

Rhode Island Marine Fisheries Council

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

Meeting Notice

Shellfish Advisory Panel Wednesday September 2, 2020, 4:00PM

Virtual public meeting - Zoom webinar

MEETING AGENDA

Agenda item	Recommended action(s)	ePacket
		Attachment(s)/links
1. Aquaculture application 2019-	Provide recommendation to	 Application out to
10-047 (East Beach Oyster Co.	the CRMC/Council pursuant	public notice
LLC, Papa)	to <u>RI Gen. Laws §20-10-5(d)</u>	 DEM Review letter
2. Aquaculture application 2020-	Provide recommendation to	 Application out to
05-083 (Van Hemelrijck)	the CRMC/Council pursuant	public notice
	to <u>RI Gen. Laws §20-10-5(d)</u>	• DEM Review letter
3. Aquaculture application <u>2020-</u>	Provide recommendation to	 Application out to
<u>04-037</u> (Bowen)	the CRMC/Council pursuant	public notice
	to RI Gen. Laws §20-10-5(d)	• DEM Review letter
4. Shellfish harvest schedules for	Discussion. Provide	Current harvest
winter management areas	recommendation to the	schedules (Part 4 –
(Greenwich Bay, Bissel Cove,	Council on harvest schedule	Shellfish: sections
Bristol Harbor Shellfish	changes.	4.12.2(A), 4.12.2(E),
Management Areas)		and 4.12.2(G)
5. Providence River Transplant	Discussion on upcoming	
	transplant scheduled for	
	September 15 th	
6. Any Other Matters	Discussion and/or	
	recommendations for future	
	actions	
7 4 1		
7. Adjourn		

To join the webinar, click here. Or enter the following into your web browser: https://zoom.us/j/98106352056

To join by phone, call: 1-929-205-6099

Meeting ID: 981 0635 2056

Participant ID: Provided once you log onto webinar. If not logging onto webinar, simply

wait on the line to be connected on the phone.

All RIMFC Species Advisory Panel meetings are open to the public.

For more information please contact Anna Gerber-Williams at (401) 423-1930.

* Aquaculture applications can be found at http://www.crmc.ri.gov/applicationnotices.html

* Posted to Sec. of State August 21, 2020

Panel Chair: Katie Eagan

Membership:

Jeff Gardner Aquaculture

Bob Rheault Alternate for J. Gardner

David Ghigliotty Comm. Bullrake

Mike McGiveney Comm. Bullrake

Gerald Schev Comm. Bullrake

Manuel Sousa Comm. Bullrake

Bob Smith Dealer

Roger Tellier Recreational Rod & Reel

Richard Pastore Recreational Rod & Reel

Edward Troiano Recreational Shellfish

Kenneth Murgo Comm. Shellfishing

John McDonald Comm. Shellfishing

Marine Fisheries staff: Anna Gerber-Williams



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:	2019-10-047	Date:	October 21, 2019
This office has	under consideration the application of	:	
	East Beach Oyste 1176 Post F		

Wakefield, RI 02879

for a State of Rhode Island Assent to re-configure, expand and maintain: a bottom plant oyster farm in Ninigret Pond. The current site area is 10.69 acres. The reconfiguration would relinquish a portion of the existing site and expand the remaining portion of the site to create a farm of 15.6 acres.

Project Location:	Ninigret Pond
City/Town:	Narragansett
Plat/Lot:	/
Waterway:	

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 20, 2019.



State of Khode 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 th	e Public Laws of 1971 Amended.
	File No (CRMC use only):
Applicant's Name: East Beach Oyster (o. LLC	2019-10-047
Mailing Address: 1176 Fos+ Rd	Res. Tel. #
City/Town: Wakefield State: Pl Zip Code Od	Bus. Tel. #(401)649-0117
Waterway: Ningret Pond Est. Project Cost \$ 200.00	
Longitute/latitude of all corners of Proposed Aquaculture Project Location (prefera	ably in decimal degrees): 3 " / 41° 21' 14.61"
W 71° 40'53,38 / 41° 21'10.04 & 71° 40'35.71 Sw 71° 40'52.86'/41°21'07.61" SE 71° 40'35.19	/ 410 21 12.18
Have you or any previous owner filed an application for and/or received an assent for the file and/or assent numbers). File $\#$ $2019 - 62 - 078$	or any activity on this site? (If so please provide
Is this application being submitted in response to a coastal violation? Yes	No
If yes, you must indicate NOV or C&D Number	
Is this site within a designated historic district? No	
PiJCZ	
Owner's Signature (sign and pring	nt)

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.

PLEASE REVIEW REVERSE SIDE OF APPLICATION FORM

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OCT 1 0 2019

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OCT 1 0 2019

COASTAL RESOURCES
MANAGEMENT COUNCIL

East Beach Oyster Co. Prepared on 9/14/2019

Written Description

This proposal is to reconfigure and expand our bottom culture lease #2015-5-107. Our request is to relinquish 900' from the east end of the existing lease to ease the most heavily traveled north eastern corner and make navigation for other boaters more fluid. We also would like to shift the existing western border 400' to the west. The reconfiguration of the lease will result in a total area of 15.6 acres which is a net expansion of 4.91 acres. On this site we will be bottom planting eastern oysters and hard shell clams. Periodically a boat will be on site either planting or harvesting. The harvesting techniques will include bullraking, dredging and diving. Between memorial day and labor day harvesting will be limited to weekdays. The shellfish will be graded and marketable product will be sold and sub market product will be returned to the site to be replanted. The site will be marked with 4 corner markers no larger than 12" and also one marker in the middle of each corner to make the border clear. The proposed area is a silty sand bottom ranging from 6'-8' deep.



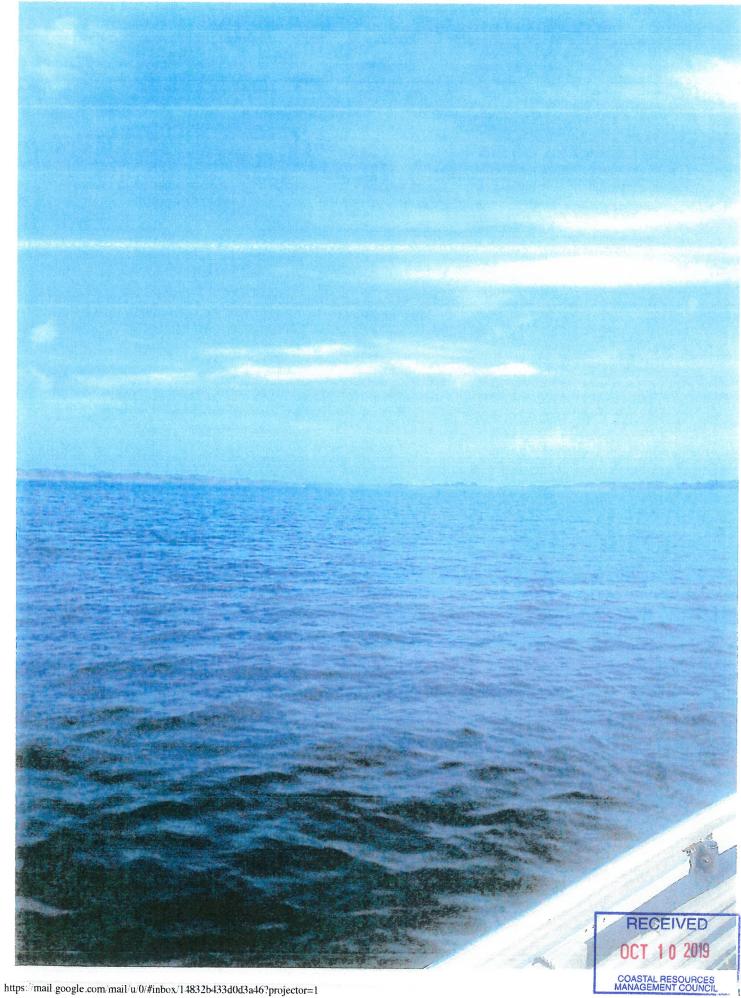
Nicholas J. Papa East Beach Oyster Co. LLC Prepared on 9/14/2019

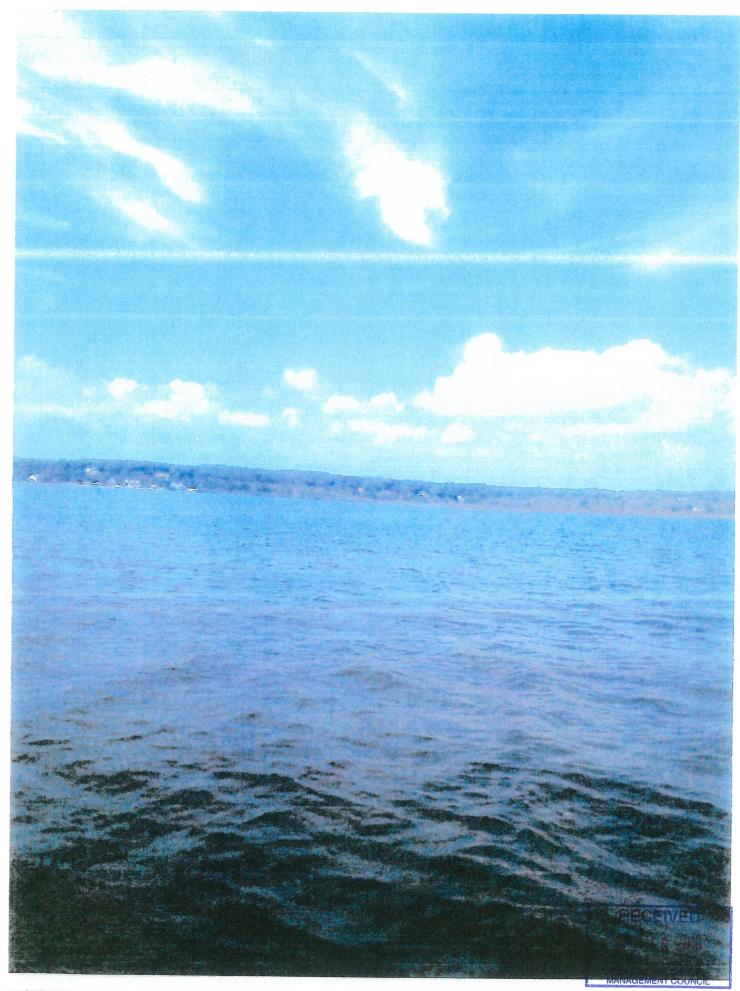
Operational Plan

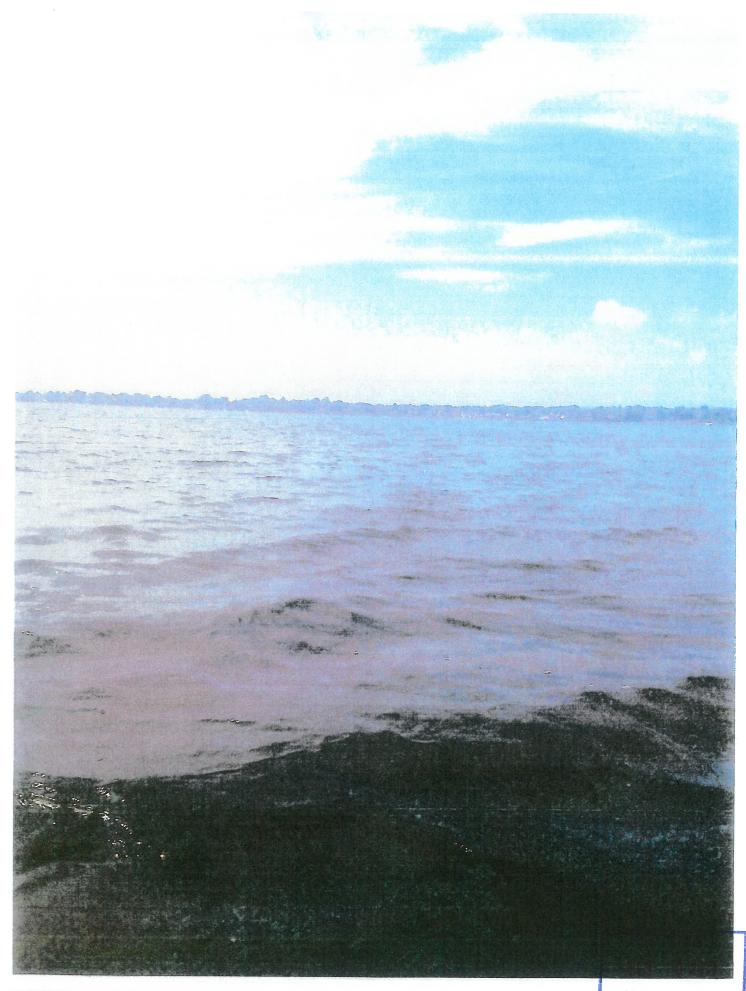
The Proposed Shellfish farming operation will be raising oysters and clams from juvenile to market size on the bottom only. The seed will be purchased from a number of approved sources. The oysters will be raised up to about 1.5-2inch on our cage lease. It will then be planted on the bottom where it will grow out to market size. The clam seed will be planted in the fall directly in the sand below the oysters and left there for grow out.. Once the oysters reach market size, they will be sold to the Ocean State Shellfish Co-op located on Walts way in Narragansett. The market oysters and clams will be culled out by hand. The shellfish will be bull raked, dredged or harvested by diving.











East Beach Oysier Company

360

7.82 ac. Bottom Culture

ose

ARE

Existing Area

ose

100

250'x 900' Relinquished

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COASTAL RESOURCES

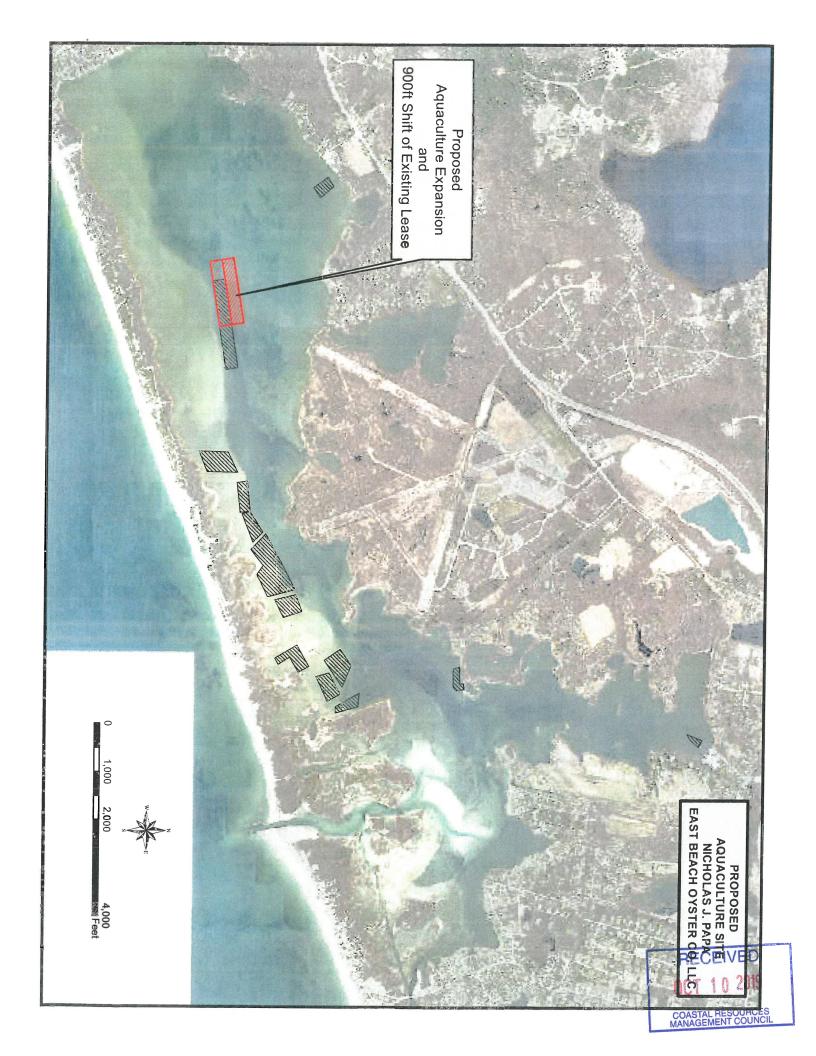
East Beach Dyster Company
09/14/2019

00.

Bottom Culture

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COASTAL RESOURCES
MANAGEMENT COUNCIL



NICHOLAS J. PAPA EAST BEACH OYSTER CO. LLC PREPARED ON: 9/14/2019

Section 300.1

- 1) Q:Demonstrate the need for the proposed activity or alteration.

 A:The proposed activity consists of an expansion of an existing lease in the west end of Ninigret Pond. This site is desired for the cultivation of the eastern oyster, Crassostrea virginica. The East Beach Oyster Company LLC will use this additional acreage to not only continue healthy farming practices, but also insure healthy and responsible oyster husbandry in the pond.
- 2) Q:Demonstrate that all local zoning ordinances, building codes, flood hazard standards, and all safety codes, fire codes, and environmental requirements have or will be met.
 - A:The proposed project will not impact the Land.
- 3) Q:Describe the boundaries of the coastal waters and land area that are anticipated to be affected.
 - A:The proposed site is located in the west end of Ninigret Pond. The site is north of the sand flats and north of the East Beach Oyster Co. existing bottom culture lease.
- 4) Q: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.
 - A:The proposed activity will not impose any threat of erosion or deposition to the area or surroundings. The activities will be very low impact.
- 5) Q:Demonstrate that the alteration or activity will not result in significant impacts on the abundance and diversity of plant and animal life. A:The proposed activity will aid in the diversity and abundance of animal life by providing additional habitat and micro-ecosystems. The presence of oysters in this area will help mitigate the negative effects of Nitrogen run off from waterfront lawn fertilizer applications and septic systems in close proximity to the pond.
- 6) Q: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.
 - A:The proposed activity will not interfere with shoreline access or to the waters. The proposed operation is for bottom culture only which will not interfere with navigation of vessels.
- 7) Q:Demonstrate that the alteration will not result in significant impacts to water circulation, flushing, turbidity, and sedimentation A:The proposed operation will be very low profile and not affect circulation, flushing, turbidity or sedimentation.



- 8) Q:Demonstrate that there will be no significant deterioration in the quality of the water in the immediate vicinity as defined by DEM A:The water quality will be improved by oysters' food filtration system and by the increase in biodiversity. Each oyster can filter up to 50 gallons of water a day, resulting in a cleaner pond. This can negate the skyrocketing nitrogen input(Lawn fertilizer and septic runoff) from more than ten waterfront homes. Adding oysters in the proposed site creates an ecosystem, which builds biodiversity. This, in turn, promotes bioturbation, aiding in sediment health.
- 9) Q:Demonstrate that the alteration or activity will not result in significant to the areas of historic and archaeological significance.

 A:The proposed site is not of historical or archeological significance.
- 10)Q:Demonstrate that the alteration or activity will not result in significant conflicts with water-dependent uses and activities such as boating, fishing, swimming, navigation, and commerce, and...

 A:The proposed activity will not interfere with navigation or recreational activities.
- 11)Q:Demonstrate that measures have been taken to minimize any adverse scenic impact(see section 330)

 A:The proposed site will be marked with only a 12" buoy on each point. And due to the size of the area and distance between corners there will also a buoy between the corner markers to clearly mark the boundary.

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 of individual, firm, partnership, association, academic institution, municipality, or corporation who is principally responsible for the aquaculture operation or activity; if corporation, specify and include names of all owners/partners: East Beach Oyster Co. LLC 1176 Post Road, Wakefield RI, 18879
- 2. *CRMC file number* for the facility; new applications will be assigned a file number by CRMC:
- 3. **DEM Aquaculture License number** (applicable if products are offered for sale); new applicants will need to obtain the DEM aquaculture license:056
- 4. *Type of facility* (e.g., commercial lease site, upweller, experimental site, restoration site) and *nature of operation* (i.e., methodology used). Commercial oyster lease/bottom culture
- 5. Location of facility (include aerial or chart depicting exact location):

• Town: Charlestown

Water body: Ninigret pond

• Lat/long coordinates of facility:-71 39'33.94", 41 21'17.14"



- 6. Identification of all *species of shellfish* grown at the facility. Acknowledgement that the applicant will follow Biosecurity Board seed protocols should be included. Crassostrea Virginica and mercenaria mercenaria will be grown and all biosecurity board protocols will be followed
- 7. Description of *types of structures, gear and methods* used at the facility (e.g., rafts, pens, cages, tanks, upwellers, docks) and their locations on the site. (Include a sketch/site plan that details a cross-section of structures as they appear in water column including proximity to surface and bottom.): The proposed expansion will be for bottom culture only, see cross section in application.
- 8. Description of the *methods and equipment used to identify and mark site*. The site will be marked at each corner with a 12'lobster pot buoy with the CRMC assent number visible.
- 9. DEM Shellfish Harvesting Classification at site. DEM6p
- 10. Description of *practices and procedures used* during the growth, harvest, storage, transportation, and sale of the cultured species. The oysters will be grown on the sand bottom and harvested with bull rakes and by hand. Once harvested, the oysters will be packed and iced and delivered to the dock where the Ocean State Shellfish Cooperative refrigerated truck will pick them up. Tags showing the harvest time, date and location will accompany all shellfish at time of transfer. All vibrio regulations will be met or exceeded during the sale of shellfish.

11. Procedures for *maintaining records*:

For operations using seed acquired from out-of-state: A log will be taken and pathology reports will be reported and filed.

Description of notification, disease certification, and labeling/tagging procedures:Pathology reports will be obtained and filed with CRMC before any transfer takes place. Upon harvest tags will acompany all product.

12. Procedures for *maintaining records*:

For upwellers/seed-growing facilities in prohibited waters: All seed will be grown in certified waters.

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): The seed will be graded weekly minimum and will be brought to the sight once it reaches 9mm.



November 21, 2019

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

Re: East Beach Oyster CO. LLC public notice #2019-10-047

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 East Beach Oyster Co. LLC for a proposed site reconfiguration and expansion of assent # 2015-05-107 from 4.91 acres to 15.6 acres total in Ninigret Pond for cultivating oysters (*Crassostrea virginica*) and hard shell clams (*Mercenaria mercenaria*) using bottom planting.

The DMF believes that the adverse impacts to marine fisheries and wildlife and their habitat from this prospective shellfish farm would be minimal. As such, the DMF does not have objections to this proposed site expansion as is outlined in the application.

The shallow waters adjacent to the saltmarshes of Ninigret Pond provide critical wintering habitat for a variety of waterfowl including American Black Ducks, Mallards, Bufflehead, Goldeneye, Redbreasted Mergansers and Canada Geese. Of particular concern is the potential for negative impacts on American Black Ducks (ABDU), a species of greatest conservation need (RI WAP 2015), whose 2015 estimated breeding population was 541,000, 11% below the 2014 estimate and 13% lower than the 1990-2014 average of 618,000 birds (USFWS 2015). Research into the drivers of ABDU populations is currently underway; however, some early indications suggest that habitat degradation or loss may be one explanation for the decreasing population.

The fact that this expansion is in an area of Ninigret pond that already has a high density of leases does not negate the negative impacts that it will have. Increased boat traffic and activities associated with the maintenance of the expanded lease will cause flushing and displacement of waterfowl resulting in higher energy expenditure during the winter period when energy conservation is critical for survival.

Additionally, federally threatened Piping Plovers nest and raise chicks on East Beach and forage with their chicks on the Ninigret Pond mudflats annually from April to September (Figure 2). Mudflats are a critical habitat for Piping Plover survival during the chick rearing stage (Elias et al. 2000). Evidence suggests that activity at similar aquaculture facilities can significantly deter Piping Plover and other shorebirds from foraging in adjacent areas (Burger et al. 2015).

Therefore, DFW requests that construction at the lease be performed outside of the three hours surrounding low tide from April 15th through September 15th in order to limit disturbance to foraging shorebirds. DFW additionally requests that from December 1st through March 31st annually, work on the lease occurs only between the hours of 10am and 2pm to minimize disturbance to wintering waterfowl.

The DMF and DFW believes that the adverse impacts to marine fisheries and wildlife and their habitat from this prospective shellfish farm would be minimal. However, in order to minimize impacts to migrating birds, DFW requests the following conditions be added to the lease: 1) construction at the lease be performed outside of the three hours surrounding low tide from April 15th through September 15th annually in order to limit disturbance to foraging shorebirds, and 2) from December 1st through March 31st annually, work on the lease occurs only between the hours of 10am and 2pm to minimize disturbance to wintering waterfowl.

The Divisions' acceptance of the current proposal is specific to the location and specifications outlined in the application and the amendments listed above. The Department looks forward to working with the applicant in the future.

Sincerely,

Jason McNamee, Chief of Marine Resource Management

Jay Osenkowski, Deputy Chief, Wildlife

References

- Borgmann, K. L. 2010. A Review of Human Disturbance Impacts on Waterbirds. Audubon California, 376 Tiburon, California 94920.
- Longcore, Jerry R., Daniel G. Mcauley, Gary R. Hepp and Judith M. Rhymer. 2000.

 American Black Duck (Anas rubripes), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online:

 http://bna.birds.cornell.edu.bnaproxy.birds.cornell.edu/bna/species/481doi:10.2173/bna.481
- Platteeuw, M., and R. J. H. G. Henkens. 1997. Possible impacts of Disturbance to Waterbirds: Individuals, Carrying Capacity and Populations. Wildfowl 48:225-236.
- Rhode Island Wildlife Action Plan. 2015. Rhode Island Department of Environmental Management, Providence, RI, USA.
- U.S. Fish and Wildlife Service. 2015. Waterfowl population status, 2015. U.S. Department of the Interior, Washington, D.C. USA.



Figure 1. Proposed site shift and expansion

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:	2020-05-083	Date:	June 10, 2020	
This office has	under consideration the application of:			
	Andrew Van Hem	nelrijck		
	167 Broadrock I	Road		
	South Kingstown, Rl	02879		

for a State of Rhode Island Assent to construct and maintain: a 0.55 acre primary site for an oyster farm using bottom cages and a 0.05 acre winter site for bottom cages.

Project Location:	Point Judith Pond
City/Town:	Narragansett
Waterway:	West side of Great Island

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, 2020.



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.		
Project Location Point Judith Podvarragansett, Pl No. Street Otty/Town	File No. (CRMC USE ONLY) 2020-05-083	
Owner's Name Andrew Van Hemelijck	Plat: Lot(s):	
Mailing Address 167 Broad Rock Rd.	Contact No.: (401)741-6507 Email Address:	
City/Town South Kingstown State R1 Zip Code 02879	andrewvanhemelrick@pmi	
Contractor RI Reg. # Address	Email address: Tel. No.	
Designer Address	Tel. No.	
Name of Waterway Point Judith Pond Describe accurately the work proposed (Use alliting Inc.)	Estimated Project Cost (EPC): 5,000 Application Fee: 50-00	
Describe accurately the work proposed. (Use additional sheets of paper if necessary and attach this form.) Application for equacilibre lesse to grow oystra 3 quality at 2 Sites in Point Judith Pand.		
Have you or any previous owner filed an application for and/or received an assent for any activity on this property? (If so please provide the file and/or assent numbers):		
Is this site within a designated historic district?	S ENO	
Is this application being submitted in response to a coastal violation? \Box YE		
If YES, you must indicate NOV or C&D Number:		
Name/mailing addresses of adjacent property owners whose property adjoins the project site. Accurate mailing addresses will		
insure proper notificationApplicant must initial to certify accuracy of adjacent property owners and accuracy of mailing addresses.		
STORMTOOLS (<u>Http://www.beachsamp.org/resources/stormtools/</u>) is a planning to of sea level rise and storm surge on their projects. The Council encourages appli understand the risk that may be present at their site and make appropriate adjust	cants to use STORMTOOLS to help them	

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.

Owner's Signature (sign and print)

PLEASE REVIEW REVERSE SIDE OF APPLICATION FORM

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MAY 28 2020

COASTAL RESOURCES

Andrew Van Hemelrijck Aquaculture Lease Application June 9, 2020 Operational Plan

CRMC File Number - 2020-03-029

DEM Aquaculture License number - 000121

Type of facility - 2 Commercial Lease Sites (one primary, one winter location)

GPS Lat/long coordinates Primary Site

- **1 -** 41.38845° N, -71.51172° W
- 2 41.38867° N, -71.51129° W
- **3 -** 41.3883° N, -71.51095° W
- 4 41.38807° N, -71.51136° W

Winter Site

- **1 -** 41.38725° N, -71.51301° W
- 2 41.38724° N, -71.51292° W
- 3 41.38701° N, -71.51295° W
- 4 41.38701° N, -71.51304° W

Proposed Species

Eastern Oysters (*Crassostrea virginica*), Quahogs (*Mercenaria mercenaria*)

Summary

I plan to grow Oysters and Quahogs will at this site using several proven aquaculture methods including grow-out bags, cages, rack and bag systems, and direct bottom planting. Both of these species are native to the immediate area.

I have 5 years experience growing oysters in the immediate area both with a commercial viability permit at this location, and also with my parents Lisa and Chris Van Hemelrijck under their dockside permit. Both my parents and grandfather own property overlooking the site, and my family has lived on these 2 waterfront properties for 4 generations. I grew up directly in view of this area as a year round resident, allowing me to become very familiar with this location. I have also completed the Applied Shellfish Farming course at Roger Williams University with Dale Leavitt.

Low tide events (<.5ft below mean) might pose an issue in cold winters, and for this reason I am applying for a winter location in nearby deeper water as well. Cages will be

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used at the winter site and will be placed on the sea floor remaining submerged by ~5ft of water at low tides. Gear at the primary site will be on the seafloor as well and will remain submerged in all but the lowest tides. Great care will be taken to ensure that the site appears orderly and presentable.

Design & Operation

Primary Site - Several different methods will be used at the primary site including grow out bags in various configurations, cages, and direct bottom planting. The water depth at this site ranges from a foot to a foot and a half at mean low tide, so all gear used will be designed to maintain a low profile. The site and all gear will be adequately marked with buoys to ensure it is not a navigational hazard. I plan to start small at first and work up to full operating capacity over about a 3 year period.

Grow out bags will be organized in trawls throughout the site. Two configurations will be used to keep the bags slightly elevated off the seafloor: 5" diameter PVC feet will be attached to bags, and racks will be constructed of 3" PVC with bags attached to the top. The bags with PVC feet will be clipped to lines and anchored to the seafloor with helicle screws or weighted anchors, and the PVC racks will be driven into the sand. The maximum height of both of these configurations will be 8", and a maximum of 1500 bags will be used.

Cages with bays to hold grow out bags will be used in the Eastern corner of the site where the water is deepest. Cages are heavy enough to be placed as is on the sand with detachable buoys to mark and access these cages at higher tides. Cage heights will be 14 - 18", and a maximum of 80 cages will be used.

Oysters and quahogs will also be planted directly into the seafloor in the center of the site.

Winter Site - Cages from the primary site will be relocated to the winter site for the months of December through March each year. None of the other gear types will be used here, and a maximum of 80 cages will be used. The site and all gear will be adequately marked with buoys when gear is onsite.

Seed Stock Origin

Seed cultured in waters from within Point Judith Pond will be used whenever possible. In cases where seed must be sourced from other biosecurity zones it will be from an approved aquaculture facility and accompanied by a shellfish pathology report.

Seed stock from areas not approved for the harvest of shellfish will be recorded to track purchase data, marked using color-coded zip ties, and kept in marked trawls for 12 months before shellfish are offered for sale/consumption.



I don't anticipate any significant effects on erosion or deposition processes in the area. The site does not abut the shore, and aquaculture sites in the area using the same or similar methods have not been shown to significantly impact these processes.

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

The shellfish farming equipment I intend to use is known to create refuges for many marine species, attracting a variety of small fish and crustaceans, along with some commercially important species as well. Juvenile tautog, black sea bass, lobsters and others can often be found using Point Judith Pond shellfish farms for protection as they grow. If anything, an increase in abundance and diversity of plant and animal life is expected.

(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 proposed site does not border the shoreline or significantly interfere with access to this area of the pond. All proposed gear will be low-profile and kept tight along the seafloor to minimize any impact it may have.

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

All grow-out gear is designed to allow the maximum flow of water to pass through the area because it is necessary for good shellfish growth, so the typical flow of water through the area will not be impeded. The gear I plan to use does not cause sedimentation, and activity at the site will have no net effect on turbidity.

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

Shellfish are filter feeders, and the species I intend to cultivate are known to improve water quality in the area where they are farmed. Shellfish farming is known to clarify water in the local environment and stimulate denitrification, combating harmful algae blooms and benefiting many local species including eel grass. No chemicals or feed of any kind will be used or needed in the operation of the 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 not on or near any known sites of historic 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;



Activity in the area will not be significantly affected by the proposed farm. This area is rarely used for recreational activities. It is a shallow area that most mariners avoid in all but the highest tides, and it does not contain shellfish in high enough concentrations to attract harvesters. The farm will not obstruct typical navigation in any significant way, and the ability of the public to access the site and surrounding area (by kayak, paddle board or on foot for example) will not be impeded.

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

Every effort will be made to ensure that the equipment is visually innocuous. All gear will be designed to be as minimal and low profile as possible and arranged in orderly rows to achieve this end.

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COASTAL RESOURCES
MANAGEMENT COUNCIL

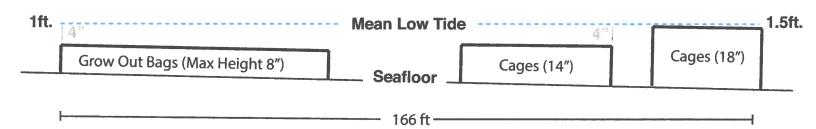
Andrew Van Hemelrijck Aquaculture Lease Application June 9, 2020 **Primary Site Plans** 411 ft **GPS Coordinates: Dimensions: 1 -** 41.38845° N, -71.51172° W 146ft x 166ft **2 -** 41.38867° N, -71.51129° W .55 acres **3 -** 41.3883° N, -71.51095° W **4 -** 41.38807° N, -71.51136° W 100 Mean Low Tide N Feet True North

Andrew Van Hemelrijck Aquaculture Lease Application

June 9, 2020 Primary Site Plans - Side View

Side View

----- Mean High Tide (4.4 ft.)



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COASTAL RESOURCES
MANAGEMENT COUNCIL

Andrew Van Hemelrijck Aquaculture Lease Application June 9, 2020 Winter Site Plans

Sandbar

GPS Coordinates:

- 1 41.38725° N, -71.51301° W
- 2 41.38724° N, -71.51292° W
- 3 41.38701° N, -71.51295° W
- 4 41.38701° N, -71.51304° W

100



True North

Little o Islan

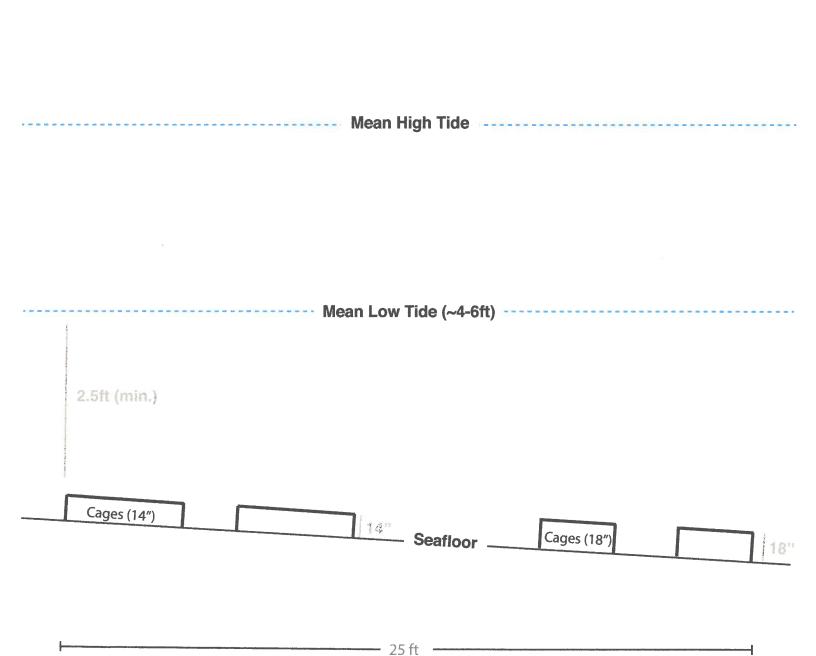
Dimensions: 87ft x 25ft .05 acres

Bo

Andrew Van Hemelrijck Aquaculture Lease Application

June 9, 2017 Winter Site Plans - Side View

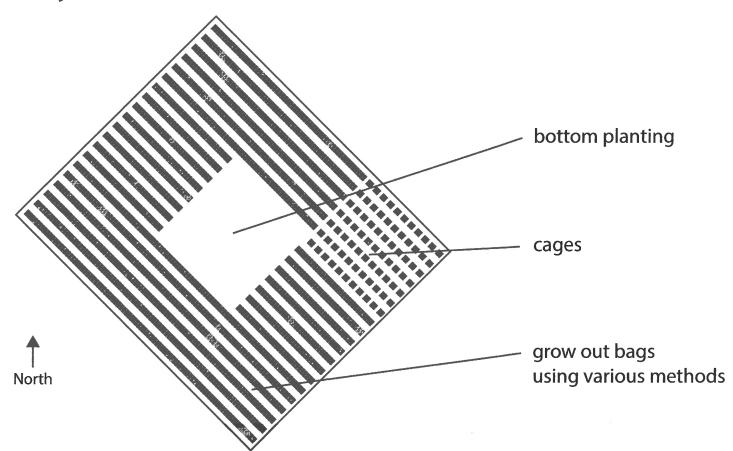
Side View



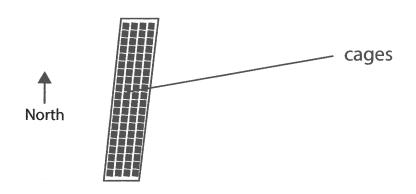


Andrew Van Hemelrijck Aquaculture Lease Application June 9, 2020 Gear Layout Plan

Primary Site



Winter Site



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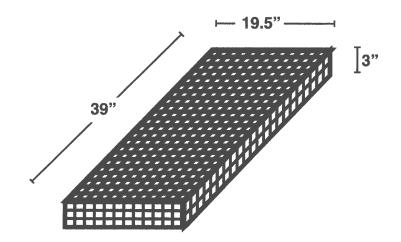
UIN 09 2020

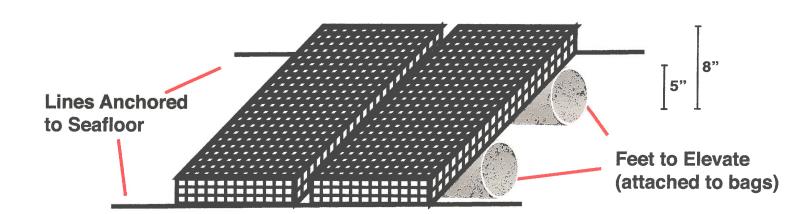
COASTAL RESOURCES
MANAGEMENT COUNCIL

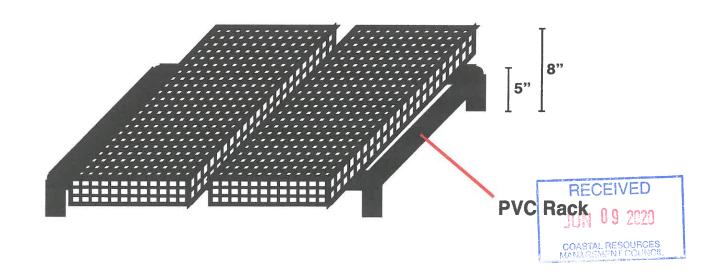
Andrew Van Hemelrijck Aquaculture Lease Application

June 9, 2020 Gear Details

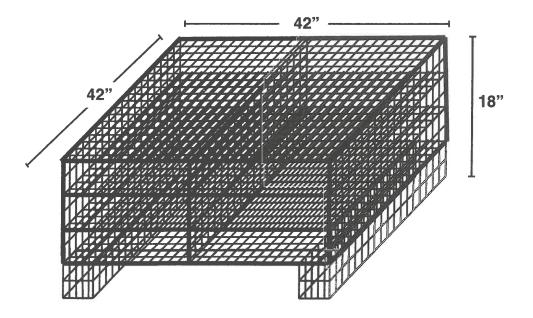
Grow-out Bags -







Cages -





* 3 high by 2 wide are pictured, but 2 high by 3 wide will be used as well. N 0 9 2020

COASTAL RESOURCES

Photos -



Facing North, looking at Primary Site



Facing East, from Primary Site





Facing South, from Primary Site, Winter Site is on the right of the frame.



Facing West, from Primary Site, Winter Site is on the left of the frame.

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COASTAL RESOURCES
MANAGEMENT COUNCIL



From Little Comfort facing WNW. Winter site is on the right of the frame.

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JUN 0 9 2020

COASTAL RESOURCES
MANAGEMENT COUNCIL

June 25, 2020

Benjamin Goetsch Aquaculture Coordinator Coastal Resources Management Council 4808 Tower Hill Road Wakefield, RI 02879

Re: Van Hemelrijck 2020-05-083

Dear Mr. Goetsch:

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 Andrew Van Hemelrijck for a 0.55 acre site and a 0.05 acre winter storage site (total area of 0.6 acres), both in Point Judith Pond for cultivating eastern oysters (*Crassostrea virginica*). The primary site will use grow out bags in various configurations, cages, and direct bottom plant. Oysters will be placed in bottom cages for storage from December through March at the winter storage site.

Given the existence of the site for the last three years as a commercial viability permit and the absence of issues, the DMF believes that the adverse impacts to marine fisheries and their habitat from this prospective site would be minimal. As such, the DMF does not have objections to this application. However, the DMF would like the applicant to be aware that this area is sometimes used for recreational shellfishing.

The shallow waters of Point Judith Pond provide important wintering habitat for a variety of waterfowl including American Black Ducks, Mallards, Bufflehead, Goldeneye, Redbreasted Mergansers and Canada Geese. Should the lease be approved, DFW requests that from December 1st through March 31st annually, work on the winter storage lease occurs only between the hours of 10am and 2pm to minimize disturbance to wintering waterfowl.

The DMF and DFW's acceptance of the current proposal is specific to the location (provided by the coordinates) and specifications outlined in the application. However, the DMF does request that coordinates be provided for both sites in decimal degree format with six digits after the decimal point. This level of precision is necessary to ensure that

the site is properly displayed in the DMF's spatial database. These higher resolution coordinates should be included in the final assent if the site is approved.

Sincerely,

My Mamle

Jason McNamee,

Deputy Director, Bureau of Natural Resources

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:	2020-04-037	Date:	April 17, 2020
This office has	under consideration the application of:		
	7.1. 5	-	
	John Bowen & Patrick	Bowen	
	79 Shaw Road	l	
	Little Compton, RI	02831	

for a State of Rhode Island Assent to create and maintain: a one acre oyster farm using bottom cages

Project Location:	Sakonnet River
City/Town:	Tiverton
Plat/Lot:	
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 May 17, 2020



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.

Project Location Sakonnet River, Tiverton No. Street City/Town	File No. (CRMC USE ONLY)
1 Toject Boothon	File No. (CRIME USE ONLY)
	2020-04-037
Owner's Name John Bowen, Patrick Bowen	Plat: Lot(s):
Mailing Address 79 Shaw Road	Contact No.: 617-719-7842
City/Town Little Compton State RI Zip Code 02837	Email Address: seanbow@yahoo.com
Contractor RI Reg. # Address	Email address: Tel. No.
Designer N/A Address	Tel. No.
Name of Waterway Sakonnet River	Estimated Project Cost (EPC): Application Fee:
Northwest Corner: 41.580975; -71.210326 Southwest Corner: 41.580122; -71.209876	
Southeast Corner: 41.580026; -71.209485 Have you or any previous owner filed an application for and/or received an a (If so please provide the file and/or assent numbers): NO	ssent for any activity on this property?
Have you or any previous owner filed an application for and/or received an a (If so please provide the file and/or assent numbers): Is this site within a designated historic district?	S NO
Have you or any previous owner filed an application for and/or received an a (If so please provide the file and/or assent numbers): Is this site within a designated historic district? Is this application being submitted in response to a coastal violation?	S NO NO
Have you or any previous owner filed an application for and/or received an a (If so please provide the file and/or assent numbers): Is this site within a designated historic district?	S NO S NO D Number: the project site. Accurate mailing addresses will
Have you or any previous owner filed an application for and/or received an (If so please provide the file and/or assent numbers): NO Is this site within a designated historic district? If YES, you must indicate NOV or Consumer in the property owners whose property adjoins insure proper notification. Applicant must initial to certify accuracy of adjacent property.	

TLEASE REVIEW REVERSE SIDE OF APPLICAT

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

Print Name and Mailing Address

2000

CRMC AQUACULTURE APPLICATION FOR STATE ASSENT

Applicant Name and Mailing Address:

Applicant Name(s): John Bowen, Patrick Bowen

Street: 79 Shaw Road

City/Town: Little Compton State: RI Zip Code: 02837

E-Mail: Seanbow@yahoo.com

CRMC File Number: 29-12-023

<u>DEM License Number:</u> Application Pending

Type of Facility: Commercial lease site

Location of Proposed Aquaculture Site (Waterway): Sakonnet River, Southwest of Seapowet Creek



Size of Proposed Aquaculture Site: 0.97 acres

Latitude /Longitude of Proposed Aquaculture Site:

Northeast Corner: 41.580836, -71.209611 Northwest Corner: 41.580975, -71.210326 Southwest Corner: 41.580122, -71.209876 Southeast Corner: 41.580026, -71.209485

Signature of Requestor:

1. Introduction.

John Bowen and Patrick Bowen are seeking State Assent from Coastal Resources Management Council for a shellfish aquaculture farm in Tiverton, RI. The site is located in the Sakonnet River, Southwest of Seapowet Creek. The site was chosen for a variety of reasons, including proximity to the nutrient rich Seapowet Creek tidal flow, depth, and lack of wild shellfish resource within the site.

Farming practices will focus on environmental sustainability, and utilize a low-profile approach. The growout gear utilized will not be visible from shore, even at low tide. Culture methods will suit the site and accommodate multiple stages of growth, consisting of top loading cages, with mesh bags affixed to the cages.

John Bowen and his brother Patrick Bowen will be primarily responsible for daily management of the farm, with their sons Samuel and Malcolm actively assisting in farm operation. John and Patrick have both completed the course, "Fundamentals of Shellfish Farming: Practical Tools, Tips, and Techniques", presented by Roger Williams University and Cape Cod Cooperative Extension, and both have experience working on an oyster farm, dating back to the early 1980s. Additionally, John has a Bachelor's Degree in Environmental Science, with Emphasis in Aquaculture from Unity College in Maine. It is their intention to be model stewards of the area, and they understand the responsibility and privilege of a shellfish aquaculture lease.

Changes to application as a result of recommendations from the Preliminary Determination Hearing, held February 17, 2020:

- 1. Tiverton Harbor and Coastal Waters Management Commission, DEM, and an objector had concerns regarding the shallow depth of the proposed site.
 - In response to this, the location of the site was moved into deeper water (average MLW depth of two to four feet).
- 2. Tiverton Harbor and Coastal Waters Management Commission and DEM had concern regarding the location of the site in relation to the DEM Recreational Shellfish Area.
 - In response to this, the site was moved to the west, and outside the bounds of the DEM Recreational Shellfish Area.
- 3. Concern was raised by DEM and CRMC regarding transporting oyster cages across and through the Sapowet Management Area public parking area.

In response to this, the applicants will not transport oyster cages across the Sapowet Management Area public parking area. Installation (placement) and removal of the cages will be conducted by boat and/or private access to the shore.

As stated in the CRMC Preliminary Determination Report of Findings,

"The Commission, DEM, and the objector all stated that they would not have an issue with this farm if it was moved to deeper water adjacent to this site."

John and Patrick Bowen (applicants) believe that the above changes to their initial application address the concerns resulting from the Preliminary Determination Hearing, and as expressed in the CRMC Preliminary Determination Report of Findings.

OPERATIONAL PLAN:

1. Name and Address:

John Bowen, Patrick Bowen 79 Shaw Road Little Compton, RI 02837

2. CRMC File Number: 2019-12-023

3. **DEM Aquaculture License Number:** To be determined

4. Type of Facility: Commercial Aquaculture Lease Site

5. Location of Facility: Tiverton, RI, Sakonnet River, Southwest of Seapowet Creek. The dimensions of the site are: West Side: 330', North Side: 200', East Side: 300', South Side: 110'. The site extends in a Southwest direction in a trapezoid shape. The proposed site is 42,212 square feet, or .97 acres.

Setbacks:

320' from Northeasterly corner to Mean Low Water (MLW) (nearest point of the site)
325' from the Southeast Corner to Mean Low Water (MLW)
410' from a point on the SW corner of the Seapowet Bridge to the NE corner of the site

500' from a point on the SW corner of the Seapowet Bridge to the NW corner of the site. Longitude/Latitude of Proposed Aquaculture Site:

Northeast Corner: 41.580836, -71.209611 Northwest Corner: 41.580975, -71.210326 Southwest Corner: 41.580122, -71.209876 Southeast Corner: 41.580026, -71.209485



6. **Species Grown:** <u>Crassostrea virginica</u>. Eastern Oyster shellfish seed is to be purchased from a New England shellfish hatchery approved by DEM (Aquacultural Research Corporation, Dennis, MA; Fishers Island Hatchery, New York; Mook Sea Farms, Damariscotta, ME, or other approved

shellfish hatchery), in accordance with regulation. Only diploid seed will be deployed in the first year (and likely thereafter). It is the hope of the applicants that any oyster spawning which results from the farm will supplement the natural oyster recruitment in the area. Applicants are very much aware of the importance of agricultural biosecurity as applied to shellfish aquaculture, and will be fully compliant with Biosecurity Board protocols.

7. Gear Description: Predominant culture method will be top loaded wire cages, dimensions of 24" wide, 48" long, and 14" tall, with 2" runners to keep them elevated from the bottom (total cage height is 16" tall). The cages will be placed directly on the bottom. Cages are accessed through the top, will contain stacked trays (plastic or wire), and will be covered with a rigid wire cover, affixed with shock cord.

The cages will be deployed in a series of ten (each ten cages referred to as a "trawl"), oriented such that the 48" sides of the cages are approximately 6" apart , each trawl spanning approximately thirty feet. The trawls will be secured with 5/8"x36" helical anchors installed at each end, with a line (half inch diameter, three strand, twisted nylon rope, minimum breaking load (MBL) of 5,670 lbs) attached to the helical-anchors on each side, creating a lateral line around the trawl. Each cage will be secured to the lateral line on both ends.

Additionally, standard 18"x36" ADPI bags (rigid mesh plastic bags) will be secured directly to the cages using heavy-duty clips.

The first year 25,000 oyster seed will be purchased, and grown utilizing the culture methods described above. We anticipate harvest time to be approximately 18-24 months.

8. Identifying Markers

Each of the four corners of the farm will be marked with standard 11" pot buoys, each of which will be marked in 3" letters "CRMC", and the File Number provided at the time of Assent. This will be done within ten days of CRMC Assent.

9. DEM Shellfish Harvesting Classification:

DEM Growing Area 4 (GA4). NSSP Growing Area Classification: Approved.

10. Description of Practices and Procedures:

As described above, <u>Crassostrea virginica</u>, <u>Eastern Oyster</u> shellfish seed is to be purchased from a regional shellfish hatchery approved by DEM (Aquacultural Research Corporation, Dennis, MA; Fishers Island Hatchery, New York, Mook Sea Farms, Damariscotta, ME, or other hatchery approved by DEM and CRMC), in accordance with regulation. We plan to use only diploid seed in the first year (and likely thereafter). The first year (and likely thereafter) larger seed size will be purchased, anticipating 5-7 mm size). The CRMC Aquaculture Coordinator will be notified of seed source and provided with a pathology report as required, at least five days prior to delivery of the seed.

11. Harvest, Storage, and Transportation:

It is anticipated that harvest time will be 18-24 months. Initially, oysters are expected to be sold to licensed Rhode Island Wholesale Dealers, rather than direct marketed, however the goal of the applicants is to attain proper licensure to sell shellfish locally. Harvesting and transporting oysters will be conducted with a focus on public health requirements, including icing, tagging, sanitation, and record keeping as required.

12. Time Table of Work

Farm work will take place predominantly at low tide (an hour before to an hour after), accessing the site using waders (or shorts during the summer months), and will consist of replacing bio-fouled plastic and wire trays inside the cages with clean trays, to reduce fouling and allow for better water flow over the oysters; splitting volumes of oysters into additional gear to maintain low densities; and culling/sorting oysters by size and quality. As oysters reach harvest size, they will be pre sorted for quantity, and pre bagged to reduce harvest time and allow for more rapid cooling during the summer months.

13. Record Keeping:

Records of all seed purchases (including origin, quantity, pathology reports, etc.), harvesting records, and operating records will be submitted to CRMC as required, and maintained by John Bowen, available for review as needed upon request. Annual reporting to CRMC with all required information will be conducted as required.

- **14.** Procedures for maintaining records regarding upwellers in prohibited waters: An upweller will not be used.
- **15.** Procedure for maintaining records for operations using seed from prohibited waters: Seed will not be obtained from prohibited waters.

Coastal Resources Management Program - Section 1.3.1(A) - Category B Requirements

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

John Bowen and Patrick Bowen are proposing an oyster farm in Tiverton, RI. The site is located in the Sakonnet River, Southwest of Seapowet Creek. This site was chosen based upon proximity to the nutrient rich Seapowet Creek tidal flow, water depth, and lack of wild shellfish resource within the site. Shellfish aquaculture, especially oyster culture, is increasing in Rhode Island, however, the East Bay is largely under-represented. This proposal utilizes a low profile approach to this nutrient extractive agricultural process in an environmentally sensitive area, and helps to maintain local, historical marine tradition.

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:

Permits required for the proposed lease will be obtained through RI CRMC pending approval of subsequent applications.

3. Describe the boundaries of the coastal waters and the land area that is anticipated to be affected: The proposed lease site is located in Tiverton, in the Sakonnet River, Southwest of Seapowet Creek. Latitude/Longitude of Proposed Aquaculture Site:

Northeast Corner: 41.580836, -71.209611 Northwest Corner: 41.580975, -71.210326 Southwest Corner: 41.580122, -71.209876 Southeast Corner: 41.580026, -71.209485

The dimensions of the site are: West Side: 330', North Side: 200', East Side: 300', South Side: 110'. The site extends in a Southwest direction in a trapezoid shape. The proposed site is 42,212 square feet, or .97 acres.

Setbacks:

320' from Northeasterly corner to Mean Low Water (MLW) (nearest point of the site)
325' from the Southeast Corner to Mean Low Water (MLW)
410' from a point on the SW corner of the Seapowet Bridge to the NE corner of the site
500' from a point on the SW corner of the Seapowet Bridge to the NW corner of the site.

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:

All gear on the site will be temporary (not permanent), and designed to allow water to flow through, having minimal impact on erosion or deposition.

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

Culture methods proposed are intended to be low-impact. The site should have no negative impact on the abundance or diversity of plant and animal life. To the contrary, aquaculture gear provides habitat structure and supports a diverse assemblage of juvenile fish, crabs, lobsters. Oyster grow-out cages provide valuable habitat for finfish and have been compared with artificial reefs as part of habitat restoration programs.*

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:

As a result of the Preliminary Determination Hearing and subsequent CRMC Report of findings, the coordinates of the proposed site have been moved into deeper water, and outside of DEM's Recreational Shellfish Area.

The site is located in the Sakonnet River, on the southwest side of Seapowet Creek. The water depth and coarse sand/gravelly bottom are not conducive to boating*, swimming**, or fishing, and there is no significant wild shellfish resource on the site. The area SW of Seapowet Point is extremely shallow and cannot be safely navigated during low tides*. The area west of Seapowet and Fogland Points presents dangerous swimming conditions.** Fishermen, shellfishermen and bathers typically use the area to the north of the Seapowet Creek. The lease site would still be possible for people to walk or wade through, or kayak through.

- *TIVERTON HARBOR AND COASTAL WATERS MANAGEMENT PLAN: II(A)(3)(e)

 ** CODE OF ORDINANCES, TOWN OF TIVERTON, Chapter 14, Article II, Section 14-193
- 7. Demonstrate that the alterations will not result in significant impacts to water circulation, flushing, turbidity, and sedimentation:

The proposed gear is designed to be low-impact, not extending greater than 18" from the bottom. All gear is intended to allow water to flow freely, as it increases oyster growth. Oyster filtration has been found to reduce turbidity and increase water clarity. Turbidity or sedimentation caused by work on the farm should be minimal and temporary.

^{*}Tallman, Forrester; Transactions of the American Fisheries Society, May, 2007

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

The proposed oyster farm will have no negative effect on water quality as defined by DEM (based on fecal coliform levels). Additionally, as estuarine nutrient loading is increasingly an ongoing global issue of concern, oysters are able to integrate nitrogen from algae in the water column within shell and tissue, which through harvesting, is removed from the system*, asserting an ecological benefit.

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

There are no known historic or archaeological resources in 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, swimming, navigation, and commerce:

As a result of the Preliminary Determination Hearing and subsequent CRMC Report of findings, the coordinates of the proposed site have been moved into deeper water, and outside of DEM's Recreational Shellfish Area.

The site is located in the Sakonnet River, on the southwest side of Seapowet Creek. The water depth and coarse sand/gravelly bottom are not conducive to boating*, swimming** or fishing, and there is no significant hardshell clam resource on the site. The area SW of Seapowet Point is extremely shallow and cannot be safely navigated during low tides*. The area west of Seapowet and Fogland Points presents dangerous swimming conditions.** Fishermen, shellfishermen and bathers typically use the area to the north of the Seapowet Creek. The lease site would still be possible for people to walk or wade through, or kayak through.

11. Demonstrate that measures have been taken to minimize any scenic impact:

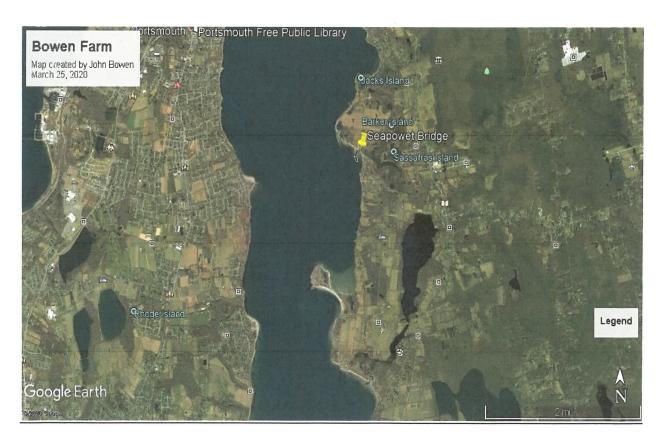
The gear design is such that it will not be visible, even at low tide, with the exception of buoys at each of the corners, as required.

^{*} Pollack, Yoskowitz, Kim, Montagna; *Plos One*, Volume 8, Issue 6, June 2013

^{*}TIVERTON HARBOR AND COASTAL WATERS MANAGEMENT PLAN: II(A)(3)(e)

^{**} CODE OF ORDINANCES, TOWN OF TIVERTON, Chapter 14, Article II, Section 14-193











North



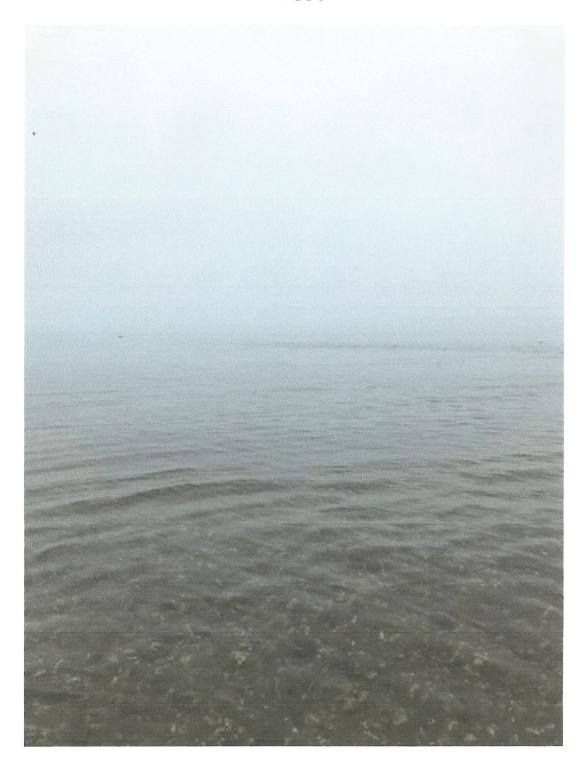
South



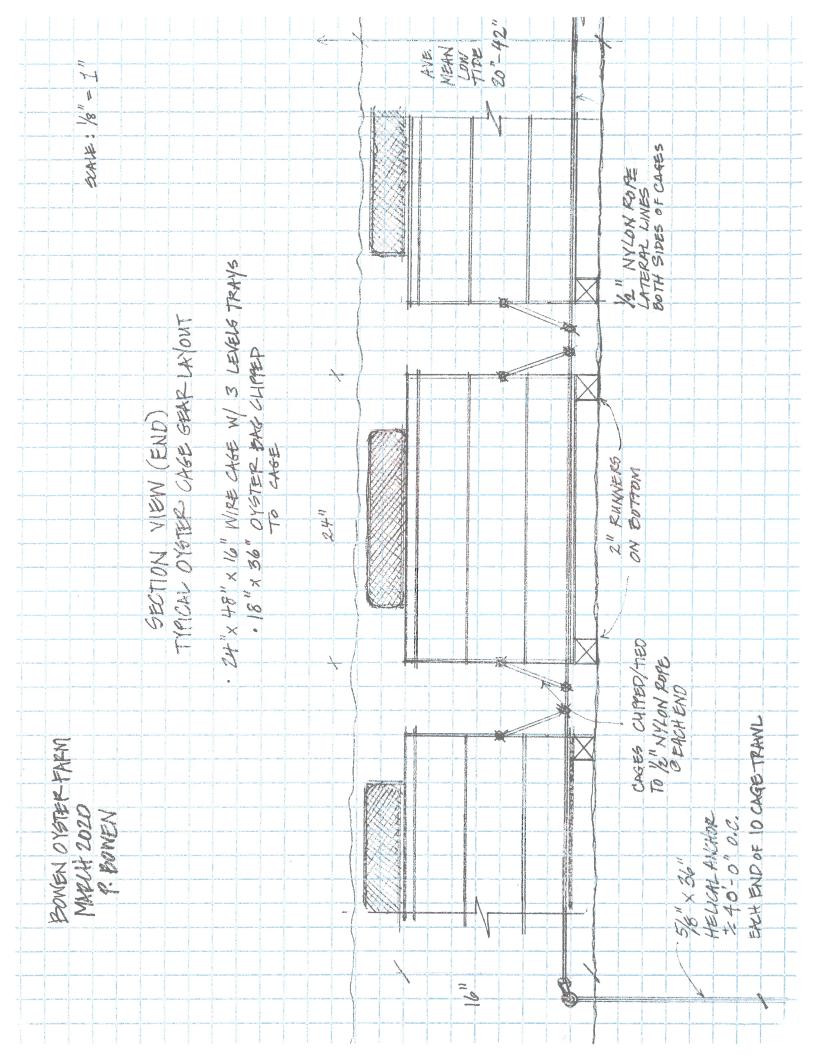
East



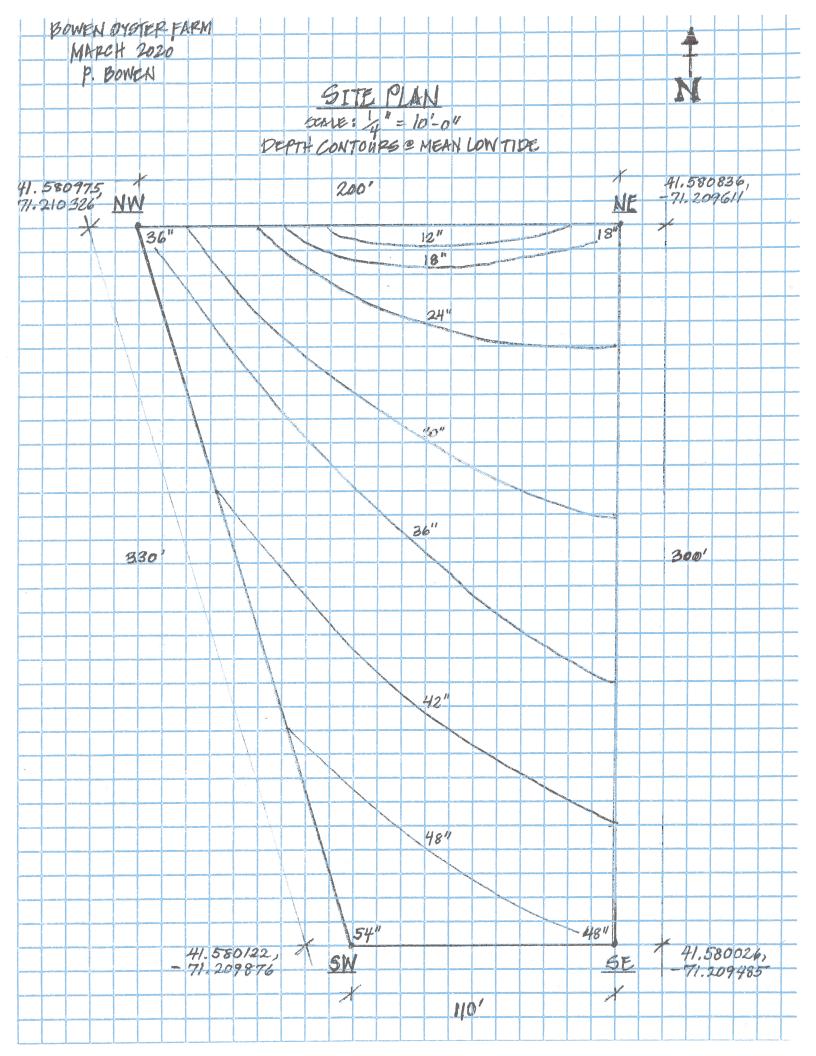
West

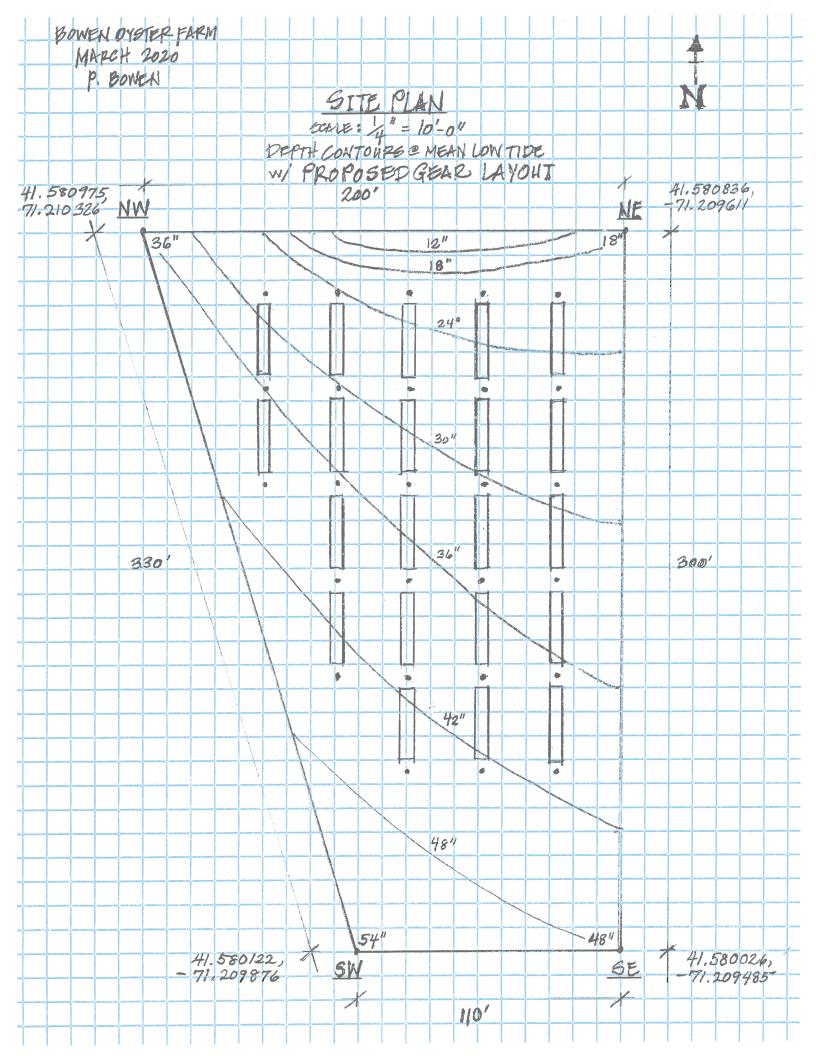


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RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **DIVISION OF FISH AND WILDLIFE**

Application for a Special Permit for Aquaculture R.I.G.L. 20-10-12

Name: John Bowen, Patrick Bowen **CRMC Assent#:** Applied For

Address: 79 Shaw Road **Assent Expiration Date:** N/A

Little Compton, RI 02837 **Assent Type:** Commercial

Species to be cultured/possessed: Eastern oyster, Crassostrea virginica

(must coincide with terms of CRMC Assent)

Location where organisms will be held: Sakonnet River, Tiverton, RI

(must coincide with terms of CRMC Assent)

Land Based: NO Open Water: YES Bottom Culture: NO

Cage Culture: YES Number: 200 Approximate Size: 24"Wx48"Lx16"H

Raft Culture: NO

Other (describe): Standard 18"x36" ADPI bags secured to cages.

Lease: One lease site, applied for. Size: 0.97 acres

Type/description of markers used to identify site: Yellow pot buoys, 11" on each corner,

marked with CRMC Assent Number

(Must coincide with terms of CRMC Assent)

Will the cultured species always be maintained within the lease?: YES

Will they be moved (from upwellers, spat collectors, raceways, cages, etc. to grow-out area) as part of culture: NO

Purpose for culture: Food Production

Is the end product to be sold?: YES

In-state: YES Out of State: NO

Live: YES Whole: YES Processed: NO

Source of organisms to be used for culture: Hatchery: YES Name of Hatchery: Approved hatchery to be determined

Anticipated time of delivery to Rhode Island?: <u>After CRMC Assent granted, when seed is</u> available.

The aquaculturist must notify the D.E.M. Divisions of Fish and Wildlife and Enforcement of every shipment of animals for culture at least five days prior to entry into the state and each shipment must be accompanied by a certificate of disease inspection from a recognized laboratory appropriate to the species being raised.

Approximate size of organisms (seed, fingerlings, larvae, adults) to be imported into RI: 7mm

Approximate quantity anticipated to be received this (permit) year: 25,000

Other Conditions:

By submission of this application for issuance or renewal of a Special Permit for Aquaculture, the aquaculturist provides the Division of Fish and Wildlife and the Division of Enforcement with the authority to enter and inspect all aquaculture facilities which have been requested to be permitted. (R.I.G.L. 20-10-15). By submission of this application, the aquaculturist agrees to acquire and maintain all of the appropriate licenses and permits necessary to conduct the culture and seafood business within the State of R.I. and comply with all laws, rules, and regulations regarding the possession, sale, trade, transport, purchase, and barter of fish/shellfish and seafood products. Noncompliance of the conditions of this permit will result in forfeiture of this Special Permit for Aquaculture and possible prosecution.

Authorized Signature)

4-/3-2030 (Date)

Appendix D Revised 03/18



June 25, 2020

Benjamin Goetsch Aquaculture Coordinator Coastal Resources Management Council 4808 Tower Hill Road Wakefield, RI 02879

Re: Bowen and Bowen public notice #2020-04-037

Dear Mr. Goetsch:

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 John and Patrick Bowen for a proposed 1.1-acre aquaculture lease in Narragansett Bay for cultivating eastern oysters (*Crassostrea virginica*) using bottom cages.

The site was revised substantially between the Preliminary Determination (PD) and the Public Notice to mitigate a variety of concerns addressed at the PD meeting held on February 17, 2020. The revised lease has an area of 1.1 acres. The DEM commends the applicants for their revisions to the application, which address most of the concerns DMF staff presented at the PD meeting.

- The site was moved into deeper water to prevent exposure of cages and to avoid an area of known recreational shellfishing activity.
- The increase in depth reduces the likelihood of cages to be exposed at the surface, which may also reduce the risk of waterfowl depredation that aquaculture production is frequently affected by (Price & Nickum 1995, Varennes et al. 2013). If depredation does become an issue, please be aware that the DFW will not support moving deterrents, scarecrows, etc., as they will also displace nontarget species from the lease and surrounding area. Lethal removal of depredating birds requires authorization from DFW and may not be supported. Additionally, installation of exclusion devices or deterrents will be considered lease modifications and will need to be approved, as some versions are known to have lethal implications for diving ducks (Varennes et al. 2013).
- While the prospective site still intersects with the recreational shellfishing area, the amount of overlap has been dramatically reduced and is less likely to cause use conflicts.

Furthermore, the applicants have also committed to not transport oyster cages
across the Sapowet Management Area public parking lot as initially proposed.
They will install and remove cages by boat or from private access to the shore.

Consequently, the DMF and DFW believe that the adverse impacts to marine fisheries and their habitat from this prospective site would be minimal. As such, the Divisions do not have objections to this application.

The DMF and DFW's acceptance of the current proposal is specific to the location (provided by the coordinates) and specifications outlined in the application.

Sincerely,

Jasøn McNamee,

Deputy Director, Bureau of Natural Resources

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References:

Price IM, Nickum JG (1995) Aquaculture and Birds: The Context for Controversy. Colon Waterbirds 18:33–45.

Varennes É, Hanssen S, Bonardelli J, Guillemette M (2013) Sea duck predation in mussel farms: the best nets for excluding common eiders safely and efficiently. Aquac Environ Interact 4:31–39.