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

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

PUBLIC NOTICE

File Number: 2015-07-031 Date: January 7, 2022

This office has under consideration the application of:

East Beach Farms, LLC
Attn: James Arnoux
141 Pine Hill Road
Wakefield, RI 02879

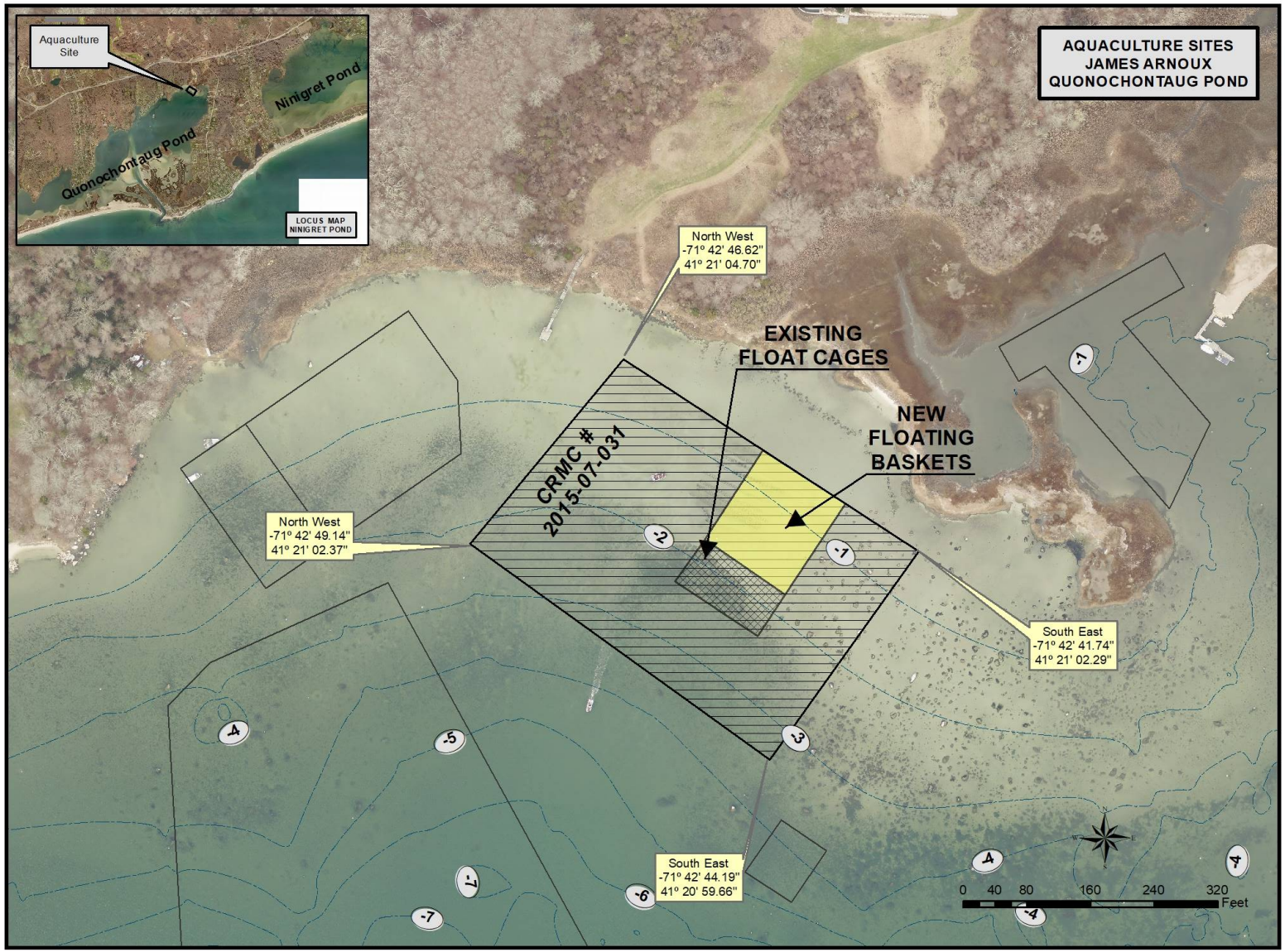
for a modification of a State of Rhode Island Assent to: replace wire bottom trays with low profile floating longline baskets, known as Hexcly© Pods, within the approved 0.75 acre gear area only of the 3.2 acre lease. The 0.75 acre gear area is approved for bottom trays, bottom cages, and high profile floating OysterGro© cages. This application seeks to replace all existing one-hundred bottom trays with ten rows of thirty low profile floating Hexcly© Pods. There will be no expansion of the existing 0.75 acre gear area. The remaining 2.45 acres of the lease will continue to remain free of gear and used for the cultivation of oysters directly on the bottom. See map below.

Project Location/Waterway:	Quonochontaug Pond
City/Town:	Charlestown
Related CRMC Files:	2012-10-066; 2013-10-063; 2014-01-007; 2015-05-068

Plans of the proposed work may be seen at the CRMC office in Wakefield and can also be found attached to this notice. 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, that 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 7, 2022.


AQUACULTURE SITES
JAMES ARNOUX
QUONOCHONTAUG POND
Aquaculture Site
Ninigret Pond
Quonochontaug Pond
LOCUS MAP
NINIGRET POND
North West
-71° 42' 46.62"
41° 21' 04.70"
EXISTING
FLOAT CAGES
NEW
FLOATING
BASKETS
CRMC #
2015-07-031
North West
-71° 42' 49.14"
41° 21' 02.37"
South East
-71° 42' 41.74"
41° 21' 02.29"
South East
-71° 42' 44.19"
41° 20' 59.66"
-1
-2
-3
-4
-5
-6
-7
0 40 80 160 240 320
Feet

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REQUEST FOR ASSENT MODIFICATION

Assent/Permit Number: ~~2017-09-012~~ 2015-07-031 **(including extensions) Expiration Date:** 06/24/2029

Name of Assent Holder: East Beach Farms LLC

Location of Project: Quonochontaug Pond 41 21'04.70" N / 71 42'.46.62" W

City/Town: Charlestown **Plat:** N/A

Lot: N/A

Name of Present Owner: James Arnoux (owner/member of East Beach Farms LLC)

Mailing Address: 141 Pine Hill Road

City/Town: Charlestown **State:** RI **Zip:** 02879

Phone Number: (401)742-0817 **Contact Person:** James Arnoux

Abutters: The lease abuts open space parcel according to tax assessor data. The owner of the adjoining property to the open space parcel has been contacted and intends to submit a comment of no objection to the application once comment period opens.

I hereby certify that the names and addresses of adjacent property owners whose property adjoins the project site are accurate and current as of the date of application. If said names and addresses are found to be not accurate and/or current, any subsequent Assent may become Null and Void. **Signed:** _____

Describe the proposed modification(s): Remove existing wire trays and replace with Hexcyl "pod-style" floating longline baskets in the area of the lease that is currently permitted for other bottom gear types (see site plan for location of proposed gear). Hexcyl pods would be installed in April/May and removed in December annually.

Reason: An increase in non-native bryozoans and macroalgaes in recent seasons has made the use of existing trays no longer feasible for effective grow-out of oysters. The proposed Hexcyl pods would be located on the lease adjacent to a boulder field to minimize conflicts. The currently permitted bottom cages and floating OysterGro cages would remain while the wire trays would be removed from the site.

What state of construction is the project in: Lease is already active, proposed gear would only be installed after approval of the permit modification.

Owner's Signature: _____

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. 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. The filing of false information can result in the Coastal Resources Management Council revoking State Assent. Applicant requires that as a condition to the granting of this assent, members of the CRMC or its staff shall be access to the applicant's property to make on-site inspections to ensure compliance with the assent. This application is made under oath and subject to penalties of perjury. 5/00

/ajt 11/2019

RECEIVED
NOV 12 2021
COASTAL RESOURCES MANAGEMENT COUNCIL

East Beach Farms, LLC (owned and operated by James Arnoux) has operated a 3.2 acre commercial aquaculture lease in the northeastern corner of Quonochontaug Pond since 2015. The lease is currently approved for growing oysters utilizing bottom culture, wire trays, bottom cages, and floating cages. The lease is one of several the company successfully operates in Quonochontaug and Ninigret Ponds beginning in 2005 with it's first 1 acre site. Since then we have kept our focus on growing high-quality oysters while also striving to co-exist with the other users of the ponds, participating in numerous shellfish restoration programs and pond-clean-ups, and partnering with local institutions with salt pond research projects.

During the past several seasons the lease site in this application (#2015-07-031) has been experiencing an increase in coverage and intensity of several non-native bryozoans and macroalgae species. Employing the usual method of hauling cages and trays up to desiccate (i.e. "dry out") to kill these organisms has increased significantly to the point where the success of the farm has been hampered. There is now a need to utilize more efficient gear that both increases product quality and reduces labor time in an environment of labor shortages and an increasingly competitive oyster market. It is expected that the floating baskets will save up to 300 hours of labor per season while also increasing the yield of the site by 20% or greater annually due to improved growth and decreased mortality.

The proposed gear modification would replace the 2' x 3' wire bottom trays with similar dimension Hexcyl© Australian-style longline baskets suspended by low-profile floats and rope longline. The baskets would be grouped into "pods" of 3 baskets with 2 floats per pod. A total of up to 300 pods deployed on 10 lines of (30 pods per longline) would replace the wire trays. Each line would be securely moored by 150# pyramid anchors and 24" helix augers, with all gear being removed each winter to prevent ice damage. The farm has successfully demonstrated experience with keeping the current OysterGro floating cages securely moored and we also operate a mooring service business with the equipment to deploy the anchors.

The area proposed for the Hexcyl pods is in the area of the lease that is currently approved for gear under the current permit and is directly adjacent to a large group of boulders which prevent navigation by boat traffic. In terms of square footage, there would be a reduction of 1200 square feet of bottom wire trays countered by the addition of 1980 square feet of floating baskets.

The other gear types currently permitted for use at the site are floating OysterGro cages and 3 bag bottom cages. These will both continue to be utilized with the only difference being the bottom cages will get re-oriented just to the west of the proposed Hexcyl pods but in the same area of the lease that the wire bottom trays currently occupy.

One of the emerging concerns with floating gear is the use of the floats as perches for birds and the associated bacterial concerns (Campylobacter). If permitted, all oysters grown in the floating Hexcyl pods would be transferred to bottom cages for a minimum of 2 weeks before sales. In addition, the floats would be attached with extra length zip ties with the ends untrimmed (i.e. pointing skyward) to discourage birds from perching/landing on the floats.

Voluntary sampling for Campylobacter may also be performed at a private lab if feasible to monitor for this.

In summary, the additional floating gear requested will substantially improve the viability of the lease site while, as described in the Category B responses below, minimize the potential conflicts and concerns that may arise from floating aquaculture gear.

RESPONSES TO CATEGORY B REQUIREMENTS:

(1) *Demonstrate the need for the proposed activity:* The proposed gear modification is sought primarily to combat the increased presence of invasive and native bryozoans and macroalgae that rapidly colonize the current wire trays and prevent shellfish growth. Low-profile floating Hexcyl pods will have the ability to be frequently dried out to eliminate fouling organisms without the significant labor involved to load the gear onto the boat. Utilizing this type of gear will also improve product quality, which in an increasingly competitive market will be essential to the long-term viability of the farm.

(2) *Demonstrate all local building codes and local ordinances will be met:* When the gear is removed for the winter months it will be stored on commercial property that is also used to store boats. Since the gear would be routinely dried out it will likely be cleaner/less fouled than the typical boat is at the end of a boating season. There will be no other land-based activities as a result of the proposed modification.

(3) *Describe the boundaries of the coastal waters and land areas anticipated to be affected:* The current lease where the proposed gear would be located is just to the west of an area of exposed boulders in the northeastern corner of Quonochontaug Pond, or approximately 1000 feet west of the intersection of Briarwood Drive and West Beach Road in the town of Charlestown. The CRMC classification for the waters is Type II (Low Intensity Use), as is all of Quonochontaug Pond. The adjacent shoreline has one residence located on 5740 Post Road (Map 3 - Lot 152 as shown on the Charlestown assessor's map) and zoned open space. Access to the residential dock facility for 5740 Post Road will not be altered or restricted by the proposed modification; bottom culture of oysters is the method used in the current lease area that is adjacent to this dock.

(4) *Impacts to erosion and/or deposition processes:* The floating cages (while securely moored) will move slightly according to wave and tidal action and will not impede these processes.

(5) *Impacts to the abundance and diversity of plant and animal life:* It has been noted that the floats used with floating oyster gear may attract birds; to mitigate this we will use extended length zip ties to secure the floats to the baskets and leave the ends untrimmed to act as a deterrent to birds landing on the floats. Otherwise the floating gear will serve as shelter and habitat for juvenile finfish and crabs similar to what we observe within/under the currently permitted floating cages.

Noise impacts will be limited to a small four-stroke outboard motor and occasional use of a 2000 watt inverter generator. Each of these is comparable or less noisy than existing outboard engines and homeowner power equipment used around the ponds. Lack of noise is one of the main benefits of floating gear; floats will be flipped manually at low tide therefore no machinery or pressure washing is needed to lift or clean the gear.

(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 lease site was originally chosen in large part due to the distance from the some of the most actively used parts of the pond (i.e. the Breachway, Bill's Island, Ski Beach, etc.). A second reason for the site location was due to its proximity directly adjacent to a large boulder field. These boulders preclude most boating activity in the area, thus limiting activity to kayaks and other paddlecraft. The proposed modification stays within close proximity to numerous boulders and is limited to a relatively small footprint compared to the overall lease. We frequently see and interact with members of the public who paddle through the lease without disruption.

There are also moorings located approximately 600' to the southeast and southwest of the proposed gear modification. The Hexcyl pods will not interfere with boat access to these moorings in any way as they will be anchored well shoreward of the nearest moorings.

Public access to the pond in the vicinity of the site is limited due to the distance from public roads and/or parking; however, there is a minimum of approximately 75' between the northeast extent of the proposed gear and the shoreline so shoreline access will be maintained.

(7) *Impacts to water circulation, flushing, turbidity, and sedimentation:* The proposed structures are designed to allow for the greatest flow of water to promote feeding and growth of the oysters. Structures will be arranged in roughly SW-NE rows to allow for predominant wind and tide directions to flow unimpeded through the site.

(8) *Demonstrate that there will be no significant deterioration of water quality in the immediate vicinity:* Shellfish aquaculture has been proven to increase water quality due to the filtering action of shellfish. The site will be accessed using a small 22' work barge with a four-stroke engine equipped with a fuel spill kit.

In terms of how the floats may attract waterfowl, we already see a large number of cormorants, terns, and other birds attracted to the area due to the exposed boulders. However, to mitigate the potential for additional birds utilizing the floats we will be equipping the floats with extra-long zip ties to deter landing. We have observed that the localized population of birds fluctuates depending on the concentration of baitfish in the immediate area and would expect this to continue with or without the additional proposed gear.

(9) *Demonstrate that the activity will not result in significant impacts to areas of historic or archaeological significance:* There are no known historic or archaeological resources within the proposed site. If any were discovered, the location of aquaculture gear will not impact their

existence. The gear could be shifted within the site as requested.

(10) *Demonstrate the activity will not result in significant conflicts with water-dependent uses:* As noted in item (6) above, the site was chosen largely due to the distance from known areas of heavy recreational use. There are no mooring fields, navigation channels, or boating facilities nearby that will be significantly impacted by the proposed gear change. Fishing, swimming, and kayaking will not be restricted by the presence of aquaculture gear or farm operations as the gear is laid out in parallel rows. Due to the adjacent submerged and exposed boulders, the area is typically avoided by power boaters.

(11) *Demonstrate that measures have been taken to minimize adverse scenic impacts:* The Hexcyl pods were chosen over other types of floating gear in part due to the lower profile of the floatation, with roughly 6" of the floats exposed above the waterline versus 12" or more for OysterGro floating cages. The boulder field to the east partially blocks the view of the floats by property owners to the east. There is also another existing lease several hundred feet to the north that utilizes floating bag culture, so the proposed modification will not be the only floating gear in the immediate viewshed. The floats will be removed from the site from December - April annually so the visual impacts will be non-existent during this time frame.

OPERATIONAL PLAN FOR PROPOSED SITE:

1. *Name and address*: James Arnoux - Owner, East Beach Farms, LLC, 141 Pine Hill Road, South Kingstown, RI 02879

2. *CRMC lease #*: Currently commercial aquaculture 2015-07-031

3. *Aquaculture Permit:* DEM Aquaculture License #056

4. *Type of facility*: Commercial shellfish aquaculture lease site utilizing rack-and bag bottom cages, floating cage, and bottom culture methods.

5. *Location:* The proposed lease site is located in the northeast corner of Quonochontaug Pond, Charlestown, RI.

6. *Species cultured*: Eastern oysters (Crassostrea virginica) are grown at the facility. Seed is either to be transferred from CRMC permitted upweller #1994-10-099 located in Ninigret Pond and/or purchased from approved source(s) pending pathology certifications and permission from the Biosecurity Board. Current hatcheries and farms used to supply seed for the site include Fishers Island Oyster Farm (NY), Cherrystone AquaFarms (VA), and Christian Durfee (RI).

7. *Structures used at facility*: Up to 100 bottom cages (77.5" x 41.5" x 13.5" height), 30 floating "Oystergro" cages (67.5" x 36" x 9" submerged height). Proposed new gear type Hexcyl floating longline baskets in "pod" array of 3 baskets/2 floats 11" x 29" x 33" (total of 300 pods). The bottom cages and Hexcyl pods will be in depths of 2' MLW and the floating cages are in depth of 4' MLW.

8. *Lease markers*: Four 12" round white buoys with 3" CRMC lease numbers are to be used to mark the lease corners. One 6" x 12" sign with a caution symbol will be used to indicate the presence of submerged gear.

9. *DEM Water Classification:* Lease is located in approved waters, tagging area 11Q.

10. *Contamination Prevention*: All fueling will be done using approved portable containers and a fuel spill kit will be stored aboard the workboat. Temperature control of shellstock is to be achieved by same-day wet storing of all product in crates until time of departure from the lease, followed by use of shade, ice (June - September) and immediate pick-up of shellstock within 1 hour of removal from water by the Ocean State Shellfish Cooperative refrigerated truck (of which East Beach Farms is a member of). **OYSTERS GROWN IN FLOATING GEAR WILL BE TRANSFERRED TO BOTTOM CAGES OR DIRECTLY ON BOTTOM FOR MINIMUM OF 2 WEEKS PRIOR TO SALE TO ADDRESS CAMPYLOBACTER CONCERNS. NO EXCEPTION.**

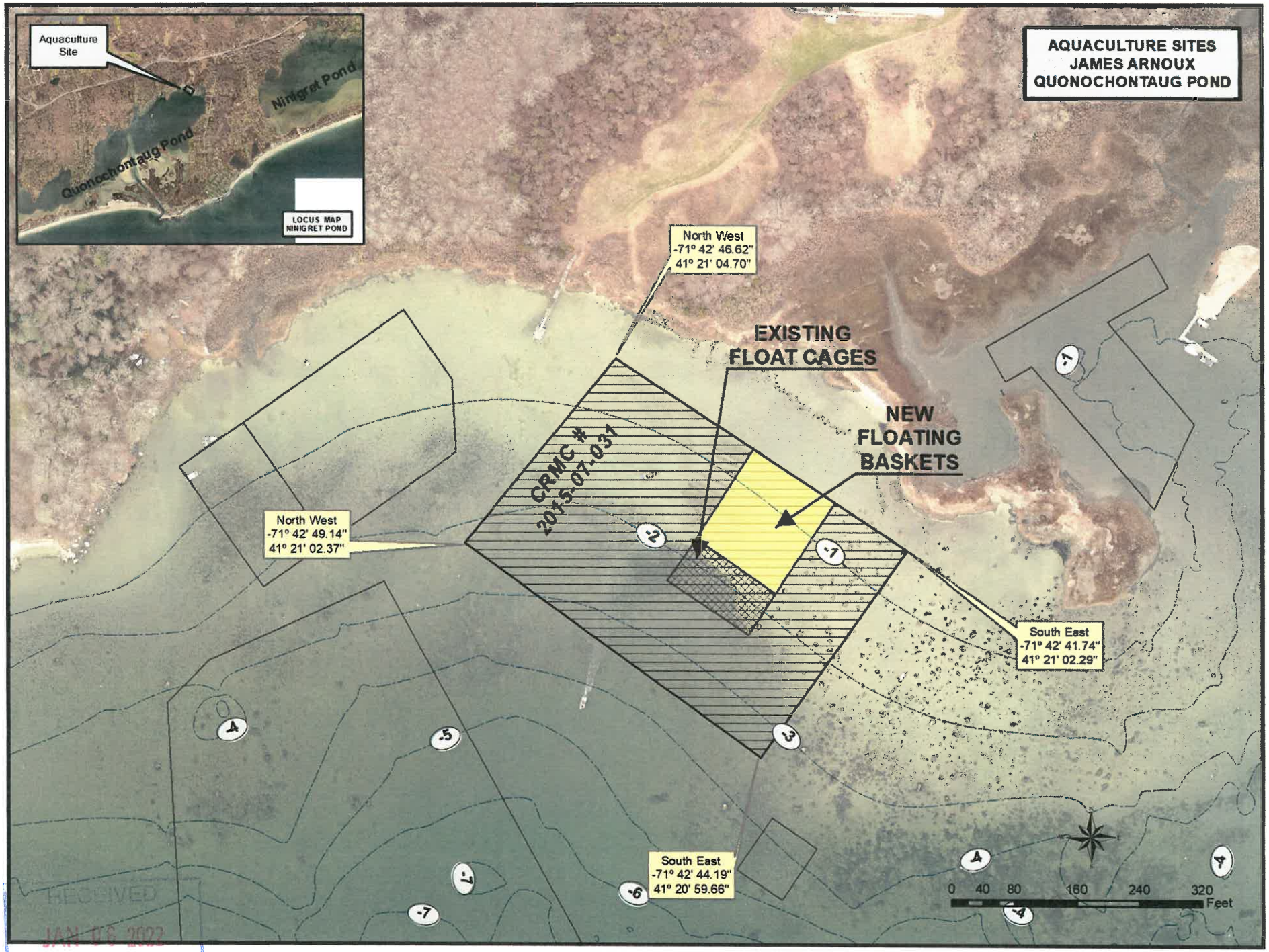
11. *Methods to transition shellfish through growth*: Shellfish will be transitioned to each of the three gear types proposed by the use of a 120V powered tumbler/sorter aboard the work vessel. The floating cages will hold seed less than 1.5" in length (less than 1" mesh retained screen), the proposed Hexcyl pods will hold seed greater than 1.5" in length (1" retained), and the bottom cages will be used to hold market or near market size inventory. Bags will be rotated between the lease and the storage site to control biofouling - no pressure washing will be used. The floating cages and Hexcyl pods will be dried on a bi-weekly basis from April - December. Harvesting will be performed by picking oysters directly from the gear, bullraking, and/or diving and sold on a weekly basis to the Ocean State Shellfish Cooperative.

12. *Record keeping*: Records are to be maintained daily using a spreadsheet application operated by cell phone. Each trawl of cages or line of trays is given a unique designated number (i.e A1, A2, B1, B2, etc.) to form a basic grid system. The following information is recorded each time the particular line of gear is hauled: hatchery where seed originated from, size grade, and date last hauled. For any seed originating from uncertified waters, the notes shall include an asterisk and the month/year the seed was planted in certified waters on the lease (example: Row A1 = Muscongus 5/12* 1" grade, hauled 7/01/12). A handwritten logbook is also used as a back-up to record the original planting dates and subsequent location of all seed purchased from uncertified waters; however, we do not currently nor plan to use seed from uncertified waters in order to simplify record keeping.

13. *Record keeping for seed purchased outside of RI*: Any out-of-state seed purchases are made only after the approval of the Biosecurity Board pending disease certifications from the relevant hatchery. Record keeping for seed purchases is outlined above in item #12.

14. *Seed in upwellers located in prohibited waters:* No upwellers located in prohibited waters will be used in conjunction with this lease.

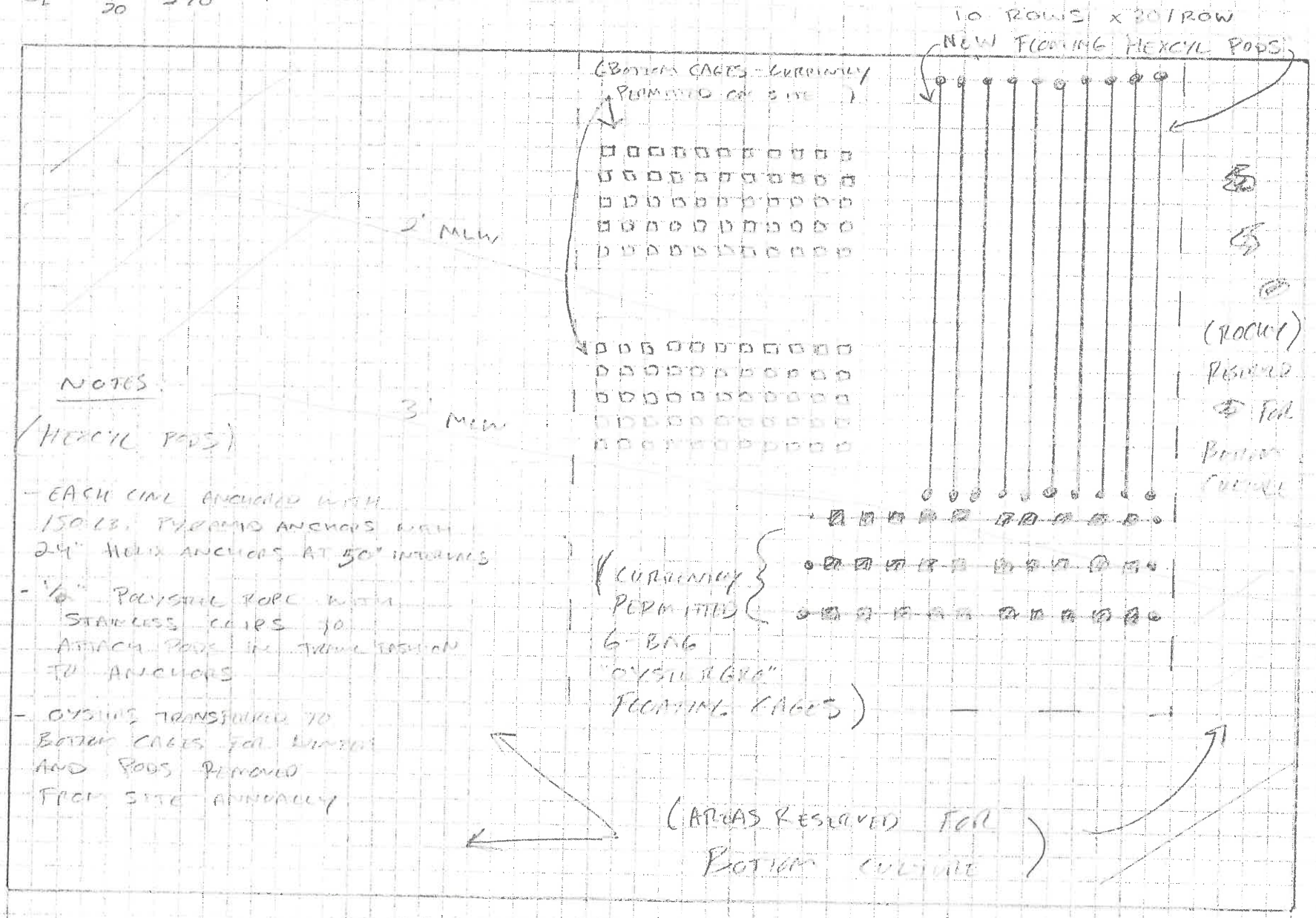
15. N/A at this time, seed is purchased from approved waters. If seed is purchased from prohibited waters in the future, record keeping practices will continue as described in item 12, and the operational plan shall be updated and resubmitted. Additional measures would include marking gear with labeled Tyvek tags to record the cage/tray number that corresponds to the record keeping log (i.e. A1, A2, etc.).



EAST BEACH FARMS
9/10/2021

PLAN VIEW - PROPOSED MODIFICATIONS
TO LEASE 2015-07-031

SCALE (FT)
OF 1/20 = 340



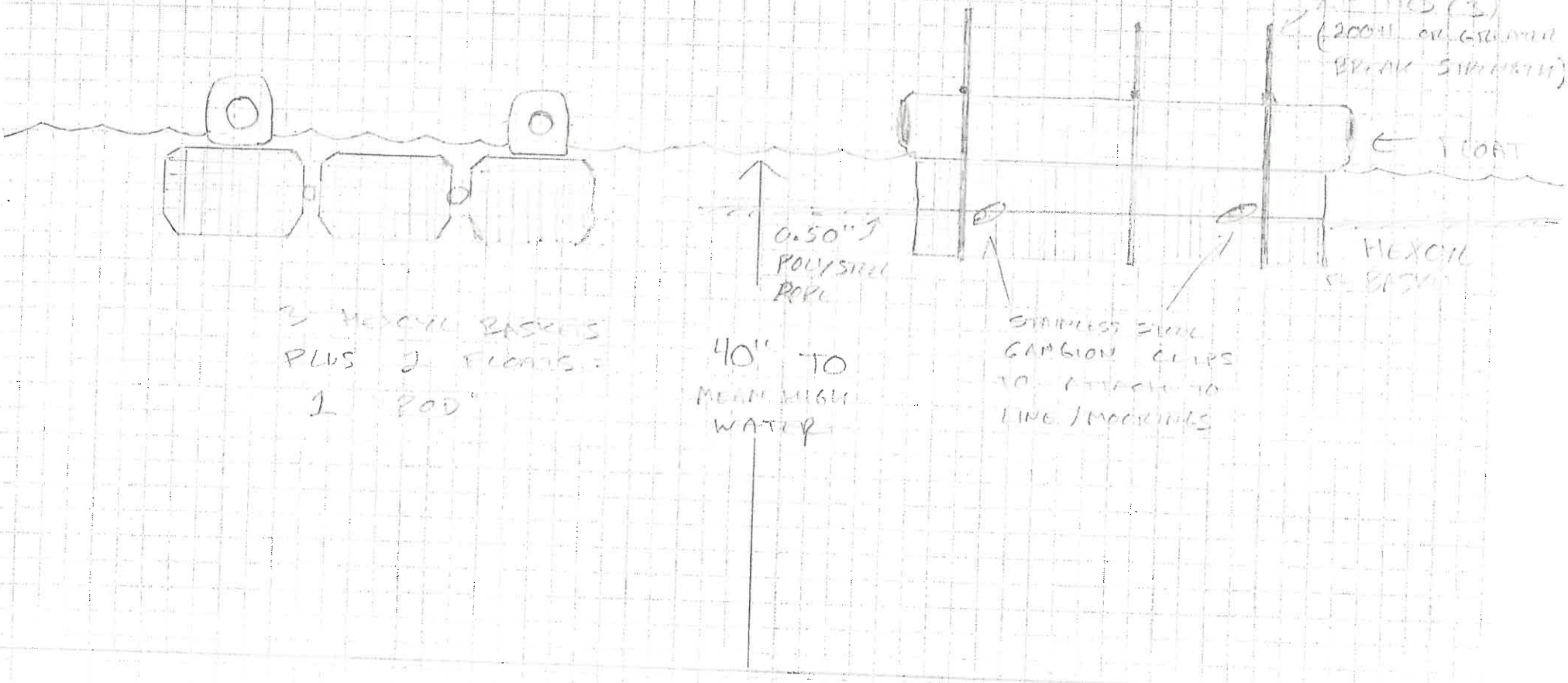
EAST BEACH FARMS

9/10/2021

SIDE VIEW - PROPOSED HEXCYL POD

SCALE (INCHES)

0 — 6 — 12

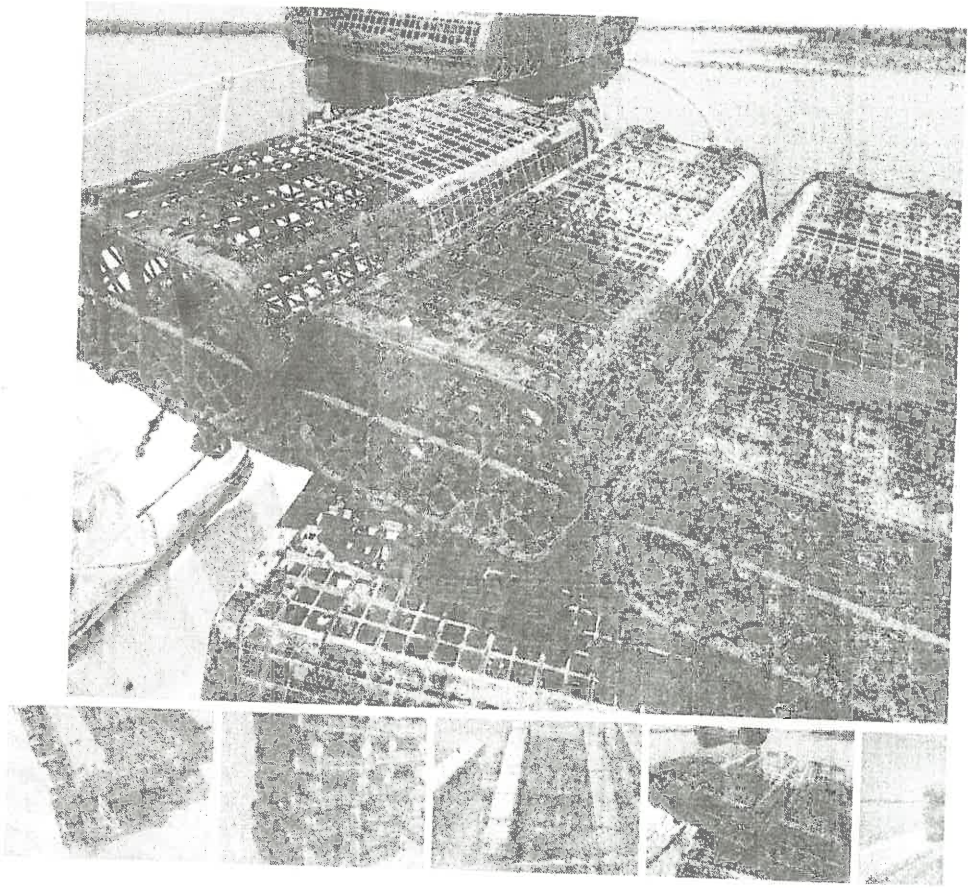


2 HEXCYL BASKETS PLUS 2 FLOATS: 1 POD

Hoopers Island

Hexcyl Pod

Surface gear system increases growth rate, taste and quality of farmed oysters

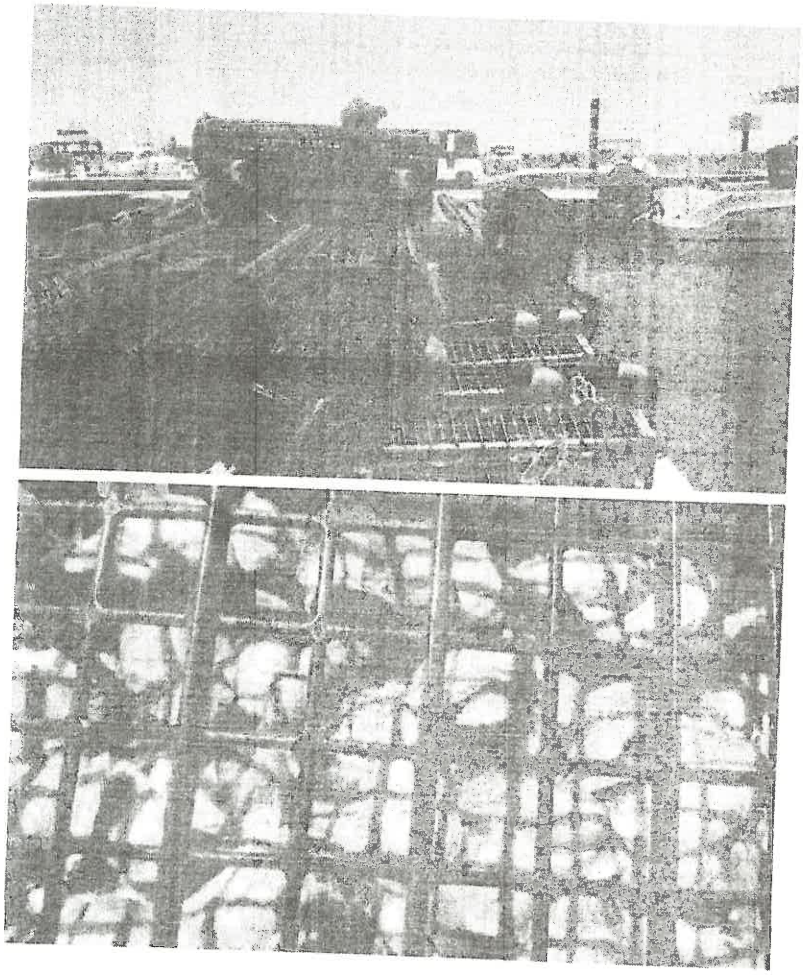


Description

Designed for smaller farms or to allow for easy boat access, Hoopers Island Oysters developed the Hexcyl Pod to give oyster growers a competitive advantage. Featuring three Hexcy baskets connected with two, GoDeep GD-11 floats, the Pod converts traditional long-line gear into flexible surface gear. The Pod is one-quarter the size of the HI-Flow system allowing it to be easily deployed, stocked and managed in open waters.

Features

https://hoopersisland.com/equipment-item/hexcyl-pod/



- Two doors for easy access to load/unload stock
- High quality 100% virgin UV resistant mesh bags
- Heavy duty construction
- Available with 3mm, 5mm, 10mm, 15mm and 20mm mesh bags

Benefits

- Easily moved and managed to maximize tidal flow conditions
- Encourages proper water flow
- Easy to stock and maintain
- Environmentally friendly materials
- Easy to stock and record growth thanks to 1.5 liter marker

Components & Dimensions

- Three (3) Hexcyl Baskets in 3mm 5mm, 10mm, 15mm, or 20mm mesh
- Two (2) GD-11 Floats
- Fully assembled size is: 11h x 29l x 33w

Stocking Density Guidelines