COASTAL RESOURCES MANAGEMENT COUNCIL

SEMI-MONTHLY MEETING

TUESDAY, JUNE 25, 2019

6:00 P.M.

AGENDA

State of Rhode Island and Providence Plantations
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 116
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-2069

AGENDA

Semi-Monthly Meeting – Full Council
Tuesday, June 25, 2019; 6:00 p.m.
Administration Building; Conference Room A
One Capitol Hill, Providence, RI 02908

Approval of the minutes of the previous meeting – June 11, 2019
Subcommittee Reports
Staff Reports

Education Series:

APPLICATIONS WHICH HAVE BEEN OUT-TO-NOTICE AND ARE BEFORE THE FULL COUNCIL FOR DECISION:

2019-01-002 **RIDEM/DIVISION OF MARINE FISHERIES & THE NATURE CONSERVANCY** -- To create an artificial reef to enhance habitat and fishing opportunities in the Providence River. Please see attached map of Sabin Point. Located in the Providence River south of Sabin Point, East Providence, RI.

2018-09-033 **DANIEL TORRE & MAX DAVISON** -- Establish and maintain a three acre oyster farm in the Sakonnet River using floating gear (2 foot by 3 foot floating bags). Located in the Sakonnet River of Portsmouth, RI.

2018-05-159 **BRIAN PINSKY** -- 401 Oyster Company, LLC. -- Expand an existing oyster farm using open top bottom trays and direct bottom plant. The total area for the existing and expanded farm would be 6.5 acres. Located in Ninigret Pond of Charlestown, RI.

PUBLIC HEARING ON PROPOSED RULEMAKING:

Title of Rule: RICRMP: Ocean SAMP Chapter 11 Policies of the Ocean SAMP (650RICR200511)

Summary of Rulemaking Action:
The CRMC proposes to amend the policies and standards of Ocean Special Area Management Plan (Ocean SAMP) Chapter 11 to improve the predictability of state permitting and federal consistency review processes for offshore renewable energy projects. The proposed amendments apply to any renewable energy and offshore development activity located within state waters or federal waters within CRMC geographic location description (GLD) boundaries that are subject to federal consistency review.

Summary of proposed amendments to 650-RICR-20-05-11

1. Amend § 11.2(A) to clarify the purpose of the regulations and better differentiate between state permitting and federal consistency review authority.

2. Amend § 11.3(E) to add representation of seafood processing facilities onto CRMC Fishermen's Advisory Board (FAB) and increase FAB membership to twenty (20) to account for seafood processing representatives.

3. Further clarify 2011 and 2018 geographic location descriptions (GLD) as defined in § 11.3(F).

4. Move deleted text in § 11.3(H)(6) to correct placement in § 11.3(H)(5).

5. Delete anachronistic text and clarify NOAA approval of Ocean SAMP and federal consistency authority in § 11.5.

6. Add new § 11.9(C) using text moved from § 11.10.1(D). Delete § 11.10.1(D).

7. Add new § 11.9(D) for $20,000 administrative fee for projects subject to CRMC federal consistency review only (no state permit required).

8. Amend § 11.9.1(E) to add reference to NOAA-approved GLDs.

9. Add deleted text from § 11.10.1(Q) to § 11.9.3(J).

10. Amend § 11.9.4(C) to include CRMC required (in state waters) wind farm design standards to enhance compatibility with commercial fishing operations.

11. Amend § 11.9.4(H) to increase from 6 to 7 FAB votes for RI interests to account for adding representation from the seafood processing facilities on the FAB as per proposed amendment in § 11.3(E).

12. Delete repetitive text in § 11.9.7(H); same text in § 11.9.4(F).

13. Add new § 11.9.8 for application requirements in state waters using deleted text from § 11.10.5.

14. Add new § 11.9.9 for baseline assessment requirements and standards in state waters including deleted text from § 11.10.9.

15. Add new §§ 11.9.9(E) for baseline assessment standards and (F) for post construction assessment requirements.

16. Amend § 11.10.1(C) to further clarify significant adverse impacts and coastal effects to commercial fisheries, when mitigation may be considered, and federal consistency issues.

17. Amend § 11.10.1(D) to include pre-application meetings with FAB and further clarify formal meeting with FAB to meet federal consistency necessary data and information requirements.

18. Add new § 11.10.1(D)(1) to clarify CZMA federal consistency review process as it relates to BOEM and the filing of a construction and operation plan (COP).

19. Amend § 11.10.1(E) to further clarify CZMA process and mitigation requirements.

20. Delete § 11.10.1(F) as first sentence is repetitive in § 11.10.1(C) and second sentence added to § 11.10.1(C).

21. Amend new § 11.10.1(F) to add shore-side seafood processing facilities as a fisheries user group and further clarify mitigation process and requirements in CZMA federal consistency review process.

22. Amend § 11.10.1(I) to clarify CZMA federal consistency review process as it relates to BOEM and the filing of a construction and operation plan (COP).

23. Add new § 11.10.1(O) for construction noise abatement requirements and standards to minimize adverse impacts to fishery resources.

24. Add new § 11.10.1(P) for cable burial requirements and standards to avoid significant adverse impacts to commercial fishing activities.

25. Amend § 11.10.5(A) to clarify when necessary data and information may be filed for CRMC federal consistency review.

26. Amend § 11.10.5(C) to remove anachronistic text and clarify the timing of a COP and SAP filing in the BOEM process.

27. Amend § 11.10.5(C)(1) to clarify SAP process for projects in state waters.

28. Amend § 11.10.5(C)(1)(g) to clarify that when NDI is missing the CRMC must follow federal regulations for a delay in CZMA federal consistency review process.

29. Delete §§ 11.10.5(C)(1)(h) and (j) through (q) and move to § 11.9.8(A).

30. Delete §§ 11.10.5(C)(2)(h) through (o) and move to § 11.9.8(B).

31. Delete § 11.10.5(C)(2)(o)(1) and move to § 11.9.8(B)(8).

32. Delete § 11.10.6 and move to § 11.9.8(C).

33. Delete § 11.10.7 and move to § 11.9.8(D).

34. Delete § 11.10.8 and move to § 11.9.8(E).

35. Amend § 11.10.9(A) to clarify baseline assessment requirements for projects subject to CZMA federal consistency review and move deleted text to new § 11.9.9.

36. Other minor edits and corrections as noted in track changes within the document.

2019-01-002 RIDEM/DIVISION OF MARINE FISHERIES & THE NATURE CONSERVANCY

CRMC DECISION WORKSHEET
2019-01-002
Department of Environmental Management

Hearing Date:			
Approved as Recommended			
Approved w/additional Stipulations			
Approved but Modified			
Denied		Vote	

APPLICATION INFORMATION

File Number	Town	Project Location	Category	Special Exception	Variance
2019-01-002	Providence	Providence River Plat: Lot:	B	☐	☐
		Owner Name and Address			
Date Accepted	1-24-2019	Department of Environmental Management Division of Marine Fisheries 3 Fort Wetherill Road Jamestown, RI 02835	Work at or Below MHW		☒
Date Completed	4-22-2019		Lease Required		☐

PROJECT DESCRIPTION

Sabin Point Artificial Reef Pilot Project: Enhancing Habitat and Fishing Opportunities.

KEY PROGRAMMATIC ISSUES

Coastal Feature: Submerged land

Water Type: Type 2, Low Intensity Use

CRMP: §§ 1.2.1(E); 1.3.1(A); and 1.3.1(J)

Variances and/or Special Exception Details:

Additional Comments and/or Council Requirements:

Specific Staff Stipulations (beyond Standard stipulations):

STAFF RECOMMENDATION(S)

Engineer _____ Recommendation: N/A

Biologist _____ Recommendation: N/A

Aquaculture DFB Recommendation: Approved

_____ date

Executive Director Sign-Off

4/23/2019 date

David Bental 4-23-19

Aquaculture Coordinator Sign-off date

David Bental 5-21-19

Staff Sign off on Hearing Packet (Aqua) date

Name: Department of Environmental Management
CRMC File No.: *2019-01-002*
Staff Report

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

COASTAL RESOURCES MANAGEMENT COUNCIL

INTER-OFFICE MEMORANDUM

DATE: April 22, 2019

TO: Grover J. Fugate, Executive Director

FROM: David Beutel

SUBJECT: CRMC File No. 2019-01-002

Applicant's Name: Department of Environmental Management
Project: artificial reef

Location: Providence River, Providence,
Water Type/Name: Type 2, Low Intensity Use,
Coastal Feature: submerged land

STAFF REPORT

In January 2019 Rhode Island Department of Environmental Management (DEM) and The Nature Conservancy (TNC) submitted an application to create a small artificial reef just south of Sabin point in the Providence River. The area proposed is 0.91 acres with the goal of enhancing recreational fishing at the reef. The application provides the science and logic for using the proposed reef balls at this location. The reef balls proposed were of two sizes (4'x3' and 3'x2') in a symmetrical array. The location is away from navigation channels and is in a little used area of the Providence River.

During the thirty day public notice period CRMC received one letter of support from the RI Saltwater Anglers Association. Staff received verbal support from individual recreational fishermen while attending other fisheries meetings. CRMC has received no objections and no negative comments about this application.

Agency correspondence received:

- RIDEM Office of Water Resources-water quality certificate not needed-Feb. 4, 2019
- RI Historical Preservation and Heritage Commission-no significant impact-Feb. 14, 2019

Name: Department of Environmental Management
CRMC File No.: *2019-01-002*
Staff Report

This application was reviewed at the March 7, 2019 General Permit meeting with the Army Corps of Engineers. The applicants proposed changes to the proposal at that time. Staff requested written documentation of the proposed changes but all meeting attendees agreed that the changes would likely not require a new public notice. Staff met with the applicants on March 27, to discuss the changes in more detail and received the written changes on April 2, 2019.

The proposed changes use only once size reef ball (4'x3'), reduces the number of reef balls from 91 to 80, while all still in the original 0.91 acre area. The reason behind the change is that the applicants attended a conference on artificial reef building and received new information from successful reef construction projects. The actual reef area will be four sections of 36' x 24' reef balls in the 0.91 acre site. Staff agrees that the changes are not significant. The Army Corps of Engineers will issue a permit if the CRMC issues a permit to build this artificial reef. This project has potential for public benefit and little impact to the environment if it does not accomplish the goal of fish attraction. Staff review marginally fits under the RI Coastal Resources Management program Section 1.3.1(J) Filling in Tidal Waters. Because of the small size of the project, lack of negative impacts, receiving no objections, receiving support from the recreational fishing industry, the potential to enhance fishing, and that the applicant is DEM, staff recommends this application for approval.

David Beutel Aquaculture Coordinator

SUMMARY OF PROPOSED DESIGN UPDATE

The applicants are proposing an update to their design and monitoring plan for the Sabin Point artificial reef project. The goal of this modification is to maximize the benefits that this project will have and ultimately increase the fishing opportunity at the Sabin Point Fishing pier. After receiving feedback from members of the Atlantic and Gulf State Marine Fisheries Commissions (ASMFC and GSMFC) Artificial Reef Programs on our original design (Figure 11a), we believe that our design could be enhanced by allowing for additional spacing between the reef modules. In our design update, we would be decreasing the total number of modules from 91 to 80, as well as the bottom surface area that these modules occupy. These modules will be divided into four, 4 X 5 patch reefs that are spaced 25-30 meters apart within the original 200' x 200'footprint (Figure 11b). This allows for more space between the modules resulting in a decrease predation intensity on prey resources adjacent to the reefs and a reduction in competition amongst finfish that colonize the reefs. These modifications should have less direct impact on the benthic habitat community, produce a more viable habitat for reef fish to colonize, and allow for more robust statistical analyses by increasing replication. Changes to the AR monitoring plan include four 10-meter transects instead of one 40-meter transect, and the updated fish survey work will now include additional eel pot sampling to account for juvenile finfish that may not be captured in the fish pot survey work.

5. REEF DESIGN AND CONSTRUCTION

We have selected Reef Balls™ for our fish habitat enhancement work at Sabin Point because of their documented success in estuarine environments in the Southeastern Atlantic and West Coast of the United States. Studies show that artificial reefs balls promote aggregations of demersal finfish (Bohnsack 1990, Bohnsack 1991, Ambrose 1989), which is one of the primary objectives of our project. Several AR experiments have shown that habitat enhancement with Reef Balls™ can increase abundance, diversity, and production when compared to natural reefs and sandy substrate controls (Folpp 2013, Hackradt 2011, Powers 2003). Upon review of these publications, we have decided to deploy the reef balls in four distinct "patch" reefs that optimize the max benefit to the benthic habitat by allowing for inter patch refuge for prey species, while still close enough to aggregate target reef associating species to these reefs and the fishing pier. ARs have also shown greater attraction of planktivores (i.e., menhaden, herring, and juvenile grunts) as well as benthic feeding fish compared to natural reefs and sand bottom (Bohnsack 1994). In addition to the biological benefits observed, a new research project in Maryland is attempting to utilize Reef Balls™ to alleviate hypoxic zones in the Severn River in an effort to restore this habitat for oyster and associated reef fish colonization (Wheeler 2018).

A contracted professional (Reef Innovations) will oversee the fabrication and deployment of the reef modules to maintain quality assurance and control. The contractor has over 15 years of experience in reef construction and is licensed to construct and deploy Reef Balls™. We will use Reef Balls™ made from a mixture of cement (limestone), silica and water. Cement types II or greater will be used, as these cement grades are resistant to sulfates and other chemicals in sea water which can break down lower grade concrete. Pozzalanic materials such as micro-silica, and/or crushed shell will be used to help neutralize the pH of the cement to that of seawater (pH of 8.3). An adequate water to cement ratio will be used in the manufacturing process to ensure structural integrity and durability. Reef Balls™ are chemically engineered to be long-lasting (500-yr lifespan) in seawater and enhance epifaunal growth. Reef Balls™ are physically designed to resist being overturned by waves in shallow subtidal and subtidal locations. A

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certified pre-cast company will be hired to fabricate reef modules and ship them to Rhode Island. We intend to use larger of the two commonly used estuarine Reef Balls™ to maximize the number of crevices available for finfish to utilize (Table 1).

Table 1. Type and number of Reef Balls™ that will be used per location based on the current array. Data was provided by Reef Innovations Inc.

Unit Type	#	Width (ft.)	Height (ft.)	Surface Area (ft^2)	Volume (ft^3)	Weight (lbs)
Pallet Ball	80	4	2'9"	75	28.47	1,300

Prior to construction, the boundaries of project sites will be georeferenced using d-GPS and marked with surface floats. Boundary markers will be maintained throughout the duration of our study. We are applying for a 200'x 200' permit area, within which we will be constructing the artificial reef array. To maximize the benefit of this AR project, we are planning on making four distinct reef patches that are spaced 25-30 meters apart in a square pattern (Figure 11). Our current reef design is currently scoped to four, 28' by 36' reef patches (0.023 acres) that will not exceed the 200' by 200' permit area. In each patch, 20 Pallet Reef Balls™ will be evenly distributed 8' from center. The two nearshore reef patches will also be 30 meters away from the middle of the fishing pier.

Our patch reef array will increase the amount of adjacent, undisturbed, sandy habitat next to our reefs. Finfish abundance is generally greatest on, or just off the edge of reef (e.g., black sea bass; Rosemond 2018, dos Santos 2010). We expect to see an increase in the number of prey species such as crustaceans and mollusks to increase with distance from the patch reefs (e.g. stone crabs; Frazer 1994).In order to maximize the aggregation of recreational species that prefer artificial reef structure, while minimally impacting available prey biomass in the area, we have chosen a 30 meter distance (15 m buffer) between patches which we expect will have the greatest effect on the fishing opportunity at the Sabin Point fishing pier. We decided to make the arrays with Pallet Ball modules, as opposed to Bay Balls, because they are only slightly larger (1' wider, 0.75' taller) but provide 3-10 more holes (Reef Innovations). As we increase the number of holes we anticipate that the complexity of the habitat will increase and allow for a greater holding capacity of finfish species. This will also increase the number of larger reef fish that can reside there at the same time. Since the goal of our project is to increase fishing opportunity at the pier, if we increase the size and complexity of the habitat that is available for structure limited fish, we can anticipate more fish colonizing the reef (Caddy, 2011, Hackradt, 2011).

Our proposed updated artificial reef array consists of 80 Pallet Balls. Reef modules will be transported to the project site by barge and lowered to the seafloor by crane. A single reef module will be lowered to the seafloor using a spray bar and a crane. Once in contact with the bottom, tension hooks (Pelican Hook) will release the reef modules from its strap in a fixed position. Divers may be used to ensure proper placement. This methodology will ensure accuracy and proper placement of the reef modules. We anticipate reef construction to take no more than one week and will begin after October 15th. We expect the construction window will have little to no impact on commercial and recreational use of the surrounding waters as well as the temporal winter flounder essential fish habitat (EFH) window.

5B. CONTIGENCY PLAN

Discussions with coordinators of other state AR Programs (FL, NC, LA, etc.) have verified they have deployed Reef Balls™ in areas with similar depths and they have not moved from their original deployment locations during major storm events (e.g, Hurricane Michael, Hurricane Florence) For example, the Reef Balls at the Bell Shoal artificial reef near Mexico Beach, Florida were shown to be superior to other concrete pyramid module designs in terms of stability during the hurricane. Side Scan taken before and after Hurricane Michael determined that Reef Balls™ did not move, and in some cases actually provided anchorage for other materials that where toppled and dragged by the hurricane force swells (Bell Shoals Hurricane Assessment Viewer http://myfwc.maps.arcgis.com)(Mille, 2019).

Based on these previous experiences, all of which show no movement of Reef Balls™ post-deployment, we are confident that the AR we are proposing will not move under normal or storm conditions. In the event the proposed Reef Balls™ are moved out of the permitted area during the lifespan of the project, DEM and TNC have financial ability to rectify the Reef Balls™ positioning.

6. REEF MONITORING

The applicants will monitor the reef sites with video observations following the deployment of the Reef Balls™. Survey data will provide a baseline to evaluate potential movement or burial of reef materials.

The applicants will monitor changes in fish and macroinvertebrate communities due to the AR habitat. Prior to installing AR modules, the applicants will finalize an appropriate monitoring design using techniques such as underwater video, fish traps, eel pots, and dive surveys to monitor fish populations. Baseline beach seine and fish trap survey data have been collected monthly (May-October) at Sabin Point over the last two years (2017 and 2018) and will continue after installation of the ARs, assisting with the evaluation of differences in fish abundance before and after reef construction, including trap surveys that target both adult and juvenile size classes (i.e., fish pots (>1+), eel pots (0-1)). The Sabin Point Pier site will be compared to a sandy control site (Sabin Point) and an additional "natural rocky habitat" to evaluate how the artificial reef balls compare to a natural rocky habitat in the Upper Narragansett Bay (most likely Rock Island to the SW or Pomham Rocks Lighthouse to the North). These sites will be evaluated during the pre-enhancement baseline survey during the Summer of 2019. These four sites are all greater than 120m to establish appropriate buffers to ensure habitat footprints do not overlap (KEEN protocol is >100m). Rosemond et al 2018 found that 97% of the fish species observed were within the first 120 of an artificial reef.

To determine the relative habitat value produced by creating an AR at Sabin Point, the applicants intend to utilize a modified version of the Kelp Ecosystem Ecology Network (KEEN) monitoring protocol. We will treat each patch reef as its own distinct unit. We will conduct four transects through the middle of each patch (~10 meters). In total this will give us 40 meters of artificial habitat that is available to survey at Sabin Point, which is equivalent to the area sampled for each KEEN replicate. This approach will allow the applicants to compare AR habitat to those such as kelp, eelgrass, and oyster reefs. The applicants expect to conduct monitoring up to three years post-construction, andat least once a year in the late summer/early fall. KEEN monitoring techniques include: quadrat (4-6, $1m^2$, quadrats per transect), uniform point count of substrate type (two, 50 cm inshore and offshore of the transect every meter), swath (finfish/mobile invert

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counts within a meter to each side of the transect), and cube volume finfish counts (2m x 2m x 10m), all of which will be completed on SCUBA conducted along transects parallel to shore through the middle of each patch reef. These surveys are designed to sample common algae, invertebrates, and fish species associated with the target habitat. Additionally, temperature, salinity, and dissolved oxygen measurements will be collected at the site. The applicants will also monitor the location of Reef Balls™ units, to ensure that they have not moved beyond the permitted area. During dive transects, the position of the modules will be documented in addition to any material degradation or scouring.

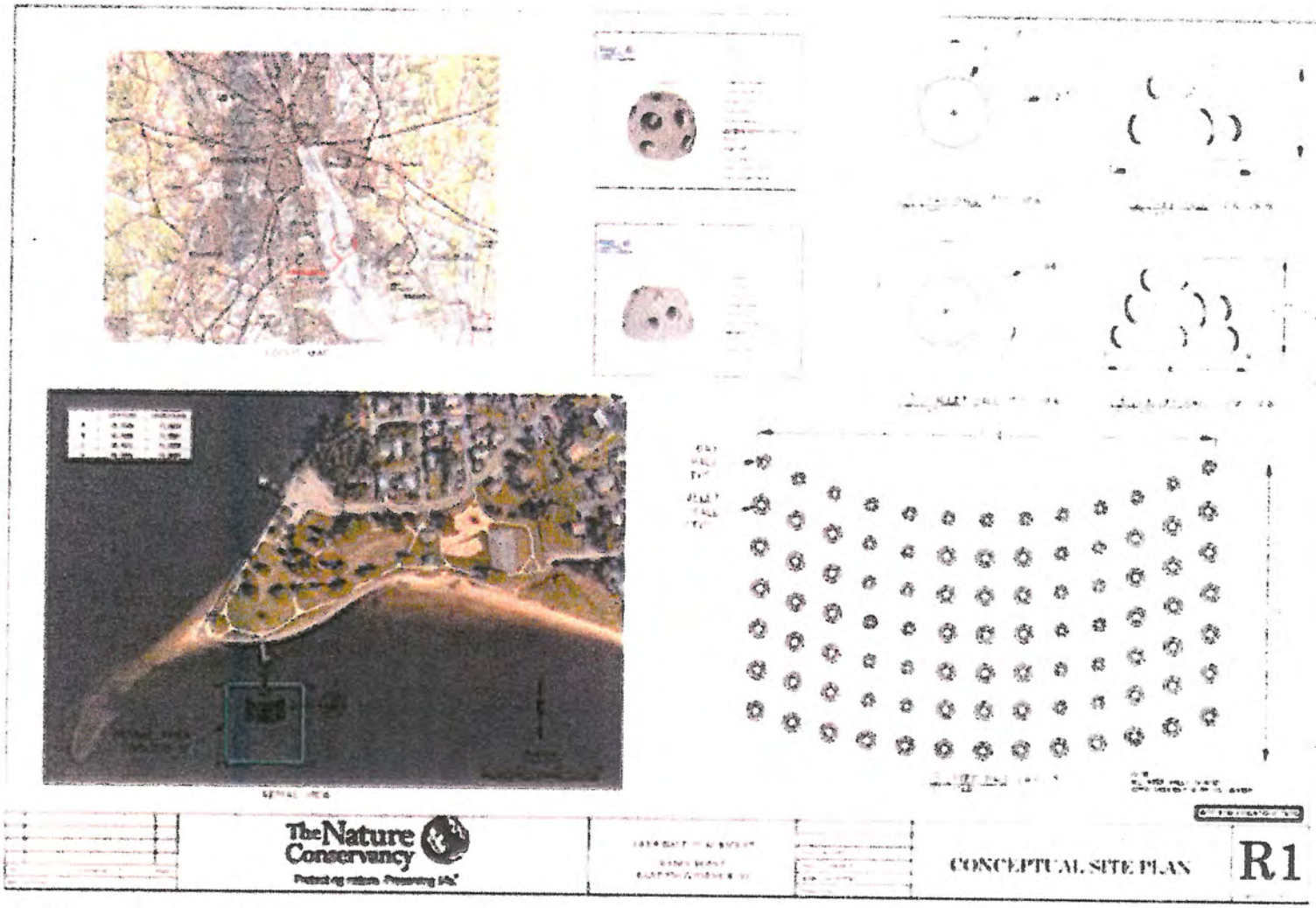


Figure 11a Original Reef Array.

P8

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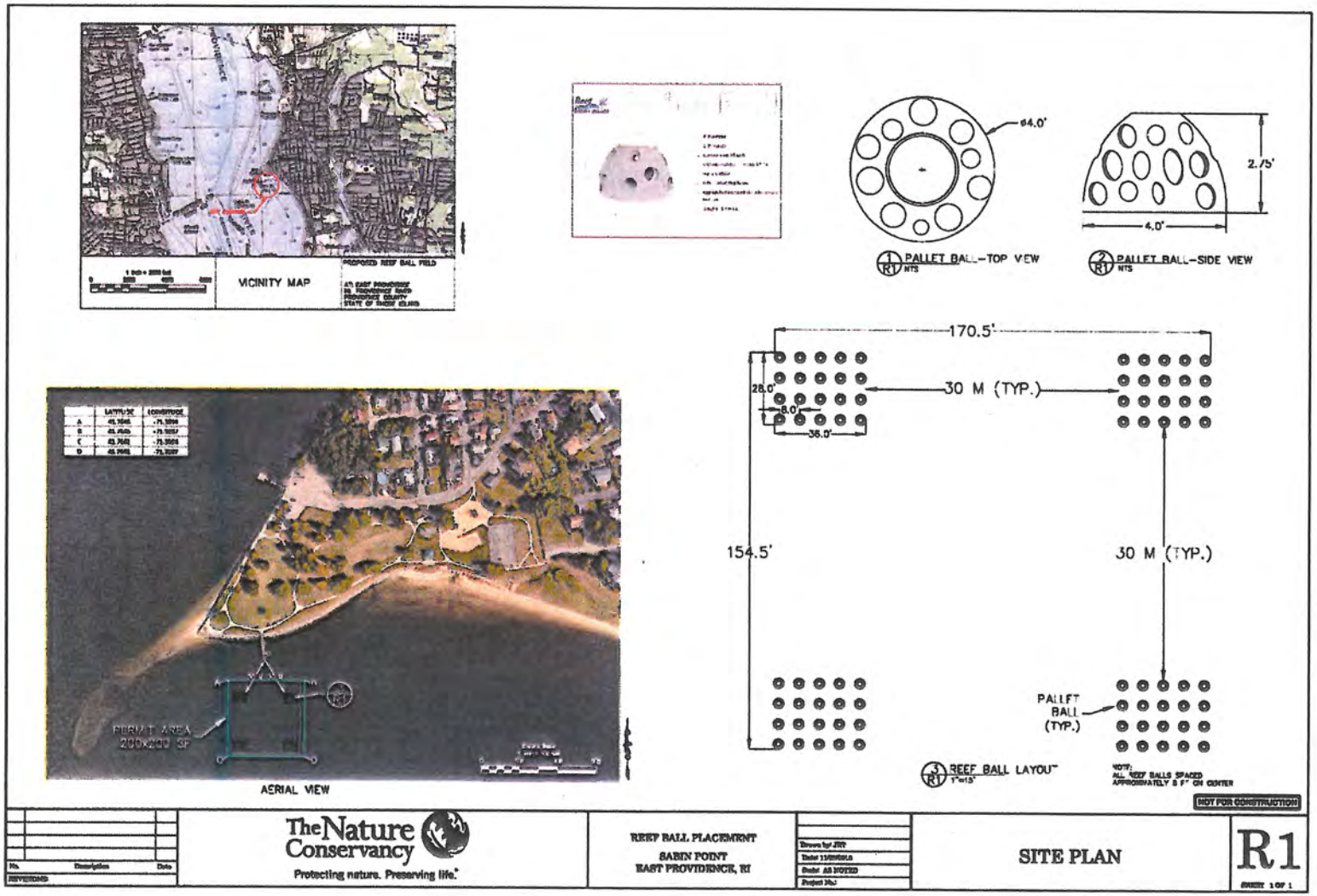


Figure 11b Updated Artificial Reef Array. Four patch reefs spaced 30 meters apart each with 20 Pallet Ball modules per patch, arranged in a 4x5 rectangle. Each module is 8' off center from one another.

Additional Works Cited

Rosemond,R.C, Paxton, A.B., Lemoine1,H.R., Fegley,S.R., Peterson, C.H. (2018) Fish use of reef structures and adjacent sand flats:implications for selecting minimum buffer zones between new artificial reefs and existing reefs. *MARINE ECOLOGY PROGRESS SERIES Mar Ecol Prog Ser Vol. 587: 187–199.*

Frazer, T.K., Lindberg, W.J. (1994). Refuge Spacing Similarity Affects Reef-Associated Species from Three Phyla. *Bulletin of Marine Sciecne, 55(2-3): 388-400.*

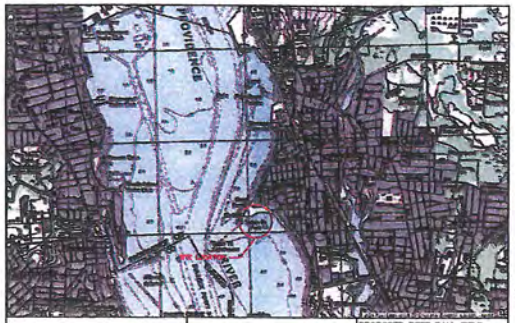
dos Santos, L.N.,Brotto, D.S.,Zalmon, I.R. (2010). Fish responses to Increasing distance from artificial reefs on the Southeastern Brazilian Coast. *Journal of Experimental Marine Biology and Ecology 386 54-60.*

Hackradt, C.W., Félix-Hackradt,F.C., García-Charton, J.A. 2011. Influence of Habitat Structure on Fish Assemblage of an Artificial Reef in Southern Brazil. *Marine Environmental Research 72; 235-247.*

Caddy, John F. "How Artificial Reefs Could Reduce the Impacts of Bottlenecks in Reef Fish Productivity within Natural Fractal Habitats." *Artificial Reefs in Fisheries Management*, by Stephen A. Bortone, CRC Press, 2011, pp. 45–64.

Mille, K. (2019) Assessment of Artificial Reefs Impacted by Hurricane Michael. *Joint ASMFC and GSMFC Artificial Reef Committees Meeting. Presented February 27, 2019.*

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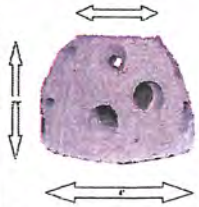


VICINITY MAP

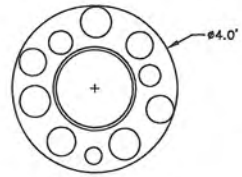
PROPOSED REEF BALL FIELD

AT: EAST PROVIDENCE
IN: PROVIDENCE RIVER
PROVIDENCE COUNTY
STATE OF RHODE ISLAND

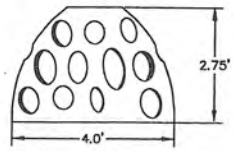
Pallet Ball



- 4' diameter
- 2'9" height
- surface area 75 sq ft
- average number of holes 17-24
- wavy bottom
- interconnecting holes
- aggregated exposed outside surface texture
- Weight 1300 lbs.



1 R1 PALLET BALL–TOP VIEW NTS

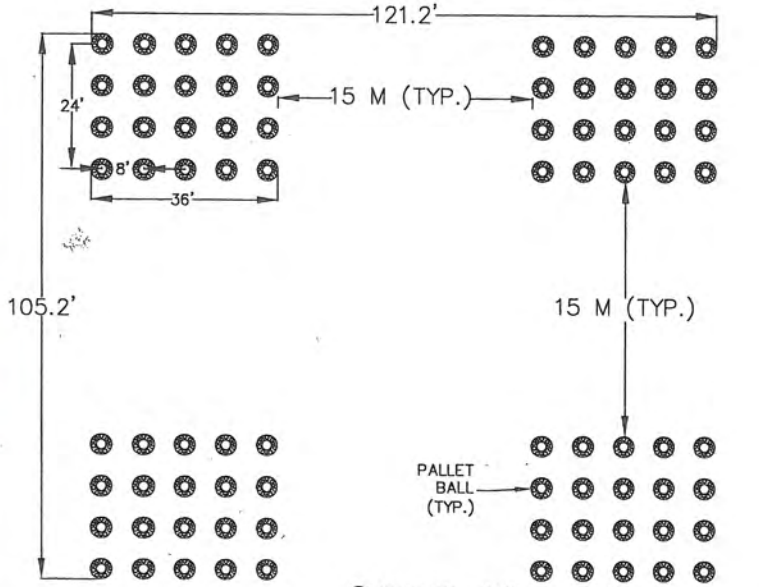


2 R1 PALLET BALL–SIDE VIEW NTS

	LATITUDE	LONGITUDE
A	41.7646	-71.3694
B	41.7646	-71.3687
C	41.7641	-71.3694
D	41.7641	-71.3687



AERIAL VIEW



3 R1 REEF BALL LAYOUT 1"=10'

NOTE:
ALL REEF BALLS SPACED APPROXIMATELY 8 FT ON CENTER

NOT FOR CONSTRUCTION

No.	Description	Date
REVISIONS:		

The Nature Conservancy
Protecting nature. Preserving life.

REEF BALL PLACEMENT
SABIN POINT
EAST PROVIDENCE, RI

Drawn by: JRT
Date: 11/29/2018
Scale: AS NOTED
Project No.:

SITE PLAN

R1
SHEET 1 OF 1

P11

	LATITUDE	LONGITUDE
A	41.7646	-71.3694
B	41.7646	-71.3687
C	41.7641	-71.3694
D	41.7641	-71.3687



AERIAL VIEW

P12

	LATITUDE	LONGITUDE
A	41.7646	-71.3694
B	41.7646	-71.3687
C	41.7641	-71.3694
D	41.7641	-71.3687



AERIAL VIEW

P13

2019-01-002

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

January 31, 2019
Dave Beutel Aquaculture Coordinator
Coastal Resources Management Council
Wakefield, RI 02879-1900

Dear Mr. Beutel,

I am writing in reference to the Permit Application request by the Nature Conservancy and RIDEM DMF for the Sabin Point Artificial Reef Pilot Project (File number DEM-TNC 2019). The proposed location for this site is in waters classified as Prohibited for shellfish harvesting located in the Providence River GA -16 in the city of East Providence .

Since this reef pilot project as proposed is not intended for the aquaculture of shellfish this office has no comment as to the suitability of these waters as they relate to shellfish water quality and the application of the NSSP Model Ordinance.

Neither a RIPDES permit nor a Water Quality Certificate is required for the proposed facility. Please call me at 222-4700, Ext. 7241 if you have any questions.

Sincerely,

Lucinda M. Hannus

Lucinda M. Hannus, Principal Environmental Scientist
RI DEM
Office of Water Resources – Shellfish Program

cc Angelo Liberti
Conor McManus
Dennis Erkan
Julia Livermore

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TTY / Relay 711 Website www.preservation.ri.gov

Jennifer R. Cervenka, Chair
Coastal Resources Management Council
Stedman Government Center, 4808 Tower Hill Road
Wakefield, RI 02879

CRMC File Number: 2019-01-002

Applicant: Nature Conserving / DEM

Town: Salt in Pt Artificial Reef

Response Date: 2/4/19

Dear Ms. Cervenka,

The Rhode Island Historical Preservation & Heritage Commission has reviewed the above- referenced project. It is our conclusion that this project will have no effect on any significant cultural resources (those listed on or eligible for listing on the National Register of Historic Places).

These comments are provided in accordance with Section 220 of the Coastal Resources Management Plan. If you have any questions, please contact Jeff Emidy, Project Review Coordinator, or Charlotte Taylor, Senior Archaeologist, at this office.

Very truly yours,

Charlotte Taylor (for)

J. Paul Loether
Executive Director, RIHPHC
State Historic Preservation Officer

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RHODE ISLAND
SALTWATER
ANGLERS
Association

P.O. Box 1465, Coventry, Rhode Island 02816 401-826-2121 FAX: 401-826-3546 www.RISAA.org

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January 31, 2019

Coastal Resources Management Council
Attn: David Beutel
Stedman Government Center, Suite 3
4808 Tower Hill Road
Wakefield, RI 02879-1900

Re: CRMC # 2019-01-002

Dear Mr. Beutel,

The Board of Directors of the Rhode Island Saltwater Anglers Association (RISAA) supports the TNC and DEM joint application to create an artificial reef near the Sabin Point Park Fishing Pier in East Providence, RI (CRMC File Number 2019-01-002, public noticed on January 28, 2019).

RISAA supports the main objective of the DEM-TNC proposed work, "to determine how artificial reefs can be used as a fish habitat enhancement tool in degraded areas of the upper Narragansett Bay and Providence River estuary", and RISAA is specifically interested in how this work will enhance the recreational fishing opportunities at the proposed enhancement site.

RISAA agrees with the applicant that this location is currently underutilized by the recreational fishing community, most likely due to the lack of quality fish habitat. The below -average habitat quality and adjacent public access fishing pier provides an unique opportunity to enhance the habitat and increase the abundance of recreationally important finfish (e.g., scup, tautog, and black sea bass) likely to colonize this location post enhancement, in a location where recreational fishers can easily access. RISAA is also interested in understanding how recreational users of the Sabin Point Fishing Pier view the change in their fishing experience once the reef is created.

In closing, we support the proposed project and look forward to seeing the expected benefits. We anticipate that the creation of the artificial reef at Sabin Point will improve the fishing experience at the park and should help validate the use of artificial reefs as one of several targeted habitat enhancement practices for Rhode Island and surrounding area waters.

Sincerely,

Stephen J. Medeiros
Executive Director

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PERMIT APPLICATION
REQUEST 2019

Project Title: Sabin Point Artificial Reef Pilot Project: Enhancing Habitat and Fishing Opportunities in the Providence River

Project Category: Research

Lat/Lon of Site: **Site 1 41.76435, -71.36905**
corner points provided in **Figure 1*

Permit Area: <1 acre (~0.91 acres)

Reef Area: <0.25 acres (~0.14 acres)

Applicant(s):

Will Helt WSKH
The Nature Conservancy, Rhode Island Chapter
159 Waterman Street
Providence, RI 02906
Email: william.helt@tnc.org
Phone: 401-214-4528

Patrick Barrett
Rhode Island Department of Environmental Management
Division of Marine Fisheries
Fort Wetherill Marine Laboratory, 3 Fort Wetherill Road
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Phone: 401-423-1947

Date Submitted: 1/2/2019

TABLE OF CONTENTS

1. PERMIT REQUEST 4
2. PROJECT NEED 4
3. SITE SELECTION 5
4. ALTERNATIVE SITES 13
5. REEF DESIGN AND CONSTRUCTION 14
6. REEF MONITORING 16
7. TIMELINE OF ACTIVITIES 17
8. PUBLIC SUPPORT AND COMMUNICATIONS 18
9. POTENTIAL ADVERSE IMPACTS 19
10. LIMITATIONS ON SUCCESS 19
11. BENEFITS AND EXPECTED RESULTS 20
APPENDIX 23

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PERMIT APPLICATION
REQUEST 2019

1. PERMIT REQUEST

The Nature Conservancy (TNC), in partnership with the Rhode Island Department of Environmental Management (RI DEM) Division of Marine Fisheries (DMF), is requesting an Army Corps of Engineers (ACOE) Individual Permit, Rhode Island Department of Environmental Management (DEM) Water Quality Certificate, and a Rhode Island Coastal Resources Management Council (CRMC) Category B Assent for habitat restoration projects undertaken by public entities. This project seeks to enhance habitat and fishing opportunities in the Providence River. Pre- and post-enhancement monitoring will allow us to evaluate the effectiveness of artificial reefs as an enhancement tool in Rhode Island waters. We expect this project will serve as a model for artificial reef projects in Rhode Island state waters by improving habitat, increasing local abundance of fish, and providing societal benefits through increased fishing opportunities.

2. PROJECT NEED

The main ***objective*** of our study is to determine how artificial reefs can be used as a fisheries resource and fish habitat enhancement tool in degraded areas of the upper Narragansett Bay and Providence River estuary. Since 2016, TNC and DMF (hereafter the applicants) have conducted benthic video monitoring and finfish surveys at selected sites to assess their suitability for various enhancement techniques. These assessments have provided the applicants insight into the current habitat condition and fish assemblage in these areas, and the ability to prioritize locations of where such fish habitat enhancement work would be most successful.

Through this assessment, artificial reefs (ARs) set at Sabin Point were identified as the best viable option for fish habitat in the Providence River estuary. Alternate sites were evaluated, including upland alternatives as required by the ACOE Individual Permit. Constructing an AR using a three-dimensional Reef Ball™ module array at Sabin Point Park will help enhance fish habitat by providing structure for fish – a habitat that is currently not present at this site. In addition to the actual structures, the resulting epifaunal colonization (e.g., algae, barnacles, bivalves, sponges, and anemone species) on the AR will provide food and enhanced habitat for fish species. The increase in fish abundance created by the reef system will help improve the recreational fishing experience at the park's pier. Finally, this array will help advance research on the impact of ARs in Rhode Island waters and provide the first AR Reef Ball™ research station in Narragansett Bay, which may serve as a model in future AR initiatives.

Using a variety of research techniques, we will seek to answer the following questions:

1) How do reef balls affect the area's fish assemblage and abundance?
2) What colonizing organisms will inhabit the reef over time?
3) How do fishes utilize the added structure?

4) How has recreational use of the pier changed post reef installation? (Pending Funding)

We propose the construction of a ***0.14-acre artificial reef*** using up to 100 pre-fabricated reef modules, with a maximum combined fill volume of ~2,847 ft^3. The AR footprint will be a 200 ft^2 area beginning 50 feet away from the end of the pier (Figure 1). Our current design includes 91 reef modules consisting of 58 Pallet Balls and 33 Bay Balls at a combined fill volume of ~2,016 ft^3 and will begin 75-100 feet from the end of the pier (Figure 9).

The Artificial Reef Team consists of individuals with backgrounds in fisheries management, restoration science, and GIS:

- William Helt (Co-Principal Investigator, Coastal Restoration Scientist - TNC)
- Patrick Barrett (Co-Principal Investigator, Fisheries Specialist – DEM)
- Eric Schneider (Collaborator, Principal Biologist- DEM)
- Conor McManus (Collaborator, Deputy Chief - DEM)
- Heather Kinney (Collaborator, Coastal Restoration Science Tech – TNC)
- Kevin Ruddock (Collaborator, GIS Manager- TNC)
- John O'Brien (Collaborator, Partner Specialist – TNC)

3. SITE SELECTION

Our intended goal is to enhance a site that currently provides fishing access but supports low fish abundance due to the unproductive benthic habitat. The project site has been carefully chosen to balance the goals and objectives of the project while taking into consideration the environmental constraints, logistics of implementation, and competing uses.

We used geospatial, benthic video monitoring, and scientific fisheries data to ensure that our enhancement work was conducted in a suitable location. Data collected and evaluated for the assessment included bathymetry, slope, marine shipping channel use, sediment type, dissolved oxygen, benthic habitat, seagrass distribution, and demersal fish abundance. Data sources and maps can be provided upon request.

Based on our pre-enhancement monitoring and site assessment of 12 locations in the upper Narragansett Bay and Providence River estuary, we identified Sabin Point as an ideal location for AR fish habitat enhancement. This area was selected based on the following attributes:

(1) Available infrastructure near project site for fishing access
(2) Relatively low quantity and quality of fish habitat structure currently in the surrounding subtidal
(3) Suitable physical and biological attributes to support fish abundance
(4) Background knowledge on recreational and commercial uses of the site

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(1) Available infrastructure for fishing access

On the southwest end of Sabin Point Park, a public access fishing pier was constructed to improve the recreational fishing opportunity (Figure 1). Of the eleven alternative sites that are

suitable for AR enhancement work, Sabin Point is the only location that has a fishing pier in place at this time.



Figure 1. Sabin Point Park Fishing Pier, Sabin Point artificial reef area (teal line).

(2) *Presence of structure in surrounding subtidal*

Benthic habitat condition from 2016 to 2018 at all sites was evaluated with an underwater video sled, along with water quality parameters including salinity (ppt), temperature (°C), dissolved oxygen (mg/L), and chlorophyll a (µg/L). A quantitative analysis using the Coastal and Marine Ecological Classification Standard (CMECS) was used to analyze the data. During the analysis, two of the four CMECS components (substrate and biota) were used to describe the benthic habitat.

In 2017, a 0.5km video transect was taken in the Sabin Point cove area. During the analysis, eight of the ten randomly selected video snapshots were defined as unconsolidated mineral substrate and had a predominantly dense composition (70-<90%) of muddy sand with sparse amounts (10-<30%) of shell hash/rubble (Figure 2). One of the snapshots was classified as unidentifiable due to poor video quality, and another was defined as shell substrate and composed of a moderately high density (50-<70%) of *Crepidula fornicata* and moderately low amounts (30-<50%) of shell hash/rubble. Areas closer to the shoreline and sandspit tend to have a higher density of shell rubble (mostly clam and slippershell) mixed with the muddy sand. This can be seen in the snapshots taken within the proposed site from the 2018 video transect (Figures 3 and 4, in Appendix). The video also shows that area is devoid of complex structure for fish (aside from the fishing pier).

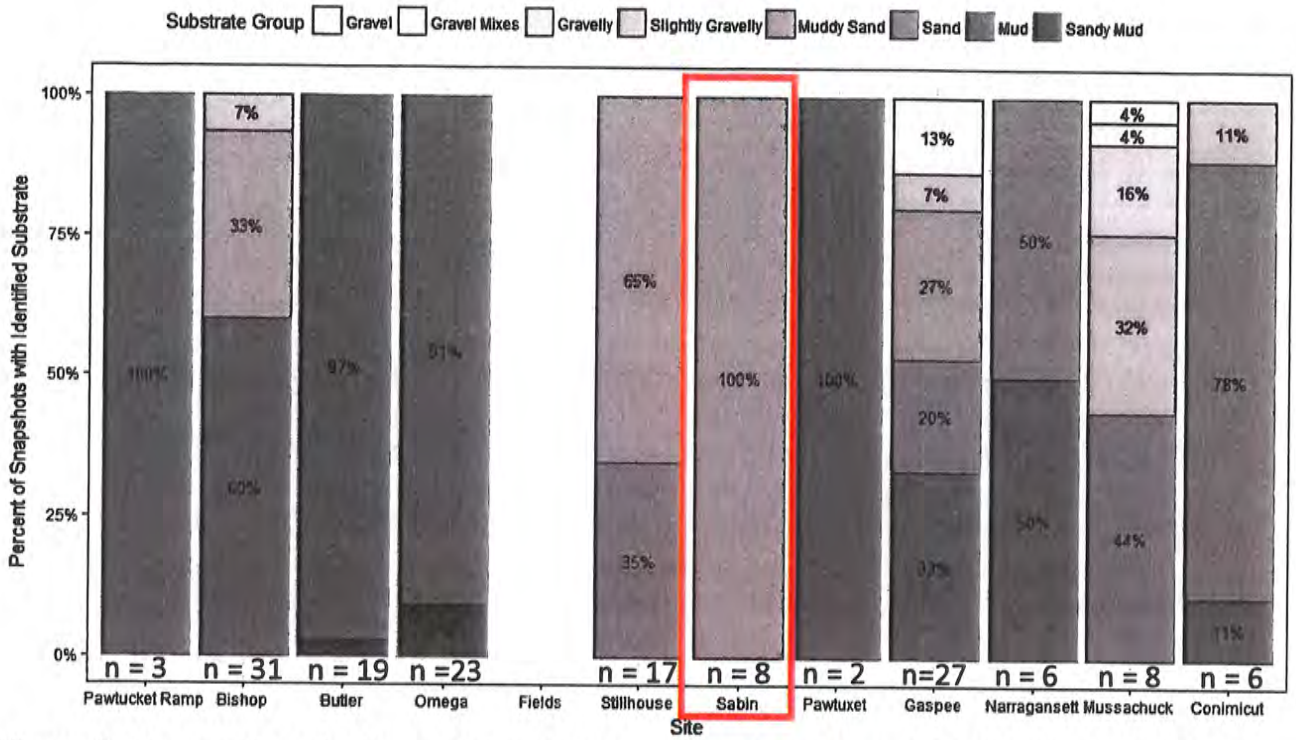


Figure 2. Unconsolidated Mineral Substrate broken down into Substrate Group for samples with sufficient video quality at the 12 potential locations in the upper Narragansett Bay and Providence River estuary analyzed in 2017. Percent values indicate the proportion of snapshots identified as the dominant substrate. Sites contain varying numbers of total snapshots analyzed and are indicated by the number within the column. Sites are listed by latitude starting from the northernmost to the southernmost site.

An extensive survey of the project location was completed on October 24, 2018. A Ponar grab (0.06 m^2) was used to sample sediments and benthic macrofauna to ground truth the results from the CMECS video analysis. Upon retrieval, grab samples were sieved, and individual organisms were identified to the lowest possible taxonomic level. Sediment grain size was analyzed in the field using texturing techniques to determine general soil description and relative grain size proportions. A YSI Pro-Plus® probe was suspended about one meter above the sediment surface at each sample location to measure water temperature, salinity, and dissolved oxygen. Water depth and location were recorded using on-ship navigational tools (Garmin GPSMAP® 7607xsv).

Results from the grain size analysis indicated that sediments are composed almost entirely of coarse to fine sands, with only minor percentages of silt. The samples taken from within the proposed permit area have coarse sand contents indicating that the material is well-sorted and located in a medium-high energy environment. Low benthic habitat quality was evident from video as well as benthic grab samples. Bottom habitat features included shell hash of *Mya arenaria* and *Crepidula* spp. The video and Ponar grab data suggest that the area has the appropriate bottom type to support the proposed reef and that this location could benefit from this type of structural enhancement.

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(3) Physical and Biological Attributes

Onset HOBO data loggers (Dissolved Oxygen-U26-001 and Conductivity-U24-002-C) were deployed at each of the 12 potential locations in the upper Narragansett Bay and Providence River estuary monitored during pre-enhancement finfish seine and fish trap surveys conducted by the applicants. Temperature, salinity, and dissolved oxygen (DO) data were collected to determine how sites differed and if any differences in catch per unit effort covaried with any of these parameters. As expected, several locations in the Providence River estuary experienced temporary periods of hypoxic conditions (< 2.0 mg/l) in the late summer and early fall. In 2017, Sabin Point experienced temporary hypoxia from mid-September to the beginning of October (Figure 5). Mats of *Ulva* spp. get blown into the cove formed behind the sandspit and settle in the shallows south of Sabin Point park, contributing to the observed hypoxic days. We do not anticipate these events having a significant impact on the success of the artificial reef in this location and provides additional reasoning why we believe that Sabin Point could benefit from habitat enhancement. Added structure and improved rugosity to benthic habitats have been shown to improve turbulent flow of an area, which could help alleviate the severity and length at which these events occur as well as provide important water column mixing for active suspension feeders that will colonize the reef (Lenihan 1996, Lenihan 1998, Lenihan 1999, Lenihan 2001). Turbulent flow also increases shear stress that thins the diffusive boundary layer that regulates mass transfer, allowing for greater mass flux of molecules, such as oxygen, across the sediment-water interface (Patterson 1991a, 1991b, Reidenbach 2010). These physical processes are especially important for sessile organisms (e.g., corals, oysters) during times of stress as they can increase the transfer of oxygen molecules (Finelli et al. 2006). Despite these periodic low DO events, this location still possesses a dense quahog population according to DEM's dredge survey data, and the Providence River surveys record that demersal finfish utilize this location both before and after events, suggesting that the low DO conditions should not negatively impact the potential benefits of the artificial reef and should improve once the reef is constructed.

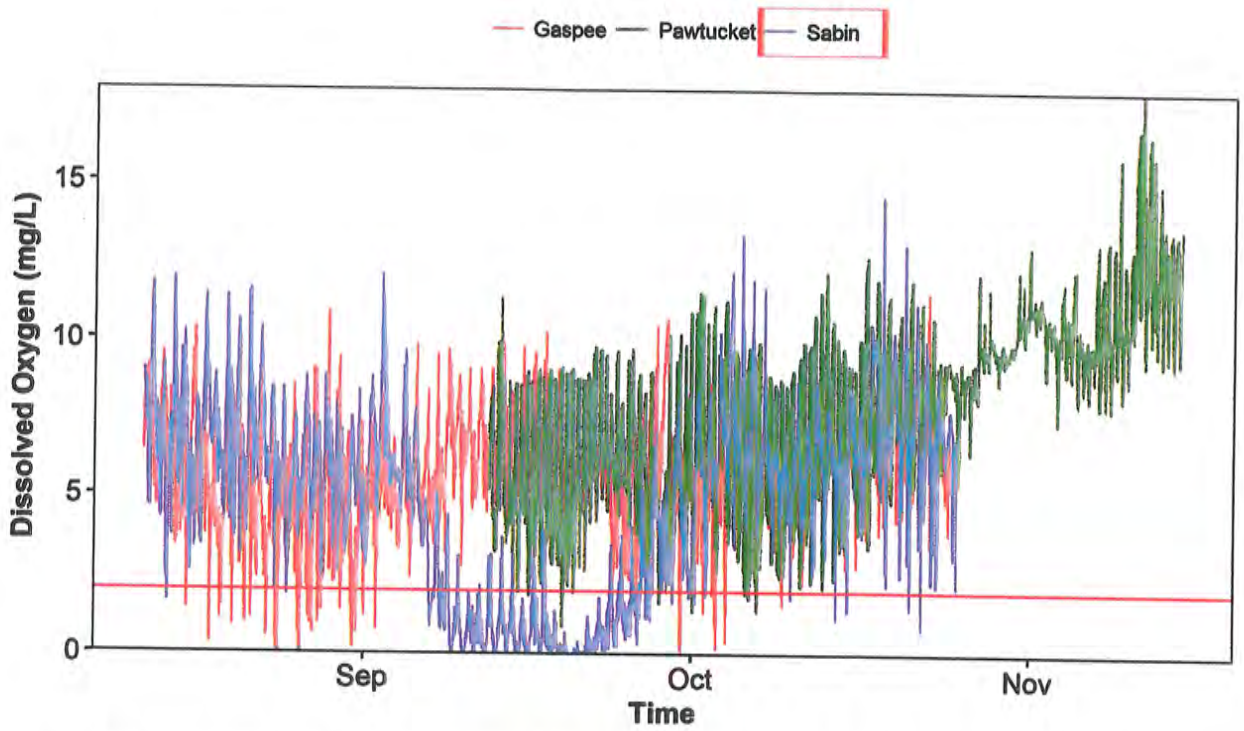


Figure 5. Timeseries displaying Dissolved Oxygen (DO) values at Sabin Point from 9/12/17 – 10/25/17. Red horizontal line represents hypoxia threshold (DO $\leq$2 mg/L)

During the October 2018 survey, the Ponar grabs suggested that benthic infaunal diversity and abundance was low and comprised mostly of small crustacea and amphipods. Hard clam density ranged from 0 to 1 individuals per grab. In addition, the DMF dredge survey at the station most representative of the proposed site has an average quahog density of ~11.49 (ind./m^2). Prior to deploying the reef modules, we will survey the shellfish density of the proposed area. If deemed necessary by the RI DEM DMF, shellfish from the reef footprint area will be relocated prior to construction in accordance with process described in the RI DEM DMF "Guidance for Conducting Shellfish Surveys for Dredging Projects" document, updated August 2018.

Video analysis of the biotic components showed three of the five video snapshots defined as aquatic vegetation bed, one as reef biota, and one as faunal bed. Snapshots defined as aquatic vegetation had a sparse composition (10-<30%) of sheet algal species (mainly *Ulva* sp.) with trace amounts (<10%) of mud snails and sparse amounts of small surface burrowing fauna (2-<5mm burrow width). The snapshot defined as reef biota had a moderately low density of *Crepidula* with trace amounts of filamentous algae (*Aghardiella* sp.) and mud snails, and sparse amounts of sheet algae. Examples of benthic substrate snapshots from the benthic monitoring tows at Sabin Point, with GPS tacks, are included in the Appendix (Figures 2 and 4).

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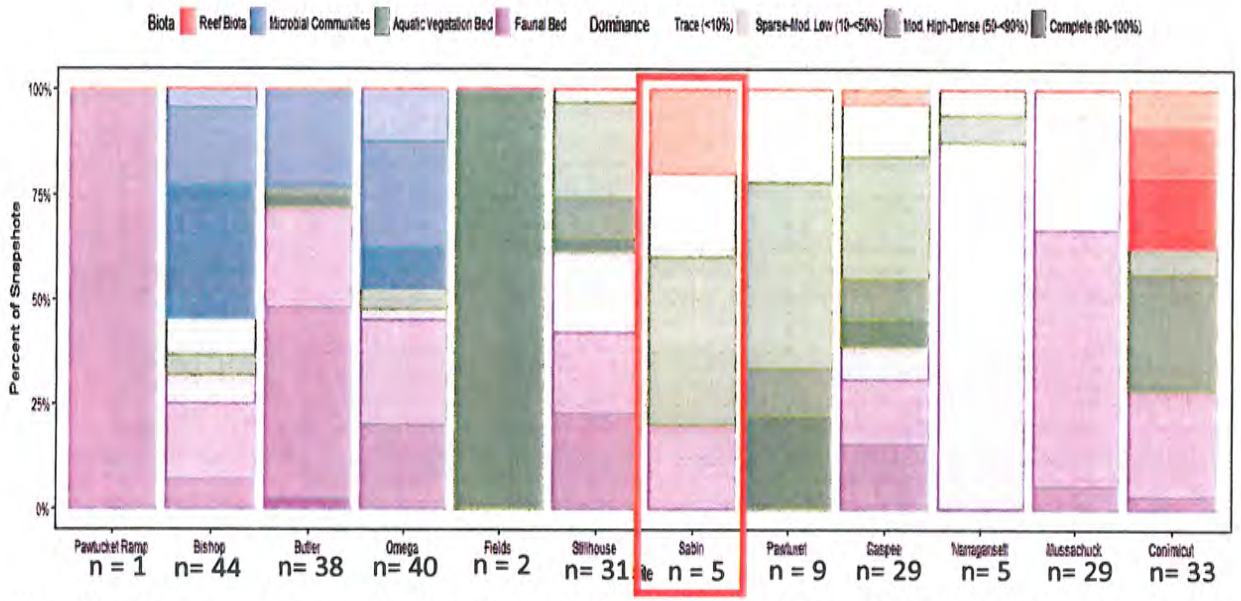


Figure 6. Biotic components broken down into Biotic Class with video quality ≥3 across the 12 potential locations in the upper Narragansett Bay and Providence River estuary analyzed in 2017. Percent values indicate the number of snapshots identified as the dominant substrate with levels of dominance depicted by increasing color saturation. Sites contain varying numbers of total snapshots analyzed and are indicated by the number within the column. Sites are listed by latitude starting from the northernmost to the southernmost site.

Baseline seine and fish trap data from 2016 to 2017 show that Sabin Point supports has the highest number of juvenile winter flounder of the 12 sites (Figure 7). However, the beach seine conducted at Sabin Point is approximately 250 meters away from the proposed AR on a sand substrate, which is more suitable for winter flounder settlement (Pereira, 1999). Given the small scale, non-preferential sediment type for settlement, and time of the year we plan to build (October 15th, pre-spawning), the artificial reef at Sabin Point should not impact the Winter Flounder spawning potential of the nearby sandy locations. The fish trap data also suggest that the area supports recreationally important finfish such as scup, tautog and black sea bass (Figure 8). Analyzing the length frequencies of fish caught shows that although there is a low abundance of fish per haul, at Sabin Point, legal recreationally-sized scup are present, along with tautog that are within one inch of the legal possession limit (Figure 9).

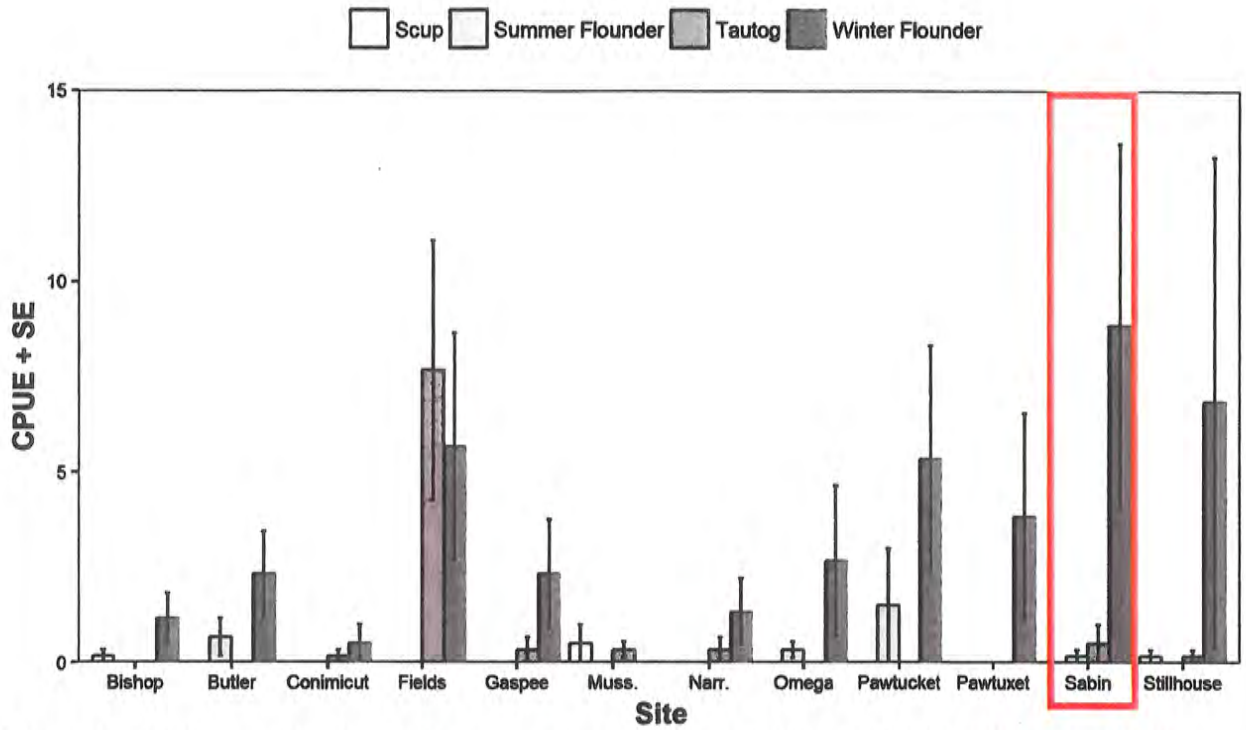


Figure 7. Catch per unit effort of scup, summer flounder, tautog, and winter flounder during seine sampling (2016-2018) at the 12 study sites.

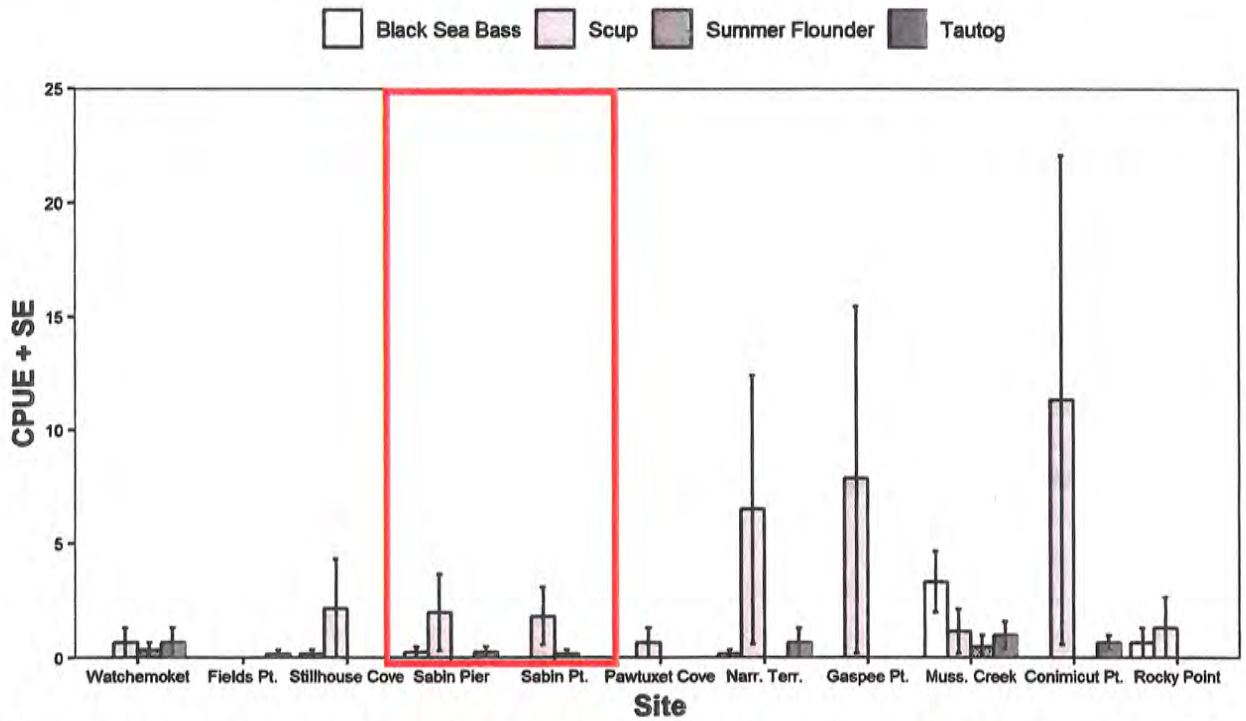


Figure 8. Catch per unit effort of black sea bass, scup, summer flounder, and tautog during fish trap sampling (2017-2018) at the 12 study sites.

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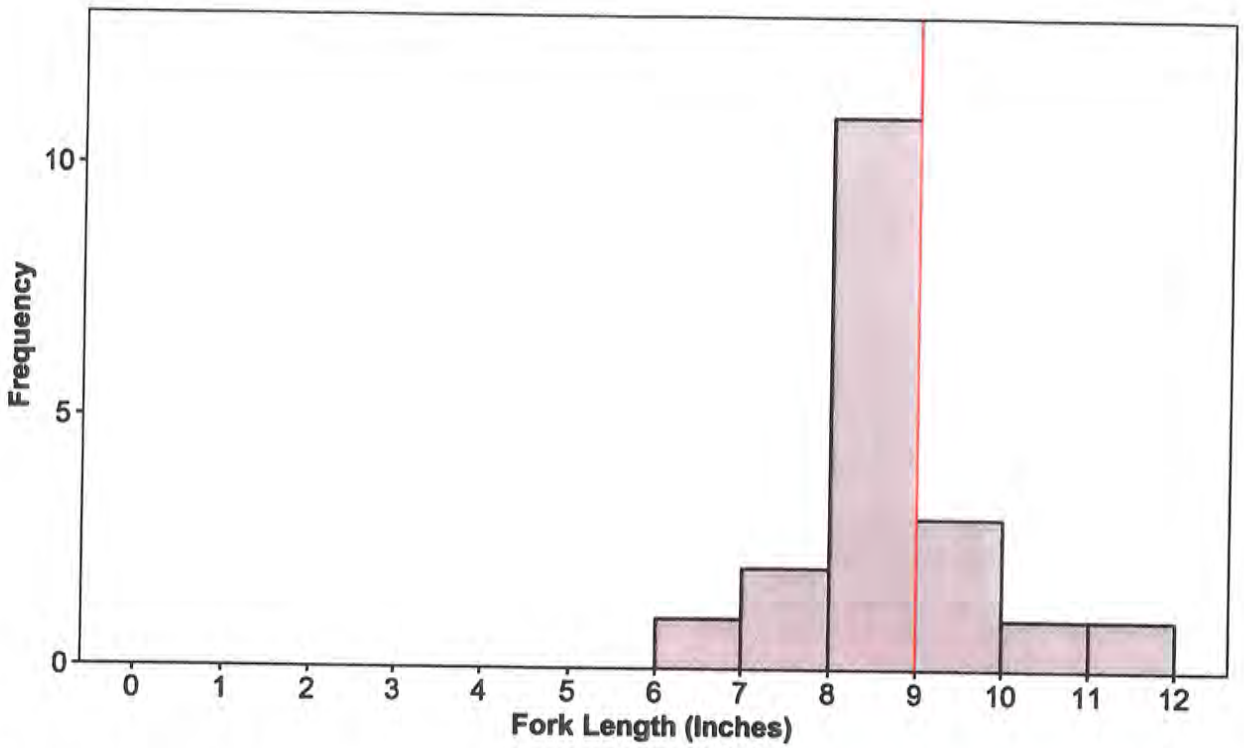


Figure 9. Histogram of scup caught in the Sabin Point fish traps. Scup were measured by fork length. The red line represents the recreational legal limit (9 inches by Total Length).

(4) Background Knowledge: Recreational and Commercial Use

Historically, Sabin Point was a significant winter flounder fishing spot (pers. comm. Michael Bucko, DMF Lead APAIS Biologist). However, the decline of the winter flounder population has reduced the popularity of the park and fishing pier for recreational anglers. Angler survey data gathered from the APAIS MRIP program, as well as communications with the Rhode Island Saltwater Anglers Association (RISAA), have confirmed that Sabin Point is an unpopular recreational fishing spot for demersal finfish, with occasional recreational fishing for pelagic or multi-habitat associated fish (NOAA, MRIP Rhode Island Public Access Fishing Site Register). This information supports the low abundance of demersal finfish observed in our surveys at this location. Since this area is not heavily utilized, the applicants believe additional structure provided by reef balls can help enhance scup, tautog, and black sea bass fishing opportunities at this location, increasing utilization of the park and enhancing fishing opportunities in the upper bay.

The 0.91-acre project site (Figure 1) is highly suitable for artificial reef construction based on data collected during our field survey and information collected from meetings and communications with stakeholders (City of East Providence, RISAA, Commercial Whelk and Quahog Fisheries, DEM Enforcement, USACE, and CRMC; see Section 8: Public Support and Communications). Through this assessment, artificial reefs (ARs) were highlighted as the best viable option for fish habitat enhancement work at Sabin Point.

In summary, Sabin Point was selected because of the available infrastructure near project site for fishing access, the relatively low quantity and quality of fish habitat structure in the surrounding subtidal, the suitable physical and biological attributes for supporting fish, the low impact to competing uses of the selected area.

4. ALTERNATIVE SITES

Alternative sites for fish habitat enhancement are located within the same geographic area as the chosen Sabin Point Park location (Figure 10). The purpose of this project is to improve fish habitat and increase fishing opportunities in the Providence River estuary. This project is water-dependent and an upland alternative would not be applicable given the goals of this project.

The four northern sites (Pawtucket State Pier, Bishop Point, Butler, and Omega Pond) are not deep enough (1ft MLW) to support this type of AR work. In addition, instances of hypoxia and fish kills in these areas make them less suitable locations for fish habitat enhancement. The remaining sites generally maintain more suitable water quality conditions for finfish than those in the Seekonk River. Fields Point was not selected because it is relatively shallow (3ft MLW) and already has a large amount of underwater structure from the riprap along the shore. Enhancement from additional structure in this area would not have as much added benefit than at other sites. The remaining sites were either too shallow (Stillhouse, Pawtuxet Cove, Gaspee), too close to the shipping channel, had more competing uses than Sabin (Conimicut, and Mussachuck), were more heavily trafficked by boaters (Mussachuck, Conimicut, Narragansett Terrace, and Pawtuxet Cove), were closer to surrounding residential waterfront property (Narragansett Terrace, Conimicut, Pawtuxet Cove) among other logistical reasons relating to ease of reef construction. Ultimately, Sabin Point was determined to be the most ideal location for AR fish habitat enhancement work at this time.

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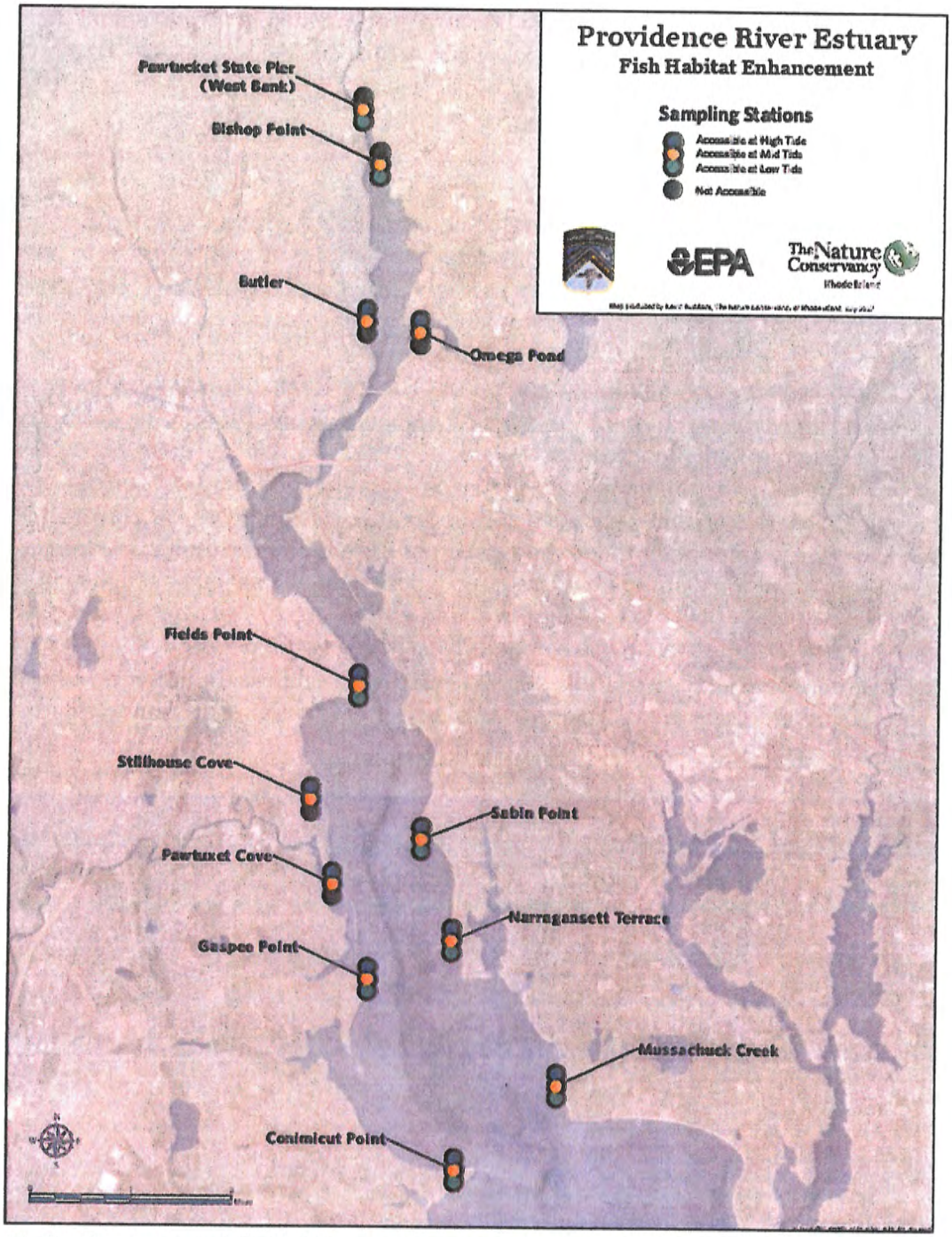


Figure 10. Station map and for habit assessment conducted in the Providence River and upper Narragansett Bay tidal estuaries.

5. REEF DESIGN AND CONSTRUCTION

We chose Reef Balls™ to design our fish habitat enhancement work at Sabin Point because of their documented success in estuarine environments in the Southeastern Atlantic and West Coast of the United States. Studies show that artificial reefs balls promote aggregations of

demersal finfish (Bohnsack 1990, Bohnsack 1991, Ambrose 1989), which is one of the primary objectives of our project. Several AR experiments have shown that habitat enhancement with Reef Balls™ can increase abundance, diversity, and production when compared to natural reefs and sandy substrate controls (Folpp 2013, Hackradt 2011, Powers 2003). Upon review of these publications, we have decided to maximize the number and limit the spacing between modules in order to increase the potential benefit of the Sabin Point Artificial Reef Project (Bohnsack 1994, Sherman 2002). ARs have also shown greater attraction of planktivores (i.e., menhaden, herring, and juvenile grunts) as well as benthic feeding fish compared to natural reefs and sand bottom (Bohnsack 1994). In addition to the biological benefits observed, a new research project in Maryland is attempts to utilize Reef Balls™ to alleviate hypoxic zones in the Severn River in an effort to restore this habitat for oyster and associated reef fish colonization (Wheeler 2018).

A contracted professional (Reef Innovations) will oversee the fabrication and deployment of the reef modules to maintain quality assurance and control. The contractor has over 15 years of experience in reef construction and is licensed to construct and deploy Reef Balls™. We will use Reef Balls™ made from a mixture of cement (limestone), silica and water. Cement types II or greater will be used, as these cement grades are resistant to sulfates and other chemicals in sea water which can break down lower grade concrete. Pozzalanic materials such as micro-silica, and/or crushed shell will be used to help neutralize the pH of the cement to that of seawater (pH of 8.3). An adequate water to cement ratio will be used in the manufacturing process to ensure structural integrity and durability. Reef Balls™ are chemically engineered to be long-lasting (500-yr lifespan) in seawater and enhance epifaunal growth. Reef Balls™ are physically designed to resist being overturned by waves in shallow subtidal and subtidal locations. A certified pre-cast company will be hired to fabricate reef modules and ship them to Rhode Island. We intend to use two sizes of Reef Balls™ to maximize topographic heterogeneity and mimic natural reefs, while keeping logistics simple for this pilot project (Table 1).

Table 1. Type and number of Reef Balls™ that will be used per location based on the current array. Data was provided by Reef Innovations Inc. The ratio or Pallet to Bay bays may change based on logistics but the number will not exceed a total of 100 Reef Balls™.

Unit Type	#	Width (ft.)	Height (ft.)	Surface Area (ft^2)	Volume (ft^3)	Weight (lbs)
Pallet Ball	58	4	2.9	75	28.47	1,300
Bay Ball	33	3	2	40	11.043	500

Prior to construction, the boundaries of project sites will be georeferenced using d-GPS and marked with surface floats. Boundary markers will be maintained throughout the duration of our study. We are applying for a 200'x 200' permit area, within which we will be constructing the artificial reef array. Our current reef design is currently scoped to have a 95.4 by 62.9 foot reef area (0.14 acres), but will not exceed the 200 by 200 permit area if spacing between, or the number of, Reef Balls™ needs to be adjusted. 91 Reef Balls™ will be evenly distributed in a 7x13 grid parallel to shore. Each row will curve, starting ~75 to 100 feet from the end of the pier, so that within each row the modules are the same distance from the pier. (Figure 11).

Our proposed artificial reef array currently consists of 58 Pallet Balls and 33 Bay Balls (91 total modules). Reef modules will be transported to the project site by barge and lowered to

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the seafloor by crane. A single reef module will be lowered to the seafloor using a spray bar and a crane. Once in contact with the bottom, tension hooks (Pelican Hook) will release the reef modules from its strap in a fixed position. Divers may be used to ensure proper placement. This methodology will ensure accuracy and proper placement of the reef modules. We anticipate reef construction to take no more than one week and will begin after October 15th. We expect the construction window will have little to no impact on commercial and recreational use of the surrounding waters as well as the temporal winter flounder essential fish habitat (EFH) window.

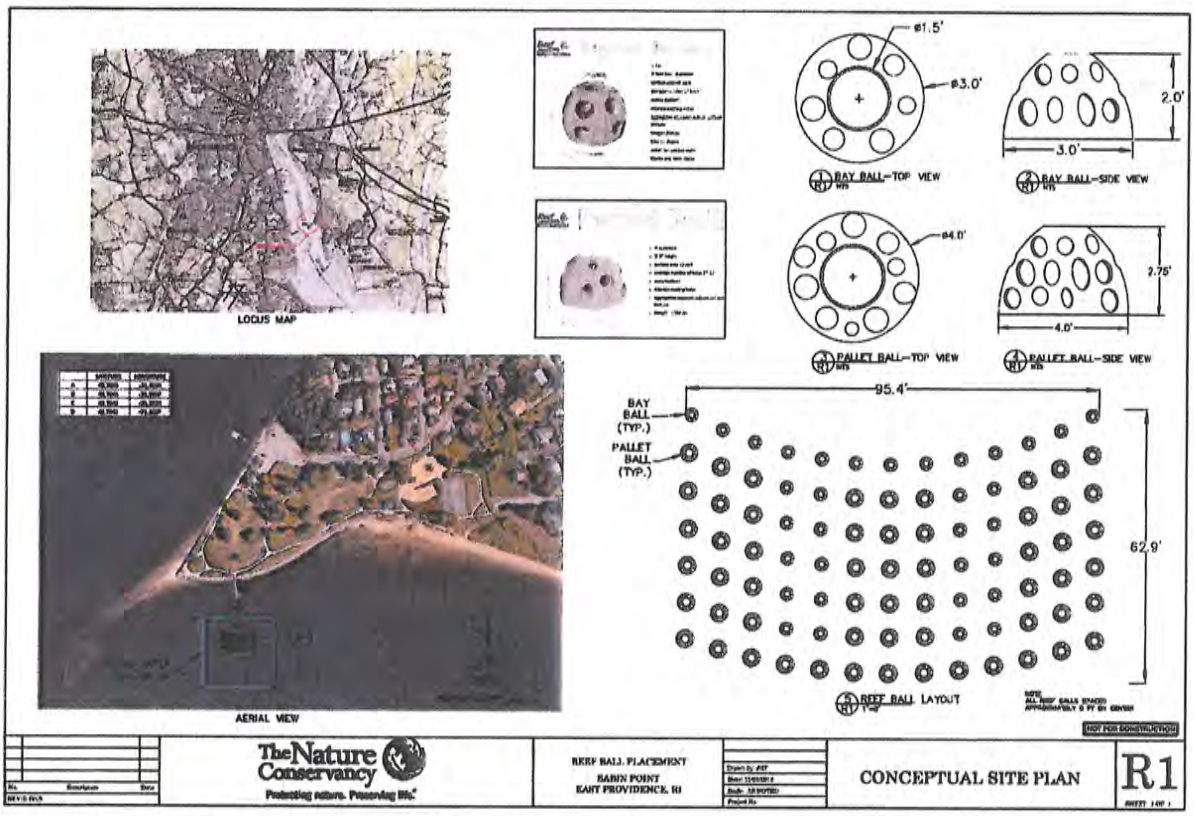


Figure 11. proposed reef layout showing the intended array of reef modules consisting of Pallet Balls and Bay Balls.

6. REEF MONITORING

The applicants will monitor the reef sites with video observations following the deployment of the Reef Balls™. Survey data will provide a baseline to evaluate potential movement or burial of reef materials.

The applicants will monitor changes in fish and macroinvertebrate communities due to the artificial reef habitat. Prior to installing AR modules, the applicants will finalize an appropriate monitoring design using techniques such as underwater video, fish traps, and dive surveys to monitor fish populations. Baseline beach seine and fish trap survey data have been collected monthly (May-October) at Sabin Point over the last two years (2017 and 2018) and will continue after installation of the artificial reefs, assisting with the evaluation of differences in fish abundance before and after reef construction.

To determine the relative habitat value produced by creating an AR at Sabin Point, the applicants intend to utilize a modified version of the Kelp Ecosystem Ecology Network (KEEN) monitoring protocol. This approach will allow the applicants to compare AR habitat to those such as kelp, eelgrass, and oyster reefs. The applicants expect to conduct monitoring up to three years after construction. Examples of KEEN monitoring techniques include: quadrat, uniform point count, swath, cube, and hand core surveys. These surveys are designed to sample common algae, invertebrates, and fish species associated with artificial reefs. Additionally, temperature, salinity, and dissolved oxygen measurements will be collected at the site.

7. TIMELINE OF ACTIVITIES

Table 2 provides an expected timeline of project activities. We do not anticipate any changes in proposed timeline, but notifications will be provided to partners if changes occur. Reef construction will between 10/15/19 and 11/30/19. Post-construction monitoring will begin following reef construction. Biological monitoring of fish populations will start in Spring 2019.

Table 2: Timeline of project activities and completion dates.

Project Component	Activity	Projected Date
I. Location, design & permits	Identify project sites and control sites	Aug 2018
	Facilitate partner and stakeholder meetings	Fall 2018
	Baseline survey of sites (use intensity, bottom video, sediments)	May 2017-Oct 2018
	Submit permit applications	Dec 2018
	Public Hearing	Spring 2019
II. Reef Construction	Secure contracts for modules	April/May 2019
	Delineate and survey reef sites	May 2019
	Deploy modules and monitor	On or after Oct 15th, 2019
III. Post-Construction Monitoring	Bottom survey of reefs (side-scan, video transects)	2019-22
	Evaluate reef habitat succession	2019-22
	Evaluate habitat use by juvenile finfish	2019-22

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	Data synthesis and analysis	2019-22

8. PUBLIC SUPPORT AND COMMUNICATIONS

Over the last six months, the project team has facilitated meetings and provided background on the project to foster awareness and gain feedback from user groups. Before the project was presented at the Rhode Island Marine Fisheries Council public hearing, several in-person and phone meetings were held with prospective stakeholders including: RISAA, the City of East Providence Planning department and Harbor Master, ACOE, CRMC, RIDEM Enforcement, and fishermen that represent whelk and quahog industries in the vicinity of our project area. Quahogging is prohibited at Sabin Point, as it is north of the shellfishing closure line. Our reef design was created by Jillian Thompson (TNC Conservation Engineer) and was reviewed by the contacted stakeholder groups to ensure they were well briefed on the scope and goals of the proposed work. Expert advice and support on earlier drafts of the project proposal, particularly on reef construction and design, experimental design, and sampling methodology presented in our permit application (Personal Communication, Mark Russo (MA Division of Marine Fisheries Climate and Artificial Reef Specialist) and Jordan Byrum (NC Department of Environmental Quality Artificial Reef Coordinator).

On November 14th, Steve Medieros (RISAA President), was contacted and briefed on the goals and scope of the Artificial Reef Project at Sabin Point. Site plans and aerial maps of the project location were reviewed by the board of directors on two separate occasions, November 20th and December 11th. Overall, RISAA supports our study and will provide a letter of support during the public notice period.

On December 3rd, 2018, TNC and DEM met with the city of East Providence planning department to provide background and details regarding the Sabin Point Artificial Reef Project. We have received positive feedback from the department who do not foresee any negative impacts to the existing infrastructure or navigable waterways.

On December 6th, 2018, DEM met with ACOE and CRMC for a pre-application meeting to discuss the project, permitting, and any concerns they have with the proposal. Artificial reefs are considered fill by the ACOE and require an Individual Permit in which we have compared alternative locations as well as upland alternatives, to our chosen work site. Comments regarding the distance from the pier and the depth at mean low tide (~5 ft) were discussed and helped improve the siting for our artificial reef for maximum benefit to those fishing off the pier.

We have reached out to Katie Eagan, who in turn reach out to other members of the commercial whelk and quahog community regarding the suitability of the proposed project site. We have identified that the area south of Sabin Point maintains little commercial whelk activity, but given the limited footprint of our Artificial Reef, those who fish that area were not concerned that the project would not interfere with their whelk fishing efforts. Sabin Point is located north of the shellfish closure line, and thus should not interfere with the commercial Quahog community.

On December 20th we met with Chief Dean Hoxie from RIDEM Law Enforcement as well as some members of the RIDEM Public Access Committee to brief them on the project. The project was received well, and they did not foresee any issues providing the reef footprint is clearly marked. There is no dockage on the fishing pier and the shoal to the west prevents major boating traffic lowering the reefs risk as navigational hazard. Given the prevailing SW wind

during the summer, it was suggested to move the landward edge of the array as close as 75 feet from the pier so that fishers will have the opportunity to reach the reef from the pier.

While developing our permit application we have taken into consideration the thoughts and comments made by the different stakeholder groups we've met with and have adjusted the project site and construction window accordingly in order to minimize potential user-conflicts, provide maximum benefit to existing resources and users, and to avoid areas and timeframes associated with Essential Fish Habitat designations for Winter Flounder (Pereira, 1999). To our knowledge and based on response to with stakeholder groups, the proposed project will not displace or impact current users or biological communities.

9. POTENTIAL ADVERSE IMPACTS

We do not anticipate negative ecological or social impacts resulting from the proposed research project. Reef locations were surveyed using underwater video and Ponar grabs on October 24, 2018. In addition to our review of existing literature and spatial data, we do not expect displacement or loss of existing bottom habitat features. The project site is in an area of sandy sediment and shell hash. Social impacts may include the displacement of commercial fishing; however, we have consulted with representatives of fishing industry to identify potential user conflicts and concerns. Due to the small footprint and shellfish harvest closure in the Providence River, there will be negligible to no impact to these stakeholder groups. Additionally, this artificial reef will be open to both recreational and commercial fishing industries. The proposed reef construction plan will impact boat navigation in the specific 0.25-acre reef footprint but is not located in a frequented boating location and is greater than 1,000 feet from the navigation lane, thus does not pose a significant navigation hazard. The corners of the artificial reef will be marked for the duration of the study to provide awareness of potential boating hazards. At no time will reef modules extend greater than 3-feet from the sea floor. Boats will be able to navigate around and inside at their own risk and may anchor within and around project sites. Notifications of work and work dates will be provided to local Harbor Masters, RI DEM, RI CRMC, USCG, and ACOE. Annual progress reports will be provided to RI CRMC, RI DEM, and ACOE in January of each year. TNC staff will monitor reef sites over a minimum of 3-years for reef movement, subsidence, and scouring, in addition to the biological surveys planned for the project. Given the small footprint, the artificial reef will not significantly impact the viable winter flounder habitat (flat, sandy silt environment).

10. LIMITATIONS ON SUCCESS

The performance of our artificial reefs may vary based on site-dependent attributes such as localized water circulation patterns, sediment firmness and grain size, water quality and nutrient loads, and fish and invertebrate larval supply. We anticipate minor sediment burial and scouring of reefs. The water depth at Sabin Point is on the shallower end of the depth range than other fish habitat enhancement work. This may limit the amount of legal size fish that could be attracted to the area even after the reef is created. The speed of colonization of sessile organisms on the reefs could also alter the impact the added structure has on fish abundance.

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11. BENEFITS AND EXPECTED RESULTS

Constructing an AR using a three-dimensional Reef Ball™ module array at Sabin Point Park will help enhance fish habitat by providing structure for fish in an area devoid of such habitat. Added structure will increase rugosity and provide a surface area for colonization that will result in a more complex benthic environment. Added structure is expected to increase turbulent flow experienced on the sea floor (Reidenbach 2010), increasing mixing of the water column and sediment transport, which will help alleviate the stress of periodic hypoxic events allowing the colonization of a more robust benthic invert and epifaunal communities, further promoting the quality of the habitat near the Sabin Point Pier. Our assessment will allow us to determine how Artificial Reefs can enhance fishing opportunities in Rhode Island. In addition, the resulting colonization of epifauna on the reef will provide food and enhanced habitat for fish species. We expect the artificial Reef Ball™ array will increase the aggregation demersal finfish that associate with bottom structure (i.e., Scup, Tautog, and Black Seabass) (Folpp 2013, Sherman 2002, Powers 2003, Lenihan 1998, Hackradt 2011). Ultimately, we anticipate that the creation of the artificial reef at Sabin Point will improve the quality of the fishing experience at the park as a result of improved habitat, and aggregations of finfish likely to follow.

By working with resource management agencies, environmental non-profits, academics, recreational sport fishing organizations, and commercial fisheries, we will facilitate a dialog on establishing scientifically and socially-sound fish habitat enhancement practices in the Bay. Limited information exists on the benefits of artificial reef enhancement in Rhode Island let alone New England. This array will help advance research on the impact of ARs in Rhode Island and provide the first long-term AR Reef Ball™ research station in Narragansett Bay. As a pilot project, this work will help guide future fish habitat enhancement work in Narragansett Bay.

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APPENDIX

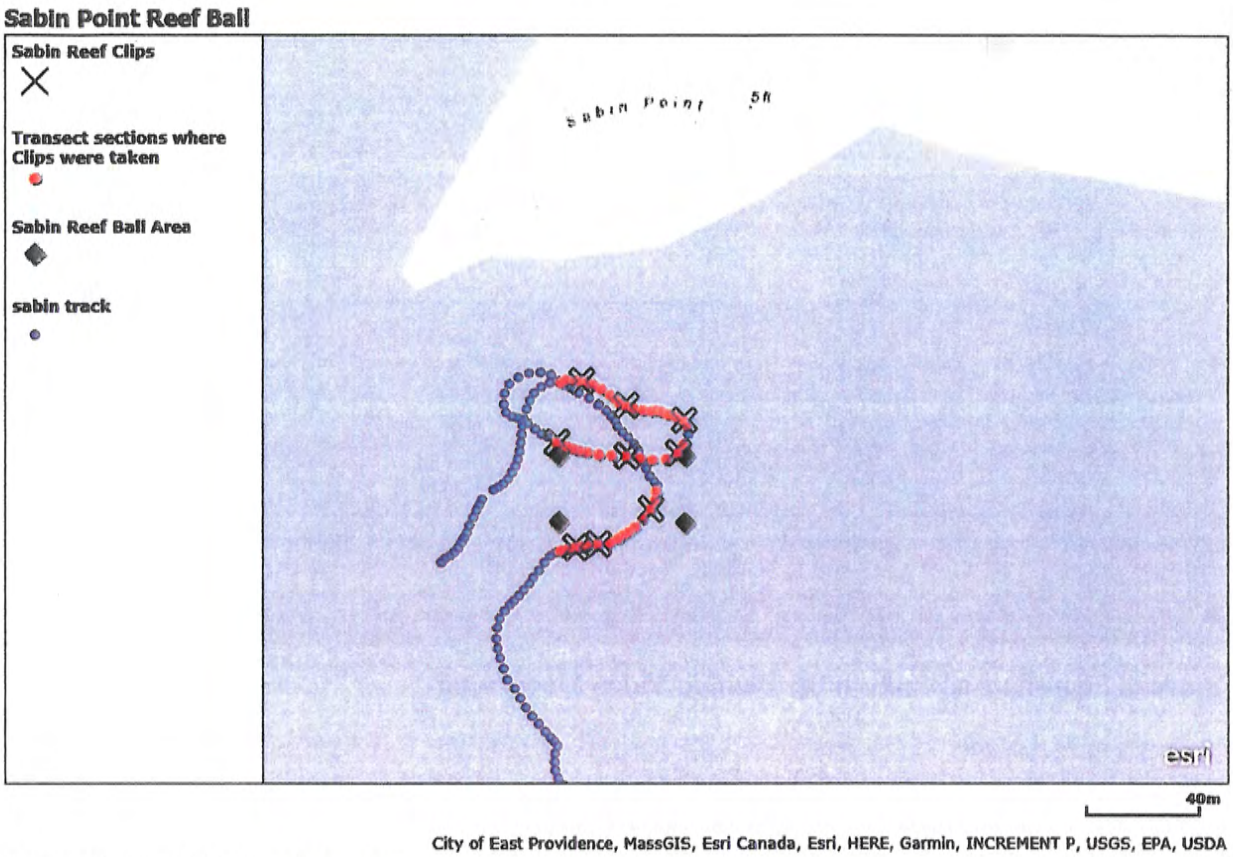


Figure 3. Benthic Monitoring Tows at Sabin Point, with Photo Snapshot location (X's) and GPS tacks.

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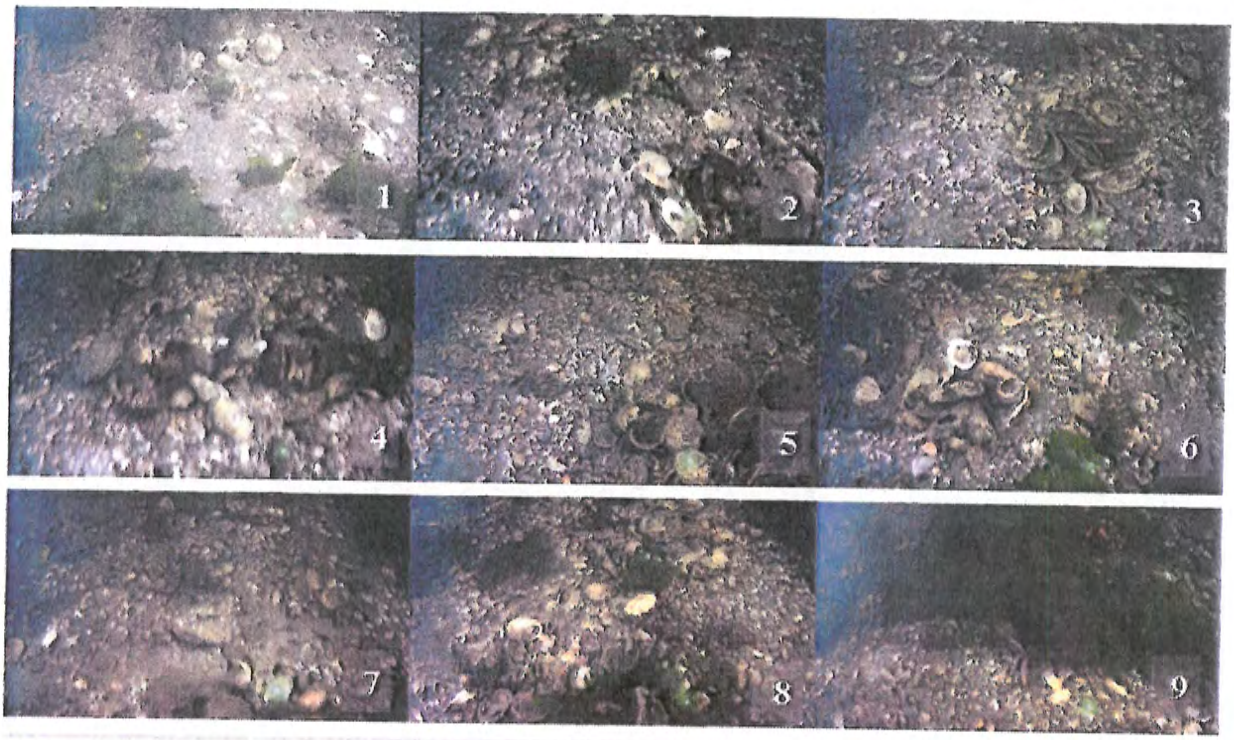


Figure 4. Snapshots taken from the Benthic Video Monitoring.

The requirements herein for a Category B Assent are necessary data and information for the purposes of federal consistency reviews. In accordance with Rhode Island Coastal Resources Management Program application requirements defined by Section 1.3.1(A) (formerly § 300.1) for a Category B Permit we are providing the following information.

a. Demonstrate the need for the proposed activity or alteration:

- The main ***objective*** of our study is to determine how artificial reefs can be used as a fisheries resource and fish habitat enhancement tool in degraded areas of the upper Narragansett Bay and Providence River estuary. Since 2016, TNC and DMF (hereafter the applicants) have conducted benthic video monitoring and finfish surveys at selected sites to assess their suitability for various enhancement techniques. These assessments have provided the applicants insight into the current habitat condition and fish assemblage in these areas, and the ability to prioritize locations of where such fish habitat enhancement work would be most successful.

- Studies show that artificial reefs balls promote aggregations of demersal finfish (Bohnsack 1990, Bohnsack 1991, Ambrose 1989), which is one of the primary objectives of our project. Several AR experiments have shown that habitat enhancement with Reef Balls™ can increase abundance, diversity, and production when compared to natural reefs and sandy substrate controls (Folpp 2013, Hackradt 2011, Powers 2003). Upon review of these publications, we have decided to maximize the number and limit the spacing between modules in order to increase the potential benefit of the Sabin Point Artificial Reef Project (Bohnsack 1994, Sherman 2002). ARs have also shown greater attraction of planktivores (i.e., menhaden, herring, and juvenile grunts) as well as benthic feeding fish compared to natural reefs and sand bottom (Bohnsack 1994). In addition to the biological benefits observed, a new research project in Maryland is attempts to utilize Reef Balls™ to alleviate hypoxic zones in the Severn River in an effort to restore this habitat for oyster and associated reef fish colonization (Wheeler 2018).

- Results from the grain size analysis indicated that sediments are composed almost entirely of coarse to fine sands, with only minor percentages of silt. The samples taken from within the proposed permit area have coarse sand contents indicating that the material is well-sorted and located in a medium-high energy environment. Low benthic habitat quality was evident from video as well as benthic grab samples. Bottom habitat features included shell hash of *Mya arenaria* and *Crepidula* spp. The video and Ponar grab data suggest that the area has the appropriate bottom type to

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support the proposed reef and that this location could benefit from this type of structural enhancement.

- In 2017, Sabin Point experienced temporary hypoxia from mid-September to the beginning of October. Mats of *Ulva* spp. get blown into the cove formed behind the sandspit and settle in the shallows south of Sabin Point park, contributing to the observed hypoxic days. Added structure and improved rugosity to benthic habitats have been shown to improve turbulent flow of an area, which could help alleviate the severity and length at which these events occur as well as provide important water column mixing for active suspension feeders that will colonize the reef (Lenihan 1996, Lenihan 1998, Lenihan 1999, Lenihan 2001). Turbulent flow also increases shear stress that thins the diffusive boundary layer that regulates mass transfer, allowing for greater mass flux of molecules, such as oxygen, across the sediment-water interface (Patterson 1991a, 1991b, Reidenbach 2010). These physical processes are especially important for sessile organisms (e.g., corals, oysters) during times of stress as they can increase the transfer of oxygen molecules (Finelli et al. 2006). We do not anticipate these events having a significant impact on the success of the artificial reef in this location and provides additional reasoning why we believe that Sabin Point could benefit from habitat enhancement.

- Angler survey data gathered from the APAIS MRIP program, as well as communications with the Rhode Island Saltwater Anglers Association (RISAA), have confirmed that Sabin Point is an unpopular recreational fishing spot for demersal finfish, with occasional recreational fishing for pelagic or multi-habitat associated fish (NOAA, MRIP Rhode Island Public Access Fishing Site Register). This information supports the low abundance of demersal finfish observed in our surveys at this location. Since this area is not heavily utilized, the applicants believe additional structure provided by reef balls can help enhance scup, tautog, and black sea bass fishing opportunities at this location, increasing utilization of the park and enhancing fishing opportunities in the providence river estuary.

b. Demonstrate that all applicable local zoning ordinances, building codes, flood hazard standards, and all safety codes, fire codes, and environmental requirements have or will be met; local approvals are required for activities as specifically prescribed for nontidal portions of a project in §§ 1.3.1(B), (C), (F), (H), (I), (K), (M), (O) and (Q) of this Part; for projects on state land, the state building official, for the purposes of this section, is the building official:

- This is in-water work and all RI DEM and CRMC requirements were addressed in the application materials. The Nature Conservancy (TNC), in partnership with the Rhode Island Department of

Environmental Management (RI DEM) Division of Marine Fisheries (DMF), is requesting an Army Corps of Engineers (ACOE) Individual Permit, Rhode Island Department of Environmental Management (DEM) Water Quality Certificate, and a Rhode Island Coastal Resources Management Council (CRMC) Category B Assent for habitat restoration projects undertaken by public entities. This project seeks to enhance habitat and fishing opportunities in the Providence River. Pre- and post-enhancement monitoring will allow us to evaluate the effectiveness of artificial reefs as an enhancement tool in Rhode Island waters. We expect this project will serve as a model for artificial reef projects in Rhode Island state waters by improving habitat, increasing local abundance of fish, and providing societal benefits through increased fishing opportunities.

- We emphasize that this work is proposed within the area of the Providence River Estuary where shellfishing is prohibited (RI DEM Marine Fisheries Regulations, Shellfish, 4.12.2.S.1, and RI DEM Office of Water Resources: http://www.dem.ri.gov/maps/mapfile/shellfsh.pdf). The river-wide probation of shellfish harvest will protect the artificial reefs from harvest if they receive a set of oyster, blue mussels, etc.

- We also emphasize that this research is conducted by a public entity and serves a compelling public purpose by providing benefits to public trust resources (e.g. the Providence River ecosystem and local fish stocks). Since this work consists of small footprint and we are enhancing the substrate to promote benefits to the aforementioned public trust resources, we expect the impacts will be beneficial, with no negative effects.

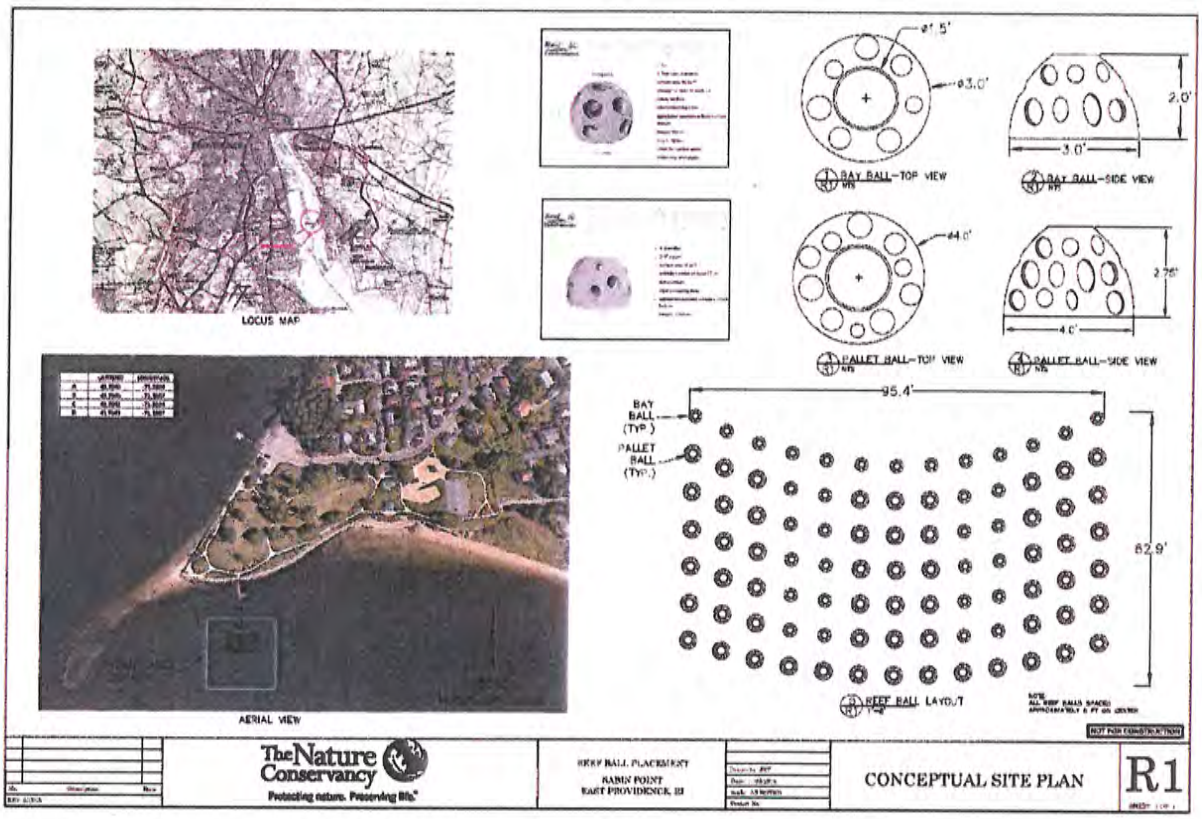
c. Describe the boundaries of the coastal waters and land area that is anticipated to be affected:

- This work is proposed in subtidal waters and will not result in any impacts along the shore and on land. Furthermore, the reef array is scoped to be around 75-100 feet from the Sabin Point fishing pier (50 feet minimum, 175 feet maximum).

- The figure below depicts the side profile of the reef modules, the artificial reef array, and an aerial map of the proposed artificial reef location. Our proposed artificial reef array currently consists of 58 Pallet Balls and 33 Bay Balls (91 total modules). Boundary markers will be maintained throughout the duration of our study. We are applying for a 200'x 200' permit area, within which we will be

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constructing the artificial reef array. Our current reef design is currently scoped to have a 95.4 by 62.9 foot reef area (0.14 acres), but will not exceed the 200 by 200 permit area if spacing between, or the number of, Reef Balls™ needs to be adjusted. 91 Reef Balls™ will be evenly distributed in a 7x13 grid parallel to shore. Each row will curve, starting ~75 to 100 feet from the end of the pier, so that within each row the modules are the same distance from the pier.



- Reef modules will be transported to the project site by barge and lowered to the seafloor by crane. A single reef module will be lowered to the seafloor using a spray bar and a crane. Once in contact with the bottom, tension hooks (Pelican Hook) will release the reef modules from its strap in a fixed position. Divers may be used to ensure proper placement. This methodology will ensure accuracy and proper placement of the reef modules. We anticipate reef construction to take no more than one week and will begin after October 15th. We expect the construction window will have little to no impact on commercial and recreational use of the surrounding waters as well as the temporal winter flounder essential fish habitat (EFH) window.

d. Demonstrate that the alteration or activity will not result in significant impacts on erosion and/or deposition processes along the shore and in tidal waters:

- This work is proposed in subtidal waters and will not result in any significant impacts on erosion and/or deposition processes along the shore and in tidal waters. We anticipate minor sediment burial and scouring of reef modules but the results from the grain size analysis indicated that sediments are composed almost entirely of coarse to fine sands, with only minor percentages of silt. The samples taken from within the proposed permit area have coarse sand contents indicating that the material is well-sorted and located in a medium-high energy environment. Low benthic habitat quality was evident from video as well as benthic grab samples. The video and Ponar grab data suggest that the area has the appropriate bottom type to support the proposed reef and that this location could benefit from this type of structural enhancement.

e. Demonstrate that the alteration or activity will not result in significant impacts on the abundance and diversity of plant and animal life:

- We do not anticipate any negative impacts from the proposed restoration work. As part of the site selection process and baseline monitoring we plan to survey the site using underwater video, snorkel, and SCUBA to evaluate anticipated benefits to the benthic habitat and finfish assemblage because of this work.

- The applicants will monitor changes in fish and macroinvertebrate communities due to the artificial reef habitat. Prior to installing AR modules, the applicants will finalize an appropriate monitoring design using techniques such as underwater video, fish traps, and dive surveys to monitor fish populations. Baseline beach seine and fish trap survey data have been collected monthly (May-October) at Sabin Point over the last two years (2017 and 2018) and will continue after installation of the artificial reefs, assisting with the evaluation of differences in fish abundance before and after reef construction. To determine the relative habitat value produced by creating an AR at Sabin Point, the applicants intend to utilize a modified version of the Kelp Ecosystem Ecology Network (KEEN) monitoring protocol. This approach will allow the applicants to compare AR habitat to those such as kelp, eelgrass, and oyster reefs. The applicants expect to conduct monitoring up to three years after construction. Examples of KEEN monitoring techniques include: quadrat, uniform point count, swath, cube, and hand core surveys. These surveys are designed to sample common algae, invertebrates, and fish species associated with artificial reefs. Additionally, temperature, salinity, and dissolved oxygen measurements will be collected at the site.

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- Studies show that artificial reefs balls promote aggregations of demersal finfish (Bohnsack 1990, Bohnsack 1991, Ambrose 1989), which is one of the primary objectives of our project. Several AR experiments have shown that habitat enhancement with Reef Balls™ can increase abundance, diversity, and production when compared to natural reefs and sandy substrate controls (Folpp 2013, Hackradt 2011, Powers 2003). Upon review of these publications, we have decided to maximize the number and limit the spacing between modules in order to increase the potential benefit of the Sabin Point Artificial Reef Project (Bohnsack 1994, Sherman 2002). ARs have also shown greater attraction of planktivores (i.e., menhaden, herring, and juvenile grunts) as well as benthic feeding fish compared to natural reefs and sand bottom (Bohnsack 1994). In addition to the biological benefits observed, a new research project in Maryland is attempts to utilize Reef Balls™ to alleviate hypoxic zones in the Severn River in an effort to restore this habitat for oyster and associated reef fish colonization (Wheeler 2018).

- We also emphasize that this research is conducted by a public entity and serves a compelling public purpose by providing benefits to public trust resources (e.g. the Providence River ecosystem and local fish stocks). Since this work consists of small footprint and we are enhancing the substrate to promote benefits to the aforementioned public trust resources, we expect the impacts will be beneficial, with no negative effects.

f. Demonstrate that the alteration will not unreasonably interfere with, impair, or significantly impact existing public access to, or use of, tidal waters and/or the shore:

- We do not anticipate any negative impacts from the proposed restoration work and no interference or impacts to existing public access to or use of tidal waters or the shore as we intend to enhance the public access fishing pier experience by creating artificial reef within casting distance.

- We do not anticipate negative ecological or social impacts resulting from the proposed research project. In addition to our review of existing literature and spatial data, we do not expect displacement or loss of existing bottom habitat features as this project site is in an area of sandy sediment and shell hash. We have consulted with representatives of fishing industry to identify potential user conflicts and concerns and due to the small footprint and shellfish harvest closure in the Providence River, there will be negligible to no impact to these stakeholder groups. Additionally,

this artificial reef will be open to both recreational and commercial fishing industries.

- The proposed reef construction plan will impact boat navigation in the specific 0.25-acre reef footprint but is not located in a frequented boating location and is greater than 1,000 feet from the navigation lane, thus does not pose a significant navigation hazard. The corners of the artificial reef will be marked for the duration of the study to provide awareness of potential boating hazards. At no time will reef modules extend greater than 3-feet from the sea floor. Boats will be able to navigate around and inside at their own risk and may anchor within and around project sites.

g. Demonstrate that the alteration will not result in significant impacts to water circulation, flushing, turbidity, and sedimentation:

- We highlight that areas of the providence river estuary are known to experience temporary hypoxic conditions during the late summer months and could benefit from added structure and slight alteration to local water circulation. In 2017, Sabin Point experienced temporary hypoxia from mid-September to the beginning of October. Mats of *Ulva* spp. get blown into the cove formed behind the sandspit and settle in the shallows south of Sabin Point park, contributing to the observed hypoxic days.

- Added structure and improved rugosity to benthic habitats have been shown to improve turbulent flow of an area, which could help alleviate the severity and length at which these events occur as well as provide important water column mixing for active suspension feeders that will colonize the reef (Lenihan 1996, Lenihan 1998, Lenihan 1999, Lenihan 2001). Turbulent flow also increases shear stress that thins the diffusive boundary layer that regulates mass transfer, allowing for greater mass flux of molecules, such as oxygen, across the sediment-water interface (Patterson 1991a, 1991b, Reidenbach 2010). These physical processes are especially important for sessile organisms (e.g., corals, oysters) during times of stress as they can increase the transfer of oxygen molecules (Finelli et al. 2006).

h. Demonstrate that there will be no significant deterioration in the quality of the water in the immediate vicinity as defined by DEM:

- We highlight that areas of the providence river estuary are known to experience temporary hypoxic conditions during the late summer months, but our project will help to reduce the severity of these in events.

- We do not anticipate this project having a negative impact on the current water quality and will only

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help to improve it. Added structure and improved rugosity to benthic habitats have been shown to improve turbulent flow of an area, which could help alleviate the severity and length at which these events occur as well as provide important water column mixing for active suspension feeders that will colonize the reef (Lenihan 1996, Lenihan 1998, Lenihan 1999, Lenihan 2001). Turbulent flow also increases shear stress that thins the diffusive boundary layer that regulates mass transfer, allowing for greater mass flux of molecules, such as oxygen, across the sediment-water interface (Patterson 1991a, 1991b, Reidenbach 2010). These physical processes are especially important for sessile organisms (e.g., corals, oysters) during times of stress as they can increase the transfer of oxygen molecules (Finelli et al. 2006).

i. Demonstrate that the alteration or activity will not result in significant impacts to areas of historic and archaeological significance:

- Historically, Sabin Point was a significant winter flounder fishing spot (pers. comm. Michael Bucko, DMF Lead APAIS Biologist). Baseline seine and fish trap data from 2016 to 2017 show that Sabin Point supports the highest number of juvenile winter flounder of the 12 sites. However, the beach seine conducted at Sabin Point is approximately 250 meters away from the proposed AR on a sand substrate, which is more suitable for winter flounder settlement (Pereira, 1999). Given the small scale, non-preferential sediment type for settlement, and time of the year we plan to build (October 15th, pre-spawning), the artificial reef at Sabin Point should not impact the Winter Flounder spawning potential of the nearby sandy locations.

j. Demonstrate that the alteration or activity will not result in significant conflicts with water dependent uses and activities such as recreational boating, fishing, swimming, navigation, and commerce:

- Our intended goal is to enhance a site that currently provides fishing access but supports low fish abundance due to the unproductive benthic habitat. The project site has been carefully chosen to balance the goals and objectives of the project while taking into consideration the environmental constraints, logistics of implementation, and competing uses.
- We used geospatial, benthic video monitoring, and scientific fisheries data to ensure that our enhancement work was conducted in a suitable location. Data collected and evaluated for the assessment included bathymetry, slope, marine shipping channel use, sediment type, dissolved oxygen, benthic habitat, seagrass distribution, and demersal fish abundance. Data sources and maps can be provided upon request.

- From the 12 alternative sites, we selected Sabin Point because this location minimizes all conflicts to other known uses occurring in Providence River Estuary. Over the last six months, the project team has facilitated meetings and provided background on the project to foster awareness and gain feedback from user groups. Before the project was presented at the Rhode Island Marine Fisheries Council public hearing, several in-person and phone meetings were held with prospective stakeholders including: RISAA, the City of East Providence Planning department and Harbor Master, ACOE, CRMC, RIDEM Enforcement, and fishermen that represent whelk and quahog industries in the vicinity of our project area. Shellfishing is prohibited at Sabin Point (RI DEM Marine Fisheries Regulations, Shellfish, 4.12.2.S.1, and RI DEM Office of Water Resources: http://www.dem.ri.gov/maps/mapfile/shellfsh.pdf). Our reef design was reviewed by the contacted stakeholder groups to ensure they were well briefed on the scope and goals of the proposed work, and no foreseen conflicts arose from any of these groups.

k. Demonstrate that measures have been taken to minimize any adverse scenic impact (see § 1.3.5 of this Part):

- The proposed work will result in no adverse scenic impacts given that these reefs will not be exposed above the surface of the water. More specifically, we anticipate the top of each reef will be at minimum 2 feet below the surface of the water at mean low water.

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JAN 03 2019
COASTAL RESOURCES MANAGEMENT COUNCIL

State of Rhode Island
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879
(401)783-3370

State of Rhode Island
Department of Environmental Management
Office of Technical and Customer Asst.
235 Promenade Street
Providence, RI 02908-5767
(401)222-6822

JOINT PUBLIC NOTICE

CRMC File No.: 2019-01-002 January 28, 2019

RIDEM Water Quality Certification Number: 19-011

These offices have under consideration the application of:

Department of Environmental Management
Division of Marine Fisheries
3 Fort Wetherill Road
Jamestown, RI 02835
And
The Nature Conservancy
159 Waterman Street
Providence, RI 02906

for State of Rhode Island Assent (in accordance with the Coastal Resources Management Program), and State of Rhode Island Water Quality Certification (in accordance with Chapter 42-35 pursuant to Chapters 46-12 and 42-17.1 of the RIGL, as amended): to create an artificial reef to enhance habitat and fishing opportunities in the Providence River. Please see attached map of Sabin Point.

Project Location: Providence River south of Sabin Point

Street & Number: Providence River

City/Town: East Providence

Plans of the proposed work may be seen at the CRMC office in Wakefield.

In accordance with the Administrative Procedures Act (Chapter 42-35 of the Rhode Island General Laws) you may request a hearing on this matter. You are advised that if you have good reason to enter protests against the proposed work it is your privilege to do so. It is expected that objectors will review the application and plans thoroughly, visit site of proposed work if necessary, to familiarize themselves with the conditions and cite what law or laws, if any, would in their opinion be violated by the work proposed.

This also serves as notice that the Rhode Island Department of Environmental Management, Office of Water Resources, Water Quality Certification Program has under consideration and review the same proposed activity as described above for compliance with the State's Water Quality Regulations (AUTHORITY: in accordance with Clean Water Act, as amended (33 U.S.C. 1251 et.seq.; Chapter 42-35 pursuant to Chapters 46-12 and 42-17.1 of the Rhode Island General Laws of 1956, as amended).

If you desire to protest, you must attend the scheduled hearing and give sworn testimony. A notice of the time and place of such hearing will be furnished you as soon as possible after receipt of your request for hearing. If you desire to request a hearing, to receive consideration, it should be in writing and be received at this office on or before **February 28, 2019.**

It is expected that objectors will review the application and associates plans thoroughly. Comments that pertain to this Joint Notice must be submitted in writing and must be addressed to Rhode Island Coastal Resources Management Council and Rhode Island Department of Environmental Management at the above referenced addresses.

/lat


LATITUDE
LONGITUDE
A
B
C
D
PERMIT AREA

CRMC Mailing List for Department of Environmental Management
CRMC File Number 2019-01-002

Department of Environmental Management
Division of Marine Fisheries
3 Fort Wetherill Road
Jamestown, RI 02835

CRMC (2019-01-002)
O. S. Government Center
4808 Tower Hill Road
Wakefield, RI 02879

RIDEM/Office of Technical and Customer Asst.
235 Promenade Street
Providence, RI 02908-5767

Lisa Turner

From: Lisa Turner <lturner@crmc.ri.gov>
Sent: Monday, January 28, 2019 2:05 PM
To: Alison Kates, NRPA Program Coordinator; Amy Rose Weinreich, Charlestown TC; 'Andrew Nota, Jamestown Town Administrator'; 'Bruce Eastman, RISA'; 'C. Brown, DBEngineers'; Carol Wordell Little Compton TC; 'Charlotte Taylor'; Cheryl Fernstrom, Jamestown TC; 'Chris Church, Reporter'; 'Christine Andrews, QDC'; Colin Howard, Independent RI -- South Kingstown; Dale Holberton South Kingstown TC; David Latham; 'David Murdock'; David Prescott, Save the Bay; 'Deborah Mongeau, Librarian'; 'Dennis Erkan, RIDEM F&W'; Donna Giordano, Westerly TC; 'Emilie Holland'; 'Eric Schneider, RIDEM Fish and Wildlife'; Glenn Modica; James Bessette, Editorial Assistant; Jean Bellm, Exec Asst, Barrington; Jeanne Spencer, Tiverton Town Clerk's Office; Jeannette Alyward, North Kingstown TC; 'Jeffrey Gardner'; Jennifer M. West , Portsmouth TC; Jerry Elmer , Esq, CLF; 'John Torgan'; 'John Williams, Warwick Cove Marina'; 'Jonathan F. Stone, Exec Dir'; 'Jude Zeh'; Julie Coelho Warren TC; Kathy & Steve Jacques; Kathy & Steve Jacques; 'Kendra L. Beaver, Esq, Save the Bay'; Kim A. Casci-Palangio, East Prov CC; Laura C. Swistak, City Clerk, Newport; 'Lawrence Taft, Exec Dir'; Leigh Carney, Town Clerk; Liz Boardman; Lori Hagen, Prov City Clerk; Louis P. Cirillo, Bristol Town Clerk; Lyn Pagliarini, Warwick City Clerk; Maria Wall Cranston TC; 'Matt Gineo, Oldport Marine'; Matt O'Brien, AP Reporter; Matthew Enright, Independent RI -- Narragansett; Meg Kerr, Audubon Society of RI; Melanie Jewett Army, AICP, RIDOT; Meredith J. DeSisto, Barrington TC; 'Michael McGiveney'; Mike Jarbeau, Save The Bay; Nancy Mello, Tiverton TC; 'Neal Personeus, RIDEM'; Nick Donadio; 'Peter A. Healey'; 'Peter M. Vieira, Marine Construction'; Phil Capaldi; Richard Goldstein Pawtucket TC; 'Richard Kalunian'; 'Robert Lyons, Ocean House Marina'; Rodman R. Black Jr. HIIA; 'Scott Briggs, Librarian'; Taylor Bell (Taylor.M.Bell@usace.army.mil); 'Thomas R. Evans, State Librarian'; 'tim rockwell'; 'Tom Kutcher STB Bay Keeper'; Wendy J. W. Marshall, Middletown TC; Albert Quatrucci East Providence BO; Anna M. Sousa, East Providence City Council; Anthony Perry,Chair, East Providence Harbor Commission; Brian J. Faria, East Providence City Council; Diane M. Feather AICP, Planning Director, City of East Providence; Edward Pimentel AICP, Zoning Official, City of East Providence; Erik Skadberg, City Engineer, City of East Providence; Gregg M. Amore, Representative, City of East Providence; James A. Briden, Mayor, City of East Providence; Oscar M. Elmasian, Chief, East Providence Fire Dpt.; Robert Britto, Assistant Mayor, City of East Providence; S. Bruce Dufresne, EP Harbormaster; Scott Pickering, GM, Eastbay Newspapers; Steve Coutu, PE, Director, City of E. Providence Public Works; Steven Hazard, Assessor, City of East Providence; Timothy Chapman, City Manager, East Providence; Wayne Barnes, East Providence Conservation Commission Liaison; William J. Conley Jr, Senator, City of East Providence
Subject: CRMC Public Notice -- RIDEM & The Nature Conservancy Joint Public Notice
Attachments: 2019-01-002 RIDEM E Providence.pdf

Please note: Comments must be received in our offices by February 28, 2019

Lisa A. Turner
Office Manager
Coastal Resources Management Council
O S Government Center
4808 Tower Hill Road, Rm 116
Wakefield, RI 02879
(401)783-3370

Lisa Turner

From: Dave Beutel <dbeutel@crmc.ri.gov>
Sent: Monday, January 28, 2019 2:11 PM
To: 'Alison Verkade - NOAA Federal'; 'Steve Medeiros'; 'Azure Cygler'; 'Robert Rheault'; 'Robert Ballou'; 'Rich Fuka'; mclamdigger@aol.com; 'Dennis Erkan'; 'Prescott, David'; 'Leavitt, Dale'; gvdwood@cox.net; 'Jim Arnoux'; 'Dave Reis'; 'Jeff Grant'; 'Jeff Gardner'; 'Jody King'; 'Katie Eagan'; kurt.blanchard@dem.ri.gov; 'Michael A. Rice'; 'Rich Hittinger '; FVThistle@verizon.net; dmontifish@verizon.net; 'Rick Bellavance'; cgreinstrategies@gmail.com; lad0626@aol.com; 'Catherine White'; 'John Torgan'; dean.hoxsie@dem.ri.gov; 'Beuth, Joshua (DEM)'; 'LeBlanc, Edward G CIV'; cindy.hannus@dem.ri.gov; 'Jerry Carvalho'; 'Phil Capaldi'; marcapcar@icloud.com; marcapcar@me.com; michaelaonosko@gmail.com; john_crosson@watkinson.org; dacapaldi@aol.com; mmcapaldi@aol.com; jschickler@cox.net; suemarinaro@me.com; traceydistefano@gmail.com; travisbarao@gmail.com; mroderick@towndock.com; maridee2@gmail.com; Taylor.M.Bell@usace.army.mil; dacapaldi@aol.com; mmcapaldi@aol.com; 'Ed'; buddhajay108@yahoo.com; 'Kenneth Murgo'
Cc: 'Janet Coit'; 'Jason McNamee'; 'Osenkowski, Jay (DEM)'; ckarp@brown.edu; psozek@lightower.com; 'Mcmanus, Conor (DEM)'; 'Livermore, Julia (DEM)'; 'Dick Pastore'; 'Mike Jarbeau'; 'Todd Corayer'; traceydistefano2013@gmail.com; 'Lisa Turner'; 'Gerry Schey'; davidclatham@gmail.com; william.helt@tnc.org; patrick.barret@dem.ri.gov; eric.schneider@dem.ri.gov
Subject: thirty day public notice Providence River
Attachments: 2019 DEM-TNC.pdf

This application for assent begins thirty day public notice today. The application is for a 0.91 acre site to create an artificial reef to enhance habitat and fishing opportunities. Please send comments to me by February 28, 2019.

David Beutel
Coastal Resources Management Council
Aquaculture Coordinator
Oliver Stedman Government Center
4808 Tower Hill Road
Wakefield, RI 02879
401-783-3370

AVG. This email has been checked for viruses by AVG antivirus software.
www.avg.com

CRMC DECISION WORKSHEET
2018-09-033

Daniel Torre & Max Davidson

Hearing Date:			
Approved as Recommended			
Approved w/additional Stipulations			
Approved but Modified			
Denied		Vote	

APPLICATION INFORMATION

File Number	Town	Project Location	Category	Special Exception	Variance
2018-09-033	Portsmouth	Sakonnet River Plat: Lot:	B	☐	☐
		Owner Name and Address			
Date Accepted: 9-12-18		Daniel Torre & Max Davidson 152 Winter Street Wakefield, RI 02879	Work at or Below MHW		☒
Date Completed: 5-6-2019			Lease Required		☒

PROJECT DESCRIPTION

Three acre oyster culture farm

KEY PROGRAMMATIC ISSUES

Coastal Feature: Submerged land

Water Type: Type 2, Low Intensity Use

CRMP: §§ 1.2.1(B); 1.3.1(A); 1.3.1(K); and 1.3.1(R)

Variances and/or Special Exception Details:

Specific Staff Stipulations (beyond Standard stipulations): lighted corner buoys for corners farthest from shore

STAFF RECOMMENDATION(S)

Engineer		Recommendation:	NA
Biologist		Recommendation:	NA
Other Staff	JSB	Recommendation:	Approval

Executive Director Sign-Off — 5/8/2019 date

David Beutel — 5-7-19
Aquaculture Coordinator Sign-off — date

David Beutel — 5-21-19
Staff Sign off on Hearing Packet (Aqua) — date

Name: Daniel Torre & Max Davidson
CRMC File No.: *2018-09-033*
Staff Report

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

COASTAL RESOURCES MANAGEMENT COUNCIL

INTER-OFFICE MEMORANDUM

DATE: May 6, 2019

TO: Grover J. Fugate, Executive Director

FROM: David Beutel

SUBJECT: CRMC File No. 2018-09-033

Applicant's Name: Daniel Torre & Max Davidson
Project: three acre oyster farm using floating gear

Location: Sakonnet River, Portsmouth
Water Type/Name: Type 2, Low Intensity Use,
Coastal Feature: submerged land

STAFF REPORT

This application is for a three acre oyster farm using small, low profile (2'x3') floating cages in Type 2 waters in the Sakonnet River. The location was modified following the preliminary determination (#2018-02-048) to avoid an eelgrass bed adjacent to the dock at Glen Manor House, Portsmouth, RI. The proposed site is north of the dock at Glen Manor House along a rugged shoreline with little activity. The site is in a sheltered area from westerly winds in between McCorrie Point and Sandy Point. The gear proposed would include up to 600 floating cages. The low profile floating cages meet the guidelines CRMC has for floating gear with the exception of the anchor system. The bottom for the proposed site is ledge so helical anchors will not work, so three concrete anchors will be used on each of the ten trawl lines.

The thirty day public notice period for this application ended on November 1, 2018. CRMC received twelve letters/e-mails of objection or questions about process. A news release and the correspondence is attached. The topics of concern are listed below:

- Impacts to navigation
- Impacts to water quality
- Impacts to recreation

- Noise
- Land side traffic
- Visual impacts
- Smell
- Use of Sandy Point Beach
- Property devaluation

Staff will address each concern in the order listed with relevant regulation:

- Impacts to navigation § 1.3.1(A) (1)(j)—this location is not near the channel and is not in a direct line between McCorrie Point and Sandy Point; the U.S. Coast Guard does not find this location objectionable; staff agrees that floating aquaculture will affect the ability to navigate through the leased area but this location is clearly not a busy boating or recreation area
- Impacts to water quality § 1.3.1(A) (1)(g) and (h)—shellfish aquaculture is known to be at least net neutral in the denitrification process which does not include the nitrogen removal from harvest; RI Department of Environmental Management (DEM) Office of Water Resources has submitted a letter stating that a water quality certificate is not required and that this location is in an area approved for the harvest of shellfish
- Impacts to recreation § 1.3.1(A) (1)(f) and (j)—staff agrees that floating aquaculture will have a negative effect on recreation; however the lease site is not a significant area of recreation
- Noise—CRMC does not have a noise regulation; it is difficult to see negative sound effects from floating aquaculture; a stipulation prohibiting power washing on site may be prudent
- Land side traffic—CRMC does not have a regulation concerning landside traffic; it is difficult to see how an aquaculture site accessed by boat will impact landside traffic
- Visual impacts § 1.3.1(A) (1)(k)—the applicant has followed the CRMC guidelines for using low profile floating gear; the impact will be minimal
- Smell—while oysters may be considered livestock they are not cattle; smell is not a criteria in the RI Coastal Resources Management Plan (CRMP)
- Use of Sandy Point Beach—given the location of the beach and the location of the proposed farm, the use of Sandy Point Beach for recreation will be unaffected
- Property devaluation—this objection has been received on other applications; staff has found nothing that supports this claim in peer reviewed literature

CRMC has received the following correspondence of no significant impact or concerns:

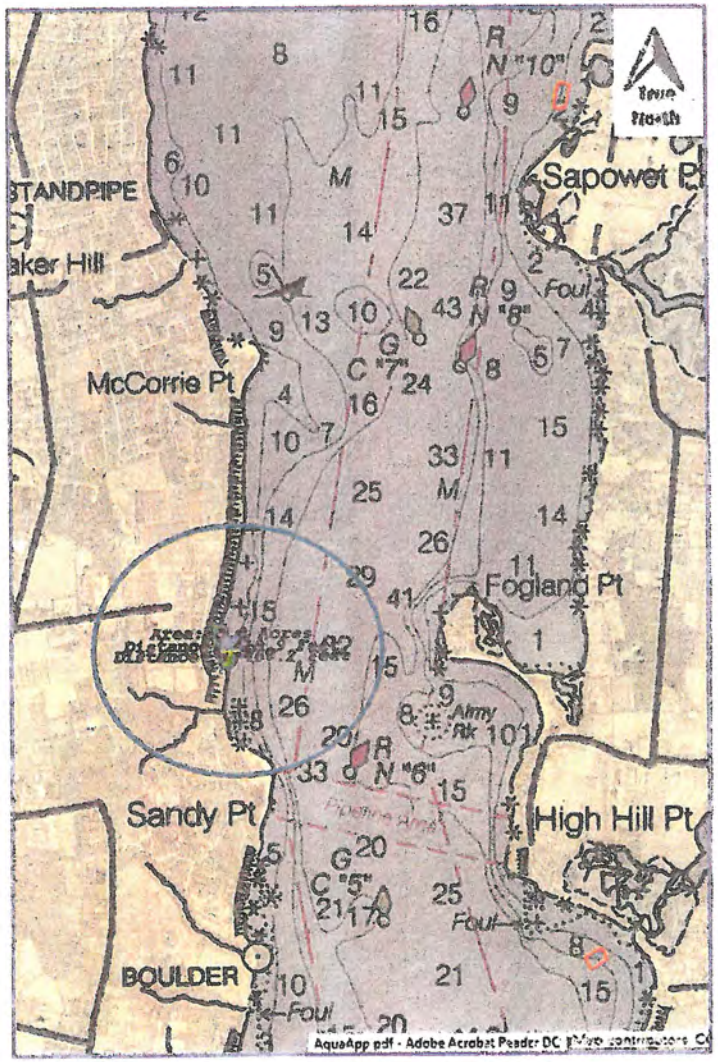
- RI Department of Environmental Management (DEM) Office of Water Resources—as part of the preliminary determination—no water quality certificated required; May 11, 2018
- RI Historical Preservation and Heritage Commission—no significant impact on cultural resources; October 2, 2018
- U.S. Coast Guard—no objection; October 3, 2018
- RI DEM Division of Marine Fisheries—no significant impact to marine resources; Nov. 16, 2018
- RI Marine Fisheries Council—no significant impact on marine fisheries; April 26, 2019

Name: Daniel Torre & Max Davidson
CRMC File No.: *2018-09-033*
Staff Report

In staff opinion this project for floating oyster gear will have no significant impact on the area or its competing uses. The applicant has addressed concerns from the preliminary determination and has met the requirements of the RI CRM. Staff would like to stipulate that the offshore corner markers of this site should have a lighted buoy. This application is recommended for approval.

David Beutel _____ Aquaculture Coordinator

Torre & Davidson Application
Prepared 2/16/2018
Site Location NOAA

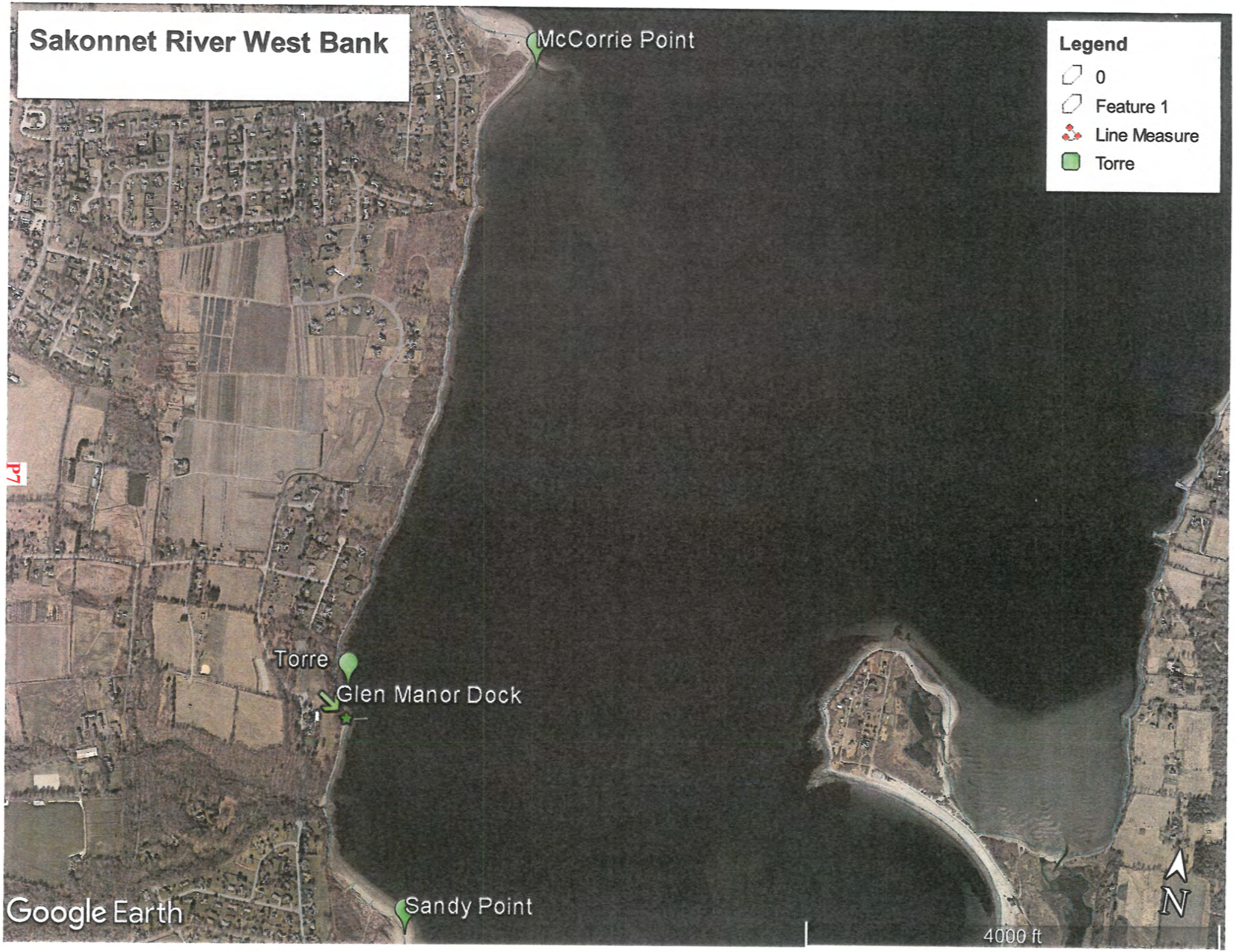


P5

Torre & Davidson Application
Prepared 2/16/2018
Site Location



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MANAGEMENT COUNCIL


Sakonnet River West Bank
McCorrie Point
Legend
0
Feature 1
Line Measure
Torre
Torre
Glen Manor Dock
Sandy Point
Google Earth
4000 ft
N

3. Guidelines for floating aquaculture gear

a. floating gear should be a minimum of 750 feet from the nearest residence

b. low profile floating gear shall be required (maximum 4" above still water elevation).

c. floating gear is discouraged in areas where the fetch from the prevailing wind is greater than 3 nautical miles.

d. floating gear should be secured with helical (screw) anchors

e. floating gear shall have a minimum $15,000 proof of performance bond

f. initial floating gear leases should be a maximum of three (3) acres

g. floating gear is discouraged in Type 1 waters

h. areas which are subject to significant boat traffic or significant water based recreational activities including but not limited to sailing, kayaking, paddleboarding, kiteboarding or swimming should not have floating gear

i. floating gear should be at least 200 feet from an existing CRMC approved recreational mooring field

j. floating gear shall not be permitted over or within 25 feet of protected submerged aquatic vegetation (SAV)

k. floating gear shall not be permitted in areas of significant fishing activity

l. towns may recommend areas where floating gear should be discouraged

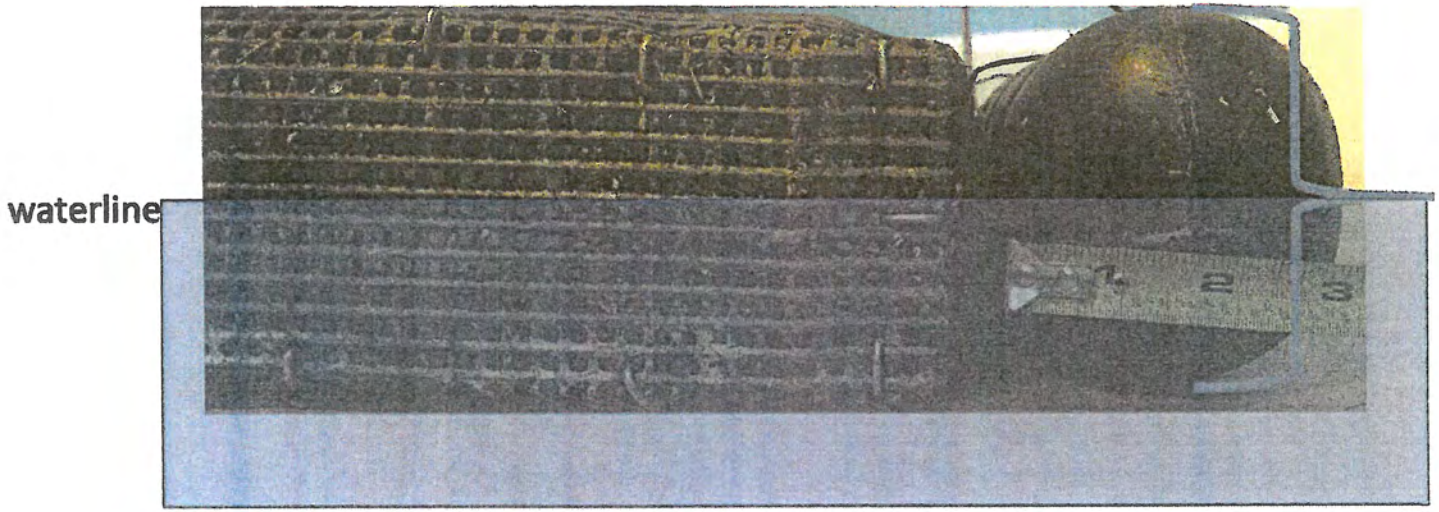
m. floating gear should be discouraged within 400 feet along shorelines which have been preserved for conservation, recreation and/or public access through easements, purchase by the state or municipality or are owned by a land trust or conservation organization and have been recognized by the CRMC

n. floating gear should not be located within 400 feet along shorelines where public access is provided through CRMC rights-of-way, public land where the primary purpose is intended for public access, or by CRMC easements and/or where there is evidence of significant public usage and access

o. leases permitted for direct bottom plant may receive a stipulation preventing modification to floating gear

Determinations such as "significant" will be a determination made by the CRMC based on staff experience, communication with municipalities, user groups and other organizations, available guides, publications and promotional literature, photographs, satellite images, aerial photographs and through public comments and consultations.

Torre & Davidson Application
Prepared 2/16/2018
Site Plans (Floating Cage Side-View Only)



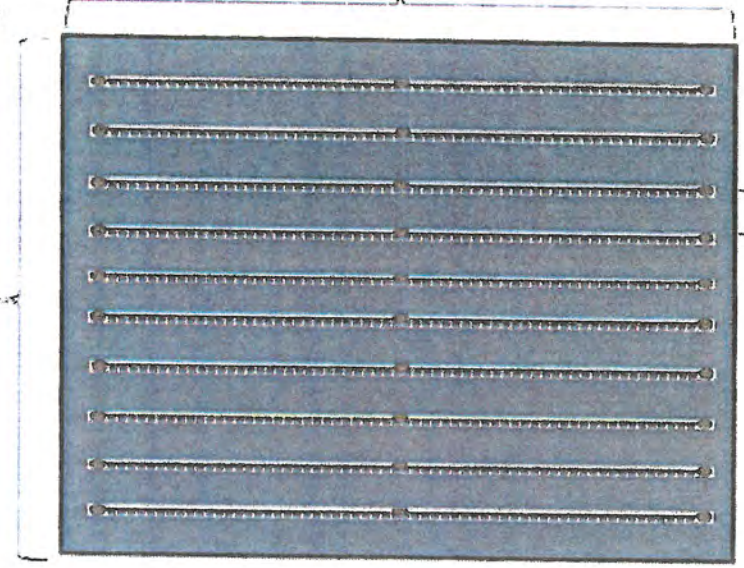
Torre & Davidson Application
Prepared 2/16/2018
Site Plants (Farm Schematic Only)

10 Floating Lines about 25 ft apart
with 42.5 ft buffer on North and South

420 ft

NW Corner:
Lon: 71.237900 W
Lat: 41.560671 N

NE Corner:
Lon: 71.236379 W
Lat: 41.560638 N



25

310 ft

SW Corner:
Lon: 71.237900 W
Lat: 41.559804 N

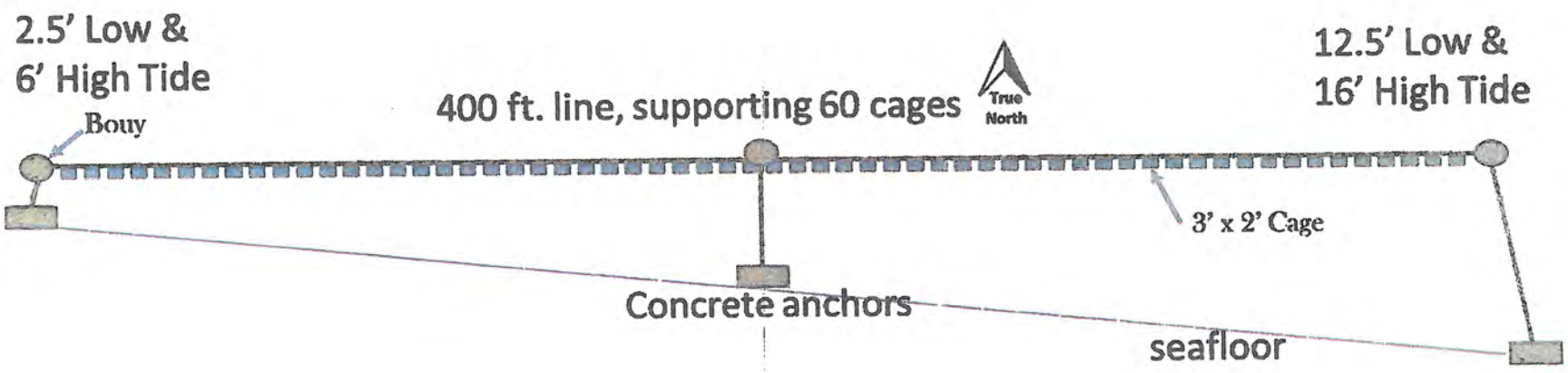
SE Corner:
Lon: 71.236379 W
Lat: 41.559804 N

P10

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Torre & Davidson Application
Prepared 2/16/2018
Site Plans (Cross-section Only)

Example for floating line



P11

State of Rhode Island and Providence Plantations
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-2069

APPLICATION FOR STATE ASSENT

To perform work regulated by the provisions of Chapter 279 of the Public Laws of 1971 Amended.

Applicant's Name: Daniel Torre	File No (CRMC use only): 2018-09-033
Mailing Address: 243 Colonel John Gardner Road	Res. Tel. # (609)351-3006
City/Town: Narragansett State: RI Zip Code 02882	Bus. Tel. # (609)351-3006
Waterway: Sakonnet River Est. Project Cost $	Fee/Costs: $ $150

Longitude/latitude of **all corners** of Proposed Aquaculture Project Location (preferably in decimal degrees):

NW Lon: 71.237900 W Lat: 41.560671 N	NE Lon: 71.236379 W Lat: 41.560671 N
SW Lon: 71.237900 W Lat 41.559804 N	SE Lon: 71.236379 W Lat: 41.559804 N

Have you or any previous owner filed an application for and/or received an assent for any activity on this site? (If so please provide the file and/or assent numbers).

Is this application being submitted in response to a coastal violation?

Yes_____ No x

If yes, you must indicate NOV or C&D Number_____

Is this site within a designated historic district? No

Dan Torre

Owner's Signature (sign and print)

STORMTOOLS (Http://www.beachsamp.org/resources/stormtools/) is a planning tool to help applicants evaluate the impacts of sea level rise and storm surge on their projects. The Council encourages applicants to use STORMTOOLS to help them understand the risk that may be present at their site and make appropriate adjustments to the project design.

NOTE: The applicant acknowledges by evidence of their signature that they have reviewed the Rhode Island Coastal Resources Management Program, and have, where possible, adhered to the policies and standards of the program. Where variances or special exceptions are requested by the applicant, the applicant will be prepared to meet and present testimony on the criteria and burdens of proof for each of these relief provisions. The applicant also acknowledges by evidence of their signature that to the best of their knowledge the information contained in the application is true and valid. If the information provided to the CRMC for this review is inaccurate or did not reveal all necessary information or data, then the permit granted under this application may be found to be null and void. Applicant requires that as a condition to the granting of this assent, members of the CRMC or its staff shall have access to the applicant's property to make on-site inspections to insure compliance with the assent. This application is made under oath and subject to the penalties of perjury. 01/17

PLEASE REVIEW REVERSE SIDE OF APPLICATION FORM

RECEIVED
SEP 12 2018
COASTAL RESOURCES MANAGEMENT COUNCIL

STATEMENT OF DISCLOSURE AND APPLICANT AGREEMENT AS TO FEES

The fees which must be submitted to the Coastal Resources Management Council are based upon representations made to the Coastal Resources Management Council by the applicant. If after submission of this fee the Coastal Resources Management Council determines that an error has been made either in the applicant's submission or in determining the fee to be paid, the applicant understands that additional fees may be assessed by the Coastal Resources Management Council. These fees must be paid prior to the issuance of any assent by the Coastal Resources Management Council.

The applicant understands the above conditions and agrees to comply with them.

Dan Torre

Signature

09/10/2018

Date

Dan Torre
243 Colonel John Gardner Road
Narragansett, RI
02882

Print Name and Mailing Address

Full Application Written Description:

Dan Torre & Max Davidson
243 Colonel John Gardner Road,
Narragansett, Rhode Island 02882
danmtorre@gmail.com
(609) 351-3006
CRMC file number: D2018-02-048
DEM Aquaculture License number: TBD

Overview

Our farm will utilize a floating culture method to commercially culture the eastern oyster (*Crassostrea virginica*) off the West bank of the Sakonnet River, RI. Seed oysters will be purchased from established and approved hatcheries and placed in the field.

We will set up 10 units of 60, 2' x 3' floating polyethylene cages that are suspended from a floating longline system in the water column, and anchored on both ends, and a mid-point for extra stability using concrete anchors and helical anchors as needed. Bags will vary in mesh size to maximize flow, while ensuring no loss of product.

Floating cages will eliminate the need for mechanized tumblers and power washers due to their inherent design which constantly tumbles the oysters via wave action with intermittent periods of air drying. Oysters will be cleaned and sorted by hand to ensure marketability.

During the warmer summer months, oysters will be feeding at a maximum and cages will be flipped regularly by hand to minimize fouling and tumbled to promote cup shaped oysters that are free of fouling organisms. Additionally oysters farmed in this manner will be more consistent in size, shape, and quality.

During the winter months oyster cages will be sunk to the bottom, by removing both floats. As a result of our oyster cages being sunk during the winter months they will have limited interaction with migratory waterfowl populations. Though no work will be planned during this time, any work that does occur during these winter months (November to April) will be done from 10:00am to 2:00pm.

Impacts:

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Oyster aquaculture in this area will have positive implications on throughout many estuarine trophic levels. Our product will be actively removing nitrogen from the water column as it is assimilated into oyster biomass, or deposited in the sediment due to particulate settling. Increased particulate nitrogen to the sediment is thought to be extremely advantageous for restoring eelgrass, as eelgrass can opportunistically uptake nitrogen from the sediment.

Outreach:

As both of us stem from a background in marine science, we are interested in the possibility of setting up a blog to document our work to educate the public on the benefits of oyster aquaculture in estuarine habitats and inform conservation groups of our work.

1.3.1(A).

Permitting the proposed farm will create jobs directly, and indirectly, while helping to meet the increasing demand for oysters. The land adjacent to the farm is a rock and debris filled slope, followed by a 30-foot cliff that shows evidence of erosion. Aquaculture, and especially floating aquaculture has been noted to reduce erosion to adjacent land for a several reasons. Aquaculture promotes the proliferation of submerged aquatic vegetation, which has obvious advantages in areas subject to erosion. In addition, it's been hypothesized that floating aquaculture reduces wave energy which would ultimately diminsh erosion of nearby land.

The closest public land access is south of the site, leading to the Glen Manor House dock. The proposed site is over 400 feet from the dock access and would not impede any recreational activities taking place on or near the dock. Only positive impacts on water quality, sedimentation, turbidity, flushing and water circulation will be observed from the proposed farm. The proposed site is adjacent to an abandoned boathouse, with significant deterioration and misuse, and as such it is unsafe for recreation in the area due to fallen pilings, stray metal piping, etc., Scenic impacts will be minimized by using low profile cages that will only stick out


ArcGIS
Legend
Measurement Result
esri

of the water a fraction of an inch, and by using low profile coloring (black/gray). In addition, the proposed location was chosen in an area which would be unseen by residents.

Floating Gear Guidelines:

During the preliminary determination meeting the following items were identified to be addressed moving forward (my responses in bold):

d. floating gear should be secured with helical (screw) anchors
Due to terrain in this area, it has been suggested to use concrete blocks.

j. floating gear shall not be permitted over or within 25 feet of protected submerged aquatic vegetation (SAV)
The initially proposed lease was adjusted to removed contact with eelgrass, according to a CRMC survey conducted in September of 2018. The current lease site was does not interfere with eelgrass or other SAV according to the survey conducted.

l. towns may recommend areas where floating gear should be discouraged
Conversations with Gary Crosby, Portsmouth Town Planner, and Don Wilkinson, manager of Glen House Manor Estate, have not identified any issues with siting floating gear in this area.

m. floating gear should be discouraged within 400 feet along shorelines which have been preserved for conservation, recreation and/or public access through easements, purchase by the state or municipality or are owned by a land trust or conservation organization and have been recognized by the CRMC
No CRMC recognized right-of-way in the area according to CRMC website (see attached figure below). In addition, the proposed lease is over 400 feet from the closest shore access point. The shoreline adjacent to the proposed site presents a hazardous path over old brick and stone rubbish.
http://www.arcgis.com/home/webmap/viewer.html?webmap=6ab50d9cef0c47a49e894cde4b1d2ef7&extent=-72.5362,40.952,-70.3994,42.1442

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Guidance Document for Aquaculture Operations Plans

Anyone conducting aquaculture operations in RI must comply with all applicable CRMC regulations (*Coastal Resources Management Program Section 300.11*) and DEM regulations, as set forth in "*Aquaculture of Marine Species in RI Waters.*" Plans provided to the CRMC will be available for DEM review. Modifications to the permit must follow the CRMC process for modification of assent. Separate, individual plans shall be developed and submitted for each aquaculture site/facility (i.e., one for each lease site, one for each upweller location, etc.); provided, however, that if lease sites are contiguous, or part of a single, unified operation, the overall site can be covered by a single plan. Operations Plans shall address each of the items listed below, as applicable, following the format set forth below.

Note: All plans must be type written. This Microsoft Word document is intended to be used by licensees/operators as a template when preparing plans and may be modified as needed to fit the specific needs of the operator.

1. ***Name and mailing address***:

Dan Torre and Max Davidson
243 Colonel John Gardner Road
Narragansett, RI, 02882

2. ***CRMC file number:*** TBD
3. ***DEM Aquaculture License number:*** TBD
4. ***Type of facility:***

This is a commercial oyster aquaculture lease site where floating cultivation will be used to grow oysters to commercial sale size.

5. ***Location of facility:*** (include aerial or chart depicting exact location)*:*

- Town: Portsmouth
- Water body: Sakonnet River
- Lat/long coordinates of facility:

6. ***Species of shellfish*** grown at the facility:

Our farm will utilize a floating culture method to commercially culture the eastern oyster (*Crassostrea virginica*) off the West Bank of the Sakonnet River, RI. Seed oysters will be purchased from established and approved hatcheries following Biosecurity Board protocols.

7. ***Types of structures, gear and methods:***

We will set up 10 units of 60, 2' x 3' floating polyethylene cages that are suspended from a floating longline system in the water column, and anchored on both ends, and a mid-point for extra stability using a combination of concrete and helical anchors. Bags will vary in mesh size to maximize flow, while ensuring no loss of product.

8. ***Methods and equipment used to identify and mark site:***

The four corners of the commercial aquaculture site will be marked using the standard 11inch pot buoys with written notation marking in 3 inch letters "CRMC" including our file number when available.

9. DEM ***Shellfish Harvesting Classification*** at site.

Lease is located in approved waters outside of known shellfish beds.

10. Description of ***practices and procedures used*** during the growth, harvest, storage, transportation, and sale of the cultured species.

During the warmer summer months, oysters will be feeding at a maximum and cages will be flipped regularly by hand to minimize fouling and tumbled to promote cup shaped oysters that are free of fouling organisms. Additionally, oysters farmed in this manner will be more consistent

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in size, shape, and quality. Oysters will be cleaned and sorted by hand to ensure marketability. Bags will also be rotated to dry bags to reduce biofouling.

11. Procedures for ***maintaining records***:

For operations using seed acquired from out-of-state:

Description of notification, disease certification, and labeling/tagging procedures:

All out of state seed purchases will go through the approval of the Biosecurity Board pending disease certifications from the relevant hatchery.

Disease certification will be conducted when seed is purchased and a pathology report will be collected before sale. Tags will be equipped with company information including name, address, contact information, location of harvest, the intended recipient, and time of harvest,

12. Procedures for ***maintaining records***:

For upwellers/seed-growing facilities in prohibited waters:

This does not apply as we will not be using these

Description of procedures, including frequency of grading (with particular reference to requirements that seed must be removed before it exceeds maximum "seed" size threshold, i.e., <32 mm for oysters, <25 mm for quahogs):

13. Procedures for ***maintaining records***:

For operations using seed from prohibited waters, or operations using shellfish obtained from a third party that originated as seed from prohibited waters:

No seed from prohibited waters will be used.

Detailed description of demarcation methods and record-keeping practices used at the lease site to ensure that animals have been cultured at least twelve (12) months in approved waters, prior to sale, including:

a. Detailed record-keeping practices specifying date, source, average size, and amount of seed; and

b. Protocols and associated record keeping for tracking product, e.g., use of tagged/numbered cages and/or bags, use of marked trawls, and/or use of marked, segregated portions of lease sites.

Description of the process for notifying the third party that (a) seed came from prohibited waters, (b) the date of that transfer, and (c) the remaining time needed to maintain the animals in approved waters prior to sale.

Oyster aquaculture has been noted to increase water quality, provide habitat and overall increase the abundance and diversity of plant and animal life.

(6) demonstrate that the alteration will not unreasonably interfere with, impair, or significantly impact existing public access to, or use of, tidal waters and/or the shore;
There are no CRMC recognized rights-of-way in the area according to CRMC GIS database. In addition, the proposed lease is over 400 feet from the closest accessible point. The shoreline adjacent to the proposed site presents a hazardous path over old brick, rusted piping and stone rubbish.

(7) demonstrate that the alteration will not result in significant impacts to water circulation, flushing, turbidity, and sedimentation;
Only positive impacts on water quality, circulation, sedimentation, turbidity, flushing and water circulation will be observed from the proposed farm.

(8) demonstrate that there will be no significant deterioration in the quality of the water in the immediate vicinity as defined by DEM;
Only positive impacts on water quality, sedimentation, turbidity, flushing and water circulation will be observed from the proposed farm.

(9) demonstrate that the alteration or activity will not result in significant impacts to areas of historic and archaeological significance;
The proposed site is adjacent to an abandoned boathouse, with significant deterioration and misuse, and as such it is unsafe for recreation in the area due to fallen pilings, stray metal piping, etc., Scenic impacts will be minimized by using low profile cages that will only stick out of the water a fraction of an inch, and by using low profile coloring (black/gray). In addition, the proposed location was chosen in an area which would be unseen by residents, due to the large cliff adjacent to the proposed site.

(10) demonstrate that the alteration or activity will not result in significant conflicts with water-dependent uses and
activities such as recreational boating, fishing, swimming, navigation, and commerce, and;
The proposed site is adjacent to an abandoned boathouse, with significant deterioration and misuse, and as such it is unsafe for recreation in the area due to fallen pilings, stray metal piping, etc.,

Coastal Resources Management Program

Section 300.1

Category B Requirements

All persons applying for a Category B Assent are required to:

(1) demonstrate the need for the proposed activity or alteration;

Permitting the proposed farm will create jobs directly, and indirectly, while helping to meet the increasing demand for oysters required for Rhode Island large tourist attraction. There are no negative impacts to the proposed farm, due to its remote and unused location. On the contrast localized environmental benefits are expected, including increased water quality, biodiversity and abundance, as well as reduced wave energy.

(2) demonstrate that all applicable local zoning ordinances, building codes, flood hazard standards, and all safety codes, fire codes, and environmental requirements have or will be met; local approvals are required for activities as specifically prescribed for nontidal portions of a project in Sections 300.2,300.3, 300.6, 300.8, 300.9, 300.11, 300.13, 300.15 and 300.17; for projects on state land, the state building official, for the purposes of this section, is the building official,

NA

(3) describe the boundaries of the coastal waters and land area that are anticipated to be affected;

The land adjacent to the farm is a rock and debris filled slope, followed by a 30-foot cliff. The lease is proposed over 100 feet from shore.

(4) demonstrate that the alteration or activity will not result in significant impacts on erosion and/or deposition processes along the shore and in tidal waters.

The land adjacent to the farm is a rock and debris filled slope, followed by a 30-foot cliff that shows evidence of erosion. Aquaculture, and especially floating aquaculture has been noted to reduce erosion to adjacent land for a several reasons. Aquaculture promotes the proliferation of submerged aquatic vegetation, which has obvious advantages in areas subject to erosion. In addition, it's been hypothesized that floating aquaculture reduces wave energy which would ultimately diminish erosion of nearby land.

(5) demonstrate that the alteration or activity will not result in significant impacts on the abundance and diversity of plant and animal life.

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Fishing practices were observed over a full season and no conflicts were observed. Commercial fishing practices were observed in the area, but were several hundred feet past the scope of the proposed farm, likely due to insufficient depth to navigate commercial fishing vessels, and lack of efficient fishable habitat.

(11) demonstrate that measures have been taken to minimize any adverse scenic impact (see Section 330). Each topic shall be addressed in writing.

Scenic impacts will be minimized by using low profile cages that will only stick out of the water a fraction of an inch, and by using low profile coloring (black/gray). In addition, the proposed location was chosen in an area which would be unseen by residents.

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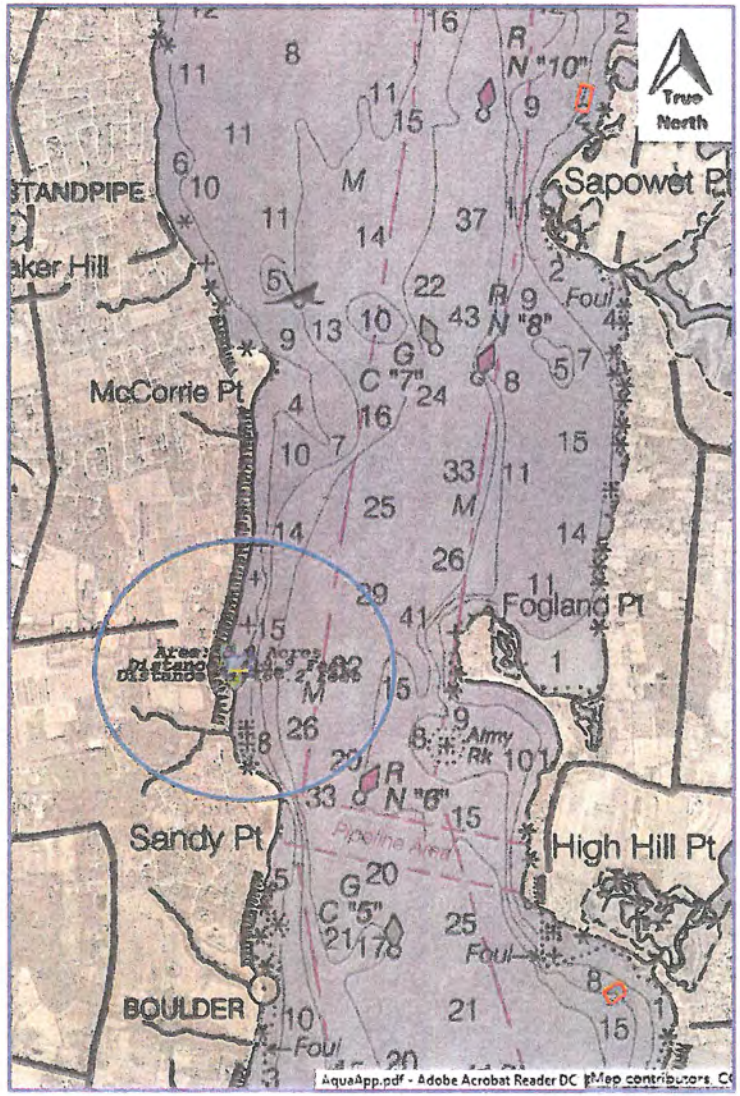
Torre & Davidson Application
Prepared 2/16/2018
Site Location



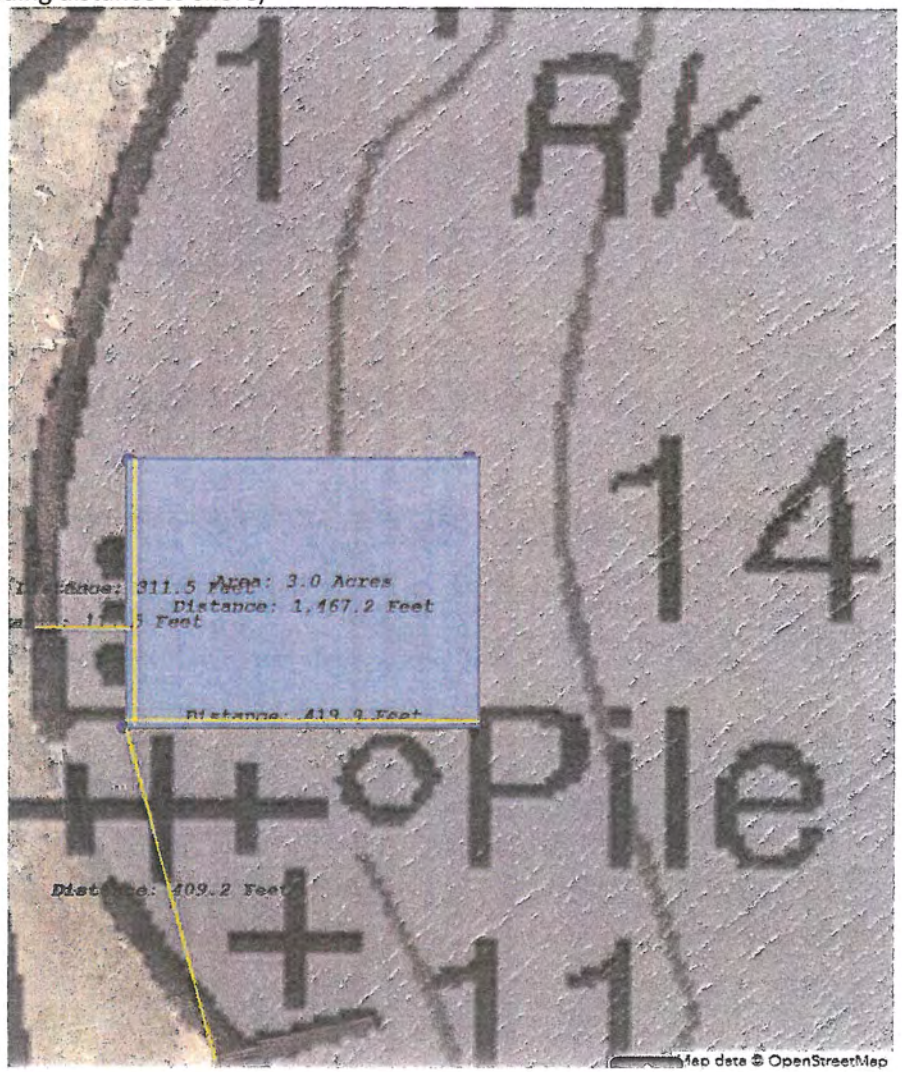
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Torre & Davidson Application
Prepared 2/16/2018
Site Location NOAA



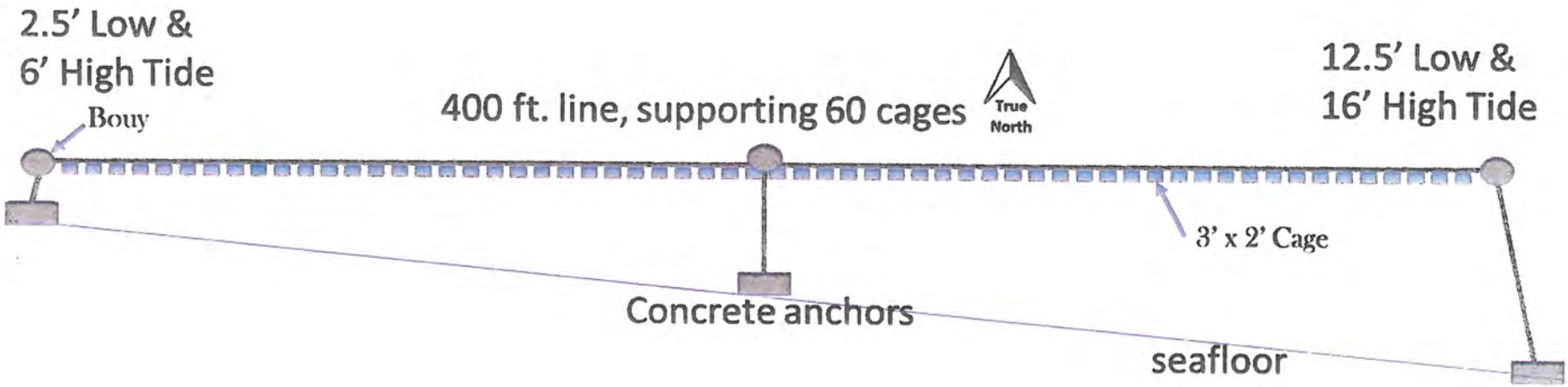
Torre & Davidson Application
Prepared 2/16/2018
Site Plans (aquaculture tool, including distance to shore)



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Torre & Davidson Application
Prepared 2/16/2018
Site Plans (Cross-section Only)

Example for floating line



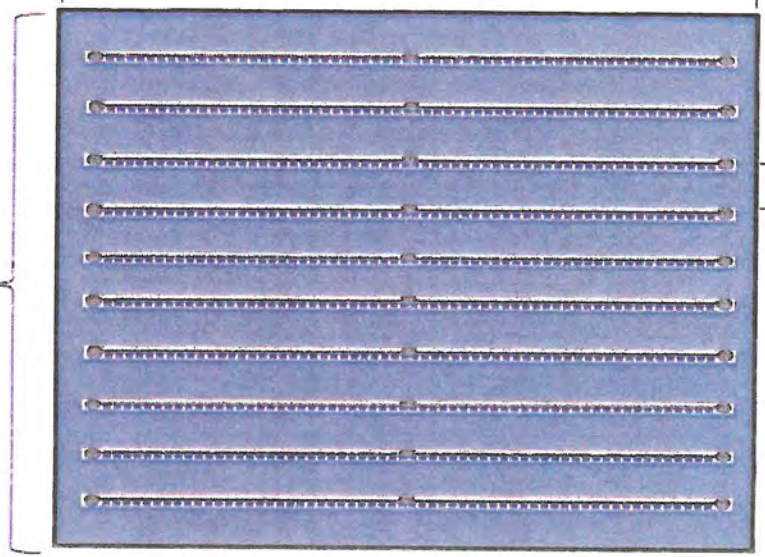
Torre & Davidson Application
Prepared 2/16/2018
Site Plants (Farm Schematic Only)

10 Floating Lines about 25 ft apart
with 42.5 ft buffer on North and South

420 ft

NW Corner:
Lon: 71.237900 W
Lat: 41.560671 N

NE Corner:
Lon: 71.236379 W
Lat: 41.560638 N



25

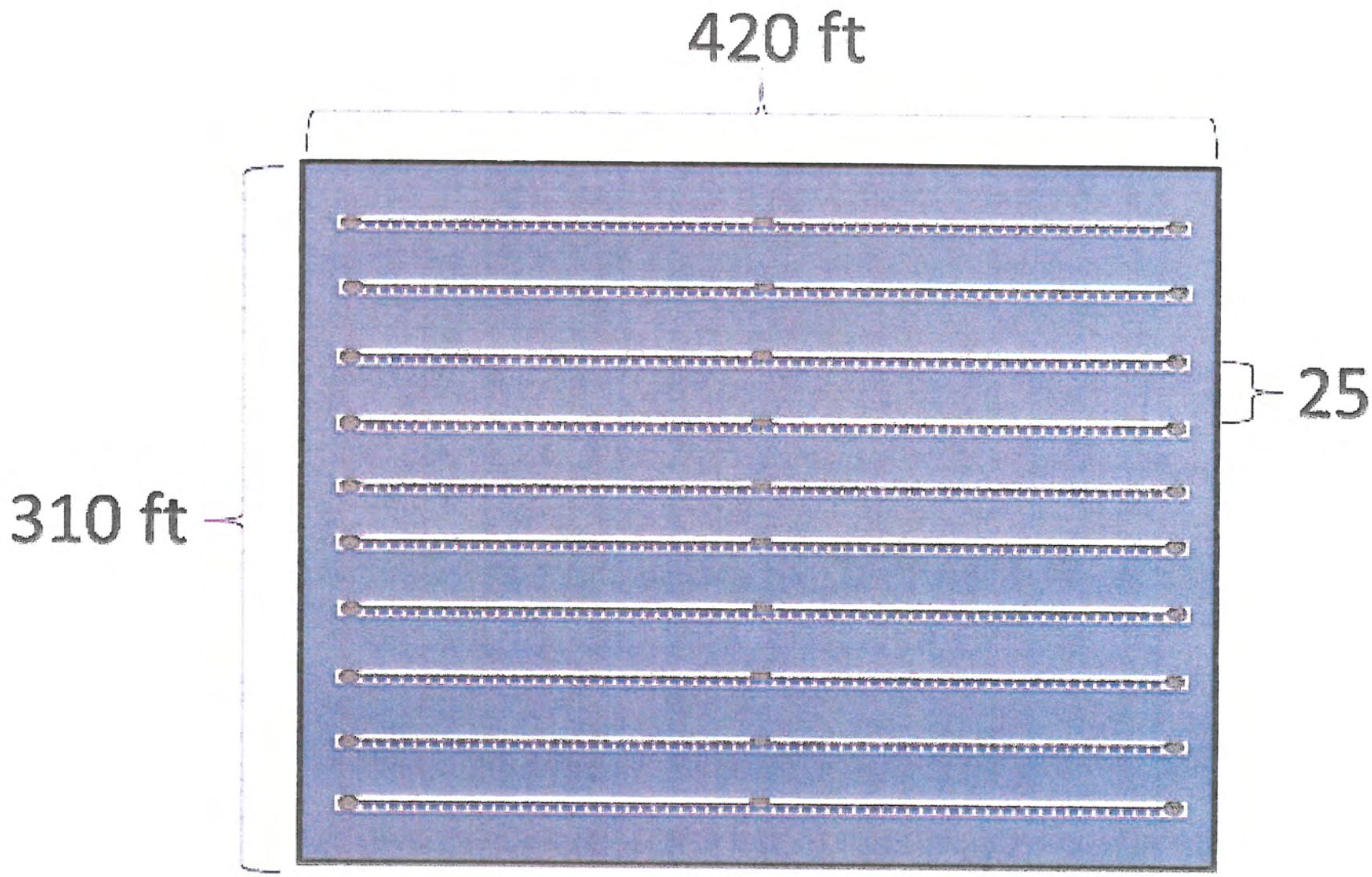
310 ft

SW Corner:
Lon: 71.237900 W
Lat: 41.559804 N

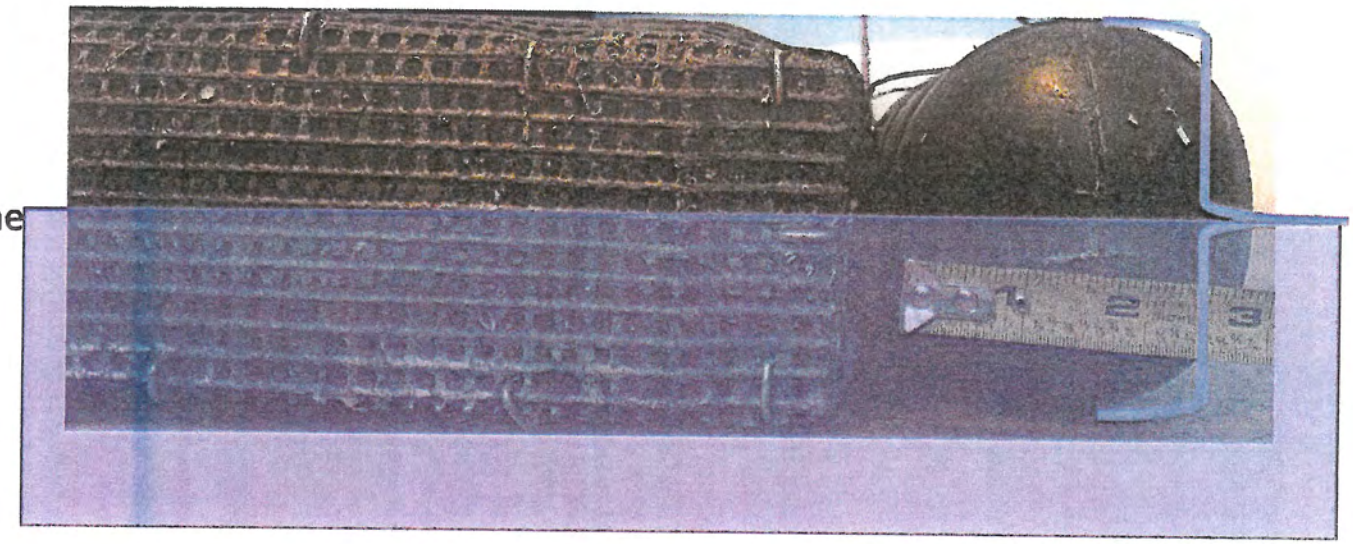
SE Corner:
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Lat: 41.559804 N

P27

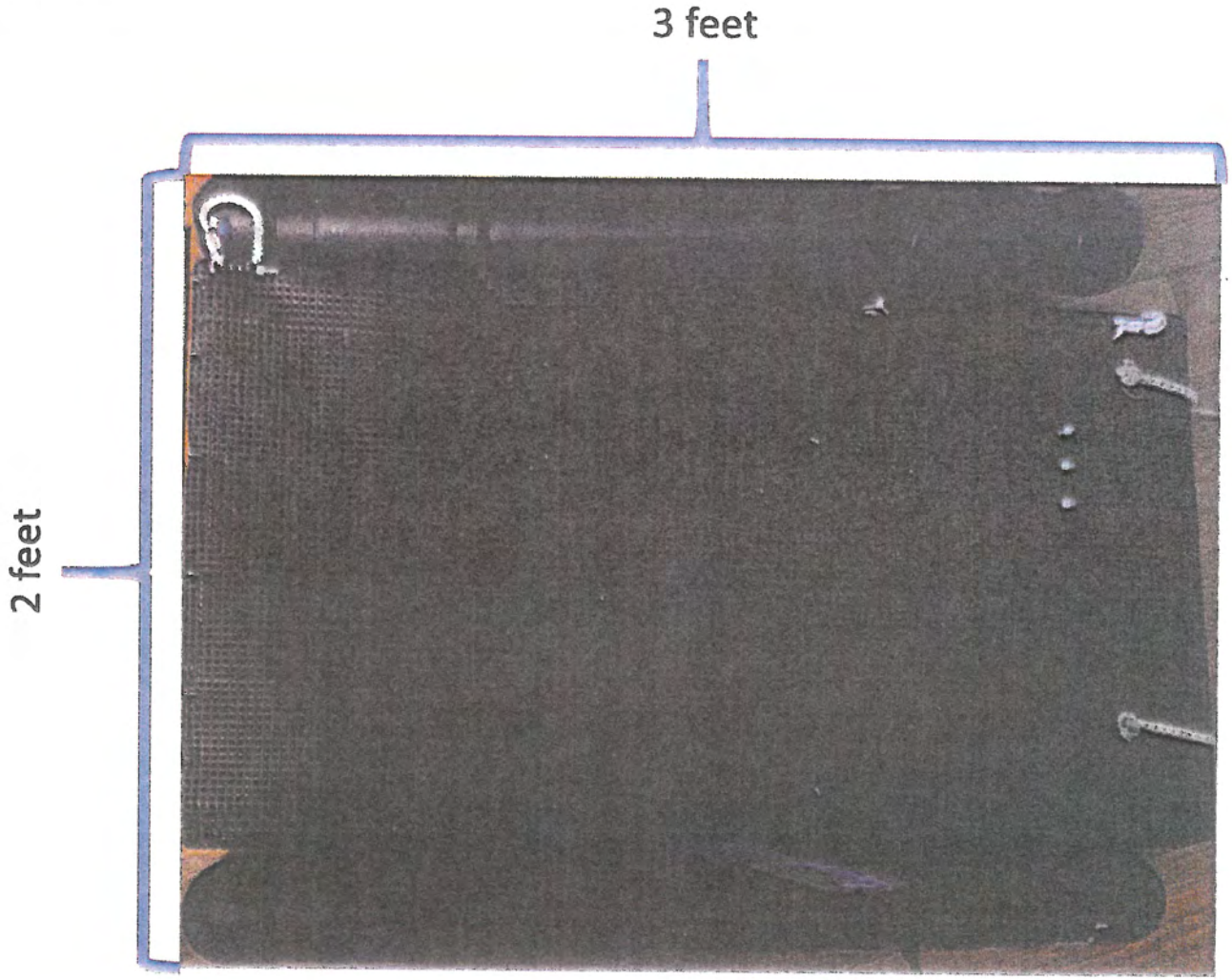
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420 ft
310 ft
25

Torre & Davidson Application
Prepared 2/16/2018
Site Plans (Floating Cage Side-View Only)

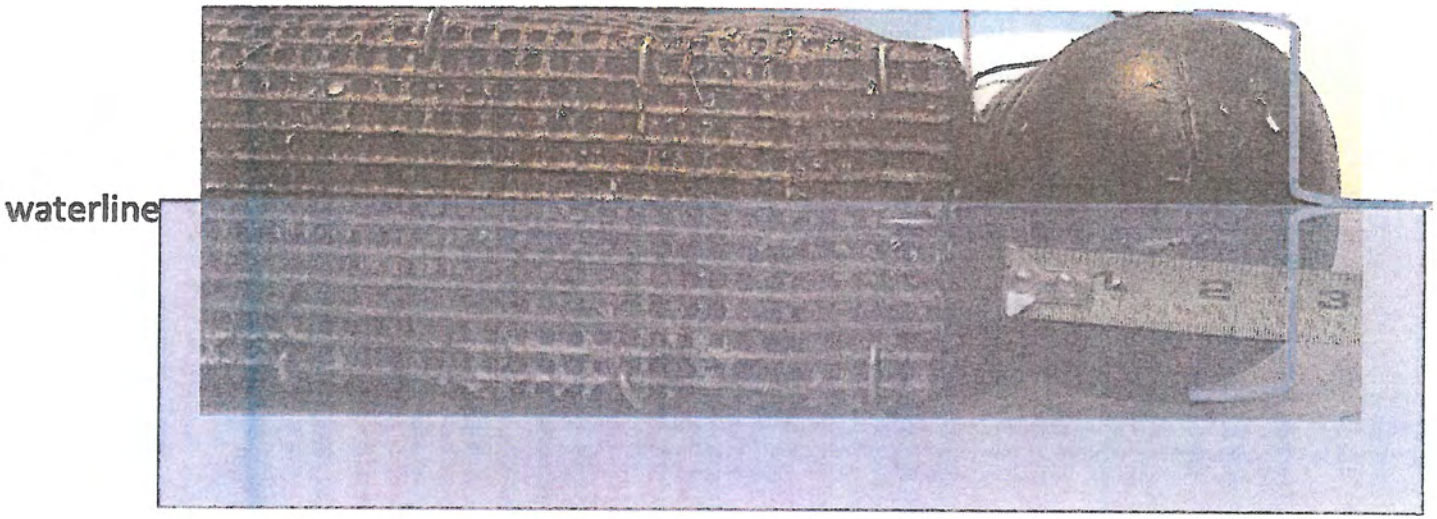


Torre & Davidson Application
Prepared 2/16/2018
Site Plans (Floating Cage Top-View Only)

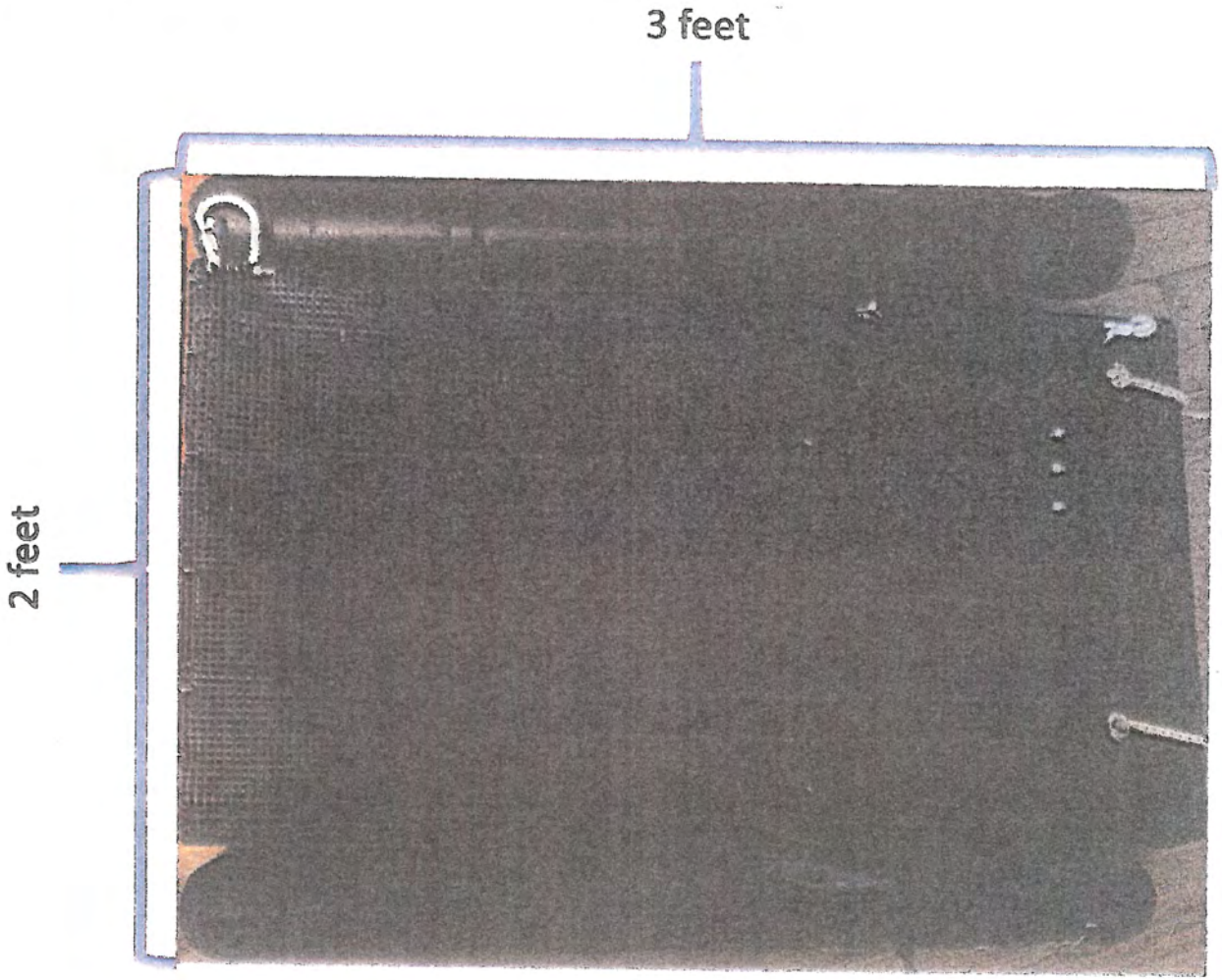


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Torre & Davidson Application
Prepared 2/16/2018
Site Plans (Floating Cage Side-View Only)



Torre & Davidson Application
Prepared 2/16/2018
Site Plans (Floating Cage Top-View Only)



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Torre & Davidson Application
Prepared 2/16/2018
Site Plants (Farm Schematic Only)

10 Floating Lines about 25 ft apart
with 42.5 ft buffer on North and South

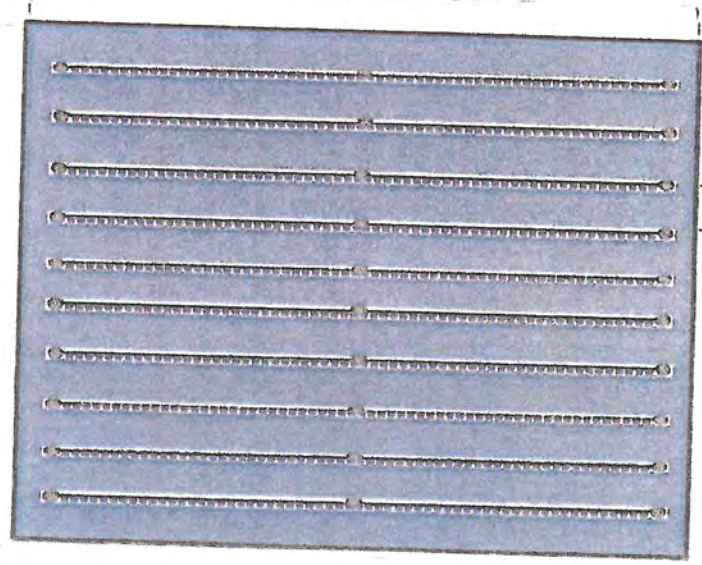
420 ft

NW Corner:
Lon: 71.237900 W
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NE Corner:
Lon: 71.236379 W
Lat: 41.560638 N

25

310 ft

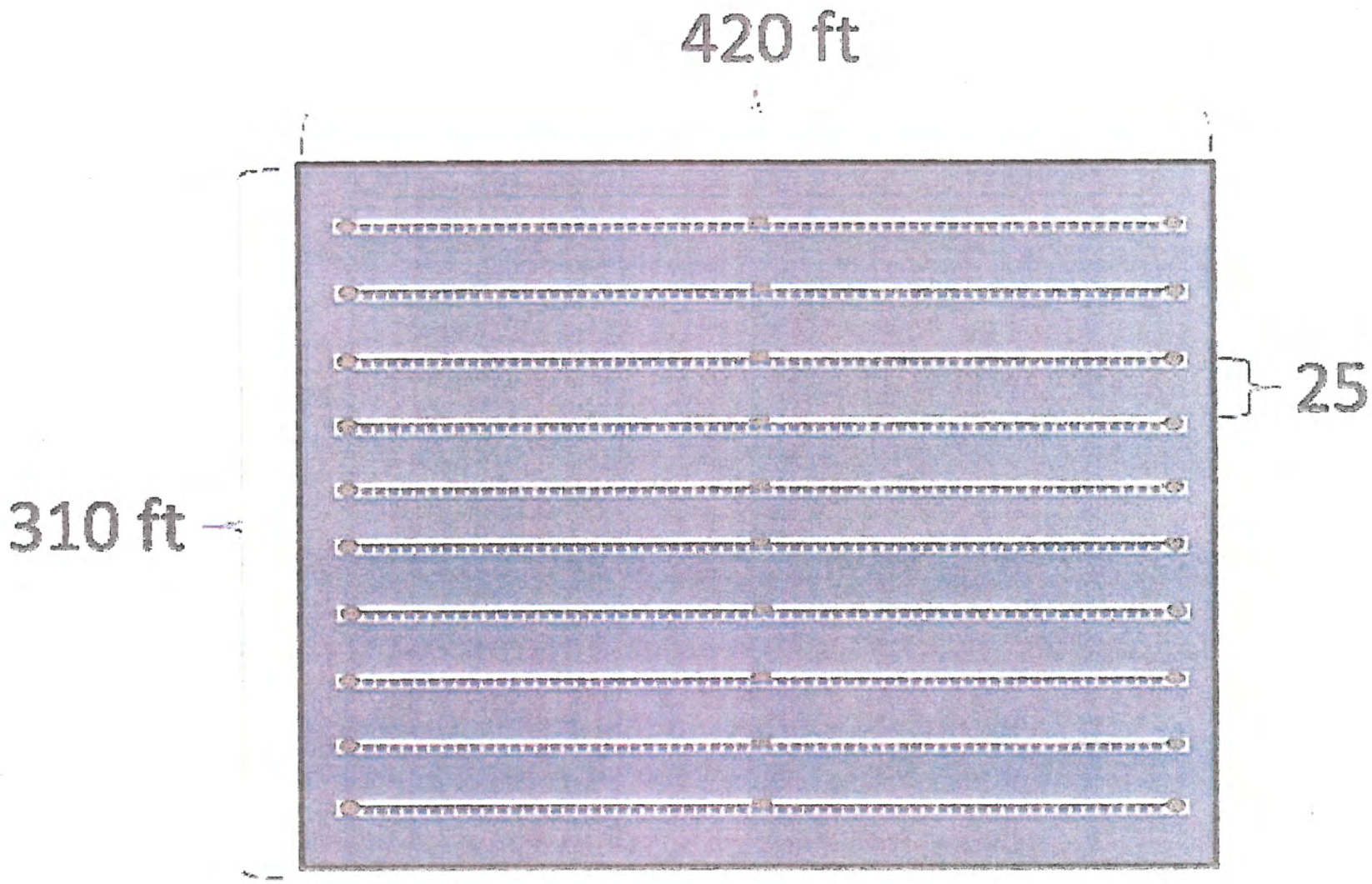


SW Corner:
Lon: 71.237900 W
Lat: 41.559804 N

SE Corner:
Lon: 71.236379 W
Lat: 41.559804 N

P33

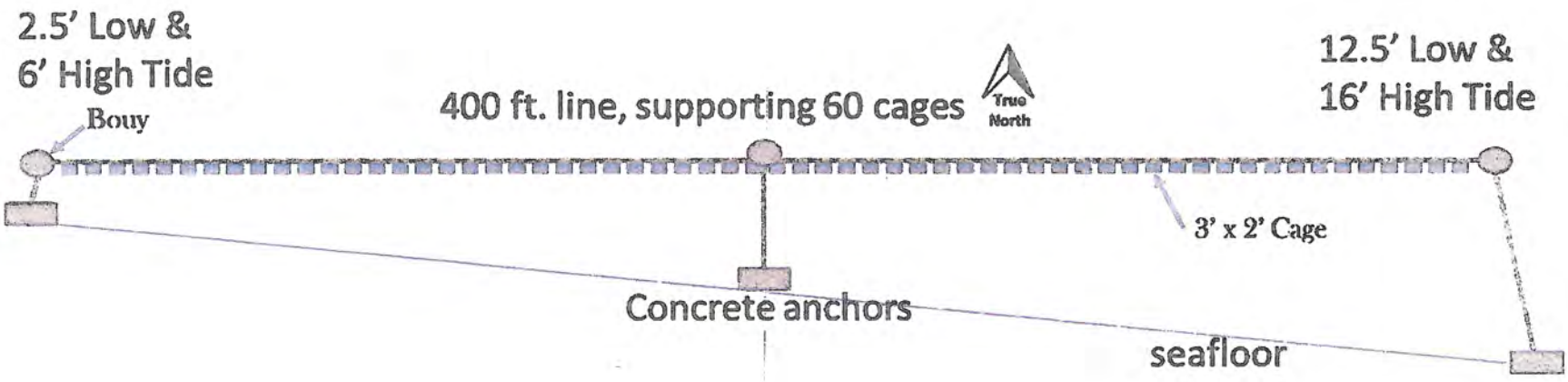
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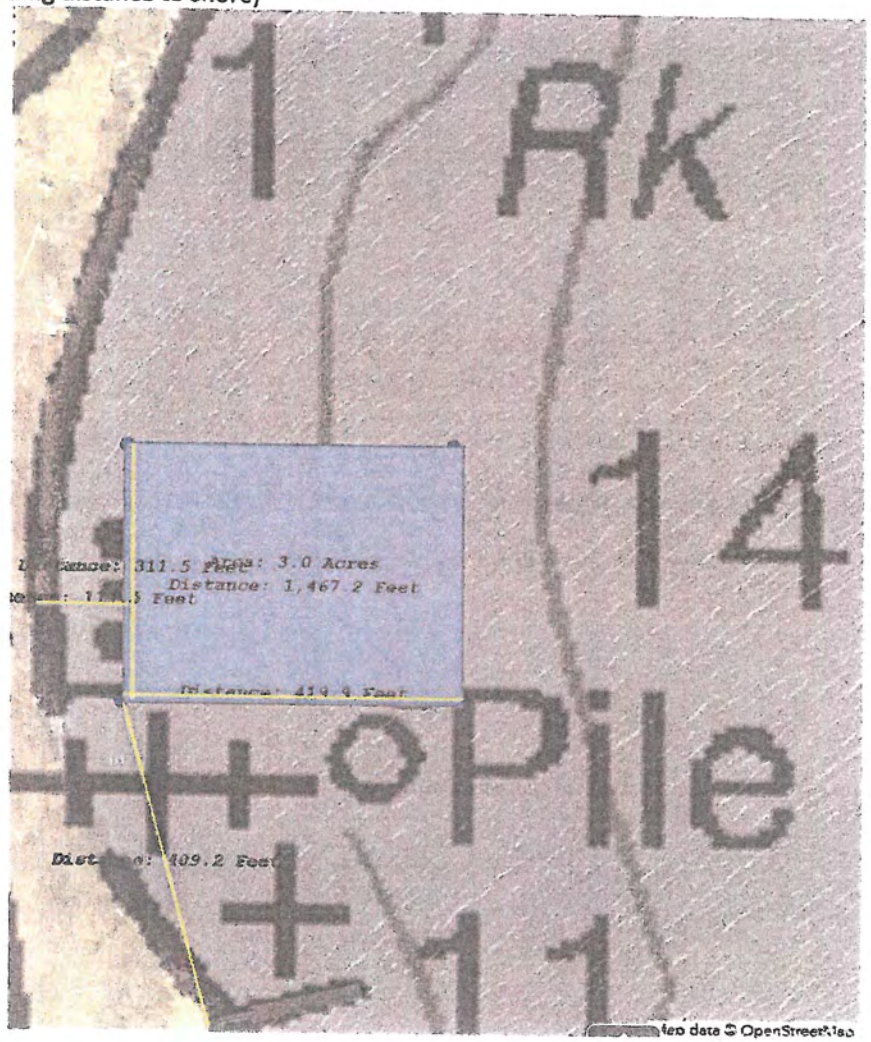
P34

Torre & Davidson Application
Prepared 2/16/2018
Site Plans (Cross-section Only)

Example for floating line



Torre & Davidson Application
Prepared 2/16/2018
Site Plans (aquaculture tool, including distance to shore)



P36

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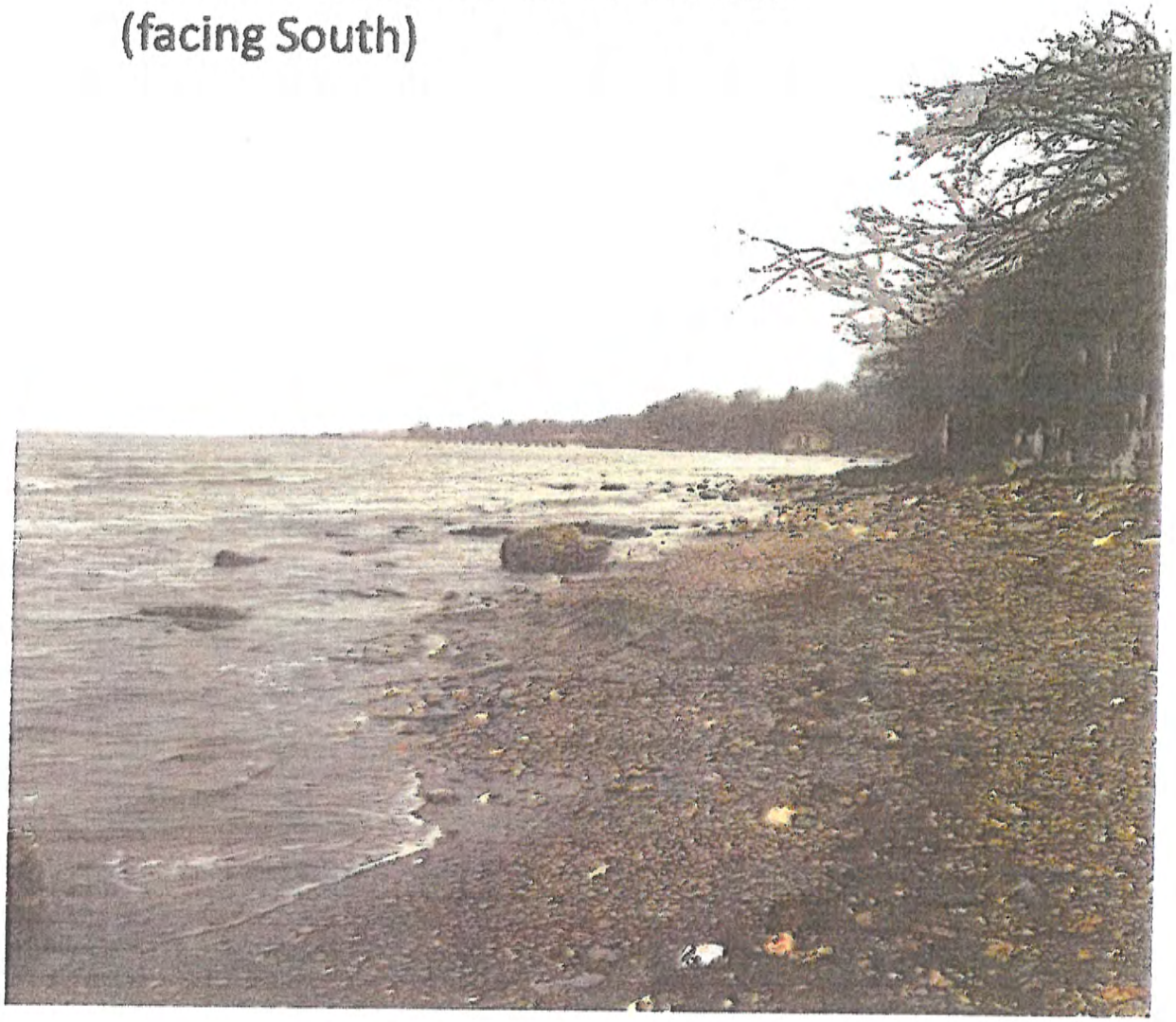
Torre & Davidson Application
Prepared 2/16/2018
Site Photos

View from the South of the site (facing North)



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View from the North of the site
(facing South)



State of Rhode Island and Providence Plantations
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-2069

PUBLIC NOTICE

File Number: 2018-09-033 Date: October 2, 2018

This office has under consideration the application of:

Daniel Torre & Max Davidson
243 Colonel John Gardner Road
Narragansett, RI 02882

for a State of Rhode Island Assent to create and maintain:

a three acre oyster farm in the Sakonnet River using floating gear (2foot by 3 foot floating bags).

Project Location:	Sakonnet River
City/Town:	Portsmouth
Waterway:	Sakonnet River

Plans of the proposed work may be seen at the CRMC office in Wakefield.

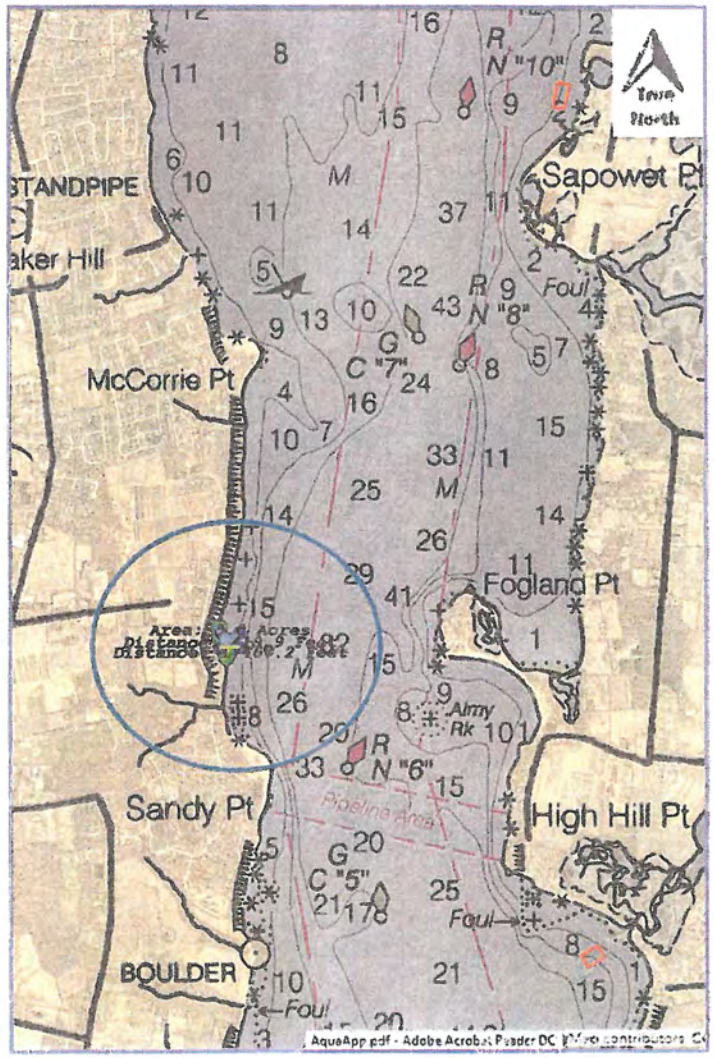
In accordance with the Administrative Procedures Act (Chapter 42-35 of the Rhode Island General Laws) you may request a hearing on this matter.

You are advised that if you have good reason to enter protests against the proposed work it is your privilege to do so. It is expected that objectors will review the application and plans thoroughly, visit site of proposed work if necessary, to familiarize themselves with the conditions and cite what law or laws, if any, would in their opinion be violated by the work proposed.

If you desire to protest, you must attend the scheduled hearing and give sworn testimony. A notice of the time and place of such hearing will be furnished you as soon as possible after receipt of your request for hearing. If you desire to request a hearing, to receive consideration, it should be in writing (**with your correct mailing address, e-mail address and valid contact number**) and be received at this office on or before November 1, 2018.

/lat

Torre & Davidson Application
Prepared 2/16/2018
Site Location NOAA

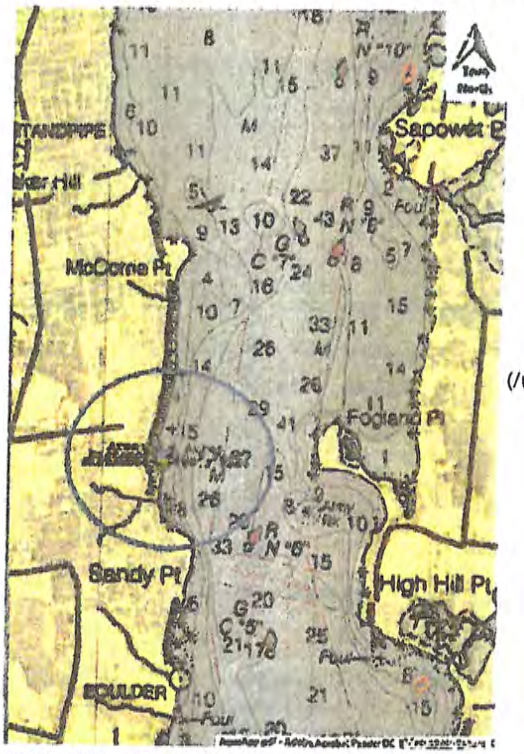


EastBayRI (/)

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Three-acre oyster farm proposed for Sakonnet River

CRMC seeking comments on application until Nov. 1



(/uploads/original/20181004-131628-oyster farm map.jpg)

Map shows approximate location of three-acre oyster farm proposed for the Sakonnet River, between Sandy Point and McCorrie Point.

Buy this photo

Posted Thursday, October 4, 2018 1:17 pm

PORTSMOUTH — The R.I. Coastal Resources Management Council (CRMC) is considering an application to build and maintain a **three-acre oyster farm (http://www.portsmouthri.com/AgendaCenter/ViewFile/Item/4966?fileID=8059)** in the Sakonnet River.

The proposal, by Daniel Torre and Max Davidson of Narragansett, would use floating gear consisting of 2x3-foot floating bags, according to the application.

The oyster farm would be located between McCorrie Point and Sandy Point.

Members of the public may request a hearing on the application. Objectors must attend the hearing and give sworn testimony when one is scheduled, according to CRMC.

To request a hearing, write to the CRMC, Oliver H. Stedman Government Center, 4808 Tower Hill Road, Suite 3, Wakefield, RI 02879-1900. Include your mailing address, e-mail address and contact number.

All requests must be received at the CRMC office by Nov. 1.

Brittany Spurlock

From: cstaff1@crmc.ri.gov
Sent: Friday, November 16, 2018 8:09 AM
To: Brittany Spurlock
Subject: FW: Proposed oyster farm in the Sakonnet River

Objection 2018-09-033 Torre Davidson

Lisa A. Turner
Office Manager
Coastal Resources Management Council
O S Government Center
4808 Tower Hill Road, Rm 116
Wakefield, RI 02879
(401)783-3370

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Help promote Green Business practices by not printing this email

From: rosiedav [mailto:rosiedav@aol.com]
Sent: Thursday, November 15, 2018 6:21 PM
To: cstaff1@crmc.ri.gov
Subject: Proposed oyster farm in the Sakonnet River

To whom it may concern:
I am sending this in response to hearing the possibility of an Oyster Farm proposal near Sandy Point Beach in Portsmouth.
My question is why would that be a consideration when the beach is often closed due to contamination? I feel you should strongly reconsider if in fact you are considering it for approval. That strip along the shore between McCorrie Point and Sandy Point is also a busy and popular recreational waterway where boating and other marine sports are frequent activities because the middle of the river has strong currents.
Please consider. This was not well publicized to the Portsmouth Community.
Thank you, Rosemary Davidson Rosiedav@aol.com

Sent from my Galaxy Tab® A

Virus-free. www.avg.com

Brittany Spurlock

From: cstaff1@crmc.ri.gov
Sent: Friday, November 02, 2018 8:19 AM
To: Brittany Spurlock
Subject: FW: Application No . 2018-09-033. Applicant: Daniel Torre & Max Davidson RE: Oyster Farm Proposal Sakonnet River Portsmouth RI

From: Lisa Lepore [mailto:leporelisa1@gmail.com]
Sent: Thursday, November 01, 2018 7:02 PM
To: council@crmc.ri.gov; cstaff1@crmc.ri.gov
Subject: Application No . 2018-09-033. Applicant: Daniel Torre & Max Davidson RE: Oyster Farm Proposal Sakonnet River Portsmouth RI

Dear CRMC :

This application requires a complete public review and hearing with supported documentation of environmental assessment by the project proponents to adequately evaluate what impacts such a farm adjacent to recreational water use / the town beach would have. This should be reviewed by CRMC and the public and made available with an appropriate review period.

Thank you for your consideration.

Lisa E Lepore PE
70 Adams Drive
Portsmouth RI 02871

Cell: 401 835 7534
Email: leporelisa1@gmail.com

Virus-free. www.avg.com

cstaff1@crmc.ri.gov

From: Peter Hussey <ghussey411@aol.com>
Sent: Thursday, November 01, 2018 5:16 PM
To: cstaff1@crmc.ri.gov
Subject: #2018-09-033 Daniel Torre and Michael Davidson

I am a local taxpayer and have lived overlooking the Sandy Point Beach in Portsmouth for nearly 30 years. I learned today of the planned oyster farm on the Sakonnet River and have concerns regarding traffic, noise, pollution, location and although I am not necessarily against the project, want to make sure that there are no unattended consequences that may arise from that could affect my neighborhood.

I hope that there will be public forum available to discuss these and any other related concerns.

Thanks,

P. Hussey
General Sullivan Circle
Portsmouth, RI 02871

Tina & Angelo Grilli
105 Heidi Drive
Portsmouth, RI 02871
Agpropmgt@gmail.com
401-623-5900

RECEIVED
NOV 01 2018
COASTAL RESOURCES MANAGEMENT COUNCIL

November 1, 2018

Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

Re: File # 2018-09-033
Oyster Farm in the Sakonnet River

I am writing in regard to the proposed oyster farm in the Sakonnet River. **I OBJECT to this development** and wish to request an initial private meeting and request to be heard at a public hearing to discuss our concerns and those of many others in the immediate neighborhood; some of which I've listed below.

- The creation of this farm will cause a significant navigational hazard for boaters. There are multiple moorings in that immediate area where the access will be impaired.
- The farm will impede and negatively impact the neighborhood and surrounding recreational use of the water. The residents enjoy boating, kayaking, paddleboarding, swimming, sailing and wind surfing in this exact area. Also, the children take sailing lessons from Sandy Point Beach and they sail right through this area. In fact, children have been jumping off the dock at Glen Manor for decades into this area which is exactly where the nets and buoys will be. We are extremely concerned about the children's safety getting caught in these nets which would impose a very dangerous situation. I am also concerned about the quality of the water and any health hazards that MAY present as a result of the farm.
- This area is a quiet haven enjoyed by all in this neighborhood. We are very concerned about the potential noise from the boat motors and power washing of the cages and the smell that this could bring. The proposed oyster farm is over three acres which is extremely large for this space that the neighborhood uses. There is also a major concern about the devaluation of the properties in the immediate area; specifically mine. I'm not sure what a seller would think if their use of the water directly in front of their house or right next to it could not be used because there were buoys and nets where they could not enjoy and utilize their mooring. As stated by members of the town council, "It will not be visible from Glen Manor." If visibility is a concern of the Town Council, it is certainly a concern of mine and my neighbors as it will clearly be visible from our properties.

Please let me know as soon as possible the date of the meeting.

Sincerely,

Tina & Angelo Grilli

Norman & Joyce Cote
95 Heidi Drive
Portsmouth, RI 02871
njctj@aol.com
401-862-8802

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NOV 01 2018
COASTAL RESOURCES
MANAGEMENT COUNCIL

November 1, 2018

Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

Re: File # 2018-09-033
Oyster Farm in the Sakonnet River

I am writing in regard to the proposed oyster farm in the Sakonnet River. I **OBJECT to this development** and wish to request an initial private meeting and request to be heard at a public hearing to discuss our concerns and those of many others in the immediate neighborhood; some of which I've listed below.

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Please let me know as soon as possible the date of the meeting.

Sincerely,

Norman & Joyce Cote

cstaff1

From: Sue Burghouwt <susan@burney.com>
Sent: Thursday, November 01, 2018 1:37 PM
To: cstaff1@crmc.ri.gov
Cc: burghouwt@cox.net
Subject: Daniel Torre & Max Davidson

Re: file number 2018-09-033

As a resident of 22 Annette Drive in Portsmouth, RI, I am interested in learning more about the proposed Oyster Farm between us and Sandy Point. We are interested in supporting farming in the state. But we have questions about how the proposal effects the use of the Sakonnet River between McCorrie Point and Sandy Point. Will physical barriers be visible above the water, and will we be prevented from kayaking in the area? Will there be a chance to see what this looks like from land before the proposal is decided?

Thanks,
Susan Burghouwt

THE BURNEY COMPANY
INVESTMENT MANAGEMENT

Sue Burghouwt, Administrator
283 Carriage Dr. Portsmouth, RI

(401) 847-2953 (phone)
(866) 245-1263 (fax)
www.burney.com

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NOV 01 2018
COASTAL RESOURCES MANAGEMENT COUNCIL

Ellen Toner
70 Sigourney Rd
Portsmouth, RI 02871
401.228.5672

No email

October 25, 2018

Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Rd, Suite 3
Wakefield, RI 02879

RE: File#2018-09-033
Application of Daniel Torre & Max Davidson

Dear Coastal Resources Management Council:

I am writing because I am concerned with the proposed Oyster Farm near Sandy Point Beach. As I am not opposed to Oyster Farms in general, I am opposed to the location and size of this Oyster Farm. Have alternative locations been explored and does it really need to be so large?

My sons and their friends sail along the shallow water in this proposal. For safety reasons, they are restricted to sail between Sandy Point and Mc Corrie's Point. If this water way is restricted, it will force them further out into the channel with larger vessels. Afternoon winds constantly blow them and others on their sunfishes, paddleboards and kayaks into the proposed cove area. Even the Town's vandalized life guard chairs floated into that area last summer.

I personally use this area for early morning paddle boarding with my friends. This oyster farm would also push us further out into the current making our daily exercise more difficult and harder to reach shore if one of us were to incur an injury.

Please consider an alternate location for this farm. Our children already use this area for recreational purposes. As parents, we struggle every day to keep them occupied and doing outdoor activities and away from video games and the lure of drug experimentations.

The water way off the shores of Montaup Golf course are not utilized by the public, this area would not interfere with the public use of the water. There are other suitable alternate locations without interfering with the public's enjoyment of this waterway.

Sincerely,

Ellen Toner

Ellen Toner

cstaff1

From: JOHN HOUGH <ajhough@cox.net>
Sent: Tuesday, October 30, 2018 4:24 PM
To: cstaff1@crmc.ri.gov
Subject: file#2018-09-033 Daniel Torre&Max Davidson

I live on Adams Dr, Portsmouth

I read about the request today in the Daily News. Previously I was not notified though this will impact my family as we use Sandy Point Beach, have a view of the Sakonnet River from our home, and use Sandy Point Avenue.

I have several reservations about the creation of an oyster farm in the Sakonnet River.

How much would this impact the traffic on Sandy Point Avenue?

How much would this impact the parking at Sandy Point Beach (which, at times, is completely full)?

Three acres sounds much larger than 2x3 floating bags, and it seems this could be a visual eyesore against our beautiful view and would impact the value of our properties.

I do not know if the water quality would be affected. Our beach is used by many families with young children, as well as adults.

I don't know if this area would be a stepping stone to a larger area with more impact, under the "we're already there" argument.

Please consider all of this.

Arleen Hough 4401-847-4833

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cstaff1

From: Gretchen Markert <markertg@gmail.com>
Sent: Wednesday, October 31, 2018 9:59 AM
To: cstaff1@crmc.ri.gov
Subject: 2018-09-033

Hello,
I have a few questions in reference to the proposed oyster farm in Portsmouth.

1. Are there images available online that show what the installation would look like, both from the shore and from the air?

2. What is the term of the license? If the venture was approved by the Town but residents later objected to various facets of it, at what point could the Town decide to not renew the approval/license?

3. If the venture wanted to expand, would that require approval?

4. Is it possible or probably that this venture would negatively impact expected revenue from the Glen Manor House rentals?

5. Would approval of this venture be a precedent for other similar ventures on the coastal sections of Portsmouth?

Thank you for asking for input and for your response.

Sincerely,

Gretchen Markert
270 Vanderbilt Lane
Portsmouth, RI

Virus-free. www.avg.com

cstaff1

From: Lara Both <lmaxmillion@cox.net>
Sent: Tuesday, October 30, 2018 5:22 PM
To: cstaff1@crmc.ri.gov
Subject: Daniel Torre & Max Davidson

Dear Coastal Resource Management Council, I am writing in regards to file #2018-09-033.
I am a Glen Farm / Sandy Point homeowner who frequents Sandy Point Beach daily, especially in the Spring / Summer and Fall.
Not only do we use the beach but also the waters between the beach and Glen Manor property for water sports and boating activities.
This is the towns recreational area and should not be used for oyster farming.
Please do not consider approving this application as it is currently written.
I am in support of all local farmers, especially for oysters (which I love) but an oyster farm does not belong that close to a marine recreational area.
Don't take away some of the only summer fun our town has on the waters around Portsmouth.
Please consider asking them to look at a different area of the Sakonnet, possible closer to the south side of McCorrie Beach.
Sincerely, Lara Both

This email has been checked for viruses by AVG.
https://www.avg.com

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OCT 26 2018
COASTAL RESOURCES
MANAGEMENT COUNCIL

Diane Bolusky
108 Raymond Drive
Portsmouth, RI 02871
October 16, 2018

Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879

Re: File Number 2018-09-033
Application of Daniel Torre & Max Davidson

Dear Coastal Resources Management Council:

I am a resident of Portsmouth and a frequent user of our town beach, Sandy Point Beach. I am writing to express concern about the proposed three acre oyster farm adjacent to Sandy Point Beach. The oyster farm area noted in the published map is in a location that is frequently used by residents for water activities, including paddle boarding, kayaking, swimming, sailing and boating. As the only beach in the town, it is also the location for many town recreational activities, including youth sailing. Restricting such a wide area will force residents doing water activities away from the protected cove area and out into the main channel that is frequently congested with power boat traffic. This is particularly problematic for youngsters learning to sail since wind in the afternoon is generally quite strong once they get out of the cove. The Sakonnet River is very large. I struggle to understand why the oyster farm needs to be located in the area most used by Portsmouth town residents and request that an alternative location be identified.

Sincerely,

Diane Bolusky

Diane Bolusky

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OCT 10 2018
COASTAL RESOURCES
MANAGEMENT COUNCIL

October 10, 2018

State of Rhode Island and Providence Plantations
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

RE: File number 2018-09-033

Dear Members of the Coastal Resources Council,

We would like to notify you of our opposition to the above referenced application to create and maintain a 3 acre oyster farm in the Sakonnet River using floating bags, and we would like to request a hearing.

Sincerely,
Michael and Elizabeth McBreen
143 Heidi Drive
Portsmouth, RI 02871
Mmcbreen125@yahoo.com
Bmcbreen1@cox.net
(401) 486-9831 Michael

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MAY 11 2018
COASTAL RESOURCES
MANAGEMENT COUNCIL

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

May 11, 2018
Dave Beutel Aquaculture Coordinator
Coastal Resources Management Council
Wakefield, RI 02879-1900

Dear Mr. Beutel,

I am writing in reference to the Preliminary Determination request by Dan Torre and Max Davidson for a floating gear aquaculture lease (File number 2018-02-048). The proposed location for this site is in waters approved for shellfish harvesting located in shellfish classification area Sakonnet River GA4 harvest area 5B in the town of Portsmouth .

The classification of shellfish grounds is an ongoing process based on the principles of the National Shellfish Sanitation Program. The Department of Environmental Management assumes no liability by the leaseholder for changes in classifications that may restrict or prohibit access and/or harvesting from said lease area. While this site currently has an approved classification for the harvesting of shellfish, extraordinary circumstances (i.e., large amounts of rainfall, hurricanes or oil spills) could temporarily halt such harvesting and prohibit work on said lease. If approved please include the following language that CRMC and DEM previously agreed to as a stipulation:

> Aquaculturists in areas where emergency shellfish closures have been enacted will be allowed access to their leases for the purposes of preparing for and planting seed and when extreme weather could result in loss or damage of gear to conduct necessary maintenance/retrieval of their equipment. All other activities on the aquaculture lease, including but not limited to the harvest of shellfish, will remain prohibited until the water quality is acceptable to allow for harvest. Aquaculturists seeking permission to access their lease during an emergency closure must seek authorization by contacting Dave Beutel, CRMC's aquaculture coordinator at 783-7587.

The applicant should be aware that at the 2017 ISSC conference, changes were adopted to the model ordinance relating to floating aquaculture gear. The proposed changes are under review by FDA for final approval and inclusion in the next model ordinance update. The changes adopted at the ISSC conference include a requirement that aquaculture gear that attracts birds or mammals to the extent that their waste presents a human health risk shall have a written operation plan. While not yet a requirement, please advise the applicants of this pending requirement and encourage them to consider methods to deter waterfowl attraction in consultation with RIDEM Division of Marine Fisheries

In the effort to address increasing water temperatures and the potential threat of a Vibrio Illness outbreaks we are asking all lease holders to monitor water temperature at their lease site and keep records of actual temperatures of bottom, surface and at the depth waters where the shellfish are being grown during the Summer months (June-September). If this project is approved, please include this request in your aquaculture approval document.

Neither a RIPDES permit nor a Water Quality Certificate is required for the proposed facility. Please call me at 222-4700, Ext. 7241 if you have any questions.

Sincerely,

Lucinda M. Hannus

Lucinda M. Hannus, Principal Environmental Scientist
RI DEM
Office of Water Resources – Shellfish Program

cc Angelo Liberti
Conor McManus
Dennis Erkan
Julia Livermore
Catherine White- RIDOH

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

DIVISION OF MARINE FISHERIES
3 Fort Wetherill Road
Jamestown, RI 02835

DIVISION OF FISH AND WILDLIFE
277 Great Neck Road
West Kingston, RI 02892

October 31, 2018

David Beutel
Aquaculture Coordinator
Coastal Resources Management Council
4808 Tower Hill Road
Wakefield, RI 02879

Re: Torre and Davidson Lease Application #2018-09-033

Dear Mr. Beutel:

The Rhode Island Department of Environmental Management (Department), through the Division of Marine Fisheries (DMF) and the Division of Fish and Wildlife (DWF), has received and reviewed the application submitted by Daniel Torre and Max Davidson for a 2.96-acre lease for cultivating oysters (*Crassostrea virginica*) using floating cages.

The DMF and DFW believe that the adverse impacts to marine fisheries and wildlife and their habitat from this prospective shellfish farm would be minimal. As such, the DFW and DMF do not have objections to this application. The Divisions' acceptance of the current proposal is specific to the location and specifications outlined in the application.

Sincerely,

Dean Hoxsie,
Acting Associate Director for Natural Resources

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COASTAL RESOURCES MANAGEMENT COUNCIL

Rhode Island Marine Fisheries Council

3 Fort Wetherill Road Jamestown, Rhode Island 02835
(401) 423-1920 Fax: (401) 423-1925

Robert Ballou
Chairman

David Monti
Vice Chair

Travis Barao

Andrew Dangelo

Jeff Grant

Jason Jarvis

Christopher Rein

Michael Rice, Ph.D.

Michael Roderick

April 24, 2019

Dave Beutel, Aquaculture Coordinator
Coastal Resources Management Council
4808 Tower Hill Road
Wakefield, RI 02879

Re: CRMC Aquaculture Lease Application # 2018-09-033 – Torre and Davidson – Sakonnet River

Dear Mr. Beutel:

Pursuant to RIGL §20-10-5, the above-referenced application was brought before the RI Marine Fisheries Council (hereafter "Council") on April 1, 2019 for review and consideration. The Council found that the proposal poses no inconsistency with competing uses engaged in the utilization of marine fisheries in the area.

Sincerely,

Robert Ballou, Chair

cc: RIMFC Members

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APR 26 2019
COASTAL RESOURCES MANAGEMENT COUNCIL

Dave Beutel

From: LeBlanc, Edward G CIV <Edward.G.LeBlanc@uscg.mil>
Sent: Wednesday, October 03, 2018 10:31 AM
To: Dave Beutel
Subject: RE: [Non-DoD Source] thirty day public notice floating aquaculture in Sakonnet River

No objection Dave.

Edward G. LeBlanc
Chief, Waterways Management Division
Coast Guard Sector Southeastern New England
Office 401-435-2351
Cell 401-580-8747
Fax 401-435-2399
E-mail: Edward.G.LeBlanc@uscg.mil

From: Dave Beutel <dbeutel@crmc.ri.gov>
Sent: Tuesday, October 2, 2018 12:07 PM
To: 'Alison Verkade - NOAA Federal' <alison.verkade@noaa.gov>; 'Steve Medeiros' <stevem@risaa.org>; 'Azure Cygler' <azure@crc.uri.edu>; 'Robert Rheault' <bob@ecsga.org>; 'Robert Ballou' <robert.ballou@DEM.RI.GOV>; 'Rich Fuka' <captlobster@gmail.com>; mclamdigger@aol.com; 'Dennis Erkan' <dennis.erkan@DEM.RI.GOV>; 'Prescott, David' <dprescott@SaveBay.org>; 'Leavitt, Dale' <dleavitt@rwu.edu>; gvdwood@cox.net; 'Jim Arnoux' <eastbeachoysterfarm@gmail.com>; 'Dave Reis' <dreis@crmc.ri.gov>; 'Jeff Grant' <jeffgrant19@cox.net>; 'Jeff Gardner' <watchhilloysters@gmail.com>; 'Jody King' <nosmoshep@icloud.com>; 'Katie Eagan' <eagan.katie@gmail.com>; kurt.blanchard@dem.ri.gov; 'Michael A. Rice' <rice@uri.edu>; 'Rich Hittinger ' <hittinger@risaa.org>; FVThistle@verizon.net; dmontifish@verizon.net; 'Rick Bellavance' <makosrule@verizon.net>; cgreinstrategies@gmail.com; lad0626@aol.com; 'Catherine White' <Catherine.White@health.ri.gov>; 'John Torgan' <jtorgan@TNC.ORG>; dean.hoxsie@dem.ri.gov; 'Beuth, Joshua (DEM)' <Joshua.Beuth@DEM.RI.GOV>; LeBlanc, Edward G CIV <Edward.G.LeBlanc@uscg.mil>; cindy.hannus@dem.ri.gov; 'Jerry Carvalho' <comfish100@gmail.com>; 'Phil Capaldi' <philcapaldi@yahoo.com>; marcapcar@icloud.com; marcapcar@me.com; michaelaonosko@gmail.com; john_crosson@watkinson.org; dacapaldi@aol.com; mmcapaldi@aol.com; jschickler@cox.net; suemarinaro@me.com; traceydistefano@gmail.com; travisbarao@gmail.com; mroderick@towndock.com; maridee2@gmail.com; Taylor.M.Bell@usace.army.mil; dacapaldi@aol.com; mmcapaldi@aol.com; Ed <etroiano1@cox.net>; buddhajay108@yahoo.com; Kenneth Murgo <kenneth.murgo@gmail.com>
Cc: 'Janet Coit' <Janet.Coit@DEM.RI.GOV>; 'Jason McNamee' <jason.mcnamee@DEM.RI.GOV>; 'Osenkowski, Jay (DEM)' <jay.osenkowski@DEM.RI.GOV>; ckarp@brown.edu; psozek@lightower.com; 'Mcmanus, Conor (DEM)' <Conor.McManus@dem.ri.gov>; 'Livermore, Julia (DEM)' <Julia.Livermore@dem.ri.gov>; 'Dick Pastore' <RPENGRI@gmail.com>; 'Mike Jarbeau' <mjarbeau@savebay.org>; 'Todd Corayer' <tcorayer@fishwrapwriter.com>; traceydistefano2013@gmail.com; 'Lisa Turner' <lturner@crmc.ri.gov>; 'Gary R. Crosby' <gcrosby@portsmouthri.com>; Gerry Schey <gerryschey22@gmail.com>; Max Davidson <maxiandavidson@gmail.com>; Daniel Torre <Daniel.Torre@rpsgroup.com>; davidclatham@gmail.com
Subject: [Non-DoD Source] thirty day public notice floating aquaculture in Sakonnet River

This application for aquaculture assent begins thirty day public notice today. The application is for a 3 acre site to grow oysters using floating cages (2' x 3') in the Sakonnet River. Please send comments to me by November 1, 2018.

David Beutel
Coastal Resources Management Council
Aquaculture Coordinator

BLISH & CAVANAGH LLP
COUNSELLORS AT LAW

Joseph V. Cavanagh, Jr.
William R. Landry
Edmund L. Alves, Jr.
Scott T. Spear
Mary Cavanagh Dunn
Joseph V. Cavanagh, III
Lynne Barry Dolan
Robert J. Cavanagh, Jr.
Matthew J. Landry
Thomas J. Alves

John H. Blish
(1986-2007)

Commerce Center
30 Exchange Terrace
Providence, RI 02903-1765

Tel (401) 831-8900
Fax (401) 751-7542
www.blishcavlaw.com

E-Mail and Overnight Mail

May 24, 2019

State of Rhode Island
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road; Suite 3
Wakefield, RI 02879-1900
cstaff1@crmc.ri.gov

Re: Application Of Daniel Torre & Max Davidson
(Oyster Culture Farm) / 2018-09-033
(Hearing Date: May 28, 2019)

Gentlemen:

I am writing in behalf of Michael and Elizabeth McBreen ("the McBreens") to note for the record their opposition to the above-referenced aquaculture facility application.

The McBreens own the property at 143 Heidi Drive in Portsmouth, more particularly described as Town of Portsmouth Tax Assessor's Plat 59, Lot 37. It is situated along the Sakonnet River, a very short distance from this proposed 3-acre floating aquaculture facility, and within clear view of its proposed location. The McBreen's property includes steps down to the beach and an active private recreational boating facility/dock.

The proposed site of this large aquaculture facility is at perhaps the narrowest point of the Sakonnet River, in an area of regular and substantial recreational water-based activity, and within a triangle of three seasonally busy beaches, Sandy Point Beach and McCorrie Beach, and Fogland Beach on the other side of the River.

The cove between Sandy Point Beach and McCorrie Beach is a particularly active area of heavy water traffic and access, for swimming, tubing, kayaking, paddle boarding, fishing, small boat sailing, particularly by youth, all daily in season. There are also moorings in the immediate area, one of which is owned by the McBreens.

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COASTAL RESOURCES
MANAGEMENT COUNCIL

The Applicants' submission makes much of the fact that certain uplands near the proposed aquaculture site are not in good shape, including an old boathouse, nor heavily used. However, this does not accurately describe the water use in the area, which is heavily accessed and used via steps from private property, and deeded neighborhood access points. Safety and use conflicts abound, and are a serious concern. Moreover, the notion that the facility will not be in plain view is simply wrong. It is within plain sight of the McBreen property and many more. Similarly – and respectfully, the statement in the Staff Report that the cove is "not a significant area of recreation" is simply not true, and is directly contradicted in the dozen or so letters of objection submitted by concerned homeowners that live there, all independently articulated and provided to CRMC.

Moreover, if the proposed aquaculture facility were to ever be expanded further from its currently proposed location, the use and view conflicts would go from bad to worse, and the situation would be even more dangerous.

In behalf of the McBreens, we respectfully request that the Council encourage these Applicants, who are apparently from Narragansett, to relocate their proposed business venture to one of the countless more suitable locations along the Ocean State.

Thank you for your consideration.

Sincerely,

William R. Landry

cc: Michael and Beth McBreen

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MAY 28 2019
COASTAL RESOURCES MANAGEMENT COUNCIL

2018-05-159 BRIAN PINSKY

CRMC DECISION WORKSHEET
2018-05-159
Brian Pinsky 401 Oyster Company, LLC.

Hearing Date:			
Approved as Recommended			
Approved w/additional Stipulations			
Approved but Modified			
Denied		Vote	

APPLICATION INFORMATION

File Number	Town	Project Location	Category	Special Exception	Variance
2018-05-159	Charlestown	Ninigret Pond Plat Lot	B	☐	☐
		Owner Name and Address			
Date Accepted	6/5/2018	Brian Pinsky 401 Oyster Company, LLC. P O Box 1694 Charlestown, RI 02813	Work at or Below MHW	☒	
Date Completed	5/2/2019		Lease Required	☒	

PROJECT DESCRIPTION

Oyster Farm Expansion

KEY PROGRAMMATIC ISSUES

Coastal Feature: Submerged land

Water Type: Type 1, Conservation Areas

CRMP: §§ 1.2.1(B); 1.3.1(A); 1.3.1(K); and 1.3.1(R)

Variances and/or Special Exception Details:

Additional Comments and/or Council Requirements:

Specific Staff Stipulations (beyond Standard stipulations):

winter work hours November 1 through March 31 10:00 am to 2:00 pm

STAFF RECOMMENDATION(S)

Engineer _____ Recommendation: **NA**

Biologist _____ Recommendation: **NA**

Other Staff DTB Recommendation: **Approval**

Executive Director Sign-Off 5/3/2019 date

David Beutel 5-3-19
Aquaculture Coordinator Sign-off date

David Beutel 6-19-19
Staff Sign off on Hearing Packet (Aqua) date

Name: Brian Pinsky401 Oyster Company, LLC.
CRMC File No.: *2018-05-159*
Staff Report

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

COASTAL RESOURCES MANAGEMENT COUNCIL

INTER-OFFICE MEMORANDUM

DATE: May 2, 2019

TO: Grover J. Fugate, Executive Director

FROM: David Beutel

SUBJECT: CRMC File No. 2018-05-159

Applicant's Name: Brian Pinsky 401 Oyster Company, LLC.
Project: Oyster farm expansion

Location: Ninigret Pond, Charlestown,
Water Type/Name: Type 1, Conservation Areas,
Coastal Feature: submerged land

STAFF REPORT

The 401 Oyster Company LLC currently operates an oyster farm in Ninigret Pond using bottom cages and a rack and bag system (#2013-08-013). The farm has been successful and is fully utilized. This application is for an expansion on the southern and western edges of the existing farm. The new area would be partly for additional cages (including rack and bag) with the rest of the new area used for direct bottom plant.

Staff has visited this site annually since 2013 and has found no eelgrass present and a low density of native shellfish (0.4 quahogs/ meter square). This application was modified from the preliminary determination to mitigate the concerns of RI Department of Environmental Management (DEM) regarding possible effects on migratory waterfowl. The applicant will follow the winter work hours of 10:00 am to 2:00 pm as suggested by DEM.

If approved, the total area of this lease would be 6.5 acres. The additional area would bring the aquaculture area for Ninigret Pond up to 3.9%, well within the 5% limit defined in the RI Coastal Resources Management Program (RICRMP) § 1.3.1(K)(4)(f).

Name: Brian Pinsky401 Oyster Company, LLC.
CRMC File No.: *2018-05-159*
Staff Report

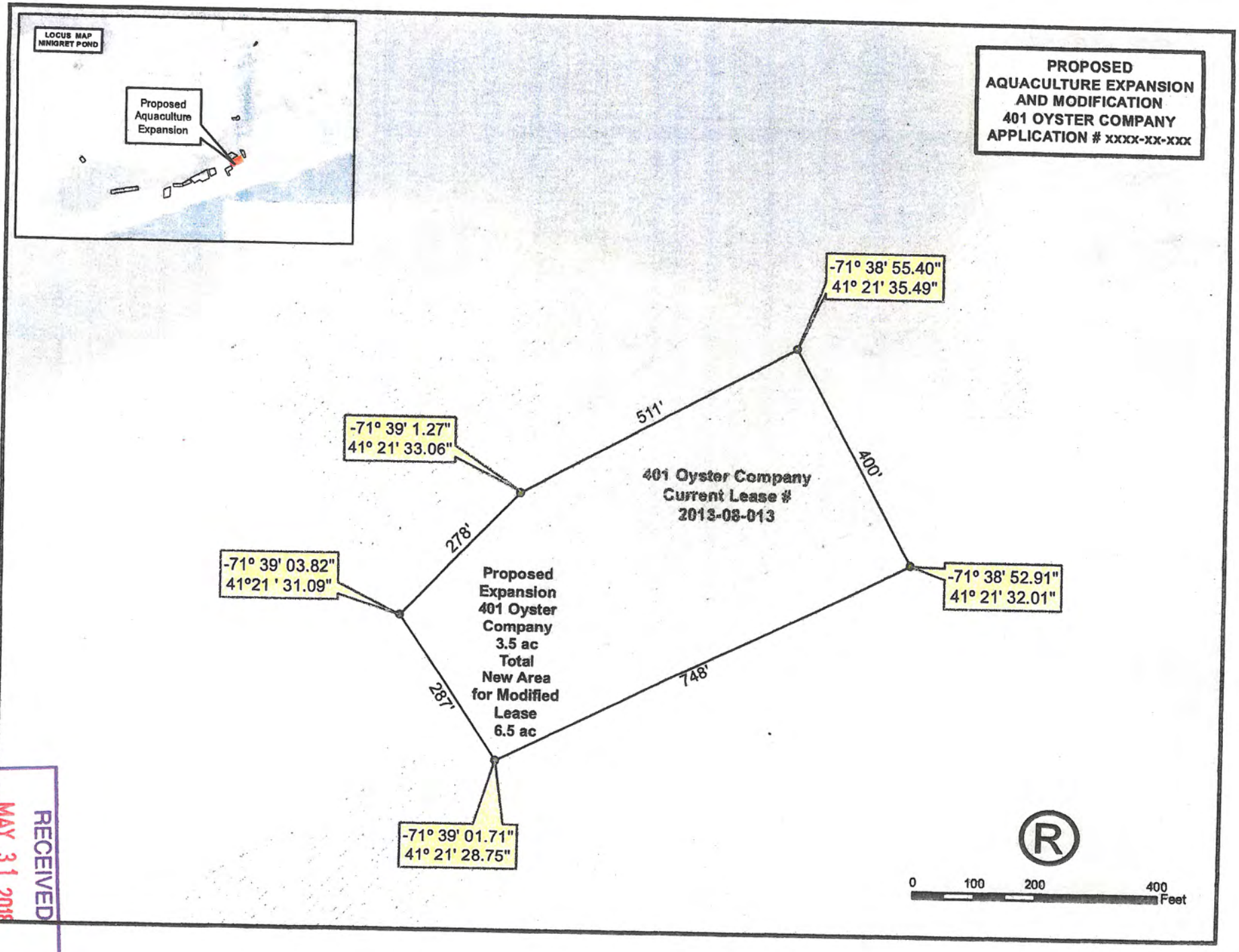
This application has received no objections. Aquaculture applications in Ninigret Pond that are expansions for existing operations do not appear to receive objections. Applications from new people wanting to conduct aquaculture anywhere in Charlestown do appear to receive objections.

CRMC has received the following correspondence:

- RIDEM Office of Water Resources-no water quality certificate needed June 18, 2018
- RI Historical Preservation and Heritage Commission-no effect on cultural resources June 24, 2018
- RI Marine Fisheries Council-no effect on competing fisheries in the area April 24, 2019
- RIDEM Division of Marine Fisheries-effect on marine resources not significant April 30, 2019

The applicant has met the requirements of the RICRMP. The existing site is already successful for growing oysters and is fully utilized. Staff recommends approval of this application.

David Beutel Aquaculture Coordinator



P4

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State of Rhode Island and Providence Plantations
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-2069

APPLICATION FOR STATE ASSENT

To perform work regulated by the provisions of Chapter 279 of the Public Laws of 1971 Amended.

Applicant's Name: Brian Pinsky, 401 Oyster Company LLC	File No (CRMC use only): 2018-05-159
Mailing Address: PO Box 1694	Res. Tel. # 413 250 2861
City/Town: Charlestown State: RI Zip Code 02813	Bus. Tel. # Same
Waterway: Ninigret Pond Est. Project Cost $ 2000	Fee/Costs: $ 100

Longitude/latitude of **all corners** of Proposed Aquaculture Project Location (preferably in decimal degrees):

-71°38'55.4"	-71°38'52.91"	-71°39'01.71"	71°39'03.82"	-71°39'1.27"
41° 21' 35.49"	41°21'32.01"	41°21'28.75"	41°21'31.09"	41°21'33.06"

Have you or any previous owner filed an application for and/or received an assent for any activity on this site? (If so please provide the file and/or assent numbers).

yes 2013-08-013

Is this application being submitted in response to a coastal violation?

Yes_____ No X

If yes, you must indicate NOV or C&D Number_____

Is this site within a designated historic district? no

Brian Pinsky

Owner's Signature (sign and print)

STORMTOOLS (Http://www.beachsamp.org/resources/stormtools/) is a planning tool to help applicants evaluate the impacts of sea level rise and storm surge on their projects. The Council encourages applicants to use STORMTOOLS to help them understand the risk that may be present at their site and make appropriate adjustments to the project design.

NOTE: The applicant acknowledges by evidence of their signature that they have reviewed the Rhode Island Coastal Resources Management Program, and have, where possible, adhered to the policies and standards of the program. Where variances or special exceptions are requested by the applicant, the applicant will be prepared to meet and present testimony on the criteria and burdens of proof for each of these relief provisions. The applicant also acknowledges by evidence of their signature that to the best of their knowledge the information contained in the application is true and valid. If the information provided to the CRMC for this review is inaccurate or did not reveal all necessary information or data, then the permit granted under this application may be found to be null and void. Applicant requires that as a condition to the granting of this assent, members of the CRMC or its staff shall have access to the applicant's property to make on-site inspections to insure compliance with the assent. This application is made under oath and subject to the penalties of perjury. 01/17

PLEASE REVIEW REVERSE SIDE OF APPLICATION FORM

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STATEMENT OF DISCLOSURE AND APPLICANT AGREEMENT AS TO FEES

The fees which must be submitted to the Coastal Resources Management Council are based upon representations made to the Coastal Resources Management Council by the applicant. If after submission of this fee the Coastal Resources Management Council determines that an error has been made either in the applicant's submission or in determining the fee to be paid, the applicant understands that additional fees may be assessed by the Coastal Resources Management Council. These fees must be paid prior to the issuance of any assent by the Coastal Resources Management Council.

The applicant understands the above conditions and agrees to comply with them.

Signature

5/30/2018
Date

Brian Pinsky PO Box 1694
Print Name and Mailing Address Charlestown, RI 02813

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DEC 05 2018
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Rhode Island Coastal Resources Management Council
Aquaculture Site Evaluation

Assessment Date/Time:

File Number: 2018-05-159 Applicant: Pinsky
Location: Ninigret Water Type: 2

Tidal Stage: low Tidal Flow: ebb
Substrate: hard sand Shoreline:

Sampling Equipment: tongs

Shellfish Sampling: 2 quahogs for 20 samples
0.4 quahogs/m²

Vegetation Observations:
N/A

Marine Invertebrate Species Observed:
spider crab

Fish Species Observed:
N/A

Investigator: Beutel

Witnesses: McCandless

Signatures: David Beutel

Brian Pinsky

401 Oyster Company, LLC

PO Box 1694. Charlestown, RI 02813

Prepared 05/30/2018

Written Description:

The proposed site will be used to culture and harvest the Eastern Oyster. Two growing methods will be employed on the site, open top cage culture and bottom culture. The site will be marked with 12" standard lobster pot buoys on each of the corners, smaller buoys between corners, reflective tape on all markers, and all painted in green to distinguish my lease from others. The gear will be organized in neat rows from east to west. The proposed site is part of the over wash from East Beach and is a sandy substrate.

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Brian Pinsky

401 Oyster Company, LLC

PO Box 1694. Charlestown, RI 02813

Prepared 05/30/2018

Operations Plan

CRMC File # of existing site: 2013-08-013

DEM Aquaculture License: 101

This operations plan is for a commercial aquaculture lease site. The site employs a variety of grow out methods. These include rack and bag, cages, open top trays, and direct bottom plant.

Location: Ninigret Pond, Charlestown. Center of existing site approximately 41 21.550'N, 71 38.965'W.

Species Cultured: Eastern Oyster. All biosecurity protocols for seed are followed.

Gear Description: 2x3 and 3x2 wire bag-cages are used on one portion of the site, PVC pipe racks are used on one portion, and open top trays are used on another.

The site is divided into 6 areas. Two bag-cage areas, a PVC pipe rack area, a bottom culture area, and two open top tray areas. These can all be seen on the site plans.

Site Marking: The site will be marked with large green lobster pot buoys on its corners. These will be marked with the CRMC file # and my last name. Between the corners will be small green markers, either 1 or 2 per side depending on the length. All buoys will be tied to cinder blocks with enough line to always be visible. Also, all buoys will include reflective tape for better visibility.

DEM Harvesting Classification at Site: Approved shell fishing waters

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Practices and Procedures: After being purchased from an approved seed source, oysters begin in mesh bags in either bag-cages or on PVC pipe racks. They are sorted periodically, and once retained on a 1.5" mesh they are moved to open top trays. The open top trays are picked on a regular basis for market oysters. Any market oysters are immediately iced and then sold to the Ocean State Shellfish Cooperative. Oysters that do not reach market size by year two in the trays are then bottom planted in the bottom plan area. The bottom plant area is periodically harvested by hand or bull rake.

As recommended in the CRMC summary of findings from the preliminary determination meeting, work activities on this site will occur between the hours of 10:00am and 2:00pm from November 1 to March 31.

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Brian Pinsky

401 Oyster Company, LLC

PO Box 1694. Charlestown, RI 02813

Prepared 05/30/2018

Section 300.1 Category B Requirements All persons applying for a Category B Assent are required to:

(1) demonstrate the need for the proposed activity or alteration;

The proposed activity is to expand an existing aquaculture lease site in Ninigret Pond. 401 Oyster Company will use the site to allow the business to continue the growth it has seen over the past 3 years. This expansion will in short time aid in the harvest of more oysters, healthiest stocking densities of the oysters on the farm, and the creation of more jobs on the farm.

(2) demonstrate that all applicable local zoning ordinances, building codes, flood hazard standards, and all safety codes, fire codes, and environmental requirements have or will be met; local approvals are required for activities as specifically prescribed for nontidal portions of a project in Sections 300.2, 300.3, 300.6, 300.8, 300.9, 300.11, 300.13, 300.15 and 300.17; for projects on state land, the state building official, for the purposes of this section, is the building official,

The proposed activity will not impact the land at all.

(3) describe the boundaries of the coastal waters and land area that are anticipated to be affected;

The proposed site is located south of the Ninigret Park kayak launch. The proposed site would extend the existing lease west and also south.

(4) demonstrate that the alteration or activity will not result in significant impacts on erosion and/or deposition processes along the shore and in tidal waters.

The activity will not result in impacts on erosion or deposition. All activities on the lease site are extremely low impact.

(5) demonstrate that the alteration or activity will not result in significant impacts on the abundance and diversity of plant and animal life.

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The activity will only result in positive impacts on the abundance and diversity of animal life in the area. The activity will provide habitat for a variety of animal species and will also help to negate the negative effects of fertilized lawns and septic systems on or close to the pond.

(6) demonstrate that the alteration will not unreasonably interfere with, impair, or significantly impact existing public access to, or use of, tidal waters and/or the shore;

The activity will not interfere with public access and use of the area. People will still be able to pass through the area on foot or in a kayak/canoe.

(7) demonstrate that the alteration will not result in significant impacts to water circulation, flushing, turbidity, and sedimentation;

The proposed activity will not significantly impact circulation, flushing, or sedimentation. It will aid in reducing turbidity.

(8) demonstrate that there will be no significant deterioration in the quality of the water in the immediate vicinity as defined by DEM;

The water quality will be improved in the immediate vicinity to the proposed site. Through filtering the water for food the oysters will reduce turbidity, remove nitrogen, and build overall biodiversity in the area.

(9) demonstrate that the alteration or activity will not result in significant impacts to areas of historic and archaeological significance;

The proposed site is not of historical or archaeological significance.

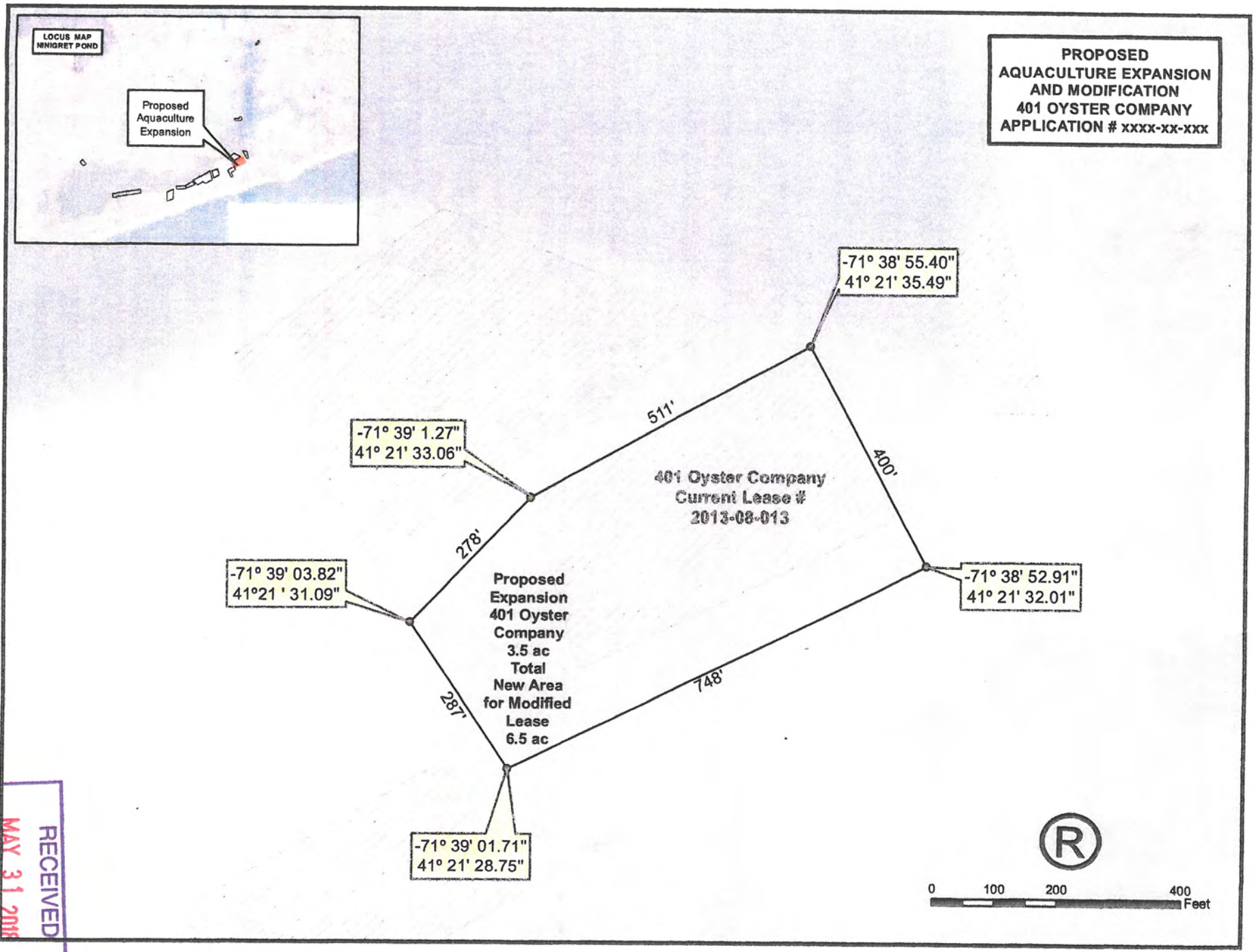
(10) demonstrate that the alteration or activity will not result in significant conflicts with water-dependent uses and activities such as recreational boating, fishing, swimming, navigation, and commerce, and;

The proposed activity will not have any negative conflicts with water dependent uses and activities or navigation.

(11) demonstrate that measures have been taken to minimize any adverse scenic impact (see Section 330).

No gear on the proposed site will be visible above the water. The site will be marked on the corners with 12" green lobster pot buoys.

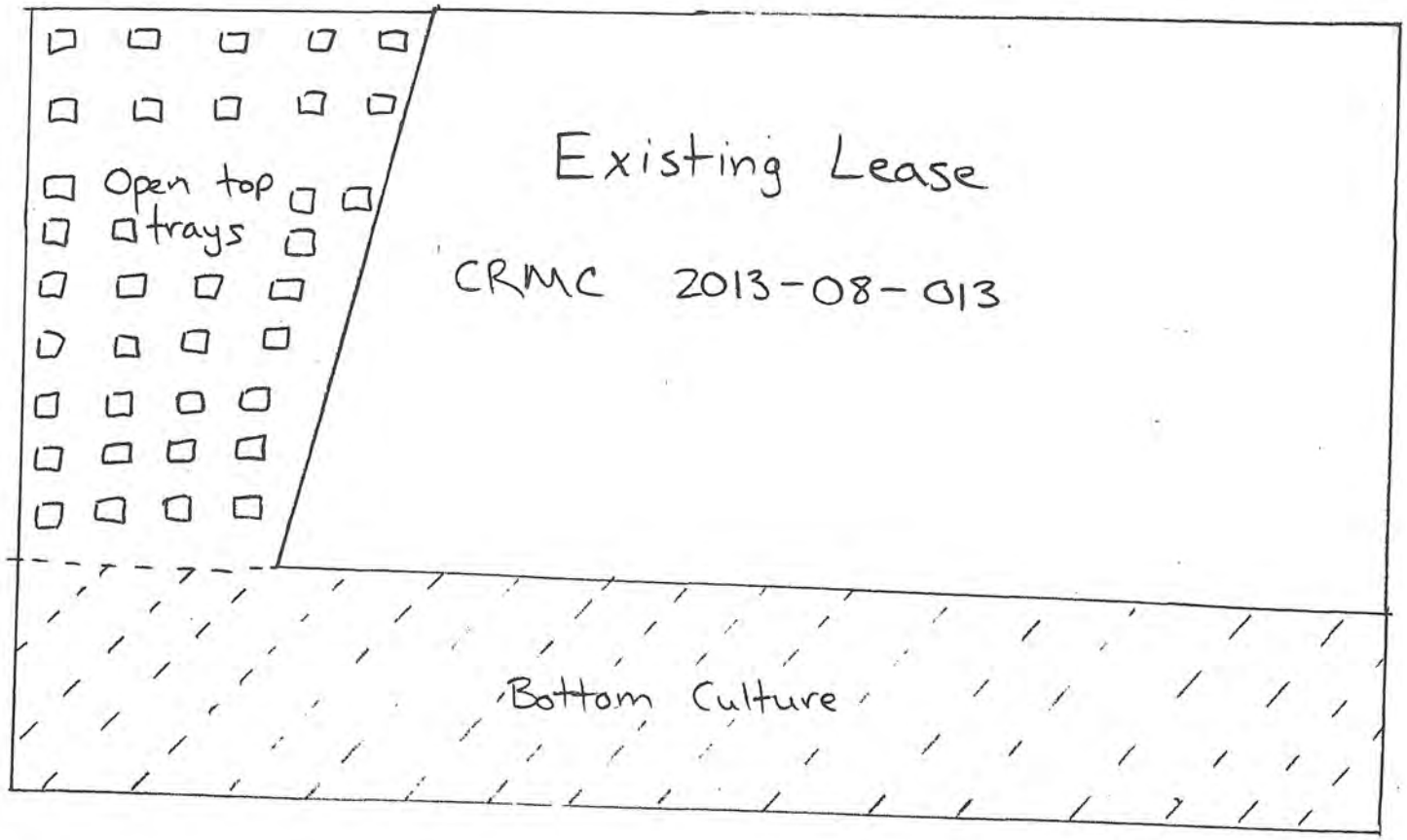
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Brian Pinsky
401 Oyster Company, LLC
Prepared 5/30/2018

PLAN VIEW

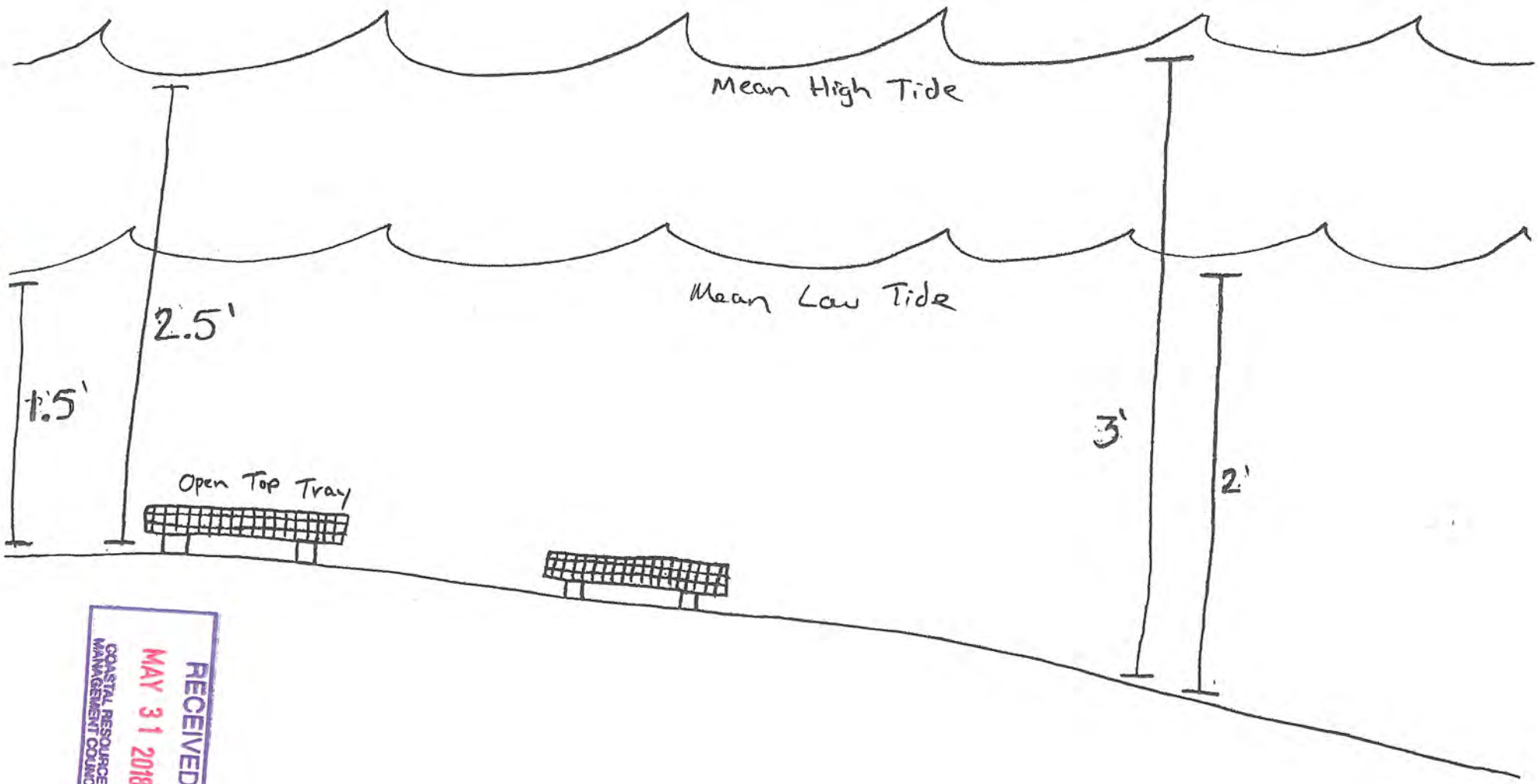


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401 Oyster Company, LLC
Prepared 5/30/2018

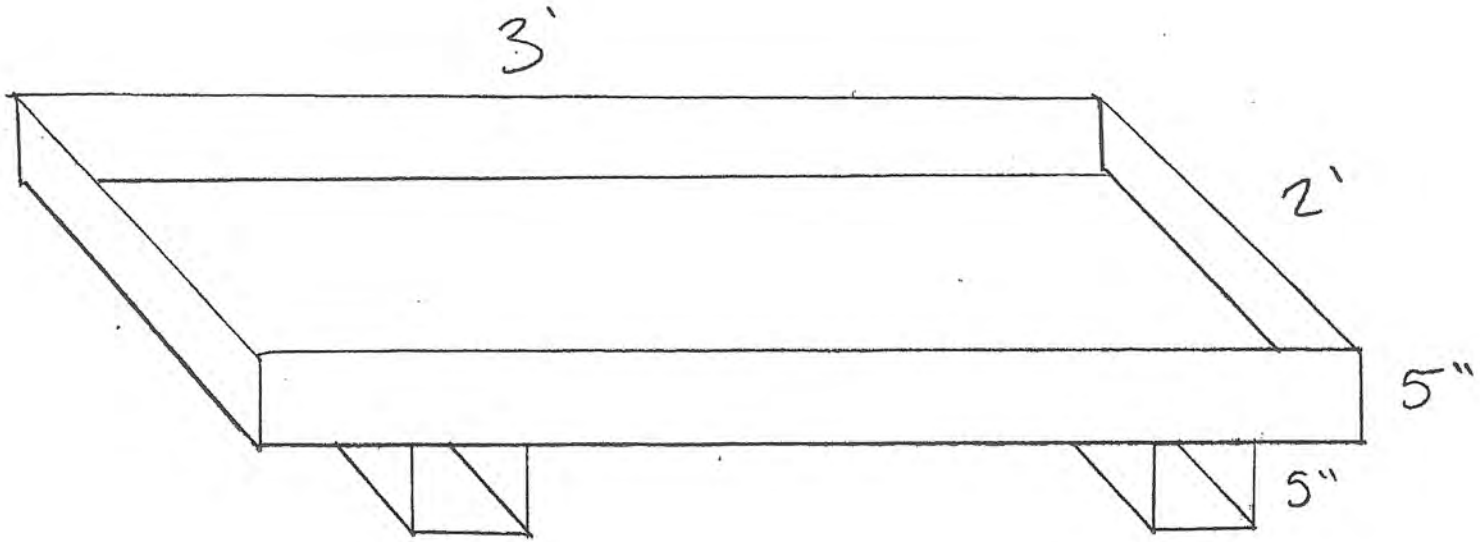
Cross Section View



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Brian Pinsley
401 Oyster Company, LLC
Prepared 5/30/2018

Gear Detail



Open Top Tray
- constructed with 1" wire mesh

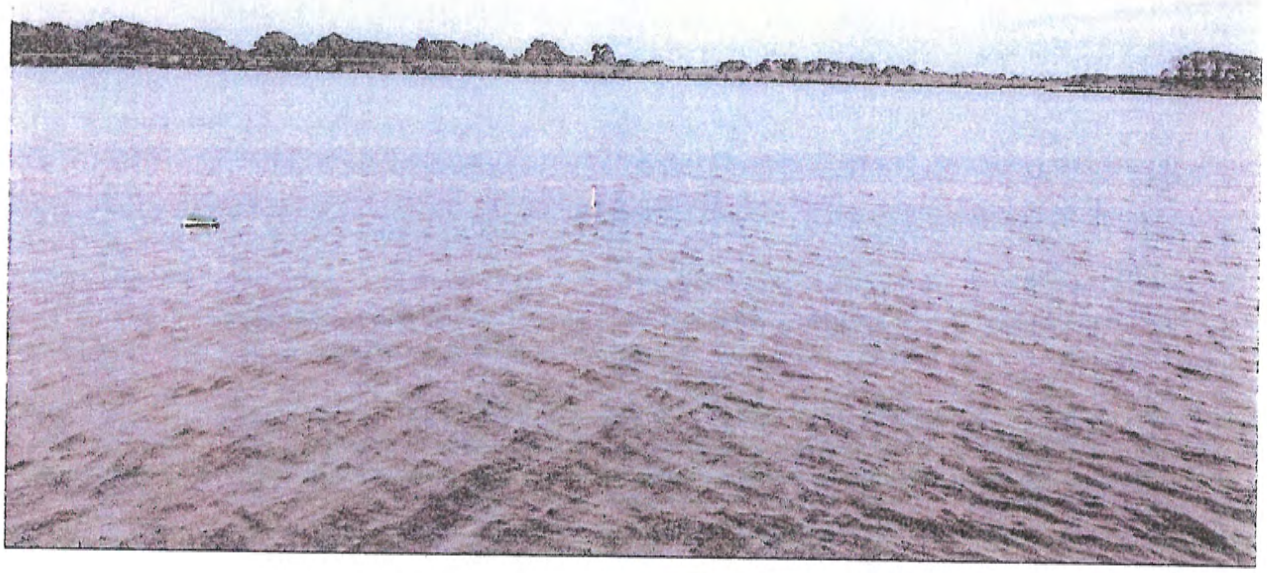
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Looking North



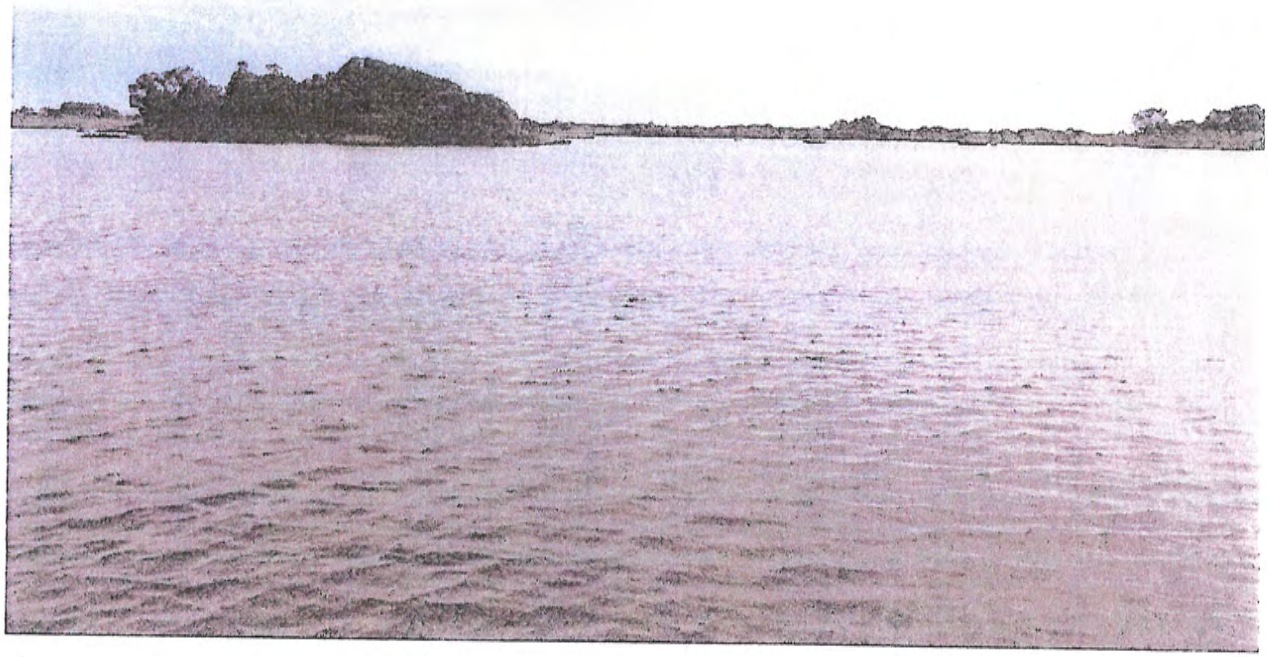
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Looking East



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Looking South



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Looking West



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Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-2069

PUBLIC NOTICE

File Number: 2018-05-159 Date: June 11, 2018

This office has under consideration the application of:

Brian Pinsky
401 Oyster Company, LLC.
P O Box 1694
Charlestown, RI 02813

for a State of Rhode Island Assent to:

Expand an existing oyster farm using open top bottom trays and direct bottom plant. The total area for the existing and expanded farm would be 6.5 acres. Please see the attached map.

Project Location:	Ninigret Pond
City/Town:	Charlestown
Waterway:	Ninigret Pond

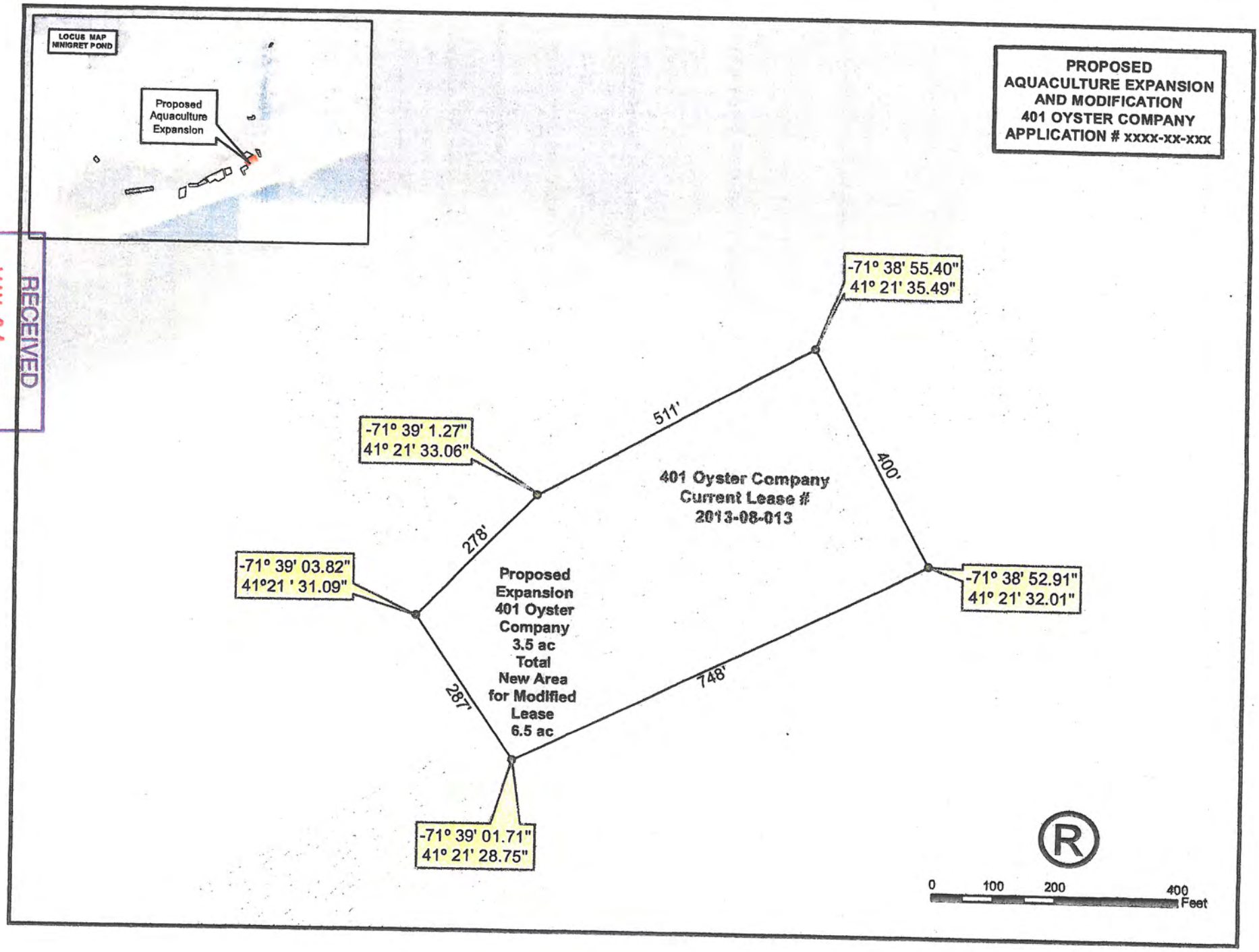
Plans of the proposed work may be seen at the CRMC office in Wakefield.

In accordance with the Administrative Procedures Act (Chapter 42-35 of the Rhode Island General Laws) you may request a hearing on this matter.

You are advised that if you have good reason to enter protests against the proposed work it is your privilege to do so. It is expected that objectors will review the application and plans thoroughly, visit site of proposed work if necessary, to familiarize themselves with the conditions and cite what law or laws, if any, would in their opinion be violated by the work proposed.

If you desire to protest, you must attend the scheduled hearing and give sworn testimony. A notice of the time and place of such hearing will be furnished you as soon as possible after receipt of your request for hearing. If you desire to request a hearing, to receive consideration, it should be in writing (**with your correct mailing address, e-mail address and valid contact number**) and be received at this office on or before July 10, 2018.

/lat



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COASTAL RESOURCES
MANAGEMENT COUNCIL

Rhode Island Marine Fisheries Council

3 Fort Wetherill Road Jamestown, Rhode Island 02835
(401) 423-1920 Fax: (401) 423-1925

Robert Ballou
Chairman

David Monti
Vice Chair

Travis Barao

Andrew Dangelo

Jeff Grant

Jason Jarvis

Christopher Rein

Michael Rice, Ph.D.

Michael Roderick

April 24, 2019

Dave Beutel, Aquaculture Coordinator
Coastal Resources Management Council
4808 Tower Hill Road
Wakefield, RI 02879

Re: CRMC Aquaculture Lease Application # 2018-05-159 – Pinsky – Ninigret Pond

Dear Mr. Beutel:

Pursuant to RIGL §20-10-5, the above-referenced application was brought before the RI Marine Fisheries Council (hereafter "Council") on April 1, 2019 for review and consideration. The Council found that the proposal poses no inconsistency with competing uses engaged in the utilization of marine fisheries in the area.

Sincerely,

Robert Ballou, Chair

cc: RIMFC Members

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

DIVISION OF MARINE FISHERIES
3 Fort Wetherill Road
Jamestown, RI 02835

DIVISION OF FISH AND WILDLIFE
277 Great Neck Road
West Kingston, RI 02892

April 30, 2019

David Beutel
Aquaculture Coordinator
Coastal Resources Management Council
4808 Tower Hill Road
Wakefield, RI 02879

Re: Pinsky modification to assent #2018-05-159

The Rhode Island Department of Environmental Management (Department), through the Divisions of Marine Fisheries (DMF) and Fish and Wildlife (DFW), has received and reviewed the application submitted by Brian Pinsky for a proposed 2.8-acre aquaculture lease expansion (total area of 6.48 acres) in Ninigret Pond for raising Eastern Oysters (*Crassostrea virginica*) using open top trays and bottom plant.

The DMF and DFW believe that the adverse impacts to marine fisheries and wildlife and their habitat from this prospective expansion would be minimal. The Division does not have objections to the proposed site regarding marine fish and shellfish and wildlife at this time. The Division's acceptance of the current proposal is specific to the location and specifications outlined in the application.

Sincerely,

Dean Hoxsie,
Deputy Director for Natural Resources

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RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

June 18, 2018
Dave Beutel Aquaculture Coordinator
Coastal Resources Management Council
Wakefield, RI 02879-1900

Dear Mr. Beutel,

I am writing in reference to the Public Notice request by Brian Pinsky for the expansion application of his existing oyster farm (File number 2018-05-159). The proposed location for this site is in waters approved for shellfish harvesting located in shellfish growing area GA11NG and harvest area 6N in Ninigret Pond in the town of Charlestown .

The classification of shellfish grounds is an ongoing process based on the principles of the National Shellfish Sanitation Program. The Department of Environmental Management assumes no liability by the leaseholder for changes in classifications that may restrict or prohibit access and/or harvesting from said lease area. While this site currently has an approved classification for the harvesting of shellfish, extraordinary circumstances (i.e., large amounts of rainfall, hurricanes or oil spills) could temporarily halt such harvesting and prohibit work on said lease. If approved please include the following language that CRMC and DEM previously agreed to as a stipulation:

> Aquaculturists in areas where emergency shellfish closures have been enacted will be allowed access to their leases for the purposes of preparing for and planting seed and when extreme weather could result in loss or damage of gear to conduct necessary maintenance/retrieval of their equipment. All other activities on the aquaculture lease, including but not limited to the harvest of shellfish, will remain prohibited until the water quality is acceptable to allow for harvest. Aquaculturists seeking permission to access their lease during an emergency closure must seek authorization by contacting Dave Beutel, CRMC's aquaculture coordinator at 783-7587.

In the effort to address increasing water temperatures and the potential threat of a Vibrio Illness outbreaks we are asking all lease holders to monitor water temperature at their lease site and keep records of actual temperatures of bottom, surface and at the depth waters where the shellfish are being grown during the Summer months (June-September). If this project is approved, please include this request in your aquaculture approval document.

Neither a RIPDES permit nor a Water Quality Certificate is required for the proposed facility. Please call me at 222-4700, Ext. 7241 if you have any questions.

Sincerely,

Lucinda M. Hannus

Lucinda M. Hannus, Principal Environmental Scientist
RI DEM
Office of Water Resources – Shellfish Program

cc Angelo Liberti
Conor McManus
Dennis Erkan
Julia Livermore

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
HISTORICAL PRESERVATION & HERITAGE COMMISSION
Old State House • 150 Benefit Street • Providence, R.I. 02903-1209
TEL (401) 222-2678 FAX (401) 222-2968
TTY / Relay 711 Website www.preservation.ri.gov

Jennifer R. Cervenka, Chair
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road
Wakefield, Rhode Island 02879

CRMC File Number: 2018-05-159

Applicant: B. Pinky

Town: Charlestown

Response Date: 6/22/18

Dear Ms. Cervenka:

The Rhode Island Historical Preservation and Heritage Commission (RIHPHC) staff has reviewed the above-referenced project. It is our conclusion that this project will have no effect on any significant cultural resources (those listed on or eligible for listing on the National Register of Historic Places).

These comments are provided in accordance with Section 220 of the Coastal Resources Management Council. If you have any questions, please contact Glenn Modica, Project Review Coordinator, or Charlotte Taylor, archaeologist, at this office.

Very truly yours,

Jeffrey Emidy
Acting Executive Director, RIHPHC

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JUN 26 2018
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PUBLIC HEARING ON PROPOSED RULEMAKING:

RHODE ISLAND GOVERNMENT REGISTER
PUBLIC NOTICE OF PROPOSED RULEMAKING

COASTAL RESOURCES MANAGEMENT COUNCIL

Title of Rule: RICRMP: Ocean SAMP - Chapter 11 - Policies of the Ocean SAMP (650-RICR-20-05-11)

Rule Identifier: 650-RICR-20-05-11

Rulemaking Action: Proposed Amendment

Important Dates:
Date of Public Notice: 06/12/2019
Hearing Date: 06/25/2019
End of Public Comment: 07/12/2019

Authority for this Rulemaking:
R.I. Gen. Laws § 46-23 et seq.

Summary of Rulemaking Action:
The CRMC proposes to amend the policies and standards of Ocean Special Area Management Plan (Ocean SAMP) Chapter 11 to improve the predictability of state permitting and federal consistency review processes for offshore renewable energy projects. The proposed amendments apply to any renewable energy and offshore development activity located within state waters or federal waters within CRMC geographic location description (GLD) boundaries that are subject to federal consistency review.

Summary of proposed amendments to 650-RICR-20-05-11

1. Amend § 11.2(A) to clarify the purpose of the regulations and better differentiate between state permitting and federal consistency review authority.

2. Amend § 11.3(E) to add representation of seafood processing facilities onto CRMC Fishermen's Advisory Board (FAB) and increase FAB membership to twenty (20) to account for seafood processing representatives.

3. Further clarify 2011 and 2018 geographic location descriptions (GLD) as defined in § 11.3(F).

4. Move deleted text in § 11.3(H)(6) to correct placement in § 11.3(H)(5).

5. Delete anachronistic text and clarify NOAA approval of Ocean SAMP and federal consistency authority in § 11.5.

6. Add new § 11.9(C) using text moved from § 11.10.1(D). Delete § 11.10.1(D).

7. Add new § 11.9(D) for $20,000 administrative fee for projects subject to CRMC federal consistency review only (no state permit required).

8. Amend § 11.9.1(E) to add reference to NOAA-approved GLDs.

9. Add deleted text from § 11.10.1(Q) to § 11.9.3(J).

10. Amend § 11.9.4(C) to include CRMC required (in state waters) wind farm design standards to enhance compatibility with commercial fishing operations.

11. Amend § 11.9.4(H) to increase from 6 to 7 FAB votes for RI interests to account for adding representation from the seafood processing facilities on the FAB as per proposed amendment in § 11.3(E).

12. Delete repetitive text in § 11.9.7(H); same text in § 11.9.4(F).

13. Add new § 11.9.8 for application requirements in state waters using deleted text from § 11.10.5.

14. Add new § 11.9.9 for baseline assessment requirements and standards in state waters including deleted text from § 11.10.9.

15. Add new §§ 11.9.9(E) for baseline assessment standards and (F) for post construction assessment requirements.

16. Amend § 11.10.1(C) to further clarify significant adverse impacts and coastal effects to commercial fisheries, when mitigation may be considered, and federal consistency issues.

17. Amend § 11.10.1(D) to include pre-application meetings with FAB and further clarify formal meeting with FAB to meet federal consistency necessary data and information requirements.

18. Add new § 11.10.1(D)(1) to clarify CZMA federal consistency review process as it relates to BOEM and the filing of a construction and operation plan (COP).

19. Amend § 11.10.1(E) to further clarify CZMA process and mitigation requirements.

20. Delete § 11.10.1(F) as first sentence is repetitive in § 11.10.1(C) and second sentence added to § 11.10.1(C).

21. Amend new § 11.10.1(F) to add shore-side seafood processing facilities as a fisheries user group and further clarify mitigation process and requirements in CZMA federal consistency review process.

22. Amend § 11.10.1(I) to clarify CZMA federal consistency review process as it relates to BOEM and the filing of a construction and operation plan (COP).

23. Add new § 11.10.1(O) for construction noise abatement requirements and standards to minimize adverse impacts to fishery resources.

24. Add new § 11.10.1(P) for cable burial requirements and standards to avoid significant adverse impacts to commercial fishing activities.

25. Amend § 11.10.5(A) to clarify when necessary data and information may be filed for CRMC federal consistency review.

26. Amend § 11.10.5(C) to remove anachronistic text and clarify the timing of a COP and SAP filing in the BOEM process.

27. Amend § 11.10.5(C)(1) to clarify SAP process for projects in state waters.

28. Amend § 11.10.5(C)(1)(g) to clarify that when NDI is missing the CRMC must follow federal regulations for a delay in CZMA federal consistency review process.

29. Delete §§ 11.10.5(C)(1)(h) and (j) through (q) and move to § 11.9.8(A).

30. Delete §§ 11.10.5(C)(2)(h) through (o) and move to § 11.9.8(B).

31. Delete § 11.10.5(C)(2)(o)(1) and move to § 11.9.8(B)(8).

32. Delete § 11.10.6 and move to § 11.9.8(C).

33. Delete § 11.10.7 and move to § 11.9.8(D).

34. Delete § 11.10.8 and move to § 11.9.8(E).

35. Amend § 11.10.9(A) to clarify baseline assessment requirements for projects subject to CZMA federal consistency review and move deleted text to new § 11.9.9.

36. Other minor edits and corrections as noted in track changes within the document.

Additional Information and Comments:

All interested parties are invited to request additional information or submit written or oral comments concerning the proposed amendment until July 12, 2019 by contacting the appropriate party at the address listed below:

James Boyd
Coastal Resources Management Council
Stedman Government Center
4808 Tower Hill Road
Wakefiled, RI 02879
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Public Hearing:
A public hearing, in accordance with R.I. Gen. Laws § 42-35-2.8, to consider the proposed amendment shall be held on June 25, 2019 at 6:00 pm at Administration Building, Conference Room A, One Capitol Hill, Providnece, RI 02908 at which time and place all persons interested therein will be heard. The seating capacity of the room will be enforced and therefore the number of persons participating in the hearing may be limited at any given time by the hearing officer, in order to comply with safety and fire codes.

The place of the public hearing is accessible to individuals who are handicapped. If communication assistance (readers/interpreters/captioners) is needed, or any other accommodation to ensure equal participation, please call 401-783-3370 or RI Relay 711 at least three (3) business days prior to the meeting so arrangements can be made to provide such assistance at no cost to the person requesting.

Regulatory Analysis Summary and Supporting Documentation:
The CRMC has undertaken an analysis of the benefits and costs of a reasonable range of regulatory alternatives associated with the proposed rulemaking. The regulations contained with the CRMC's Ocean SAMP and its marine spatial planning protects Rhode Island coastal uses and resources within state and federal offshore waters while promoting renewable energy growth. In consideration of the alternatives the CRMC has determined that there is no alternative approach among the alternatives considered that would be as effective and less burdensome to affected private persons as another regulation. In addition, there are no other state regulations which are overlapped or duplicated by the proposed regulation.

The CRMC has determined that the benefits of the proposed rule justify the costs of the proposed rule, and that the proposed rule will achieve the objectives of the authorizing statute in a more cost-effective manner and with greater net benefits than other regulatory alternatives.

For full regulatory analysis or supporting documentation see agency contact person above.

State of Rhode Island and Providence Plantations
Coastal Resources Management Council
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June 12, 2019

NOTICE FOR PUBLIC WORKSHOP

CRMC Ocean SAMP – Chapter 11: 650-RICR-20-05-11

The Coastal Resources Management Council (CRMC) is proposing amendments to RICRMP: Ocean SAMP - Chapter 11 - Policies of the Ocean SAMP (650-RICR-20-05-11) and has issued a **public notice** dated June 12, 2019 and scheduled a **public hearing** for June 25, 2019. The public notice and a copy of the proposed amendments to Ocean SAMP Chapter 11 is accessible online at the Secretary of State's web site here: https://rules.sos.ri.gov/promulgations/part/650-20-05-11.

The CRMC has scheduled a **Public Workshop** for **Monday, June 17, 2019 at 5:00 p.m.** in Corless Auditorium, URI Bay Campus, South Ferry Road, Narragansett, RI. The CRMC is interested in obtaining the views of interested parties on the proposed 650-RICR-20-05-11 amendments in advance of the June 25, 2019 public hearing noted above. CRMC staff will be presenting the proposed amendments for discussion with meeting attendees.

/lat

650-RICR-20-05-11

TITLE 650 – COASTAL RESOURCES MANAGEMENT COUNCIL

CHAPTER 20 – COASTAL MANAGEMENT PROGRAM

SUBCHAPTER 05 – OCEAN SPECIAL AREA MANAGEMENT PLAN

PART 11 – Policies of the Ocean SAMP

11.1 Authority

A. Pursuant to the federal Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C. §§ 1451 through 1466) and R.I. Gen. Laws Chapter 46-23 the Coastal Resources Management Council (CRMC) is authorized to develop and implement special area management plans.

B. The regulations herein constitute a RICR regulatory component of the Ocean Special Area Management Plan (SAMP) Chapter 11 - The Policies of the Ocean SAMP, and must be read in conjunction with the other RICR regulatory components and chapters of the Ocean SAMP for the full context and understanding of the CRMC's findings and policies that form the basis and purpose of these regulations. The other RICR regulatory components and chapters of the Ocean SAMP should be employed in interpreting the regulations herein and R.I. Gen. Laws § 46-23-1, *et seq*.

11.2 Purpose

A. The purpose of these rules is to carry out the responsibilities of the Coastal Resources Management Council in establishing the Ocean Special Area Management Plan (Ocean SAMP) for the state's offshore waters (~~beyond~~ within the 3 nautical mile state water boundary). The CRMC will apply its SAMP responsibilities to projects that are proposed in federal waters (beyond the 3 nautical mile state water boundary) through the CZMA federal consistency provisions pursuant to 16 U.S.C. § 1456 and 15 C.F.R. Part 930. This includes developing ~~within~~ the geographic location descriptions (GLDs) in federal waters. The SAMP, GLDs, and CZMA federal consistency authority ~~and to~~ provide the ~~regulatory~~ framework for promoting a balanced and comprehensive ecosystem-based management approach to the development and protection of Rhode Island's ocean-based resources. In addition, these rules establish the regulatory standards and enforceable policies ~~within the GLD~~ for purposes of the federal ~~Coastal Zone Management Act~~CZMA federal consistency provisions pursuant to 16 U.S.C. § 1456 and 15 C.F.R. Part 930.

11.3 Definitions

A. "Certified verification agent" or "CVA" means 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.

B. "Construction and operations plan" or "COP" means a plan that describes the applicant's construction, operations, and conceptual decommissioning plans for a proposed facility, including the applicant's project easement area.

C. "Ecosystem based management" or "~~EMB~~EBM" means an integrated approach to management that considers the entire ecosystem, including humans. The goal of EBM is to maintain an ecosystem in a healthy, productive and resilient condition that provides the services humans want and need.

D. "Enforceable policy" means State policies which are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or administrative decisions, by which a State exerts control over private and public land and water uses and natural resources in the coastal zone.

E. "Fishermen's Advisory Board" or "FAB" means an advisory body to the Council that shall be comprised of up to ~~eighteen~~ twenty (~~18~~20) total members, to include the following:

1. Up to two (2) members representing each of the following six Rhode Island fisheries: bottom trawling; scallop dredging; gillnetting; lobstering; party and charter boat fishing; and recreational angling; ~~and~~

2. Up to two (2) members who are managers representing Rhode Island seafood processing facilities; and

~~2~~3. Up to six (6) members, who are Massachusetts fishermen who fish in the Ocean SAMP area to include four commercial fishermen and two recreational fishermen.

F. "Geographic location description" or "GLD" means a geographic area in federal waters~~, consistent with the Ocean SAMP study area,~~ where certain federal ~~agency activities,~~ license~~s~~, and permit activities pursuant to 15 C.F.R. Part 930 Subparts D and E will be subject to Rhode Island review under the ~~Coastal Zone Management Act (~~CZMA~~)~~ federal consistency provisions. Rhode Island has two federally approved GLDs (2011 and 2018).

G. "Habitat Advisory Board" or "HAB" means an advisory body to the Council that shall be comprised of nine members, five representing marine research institutions with experience in the Ocean SAMP study area and surrounding waters, and four representing environmental non-governmental organizations that maintain a focus on Rhode Island.

H. "Large-scale offshore developments" means:

1. offshore wind facilities (5 or more turbines within 2 km of each other, or 18 MW power generation);

2. wave generation devices (2 or more devices, or 18 MW power generation);

3. instream tidal or ocean current devices (2 or more devices, or 18 MW power generation);

4. offshore LNG platforms (1 or more);

5. 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; and

6. outer continental shelf (OCS) exploration, development, and production plans~~, except for projects of a public nature whose primary purpose is habitat enhancement~~.

I. "Marine spatial planning" or "MSP" means the process by which ecosystem-based management is organized to produce desired outcomes in marine environments.

J. "Site assessment plan" or "SAP" means a pre-application plan that describes the activities and studies the applicant plans to perform for the characterization of the project site.

11.4 Introduction ~~(formerly § 1100)~~

A. 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 [R.I. Gen. 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.*).

B. The Ocean Special Area Management Plan ~~(Ocean SAMP)~~ is the regulatory, planning and adaptive management tool that CRMC ~~is applying~~applies to uphold these regulatory responsibilities in the Ocean SAMP area. 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, 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.

C. 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, together with energy conservation, the harm and costs associated with these potential impacts can be reduced and may be avoided.

D. 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. § 11.9 of this Part presents all Ocean SAMP general policies, while § 11.10 of this Part 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. The general policies in § 11.9 of this Part are policies the CRMC applies through its various management and regulatory functions, but the general policies are not "enforceable policies" for purposes of the federal ~~Coastal Zone Management Act (~~CZMA~~)~~ federal consistency provision at 16 U.S.C. § 1456 and 15 C.F.R. Part 930. For CZMA federal consistency purposes the general policies are advisory only and cannot be used as the basis for a CRMC CZMA federal consistency concurrence or objection. However, for state permitting purposes, offshore developments proposed to be sited in state waters are bound by both the general policies in § 11.9 of this Part and regulatory standards in § 11.10 of this Part. The regulatory standards in § 11.10 of this Part are enforceable policies for purposes of the federal CZMA federal consistency provision pursuant to16 U.S.C. § 1456 and 15 C.F.R. Part 930. For CZMA federal consistency purposes the regulatory standards, in addition to other applicable federally approved RICRMP enforceable policies, shall be used as the basis for a CRMC CZMA federal consistency concurrence or objection.

E. States, generally, do not have jurisdiction in federal waters and the federal ~~Coastal Zone Management Act (~~CZMA~~)~~ does not confer such jurisdiction. Therefore, in order to meet CZMA requirements, state plans, enforceable policies, and Areas of Particular Concern (APCs) must only apply to areas of state jurisdiction. The Ocean SAMP is a planning and regulatory component for the State of Rhode Island and ~~will be~~is incorporated into the NOAA-approved Rhode Island Coastal Resource Management Program ~~(RICRMP)~~. As such, in order to meet the CZMA's definition of "enforceable policy" and NOAA's corresponding regulations, the Ocean SAMP only applies to state waters (out to 3 nautical miles). The enforceable policies, APCs and Areas Designated for Preservation (ADPs) in ~~a~~ the NOAA-approved Ocean SAMP ~~will~~ apply to activities in federal waters through the CZMA federal consistency provision.

F. The Ocean SAMP includes maps of federal waters and identifies uses, resources and areas of federal waters. The data and maps pertaining to federal waters are not enforceable components of the Ocean SAMP. However, the data and maps contain a substantial amount of environmental, ecological, geologic, and human use information for state and federal waters. This information will be useful for environmental reviews (including reviews under the National Environmental Policy Act and coastal effects analyses under the CZMA), engineering issues (e.g., is the seafloor material compatible for a particular piece of equipment), and other planning and regulatory decisions. The CRMC may use the data and maps for federal waters to assess coastal effects, but Rhode Island's CZMA federal consistency concurrence or objection must be based on enforceable policies contained in the NOAA-approved RICRMP.

11.5 Building on CRMC's Existing Program ~~(formerly § 1110)~~

A. Ocean SAMP policies and recommendations build upon and refine the CRMC's existing ~~Program~~ program and regulations presented in the Rhode Island Coastal Resources Management ~~Plan~~ Program ~~(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, §§ 00-1.3.1(C)~~,~~ and 1.3.1(H) ~~and 1.3.8~~ of this Chapter are hereby superseded for this Ocean SAMP region. Aquaculture projects of any size shall follow § 00-1.3.1(K) of this Chapter. Dredging and dredge disposal activities remain governed by § 00-1.3.1(I) of this Chapter. ~~An approved Ocean SAMP by NOAA's Office for Coastal Management will confer federal consistency authority to the Council for a boundary extension in federal waters within the Ocean SAMP area. However, it should be noted that the Ocean SAMP boundary does not limit the zone for federal consistency, and the CRMC may still exercise its federal consistency authority over future activities which may be proposed in federal waters beyond the Ocean SAMP area.~~

B. All federal consistency ~~determinations~~ certifications for large-scale offshore developments, as defined in § 11.3(H) of this Part, will be concurred with or

objected to by the full Council after receiving a timely recommendation from the CRMC Executive Director.

C. 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 (§ 00-1.2.1(~~D~~E) of this Chapter).

D. 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.

E. As with the six existing Rhode Island SAMPs and CRMC's water type designations, CRMC implements the marine spatial planning (MSP) process to achieve ecosystem-based management (EBM) for the Ocean SAMP region. For the purposes of the Ocean SAMP, the CRMC adopts the definition of EBM as defined in § 11.3 of this Part. The goal of EBM is to maintain an ecosystem in a healthy, productive and resilient condition that provides the services 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.

11.6 Ocean SAMP Goals and Principles ~~(formerly § 1120)~~

A. The following goals and principles guided the process to both develop the Ocean SAMP as well as establish its policies and regulations ~~was 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.

B. The Ocean SAMP Goals are to:

1. Foster a properly functioning ecosystem that is both ecologically sound and economically beneficial;

2. Promote and enhance existing uses;

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

4. Build a framework for coordinated decision-making between state and federal management agencies.

C. The Ocean SAMP Principles are to:

1. Develop the Ocean SAMP document in a transparent manner;

2. Involve all stakeholders;

3. Honor existing activities;

4. Base all decisions on the best available science; and

5. Establish monitoring and evaluation that supports adaptive management.

11.7 Applying Adaptive Management to Implement the Ocean SAMP ~~(formerly §1130)~~

A. 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~~previous 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.

B. 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. To develop the science research agenda, the Council will put together an advisory group including scientists, partner federal and state agencies, environmental organizations, and users of the Ocean SAMP area. This group will help the Council to identify data gaps, short- and long-term research priorities, potential partners, and potential funding sources.

C. 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.

D. 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.

E. 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.

F. 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 Ocean 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.

11.8 Decision-making ~~(formerly § 1140)~~

A. In accordance with and pursuant to the provisions of R.I. Gen. 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:

1. The Council shall work to the maximum extent practicable in coordination with the Ocean SAMP joint agency working group as defined in § 11.9.7(~~J~~I) of this Part, 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 § 11.9.7(~~J~~I) of this Part.

2. 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 § 11.3(E) of this Part. 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 (siting of individual wind turbines within a wind farm to identify the best site for each individual structures); access limitations; and measures to mitigate the potential impacts of such projects. For more information on the FAB, see § 11.9.4(H) of this Part.

3. 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 §§ 11.9.4 through 11.9.7 of this Part for further information.

4. 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 § 11.9.2(C) of this Part.

5. 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 Ocean SAMP area to then determine appropriate sites suitable for preservation and/or future development. For more information on these tools, see Chapter 2, Ecology of the SAMP Region, and Part 8 of this Subchapter (Renewable Energy and Other Offshore Development).

11.9 General Policies ~~(formerly § 1150)~~

A. 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 CZMA to achieve the Ocean SAMP goals and principles described in the Introduction Chapter. The "General Policies" in § 11.9 of this Part are policies the CRMC applies through its various management and regulatory functions, but the General Policies are not "enforceable policies" for purposes of the federal CZMA federal consistency provision (16 U.S.C. § 1456 and 15 C.F.R. Part 930). For CZMA federal consistency purposes the General Policies are advisory only and cannot be used as the basis for a CRMC CZMA federal consistency concurrence or objection. However, for state permitting purposes, offshore developments proposed to be sited in state waters are bound by both the General Policies (§ 11.9 of this Part) and Regulatory Standards (§ 11.10 of this Part) listed herein, The Policies of the Ocean SAMP. The "Regulatory Standards" in § 11.10 of this Part are enforceable policies for purposes of the federal CZMA federal consistency provision (16 U.S.C. § 1456 and 15 C.F.R. Part 930). For CZMA federal consistency purposes

the CRMC shall use the Regulatory Standards, in addition to other applicable federally approved RICRMP enforceable policies, ~~shall be used~~ as the basis for a CRMC CZMA federal consistency concurrence or objection. These general and regulatory ~~P~~policies ~~presented~~ for cultural and historic resources, fisheries, recreation and tourism, and marine transportation promote and enhance existing uses and honor existing activities (§ 11.6(C)(3) of this Part). 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 (§ 11.6(C)(4) of this Part). 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 (§ 11.6(B)(3) of this Part). 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 (§ 11.6(B)(4) of this Part), developing in a transparent manner (§ 11.6(C)(1) of this Part), and promoting adaptive management (§ 11.6(C)(5) of this Part). All of the Ocean SAMP policies are ~~all~~ important to ~~ensuring~~ ensure 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.

B. § 11.9 of this Part presents all Ocean SAMP general policies, while § 11.10 of this Part 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 these two sections.~~

C. Any assent holder of a CRMC-approved offshore development shall:

1. 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.

2. Submit requests, applications, plans, notices, modifications, and supplemental information to the Council as required;

3. Follow up, in writing, any oral request or notification made by the Council, within three (3) business days;

4. 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 § 11.10.5 of this Part;

5. Make all applicable payments on time;

6. Conduct all activities authorized by the permit in a manner consistent with the provisions of this document, the Rhode Island Coastal Resources Management Program (Subchapter 00 Part 1 of this Chapter), and all relevant federal and state statutes, regulations and policies;

7. 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

8. Respond to requests from the Council in a timeframe specified by the Council. **(Note: this section moved in its entirety from § 11.10.1(D)**

D. Administrative processing fee: For large-scale offshore developments, underwater cables, and other projects as determined by the Council, the CRMC may asses the applicant with an administrative processing fee to help defray costs to conduct the CZMA federal consistency review, including the mitigation negotiations. This fee shall be $20,000. The Council cannot issue a conditional concurrence or an objection for failure to pay the fee.

11.9.1 Ecology ~~(formerly § 1150.1)~~

A. 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. Proposed activities shall be designed to avoid impacts and, where unavoidable impacts may occur those impacts shall be minimized and mitigated.

B. As the Ocean SAMP is an extension and refinement of CRMC's policies for Type 4 multipurpose waters as described in § 00-1.2.1(~~D~~E) of this Chapter, CRMC will encourage a balance among the diverse activities, both traditional and future water dependent uses, while preserving and restoring the ecological systems.

C. 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 proposed activities shall be designed to avoid impacts to these sensitive habitats, and, where unavoidable impacts may occur, those impacts shall be 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.

D. Because the Ocean SAMP is located at the convergence of two eco-regions and therefore more susceptible to change, the Council will work with partner federal

and state agencies, research institutions, and environmental organizations to carefully manage this area, especially as it relates to the projected effects of global climate change on this rich ecosystem.

E. The Council shall appoint a standing Habitat Advisory Board (HAB) which shall provide advice to the Council on the ecological function, restoration and protection of the marine resources and habitats in the Ocean SAMP area and on the siting, construction, and operation of off shore development in the Ocean SAMP study area and in NOAA-approved geographic location descriptions (GLDs). The HAB shall also provide advice on scientific research and its application to the Ocean SAMP. The HAB is an advisory body to the Council and does not supplant any authority of any federal or state agency responsible for the conservation and restoration of marine habitats. The HAB is defined in § 11.3(G) of this Part. HAB members shall serve four-year terms and shall serve no more than two consecutive terms. The Council shall provide to the HAB a semi-annual status report on Ocean SAMP area marine resources and habitat-related issues and adaptive management of projects in the Ocean SAMP planning area, including but not limited to: protection and restoration of marine resources and habitats, cumulative impacts, climate change, environmental review criteria, siting and performance standards, and marine resources and habitat mitigation and monitoring. The Council shall notify the HAB in writing concerning any project in the Ocean SAMP area. The HAB shall meet not less than semi-annually with the Fishermen's Advisory Board and on an as-needed basis to provide the Council with advice on protection and restoration of marine resources and habitats in the Ocean SAMP areas and potential adverse impacts on marine resources and habitat posed by proposed projects reviewed by the Council. The HAB may also meet regularly to discuss issues related to the latest science of ecosystem-based management in the marine environment and new information relevant to the management of the Ocean SAMP planning area. In addition the HAB may aid the Council and its staff in developing and implementing a research agenda. As new information becomes available and the scientific understanding of the Ocean SAMP planning area evolves, the HAB may identify new areas with unique or fragile physical features, important natural habitats, or areas of high natural productivity for designation by the Council as Areas of Particular Concern or Areas Designated for Preservation.

11.9.2 Global Climate Change ~~(formerly § 1150.2)~~

A. 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 encourages energy conservation, mitigation of greenhouse gasses and adaptation approaches for management. 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.

B. 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~~ storm intensity 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.

C. 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. The findings of this Science Advisory Panel will be forwarded on to the legislatively-appointed Rhode Island Climate Change Commission for their consideration.

D. 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.

E. 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.

F. 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 the 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 acidity in the sea.

G. 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.

11.9.3 Cultural and Historic Resources ~~(formerly § 1150.3)~~

A. 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.

B. 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.

C. 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. For other tribes outside of Rhode Island that might be affected by a federal action it is the responsibility of the applicable federal agency to consult with affected tribes.

D. Project reviews will follow the policies outlined in §§ 00-1.2.3 (Areas of Historic and Archaeological Significance) and 00-1.3.5 of this Chapter (Guidelines for the Protection and Enhancement of the Scenic Value of the Coastal Region) of the State of Rhode Island Coastal Resources Management Program, as amended (Subchapter 00 Part 1 of this Chapter). The standards for the identification of cultural resources and the assessment of potential effects on cultural resources will be in accordance with the National Historic Preservation Act Section 106 regulations, 36 C.F.R. Part 800, Protection of Historic Properties.

E. Historic shipwrecks, archeological or historical sites located within Rhode Island's coastal zone are Areas of Particular Concern (APCs) for the Rhode Island coastal management program. Direct and indirect impacts to these resources must be avoided to the greatest extent possible. Other areas, not noted as APCs, may also have significant archeological sites that could be identified through the permit process. For example, the area at the south end of Block Island waters

within the 30 foot depth contour is known to have significant archeological resources. As a result, projects conducted in the Ocean SAMP area may have impacts to Rhode Island's underwater archaeological and historic resources.

F. Archaeological surveys shall be required as part of the permitting process for projects which may pose a threat to Rhode Island's archaeological and historic resources. During the filing phase for state assent, projects needing archaeological surveys will be identified through the joint review process. The survey requirements will be coordinated with the SHPO and, if tribal resources are involved, with the Narragansett THPO.

G. Areas of Particular Concern may require a buffer or setback distance to ensure that development projects avoid or minimize impacts to known or potential historic or archaeological sites. The buffer or setback distance during the permitting process will be determined by the SHPO and if tribal resources are involved, the Narragansett THPO.

H. In addition to general Area of Particular Concern buffer/setback distances around shipwrecks or other submerged cultural resources, the Council reserves the right, based upon recommendations from RIHPHC, to establish protected areas around all submerged cultural resources which meet the criteria for listing on the National Register of Historic Places.

I. Projects conducted in the Ocean SAMP area may have impacts that could potentially affect onshore archaeological, historic, or cultural resources. Archaeological and historical surveys may be required of projects which are reviewed by the joint agency review process. During the filing phase for state assent, projects needing such surveys will be identified and the survey requirement will be coordinated with the SHPO and if tribal resources are involved, with the Narragansett THPO.

J. Guidelines for onshore archaeological assessments in the Ocean SAMP area can be obtained through the RIHPHC in their document, "Performance Standards and Guidelines for Archaeological Projects: Standards for Archaeological Survey" (RIHPHC 2007), or the lead federal agency responsible for reviewing the proposed development. In addition, guidelines for landscape and visual impact assessment in the Ocean SAMP area can be obtained through the lead federal agency responsible for reviewing the proposed development. (Note: this text moved from § 11.10.1(Q))

11.9.4 Commercial and Recreational Fisheries ~~(formerly § 1150.4)~~

A. 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 Ocean SAMP area could potentially displace commercial or recreational fishing activities or have other adverse impacts on commercial and recreational fisheries.

B. 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 R.I. Department of Environmental Management, the R.I. Marine Fisheries Council, the NOAA National Marine Fisheries Service, the New England Fishery Management Council, and the Mid-Atlantic Fishery Management Council. The Council recognizes the jurisdiction of these organizations in fishery management and will work with these entities to protect fisheries resources. The Council will also work in coordination with these entities to protect priority habitat areas.

C. The Council's policy is to protect commercial and recreational fisheries within the Ocean SAMP area, and the 2011 and 2018 GLDs, from the adverse impacts of other uses, while supporting actions to make ongoing fishing practices more sustainable. ~~It should be recognized~~The Council anticipates that over time there will be improved 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~~ using the unique skills and expertise of the fishing community, will be a cornerstone to this goal.

1. Because significant adverse impacts may result from randomly placed turbine foundations with varying separation distances that pose navigation and safety hazards to vessels, especially multiple commercial fishing vessels working simultaneously within the same area, under all conditions, but particularly at night, during fog, and stormy weather, the Council requires the following offshore wind farm design elements to enhance the compatibility of a wind power project with commercial fishing operations and to avoid significant adverse impacts to commercial fishing activities such that commercial fishing vessels can cooperatively conduct fixed and mobile gear operations within a wind power project:

   a. Turbines shall be arranged in a grid pattern based on latitude and longitude with east-west rows;

   b. There shall be a minimum spacing of one (1) nautical mile between all turbines, and all lanes between turbines (east-west and north-south) shall be a minimum of 1 nautical mile wide; and

c. There shall be at least one transit lane for navigation with a minimum spacing of two (2) nautical miles for each wind farm that is consistent with any adjacent wind farm transit lane(s) and any BOEM approved wind energy area transit lane plan.

D. 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:

1. In consultation with the Fishermen's Advisory Board, as defined in § 11.3(E) of this Part, identify and evaluate prime fishing areas on an ongoing basis through an adaptive framework.

2. Review any uses or activities that could disrupt commercial or recreational fisheries activities.

E. 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.

F. Discussions with the U.S. Coast Guard, the U.S. Department of the 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 as soon as is practicable of any federal action that may affect vessel access around and through offshore structures and developments and along cable routes. The Council will continue to monitor changes to navigational

activities around and through offshore developments and along cable routes. Any changes affecting existing navigational activities may be subject to CZMA federal consistency review if the federal agency determines its activity will have reasonably foreseeable effects on the uses or resources of Rhode Island's coastal zone.

G. The Council recognizes that commercial and recreational fishermen from other states, such as the neighboring states of Connecticut, New York, and Massachusetts, often fish in the Ocean SAMP area. The Council also recognizes that many fish species that are harvested in adjacent waters may rely on habitats and prey located within the Ocean SAMP area. Accordingly, the Council will work with neighboring states to ensure that Offshore Development and other uses of the Ocean SAMP area do not result in significant impacts to the fisheries resources or activities of other states.

H. 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, including but not limited to the Marine Fisheries Council and its authorities set forth in R.I. Gen. Laws § 20-3-1 *et seq*. The FAB is defined in § 11.3(E) of this Part. When there are two members representing a fishing interest, only one vote may be cast on behalf of that interest. If the two members representing that fishery cannot agree on their vote then there shall be no vote for that fishery for the item under consideration. In any vote on a matter, there shall be no more than ~~6~~ 7 votes total for RI interests and no more than 3 votes total for MA interests. The FAB members may elect a chair and a vice-chair from amongst its members. In addition the FAB may establish rules governing its members such as a minimum number of meetings each member must attend to maintain standing as a member. FAB members shall serve four-year 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 with the Habitat Advisory Board 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 (siting of individual wind turbines within a wind farm to identify the best site for each individual structure); access limitations; and measures to mitigate the potential impacts of such projects on the fishery. In addition the FAB may aid the Council and its staff in developing and implementing a research agenda. As new information becomes available and the scientific understanding of the Ocean SAMP planning area evolves, the FAB may identify new areas with unique or fragile physical features, important natural habitats, or areas of high natural productivity for designation by the Council as Areas of Particular Concern or Areas Designated for Preservation.

11.9.5 Recreation and Tourism ~~(formerly § 1150.5)~~

A. 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 or values.

B. 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.

C. The Council will encourage and support uses of the Ocean SAMP area that enhance marine recreation and tourism activities.

D. 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 Ocean SAMP 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 6 in § 11.10.2(I) of this Part, and accordingly has designated these areas as Areas of Particular Concern. See § 11.10.2 of this Part for requirements associated with Areas of Particular Concern.

E. See § 11.9.4(E) of this Part for policy regarding safe navigation around and through offshore structures and developments and along cable routes.

F. See § 11.9.4(F) of this Part for policy regarding vessel access around and through offshore structures and developments and along cable routes.

G. 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.

11.9.6 Marine Transportation, Navigation and Infrastructure ~~(formerly § 1150.6)~~

A. The Council recognizes the importance of designated navigation areas, which include shipping lanes, precautionary areas, recommended vessel routes, pilot boarding areas, anchorages, military testing 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.

B. 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, military testing areas, and submarine transit lanes. See § 11.10.2 of this Part for discussion of navigation areas which have been designated as Areas of Particular Concern.

C. 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, military testing areas, and submarine transit lanes.

D. See § 11.9.4(E) of this Part for policy regarding safe navigation around and through offshore structures and developments and along cable routes.

E. See § 11.9.4(F) of this Part for policy regarding vessel access around and through offshore structures and developments and along cable routes.

11.9.7 Offshore Renewable Energy and Other Offshore Development ~~(formerly § 1150.7)~~

A. The Council supports offshore development in the Ocean SAMP area that is consistent with the Ocean SAMP goals, which are to:

1. Foster a properly functioning ecosystem that can be both ecologically effective and economically beneficial;

2. Promote and enhance existing uses; and

3. 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.

B. The Council supports the policy of increasing renewable energy production in Rhode Island. The Council also recognizes:

1. Offshore wind energy currently represents the greatest potential for utility-scale renewable energy generation in Rhode Island;

2. Offshore renewable energy development is a means of mitigating the potential effects of global climate change;

3. Offshore renewable energy development will diversify Rhode Island's energy portfolio;

4. Offshore renewable energy development will aid in meeting the goals set forth in Rhode Island's Renewable Energy Standard;

5. Marine renewable energy has the potential to assist in the redevelopment of urban waterfronts and ports.

C. The Council's support of offshore renewable energy development shall not be construed to endorse or justify any particular developer or particular offshore renewable energy proposal.

D. 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.

E. 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.

F. 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.

G. 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.

~~H. Discussions 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 as soon as is practicable of any federal action that may affect vessel access around and through offshore structures and developments and along cable routes. The Council will continue to monitor changes to navigational activities around and through offshore developments and along cable routes. Any changes affecting existing navigational activities may be subject to CZMA federal consistency review if the federal agency determines its activity will have reasonably foreseeable effects on the uses or resources of Rhode Island's coastal zone.~~(Note: deletion of repetitive text; same as in § 11.9.4(F) above)

~~I~~H. To coordinate the review process for offshore wind energy developments, the Council shall adopt consistent information requirements similar to the requirements 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~~ when issuing renewable energy leases on the Outer Continental Shelf. For further details on these regulations see 30 C.F.R. §§ 285 *et seq*. The Council shall continue to monitor the federal review process and information requirements for any changes and will make adjustments to the Ocean SAMP policies accordingly.

~~J~~I. 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 by the applicant during the pre-construction, construction, operation and 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. State members of the Joint Agency Working Group shall coordinate with the Habitat Advisory Board and the Fishermen's Advisory Board and shall seek input from these Boards before establishing

project specific ~~requirements that shall be followed by the applicant~~recommendations for an offshore development. ~~And, t~~To the maximum extent practical, and consistent with the federal agency and tribal members' authorities, federal members of the Joint Agency Working Group, are ~~strongly~~ encouraged to coordinate with the Habitat Advisory Board and the Fishermen's Advisory Board. 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, but ~~will~~ should generally include the lead federal agency with primary jurisdiction over the proposed project and the CRMC. The pre-construction survey requirements outlined in § 8.5.2(F) of this Subchapter may be reduced for small- scale offshore developments as ~~specified~~ recommended by the Joint Agency Working Group.

~~K~~J. The Council identifies the following ~~are~~ industry goals ~~that~~ for offshore 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:

1. 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 µPa2 in any 1/3 octave band at a range of 100 meters at full power production.

2. The applicant and manufacturer should endeavor to minimize the radiated airborne noise from the wind turbines.

3. A monitoring system including acoustical, optical and other sensors should be established near these facilities to quantify the effects.

11.9.8 Application Requirements in State Waters

A. Applicants shall meet the site assessment plan (SAP) requirements in § 11.10.5 of this Part and the following: **(Note: the following text has been moved from §§ 11.10.5 and 11.10.6)**

1. As appropriate, the Council shall coordinate and consult with relevant Federal and State agencies, and affected Indian tribes.

2. 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.

3. Once the SAP is approved by the Council the applicant may begin conducting the activities approved in the SAP.

4. Reporting requirements of the applicant under an approved SAP:

a. 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.

b. 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.

c. 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.

5. 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.

6. 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.

7. 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.

8. 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.

9. The Executive Director on behalf of the Council will be responsible for reviewing and approving study designs conducted as part of the necessary data and information contained in the SAP. The Executive Director shall seek the advice of the FAB and HAB in setting out the study

designs to be completed in the SAP. The Executive Director shall also brief the Ocean SAMP Subcommittee on each study design as it is being considered. Any applicant that initiates, conducts and/or completes site assessment studies or surveying activities shall demonstrate to the Council's satisfaction that the completed studies were conducted with approval from the Executive Director and in accordance with §§ 11.10.5(A), 11.10.5(C)(2), 11.9.8(B)(8)(a) and 11.9.8(B)(8)(b) of this Part.

B. Applicants shall meet the construction and operation plan (COP) requirements in § 11.10.5 of this Part and the following:

1. The applicant shall submit an oil spill response plan per the Oil Pollution Act of 1990, 33 U.S.C. § 2701 *et seq.*

2. The applicant shall submit the applicant's safety management system, the contents of which are described below:

   a. How the applicant plans to ensure the safety of personnel or anyone on or near the facility;

   b. Remote monitoring, control and shut down capabilities;

   c. Emergency response procedures;

   d. Fire suppression equipment (if needed);

   e. How and when the safety management system shall be implemented and tested; and

   f. How the applicant shall ensure personnel who operate the facility are properly trained.

3. The Council shall review the applicant's COP and the information 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.

4. As appropriate, the Council shall coordinate and consult with relevant Federal, State, and local agencies, the FAB and affected Indian tribes.

5. 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.

6. 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.

7. 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.

8. If the application and COP is approved, prior to construction the applicant shall submit to the Council for approval the documents listed below in §§ 11.9.8(B)(8)(a), (b), (c), (d) and (e) of this Part:

a. 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 § 11.9(G) of this Part. The applicant shall include the following items in the applicant's facility design report:

(1) Table 1: Contents of the facility design report.

Required documents:	**Required contents:**	**Other requirements:**
(1) Cover letter	(i) Proposed facility designations; (ii)The type of facility	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(2) Location	(i) Latitude and longitude coordinates, Universal Mercator grid-system coordinates, state plane coordinates in the Lambert or Transverse Mercator Projection System; (ii) These coordinates shall be based on the NAD (North American Datum) 83 datum plane coordinate system; and (iii) The location of any proposed project easement.	The applicant's plat shall be drawn to a scale of 1 inch equals 100 feet and include the coordinates of the project site, and boundary lines. The applicant shall submit four (4) paper copies and one (1) electronic copy.
(3) Front, Side, and Plan View drawings	(i) Facility dimensions and orientation;	The applicant's drawing sizes shall not exceed 11" x 17". The applicant shall submit four (4) paper

	(ii) Elevations relative to mean lower low water (MLLW); and (iii) Pile sizes and penetration.	copies and one (1) electronic copy.
(4) Complete set of structural drawings	The approved for construction fabrication drawings should be submitted, including, e.g., (i) Cathodic protection systems; (ii) Jacket design; (iii) Pile foundations; (iv) Mooring and tethering systems; (v) Foundations and anchoring systems; and (vi) Associated cable and pipeline designs.	The applicant's drawing sizes shall not exceed 11" x 17". The applicant shall submit four (4) paper copies and one (1) electronic copy.
(5) Summary of environmental data used for design	A summary of the environmental data used in the design or analysis of the facility. Examples of relevant data include information on: (i) Extreme weather; (ii) Seafloor conditions; and (iii) Waves, wind, currents, tides, temperature, sea level rise projections, snow and ice effects, marine growth, and water depth.	The applicant shall submit four (4) paper copies and one (1) electronic copy. If the applicant submitted these data as part of the SAP or COP, the applicant may reference the plan.
(6) Summary of the engineering design data	(i) Loading information (e.g., live, dead, environmental); (ii) Structural information (e.g., design-life; material types; cathode protection systems; design criteria; fatigue life; jacket	The applicant shall submit four (4) paper copies and one (1) electronic copy.

	design; deck design; production component design; foundation pilings and templates, and mooring or tethering systems; fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria).	
(7) A complete set of design calculations	Self-explanatory.	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(8) Project-specific studies used in the facility design or installation	All studies pertinent to facility design or installation, (e.g., oceanographic and soil reports)	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(9) Description of the loads imposed on the facility	(i) Loads imposed by jacket; (ii) Turbines; (iii) Transition pieces; (iv) Foundations, foundation pilings and templates, and anchoring systems; and (v) Mooring or tethering systems.	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(10) Geotechnical report	A list of all data from borings and recommended design parameters.	The applicant shall submit four (4) paper copies and one (1) electronic copy.

b. For any floating facility, the applicant's design shall meet the requirements of the U.S. Coast Guard for structural integrity and stability (e.g., verification of center of gravity). The design shall also consider:

(1) Foundations, foundation pilings and templates, and anchoring systems; and

(2) Mooring or tethering systems.

c. The applicant is required to use a certified verified agent (CVA). The facility design report shall include two paper copies of the following certification statement: "The design 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. The certified design and as-built plans and specifications shall be on file at (given location)."

d. Fabrication and installation report - The applicant's fabrication and installation report shall describe how the applicant's facilities shall be fabricated and installed in accordance with the design criteria identified in the facility design report; the applicant's approved SAP or COP; and generally accepted industry standards and practices. The applicant's fabrication and installation report shall demonstrate how the applicant's facilities shall be fabricated and installed in a manner that conforms to the applicant's responsibilities listed in § 11.9(G) of this Part. The applicant shall include the following items in the applicant's fabrication and installation report:

(1) Table 2: Contents of the fabrication and installation report.

Required documents:	**Required contents:**	**Other requirements:**
(1) Cover letter	(i) Proposed facility designation; (ii) Area, name, and block number; and (iii) The type of facility	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(2) Schedule	Fabrication and installation.	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(3) Fabrication information	The industry standards the applicant shall use to ensure the facilities are fabricated to the design	The applicant shall submit four (4) paper copies and one (1) electronic copy.

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

e. 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."

9. 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:

a. Summary reports that show compliance with the terms and conditions which require certification; and

b. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. The applicant shall notify the Council in writing of the following events, within the time periods provided:

a. No later than ten (10) days after commencing activities associated with the placement of facilities on the lease area under a fabrication and installation report.

b. No later than ten (10) days after completion of construction and installation activities under a fabrication and installation report.

c. At least seven (7) days before commencing commercial operations.

15. The applicant may commence commercial operations within thirty (30) days after the CVA has submitted to the Council the final fabrication and installation report.

16. 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.

a. A major repair is a corrective action involving structural members affecting the structural integrity of a portion of or all the facility.

b. A major modification is an alteration involving structural members affecting the structural integrity of a portion of or all the facility.

c. The report must also identify the location of all records pertaining to the major repairs or major modifications.

d. The Council may require the applicant to use a CVA for project modifications and repairs.

C. 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.

a. 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:

(1) 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;

(2) Ensure that repairs and major modifications are completed in conformance with accepted engineering practices; and

(3) Provide the Council immediate reports of all incidents that affect the design, fabrication, and installation of the project and its components.

2. 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.

3. 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.

4. The verification shall be conducted by or under the direct supervision of registered professional engineers.

5. The Council shall approve or disapprove the applicant's CVA prior to construction.

6. 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.

7. 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.

8. 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.

9. 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 § 11.9.8(C)(11) of this Part;

   d. Make periodic onsite inspections while installation is in progress and satisfy the requirements of § 11.9.8(C)(12) of this Part; 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 thirty (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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. The CVA shall conduct an onsite survey of the facility after transportation to the approved location.

16. 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.

17. 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.

18. Until the Council releases the applicant's financial assurance under § 11.9.8(D)(2) of this Part, 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.

19. 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 § 11.9.8(D)(2) of this Part. 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).

20. The applicant shall provide the Council with the location of these records in the certification statement.

21. 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.

D. Pre-construction standards

1. The Council may issue a permit for a period of up to fifty (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 five (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 R.I. Gen. Laws Chapter 20-10 and § 00-1.3.1(K) of this Chapter.

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 restoration of the site. The Council shall review the bond amount initially and every three (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, 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 § 11.3(E) of this Part, 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 Ocean SAMP Chapter 7, 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:

    a. Negligible: No measurable impacts.

b. 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.

c. 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.

d. 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.

E. 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 near-shore 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 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 § 11.10.1(E) of this Part, and using:

   a. Trained personnel; and

   b. 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.

   a. As required, the applicant shall submit to the Council:

      (1) Measures designed to avoid or minimize adverse effects and any potential incidental take of endangered or threatened species as well as all marine mammals;

      (2) Measures designed to avoid likely adverse modification or destruction of designated critical habitat of such endangered or threatened species; and

      (3) 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.

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:

   a. Immediately halt all seafloor disturbing activities within the area of the discovery;

   b. Notify the Council of the discovery within 24 hours; and

   c. 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.

(1) 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 C.F.R. § 60.4. The Council shall do this if:

(AA) The site has been impacted by the assent holder's project activities; or

(BB) Impacts to the site or to the area of potential effect cannot be avoided.

(2) 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 ninety (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 any mandatory best management practices established by the Council in coordination with the Joint Agency Working Group and which are incorporated into the RICRMP.

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.

F. When mitigation is required by the Council, the reasonable costs associated with mitigation negotiations, 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 the negotiations or such other mechanism as set forth in the permit or approval condition pertaining to mitigation.

G. The CRMC shall convene a Wind Energy Industry-Fishery Coordination Board that will be composed of invited representatives of wind energy developers with projects located within state waters and the Rhode Island 2011 and 2018 GLDs, fishery representatives of the major sectors from the states of Rhode Island and Massachusetts, and state fishery and coastal management representatives from each state, including any other representatives of state or federal agencies deemed necessary. The Board will meet semi-annually to discuss and resolve

fishery and wind industry interactions during and after the construction phase of each wind energy project.

11.9.9 Baseline Assessment Requirements and Standards in State Waters

A. The Council in coordination with the Joint Agency Working Group, as described in § 11.9.7(I) of this Part, shall determine requirements for the development of baseline assessments prior to, during, and post construction for all offshore projects. Monitoring of offshore projects is essential to determine whether construction and operation activities may have an adverse impact on the physical and biological components of offshore waters. In particular, establishment of pre-construction baseline assessments of commercial and recreational fishery resource conditions (i.e., community structure, biodiversity, and species biomass, abundance, size distribution) is necessary for evaluation of any potential coastal effects. Assessments and monitoring are essential to determine whether there are any potential coastal effects and potential cumulative impacts resulting from the construction and operation of multiple wind energy projects. Specific assessment and monitoring requirements shall be determined on a project-by-project basis and may include but are not limited to the assessment and monitoring of:

1. Coastal processes and physical oceanography
2. Underwater noise
3. Benthic ecology
4. Avian species
5. Marine mammals
6. Sea turtles
7. Fish and fish habitat
8. Commercial and recreational fishing
9. Recreation and tourism
10. Marine transportation, navigation and existing infrastructure
11. Cultural and historic resources

B. 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, but not limited to, the July 4th holiday weekend, the week in June when the Block Island Race Week typically takes place, and other recreational boating events within Narragansett Bay, and Rhode Island and Block Island Sounds. The quantitative results of such observations, including raw boat counts and average number of vessels per day, will be provided to the Council.

C. The items listed below shall be required for all offshore developments:

1. A biological assessment of commercially and recreationally targeted fishery species shall be required within the project area for all offshore developments for the periods specified in § 11.9.9(E) of this Part. 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, using 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.

2. An assessment of commercial and recreational fisheries effort, landings, and landings value shall be required for all proposed offshore developments. The assessment shall focus on the proposed project area and any alternatives. This assessment shall evaluate commercial and recreational fishing effort, landings, and landings value at three different stages: pre-construction (to assess baseline conditions); during construction; and during operation, as specified in § 11.9.9(E) of this Part. 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 (pre-construction) conditions.

D. 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:

1. Post construction monitoring including regular visual inspection of inner array cables and the primary export cable to ensure proper burial, foundation and substructure inspection.

E. Assessment standards – applicants shall provide the following biological assessments necessary to establish the baseline conditions of the fishery resource conditions during the project phases detailed below so that an analysis of comparison between project phases can be completed to assess whether

project construction, installation and operation has resulted in significant adverse impacts to the commercial and recreational fishery resources.

1. Pre-construction baseline biological assessments of commercial and recreational targeted fishery species as specified in § 11.9.9(C) of this Part for a minimum of two (2) complete years before offshore construction and installation activities begin;

2. During construction biological assessments of commercial and recreational targeted fishery species as specified in § 11.9.9(C) for each year (if construction extends beyond a single year) of construction and installation; and

3. Post-construction biological assessments of commercial and recreational targeted fishery species as specified in § 11.9.9(C) of this Part for three (3) complete years following completion of construction and installation activities and during the operational phase of the project.

F. The Council shall require post-construction assessments of commercial and recreational targeted fishery species at five (5) year intervals following the post-construction monitoring required in § 11.9.9(E)(3) of this Part. The assessments shall be conducted during the four seasons of a year as specified in § 11.9.9(C) of this Part. If the analysis of post-construction assessments demonstrate adverse impacts to fishery species as compared to the baseline assessments required in § 11.9.9(E)(1) of this Part that are attributable to the construction or operation of a wind energy project, then the Council may require mitigation measures consistent with §§ 11.10.1(E) and (F) of this Part.

11.10 Regulatory Standards ~~(formerly § 1160)~~

A. 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. § 11.10.1 of this Part, 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. The "Regulatory Standards" in § 11.10 of this Part are enforceable policies for purposes of the federal CZMA federal consistency provision (16 U.S.C. § 1456 and 15 C.F.R. Part 930). For CZMA federal consistency purposes the Council shall use the Regulatory Standards, in addition to other applicable federally approved RICRMP enforceable policies, ~~shall be used~~ as the basis for a CRMC CZMA federal consistency concurrence or objection.

B. The federal offshore renewable energy leasing process, and subsequent regulation of renewable energy projects located in federal waters, ~~will remain~~are under the jurisdiction of the U.S. Department of the Interior, Bureau for Ocean

Energy Management (BOEM), in consultation and coordination with relevant federal agencies and affected state, local, and tribal officials, ~~as per~~under BOEM's statutory authority at 43 U.S.C. § 1337(p) and ~~the~~ BOEM's regulations found at 30 C.F.R. Part 285.

11.10.1 Overall Regulatory Standards ~~(formerly § 1160.1)~~

A. All offshore developments regardless of size, including energy projects, which are proposed for or located within state waters of the Ocean SAMP area, are subject to the policies and standards outlined in §§ 11.9 and 11.10 of this Part. ~~(~~eExcept, as noted above, the Council shall not use § 11.9 of this Part ~~shall not be used~~ for CRMC concurrences or objections for CZMA federal consistency reviews~~)~~. For the purposes of the Ocean SAMP, offshore developments are defined as:

1. 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);

   d. offshore LNG platforms (1 or more);

   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; and

   f. outer continental shelf (OCS) exploration, development, and production plans.

2. Small-scale projects, defined as any projects that are smaller than the above thresholds;

3 Underwater cables;

4. Mining and extraction of minerals, including sand and gravel;

5. Aquaculture projects of any size, as defined and regulated in § 00-1.3.1(K) of this Chapter;

6. Dredging, as defined and regulated in § 00-1.3.1(I) of this Chapter; or

7. Other development as defined in Subchapter 00 Part 1 of this Chapter (RICRMP – Red Book) 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.

B. 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 1 in § 11.10.1(~~R~~Q) of this Part, below. The Council designates this area as Type 4E waters. In the Rhode Island Coastal Resources Management Program (Subchapter 00 Part 1 of this Chapter) these waters were previously designated as Type 4 (multipurpose) but are hereby modified to show that this is the preferred site for large scale renewable energy projects in state waters. The Council may approve offshore 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 consistent with § 11.10.2 of this Part. No large-scale offshore renewable energy development shall be allowed in Areas Designated for Preservation consistent with § 11.10.3 of this Part.

C. Offshore developments shall not have a significant adverse impact on the natural resources or existing human uses of the Rhode Island coastal zone, as described in the Ocean SAMP. For purposes of the Rhode Island-based commercial and recreational fisheries, significant long-term negative impacts occur when commercial or recreational vessels are unable to access the project area because of the project design, or are limited in accessing a project area due to construction and operation activities, which results in negative economic impact for a period of two (2) years or more. In making the evaluation of the effect on human uses, the Council will determine, for example, if there is an overall net benefit to the Rhode Island marine economic sector from the development of the project or if there is an overall net loss. In addition, the Council will determine whether any adverse effects to coastal uses or resources are consistent with the other enforceable policies in this Part (§ 11.10 of this Part) and other applicable enforceable policies of the RICRMP. Where the Council determines that impacts on the natural resources or human uses of the Rhode Island coastal zone through the pre-construction, construction, operation, or decommissioning phases of a project constitute significant adverse effects not previously evaluated, the Council shall, through its permitting and enforcement authorities in state waters and through any subsequent CZMA federal consistency reviews, require that the applicant modify the proposal to avoid ~~and/or mitigate~~ the impacts. Therefore, consistent with federal permitting requirements for an activity, the Council may decide that it will not consider mitigation options until the applicant has demonstrated that all feasible options have been evaluated for modifying the project to avoid the impacts. If the applicant cannot modify the proposal to avoid impacts and the Council

determines that proposed mitigation is not sufficient to offset the impacts, then ~~or~~ the Council shall deny a CRMC Assent or, for purposes of the CZMA federal consistency provision, concur with, concur with conditions, or object to the ~~proposal~~applicant's consistency certification.

~~D. Any assent holder of an approved offshore development shall:~~

~~1. 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.~~

~~2. Submit requests, applications, plans, notices, modifications, and supplemental information to the Council as required;~~

~~3. Follow up, in writing, any oral request or notification made by the Council, within three (3) business days;~~

~~4. 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 § 11.10.5 of this Part.;~~

~~5. Make all applicable payments on time;~~

~~6. Conduct all activities authorized by the permit in a manner consistent with the provisions of this document, the Rhode Island Coastal Resources Management Program (Subchapter 00 Part 1 of this Chapter), and all relevant federal and state statutes, regulations and policies;~~

~~7. 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~~

~~8. Respond to requests from the Council in a timeframe specified by the Council.~~ (Note: (D)(1) through (8) moved in its entirety to new § 11.9 (C))

~~E~~D. Any large-scale offshore development, as defined in § 11.3(~~F~~H) of this Part, shall require a meeting between the Fisherman's Advisory Board (FAB), the applicant, and the Council staff to discuss potential fishery-related impacts, such as, but not limited to, project location, wind turbine configuration and spacing, construction schedules, alternative locations, project minimization and identification of high fishing activity or habitat edges. For any state permit process for a large-scale offshore development this meeting shall occur prior to submission of the state permit application. The Council cannot require a pre-application meeting for federal permit applications, but the Council strongly encourages applicants for any large-scale offshore development, as defined in § 11.3(~~F~~H) of this Part, in federal waters to meet with the FAB and the Council staff prior to the submission

of a federal application, lease, license, or authorization. These pre-application meetings, however, do not constitute a formal meeting to satisfy the necessary data and information required for federal consistency reviews, unless mutually agreed to between the CRMC and the applicant. However, for federal permit applicants, a meeting with the FAB as described within this section shall be necessary data and information required for federal consistency reviews for purposes of starting the CZMA 6-month review period for federal license or permit activities under 15 C.F.R. Part 930, Subpart D, and OCS Plans under 15 C.F.R. Part 930, Subpart E, pursuant to 15 C.F.R. § 930.58(a)(2). ~~Any necessary data and information shall be provided before the 6-month CZMA review period begins for a proposed project.~~

1. For purposes of BOEM's renewable energy program under the Outer Continental Shelf Lands Act, the CZMA federal consistency process cannot begin until a construction and operations plan (COP) has been submitted for BOEM's review and approval. Once BOEM has determined the COP and supporting information is sufficient to begin its environmental review under the National Environmental Policy Act, a Notice of Intent to prepare an Environmental Impact Statement will be issued. Only when BOEM issues the COP Notice of Intent can the CZMA review period begin. In most cases, an applicant provides the necessary data and information to the state at the time the applicant files its consistency certification and once the consistency certification and necessary data and information are submitted to the state, the six-month CZMA review period begins. However, for CZMA purposes the CRMC FAB meeting can occur before BOEM issues the COP Notice of Intent if the CRMC and the applicant mutually agree. If the FAB meeting does not occur until after BOEM issues the COP Notice of Intent, then the CZMA six-month review period shall not begin until the day after the FAB meeting, providing that the applicant has submitted all other necessary data and information and the consistency certification pursuant to NOAA's regulations. If the applicant requests the FAB meeting, it must be made in writing to the CRMC and the Chair of the FAB. The CRMC shall schedule the meeting in a timely manner to ensure that the CZMA process is not delayed.

~~F. 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.~~(Note: first sentence is covered in § 11.10.1(C), second sentence added to § 11.10.1(C))

~~G~~E. The Council shall require that the potential adverse impacts of offshore developments and other uses on commercial or recreational fisheries be evaluated, considered and avoided. To assist the Council in concurring with CZMA consistency certification, offshore wind energy projects should be designed in accordance with § 11.9.4(C)(1) of this Part to avoid significant adverse impacts to commercial fishing activities. If adverse impacts cannot be

avoided through the modification of the project, then the applicant shall~~and~~ mitigate~~d~~ for adverse impacts as described in § 11.10.1(~~H~~F) of this Part. The Council may decide that it will not consider mitigation options until the applicant has demonstrated that all feasible options have been evaluated for modifying the project layout and design to avoid significant adverse impacts to Rhode Island's commercial or recreational fisheries. Mitigation may include compensation if the Council and applicant mutually agree to compensation for any fishing gear or fisheries harvest losses by Rhode Island vessels, including any secondary impacts to fisheries such as increased vessel operating costs and associated effects on seafood processing facilities, resulting from the project. The Council cannot compel monetary compensation through the CZMA federal consistency process, but the Council and applicant can agree to compensation as one means to meet the mitigation policy in § 11.10.1(F) of this Part

~~H~~F. For the purposes of fisheries policies and standards as summarized in Ocean SAMP Chapter 5, Commercial and Recreational Fisheries, §§ 5.3.1 and 5.3.2 of this Subchapter, mitigation is defined as a process to make whole those fisheries user groups, including related shore-side seafood processing facilities, that are adversely affected by offshore development 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 commercial and recreational fisheries ~~in the Ocean SAMP area~~, including but not limited to those set forth above in § 11.9.4(B) of this Part. 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 and commercial fishing fleet improvements. Where there are potential impacts associated with proposed projects, the need for mitigation shall be presumed (see § 11.10.1(F) of this Part). ~~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 final mitigation will be the mitigation required by the CRMC and included in the CRMC's Assent for the project or, included within the CRMC's federal consistency decision for a project's federal permit application.~~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.~~

~~I~~G. The Council recognizes that moraine edges, as illustrated in Figures 3 and 4 in § 11.10.2 of this Part, 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.

~~J~~H. 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 § 11.10.5(C) of this Part.

~~K~~I. Any large-scale offshore development, as defined in ~~§ 11.10.1(A) of~~ this Part, shall require a meeting between the HAB, the applicant, and the Council staff to discuss potential marine resource and habitat-related issues such as, but not limited to, impacts to marine resource and habitats during construction and operation, project location, construction schedules, alternative locations, project minimization, measures to mitigate the potential impacts of proposed projects on habitats and marine resources, and the identification of important marine resource and habitat areas. For any state permit process for a large-scale offshore development, this meeting shall occur prior to submission of the state permit application. The Council cannot require a pre-application meeting for federal permit applications, but the Council strongly encourages applicants for any large-scale offshore development, as defined in ~~§ 11.10.1(A) of~~ this Part, in federal waters to meet with the HAB and the Council staff prior to the submission of a federal application, lease, license, or authorization. However, for federal permit applicants, a meeting with the HAB shall be necessary data and information required for federal consistency reviews for purposes of starting the CZMA ~~6~~six-month review period for federal license or permit activities under 15 C.F.R. Part 930, Subpart D, and OCS Plans under 15 C.F.R. Part 930, Subpart E, pursuant to 15 C.F.R. § 930.58(a)(2). ~~Any necessary data and information shall be provided before the 6-month CZMA review period begins for a proposed project.~~

1. For purposes of BOEM's renewable energy program under the Outer Continental Shelf Lands Act, the CZMA federal consistency process cannot begin until a construction and operations plan (COP) has been submitted for BOEM's review and approval. Once BOEM has determined the COP and supporting information is sufficient to begin its environmental review under the National Environmental Policy Act, a Notice of Intent to prepare an Environmental Impact Statement will be issued. Only when BOEM issues the COP Notice of Intent can the CZMA review period

begin. In most cases, an applicant provides the necessary data and information to the state at the time the applicant files its consistency certification and once the consistency certification and necessary data and information are submitted to the state, the six-month CZMA review period begins. However, for CZMA purposes the HAB meeting can occur before BOEM issues the COP Notice of Intent if the CRMC and the applicant mutually agree. If the HAB meeting does not occur until after BOEM issues the COP Notice of Intent, then the CZMA six-month review period shall not begin until the day after the HAB meeting, providing that the applicant has submitted all other necessary data and information and the consistency certification pursuant to NOAA's regulations. If the applicant requests the HAB meeting, it must be made in writing to the CRMC. The CRMC shall schedule the meeting in a timely manner to ensure that the CZMA process is not delayed.

~~L~~J. The potential impacts of a proposed project on cultural and historic resources will be evaluated in accordance with the National Historic Preservation Act and Antiquities Act, and the Rhode Island Historical Preservation Act and Antiquities Act as applicable. Depending on the project and the lead federal agency, the projects that may impact marine historical or archaeological resources identified through the joint agency review process ~~shall~~ may require a marine archaeology assessment that documents actual or potential impacts the completed project will have on submerged cultural and historic resources.

~~M~~K. Guidelines for marine archaeology assessment in the Ocean SAMP area can be obtained through the RIHPHC in their document, "Performance Standards and Guidelines for Archaeological Projects: Standards for Archaeological Survey" (RIHPHC 2007), or the lead federal agency responsible for reviewing the proposed development.

~~N~~L. The potential non-physical impacts of a proposed project on cultural and historic resources shall be evaluated in accordance with 36 C.F.R. § 800.5, assessment of adverse effects, including the introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features. Depending on the project and the lead federal agency, the Ocean SAMP Interagency Working Group may require that a project undergo a visual impact assessment that evaluates the visual impact a completed project will have on onshore cultural and historic resources.

~~O~~M. A visual impact assessment may require the development of detailed visual simulations illustrating the completed project's visual relationship to onshore properties that are designated National Historic Landmarks, listed on the National Register of Historic Places, or determined to be eligible for listing on the National Register of Historic Places. Assessment of impacts to specific views from selected properties of interest may be required by relevant state and federal agencies to properly evaluate the impacts and determination of adverse effect of the project on onshore cultural or historical resources.

~~P~~N. A visual impact assessment may require description and images illustrating the potential impacts of the proposed project.

~~Q. Guidelines for landscape and visual impact assessment in the Ocean SAMP area can be obtained through the lead federal agency responsible for reviewing the proposed development.~~(Note: This text moved to 11.9.3(J))

O. Construction noise. All construction and pile driving operations shall be performed using the best available control technology (BACT) as necessary to minimize acoustic energy (noise) impacts, including any hammer energy transfer to sediments. The applicant shall provide an analysis of available wind tower designs and pile driving technologies comparing the costs, site specific impacts to species and habitat, and availability. Potentially impacted organisms (receptors) including all life stages shall be evaluated for their individual sensitivity to acoustic energy perturbation. The BACT approach shall be presented in an evaluation table format consisting of the available technologies, effectiveness of minimizing acoustic energy impacts, potentially impacted receptors, and cost of implementation. The applicant shall use this analysis to identify the selected acoustic energy reduction technology and strategy selected for the project. The CRMC in consultation with the FAB and HAB shall determine if the applicant has chosen the BACT based on this analysis.

P. Cable burial

1. All utility power cables, including but not limited to, wind turbine generator (WTG), inter-array, electrical service platform (ESP) and export cables proposed for installation on a stable seafloor bottom shall be buried below the seafloor surface a minimum of 1.5 meters. A stable seafloor bottom shall be considered those areas that have been determined through suitable geophysical investigation techniques to have minimal, if any, sediment transport or formation of sand waves.

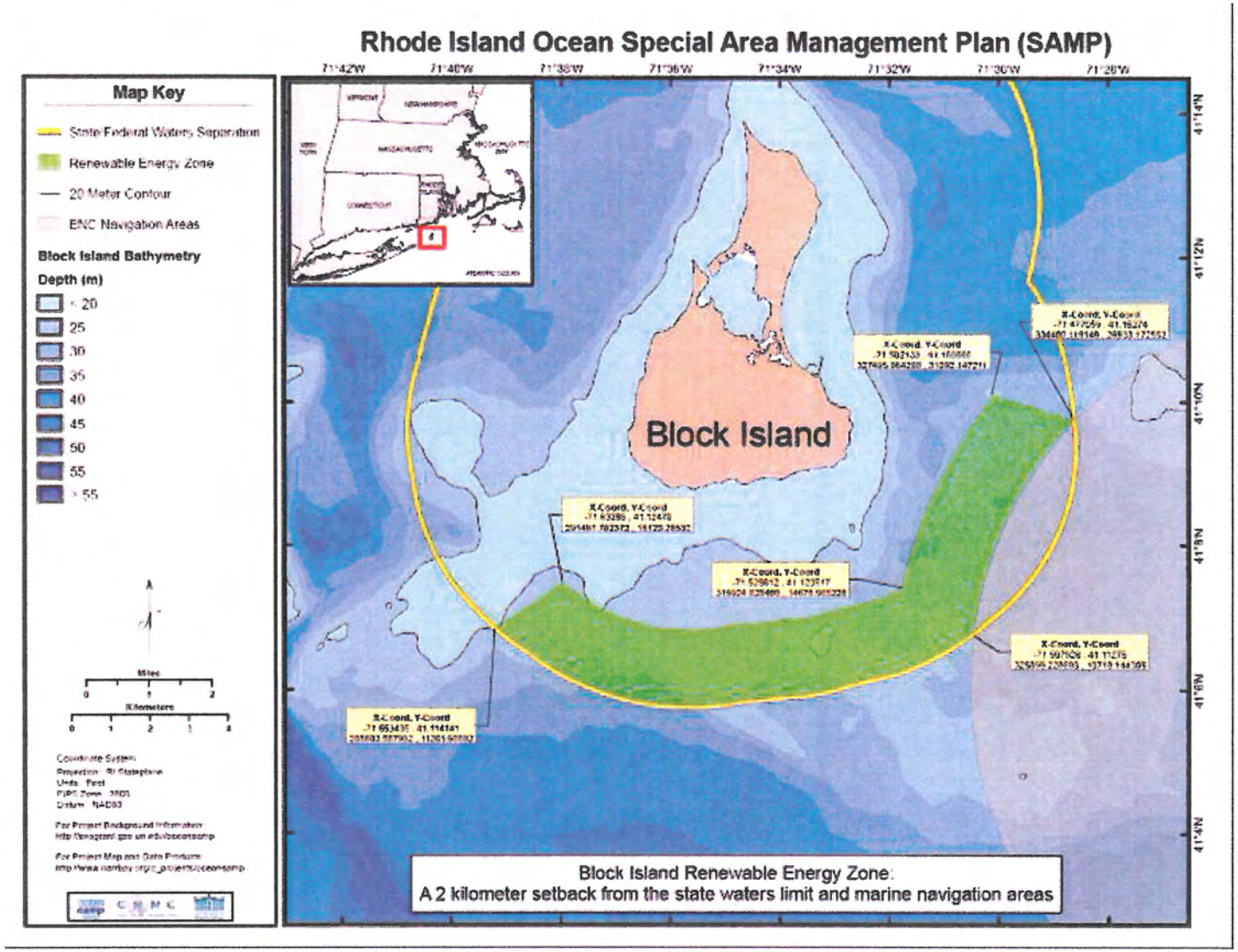
2. In areas of unstable seafloor bottoms, including areas of sand waves and other bottoms which experience periodic and/or storm-induced sediment transport, power cables shall be buried to a depth where the best available geophysical investigation techniques have determined the cables will not be exposed during the intended service life of the cable(s), but in no case less than 1.5 meters.

3. In areas of hard-bottom crossings, the applicant must use the best available equipment and installation techniques to assure a minimum burial depth of 1.5 meters. In general, jet plow installation techniques shall not be considered suitable for cable installation in areas of hard bottom (those containing rocks, cobble, excess clay and silt and other known obstructions). Absent an adequate demonstration that exposed or shallow cable burial or subsequent armoring of shallow or exposed cable will not impact marine organisms or the use of marine resources, the CRMC shall

consider any and all expected areas of potential shallow cable burial to be a significant impact on such resources and their uses. Anticipated coastal effects include the potential for electro-magnetic field (EMF) impacts to sensitive marine resources (including elasmobranchs and lobsters), an impact on the ability to harvest fishery and shellfish resources, and an impact on the ability to anchor a vessel. The advice to the CRMC by the FAB and HAB on whether such impacts will be a factor with regard to a particular project and project location shall be based on the best available site information and marine science. Because cable armoring has adverse impacts on commercial fishing mobile gear by creating obstructions that will snag and cause damage to mobile fishing gear (e.g., trawl nets), the CRMC shall consider cable armoring that exceeds two (2) percent of the overall length of proposed cable installation (combined length of inter-array and export cables) to be a significant coastal effect and an unnecessary impact on coastal resources and uses.

4. All utility power cables and export cables shall have a minimum cable burial depth of 3.0 meters MLLW for any cable landings on sandy or erodible shorelines.

RQ. Figure 1: Renewable energy zone



11.10.2 Areas of Particular Concern ~~(formerly § 1160.2)~~

A. Areas of Particular Concern (APCs) have been designated in state waters through the Ocean SAMP process with the goal of protecting areas that have high conservation value, cultural and historic value, or human use value from large-scale offshore development. These areas may be limited in their use by a particular regulatory agency (e.g., shipping lanes), or have inherent risk associated with them (e.g., unexploded ordnance locations), or have inherent natural value or value assigned by human interest (e.g., glacial moraines, historic shipwreck sites). Areas of Particular Concern have been designated by reviewing habitat data, cultural and historic features data, and human use data that has been developed and analyzed through the Ocean SAMP process. Currently designated Areas of Particular Concern are based on current knowledge and available datasets; additional Areas of Particular Concern may be identified by the Council in the future as new datasets are made available. Areas of Particular Concern may be elevated to Areas Designated for Preservation in the future if future studies show that Areas of Particular Concern cannot risk even low levels of large-scale offshore development within these areas. Areas of Particular Concern include:

1. Areas with unique or fragile physical features, or important natural habitats;

2. Areas of high natural productivity;

3. Areas with features of historical significance or cultural value;

4. Areas of substantial recreational value;

5. Areas important for navigation, transportation, military and other human uses; and

6. Areas of high fishing activity.

B. The Council has designated the areas listed below in § 11.10.2(C) of this Part in state waters as Areas of Particular Concern. All large-scale, small-scale, or other offshore development, or any portion of a proposed project, shall be presumptively excluded from APCs. This exclusion is rebuttable if the applicant can demonstrate by clear and convincing evidence that there are no practicable alternatives that are less damaging in areas outside of the APC, or that the proposed project will not result in a significant alteration to the values and resources of the APC. When evaluating a project proposal, the Council shall not consider cost as a factor when determining whether practicable alternatives exist. Applicants which successfully demonstrate that the presumptive exclusion does not apply to a proposed project because there are no practicable alternatives that are less damaging in areas outside of the APC must also demonstrate that all feasible efforts have been made to avoid damage to APC resources and values

and that there will be no significant alteration of the APC resources or values. Applicants successfully demonstrating that the presumptive exclusion does not apply because the proposed project will not result in a significant alteration to the values and resources of the APC must also demonstrate that all feasible efforts have been made to avoid damage to the APC resources and values. The Council may require a successful applicant to provide a mitigation plan that protects the ecosystem. The Council will permit underwater cables, only in certain categories of Areas of Particular Concern, as determined by the Council in coordination with the Joint Agency Working Group. The maps listed below in § 11.10.2(C) of this Part depicting Areas of Particular Concern may be superseded by more detailed, site-specific maps created with finer resolution data.

C. Areas of particular concern that have been identified in the Ocean SAMP area in state waters are described as follows:

1. Historic shipwrecks, archeological or historical sites and their buffers as described in Ocean SAMP Chapter 4, Cultural and Historic Resources, Sections 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.

2. Offshore dive sites within the Ocean SAMP area, as shown in Figure 2 in § 11.10.2 of this Part, 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.

3. Glacial moraines are important habitat areas for a diversity of fish and other marine plants and animals because of their relative structural permanence and structural complexity. Glacial moraines create a unique bottom topography that allows for habitat diversity and complexity, which allows for species diversity in these areas and creates environments that exhibit some of the highest biodiversity within the entire Ocean SAMP area. The Council also recognizes that because glacial moraines contain valuable habitats for fish and other marine life, they are also important to commercial and recreational fishermen. Accordingly, the Council shall designate glacial moraines as identified in Figures 3 and 4 in § 11.10.2 of this Part as Areas of Particular Concern.

4. 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 5 in § 11.10.2 of this Part 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.

5. Areas of high fishing activity as identified during the pre-application process by the Fishermen's Advisory Board, as defined in § 11.3(E) of this Part, may be designated by the Council as Areas of Particular Concern.

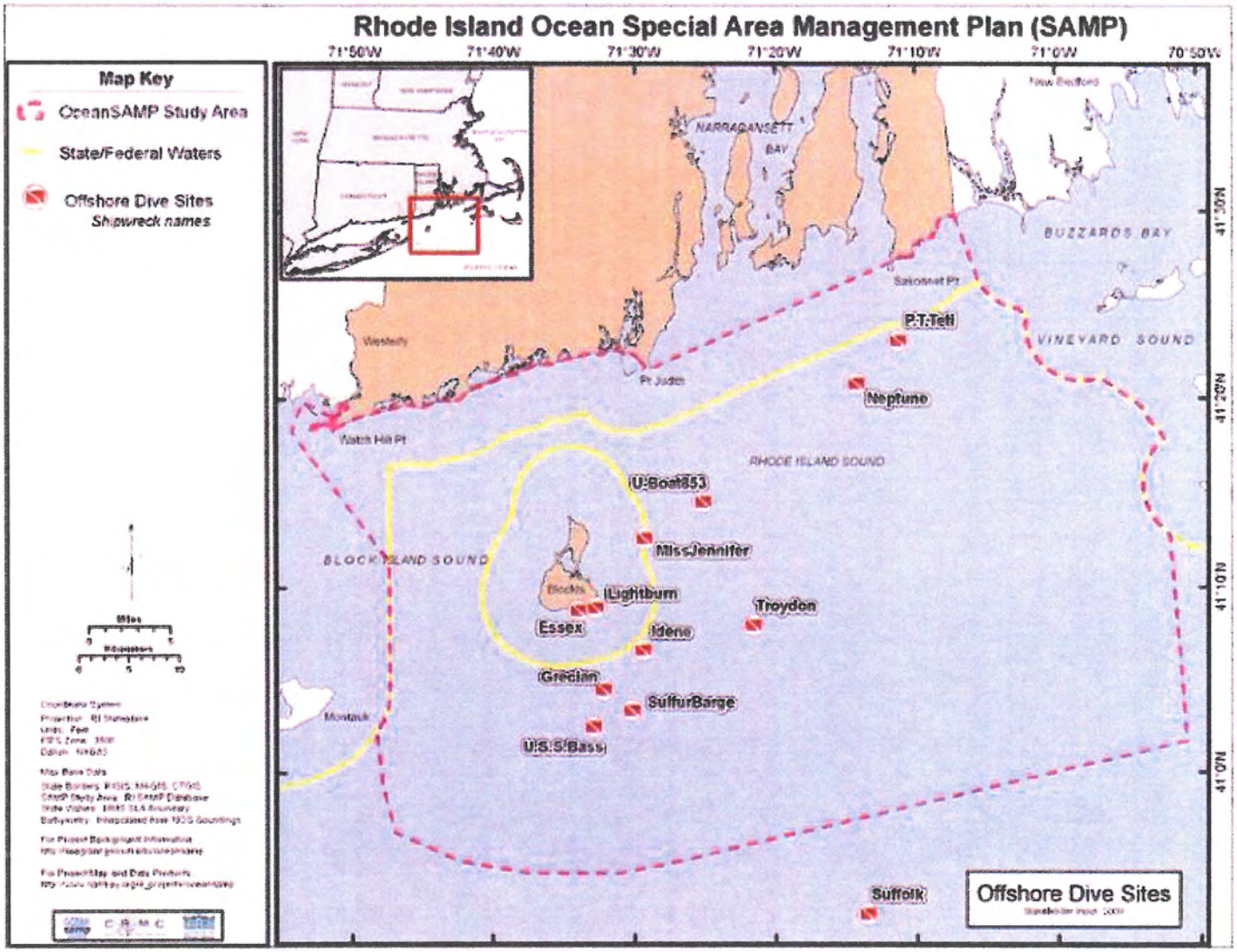
6. Several heavily-used recreational boating and sailboat racing areas, as shown in Figure 6 in § 11.10.2 of this Part, are designated as Areas of Particular Concern. The Council recognizes that organized recreational boating and sailboat racing activities are concentrated in these particular areas, which are therefore important to sustaining Rhode Island's recreation and tourism economy.

7. Naval fleet submarine transit lanes, as described in Ocean SAMP Chapter 7, Marine Transportation, Navigation, and Infrastructure Section 720.7, are designated as Areas of Particular Concern.

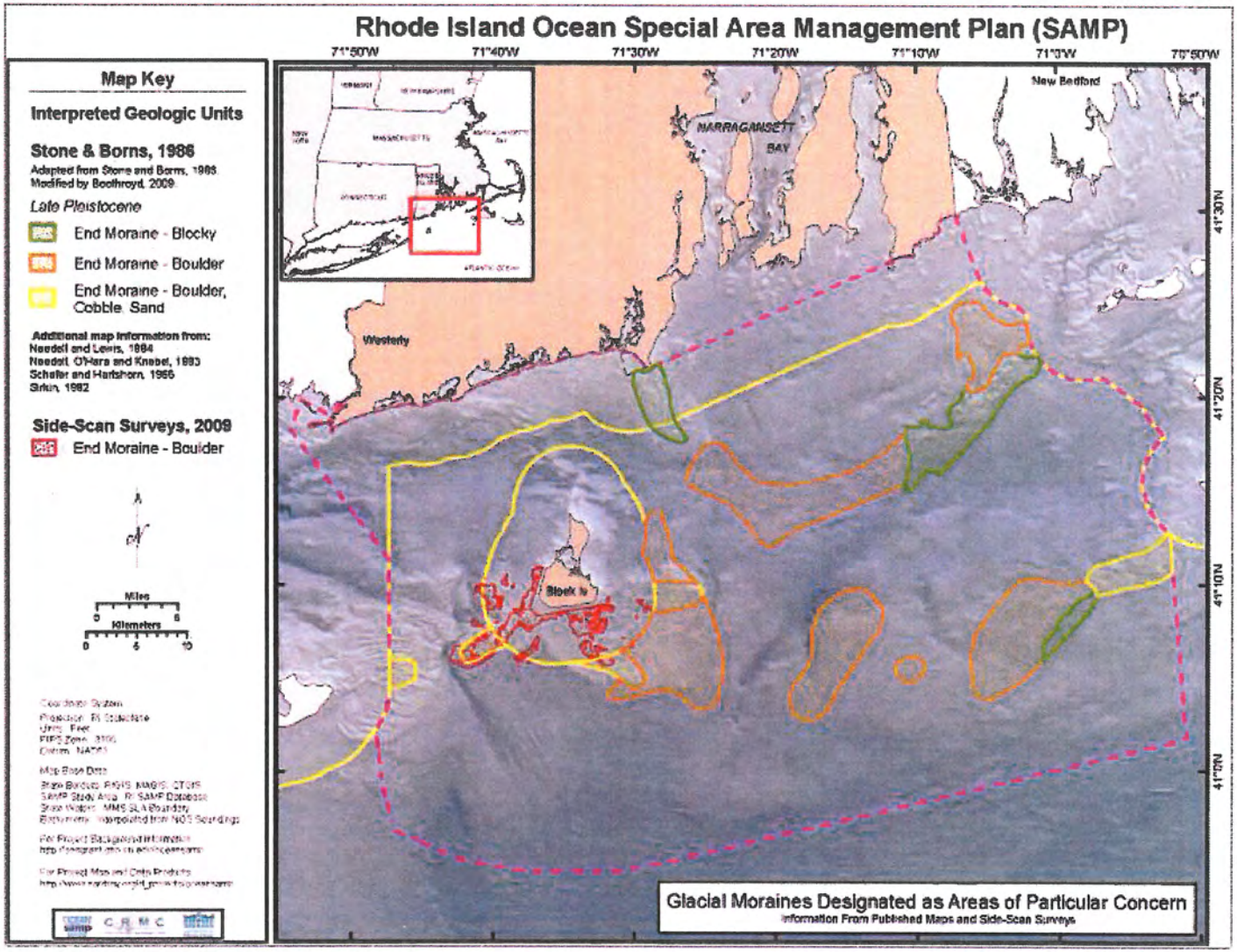
8. Other Areas of Particular Concern may be identified during the pre-application review by state and federal agencies as areas of importance.

D. Developers proposing projects for within the renewable energy zone as described in § 11.10.1(B) of this Part shall adhere to the requirements outlined in § 11.10.2 of this Part regarding Areas of Particular Concern in state waters, including any Areas of Particular Concern that overlap the renewable energy zone (see Figure 7 in § 11.10.2 of this Part).

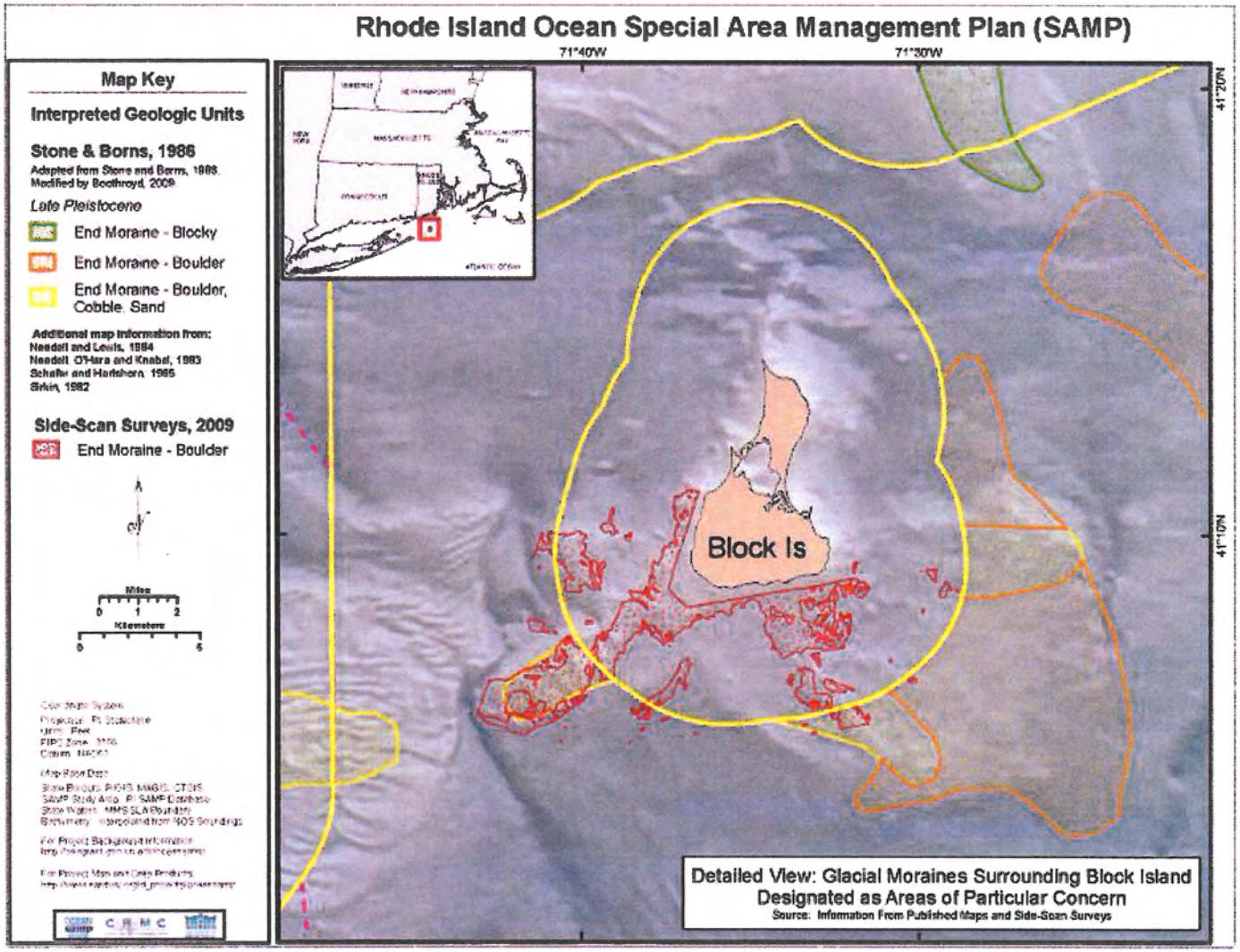
E. Figure 2: Offshore dive sites designated as Areas of Particular Concern in state waters



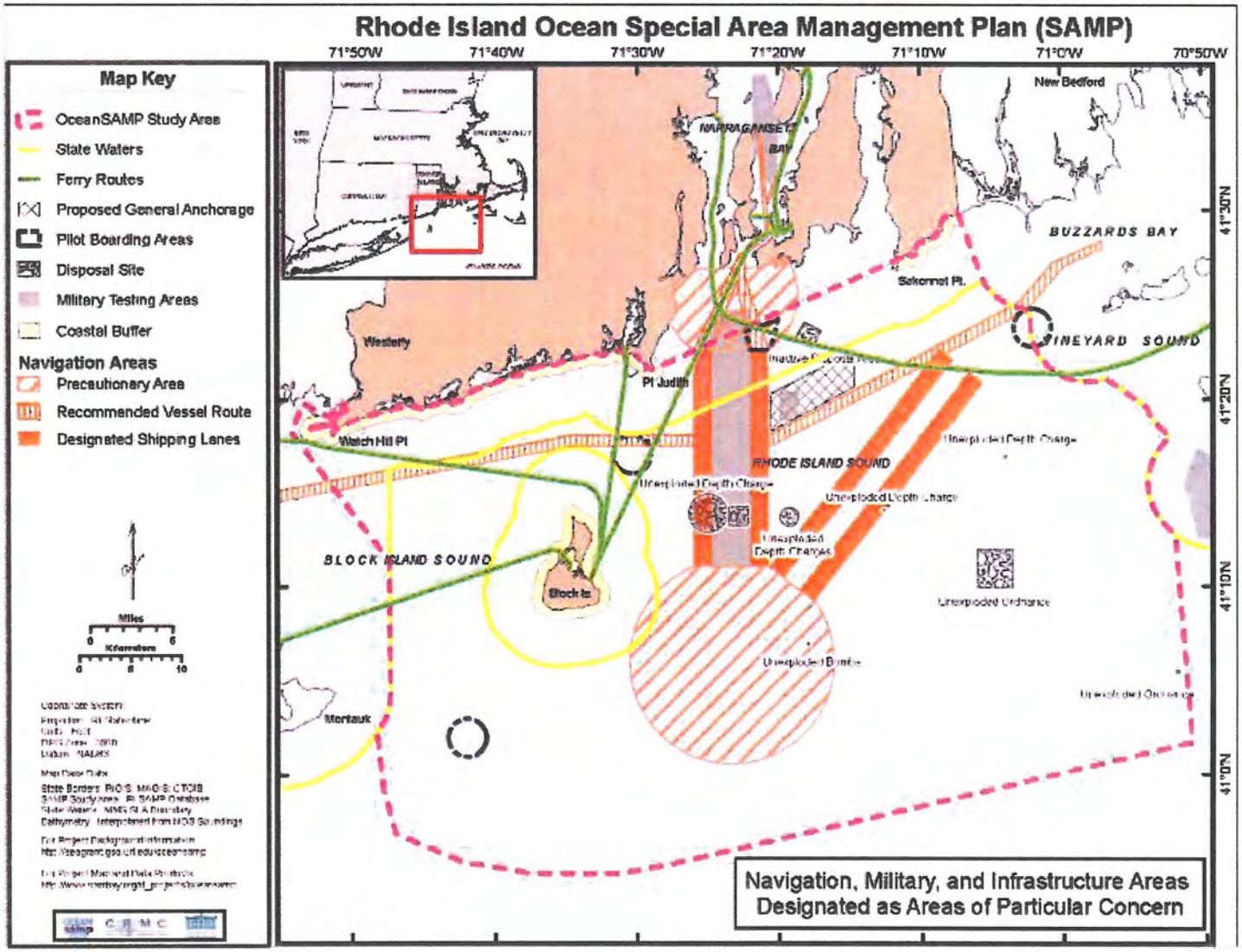
F. Figure 3: Glacial moraines designated as Areas of Particular Concern in state waters



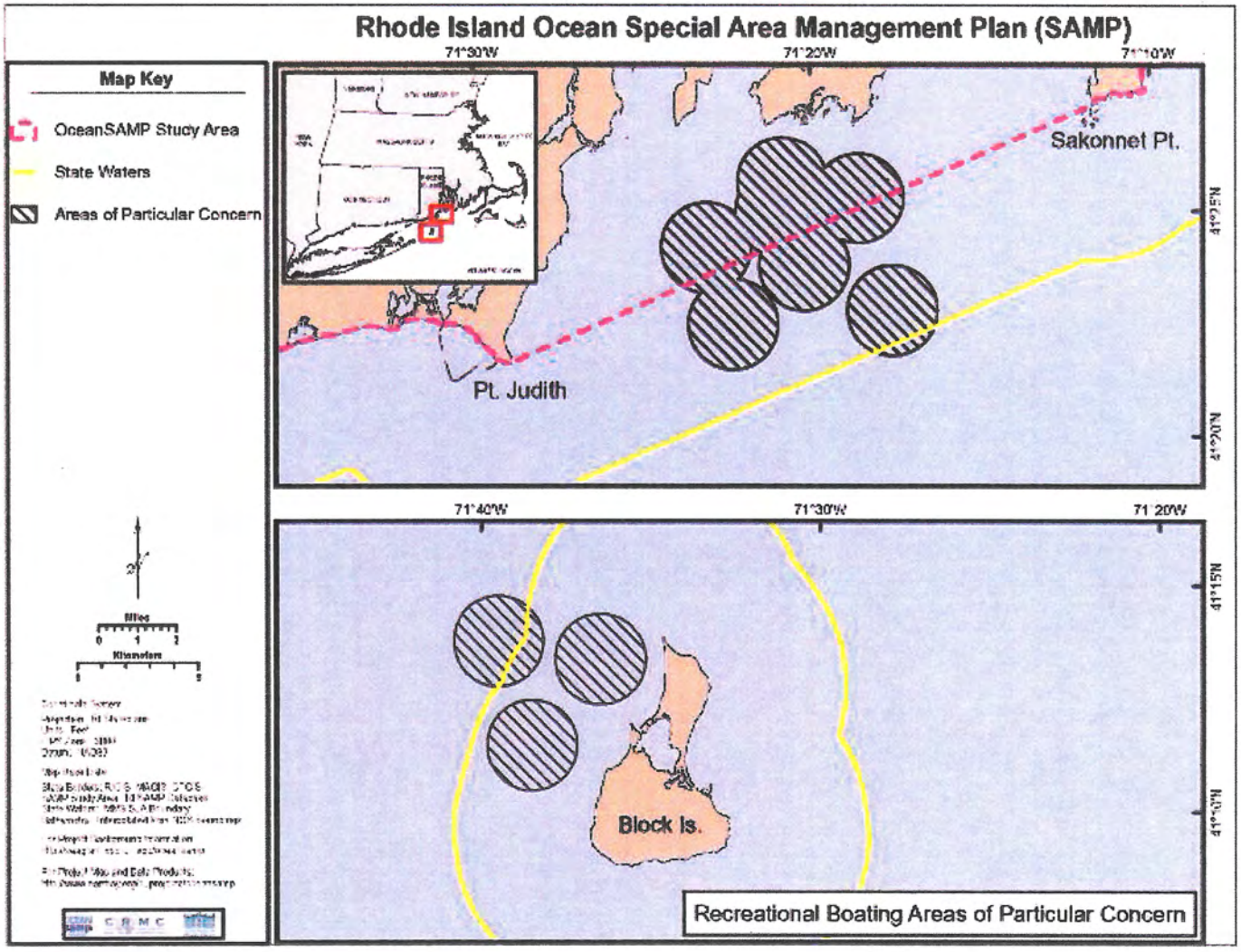
G. Figure 4: Detailed view: Glacial moraines surrounding Block Island designated as Areas of Particular Concern in state waters



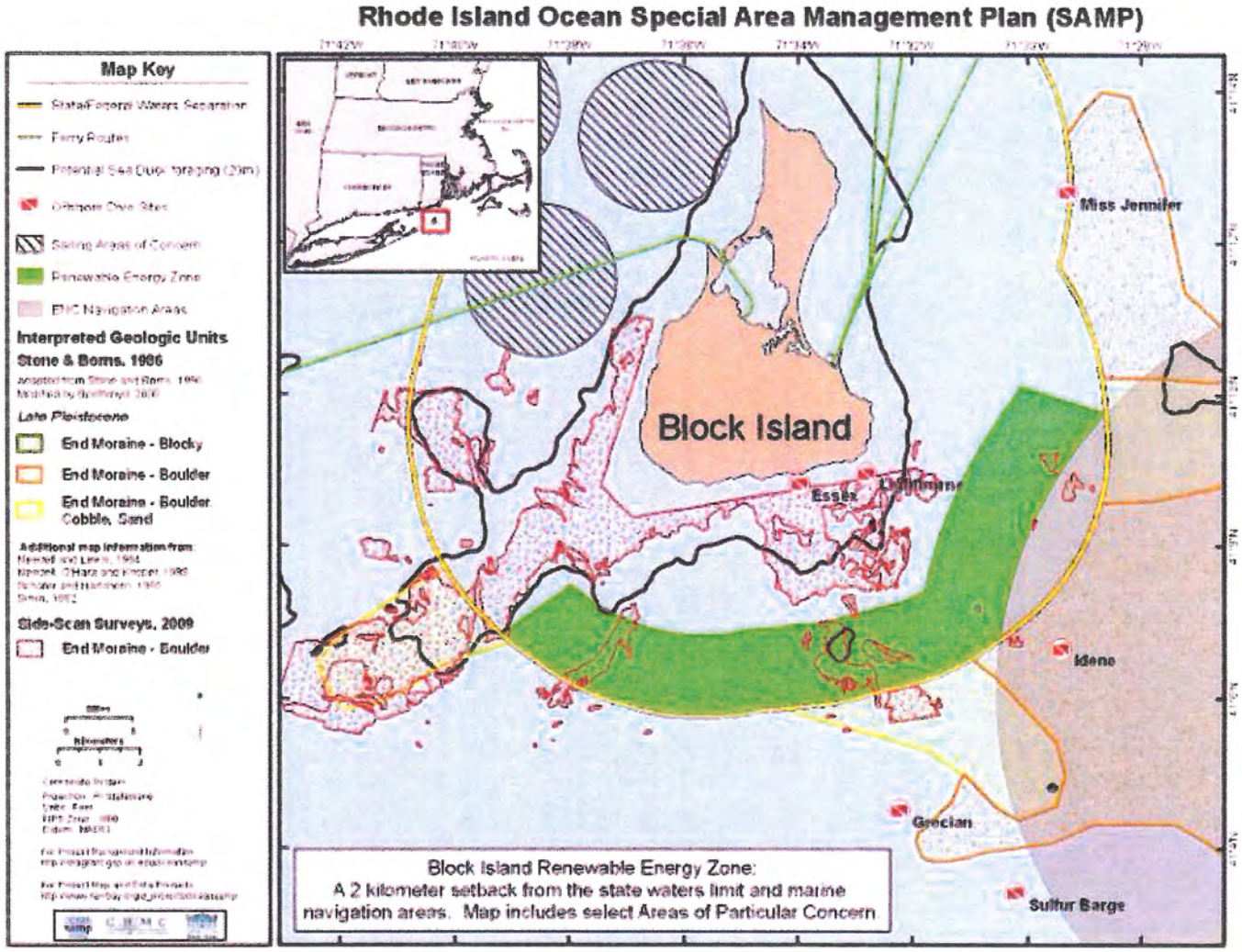
H. Figure 5: Navigation, military, and infrastructure areas designated as Areas of Particular Concern in state waters



I. Figure 6: Recreational boating areas designated as Areas of Particular Concern in state waters



J. Figure 7: Areas of Particular Concern overlapping the Renewable Energy Zone in state waters



11.10.3 Prohibitions and Areas Designated for Preservation ~~(formerly § 1160.3)~~

A. Areas Designated for Preservation are designated in the Ocean SAMP area in state waters for the purpose of preserving them for their ecological value. Areas Designated for Preservation were identified by reviewing habitat and other ecological data and findings that have resulted from the Ocean SAMP process. Areas Designated for Preservation are afforded additional protection than Areas of Particular Concern (see § 11.10.2 of this Part) because of scientific evidence indicating that large-scale offshore development in these areas may result in significant habitat loss. The areas described in § 11.10.3 of this Part 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:

1. Ocean SAMP sea duck foraging habitat in water depths less than or equal to 20 meters [65.6 feet] (as shown in Figure 8 in § 11.10.3 of this Part) are designated as Areas Designated for Preservation due to their ecological value and the significant role these foraging habitats play to avian species, and existing evidence suggesting the potential for permanent habitat loss as a result of offshore wind energy development. The current research regarding sea duck foraging areas indicates that this habitat is depth limited and generally contained within the 20 meter depth contour. It is likely there are discreet areas within this region that are prime feeding areas, however at present there is no long-term data set that would allow this determination. Thus, the entire area within the 20 meter contour is being protected as an Area Designated for Preservation until further research allows the Council and other agencies to make a more refined determination.

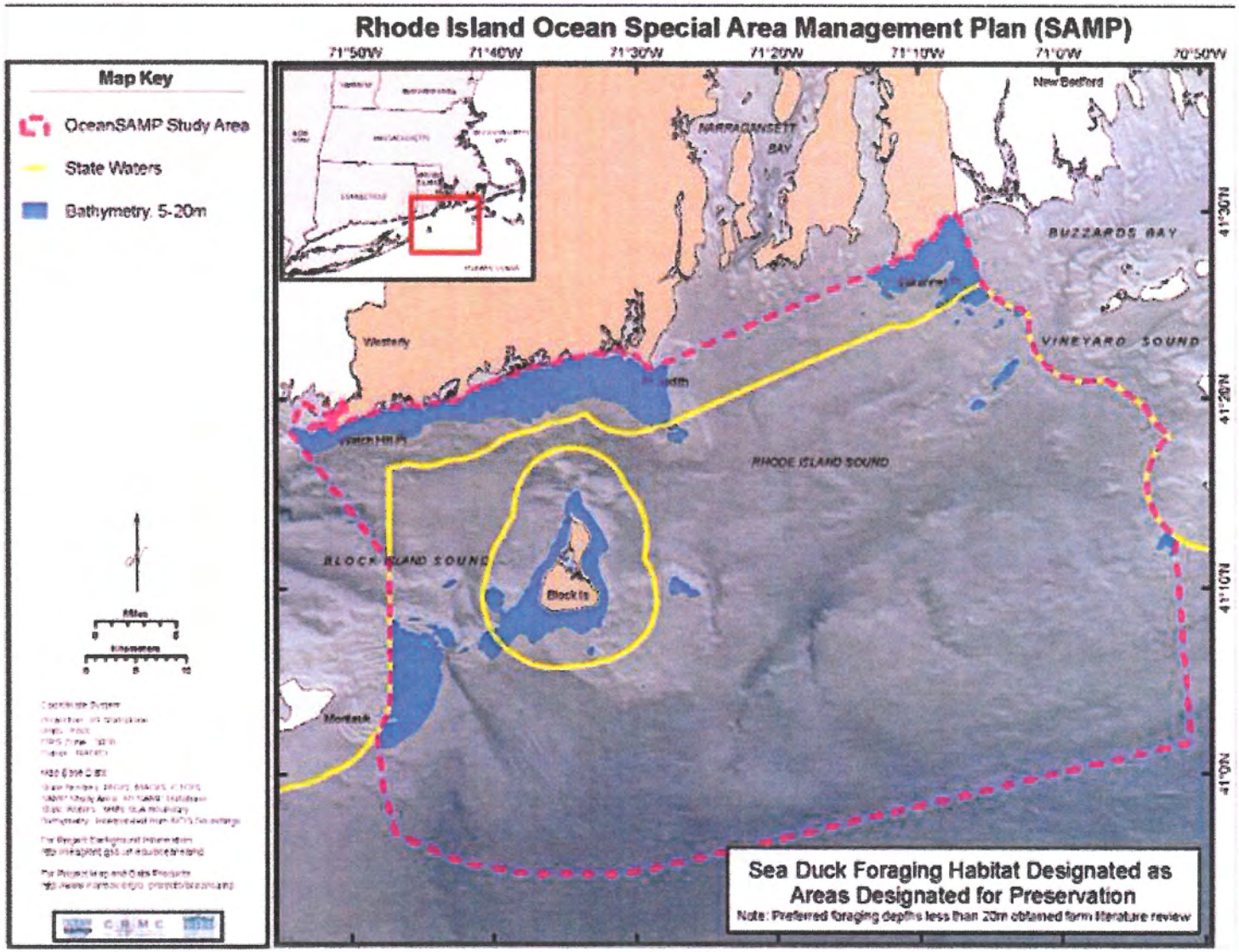
2. The mining and extraction of minerals, including sand and gravel, from tidal waters and salt ponds is prohibited. This prohibition does not apply to dredging for navigation purposes, channel maintenance, habitat restoration, or beach replenishment for public purposes.

3. The Council shall prohibit any offshore development in areas identified as Critical Habitat under the Endangered Species Act.

4. Dredged material disposal, as defined and regulated in § 1.3.1(I) of this Chapter, is further limited in the Ocean SAMP area by the prohibition of dredged material disposal in the following Areas of Particular Concern as defined in § 11.10.2 of this Part: historic shipwrecks, archaeological, or historic sites; offshore dive sites; navigation, military, and infrastructure areas; and moraines. Beneficial reuse may be allowed in Areas

Designated for Preservation, whereas all other dredged material disposal is prohibited in those areas. All disposal of dredged material will be conducted in accordance with the U.S. EPA and U.S. Army Corps of Engineers' manual, Evaluation of Dredged Material Proposed for Ocean Disposal.

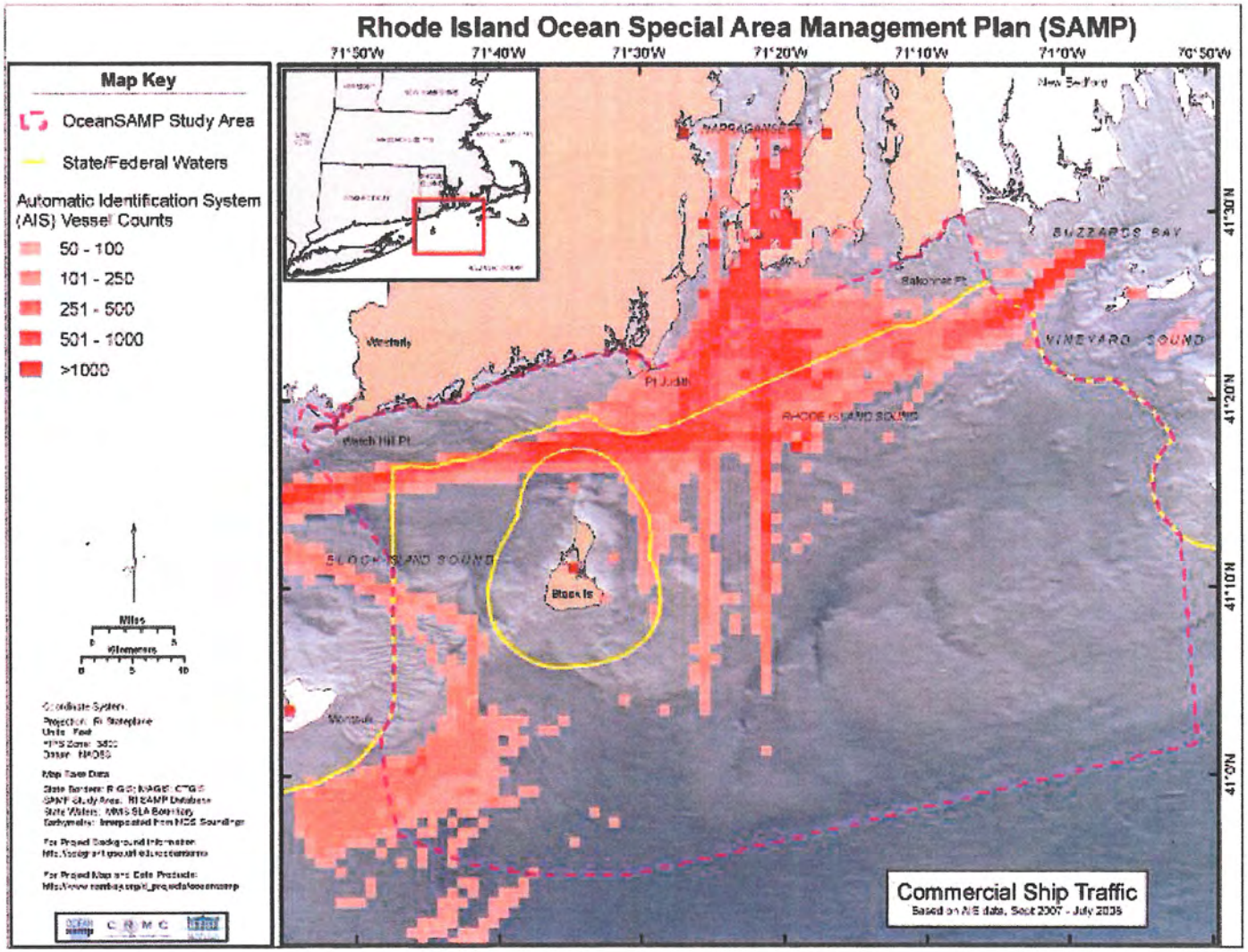
B. Figure 8: Sea duck foraging habitat designated as Areas Designated for Preservation in state waters



11.10.4 Other Areas ~~(formerly § 1160.4)~~

A. 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 in state waters. 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 1 km by 1 km grid, as shown in Figure 9 in § 11.10.~~2~~ 4(B) of this Part.

B. Figure 9: Areas of high intensity commercial ship traffic in state waters.



11.10.5 Application Requirements ~~(formerly § 1160.5)~~

A. For the purposes of this document, the phrase "'necessary data and information'" shall refer to the necessary data and information required for federal consistency reviews for purposes of starting the Coastal Zone Management Act (CZMA) ~~6~~six-month review period for federal license or permit activities under 15 C.F.R. Part 930, Subpart D, and OCS Plans under 15 C.F.R. Part 930, Subpart E, pursuant to 15 C.F.R. § 930.58(a)(2). Any necessary data and information shall be provided before the ~~6~~six-month CZMA review period begins for a proposed project or at the time the applicant provides the consistency certification. It should be noted that other federal and state agencies may require other types of data or information as part of their review processes.

B. For the purposes of this document, the following terms shall be defined as:

1. 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.

2. 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.

3. 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. The CVA should have licensed and qualified Professional Engineers on staff.

C. Prior to construction, the following sections shall be considered necessary data and information ~~and shall be required by the Council~~:

1. 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. For projects in state waters t~~T~~he applicant shall receive the approval of the SAP by the Council (see § 11.9.8 of this Part). For projects within Type 4E waters (depicted in Figure 1 in § 11.10.1

of this Part), 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. For a SAP required by BOEM under the Outer Continental Shelf Lands Act for projects in federal waters, if BOEM combines the SAP with the COP, then the SAP and COP would be filed at the same time. If BOEM does not require a SAP for a project in federal waters, then the SAP shall not be necessary data and information for federal consistency reviews.

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 § 11.10.1(E) of this Part:

   (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 § 11.10.5(C)(2) of this Part.

d. The applicant's SAP shall include the information described in Table ~~1~~ 3 in § 11.10.5 of this Part, as applicable.

(1) Table ~~1~~3: 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 testing concept.	A discussion of the objectives; description of the 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 design, fabrication, and installation.	Information for each type of facility associated with 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 for avoiding, minimizing, reducing, eliminating, and monitoring environmental impacts.	A description of the measures the applicant shall take to avoid or minimize adverse effects and any potential incidental take, before the applicant conducts 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 ~~2~~ 4 in § 11.10.5 of this Part (with the supporting data) in the applicant's SAP:

(1) Table ~~2~~4: 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 *in situ* 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 resources.	The results from the archaeological survey with supporting data, if required.	(i) A description of the results and data from the archaeological survey; (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 §§ 00-1.2.3 and 00-1.3.5 of this Chapter, as applicable; (iii) For more information on the archeological surveys and assessments required see § 4.3 of this Subchapter.
(4) Geological survey.	The results from the geological survey with supporting data.	A report that describes the results of a geological survey that includes 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 survey with supporting data.	A description of the results of a 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 survey	The results from the fish and fisheries survey with supporting data.	A report that describes the results 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 § 11.~~10~~9.9~~(C)~~ of this Part.

f. The applicant shall submit a SAP that describes those resources, conditions, and activities listed in Table ~~3~~ 5 in § 11.10.5 of this Part 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:

(1) Table ~~3~~5: 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 §§ 00-1.2.3 and 00-1.3.5 of this Chapter, 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 view shed.
(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.
(9) 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. If the Council determines that necessary data and information is missing, the CRMC may only delay the CZMA six-month federal consistency review period in accordance with NOAA's regulations at 15 C.F.R. §§ 930.60(a) and 930.77(a)(1).

~~h. As appropriate, the Council shall coordinate and consult with relevant Federal and State agencies, and affected Indian tribes.~~(Note: moved to § 11.9.8(A))

~~i~~h. Any large-scale offshore development, as defined above in § 11.10.1(A) of this Part, 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. See § 11.10.1(D) of this Part describing the FAB meeting and necessary data and information.

~~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 Council the applicant may begin conducting the activities approved in the SAP.~~

~~l. 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.

q. The Executive Director on behalf of the Council will be responsible for reviewing and approving study designs conducted as part of the necessary data and information contained in the SAP. The Executive Director shall seek the advice of the FAB and HAB in setting out the study designs to be completed in the SAP. The Executive Director shall also brief the Ocean SAMP Subcommittee on each study design as it is being considered. Any applicant that initiated, conducted and/or completed site assessment studies or surveying activities prior to the adoption of the policies set forth in the SAMP, shall demonstrate that the studies were done in accordance with federal protocols for such studies or in the alternative, to the Council's satisfaction that the completed studies were conducted with approval from the Executive Director and in accordance

~~with §§ 11.10.5(A), 11.10.5(C)(2), 11.10.5(C)(3) and 11.10.5(C)(4) of this Part.~~ (Note: (j) through (q) moved to §11.9.8(A))2. 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.

(1) Table 46: 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.
(4) 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.
(5) 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.
(6) 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.
(7) A description of the deployment activities	Safety, prevention, and environmental protection features or measures that the applicant shall use.
(8) A list of solid and liquid wastes generated	Disposal methods and locations.
(9) 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.

(10) Decommissioning and site clearance procedures	A discussion of general concepts and methodologies.
(11) A list of all federal, state, and local authorizations, approvals, or permits that are required to conduct the proposed activities, including commercial operations	A list of all federal, state, and local authorizations, approvals, or permits that are required to conduct the proposed activities, including commercial operations. In addition, a statement indicating whether the applicant has applied for or obtained such authorizations, approvals, or permits.
(12) The applicant's proposed measures for avoiding, minimizing, reducing, eliminating, and monitoring environmental impacts	A description of the measures the applicant shall take to avoid or minimize adverse effects and any potential incidental take before conducting activities on the project site, and how the applicant shall minimize environmental impacts from proposed activities, including a description of the measures.
(13) Information the applicant incorporates by reference	A list of the documents referenced and the actual document if requested.
(14) A list of agencies and persons with whom the applicant has communicated, or with whom the applicant shall communicate, regarding potential impacts associated with the proposed activities	Contact information, issues discussed and the actual document if requested
(15) Reference	Contact information
(16) 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 § 11.9.8(D)(2)~~11.10.7(B)~~ of this Part.
(17) CVA nominations	CVA nominations for reports required.
(18) Construction schedule.	A reasonable schedule of construction activity showing significant milestones leading to the commencement of commercial operations.

(19) Air quality information.	Information required for the Clean Air Act (42 U.S.C. § 7409) and implementing regulations.
(20) 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:

(1) Table ~~5~~7: Necessary data and information to be provided in the construction and operations plan.

Information:	**Report contents:**	**Including:**
(1) Shallow hazards	The results of the shallow hazards survey with supporting data, if required.	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; or (v) Ice scour of seabed sediments.
(2) Geological survey relevant to the siting and design of the facility	The results of the geological survey with supporting data.	Assessment 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.

(3) Biological survey	The results of the biological survey with supporting data.	A description of the results of biological 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 survey	The results from the fish and fisheries survey with supporting data.	A report that describes the results 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 § 11.9.8(D)(2)~~11.10.9(C)~~ of this Part.
(5) Geotechnical survey	The results of any sediment testing program with supporting data, the various field and laboratory tests employed, and the applicability of these methods as they pertain to the quality of the samples, the type 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.	(i) The results of a testing program used to investigate the stratigraphic and engineering properties of the sediment that may affect the foundations or anchoring systems of the proposed facility. (ii) The results of adequate in situ 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.
(6) Archaeological and visual resources, if required	The results of the archaeological resource survey with supporting data.	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 §§ 00-1.2.3 and 00-1.3.5 of this Chapter, as applicable.

(7) Overall site investigation	An overall site investigation report for the proposed facility that integrates the findings of the shallow hazards surveys and geologic surveys, and, if required, the subsurface surveys with supporting data.	An analysis of the potential for: (i) Scouring of the seabed; (ii) Hydraulic instability; (iii) The occurrence of sand waves; (iv) Instability of slopes at the facility location; (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 collapse mechanisms; and (xi) Sediment reactions on the facility foundations or anchoring systems.

g. The applicant's COP shall describe those resources, conditions, and activities listed in Table ~~6~~ 8 in § 11.10.5 of this Part that could be affected by the applicant's proposed activities, or that could affect the activities proposed in the applicant's COP, including:

(1) Table ~~6~~8: Resources, conditions and activities that shall be described in the construction and operations plan.

Type of Information:	**Including:**
(1) Hazard information and sea level rise	Meteorology, oceanography, sediment transport, 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 Ocean SAMP Chapter 3, Section 350.2 for more information).
(2) Water quality and circulation	Turbidity and total suspended solids from construction. Modeling of circulation and stratification to ensure that water flow patterns and velocities are not altered in ways that would lead to major ecosystem change.
(3) Biological resources	Benthic communities, marine mammals, sea turtles, coastal and marine birds, fish and shellfish not targeted by commercial or recreational fishing, plankton, sea grasses, and plant life.
(4) Threatened or endangered species	As defined by the ESA (16 U.S.C. § 1531 *et seq.*)
(5) Sensitive biological resources or habitats	Essential fish habitat, refuges, preserves, Areas of 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.*), as amended.
(7) Social and economic resources	As determined by the Council in coordination with the Joint Agency Working Group.
(8) Coastal and marine uses	Military activities, vessel traffic, and energy and non-energy mineral exploration or development.

h. The applicant shall submit an oil spill response plan per the Oil Pollution Act of 1990, 33 U.S.C. § 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.

j. The Council shall review the applicant's COP and the information 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.

l. 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: (Note: (h) through (o) moved to § 11.9.8(B))

(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 § 11.10.6 of this Part. The applicant shall include the following items in the applicant's facility design report:

(AA) Table 7: Contents of the facility design report.

Required documents:	Required contents:	Other requirements:
(1) Cover letter	(i) Proposed facility designations; (ii)The type of facility	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(2) Location	(i) Latitude and longitude coordinates, Universal Mercator grid-system coordinates, state plane coordinates in the Lambert or Transverse Mercator Projection System; (ii) These coordinates shall be based on the NAD (North American Datum) 83 datum plane coordinate system; and (iii) The location of any proposed project easement.	The applicant's plat shall be drawn to a scale of 1 inch equals 100 feet and include the coordinates of the project site, and boundary lines. The applicant shall submit four (4) paper copies and one (1) electronic copy.
(3) Front, Side, and Plan View drawings	(i) Facility dimensions and orientation; (ii) Elevations relative to mean lower low water (MLLW); and (iii) Pile sizes and penetration.	The applicant's drawing sizes shall not exceed 11" x 17". The applicant shall submit four (4) paper copies and one (1) electronic copy.

(4) Complete set of structural drawings	The approved for construction fabrication drawings should be submitted, including, e.g., (i) Cathodic protection systems; (ii) Jacket design; (iii) Pile foundations; (iv) Mooring and tethering systems; (v) Foundations and anchoring systems; and (vi) Associated cable and pipeline designs.	The applicant's drawing sizes shall not exceed 11" x 17". The applicant shall submit four (4) paper copies and one (1) electronic copy.
(5) Summary of environmental data used for design	A summary of the environmental data used in the design or analysis of the facility. Examples of relevant data include information on: (i) Extreme weather; (ii) Seafloor conditions; and (iii) Waves, wind, currents, tides, temperature, sea level rise projections, snow and ice effects, marine growth, and water depth.	The applicant shall submit four (4) paper copies and one (1) electronic copy. If the applicant submitted these data as part of the SAP or COP, the applicant may reference the plan.
(6) Summary of the engineering design data	(i) Loading information (e.g., live, dead, environmental); (ii) Structural information (e.g., 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;	The applicant shall submit four (4) paper copies and one (1) electronic copy.

	fabrication or installation guidelines); (iii) Location of foundation boreholes and foundation piles; and (iv) Foundation information (e.g., soil stability, design criteria).	
(7) A complete set of design calculations	Self-explanatory.	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(8) Project-specific studies used in the facility design or installation	All studies pertinent to facility design or installation, (e.g., oceanographic and soil reports)	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(9) Description of the loads imposed on the facility	(i) Loads imposed by jacket; (ii) Turbines; (iii) Transition pieces; (iv) Foundations, foundation pilings and templates, and anchoring systems; and (v) Mooring or tethering systems.	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(10) Geotechnical report	A list of all data from borings and recommended design parameters.	The applicant shall submit four (4) paper copies and one (1) electronic copy.

(2) For any floating facility, the applicant's design shall meet the requirements of the U.S. Coast Guard for structural integrity and stability (e.g., verification of center of gravity). The design shall also consider:

(AA) foundations, foundation pilings and templates, and anchoring systems; and

(BB) mooring or tethering systems.

(3) The applicant is required to use a certified verified agent (CVA). The facility design report shall include two paper copies of the following certification statement: "The design 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. The certified design and as-built plans and specifications shall be on file at (given location)."

(4) Fabrication and installation report - The applicant's fabrication and installation report shall describe how the applicant's facilities shall be fabricated and installed in accordance with the design criteria identified in the facility design report; the applicant's approved SAP or COP; and generally accepted industry standards and practices. The applicant's fabrication and installation report shall demonstrate how the applicant's facilities shall be fabricated and installed in a manner that conforms to the applicant's responsibilities listed in § 11.10.6 of this Part. The applicant shall include the following items in the applicant's fabrication and installation report:

(AA) Table 8: Contents of the fabrication and installation report.

Required documents:	**Required contents:**	**Other requirements:**
(1) Cover letter	(i) Proposed facility designation; (ii) Area, name, and block number; and (iii) The type of facility	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(2) Schedule	Fabrication and installation.	The applicant shall submit four (4) paper copies and one (1) electronic copy.
(3) Fabrication information	The industry standards the applicant shall use to ensure the facilities are fabricated to the design criteria identified in the facility design report.	The applicant shall submit four (4) paper copies and one (1) electronic copy.

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

(5) 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 ten (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 ten (10) days after completion of construction and installation activities under a fabrication and installation report.

(3) At least seven (7) days before commencing commercial operations.

v. The applicant may commence commercial operations within thirty (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.(Note: this section in its entirety moved to new § 11.9.8(B)(8)

11.10.6 Design, Fabrication and Installation Standards (formerly § 1160.6)

A. 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.

1. 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.

2. 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.

3. 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.

4. The verification shall be conducted by or under the direct supervision of registered professional engineers.

5. The Council shall approve or disapprove the applicant's CVA prior to construction.

6. 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.

7. 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.

8. 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.

9. 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 § 11.10.6(A)(11) of this Part;

d. Make periodic onsite inspections while installation is in progress and satisfy the requirements of § 11.10.6(A)(12) of this Part; 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 thirty (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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. The CVA shall conduct an onsite survey of the facility after transportation to the approved location.

16. 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.

17. 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.

18. Until the Council releases the applicant's financial assurance under § 11.10.7(B) of this Part, 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.

19. 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 § 11.10.7(B) of this Part. 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).~~

~~20. The applicant shall provide the Council with the location of these records in the certification statement.~~

~~21. 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.~~(Note: this section in its entirety moved to new § 11.9.8(C)

~~11.10.7 Pre-Construction Standards (formerly § 1160.7)~~

~~A. The Council may issue a permit for a period of up to fifty (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 five (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 R.I. Gen. Laws Chapter 20-10 and § 00-1.3.1(K) of this Chapter.~~

~~B. 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 three (3) years thereafter to ensure the amount is sufficient.~~

~~C. 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, Army Corps of Engineers, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency.~~

~~D. The Council shall consult with the U.S. Coast Guard, the U.S. Navy, marine pilots, the Fishermen's Advisory Board as defined in § 11.3(E) of this Part, 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.~~

E. 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.

F. 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).

G. 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

H. 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.

I. 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."

J. 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 Ocean SAMP Chapter 7, 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:

1. Negligible: No measurable impacts.

2. 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.

3. 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.

4. 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.

K. 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. (Note: this section in its entirety moved to new § 11.9.8(D)

11.10.8 Standards for Construction Activities (formerly § 1160.8)

A. 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.

B. 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.

C. 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.~~

~~D. All construction activities 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.~~

~~E. 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 § 11.10.1(E) of this Part, and using:~~

~~1. Trained personnel; and~~

~~2. Technologies, precautions, and techniques that shall not cause undue harm or damage to natural resources, including their physical, atmospheric, chemical and biological components.~~

~~F. 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.~~

~~1. 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~~

~~G. 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:~~

~~1. Immediately halt all seafloor disturbing activities within the area of the discovery;~~

~~2. Notify the Council of the discovery within 24 hours; and~~

~~3. 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 C.F.R. 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.

H. 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 ninety (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.

I. All pile-driving or drilling activities shall comply with any mandatory best management practices established by the Council in coordination with the Joint Agency Working Group and which are incorporated into the RICRMP.

J. 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. (Note: this section in its entirety moved to new § 11.9.8(E)

11.10.96 Monitoring Baseline Assessment Requirements (formerly § 1160.9)

A. The Council in coordination with the Joint Agency Working Group, as described in § 11.9.7(JI) of this Part, shall determine requirements for developing baseline assessments monitoring prior to, during, and post constructionas specified in § 11.9.9 of this Part. For CZMA federal consistency purposes the Council must identify any baseline assessments and construction monitoring activities during its CZMA six-month review of the COP. The Council cannot require monitoring actions after its CZMA review. A detailed commercial fisheries baseline assessment shall be considered necessary data and information to be filed with the applicant's consistency certification for a CZMA review and to demonstrate compliance with this enforceable policy.Specific monitoring requirements shall be determined on a project-by-project basis and may include but are not limited to the monitoring of:

1. Coastal processes and physical oceanography

2. Underwater noise

3. Benthic ecology

4. Avian species

5. Marine mammals

6. Sea turtles

7. Fish and fish habitat

8. Commercial and recreational fishing

9. Recreation and tourism

10. Marine transportation, navigation and existing infrastructure

11. Cultural and historic resources

B. 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.

C. The items listed below shall be required for all offshore developments:

1. 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. one (1) year after construction and then post-construction). 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

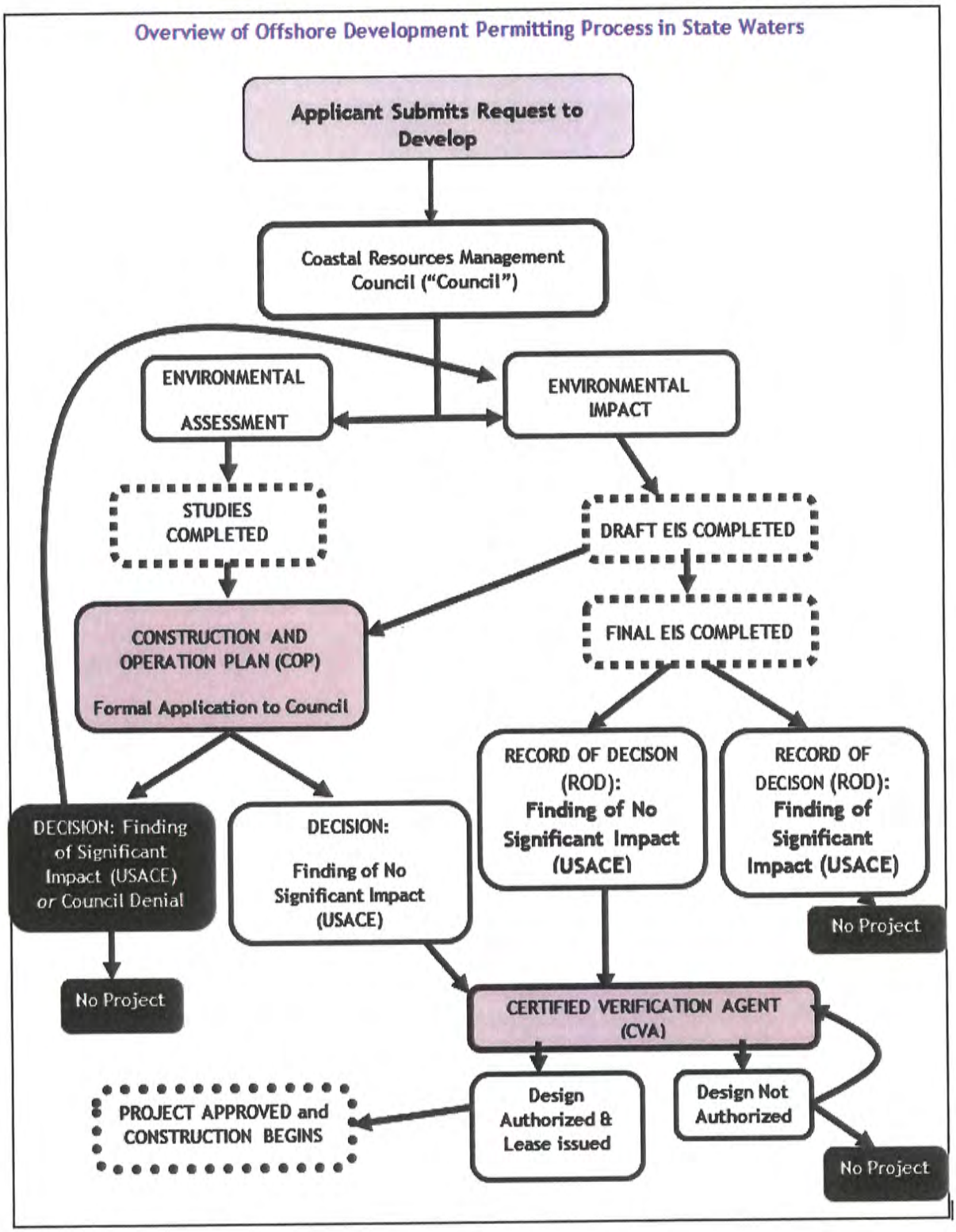
~~proposed projects within the renewable energy zone that are proposed within two (2) years of the adoption of the Ocean SAMP.~~

2. ~~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: pre-construction (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 two (2) years of the adoption of the Ocean SAMP.~~

D. ~~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:~~

1. ~~Post construction monitoring including regular visual inspection of inner array cables and the primary export cable to ensure proper burial, foundation and substructure inspection.~~ (Note: deleted text within this section has been moved to new § 11.9.9)

11.11 Appendix 1 - Overview of offshore development permitting process in state waters


Overview of Offshore Development Permitting Process in State Waters
Applicant Submits Request to Develop
Coastal Resources Management Council ("Council")
ENVIRONMENTAL ASSESSMENT
ENVIRONMENTAL IMPACT
STUDIES COMPLETED
DRAFT EIS COMPLETED
CONSTRUCTION AND OPERATION PLAN (COP)
Formal Application to Council
FINAL EIS COMPLETED
RECORD OF DECISON (ROD): Finding of No Significant Impact (USACE)
RECORD OF DECISON (ROD): Finding of Significant Impact (USACE)
DECISION: Finding of Significant Impact (USACE) or Council Denial
DECISION: Finding of No Significant Impact (USACE)
No Project
No Project
CERTIFIED VERIFICATION AGENT (CVA)
PROJECT APPROVED and CONSTRUCTION BEGINS
Design Authorized & Lease issued
Design Not Authorized
No Project