide stronger indicators.
ii. Research has been/is being conducted to better understand the current status of the natural resources, ecosystem conditions, and the implications of various human activities.	 -Extensive ecological and existing-use research has been conducted within the Ocean SAMP area. See Figure 6 for a listing of some of the completed research efforts and the Ocean SAMP V. II (CRMC, 2010b) for a complete appendix of initial research efforts incorporated into the Ocean SAMP document. - more than100 scientists collaborated with regulators and stakeholders to improve the understanding the Ocean SAMP area's ecological systems and human uses as well as the potential effects of new development on that area. -Ongoing research needs have been identified through the Future Science Research Agenda (CRMC, 2012), a publicly-vetted document. 	 -Creation of a functional database of Ocean SAMP data and findings to facilitate interdisciplinary analysis of the Ocean SAMP area -Follow up on the Science Research Agenda to identify new research needs as well as the remaining unaddressed identified gaps. -In Section 1150.1.5, the Ocean SAMP calls for CRMC to provide to the HAB a semi-annual status
	-Current research is outlined in the Ocean SAMP Research Projects webpage	report on Ocean SAMP. There are currently informal verbal

	(http://seagrant.gso.uri.edu/oceansamp/research.html).	reports at HAB meetings, but no
		written reports for reference by
	-In Section 1150.1.5, the Ocean SAMP document (CRMC,	the HAB and other interested
	2010a) calls for a standing Habitat Advisory Board (HAB) to	parties. Additionally, the HAB
	provide advice to the CRMC on the ecological function,	has not met regularly since
	restoration, and protection of the marine resources and habitats in	December 2012.
	the SAMP area and advice on scientific research.	
		-Section 350.1.3 of the Ocean
	-The CRMC provides verbal updates to the HAB on Ocean	SAMP document (CRMC, 2010a)
	SAMP activities including proposed offshore developments and	specifically calls for a biannual
	federal leasing processes on an as-needed basis.	panel of scientists to advise the
		CRMC in regards to current
	- Ocean SAMP researchers are partnered with the Narragansett	climate change science and the
	Tribe on an archeological mapping project for submerged paleo-	ecological and management
	cultural landscapes for BOEM	implications for management of
	(http://www.boem.gov/uploadedFiles/BOEM/Environmental_Ste	coastal and offshore regions. To
	wardship/Environmental_Studies/Renewable_Energy/AT%2012-	date, such meetings have not been
	<u>01.pdf</u>).	held.
	-Data collection agreements were developed to provide overall	-Some concerns remain for
	guidance for data collection and agreed-upon sampling protocols,	procuring long-term funding for
	as well as to minimize costs (Tierney, 2013).	implementing the research agenda
iii. Standards have	-Ocean SAMP policies direct potential developers to avoid Areas	-In the Fisheries Mitigation
been set within the	of Particular Concern (APCs) and Areas Designated for	Review (Perry and Smith, 2012) a
SAMP document to	Preservation (ADPs)	number of recommendations were
protect and where		made for mitigating impacts of
possible restore and	-A review of fisheries mitigation options (see Perry and Smith,	development on the fishing
enhance natural	2012) has been developed to offset unavoidable impacts from	industry. Follow-up on these
resources and ensure	offshore development projects on commercial and recreational	recommendations is needed and
that impacts from	fishing interests	would be valuable for the
future activities are		continued engagement of the
avoided, and if they	-Section1150 of the Ocean SAMP Volume I outlines the general	fishing community.
are unavoidable, are	policies that the CRMC must uphold in achieving the Ocean	

minimized and mitigated.	SAMP goals and principles. These include general policies and regulatory standards that are outlined for state permitting of	-Information on existing uses and potential impacts needs to be
	proposed offshore developments in state waters.	regularly updated.
	-Regulatory Standards (Section 1160 of the Ocean SAMP	-Most of the existing policies
	document (CRMC, 2010a)) have been developed that are	only <i>protect</i> natural resources,
	Management Act consistency provision	<i>enhance</i> natural resources.
	-The location of the renewable energy zone was directly attributable to ocean engineering models, seabed characterizations, and discussions with Ocean SAMP stakeholders.	
	-Section 1160.5 of the Ocean SAMP document (CRMC, 2010a) outlines a set of permitting application requirements for new development in the Ocean SAMP area.	
	-All waters less than 20 meters in depth are areas of preservation where no large-scale development is allowed, which is based on research recommendations	
	-Chapter 8 "Renewable Energy and Other Offshore	
	Development" and Chapter 9" Other Future Uses" of the Ocean	
	SAMP document (CRMC, 2010a) discuss future activities that could be possible in SAMP area, and the GLD allows for these	
	protection policies to be relevant in both state and federal waters.	
iv. Monitoring	-In Section 1130.2, the Ocean SAMP document calls for the	-A more formalized monitoring
protocols have been	development of the Science Research Agenda to allow for the	protocol needs to be established
established to evaluate	coordination of researchers and other parties to improve policies	and coordinated.
the consequences of	and practices	
decisions and adapt		-Section 1130.2 of the Ocean
management to the	-Deepwater Wind, the selected "preferred developer," has	SAMP document calls for a

monitoring results.	engaged the HAB and FAB in the development of monitoring protocols	Progress Assessment and Monitoring Process to be established to assess progress
	-The National Oceanographic Partnership Program (NOPP) project developed monitoring protocols for offshore renewable energy development (see McCann, 2012).	goals and principles, but the process still needs to be developed.
		-Ensure that monitoring and research are relevant and communicated to public
		-Ensure that the NOPP results are considered as monitoring is developed for both state and federal development activity.

Figure 7. Accomplishments and areas of opportunity related to Goal 1 of the Rhode Island Ocean SAMP as identified by the assessor through a document review and discussions with the Ocean SAMP team. The indicators are taken from the outlined description of each goal in the Ocean SAMP Vol.1 (CRMC, 2010a, also included in Section 1.3 of this document).

4.3 Findings Related to Goal 2—To promote and enhance existing uses.

Efforts related to Goal 2 of promoting and enhancing existing human and ecological uses of the Ocean SAMP area were one of the key accomplishments of the Ocean SAMP team that was recognized by many of the interview participants. Participants noted ample opportunities available for interested stakeholders to engage in the Ocean SAMP planning process and Payne (2010) noted 17 meetings from October 2008-June 2010 alone (some of the other opportunities are listed in Figure 8). These stakeholders also helped conduct research and provide existing data from within the area to better understand existing uses and also to better understand the ecosystem.

While many interview participants recognized that the process was not perfect, they did believe that it was a positive step in the right direction towards stakeholder engagement and the best stakeholder process in which they had participated. For the Ocean SAMP stakeholder process, environmental non-government organizations (NGOs), fishing, recreational boating, and marine transportation stakeholders provided valuable information and feedback. Participants were encouraged that, for the first time, the existing activities within the Ocean SAMP area have been documented to proactively identify possible conflicts. A number of interview participants identified the improved understanding and increased respect across different stakeholders as a positive outcome of the Ocean SAMP process as the group began to see the value of shared goals. They also identified the contributions of other engaged stakeholder groups as one of the strengths of the Ocean SAMP process. Improved relationships with the fishing community have facilitated a number of collaborative research efforts in the Ocean SAMP area including a cooperative research program with BOEM and URI to identify potential impacts to the lobster fishery from renewable energy development (BOEM, 2013).

The inclusion of the Narragansett Tribe's first-ever-recorded oral history in a regulatory document, the Ocean SAMP, was identified by a number of participants as a notable accomplishment of the Ocean SAMP process. The oral history was also investigated through the biophysical research of some of the URI researchers and continues through a joint research project focused on developing protocols for identifying the presence/absence of tribal remains/resources in submerged paleo-landscapes. The federal-recognition status of the Narragansett Tribe was identified as an important component of these relationships because it allowed for nation-to-nation discussions and negotiations.

Although the overall stakeholder process was identified as a positive step toward stakeholder engagement, there were several concerns with the process. For example, several participants noted concern that recent participation in the Ocean SAMP process has decreased drastically since implementation. Stakeholder participation requires time and sometimes resources to be sacrificed by those stakeholders, and the benefits of participation need to be worthy of those sacrifices (Cheng and Mattor, 2006). The Ocean SAMP team also recognized that keeping stakeholders engaged over the long-term has been a challenge. All of the engaged

stakeholders who were interviewed believed that their early participation was valuable and well received, but fewer see ongoing participation as being valuable enough to participate regularly. Other interview participants noted participation fatigue, the large number of stakeholder meetings, as a factor. Many of the stakeholders who participated in the Ocean SAMP are also a part of a number of other participatory processes, and their time is limited (also supported by Nutters and Pinto da Silva, 2012). Combining activities into one meeting, such as the presentation of research findings and permitting updates, is beneficial for protecting the stakeholders' time and minimizing fatigue.

Earlier meetings were held at different times throughout the day and at various locations throughout the state, and the ongoing efforts should also aim for diversity of time/location to facilitate engagement by stakeholders with different schedules (also supported by Nutters and Pinto da Silva, 2012). Several of the interview participants noted that some stakeholders may feel intimidated in some settings, so providing a diversity of locations/times could help also help engage more stakeholders. They also emphasized the need to provide information that is easily understood by diverse audiences, and especially for presenters to be careful about the overuse of acronyms or highly technical terms. Stakeholder engagement remains important and should be maintained and improved upon, especially in consideration of the recent wind development permitting process.

While the development of the Habitat Advisory Board (HAB) and the Fishermen's Advisory Board (FAB) were important steps for continuing stakeholder and scientist engagement in the Ocean SAMP process, interview participants identified several improvements to the process. First, several participants noted that although there is considerable overlap in the roles of the two boards, the HAB and FAB meet separately. They believed that more joint meetings of the two boards would engender positive dialogue across the groups in the identification of common objectives for management of the Ocean SAMP area. Second, some of the interview participants were interested in attending the FAB/HAB board meetings, and were concerned that these meetings are not open for the public. Related to this, although the FAB selection process provided requirements for the positions, uniform applications for the positions, and a CRMC review for each position, several of the participants noted disappointment by some people in the community in how the FAB/HAB members were chosen and who was chosen. However, the current FAB members are limited to no more than two consecutive 4-year terms (CRMC, 2010a-Section 1150.4.8), so new members will be selected in the future.

Several interview participants noted a lack of understanding about the role of stakeholders in the Ocean SAMP planning process. They noted that although they understood it was a huge, ongoing process, they believed their role was not articulated fully to stakeholders. For example, some chapters of the Ocean SAMP were changed after public comments and before public hearings, but those changes were not made available prior to the hearings. The Ocean SAMP team kept a list of participants in the Ocean SAMP process and those who provided contact information were emailed about meetings. Additionally, Payne (2010) outlines a number of efforts by the Ocean SAMP to clarify the stakeholder process including the several

months spent establishing the stakeholder process. Despite these efforts of the Ocean SAMP team, several interview participants noted that they wished that the overall stakeholder process had been articulated more specifically in the beginning, including the level of decision-making authority that the stakeholder process would hold (also supported by Nutters and Pinto da Silva, 2012).

The other major concern with the stakeholder process was a perceived lack of communication about meeting times and/or locations. Multiple interview participants mentioned that they had to keep track of the CRC website in order to know when meetings were occurring. The Ocean SAMP team's responded that they made every effort to notify the public of stakeholder meetings through the Ocean SAMP listserve, CRMC website and Ocean SAMP website. Most of these participants did note that the communication about meetings had improved as the process progressed.

Figure 8 outlines the accomplishments and remaining opportunities for the Ocean SAMP process in meeting Goal 2. These were identified through discussions with the Ocean SAMP team and the review of Ocean SAMP documents. These discussions and documents reveal a large number of opportunities for stakeholder engagement, and the need to continue engagement in various decision-making processes.

GOAL 2-TO PROMOTE AND ENHANCE EXISTING USES.				
Indicator	Accomplishments by 2013	Remaining Opportunities		
i. Through both	-Commercial and recreational fishing areas mapped in coordination	-Need for continued research on existing		
scientific and	with fishing community.	and future uses of the Ocean SAMP area,		
anecdotal		and for the feedback of findings to		
research, there is	-Marine transportation for freight and passenger vessel paths mapped	update the Ocean SAMP document.		
a better				
understanding of	-Researchers refined two methodologies (1. Technology	-As the Science Research Agenda		
the existing	Development Index and 2. Principal Components-Cluster Analysis)	(CRMC, 2012) proposes, develop human		
activities taking	to assist marine spatial planning by identifying potential energy	use and other socio-economic baselines		
place within the	resource and conflicts from other existing uses (see Spaulding et al.,	prior to construction		
Ocean SAMP	2010).			
study area.	The small birds are affeld. No management (17) its management of an d	-Address other limitations in the fisheries		
	- The oral history of the Narragansett Tribe was recorded and	and ecological data as outlined by the		
	incorporated into the document.	2012)		
	Technical reports from the Ocean SAMP document (V. II: CPMC	2012).		
	2010b) as well as human use qualitative data collection were			
	synthesized to improve understanding of human uses within the			
	Ocean SAMP area.			
	-Part of Cox's Ledge, a valuable fishing area, was removed from the			
	AMI leasing Area due to FAB input to BOEM			
	-The Ocean SAMP has spawned \$24 million in additional research			
	beyond the state's original investment.			
ii. Individuals	-Commercial and recreational fishing areas mapped in coordination	-Continue stakeholder meetings, and		
and organizations	with fishing community. Additionally, a former member of the FAB	continue alternating locations/times to		
representing those	is now developing an app for the recreational fishing community and	allow for the participation of		
users of the	party/charterboat owners to map their spatial distribution based on	stakeholders with diverse schedules.		
SAMP area as	the identification of this as a research need. The Northeast Regional			
well as	Ocean Council (NROC) is funding this effort.	-Continue the engagement of various		
individuals from		stakeholder groups in ongoing and future		

around the globe	-A number of non-governmental organizations contributed existing	research efforts.
working on	datasets, including those collected through citizen-science efforts.	
similar issues are		
collaborating to	-Federal, state (including neighboring states), and tribal agencies	
identify policies	were engaged in the Ocean SAMP effort	
and actions that		
can both promote	-RI CRC and RI Sea Grant are serving as neutral facilitators to	
and enhance	engage various stakeholders and agencies in the Ocean SAMP	
existing uses	process	
while ensuring	The Ocean CAMD descent and among the sector size allowed in the	
that negative and	- The Ocean SAMP document underwent an extensive chapter-by-	
from futuro	chapter public review process prior to adoption	
activities are	The Future Research Agenda also underwant a public review	
avoided and if	process prior to adoption	
they are		
unavoidable, are	-The HAB is composed of members from marine research institutions	
minimized.	and environmental non-governmental organizations	
	-The FAB is composed of members of the fishing community	
	including six voting representatives of Rhode Island fisheries and	
	three voting representatives of the Massachusetts fishing community	
	that targets the Ocean SAMP area	
	- The Fisherman's Advisory Board and Habitat Advisory Board	
	continue to meet and provide guidance to the Ocean SAMP team	
	Ongoing stakeholder meetings continue to provide opportunities for	
	interested citizens	
	-Experts from around the world were engaged in the crafting of	
	policies so that their lessons learned could benefit the Ocean SAMP.	

-Two trainings were held to share lessons learned from the Ocean	
SAMP process	
-Members of the Ocean SAMP team participate in several regional	
planning efforts including NROC (<u>http://northeastoceancouncil.org</u>)	
and the BOEM Rhode Island/Massachusetts Energy Task Force	
(http://www.boem.gov/Renewable-Energy-Program/State-	
Activities/Rhode-Island.aspx)	
-Archaeological surveys are required as a part of the permitting	
process for projects which may pose a threat to RI's archaeological	
and historic resources	

Figure 8. Accomplishments and areas of opportunity related to Goal 2 of the Rhode Island Ocean SAMP as identified by the assessor through a document review and discussions with the Ocean SAMP team. The indicators are taken from the outlined description of each goal in the Ocean SAMP Vol.1 (CRMC, 2010a, also included in Section 1.3 of this document).

4.4 Findings Related to Goal 3—Encourage marine-based economic development that considers the aspirations of local communities and is consistent with and complementary to the state's overall economic development, social, and environmental needs and goals.

Most stakeholders involved with the Ocean SAMP process recognized that a main underlying motive for undergoing the Ocean SAMP planning was to identify the best areas for offshore renewable energy development. Many participants also saw that beyond the identification of these particular areas for wind farm development, there is considerable value in marine spatial planning for Rhode Island's waters. Goal 3 (see Figure 9 for full goal and indicators) was often identified as the goal whose success remains to be seen based on the successful development of wind farms or other types of development and the sites chosen for that development.

Although the stakeholder process directly addresses these concerns (see Payne, 2010), the perception of wind farm development as the main driver for the process still negatively hindered the perceived transparency of the Ocean SAMP. In particular, the overlapping timeline for choosing a preferred developer by the State of Rhode Island with the Ocean SAMP planning process impacted some stakeholders' perceptions of the transparency of the process. This made some interview participants feel like wind development was a "done deal," and that the Ocean SAMP planning process was an effort to rubber stamp projects to accelerate wind development. Some of these participants noted that if the key goal of the process is to promote wind development, then the goal of protecting the ecosystem is weakened. In addition to concerns about promoting wind development, multiple interview participants noted concern about which areas will eventually be chosen as wind development areas, especially in regards to important habitat or nursery areas.

Figure 9 outlines the accomplishments and remaining opportunities for the Ocean SAMP process in meeting Goal 3. These were identified through discussions with the Ocean SAMP team and the review of Ocean SAMP documents. These discussions and documents reveal a number of tools developed for coastal decision making as well as the identification of areas for possible renewable energy development.

GOAL 3-TO ENCOURAGE MARINE-BASED ECONOMIC DEVELOPMENT THAT CONSIDERS THE ASPIRATIONS OF LOCAL COMMUNITIES AND IS CONSISTENT WITH AND COMPLEMENTARY TO THE STATE'S OVERALL ECONOMIC DEVELOPMENT, SOCIAL, AND ENVIRONMENTAL NEEDS AND GOALS.

Indicator	Accomplishments by 2013	Remaining Opportunities
i. Development	-As discussed in Goal 2, commercial and recreational fishing areas, marine	-Sections 410.4/5 of the
has drawn/is	transportation routes, and cultural landscapes were mapped in coordination	Ocean SAMP document call
drawing upon and	with the fishing community to better ensure protection of existing marine uses	for the CRMC to update the
inspired by the	and cultural, economic and ecological resources within the Ocean SAMP	cultural landscape contexts
beauty and quality	area.	based on research findings. In
of the environs,		consideration of recent
including the	-The Renewable Energy Zone was designated in a location that minimizes	research being conducted by
protection and	impacts to the environment and existing maritime activities while also	URI and the Narragansett
enhancement of	considering the physical needs for wind turbines.	Indian Tribe Historic
maritime activities,		Preservation Office, CRMC
marine culture and	-Areas Designated for Preservation (ADPs) and Areas of Particular Concern	should revisit the initial
a sense of place.	(APCs) were identified and protected based on baseline data collected in the	cultural landscape contexts.
	SAMP process	Unon annual of an actual
	The Ocean SAMP represents the first comprehensive effort to study the	-Upon approval of an actual
	- The Ocean SAMF represents the first comprehensive effort to study the state's underwater and maritime cultural heritage outside of Narragansett Bay	development project
	state s underwater and martime cultural hemage outside of Narragansett Day.	implementation of these
	-The Narragansett Indian Tribe provided their entire oral history in the	policies needs to be monitored
	Cultural Chapter of the Ocean SAMP This was the first time a tribe's oral	and evaluated
	history was ever incorporated into a regulatory document.	
	-Mitigation options were developed by the fishing community in the event of	
	impacts from future development on the fishing industry (see Perry and	
	Smith, 2012).	
	-Ocean SAMP policies created a framework for how offshore development in	
	the Ocean SAMP area would be regulated in order to ensure a balance	
	between existing and new uses as well the natural environment	

ii. Coastal	-Chapter 8 of the Ocean SAMP document (CRMC, 2010a) includes	-As noted in the Fisheries
decision-making	specifications for reviews and information requirements for renewable energy	Mitigation Options Review
tools have been	developers for each phase of development.	(Perry and Smith, 2012), the
developed, along		fishing community would like
with	-Chapter 9 of the Ocean SAMP document (CRMC, 2010a) includes a	a development liaison to
accompanying	discussion of other potential future uses.	maintain a website of
standards and		construction statuses and
performance	-The methodologies of Spaulding et al. (2010; Technology Development	project timelines to increase
measures, for	Index and Principal Components-Cluster Analysis) discussed in Goal 2, were	awareness of any activities
determining	utilized to assist marine spatial planning by identifying potential energy	that may affect the fishing
appropriate and	resource and conflicts from other uses and logistical feasibility of siting for	community
compatible roles	offshore renewable energy facilities	
for future activities		
within the study	-An Ocean SAMP timeline was developed for the different components of the	
area, including	process and used to maintain accountability.	
offshore renewable		
energy	-Ecological Value Mapping (see Chapter 2 of the Ocean SAMP V.1 (CRMC,	
infrastructure.	2010a)) was also developed through the Ocean SAMP process and further	
	refined through the NOPP project (McCann, 2012).	
	The Ocean SAMP process and plan were the basis for the development of	
	BOEM's Environmental Protocols and Modeling Tools to Support Ocean	
	Renewable Energy and Stewardship (McConp. 2012)	
	Kenewable Energy and Slewaraship (McCalli, 2012).	

Figure 9. Accomplishments and areas of opportunity related to Goal 3 of the Rhode Island Ocean SAMP as identified by the assessor through a document review and discussions with the Ocean SAMP team. The indicators are taken from the outlined description of each goal in the Ocean SAMP Vol.1 (CRMC, 2010a, also included in Section 1.3 of this document).

4.5 Findings Related to Goal 4—Build a framework for coordinated decision-making between state and federal management agencies.

According to interview participants, the Ocean SAMP process has accomplished a number of important milestones, but still has a number of major hindrances in building a cross-agency framework (Goal 4). These stronger relationships also helped to streamline energy permitting requirements across jurisdictional boundaries. For example, the Area of Mutual Interest (AMI) Memorandum of Understanding (RI/MA, 2010) clarifies the joint goals between the states of Massachusetts and Rhode Island to encourage offshore wind energy development and enhance coordination, and the Bureau of Ocean Energy Management (BOEM) started with this area in its efforts to identify appropriate federal offshore wind energy areas. The Ocean SAMP (CRMC 2010a) also calls for Joint Agency Working Groups to be composed of all federal, state, and Narragansett Indian Tribe agencies with responsibilities toward a proposed project.

Additionally, several interview participants noted the contribution of the Geographic Location Description (GLD), which was approved by the National Oceanic and Atmospheric Administration (NOAA). The GLD allows Ocean SAMP regulatory standards to apply to many federal actions in offshore waters out to 30 miles off the Rhode Island coast. This allows the CRMC to more effectively oversee activities and development proposed in both state and federal waters. A stronger, more streamlined relationship with BOEM was recognized by a number of interview participants as a positive outcome of the Ocean SAMP process. The Ocean SAMP planning process was also presented at a number of regional workshops with other states and at meetings of the Northeast Regional Ocean Council (NROC) and Atlantic Governor's Consortium.

This assessment also finds some areas for improvement in building a framework for coordinated decision making between local, state and federal management agencies. Several interview participants noted that this is also reflective of the larger issues in regional marine spatial planning and is also the result of the co-existence of multiple regional planning efforts. The interviews revealed a strong relationship between the CRMC, federal agencies and tribe such as BOEM, NOAA, and the Narragansett Tribe (also supported by Tierney, 2013). However, these stronger relationships were not necessarily built across all state agencies in Rhode Island, and other neighboring states and tribes. More specifically, a number of interview participants noted the tension and lack of collaboration between Rhode Island state agencies in the decision-making process. These relationships often reflect conflicts outside the realm of the Ocean SAMP process, and several participants noted that although still not strong, there is an improvement in the relationships. Furthermore, while a close working relationship with the State of Massachusetts has developed and ultimately produced the Memorandum of Understanding on the AMI, there has been less contact with New York and Connecticut agencies. However, NROC and regional planning efforts may provide greater opportunities for interstate

collaboration. Local government participation in the Ocean SAMP process was also varied, with some towns like New Shoreham being very involved whereas other municipalities' were less so.

The large number of involved agencies and the relationships between those organizations led to a lack of clarity by most interview participants in understanding the specific roles of each agency within the Ocean SAMP process. With so many federal, state, and tribal agencies involved in the management process, many of the interview participants found it difficult to understand which agency was in charge of different efforts. This makes communication across agencies and also between the different stakeholder groups and the agencies more difficult. Some interview participants noted that this could make stakeholders feel overwhelmed and outside of the decision-making process and communication efforts. Other interview participants noted that although they may not know the right agency to contact with questions or concerns, if they asked the wrong agency, they believed that they would be directed to the appropriate agency. Several participants said that increasing clarity of the relationships among agencies and the responsibilities of those agencies within the Ocean SAMP process would also benefit the overall transparency of the process.

Figure 10 outlines the accomplishments and remaining opportunities for the Ocean SAMP process in meeting Goal 4. These were identified through discussions with the Ocean SAMP team and the review of Ocean SAMP documents. These discussions and documents reveal a significant strengthening of relationships across a number of federal, state and tribal agencies, but with room for improved relationships with a number of other agencies.

GOAL 4-TO BUILD A FRAMEWORK FOR COORDINATED DECISION-MAKING BETWEEN STATE AND FEDERAL				
MANAGEMENT AGENCIES.				
Indicator	Accomplishments by 2013	Remaining Opportunities		
i. Federal and state	-Creating the Ocean SAMP was a high priority for the CRMC in	-Evaluation of this goal is largely		
agencies have been	proactively managing marine development in offshore waters and the	dependent on the implementation		
engaged/are	Ocean SAMP subcommittees, council members, and CRMC staff	of the JAWG with the upcoming		
engaged in all	were actively engaged in all stages of its development.	proposed development.		
phases of the Ocean				
SAMP process to	-Chapter 11 of the Ocean SAMP (CRMC, 2010a) established a Joint	-Continued collaboration and		
ensure that all	Agency Working Group (JAWG) composed of all federal and state	communication with other federal,		
appropriate	agencies with a regulatory responsibility towards a proposed project,	state, and tribal agencies is critical,		
regulatory	as well as the Narragansett Indian Tribe, to assure that permitting	especially with upcoming		
requirements are	decisions are well-informed and complementary to the regulatory	development.		
integrated into the	requirements of relevant agencies,			
process.		-For the identified strained		
	-A number of federal, state, and tribal agencies have been engaged in	relationships between state		
	the Ocean SAMP process since the beginning.	agencies, progressing forward in a		
		constructive and collaborative		
	-A series of webinars were conducted with BOEM to debrief their	process will benefit the Ocean		
	staff on the Ocean SAMP research, which then informed the	SAMP process and the state of		
	Environmental Assessment for the AMI area. Coordination continues	Rhode Island.		
	with BOEM through the Atlantic Governor's Consortium and			
	BOEM's Offshore Renewable Energy Task Forces.	-Because such a large number of		
		agencies are involved in a variety		
	- The Ocean SAMP's state-level renewable energy permitting	of ways, preparing a factsheet or		
	requirements were designed to dovetail with BOEM's permitting	diagram to explain the relationships		
	requirements, to facilitate streamlined permitting and decision-making	among the different agencies in the		
	processes.	Ocean SAMP process would be		
		greatly beneficial for stakeholder		
	- The Ocean SAMP is recognized as a comprehensive plan by FERC,	understanding.		
	so the plan will be considered when FERC is permitting/reviewing			
	any future projects in the area.			

-The Ocean SAMP calls for CRMC to engage the Narragansett Tribe's Tribal Historic Preservation Office when evaluating impacts of proposed development on cultural and historic resources. The office has contributed greatly to the development of the Ocean SAMP including participation in stakeholder meetings, research collaborations, and the inclusion of the Narragansett Tribe's Oral History in the Ocean SAMP	
-The Geographic Location Description (GLD) approved by NOAA allows CRMC participation in the review of federal activities out to 30 miles off the RI coast, which also allows for Rhode Island's coastal program's policies to apply to federal actions	
-CRMC is coordinating with state and regional fisheries organizations the Atlantic States Marine Fisheries Commission, the R.I. Department of Environmental Management, the R.I. Marine Fisheries Council, the NOAA National Marine Fisheries Service, the New England Fishery Management Council, and the Mid-Atlantic Fishery Management Council to protect fisheries within the Ocean SAMP area	
-Individuals from federal and state agencies (as well as other organizations) who reviewed chapters are listed in the "Cover" chapter of the Ocean SAMP document (CRMC, 2010a) <u>http://seagrant.gso.uri.edu/oceansamp/pdf/samp_approved/0_Cover.pd</u> <u>f</u>	
-As discussed in Goal 2, members of the Ocean SAMP team participate in several regional planning efforts including NROC (<u>http://northeastoceancouncil.org</u>) and the BOEM Rhode Island/Massachusetts Energy Task Force (<u>http://www.boem.gov/Renewable-Energy-Program/State-Activities/Rhode-Island.aspx</u>)	

	-Increased tribal collaboration has been created as a result of a post-	
	Ocean SAMP research project focused on engaging tribes throughout	
	New England and beyond in the development of survey protocols to	
	inform the siting of offshore renewable energy projects (see	
	http://www.boem.gov/uploadedFiles/BOEM/Environmental_Stewards	
	hip/Environmental_Studies/Renewable_Energy/AT%2012-01.pdf)	
ii. The neighboring	-Neighboring state agencies were and continue to be engaged in the	-More formalized mechanisms
states of New York,	Ocean SAMP effort through the Northeast Regional Ocean Council	should be developed to facilitate
Connecticut, and	(NROC) and the RI/MA BOEM Task Force.	communication with relevant
Massachusetts are		agencies in bordering states.
informed of all	-The Area of Mutual Interest, with federal waters off of Massachusetts	
major actions.	and Rhode Island, was identified by both governors and is governed	-Ongoing communication is
	through the Ocean SAMP.	minimal with Connecticut and New
		York.
	-The state of Connecticut provided comments on the Ocean SAMP.	
	(http://seagrant.gso.uri.edu/oceansamp/pdf/comments/FULL_samp_co	
	mments.pdf)	

iii. Technical	-A number of stakeholder meetings were held and continue to be held	-No database for sharing
information has	to present project updates and to better understand concerns and	information/making information
been/is being shared	opinions of stakeholders.	has been developed.
across all sectors,		
enhance	-3 major conferences have been held to share research outputs and the	-Sharing information across all
management of	policy process utilized in the Ocean SAMP with interested	sectors remains a critical need for
these coastal	agencies/areas.	the Ocean SAMP, especially in the
ecosystems, and		review of initial permitting
streamline the	-A number of different sectors, including agencies, non-governmental	requests.
permitting process	organizations, and various stakeholders have been engaged at all	
where and if	stages of the Ocean SAMP process.	
appropriate.		
	-An informational website is hosted on the Rhode Island Sea Grant's	
	website (<u>http://seagrant.gso.uri.edu/oceansamp/</u>) providing access to	
	the Ocean SAMP plan, maps, and other related documents.	

Figure 10. Accomplishments and areas of opportunity related to Goal 4 of the Rhode Island Ocean SAMP as identified by the assessor through a document review and discussions with the Ocean SAMP team. The indicators are taken from the outlined description of each goal in the Ocean SAMP Vol.1 (CRMC, 2010a; also included in Section 1.3 of this document).

SECTION 5. CONCLUSION

The Ocean SAMP document was designed to be adaptive throughout its implementation with the incorporation of regular assessments and monitoring activities. As more of the plan is implemented, especially with regards to proposed offshore development projects, future assessments will be able to review the effectiveness of more of the Ocean SAMP policies and standards. This initial evaluation however provides an important first look at the accomplishments of the Ocean SAMP process, as well as where future efforts can be directed to advance the goals of this plan.

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