Meeting Notice
Shellfish Advisory Panel
Wednesday May 27, 2020, 4:00PM

Virtual public meeting
Zoom webinar

MEETING AGENDA
(revised)

<table>
<thead>
<tr>
<th>Agenda item</th>
<th>Recommended action(s)</th>
<th>ePacket Attachment(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aquaculture application 2019-12-079 (Seakist Aquaculture)</td>
<td>Provide recommendation to the CRMC/Council pursuant to RI Gen. Laws §20-10-5(d)</td>
<td>Application out to public notice, DMF Review letter</td>
</tr>
<tr>
<td>2. Aquaculture application 2019-12-055 (Walrus and Carpenter Oysters LLC)</td>
<td>Provide recommendation to the CRMC/Council pursuant to RI Gen. Laws §20-10-5(d)</td>
<td>Application out to public notice, DMF Review letter</td>
</tr>
<tr>
<td>3. Division proposal to re-establish areas closed to shellfish harvest in Ninigret Pond Shellfish Mgmt. Area (Foster Cove)</td>
<td>Provide recommendation to the Council</td>
<td>Part 4 section 4.12.2(M) (Ninigret Pond Shellfish Mgmt. Area)</td>
</tr>
<tr>
<td>4. Division proposal to extend oyster harvest moratorium in Bissel Cove/Fox Is. Shellfish Mgmt. Area.</td>
<td>Provide recommendation to the Council</td>
<td>Part 4 section 4.12.2(E) (Bissel Cove/Fox Is. Shellfish Mgmt. Area)</td>
</tr>
<tr>
<td>5. Proposed change to whelk minimum size currently out to public notice</td>
<td>Provide recommendation to the Council on the proposed amendment</td>
<td>Public Notice, Draft rule (Part 4 – Shellfish, section 4.9(G))</td>
</tr>
<tr>
<td>6. Proposed changes to area descriptions of Shellfish Mgmt. Areas currently out to public notice</td>
<td>Provide recommendation to the Council on the proposed amendment</td>
<td>Public Notice, Draft rule (Part 4 – Shellfish, section 4.12.2))</td>
</tr>
<tr>
<td>7. Proposed change of word &quot;bycatch&quot; to &quot;incidental catch&quot; for Sakonnet River bay quahog possession limit currently out to public notice</td>
<td>Provide recommendation to the Council on the proposed amendment</td>
<td>Public Notice, Draft rule (Part 4 – Shellfish, section 4.12.2(J)(2))</td>
</tr>
<tr>
<td>8. Any Other Matters</td>
<td>Discussion and/or recommendations for future action</td>
<td></td>
</tr>
<tr>
<td>9. Adjourn</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To join the webinar:
Click here to join online webinar
Or enter the following into your web browser:  https://zoom.us/j/97034616979

To join the phone call:
1-929-205-6099
Meeting ID: 926 3461 6979
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

Re-posted to Sec. of State May 22, 2020
PUBLIC NOTICE

File Number: 2019-12-079 Date: January 7, 2020

This office has under consideration the application of:

Seakist Aquaculture LLC
Attn: Nicholas Papa
151 Cedar Hill Drive
Jamestown, RI 02835

for a State of Rhode Island Assent to expand and maintain: an existing oyster farm using floating gear. The current site is 3.8 acres and the application is for a 4.8 acre expansion for a total of 8.6 acres.

<table>
<thead>
<tr>
<th>Project Location</th>
<th>Narragansett Bay</th>
</tr>
</thead>
<tbody>
<tr>
<td>City/Town:</td>
<td>Jamestown</td>
</tr>
<tr>
<td>Plat/Lot:</td>
<td>/</td>
</tr>
<tr>
<td>Waterway:</td>
<td>Dutch Island Harbor</td>
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</table>

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 February 6, 2020.
APPLICATION FOR STATE ASSENT
To perform work regulated by the provisions of Chapter 279 of the Public Laws of 1971 Amended.

<table>
<thead>
<tr>
<th>Applicant's Name:</th>
<th>Seakist Aquaculture LLC</th>
<th>File No (CRMC use only):</th>
<th>2019-12-079</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailing Address:</td>
<td>151 Cedar Hill Dr</td>
<td>Res. Tel. #</td>
<td>(401) 649-0117</td>
</tr>
<tr>
<td>City/Town:</td>
<td>Jamestown</td>
<td>Bus. Tel. #</td>
<td>(401) 649-0117</td>
</tr>
<tr>
<td>Waterway:</td>
<td>Narragansett Bay</td>
<td>Fee/Costs:</td>
<td>$200.00</td>
</tr>
<tr>
<td>Est. Project Cost:</td>
<td>$10,000.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

(Nw) 41° 23' 30.3688728' W 71° 28' 6.6739'' E
(Sw) 41° 23' 09.8333333'' W 71° 28' 6.6739'' E
(Ne) 41° 23' 10.7833333' W 71° 29' 12.0804'' E
(Se) 41° 23' 09.8333333'' W 71° 28' 6.6739'' E

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

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

Is this site within a designated historic district? No

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.
Figure 5: Distance to proposed site from nearest shoreline features and adjacent ocean farms (existing and proposed).
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
   Dutch Harbor region of Narragansett Bay. This site is desired for the cultivation
   of the eastern oyster, Crassostrea virginica. Seakist Aquaculture LLC will use this
   additional acreage to not only continue healthy farming practices, but also insure
   healthy and responsible oyster husbandry in the bay.

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. All regulations pertaining to
    aquaculture will be followed.

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 passage of Narragansett Bay. It lies
    directly between Jamestown and Dutch Island just to the west of Zeek’s creek.

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
    bay and it’s watershed.

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 alteration will be clearly marked and will allow for easy shoreline
    access.

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.
Operational Plan

The proposed shellfishing farming operation will be for raising oysters from 1/2” to market size in floating baskets. The seed will be purchased from a number of approved sources. Once the seed is procured from the approved source it will be planted in our gear and maintained until they reach market size. The maintainence procedures involve a boat being on site to flip and dry the oysters and cages and periodically grade the oysters by size. Once the oysters reach market size, they will be sold to the Ocean State Shellfish Cooperative in Narragansett. State required safe harvesting protocols will be followed.
The proposal is to expand the existing lease: B2015-11-032 to the southwest and northwest resulting in an 8.7 acre oyster farm. It will be marked with 4 lighted buoys, 1 on each corner. The expansion will utilize a new floating basket style gear. The new gear is lower profile than the existing gear type.

The gear will run parallel to shore in very evenly spaced rows creating a very organized look. There will be 32 rows that are 350 feet in length with 22’ of space between them. The rows will begin approximately 50 feet from each border to ensure that the gear stays well within the boundaries. Each row will consist of 350 baskets and the farm will have 12,000 total baskets. The farm will range from 7.5’ deep in the shallows at low tide to 16’ deep at low tide in the depths.
Seakist Aquaculture

Proposed Expansion

Existing Lease

1" = 100'
Guidance Document for Aquaculture Operations Plans

Anyone conducting aquaculture operations in RI must comply with all applicable CRMC regulations (Coastal Resources Management Program §§ 1.3.1(A) and 1.3.1(K)) 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.
   
   Seakist Aquaculture
   
   151 Cedar Hill Drive
   
   Jamestown, RI 02835

2. **CRMC file number** for the facility; new applications will be assigned a file number by CRMC.

   B2015-11-032

3. **DEM Aquaculture License number** (applicable if products are offered for sale); new applicants will need to obtain the DEM aquaculture license after an aquaculture assent is issued.

   DEM AQUA000110

4. **Type of facility** (e.g., commercial lease site, upweller, experimental site, research, commercial viability) and **nature of operation** (i.e., methodology used).

   Commercial Floating basket Oyster Lease

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

   • Adjacent town: Jamestown RI

   • Water body: Narragansett Bay(Northern Dutch Harbor)(See attached map)
* Lat/long coordinates of facility: 41°30'36.5396"N
  71°23'15.1402"W

6. Identification of all species of shellfish grown at the facility. Acknowledgement that the applicant will follow Biosecurity Board seed protocols should be included.

   We will be growing the eastern oyster and all biosecurity board seed 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 with a depth profile at mean low water and mean high water. Include maximum number of cages proposed and the size of the cages proposed.

   We will be utilizing a floating basket system. They will be arranged in uniform rows, evenly spaced. They will be oriented running NW to SE. The baskets are 29" long, 10-5/8" wide and 5-7/16" tall. There will be a maximum of 12,000 baskets on the lease.

8. Description of the methods and equipment used to identify and mark site.

   There will be a lighted buoy at each corner.

9. DEM Shellfish Harvesting Classification at site.

   3W (Approved waters)

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

    The oysters will be planted at about 1/2". They will be flipped over to dry weekly as a means of biofouling control. Once the volume of oysters has increased, they will be graded by size and returned to the baskets. Once they reach market size, they will be selected and put into a designated area for storage. They will then be packed and delivered in accordance with the state mandated safe shellfish handling protocols.

11. Procedures for maintaining records:

    For operations using seed acquired from out-of-state: Records will be kept to track the seed through our system.

    Description of notification, disease certification, and labeling/tagging procedures: CRMC will be provided a clean pathology report and will be notified of any transfer of seed onto the lease. Upon harvest, shellfish harvest tag will accompany the oysters.

12. Procedures for maintaining records:
For upwellers/seed-growing facilities in prohibited waters:

Seed will not be grown in prohibited 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): Seed will be procured from an approved source at approximately 12mm.

13. Procedures for \textit{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:

Detailed description of demarcation methods and record-keeping practices used at the lease site to ensure that animals have been cultured at least six (6) 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.

The seed will be grown in a segregated (seed) section; approximately 25% of the baskets. All seed will originate from approved waters. The seed will take at least 9 months to reach market size. The movement of oysters through the system will be recorded in a logbook.

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.

All seed will come from approved waters.
February 3, 2020

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

Re: Seakist Aquaculture LLC public notice #2019-12-079  

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 Nicholas Papa for a proposed 4.8-acre aquaculture lease expansion of assent 2015-11-032 from 3.8 acres for a total of 8.58 acres in Narragansett Bay for cultivating eastern oysters (Crassostrea virginica) using floating baskets.  

A discrepancy within the preliminary determination application regarding the site area calculation was brought to the attention of the applicant during the preliminary determination meeting. However, the inaccuracy is still present within the full public notice application. Under the section “Written Description” it states that the new lease will result in an 8.7-acre site. In contrast, the maps provided within the application and maps created by DMF based on the provided coordinates show the site is 8.58 acres in area. Thus, the following DMF comments are based on the assumption that the coordinates provided in the application and on the maps are the true representation of the site area.  

The DMF believes that the adverse impacts to marine fisheries and their habitat from this prospective site would be minimal. As such, the DFW does not have objections to this application.  

While DFW does not believe that the proposed facility poses a significant risk to migratory birds, DFW does want the lease holder to be aware that the nearby Marsh Meadows is a globally recognized Important Bird Area. Rhode Island Species of Greatest Conservation Need, including the American Black Duck and Common Eider, frequently feed on invertebrates such as clams and mussels (Żydelis et al. 2009, Cramer et al. 2012,
Beuth et al. 2017). As such, the aquaculture production may frequently face depredation from these or similar species (Price & Nickum 1995, Varennes et al. 2013). Various species of wading birds, gulls, and terns may also be attracted to the floating cages both as foraging and roosting opportunities (Callier et al. 2018). DFW encourages the applicant to explore floating gear designs that deter roosting (see Comeau et al. 2009). DFW will not support moving deterrents, scarecrows, etc. as they will also displace non-target species from the lease and surrounding area. Lethal removal of depredating birds requires authorization from DFW and likely will 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). The applicant will be legally responsible for any take of migratory birds that is caused by unapproved exclusion devices.

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,

Jason E. McNamee,
Chief of Marine Resource Management

Jay Osenkowski,
Deputy Chief, Wildlife
References:


Figure 1. Proposed site expansion from 3.8-acres to 8.58-acres
PUBLIC NOTICE

File Number: 2019-12-055                      Date: December 31, 2019

This office has under consideration the application of:

Walrus & Carpenter Oysters LLC
c/o Jules Opton-Himmel
83 State Street
Narragansett, RI 02882

for a State of Rhode Island Assent to create and maintain: a 7.8 acre aquaculture site using floating cages

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<td>/</td>
</tr>
<tr>
<td>Waterway:</td>
<td>Narragansett Bay-West Passage</td>
</tr>
</tbody>
</table>

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 January 30, 2020.
APPLICATION FOR STATE ASSENT

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

Applicant's Name: Walrus and Carpenter Oysters, LLC

Mailing Address: 83 State Street

City/Town: Narragansett

Waterway: East Passage, Narragansett Bay

File No (CRMC use only):

Res. Tel. #

State: RI

Bus. Tel. # 401-742-6190

Zip Code 02882

Est. Project Cost $ 20,000

Fee/Costs: $ 250

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


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).

No

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

Jules Opton-Himmel

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.

PLEASE REVIEW REVERSE SIDE OF APPLICATION FORM
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

12/3/19

Date

Jules Opton-Himmel, 83 State Street, Narragansett, RI 02882

Print Name and Mailing Address
Concise Description of Proposed Project:

Walrus and Carpenter Oysters’ (WCO) mission is to farm the ocean, restore the environment, and distribute the sustainable seafood we raise directly to our community. WCO has been successfully operating a six-acre ocean farm in Ninigret Pond for the past ten years and a two-acre ocean farm in Narragansett Bay for four years. Walrus and Carpenter Oysters® are distributed twice a week, year-round directly from our farms to over 50 restaurants in Rhode Island. WCO employs seven full-time Rhode Islanders and is owned by a Rhode Island resident.

Our current farm in Dutch Harbor is 0.260 miles north of the nearest waterfront homes within view. Residents of these homes have voiced considerable objection to the visual impact of our two-acre floating ocean farm. In response to their concerns we are proposing to voluntarily move our farm further north to a location 0.653 miles away from the nearest waterfront homes in view (see figure 11 for a visualization of the proposed new site from the nearest home). If granted this proposed lease we would relinquish our existing 2-acre farm in Dutch Harbor within two years. Relinquishing our existing Dutch Harbor farm without an economically viable lease to replace it would place the future of WCO in serious jeopardy.

Our original application in 2015 was to lease 7-acres in Dutch Harbor. That was the minimum area we believed necessary to operate an efficient and profitable ocean farm. Due to various objections during the application process the size of the farm was reduced to 2-acres. After working the 2-acre site for four years we remain convinced that a larger area is necessary to operate an economically sustainable farm. Therefore, this application is to lease 7.8 acres in the West Passage of Narragansett Bay. The site would be used to cultivate oysters (Crassostrea virginica) in floating racks, and sugar kelp (Laminaria saccharina) on submerged long lines.

We recognize that this could be a controversial application given the size of the lease and the number of floating racks proposed. However, we believe in our mission. We have learned through experience that this is the growth we need to achieve our goals and remain in business for generations to come. We also respect the need to balance all of the uses and functions of estuaries. This is why we have searched throughout the waters of Rhode Island to find what we believe to be the most out of the way location that still meets our needs. We respect the fact that we are farming in the commons and that this is a privilege and not a right. We want to be good neighbors and good citizens of Rhode Island. However, deep in our hearts we believe that while our plans may displease some people, they will serve the greater good of our community.

We have made a commitment to distribute our oysters no more than 150 miles from our farms and to become a carbon neutral company by 2024. The only option humanity has to survive the future impacts of climate change is to build a zero-carbon future.1 Growing and distributing food locally without emitting greenhouse gases is one part of that solution.2 Shellfish farmed in the ocean have the lowest carbon footprint of any farmed animal proteins.3 We hope that you will see the long-term

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value in our proposal and find that it outweighs the sometimes initial discomfort of change to the status-quo.
Figure 2a. Photo taken from the center of the proposed site facing to the North.
Figure 2b. Photo taken from the center of the proposed site facing to the east.
Figure 2c: Photo taken from the center of the proposed site facing to the South.
Figure 2d. Photo taken from the center of the proposed site facing to the West.
NARRAGANSETT BAY, JAMESTOWN, RI

PROPOSED SITE PLAN
OYSTER CULTIVATION

WALRUS AND CARPENTER OYSTERS LLC

SCALE 1" = 200'

PROPOSED SITE
BOUNDAry

CREGAN LEASE

41° 30' 40.768'
71° 22' 2.4356'
10 ft MLW
6 ft MLW
41° 30' 40.768'
71° 22' 2.4356'
16 ft MLW
6 ft MLW
N

FLOATING OYSTER CAGES

SIKES LEASE

41° 30' 44.5756'
71° 22' 2.2465'
10 ft MLW
6 ft MLW
41° 30' 44.5756'
71° 22' 2.2465'
16 ft MLW
6 ft MLW
N

DEC 18 2019
RECEIVED
Figure 6: Cross-section view of proposed site – oyster cultivation
Figure 8: Details of the proposed site oyster cultivation gear – 6-bay floating rack

GEAR DETAILS - OYSTER CULTIVATION
6 BAY FLOATING RACK
WEST PASSAGE NARRAGANSETT BAY, JAMESTOWN, RI

SCALE: 1" = 1.5'

WALRUS AND CARPENTER OYSTERS LLC
PREPARED: SEPTEMBER 2019

RECEIVED
DEC 18 2019
Figure 9: Details of the proposed oyster cultivation gear – 9-bay floating rack

Details of the proposed oyster cultivation gear – 9-bay floating rack are shown in the diagram. The diagram includes various annotations such as:

- Submerged 1/2" long line
- Seed oysters (year 1)
- Sea surface (rack full of
- Wire rack to hold
- Exact length TBD
- 3/8" line pretwist
- Sinkling in winter
- Plastic float with caps for
- Front view
- Side view
- Top view

The diagram also includes measurements and other relevant details for the gear.
Figure 1: Visualization of foaling oyster racks at proposed site from the vanishing point and elevation of nearest home in view (prepared by Water Desk of Johnson and Wales University).
Operation Plan:

Walrus and Carpenter Oysters (WCO) mission is to farm the ocean, restore the environment, and distribute the sustainable seafood we raise directly to our community. WCO has been successfully operating a six-acre ocean farm in Ninigret Pond for the past ten years and a two-acre ocean farm in Narragansett Bay for four years. Walrus and Carpenter Oysters® are distributed twice a week, year-round directly from our farms to over 50 restaurants in Rhode Island. WCO employs seven full-time Rhode Islanders and is owned by a Rhode Island resident.

The goal of this application is to (a) move our existing operation 0.393 miles north, making it 2.5 times farther away from the nearest homes in view and (b) expand our existing operation to the size we originally applied for in 2015.

Our current farm in Dutch Harbor is 0.260 miles north of the nearest waterfront homes within view. Residents of these homes have voiced considerable objection to the visual impact of our two-acre floating ocean farm. In response to their concerns we are proposing to move our farm further north to a location 0.653 miles away from the nearest waterfront homes in view. If granted this proposed lease we would relinquish our existing 2-acre lease in Dutch Harbor within two years. Relinquishing our Dutch Harbor lease with-out an economically viable lease to replace it would place the long-term future of WCO in serious jeopardy.

Our original application in 2015 was to lease 7-acres in Dutch Harbor. That was the minimum area we believed necessary to operate an efficient and profitable ocean farm. Due to various objections during the application process the size of the farm was reduced to 2-acres. After working the 2-acre site for four years we remain convinced that a larger area is necessary to operate an economically sustainable farm. Therefore, this application is to lease 7.8-acres in the West Passage of Narragansett Bay. The site would be used to cultivate oysters (Crassostrea virginica) in floating racks, and sugar kelp (Laminaria saccharina) on submerged long lines.

Oyster Cultivation:

After farming oysters for ten years in various locations using various methods we have concluded that the optimal solution for our company is an annual production goal of 500,000 market oysters raised in floating racks in a high flow and cool water environment. (1) We have created a market in Rhode Island for this volume of our brand of oysters and developed a distribution system to consistently provide excellent service in fulfilling this demand. (2) We have learned through research, observation and experimentation that floating racks, each capable of housing and effectively drying six or nine plastic mesh grow-out bags of oysters, are the most effective technology currently available. (3) We have learned from other oyster farmers in New England and through our own controlled experiments that stocking each grow-out bag with 200 oysters from the time they leave the nursery (called an upweller) until the time they are first culled for harvest (typically 2 years) is the most efficient and effective method of cultivating oysters. (4) We have had the good fortune of farming the same seed stock using comparable husbandry regimes in two very different estuaries; Narragansett Bay and Ninigret Pond. This large-scale experiment has taught us that the three times greater flow of water and roughly ten-degree lower average water temperature in the southern section of the west passage of Narragansett Bay results in nearly double the growth rate and half the mortality rate of oysters. This proposal is based on all that we
have learned. We believe that it will allow us to create a sustainable farm business that best fits our abilities and aspirations for years to come.

The calculations used to design our plan are summarized in the following two tables:

### Oyster and Rack Calculations:

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual production goal (oysters)</td>
<td>500,000</td>
</tr>
<tr>
<td>Production cycle (years)</td>
<td>3</td>
</tr>
<tr>
<td>Mortality assumption (%)</td>
<td>0.35</td>
</tr>
<tr>
<td>Oysters per grow-out bag</td>
<td>200</td>
</tr>
<tr>
<td>Oysters per 6-bag floating rack</td>
<td>1,200</td>
</tr>
<tr>
<td>Oysters planted per year class (# oysters)</td>
<td>769,231</td>
</tr>
<tr>
<td>Total capacity of farm for three year classes (# oysters)</td>
<td>2,307,692</td>
</tr>
<tr>
<td>6-bay floating rack needed (# racks)</td>
<td>1,923</td>
</tr>
</tbody>
</table>

### Lease Lay-Out and Area Calculations:

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row orientation</td>
<td>N to S</td>
</tr>
<tr>
<td>Column orientation</td>
<td>E to W</td>
</tr>
<tr>
<td>Distance on either end of columns of racks for anchors (feet)</td>
<td>30</td>
</tr>
<tr>
<td>Distance between columns (feet)</td>
<td>20</td>
</tr>
<tr>
<td>Distance between individual racks in a row (feet)</td>
<td>7</td>
</tr>
<tr>
<td>Round number of floating racks required(#)</td>
<td>2,000</td>
</tr>
<tr>
<td>Racks per column (#)</td>
<td>40</td>
</tr>
<tr>
<td>Racks per row (#)</td>
<td>50</td>
</tr>
<tr>
<td>Length of a column - including anchor lines (feet)</td>
<td>340</td>
</tr>
<tr>
<td>Length of a row (feet)</td>
<td>1,000</td>
</tr>
<tr>
<td>Lease area required (square feet)</td>
<td>340,000</td>
</tr>
<tr>
<td>Lease area required (acres)</td>
<td>7.8</td>
</tr>
</tbody>
</table>

Floating racks offer the ability to effectively and efficiently control for fouling organisms (growth of plants and animals other than oysters on the cultivation gear) by periodically exposing the cultivation gear to air-drying. This is done by flipping the racks 180 degrees around their long axis so that the floats are below the rack and bags holding the oysters. The less fouling on the racks and bags, the greater the flow of water across the oysters and therefore, the more they are able to feed on naturally occurring phytoplankton in the water. This results in faster growing, healthier oysters, which will be more resilient to challenges in their environment and be ready for market sooner.
After researching all of the options for floating racks currently available on the market we deemed that those sold under the brand names of “Flow and Grow” and “Oyster Gro” were ideal. These racks are capable of housing and effectively drying six or nine plastic mesh oyster grow-out bags. They are constructed out of vinyl coated galvanized wire mesh panels, which are bent and clipped together into shelving units for oyster bags, and attached to black ultraviolet resistant plastic floats with removable caps. The typical dimensions of these racks can be found in figures 8 and 9. We have tested hundreds of these racks for four years at our existing lease in Dutch Harbor and found their performance superb. During that time, we have also developed equipment, techniques, systems and knowledge suited to effectively work with these racks. This being said, we will consider new technologies with a lower profile above the water surface as they become available.

The infrastructure necessary to achieve our goals for the site and to secure the racks described above will be installed in phases. The final result will consist of fifty columns of floating racks spaced 20’ apart. This results in the 1000’ long axis of the site. Each row will consist of forty racks spaced seven feet apart end-to-end for a row length of 280’ plus 30’ on either end for anchor line scope. This results in the 340’ short axis of the site. The total area of the site is therefore 340,000 square feet or 7.8-acres. The four corners of the site will be marked with highly visible lighted buoys and high flier radar reflectors.

The racks will be secured to 1/2” long-lines from either end of their long axis by 3/8” tether lines. These lines will be secured to the sea bottom with galvanized steel screw helix anchors. The anchors will be five-feet long, have 1-inch diameter shafts, and 9-inch diameter screws. The anchors will be installed from the surface using a barge equipped with a 5-hp post hole digger fitted with a custom underwater drilling attachment. A combination of 3/4” chain and 1/2” sinking line of sufficient length to provide the appropriate scope will be attached from the screw anchors to a 24” hard plastic low-profile float at the surface. The rows of forty racks will be divided into two separate but abutting long-lines, consisting of twenty racks each. Each twenty-rack long line will be secured at either end by helix anchor. Therefore, each row of forty racks will be secured by four helix anchors. This layout is achieved by overlapping the top ends of the anchor lines in the middle of the rows (please see figure 6 for a graphic representation as it can be hard to visualize from words alone). We have effectively used this exact equipment and configuration (the design of which was developed and tested in Canada) on a smaller scale at our existing lease for the last four years without any issues.

The oysters will be tended to throughout the growing season. This will involve flipping each rack into the drying position every two weeks for a period of 24 to 48 hours at a time. By air-drying the racks and bags, fouling organisms are eliminated. The length of drying time will depend on air temperature, weather conditions, and fouling organisms targeted for control.

After two years in the grow-out bags, we will begin to systematically sort out oysters to be sold. The oysters not ready for market (which we call “runts”) will be returned to bags at a density of 200 oysters per bag to continue growing. After several months of growing the process is repeated. Typically, it takes two to three cycles of this sorting process over a one to two-year time frame to sell the entire crop from one particular year class.

At the end of the oyster-growing season, which is typically around December 1st, the racks will be sunk to the sea floor by removing the caps from the floats and allowing them to flood with sea water. This protects the gear and oysters from winter ice and storms. When the water temperature increases and the
oysters begin feeding again, typically in April, each of the racks will be lifted to the surface by a hydraulic boom. The floats will be washed out and the caps re-installed leaving the columns of racks floating at the surface again.

Sea Vegetable Cultivation:

The global aquaculture production of edible seaweed is valued at $5.5 billion. For the past 10-years seaweed production has grown at an average rate of 5.2% per year. Of this production 99% is produced in Asia. There is an unrealized opportunity to produce and sell this product domestically in the United States. As of yet a market for such a product is underdeveloped. Therefore, the sea vegetable production component of this application is being considered as an opportunity to experiment and not as a stand-alone business. Fortunately oysters and some sea vegetables have opposite growing seasons. The beauty of the proposed plan is that the deep-water infrastructure investments necessary to grow oysters during the summer are in place and unused during the winter, because the oyster racks are sunk to the bottom.

Once the oyster cultivation gear has been sunk to the bottom the submerged long-lines for sea vegetable cultivation can be deployed in their place. Grow-out twine seeded with kelp spores wound around PVC tubes are used to plant the sea vegetables. One end of a long line is threaded through the PVC tube, the 1mm twine is tied to the long line and the boat is slowly backed away, thereby slowly winding the twine around the long line. In the middle of a long line, at 140”, a dropper buoy and weight is spliced in to keep the long line in place. The site will then be monitored every two weeks to adjust the buoyancy of the line as the sea vegetables grow by adding additional weights to the droppers as necessary. The final product will be harvested periodically in the early spring before the growth of fouling organisms begins to deteriorate the quality.

Farm Operation and Distribution:

The farm will be operated by our 20-foot work boat and 30-foot barge moored at Dutch Harbor Boat Yard.

A system will be implemented to track oysters on the farm to ensure that seed from upwellers or hatcheries in “closed” or “conditional” waters are not harvested before they have been in “open” water for one-year. To do this a spreadsheet that represents the spatial configuration of the farm and depicts all of the individual units of gear on the farm will be created. A color code for each batch of seed and numerical code for each size grade of oyster will be assigned. The spreadsheet is then populated with the current inventory of oysters on the farm. Each week’s farm activity is recorded in a new tab in the spreadsheet. The result is a weekly record of the inventory and the status of the farm at any given time, including the location, source, number and size class of all of the oysters on the farm. To compliment the spreadsheet and make daily operations easier each piece of gear will be labeled with a numbered plastic tag. This system allows each batch of oysters to be tracked as they move through the farm and ensures that seed from “closed” or “conditional” waters will remain in the “open” water on the farm for a minimum of one year.

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5 Ibid
6 Ibid
Market oysters will be processed and harvested from the farm in a manner that is in complete compliance with all Rhode Island Department of Health (RIDOH) and Department of Environmental Management (RIDEM) rules and regulations. This will include adhering to the Interstate Shellfish Sanitation Commissions (ISSC) harvest protocol for resubmergence of oysters prior to sending them to market. In addition, if birds perching on the racks proves to be a risk for contamination, zip-ties will be affixed to the highest point of the floats to deter them from landing. The firm currently holds a RIDOH shellfish business license - shipper (SHL 00505), a RIDEM aquaculture license (“AQUA 000129 POT”), a RIDEM multi-purpose dealers license (DMPURP 000244) and is listed on the United States Food and Drug Administration Certified Interstate Shellfish Shippers List (505).

The large majority of Walrus and Carpenter Oysters™ are sold and distributed directly by our company via our refrigerated box truck to approximately 50 restaurants throughout Rhode Island.
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:

Walrus and Carpenter Oysters LLC  
83 State Street  
Narragansett, RI 02802

Jules Opton-Himmel - Owner

2. **CRMC file number** for the facility; new applications will be assigned a file number by CRMC:

CRMC File No. 2019-09-077

3. **DEM Aquaculture License number** (applicable if products are offered for sale); new applicants will need to obtain the DEM aquaculture license:

AQUA 000129 POT

4. **Type of facility** (e.g., commercial lease site, upweller, experimental site, restoration site) and **nature of operation** (i.e., methodology used).

Commercial lease site with floating oyster and kelp cultivation gear.

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

   - Town: Jamestown
   - Water body: East Passage, Narragansett Bay
   - Lat/long coordinates of facility:
     - NE Corner: 41° 30’ 47.1614”, 71° 23’ 24.4352”
     - NW Corner: 41° 30’ 44.5732”, 71° 23’ 27.2995”
     - SW Corner: 41° 30’ 38.1925”, 71° 23’ 17.2592”
     - SE Corner: 41° 30’ 40.7808”, 71° 23’ 14.3996”

   (Please see Figure 1 in above application for chart depicting exact location)

6. Identification of all **species of shellfish** grown at the facility. Acknowledgement that the applicant will follow Biosecurity Board seed protocols should be included.

   Eastern oysters (*Crassostrea virginica*)  
   Sugar kelp (*Laminaria saccharina*)

   We will follow all Biosecurity Board seed protocols.
7. Description of *types of structures, gear and methods* used at the facility (e.g., rafts, pens, racks, 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.):

Please see above operation plan and Figures 3-10.

8. Description of the *methods and equipment used to identify and mark site*.

The corners of the site will be marked with high-flier radar reflectors and solar-powered white navigation beacons.

9. DEM *Shellfish Harvesting Classification at site*.

Open

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

Please see above operation plan

11. Procedures for *maintaining records*:

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

   Please see above operation plan

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

   Please see above operation plan. In addition, all RIDEM and RIDOH regulations will be followed.

12. *Procedures for maintaining records*:

   For upwellers/seed-growing facilities in prohibited waters:

   Not applicable

   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.,

   Not applicable

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:

Please see above operation plan

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

   Please see above operation plan

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

   Please see above operation plan.

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.

Please see above operation plan
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;

Climate change is the single greatest threat to humanity. All citizens and businesses have a responsibility to reduce or eliminate their greenhouse gas emissions. Ocean cultivated shellfish have the lowest carbon footprint of all farmed animal proteins. We have made a commitment to distribute our oysters no more than 150 miles from our farms and to become a carbon neutral company by 2024. Therefore, by producing more oysters, more efficiently, with less greenhouse gas emissions we are providing a low-carbon alternative to both seafood shipped great distances and other types of animal protein with large carbon footprints.

In the United States 90% of the seafood consumed is imported from other countries while 30% of the seafood caught in the United States is exported. There is currently a demand for responsibly cultivated local seafood in our region. Ocean farming is a means of meeting this demand and reducing the trade deficit.

(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,

This question does not apply to our activities given that all of our activities will occur in State owned sub-tidal waters.

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

All of our activities will occur in sub-tidal portions of Narragansett Bay and there will be no impact on coastal lands.

(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.

Our aquaculture gear consists of ½" long lines, wire racks and mesh bags that permit water to flow through them by design since the species we are cultivating depend on the flow of water. Therefore, our

gear will not restrict or alter circulation within the estuary. As a result, we expect no impact on sediment transport; and therefore our activities will not effect erosion or deposition processes.

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

Given that we will be cultivating native species of oysters and macroalgae there is no risk of introducing invasive species that would out compete native flora or fauna. The small footprint of our proposed lease area, which in turn is only a minute fraction of the entire bay, will cause minimal disturbance to benthic communities. Furthermore, there is no eelgrass within the proposed sites.

We do not anticipate that the proposed farm would have a negative impact on the diversity and abundance of native species in Narragansett Bay. Rather, we expect our proposed aquaculture activities to have a beneficial effect on native plant and animal life. The gear should provide structure and therefore habitat for a wide array of native species.

Finally, raising and harvesting oysters and sugar kelp will directly remove carbon and nitrogen from Narragansett Bay. Excessive loading of nitrogen from land based anthropogenic activity is a continual threat to the ecological integrity of estuaries in developed regions. The sequestration of carbon from the atmosphere is a means of climate change mitigation.

(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 lease sites do not directly block any public or private access to tidal waters and/or the shore.

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

Circulation and flushing will not be impacted because our long lines will be spaced 20’ apart to allow for normal water movement. It is in our best interest not to obstruct natural circulation or flushing patterns in any way given that our oysters and sea vegetables will depend on the flow of water for survival and growth. Our activities will have no significant effect on sedimentation as most of the activity will be near the surface of the water column in a well flushed area of the bay.

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

Oyster and sea vegetable aquaculture are extremely low impact. Unlike fish farming, they do not require any external inputs of feed or chemicals to raise the product. Therefore, there will not be deterioration in the quality of the water in the vicinity of the proposed farm. Rather, we expect water quality to improve as a result of the installation of the farm because of the filtering capacity of oysters.

(9) demonstrate that the alteration or activity will not result in significant impacts to areas of historic and archaeological significance;
The proposed lease will in no way impact an area that has neither, historic nor archeological significance given that the entire area is sub-tidal and devoid of historic or archaeological relics.

(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;

Our proposed sites are located well clear of the boating channel and not in the direct path of any destinations. Just as we do at our existing farms we intend to (a) always keep the gear in neat and orderly rows so their location is predictable, (b) maintain a good deal of distance (20’) between the long lines, and (c) to place highly visible markers along the perimeter and corners of the site.

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

One of the primary motivations for this application is to reduce the visual impact of our operations to waterfront home owners by moving our farm further away from them. Our original lease is 0.260 miles from the nearest waterfront home within view. This proposed new location is 0.653 miles from the nearest waterfront home within view. We are not obligated to abandon our existing lease but have opted to agree to do so at great expense and risk (given that the original site is proven while this new site has not been tested) in the hopes of improving our relationship with our neighbors.
January 31, 2020

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

Re: Walrus & Carpenter Oysters LLC public notice #2019-12-55

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 Jules Opton-Himmel for a proposed 7.8-acre aquaculture lease in Narragansett Bay, West Passage for cultivating eastern oysters (Crassostrea virginica) year-round using floating racks with zip-tie bird deterrents if deemed necessary, and sugar kelp (Laminaria saccharina) on submerged long lines (Figure 1). In addition, the applicant states that they will relinquish their 2-acre lease in Dutch Harbor if this application is approved.

The current proposed site overlaps with historical eelgrass (Zostera marina) beds, which were present during 2012 surveying. Species of submerged aquatic vegetation (SAV), which include eelgrass, are critical habitat for juvenile marine life and provide surface sediment stabilization (Dennison et al. 1993; Fonseca 1996). Rhode Island has deemed SAV as a critical marine resource and is protected by both Federal (Clean Water Act; 33 U.S.C. 26 section 1251 et seq) and state legislation (650-RICR-20-00-01 §1.3.1(R)). Eelgrass recovery time requires a stable state ecosystem without continuous and cumulative stressors or disturbances; aquaculture practices can create the types of disturbances and stressors noted in the literature (Gunderson 2000). Research has shown that eelgrass can recover over a variety of timescales ranging between five years and decades (Zieman et al. 1984), therefore, older eelgrass presence data still provides insight into potential future eelgrass habitat recovery.

Additionally, the use of floating gear has been shown to cause a significant decrease in eelgrass density, percent cover, and reproduction due to limited light (Ferriss et al. 2019). The proposed application states that it will sink their oyster cages during the winter so that they are resting on the bottom. This will directly disturb the bottom sediments, which
can cause serious damage to underground roots, rhizomes, and meristems preventing further continued growth and survival of SAV (Stephan et al. 2000, Wisehart et al. 2007). Aquaculture use in the northern section of the proposed site could have significant impacts to the current habitat that would prevent critical SAV recovery and survivorship.

DMF staff commented on the issue of historical eelgrass overlap during the Preliminary Determination and met with the applicant to discuss shifting the site further out from shore to prevent habitat overlap in the northern section of the proposed site. The DMF request for a slight site shift to protect critical habitat was not included by the applicant in the full application. Thus, the DMF does not support the currently proposed site location, as negative impacts to fish habitat may occur.

While DFW does not find the proposed facility poses a significant risk to migratory birds, DFW does want the lease holder to be aware that the nearby Marsh Meadows is a globally recognized Important Bird Area. Rhode Island Species of Greatest Conservation Need, including the American Black Duck and Common Eider, frequently feed on invertebrates such as clams and mussels (Zydelis et al. 2009, Cramer et al. 2012, Beuth et al. 2017). As such, the aquaculture production may frequently face predation from these or similar species (Price & Nickum 1995, Vareness et al. 2013). Various species of wading birds, gulls, and terns may also be attracted to the floating cages both as foraging and roosting opportunities (Callier et al. 2018). DFW encourages the applicant to explore floating gear designs that deter roosting (see Comeau et al. 2009). DFW will not support moving deterrents, scarecrows, etc. as they will also displace non-target species from the lease and surrounding area. Lethal removal of depredating birds requires authorization from DFW and likely will 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 (Varenes et al. 2013). The applicant will be legally responsible for any take of migratory birds that is caused by unapproved exclusion devices.

In conclusion, the DMF and DFW believe that adverse impacts to marine fisheries and their habitat from this prospective oyster and kelp aquaculture site could be significant. On the basis of negative impacts to critical SAV habitat, the DMF objects to this application and the current proposal specific to the location and specifications outlined in the application. The Department is willing to further discuss these comments and to work with the applicant to identify other potential sites or modifications to the current proposal, that would result in minimal impacts marine fisheries and wildlife and their habitat.

Sincerely,

Jason McNamee,
Chief of Marine Resource Management
Jay Osenkowski,
Deputy Chief, Wildlife

References:


Clean Water Act; 33 U.S.C. 26 section 1251 et seq. Federal Water Pollution Control Act


Figure 1. Proposed 7.81-acre site
4.12 Shellfish Management Areas – Descriptions, Seasons, and Possession Limits

4.12.2 Shellfish Management Areas

E. Bissel Cove/Fox Island: The marine waters of Bissel Cove in its entirety and adjacent waters of Narragansett Bay located south of a line extending from utility pole #275 at the corner of Waldron and Seaview Avenues (Latitude: 41.553567 Decimal Degrees North, Longitude: -71.429705 Decimal Degrees West) to the southwestern-most point of Fox Island (Latitude: 41.553236 Decimal Degrees North, Longitude: -71.419937 Decimal Degrees West); and west of a line extending from the southwestern-most point of Fox Island (Latitude: 41.553236 Decimal Degrees North, Longitude: -71.419937 Decimal Degrees West) to the northern-most point of Rome point (Latitude: 41.548853 Decimal Degrees North, Longitude: -71.423836 Decimal Degrees West), in the town of North Kingstown.

2. Oyster harvest moratorium: The harvest and possession of oysters in the Bissel Cove/Fox Island Shellfish Management Area is prohibited until November 15, 2020.

M. Ninigret (Charlestown) Pond: The marine waters of Ninigret Pond in its entirety located west of the bridge at Charlestown Beach Road (Latitude: 41.364173 Decimal Degrees North, Longitude: -71.625958 Decimal Degrees West) in the town of Charlestown; and north of the mouth of Charlestown Breachway (Latitude: 41.354865 Decimal Degrees North, Longitude: -71.638536 Decimal Degrees West) in the town of Charlestown.

1. Harvest schedule: Open daily, except for the following:

2. Ninigret Pond sub-area 1 (western closed area): The marine waters within an area enclosed by the following points and boundaries: from point “A” at the north end of the Ninigret Conservation Area parking lot (Latitude: 41.344726 Decimal Degrees North, Longitude: -71.690149 Decimal Degrees West); following the Ninigret Conservation Area shoreline approximately 580 meters eastward to point “B” (Latitude: 41.346815 Decimal Degrees North, Longitude: -71.683958 Decimal Degrees West); from point “B” approximately 1,382 meters northward to point “C” at the Ninigret Landing Marina (Latitude: 41.358561 Decimal Degrees North,
Longitude: -71.689409 Decimal Degrees West); from point “C” following the shoreline approximately 962 meters westward to “D” at the westernmost end of Reeds Point (Latitude: 41.352794 Decimal Degrees North, Longitude: -71.694621 Decimal Degrees West); from point “D” approximately 971 meters southward to point “A”, completing the final boundary.

a. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops.

3. Ninigret Pond-Foster Cove sub-area 1 (northern closed area): The marine waters within an area enclosed by the following points and boundaries: from point “A” on the Foster Cove shoreline (Latitude: 41.366362 Decimal Degrees North, Longitude: -71.676036 Decimal Degrees West); from point “A” approximately 46 meters southward to point “B” (Latitude: 41.365970 Decimal Degrees North, Longitude: -71.676220 Decimal Degrees West); from point “B” approximately 82 meters eastward to point “C” (Latitude: 41.365690 Decimal Degrees North, Longitude: -71.675310 Decimal Degrees West); from point “C” approximately 46 meters northward to point “D” (Latitude: 41.366086 Decimal Degrees North, Longitude: -71.675128 Decimal Degrees West); from point “D” following the shoreline approximately 109 meters eastward to point “A” completing the final boundary.

a. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops until January 1, 2020, unless extended by the Director after RIMFC review.

4. Ninigret Pond-Foster Cove sub-area 2 (eastern closed area): The marine waters within 25 meters of the shoreline surrounding the Ninigret National Wildlife Refuge western point enclosed by the following points and boundaries: from point “A” on the Foster Cove shoreline (Latitude: 41.363705 Decimal Degrees North, Longitude: -71.673512 Decimal Degrees West); following the shoreline approximately 209 meters westward to point “B” at the end of the point (Latitude: 41.364515 Decimal Degrees North, Longitude: -71.675236 Decimal Degrees West); from point “B” following the shoreline approximately 183 meters eastward to point “C” (Latitude: 41.364330 Decimal Degrees North, Longitude: -71.673220 Decimal Degrees West).

a. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops until January 1, 2020, unless extended by the Director after RIMFC review.
Title of Rule: Shellfish (250-RICR-90-00-4)

Rule Identifier: 250-RICR-90-00-4

Rulemaking Action: Proposed Amendment

Important Dates:
Date of Public Notice: 05/01/2020
End of Public Comment: 05/31/2020

Authority for this Rulemaking:

Summary of Rulemaking Action:
1. **Whelk minimum size (section 4.9(G)):**
   - Option 1: Remove length as a minimum size measurement metric and add language and diagram to clarify how to measure width.
   - Option 2: Remove both length and width as minimum size measurement metrics and replace with shell height; add language and diagram to clarify how to measure height.

2. **Clarification of boundary descriptions of Shellfish Management Areas (sections 4.12.2(A) through (V)):** Proposed addition of coordinates (latitude and longitude decimal degrees) to Shellfish Management Areas boundary descriptions and minor changes in instances when landmarks used in the descriptions have changed (e.g., landmark is no longer present).

3. **Change "bycatch" to "incidental catch" for Sakonnet River bay quahaug possession limit (section 4.12.2)(J)(2):** Change proposed consistent with proposed addition of term "incidental catch" in Part 1, and changes to sections 3.29.2(B)(3) and 5.8.1(L)(1). Propose change is non-substantive in nature, meant to clarify only.

4. Other non-substantive clarifications.

Additional Information and Comments:
All interested parties are invited to request additional information or submit written or oral comments concerning the proposed amendment until May 31, 2020 by contacting the appropriate party at the address listed below:
In accordance with R.I. Gen. Laws § 42-35-2.8, an oral hearing will be granted if requested by twenty-five (25) persons, by an agency or by an association having at least twenty-five (25) members. A request for an oral hearing must be made within thirty (30) days of this notice.

**Regulatory Analysis Summary and Supporting Documentation:**
In the development of the proposed amendment consideration was given to: (1) alternative approaches; (2) overlap or duplication with other statutory and regulatory provisions; and (3) significant economic impact on small business. No alternative approach, duplication, or overlap was identified based upon available information.

For full regulatory analysis or supporting documentation see agency contact person above.
250-RICR-90-00-4

TITLE 250 – DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CHAPTER 90 – MARINE FISHERIES

SUBCHAPTER 00 – N/A

PART 4 – Shellfish

4.1 Purpose

The purpose of these Rules and Regulations is to manage the marine resources of Rhode Island.

4.2 Authority


4.3 Application

The terms and provisions of these Rules and Regulations shall be liberally construed to permit the Department to effectuate the purposes of state law, goals, and policies.

4.4 Definitions

See Marine Fisheries Definitions, Part 1 of this Subchapter.

4.5 Severability

If any provision of these Rules and Regulations, or the application thereof to any person or circumstances, is held invalid by a court of competent jurisdiction, the validity of the remainder of the Rules and Regulations shall not be affected thereby.

4.6 Superseded Rules and Regulations

On the effective date of these Rules and Regulations, all previous Rules and Regulations, and any policies regarding the administration and enforcement of
these regulations shall be superseded. However, any enforcement action taken by, or application submitted to, the Department prior to the effective date of these Rules and Regulations shall be governed by the Rules and Regulations in effect at the time the enforcement action was taken, or application filed.

4.7 General Provisions

A. Recreational harvest: Shellfish harvested recreationally shall not be sold or offered for sale.

B. No person shall take shellfish from waters declared polluted by the Director pursuant to R.I. Gen. Laws § 20-8.1-3 unless authorized by the Director (ref. R.I. Gen. Laws § 20-8.1-5). This sub-section shall not apply to the harvest of Whelk or Bay scallop. For the water quality status of shellfish grounds subject to conditional closures or emergencies call 401-222-2900. (R.I. Gen. Laws Chapter 20-8.1)

C. Night shellfishing prohibited: The harvesting of shellfish is prohibited during the hours between sundown and sunrise (R.I. Gen. Laws § 20-6-23).

D. Opening shellfish on water: No person shall possess the meats of six (6) or more shellfish while shellfishing on the waters of the State, or throw the shells of open bay scallops onto bay scallop beds (R.I. Gen. Laws § 20-6-21).

E. Whelk – general provisions:

1. Mutilation and/or possession of whelk meat; cooked or uncooked: Prior to landing of any whelk, no person shall mutilate any cooked or uncooked whelk by breaking and removing the meat from the shell or have in his or her possession any part or parts of any uncooked whelk so mutilated. In any and all prosecutions under this sub-section, the possession of any part or parts of any cooked or uncooked whelk so mutilated shall be prima facie evidence sufficient to convict. All whelks are to be landed whole in the shell.

2. Hauling or setting whelk pots at night: No person shall haul or unduly disturb any whelk pot within the territorial waters of this state between the hours of one (1) hour after sundown and one (1) hour before sunrise.

F. License Required:

1. Recreational harvest – R.I. resident: R.I. residents are not required to obtain a license for the recreational harvest of shellfish (R.I. Gen. Laws § 20-6-1).

2. Recreational harvest – non-resident: A non-resident over the age of twelve (12) years wishing to take or possess shellfish recreationally in
Rhode Island waters must obtain shellfish license (R.I. Gen. Laws § 20-2-22):

a. Annual: The fee for an annual shellfish license is two hundred dollars ($200). This license will expire on the last day in February annually.

b. 14-day: The fee for a fourteen (14) day tourist license is eleven dollars ($11). This license is valid for fourteen (14) consecutive days only, including the date of issue, and is limited to one (1) license per person per calendar year.

c. Non-resident landowner: A non-resident landowner may, with proof of residential property ownership in the form of a current tax bill from a town or city hall showing that the non-resident landowner is current in his or her property tax obligation, obtain an annual, non-commercial, non-resident shellfish license for a fee of twenty-five dollars ($25) (R.I. Gen. Laws § 20-2-22(d)).

3. Commercial harvest: See specific requirements and conditions in DEM’s [Part 2 of this Subchapter](#), Commercial and Recreational Saltwater Fishing Licensing Regulations.

a. A commercially licensed fisherman shall only sell, barter, or trade shellfish taken from Rhode Island waters to a licensed shellfish dealer or multipurpose dealer.

b. A commercially licensed fisherman shall not sell, deliver, or otherwise transfer shellfish taken from Rhode Island waters to a licensed shellfish or multipurpose dealer without first presenting said dealer, a valid shellfish license issued by the DEM.

4.8 Equipment Provisions and Harvest Methods

A. SCUBA prohibition: The taking of shellfish by the use of a self-contained underwater breathing apparatus (SCUBA) from Green Hill Pond, Quonochontaug Pond, Ninigret Pond, and Potter Pond is prohibited (R.I. Gen. Laws § 20-6-30).

B. The use of a diving apparatus is prohibited while recreational shoredigging.

C. Use of devices capable of harvesting shellfish while in polluted areas: No person shall work, cast, haul, or have overboard a dredge, pair of tongs, rake or rakes, air-assisted equipment, water-assisted equipment, or any other implement capable of harvesting shellfish, except for the taking of whelk in pots and the use of an implement commonly employed for the taking of bay scallops (within established bay scallop harvest seasons), in waters declared polluted by the Director (R.I. Gen. Laws § 20-8.1-6).
D. Power hauling of tongs and bullrakes: Power hauling of tongs and bullrakes for any purpose other than the removal and retrieval of bullrakes and tongs from the benthic sediments is prohibited.

E. Method of harvest of oysters, bay quahaugs, soft-shell clams: No person shall dig and/or take any oysters, bay quahaugs, or soft-shell clams from the waters of this State by dredge(s), rakes, or other apparatus operated by mechanical power or hauled by power boats, unless as provided for in these regulations.

F. Dimensions for bullrakes and tongs when using power hauling equipment: No person shall use any power hauling equipment in the operation of bullrakes and tongs with dimensions exceeding the following:

1. Maximum width measured along a line parallel to the tooth bar: Thirty-one and one-half inches (31 ½"") inches;
2. Maximum tooth length: Four and one-half inches (4 ½"") inches;
3. Maximum basket depth: Twelve inches (12"") inches, measured along a line perpendicular to the tooth bar and extending from the tooth bar to any point on the basket.
4. Possession of bullrakes and tongs in excess of these size restrictions shall be prohibited aboard vessels equipped with any power hauling equipment.
5. Except as required for safety or to avoid property loss, no vessel involved in the harvest of bay quahaugs or oysters by use of bullrakes or tongs may be moved or propelled by any source of mechanical power at any time when any bullrakes or tongs operated from such vessel are submerged in the waters of the state.

G. Tong construction: No person shall take shellfish, or attempt to take shellfish, or have in his possession while on the waters of this State, with tongs not meeting the following dimensions:

1. Minimum tooth gap: Not less than one inch (1"") inch apart.
2. Heads: Heads on the bar or heads constructed with wires, rods, cross-bars, or reinforcement that will form a rectangle shall not be less than one inch (1"") inch by two and one half inches (2 ½"") inches.
3. A tolerance of one sixteenth of an inch (1/16"") of an inch is allowed.

H. Bullrake construction: No person shall take shellfish, or attempt to take shellfish, or have in his possession while on the waters of this State, with a bullrake not meeting the following dimensions:

1. Minimum tooth or tine gap: Not less than one inch (1"") inch apart.
2. Crossbars or reinforcement that will form a rectangle shall not be less than one \textit{inch} (1") inch by two and one half \textit{inches} (2 1/2") inches.

3. A tolerance of one sixteenth \textit{of an inch} (1/16") \textit{of an inch} is allowed.

I. \textbf{Bay Quahaoq diving basket construction:} No commercially licensed diver shall take or attempt to take bay quahaoqs from the waters of the State of Rhode Island with a diver’s bay quahaoq harvesting basket, bag, or combination of basket and bag, or similar device not meeting the following dimensions:

1. Bar spacing: Not less than one \textit{inch} (1") inch by two and one half \textit{inches} (2 1/2") inches. A tolerance of one sixteenth \textit{inch} (1/16") inch is allowed.

2. Bag mesh on the bay quahaoq harvesting basket: Not less than two \textit{inches} (2") inches when measured on the stretch (from inside of knot to inside of the knot). A tolerance of one eighth \textit{inch} (1/8") inch for variance in the twine is allowed. The bag shall be hung on the square so that when held by the mouth, the twine forms fully opened squares.

J. Dredging of bay scallops:

1. Maximum number of single dredges used: Six (6) single dredges.

2. Maximum width of dredge blades: Twenty-eight \textit{inches} (28") inches.


4. Each single dredge shall be towed and hauled aboard the registered vessel individually. All oysters, soft-shell clams, or bay quahaoqs shall be immediately returned to the waters from which they were taken (R.I. Gen. Laws §§ 20-6-7 and 20-6-19).

5. Areas where bay scallop dredging is prohibited: The use of bay scallop dredges is prohibited in closed areas of Shellfish Management Areas.

K. Dredging of blue mussels:

1. When dredging for blue mussels, all bay scallops, oysters, or bay quahaoqs shall be immediately returned to the waters from which they were taken (R.I. Gen. Laws § 20-6-7).

2. Blue Mussel Dredging Permit: A permit issued from the Director is required for the commercial dredging for blue mussels. Applications shall be made annually on forms prescribed by the Director (R.I. Gen. Laws § 20-6-7).

L. Dredging of surf clams and ocean quahaoqs:
1. Surf clam gear restrictions:
   a. Hydraulic dredging: The maximum width of a dredge blade, knife or manifold is forty-eight inches (48"") inches.
   b. Multiple dredge restriction: It is unlawful for any vessel to operate more than one (1) dredge while harvesting for surf clams.

2. Areas prohibited for the dredging of surf clams or ocean quahaugs: All waters north of a line extending from Church Point in the town of Little Compton, to Flint Point in the town of Middletown; and north of a line extending from Castle Hill Point in the city of Newport, to Southwest Point in the town of Jamestown and to Bonnet Point in the town of Narragansett.

3. Tagging of cages: Shellfish cages must be tagged in accordance with the United States Food and Drug Administration/RIDOH regulations before being off-loaded in Rhode Island.

M. Dredging for sea scallops:

1. Maximum dredge size for a vessel in possession of sea scallops: Ten and one half feet (10 ½') feet.

2. Minimum dredge ring size: Four inches (4") inches.

3. The minimum mesh size of a net, net material or any other material on the top of a sea scallop dredge (twine top) possessed or used by vessels fishing with sea scallop dredge gear/net size of twine top is ten inch (10") inch square or diamond mesh.

4.9 Minimum Sizes

A. Bay quahaug: One inch (1") shell thickness (hinge width) (R.I. Gen. Laws § 20-6-11).

B. Soft-shell clam: Two inches (2") measured as the shell diameter or parallel to the long axis of the clam (R.I. Gen. Laws § 20-6-11).

C. Oyster: Three inches (3") measured parallel to the long axis of the oyster (R.I. Gen. Laws § 20-6-11).

D. Bay scallop: The taking or possession of a seed Bay scallop is prohibited. Seed bay scallops shall be immediately returned to their natural beds in the water from which taken (R.I. Gen. Laws § 20-6-17).

E. Surf clam: Five inches (5") measured parallel to the long axis of the clam.
F. Sea scallop: Three and one-half inches (3½”), measuring in a straight line from the hinge to the part of the shell furthest from the hinge, whether caught within the jurisdiction of this State or otherwise.

**Whelk Minimum Size**

**Option 1:** Remove length as a minimum size measurement metric and add language and diagram to clarify how to measure width:

G. Whelk: Three inches (3") shell width or five and three eighths inches (5 3/8") shell length. Shell width shall be the distance between opposing shell margins with the shell resting flat on a horizontal surface with the operculum opening facing down and the whelk retracted inside the shell. The shell shall be oriented with one (1) shell edge abutted against a vertical surface that is perpendicular to the horizontal surface, and the columella axis parallel to the vertical surface. The measurement shall be a line extending perpendicular from the vertical surface to the farthest point on the opposing shell edge.

**Option 2:** Remove both length and width as minimum size measurement metrics and replace with shell height; add language and diagram to clarify how to measure height:

G. Whelk: Three inches (3") shell width or five and three eighths inches (5 3/8") shell length. Two and nine-thirty-seconds inches (2 9/32") shell height. Shell height shall be the distance along a straight perpendicular line from the opercular side of the shell to the farthest point of the top of the shell. This distance is measured with the whelk retracted, and shell placed with the operculum stably positioned against a flat surface. To properly measure shell height using a gauge: Minimum legal shell height shall be the two and nine-thirty-seconds inches (2 9/32") distance between opposing parallel surfaces, measured with the whelk retracted and shell placed with the operculum stably positioned against one (1) of the parallel surfaces. The whelk is legal-sized if it does not fit between the opposing parallel surfaces.

4.10 Seasons

A. Bay quahaug, soft-shell clam, blue mussel, sea scallop, whelk, surf clam, and ocean quahaug:

1. Open daily in waters other than Shellfish Management Areas, unless otherwise closed due to pollution or other management purposes.

B. Oyster: September 15 through May 15 annually.

C. Bay scallop:

1. Dip-netting from a boat: Open only from the first Saturday in November through December 31 annually.
2. Dredging: Open only from December 1 through December 31 annually.

4.11 Daily Possession Limits in Waters Other Than Shellfish Management Areas

A. Recreational – R.I. resident:
   1. Bay quahaug, soft-shell clam, surf clam, blue mussel, and oyster: One half (½) bushel per person per day (R.I. Gen. Laws § 20-6-1).
   2. Bay scallop: One (1) bushel per person per day (R.I. Gen. Laws § 20-6-1).
   3. Whelk: One half (½) bushel per resident per day; and maximum of one (1) bushel per vessel per day.
      a. Whelk pot limit: Maximum of five (5) whelk pots in the water at any one time.
   4. Sea scallop: Forty (40) pounds shucked; or five (5) bushels of in-shell scallops per vessel per day.

B. Recreational – Licensed non-resident:
   1. Bay quahaug, soft-shell clam, surf clam, blue mussel, and oyster: One (1) peck per person per day (R.I. Gen. Laws § 20-6-10).
   2. Bay scallop: The harvest or possession of Bay scallops by non-residents is prohibited.

C. Whelk: The harvest or possession of whelk by non-residents is prohibited.

D. Sea scallop: Forty (40) pounds shucked; or five (5) bushels of in-shell scallops per vessel per day.

E. Commercial:
   1. Bay quahaug:
      a. Multi-purpose (MPURP) and Principal Effort License (PEL) holders: Twelve (12) bushels per person per day (R.I. Gen. Laws § 20-6-10).
      b. Commercial Fishing License (CFL), Student shellfish license, and Over-65 shellfish license holders: Three (3) bushels per person per day (R.I. Gen. Laws § 20-2.1-5).
   2. Soft-shell clam: Twelve (12) bushels per person per day (R.I. Gen. Laws § 20-6-10).
3. Oyster: Three (3) bushels per person per day (R.I. Gen. Laws § 20-6-10).

4. Bay scallop: Three (3) bushels per person per day; and maximum of three (3) bushels per vessel per day (R.I. Gen. Laws § 20-6-16).

5. Surf clam: Two hundred (200) bushels per person per day.

6. Ocean quahog: Twenty six (26) cages or eight hundred thirty two (832) bushels per person per day.

7. Sea scallops: For non-federally permitted vessels, four hundred (400) pounds of shucked; or fifty (50) bushels of in-shell scallops per vessel per day.

8. Whelk: Thirty five (35) bushels per vessel per day.

   a. Commercial whelk pot limit: Maximum of three hundred (300) whelk pots per licensee in the water at any one time.

4.12 Shellfish Management Areas – Descriptions, Seasons, and Possession Limits

4.12.1 General


B. Shellfish Management Areas may have additional regulations specific to the Management Area. Refer to each Management Area listed below.

4C. In Shellfish Management Areas, shoredigging is open daily at reduced Shellfish Management Areas possession limits specified herein, unless closed due to pollution or other management purposes.

2D. Commercial boat harvest schedule in Shellfish Management Areas: Recommendation for a change to the a commercial boat harvest default schedules specified herein shall must be submitted to the Director at least sixty (60) days prior to the first proposed opening date.

3.——Greenwich Bay area’s 1 & 2:
a. The schedule for the month of December may include up to 48 hours of permitted shellfishing, spread over any number of days during the month, excluding December 25.

b. If weather or water quality conditions during the month of December prevent opening on two or more scheduled days, the DEM may modify the December schedule to allow for additional hours or days of permitted shellfishing.

CE. Daily possession limits:

1. Recreational – R.I. resident:
   a. Bay quahog, soft-shell clam, surf clam, blue mussel, and oyster:
      One (1) peck per person per day.
   b. Bay scallop:
      One (1) bushel per person per day.
   c. Whelk:
      One half (½) bushel per resident per day; or if a vessel with more than one (1) resident onboard is used, a maximum of one (1) bushel per vessel per day.
   d. Whelk pot limit:
      Five (5) whelk pots in the water at any one time.

2. Recreational – licensed non-resident:
   a. Bay quahog, soft-shell clam, surf clam, blue mussel, and oyster:
      One half (½) peck per person per day.
   b. Bay scallop:
      The harvest or possession of Bay scallops by non-residents is prohibited.
   c. Whelk:
      The harvest or possession of whelk by non-residents is prohibited.

3. Commercial:
   a. Bay quahog, soft-shell clam, surf clam, blue mussel, and oyster:
      Three (3) bushels per person per calendar day; maximum of six (6) bushels per vessel per calendar day;

      (1) A maximum of two (2) licensed persons per vessel is allowed.

      (2) Possession limit for shore-digging in Greenwich Bay Management Area sub-areas 1 and 2:
      The possession limit is three (3) bushels per person per day whenever GB sub-area 1 is open to boat harvest, but one (1) peck per person
per day whenever GB sub-area 1 is not open to boat harvest.

b. Bay scallop: Three (3) bushels per person per day; maximum of three (3) bushels per vessel per day.

c. Whelk:

(1) Thirty-five (35) bushels per vessel per day.

(2) Commercial whelk pot limit: Maximum of three hundred (300) whelk pots per licensee in the water at any one time.

### 4.12.2 Shellfish Management Areas

**A. Greenwich Bay (GB):** Described as the waters west of a line between the flagpole at the Warwick Country Club and the end of Sandy Point on the Potowomut Shore, in the town of East Greenwich and city of Warwick. Includes the marine waters of Greenwich Bay in its entirety located west of a line extending from the flagpole at the Warwick Country Club (Latitude: 41.672412 Decimal Degrees North, Longitude: -71.389382 Decimal Degrees West) to the end of Sandy Point on the Potowomut Shore (Latitude: 41.662997 Decimal Degrees North, Longitude: -71.408568 Decimal Degrees West), in the town of East Greenwich and city of Warwick.

1. **GB sub-area 1** *(western GB)*: Described as the waters east of a line between the DEM range marker located at the end of Neptune Street in Chepiwanoxet to the DEM range maker located on Cedar Tree Point, and north of a line between the far northeastern section of Chepiwanoxet Point and the westernmost flagpole on Promenade Street, Old Buttonwoods. The marine waters located north of a line extending from the far northeastern section of Chepiwanoxet Point (Latitude: 41.674585 Decimal Degrees North, Longitude: -71.441152 Decimal Degrees West) to the western fixed pier on Promenade Street, Old Buttonwoods (Latitude: 41.684468 Decimal Degrees North, Longitude: -71.417575 Decimal Degrees West).

2. **GB sub-area 2** *(mid-GB)*: Described as the waters west of a line between Sally Rock Point and the westernmost flagpole on Promenade Street, Old Buttonwoods; and south of a line between the far northeastern section of Chepiwanoxet Point and the westernmost flagpole on Promenade Street, Old Buttonwoods. The marine waters located west of a line extending from Sally Rock Point (Latitude: 41.671413 Decimal Degrees North, Longitude: -71.425511 Decimal Degrees West) to the western fixed pier on Promenade Street, Old Buttonwoods (Latitude: 41.684468 Decimal Degrees North, Longitude: -71.417575 Decimal Degrees West); and south of a line extending from the far northeastern section of Chepiwanoxet Point (Latitude: 41.674585 Decimal Degrees North, Longitude: -71.441152 Decimal Degrees West).
3a. Commercial boat harvest schedule for GB sub-areas 1 and 2:

   d(1) Default commercial boat harvest schedules for GB sub-areas 1 & 2: If when a previously established boat harvest schedule expires, the following default schedule shall be in effect: (1) Open 8:00AM to 12:00PM on Mondays, Wednesdays, and Fridays, beginning on the second Wednesday of December through the last Friday in April, excluding December 25 and January 1.

   (2) The schedule for the month of December may include up to forty-eight (48) hours of permitted shellfishing, spread over any number of days, excluding December 25.

   (3) If weather or water quality conditions during the month of December prevent opening on two (2) or more scheduled days, the Director may modify the December schedule to allow for additional hours or days of permitted shellfishing.

   a-(4) December 2019: Open from 8:00 AM to 12:00 PM on December 11, 13, 16, 18, 20, 23, 24, 26, 27, 30, and 31.

   b-(5) January through April 2020: Open 8:00 AM to 12:00 PM on Mondays, Wednesdays, and Fridays from January 3 through April 29.

   c-(6) May 1 through November 30, 2020: Closed.

43. GB sub-area 3 (eastern GB): Described as the waters east of a line between Sally Rock Point and the westernmost flagpole on Promenade Street, Old Buttonwoods, and west of a line between the flagpole at the Warwick Country Club and the end of Sandy Point on the Potowomut Shore. The marine waters located east of a line extending from Sally Rock Point (Latitude: 41.671413 Decimal Degrees North, Longitude: -71.425511 Decimal Degrees West) northward to the fixed pier on Promenade Street, Old Buttonwoods (Latitude: 41.684468 Decimal Degrees North, Longitude: -71.417575 Decimal Degrees West); and west of a line extending from the flagpole at the Warwick Country Club (Latitude: 41.672412 Decimal Degrees North, Longitude: -71.389382 Decimal Degrees West) to the end of Sandy Point on the Potowomut Shore (Latitude: 41.662997 Decimal Degrees North, Longitude: -71.408568 Decimal Degrees West).

   a. Commercial boat harvest schedule: Open daily.
B. **Conimicut Point:** Described as the waters south of a line running from the pole (Latitude: 41° 43’ 2.93” North, Longitude: 71° 21’ 27.68” West) on Conimicut Point to the center of the Old Tower at Nayatt Point; and north of a line from the westernmost extension of Samuel Gorton Avenue in the city of Warwick, and the southernmost extension of Bay Road in the town of Barrington. The marine waters located south of a line extending from a pole (Latitude: 41.717493 Decimal Degrees North, Longitude: -71.357820 Decimal Degrees West) on Conimicut Point to the center of the Old Tower at Nayatt Point (Latitude: 41.725121 Decimal Degrees North, Longitude: -71.338957 Decimal Degrees West); and north of a line extending from the westernmost extension of Samuel Gorton Avenue in the city of Warwick (Latitude: 41.703781 Decimal Degrees North, Longitude: -71.365120 Decimal Degrees West) to the southernmost extension of Bay Road in the town of Barrington (Latitude: 41.722546 Decimal Degrees North, Longitude: -71.309105 Decimal Degrees West).

1. **Harvest schedule:** Open daily.

2. The reduced Shellfish Management Area possession limit applies only to soft-shell clams.

C. **Potowomut:** Described as the waters at the mouth of Greenwich Bay south of a line between the flagpole at the Warwick Country Club to the seaward end of Sandy Point and north of a line between and the seaward end of Pojac Point to buoy “G1” (Round Rock) to the Warwick Lighthouse, including all the waters of the Potowomut River seaward of the Forge Road Spillway, in the towns of East Greenwich and city of Warwick. The marine waters located south of a line extending from the flagpole at the Warwick Country Club (Latitude: 41.672412 Decimal Degrees North, Longitude: -71.389382 Decimal Degrees West) to the end of Sandy Point on the Potowomut Shore (Latitude: 41.662997 Decimal Degrees North, Longitude: -71.408568 Decimal Degrees West); and north of a line extending from the end of Pojac Point (Latitude: 41.650506 Decimal Degrees North, Longitude: -71.408400 Decimal Degrees West) to buoy G1 “Round Rock” (Latitude: 41.656736 Decimal Degrees North, Longitude: -71.390567 Decimal Degrees West) to the Warwick Lighthouse (Latitude: 41.667124 Decimal Degrees North, Longitude: -71.378385 Decimal Degrees West), including all the marine waters of the Potowomut River seaward of the Forge Road Spillway, in the town of East Greenwich and city of Warwick.

1. **Area A Potowomut sub-area 1 (western Potowomut):** Described as the waters west of a line between the seaward end of Sandy Point and buoy “G1” (Round Rock) and north of a line between the seaward end of Pojac Point to buoy “G1” (Round Rock). The marine waters located west of a line extending from the end of Sandy Point on the Potowomut Shore (Latitude: 41.662997 Decimal Degrees North, Longitude: -71.408568 Decimal Degrees West) to buoy G1 “Round Rock” (Latitude: 41.656736 Decimal Degrees North, Longitude: -71.390567 Decimal Degrees West) to
the end of Pojac Point (Latitude: 41.650506 Decimal Degrees North, Longitude: -71.408400 Decimal Degrees West).

a. Harvest schedule: Open daily.

2. Area B Potowomut sub-area 2 (mid-Potowomut/closed area): Described as the triangular area east of a line between the seaward end of Sandy Point and buoy “G1” (Round Rock) and west of a line between the flagpole at the Warwick Country Club and buoy “G1” (Round Rock) and south of a line between the flagpole at the Warwick Country Club to the seaward end of Sandy Point. Area “B” is closed to shellfishing until further notice. The marine waters within a triangular area located north of a line extending from the end of Sandy Point on the Potowomut Shore (Latitude: 41.662997 Decimal Degrees North, Longitude: -71.408568 Decimal Degrees West) to buoy G1 “Round Rock” (Latitude: 41.656736 Decimal Degrees North, Longitude: -71.390567 Decimal Degrees West); and west of a line extending from the flagpole at the Warwick Country Club (Latitude: 41.672412 Decimal Degrees North, Longitude: -71.389382 Decimal Degrees West) to buoy G1 “Round Rock” (Latitude: 41.656736 Decimal Degrees North, Longitude: -71.390567 Decimal Degrees West); and east of a line extending from the flagpole at the Warwick Country Club (Latitude: 41.672412 Decimal Degrees North, Longitude: -71.389382 Decimal Degrees West) to the seaward end of Sandy Point on the Potowomut Shore (Latitude: 41.662997 Decimal Degrees North, Longitude: -71.408568 Decimal Degrees West).

a. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops.

3. Area C Potowomut sub-area 3 (eastern Potowomut): Described as the waters east of a line between the flagpole at the Warwick Country Club and buoy “G1” (Round Rock) and north of a line from buoy “G1” (Round Rock) to the Warwick Lighthouse. The marine waters east of a line extending from the flagpole at the Warwick Country Club (Latitude: 41.672412 Decimal Degrees North, Longitude: -71.389382 Decimal Degrees West) to buoy G1 “Round Rock” (Latitude: 41.656736 Decimal Degrees North, Longitude: -71.390567 Decimal Degrees West); and west of a line extending from buoy G1 “Round Rock” (Latitude: 41.656736 Decimal Degrees North, Longitude: -71.390567 Decimal Degrees West) to the Warwick Lighthouse (Latitude: 41.667124 Decimal Degrees North, Longitude: -71.378385 Decimal Degrees West).

a. Harvest schedule: Open daily.

D. High Banks: Described as the waters of the upper west passage south of a line between the seaward end of Pojac Point to the Round Rock buoy “G1” and north
of a line from the seaward end of the fence between the former Davisville Navy property and Pettee Street in the Mount View section of North Kingstown to “N6” buoy located mid-bay west of Prudence Island. The area is bounded on the east by a line projecting from the easternmost end of Pier 2 at Davisville to the Round Rock buoy “G1” and is bounded to the west by the shore, in the town of North Kingstown. The marine waters located south of a line extending from the seaward end of Pojac Point (Latitude: 41.650506 Decimal Degrees North, Longitude: -71.408400 Decimal Degrees West) to buoy G1 “Round Rock” (Latitude: 41.656736 Decimal Degrees North, Longitude: -71.390567 Decimal Degrees West); and west of a line extending from buoy G1 “Round Rock” (Latitude: 41.656736 Decimal Degrees North, Longitude: -71.390567 Decimal Degrees West) to the southeastern corner coordinate (Latitude: 41.635211 Decimal Degrees North, Longitude: -71.396539 Decimal Degrees West); and north of a line extending from the seaward end of the fence located between the former Davisville Navy property and Pettee Street in the Mount View section (Latitude: 41.634401 Decimal Degrees North, Longitude: -71.407115 Decimal Degrees West) to High Banks southeast corner coordinate (Latitude: 41.635211 Decimal Degrees North, Longitude: -71.396539 Decimal Degrees West), in the town of North Kingstown. The southeastern corner coordinate is established at the intersection of two lines described as follows: One line extends from the easternmost end of Pier 2 at Davisville (Latitude: 41.615012 Decimal Degrees North, Longitude: -71.402139 Decimal Degrees West) to buoy G1 “Round Rock” (Latitude: 41.656736 Decimal Degrees North, Longitude: -71.390567 Decimal Degrees West); and the second line extends from the seaward end of the fence between the former Davisville Navy property and Pettee Street in the Mount View section (Latitude: 41.634401 Decimal Degrees North, Longitude: -71.407115 Decimal Degrees West) to buoy N6 (Latitude: 41.637323 Decimal Degrees North, Longitude: -71.369265 Decimal Degrees West), located mid-bay west of Prudence Island.

1. Harvest schedule: Open daily

E. Bissel Cove/Fox Island: Described as the waters of Bissel Cove in its entirety and adjacent waters of Narragansett Bay south of a line between Pole #275 at the corner of Waldron and Seaview Avenues and the southwesternmost point of Fox Island (south of the cable area), west of a line from the southwesternmost point of Fox Island to the northernmost point of Rome Point, in the town of North Kingstown. The marine waters of Bissel Cove in its entirety and adjacent waters of Narragansett Bay located south of a line extending from utility pole #275 at the corner of Waldron and Seaview Avenues (Latitude: 41.553567 Decimal Degrees North, Longitude: -71.429705 Decimal Degrees West) to the southwestern-most point of Fox Island (Latitude: 41.553236 Decimal Degrees North, Longitude: -71.419937 Decimal Degrees West); and west of a line extending from the southwestern-most point of Fox Island (Latitude: 41.553236 Decimal Degrees North, Longitude: -71.419937 Decimal Degrees West) to the northern-most point of Rome point (Latitude: 41.548853 Decimal Degrees North, Longitude: -71.423836 Decimal Degrees West), in the town of North Kingstown.
1. Commercial boat harvest schedule:
   
   da. Default commercial boat harvest schedule: If when a previously established boat harvest schedule expires, the following default schedule shall be in effect: (1) Open 8:00 AM to 12:00PM on Mondays, Wednesdays, and Fridays, beginning on the second Wednesday of December through the end of April, excluding December 25 and January 1.

   ab. December 2019: Open from 8:00 AM to 12:00 PM on December 11, 13, 16, 18, 20, 23, 24, 26, 27, 30, and 31.

   bc. January through April 2020: Open 8:00 AM to 12:00 PM on Mondays, Wednesdays, and Fridays from January 3 through April 29.

   cd. May 1 through November 30, 2020: Closed.

2. Oyster harvest moratorium: The harvest and possession of oysters in the Bissel Cove/Fox Island Shellfish Management Area is prohibited until November 15, 2020.

F. Mill Gut: Described as the waters of Mill Gut, lying south of the northern-most bridge on Colt Drive, in the town of Bristol. The marine waters of Mill Gut in its entirety located south of the northern-most bridge on Colt Drive (Latitude: 41.681840 Decimal Degrees North, Longitude: -71.299113 Decimal Degrees West), in the town of Bristol.

   1. Harvest schedule: Open for the harvesting of bay quahogs, soft-shell clams, blue mussels, and oysters only between the second Wednesday in December and April 30 annually.

G. Bristol Harbor: Described as the marine waters of Bristol Harbor and its tributaries located south of a line extending between CRMC permitted dock #419 located at 163 Poppasquash Road in the town of Bristol to and the northwest corner of the Rockwell Pier municipal parking lot in the town of Bristol; and north of a line beginning extending from the north side of CRMC permitted dock #1601 where it meets the shoreline, located at 363 Poppasquash Road to the northwest corner of the U.S. Coast Guard station pier in the town of Bristol. The marine waters of Bristol Harbor and its tributaries located south of a line extending from the CRMC permitted dock #419 located at 163 Poppasquash Road (Latitude: 41.669558 Decimal Degrees North, Longitude: -71.288764 Decimal Degrees West) to the northwest corner of the Rockwell Pier municipal parking lot (Latitude: 41.669742 Decimal Degrees North, Longitude: -71.279250 Decimal Degrees West); and north of a line extending from the north side of CRMC Permitted Dock #1601 where it meets the shoreline (Latitude: 41.664246 Decimal Degrees North, Longitude: -71.290396 Decimal Degrees West), located at 363 Poppasquash Road to the northwest corner of the U.S.
Coast Guard station pier (Latitude: 41.666268 Decimal Degrees North, Longitude: -71.278351 Decimal Degrees West); and west of a line extending from utility pole # 20 on Poppasquash Road (Latitude: 41.682529 Decimal Degrees North, Longitude: -71.285175 Decimal Degrees West) to the northern extremity of Hog Island (Latitude: 41.647959 Decimal Degrees North, Longitude: -71.279880 Decimal Degrees West) in the town of Bristol. The northeast corner coordinate is established at (Latitude: 41.669666 Decimal Degrees North, Longitude: -71.283207 Decimal Degrees West). The Southeast Corner Coordinate is established at (Latitude: 41.665503 Decimal Degrees North, Longitude: -71.282569 Decimal Degrees West).

1. Commercial boat harvest schedule:

   ea. Default commercial boat harvest schedule: If when a previously established boat harvest schedule expires, the following default schedule shall be in effect:

   (1) January 2 through January 31: Open 8:00 AM to 12:00 PM on Mondays, Wednesdays, and Fridays.

   (2) February 1 through April 30: Open daily.

   (3) May 1 through January 1: Closed.

   ab. December 2015: Closed.

   bc. Beginning January 11, 2016: Open 8:00 AM to 12:00 PM on Mondays, Wednesdays, and Fridays.

   cd. February 1 through April 30, 2016: Open daily.

   de. May 1 through November 30 annually: Closed.

H. Kickemuit River: Described as the waters of the Kickemuit River north of a line connecting nun buoy 6 and can buoy 1 at Bristol Narrows. The marine waters of the Kickemuit River in its entirety located north of a line extending from the seaward end of Narrows Road (Latitude: 41.696927 Decimal Degrees North, Longitude: -71.246322 Decimal Degrees West) in the town of Bristol to Nun Buoy 6 (Latitude: 41.698489 Decimal Degrees North, Longitude: -71.244195 Decimal Degrees West) to a point (Latitude: 41.699115 Decimal Degrees North, Longitude: -71.243342 Decimal Degrees West) in the southwestern section of the Little Neck/Touisset section of the Town of Warren.

   1. Harvest schedule: Open daily.

I. Jenny’s Creek: Described as the waters of Prudence Island including Jenny’s Creek north of the inlet at Pine Hill Cove. The marine waters of Jenny Pond on Prudence Island in its entirety located north of its mouth at its inlet at Pine Hill
Cove (Latitude: 41.629838 Decimal Degrees North, Longitude: -71.333696 Decimal Degrees West) in the town of Portsmouth.

1. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops.

J. Sakonnet River: Described as the waters north of a line from Sachuest Point to Sakonnet Light. The northern boundary is an east/west line across the Sakonnet River lying one quarter (1/4) mile south of the pipeline found just south of Black Point, so-called; the western boundary is a north/south line running from Flint Point to Taggart’s Ferry, so-called, in the town of Middletown. The marine waters located north of a line extending from Sachuest Point (Latitude: 41.472362 Decimal Degrees North, Longitude: -71.247257 Decimal Degrees West) in the town of Middletown to Sakonnet Light (Latitude: 41.453130 Decimal Degrees North, Longitude: -71.202434 Decimal Degrees West) in the town of Little Compton to Sakonnet Point (Latitude: 41.454587 Decimal Degrees North, Longitude: -71.195124 Decimal Degrees West) in the town of Little Compton; and south of a line extending from a point on the shoreline (Latitude: 41.519498 Decimal Degrees North, Longitude: -71.230893 Decimal Degrees West) in the town of Portsmouth to Brown Point (Latitude: 41.519896 Decimal Degrees North, Longitude: -71.204959 Decimal Degrees West) in the town of Little Compton; and east of a line extending from a point on the shoreline (Latitude: 41.504347 Decimal Degrees North, Longitude: -71.239782 Decimal Degrees West) in the town of Middletown to Flint Point (Latitude: 41.486523 Decimal Degrees North, Longitude: -71.237974 Decimal Degrees West) in the town of Middletown.

1. The possession limit for surf clams is two hundred (200) bushels/vessel/day.

2. A bycatch An incidental catch limit of one (1) bushel of bay quahaugs for each ten (10) bushels of surf clams, not to exceed twelve (12) bushels of bay quahaugs, is allowed per vessel.

K. Point Judith Pond: Described as the waters of Point Judith Pond, including East Pond, in their entireties, in the towns of South Kingstown and Narragansett. The marine waters of Point Judith Pond in its entirety located east of the bridge at Succotash Road (Latitude: 41.386004 Decimal Degrees North, Longitude: -71.526019 Decimal Degrees West) in the town of South Kingstown; and north of the mouth of the breachway where it meets the Harbor of Refuge (Latitude: 41.375149 Decimal Degrees North, Longitude: -71.513755 Decimal Degrees West) in the town of Narragansett.

1. Harvest schedule: Open daily.

L. Potter Pond: Described as the waters of Potter Pond in its entirety, west of the bridge at Succotash Road, in the town of South Kingstown. The marine waters of Potter Pond in its entirety located west of the bridge at Succotash Road
1. Harvest schedule: Open daily, except for the following:

2. Potter Pond Closed sub-area 1 (closed area): The harvest and possession of shellfish is prohibited, except for the harvest of bay scallops by dip-net from a boat during the open season for bay scallops, in the following area: The area within Sycamore Cove defined as north of a line running easterly from a special DEM marker located at N 41 degrees 23 minutes 2.0 seconds, W 71 degrees 32 minutes 13.0 seconds; to a second special DEM marker located at N 41 degrees 23 minutes 1.0 second, W 71 degrees 31 minutes 59.5 seconds; and bound by the northern pond shoreline between the special DEM markers. The marine waters of Sycamore Cove located north of a line extending easterly from point “A” (Latitude: 41.383435 Decimal Degrees North, Longitude: -71.537009 Decimal Degrees West) to point “B” (Latitude: 41.383661 Decimal Degrees North, Longitude: -71.533286 Decimal Degrees West); from point “B” following the Sycamore Cove shoreline approximately 638 meters back to point “A”.

a. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops.

M. Ninigret (Charlestown) Pond: Described as the waters of Ninigret Pond in its entirety, in the town of Charlestown. The marine waters of Ninigret Pond in its entirety located west of the bridge at Charlestown Beach Road (Latitude: 41.364173 Decimal Degrees North, Longitude: -71.625958 Decimal Degrees West) in the town of Charlestown; and north of the mouth of Charlestown Breachway (Latitude: 41.354865 Decimal Degrees North, Longitude: -71.638536 Decimal Degrees West) in the town of Charlestown.

1. Harvest schedule: Open daily, except for the following:

2. Ninigret Pond sub-area 1 (western closed area): The harvest and possession of shellfish is prohibited, except for the harvest of bay scallops by dip-net from a boat during the open season for bay scallops, in the following area: The waters within an area formed by the following points: from (“A” N 41 degrees 20 minutes 41.7 seconds W 71 degrees 41 minutes 41 minutes 24.3 seconds, the northeast corner of the Ninigret Conservation Area parking lot) following the shoreline to (“B” N 41 degrees 20 minutes 49.6 seconds W 71 degrees 41 minutes 41 minutes 4.6 seconds, a DEM sign approximately 500 meters eastward of “A”); from “B” northward to (“C” N 41 degrees 21 minutes 31.0 seconds W 71 degrees 41 minutes 22.2 seconds, the Lavin’s Ninigret Landing Marina launching ramp); from “C” following the shoreline to (“D” N 41 degrees 21 minutes 10.1 seconds W
71 degrees 41 minutes 40.9 seconds, a DEM sign on the westernmost end of Reeds Point); from “D” southward to “A”. The marine waters within an area enclosed by the following points and boundaries: from point “A” at the north end of the Ninigret Conservation Area parking lot (Latitude: 41.344726 Decimal Degrees North, Longitude: -71.690149 Decimal Degrees West); following the Ninigret Conservation Area shoreline approximately 580 meters eastward to point “B” (Latitude: 41.346815 Decimal Degrees North, Longitude: -71.683958 Decimal Degrees West); from point “B” approximately 1,382 meters northward to point “C” at the Ninigret Landing Marina (Latitude: 41.358561 Decimal Degrees North, Longitude: -71.689409 Decimal Degrees West); from point “C” following the shoreline approximately 962 meters westward to “D” at the westernmost end of Reeds Point (Latitude: 41.352794 Decimal Degrees North, Longitude: -71.694621 Decimal Degrees West); from point “D” approximately 971 meters southward to point “A”, completing the final boundary.

a. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops.

3. **Ninigret Pond-Foster Cove sub-area 1** (northern closed area): The harvest and possession of shellfish is prohibited in the following area: The waters within an area formed by the following points: from (“A” N 41 degrees 21 minutes 58.7 seconds, W 71 degrees 40 minutes 33.8 seconds [41°21'58.7"N, 71°40'33.8"W]) to a point 125 feet south-southeast (“B” N 41 degrees 21 minutes 57.5 seconds, W 71 degrees 40 minutes 34.4 seconds [41°21'57.5"N, 71°40'34.4"W]), to a point 275 feet east-southeast (“C” N 41 degrees 21 minutes 56.5 seconds, W 71 degrees 40 minutes 31.1 seconds [41°21'56.5"N, 71°40'31.1"W]), to a point 125 feet north-northeast (“D” N 41 degrees 21 minutes 57.8 seconds, W 71 degrees 40 minutes 30.5 seconds [41°21'57.8"N, 71°40'30.5"W], from “D” westward continuing along the shoreline to “A”. The marine waters within an area enclosed by the following points and boundaries: from point “A” on the Foster Cove shoreline (Latitude: 41.366362 Decimal Degrees North, Longitude: -71.676036 Decimal Degrees West); from point “A” approximately 46 meters southward to point “B” (Latitude: 41.365970 Decimal Degrees North, Longitude: -71.676220 Decimal Degrees West); from point “B” approximately 82 meters eastward to point “C” (Latitude: 41.365690 Decimal Degrees North, Longitude: -71.675310 Decimal Degrees West); from point “C” approximately 46 meters northward to point “D” (Latitude: 41.366086 Decimal Degrees North, Longitude: -71.675128 Decimal Degrees West); from point “D” following the shoreline approximately 109 meters eastward to point “A” completing the final boundary.
a. These areas shall remain closed until January 1, 2020, unless extended by the Director after RIMFC review. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops until January 1, 2020, unless extended by the Director after RIMFC review.

4. Ninigret Pond-Foster Cove sub-area 2 (eastern closed area): The harvest and possession of shellfish is prohibited in the following area: The waters within 75 feet of shore beginning at a point (“A” N 41 degrees 21 minutes 49.3 seconds, W 71 degrees 40 minutes 24.8 seconds [41°21'49.3"N 71°40'24.8"W]) continuing along the shore to a point northwest (“B” N 41 degrees 21 minutes 52.4 seconds, W 71 degrees 40 minutes 31.0 seconds [41°21'52.4"N 71°40'31.0"W]), continuing along the shore to a point east-southeast (“C” N 41 degrees 21 minutes 51.6 seconds, W 71 degrees 40 minutes 23.6 seconds [41°21'51.6"N 71°40'23.6"W]). The marine waters within 25 meters of the shoreline surrounding the Ninigret National Wildlife Refuge western point enclosed by the following points and boundaries: from point “A” on the Foster Cove shoreline (Latitude: 41.363705 Decimal Degrees North, Longitude: -71.673512 Decimal Degrees West); following the shoreline approximately 209 meters westward to point “B” at the end of the point (Latitude: 41.364515 Decimal Degrees North, Longitude: -71.675236 Decimal Degrees West); from point “B” following the shoreline approximately 183 meters eastward to point “C” (Latitude: 41.364330 Decimal Degrees North, Longitude: -71.673220 Decimal Degrees West).

a. These areas shall remain closed until January 1, 2020, unless extended by the Director after RIMFC review. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops until January 1, 2020, unless extended by the Director after RIMFC review.

N. Quonochontaug Pond: Described as the waters of Quonochontaug Pond in its entirety, in the towns of Charlestown and Westerly. The marine waters of Quonochontaug Pond in its entirety located north of the mouth of Quonochontaug Breachway (Latitude: 41.330878 Decimal Degrees North, Longitude: -71.718764 Decimal Degrees West) in the towns of Charlestown and Westerly.

1. Harvest schedule: Open daily, except for the following:

2. Closed areas:

a. Quonochontaug Pond sub-area 1 (western closed area): The harvest and possession of shellfish is prohibited in the following area: Described as the waters south of a line running easterly from the special DEM marker at the end of Quahaug Point (N 41
degrees 20 minutes 0.0 seconds, W 71 degrees 44 minutes 39.5 seconds), to a second special DEM marker at the northern end of Nope's Island (N 41 degrees 20 minutes 5.0 seconds, W 71 degrees 44 minutes 1.0 second). The area will be bordered on the west by a line running south from Quahaug Point to a special DEM marker located on the barrier beach shoreline (N 41 degrees 19 minutes 50.0 seconds, W 71 degrees 44 minutes 40.0 seconds). The southern boundary will be the shoreline between the barrier beach special DEM marker and Nope's Island special DEM marker. The marine waters within an area enclosed by the following points and boundaries: the waters south of a line extending approximately 911 meters easterly from “A” on the southern end of Quahaug Point (Latitude: 41.333330 Decimal Degrees North, Longitude: -71.744365 degrees West) in the town of Westerly; to “B” at the northern end of Nope’s Island (Latitude: 41.344528 Decimal Degrees North, Longitude: -71.733593 Decimal Degrees West) in the town of Westerly; from “B” following the Quo- nochontaug Barrier shoreline generally westward, approximately 1,545 meters to “C” in the town of Westerly (Latitude: 41.330564 Decimal Degrees North, Longitude: -71.744459 degrees West); from “C” approximately 307 meters northward to "A" completing the final boundary, in the town of Westerly.

b. Quonochontaug Pond sub-area 2 (eastern closed area): The harvest and possession of shellfish is prohibited, except for the harvest of bay scallops by dip-net from a boat during the open season for bay scallops, in the following area: Described as the waters east of a line running southerly from the special DEM marker located at N 41 degrees 21 minutes 1.1 seconds W 71 degrees 42 minutes 33.4 seconds, to a second special DEM marker located at N 41 degrees 20 minutes 41.0 seconds W 71 degrees 42 minutes 44.1 seconds; and bound by the eastern pond shoreline between the special DEM markers. The marine waters within an area enclosed by the following points and boundaries: the waters east of a line extending approximately 673 meters southerly from point “A” on the eastern end of the QYC stone pier (Latitude: 41.350312 Decimal Degrees North, Longitude: -71.709292 degrees West) in the town of Charlestown; to point “B” at the eastern end of the unnamed island (Latitude: 41.344710 Decimal Degrees North, Longitude: -71.712336 Decimal Degrees West) in the town of Charlestown; from point “B” following the Quonochontaug Pond shoreline generally northward, approximately 1120 meters back to point “A” completing the final boundary.

3. The harvest and possession of oysters in Quonochontaug Pond is prohibited until September 15, 2021.
O. Winnapaug Pond: Described as the waters of Winnapaug Pond in its entirety, in the town of Westerly. The marine waters of Winnapaug Pond in its entirety located north of the mouth of Weekapaug Breachway (Latitude: 41.327627 Decimal Degrees North, Longitude: -71.762913 Decimal Degrees West) in the town of Westerly.

1. Harvest schedule: Open daily, except for the following:

2. Winnapaug Pond sub-area 1 (closed area): The harvest and possession of shellfish is prohibited, except for the harvest of bay scallops by dip-net from a boat during the open season for bay scallops, in the following area: Described as the waters north of a line running easterly from a special DEM marker at Big Rock Point (N 41 degrees 19 minutes 49.0 seconds, W 71 degrees 47 minutes 57.0 seconds), to the special DEM marker at the southern end of Larkin's Island (N 41 degrees 19 minutes 55.0 seconds, W 71 degrees 47 minutes 5.0 seconds). The area will be bordered on the east by a line running northwesterly the Larkin's Island special marker to a special DEM marker adjacent to the end of Bayside Avenue (N 41 degrees 19 minutes 58.0 seconds, W 71 degrees 47 minutes 9.0 seconds). The northern boundary is the shoreline between the Bayside Ave special DEM marker and the Big Rock Point special DEM marker. The marine waters within an area enclosed by the following points and boundaries: the waters north of a line extending approximately 1,239 meters easterly from point “A” on the southeastern portion of Big Rock Point (Latitude: 41.330229 Decimal Degrees North, Longitude: -71.799555 Decimal Degrees West) in the town of Westerly; to point “B” at the southern end of Larkin’s Island (Latitude: 41.331958 Decimal Degrees North, Longitude: -71.784941 Decimal Degrees West) in the town of Westerly; from point “B” approximately 119 meters northwesterly to point “C” adjacent to the end of Bayside Avenue (Latitude: 41.332611 Decimal Degrees North, Longitude: -71.786066 Decimal Degrees West) in the town of Westerly; from point “C” following the shoreline generally westward, approximately 1,590 meters to point “A”, completing the final boundary.

P. Green Hill Pond: Described as the marine waters of Green Hill Pond and its tributaries in its entirety, in the towns of South Kingstown and Charlestown. The marine waters of Green Hill Pond in its entirety located east of the bridge at Charlestown Beach Road (Latitude: 41.364173 Decimal Degrees North, Longitude: -71.625958 Decimal Degrees West), in the towns of Charlestown and South Kingstown.

1. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops.

Q. Narrow River: Described as the marine waters of the Narrow River in its entirety, in the towns of Narragansett, South Kingstown, and North Kingstown.
marine waters of the Narrow River in its entirety located west and north of its mouth at the Narrows (Latitude: 41.442019 Decimal Degrees North, Longitude: -71.440679 Decimal Degrees West) in the towns of Narragansett; south of Gilbert Stuart Rd. (Latitude: 41.519845 Decimal Degrees North, Longitude: -71.444608 Decimal Degrees West) in the town of and North Kingstown; and north of Mumford Rd. (Latitude: 41.439006 Decimal Degrees North, Longitude: -71.473478 Decimal Degrees West) in the town of Narragansett.

1. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops.

R. Little Narragansett Bay and Pawcatuck River: Described as the marine waters of Little Narragansett Bay and Pawcatuck River within the State of Rhode Island which are northeast of a line from the DEM range marker on a pole (Latitude 41.321703 Decimal Degrees North, Longitude 71.878691 Decimal Degrees West) the DEM range marker on a pole near the southeastern extremity of Sandy Point to a DEM range marker on a pole (Latitude 41.310300 Decimal Degrees North, Longitude 71.877500 Decimal Degrees West) on the northern shoreline of Napatree Point, including all waters of the “Kitchen” so called, and those waters northeast of the southwest shoreline of Sandy Point to the state line. Harvesters should refer to the above latitudes and longitudes for the closure line if the range markers and or poles are no longer present.

S. Providence and Seekonk Rivers: Described as the marine waters of the Providence River and Seekonk River and their tributaries located north of a line extending from the flagpole on Conimicut Point in the City of Warwick and the center of the Old Tower at Nayatt Point; and southerly and seaward of the Hurricane barrier in the city of Providence; and southerly and seaward of the Main Street Dam in the city of Pawtucket. The marine waters of the Providence and Seekonk Rivers and their tributaries located north of a line extending from the flagpole on Conimicut Point in the City of Warwick (Latitude: 41.717493 Decimal Degrees North, Longitude: -71.35820 Decimal Degrees West) located at Conimicut Point in the city of Warwick and the center of the Old Tower at Nayatt Point; and southerly and seaward of the Hurricane barrier (Latitude: 41.815785 Decimal Degrees West).
North, Longitude: -71.401958 Decimal Degrees West) in the City of Providence; and southerly and seaward of the Main Street Dam (Latitude: 41.876594 Decimal Degrees North, Longitude: -71.383100 Decimal Degrees West) in the city of Pawtucket.

1. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops.

T. Warren River Shellfish Management Area: Described as the marine waters of the Warren River and its tributaries located north and east of a line extending from the flagpole at 178 Adams Point Road on Adams Point in Barrington to the DEM range marker at Jacobs Point; and southerly and downstream of the Main street/Route 114 bridge at its intersection with the Barrington River in the town of Barrington; and southerly and downstream of the Main street/Route 114 bridge at its intersection with the Palmer River in towns of Bristol and Warren. The marine waters of the Warren River and its tributaries located north and east of a line extending from the flagpole at 178 Adams Point Road in Town of Barrington (Latitude: 41.716089 Decimal Degrees North, Longitude: -71.293291 Decimal Degrees West) to the DEM range marker at Jacobs Point in the Town of Warren (Latitude: 41.714306 Decimal Degrees North, Longitude: -71.286673 Decimal Degrees West); and southerly and downstream of the Main street/Route 114 bridge at its intersection with the Barrington River in the Town of Barrington (Latitude: 41.736701 Decimal Degrees North, Longitude: -71.295451 Decimal Degrees West); and southerly and downstream of the Main street/Route 114 bridge at its intersection with the Palmer River in Towns of Bristol and Warren (Latitude: 41.737396 Decimal Degrees North, Longitude: -71.289081 Decimal Degrees West).

1. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops.

U. Town Pond: Described as the marine waters of Founders Brook and Town Pond in their entirety, in the town Portsmouth. The marine waters of Founders Brook and Town Pond in their entirety located south of the tidal connection to Mount Hope Bay in the town of Portsmouth (Latitude: 41.638944 Decimal Degrees North, Longitude: -71.245269 Decimal Degrees West).

1. Harvest schedule: Closed except for the harvest of bay scallops by dip-netting only from a boat during the open season for bay scallops.

V. Jacobs Point Shellfish Management Area: Described as the marine waters of the Warren River south of a line extending from the DEM range marker on the shore north of Jacobs Point, located at 71°17′12.104″W, 41°42′51.541″N, to nun buoy 12; and east of a line extending from nun buoy 12 to the DEM range marker on the shore south of Jacobs Point, located at 71°17′28.61″W, 41°42′36.91″N. The marine waters of the Warren River located south of a line extending from the DEM range marker on the shore north of Jacobs Point (Latitude: 41.714306
Decimal Degrees North, Longitude: -71.286673 Decimal Degrees West) to nun buoy 12 in the Town of Warren (Latitude: 41.713780 Decimal Degrees North, Longitude: -71.291593 Decimal Degrees West); and east of a line extending from nun buoy 12 to the DEM range marker on the shore south of Jacobs Point in the Town of Bristol (Latitude: 41.710253 Decimal Degrees North, Longitude: -71.291327 Decimal Degrees West).

1. Harvest schedule: Open daily.

2. The reduced Shellfish Management Area possession limit applies only to oysters. The commercial possession limit for oysters is one (1) peck per person per day.

4.13 Wet Storage of Shellfish

No person shall engage in wet storage of molluscan shellfish without first obtaining a dealer's license from DOH and DEM.

4.14 Commercial Handling of Shellfish

A. Commercial shellfishermen shall conduct all activities and operations involving or relating to the possession and handling of shell stock so as to prevent contamination, deterioration and decomposition of such shell stock.

B. Containers used for storing shell stock must be clean.

C. Boat decks and storage bins used in the harvest or transport of shell stock shall be kept clean with potable water or water from the growing area in approved classification or the open status of conditional areas.

D. Commercial shellfishermen using a vessel to harvest and transport shell stock shall assure that said vessel is properly constructed, operated and maintained to prevent contamination, deterioration and decomposition of shell stock.

E. Commercial shellfishermen using a vessel to harvest and transport shell stock shall prevent bilge water from coming into contact with shell stock.

F. Commercial shellfishermen using a boat to harvest and transport shell stock shall provide such vessel with effective drainage to avoid contact between bilge water and shell stock.

G. Commercial shellfishermen using a vessel to harvest and transport shell stock shall locate bilge pumps so that discharge shall not contaminate shell stock.

H. Shell stock shall be washed reasonably free of bottom sediments as soon after harvesting as possible. The harvester shall be primarily responsible for washing shell stock. If shell stock washing is not feasible at the time of harvest, the dealer shall assume this responsibility. Water used for washing shall be from a potable
water source, or growing area in the approved classification or open status of the conditionally approved classification.

I. The discharge of human sewage from a vessel used in the harvesting of shell stock, or from vessels that buy shell stock, within waters of the state is prohibited.

4.15 Commercial Tagging of Shellfish

A. Commercial shellfishermen must place any and all shellfish taken by them (except those shellfish returned to the waters of the harvest area) into containers, and must tag each and every container with a “harvester tag” conforming to the requirements of this sub-section, prior to shellfish being placed in the container.

B. The harvester tag shall be durable, waterproof, and sanctioned by the R.I. Department of Health. The tag shall contain the following indelible, legible information in the order specified as follows: The harvester’s identification number as assigned by DEM; the date of harvest; the harvest commencement time; the harvest location as identified on the R.I. Shellfish Harvest Area Tagging Map; the shellfish management area; the type (species) of shellfish; and the approximate quantity of shellfish. The harvest commencement time will indicate the time that the first shellfish that the harvester is currently in possession of was removed from the water and should be the same for all shellfish that the harvester is in possession of regardless of tagging area.

C. Each tag shall also carry the following statement in bold capitalized type: “This tag is required to be attached until container is empty or it retagged and thereafter kept on file for 90 days”. Commercial shellfishermen shall not place shell stock harvested from more than one growing area into the same container. When the harvester is also a dealer, the harvester has the option to tag the shell stock with a harvester tag or a dealer’s tag meeting the requirements of the RIDOH regulations.

D. Bulk tagging of shell stock will be permitted only with prior approval of the Director under the following criteria:

1. When shell stock are harvested from one harvest area on a single day, multiple containers may be utilized on a wrapped pallet, in a tote, in a net brailer, or other container and the unit tagged with a single tag; and,

2. A statement that all shell stock containers in this lot have the same harvest data and area of harvest; and number of containers in the unit.

4.16 Commercial Temperature Control of Shellfish

A. Commercial shellfishermen shall not allow shell stock to deteriorate or decompose from exposure to excessive temperature and shall deliver shell stock to a licensed dealer before such deterioration or decomposition occurs.
B. Harvest of shellfish from sunrise November 1 through sunset March 31 annually: The maximum allowable time between the commencement of harvest of shell stock and delivery to a dealer shall be twenty (20) hours. Possession of shell stock in excess of twenty (20) hours is prohibited.

C. Harvest of shellfish from sunrise April 1 through sunset October 31 annually: The maximum allowable time between the commencement of harvest of shell stock and delivery to a dealer shall be ten (10) hours. Possession of shell stock in excess of ten (10) hours is prohibited.

1. The harvester shall provide shading to all shellfish intended for harvest aboard vessels and during land-based deliveries.

2. Harvest of quahogs or oysters from within Designated Temperature Control Areas that exceed five hours to complete shall be placed in mechanical refrigeration or adequately iced in a storage container within five (5) hours of the commencement of harvest until the shellfish are transferred to a licensed dealer within ten (10) hours.

D. Ocean quahogs, surf clams, and whelks are exempt from temperature control requirements.

4.17 Shellfish Transplant Regulations

A. The Director is authorized and directed, after requiring all necessary safeguards, to transfer shellfish from uncertified waters of the State to approved areas. The Director may make Rules and Regulations governing the re-harvest of those shellfish to the best economic benefit of the state after all necessary safeguards to insure their cleanliness (R.I. Gen. Laws § 20-6-26).

B. Any person participating in the transplant program shall surrender his commercial license to the conservation officer or DEM employee afloat on the transplant bed or otherwise stationed to collect licenses. The license must be surrendered before the participant commences digging shellfish.

C. The boundaries of the transplanting area shall be marked with designated corner markers. All shellfishermen participating in the transplant program shall harvest shellfish only within the boundaries of the transplant area so marked.

D. No shellfisherman shall commence harvesting shellfish in the transplant area before the hour at which the transplant program is scheduled to commence. Hours of transplanting shall be publicized in advance.

E. Shellfishermen participating in the transplant program shall bring no shellfish into the transplant area before beginning the transplant. Any shellfish on board a participant's boat shall be considered transplant shellfish, dug from the transplanting area.
F. Any participant in the transplant program shall be considered to have completed his participation in the program when he presents his shellfish to the "buy boat/buy station" for counting/weighing. If the method of transplanting involves diggers planting their own catch in the transplant bed, the shellfisherman shall first present his catch to the authorized DEM officer for counting/weighing, and shall then proceed directly to the planting area. Once the shellfisherman commences to remove the shellfish from his boat to the "buy boat/buy station" or into the transplant bed, he shall remove all shellfish from his boat before changing location. Any change of location shall indicate that the shellfisherman has cleared his boat of shellfish and is ready for inspection and return of license by DEM officers. No shellfish shall be aboard any participant's boat at the time of inspection.

G. Temporary creation of a transplanting area shall in no way affect the polluted status of the waters therein, or of any waters surrounding the transplanting area and declared polluted.

H. Violation of any of these provisions shall be punishable by a fine of up to five hundred dollars ($500) and/or up to thirty (30) days in jail.

I. Agents of the DEM may limit the maximum allowable harvest by each participant in a transplant. Agents of the DEM may limit the number of participants in a shellfish transplant program provided that the limit is determined in a fair and equitable manner (R.I. Gen. Laws § 20-6-29).

J. Dredging, Raking, and Tonging in Transplant Beds: Those areas to which the shellfish are transferred shall be marked out, and dredging, raking, or tonging on them shall be prohibited except under the special direction of the Director (R.I. Gen. Laws § 20-6-27).

4.18 Commercial Whelk Pot Tagging:

A. Applicability: No person shall set, haul, or maintain a whelk pot unless the pot has attached a valid whelk pot tag issued by the Director.

B. Application for whelk pot tags shall be made on forms as prescribed by the Director.

C. Cost of tags shall be borne by the license holder and shall not exceed the cost of producing such tags by the vendor(s) selected by the Department.

D. Tags shall be permanently attached to the pot in a location clearly visible for inspection.

E. Tags shall be valid on an annual basis from April 1 through March 31.

F. No person shall transfer whelk pot tags between whelk pots, or between individuals or vessels.
G. No person shall possess at any one time more whelk pot tags than are authorized.

H. Only tags for the current fishing year and the immediate previous or following fishing year shall be allowed to remain attached to each whelk pot.

I. Pot tag types and issuance:

1. Original tags: Eligible license holders may order up to the maximum pot limit plus a fifteen percent (15%) over-allotment to allow for replacement of tags due to routine losses. When a routine loss of an original tag occurs, the ten percent (10%) over-allotment shall be used to replace the lost tag.

2. Gear rotation tags: Eligible license holders may order additional tags to be used for gear rotation and maintenance. The number of gear rotation tags issued shall not exceed the maximum pot limit or exceed the number of original tags ordered. Gear rotation tags shall be held by the Director. The Director shall issue gear rotation trap tags on a one-for-one basis upon receipt of the original tags.

3. Catastrophic loss tags: Eligible license holders may order up to two (2) complete sets of catastrophic loss trap tags, in an amount equal to the number of original tags ordered, to be used in the event of catastrophic loss or to replace original trap tags not received.
   
   a. Catastrophic loss trap tags ordered shall be held by the Director.

   b. Issuance of catastrophic loss tags shall null and void original and gear rotation tags issued. No original tag issued may be used upon issuance of catastrophic trap tags.

   c. Catastrophic loss trap tags shall be distinguishable from original trap tags (i.e. color).