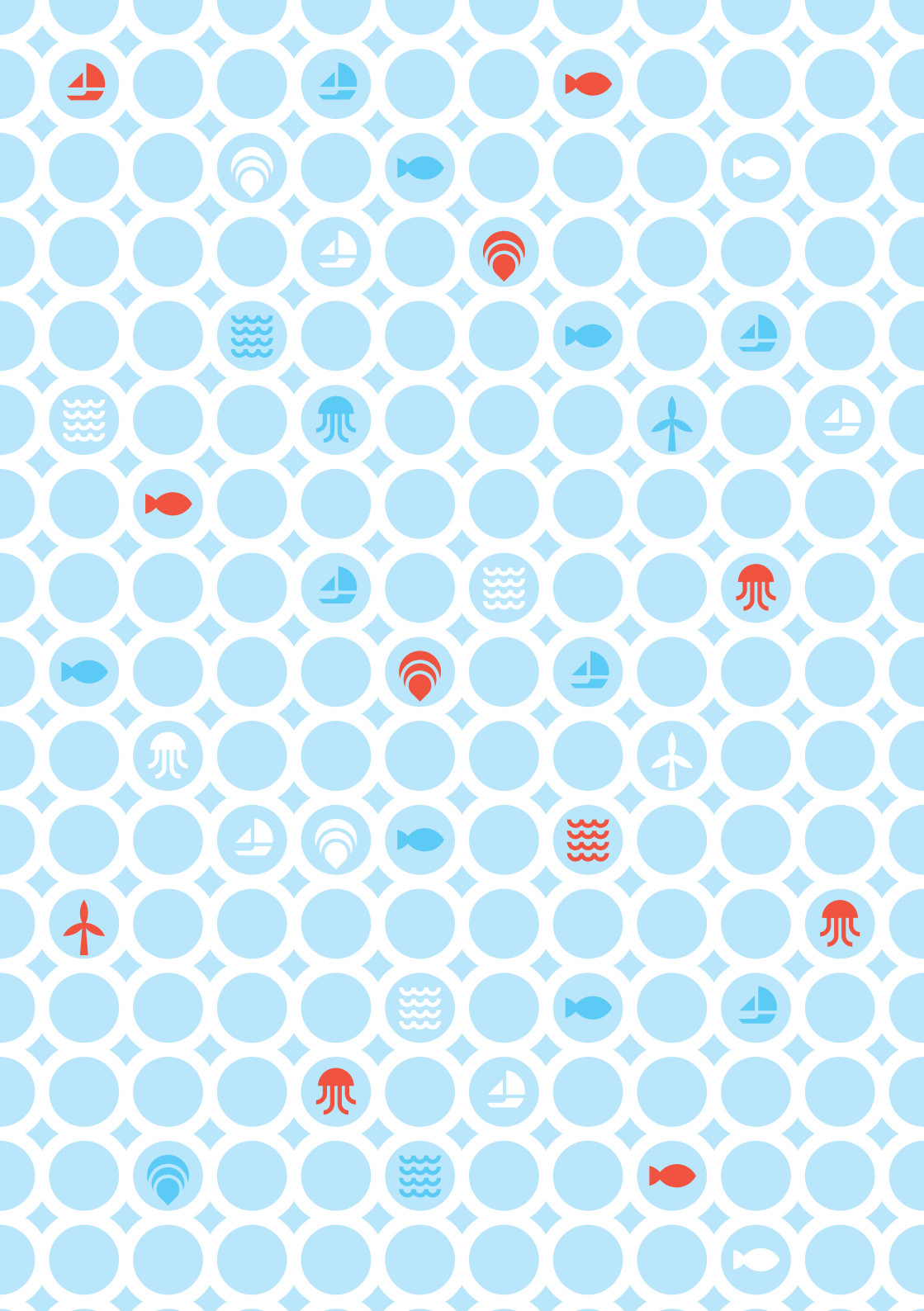
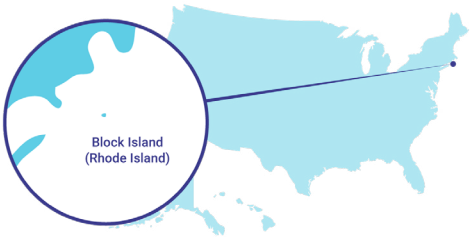
MULTI FRAME

MULTI-USE BLUEPRINT

Fishing, Offshore Wind Energy & Tourism
in the Block Island wind farm, United States

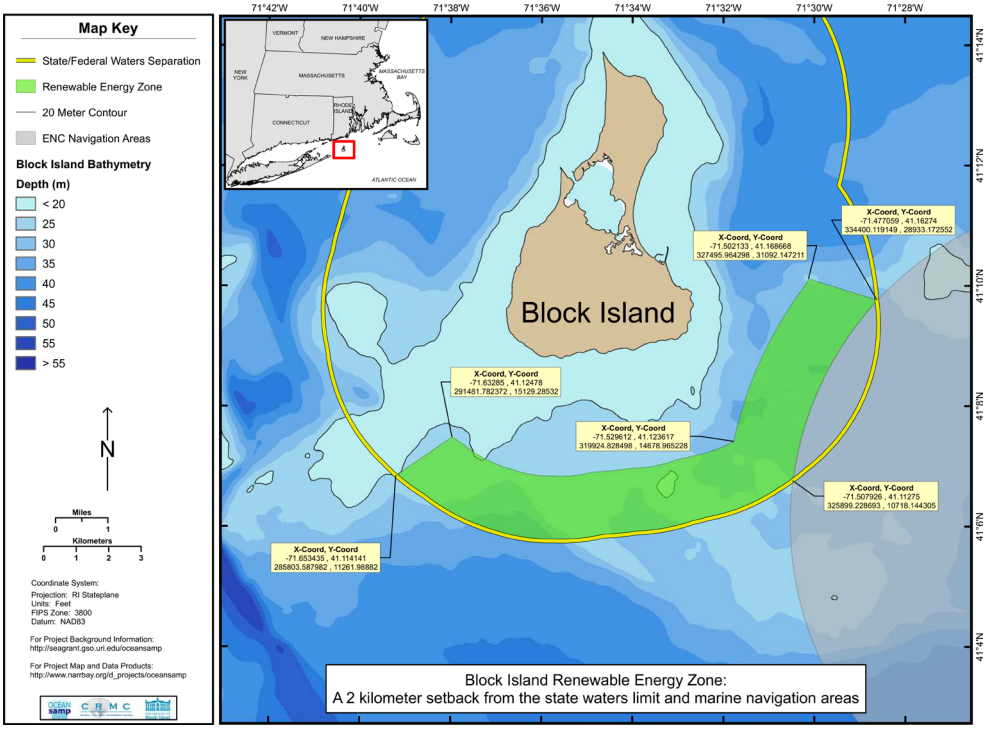


Location



Located about 3 miles (4.8 km) southeast of Block Island, Rhode Island, and about 16 miles (25.7km) from the Rhode Island mainland, the Block Island Wind Farm (BIWF) is the first offshore wind farm in the United States (U.S.) and began energy production in 2016. Block Island is in the state of Rhode Island, a state in the New England region of the Northeastern US. The smallest U.S. state by area, Rhode Island borders Connecticut Massachusetts and the Atlantic Ocean. The 30 megawatt, five-turbine demonstration project produces more than 125,000 megawatt hours of electricity annually.

Rhode Island Ocean Special Area Management Plan (SAMP)



Source: Ocean SAMP Practioners Guide
http://www.crmc.ri.gov/samp_ocean/reports/Ocean_SAMP_Practioners_Guide.pdf

Power is transmitted from the turbines to the electric grid along a 21-mile (34 km) transmission submarine power cable buried under the ocean floor, making landfall north of Scarborough Beach in Narragansett, Rhode Island. Based on the analysis of information including wind speeds, water depth, substrate types, existing uses (e.g., shipping, fishing, tourism and recreation, military testing), and protected areas, as well as considering the potential effects of offshore wind turbines on wildlife and existing uses from renewable energy, the Ocean SAMP designated Renewable Energy Zone (REZ), which is now the location of the BIWF.

Approximately 2 kilometers (1.2 miles) wide and 34 square kilometers (13 square feet) long, this area extends from the east to the south-west of Block Island, just landward of the state water boundary. Because the BIWF developer, Deepwater Wind, submitted development proposals for the BIWF within the REZ within two years of Ocean SAMP approval, it was able to use data from the SAMP to complete its permitting process, expediting the permitting process.

Description

The Ocean SAMP, a federally adopted regulatory management plan, applies an ecosystem-based management approach to foster a properly functioning ecosystem that is both ecologically sound and economically beneficial. A major driver for this plan was to identify a location in Rhode Island's offshore waters to site offshore wind that had the least amount of impact on wildlife and Rhode Islanders. While a science and knowledge-based public process served to steer the development of this plan, policy tools anchored the plan's success. Within the REZ, activities including tourism, commercial and recreational fishing and boating, essential fish habitat protection, and cooperative research take place within the BIWF.

Enabling conditions and tools

The Ocean SAMP provides a supportive framework that prioritizes multi-use, especially within the REZ. The following conditions and tools continue to be applied to maintain this multi-use support:

Integrated local knowledge and expertise

Through the establishment of the CRMC Ocean SAMP Habitat (HAB) and Fishermen's (FAB) Advisory Boards, key stakeholder groups, including fishing, environmental and research interests, have a well-defined means of officially engaging in this state driven decision-making process – giving them assurance of their involvement in and influence over the process. Specifically, during the Ocean SAMP process and after, the HAB and FAB met frequently with CRMC staff and Deepwater Wind (the BIWF developer) to discuss such issues as cable siting, mitigation, and research and monitoring design and implementation. Because these activities were taking place in state waters and CRMC prioritized the value of HAB and FAB expertise, this process established trust and enhanced communication between the fishing industry, researchers, e-NGO's, state government, and developers, which resulted in the sharing of this area. While OWE, the newest maritime use in the area, and commercial fishing, one of the oldest uses, use this area all year long, other activities such as tourism, including recreational fishing and boating, takes place mostly during late Spring to early Fall. While the HAB and FAB continue to engage in the current federal OWE development siting processes, as required by the Ocean SAMP policies, much of this trust has deteriorated in part because HAB and especially FAB members feel their concerns or requests have not been valued or considered as decisions are being made by the developers or government.

Clear policy to support streamlined decision-making

Through the REZ and associated regulations, the BIWF was permitted in 2014 relatively quickly and efficiently, with extensive input from stakeholders including highly- affected groups, like fishermen, the Narragansett Tribe, and environmental non-governmental groups, with minimal conflict. This support was possible in part because the Ocean SAMP process (2008–2010) responded to their concerns and access to the ocean area was not going to be significantly impacted and the natural resources were going to be protected.

Authority

The Rhode Island state policy authorizes CRMC to encourage multi-use in areas with the Water Classification Type 4 (multipurpose) zone. Originally in a Type 4 zone, the REZ has been modified as Water Classification Type 4E to show that while this is the preferred site for large scale renewable energy projects in state waters, other activities including but not limited to habitat protection, tourism, fisheries, or research should not be hindered. The regulations are specific to requiring that in these Type 4E waters essential fish habitat should remain protected and there are no 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.

Impacts and positive changes

Based on current research and in part anecdotal data, commercial and recreational fishing, tourism, research, and conservation activities have had no significant negative impacts because of the BIWF. In many cases, multi-use within the area has been enhanced. Because of FAB involvement, cooperative research has in many cases produced more trusted data on the effects on fish and fish habitats because of the wind farm. Researchers have documented that the BIWF serves as an auxiliary attraction to other recreationist or tourist activities. The recreational fishermen state that the turbines are serving as artificial reefs and the local tourism industry recognizes that tourists are buying tickets to travel to the wind farm just to observe it. Researchers, students, government officials and others interested in learning the Ocean SAMP story, seeing the nation's first offshore wind farm, or understanding the economic and environmental opportunities surrounding offshore wind development flock to Rhode Island. The wind developer is allowing research equipment on structures and social and physical research is being funded. While commercial fishing does take place within the wind farm during fair weather days, there is still a concern about safety by commercial fishermen during more inclement days. In addition, while mussel harvesting from the turbine structures has been considered this possible multi-use opportunity has not taken place for economic, safety, insurance, and logistical reasons.

Contacts and links

- **Partners:** Rhode Island Department of Environmental Management, University of Rhode Island, Rhode Island Sea Grant
- **CRMC web page Wind Energy**
  http://www.crmc.ri.gov/windenergy.html
- **Ocean SAMP Practitioners Guide**
  http://www.crmc.ri.gov/samp_ocean/reports/Ocean_SAMP_Practioners_Guide.pdf
- **Offshore-renewable energy –** planning and policy
  https://web.uri.edu/offshore-renewable-energy/planning-and-policy
- **Analysis of Effects of the Block Island** Wind Farm on Rhode Island Recreation and Tourism Activities
  https://web.uri.edu/offshore-renewable-energy/research/analysis-of-effects-of-the-block-island-wind-farm-on-rhode-island-recreation-and-tourism-activities/

Imprint

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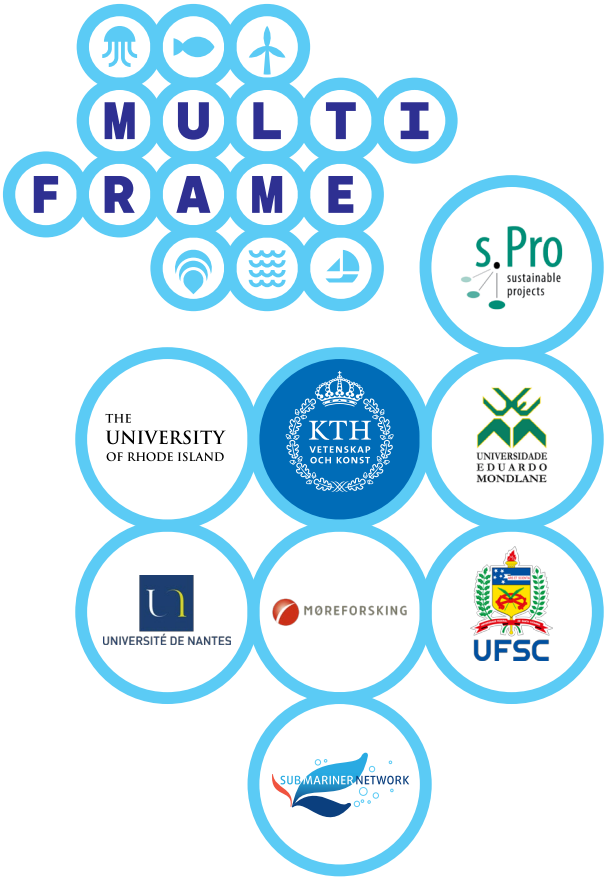

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