



Rhode Island Ocean Special Area Management Plan

Case Study Summary Report

Service Contract: EASME/ECFF/2014/1.3.1.8/SI2.717082



May, 2017

EUROPEAN COMMISSION

Directorate-General for Maritime Affairs and Fisheries
Directorate A — Maritime Policy and Blue Economy
Unit A.2 — Blue Economy Sectors, Aquaculture and Maritime Spatial Planning
Contact: Valentia Mabilia
E-mail: valentina.mabilia@ec.europa.eu
European Commission
B-1049 Brussels

Executive Agency for Small and Medium-sized Enterprises (EASME)

Department A - COSME, H2020 SME and EMFF
Unit A3 EMFF
B-1210 Brussels
<http://ec.europa.eu/easme>
Contact: David Sanmiguel Esteban
E-mail: EASME-EMFF@ec.europa.eu

Lead authors: Gonçalo Carneiro¹, Sara Méndez Roldán², Jennifer McCann³

Contributing authors: Tiffany Smythe³

¹ NIRAS Indevelop Sweden (www.niras.se)

² NIRAS Consulting Ltd (www.nirasconsulting.co.uk)

³ University of Rhode Island Coastal Resources Centre (URI CRC), www.crc.uri.edu/

Acknowledgements: We thank all interview participants, stakeholders, authorities, communities - your time and dedication have been invaluable to capture the range of views that this report has attempted to synthesise, and we thank the US Northeast Ocean Council for their engagement. This report and the Global MSP Inventory developed for this study use information from the UN Environment *MSP in Practice Initiative* and its associated database of MSP processes. We thank UN Environment for its support in sharing this information.

Nota Bene

This document is part of the "STUDY ON INTERNATIONAL BEST PRACTICES FOR CROSS-BORDER MARITIME SPATIAL PLANNING ". In order to get a complete understanding of the concepts, definitions and methodology used in this document it is advised to read the main report first.

Rhode Island Ocean Special Area Management Plan

Case Study Summary Report

Reporting on the Service Contract: EASME/EMFF/2014/1.3.1.8/SI2.714082: Study on international best practices for cross-border Maritime Spatial Planning

Coordinator: NIRAS

Project Partners:

UNEP-WCMC, URI CRC, TNC, Xiamen University, SAERI, WMU, QED



***Europe Direct is a service to help you find answers
to your questions about the European Union.***

Freephone number (*):

00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

LEGAL NOTICE

This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

More information on the European Union is available on the Internet (<http://www.europa.eu>).

Luxembourg: Publications Office of the European Union, 2017

ISBN 978-92-9202-253-2

doi: 10.2826/514498

© European Union, 2017

TABLE OF CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS..... VI

EXECUTIVE SUMMARY VII

1. INTRODUCTION12

2. METHODOLOGY13

3. KEY FINDINGS15

 3.1. Context.....15

 3.1.1. Natural environment.....15

 3.1.2. Socio-economic uses.....16

 3.1.3. Governance of coastal and marine areas19

 3.1.4. Cross-jurisdictional collaboration in coastal and marine planning21

 3.2. Drivers, issues and goals.....27

 3.2.1. Drivers and issues at initiation27

 3.2.2. Goals and principles.....28

 3.2.3. Use of the ecosystem-based approach29

 3.3. Overview for the Rhode Island Ocean SAMP.....32

 3.3.1. Overview of the process32

 3.4. Funding the Ocean SAMP.....33

 3.4.1. Legal basis34

 3.4.2. Intra- and interstate institutional collaboration34

 3.5. Scope and design of the Ocean SAMP37

 3.5.1. The institutions of the Ocean SAMP.....37

 3.5.2. Land-sea interactions in the planning phase.....38

 3.6. Collaboration and consultation in the planning phase40

 3.6.1. Consultation with other state and federal agencies, legislators and
federally-recognised tribes41

 3.7. Features of the implementation phase44

 3.7.1. Adaptive management of the Ocean SAMP.....46

4. OUTCOMES AND LESSONS LEARNED54

 4.1. Achievement of planned goals and impacts of the Ocean SAMP54

 4.1.1. Impacts on socio-economic conditions, including sea use conflicts54

 4.1.2. Impacts on ecosystem goods and services, and on biodiversity55

 4.1.3. Impacts on institutional coordination, including across jurisdictional
borders56

 4.2. Lessons learned57

 4.2.1. Lessons learned from the Ocean SAMP process in general57

 4.2.2. Lessons learned about cross-jurisdictional collaboration58

REFERENCES.....60

ANNEX 1 – ANALYTICAL FRAMEWORK (ABRIDGED VERSION)62

ANNEX 2 – LIST OF PARTICIPANTS AND SCHEDULE64

ANNEX 3 – LEGAL AND GOVERNANCE ANALYSIS67

LIST OF ABBREVIATIONS AND ACRONYMS

AMI	Area of Mutual Interest
BOEM	Bureau of Ocean Energy Management
BOEMRE	Bureau of Ocean Energy Management, Regulation, and Enforcement
CRC	Coastal Resources Center
CRMC	Coastal Resources Management Council (of the State of Rhode Island)
CZMA	Coastal Zone Management Act
DEM	Department of Environmental Management (of the State of Rhode Island)
EC	European Commission
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FAB	Fishermen’s Advisory Board
FERC	Federal Energy Regulatory Commission
GLD	Geographic Location Description
JAWG	Join Agency Working Group
MA	Massachusetts
MoU	Memorandum of Understanding
MRDP	Marine Resources Development Plan
MSP	Maritime / Marine Spatial Planning
NEPA	National Environmental Policy Act
NE RPB	Northeast Regional Planning Body
NOAA	National Oceanic and Atmospheric Administration
NROC	Northeast Regional Ocean Council
OER	Office of Energy Resources
REA	Renewable Energy Area (term used in Massachusetts)
REZ	Renewable Energy Zone (term used in Rhode Island)
RI	Rhode Island
RI CRMP	Rhode Island Coastal Resources Management Program
RPB	Regional Planning Body
SAMP	Special Area Management Plan
TAC	Technical Advisory Committee
URI	University of Rhode Island
WEA	Wind Energy Area

EXECUTIVE SUMMARY

This report summarises the key findings and conclusions from the Rhode Island case study that is part of the EC-funded *Study on international best-practices of cross-border maritime spatial planning*. The case study was conducted primarily in Rhode Island (RI), with shorter visits to Massachusetts (MA) and New Hampshire (NH) between 28 September and 7 October 2016. It focused on the processes of planning and implementing the Rhode Island Ocean Special Area Management Plan (Ocean SAMP), and on its outcomes since adoption in 2011. The cross-jurisdictional dimensions studied include **interactions between state and federal authorities across the state-federal marine waters boundary; and between neighbouring states, with particular focus on Rhode Island and Massachusetts.**

The Ocean SAMP was developed over a two year period, culminating in its approval by RI state authorities in mid-2010 and by federal authorities in late 2011, making it part of the federally-approved coastal management programme. The primary driver of the RI Ocean SAMP has been the desire to tackle the state's rising greenhouse gas emissions and energy cost through the development of offshore wind energy. In response to a gubernatorial decree, the Coastal Resources Management Council (CRMC) jointly with the University of Rhode Island (URI) proposed in 2008 the development of the Ocean SAMP as a mechanism to develop a comprehensive management and regulatory tool to proactively engage the public and provide policies and recommendations for appropriate siting of offshore renewable energy infrastructure. A concern associated with that driver was the excessive duration, cost and uncertainty associated with earlier procedures for assessing offshore infrastructure developments, which typically involved comprehensive environmental assessment processes over several years.

The plan area extends over approximately 3,800 km² extending from 500 ft (approx. 152m) seaward of the RI coastline to 30 nm offshore, thereby encompassing both state and federal waters. At the convergence of northern cold and southern warm waters, the Ocean SAMP area is biologically and ecologically rich, providing valuable ecosystem services that have been used by humans for almost 30,000 years. Important marine activities include commercial and recreational fishing, shipping and ports, naval operations, yacht racing, different types of marine recreation and offshore wind energy, the most recent sector. Some of these activities, such as fisheries and maritime transportation have been carried out for centuries, whereas others, such as marine salt production, were of great importance in the past but have disappeared as society changed. The entire New England offshore area is characterised by strong and steady winds, rendering it a preferred region for the development of offshore wind energy.

The governance regime for marine and coastal areas is complex, with resources and human uses subject to a wide array of state and federal statutes, regulations and policies. These are typically administered by separate agencies, each with its own specific mandate for activities or developments at sea. At the RI state level, the CRMC is responsible for implementing the state's coastal management programme and plays a key role in planning and managing the state's marine and coastal areas, and coordinating the different agencies in what affects these areas. An important legal provision is the (so-called) federal consistency review, which grants states the right to review federal authorisations or actions taking place in federal or neighbouring state waters that potentially affect with that state's coastal management programme.

With respect to cross-jurisdictional cooperation in marine and coastal management, states do not typically cooperate across borders. This has also been observed in the case of the Ocean SAMP, where no formal collaboration was established for marine planning, due primarily to differences in regulatory and administrative arrangements and in policy priorities between RI and its neighbour states. In the particular case of RI and MA, the two states were also competing at the time for the development of the nation's first offshore wind energy project. Cooperation in marine planning and management across state-federal jurisdictional borders is complex and varied, given the large number of statutes and agencies involved, and differences in the legal and administrative frameworks between states.

Support for the Ocean SAMP among user groups at initiation varied, with important user groups convinced that the siting of offshore wind farms in RI waters was a "done deal" prior to the

Ocean SAMP process. Fishermen regarded the placement of offshore wind turbines as a threat to their livelihoods, and citizens and stakeholder groups were concerned about the negative impacts on the marine environment. An intensive stakeholder engagement process was therefore followed to trust by engaging stakeholders in the Ocean SAMP, and at present this remains one of the Ocean SAMP's greatest achievements, in that it succeeded in building support for the plan with stakeholders. With their input, the following four broad goals were established that covered social, economic and environmental outcomes and which all stakeholders could support: 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; and 4) build a framework for coordinated decision-making between state and federal management agencies. The Ocean SAMP also invested significantly in describing the natural and human characteristics of the Ocean SAMP area as part of the effort to ensure that the plan was ecosystem based.

The development of the Ocean SAMP followed a clearly-delineated process, which was periodically discussed with stakeholders in an effort to keep them engaged and contributing. The two-year plan preparation phase cost approximately USD 8 million, and was funded primarily by RI state, with smaller contributions from the federal government and URI (in kind). Due to varying priorities (e.g. focus on the development of the Beach SAMP (see Section 3.5.2), minimal funding has been granted by the state to the Ocean SAMP after its formal approval, and the CRMC and URI have had to use other sources to undertake plan reviews and updates.

Cooperation between sector agencies in the state of RI has been enabled since before the Ocean SAMP by different institutions, and in spite of occasional discrepancies and overlaps in their respective roles, cooperation is generally effective. Inter-state collaboration involving state executive agencies is less frequent, and typically requires a formal agreement between the states to commit agencies on both sides of the border. No formal collaborative agreements existed in the domain of coastal and marine management involving the state of RI and its neighbour states before the Ocean SAMP. The latter led to the signing of a memorandum of understanding between RI and MA for the development of offshore wind in federal waters adjacent to both states. Frequent contacts and exchanges do occur between for example the RI CRMC and its MA counterpart, the Office of Coastal Zone Management. The situation at the state level is not very different from that at the federal level, where each agency needs to deliver on its individual legal mandate but is required to consult and coordinate with others whenever necessary. Interstate features of this MSP have been present from initiation but have not been a central feature, and have not shaped the planning or implementation in a very significant way, despite the interstate federal consistency provision. On the other extreme, state-federal relationships have been one of the defining features of the Ocean SAMP, both in planning and implementation.

The authorities for the elaboration and implementation of the Ocean SAMP have been present and clearly defined since the start. The process was led by the CRMC in collaboration with the University of Rhode Island, who had a long history of collaboration in developing earlier SAMPs under the RI Coastal Management Programme. Early in the planning phase a number of advisory committees and a stakeholder working group were created to ensure adequate input of all relevant parties to the process. The Ocean SAMP management team is generally regarded as very competent and committed, and capable of dealing with the complexities of developing a plan in only two years.

Connections between land and sea are a central feature of RI's coastal management programme, and are recognized in the Ocean SAMP. However, the plan is mostly concerned with the management of activities taking place at sea, although some of its policies concern the minimization and mitigation of impacts of these activities on land-based activities or values. Planning on land is dealt with in other instruments, some of which under the RI coastal programme and the authority of the CRMC.

Implementation of the Ocean SAMP follows a number of (so-called) 'general policies' and 'regulatory standards', which, since the adoption of the plan, are legally enforceable. The policies affect all marine uses, and pertain primarily to the way existing uses interact with new developments, such as offshore wind. The regulatory standards are norms and procedures applicable to the stages of application; design, fabrication and installation; pre-construction; construction and decommissioning; and monitoring of new developments in the area of the Ocean SAMP. The plan also created a number of advisory and collaborative bodies that state and federal agencies and developers are required to consult for any such developments. In addition, the plan designated close to 54% of the area under two new protection regimes, to contain the type and magnitude of new activities. An ambitious approach to plan review and update was established initially, but its content has not been followed thoroughly, primarily due to insufficient funding.

Plan implementation has largely proceeded as required, with effective enforcement and compliance of policies and regulations. Collaboration between institutions has been effective in supporting implementation, in particular across the state-federal jurisdictional border. The ability to enforce regulations and policies upon ocean users, notably offshore wind developers is regarded as a decisive factor for the success in implementation, as it enables the state to regulate developments in line with the content of the plan, as accepted by state and federal government, and plan stakeholders. Also important is the fact that the plan continues to enjoy strong political support, especially at the state and federal level. The sustainability of funding from state or other sources remains an unresolved issue, though.

The plan has played a crucial role in preventing potential conflicts between existing users of the Ocean SAMP area and offshore wind developments. This has been essential for wind developers to make the large investments in the construction of the Block Island wind farm, and more recently the joint RI-MA Area of Mutual Interest.

So far, the Ocean SAMP can be said to have achieved the following results in terms of improving socio-economic conditions and reducing conflicts:

- *Streamlining the regulatory process and facilitating investment in offshore wind development*, resulting in the construction of the first US offshore wind farm in the Renewable Energy Zone off Block Island.
- Generating and compiling an unprecedented amount of knowledge about the ecosystem in the Ocean SAMP area, including of human uses.
- *Delimitation of restricted use areas*, to preserve the environment or certain human activities, respectively the Areas Designated for Preservation (ADP) and Areas of Particular Concern (APC), which have been established based on data collected for the Ocean SAMP.
- Development of tools and coordination mechanisms *facilitating the siting of offshore infrastructure and other activities* in areas with the least impacts on other activities.
- *Establishment of new relationships between user groups*, notably fisheries and offshore wind developers, promoting good practices introduced through the policies of the Ocean SAMP and *reducing conflict between user groups*, particularly offshore wind developers and fishermen.
- Related to the previous point, creation of a '*social capital*', a constituency of individuals and organisations engaged in the protection and sustainable use of RI's offshore marine resources.

Important results in terms of the changes in ecosystem goods and services and on biodiversity are difficult to assess at this early stage, but the conditions appear to be in place for the plan to address cumulative impacts on the environment, sustain the flow of ecosystem goods and services and make a positive contribution to biodiversity in the area.

In what concerns results of the Ocean SAMP on institutional coordination, the following can be reported:

- Close relationship between state and federal agencies in developing and implementing the Ocean SAMP.
- Approval of the *Geographical Location Description for federal waters in the Ocean SAMP area*, effectively rendering the Ocean SAMP the fundamental regulatory instrument for specific developments proposed for the entire area.
- Support for the plan by the Narragansett Indian Tribe, a federally recognized tribe of the Federal Government.
- Formation of the *Fisherman and Habitat Advisory Boards* as two formally recognised organs that must be consulted on any development in the Ocean SAMP area.

With respect to coordination with neighbouring states, other than informal exchanges and mutual learning, the Ocean SAMP has contributed to the identification and design of the Area of Mutual Interest (AMI) governed through a Memorandum of Understanding between RI state and the Commonwealth of Massachusetts based on the regulations and policies of the Ocean SAMP.

It was found that cross-border collaboration between RI and neighbouring states during the development and implementation of the RI Ocean SAMP was and still is relatively limited. Despite recurrent exchanges, there are few cases of formal cross-border collaboration in marine planning. In this context, the NE Regional Plan can be considered to be using MSP as a process to strengthen institutional relationships and coordinate planning decisions involving mainly federal agencies at different levels.

Lessons learned from the Ocean SAMP in general include:

- Having a clear driver generated and helped to keep the momentum for the planning effort, as well as focus the minds and actions of the many actors involved.
- A competent, engaged and multi-faceted team with a broad scope of skills and knowledge is necessary to deal with complex and lengthy marine planning processes.
- The extent and outcomes of the interactions between different organisations engaged in planning depends on the relationships between the individuals involved, especially those in positions of authority.
- Because marine planning implies making important decisions that can affect the lives of people negatively, those leading the planning need to ensure objectivity and impartiality of process and deliberations, so that they can gain the trust of plan stakeholders.
- A clear process that was regularly communicated to all involved parties helps generate commitment and a sense of urgency that enables a planning process to keep to schedule and maintain the commitment of those involved.
- Planning is likely to yield better results and be easier to implement if it has the backing of affected stakeholders.
- Open, transparent and inclusive processes are a pre-condition for building trust and gaining the support of stakeholders who expect to participate in planning and implementation processes.
- Elaborating complicated systems for progress monitoring and periodic evaluation that are too demanding and do not address the needs of managers during implementation is likely to be a worthless exercise and create expectations among stakeholders that end up not being met.
- If a plan is to be implementable, it needs to have clear mechanisms that commit specific actors to a given course of action.

Lessons learned from the Ocean SAMP about cross-jurisdictional collaboration include:

- Cross-jurisdictional marine planning needs a clear and strong driver.
- Working with existing policy and regulatory frameworks simplifies and shortens the planning process.

- Marine planning can be an instrument for regulatory and management harmonisation across borders.
- Cross-jurisdictional collaboration benefits from regularly engaging all stakeholders in the planning process, irrespective of jurisdiction.
- The planning and implementation authority needs to be accepted by stakeholders in the different jurisdictions.
- Planning is a tool for cross-jurisdictional exchanges and learning.

1. INTRODUCTION

The 'Study on international best practices for cross-border Maritime Spatial Planning' (MSP) (hereafter referred to as 'the Project') has been designed to compile and assess experiences of approaches to MSP, in order to assist the European Commission (EC) and its member states in implementing the EU MSP Directive.¹ The Project's second objective involves conducting four case studies from international locations outside of Europe, to identify good practices that are relevant for the implementation of the MSP Directive, with a particular focus on cross-border cooperation. These case studies are: (i) Rhode Island/New England, (ii) China/Xiamen, (iii) the Southern Ocean and (iv) the Coral Triangle.

The Rhode Island Ocean Special Area Management Plan (RI Ocean SAMP) case study was selected because of its relative maturity, being one of the few non-European MSP processes that has been formally adopted and progressed to implementation. Also relevant for the Project are the facts that it is generally recognised as a successful case, is exceptionally well documented, and enables the investigation of inter-state and state-federal collaborations in marine planning.

This case study does not address MSP across national borders, as there are no joint planning initiatives with neighbouring Canada. Instead, it explores issues of planning across jurisdictional borders. Firstly, it explores the relationship between RI state and federal planning and management, since the area of the Ocean SAMP straddles the state-federal maritime boundary. Secondly, it briefly considers the parallel process that took place in Massachusetts (MA) through the development of the MA Ocean Plan, and whether and how this process articulated with the one taking place in RI. Finally, this case study also looks into the development of the Northeast Ocean Plan, which commenced after the adoption of the RI Ocean SAMP and MA Ocean Plan, in 2012, and brings together six New England states, nine federal agencies and six federally recognized tribes.

This case study has been supported by the Project's regional expert, Jennifer McCann, Director of US Coastal Programs at the University of Rhode Island Coastal Resource Center (CRC-URI), who was responsible for public outreach and policy development in the RI Ocean SAMP, and who facilitated access to relevant literature, set up interviews with key stakeholders and individuals involved in the development of the Ocean SAMP, and contributed to data gathering and analysis.

This document presents a summary of the RI Ocean SAMP case study, presenting the key findings, conclusions and lessons learned, according to the structure of the analytical framework developed for the Project. Together with the reports for the other three case studies, it is one of the inputs to the consolidated analysis and the final report of the Project.

¹ Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning

2. METHODOLOGY

In order to ensure consistency in the description and assessment of the four case studies, and enable the comparison of very distinct MSP initiatives, the Project developed a common analytical framework for all four case studies (see Annex 1). In this framework, MSP attributes have been organised into eight different sections, namely: (1) Context, (2) Driver, issues and goals, (3) Overview of the MSP, (4) Scope and design of the MSP, (5) Collaboration and consultation in the MSP planning phase, (6) Features of the MSP process implementation phase, (7) Implications of the application of MSP in areas beyond national jurisdiction, and (8) Outcomes and lessons learned. Section 7 has not been included in the RI Ocean SAMP case study, as the entire Ocean SAMP area falls within national jurisdiction.

Each of the MSP attributes have been investigated by means of both descriptive – termed ‘facts of the matter’ (FoM) – and assessment – termed ‘to what extent’ – questions. The data for answering both types of questions were collected through a review of literature and key informant interviews conducted in the period July - October 2016:

a) Literature review

Peer-reviewed and grey literature, identified by the Regional Expert and through online searches, was reviewed with the primary aim of answering the FoM questions in the analytical framework. To a lesser extent, the literature review enabled the team to address some of the assessment questions.

b) Key informant interviews

A total of 21 interviews, involving 27 participants were conducted between 28 September and 7 October 2016 in the states of Rhode Island, Massachusetts and New Hampshire. With the exception of one interview, all 21 interviews were conducted face-to-face.

The interviewees were selected based on their engagement in and knowledge of the RI Ocean SAMP, the MA Ocean Plan and/or the Northeast Regional Planning processes, and included:²

- **State agencies:** RI Coastal Resources Management Council (CRMC), RI Department of Environmental Management (DEM), and the MA Office of Coastal Zone Management (CZM)
- **Federal agencies:** National Oceanic and Atmospheric Administration (NOAA), United States Army Corps of Engineers (USACOE), US Navy, and the US Coast Guard;
- **Sector representatives:** Commercial and recreational fishing, tourism, offshore wind developers, recreational sailing, and representatives of Block Island residents
- **Academia:** URI Graduate School of Oceanography, and URI-CRC
- **NGOs:** Conservation Law Foundation, The Nature Conservancy, RI Commercial Fisheries Research Foundation, and Ocean View Foundation.

Six out of the 21 interviews were conducted with more than one participant, and all except three interviews were attended by the regional expert or another URI-CRC representative.³

A semi-structured interview format based on the analytical framework was employed to gather data, ensuring a degree of comparability across interviews, while allowing for the investigation of themes and issues specific to each particular interviewee. The interviews were all led by the case study lead, Gonçalo Carneiro, with support from Sara Méndez and Jennifer McCann.

All participants were given a hard copy of the “participant information sheet” and “consent form”, the latter of which was signed by 23 of the 27 participants, providing consent for an

² The full list of participants and the schedule of interviews can be found in Annex 2.

³ This representative was Dr Tiffany Smythe, who accompanied the case study team to Block Island on 28 September 2016.

interview audio recording and the use and storage of interview data as described in the information sheet. The data of those who declined to sign the consent form was used in this report, but their names and professional affiliation have not been disclosed in this report.

All interviews were summarised in writing and shared with participants for accuracy check, and this information was then used to produce the scores for the assessment questions for the case study.

In addition to the interviews, the team attended a meeting of the Northeast Regional Ocean Council (NROC) held in New Hampshire on 3 October 2016⁴, which provided an opportunity to observe part of the deliberations taking place at the regional level and to engage with some of the actors involved in the Northeast Regional Planning process. The team delivered a short presentation of the Project, including some initial findings from the RI Ocean SAMP, and gathered some feedback from the audience. Finally, a public briefing on the Project and preliminary case study results was held at CRC-URI on 7 October 2016, which enabled the team to discuss elements of the case study with an audience of URI staff, Ocean SAMP stakeholders and students from a RI high school.

The data collected through the literature review, the interviews and the two events in New Hampshire and URI-CRC were used to describe and assess the attributes of the RI Ocean SAMP and distil the key conclusions and lessons learned presented in this document.

⁴ Background material and the agenda of the NROC meeting are available at http://northeastoceancouncil.org/wp-content/uploads/2016/09/NROC-Council-Meeting_Oct2016_BP.pdf

3. KEY FINDINGS

The RI Ocean SAMP covers an area of approximately 3,800 km² extending from 500 ft (approx. 152m) seaward of the RI coastline to 30 nm offshore (cf. Figure 1, dashed line). Since RI's state waters only extend 3 nm offshore from the coastline (including the water surrounding Block Island), the area of the plan is actually mostly made up of federal waters, which lie beyond the reach of state jurisdiction. This section summarises the key attributes of the area of the SAMP.

3.1. Context

3.1.1. Natural environment

Rhode Island's offshore region is ecologically unique. It comprises shallow, nearshore continental shelf waters that are dynamically connected to Narragansett Bay to the north, Buzzards Bay to the east, Long Island Sound to the west, and the Atlantic Ocean to the south (cf. Figure 1).

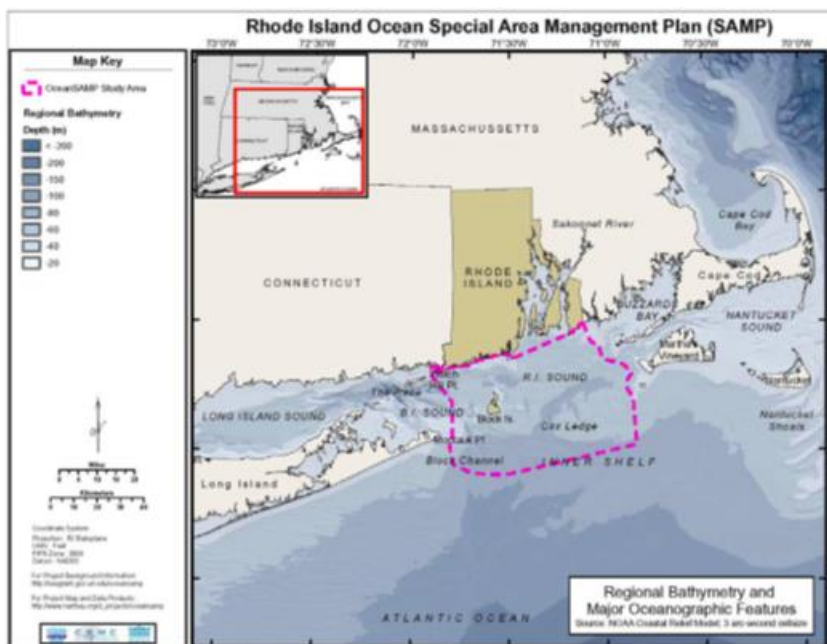


Figure 1 - Bathymetry and major oceanographic features in southern New England (source: RICRMC, 2010, ch.2, p.7) (Not to Scale).

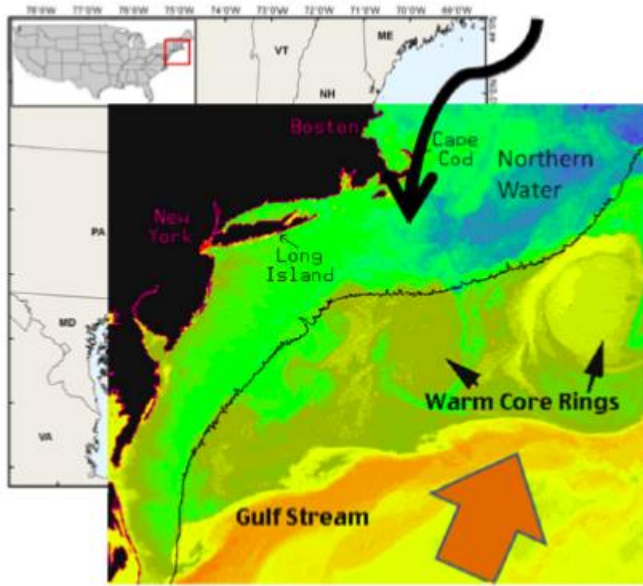


Figure 2 - Schematic representation of northern cold water currents, southern warm current and Gulf Stream warm core rings entering the Ocean SAMP area. (Source: RICRMC, 2010, ch.2, p.26)

This area is characterized by high biodiversity, combining northern cold water species and southern warm water species (Smythe *et al.* 2016; cf. Figure 2). It contains a diversity of benthic habitats supporting rich marine flora and faunal assemblages. Nearshore and offshore marine areas also harbour different species of marine mammals, and support a large number of marine birds.

As elsewhere, Rhode Island's marine and coastal environments are expected to experience changes due to global climate change. Impacts observed in the Ocean SAMP area over the last century include an increase in both air and sea temperature, a rise in sea level, an increase in average precipitation and an increase in the severity of storms. Future projections of climate change include sea water warming and possible changes to offshore ocean circulation patterns, stratification, nutrient distribution, and plankton productivity. Alteration of these variables is expected to affect the ecological functioning of the Ocean SAMP region, create stress on marine plants and animals, shift geographic ranges of commercially important fish species northward, and change the timing of biological events (RICRMC 2010, ch.3)

3.1.2. Socio-economic uses

The nearshore and offshore waters in the entire region, including off RI, have been used by humans since the time of the earliest settlements, estimated at approx. 30,000 years ago by the Narragansett people. Current uses include commercial and recreational fishing, shipping and ports, naval operations, yacht racing, different types of marine recreation and offshore wind energy, the most recent sector. Some of these activities, such as fisheries and maritime transportation have been carried out for centuries, whereas others, such as marine salt production, were of great importance in the past but have now disappeared as society changed. Table 1 presents employment and economic value figures for the most important maritime activities taking place in Rhode Island waters.⁵ Figures 3, 4 and 5 depict patterns of use of the Ocean SAMP area by different economic activities.

⁵ Data for fisheries concern landings in Rhode Island harbours, from captures made beyond state waters and the Ocean SAMP boundaries.

Table 1 - Employment and economic value of key maritime activities in Rhode Island.

Maritime activities	Employment and Economic value
Commercial fishing	In 2013, landings from Rhode Island’s commercial fisheries generated USD 86 million in revenue excluding imports, the state’s fishing industry supported over 5,400 jobs, over USD 304 million in sales, and over USD 111 million in income (NOAA 2013).
Seafood processing and wholesale	Employment: 605 (2005) Economic value: USD 69 million (NOAA/NMFS 2008, cited in McCann <i>et al.</i> 2013)
Recreational fishing	A 2007 study estimated that 182,000 anglers fish in Rhode Island’s waters each year, making 1.2 million trips; 50% of these anglers come from out of state (Ninigret Partners 2007). Data from 2015, however, suggests that the number of trips has declined to just over 1 million, although fishing participation increased by 1.15% (National Marine Fisheries Service, Fisheries Statistics Division, pers. comm. 2015a; 2015b). In 2013, Rhode Island’s recreational fisheries supported over 2,500 jobs, over USD 226 million in sales and over USD 102 million in income (NOAA 2013).
Recreation and tourism	In 2012, the Rhode Island cluster of marine businesses that supports recreational boating and yacht racing in this region supported 14,700 jobs, USD 2.6 billion in sales and USD 598 million in wages (Planning Decisions, Inc, 2014). USD 1.92 billion spent in Ocean SAMP adjacent counties (IHS 2014)
Shipping and ports operations	In 2013, marine transportation alone accounted for over 2,500 jobs and USD 180 million in wages in RI state (National Ocean Economics Program 2015)

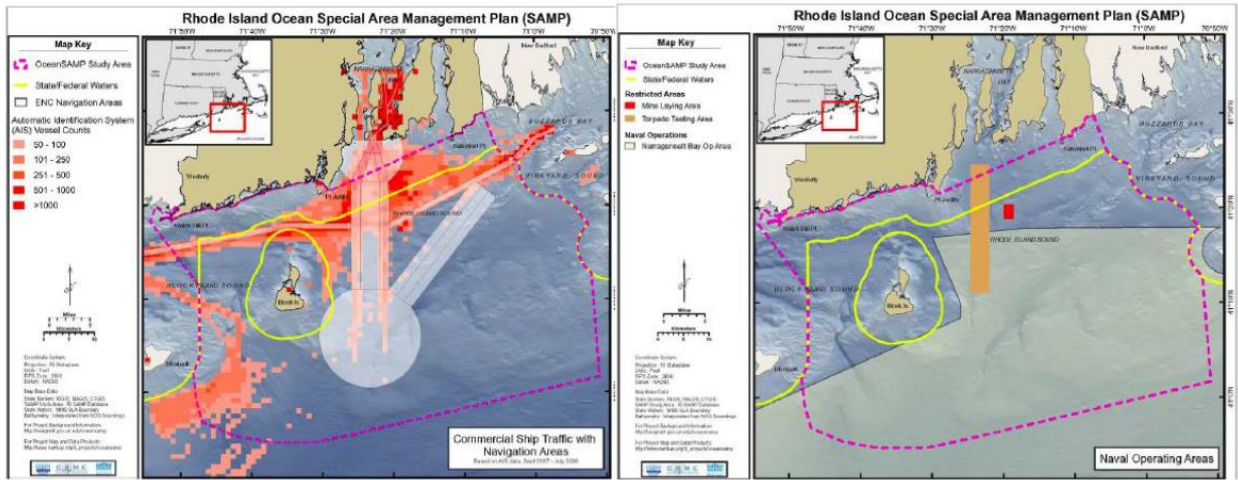


Figure 3 - Maritime traffic with navigation zones (left) and naval operating areas (right) in the Ocean SAMP area (Not to Scale) (Source: RICRMC, 2010, ch.7)

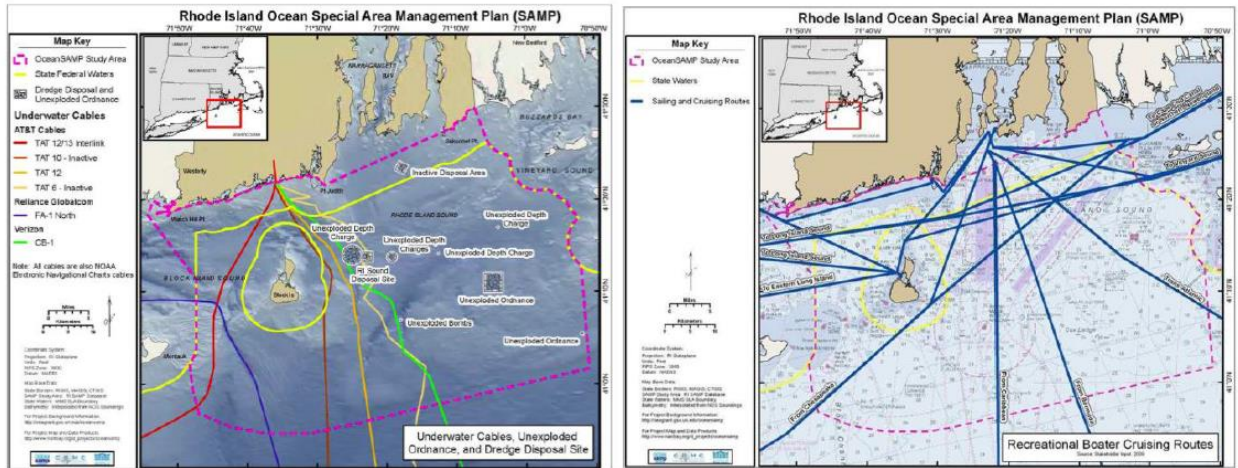


Figure 4 - Submarine utilities (left) and recreational boating cruising routes in the Ocean SAMP area (Not to Scale) (Source: RICRMC, 2010, ch. 6 & 7)

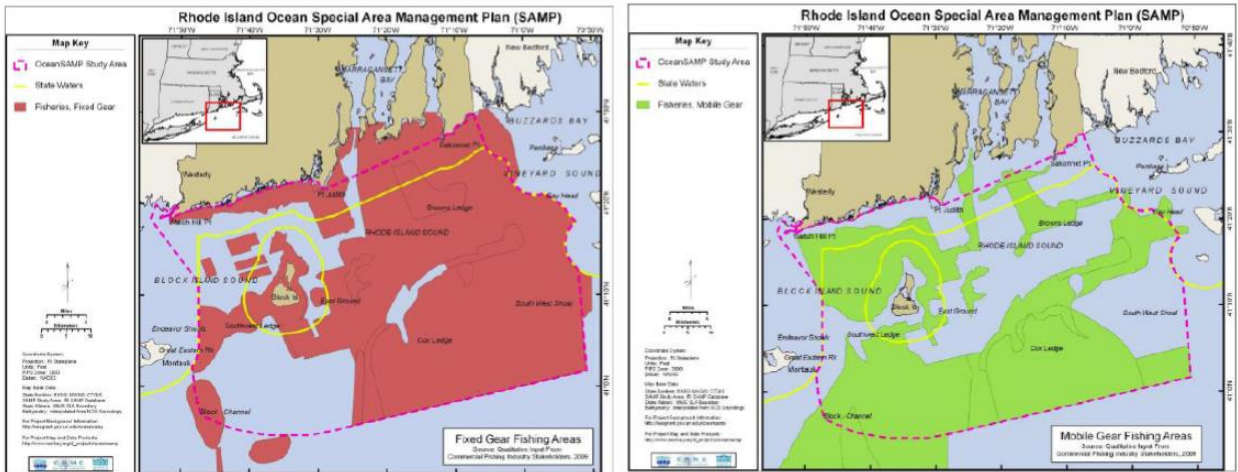


Figure 5 - Fixed gear (left) and mobile gear (right) fishing areas in the Ocean SAMP area based on qualitative input (Not to Scale) (Source: RICRMC, 2010, ch.5)

Of particular relevance for the Ocean SAMP is that the entire offshore US Northeast region is characterized by strong and steady winds, which makes it very attractive for offshore wind development (cf. Figure 6). The favourable wind conditions and bathymetry, and the proximity to one of the largest economic region in the US contributed to this area being selected for the siting of the first offshore wind farms in the US. As discussed in the next section, this was the key driver for the elaboration of the Ocean SAMP.

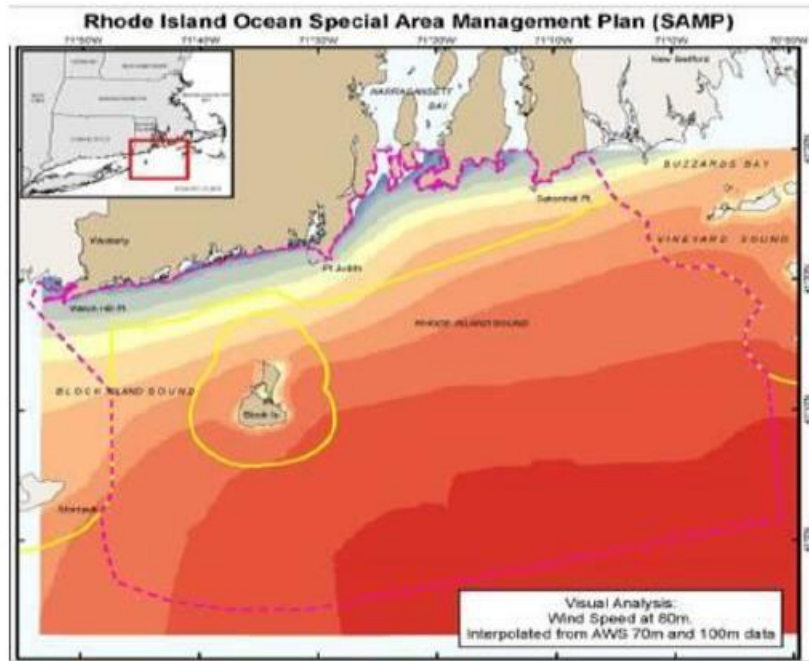


Figure 6 - Average wind speeds at 80m above sea level in the Ocean SAMP area (Source: RICRMC, 2010, ch.8)

3.1.3. Governance of coastal and marine areas

Since the area of the Ocean SAMP includes RI state and federal waters, its resources and uses are subject to both state and federal statutes, regulation and policies (see Annex 3). Some of the latter apply both to federal and state waters, and federal authorities in some instances delegate authority for their enforcement to the state. This combined state-federal governance regime is a complex one, and this section only synthesises its most pertinent elements. In doing so, it also attempts to provide a sense of the diversity of regulatory procedures that need to be observed by any entity – public or private – when proposing to undertake any activities at sea.⁶

The Submerged Lands Act of 1953 gives coastal states jurisdiction over marine waters from the mean high-water mark to 3 nm offshore.⁷ This act grants coastal states "title to and ownership of the lands beneath navigable waters within the boundaries of the respective states, and the natural resources within such lands and waters." Although the federal government retains "the power to regulate commerce, navigation, power generation, national defence, and international affairs throughout state waters"⁸ the act underscores that the federal government does not have "the rights of management, administration, leasing, use and development of the lands and natural resources which are specifically recognized, confirmed, established, and vesting in and assigned to the respective states [...]."⁹ This means that states have the exclusive right to manage and exploit state marine waters, including the granting of exploration and exploitation licenses.

At the same time, the 1971 Act enabling the Coastal Resources Management Council (CRMC) Authority, declares the state to be responsible for protecting the public's interest in all state submerged lands. In doing so, the state preserves public rights such as those to fishing, commerce or navigation in state waters and submerged lands.

⁶ For a compendium of regulations applicable to coastal and marine spatial planning in the US, refer to National Ocean Council (2011).

⁷ Except in the state of Texas, Puerto Rico and the west coast of Florida, where state jurisdiction extends to 9 nm.

⁸ 2004 U.S. Commission on Ocean Policy, *An Ocean Blueprint for the 21st Century*, p.71.

⁹ Submerged Lands Act, Section 1314.

The CRMC has been delegated the exclusive authority for leasing and licensing of submerged lands, and has the primary responsibility for planning and managing the state's coastal and marine resources. It does so through a diversity of policies and regulations, which make up the federally-approved RI Coastal Resources Management Programme (RI CRMP), and are compiled in the (so-called) 'Red Book'. Two salient instruments in the RI CRMP are the SAMPs (see below) and a typology of waters under CRMC jurisdiction into six categories¹⁰ linked to their uses and qualities (cf. CRMC, 2012, Section 200). With the exception of a small area abutting the Point Judith-Galilee, all marine waters in the area of the SAMP fall under category 4 'Multipurpose Waters', relative to which the goal of the CRMC is to "maintain a balance among the diverse activities that must coexist", noting that the "changing characteristics of traditional activities and the development of new water-dependent uses shall, where possible, be accommodated [...]." (CRMC 2010, p.2, Sec.200.4)¹¹ As described later, the Ocean SAMP led to the modification of the policies, standards and definitions for Type 4 waters.

The Rhode Island Department of Environmental Management (RI DEM)¹² cooperates with the CRMC in various aspects of coastal management, with responsibility over programmes affecting coastal resources, fish and wildlife, water resources and watersheds among other environmental resources.

Also of relevance, the 1972 Coastal Zone Management Act (CZMA) provides the framework for state coastal management programmes, under which states have the authority to prepare special area management plans (SAMPs). SAMPs are management strategies for specific areas designed to protect natural resources, coastal-dependent economic activities, life and property.¹³ An important function of SAMPs is that they enable the RI Coastal Programme to extend its remit to areas beyond the CRMC's primary regulatory boundary (i.e. 200ft, approx. 60m inland from the high water mark), usually to address watershed management issues (see Appendix 3).

A very important element of the CZMA is (so-called) 'federal consistency review', a mechanism for ensuring that federal agency actions or federal license activities align with policies and regulations of federally-approved state coastal programmes (see Appendix 3).

States with federally approved coastal programmes may activate the (so-called) interstate consistency provision under NOAA Federal Consistency Regulations. Interstate consistency applies *only to federal authorisations or actions*, and allows states to review:

- Federal authorisations and actions occurring inside or outside a state's coastal zone, including federal waters (i.e. beyond 3 nm from the shoreline) that potentially affect any use or natural resource of a state's coastal zone – so-called 'CZMA federal consistency';¹⁴

¹⁰ Type 1 (Conservation areas), Type 2 (Low-intensity recreational and residential uses), Type 3 (High intensity boating), Type 4 (Multipurpose waters), Type 5 (Commercial and recreational Harbours) and Type 6 (Industrial waterfronts and commercial navigation channels)

¹¹ The mentioned waters off Point Judith-Galilee are classified as Type 2 'Low-Intensity Use' and in the entrance to the Port of Galilee, Type 5 'Recreational and Commercial Harbours'. Along the entire coastline, the first 500 ft from the high-water mark are classified as Type 1 'Conservation Areas'. Recall in this respect that the area of the Ocean SAMP starts 500 ft offshore.

¹² For more information on DEM activities see <http://www.dem.ri.gov>

¹³ In the CZMA, a SAMP means "a comprehensive plan providing for natural resource protection and reasonable coastal-dependent economic growth containing a detailed and comprehensive statement of policies; standards and criteria to guide public and private uses of lands and waters; and mechanisms for timely implementation in specific geographic areas within the coastal zone." (CZMA of 1972, 16 U.S.C. § 1453. Definitions [Section 304], no.17)

¹⁴ Such authorisations and actions include: i) *federal agency activities*, conducted by or on behalf of a federal agency; ii) *federal license or permit activities*, activities proposed by a non-federal entity subject to a federal authorisation; iii) *Outer Continental Shelf Oil and Gas Plans*, for the exploration, development or production of oil and gas in federal waters, pursuant to the Outer Continental Shelf Lands Act; and iv) *federal financial assistance activities*, an application by a state agency or local government for federal financial assistance.

- Federal authorisations and actions occurring in one state that potentially affect the uses and resources of another state’s coastal zone – so-called ‘Interstate consistency’.

In a standard consistency assessment, the onus lies with the affected state to demonstrate the potential impact of a federal activity in order to justify the review. The onus can, however, be reversed by means of a so-called Geographic Location Description (GLD), in which a state submits to NOAA a list of federal activities in a given ‘geographic location’ (in federal or another state’s waters) potentially affecting marine uses and resources in that state’s waters. If approved, the GLD obliges federal agencies to report to the affected state the activities planned and report the anticipated effects. As will be discussed later, the RI CRMC secured a GLD for the entire area of the Ocean SAMP (extending approx. 27 nm into federal waters), effectively granting it greater control over certain developments in its entire area.¹⁵

The interstate consistency clause does not formally allow one state to interfere with the sovereign rights of another, since it only applies to federal, and not state-led actions. However, because most developments at sea require federal permits, this clause is frequently regarded as a mechanism for states to threaten one another with legal action against such developments. On a more positive note, it is a mechanism for encouraging consultation and coordination between states and between the state and federal levels in matters concerning the use of coastal and marine areas or resources.

For more information on federal and state statutes, regulations and policies of relevance for the Ocean SAMP please refer to Annex 3.

3.1.4. Cross-jurisdictional collaboration in coastal and marine planning

There is not a tradition of interstate collaboration in marine and coastal planning. States have often elaborated their respective coastal management programmes and related acts in relative isolation from one another. The same is true of most other areas of policy, such that neighbouring states can, and sometimes do, have very different legal regimes and administrative structures. The states’ coastal management programmes are therefore designed within state-specific legal/institutional frameworks that are seldom compatible.

There is no provision in the federal CZMA specifically preventing states from collaborating across borders. It is equally true, however, that there is no incentive for cross-border collaboration in either the act or the federal Coastal Zone Management Program administered by NOAA. Because state marine planning tends to be conducted under the aegis of state coastal management programmes, so far they have had little or no consideration of cross-border issues.¹⁶ On the other hand, the fact that the state coastal programmes follow the same set of standards imposed by the CZMA ensures a large degree of compatibility between the coastal programmes of different states. Inter-state collaboration might therefore be perceived as unnecessary for the sake of ensuring a sufficient degree of compatibility.

Interstate collaboration on matters affecting their regulatory/institutional framework typically involves states entering into a (so-called) ‘interstate compact’, a voluntary agreement for solving specific common problems and that becomes part of the law of each state. Compacts exist for a variety of policy domains; within environmental policy they have been used for states to cooperate on issues of freshwater management, pollution control, wildlife protection and

¹⁵ The GLD only pertains to activities justified, e.g. disposal dumping could not be included in the RI Ocean SAMP GLD

¹⁶ The marine planning processes in San Francisco Bay described in Smythe, McCann *et al.* (2016) are two cases of federally-led efforts that were not conducted within an existing state coastal management programme.

regional fisheries management, among others.¹⁷ Compacts always lead to the creation of an administrative body – usually a commission, and require congressional approval, which renders them relatively burdensome efforts. While no compacts exist today specifically for coastal or ocean management, in 1990 the state of Rhode Island and the Commonwealth of Massachusetts enacted the Bay State – Ocean State Compact to “study, develop and make recommendations about the environmental and economic aspects of Narragansett Bay and Mount Hope Bay.”¹⁸

In the specific case of the RI Ocean SAMP there has been no actual cooperation in ocean planning with the neighbouring states of Connecticut, New York and Massachusetts. The former two had, at the time of initiation of the Ocean SAMP process (Spring-Summer 2008) no ocean planning efforts¹⁹ Massachusetts, on the other hand, was at the time producing its first Ocean Management Plan, which was promulgated on 31 December 2009, approx. ten months before the formal approval of the RI Ocean SAMP. Interviewees from the RI and MA coastal management agencies consulted for this study mentioned three main reasons for the lack of cooperation between the two states: firstly, the coastal programmes of the two states had important regulatory and administrative differences that would have made cooperation cumbersome from a legal / institutional perspective; secondly, the two states had different approaches to planning, starting with the decision of RI to include federal waters in the planning area, something that MA decided not to, in part as a result of the controversy surrounding the Cape Wind project that was being proposed for federal waters in Nantucket Sound (cf. Figure 7); thirdly, and possibly most importantly, the two states were at the time competing for offshore wind investments, which would be the first in the country. As discussed in the next section, the RI Ocean SAMP in particular originated in response to an explicit gubernatorial mandate to increase renewable energy production from offshore sources, and hence there was little – if any – incentive to engage in a protracted cooperation agreement for ocean planning with Massachusetts, where offshore wind developments taking place in federal waters at the time were all but problematic.

¹⁷ The Atlantic States Marine Fisheries Commission mentioned in the previous section has been established by a compact ratified by the Atlantic coast states (except S. Carolina) and approved by the US Congress in 1942. Cf. www.asmfc.org and <http://apps.csg.org/ncic/Compact.aspx?id=15>, accessed 30 Nov 2016.

¹⁸ Bay State – Ocean State Compact, art.1. Available online at <http://apps.csg.org/ncic/PDF/Bay%20State-Ocean%20State%20Compact.pdf>, accessed 30 Nov 2016.

¹⁹ New York has been working on its Ocean Action Plan since 2012, which is currently still in draft form. Interestingly, the draft plan document does not contain a single reference to the RI Ocean SAMP, despite sharing a long border with the area of the SAMP, and adopting a similar approach of including federal waters within the planning area (NY State DEC 2015).

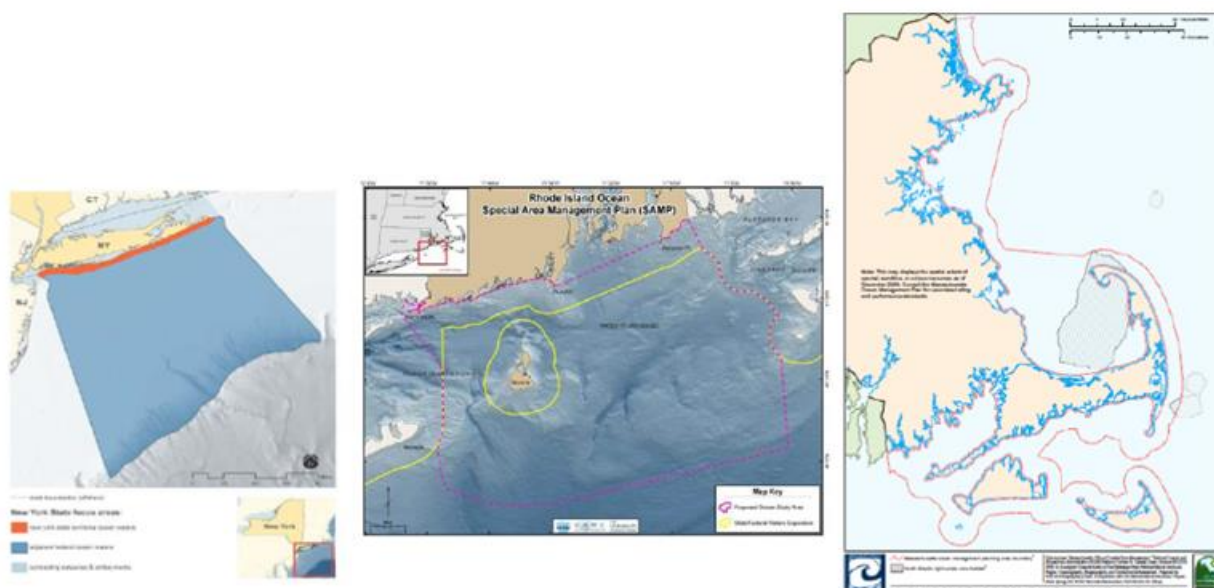


Figure 7 - Geographic scope of the NY Ocean Action Plan, the RI Ocean SAMP and the MA Ocean Management Plan (Sources: NY State DEC, 2015; CRMC, 2012; Commonwealth of Massachusetts, 2009).

Interestingly, in 2006 the RI CRMC had led an attempt to create a multi-state ocean SAMP involving the states of New York, Connecticut and Massachusetts, under the aegis of the Northeast Regional Ocean Council (NROC).²⁰ This effort bore no fruits in terms of interstate marine planning, but for some time at least resulted in the establishment of the (so-called) Southern New England/New York Ocean Council working group within NROC, with the aims of prioritising issues requiring coordination among the four states and research mechanisms to enhance shared resources (CRMC 2012).

Cooperation in marine planning and management across state-federal borders is complex and diversified, given the large number of statutes and agencies involved on each side of the border. The fact that states have different legal and administrative frameworks means that state-federal dynamics vary between states, and except when states have some form of interstate organ – for example a commission established by an interstate compact – federal agencies usually have different arrangements with agencies in different states. A central provision that is common to all states having a federally-approved coastal management programme and which shapes much of the state-federal cooperation in marine and coastal management is the federal consistency review, discussed above. It creates mutual obligations regarding consultation and can be said to have assisted state and federal authorities in avoiding serious – and legally paralysing – disagreements on the use of offshore areas and resources.

Finally, it is worth alluding briefly to the Northeast Ocean Planning process as a further dimension of cross-border collaboration in marine planning involving the state of RI. In 2010, President Barack Obama issued an executive order establishing a National Policy for the “Stewardship of the Ocean, Our Coasts and the Great Lakes”²¹, to promote sustainable development of these three environments through *inter alia* the implementation on Coastal and Marine Spatial Planning. The President tasked federal agencies, through the formation of regional planning bodies (RPB), with the responsibility of developing regional ocean plans. Being a presidential executive order, tribal and state participation was voluntary, but in New England, the six New England states, six federally recognized tribes, nine federal agencies, the

²⁰ The NROC, formed in 2005, is a state and federal partnership that facilitates the New England states (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut), federal agencies, regional organizations, and other interested regional groups in addressing ocean and coastal issues that benefit from a regional response. More information available at: <http://northeastoceancouncil.org/>

²¹ Available at: http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/Req-E013547watersteward.pdf

New England Fishery Management Council and New York State and Canada as ex-officio members joined forces in 2012 within the Northeast Regional Planning Body (NE RPB) to develop the Northeast Ocean Plan.²² The final draft of the plan was submitted to the National Ocean Council in October 2016, and certified in December 2016. Through this process, a commitment to share data and consult with each other on future proposed management and development efforts was established.

The main contribution of the NE Ocean Plan lies in the very extensive data compilation and analysis effort that has resulted in the production of a portal with data on the ocean ecosystem and ocean uses in the whole of New England accessible to all state and federal agencies and the public. The plan does not alter any of the existing responsibilities or authorities of federal agencies, and as a presidential order, does not commit state agencies. Interviewees contacted for this study praised the regional planning process for its efforts in bringing different actors to the same table, building relationships in the discussion of ocean status and uses, as well as for the value of the information being produced and made openly available. Some of these data may prove useful in the early screening stages of future permit or licence applications. At the same time, because the NE Ocean Plan does not contain enforceable policies, several interviewees feared that the plan's relevance would be limited to being a very comprehensive source of ocean data.

²² Available at: <http://neocceanplanning.org/>

Assessment Question	0	1	2	3	Justification
a) At initiation, to what extent was there support for MSP within the relevant government institutions?	Several institutions critical to the functioning of this MSP were initially resistant to its establishment	Support for this MSP has been uneven among the institutions involved	With few exceptions the responsible institutions have supported the development and implementation of this MSP	All responsible institutions have strongly supported the formulation of this MSP from its inception	<p>The vast majority of government institutions have supported the process, both at the state and federal levels.</p> <p>Important exceptions include the RI Department of Environmental Management (DEM), which had reservations about CRMC having the exclusive responsibility for leading the process. Issues of individual relationships have also played a role.</p> <p>The NE Fisheries Council and NE Atlantic Fisheries Commission declined to be involved, despite repeated insistence by Ocean SAMP staff.</p>
b) At initiation, to what extent was there support for MSP among the different marine users/sectors?	Several marine users/sectors have strongly resisted or been sceptical of the benefits of establishing this MSP	Resistance and/or opposition to this MSP has been limited to a minority of the marine users affected	With minor exceptions, marine users have supported this MSP	All affected marine users (sectors?) have supported the development and implementation of this MSP from its inception	With minor exceptions, marine users have supported this MSP. Originally fishermen were perceived to oppose to the process, as they saw the Ocean SAMP as a threat to the traditional use of their resources. But eventually recognised its value and joined the FAB. Still some individuals remain reticent, or at least detached from the plan.
c) At initiation, to what degree did marine users conform to the pre-existing rules within the MSP focal area?	There were no governance mechanisms (laws, user rights) or significant rules affecting the activities of users of the focal area	There were traditional and/or governmental rules, but non-conformance was common	Conformance with rules was generally good with only occasional exceptions	Rules were widely known to all users and conformance was high	Rules are widely known by all users, and conformance was generally high among most, with the exception of some fishermen, among which pockets of non-conformance remain a problem to this day.
d) To what extent have the historical/political contextual factors constrained cross-border collaboration?	Expressions of cross-border tensions and/or disagreements have been a major constraint on the MSP process	Historical/political tensions have been significant but largely overcome during this MSP process	Cross-border MSP collaboration has been somewhat constrained by cross-border tensions	There is a history and tradition of cross-border collaboration	<p>The federal system has long required state and federal authorities to cooperate in matters pertaining to marine management. The Ocean SAMP engaged with federal agencies to the extent necessary given the nature and goals of the plan.</p> <p>Although inter-state collaboration in planning has traditionally been constrained by institutional and administrative differences between states and a sense of competition rather than cooperation in matters concerning development, there is a history of states developing cooperation mechanisms when necessary. For the specific aims of the Ocean SAMP, it is felt that RI engaged neighbouring states to the necessary extent, and created additional mechanisms when necessary.</p>
e) To what extent have the socio-economic contextual factors affected cross-border	The socio-economic context has been a powerful factor in	The socio-economic context has presented some challenges to cross-	Apart from some specific issues, the socio-economic context	Cross-border cooperation has benefited from, or not been in any	The decision to extend the area of the Ocean SAMP into federal waters was made on economic grounds, to enable RI state to have control over offshore developments in a much larger area where offshore wind infrastructure could be viable. Hence

Assessment Question	0	1	2	3	Justification
<i>cooperation on MSP?</i>	<i>making cross-border cooperation towards a consistent MSP across borders very challenging</i>	<i>border cooperation, with mixed results</i>	<i>has not affected successful cross-border cooperation</i>	<i>way adversely affected by the socio-economic context of the MSP area.</i>	<p>economic factors were key to the Ocean SAMP straddling the state-federal waters boundary.</p> <p>With respect to interstate cooperation with MA, RI and MA did cooperate where there was a joint economic interest, namely in the development of the Area of Mutual Interest for offshore wind.</p>
f) <i>To what extent have the environmental contextual factors affected cross-border cooperation on MSP?</i>	<i>The environmental context has been a powerful factor in making cross-border cooperation towards a consistent MSP across borders very challenging</i>	<i>The environmental context has presented some challenges to cross-border cooperation, with mixed results</i>	<i>Apart from some specific issues, the environmental context has not affected successful cross-border cooperation</i>	<i>Cross-border cooperation has benefited from, or not been in any way adversely affected by the environmental context of the MSP area.</i>	The ability or willingness of states to collaborate in planning across borders has not been affected by environmental issues, rather political/regulatory and socio-economic.
g) <i>To what extent have governance structures of contributing countries/states/provinces been capable of facilitating cross-border collaboration on MSP-relevant matters?</i>	<i>Existing governance structures have not been capable of aligning the management of MSP-relevant matters across the border.</i>	<i>Existing governance structures have been capable of aligning management on some, but not on the most important MSP-relevant matters.</i>	<i>Existing governance structures have faced some challenges in cross-border collaboration, but have been capable of aligning the management of the most important MSP-relevant matters.</i>	<i>Existing governance structures have been capable of sharing good practices across borders or establishing a specific governance structure for the MSP area</i>	<p>Mechanisms for state-federal coordination and cooperation were already well established at initiation. The Ocean SAMP built on the existing mechanisms and governance structures and complemented them with additional ones to serve the specific purposes of the plan. The governance system thus established has been largely successful.</p> <p>The coastal programmes of RI and neighbouring states do engage in some exchanges. There is a large degree of alignment as a result of the common federal framework and regular sharing of good practices. RI and MA, jointly with federal authorities succeeded in establishing the necessary governance structure to manage the Area of Mutual Interest for offshore wind development.</p> <p>The NE Regional Ocean Plan has been a platform for federal agencies, tribes and states to discuss and coordinate management, but it formally only commits federal agencies and the implications for inter-state cross-border collaboration in planning are difficult to anticipate at this early stage.</p>

3.2. Drivers, issues and goals

3.2.1. Drivers and issues at initiation

The primary driver of the RI Ocean SAMP has been the desire to tackle the state's rising greenhouse gas emissions and energy cost through the development of offshore wind energy. Ambitious renewable energy targets were set in 2004 through the Renewable Energy Standard (RES)²³, in 2007 Governor Donald Carcieri mandated that offshore wind resources should contribute to 15% of the state's electrical power by 2020. The primary focus was from the start to obtain that additional energy from offshore wind farms located in state and adjacent federal waters. A study commissioned by the RI government subsequently identified 10 areas believed to be suitable for the siting of offshore wind farms (cf. Figure 8). According to interviewees contacted for this study, the results of this study generated a wave of concern among marine users and managers alike. Among the former the study was interpreted as the siting of the wind farm being a 'done deal' between the state government and Deepwater Wind (who had been selected as the 'preferred developer' by the state), raising fears among coastal managers of mass discontent and opposition similar to the one observed in neighbouring Massachusetts with the Cape Wind project.

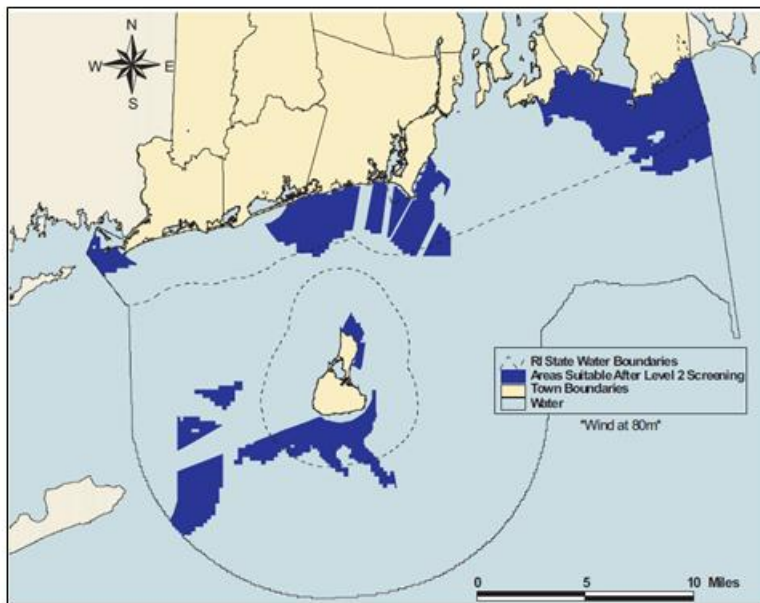


Figure 8 - Proposed sites for offshore wind development from the pre-Ocean SAMP offshore wind feasibility study (courtesy of J. McCann).

In response, in 2008, the CRMC proposed the creation of the Ocean SAMP as a mechanism to develop a comprehensive management and regulatory tool that would proactively engage the public and provide policies and recommendations for appropriate siting of offshore renewable energy (CRMC 2010). The plan therefore had a very clear focus on solving issues related to the siting of offshore wind farms, to the extent that in the May 2008 joint CRMC-URI proposal to the RI Office of Energy Resources, it still carried the designation of 'Ocean/Offshore Renewable Energy' SAMP (CRMC and URI 2008).

One such issue, mentioned explicitly in the joint CRMC-URI proposal and in several of the interviews conducted for this study, was the duration, cost and uncertainty associated with the 'traditional' way of assessing offshore infrastructure developments, which involved conducting an Environmental Impact Statement (EIS) that took an estimated five to seven years to be

²³ To supply 16% of their retail electricity sales from renewable resources by 2019; updated in 2016 to extend RES to 2035 and target to 38.5%. RES available at: <http://programs.dsireusa.org/system/program/detail/1095>

completed. The Cape Wind project in Massachusetts had taken the 'traditional' route and provided an eloquent illustration of the scenario to be avoided. An important driver was therefore to reduce the lead time until project approval to two years, ensuring that in that time the Ocean SAMP would meet the requirements of federal and state agencies for scientific analysis, planning and stakeholder involvement.

Support for the Ocean SAMP among user groups at initiation varied, and the project team was well aware of the contentious nature of some of the issues the project intended to address. Greatest concerns came from fishermen, who regarded the placement of offshore wind turbines as a threat to their livelihoods; and from citizens and stakeholder groups concerned about the negative impacts on the marine environment. The following are some of the initial public concerns that have been summarised by McCann and Schumann (2013, p.15):

- This is a "done deal" since the developer of the wind farm was selected and sites were identified prior to the Ocean SAMP process
- The developer will have more access to the information and the public will not be treated equally
- Stakeholders will not have influence over siting or any other regulations
- Wind turbines will restrict fishing and business
- Collisions with the turbines by boats will be significant
- The area's marine life and wildlife will be harmed
- Tourists will hate looking at the turbines, as they spoil the natural vista
- Power cables are going to affect the health of marine life, wildlife, and all Rhode Islanders

3.2.2. Goals and principles

At initiation, the explicit offshore wind focus of the Ocean SAMP is clearly visible from the goal set in the joint CRMC-URI proposal submitted to the RI Office of Energy Resources: "to facilitate Rhode Island's entry into the exploration and development of offshore energy resources to help achieve the Governor's 15% renewable energy resources goal." (CRMC and URI 2008, p.1) The vision was that the Ocean SAMP would make RI a national leader in offshore energy development, and to this end four objectives were proposed for the plan:

- 1) To streamline cumbersome federal and state permitting processes and establish a more cost-effective permitting environment for investors;
- 2) To promote a balanced approach to considering the development and protection of ocean-based resources;
- 3) To complete the necessary studies to yield the most accurate and current ocean-based scientific data and technologies to build knowledge critical for supporting the permitting process; and
- 4) To foster a well-informed and committed public constituency.

Interestingly, the commitment to the fourth objective, in particular the intention to elaborate goals that would address the issues and concerns expressed by stakeholders, led to a complete overhaul of that first set of objectives. In a consultative process through which the project team attempted to incorporate the views of the different stakeholder groups – though recognising, as often expressed in the interviews conducted for this study, that some stakeholders declined to be involved and that differences in opinion persisted as to what the plan should achieve and contain – four main goals were elaborated that address not only environmental, social and environmental outcomes, but also governance outcomes related specifically to the multifaceted relationship between state and federal agencies. The goals of the Ocean SAMP are:

- To foster a properly functioning ecosystem that is both ecologically sound and economically beneficial;
- To promote and enhance existing uses;
- 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; and
- To build a framework for coordinated decision-making between state and federal management agencies.

In working towards the Ocean SAMP goals, key principles were defined to guide the collaborative efforts of the different stakeholders in producing the plan. Those principles included developing the Ocean SAMP document in a transparent manner; involving all stakeholders as early as possible in the process; honouring existing activities, notably fishing, recreation and tourism, transportation and military activities; basing decisions on the best available science and on ecosystem-based management approaches; and establishing a long-term monitoring and evaluation system as the basis for adaptive management.

3.2.3. Use of the ecosystem-based approach

The CRMC regarded the Ocean SAMP as a process through which ecosystem-based management (EBM) of the planning area could be achieved. It explicitly adopted the EBM definition elaborated by the 'Scientific Consensus Statement on Marine Ecosystem-Based Management' (McLeod *et al.* 2005), that considers EBM to be "an integrated approach to management that considers the entire ecosystem, including humans", and whose goal "is to maintain an ecosystem in a healthy, productive and resilient condition that provides the services humans want and need."

Of particular importance is that one of the principles adopted for developing the Ocean SAMP was that "all management and regulatory decisions [would] be based on the best available science and on *ecosystem-based management approaches*." (RICRMC 2012, Section 130, no.5.4) However, neither the SAMP document, nor any of the supporting documentation available to the public²⁴ describe what these approaches entail. The study team could not find guidance on how to apply EBM in practice in any other RI state document, which suggests that state environmental management agencies do not follow a standard approach to EBM. From the plan document (RICRMC 2012), and in particular the 2013 Practitioners Guide (McCann and Schumann 2013), it is possible to identify the following key elements of how EBM was applied in the Ocean SAMP:

- 1) Understanding the structure and dynamics of the natural ecosystem**, by means of scientific studies to characterise its current status and predict future conditions, including in response to climate change;
- 2) Understanding the role of humans**, by assessing how human activities benefit from and impact on the ecosystem;
- 3) Anticipating the potential impacts on the ecosystem** (including its human components) of future uses before they are approved, and putting in place the necessary policy and regulatory measures to avoid, minimise and mitigate those impacts; and
- 4) Monitoring the impact of the implementation** of the Ocean SAMP on the ecosystem and selected human activities that depend on it.

Interviewees consulted for this study generally considered that the first three elements had been adequately addressed in the Ocean SAMP process. Indeed, the Ocean SAMP generated an

²⁴ Through the Ocean SAMP pages of the RI Sea Grant and the RI CRMC websites, respectively <http://seagrant.gso.uri.edu/oceansamp/documents.html> and http://www.crmc.ri.gov/samp_ocean.html

amount of new knowledge about the ecosystem in the planning area unparalleled in the state and possibly the entire region. The fourth element however has hardly been addressed, given the near absence of systematic monitoring of plan implementation (see Section 3.6).

Some reservations have been expressed by Ocean SAMP stakeholders about the extent to which the Ocean SAMP was truly ecosystem-based. The Conservation Law Foundation, for example, in its comments to the Commercial and Recreational Fisheries chapter observed that the decision not to include management activities to control the impacts of fishing in the Ocean SAMP was a major impediment to the plan addressing “the single activity in the ocean realm that has the greatest, most pervasive and negative impact on the ocean ecosystem.”²⁵

An URI researcher interviewed for this study expressed reservations about the fact that the boundaries of the Ocean SAMP actually do not correspond to those of an entire ecosystem. He noted, to illustrate his point, that the RI marine ecosystem actually encompasses Narragansett Bay, hence if the Ocean SAMP were to be truly ecosystem-based, it would have had to include the Bay in the planning area. A similar argument could easily be done about ecosystem linkages to the marine ecosystems off the neighbouring states of Massachusetts, New York and Connecticut, not only on account of the connectivity of biophysical and ecological ecosystem components, but also of the cross-border nature of the different human activities in the region.

At the same time, the same researcher observed that the data requirements for an exhaustive characterisation of the ecosystem would render the costs of the Ocean SAMP unacceptable to society. He was of the view that the data produced and used in the Ocean SAMP was probably the best that the budget available could ‘buy’. It provided the best possible assessment of ecosystem structure and dynamics and rendered the Ocean SAMP as ecosystem-based as possible, given the time and budget constraints.

One fisherman and a representative of the Commercial Fisheries Research Foundation interviewed for this study, while praising the efforts to characterise the ecosystem in the Ocean SAMP, expressed more generic reservations about the validity of some of the fisheries data produced by academic researchers and fisheries management agencies used in the Ocean SAMP. More generically, other interviewees admitted that fishermen tend to mistrust research findings from those two types of institutions. As discussed in section 3.5, this was one of the reasons why the Ocean SAMP, and subsequently Deepwater Wind, engaged some fishermen in fishery surveys jointly with scientists.

²⁵ Ocean SAMP Chapter 5. Commercial and Recreational Fisheries – Comments & Responses (as of 8/12/10), p.11. Available at http://seagrant.gso.uri.edu/oceansamp/pdf/comments/500_fisheries_8.12.10.pdf

Assessment Question	0	1	2	3	Justification
a) To what extent has the ecosystem based management approach been used in the design of the MSP?	The ecosystem approach had little or no influence upon the design and scope of this MSP	The ecosystem approach has informed this MSP but has not been a central feature of its design	The ecosystem approach was one of several principles incorporated in this MSP but others were equally important	The ecosystem approach has been a central feature of the design, scope and process of this MSP since its inception.	<p>The RI coastal programme has long adopted EBM as a central component of its work, in particular the design of SAMPs. The Ocean SAMP has been developed based on a comprehensive effort to understand the structure and function of RI's offshore marine ecosystem, including the interactions between human activities and the environment. The regulations and policies have an explicit aim to minimize and when possible mitigate negative impacts on the ecosystem, including its human components.</p> <p>A similar approach has been adopted in neighbouring states MA and NY in the design of their ocean plans, but each state's effort has mostly been conducted in isolation.</p> <p>(Further elaboration in the text)</p>
b) To what extent do the MSP goals address desired social, economic and environmental outcomes?	MSP goals are defined in general terms	Goals define one of the variables but not the other two	Goals define two of the variables	Goals define desired outcomes in terms of all three variables	The goals elaborated for the Ocean SAMP cover all three aspects.
c) To what extent have (would have) time bounded and quantitative goals enabled or constrained this MSP process?	Time bounded and quantitative goals have (would have) been a key constraint in this MSP process.	Time bounded and quantitative goals have had/would have had some minor benefits, but overall their use has/would have been detrimental to the MSP process.	Time bounded and quantitative goals (would) have posed some minor challenges, but their use would have/has been overall positive for the MSP process.	Time bounded and quantitative goals have been a key enabling factor of this MSP process.	The Ocean SAMP management team and stakeholders purposely avoided the elaboration of time-bounded and quantitative goals, as it was felt that such goals would not have received the broad support that was felt necessary to gain the support and commitment of all relevant parties. Time-bounded and quantitative goals would have made follow-up of progress and achievements easier, but would have weakened the support for the plan, which was regarded more important when the plan was being designed.

3.3. Overview for the Rhode Island Ocean SAMP

3.3.1. Overview of the process

The Ocean SAMP was developed by the RI CRMC jointly with the URI over a two-year period, from August 1st, 2008 to July 31st, 2010. The timeline with the five main policy steps and corresponding activities is summarised in Table 2. Figure 9 overleaf depicts the methods used in the elaboration of the Ocean SAMP and how they related to one another.

Table 2- Timeline of the Ocean SAMP process

Step	Start date	Key activities
Step 1 Issue identification and assessment	July 2008	<p>Taking stock:</p> <ol style="list-style-type: none"> 1. Define local, state, and global drivers and determine how they influence the process. 2. Establish the core team. 3. Determine project end date/milestones and budget. <p>Pre-planning:</p> <ol style="list-style-type: none"> 4. Identify and prioritize stakeholder and client issues. 5. Collect available information for issues and drivers. 6. Determine and prioritize research agenda based on meetings and collected information. 7. Define Ocean SAMP boundaries, goals and principles. 8. Design a public process that provides stakeholders with both access and influence over decisions.
Step 2 Preparation of the SAMP	July 2009	<p>Defining and communicating existing conditions:</p> <ol style="list-style-type: none"> 1. Implement the research agenda, focusing on the priorities identified in the "Taking Stock" phase. 2. Engage stakeholders in research. 3. Communicate research to stakeholders. <p>Developing policies transparently:</p> <ol style="list-style-type: none"> 4. Craft policies for each Ocean SAMP chapter, using stakeholder input and the best available science. 5. Organize workshops and meetings with stakeholders to review chapters and ensure expertise and concerns incorporated into chapter.
Step 3 Formal Adoption	July 2010	<ol style="list-style-type: none"> 1. Formal public workshops and public comment period implemented. 2. Ocean SAMP is adopted by CRMC (October 2010). 3. Ocean SAMP is adopted NOAA as a routine programmatic change to the Rhode Island Coastal Management Program (July 2011). 4. The Ocean SAMP is endorsed by lead federal agencies.
Step 4 Implementation	Summer 2011	<ol style="list-style-type: none"> 1. Ocean SAMP implementation funding is secured. 2. CRMC is implementing adaptive management approaches. 3. Permits for new activities within the Ocean SAMP boundaries are processed. 4. Performance standards for permitted activities are monitored and enforced. 5. Impacts on the ecosystem and selected human activities are monitored. 6. Mechanisms to ensure the Ocean SAMP is the guiding document for the entire study area (both federal and state waters) are put in place. 7. Joint Advisory Working Group is organized. 8. Stakeholder advisory committees are organized and commence meeting.
Step 5 Evaluation	Summer 2011	<ol style="list-style-type: none"> 1. Program outcomes are documented. 2. Management issues are reassessed. 3. Priorities and policies are adjusted to reflect experience and changing social and environmental conditions. 4. External evaluations are conducted at junctures in the program's evolution. 5. New issues or areas are identified for inclusion in the program. 6. Biannual public forums are held to review monitoring results and revise policies to address the SAMP goals.

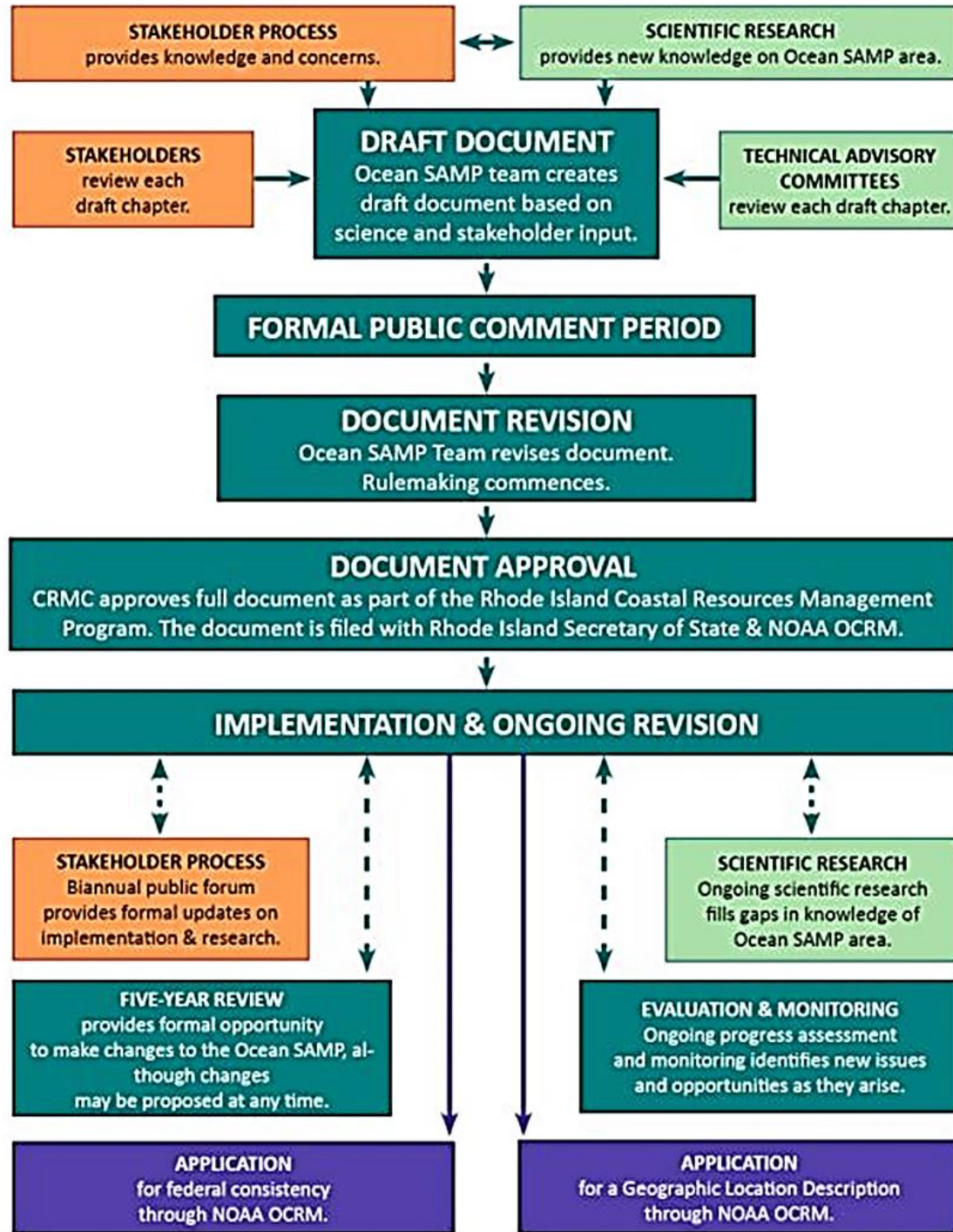


Figure 9 - Ocean SAMP methods flowchart (Courtesy of J. McCann)

3.4. Funding the Ocean SAMP

At initiation, CRMC and URI requested USD 6 million from RI state to complete the Ocean SAMP in two years. The initial grant from the state Renewable Energy Fund amounted to slightly over half that value, but a recognition by the state of the potential benefits of the Ocean SAMP led to a further grant from the state Economic Development Corporation of USD 2.8 million. A USD 0.67 million federal grant was obtained in the second year from the Department of Energy, and the process also benefitted significantly from in-kind contributions from URI researchers and the University, estimated at USD 1 million. Table 3 summarises the size and distribution of the funds for developing the Ocean SAMP.

Table 3 - Breakdown of Ocean SAMP funds. REF – (RI) Renewable Energy Fund; EDC – (RI) Economic Development Corporation; DoE – Department of Energy (McCann and Schumann 2013)

Year secured	Amount (USD mil.) and source	Budget component (%)			
		Synthesis of existing information	Generating new information	SAMP document development and outreach	Administration
2010	3.2 (RI REF)	40	15	35	10
2011	2.8 (RI EDC)	10	80	0	10
2011	0.67 (DoE)	30	40	20	10
2011	1 (in-kind)	20	80	0	0

Following approval of the Ocean SAMP, a minimal amount of additional funding has been granted by the state for its implementation. URI has applied funds from other sources to conduct two reviews, in 2013 and 2016, but there are no other funds for regular monitoring of implementation or for implementing the Ocean SAMP research agenda. CRC and Rhode Island Sea Grant have, however, made a commitment to maintain a website and hold periodic stakeholder meetings to communicate to the public implementation elements and new research findings.

The 2015 update of the Ocean SAMP Recreation and Tourism chapter benefitted from the analysis of this sector conducted for the NE regional planning process. The Ocean SAMP contains no provisions for the collection of fees from the users of the area. The lease and license fees paid by offshore developers are not used to fund Ocean SAMP implementation or review.

Since the start of implementation, a central component of which have been the different processes associated with the licensing and construction of the offshore wind farms off Block Island and in the Area of Mutual Interest (cf. Section 3.6), the Ocean SAMP has also “spawned” additional funds for research associated with those processes. According to the evaluation conducted in 2013, two years into implementation those funds amounted to USD 24 million (Mulvaney 2013, p.29).

3.4.1. Legal basis

The Ocean SAMP is a regulatory, planning and management instrument for the CRMC to uphold its regulatory responsibilities on behalf of the state of RI in the area of the Ocean SAMP. As is the case with the remainder of the rules and regulations promulgated by the CRMC, it is subject to the Rhode Island Administrative Procedures Act. As indicated earlier, it is part of the federally-approved RI CRMP, and can therefore serve as the basis for federal consistency review assessments.

Whereas the Ocean SAMP describes its policies and regulations as enforceable, which would render it legally binding, its actual enforceability depends on the particular provisions under examination as parts of the Plan are narrative or recommendatory by their own words. The CRMC is entrusted with the necessary administrative and criminal procedures to enforce the plan, notably the issuing of orders to cease and desist violations, the power to remedy any violation of plan provisions, the assessment of administrative and criminal penalties for such violations, and prosecution in state courts (see Annex 3).

3.4.2. Intra- and interstate institutional collaboration

Institutions for coordinating the work of different RI state agencies involved in coastal and marine management have existed since before the Ocean SAMP. The CRMC is the foremost of these, carrying the primary responsibility for “the continuing planning for and management of the resources of the state’s coastal region.” (RICRMC 2012, Chapter 10, p.5). The Council has 16 members appointed by the RI state governor for 3-year terms, served on a part-time basis. Members include representatives from state and local government as well as private RI citizens, some of which having environmental or regulatory expertise. The Council is the key body

making decisions affecting the state coastal zones, and also has the responsibility for implementing and enforcing those decisions.

State executive agencies have, as is the norm, their individual responsibilities within the sector they are mandated to plan and regulate. These responsibilities are generally carried out in an independent manner, and where necessary, in consultation or collaboration with other agencies. Such is the case with the licensing of several maritime activities, where a lead agency often needs to consult with others before granting leases or licenses. An example given above is that of aquaculture facility licensing, which the CRMC is responsible for, but which requires the RI DEM review of potential impacts on fishery resources. The regulatory system affecting institutional collaboration is complex but well established. The fragmentation of responsibilities certainly renders coordination demanding, but at the same time caters for the specificities of each sector, which need to be observed. From the interviews conducted for this study, it appears that inter-agency cooperation is sought whenever there is a sense of mutual benefit. Individual personalities are known to play an important, albeit often undocumented role.

Inter-state collaboration involving state executive agencies is less frequent, and as observed in section 3.1, require some form of formal agreement between the states if they are to commit agencies on both sides of the border. The study team was not made aware of any formal collaborative agreements in the domain of coastal and marine management involving the state of Rhode Island and its neighbour states – except the regional fisheries agreement. Interviewees did confirm however, that frequent contacts and exchanges exist between for example the RI CRMC and its counterpart in Massachusetts, the Office of Coastal Zone Management. It is likely that similar exchanges take place with the counterpart offices in other states in the region, and between other agencies in RI and their counterparts.

The situation does not seem to be very different for federal agencies, in that each needs to deliver on its individual legal mandate. In doing so, “[o]wing to both practical necessity and legal requirements, many of the relevant actors are required to consult and coordinate with one another to consider how their responsibilities overlap and to be responsive to the public.” (Northeast Regional Planning Body 2016, p.11).

With the aim of assuring that permitting decisions for offshore developments are well informed and in line with the requirements of different agencies, the Ocean SAMP proposed the creation of a (so-called) Joint Agency Working Group (JAWG) made up of all federal and state agencies with regulatory responsibilities for new projects, as well as representatives of the Narragansett Indian Tribe. Although this body was never formally set up, there has been significant coordination among all agencies involved the development of the Block Island wind farm. The approach to institutional collaboration in marine and coastal management in the US seems to be one in which existing agencies retain their authority and responsibilities, and a new structure is created to facilitate the concerned agencies in coordinating their functions in a specific matter that affects them all.

Assessment Question	0	1	2	3	Justification
a) <i>To what extent have cross-border issues shaped the collaboration in this MSP from its inception?</i>	<i>The cross-border dimensions of this MSP were not a feature of this MSP at its inception</i>	<i>Cross-border features of this MSP have been present from initiation but not a central feature</i>	<i>Cross-border features have been one of several important features of this MSP</i>	<i>Cross-border collaboration has been central to the design of this MSP from the beginning</i>	<p>Interstate features of this MSP have been present from initiation but have not been a central feature, and have not shaped the planning or implementation in a very significant way. <i>Cross-border collaboration has been central to the design of this MSP from the beginning</i></p> <p>State-federal relationships have been one of the defining features of the Ocean SAMP, both in planning and implementation.</p>
b) <i>To what extent are the institutions responsible for MSP planning and management working independently or collaboratively?</i>	<i>Planning and management of each country's zone is conducted by that jurisdiction's institutions in an independent manner</i>	<i>The cross-border coordinating mechanisms define the goals and principles of this MSP that individual jurisdictions tailor to their needs; the agenda for cross-border collaborative management is limited to a few issues</i>	<i>Major policies and features of this MSP are negotiated by representatives of each jurisdiction convened by a cross-border coordinating institution</i>	<i>Planning and management is centralized and the responsibility of the lead cross-border institution</i>	<p>The state agencies responsible for marine planning in RI and neighbouring states work for the most part independently, but consult and exchange as needed on matters that might affect each other, in particular in light of the interstate federal consistency provision. Cross-border concerns therefore affect the nature of the regulations and policies elaborated by each state for its marine areas.</p> <p>State and federal management is carried out separately by the respective institutions, which coordinate through well-established mechanisms whenever necessary. The Ocean SAMP has put in place additional coordination structures to serve its specific purposes, given its straddling of state and federal waters.</p> <p><i>(Further elaboration in the text)</i></p>
c) <i>To what extent has external funding enabled this MSP process?</i>	<i>External funding has been a barrier to achieving the objectives of this MSP.</i>	<i>Despite important contribution in some areas, external funding has been generally detrimental to this MSP process.</i>	<i>Despite some detrimental effects in some areas, external funding has made an overall positive contribution to this MSP process.</i>	<i>External funding has been a primarily enabler of this MSP process.</i>	<p>(Grade not applicable)</p> <p>External funding has been negligible in the financing of the Ocean SAMP, and has therefore not played any significant role, neither positive nor negative. This situation is not captured by any of the markers.</p>

3.5. Scope and design of the Ocean SAMP

3.5.1. The institutions of the Ocean SAMP

The Ocean SAMP was developed by the RI CRMC in partnership with the URI. As indicated in section 3.1, the CRMC is vested with the exclusive authority to develop SAMPs within the RI coastal management programme.²⁶ The CRMC's Executive Director, Grover Fugate was the manager of the project to develop the Ocean SAMP. He was aided by two senior advisors, Dennis Nixon from the URI Graduate School of Oceanography, and Malcom Spaulding, from URI Ocean Engineering. The management team also comprised two co-principal investigators: Jennifer McCann, of URI Coastal Resources Center/RI Sea Grant, who was lead for policy and outreach; and Sam DeBow, of URI Graduate School of Oceanography, who coordinated data acquisition.

The fact that the CRMC and URI had a history of collaboration going back to the 1970s, when both institutions cooperated in the elaboration of RI's first SAMPs. The view about this collaboration widely held by interviewees contacted for this study has been summarised by Smythe (2016, p.11) with the following words: "By the time the Ocean SAMP was ready to be developed, this history of collaboration between CRMC, [the Coastal Resources Center], and the broader URI community provided a strong foundation of trust and familiarity that facilitated an efficient and consistent planning and research process."

As depicted in Figure 10, the project set up five supporting committees to ensure adequate representation of relevant stakeholder groups in the planning process. The state agency advisory committee included not only representatives from RI state agencies, but also from neighbouring states New York, Connecticut and Massachusetts, as the waters of these three states abutted the Ocean SAMP area. A similar advisory committee was established for relevant federal agencies.²⁷

According to McCann and Schumann (2013, p.10), the legal and the scientific advisory task forces ended up being of little use, since the short schedule of the Ocean SAMP required faster advisory services than what the committees could deliver. Committee advisors were therefore used on an individual basis whenever necessary.

The stakeholder working group was chaired by an independent volunteer facilitator and engaged close to 50 organizations. It was open to the general public, who also were invited to participate in the process. As described in greater detail in section 3.5, members of the stakeholder group integrated the Technical Advisory Committees (TACs) made up of scientific and stakeholder experts in their fields to help write and review each draft Ocean SAMP chapter before approval.

Earlier reviews (Mulvaney 2013; Smythe 2016) and virtually all of the interviewees contacted for this study were of the opinion that the Ocean SAMP development process has been driven by a team of very competent and committed individuals, whose individual skills combined into a team capable of dealing with the complexities of developing a plan in only two years.

²⁶ It is important to note that the scope of CRMC's authority is determining for the regulations that could be included in the Ocean SAMP. A case of note discussed earlier in this document is that of marine fisheries, which the Ocean SAMP does not regulate in part because the CRMC lacks the regulatory authority over this activity.

²⁷ Cf. Annex 4 for a listing of all committee members.

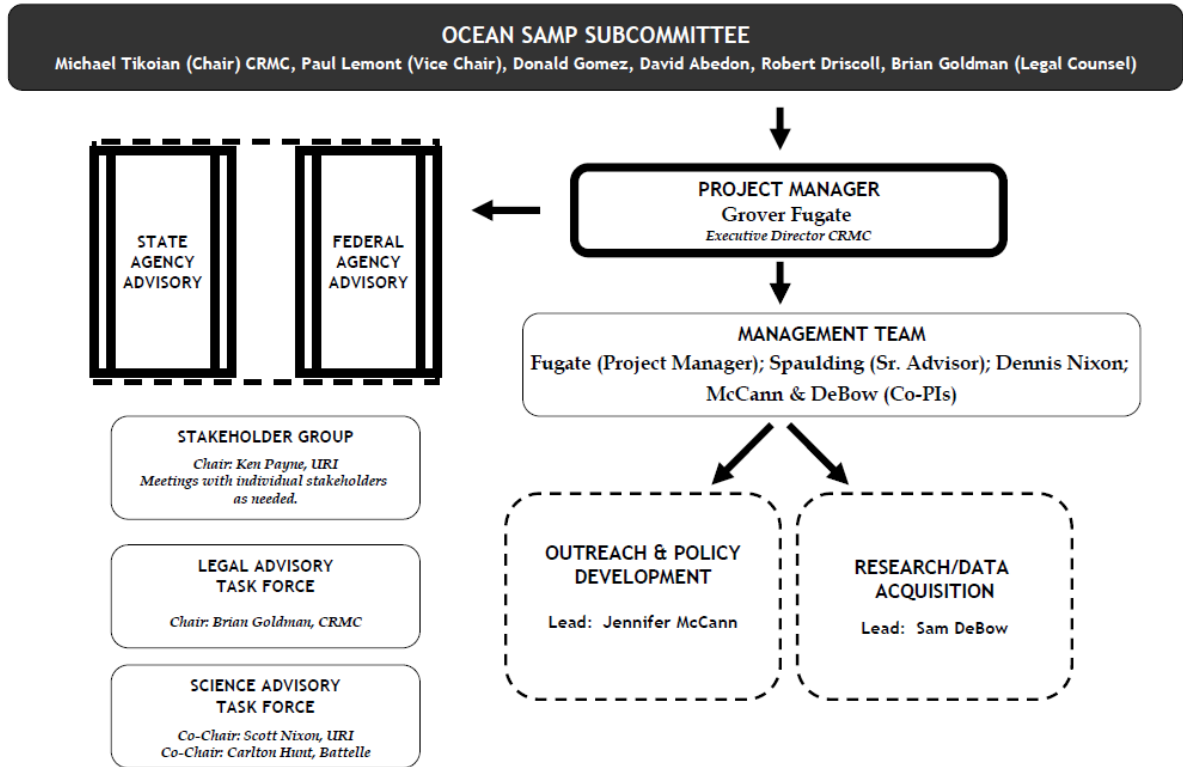


Figure 10 - Figure 10 - Organisational chart and committee list. Available at: http://seagrant.gso.uri.edu/oceansamp/pdf/documents/about_org_chart.pdf

3.5.2. Land-sea interactions in the planning phase

Although information on several land-based activities and issues (e.g. ports, historic sites) are covered in the Ocean SAMP, RI has other planning and regulatory instruments in place that deal with them. And in spite of offshore wind development – the key driver behind the Ocean SAMP – also having impacts on land use on the coastal zone – notably the placement of transmission lines, and eventually the establishment of land-based industries supporting offshore activities, land-sea interactions feature to a very limited extent in the Ocean SAMP. It is important to recall in this regard that the area of the Ocean SAMP starts 500 ft offshore, and therefore does not include any terrestrial environments. Nor does it include Narragansett Bay, or the shores of which most of the human activities and settlements concentrate.

The issue of climate change, for example, illustrates the land-sea divide in planning reflected in the Ocean SAMP. Although climate change is considered a high-priority policy issue by the state government, and in spite of the Ocean SAMP providing an account of anticipated important ecological impacts (cf. CRMC 2010, Chapter 3 for more details), planning for climate change adaptation in the coastal zone is being done separately. Indeed, in 2013 the CRMC in collaboration with URI-CRC initiated the process of developing the Rhode Island Shoreline Change SAMP, or “Beach” SAMP, which has an explicit focus on climate change impacts on the state of RI, namely those of sea level rise and erosion *on the nearshore environment and in particular on the state’s beaches and coastal communities* (Smythe *et al.* 2016). The Beach SAMP is expected to be adopted in early 2017, and once finalised will be incorporated into the Red Book (cf. Section 3.1).

Assessment Question	0	1	2	3	Justification
a) <i>To what extent does the MSP process have the authorities required to successfully implement the plan?</i>	<i>MSP implementing authority is as yet undefined</i>	<i>The distribution of authorities/responsibilities required for MSP implementation are being negotiated</i>	<i>The major roles and responsibilities for MSP implementation are known but some responsibilities and/or coordinating mechanisms remain unclear</i>	<i>Implementing authorities are clear and sufficient to fully implement this MSP</i>	The agency responsible for the Ocean SAMP was created over 40 years ago, has a clear mandate and authority and is well-established in the coastal and marine governance structure of the state and the region. Implementation of the Ocean SAMP is taking place in collaboration with other state and federal agencies, whose mandate and authority is also clear and sufficient.
b) <i>To what extent does the MSP possess the human resources required to implement the plan?</i>	<i>The necessary human resources for implementation have not yet been assigned</i>	<i>Staffing for MSP implementation is inadequate</i>	<i>Staffing for implementation is present in some institutions but not others</i>	<i>Sufficient human resources are in place to fully implement this MSP</i>	The RI CRMC as well as other state and federal agencies involved in Ocean SAMP implementation are adequately staffed and resourced. The Ocean SAMP has allowed the CRMC to secure the technical support, incl. through hired consultants necessary to ensure that the development of offshore wind infrastructures is done appropriately. Marine planning is a relatively new process in the US, though, and therefore some of the agencies involved are still in a process of strengthening their internal capacity to address novel planning and implementation requirements.
c) <i>To what extent has there been coordination of planning between land and sea in this MSP?</i>	<i>Connections between land and sea processes and issues have not been addressed in the planning.</i>	<i>Connection between land and sea have been recognized but addressing them is not within the scope of this MSP</i>	<i>Connections between the land and sea have been recognized and some are addressed by the policies and regulations of this MSP</i>	<i>The major interconnections between land and sea processes and issues have been recognized and addressed</i>	<p>Connections between land and sea are a central feature of RI's coastal management programme, and are implicitly and explicitly recognized in the Ocean SAMP. However, the plan is mostly concerned with the management of activities taking place at sea, although some of its policies concern the minimization and mitigation of impacts of these activities on land-based activities or values.</p> <p>The area of the Ocean SAMP does not include land areas, and it therefore does not affect planning on land directly. This is achieved through other instruments, some of which under the RI coastal programme and the authority of the CRMC.</p> <p><i>(Further elaboration in the text)</i></p>

3.6. Collaboration and consultation in the planning phase

The consultation process during the plan development phase was designed to create an informed and supportive constituency for both the planning process and the content of the plan. Consultations began as soon as the process got underway in mid-2008 (Olsen *et al.* 2014), guided by three main objectives: 1) to identify and prioritise stakeholder and client issues; 2) provide stakeholders with access to and influence over decisions; and 3) collect information from stakeholders to direct research and policy development. The communication plan was conceived to include public education and involvement through exhibits, preparation and distribution of educational material, podcasts, seminars / workshops and media events. The latter served to both maintain informal contact with the media (mainly to avoid miscommunication on the process), and respond to the issues identified by the interested public, as well as specific stakeholder groups.

In addition, the RI Ocean SAMP was developed through an integrated writing process, whereby researchers, Ocean SAMP stakeholders, including representatives from other states and federal agencies, in a series of public workshops and formal CRMC public hearings revised chapters individually before approval. This approach was put forward voluntarily following an initial suggestion by the Conservation Law Foundation (cf. Figure 11). Individual comments to draft chapters and the manner these were addressed by the Ocean SAMP team were posted on the

		Step 1: MT Approval	Step 2: TAC Review	Step 3: Informal Public Review	Step 4: CRMC Review	Step 5: CRMC Council Approves Rulemaking	Step 6: Formal Public Review	Step 7: Public Comments Review	Step 8: Public Hearing/Chpt. Adoption
	Draft Chapters								
0	Executive Summary*								
100	Introduction*								
200	Ecology								
300	Global Climate Change								
400	Cultural and Historic Resources								
500	Fisheries Resources and Uses								
600	Recreation and Tourism								
700	Marine Trans., Nav., Infrastructure								
800	Renewable Energy								
900	Other Future Uses								
1000	Existing Policies								
1100	Policies of the Ocean SAMP*								

Notes: *: These chapters will be processed with the full document; Dates reflect when the chapters will be presented at public meetings during specific phase.

<p>Step 1: Management Team (MT) Approval</p> <ul style="list-style-type: none"> • MT approves draft chapter to proceed to public comment. <p>Step 2: TAC Review</p> <ul style="list-style-type: none"> • Technical Advisory Committee comments on draft chapter. <p>Step 3: Informal Public Review</p> <ul style="list-style-type: none"> • Draft chapter presented at stakeholder meeting. • Informal public comments on draft chapter. <p>Step 4: CRMC Review</p> <ul style="list-style-type: none"> • Draft chapter submitted to Ocean SAMP Subcommittee. • Informal public comments/responses presented at Subcommittee meeting. • Subcommittee approves draft chapter to advance to full council. 	<p>Step 5: Rulemaking</p> <ul style="list-style-type: none"> • Full Council votes to commence rulemaking on draft chapters. <p>Step 6: Formal Public Review</p> <ul style="list-style-type: none"> • 30-day comment period takes place. • Public workshop held. <p>Step 7: Review</p> <ul style="list-style-type: none"> • Public comments reviewed by CRMC and Ocean SAMP team. <p>Step 8: Public Hearing</p> <ul style="list-style-type: none"> • Public hearing for draft chapter. • Draft Chapter approved by Full Council.
---	---

Once all chapters have completed Steps 1 -8, a public hearing will be held for the entire SAMP document prior to Full Council approval (Step 9).

Ocean SAMP website, where they remain available to this day.

Figure 11 - Public review process for the Ocean SAMP rulemaking (as of 2 Jun 2010; courtesy of J. McCann)

The stakeholder committee was chaired by an external and independent facilitator engaged on a voluntary basis, Kenneth Payne, who led the monthly stakeholder consultation meetings and ensured the necessary liaison to all stakeholder group members. The overall goal of the stakeholder engagement process was to “engage a well-informed and well-represented constituency that would understand the Ocean SAMP issues and become involved in the creation

of the plan” (McCann and Schumann, 2013, p.18). Looking back at the Ocean SAMP process, the stakeholder engagement process stands out as one of its defining features, one that served to ensure the consistency of messages, transparency, and responsiveness of the process to stakeholder demands (Smythe *et al.* 2016).

As in many other MSP initiatives, participation of fishermen in the process was highly complex, due to the diverse nature of fishermen as a group, their economic dependence on ocean resources, and their understandable reluctance to share proprietary business information about their fishing activity (Smythe *et al.* 2016). While some industry representatives continued to claim throughout the entire process that the Ocean SAMP was little more than a façade for the ‘done deal’ of offshore wind farm development – to the extent that some of these individuals refrained from engaging in the process – others adopted a more proactive and constructive stance, made efforts to get their concerns across and in the end acknowledged the stakeholder engagement effort and its benefits in giving everyone a voice.

Outreach to Block Island was not as extensive and constant as to other parts of mainland Rhode Island, due to the greater demands of organising meetings on the island and the inability of organising electronic meetings with island residents. Despite the holding of some meetings on the island and the fact that the First Warden of the Town of New Shoreham on Block Island was one of the Ocean SAMP stakeholders, some island residents felt they were not given sufficient opportunities to engage and influence the process, according to interviews conducted for this study.

3.6.1. Consultation with other state and federal agencies, legislators and federally-recognised tribes

In order to engage federal and state agencies in the planning process, a state and a federal advisory body were established at the outset with the aim of giving those agencies a platform through which to engage in the process. The state advisory body included relevant agencies from the neighbouring states of Massachusetts, Connecticut and New York. A key aim of setting up those advisory bodies was to ensure that the policies and regulations of the Ocean SAMP were consistent with existing state and federal policies and regulations. State and federal agencies were also involved in revising individual draft Ocean SAMP chapters as these were being produced.

From early in the planning process the Ocean SAMP management team held regular meetings with Rhode Island legislators and the state congressional delegation. These sessions served to brief the legislators on progress and to clarify any questions they might have, so that they too could provide correct information to any constituent who contacted them. The team held meetings every time there were significant developments, ensuring that information available to them was always updated and correct (McCann and Schumann, 2013).

The federally-recognized Narragansett Indian Tribe, whose current land abuts the RI shoreline and whose ancient lands are, according to oral history, submerged in the Ocean SAMP area, was formally involved as one of the stakeholders from the inception of the planning process. Important consequences of their engagement was the formal recognition and inclusion of the Tribe’s history in the Ocean SAMP document²⁸ and the creation of a formal requirement for the Tribe to be consulted on any development taking place in the Ocean SAMP area. Both decisions are unprecedented in marine management in the state.

²⁸ Geological studies conducted for the Ocean SAMP confirmed the oral history, and actually pushed back the estimated dates of the early settlements in the area with close to 10,000 years (McCann and Schumann, 2013, p.18).

Assessment Question	0	1	2	3	Justification
a) <i>To what extent was the design process and schedule made explicit to all parties in the initial phase of the MSP process?</i>	<i>The procedures and schedule evolved over time and changed significantly as the planning process matured</i>	<i>While the design process proceeded as expected there were some unexpected issues that delayed or interrupted the schedule</i>	<i>With minor exceptions the design process unfolded as anticipated</i>	<i>The procedures and schedule for consultation have been widely known from the initiation of this MSP and they have been followed</i>	The process and schedule for developing the Ocean SAMP were defined at the start and presented and discussed with all involved parties at initiation and on several occasions during the planning phase. This was highly appreciated by stakeholders, and helped maintain momentum and commitment throughout the entire process.
b) <i>To what extent do the affected user groups and the public understand and support the MSP process goals and strategies?</i>	<i>Those affected, and the public have a range of impressions on the goals and procedures of the MSP, some of them contradictory</i>	<i>Well informed support for the MSP is present in either the user groups or the public, but not both</i>	<i>With some exceptions, there is a good understanding and support for the goals and strategies of the MSP</i>	<i>There is strong support among both user groups and the public for the goals and procedures of this MSP</i>	<p>There was initial apprehension about the purpose of the Ocean SAMP, especially among the fishermen community, where many feared that the siting of the offshore wind farm was a done deal and the Ocean SAMP would not be more than 'window dressing' to justify a decision already made. Other sectors were more supportive or neutral at initiation.</p> <p>As a result of the intense stakeholder engagement process, at the end of the planning phase the vast majority of stakeholders supports and understands the plan, even if not everyone agrees with all its policies and regulations.</p> <p>Some individuals – again overrepresented among fishermen – have chosen to remain detached from the process.</p>
c) <i>To what extent were stakeholders involved in designing and shaping the MSP process, incl. its cross-border elements? (governmental, non-governmental and the public)</i>	<i>[Governmental/ Non-governmental/ public] stakeholders were not involved in the design process</i>	<i>[Governmental/ Nongovernmental /public] stakeholders and the public were informed of the development of this MSP but were not contributors to its design</i>	<i>[Governmental/ Nongovernmental /public] stakeholders were invited to comment; their suggestion and/or concerns were acted upon in some instances but not others</i>	<i>[Governmental/ Non-governmental /public] stakeholders were active participants in the planning process and significantly shaped the resulting plan</i>	<p>Stakeholders have had ample opportunities to influence the planning process and especially the content of the plan. A separate participation process was established for non-governmental stakeholders to gather their views, priorities and needs, and to the extent possible these were incorporated into the plan. Governmental bodies were consulted throughout the entire process.</p> <p>Each chapter of the Ocean SAMP was opened for public review before being finalized, and the management team revised and responded to every single comment, in documents that remain public to this day.</p> <p>The cross-border dimension of planning has been very reduced. In the delineation and management of the Area of Mutual Interest, only government agencies from RI and MA and federal counterparts have been involved. And, because of the creation of</p>

Assessment Question	0	1	2	3	Justification
					this Area, MA fishermen have been granted seats in the Ocean SAMP Fisheries Advisory Board.
d) To what extent were barriers to cross-border collaboration resolved?	Cross-border collaboration remains a major challenge	Some significant barriers to cross-border collaboration have been resolved but others persist	The major barriers to cross-border collaboration have been resolved but minor difficulties remain	All significant barriers to cross-border collaboration have been resolved	<p>The Ocean SAMP was purposely design to address issues involving state- and federally-led processes for offshore wind infrastructure development, and it has largely succeeded in resolving all significant issues.</p> <p>Interstate collaboration was not a prioritised issue, but the necessary engagement was done and the mechanisms were introduced for collaborating in matters deemed to be important, such as consultations with MA during the planning process or the creation of the Area of Mutual Interest.</p>
e) To what extent are there significant differences in the type and quality of information available for the jurisdictional zones?	There are major differences in the quality and scope of information for the different jurisdictional zones	Significant differences in the quality of information on the different jurisdictional zones are limited to a few topics	While there are differences in the scope and quality of information this is not seen as a major constraint on the formulation of this MSP	The quality and scope of information for each jurisdictional zone is similar	<p>In the area of the Ocean SAMP the same information is available for state and federal waters, which is an obvious aspect of the plan.</p> <p>There seem to be important differences in the type and quality of the information used by different states to manage their marine waters. This is consequence of the fact that states design and implement their coastal programmes in relative isolation from one another. However, it does not seem to have been a decisive factor for marine planning.</p> <p>To some degree, the NE Regional Ocean Plan is addressing some of the differences that exist in the data used by the different states and federal agencies to manage marine and coastal areas.</p>

3.7. Features of the implementation phase

Implementation of the Ocean SAMP takes place by means of the application/enforcement of a set of (so-called) 'General Policies' and 'Regulatory Standards' described in chapter 11 of the Ocean SAMP document (RICRMC, 2011). These two types of implementation mechanisms are used differently depending on whether developments take place in state or federal waters (cf. Table 4):

- The '**General Policies**' are applied by the CRMC through its different management and regulatory functions in state waters. Moreover, for the permitting of offshore developments in state waters, such developments are bound by the 'General Policies', i.e. a permit is only granted if the developer demonstrates that it has abided by the policies. However, for developments in federal waters and for purposes of CZMA federal consistency reviews, the 'General Policies' are merely advisory, i.e. they cannot be used as the basis for concurrence or objection decisions.
- The '**Regulatory Standards**' constitute enforceable regulations both for the purpose of permitting decisions in state waters, and for CZMA consistency decisions in federal waters, in addition to other applicable (federally approved) RI CRMP policies.

Table 4 - Degree of enforceability of the Ocean SAMP's implementation mechanisms in state and federal permitting processes

Ocean SAMP implementation mechanism	Permitting process	
	State	Federal (CZMA consistency review)
General Policies	Enforceable	Advisory
Regulatory Standards	Enforceable	Enforceable

The main aims of the '**General Policies**' were to promote and enhance existing activities, specifically in the context of new developments; and ensure that these new developments undergo a rigorous review during the permitting processes, in line with the CRMC's public trust responsibilities. 'General Policies' were drawn for ecology; global climate change; cultural and historical resources; commercial and recreational fisheries; recreation and tourism; marine transportation; navigation and infrastructure; and offshore renewable energy and other offshore development.

Through the 'General Policies' the Ocean SAMP created the (so-called) 'Habitat Advisory Board' (HAB) and 'Fishermen's Advisory Board' (FAB). The former is a standing panel composed of five representatives of marine research institutions and four of environmental NGOs, all with a focus on the area of the Ocean SAMP. It is an advisory body to the CRMC on the ecological function restoration and protection of the marine environment, as well as on the siting, construction and operation of offshore developments in the Ocean SAMP area. The HAB has held several meetings and been consulted occasionally by federal and state agencies and the offshore wind developer since adoption of the plan.

The FAB is a similar standing panel tasked with advising the CRMC on the siting and construction of other uses in marine waters from the perspective of professional and recreational fishermen. As its 'Habitat' counterpart, it is a nine-member board, of which one representing each of RI's six fisheries (bottom trawling, scallop dredging, gillnetting, lobstering, party and charter boat fishing, and recreational angling) and the other three representing Massachusetts fishermen who fish in the Ocean SAMP area. As per the 'Regulatory Standards', the 'Fishermen's Advisory Board' has been engaged frequently with the developer of the Block Island wind farm during the permitting and construction process, and more recently – although, according to interviewees consulted for this study, to a lesser extent – with federal agencies and developers about the development in the joint RI-MA Area of Mutual Interest.

A further entity created by the 'General Policies' of the Ocean SAMP is the 'Joint Agency Working Group' (JAWG), composed of representatives of state and federal agencies with regulatory

responsibility over a particular proposed project, as well as of the Narragansett Indian Tribe. The 'Working Group' is tasked with establishing project specific requirements concerning pre-construction, construction, operation and decommissioning of new offshore developments, based on the Ocean SAMP's policies and regulatory standards. The 'Working Group' is yet to be created. In its absence cross-jurisdictional coordination between the state and federal levels during implementation of the Ocean SAMP is taking place through other consultative mechanisms led by the leading permitting agencies.

The Ocean SAMP also refers to the CRMC convening a (so-called) 'Science Advisory Panel for Climate Change' to "advise on findings of current climate science for the region and the implications for Rhode Island's coastal and offshore regions" (RICRMC, 2011, ch.11, p15). However, this panel has not been established, and climate change issues are being dealt with primarily through the process of developing the 'Shoreline Management (Beach) SAMP'. This process concentrates exclusively on climate change impacts on coastal lands, and not on offshore areas.

The '**Regulatory Standards**' specify the procedures and norms that new developments must observe through the stages of application; design, fabrication and installation; pre-construction; construction and decommissioning; and monitoring. They are detailed and comprehensive, and their description is beyond the scope of this report. The following aspects, which result from the enforcement of the 'Standards', deserve brief mention, though:

- the creation of the water use category 4E in the 'Renewable Energy Zone' SE of Block Island, to designate a multi-purpose use area (i.e. a type 4 classification) as a "preferred site for large scale renewable energy projects in state waters". (RICRMC 2011, ch.11, p.24);
- the designation of (so-called) 'Areas of Particular Concern' (APC) with the goal of protecting areas with high conservation value, cultural and historic value, or human use value from large-scale offshore developments. Based on the studies conducted for the Ocean SAMP, designated areas include historical shipwrecks, archaeological and historical sites; offshore dive sites; glacial moraines; designated shipping lanes, precautionary areas, recommended vessel routes, ferry routes, dredge disposal sites, military testing areas, unexploded ordnance, pilot boarding areas, anchorages, and a coastal buffer of 1 km; areas of high fishing activity; heavily-used recreational boating and sailboat racing areas; and naval fleet submarine transit lanes.
- the designation of (so-called) 'Areas Designated for Preservation' (ADP) in state waters in the Ocean SAMP area for the purpose of preserving them for their ecological value. These areas are given additional protection than the APCs, and in them the CRMC shall prohibit any large scale offshore development, mining and extraction of minerals and any other use that might result in significant habitat loss. ADPs in the Ocean SAMP include the entire area of state waters within the 20m contour, for its importance as sea duck foraging habitat.

Key aspects of the implementation of the Ocean SAMP are indicated in Figure 12, in years 2012 and 2013. Smythe *et al.* (2016) also summarised some of the achievements of the Ocean SAMP implementation phase in the following manner:

- A new regulatory process for evaluating applications to develop offshore renewable energy in the RI Ocean SAMP area;
- New mechanisms to facilitate continued stakeholder engagement through the FAB and HAB;
- Provisions for regular updates every five years to ensure adaptive management;
- Designation of a 13 square-mile Renewable Energy Zone, pre-selected as preferred for wind energy through the stakeholder process and scientific studies conducted throughout the Ocean SAMP;

- Increased protection of 54% of the Ocean SAMP area as either 'Areas of Particular Concern' and 'Areas Designated for Preservation'; and
- Organisation of biannual public forums used to provide updates on implementation and research, as identified through the science research agenda (CRMC 2012; cf. section 3.7.1 below).

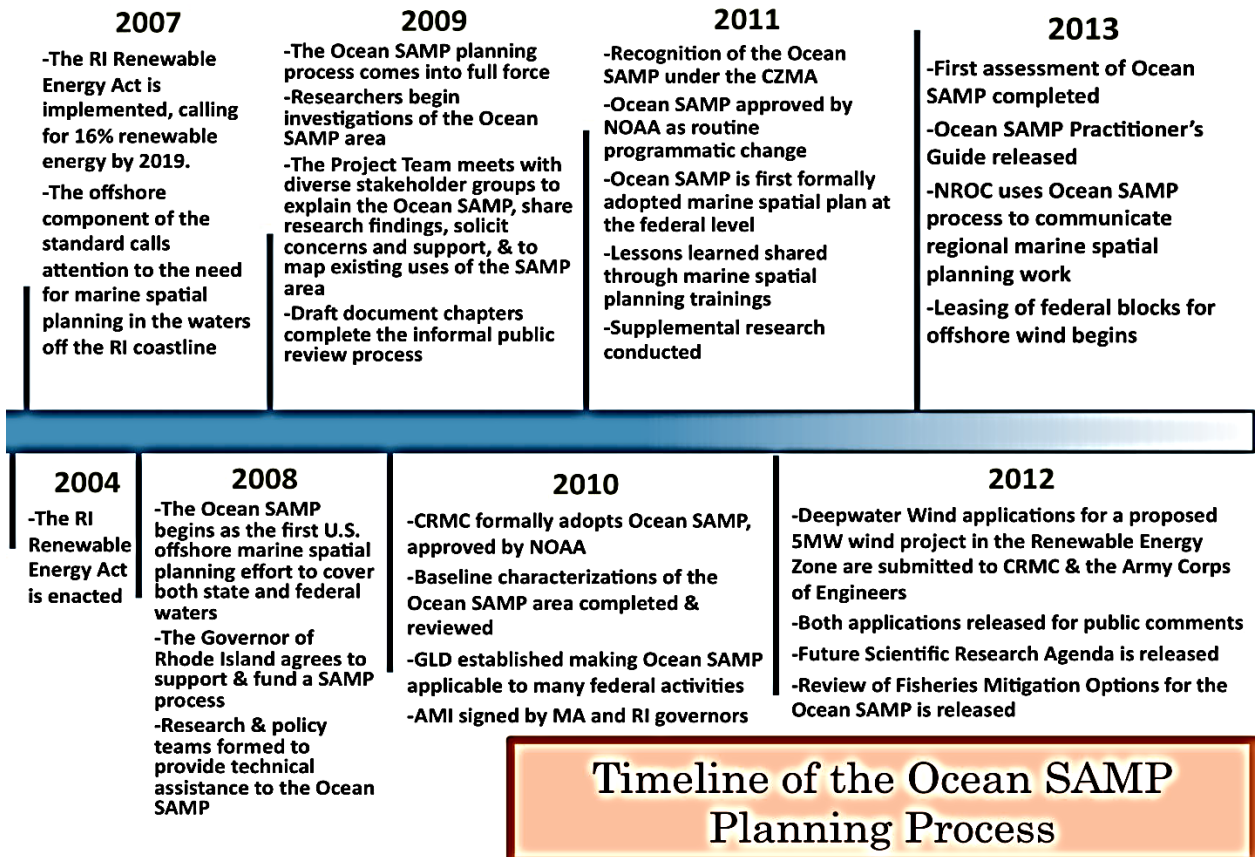


Figure 12 - Timeline of key events in Ocean SAMP planning and implementation (Source: Mulvaney 2013)

3.7.1. Adaptive management of the Ocean SAMP

Section 1130 of the Ocean SAMP describes a suite of adaptive management measures to be applied during implementation of the plan. This section briefly reviews their application so far:

- 1) *Ocean SAMP Science Research Agenda*: the agenda was published in October 2012, following recognition in the Ocean SAMP of the need for additional research, in particular with respect to understanding RI's offshore environment and human activities, the effects of future developments and other human impacts, and the project impacts of climate change. The Agenda was elaborated in a "transparent [manner], involving parties through questionnaires, as participants in meetings, and as document reviewers" with input from Ocean SAMP researchers, state and federal agencies, environmental organisations, sector organisations (fishing, recreation and tourism sectors) and the general public (Anon. 2012, p.2). It addresses four topic areas, namely i) baseline data, to refine the characterisation of ecosystems and human uses; ii) monitoring programmes, to assess impacts from developments and climate change; iii) ocean engineering, for advancing offshore renewable energy technology; and iv) information network, relative to the organisation, analysis, visualisation and dissemination of information.

Funding for the research identified in the Agenda was expected to come from different sources, and so it has been in practice, as different grants – including from BOEM and offshore wind developers – have been supporting some of the work. Specific criticism of the Agenda has been mentioned by Smythe (2016, p.52), including an excessive focus on biophysical research, opacity of tendering processes and lack of coordination and dissemination of research efforts. From the interviews conducted for this study, the major concern appears to be the lack of adequate long-term funding that could ensure implementation of the Agenda in its entirety, and not in what appears to be a piecemeal approach where coordination between the different projects seems insufficient. The study team was not made aware of any mechanism for systematically incorporating the findings from new research into the Ocean SAMP (see items 2 and 4 below).

- 2) *Progress Assessment and Monitoring Process*: This was planned to be a mechanism by the CRMC to assess progress towards achieving the goals, objectives and principles of the Ocean SAMP. It would be an ongoing process with biennial reporting to the public via the project’s website. As far as the study team could observe, this process has not been established as described in the Ocean SAMP.

An assessment of progress and achievements was conducted in 2013 though, which could be regarded as part of CRMC’s commitment to the broader Progress Assessment and Monitoring Process (cf. Mulvaney 2013). This assessment was commissioned by RI Office of Energy Resources to URI-CRC, who engaged an external consultant to ensure objectivity. No other biennial assessment has been conducted so far, due primarily to the lack of funds. Given this constraint, the CRMC and URI-CRC have adopted a more opportunistic approach using other related studies to shed light on the outcomes of the Ocean SAMP. That was the case with the 2015-2016 review conducted as part of a broader analysis of MSP experiences in the US (Smythe 2016), as well as this very case study, which URI-CRC used to revisit some of the achievements of the plan. However, as mentioned above relative to the new research data, it is not clear whether and how the findings from these studies are being incorporated into the Ocean SAMP, given that it has not been subject to any major review since adoption.

- 3) *Ocean SAMP Management Plan*: It was proposed that the CRMC would produce a plan for the “proactive management of the Ocean SAMP region and [implementation of its] goals” (RI CRMC, 2010, Chapter 11, p.9). The main components of this Plan would be the Ocean SAMP Research Agenda, the Progress Assessment and Monitoring Progress, stakeholder involvement and education and implementation of Ocean SAMP policies and regulations. As far as the study team could gather, no such plan has been produced. Periodic follow-up of implementation has been conducted at the CRMC Ocean SAMP Subcommittee meetings, which on some occasions have led to slight amendments to the Ocean SAMP.²⁹
- 4) *Five-year Review and Update*: A major review was scheduled to take place every five years after adoption of the Ocean SAMP. Although Smythe (2016, p.53) mentions that, as of end 2015 “CRMC continue[d] to work hand-in-hand with CRC on the five-year update”, the study team found no evidence of a structured process for reviewing and updating the Ocean SAMP. As mentioned in item 2) above, some degree of reviewing

²⁹ Agenda and minutes of Ocean SAMP Subcommittee meetings until 15 April 2014 are accessible at http://www.crmc.ri.gov/samp_ocean.html

has been carried out 'on the back' of other data collection and assessment initiatives – for example the update of the Recreation and Tourism chapter following a study on this sector for the NE Regional Ocean Plan. Also, as described in item 3), other amendments have been introduced by the Ocean SAMP Subcommittee, usually following the publication of new data or changes to regulations. However, due to the lack of funding, a "major review [...] using principles honoured during the development of the Ocean SAMP, including involving stakeholders and basing all decision on the best available science" (RI CRMC, 2010, Chapter 11, p.9) has not been carried out.

- 5) *Periodic Engagement of the Public:* The first Ocean SAMP public forum was held in April 2015. Before that, regular public events related to the Ocean SAMP and MSP more generally were held between 2011 and 2013, in some cases to discuss proposed amendments to the plan.³⁰ These events have also served to provide updates about the implementation of the plan.

In addition to the five measures described in the paragraphs above, the Ocean SAMP management team also developed a system for assessing progress and outcomes of planning and implementation. It builds on Olsen's 'Order of Outcomes' framework (cf. Olsen 2003), that represents progress towards the goal of sustainable development by means of progressive achievements on different temporal and spatial scales (cf. Figure 13). By means of indicators for the categories under each 'order', the framework postulates that it is possible to follow and periodically assess progress towards the goal(s) of the intervention.

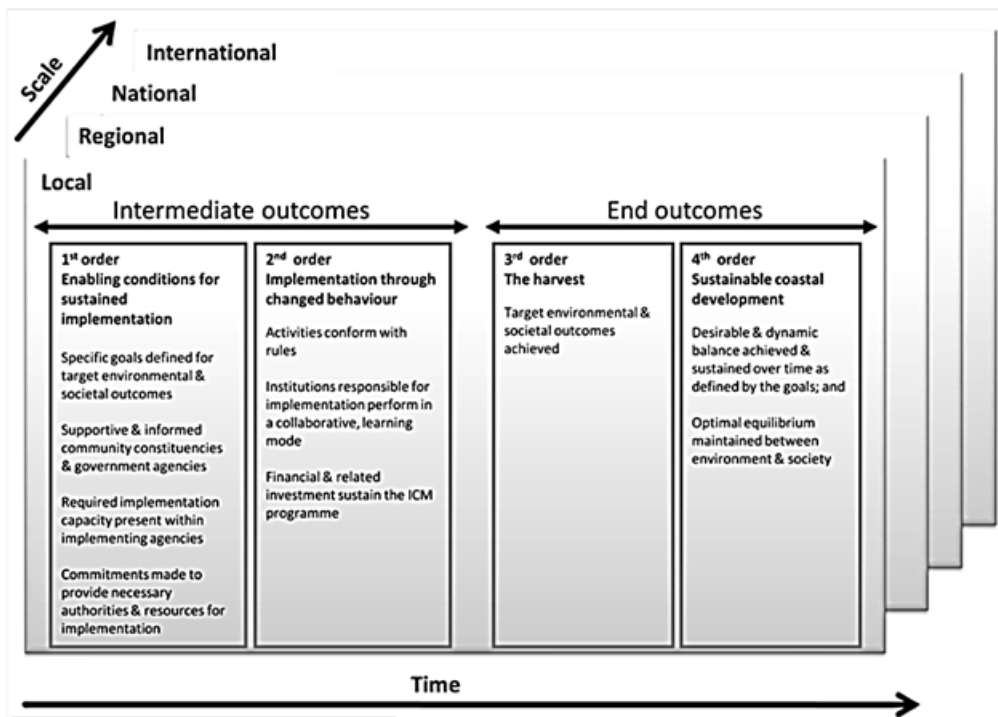


Figure 13 - Olsen's 'Order of Outcomes' framework (Adapted from Olsen 2003)

This framework was used to assess the achievement of 'first order outcomes' during the planning phase. A baseline was defined in August 2009 and progress was reassessed in March 2011, which showed progress primarily in relation to the development of a strong stakeholder

³⁰ The schedule of events and material for several of these are available at http://seagrant.gso.uri.edu/oceansamp/calendar_archive.html

constituency. However, the framework has not been used since. The director of the CRMC in particular is sceptical about the usefulness of the framework for informing management decisions, as it does not address the needs of practical implementation directly. Whether and how the framework will be used in future progress and outcome assessments remains unclear.

Assessment Question	0	1	2	3	Justification
Impacts on the behaviour of institutions					
a) <i>To what extent are implementing institutions collaborating effectively to implement the MSP process?</i>	<i>There is some MSP collaboration but this is no more than the methods employed by institutions before MSP initiation</i>	<i>More integrated forms of MSP planning and decision making are apparent but there are still some conflicts or inefficiencies</i>	<i>MSP collaboration and integrated planning between institutions are generally good but issues arise from time to time</i>	<i>There is effective cross-border collaboration between Implementing institutions to ensure that management is integrated throughout the MSP area</i>	The Ocean SAMP has established the mechanisms for inter-agency collaboration during implementation, involving both state and federal agencies, Indian Tribe representatives, and representatives of fisheries and environmental protection interests. Issues arise occasionally, in part due to the novelty of the processes associated with large-scale offshore wind developments. Cross-jurisdictional cooperation has been largely effective across the state-federal border, as well as the RI-MA border with respect to implementation of the Ocean SAMP in the Area of Mutual Interest. There has not been any inter-state cooperation on other Ocean SAMP-related matters, as it was not considered necessary.
b) <i>To what extent are MSP policies, procedures and regulations being enforced?</i>	<i>Enforcement is weak and non-compliance with rules is widespread</i>	<i>Enforcement is uneven; some rules are enforced more effectively than others and enforcement targets some groups more than others</i>	<i>Enforcement is generally effective but there are notable exceptions</i>	<i>Enforcement is effective and compliance is high throughout the MSP area</i>	With respect to the activities directly regulated by the Ocean SAMP, implementation has so far largely proceeded as planned. This however only concerns the licensing and (in the REZ) construction of offshore wind farms, and to some extent how other marine users should behave in the vicinity of the turbines. Cases of non-compliance persist to this day mainly in fishing, but this is an issue of fisheries enforcement and not enforcement of Ocean SAMP regulations.
c) <i>To what extent is the MSP's legal framework, and other laws and regulations that apply within the MSP area (including international law), contributing to achieving the goals of this MSP?</i>	<i>The existing legal framework has had a largely detrimental effect, and constrained progress towards the MSP goals in important ways.</i>	<i>The legal framework has enabled some progress towards the goals of the MSP, but important gaps remain to be addressed.</i>	<i>The legal framework has constrained some achievements of the MSP, but is has supported important developments towards its goals.</i>	<i>The legal framework has been a key contributing factor for the success of this MSP. Outstanding gaps are being addressed.</i>	The ability to enforce regulations and policies upon ocean users, notably offshore wind developers is regarded as a decisive factor for its success, at it enables the state to regulate developments in line with the content of the plan, as accepted by state and federal government, and plan stakeholders. The fact that the Ocean SAMP does not attempt to regulate existing uses – other than in terms of their interactions with new developments – was a decision contested by some groups, in particular environmentalists. This was justified with the fact that regulating those activities is beyond the legal remit of the CRMC.
d) <i>To what extent are the MSP regulations and management measures consistent across the border and do they enable</i>	<i>MSP regulations and management measures are inconsistent across the borders and this presents considerable</i>	<i>Some efforts have been made to standardize cross-border regulations and management measures for some sectors but</i>	<i>Efforts have been made to standardize regulations and management measures across all sectors involved, but</i>	<i>Regulations and management measures are consistent throughout the MSP area and implementation is</i>	In the federal waters within the Ocean SAMP area the Ocean SAMP created a new regulatory and management regime that applies across borders in the sense that it affects federal processes, and by virtue of the federal consistency provision the interest of other states. In the Area of Mutual Interest has this regime been designed with the purpose of aligning with the interests of neighbouring MA.

Assessment Question	0	1	2	3	Justification
<i>coordinated cross-border/multi-national implementation of the plan?</i>	<i>challenges to implementing the plan</i>	<i>not all</i>	<i>there are still inconsistencies between their implementation across borders</i>	<i>well coordinated</i>	
e) <i>To what extent has having a monitoring programme/M&E framework across borders affected MSP cooperation?</i>	<i>The monitoring/M&E framework (or lack thereof) has not facilitated or has actively challenged the implementation of the cross-border MSP plan</i>	<i>The monitoring /M&E has caused some major issues; some of which have been overcome and others which still need addressing.</i>	<i>In parts, the monitoring/M&E has been a successful means of establishing cooperative and cross border MSP</i>	<i>The monitoring/M&E has been well established and is a notable area of success in terms of cross-border MSP.</i>	The M&E framework that applies to the entire Ocean SAMP area – and therefore across the state-federal border - has not had any effect on cross-border MSP cooperation.
f) <i>To what extent is the MSP process practicing adaptive management by using monitoring results to shape future management decisions?</i>	<i>No systematic monitoring is in place and there is little or no visible adjustment of management practices</i>	<i>Indicator results are used to adjust management practices in either social, economic or environmental ways but not in more than one</i>	<i>Adaptive management is practiced and has produced some significant adjustments to the MSP process</i>	<i>Adaptive management is widely practiced and good practices are shared across borders</i>	<p>The procedures for adaptive management provided for in the plan are yet to be fully developed, and adjustments to the plan have been carried out so far mostly on an ad hoc basis. No standard set of indicators has been developed, and no regular monitoring is taking place.</p> <p>The pilot nature of the Block Island wind farm development has meant that procedures for offshore wind development have been/are being revised at the process unfolds, which is likely to lead to adjustments in the plan, as well as in the procedures of state and federal agencies involved in the process.</p> <p>(Further elaboration in the text)</p>
g) <i>To what extent is support within the political structure at the national level being maintained?</i>	<i>Political support at national levels is weak</i>	<i>Political leaders recognize the MSP process but public statements supporting the process are rare</i>	<i>Political support is strong, well-informed and frequently expressed but this is not consistent across borders</i>	<i>There is clear political support for the MSP plan across the borders</i>	<p>Political support is undeniably strong within RI, but not particularly with respect to cross-border collaboration in planning, which is a very small component of the plan. The same appears to be true in neighbouring state MA.</p> <p>In both states there has been strong political support for the establishment of the Area of Mutual Interest, which is the only clear expression of cross-border collaboration in planning in the Ocean SAMP.</p>
h) <i>To what extent is there integrated management of sectors within the country zones of</i>	<i>The management of sectors occurs in silos with little or no consideration of interactions and</i>	<i>There are some examples where management strategies are linked between sectors but</i>	<i>There is integration between the management strategies of most sectors, and work</i>	<i>Sectoral management strategies are integrated across all sectors in the</i>	Sector management is mostly done by the respective agencies, whenever necessary or required by law in consultation with agencies responsible for other sectors. There are important integrative mechanisms/institutions in place, the CRMC being the most important one at the level of RI state. Similar structures exist in other states.

Assessment Question	0	1	2	3	Justification
<i>the MSP?</i>	<i>interdependencies</i>	<i>overall management is done mostly sector by sector</i>	<i>is underway for integrating the outstanding sectors</i>	<i>country zones</i>	The Ocean SAMP created the Joint Agency Working Group to integrate the functions of state and federal agencies with respect to new developments in the Ocean SAMP area; and created the FAB and HAB so that the fisheries sector and the scientific and environmental communities could have a say in the development of other sectors in that area.
i) <i>To what extent is there evidence of implementation/management coordination between land and sea?</i>	<i>There is no coordination between the MSP and terrestrial coastal planning;</i>	<i>There is some coordination between terrestrial and marine planning but major issues remain unresolved</i>	<i>There are many examples of coordination between terrestrial and marine planning;</i>	<i>There is coordinated and adaptive management of the land-sea linkage and all land-based sources of threat/damage have been successfully addressed</i>	<p>The Ocean SAMP is part of the RI coastal programme, which has been designed to regulate and manage land-sea interactions in the coastal zone of RI. The coastal programmes of other states have the same function. The typology of coastal waters in the RI coastal programme is an expression of the joint management of land and sea areas by the RI CRMC.</p> <p>The Ocean SAMP itself does not regulate land-based activities extensively, not least because it does not include any emerged land areas. Instead it has mapped and assessed the known and foreseeable impacts of novel developments on certain land-based activities and values, and put in place regulations and policies to minimise and mitigate them.</p> <p>Although planning on land and at sea are largely separate processes, there are inter-agency coordination mechanisms in place to ensure a sufficient degree of consistency.</p>
Impacts upon financial investments					
a) <i>To what extent are necessary investments in infrastructure being made?</i>	<i>Infrastructure investments are minimal and necessary infrastructure is missing or inadequate</i>	<i>Infrastructure investments have begun but are not consistent across borders</i>	<i>Infrastructure required by the MSP process is in place but maintenance is poor; there is uneven distribution of investment across borders</i>	<i>Infrastructure required by the MSP process is in place and well maintained throughout the MSP area</i>	<p>Large investments in offshore wind have been made since the adoption of the Ocean SAMP, as a result and in line with the content of the plan. So far the vast majority of this investment is confined to RI though, with investments in the AMI jointly managed with MA having started only recently.</p> <p>There have not been any other relevant investments in infrastructure resulting from Ocean SAMP implementation.</p>
b) <i>To what extent is the funding of this MSP sustainable over the long term?</i>	<i>The sustainability of funding is a major unresolved issue</i>	<i>Funding for the short term is adequate but long-term funding mechanisms are not in place</i>	<i>Some long-term funding mechanisms are in place but their outcomes or sustainability are uncertain;</i>	<i>Short term and long-term sustainable funding mechanisms are in place and secure throughout</i>	Funding for the Ocean SAMP largely ceased with its approval in 2010/2011, and funding for both the Research Agenda and regular follow-up of implementation has been insufficient and sourced from external funders, namely offshore wind developers as part of their pre- and post-construction surveys. Current and future funding of Ocean SAMP implementation remains a challenge with no solution currently in sight.

Assessment Question	0	1	2	3	Justification
				<i>the MSP area</i>	
c) <i>To what extent is cross-border collaboration on MSP factored into the budget or funding mechanisms?</i>	<i>Cross-border collaboration only minimally factored in to budget or funding mechanisms</i>	<i>Cross-border collaboration has been considered in the budget but funds are insufficient</i>	<i>Funds have been allocated to cross-border collaboration but not consistently across the borders</i>	<i>All collaborating countries/states have allocated sufficient and funds for collaboration across borders</i>	(Grade not applicable) Cross-jurisdictional collaboration was not factored in separately in budgeting decisions or funding mechanisms. The issue therefore does not apply to the Ocean SAMP.
Impacts on the behaviour of user groups and businesses					
a) <i>To what extent are the good practices called for by the MSP process being adopted by target groups?</i>	<i>Good practices advocated by the MSP have not been adopted by target groups</i>	<i>There are a few instances where MSP good practices have been adopted but most are not operational</i>	<i>Some good practices are consistently practiced, but others are not</i>	<i>All MSP process good practices are being applied by target groups</i>	With respect to the main sector targeted by the Ocean SAMP – offshore wind - it seems that all good practices advocated by the plan are being followed. With respect to the other marine users, the Ocean SAMP only calls for good practices in terms of how they interact with the offshore wind farms, and so far these practices seem to have been adhered to. Institutional good practices in terms of engaging the FAB and HAB in decisions potentially affecting fisheries and the natural environment also seem to be followed whenever relevant. There seem to be some concerns about BOEM not applying the good practices in the Ocean SAMP in sites outside the Ocean SAMP area, indicating that these good practices are not being fully internalised in the organisation, but this does not directly relate to Ocean SAMP implementation though.
b) <i>To what extent are destructive forms of resource use being reduced?</i>	<i>Several destructive resource uses of concern to the MSP process continue unabated</i>	<i>Resource users are aware of destructive practices but efforts to change behaviour are mixed</i>	<i>With some important exceptions, user groups have ceased destructive practices of concern</i>	<i>Destructive resource use practices have been eliminated</i>	Destructive resource use practices is generally not recognised as a problem in the Ocean SAMP area. There are some instances of non-compliance with existing regulations, especially in the fisheries sector, but these are not regarded as cases of destructive practices. The Ocean SAMP has not directly attempted to curb existing destructive practices, but instead introduce good practices relative to resource uses that did not exist previously.
c) <i>To what extent are conflicts among user groups being reduced?</i>	<i>User conflicts are widespread and have not been reduced</i>	<i>Number and severity of user conflicts appears to be declining</i>	<i>Decline in important user conflicts has been documented</i>	<i>Major use conflicts have been resolved</i>	The potential for major conflicts between existing users and novel developments has largely been eliminated, and the Block Island offshore wind farm has been constructed without any opposition worth of mention. It is reasonable to anticipate that the Ocean SAMP provides an adequate platform to avoid conflicts and help negotiate solutions between existing and new users also in the future. The Ocean SAMP has not explicitly attempted to resolve other use conflicts, which were largely non-existing in the area of the plan.

4. OUTCOMES AND LESSONS LEARNED

4.1. Achievement of planned goals and impacts of the Ocean SAMP

The broad nature of the Ocean SAMP goals renders it very difficult, if at all possible, to assess goal achievement in a precise manner. Such an assessment is compounded further by the absence of mechanisms for periodic monitoring and evaluation of implementation.³¹ The two reviews of Ocean SAMP implementation published so far, by Mulvaney (2013) and Smythe (2016) employed different frameworks for reviewing and reporting progress, which renders comparisons and the assessment of progress from the first to the second review problematic.

Against this background, it is only possible to provide an estimate of achievements so far, based on those two reviews and the input from interviewees contacted for this study. This is reviewed in subsections 4.1.1 to 4.1.3, as follows:

- Section 4.1.1: Ocean SAMP goals 2 – *Promote and enhance existing uses* and 3 – *Encourage marine-based economic development*, and also looking more broadly at the contribution of the Ocean SAMP to the sustainability of social and economic conditions;
- Section 4.1.2: Ocean SAMP goal 1 – *Foster a properly functioning ecosystem that is both ecologically sound and economically beneficial*, considering also how cumulative impacts are being addressed, and impacts on ecosystem goods and services and on biodiversity; and
- Section 4.1.3: Ocean SAMP goal 4 – *Build a framework for coordinated decision-making between state and federal management agencies*, including effects on collaboration across other jurisdictional borders.

More generally, it can be considered that the Ocean SAMP has fulfilled its broader aim in relation to the main driver of offshore renewable energy development, having established a robust process enabling the identification of suitable areas for offshore wind development, considering social, environmental and economic dimensions, and ensuring buy-in from a broad constituency. The Ocean SAMP team has purposely utilised MSP as a process for bringing people together, setting a foundation for dialogue and collaboration, which is considered by the vast majority of interviewees, in this and earlier studies, as an outstanding achievement that will remain beyond the Ocean SAMP.

4.1.1. Impacts on socio-economic conditions, including sea use conflicts

In decreasing order of importance, the following achievements can be reported:

- *Streamlining the regulatory process and facilitating investments* in offshore wind development, resulting in the construction of the first US offshore wind farm in the Renewable Energy Zone off Block Island. This achievement needs to be seen against the difficulties faced by the Cape Wind project off neighbour state Massachusetts, which has been stalled by litigation and, more recently, the expiry of power purchase agreements. It has been estimated that the Ocean SAMP reduced the time for permitting of the Block Island wind project by five years (Boehnert 2015). As of December 2016, the offshore wind farm was generating power.
- *Generating and compiling an unprecedented amount of knowledge about the ecosystem in the Ocean SAMP area, including of human uses*. The compilation of the oral histories of the Narragansett Indian Tribe and their inclusion into a state regulatory document is unprecedented and of great socio-cultural significance. In addition to its usefulness for regulatory and management decisions, that new knowledge ought to be recognised for its intrinsic value and its contribution to a more informed and engaged society.

³¹ In the only biennial evaluation carried out so far, Mulvaney (2013, p.21) observes that “[w]hile 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.”

- *Delimitation of restricted use areas, to preserve the environment or certain human activities*, respectively the Areas Designated for Preservation and Areas of Particular Concern, which have been established based on data collected for the Ocean SAMP. The regulation of these areas ensures that new developments will be restricted and priority will be given to the sustainability of certain ecosystem conditions and/or existing human uses, both commercial and recreational.
- *Development of tools and coordination mechanisms facilitating the siting of offshore infrastructure and other activities* in areas with the least impacts on other activities. Even if no other major developments than the offshore wind farms off Block Island and in the Area of Mutual Interest are being planned at this stage, the Ocean SAMP has put in place systems and procedures to ensure that the sustainability of existing activities – notably fisheries and recreational maritime activities – is impacted the least.
- *Establishment of new relationships between user groups, notably fisheries and offshore wind developers, promoting good practices* introduced through the policies of the Ocean SAMP; reducing conflict between user groups, particularly offshore wind developers and fishermen, who remain engaged through the FAB and fisheries liaison officer working at Deepwater Wind, who works to minimise disruption to fishing activities from the construction and operation of the wind farm. The role of the liaison officer is greatly appreciated by the fishing community, including by individual fishermen who opposed the Ocean SAMP and the wind farm at initiation.
- *Related to the previous point, creation of a 'social capital', a constituency of individuals and organisations engaged in the protection and sustainable use of RI's offshore marine resources*. This constituency will be instrumental not only in the continued implementation of the Ocean SAMP, but also in related efforts such as the ongoing Beach SAMP and the possible future Narragansett Bay SAMP. In the same way as the Ocean SAMP benefitted from relationships established through earlier management initiatives, so can these newer efforts benefit from the relationships built during the Ocean SAMP process.

4.1.2. Impacts on ecosystem goods and services, and on biodiversity

Impacts on the environmental conditions of the Ocean SAMP area are particularly difficult to assess, at they take a long time to be observed and require dedicated monitoring efforts, which so far have not produced any documented evidence of changes attributable to the plan. Hence at this stage it is only possible to assess the degree to which the conditions are created for these impacts to be generated, and thereby goal 1 of the Ocean SAMP to be achieved. The following conclusions are possible to draw:

- *Addressing cumulative impacts on the environment*: The Ocean SAMP, as all other CRMC management instruments, explicitly adopt an ecosystem perspective to resource regulation and management. To this end, the Ocean SAMP has generated a large amount information on the structure and function of the marine ecosystem and how this is impacted and impacts on human uses. The regulations and policies of the Ocean SAMP are based on this information and designed to minimise or mitigate the impacts of human activities – in particular new developments – on different ecosystem components, in other words minimise and mitigate cumulative impacts. The design and implementation of these regulations, including the oversight of construction and operation, has involved representatives of different sectors and interest groups, in part to ensure that their views on the potential impacts of regulations, policies or activities are duly addressed.

Taken together, these measures indicate that there is a structured effort to ensure that cumulative impacts are adequately managed, not only impacts on the environment, but also on human activities that depend on it.

- *Sustaining the flow of ecosystem goods and services*: Largely as a result of the point above and of the principle to honour existing activities – which presupposes that “the [Ocean SAMP] area’s biology and habitat must be fully understood and highly respected

as decisions for the incorporation of future activities are determined” (McCann and Schumann 2013, p.17) – the Ocean SAMP’s policies and regulations have been designed with the explicit aim of sustaining essential ecosystem functions that sustain a prosperous marine economy. The Block Island wind farm has been sited with this aim in mind, and more recently federal agencies have revised the map of lease blocks in the Area of Mutual Interest, removing those blocks that coincide with essential fish habitat in Cox’s Ledge, that sustain important fisheries.

Also, as observed above, the creation of Areas Designated for Preservation and Areas of Particular Concern is a key instrument to ensure that elements of the ecosystem known to play an important role in sustaining the flow of ecosystem goods and services are duly protected.

- *Impacts on biodiversity:* These impacts are not possible to quantify at this stage. An illustrative case of how the Ocean SAMP and the relationships it has fostered is having an impact on species conservation is that of the decision to alter the schedule for pile driving during the installation of the turbines off Block Island so as to minimise interference with migrating North Atlantic right whales (cf. Smythe, 2016, p.46).

4.1.3. Impacts on institutional coordination, including across jurisdictional borders

The following achievements can be reported in what concerns improved institutional coordination:

- *Close relationship between state and federal agencies in developing and implementing the Ocean SAMP.* Boehnert (2015) observed in this respect that “[t]he state worked closely with federal regulators, who approved the Ocean SAMP’s jurisdiction over state waters. It was the nation’s first federally-approved state ocean zoning plan.” While the Ocean SAMP has not changed the roles and responsibilities of state or federal agencies – other than those of the CRMC – it has established collaborative arrangements to improve the coordination between agencies involved in managing and regulating marine resources use. Such arrangements include the JAWG and, for BOEM-led developments, BOEM’s Offshore Renewable Energy Task Force.
- *Approval of the Geographical Location Description for federal waters in the Ocean SAMP area,* effectively rendering the Ocean SAMP the fundamental regulatory instrument for any development proposed for the entire area.
- *Including the Narragansett Indian Tribe as a formal stakeholder* in planning and implementation, granting the Tribe an unprecedented mandate to assess any developments proposed for the Ocean SAMP area in terms of social, cultural, historical or other concerns.
- *Formation of the Fisheries and Habitat Advisory Boards* as two formally recognised organs that need to be consulted on any development in the Ocean SAMP area. This has established a mechanism for incorporating the interests of the fisheries and of the environment/research communities into any decisions affecting resource use and management in the area, including its federal waters.

With respect to coordination with neighbouring states, other than informal exchanges and mutual learning, the Ocean SAMP has contributed to the identification and design of the Area of Mutual Interest governed through a Memorandum of Understanding between RI state and the Commonwealth of Massachusetts based on the regulations and policies of the Ocean SAMP.

The other formal collaborative arrangement is the inclusion in the Fisheries Advisory Board of three representatives from Massachusetts, which, although not representing the broader planning and management interests of this state, do contribute with non-RI views to Ocean SAMP regulatory process that only commits the state of RI (and activities in federal waters covered by the GLD).

These are two explicit, but so far the only cases of interstate collaboration in the marine planning of state waters. Other than this, it was found that cross-border collaboration between RI and neighbouring states during the development and implementation of the RI Ocean SAMP was, and still is, relatively limited. Despite recurrent exchanges, there is very limited if any formal cross-border collaboration in as well planning as other aspects of coastal and marine management.

In this context, the NE Regional Plan can be considered to be using MSP as a process to strengthen institutional relationships and coordinate planning decisions involving agencies at different levels (but especially federal ones). It can also provide an opportunity to expand the relationships developed through the RI Ocean SAMP across the region and share the experiences of this process more widely.

4.2. Lessons learned

4.2.1. Lessons learned from the Ocean SAMP process in general

The following points summarise the key lessons learned from the Ocean SAMP planning and implementation processes:

- *Purposeful planning with a clear driver:* Having a clear driver generated, and helped to keep, the momentum for the planning effort, as well as focus the minds and actions of the many actors involved. It also helped in the design of the regulatory and policy framework that the plan should have in order to achieve the goals relative to the main driver; and in focusing the research efforts.
- *A competent, engaged and multi-faceted team:* Marine planning is a complex and lengthy process that requires a broad scope of skills and knowledge from those involved. Moreover, if it is to be conducted in a short time and is likely to stir strong opposition from specific groups, as was the case with the Ocean SAMP, it will also require personal commitment from those individuals. It is essential to understand the complexity and difficulties of the process as early as possible in order to include the necessary competencies in the management team.
- *Managing expectations based on relationships:* The extent and outcomes of the interactions between different organisations engaged in planning depends in part on the relationships between the individuals involved, especially those in positions of authority. Knowledge about the nature of these relationships is important in order to adjust expectation about the process and results of planning.
- *A trusted and broad base of leadership:* Marine planning implies making important decisions that often affect the lives of people significantly, and those who stand to lose from the effects of those decisions can and sometimes do challenge the planning process. Leadership therefore needs to put effort into ensuring objectivity and impartiality of process and deliberations, so that it can gain the trust of plan stakeholders. The Ocean SAMP has demonstrated that having different 'leaders' for different components of the process strengthens the sense that different stakeholder groups have a dedicated 'facilitator'/entry point to the planning process; and that decisions balance different interests and views and are not the product of one individual.
- *Clearly structured process that retains flexibility:* A clear process that was regularly communicated to all involved parties helped the Ocean SAMP generate commitment and a sense of urgency that enabled it to keep the tight schedule. At the same time, it is important to keep in mind that marine planning is a complex process involving a large number of actors, and hence it is imperative that the process is able to accommodate unforeseen changes. During implementation it is necessary to keep in mind that actors do not always respond to policies and regulations as expected.
- *Building trust requires time and a well-designed dedicated strategy:* Planning is likely to yield better results and be easier to implement if it has the backing of affected stakeholders. Gaining their trust is therefore essential if one wishes to have them

contribute to planning and conform with implementation rules and policies. Depending on the complexity of the issues at stake, the trust building process might be demanding both in terms of time and effort, and this needs to be assessed at initiation. Dealing with stakeholder issues and mistrust requires specific capacities and management arrangements – chief among which ensuring that stakeholder representatives are as objective and independent from the management team as possible.³²

- *Establish open, transparent and inclusive processes:* In democratic societies this ought to be regarded as a pre-condition for building trust and gaining the support of stakeholders who expect to participate in planning and implementation processes. An important element of this effort in the Ocean SAMP was the decision to make all data openly available, and to include stakeholders – in particular fishermen, who carried the most mistrust at initiation – in data collection efforts, so as to overcome suspicion about the quality and use of the data. Another important element is making decision processes open for scrutiny, so that stakeholders understand and are given an opportunity to voice their concerns, even if decisions end up not being in their favour. Finally, it is important to acknowledge and accept that not everyone wishes to come to the planning table: some for genuine lack of interest, some because they tacitly accept decisions taken by others, and yet some as an expression of 'strategic rejection' (cf. Smythe 2016, p.44).
- *Design an adaptive management framework that works for managers:* Elaborating complicated systems for progress monitoring and periodic evaluation that are too demanding and do not address the needs of managers during implementation is likely to be a waste of time and create expectations among stakeholders that end up not being met. More modest frameworks that anticipate the needs of implementation and provide a mechanism for communicating progress and achievements to stakeholders and the public are of greater value and stand greater chances of actually being used.
- *Incorporate in the plan the regulatory and policy mechanisms required for implementation:* If a plan is to be implementable, it needs to have clear mechanisms that commit specific actors to a given course of action. Whether this is achieved by means of regulations, policies or other types of incentives is largely determined by the governance tradition in each jurisdiction. The important aspect for the plan to be achieve its goals is that it has the necessary mechanisms for enforcement.

4.2.2. Lessons learned about cross-jurisdictional collaboration

The following lessons can be extracted from the RI Ocean SAMP case study:

- *Cross-jurisdictional marine planning needs a clear and strong driver:* Planning across different jurisdictions adds complexity to planning processes, in terms of the regulatory and management regimes, the number of stakeholders and the diversity of issues. The process is likely to take longer and be more expensive, as well as more uncertain due a greater diversity of interests and the need to go through different approval processes at each jurisdiction. The Ocean SAMP succeeded because it was clear from the start what it wanted to achieve and why it needed to engage both the state and federal levels. Similarly, with respect to interstate collaboration, RI and MA states invested – and succeeded – in collaborating where there was a perceived advantage in doing so, namely the creation of the Area of Mutual Interest.
- *Working with existing policy and regulatory frameworks simplifies and shortens the planning process:* The Ocean SAMP explicitly refrained from changing the regulatory frameworks for existing marine activities. The planning process would have been much more complicated and lengthy, and faced much greater opposition had it taken the opposite route.

³² For valuable lessons learned specifically about the stakeholder process, see McCann and Schumann (2013), pp.19-23.

- *Marine planning can be an instrument for regulatory and management harmonisation across borders:* The Ocean SAMP effectively became the single, unifying regulatory and management instrument for new offshore developments in an area that previously was under two separate regimes, the state and federal ones. Although the Ocean SAMP has not dissolved these regimes, it put in place a new one that builds on and coordinates state and federal management and regulatory processes.
- *Cross-jurisdictional collaboration benefits from regularly engaging all stakeholders in the planning process, irrespective of jurisdiction:* Federal agencies were a steady contributor to the Ocean SAMP, and several of them played an instrumental role in the planning process and content of the plan. This ensured that their needs and requests were duly taken into consideration, strengthened their engagement and ownership of the process, and reduced the risk of objections later in the process. When the process came to its end the Ocean SAMP team knew with confidence that the content of the plan had been vetted by the relevant parties in all jurisdictions.
- *The planning and implementation authority needs to be accepted by stakeholders in the different jurisdictions:* The CRMC-URI partnership was recognised by all parties to the Ocean SAMP process in RI, federal agencies and neighbouring states. This allowed it to coordinate the work of the different stakeholders irrespective of their provenance, in an effective and speedy manner. The fact that the federal authorities accepted CRMC's coordination role pre-empted the need to set up a multi-cephalous leadership team, which would have likely complicated the process substantially. In the Ocean SAMP this arrangement was possible because the regulatory regime allowed the CRMC to take on that coordinating role in a process involving other jurisdictions.
- *Planning is also a tool for cross-jurisdictional exchanges and learning:* One of the 'hidden' values of the Ocean SAMP is what it has revealed about the characteristics of the planning area, not only in terms of environmental features, but also of social, economic, cultural and historical values. The added knowledge generated in this process has an intrinsic value for individuals and societies that ought to be acknowledged. It also has an instrumental value in that it might provide input to other processes or decisions affecting the area.

REFERENCES

- Anonymous (2012) *Ocean Special Area Management Plan Science Research Agenda*. October 2012. Available at http://seagrants.gso.uri.edu/oceansamp/pdf/documents/Doc_Research_Agenda_Oct2012.pdf
- Boenhert JM (2013) *Zoning the oceans: the next big step in coastal zone management*. Chicago: American Bar Association, Section of State and Local Government Law.
- Boehnert JM (2015). *How R.I. broke down barriers to wind power*. Providence Journal, 23 Jul 2015.
- Center for regulatory effectiveness [CRE] (2011) *An evaluation of the Massachusetts Ocean Plan and its implications for coastal and marine spatial planning in the United States*. Available at: <http://www.thecre.com/creipd/wp-content/uploads/2012/11/Evaluation-of-Massachusetts-Ocean-Management-Plan-11-291.pdf>
- Coastal Resources Management Council [CRMC] (2006) *Marine Resources Development Plan*. Available at: <http://nsqg.gso.uri.edu/riu/riut06003.pdf>
- CRMC (2010) *Rhode Island Ocean Special Area Management Plan (Ocean SAMP)*. Management Program Document, Providence, RI.
- CRMC (2012) *The State of Rhode Island Coastal Resources Management Program*, a.k.a. the "Red Book". Technical revision December 2012. Available at: <http://www.crmc.ri.gov/regulations/RICRMP.pdf>
- CRMC and University of Rhode Island (2008) *The Ocean/Offshore Renewable Energy Special Area Management Plan (SAMP)*. Proposal. 13 May 2008. Available at: http://seagrants.gso.uri.edu/oceansamp/pdf/documents/doc_osamp_proposal.pdf
- Commonwealth of Massachusetts (2009). *Massachusetts Ocean Management Plan*. Volume 1. Management and Administration. December 2009. Boston, MA: Executive Office of Energy and Environmental Affairs.
- McCann J and Schumann S, with Fugate G, Kennedy S and Young C (2013) *The Rhode Island Ocean Special Area Management Plan: Managing Ocean Resources Through Coastal and Marine Spatial Planning*. A Practitioner's Guide. University of Rhode Island Coastal Resources Center/Rhode Island Sea Grant College Program, Narragansett, R.I.
- McLeod KL, Lubchenco J, Palumbi SR, and Rosenberg AA (2005) *Scientific Consensus Statement on Marine Ecosystem-Based Management*. Signed by 221 academic scientists and policy experts with relevant expertise and published by the Communication Partnership for Science and the Sea. Available at <http://compassonline.org/?q=EBM>
- Mulvaney K (2013) *First Biennial Assessment of the Rhode Island Ocean Special Area Management Plan Process*. Assessment prepared for the Rhode Island Coastal Resources Management Council and the University of Rhode Island Coastal Resources Center.
- National Ocean Council (2011). *Legal Authorities Related to the Implementation of Coastal and Marine Spatial Planning*. Available at: https://www.whitehouse.gov/sites/default/files/microsites/ceq/cmstp_legal_compendium_2-14-11.pdf
- New York State Department of Environmental Conservation (NY State DEC) (2015) *New York Ocean Action Plan 2015-2015*. Draft (v.14.13 as of 1-14-2015). East Setauket, NY: NY State DEC.
- Northeast Regional Planning Body (2016) *Northeast Ocean Plan*. Available at: <http://neoceanplanning.org/plan>

Olsen SB (2003) Frameworks and indicators for assessing progress in integrated coastal management initiatives. *Ocean & Coastal Management* **(46) (3-4)**: 347-361.

Olsen SB, Page GG and Ochoa E (2009) *The Analysis of Governance Responses to Ecosystem Change: A Handbook for Assembling a Profile*. Land-Ocean Interactions in the Coastal Zone (LOICZ) Reports and Studies (34).

Olsen S, McCann J and Fugate G (2014) The State of Rhode Island's pioneering marine spatial plan. *Marine Policy* **(45)**: 26-38. <http://dx.doi.org/10.1016/j.marpol.2013.11.003>

Olsen, SB, McCann J and LaFrance Bartley M (2015) Marine spatial planning in the United States: triangulating between state and federal roles and responsibilities. In H. D. Smith, J. L. Suárez de Vivero & T. S. Agardy (Eds.), *Routledge handbook of ocean resources and management* (pp. 333-343). Abingdon, Oxon: Routledge.

R.I. Department of State (2010, Oct. 19) Details for Regulation RICRMP: Rhode Island Ocean Special Area Management Plan (Ocean SAMP) (6208). Retrieved from <http://sos.ri.gov/rules/index.php?page=details&erlid=6208#>

Smythe T, Andrescavage N and Fox C (2016) *The Rhode Island Ocean Special Area Management Plan, 2008 – 2015: From Inception through Implementation*. In McCann, J., Ed. 2016. Case Studies of Marine Spatial Planning Report Series. Coastal Resources Center and Rhode Island Sea Grant College Program, URI Graduate School of Oceanography. Narragansett, R.I. 80 pp.

Smythe T, McCann J, Andrescavage N and Fox C (2016) *Spatial Planning for Busy Waterways: A Case Study of Innovative Waterways Management in the San Francisco Bay Region*. In McCann, J., Ed. 2016. Case Studies of Marine Spatial Planning Report Series. Coastal Resources Center and Rhode Island Sea Grant College Program, URI Graduate School of Oceanography. Narragansett, R.I. 73 pp.

Tierney SF and Carpenter S (2013) *Planning for Offshore Energy Development: How Marine Spatial Planning Could Improve the Leasing/Permitting Processes for Offshore Wind and Offshore Oil/Natural Gas Development*. Report commissioned by the New Venture Fund's Fund for Ocean Economic Research. Available at: http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Planning_for_Ocean_Energy_Development_Complete.pdf

UNEP/GPA (2006) *Ecosystem-Based Management: Markers for Assessing Progress*. UNEP/GPA, The Hague.

ANNEX 1 – ANALYTICAL FRAMEWORK (ABRIDGED VERSION)

Facts of the matter	Analytical questions ('To what extent...')
1. Context for this MSP process	
<p><u>Social</u>: major activities, number of people (incl. spatial distr.), poverty <u>Economic</u>: Major goods and services, gross value of activities and resources <u>Environmental</u>: Environmental status, CC effect (current and future) <u>Governance</u>: Mgmt & regulatory systems, institutional setup (before & after)</p>	<ul style="list-style-type: none"> - have <u>different factors</u> constrained cross-border collaboration: <u>historical/political, socio-economic, environmental</u>? - was there <u>support for MSP</u> at govt. institutions, at initiation? - did marine users <u>conform to existing regulations</u>, at initiation? - have governance structures <u>facilitated cross-border collaboration</u> on relevant issues?
2. Drivers, issues and goals	
<p><u>Issues and drivers</u>: identification, changes and spatial distribution (incl. map) <u>Ecosystem services</u>: identification and spatial distribution (incl. map) <u>Goals</u>: identification, changes over time, time-bounded & quantitative <u>Process</u>: approach to identifying drivers, issues and goals</p>	<ul style="list-style-type: none"> - has <u>EBM been used</u> in the design of the MSP? - do goals address <u>social, economic and environmental outcomes</u>? - have <u>time-bounded & quantitative goals</u> enabled or constrained the MSP?
3. Overview of this MSP	
<p><u>Introduction</u>: description and map (incl. size) <u>Timing</u>: Start of the process, and time spent in each phase; transition from planning to formal adoption and implementation <u>Funding</u>: Sources , total and current annual funding, user-fees contribution <u>Legal basis</u> Mechanisms for <u>cross-border data exchange</u> <u>Leadership</u>: 'champions' and leadership changes over time</p>	<ul style="list-style-type: none"> - has <u>external funding</u> enabled this MSP? - have <u>cross-border issues</u> shaped the collaboration in this MSP? - are responsible institutions <u>working collaboratively</u> or independently?
4. Scope and design of this MSP	
<p><u>Institutions</u>: structure, resource mgmt. responsibilities, MSP authority <u>Land-sea</u>: linkages re. resource mgmt. measures <u>Adaptive mgmt.</u>: yes/no, how (pilot, neighbouring cases)</p>	<ul style="list-style-type: none"> - does the MSP have <u>the required authorities</u> for successful implementation? - does the MSP have the <u>human resources</u> necessary for implementation? - has there been <u>coordination of planning between land and sea</u>?
5. Collaboration and consultation in the MSP planning phase	
<p><u>Stakeholders</u>: identification (govt., non-govt.) <u>Process</u>: mechanism for consultation, participation & collaboration, communication plan <u>Cross-border</u>: mechanisms for cooperation, major barriers</p>	<ul style="list-style-type: none"> - were the different stakeholders involved in designing and shaping the MSP? - was the design and schedule made explicit to all stakeholders, in initial phase? - do affected user groups understand and support MSP goals and strategies? - are there significant differences in type and quality of information in the different country zones? - have stakeholders engaged in planning the cross-border process? - were barriers to cross-border collaboration resolved?

Facts of the matter	Analytical questions ('To what extent...')
6. Features of the MSP implementation phase	
<p><u>MSP institutions</u>: differences planned vs. actual</p> <p><u>Resource use</u>: Good practices advocated, changes (formal, informal) after implementation</p> <p><u>M&E</u>: environ./economic/social indicators and their use</p>	<ul style="list-style-type: none"> - are institutions collaborating effectively in implementation? - is political support for the MSP being maintained? - is the long-term funding sustainable? - is cross-border collaboration factored into budget/funding mechanisms? - are regulations & mgmt. measures consistent across border, and enable coordinated cross-border implementation? - is sector management integrated within the country zones? - are policies, procedures and regulations being enforced? - are the good practices being adopted by target user groups? - are destructive forms of resource use being reduced? - are conflicts between user groups being reduced? - is the MSP practicing adaptive mgmt. (based on monitoring results)? - has having a cross-border M&E framework affected cooperation? - is there (evidence of) management coordination between land and sea? - are necessary investments in infrastructure being made?
7. Application of MSP in the high seas	
<p><u>Key features</u>: Issues & drivers, proportion beyond natl. jurisdiction, seabed & water column</p> <p><u>Stakeholders</u>: 'third-country' stakeholders affected</p> <p><u>Institutions</u>: agreements necessary for MSP implementation, agreement with internatl. ABNJ law</p> <p><u>Resource use regime</u>: decision-making process, establishment & enforcement of mgmt. measures, coverage</p>	<ul style="list-style-type: none"> - are the mgmt. measures <u>consistent between parties</u>, and enable coordinated implementation? - are the main stakeholders and third-country <u>resource users adhering to the plan</u>?
8. Outcomes and lessons learned	
<p><u>Overall</u>:</p> <ul style="list-style-type: none"> - Major lessons of potential usefulness to other MSP initiatives? <p><u>Cross-border</u>:</p> <ul style="list-style-type: none"> - How have cross-border collaborations contributed to consistent and equitable resource use? - What have been the key barriers to cross-border collaboration? - What are the major lessons on cross-border collaboration emerging from this MSP? 	<ul style="list-style-type: none"> - has the MSP fulfilled its stated goals? - are cumulative impacts (across time & space) being successfully managed? - has the MSP impacted on the sustainability of social and economic conditions? - are the flows of ecosystem goods and services being sustained within the MSP? - is the MSP having an impact on biodiversity? - is there consistent and equitable use of marine space across borders? - is there successful cross-border sharing of good practices within the MSP process?

ANNEX 2 – LIST OF PARTICIPANTS AND SCHEDULE

Date	Interview location	CRC Support	Time	Interviewee	Position	Relevance to the Case Study
27/09/16	Café, Block Island (RI)	Tiffany Smythe	10:30 – 12:00	Jessica Willi	Executive Director, Block Island Chamber of Commerce	Stakeholder (RI) – tourism / general public at a local level, not involved in RI Ocean SAMP / NE Regional Plan
				Christopher Willi	Charter Boat Fisherman	Stakeholder (RI) – recreation (fisheries) / general public at a local / regional level, not involved in RI Ocean SAMP / NE Regional Plan
			14:00 – 15:30	Kimberley Gaffett	Previous First Warden, long-time resident	Stakeholder (RI) – town council / general public at a local level, involved in RI Ocean SAMP
28/09/16	URI Narragansett Bay Campus (RI)	Jen McCann	10:00 – 12:00	Grover Fugate	Executive Director, RICRMC	State Agency (RI) – Led the RI Ocean SAMP development / implementation, also involved in NE Regional Plan
			13:00 – 14:30	Christopher Thompsett	Senior Environmental Planner, Naval Undersea Warfare Center	Federal Agency – US Navy, involved in the RI Ocean SAMP and NE Regional Plan
			15:00 – 17:00	Kenneth Payne	Rhode Island Agricultural Partnership (present)	Independent Facilitator of the Ocean SAMP stakeholder group
30/09/16	URI Narragansett Bay Campus (RI)	Jen McCann	10:00 – 11:00	John King	URI GSO	Academia, involved in RI Ocean SAMP
01/10/16						
02/10/16						
03/10/16	Portsmouth (NH)	-	07:00 – 08:30	Priscilla Brooks	Vice President and Director of Ocean Conservation, Conservation Law Foundation	NGO, involved in NE Regional Plan
	Great Bay Discovery Center, Greenland (NH)	Jen McCann	09:00 – 16:00	NROC meeting		
			13:00 – 14:00	Anonymous		State Agency, involved in NE Regional Plan
04/10/16	Concord (MA)	Jen McCann	10:00 – 11:30	Anonymous (3 participants)		Federal Agency, involved in RI Ocean SAMP and NE Regional Plan
	NOAA, Gloucester (MA)	Jen McCann	13:00 – 15:00	Betsy Nicholson	Federal co-lead, Northeast Regional Lead, NOAA	Federal Agency – NOAA / RPB Co-lead, involved in NE Regional Plan
				Christopher Boelke	NE Field Office Supervisor,	Federal Agency – NOAA, involved in NE Regional Plan

RI Ocean SAMP Case Study Summary Report

Date	Interview location	CRC Support	Time	Interviewee	Position	Relevance to the Case Study
					NOAA	
			15:00 – 16:00	Bruce Carlisle	Director, Massachusetts, CZM	State Agency – MA CZM, involved in RI Ocean SAMP and NE Regional Plan
			16:00 – 17:00	Sue Tuxbury	Fisheries Biologist, NIMFS Habitat Conservation Division	Federal Agency – NOAA, involved in RI Ocean SAMP and NE Regional Plan
05/10/16	URI Narragansett Bay Campus (RI)	-	09:00 – 11:00	Edward LaBlanc	Waterways management chief, US Coast Guard	Federal Agency - USCG, involved in RI Ocean SAMP and NE Regional Plan
			12:30 – 14:30	Frederick Mattera	US Coast Guard Certified (commercial fisheries), NESTCo	Stakeholder – fisheries, involved in RI Ocean SAMP
				Anna Malek Mercer	Executive Director, Commercial Fisheries Research Foundation	Stakeholder – fisheries, not involved in RI Ocean SAMP / NE Regional Plan
		Jen McCann	15:00 – 16:00	William McElroy	Lobsterman/ FAB chair	Stakeholder – fisheries, FAB, involved in RI Ocean SAMP
			16:50 – 17:30	Jennifer McCann	Coastal Resource Centre, University of Rhode Island	Coordinator of RI Ocean SAMP, also involved in NE Regional Plan
			17:30 – 19:30	Robin Wallace	Advocate for Rhode Island sailboat racing, former chairman of the RI State Yachting Committee, the RI Sailing Foundation	Stakeholder – recreation (sailing), involved in RI Ocean SAMP
				Shelia McCurdy	US Sailing	Stakeholder – recreation (sailing) , involved in RI Ocean SAMP
06/10/16	Conference call	Jen McCann	09:00 – 10:30	Aileen Kenney	Deepwater Wind	Stakeholder – offshore wind, involved in RI Ocean SAMP
	DEM, Providence (RI)	Jen McCann	11:00 – 12:30	Janet Coit	Director, Rhode Island Department of Environmental Management	State Agency – RI DEM, involved in RI Ocean SAMP
				Robert Ballou	RIDEM	State Agency – RI DEM, involved in RI Ocean SAMP and NE Regional Plan
URI Narragansett Bay Campus (RI)	Jen McCann	14:00 – 16:00	Grover Fugate	Executive Director, RICRMC	State Agency (RI) – Led the RI Ocean SAMP process also involved in NE Regional Plan	

Date	Interview location	CRC Support	Time	Interviewee	Position	Relevance to the Case Study
07/10/16	URI Narragansett Bay Campus (RI)	Jen McCann	10:00 - 12:00	Summary briefing meeting		
		-	13:30 - 15:00	John Torgan	Director of Ocean & Coastal Conservation, The Nature Conservancy	NGO, involved in RI Ocean SAMP

ANNEX 3 – LEGAL AND GOVERNANCE ANALYSIS

(by Dr Aref Fakhry, Associate Professor, World Maritime University)

1. Introduction

This Annex provides an overview of the legal underpinnings of the Rhode Island Ocean SAMP, and implications on the legal plane for a wider discussion of cross-boundary maritime spatial planning models.

The legal analysis of the case study is built around 6 specific questions:

1. Legal status: What is the legal status of the maritime spatial plan?
2. Legal content: What are the essential legal measures (other than those related to institutional and enforcement matters) introduced as part of the maritime spatial plan?
3. Relationship with other applicable legislation: How does the maritime spatial plan fit alongside other applicable legislation in the relevant coastal area?
4. Institutional aspects: What are the essential institutional measures introduced as part of the maritime spatial plan?
5. Effectiveness and enforcement: How effective is the maritime spatial plan from the legal point of view, and what enforcement measures are available for implementing its provisions?
6. Consistency with international maritime law: How consistent is the maritime spatial plan with current international maritime law?

The report concludes highlighting salient legal innovations and challenges as learned from the case study.

2. Legal status

The Ocean SAMP is a State of Rhode Island and Providence Plantations instrument, belonging to the family of special area management plans (SAMPs).

According to Rhode Island laws, SAMPs have the following aims:

to provide for the integration and coordination of the protection of natural resources, the promotion of reasonable coastal-dependent economic growth, and the improved protection of life and property in the specific areas designated council as requiring such integrated planning and coordination. (46 R.I. Gen. Laws § 46-23-6(1)(v)(B)(I).)

(The “council” referred to in the above provision is the Rhode Island Coastal Resources Management Council (CRMC). which is empowered to adopt SAMPs (R.I. Gen. Laws § 46-23-6(1)(v)(B)(I).)

Rhode Island laws further provide:

Special area management plans and any updates thereto shall be adopted as appropriate as elements of the state guide plan pursuant to § 42-11-10. (R.I. Gen. Laws § 46-23-6(1)(v)(B)(IV).)

The development of a SAMP is typically complex, lengthy and complex.

“All SAMPs ... follow an open and transparent process” (Olsen, McCann and LaFrance Bartley 2015, p. 339). In addition to the Ocean SAMP, six other SAMPs have been adopted. The first SAMP dates from over 30 years ago (Boehnert 2013, p. 142).

There is a high coordinative feature in the development of SAMPs. The Ocean SAMP itself is noteworthy in this regard:

The CRMC coordinates with local municipalities, as well as government agencies and community organizations, to prepare the SAMPs and implement the management strategies. (Ocean SAMP § 150(1).)

The state guide plan is defined in the following terms:

The state guide plan shall be a means for centralizing, integrating, and monitoring long-range goals, policies, plans, and implementation activities related thereto. (R.I. Gen. Laws § 42-11-10(d).)

The Ocean SAMP sits alongside the Rhode Island Coastal Resources Management Program (RICRMP). "Ocean SAMP policies and recommendations build upon and refine the CRMC's existing regulations presented in the RICRMP" (Ocean SAMP, sect. 110(3)).

Importantly, according to Rhode Island Gen. Laws § 46-23-11:

The rules and regulations promulgated by the council shall be subject to the Administrative Procedures Act.

That the Ocean SAMP is subject to the Administrative Procedures Act pursuant to the above provision seems clear.

According to the Ocean SAMP itself,

The Ocean Special Area Management Plan (Ocean SAMP) is the regulatory, planning and adaptive management tool that CRMC is applying to uphold [its] regulatory responsibilities in the Ocean SAMP study area. (Ocean SAMP § 110(2).)

It may be useful to resort to the following definition of a SAMP provided by one of Rhode Island's expert lawyers:

SAMPs are simply ecologically based regulatory plans for specific and defined areas whose special or unique characteristics, in the judgment of the CRMC, call for more specific, detailed, and target regulatory commitments. (Boehnert 2013, p. 142.)

To sum up, the Ocean SAMP is a regulatory plan, which is part of the state guide plan and is subject to the Administrative Procedures Act.

2.1. Adoption

The Ocean SAMP was adopted on October 19, 2010, by CRMC. The CRMC is established by statute as a public agency (R.I. Gen. Laws § 46-23-2). The CRMC's power to adopt SAMPs is provided for at R.I. Gen. Laws § 46-23-6(1)(v)(B).

The CRMC is charged by statute "to exercise effectively [the state's] responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone" (R.I. Gen. Laws § 46-23-1(b)(1); see also R.I. Gen. Laws § 46-23-1(c)). Furthermore, "[t]he primary responsibility of CRMC shall be the continuing planning for and management of the resources of the state's coastal region" (R.I. Gen. Laws § 46-23-6(1)(i)).

The Rhode Island legislator has given additional guidance to the role of CRMC:

preservation and restoration of ecological systems shall be the primary guiding principle upon which environmental alteration of coastal resources will be measured, judged, and regulated. (R.I. Gen. Laws § 46-23-1(a)(2).)

CRMC is granted “exclusive jurisdiction below mean high water for all development, operations, and dredging” (R.I. Gen. Laws § 46-23-6(2)(ii)(A)).

Land-wise, CRMC’s jurisdiction is defined as follows:

The authority of the council over land areas (those areas above the mean high water mark) shall be limited to two hundred feet (200’) from the coastal physiographic feature or to that necessary to carry out effective resources management programs. (R.I. Gen. Laws § 46-23-6(2)(iii).)

In commenting on the CRMC jurisdiction, a prominent Rhode Island lawyer writes:

Its enabling Act, Rhode Island Laws § 46-23-1 *et seq.*, gives the CRMC broad powers for both planning and enforcement ... with primary jurisdiction over coastal waters and land areas within 200 feet of the inland edge of a coastal feature. (And it has even more extensive jurisdiction.) (Boehnert 2013, p. 141.)

Boehnert (2013) intimates that coastal features are deemed to cover the banks of tidal rivers with the result that installations and buildings far inland may require authorisations from CRMC. CRMC has jurisdiction over the design, location, construction, alteration and operation of specific activities or land uses when related to a water area under the council’s jurisdiction, no matter where the land area is located in Rhode Island. The activities subject to this expansive jurisdiction include power generation of over 40 megawatts, desalination, chemical or petroleum processing, transfer, or storage, mineral extraction, sewage treatment and disposal, and solid waste disposal. (Boehnert 2013, pp. 141-142.)

The Ocean SAMP describes its policies and recommendations as “enforceable” (Ocean SAMP, vol. 1, Executive Summary, p. 1; see also Boehnert 2013, p. 136).

It would appear that the Ocean SAMP may be considered as legally binding; however, much depends on the particular provisions under examination as parts of the Plan are narrative or recommendatory by their own words, with the result that the question whether they are binding or not becomes superfluous.

3. Legal content

Although the Ocean SAMP contains policies and regulations, interestingly, it also documents facts about the coastal and marine features of the region, including the human interface and the historic use by the area’s inhabitants made of the sea and its resources (Ocean SAMP § 100(2)). There is a strong scientific component in the information provided as part of the Ocean SAMP (see, e.g., Ocean SAMP § 100(7)).

The link between maritime spatial planning and ecosystem-based management is made clear in the Ocean SAMP. Thus, “CRMC implements MSP process to achieve ecosystem-based management (EBM) for the entire Ocean SAMP region” (Ocean SAMP § 110(5)).

The Ocean SAMP has been described as “the nation’s first comprehensive ‘zoning’ of offshore waters to regulate uses and control development to be approved by federal regulators as part of a state coastal management plan” (Boehnert 2013, p. 135).

“Ocean SAMP policies and recommendations build upon and refine the CRMC’s existing regulations presented in the RICRMP” (Ocean SAMP § 110(3)). This includes for instance the RICRMP’s classification of water uses into six categories.

The Ocean SAMP designates Areas of Particular Concern and Areas Designated for Preservation (Ocean SAMP § 10(2)).

The Ocean SAMP has included intense data-gathering activities and regulations tailored to analyse such data. This is seen as quite interesting as it is supposedly going to “shave years ...

off normal permitting times for installation of alternative energy facilities” (Boehnert 2013, p. 134).

The Ocean SAMP has supported new studies focused on the ocean zoning effort:

All SAMPs call for investments in targeted research on the key management issues and sustained engagement with all interested stakeholders Each SAMP results in a detailed spatial plan, associated regulations and an agenda of actions and investments to be taken by the relevant municipalities, state and federal government agencies with responsibilities and interests in the specified area. (Olsen, McCann and LaFrance Bartley 2015, p. 339.)

The Ocean SAMP includes extensive policies and regulations fostering the development of preferred uses, specifically alternative energy protection, principally wind power.

The Ocean SAMP implements the concept of adaptive management (Ocean SAMP § 110(6)).

4. Relationship with other applicable legislation

4.1. Relationship with federal law

It should be stated at the outset that the Ocean SAMP was approved by the National Oceanic and Atmospheric Administration for formal inclusion into the federally-approved RICRMP, part of the national Coastal Zone Management Program under the federal Coastal Zone Management Act of 1972 (CZMA).

4.2. Coordination with and approval by federal authorities

A key aspect of the US system of coastal zone planning is to be found in the findings contained as part of CZMA:

The key to more effective protection and use of the land and water resources of the coastal zone is to encourage the states to exercise their full authority over the lands and waters in the coastal zone by assisting the states, in cooperation with Federal and local governments and other vitally affected interests, in developing land and water use programs for the coastal zone, including unified policies, criteria, standards, methods, and processes for dealing with land and water use decisions of more than local significance. (CZMA § 1451(i).)

The CZMA seeks to facilitate the adoption of state coastal management plans. Thus, it is provided in the CZMA that:

it is the national policy to encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone, giving full consideration to ecological, cultural, historic, and esthetic values as well as the needs for compatible economic development. ... (CZMA § 1452(2))

The CZMA also declares that

it is the national policy to encourage the participation and cooperation of the public, state and local governments, and interstate and other regional agencies, as well as of the Federal agencies having programs affecting the coastal zone, in carrying out the purposes of this chapter. (CZMA § 1452(4).)

The CZMA advocates provision by state coastal management plans for “continued consultation and coordination with, and the giving of adequate consideration to the views of, affected Federal agencies” (CZMA § 1452(2)(H)).

Under CZMA § 1452(2)(J), state coastal management plans should include “improved coordination between State and Federal coastal zone management agencies and State and wildlife agencies”.

The US Secretary of Commerce is empowered to approve state coastal management plans only if, inter alia:

The State has developed and adopted a management program for its coastal zone in accordance with rules and regulations promulgated by the Secretary, after notice, and with the opportunity of full participation by relevant Federal agencies. ... (CZMA § 1455(d)(1).)

Approval of a state management programme can only occur after “the views of Federal agencies principally affected by such program have been adequately considered” (CZMA § 1456(b)).

CRMC is expressly given a coordinating role, namely, “[c]onsulting and coordinating actions with local, state, regional, and federal agencies and private interests” (R.I. Gen. Laws § 46-23-6(3)(ii)).

The Ocean SAMP belongs to a typology of state instruments that require coordination with federal authorities in several respects. By virtue of Rhode Island legislation, SAMPs provide for integrated management across state and federal authorities:

The integrated planning and coordination herein specified [for SAMPs] shall include, but not be limited to, federal agencies, state agencies, boards, commissions, and corporations, including specifically the economic development corporation, and cities and towns. ... (R.I. Gen. Laws § 46-23-6(v)(B)(II).)

Furthermore, SAMPs are part of the state guide plan (R.I. Gen. Laws § 46-23-6(v)(B)(VIII)), which itself entails coordination with federal programmes (R.I. Gen. Laws § 42-11-10(a), (f)(1) & (5)(ii)).

In its own words, the Ocean SAMP aspires to “[b]uild a framework for coordinated decision-making between state and federal management agencies” (Ocean SAMP § 130(4)(d)). Thus, the Ocean SAMP calls for “[e]ngag[ing] federal and state agencies in all phases of the Ocean SAMP process to ensure that all appropriate regulatory requirements are integrated into the process” (Ocean SAMP § 130(4)(d)).

4.3. Consistency review process

The principle of federal consistency is articulated in § 1456 of the CZMA. It is thus provided in the Act:

Each Federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs. A Federal agency activity shall be subject to this paragraph unless it is subject to paragraph (2) or (3). (CZMA § 1456(c)(1)(A). See also § 1456(c)(2).)

Federal consistency means that activities held at the federal level which may have an impact on a state’s waters or coastal zone must be carried out in conformance to the approved state management program. This applies to activities held anywhere, that is, even outside the state’s coastal zone or waters. The federal agency carrying out the activity must provide a consistency determination to the state in question prior to its approval of the activity (CZMA § 1456(c)(1)(C)).

An exception to this principle is provided for where the President grants an exemption in the country’s national interest (CZMA § 1456(c)(1)(B)).

The Ocean SAMP is subject to the federal consistency review process, as the Plan was federally approved as part of the RICRMP.

For federal waters adoption, the CRMC requested a geographical boundary expansion to its federal consistency boundary by documenting in advance that certain licenses, permits, leases, etc., would have a foreseeable effect on the state’s coastal zone. The CRMC established formal agreements with key federal agencies by obtaining the geographical boundary extension approval from NOAA; continuing close coordination with the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) through the Atlantic Governor’s Consortium; and establishing a formal working relationship with the Federal Energy Regulatory Commission (FERC).

4.4. Relationship with neighbouring state laws

Prior the adoption of the Ocean SAMP, “the CRMC played a leadership role in the effort to engage the four southern states—New York, Connecticut, Rhode Island, and Massachusetts—in the initial phase of creating a multi-state SAMP” (Ocean SAMP § 150(2)). However, such a multi-state SAMP has not been formed yet (Ocean SAMP § 150(2)).

Boehnert (2013, p. 137) provides additional insights on this interaction with neighbouring states:

Rhode Island has ... worked closely with Massachusetts on offshore regulatory issues, and the two states have entered into a memorandum of understanding (MOU) providing for cooperation in the development of wind energy projects in a 400-square-mile area of mutual interest, which includes part of the Ocean SAMP area.

The Ocean SAMP requires informing neighbouring States of major actions with a view to “[b]uild[ing] a framework for coordinated decision-making” (Ocean SAMP § 130(4)(d)). This does not mean that the Rhode Island authorities are bringing in other states for planning and decision-making.

4.5. Relevant regulations for the RI Ocean SAMP

Selection of Federal status relevant to the RI Ocean SAMP

- *Outer Continental Shelf Lands Act*, which grants the Department of the Interior’s Bureau of Ocean Energy Management (BOEM) primary authority to authorise energy projects in the outer continental shelf.
- *2005 National Energy Policy Act*, which clarified the jurisdiction of federal agencies for the leasing, licensing and regulating offshore renewable energy projects, including granting BOEM exclusive jurisdiction over the production, transportation and transmission of energy from wind projects.
- *National Environmental Policy Act*, which directs all federal agencies to assess and disclose the environmental consequences of their projects and permitting actions, namely through a system of formal evaluation of environmental impacts, two key instruments of which are Environmental Impact Statements (EIS) and the ‘lighter’ Environmental Assessments (EA). Impact assessments are often coordinated by a lead agency, with input from ‘cooperating’ state and/or federal agencies.
- *Marine Mammal Protection Act and Federal Endangered Species Act*, which provide for the protection and management of marine mammals and any federally ‘listed’ protected species;
- *Rivers and Harbours Act (Section 10) and Clean Water Act (Section 404)*, which respectively prohibit the unauthorised obstruction or alteration of navigable waters, including by installations on the seabed; and prohibit the discharge of dredged or fill

material into any coastal waters seaward of the high-water mark, both state and federal. Enforcement is vested in the US Army Corps of Engineers.

- *Clean Water Act (Section 401)*, which in RI is administered by the state Department of Environmental Management (DEM), and which requires water quality certification for projects involving dredging, filling, water withdrawals or site disturbances in state waters.
- *Clean Air Act*, which regulates air pollution from activities in the outer continental shelf, granting the federal Environmental Protection Agency authority to control emissions from any source within 25 nm from a state's seaward boundary.
- Federal Aviation Administration Authority, whereby this administration needs to approve vertical structures higher than 61 m to avoid obstruction to navigable airspace.
- *US Coast Guard Regulations*, granting the Coast Guard safety and regulatory jurisdiction over projects in navigable waters, and permitting authority over private aids to navigation.
- *1990 Oil Pollution Act*, which requires owners or operators of offshore oil handling, storage or transportation facilities to submit a spill response plan compliant to BOEM regulations before approval of operations.
- *Magnuson-Stevens Fishery Conservation and Management Act*, which is the core legal instrument for fisheries management in the US, and requires federal agencies to consult on activities that may adversely affect designated essential fish habitat. The National Oceanic and Atmospheric Administration (NOAA) Fisheries is the responsible federal agency.
- *Migratory Bird Treaty Act and Migratory Bird Executive Order 13186*, which respectively regulate activities with potentially adverse effects on migratory birds, and require federal agencies undertaking such activities to develop and implement a Memorandum of Understanding (MoU) with the US Fish and Wildlife Service for the conservation of migratory bird populations.
- *National Historic Preservation Act, section 106* of which requires federal agencies to consider the impacts on historical and cultural properties and resources of any undertakings, incl. leases, in consultation with designated federal and state offices.
- *Federal Power Act*, according to which the Federal Energy Regulatory Commission has authority to license electrical transmission lines passing through state waters. Beyond state waters this authority lies with BOEM for non-hydrokinetic projects, following an agreement between both agencies.
- *Atlantic States Marine Fisheries Commission and Atlantic Coastal Fisheries Cooperative Management Act*. The act requires the Commission to adopt fishery management plans along the entire US east coast for any fishery straddling the waters of two or more states. States are obliged to implement those plans (and hence ensure that other activities do not compromise their ability to do so), failing which the Secretary of Commerce might declare a moratorium on the fishery.

Selection of RI state statutes, regulations and policies relevant to the RI Ocean SAMP

- *RI Endangered Species Act*, under which the RI Department of Environmental Management (DEM) may declare animal and plant species endangered and acquire or control state land to protect, cultivate or propagate any such species.

- *RI Aquaculture Regulations*, according to which the CRMC may lease submerged state lands for aquaculture projects, after review by the DEM and the Marine Fisheries Council of potential effects on marine life and indigenous fisheries, and of interference with fishing activities.
- *Fisheries Management*. The RI DEM is charged with the promulgation and enforcement of regulations to implement any fisheries management plans developed by regional fisheries councils or commissions pursuant to the Magnuson-Stevens and the Atlantic Coastal Fisheries Cooperative Management acts.
- *Energy Facility Siting Act* consolidates the state licensing and regulatory authority over major energy facilities. The siting board is directed to give preference to projects with the least emissions to air and water. The CRMC and DEM have the authority to issue licenses and permits, according to the act.

5. Institutional aspects

The Ocean SAMP has not led to the creation of new institutions. This is because the Ocean SAMP was adopted under the framework of pre-existing legislation and institutions. The principal institution in this respect is undoubtedly the CRMC. Boehnert (2013, p. 140) has provided a short description of the CRMC, which is useful to quote here:

The Rhode Island Coastal Resources Management Council is an independent state regulatory agency consisting of a 16-member council appointed by the governor for three-year terms and a professional staff of engineers, biologists, environmental scientists, and marine resource specialists. Council members are citizens serving in a part-time role. While some have environmental or regulatory expertise, such as the director of the Department of Environmental Management, who serves *ex officio*, others may be private citizens or state or local government representatives.

The executive director of the CRMC is a member of the state planning council (R.I. Gen. Laws § 42-11-10(e)(20)).

The CRMC is part of the Southern New England/New York Ocean Council working group, which acts as the southern representation for the Northeast Regional Ocean Council (NROC). The working group “was ... formed to prioritize issues (natural hazards, healthy ecosystems, marine transportation, and energy) requiring coordination among the four states and research mechanisms to enhance shared resources” (Ocean SAMP § 150(2)).

6. Effectiveness and enforcement

6.1. Effectiveness

In legal terms, the authority entrusted with the plan’s implementation should ideally be given certain powers, including power to develop implementing programmes and regulations.

The Ocean SAMP can be seen as quite effective, as CRMC is given the power to implement its programmes and plans:

The council is authorized to formulate policies and plans ... necessary to implement its various management programs. (R.I. Gen. Laws § 46-23-6(2)(i).)

The council is authorized ... to adopt regulations necessary to implement its various management programs. (R.I. Gen. Laws § 46-23-6(2)(i).)

The Ocean SAMP adopts the principle of adaptive management:

The Ocean SAMP Principles commit CRMC *inter alia* to ... establish monitoring and evaluation that supports adaptive management (Ocean SAMP, vol. 1, Executive Summary, p. 2.)

6.2. Enforcement

The level of enforcement MSP can be measured by the availability of the gamut of administrative and criminal procedures usually operating for any other regulations in the land. Enforcement may be enhanced by special enforcement mechanisms.

Orders to cease and desist violations. By virtue of R.I. Gen. Laws § 46-23-7(a)(1),

the commissioner of coastal resources management shall have the power to order any person to cease and desist ... any violation of any provisions of ... chapter [23 of title 46 of the General Laws of Rhode Island], or any rule, regulation, assent, order, or decision of the council whenever the commissioner of coastal resources management shall have reasonable grounds to believe that such violation has occurred.

The power to issue written cease and desist orders is also granted to CRMC staff, conservation officers within the department of environmental management, and state and municipal police (R.I. Gen. Laws § 46-23-7(a)(2)).

Violation remedial. Similarly to the authority to issue orders to cease and desist:

the commissioner of coastal resources management shall have the power to ... remedy any violation of any provisions of ... chapter [23 of title 46 of the General Laws of Rhode Island], or any rule, regulation, assent, order, or decision of the council whenever the commissioner of coastal resources management shall have reasonable grounds to believe that such violation has occurred. (R.I. Gen. Laws § 46-23-7(a)(1).)

Administrative penalties. Power is vested in the chairperson or executive director of CRMC to assess administrative penalties for any violation of an assent, order or decision of the Council or of an order to cease and desist (R.I. Gen. Laws § 46-23-7.1). Such penalties are capped to \$2,500 per violation, and may entail an additional penalty of up to \$500 for each day during which the violation continues following receipt of a cease and desist order (R.I. Gen. Laws § 46-23-7.1(1)). The aggregate penalties may not however exceed in any event \$10,000 (ibid.).

Criminal penalties. Any violation of the statute, the coastal resources management programme, or any rule, regulation, assent, or order is deemed a misdemeanour in the criminal law (R.I. Gen. Laws § 46-23-7.3). The offence carries criminal penalties in the form of a fine (capped at \$500) and/or imprisonment (not more than 3 months) (ibid.). A separate offence arises for each day the violation is continued or repeated (ibid.). The blocking or posting of tidal waters or public rights-of-way is similarly penalised in a separate provision.

Prosecution. Rhode Island's coastal resources management legislation provides expressly for the prosecution in the state's superior court of contraventions to its requirements, the coastal resource management programme, or any rule, regulation, assent, or order issued pursuant thereto (R.I. Gen. Laws § 46-23-7.2). This jurisdiction is without prejudice to "other administrative or judicial proceedings authorized by this chapter" (ibid.).

7. Consistency with international maritime law

Since the application of the Ocean SAMP lies wholly within US jurisdictional waters, no contradiction with international law arises prima facie. On the contrary, it is arguable that the Ocean SAMP's advanced features and ecosystem-based management premise are consistent with the latest rules in international law.

8. Conclusion and recap of salient legal innovations

- The imbrication of federal and state laws, policies and executive powers through a planned and intense coordinative framework appears to be a significant factor in the seeming success of the Ocean SAMP.
- Experience with previous SAMPs has probably helped significantly in the adoption of an ambitious maritime spatial plan covering an extensive water domain.

- The strength of the SAMPs is reflected in the fact that they “designat[e] geographically defined areas for different types and intensities of use” (Olsen, McCann & LaFrance Bartley, 2015, p. 338). SAMPs target “coastal areas where environmental issues and competing human activities create complex situations that demand a comprehensive ecosystem analysis and a planning and policy making process for a spatial area that typically extends beyond areas and activities subject to the Coastal Council’s direct regulatory authority” (Olsen, McCann & LaFrance Bartley 2015, p. 338).
- According to statute, “preservation and restoration of ecological systems shall be the primary guiding principle upon which environmental alteration of coastal resources will be measured, judged, and regulated.” (R.I. Gen. Laws § 46-23-1).
- The Ocean SAMP involves far more than Rhode Island state waters, incorporating federal waters, which according to Boehnert (2013, pp. 135-136), provides the greatest benefits to Rhode Island.
- The Ocean SAMP includes extensive policies and regulations fostering the development of preferred uses, specifically alternative energy protection, principally wind power.

HOW TO OBTAIN EU PUBLICATIONS

Free publications:

- one copy:
via EU Bookshop (<http://bookshop.europa.eu>);
- more than one copy or posters/maps:
from the European Union's representations (http://ec.europa.eu/represent_en.htm);
from the delegations in non-EU countries
(http://eeas.europa.eu/delegations/index_en.htm);
by contacting the Europe Direct service (http://europa.eu/europedirect/index_en.htm)
or calling 00 800 6 7 8 9 10 11 (freephone number from anywhere in the EU) (*).

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

Priced publications:

- via EU Bookshop (<http://bookshop.europa.eu>).

Priced subscriptions:

- via one of the sales agents of the Publications Office of the European Union
(http://publications.europa.eu/others/agents/index_en.htm).



Publications Office

ISBN: 978-92-9202-253-2
doi: 10.2826/514498