Chapter 11: The Policies of the Ocean SAMP

1100 Introduction	3
1110 Building on CRMC's Existing Program	4
1120 Ocean SAMP Goals and Principles	5
1130 Applying Adaptive Management to Implement the Ocean SAMP	5
1140 Decision-making	6
1150 General Policies	7
1150.1 Ecology	
1150.2 Global Climate Change 1150.3 Cultural and Historic Resources	8
1150.3 Cultural and Historic Resources	
1150.4 Commercial and Recreational Fisheries Resources and Uses	
1150.5 Recreation and Tourism	
1150.7 Offshore Renewable Energy and Other Offshore Development	
1160 Regulatory Standards	16
1160.1 Overall Regulatory Standards	16
1160.2 Areas of Particular Concern	
1160.3 Prohibitions and Areas Designated for Preservation	30
1160.4 Other Areas	
1160.5 Application Requirements	34
1160.6 Design, Fabrication and Installation Standards	50
1160.7 Pre-Construction Standards	54
1160.8 Standards for Construction Activities	57
1160.9 Monitoring Requirements	58
1160.10 Recommended Targets	60

List of Figures

Figure 11.1 Renewable Energy Zone	17
Figure 11.2 Offshore Dive Sites Areas of Particular Concern	22
Figure 11.3 Glacial Moraines Designated as Areas of Particular Concern	24
Figure 11.4 Detailed View: Glacial Moraines Surrounding Block Island Designated as Areas of Particular Concern	
Figure 11.5 Navigation, Military and Infrastructure Areas Designated as Areas of Particular Concern	27
Figure 11.6 Recreational Boating Areas Designated as Areas of Particular Concern	29
Figure 11.7 Sea Duck Foraging Habitat Designated as Areas Designated for Preservation	31
Figure 11.8 Areas of High-Intensity Commercial Ship Traffic	33

List of Tables

Table 11.1 Contents of a Site Assessment Plan	.35
Table 11.2 Necessary Data and Information to be provided in the Site Assessment Plan	.36
Table 11.3 Resource Data and Uses that shall be described in the Site Assessment Plan	.38
Table 11.4 Contents of a Construction and Operations Plan	.41
Table 11.5 Necessary Data and Information to be provided in the Construction and Operations Plan	.42
Table 11.6 Resources, Conditions and Activities that shall be described in the Construction and Operations Plan	.45
Table 11.7 Contents of the Facility Design Report	.46
Table 11.8 Contents of the Fabrication and Installation Report	.48

Section 1100. Introduction

- 1. The Rhode Island General Assembly mandates Rhode Island Coastal Resources Management Council (CRMC) to preserve, protect, develop, and where possible, restore the coastal resources of the state for this and succeeding generations through comprehensive and coordinated long range planning and management designed to produce the maximum benefit for society from these coastal resources; and that the 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 [Rhode Island General Laws 46-23-1(a)(2)]. To more effectively carry out its mandate the CRMC has established use categories for all state waters out to the three nautical mile boundary. The Rhode Island Coastal Resource Management Program (RICRMP) is a federally-approved coastal program under the federal Coastal Zone Management Act (16 U.S.C. 1451 *et. seq.*).
- 2. The Ocean Special Area Management Plan (Ocean SAMP) is the regulatory, planning and adaptive management tool that CRMC is applying to uphold these regulatory responsibilities in the Ocean SAMP area.¹ Using the best available science and working with well-informed and committed resource users, researchers, environmental and civic organizations, and local, state and federal government agencies, the Ocean SAMP provides a comprehensive understanding of this complex and rich ecosystem. The Ocean SAMP also documents how the people of this region have used and depended upon these offshore resources for subsistence, work and play for thousands of years, and how the natural wildlife such as fish, birds, marine mammals and sea turtles, feed, spawn, reproduce, and migrate throughout this region thriving on the rich habitats, microscopic organisms, and other natural resources. To fulfill the Council's mandate the Ocean SAMP lays out enforceable policies and recommendations to guide CRMC in promoting a balanced and comprehensive ecosystem-based management approach to the development and protection of Rhode Island's ocean-based resources.²
- 3. The Ocean SAMP region lies at the convergence of two bio-geographic provinces the Acadian to the north (Cape Cod to the Gulf of Maine) and the Virginian to the south (Cape Cod to Cape Hatteras). Due to this unique position, the Ocean SAMP area is more susceptible than other areas along the eastern seaboard to the effects of climate change. Cognizant of this fact, the CRMC integrates climate concerns and adaptation and mitigation responses into relevant policies and plans. CRMC believes that with advanced planning, the harm and costs associated with these potential impacts can be reduced and may be avoided.
- 4. This Chapter presents how the Ocean SAMP builds upon CRMC's existing program as well as describes implementation mechanisms that support the application of the adaptive management approach. Section 1150 presents all Ocean SAMP general policies, while Section 1160 integrates the regulatory standards into a regulatory process that ensures the

¹ Adaptive management is defined in section 1130.1.

² Ecosystem-based management is defined in section 1110.4.

Council's ability to uphold its mandatory requirements. To review both general policies and regulatory standards by topic area, please see that specific chapter.

Section 1110. Building on CRMC's Existing Program

- 1. Ocean SAMP policies and recommendations build upon and refine the CRMC's existing Program and regulations presented in the Rhode Island Coastal Resources Management Plan (RICRMP). The policies, standards, and definitions contained in the RICRMP for type 4 waters within the Ocean SAMP boundary, specifically from the mouth of Narragansett Bay seaward, between 500 feet offshore and the 3-nautical mile state water boundary, are hereby modified. In addition, RICRMP Sections 300.3 and 300.8 and the 1978 Energy Amendments are hereby superseded for this Ocean SAMP region. Aquaculture projects of any size shall follow Section 300.11 of the RICRMP. Dredging and dredge disposal activities remain governed by Section 300.9 of the RICRMP.
- 2. The Ocean SAMP polices for Type 4 waters require that CRMC accommodate and maintain a balance among the diverse activities, both traditional and future water dependent uses, while preserving and restoring the ecological systems. CRMC recognizes that large portions of Type 4 waters include important fishing grounds and fishery habitats, and shall protect such areas from alterations and activities that threaten the vitality of Rhode Island fisheries. Aquaculture leases shall be considered if the Council is satisfied there will be no significant adverse impacts on the traditional fishery. In addition, CRMC shall work to promote the maintenance and improvement of good water quality within the Type 4 waters (RICRMP Section 200.4).
- 3. The Ocean SAMP assists CRMC in upholding its mandate to preserve the state's coastal resources on submerged lands in accordance with the public trust. As stated in Article 1, §17 of the Rhode Island Constitution, applicable statutes, and restated in the RICRMP, the state maintains title in fee to submerged lands below the high water mark, and holds these lands in trust for the use of the public, preserving public rights which include but are not limited to fishing, commerce, and navigation in these lands and waters. Rhode Island public trust resources are defined in RICRMP as the tangible physical, biological matter substance or systems, habitat or ecosystem contained on, in or beneath the tidal waters of the state, and also include intangible rights to use, access, or traverse tidal waters for traditional and evolving uses including but not limited to recreation, commerce, navigation, and fishing.
- 4. As with the six existing Rhode Island SAMPs and the state's water classification program, CRMC implements the marine spatial planning (MSP) process to achieve ecosystem-based management (EBM) for the Ocean SAMP region. EBM is defined as maintaining or restoring an ecosystem to a healthy, productive and resilient condition that provides the services that humans want and need. Ecosystems are places and marine spatial planning (MSP) is the process by which ecosystem-based management is organized to produce desired outcomes in marine environments. Since 1983 the CRMC has applied MSP to achieve EBM along Rhode Island's coastline.

Section 1120. Ocean SAMP Goals and Principles

- 1. The process to both develop the Ocean SAMP as well as establish policies and regulations were guided by the following goals and principles. These goals and principles were developed in coordination with the Ocean SAMP researchers and the Ocean SAMP stakeholder group. For more information on the Ocean SAMP goals and principles and the Ocean SAMP stakeholder group see Chapter 1, Introduction.
- 2. The Ocean SAMP Goals are to:
 - i. Foster a properly functioning ecosystem that is both ecologically sound and economically beneficial;
 - ii. Promote and enhance existing uses;
 - iii. 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;
 - iv. Build a framework for coordinated decision-making between state and federal management agencies.
- 3. The Ocean SAMP Principles are to:
 - i. Develop the Ocean SAMP document in a transparent manner;
 - ii. Involve all stakeholders;
 - iii. Honor existing activities;
 - iv. Base all decisions on the best available science;
 - v. Establish monitoring and evaluation that supports adaptive management.

Section 1130. Applying Adaptive Management to Implement the Ocean SAMP

- 1. Since its inception in 1971, the CRMC has managed Rhode Island's coastal waters using an adaptive management approach. Adaptive management is a systematic process for continually improving management policies and practices by learning from the outcomes of previously employed policies and practices. Adaptive management requires careful implementation, monitoring, evaluation of results, and adjustment of objectives and practices. Adaptive management usually allows more reliable interpretation of results, and leads to more rapid learning and better management. To this end, CRMC will establish several mechanisms to ensure that the Ocean SAMP is implemented using this management approach.
- 2. CRMC will develop and implement the Ocean SAMP Science Research Agenda, in coordination with the Ocean SAMP researchers, federal, state, and local government and other parties, to improve management policies and practices. The Ocean SAMP Science Research Agenda will allow CRMC to: 1) Continue to learn about Rhode Island's offshore natural resources and human activities; 2) Better understand the potential effects of future development and other human impacts; and 3) Increase Rhode Island's understanding of the projected impacts of global climate change.

- 3. A Progress Assessment and Monitoring Process by CRMC will be established with the purpose of assessing progress towards achieving the Ocean SAMP goals, objectives, and principles. This process will record decisions, capture lessons learned, note achievements, and document policy and management adaptations. This process will be ongoing, available on the project web site, and formally reported to the public on a biannual basis.
- 4. The Council will develop a work plan that will guide the proactive management of the Ocean SAMP region and implement the Ocean SAMP goals: 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 meets 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. Major components of this work plan include the Ocean SAMP Science Research Agenda, the Progress Assessment and Monitoring Process, stakeholder involvement and education, and implementation of Ocean SAMP policies and recommendations.
- 5. Although the Ocean SAMP may be continually amended through an administrative process, the CRMC will conduct a major review of the Ocean SAMP document every five years from adoption. CRMC will implement this revision process using the principles honored during the development of the Ocean SAMP, including involving stakeholders and basing all decisions on the best available science. For more information on the Ocean SAMP principles, see Chapter 1, Introduction.
- 6. The Council will establish a mechanism to ensure that the public continues to be engaged in the implementation of the Ocean SAMP. The Ocean SAMP public forum will be held biannually. The public forum will feature reports and discussions of the Ocean SAMP condition and use, note progress toward goals and objectives, and recognize contributions to implementing the SAMP. The forum will highlight projects underway, report on the Progress Assessment and Monitoring Process and Science Research Agenda, including new research findings and updated global climate change projections, and provide opportunities for exchanging information, ideas, and strategies to strengthen implementation. The forum will address emerging issues and identify potential Ocean SAMP revisions. The Council will use this information to prepare its work plan. The forum may be followed up by other Ocean SAMP meetings that provide continuing opportunities to discuss progress, focus on specific issues, and coordinate ongoing actions by member groups. The public forum will be supported by the Ocean SAMP website and information systems maintained by Rhode Island Sea Grant and CRMC.

Section 1140. Decision-making

1. In accordance with and pursuant to the provisions of Rhode Island General Laws 46-23-6, the Council shall engage in the following coordination activities. The intent of establishing these coordination mechanisms is to ensure appropriate engagement of the stakeholders, including the resources users and the state and federal government agencies. These coordination mechanisms, although described here, are more thoroughly described in the identified sections:

- i. The Council shall work to the maximum extent practicable in coordination with the Ocean SAMP Joint Agency Working Group as defined in section 1160.1.4, a Group facilitated by the Council and made up of appropriate federal and state agencies, to establish project specific requirements that shall be followed by the applicant during the construction, operation and decommissioning phases of an Offshore Development. For more information on the Joint Agency Working Group, see Section 1160.1.4.
- ii. The Council shall engage commercial and recreational fishermen in the Ocean SAMP decision-making process through the Fishermen's Advisory Board (FAB), as defined in section 1160.1.6. The FAB will provide the Council with advice on the potential adverse impacts of Offshore Development on commercial and recreational fishermen and fisheries activities, and on issues including, but not limited to, the evaluation and planning of project locations, arrangements, and alternatives; micro-siting of individual structures; access limitations; and measures to mitigate the potential impacts of such projects. For more information on the FAB, see Section 1160.1.6.
- iii. The Council shall work to minimize use conflicts and ensure marine safety and navigational access around and through offshore structures and developments and along cable routes during the construction, operation and decommissioning phases of offshore development, by establishing communication and coordination mechanisms between the Council, Federal and state agencies, resource users including fishermen's organizations, marine pilots, recreational boating organizations, and marine safety organizations. See sections 1150.4 1150.7 for further information.
- iv. The Council shall convene a panel of scientists to advise on findings of current climate science for the region and the implications for Rhode Island's coastal and offshore regions, as well as the possible management ramifications. This information will allow the Council to proactively plan for and adapt to climate change impacts including, but not limited to, increased storminess, temperature change, and acidification in addition to accelerated sea level rise. For more information on the Science Advisory Panel for Climate Change, see Section 1150.2.3.
- v. The Council shall work to the maximum extent practicable with state and federal agencies, academic institutions, environmental organizations, and others to make sure it is using the best available science and modeling tools to inform the decision making process. Tools including the Technology Development Index (TDI) and the Ecological Value Map (EVM) will inform site selection of future development and help to understand where areas of greatest ecological value exist in the SAMP area to then determine appropriate sites suitable for preservation

and/or future development. For more information on these tools, see Chapter 8, Renewable Energy and Other Offshore Development.

Section 1150. General Policies

- 1. Ocean SAMP policies and regulatory standards represent actions the CRMC must take to uphold its regulatory responsibilities mandated to them by the Rhode Island General Assembly and the Federal Coastal Zone Management Act to achieve the Ocean SAMP goals and principles described in the Introduction Chapter. Policies presented for cultural and historic resources, fisheries, recreation and tourism, and marine transportation promote and enhance existing uses and honor existing activities (Goal ii, Principle iii). Ecology, global climate change, and other future uses information and policies provide a context for basing all decisions on the best available science, while fostering a properly functioning ecosystem that is both ecologically sound and economically beneficial (Goal i, Principle iv). Renewable energy and offshore development policies and regulatory standards ensure there is a rigorous review for all ocean development so that the Council meets its public trust responsibilities. The Ocean SAMP also provides thoughtful direction to encourage marine-based economic development that meets the aspirations of local communities and is consistent with and complementary to the state's overall economic development, social, and environmental needs and goals (Goal iii). All chapters work towards establishing frameworks to coordinate decision-making between state and federal management agencies and the people who use the Ocean SAMP region (Goal iv), developing in a transparent manner (Principle i), and promoting adaptive management (Principle i). Ocean SAMP policies are all important to ensuring that the Ocean SAMP region is managed in a manner that both meets the needs of the people of Rhode Island, while protecting and restoring our natural environment for future generations.
- 2. Section 1150 presents all Ocean SAMP general policies, while Section 1160 integrates the regulatory standards into a regulatory process that ensures the Council's ability to uphold its mandatory requirements. To review both general policies and regulatory standards by topic area, please see that specific chapter.

1150.1. Ecology

- 1. The Council recognizes that the preservation and restoration of ecological systems shall be the primary guiding principle upon which environmental alteration of coastal resources will be measured. Impacts from future activities shall be avoided and, if they are unavoidable, minimized and mitigated.
- 2. As the Ocean SAMP is an extension and refinement of CRMC's policies for Type 4 Multipurpose Waters as described in the RICRMP, CRMC will encourage a balance among the diverse activities, both traditional and future water dependent uses, while preserving and restoring the ecological systems.
- 3. The Council recognizes that while all fish habitat is important, spawning and nursery areas are especially critical in providing shelter for these species during the most vulnerable stages of their life cycles. The Council will ensure that impacts to these

sensitive habitats are avoided and, if they are unavoidable, are minimized and mitigated. In addition, the Council will give consideration to habitat used by species of concern as defined by the NMFS Office of Protected Resources.

4. Because the Ocean SAMP is located at the convergence of two eco-regions and therefore more susceptible to change, the Council will carefully manage this area, especially as it relates to the projected effects of global climate change on this rich ecosystem.

1150.2. Global Climate Change

- 1. The Council recognizes that the changes brought by climate change are likely to result in alteration of the marine ecology and human uses affecting the Ocean SAMP area. The Council, therefore, supports the policy of increasing offshore renewable energy production in Rhode Island as a means of mitigating the potential effects of global climate change.
- 2. The Council shall incorporate climate change planning and adaptation into policy and standards in all areas of its jurisdiction of the Ocean SAMP and its associated land-based infrastructure to proactively plan for and adapt to climate change impacts such as increased storminess and temperature change, in addition to accelerated sea level rise. For example, when evaluating Ocean SAMP area projects and uses, the Council will carefully consider how climate change could affect their future feasibility, safety and effectiveness. When evaluating new or intensified existing uses within the Ocean SAMP area, the Council will consider predicted impacts of climate change especially upon sensitive habitats, most notably spawning and nursery grounds, of particular importance to targeted species of finfish, shellfish and crustaceans.
- 3. The Council will convene a panel of scientists, biannually, to advise on findings of current climate science for the region and the implications for Rhode Island's coastal and offshore regions, as well as the possible management ramifications. The horizon for evaluation and planning needs to include both the short term (10 years) and longer term (50 years). The Science Advisory Panel for Climate Change will provide the Council with expertise on the most current global climate change related science, monitoring, policy, and development design standards relevant to activities within its jurisdiction of the Ocean SAMP and its associated land-based infrastructure to proactively plan for and adapt to climate change impacts such as increased storminess, temperature change, and acidification in addition to accelerated sea level rise.
- 4. The Council will prohibit those land-based and offshore development projects which based on a sea level rise scenario analysis will threaten public safety or not perform as designed resulting in significant environmental impacts. The U.S. Army Corps of Engineers has developed and is implementing design and construction standards that consider impacts from sea level rise. These standards and other scenario analyses should be applied to determine sea level rise impacts.

- 5. The Council supports the application of enhanced building standards in the design phase of rebuilding coastal infrastructure associated with the Ocean SAMP area, including port facilities, docks, and bridges that ships must clear when passing underneath.
- 6. The Council supports the development of design standards for marine platforms that account for climate change projections on wind speed, storm intensity and frequency, and wave conditions and will work with the U.S. Bureau of Ocean Energy Management, Regulation and Enforcement, Department of Interior, Department of Energy, and the Army Corps of Engineers to develop a set of standards that can then be applied in Rhode Island projects. The Council will re-assess coastal infrastructure and seaworthy marine structure building standards periodically not only for sea level rise, but also for other climate changes including more intense storms, increased wave action, and increased pH in the sea.
- 7. The Council supports public awareness and interpretation programs to increase public understanding of climate change and how it affects the ecology and uses of the Ocean SAMP area.
- 1150.3. Cultural and Historic Resources
 - 1. The Council recognizes the rich and historically significant history of human activity within and adjacent to the Ocean SAMP area. These numerous sites and properties, that are located both underwater and onshore, should be considered when evaluating future projects.
 - 2. The Council has a federal obligation as part of its responsibilities under the Federal Coastal Zone Management Act to recognize the importance of cultural, historic, and tribal resources within the state's coastal zone, including Rhode Island state waters. It has a similar responsibility under the Rhode Island Historic Preservation Act. The Council will not permit activities that will significantly impact the state's cultural, historic and tribal resources.
 - 3. The Council will engage federal and state agencies, and the Narragansett Indian Tribe's Tribal Historic Preservation Office (THPO), when evaluating the impacts of proposed development on cultural and historic resources. The Rhode Island Historic Preservation and Heritage Commission (RIHPHC) is the State Historic Preservation Office (SHPO) for the state of Rhode Island, and is charged with developing historical property surveys for Rhode Island municipalities, reviewing projects that may impact cultural and historic resources, and regulating archaeological assessments on land and in state waters.
- 1150.4. Commercial and Recreational Fisheries Resources and Uses
 - 1. The commercial and recreational fishing industries, and the habitats and biological resources of the ecosystem they are based on, are of vital economic, social, and cultural importance to Rhode Island's fishing ports and communities. Commercial and recreational fisheries are also of great importance to Rhode Island's economy and to the quality of life experienced by both residents and visitors. The Council finds that other

uses of the SAMP area could potentially displace commercial or recreational fishing activities or have other adverse impacts on commercial and recreational fisheries.

- 2. The Council recognizes that finfish, shellfish, and crustacean resources and related fishing activities are managed by a host of different agencies and regulatory bodies which have jurisdiction over different species and/or different parts of the SAMP area. Entities involved in managing fish and fisheries within the SAMP area include, but are not limited to, the Atlantic States Marine Fisheries Commission, the RI Department of Environmental Management, the RI Marine Fisheries Council, the NOAA National Marine Fisheries Service, the New England Fishery Management Council, and the Mid-Atlantic Fishery Management Council. The Council recognizes the jurisdiction of these organizations in fishery management and will work with these entities to protect fisheries resources.
- 3. The Council's policy is to protect commercial and recreational fisheries within the SAMP area from the adverse impacts of other uses, while supporting actions to make ongoing fishing practices more sustainable. It should be recognized that scientific knowledge of the impacts of fishing on habitats and fish populations will advance. Improvements in more sustainable gear technology, fishing practices, and management tools may improve the state of fisheries resources. A general goal of the Council is to constantly improve the health of the Ocean SAMP area ecosystem and the populations of fish and shellfish it provides. Cooperative research, utilizing the unique skills and expertise of the fishing community, will be a cornerstone to this goal.
- 4. Commercial and recreational fisheries activities are dynamic, taking place at different places at different times of the year due to seasonal species migrations and other factors. The Council recognizes that fisheries are dynamic, shaped by these seasonal migrations as well as other factors including shifts in the regulatory environment, market demand, and global climate change. The Council further recognizes that the entire Ocean SAMP area is used by commercial and recreational fishermen employing different fishing methods and gear types. Changes in existing uses, intensification of uses, and new uses within the area could cause adverse impacts to these fisheries. Accordingly, the Council shall:
 - i. In consultation with the Fishermen's Advisory Board, as defined in section 1160.1.6, identify and evaluate prime fishing areas on an ongoing basis through an adaptive framework.
 - ii. Review any uses or activities that could disrupt commercial or recreational fisheries activities.
- 5. The Council shall work together with the U.S. Coast Guard, the U.S. Navy, the U.S. Army Corps of Engineers, NOAA, fishermen's organizations, marine pilots, recreational boating organizations, and other marine safety organizations to promote safe navigation, fishing, and recreational boating activity around and through offshore structures and developments, and along cable routes, during the construction, operation, and decommissioning phases of such projects. The Council will promote and support the education of all mariners regarding safe navigation around offshore structures and developments and along cable routes.

6. Consultations with the U.S. Coast Guard, the U.S. Department of Interior Bureau of Ocean Energy Management, Regulation, and Enforcement, and the U.S. Army Corps of Engineers have indicated that no vessel access restrictions are planned for the waters around and through offshore structures and developments, or along cable routes, except for those necessary for navigational safety. Commercial and recreational fishing and boating access around and through offshore structures and developments and along cable routes is a critical means of mitigating the potential adverse impacts of offshore structures on commercial and recreational fisheries and recreational boating. The Council endorses this approach and shall work to ensure that the waters surrounding offshore structures, developments, and cable routes remain open to commercial and recreational fishing, marine transportation, and recreational boating, except for navigational safety restrictions. The Council requests that federal agencies notify the Council immediately of any federal action that may affect vessel access around and through offshore structures and developments and along cable routes. The Council also requests ongoing review of any federal agency decisions regarding vessel access around and through offshore structures and developments and along cable routes.

1150.5. Recreation and Tourism

- 1. The Council recognizes the economic, historic, and cultural value of marine recreation and tourism activities in the Ocean SAMP area to the state of Rhode Island. The Council's goal is to promote uses of the Ocean SAMP area that do not significantly interfere with marine recreation and tourism activities.
- 2. When evaluating proposed Offshore Developments, the Council will carefully consider the potential impacts of such activities on marine recreation and tourism uses. Where it is determined that there is a significant impact, the Council may modify or deny activities that significantly detract from these uses.
- 3. The Council will encourage and support uses of the Ocean SAMP area that enhance marine recreation and tourism activities.
- 4. The Council recognizes that the waters south of Brenton Point and within the 3-nautical mile boundary surrounding Block Island are heavily-used recreational areas and are commonly used for organized sailboat races and other marine events. The Council encourages and supports the ongoing coordination of race and marine event organizers with the U.S. Coast Guard, the U.S. Navy, and the commercial shipping community to facilitate safe recreational boating in and adjacent to these areas, which include charted shipping lanes and Navy restricted areas (see Chapter 7, Marine Transportation, Navigation, and Infrastructure). The Council shall consider these heavily-used recreational areas when evaluating Offshore Developments in this area. Where it is determined that there is a significant impact, the Council may suitably modify or deny activities that significantly detract from these uses. The Council also recognizes that much of this organized recreational activity is concentrated within the circular sailboat racing areas as depicted in Figure 11.6, and accordingly has designated these areas as

Areas of Particular Concern. See section 1160.2 for requirements associated with Areas of Particular Concern.

- 5. See 1150.4.5 for a policy regarding safe navigation around and through offshore structures and developments and along cable routes.
- 6. See 1150.4.6 for a policy regarding vessel access around and through offshore structures and developments and along cable routes.
- 7. The Council recognizes that offshore wildlife viewing activities are reliant on the presence and visibility of marine and avian species which rely on benthic habitat, the availability of food, and other environmental factors. The Council shall consider these environmental factors when evaluating proposed Offshore Developments in these areas. Where it is determined that there is a significant impact, the Council may modify or deny activities that significantly detract from these uses.

1150.6. Marine Transportation, Navigation, and Infrastructure

- 1. The Council recognizes the importance of designated navigation areas, which include shipping lanes, precautionary areas, recommended vessel routes, pilot boarding areas, anchorages, Navy restricted areas, and submarine transit lanes to marine transportation and navigation activities in the Ocean SAMP area. The Council also recognizes that these and other waters within the Ocean SAMP area are heavily used by numerous existing users who have adapted to each other with regard to their uses of ocean space. Any changes in the spatial use patterns of any one of these users will result in potential impacts to the other users. The Council will carefully consider the potential impacts of such changes on the marine transportation network. Changes to existing designated navigational areas proposed by the U.S. Coast Guard, NOAA, the R.I. Port Safety and Security Forums, or other entities could similarly impact existing uses. The Council requests that they be notified by any of these parties if any such changes are to be made to the transportation network so that they may work with those entities to achieve a proper balance among existing uses.
- 2. The Council recognizes the economic, historic, and cultural value of marine transportation and navigation uses of the Ocean SAMP area to the state of Rhode Island. The Council's goal is to promote uses of the Ocean SAMP area that do not significantly interfere with marine transportation and safe navigation within designated navigation areas, which include shipping lanes, precautionary areas, recommended vessel routes, pilot boarding areas, anchorages, Navy restricted areas, and submarine transit lanes. See section 1160.2 for discussion of navigation areas which have been designated as Areas of Particular Concern.
- 3. The Council will encourage and support uses of the Ocean SAMP area that enhance marine transportation and safe navigation within designated navigation areas, which

include shipping lanes, precautionary areas, recommended vessel routes, pilot boarding areas, anchorages, Navy restricted areas, and submarine transit lanes.

- 4. See 1150.4.5 for a policy regarding safe navigation around and through offshore structures and developments and along cable routes.
- 5. See 1150.4.6 for a policy regarding vessel access around and through offshore structures and developments and along cable routes.
- 1150.7. Offshore Renewable Energy and other Offshore Development
 - 1. The Council supports offshore development in the Ocean SAMP area that is consistent with the Ocean SAMP goals, which are to:
 - i. Foster a properly functioning ecosystem that can be both ecologically effective and economically beneficial;
 - ii. Promote and enhance existing uses; and
 - iii. Encourage marine-based economic development that considers the aspirations of local communities and is consistent and complementary to the state's overall economic development needs and goals.
 - 2. The Council supports the policy of increasing renewable energy production in Rhode Island. The Council also recognizes:
 - i. Offshore wind energy currently represents the greatest potential for utility-scale renewable energy generation in Rhode Island;
 - ii. Offshore renewable energy development is a means of mitigating the potential effects of global climate change;
 - iii. Offshore renewable energy development will diversify Rhode Island's energy portfolio;
 - iv. Offshore renewable energy development will aid in meeting the goals set forth in Rhode Island's Renewable Energy Standard;
 - v. Marine renewable energy has the potential to assist in the redevelopment of urban waterfronts and ports.
 - 3. Offshore Developments proposed to be sited in state waters shall not have a significant adverse impact on the natural resources or existing human uses described in the Ocean SAMP. Offshore Developments proposed to be sited in State waters are bound by all the applicable provisions listed in Chapter 11, The Policies of the Ocean SAMP. Where the Council determines that impacts on the natural resources or human uses of the SAMP area through the pre-construction, construction, operation, or decommissioning phases of a project constitute significant adverse impacts, the Council shall require that the applicant modify the proposal to avoid and/or mitigate the impacts or the Council shall deny the proposal.
 - 4. The Council may require the applicant to fund a program to mitigate the potential impacts of a proposed Offshore Development to natural resources and existing human uses. The mitigation program may be used to support restoration projects, additional monitoring, preservation, or research activities on the impacted resource or site.

- 5. To the greatest extent possible, Offshore Development structures and projects shall be made available to researchers for the investigation into the effects of large-scale installations on the marine environment, and to the extent practicable, educators for the purposes of educating the public.
- 6. The Council shall work in coordination with the U.S. Department of the Interior Bureau of Ocean Energy Management, Regulation and Enforcement to develop a seamless process for review and design approval of offshore wind energy facilities that is consistent across state and federal waters.
- 7. The Council shall work together with the U.S. Coast Guard, the U.S. Navy, the U.S. Army Corps of Engineers, NOAA, fishermen's organizations, marine pilots, recreational boating organizations, and other marine safety organizations to promote safe navigation, fishing, and recreational boating activity around and through offshore structures and developments, and along cable routes, during the construction, operation, and decommissioning phases of such projects. The Council will promote and support the education of all mariners regarding safe navigation around offshore structures and developments and along cable routes.
- 8. Consultations with the U.S. Coast Guard, the U.S. Bureau of Ocean Energy Management, Regulation and Enforcement, and U.S. Army Corps of Engineers have indicated that no vessel access restrictions are planned for the waters around and through offshore structures and developments, or along cable routes, except for those necessary for navigational safety. Commercial and recreational fishing and recreational boating access around and through offshore structures and developments and along cable routes is a critical means of mitigating the potential adverse impacts of offshore structures on commercial and recreational fisheries and recreational boating. The Council endorses this approach and shall work to ensure that the waters surrounding offshore structures, developments, and cable routes remain open to commercial and recreational fishing, marine transportation, and recreational boating, except for navigational safety restrictions. The Council requests that federal agencies notify the Council immediately of any federal action that may affect vessel access around and through offshore structures and developments and along cable routes. The Council also requests ongoing review of any federal agency decisions regarding vessel access around and through offshore structures and developments and along cable routes.

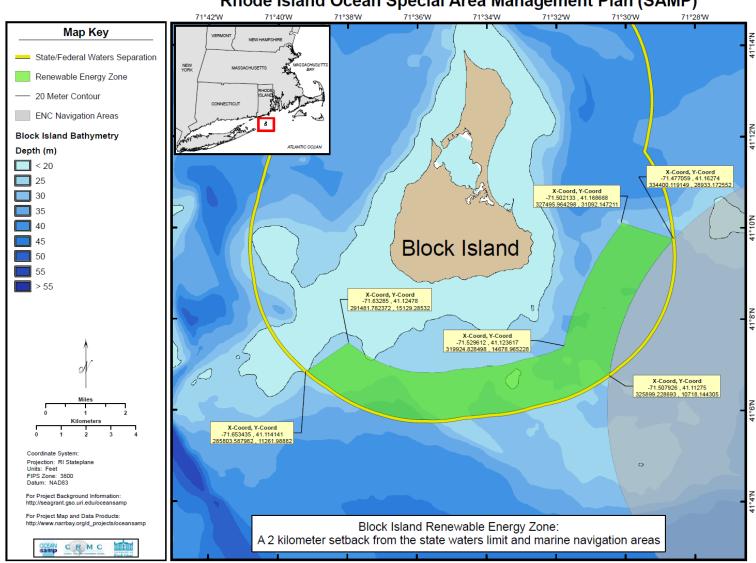
Section 1160. Regulatory Standards

- 1. This section contains all the regulatory standards outlined by the Ocean SAMP. The regulatory standards have been organized according to the following stages: application; design, fabrication and installation; pre-construction; construction and decommissioning and; monitoring. Section 1160.1, Overall Regulatory Standards, applies to all stages of development. The regulatory standards contained within all previous chapters of the Ocean SAMP document have been incorporated into this section based upon the applicable stage of development.
- 1160.1 Overall Regulatory Standards
 - 1. All Offshore Developments regardless of size, including energy projects, which are proposed for or located within the Ocean SAMP area, are subject to the policies and standards outlined in Sections 1150 and 1160. For the purposes of the Ocean SAMP, Offshore Developments are defined as:
 - i. Large-scale projects, such as:
 - a. offshore wind facilities (5 or more turbines within 2 km of each other, or 18 MW power generation);
 - b. wave generation devices (2 or more devices, or 18 MW power generation);
 - c. instream tidal or ocean current devices (2 or more devices, or 18 MW power generation); and
 - d. offshore LNG platforms (1 or more); and
 - e. Artificial reefs (1/2 acre footprint and at least 4 feet high), except for projects of a public nature whose primary purpose is habitat enhancement.
 - ii. Small-scale projects, defined as any projects that are smaller than the above thresholds;
 - iii. Underwater cables;
 - iv. Mining and extraction of minerals, including sand and gravel;
 - v. Aquaculture projects of any size, as defined in RICRMP Section 300.11; or
 - vi. Other development (as defined in the RICRMP)³ which is located from the mouth of Narragansett Bay seaward, in tidal waters between 500 feet offshore and the 3-nautical mile, state water boundary.
 - 2. In assessing the natural resources and existing human uses present in state waters of the Ocean SAMP area, the Council finds that the most suitable area for offshore renewable energy development in the state waters of the Ocean SAMP area is the Renewable Energy Zone depicted in Figure 11.1 below. The Council designates this area as Type 4E waters. In the Rhode Island Coastal Resources Management Program these waters were previously designated as Type 4 (or multipurpose) but are hereby modified to show that this is the preferred site for large scale renewable energy development elsewhere in the Ocean SAMP area, within state waters, where it is determined to have no significant adverse impact on the natural resources or human uses of the Ocean SAMP area. Large-scale Offshore Developments shall avoid areas designated as Areas of Particular Concern

³ "Development" is defined in the RICRMP Glossary.

constistent with Section 1160.2. No large-scale offshore renewable energy development shall be allowed in Areas Designated for Preservation consistent with Section 1160.3.

Ocean SAMP D R A F T of 7/23/10 Chapter 11



Rhode Island Ocean Special Area Management Plan (SAMP)

Figure 11.1 Renewable Energy Zone.

- 3. To minimize permitting inefficiencies and streamline the review process for offshore wind energy developments, the Council shall adopt a format of regulatory review similar to the regulations of the U.S. Department of the Interior's Bureau of Ocean Energy Management, Regulation and Enforcement for offshore wind energy. All documentation required at the time of application shall be similar with the requirements followed by the U.S. Department of the Interior Bureau of Ocean Energy Management, Regulation and Enforcement for Ocean Energy Management, Regulation and Enforcement when issuing renewable energy leases on the Outer Continental Shelf. For further details on these regulations see 30 CFR §§285 *et seq*.
- 4. To the maximum extent practicable, the Council shall coordinate with the appropriate federal and state agencies to establish project specific requirements that shall be followed applicant during the pre-construction, construction, operation and by the decommissioning phases of an Offshore Development. To the maximum extent practicable, the Council shall work in coordination with a Joint Agency Working Group when establishing pre-construction survey and data requirements, monitoring requirements, protocols and mitigation measures for a proposed Offshore Development. The Joint Agency Working Group shall comprise those state and federal agencies that have a regulatory responsibility related to the proposed project, as well as the Narragansett Indian Tribal Historic Preservation Office. The agency composition of this working group may differ depending on the proposed project. The Joint Agency Working Group shall be co-led by the CRMC and the lead federal agency with primary jurisdiction over the proposed project. The pre-construction survey requirements outlined in Section 1160.5.3 (i) may be reduced for small-scale offshore developments as specified by the Joint Agency Working Group.
- 5. Any assent holder of an approved Offshore Development shall:
 - i. Design the project and conduct all activities in a manner that ensures safety and shall not cause undue harm or damage to natural resources, including their physical, chemical, and biological components to the extent practicable; and take measures to prevent unauthorized discharge of pollutants including marine trash and debris into the offshore environment.
 - ii. Submit requests, applications, plans, notices, modifications, and supplemental information to the Council as required;
 - iii. Follow up, in writing, any oral request or notification made by the Council, within 3 business days;
 - iv. Comply with the terms, conditions, and provisions of all reports and notices submitted to the Council, and of all plans, revisions, and other Council approvals, as provided in section 1160.5;
 - v. Make all applicable payments on time;
 - vi. Conduct all activities authorized by the permit in a manner consistent with the provisions of this document, the Rhode Island Coastal Resources Management Program, and all relevant federal and state statutes, regulations and policies;
 - vii. Compile, retain, and make available to the Council within the time specified by the Council any information related to the site assessment, design, and operations of a project; and
 - viii. Respond to requests from the Council in a timeframe specified by the Council.

- 6. The Council shall appoint a standing Fishermen's Advisory Board (FAB) which shall provide advice to the Council on the siting and construction of other uses in marine waters. The FAB is an advisory body to the Council that is not intended to supplant any existing authority of any other federal or state agency responsible for the management of fisheries. The FAB shall be comprised of six members, one representing each of the following fisheries: bottom trawling; scallop dredging; gillnetting; lobstering; party and charter boat fishing; and recreational angling. FAB members shall serve four-year terms and shall serve no more than two consecutive terms. The Council shall provide to the FAB a semi-annual status report on Ocean SAMP area fisheries-related issues, including but not limited to those of which the Council is cognizant in its planning and regulatory activities, and shall notify the FAB in writing concerning any project in the Ocean SAMP area. The FAB shall meet not less than semi-annually and on an as-needed basis to provide the Council with advice on the potential adverse impacts of other uses on commercial and recreational fishermen and fisheries activities, and on issues including, but not limited to, the evaluation and planning of project locations, arrangements, and alternatives; micro-siting of individual structures; access limitations; and measures to mitigate the potential impacts of such projects on the fishery. Any Large-Scale Offshore Development, as defined above in section 1160.1.1, shall require a pre-application meeting between the FAB, the applicant, and the Council staff to discuss potential fishery-related impacts, such as, but not limited to, project location, construction schedules, alternative locations, and project minimization. During the pre-application meeting for a Large-Scale Offshore Development, the FAB can also identify areas of high fishing activity or habitat edges.
- 7. The Council shall prohibit any other uses or activities that would result in significant long-term negative impacts to Rhode Island's commercial or recreational fisheries. Long-term impacts are defined as those that affect more than one or two seasons.
- 8. The Council shall require that the potential adverse impacts of Offshore Developments and other uses on commercial or recreational fisheries be evaluated, considered, and mitigated as described in section 1160.1.9.
- 9. For the purposes of Fisheries Policies and Standards as summarized in Chapter 5, Fisheries Resources and Uses, sections 560.1-560.2, mitigation is defined as a process to make whole those fisheries user groups that are adversely affected by proposals to be undertaken, or undertaken projects, in the Ocean SAMP area. Mitigation measures shall be consistent with the purposes of duly adopted fisheries management plans, programs, strategies and regulations of the agencies and regulatory bodies with jurisdiction over fisheries in the SAMP area, including but not limited to those set forth above in 1150.4.2. Mitigation shall not be designed or implemented in a manner that substantially diminishes the effectiveness of duly adopted fisheries management programs. Mitigation measures may include, but are not limited to, compensation, effort reduction, habitat preservation, restoration and construction, marketing, and infrastructure improvements. Where there are potential impacts associated with proposed projects, the need for mitigation shall be presumed. Negotiation of mitigation agreements shall be a necessary

condition of any approval or permit of a project by the Council. Mitigation shall be negotiated between the Council staff, the FAB, the project developer, and approved by the Council. The reasonable costs associated with the negotiation, which may include data collection and analysis, technical and financial analysis, and legal costs, shall be borne by the applicant. The applicant shall establish and maintain either an escrow account to cover said costs of this negotiation or such other mechanism as set forth in the permit or approval condition pertaining to mitigation. This policy shall apply to all Large-Scale Offshore Developments, underwater cables, and other projects as determined by the Council.

- 10. The Council recognizes that moraine edges, as illustrated in figures 11.3 and 11.4, are important to commercial and recreational fishermen. In addition to these mapped areas, the FAB may identify other edge areas that are important to fisheries within a proposed project location. The Council shall consider the potential adverse impacts of future activities or projects on these areas to Rhode Island's commercial and recreational fisheries. Where it is determined that there is a significant adverse impact, the Council will modify or deny activities that would impact these areas. In addition, the Council will require assent holders for Offshore Developments to employ micro-siting techniques in order to minimize the potential impacts of such projects on these edge areas.
- 11. The finfish, shellfish, and crustacean species that are targeted by commercial and recreational fishermen rely on appropriate habitat at all stages of their life cycles. While all fish habitat is important, spawning and nursery areas are especially important in providing shelter for these species during the most vulnerable stages of their life cycles. The Council shall protect sensitive habitat areas where they have been identified through the Site Assessment Plan or Construction and Operation Plan review processes for Offshore Developments as described in section 160.5.3 (i).
- 1160.2 Areas of Particular Concern
 - 1. Areas of Particular Concern that have been identified through the Ocean SAMP process include:
 - i. Areas with unique or fragile physical features, or important natural habitats;
 - ii. Areas of high natural productivity;
 - iii. Areas with features of historical significance or cultural value;
 - iv. Areas of substantial recreational value;
 - v. Areas important for navigation, transportation, military and other human uses; and
 - vi. Areas of high fishing activity.
 - 2. The Council has designated the areas listed below in section 1160.2.3 as Areas of Particular Concern. The Council shall require applicants for Offshore Developments to avoid Areas of Particular Concern within the Ocean SAMP area. Avoidance shall be the primary goal for these areas for any Large-scale project. Small-scale or Other Offshore Development may also be required to avoid these areas. Where these Areas of Particular

Concern cannot be avoided, the applicant shall be required to minimize to the greatest extent possible any impact, and as necessary, mitigate any significant impact to these resources. The applicant shall be required to demonstrate why these areas cannot be avoided or why no other alternatives are available. Proposed underwater cables will be subject to certain categories of Areas of Particular Concern, as determined by the Council in coordination with the Joint Agency Working Group.

- 3. Areas of particular concern that have been identified in the Ocean SAMP area are described as follows.
 - i. Historic shipwrecks, archeological or historical sites and their buffers as described in Chapter 4, Cultural and Historic Resources, section 440.1.1 through 440.1.4, are Areas of Particular Concern. For the latest list of these sites and their locations please refer to the Rhode Island State Historic Preservation and Heritage Commission.
 - ii. Offshore dive sites within the Ocean SAMP area, as shown in Figure 11.2, are designated Areas of Particular Concern. The Council recognizes that offshore dive sites, most of which are shipwrecks, are valuable recreational and cultural ocean assets and are important to sustaining Rhode Island's recreation and tourism economy.

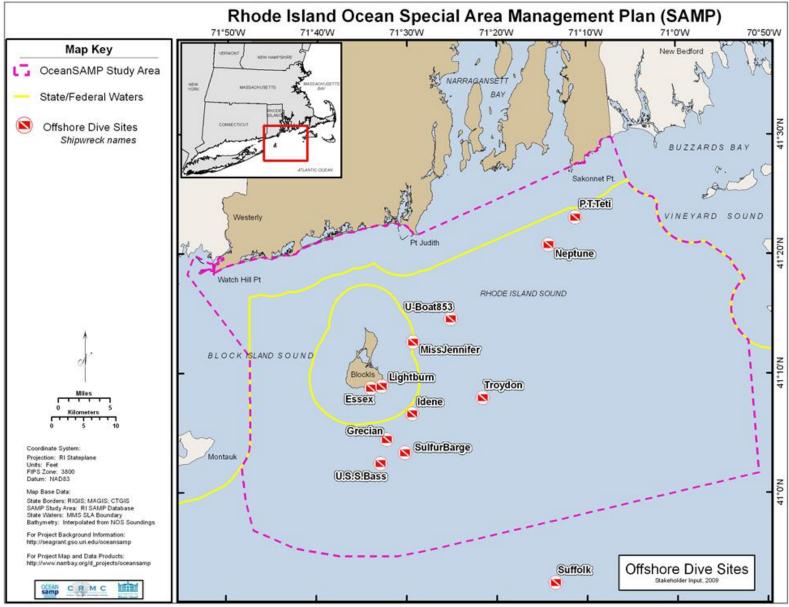


Figure 11.1 Offshore Dive Sites Designated as Areas of Particular Concern.

iii. Glacial moraines are important habitat areas for fish because of their relative structural permanence and structural complexity. The Council also recognizes that because glacial moraines contain valuable fish habitats they are also important to commercial and recreational fishermen. Accordingly, the Council shall designate glacial moraines as identified in figures 11.3 and 11.4 as Areas of Particular Concern.

Chapter 11 Ocean SAMP D R A F T of 7/23/10

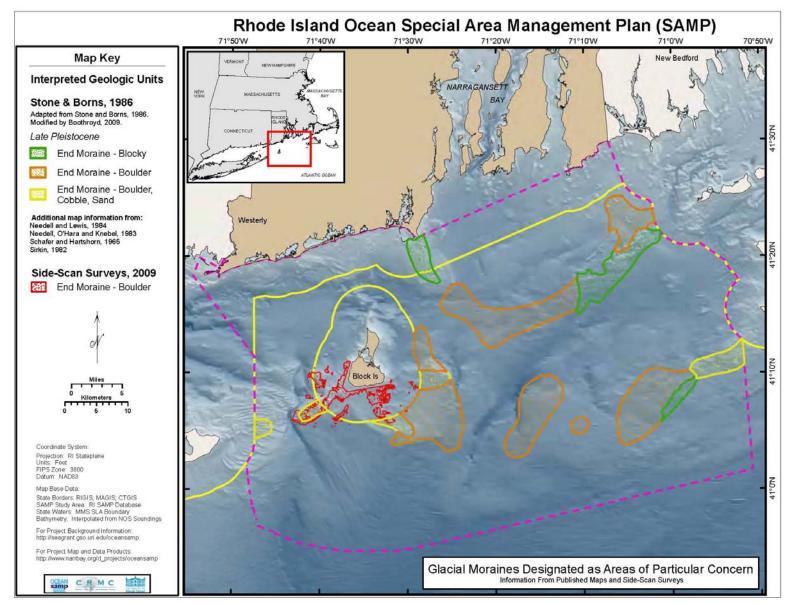


Figure 11.3 Glacial Moraines Designated as Areas of Particular Concern.

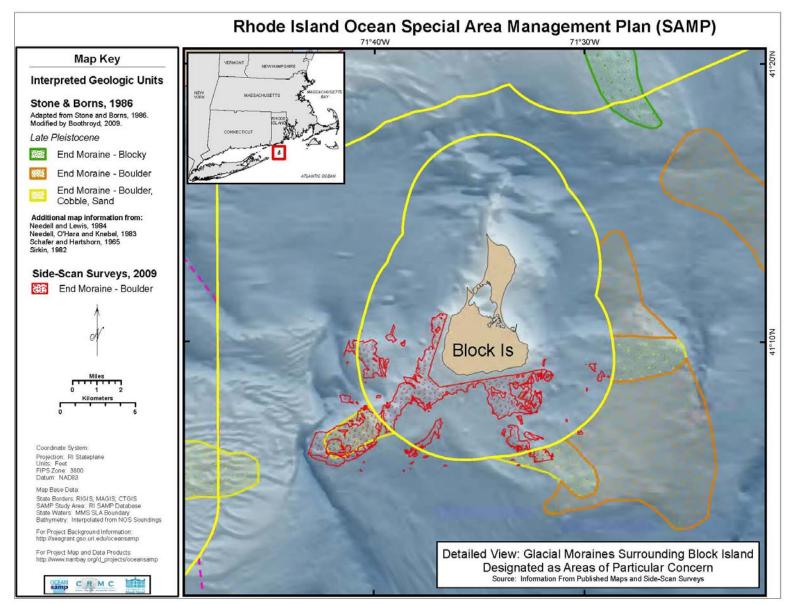


Figure 11.4 Detailed View: Glacial Moraines Surrounding Block Island Designated as Areas of Particular Concern.

iv. Navigation, Military, and Infrastructure areas including: 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 as depicted in Figure 11.5 are designated as Areas of Particular Concern. The Council recognizes the importance of these areas to marine transportation, navigation and other activities in the Ocean SAMP area.

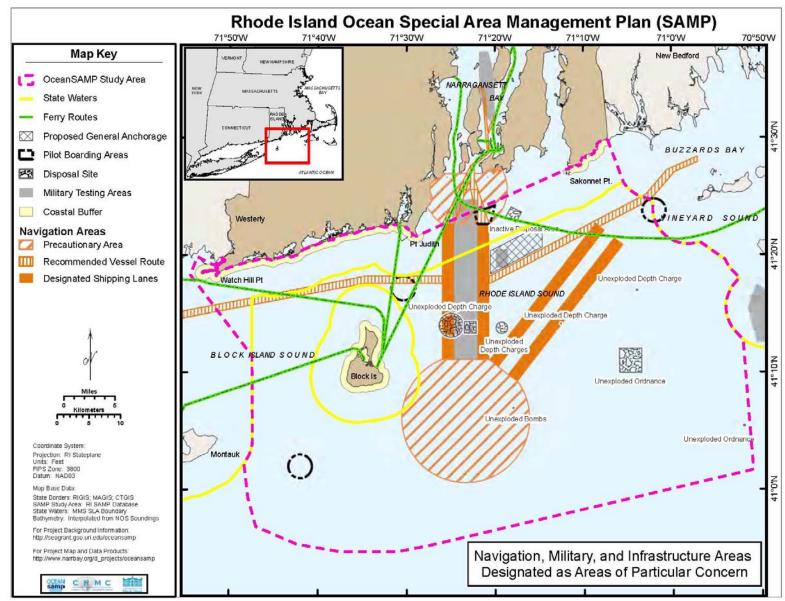


Figure 11.5 Navigation, Military, and Infrastructure Areas Designated as Areas of Particular Concern.

- vi. Areas of high fishing activity as identified during the pre-application process by the Fishermen's Advisory Board, as defined in section 1160.1.6, may be designated as Areas of Particular Concern.
- vii. Several heavily-used recreational boating and sailboat racing areas, as shown in Figure 11.6, are designated as Areas of Particular Concern. The Council recognizes that organized recreational boating and sailboat racing activities are concentrated in these particular areas, which are therefore important to sustaining Rhode Island's recreation and tourism economy.

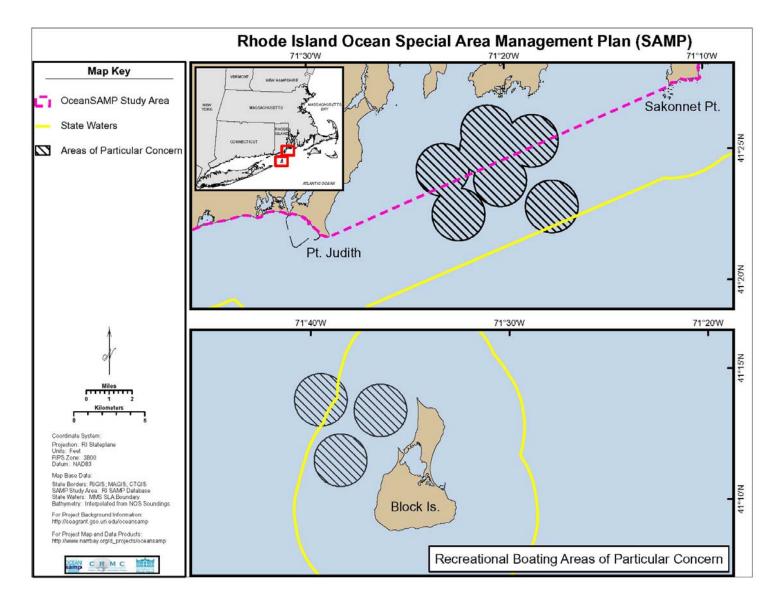


Figure 11.6 Recreational Boating Areas Designated as Areas of Particular Concern.

- viii. Naval Fleet Submarine Transit Lanes, as described in Chapter 7, Marine Transportation, Navigation, and Infrastructure section 720.7, are designated as Areas of Particular Concern.
- ix. Other Areas of Particular Concern may be identified during the pre-application review by state and federal agencies as areas of importance.

1160.3 Prohibitions and Areas Designated for Preservation

- 1. Areas Designated for Preservation are designated in the Ocean SAMP area for the purpose of preserving them for their ecological value. The areas described in Section 1160.3 are designated as Areas Designated for Preservation. The Council shall prohibit any Large-Scale Offshore Development, mining and extraction of minerals, or other development that has been found to be in conflict with the intent and purpose of an Area Designated for Preservation. Underwater cables are exempt from this prohibition. Areas designated for preservation include:
 - i. Ocean SAMP sea duck foraging habitat in water depths less than or equal to 20 meters [65.6 feet] (as shown in figure 11.7) are designated as Areas Designated for Preservation due to their ecological value and the significant role these foraging habitats play to avian species.

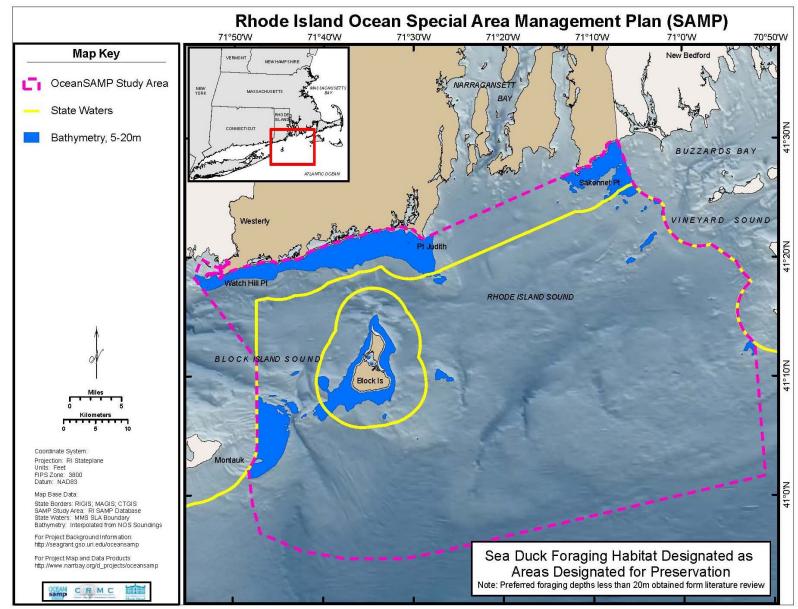


Figure 11.7 Sea Duck Foraging Habitat Designated as Areas Designated for Preservation.

- 2. The mining and extraction of minerals, including sand and gravel, from tidal waters and salt ponds is prohibited. This prohibition does not apply to dredging for navigation purposes, channel maintenance, habitat restoration, or beach replenishment for public purposes.
- 3. The Council shall prohibit any Offshore Development in areas identified as Critical Habitat under the Endangered Species Act.

Section 1160.4. Other Areas

1. Large-scale projects or other development which is found to be a hazard to commercial navigation shall avoid areas of high intensity commercial marine traffic. Avoidance shall be the primary goal of these areas. Areas of High Intensity Commercial Marine Traffic are defined as having 50 or more vessel counts within a 100 by 100 meter grid, as shown in Figure 11.8.

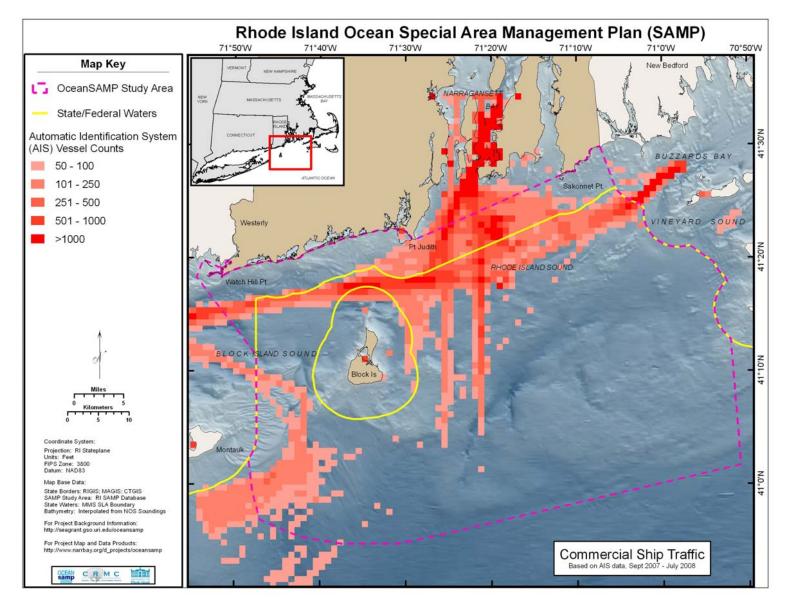


Figure 11.8 Areas of High Intensity Commercial Ship Traffic.

1160.5 Application Requirements

- 1. For the purposes of this document, the phrase 'necessary data and information' shall refer to the necessary data and information required for federal consistency determinations under the Coastal Zone Management Act (CZMA) (see 15 CFR §930.58). Any necessary data and information shall be provided before the 6-month CZMA review period begins for a proposed project.
- 2. For the purposes of this document, the following terms shall be defined as:
 - i. A **Site Assessment Plan** (SAP) is defined as a pre-application plan that describes the activities and studies the applicant plans to perform for the characterization of the project site.
 - ii. A **Construction and Operations Plan** (COP) is defined as a plan that describes the applicant's construction, operations, and conceptual decommissioning plans for a proposed facility, including the applicant's project easement area.
 - iii. A **Certified Verification Agent** (CVA) is defined as an independent third-party agent that shall use good engineering judgment and practices in conducting an independent assessment of the design, fabrication and installation of the facility.
- 3. Prior to construction, the following sections shall be considered necessary data and information and shall be required by the Council:
 - i. Site Assessment Plan – A SAP is a pre-application plan that describes the activities and studies (e.g. installation of meteorological towers, meteorological buoys) the applicant plans to perform for the characterization of the project site. Within the Renewable Energy Zone, if an applicant applies within 2 years of CRMC's adoption of the Ocean Special Area Management Plan they may elect to combine the SAP and Construction and Operation Plan (COP) phase, but only within the renewable energy zone and only for 2 years after the adoption date. If an applicant elects to combine these two phases all requirements shall still be met. The SAP shall describe how the applicant shall conduct the resource assessment (e.g., meteorological and oceanographic data collection) or technology testing activities. The applicant shall receive the approval of the SAP by the Council. For projects within Type 4E waters (depicted in Figure 11.1), pre-construction data requirements may incorporate data generated by the Ocean SAMP provided the data was collected within 2 years of the date of application, or where the Ocean SAMP data is determined to be current enough to meet the requirements of the Council in coordination with the Joint Agency Working Group. The applicant shall reference information and data discussed in the Ocean SAMP (including appendices and technical reports) in their SAP.
 - a. The applicant's SAP shall include data from:
 - 1. Physical characterization surveys (e.g., geological and geophysical surveys or hazards surveys); and
 - 2. Baseline environmental surveys (e.g., biological or archaeological surveys).

- b. The SAP shall demonstrate that the applicant has planned and is prepared to conduct the proposed site assessment activities in a manner that conforms to the applicant's responsibilities listed above in section 1160.1.5 and:
 - 1. Conforms to all applicable laws, regulations;
 - 2. Is safe;
 - 3. Does not unreasonably interfere with other existing uses of the state waters,
 - 4. Does not cause undue harm or damage to natural resources; life (including human and wildlife);the marine, coastal, or human environment; or sites, structures, or direct harm to objects of historical or archaeological significance;
 - 5. Uses best available and safest technology;
 - 6. Uses best management practices; and
 - 7. Uses properly trained personnel.
- c. The applicant shall also demonstrate that the site assessment activities shall collect the necessary data and information required for the applicant's COP, as described below in section 1160.5.3 (ii).
- d. The applicant's SAP shall include the information described in Table 11.1, as applicable.

Table 11.1	. Contents of a	Site	Assessment Plan.
-------------------	-----------------	------	------------------

Project information:	Including:
(1) Contact information	The name, address, e-mail address, and phone number
	of an authorized representative.
(2) The site assessment or technology	A discussion of the objectives; description of the
testing concept.	proposed activities, including the technology to be
	used; and proposed schedule from start to completion.
(4) Stipulations and compliance.	A description of the measures the applicant took, or
	shall take, to satisfy the conditions of any permit
	stipulations related to the applicant's proposed
	activities.
(5) A location.	The surface location and water depth for all proposed
	and existing structures, facilities, and appurtenances
	located both offshore and onshore.
(6) General structural and project	Information for each type of facility associated with
design, fabrication, and installation.	the applicant's project.
(7) Deployment activities.	A description of the safety, prevention, and
	environmental protection features or measures that the
	applicant will use.
(8) The applicant's proposed measures	A description of the measures the applicant shall take
for avoiding, minimizing, reducing,	to avoid or minimize adverse effects and any potential
eliminating, and monitoring	incidental take, before the applicant conducts
environmental impacts.	activities on the project site, and how the applicant
	shall mitigate environmental impacts from proposed
	activities, including a description of the measures to
	be used.
(9) Reference information.	Any document or published sources that the applicant

	cites as part of the plan. The applicant shall reference information and data discussed in the Ocean SAMP (including appendices and technical reports), other plans referenced in the Ocean SAMP, and other plans previously submitted by the applicant or that are otherwise readily available to the Council.
(10) Decommissioning and site clearance procedures.	A discussion of methodologies.
(11) Air quality information.	Information required for the Clean Air Act (42 U.S.C. 7409) and implementing regulations
(12) A listing of all Federal, State, and local authorizations or approvals required to conduct site assessment activities on the project site.	A statement indicating whether such authorization or approval has been applied for or obtained.
(13) A list of agencies or persons with whom the applicant has communicated, or will communicate, regarding potential impacts associated with the proposed activities.	Contact information and issues discussed.
(14) Financial assurance information.	Statements attesting that the activities and facilities proposed in the applicant's SAP are or shall be covered by an appropriate performance bond or other Council approved security.
(15) Other information.	Additional information as requested by the Council in coordination with the Joint Agency Working Group

e. The applicant's SAP shall provide the results of geophysical and geological surveys, hazards surveys, archaeological surveys (as required by the Council in coordination with the Joint Agency Working Group), and biological surveys outlined in Table 11.2 (with the supporting data) in the applicant's SAP:

Table 11.2. Necessary Data and Information to be provided in the Site Assessment Plan.

Information.	Report contents.	Including.
(1) Geotechnical.	Reports from the geotechnical survey with supporting data.	A description of all relevant seabed and engineering information to allow for the design of the foundation of that facility. The applicant shall provide information to depths below which the underlying conditions shall not influence the integrity or performance of the structure. This could include a series of sampling locations (borings and <i>in situ</i> tests) as well as laboratory
		testing of soil samples.
(2) Shallow hazards.	The results from the shallow hazards survey with supporting data, if required.	A description of information sufficient to determine the presence of the following features and their likely effects on the proposed facility, including:

		(i) Shallow faults;
		(ii) Gas seeps or shallow gas;
		(iii) Slump blocks or slump sediments;
		(iv) Hydrates; and
		(v) Ice scour of seabed sediments.
(3) Archaeological	The results from the	(i) A description of the results and data
resources.	archaeological survey with	from the archaeological survey;
	supporting data, if required.	(ii) A description of the historic and
		prehistoric archaeological resources, as
		required by the National Historic
		Preservation Act and Antiquities Act
		(16 U.S.C. 470 et. seq.), as amended,
		the Rhode Island Historical
		Preservation Act and Antiquities Act
		and Sections 220 and 330 of the
		RICRMP, as applicable;
		(iii) For more information on the
		archeological surveys and assessments
		required see Section 440.
(4) Geological	The results from the geological	A report that describes the results of a
survey.	survey with supporting data.	geological survey that includes
survey.	survey with supporting data.	descriptions of:
		(i) Seismic activity at the proposed
		site;
		(ii) Fault zones;
		(iii) The possibility and effects of
		seabed subsidence; and
		(iv) The extent and geometry of
		faulting attenuation effects of geologic
		conditions near the site.
(5) Biological survey.	The results from the biological	A description of the results of a
	survey with supporting data.	biological survey, including
		descriptions of the presence of live
		bottoms; hard bottoms; topographic
		features; and surveys of other marine
		resources such as fish populations
		(including migratory populations) not
		targeted by commercial or recreational
		fishing, marine mammals, sea turtles,
		and sea birds.
(6) Fish and Fisheries	The results from the fish and	A report that describes the results of:
Survey	fisheries survey with	
	supporting data.	(i) A biological assessment of
		commercially and recreationally
		targeted species. This assessment
		shall assess the relative abundance,
		distribution, and different life
		stages of these species at all four
		•
		seasons of the year. This
		assessment shall comprise a series

of surveys, employing survey
equipment and methods that are
appropriate for sampling finfish,
shellfish, and crustacean species at
the project's proposed location.
This assessment may include
evaluation of survey data collected
through an existing survey
program, if data are available for
the proposed site.
(ii) An assessment of commercial
and recreational fisheries effort,
landings, and landings value.
Assessment shall focus on the
proposed project area and
alternatives across all four seasons
of the year must. Assessment may
use existing fisheries monitoring
data but shall be supplemented by
interviews with commercial and
recreational fishermen.
(iii) For more information on these
assessments see Section 1160.9.3.

f. The applicant shall submit a SAP that describes those resources, conditions, and activities listed in Table 11.3 that could be affected by the applicant's proposed activities, or that could affect the activities proposed in the applicant's SAP, including but not limited to:

Table 11.3. Resource Data and Uses that shall be described in the Site Assessment Plan.

Type of information	Including:
(1) Hazard information.	Meteorology, oceanography, sediment
	transport, geology, and shallow geological or manmade hazards.
(2) Water quality.	Turbidity and total suspended solids from
	construction.
(3) Biological resources.	Benthic communities, marine mammals, sea
	turtles, coastal and marine birds, fish and
	shellfish (not targeted by commercial or
	recreational fishing), plankton, seagrasses, and
	plant life.
(4) Threatened or endangered species.	As required by the Endangered Species Act
	(ESA) of 1973 (16. U.S.C. 1531 et. seq.).
(5) Sensitive biological resources or habitats.	Essential fish habitat, refuges, preserves, Areas
	of Particular Concern, Areas Designated for
	Preservation, sanctuaries, rookeries, hard
	bottom habitat, and calving grounds; barrier
	islands, beaches, dunes, and wetlands.

(6) Archaeological and visual resources.	As required by the National Historic
	Preservation Act and Antiquities Act (16
	U.S.C. 470 et. seq.), as amended, the Rhode
	Island Historical Preservation Act and
	Antiquities Act and Sections 220 and 330 of
	the RICRMP, as applicable.
(7) Social and economic resources.	Employment, existing offshore and coastal
	infrastructure (including major sources of
	supplies, services, energy, and water), land use,
	subsistence resources and harvest practices,
	recreation, minority and lower income groups,
	and viewshed.
(8) Fisheries Resources and Uses	Commercially and recreationally targeted
	species, recreational and commercial fishing
	(including fishing seasons, location, and type),
	commercial and recreational fishing activities,
	effort, landings, and landings value.
(8) Coastal and marine uses.	Military activities, vessel traffic, and energy
	and non-energy mineral exploration or
	development.

- g. The Council shall review the applicant's SAP in coordination with the Joint Agency Working Group to determine if it contains the information necessary to conduct technical and environmental reviews and shall notify the applicant if the SAP lacks any necessary information..
- h. As appropriate, the Council shall coordinate and consult with relevant Federal and State agencies, and affected Indian tribes.
- i. Any Large-Scale Offshore Development, as defined above in section 1160.1.1, shall require a pre-application meeting between the FAB, the applicant, and the Council staff to discuss potential fishery-related impacts, such as, but not limited to, project location, construction schedules, alternative locations, and project minimization. During the pre-application meeting for a Large-Scale Offshore Development, the FAB can also identify areas of high fishing activity or habitat edges to be considered during the review process.
- j. During the review process, the Council may request additional information if it is determined that the information provided is not sufficient to complete the review and approval process.
- k. Once the SAP is approved by the the Council the applicant may begin conducting the activities approved in the SAP.
- 1. Reporting requirements of the applicant under an approved SAP:
 - 1. Following the approval of a SAP, the applicant shall notify the Council in writing within 30 days of completing installation activities of any temporary measuring devices approved by the Council.
 - 2. The applicant shall prepare and submit to the Council a report semi-annually. The first report shall be due 6 months after work on the SAP begins; subsequent reports shall be submitted every 6 month thereafter until the SAP period is

complete. The report shall summarize the applicant's site assessment activities and the results of those activities.

- 3. The Council reserves the right to require additional environmental and technical studies, if it is found there is a critical area lacking or missing information.
- m. The applicant shall seek the Council's approval before conducting any activities not described in the approved SAP, describing in detail the type of activities the applicant proposes to conduct and the rationale for these activities. The Council shall determine whether the activities proposed are authorized by the applicant's existing SAP or require a revision to the applicant's SAP. The Council may request additional information from the applicant, if necessary, to make this determination.
- n. The Council shall periodically review the activities conducted under an approved SAP. The frequency and extent of the review shall be based on the significance of any changes in available information and on onshore or offshore conditions affecting, or affected by, the activities conducted under the applicant's SAP. If the review indicates that the SAP should be revised to meet the requirements of this part, the Council shall require the applicant to submit the needed revisions.
- o. The applicant may keep approved facilities (such as meteorological towers) installed during the SAP period in place during the time that the Council reviews the applicant's COP for approval. Note: Structures in state waters shall require separate authorizations outside the SAP process.
- p. The applicant is not required to initiate the decommissioning process for facilities that are authorized to remain in place under the applicant's approved COP. If, following the technical and environmental review of the applicant's submitted COP, the Council determines that such facilities may not remain in place the applicant shall initiate the decommissioning process.

ii. Construction and Operations Plan (COP) - The COP describes the applicant's construction, operations, and conceptual decommissioning plans for the proposed facility, including the applicant's project easement area.

- a. The applicant's COP shall describe all planned facilities that the applicant shall construct and use for the applicant's project, including onshore and support facilities and all anticipated project easements.
- b. The applicant's COP shall describe all proposed activities including the applicant's proposed construction activities, commercial operations, and conceptual decommissioning plans for all planned facilities, including onshore and support facilities.
- c. The applicant shall receive the Council's approval of the COP before the applicant can begin any of the approved activities on the applicant's project site, lease or easement.
- d. The COP shall demonstrate that the applicant has planned and is prepared to conduct the proposed activities in a manner that:
 - 1. Conforms to all applicable laws, implementing regulations.

- 2. Is safe;
- 3. Does not unreasonably interfere with other uses of state waters;
- 4. Does not cause undue harm or damage to natural resources; life (including human and wildlife); the marine, coastal, or human environment; or direct impact to sites, structures, or objects of historical or archaeological significance;
- 5. Uses best available and safest technology;
- 6. Uses best management practices; and
- 7. Uses properly trained personnel.
- e. The applicant's COP shall include the following project-specific information, as applicable.

Table 11.4. Contents of the Construction and Operations Plan.

Project information:	Including:	
(1) Contact information	The name, address, e-mail address, and phone number of an authorized representative.	
(2) Designation of operator, if applicable.		
(3) The construction and operation concept	A discussion of the objectives, description of the proposed activities, tentative schedule from start to completion, and plans for phased development.	
(5) A location.	The surface location and water depth for all proposed and existing structures, facilities, and appurtenances located both offshore and onshore, including all anchor/mooring data.	
(6) General structural and project design, fabrication, and installation.	Information for each type of structure associated with the project and, unless the Council provides otherwise, how the applicant shall use a CVA to review and verify each stage of the project.	
(7) All cables and pipelines, including cables on project easements.	Location, design and installation methods, testing, maintenance, repair, safety devices, exterior corrosion protection, inspections, and decommissioning. The applicant shall prior to construction also include location of all cable crossings and appropriate clearance from the owners of existing cables.	
(8) A description of the deployment activities.	Safety, prevention, and environmental protection features or measures that the applicant shall use.	
(9) A list of solid and liquid wastes generated.	Disposal methods and locations.	
(10) A list of chemical products used (if stored volume exceeds Environmental Protection Agency (EPA) Reportable Quantities).	A list of chemical products used; the volume stored on location; their treatment, discharge, or disposal methods used; and the name and location of the onshore waste receiving, treatment, and/or disposal facility. A description of how these products would be brought onsite, the number of transfers that may take place, and the quantity that shall be transferred each time.	
(12) Decommissioning and site clearance procedures.	A discussion of general concepts and methodologies.	
(13) A list of all Federal, State,	A list of all Federal, State, and local authorizations,	

and local authorizations,	approvals, or permits that are required to conduct the
approvals, or permits that are	proposed activities, including commercial operations. In
required to conduct the proposed	addition, a statement indicating whether the applicant hass
activities, including commercial	applied for or obtained such authorizations, approvals, or
operations.	permits.
(14) The applicant's proposed	A description of the measures the applicant shall take to avoid
measures for avoiding,	or minimize adverse effects and any potential incidental take
minimizing, reducing,	before conducting activities on the project site, and how the
eliminating, and monitoring	applicant shall minimize environmental impacts from
environmental impacts.	proposed activities, including a description of the measures.
(15) Information the applicant	A list of the documents referenced and the actual document if
incorporates by reference.	requested.
(16) A list of agencies and	Contact information, issues discussed and the actual
persons with whom the applicant	document if requested
has communicated, or with	
whom the applicant shall	
communicate, regarding	
potential impacts associated with	
the proposed activities.	
(17) Reference.	Contact information.
(18) Financial assurance.	Statements attesting that the activities and facilities proposed
	in the applicant's COP are or shall be covered by an
	appropriate bond or security, as required by section 1160.7.2.
(19) CVA nominations	CVA nominations for reports required.
(20) Construction schedule.	A reasonable schedule of construction activity showing
	significant milestones leading to the commencement of
	commercial operations.
(21) Air quality information.	Information required for the Clean Air Act (42 U.S.C. 7409)
	and implementing regulations.
(22) Other information.	Additional information as required by the Council.

f. The applicant's COP shall include the following information and surveys for the proposed site(s) of the applicant's facility or facilities:

Table 11.5. Necessary	ata and Information to be provided in the Construction and Ope	erations
Plan.		

Information:	Report contents:	Including:
(1) Shallow hazards.	The results of the shallow	Information sufficient to determine the
	hazards survey with supporting	presence of the following features and
	data, if required.	their likely effects on the proposed
		facility, including:
		(i) Shallow faults;
		(ii) Gas seeps or shallow gas;
		(iii) Slump blocks or slump sediments;
		(iv) Hydrates; or
		(v) Ice scour of seabed sediments.
(2) Geological survey	The results of the geological	Assessment of:
relevant to the siting	survey with supporting data.	(i) Seismic activity at the proposed site;
and design of the		(ii) Fault zones;
facility.		(iii) The possibility and effects of
		seabed subsidence; and

		(iv) The extent and geometry of faulting
		attenuation effects of geologic
		conditions near the site.
(3) Biological Survey	The results of the biological	A description of the results of biological
	survey with supporting data.	surveys used to determine the presence
		of live bottoms, hard bottoms, and
		topographic features, and surveys of
		other marine resources such as fish
		populations (including migratory
		populations) not targeted by
		commercial or recreational fishing,
		marine mammals, sea turtles, and sea
		birds.
(4) Fish and Fisheries	The results from the fish and	A report that describes the results of:
Survey	fisheries survey with supporting	Trieport and deserves the results of.
Survey	data.	(i) A biological assassment of
		(i) A biological assessment of
		commercially and recreationally
		targeted species. This assessment shall
		assess the relative abundance,
		distribution, and different life stages of
		these species at all four seasons of the
		year. This assessment shall comprise a
		series of surveys, employing survey
		equipment and methods that are
		appropriate for sampling finfish,
		shellfish, and crustacean species at the
		project's proposed location. This
		assessment may include evaluation of
		survey data collected through an
		existing survey program, if data are
		available for the proposed site.
		(ii) An assessment of commercial and
		recreational fisheries effort, landings,
		and landings value. Assessment shall
		focus on the proposed project area and
		alternatives across all four seasons of
		the year must. Assessment may use
		existing fisheries monitoring data but
		shall be supplemented by interviews
		with commercial and recreational
		fishermen.
		(iii) For more information on these
		assessments see Section 1160.9.3.
(5) Geotechnical	The results of any sediment	(i) The results of a testing program used
survey.	testing program with supporting	to investigate the stratigraphic and
	data, the various field and	engineering properties of the sediment
	laboratory tests employed, and	that may affect the foundations or
	the applicability of these	anchoring systems of the proposed
	methods as they pertain to the	facility.
	quality of the samples, the type	(ii) The results of adequate <i>in situ</i>
	quality of the sumples, the type	(ii) The results of adequate it suit

of sediment, and the anticipated design application. The applicant shall explain how the engineering properties of each sediment stratum affect the design of the facility. In the explanation, the applicant shall describe the uncertainties inherent in the overall testing program, and the reliability and applicability of each method.	testing, boring, and sampling at each foundation location, to examine all important sediment and rock strata to determine its strength classification, deformation properties, and dynamic characteristics. A minimum of one boring shall be taken per turbine planned, and the boring shall be taken within 50 feet of the final location of the turbine. (iii) The results of a minimum of one deep boring (with soil sampling and testing) at each edge of the project area and within the project area as needed to determine the vertical and lateral variation in seabed conditions and to provide the relevant geotechnical data required for design.
	A description of the historic and
	prehistoric archaeological resources, as
with supporting data.	required by the National Historic
	Preservation Act and Antiquities Act
	(16 U.S.C. 470 et. seq.), as amended, the Rhode Island Historical
	Preservation Act and Antiquities Act
	and Sections 220 and 330 of the
	RICRMP, as applicable.
An overall site investigation	An analysis of the potential for:
	(i) Scouring of the seabed;
that integrates the findings of	(ii) Hydraulic instability;
the shallow hazards surveys and	(iii) The occurrence of sand waves;
geologic surveys, and, if	(iv) Instability of slopes at the facility
required, the subsurface surveys	location;
with supporting data.	(v) Liquefaction, or possible reduction
	of sediment strength due to increased
	pore pressures;
	(vi) Cyclic loading;
	(vii) Lateral loading;
	(viii) Dynamic loading;(ix) Settlements and displacements;
	(x) Plastic deformation and formation
F	collapse mechanisms; and
	(xi) Sediment reactions on the facility
	design application. The applicant shall explain how the engineering properties of each sediment stratum affect the design of the facility. In the explanation, the applicant shall describe the uncertainties inherent in the overall testing program, and the reliability and applicability of each method. The results of the archaeological resource survey with supporting data. An overall site investigation report for the proposed facility that integrates the findings of the shallow hazards surveys and geologic surveys, and, if

g. The applicant's COP shall describe those resources, conditions, and activities listed in Table 6 that could be affected by the applicant's proposed activities, or that could affect the activities proposed in the applicant's COP, including:

Type of Information:	Including:
(1) Hazard information and sea	Meteorology, oceanography, sediment transport,
level rise.	geology, and shallow geological or manmade
	hazards. Provide an analysis of historic and project
	(medium and high) rates of sea level rise and shall
	at minimum assess the risks for each alternative on
	public safety and environmental impacts resulting
	from the project (see Section 350.2 for more
	information).
(2) Water quality.	Turbidity and total suspended solids from
	construction.
(3) Biological resources.	Benthic communities, marine mammals, sea turtles,
	coastal and marine birds, fish and shellfish not
	targeted by commercial or recreational fishing,
	plankton, seagrasses, and plant life.
(4) Threatened or endangered	As defined by the ESA (16 U.S.C. 1531 et. seq.)
species.	
(5) Sensitive biological resources	Essential fish habitat, refuges, preserves, Areas of
or habitats.	Particular Concern, sanctuaries, rookeries, hard
	bottom habitat, barrier islands, beaches, dunes, and
	wetlands.
(6) Fisheries resources and uses	Commercially and recreationally targeted species,
	recreational and commercial fishing (including fishing
	seasons, location, and type), commercial and
	recreational fishing activities, effort, landings, and landings value.
(6) Archaeological resources.	As required by the NHPA (16 U.S.C. 470 et. seq.),
(b) Archaeological resources.	as amended.
(7) Social and economic resources.	As determined by the Council in coordination with
(7) Social and economic resources.	the Joint Agency Working Group.
(8) Coastal and marine uses.	Military activities, vessel traffic, and energy and
(o) Coastai and marme uses.	
	non-energy mineral exploration or development.

 Table 11.6. Resources, Conditions and Activities that shall be described in the Construction and Operations Plan.

- h. The applicant shall submit an oil spill response plan per the Oil Pollution Act of 1990, 33 USC 2701 *et seq*.
- i. The applicant shall submit the applicant's Safety Management System, the contents of which are described below:
 - 1. How the applicant plans to ensure the safety of personnel or anyone on or near the facility;
 - 2. Remote monitoring, control and shut down capabilities;
 - 3. Emergency response procedures;
 - 4. Fire suppression equipment (if needed);
 - 5. How and when the safety management system shall be implemented and tested; and
 - 6. How the applicant shall ensure personnel who operate the facility are properly trained.

- The Council shall review the applicant's COP and the information i. provided to determine if it contains all the required information necessary to conduct the project's technical and environmental reviews. The Council shall notify the applicant if the applicant's COP lacks any necessary information.
- k. As appropriate, the Council shall coordinate and consult with relevant Federal, State, and local agencies, the FAB and affected Indian tribes.
- 1. During the review process, the Council may request additional information if it is determined that the information provided is not sufficient to complete the review and approval process. If the applicant fails to provide the requested information, the Council may disapprove the applicant's COP.
- m. Upon completion of the technical and environmental reviews and other reviews required, the Council may approve, disapprove, or approve with modifications the applicant's COP.
- n. In the applicant's COP, the applicant may request development of the project area in phases. In support of the applicant's request, the applicant shall provide details as to what portions of the site shall be initially developed for commercial operations and what portions of the site shall be reserved for subsequent phased development.
- o. If the application and COP is approved, prior to construction the applicant shall submit to the Council for approval the documents listed below:
 - 1. Facility Design Report- The applicant's Facility Design Report provides specific details of the design of any facilities, including cables and pipelines, that are outlined in the applicant's approved SAP or COP. The applicant's Facility Design Report shall demonstrate that the applicant's design conforms to the applicant's responsibilities listed in section 1160.1.5. The applicant shall include the following items in the applicant's Facility Design Report:

Required documents:	Required contents:	Other requirements:
(1) Cover letter.	(i) Proposed facility designations;	The applicant shall submit 4
	(ii)The type of facility	paper copies and 1 electronic
		copy.
(2) Location.	(i) Latitude and longitude	The applicant's plat shall be
	coordinates, Universal Mercator grid-	drawn to a scale of 1 inch equals
	system coordinates, state plane	100 feet and include the
	coordinates in the Lambert or	coordinates of the project site,
	Transverse Mercator Projection	and boundary lines. The
	System;	applicant shall submit 4 paper
	(ii) These coordinates shall be based	copy and 1 electronic copy.
	on the NAD (North American Datum)	
	83 datum plane coordinate system;	
	and	
	(iii) The location of any proposed	
	project easement.	

Table 11.7. Contents of the Facility Design Report.

(3) Front, Side, and	(i) Facility dimensions and	The applicant's drawing sizes
Plan View drawings.	orientation;	shall not exceed 11" x 17". The
	(ii) Elevations relative to Mean	applicant shall submit 4 paper
	Lower Low Water; and	copies and 1 electronic copy.
	(iii) Pile sizes and penetration.	1 15
(4) Complete set of	The approved for construction	The applicant's drawing sizes
structural drawings.	fabrication drawings should be	shall not exceed 11" x 17". The
structurur druwnings.	submitted, including, e.g.,	applicant shall submit 4 paper
	(i) Cathodic protection systems;	copies and 1 electronic copy.
	(ii) Jacket design;	copies and Telectronic copy.
	(iii) Pile foundations;	
	(iv) Mooring and tethering systems;	
	(v) Foundations and anchoring	
	systems; and	
	(vi) Associated cable and pipeline	
	designs.	
(5) Summary of	A summary of the environmental data	The applicant shall submit 4
environmental data	used in the design or analysis of the	paper copies and 1 electronic
used for design.	facility. Examples of relevant data	copy. If the applicant submitted
	include information on:	these data as part of the SAP or
	(i) Extreme weather;	COP, the applicant may reference
	(ii) Seafloor conditions; and	the plan.
	(iii) Waves, wind, currents, tides,	uie pium
	temperature, sea level rise	
	projections, snow and ice effects,	
	marine growth, and water depth.	
(6) Summary of the	(i) Loading information (e.g., live,	The applicant shall submit 4
(6) Summary of the		
engineering design	dead, environmental);	paper copies and 1 electronic
data.	(ii) Structural information (e.g.,	copy.
· · · · · · · · · · · · · · · · · · ·	design-life; material types; cathode	
	protection systems; design criteria;	
	fatigue life; jacket design; deck	
	design; production component design;	
	foundation pilings and templates, and	
	mooring or tethering systems;	
	fabrication or installation guidelines);	
	fabrication or installation guidelines);	
	fabrication or installation guidelines); (iii) Location of foundation boreholes	
	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and	
(7) A complete set of	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria).	The applicant shall submit 4
(7) A complete set of design calculations.	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil	The applicant shall submit 4 paper copies and 1 electronic
(7) A complete set of design calculations.	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria).	paper copies and 1 electronic
design calculations.	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria). Self-explanatory.	paper copies and 1 electronic copy.
design calculations. (8) Project-specific	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria). Self-explanatory.	paper copies and 1 electronic copy. The applicant shall submit 4
design calculations.(8) Project-specific studies used in the	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria). Self-explanatory. All studies pertinent to facility design or installation, (e.g., oceanographic	paper copies and 1 electronic copy. The applicant shall submit 4 paper copies and 1 electronic
design calculations.(8) Project-specific studies used in the facility design or	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria). Self-explanatory.	paper copies and 1 electronic copy. The applicant shall submit 4
design calculations.(8) Project-specific studies used in the facility design or installation.	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria). Self-explanatory. All studies pertinent to facility design or installation, (e.g., oceanographic and soil reports)	paper copies and 1 electronic copy. The applicant shall submit 4 paper copies and 1 electronic copy.
 design calculations. (8) Project-specific studies used in the facility design or installation. (9) Description of the 	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria). Self-explanatory. All studies pertinent to facility design or installation, (e.g., oceanographic and soil reports) (i) Loads imposed by jacket;	paper copies and 1 electronic copy. The applicant shall submit 4 paper copies and 1 electronic copy. The applicant shall submit 4
 design calculations. (8) Project-specific studies used in the facility design or installation. (9) Description of the loads imposed on the 	 fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria). Self-explanatory. All studies pertinent to facility design or installation, (e.g., oceanographic and soil reports) (i) Loads imposed by jacket; (ii) Turbines; 	paper copies and 1 electronic copy. The applicant shall submit 4 paper copies and 1 electronic copy. The applicant shall submit 4 paper copies and 1 electronic
 design calculations. (8) Project-specific studies used in the facility design or installation. (9) Description of the 	 fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria). Self-explanatory. All studies pertinent to facility design or installation, (e.g., oceanographic and soil reports) (i) Loads imposed by jacket; (ii) Turbines; (iii) Transition pieces; 	paper copies and 1 electronic copy. The applicant shall submit 4 paper copies and 1 electronic copy. The applicant shall submit 4
 design calculations. (8) Project-specific studies used in the facility design or installation. (9) Description of the loads imposed on the 	 fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria). Self-explanatory. All studies pertinent to facility design or installation, (e.g., oceanographic and soil reports) (i) Loads imposed by jacket; (ii) Turbines; 	paper copies and 1 electronic copy. The applicant shall submit 4 paper copies and 1 electronic copy. The applicant shall submit 4 paper copies and 1 electronic

	systems; and
	(v) Mooring or tethering systems.
(10) Geotechnical	A list of all data from borings and The applicant shall submit 4
report.	recommended design parameters. paper copies and 1 electronic
	copy.
	1. For any floating facility, the applicant's design shall me
	the requirements of the U.S. Coast Guard for structur
	integrity and stability (e.g., verification of center
	gravity). The design shall also consider:
	a. Foundations, foundation pilings and templates, and
	anchoring systems; and
	b.Mooring or tethering systems.
	2. The applicant is required to use a Certified Verified Age
	(CVA). The Facility Design Report shall include two pap
	copies of the following certification statement: "T
	design of this structure has been certified by a Counc
	approved CVA to be in accordance with accept
	engineering practices and the approved SAP, or COP
	appropriate. The certified design and as-built plans a
	specifications shall be on file at (given location)."
2	 Fabrication and Installation Report- The applicant's Fabrication
	and Installation Report shall describe how the applicant's faciliti
	shall be fabricated and installed in accordance with the desig
	criteria identified in the Facility Design Report; the applicant
	approved SAP or COP; and generally accepted industry standar
	and practices. The applicant's Fabrication and Installation Repo
	shall demonstrate how the applicant's facilities shall be fabricate
	and installed in a manner that conforms to the applicant
	responsibilities listed in section 1160.1.5. The applicant sha
	include the following items in the applicant's Fabrication and
	Installation Report:

Required documents:	Required contents:	Other requirements:
(1) Cover letter.	(i) Proposed facility	The applicant shall submit 4
	designation,;	paper copies and 1 electronic
	(ii) Area, name, and block	copy.
	number; and	
	(iii) The type of facility	
(2) Schedule.	Fabrication and installation.	The applicant shall submit 4
		paper copies and 1 electronic
		copy.
(3) Fabrication information.	The industry standards the	The applicant shall submit 4
	applicant shall use to ensure	paper copies and 1 electronic
	the facilities are fabricated to	copy.
	the design criteria identified in	
	the Facility Design Report.	
(4) Installation process	Details associated with the	The applicant shall submit 4
information.	deployment activities,	paper copies and 1 electronic

Table 11.8. Contents of the Fabrication and Installation Report.

	equipment, and materials, including offshore and onshore equipment and support, and anchoring and mooring permits.	copy.
(5) Federal, State, and local	Either 1 copy of the permit or	The applicant shall submit 4
permits (e.g., EPA, Army	information on the status of	paper copies and 1 electronic
Corps of Engineers).	the application.	copy.
(6) Environmental	(i) Water discharge;	The applicant shall submit 4
information.	(ii) Waste disposal;	paper copies and 1 electronic
	(iii) Vessel information; and	copy. If the applicant
	(iv) Onshore waste receiving	submitted these data as part of
	treatment or disposal facilities.	the SAP or COP, the applicant
		may reference the plan.
(7) Project easement.	Design of any cables,	The applicant shall submit 4
-	pipelines, or facilities.	paper copies and 1 electronic
	Information on burial methods	copy.
	and vessels.	

- i. A CVA report shall include the following: a Fabrication and Installation Report which shall include four paper copies of the following certification statement: "The fabrication and installation of this structure has been certified by a Council approved CVA to be in accordance with accepted engineering practices and the approved SAP or COP as appropriate."
- p. Based on the Council's environmental and technical reviews, if approved, the Council may specify terms and conditions to be incorporated into any approval the Council may issue. The applicant shall submit a certification of compliance annually (or another frequency as determined by the Council) with certain terms and conditions which may include:
 - 1. Summary reports that show compliance with the terms and conditions which require certification; and
 - 2. A statement identifying and describing any mitigation measures and monitoring methods, and their effectiveness. If the applicant identified measures that were not effective, then the applicant shall make recommendations for new mitigation measures or monitoring methods.
- q. After the applicant's COP, Facility Design Report, and Fabrication and Installation Report is approved, and the Council has issued a permit and lease for the project site, construction shall begin by the date given in the construction schedule included as a part of the approved COP, unless the Council approves a deviation from the applicant's schedule.
- r. The applicant shall seek approval from the Council in writing before conducting any activities not described in the applicant's approved COP. The application shall describe in detail the type of activities the applicant proposes to conduct. The Council shall determine whether the activities the applicant proposes are authorized by the applicant's existing COP or

require a revision to the applicant's COP. The Council may request additional information from the applicant, if necessary, to make this determination.

- s. The Council shall periodically review the activities conducted under an approved COP. The frequency and extent of the review shall be based on the significance of any changes in available information, and on onshore or offshore conditions affecting, or affected by, the activities conducted under the applicant's COP. If the review indicates that the COP should be revised, the Council may require the applicant to submit the needed revisions.
- t. The applicant shall notify the Council, within 5 business days, any time the applicant ceases commercial operations, without an approved suspension, under the applicant's approved COP. If the applicant ceases commercial operations for an indefinite period which extends longer than 6 months, the Council may cancel the applicant's lease, and the applicant shall initiate the decommissioning process.
- u. The applicant shall notify the Council in writing of the following events, within the time periods provided:
 - 1. No later than 10 days after commencing activities associated with the placement of facilities on the lease area under a Fabrication and Installation Report.
 - 2. No later than 10 days after completion of construction and installation activities under a Fabrication and Installation Report.
 - 3. At least 7 days before commencing commercial operations.
- v. The applicant may commence commercial operations within 30 days after the CVA has submitted to the Council the final Fabrication and Installation Report.
- w. The applicant shall submit a Project Modification and Repair Report to the Council, demonstrating that all major repairs and modifications to a project conform to accepted engineering practices.
 - 1. A major repair is a corrective action involving structural members affecting the structural integrity of a portion of or all the facility.
 - 2. A major modification is an alteration involving structural members affecting the structural integrity of a portion of or all the facility.
 - 3. The report must also identify the location of all records pertaining to the major repairs or major modifications.
 - 4. The Council may require the applicant to use a CVA for project modifications and repairs.

1160.6 Design, Fabrication and Installation Standards

1. **Certified Verification Agent-** The Certified Verification Agent (CVA) shall use good engineering judgment and practices in conducting an independent assessment of the design, fabrication and installation of the facility. The CVA shall certify in the Facility Design Report to the Council that the facility is designed to withstand the environmental and

functional load conditions appropriate for the intended service life at the proposed location. The CVA is paid for by the applicant, but is approved and reports to the Council.

- i. The applicant shall use a CVA to review and certify the Facility Design Report, the Fabrication and Installation Report, and the Project Modifications and Repairs Report. The applicant shall use a CVA to:
 - a. Ensure that the applicant's facilities are designed, fabricated, and installed in conformance with accepted engineering practices and the Facility Design Report and Fabrication and Installation Report;
 - b. Ensure that repairs and major modifications are completed in conformance with accepted engineering practices; and
 - c. Provide the Council immediate reports of all incidents that affect the design, fabrication, and installation of the project and its components.
- ii. **Nominating a CVA for Council approval-** The applicant shall nominate a CVA for the Council approval. The applicant shall specify whether the nomination is for the Facility Design Report, Fabrication and Installation Report, Modification and Repair Report, or for any combination of these.
 - a. For each CVA that the applicant nominates, the applicant shall submit to the Council a list of documents they shall forward to the CVA and a qualification statement that includes the following:
 - 1. Previous experience in third-party verification or experience in the design, fabrication, installation, or major modification of offshore energy facilities;
 - 2. Technical capabilities of the individual or the primary staff for the specific project;
 - 3. Size and type of organization or corporation;
 - 4. In-house availability of, or access to, appropriate technology (including computer programs, hardware, and testing materials and equipment);
 - 5. Ability to perform the CVA functions for the specific project considering current commitments;
 - 6. Previous experience with the Council requirements and procedures, if any; and
 - 7. The level of work to be performed by the CVA.
- iii. Individuals or organizations acting as CVAs shall not function in any capacity that shall create a conflict of interest, or the appearance of a conflict of interest.
- iv. The verification shall be conducted by or under the direct supervision of registered professional engineers.
- v. The Council shall approve or disapprove the applicant's CVA prior to construction.
- vi. The applicant shall nominate a new CVA for the Council approval if the previously approved CVA:
 - a. Is no longer able to serve in a CVA capacity for the project; or
 - b. No longer meets the requirements for a CVA set forth in this subpart.
- vii. The CVA shall conduct an independent assessment of all proposed:
 - a. Planning criteria;
 - b. Operational requirements;
 - c. Environmental loading data;

- d. Load determinations;
- e. Stress analyses;
- f. Material designations;
- g. Soil and foundation conditions;
- h. Safety factors; and
- i. Other pertinent parameters of the proposed design.
- viii. For any floating facility, the CVA shall ensure that any requirements of the U.S. Coast Guard for structural integrity and stability (e.g., verification of center of gravity), have been met. The CVA shall also consider:
 - a. Foundations;
 - b. Foundation pilings and templates, and
 - c. Anchoring systems.
- ix. The CVA shall do all of the following:
 - a. Use good engineering judgment and practice in conducting an independent assessment of the fabrication and installation activities;
 - b. Monitor the fabrication and installation of the facility;
 - c. Make periodic onsite inspections while fabrication is in progress and verify the items required by section 1160.1.1(xi.);
 - d. Make periodic onsite inspections while installation is in progress and satisfy the requirements of section 1160.1.1 (xii.); and
 - e. Certify in a report that project components are fabricated and installed in accordance with accepted engineering practices; the applicant's approved COP or SAP; and the Fabrication and Installation Report.
 - 1. The report shall also identify the location of all records pertaining to fabrication and installation.
 - 2. The applicant may commence commercial operations or other approved activities 30 days after the Council receives that certification report, unless the Council notifies the applicant within that time period of its objections to the certification report.
- x. The CVA shall monitor the fabrication and installation of the facility to ensure that it has been built and installed according to the Facility Design Report and Fabrication and Installation Report.
 - a. If the CVA finds that fabrication and installation procedures have been changed or design specifications have been modified, the CVA shall inform the applicant and the Council.
- xi. The CVA shall make periodic onsite inspections while fabrication is in progress and shall verify the following items, as appropriate:
 - a. Quality control by lessee (or grant holder) and builder;
 - b. Fabrication site facilities;
 - c. Material quality and identification methods;
 - d. Fabrication procedures specified in the Fabrication and Installation Report, and adherence to such procedures;
 - e. Welder and welding procedure qualification and identification;
 - f. Adherence to structural tolerances specified;
 - g. Nondestructive examination requirements and evaluation results of the specified examinations;

- h. Destructive testing requirements and results;
- i. Repair procedures;
- j. Installation of corrosion protection systems and splash-zone protection;
- k. Erection procedures to ensure that overstressing of structural members does not occur;
- l. Alignment procedures;
- m. Dimensional check of the overall structure, including any turrets, turret and- hull interfaces, any mooring line and chain and riser tensioning line segments; and
- n. Status of quality-control records at various stages of fabrication.
- xii. The CVA shall make periodic onsite inspections while installation is in progress and shall, as appropriate, verify, witness, survey, or check, the installation items required by this section. The CVA shall verify, as appropriate, all of the following:
 - a. Load out and initial flotation procedures;
 - b. Towing operation procedures to the specified location, and review the towing records;
 - c. Launching and uprighting activities;
 - d. Submergence activities;
 - e. Pile or anchor installations;
 - f. Installation of mooring and tethering systems;
 - g. Transition pieces, support structures, and component installations; and
 - h. Installation at the approved location according to the Facility Design Report and the Fabrication and Installation Report.
- xiii. For a fixed or floating facility, the CVA shall verify that proper procedures were used during the following:
 - a. The loadout of the transition pieces and support structures, piles, or structures from each fabrication site; and
 - b. The actual installation of the facility or major modification and the related installation activities.
- xiv. For a floating facility, the CVA shall verify that proper procedures were used during the following:
 - a. The loadout of the facility;
 - b. The installation of foundation pilings and templates, and anchoring systems.
- xv. The CVA shall conduct an onsite survey of the facility after transportation to the approved location.
- xvi. The CVA shall spot-check the equipment, procedures, and recordkeeping as necessary to determine compliance with the applicable documents incorporated by reference and the regulations under this part.
- xvii. The CVA shall prepare and submit to the applicant and the Council all reports required by this subpart. The CVA shall also submit interim reports to the

applicant and the Council, as requested by the Council. The CVA shall submit one electronic copy and four paper copies of each final report to the Council. In each report, the CVA shall:

- a. Give details of how, by whom, and when the CVA activities were conducted;
- b. Describe the CVA's activities during the verification process;
- c. Summarize the CVA's findings; and
- d. Provide any additional comments that the CVA deems necessary.
- xviii. Until the Council releases the applicant's financial assurance under section 1160.7.2, the applicant shall compile, retain, and make available to the Council representatives, all of the following:
 - a. The as-built drawings;
 - b. The design assumptions and analyses;
 - c. A summary of the fabrication and installation examination records;
 - d. Results from the required inspections and assessments;
 - e. Records of repairs not covered in the inspection report submitted.
- xix. The applicant shall record and retain the original material test results of all primary structural materials during all stages of construction until the Council releases the applicant's financial assurance under section 1160.7.2. Primary material is material that, should it fail, would lead to a significant reduction in facility safety, structural reliability, or operating capabilities. Items such as steel brackets, deck stiffeners and secondary braces or beams would not generally be considered primary structural members (or materials).
- xx. The applicant shall provide the Council with the location of these records in the certification statement.
- xxi. The Council may hire its own CVA agent to review the work of the applicants CVA. The applicant shall be responsible for the cost of the Council's CVA. The Council's CVA shall perform those duties as assigned by the Council.

1160.7 Pre-Construction Standards

- 1. The Council may issue a permit for a period of up to 50 years to construct and operate an Offshore Development. A lease shall be issued at the start of the construction phase and payment shall commence at the end of the construction phase. Lease payments shall be due when the project becomes operational. Lease renewal shall be submitted 5 years before the end of the lease term. Council approval shall be required for any assignment or transfer of the permit or lease. This provision shall not apply to aquaculture permitting. Aquaculture permitting and leasing are governed by the provisions of Title 20 Chapter 10 of the General Laws of Rhode Island and Section 300.11 of the RICRMP.
- 2. Prior to construction, the assent holder shall post a Performance Bond sufficient to ensure removal of all structures at the end of the lease and restore the site. The Council shall review the bond amount initially and every 3 years thereafter to ensure the amount is sufficient.
- 3. Prior to construction, the assent holder shall show compliance with all federal and state agency requirements, which may include but are not limited to the requirements of the

following agencies: the Rhode Island Coastal Resources Management Council, the Rhode Island Department of Environmental Management, the Rhode Island Energy Facilities Siting Board, the Rhode Island Historical Preservation and Heritage Commission, U.S. Department of the Interior Bureau of Ocean Energy Management, Regulation and Enforcement, Army Corps of Engineers, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency.

- 4. The Council shall consult with the U.S. Coast Guard, the U.S. Navy, marine pilots, the Fishermen's Advisory Board as defined in section 1160.1.6, fishermen's organizations, and recreational boating organizations when scheduling offshore marine construction or dredging activities. Where it is determined that there is a significant conflict with season-limited commercial or recreational fishing activities, recreational boating activities or scheduled events, or other navigation uses, the Council shall modify or deny activities to minimize conflict with these uses.
- 5. The Council shall require the assent holder to provide for communication with commercial and recreational fishermen, mariners, and recreational boaters regarding offshore marine construction or dredging activities. Communication shall be facilitated through a project website and shall complement standard U.S. Coast Guard procedures such as Notices to Mariners for notifying mariners of obstructions to navigation.
- 6. For all Large-Scale Offshore Developments, underwater cables, and other development projects as determined by the Council, the assent holder shall designate and fund a third-party fisheries liaison. The fisheries liaison must be knowledgeable about fisheries and shall facilitate direct communication between commercial and recreational fishermen and the project developer. Commercial and recreational fishermen shall have regular contact with and direct access to the fisheries liaison throughout all stages of an offshore development (pre-construction; construction; operation; and decommissioning).
- 7. Where possible, Offshore Developments should be designed in a configuration to minimize adverse impacts on other user groups, which include but are not limited to: recreational boaters and fishermen, commercial fishermen, commercial ship operators, or other vessel operators in the project area. Configurations which may minimize adverse impacts on vessel traffic include, but are not limited to, the incorporation of a traffic lane through a development to facilitate safe and direct navigation through, rather than around, an Offshore Development
- 8. Any assent holder of an approved Offshore Development shall work with the Council when designing the proposed facility to incorporate where possible mooring mechanisms to allow safe public use of the areas surrounding the installed turbine or other structure.
- 9. The facility shall be designed in a manner that minimizes adverse impacts to navigation. As part of its application package, the project applicant shall submit a navigation risk assessment under the U.S. Coast Guard's Navigation and Vessel Inspection Circular 02-07, "Guidance on the Coast Guard's Roles and Responsibilities for Offshore Renewable Energy Installations."

- 10. Applications for projects proposed to be sited in state waters pursuant to the Ocean SAMP shall not have a significant impact on marine transportation, navigation, and existing infrastructure. Where the Council, in consultation with the U.S. Coast Guard, the U.S. Navy, NOAA, the U.S. Bureau of Ocean Energy Management, Regulation and Enforcement, the U.S. Army Corps of Engineers, marine pilots, the R.I. Port Safety and Security Forums, or other entities, as applicable, determines that such an impact on marine transportation, navigation, and existing infrastructure is unacceptable, the Council shall require that the applicant modify the proposal or the Council shall deny the proposal. For the purposes of Marine Transportation Policies and Standards as summarized in Chapter 7, sections 770.1-770.2, impacts will be evaluated according to the same criteria used by the U.S. Coast Guard, as follows; these criteria shall not be construed to apply to any other Ocean SAMP chapters or policies:
 - i. Negligible: No measurable impacts.
 - ii. Minor: Adverse impacts to the affected activity could be avoided with proper mitigation; or impacts would not disrupt the normal or routine functions of the affected activity or community; or once the impacting agent is eliminated, the affected activity would return to a condition with no measurable effects from the proposed action without any mitigation.
 - iii. Moderate: Impacts to the affected activity are unavoidable; and proper mitigation would reduce impacts substantially during the life of the proposed action; or the affected activity would have to adjust somewhat to account for disruptions due to impacts of the proposed action; or once the impacting agent is eliminated, the affected activity would return to a condition with no measurable effects from the proposed action if proper remedial action is taken.
 - iv. Major: Impacts to the affected activity are unavoidable; proper mitigation would reduce impacts somewhat during the life of the proposed action; the affected activity would experience unavoidable disruptions to a degree beyond what is normally acceptable; and once the impacting agent is eliminated, the affected activity may retain measurable effects of the proposed action indefinitely, even if remedial action is taken.
- 11. Prior to construction, the Applicant shall provide a letter from the U.S. Coast Guard showing it meets all applicable U.S. Coast Guard standards.

1160.8 Standards for Construction Activities

- 1. The Assent Holder shall use the best available technology and techniques to minimize impacts to the natural resources and existing human uses in the project area.
- 2. The Council shall require the use of an environmental inspector to monitor construction activities. The environmental inspector shall be a private, third-party entity that is hired by the Assent Holder, but is approved and reports to the Council. The environmental inspector shall possess all appropriate qualifications as determined by the Council. This inspector service may be part of the CVA requirements.

- 3. Installation techniques for all construction activities should be chosen to minimize sediment disturbance. Jet plowing and horizontal directional drilling in nearshore areas shall be required in the installation of underwater transmission cables. Other technologies may be used provided the applicant can demonstrate they are as effective, or more effective, than these techniques in minimizing sediment disturbance.
- 4. All construction activities occurring within state waters shall comply with the policies and standards outlined in the Rhode Island Coastal Resources Management Program (RICRMP), as well as the regulations of other relevant state and federal agencies.
- 5. The applicant shall conduct all activities on the applicant's permit under this part in a manner that conforms with the applicant's responsibilities in section 1160.1.5, and using:
 - i. Trained personnel; and
 - ii. Technologies, precautions, and techniques that shall not cause undue harm or damage to natural resources, including their physical, atmospheric, chemical and biological components.
- 6. The Assent Holder shall be required to use the best available technology and techniques to mitigate any associated adverse impacts of offshore renewable energy development.
 - i. As required, the applicant shall submit to the Council:
 - a. Measures designed to avoid or minimize adverse effects and any potential incidental take of endangered or threatened species as well as all marine mammals;
 - b. Measures designed to avoid likely adverse modification or destruction of designated critical habitat of such endangered or threatened species; and
 - c. The applicant's agreement to monitor for the incidental take of the species and adverse effects on the critical habitat, and provide the results of the monitoring to the Council as required; and
- 7. If the Assent Holder, the Assent Holder's subcontractors, or any agent acting on the Assent Holder's behalf discovers a potential archaeological resource while conducting construction activities, or any other activity related to the Assent Holder's project, the applicant shall:
 - i. Immediately halt all seafloor disturbing activities within the area of the discovery;
 - ii. Notify the Council of the discovery within 24 hours; and
 - iii. Keep the location of the discovery confidential and not take any action that may adversely affect the archaeological resource until the Council has made an evaluation and instructed the applicant on how to proceed.
 - a. The Council may require the Assent Holder to conduct additional investigations to determine if the resource is eligible for listing in the National Register of Historic Places under 36 CFR 60.4. The Council shall do this if:
 - 1. The site has been impacted by the Assent Holder's project activities; or

- 2. Impacts to the site or to the area of potential effect cannot be avoided.
- b. If the Council incurs costs in protecting the resource, under section 110(g) of the NHPA, the Council may charge the applicant reasonable costs for carrying out preservation responsibilities.
- 8. Post construction, the Assent Holder shall provide a side scan sonar survey of the entire construction site to verify that there is no post construction debris left at the project site. These side-scan sonar survey results shall be filed with the Council within 90 days of the end of the construction period. The results of this side-scan survey shall be verified by a third-party reviewer, who shall be hired by the Assent Holder but who is pre-approved by and reports to the Council.
- 9. All pile-driving or drilling activities shall comply with the best management practices established by the Council in coordination with the Joint Agency Working Group.
- 10. The Council may require the Assent Holder to hire a CVA to perform periodic inspections of the structure(s) during the life of those structure(s). The CVA shall work for and be responsible to the council.

1160.9 Monitoring Requirements

- 1. The Council in coordination with the Joint Agency Working Group, as described in Section 1160.1.4, shall determine requirements for monitoring prior to, during, and post construction. Specific monitoring requirements shall be determined on a project-by-project basis and may include but are not limited to the monitoring of:
 - i. Coastal processes and physical oceanography
 - ii. Underwater noise
 - iii. Benthic ecology
 - iv. Avian species
 - v. Marine mammals
 - vi. Sea turtles
 - vii. Fish and fish habitat
 - viii. Commercial and recreational fishing
 - ix. Recreation and tourism
 - x. Marine transportation, navigation and existing infrastructure
 - xi. Cultural and historic resources
- 2. The Council shall require where appropriate that project developers perform systematic observations of recreational boating intensity at the project area at least three times: pre-construction; during construction; and post-construction. Observations may be made while conducting other field work or aerial surveys and may include either visual surveys or analysis of aerial photography or video photography. The Council shall require where appropriate that observations capture both weekdays and weekends and reflect high-activity periods including the July 4th holiday weekend and the week in June when Block Island Race Week takes place.

The quantitative results of such observations, including raw boat counts and average number of vessels per day, will be provided to the Council.

- 3. The items listed below shall be required for all Offshore Developments:
 - i. A biological assessment of commercially and recreationally targeted species shall be required within the project area for all Offshore Developments. This assessment shall assess the relative abundance, distribution, and different life stages of these species at all four seasons of the year. This assessment shall comprise a series of surveys, employing survey equipment and methods that are appropriate for sampling finfish, shellfish, and crustacean species at the project's proposed location. Such an assessment shall be performed at least four times: pre-construction (to assess baseline conditions); during construction; and at two different intervals during operation (i.e. 1 year after construction and then postconstruction). At each time this assessment must capture all four seasons of the year. This assessment may include evaluation of survey data collected through an existing survey program, if data are available for the proposed site. The Council will not require this assessment for proposed projects within the Renewable Energy Zone that are proposed within 2 years of the adoption of the Ocean SAMP.
 - ii. An assessment of commercial and recreational fisheries effort, landings, and landings value shall be required for all proposed Offshore Developments. Assessment shall focus on the proposed project area and alternatives. This assessment shall evaluate commercial and recreational fishing effort, landings, and landings value at three different stages: preconstruction (to assess baseline conditions); during construction; and during operation. At each stage, all four seasons of the year must be evaluated. Assessment may use existing fisheries monitoring data but shall be supplemented by interviews with commercial and recreational fishermen. Assessment shall address whether fishing effort, landings, and landings value has changed in comparison to baseline conditions. The Council will not require this assessment for proposed projects within the Renewable Energy Zone that are proposed within 2 years of the adoption of the Ocean SAMP.
- 4. The Council in coordination with the Joint Agency Working Group may also require facility and infrastructure monitoring requirements, that may include but are not limited to:
 - i. Post construction monitoring including regular visual inspection of inner array cables and the primary export cable to ensure proper burial, foundation and substructure inspection.

1160.10 Recommended Targets

1. The following are industry goals that projects should strive for. These are not required standards at this time but are targets project proponents should try to meet where possible to alleviate potential adverse impacts.

- 2. A goal for the wind farm applicant and operator is to have operational noise from wind turbines average less than or equal to 100 dB re 1 μ Pa² in any 1/3 octave band at a range of 100 meters at full power production.
- 3. The applicant and manufacturer should endeavor to minimize the radiated airborne noise from the wind turbines.
- 4. A monitoring system including acoustical, optical and other sensors should be established near these facilities to quantify the effects.