

STANDARD LEASE APPLICATION: NON-DISCHARGE

1. APPLICANT CONTACT INFORMATION

Applicant	Keith P. Butterfield		
Contact Person	Keith P. Butterfield		
Address	17 Haskell Ave		
City	Raymond		
State, Zip	Maine 04071		
County	Cumberland		
Telephone	857.753.1302		
Email	keith@butterfieldshellfish.com		
Type of Application	<input checked="" type="checkbox"/> Draft Application [submitted before scoping session session]		<input type="checkbox"/> Final Application [submitted after scoping session]
Dates	Pre-Application Meeting: 8/16/202	Draft Application Submitted: 9/24/2021	Scoping Session:

Note: If applicant is a corporation or a partnership, the “Corporate Applicant Information Document” available at: <http://www.maine.gov/dmr/aquaculture/forms/standard.html> must also be completed.

2. PROPOSED LEASE SITE INFORMATION

Location of Proposed Lease Site	
Town	Harpswell
Waterbody	Casco Bay
General Description (e.g. south of B Island)	Along the southwest side of Lower Goose Island
Lease Information	
Total acreage requested (100-acre maximum)	25
Lease term requested (20-year maximum)	20
Type of culture (check all that apply)	<input type="checkbox"/> Bottom (no gear) <input checked="" type="checkbox"/> Suspended (gear in the water and/or on the bottom)
Is any portion of the proposed lease site above mean low water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Note: If you selected yes, you need to complete the steps outlined in the section titled: “19. Landowner/Municipal Permission Requirements”.

3. WATER QUALITY

Directions: Water Quality Information can be found here: <http://www.maine.gov/dmr/shellfish-sanitation-management/closures/pollution.html>

Pollution Area (e.g. "19-A"):	17-B
Pollution Area Section (e.g. "B.2". or "none"):	none
Water Quality Classification (e.g. approved, restricted, etc.):	Approved

Note: If you are proposing to grow molluscan shellfish in waters classified as anything other than open/approved, you will need to contact the Bureau of Public Health to discuss your plans at the following email: DMRPublicHealthDiv@maine.gov

4. SPECIES INFORMATION

A. Please complete the table below and add additional rows as needed.

Name of species to be cultivated (include both common and scientific names):	Name and address of the source of seed stock, juveniles, and/or smolts	Maximum number (or biomass) of organisms you anticipate on the site at any given time
1. Eastern Oyster (<i>Crassostrea virginica</i>)	Mook Seafarm, 321 State Route 129, Walpole, ME 04573	2,000,000
2. Sea Scallops (<i>Placopecten magellanicus</i>)	Wild caught spat from outside of proposed lease but within Casco Bay	500,000
3. Kelp (<i>Saccharina latissima</i>)	Sparta Seafarm, Freeport, Maine	50,000 lbs
4. Atlantic Surf Clams (<i>Spisula solidissima</i>)	Downeast Institute, 39 Wildflower Ln, Beal ME	100,000
5. Arctic Surf Clams (<i>Mactromeris polynyma</i>)	Downeast Institute, 39 Wildflower Ln, Beal ME	100,000

B. Do you intend to possess, transport, or sell whole or roe-on scallops? Yes No

If you answered "yes" please contact the Bureau of Public Health to discuss you plans at the following email: DMRPublicHealthDiv@maine.gov

Note: If you are proposing to grow molluscan shellfish, this application also serves as your written operational plan as required in the National Shellfish Sanitation Program (NSSP) Model Ordinance Chapter 2 and must be maintained in your files. If you wish to submit an operational plan separate from this application, please contact: DMRPublicHealthDiv@maine.gov

7. SITE DEVELOPMENT

Directions: If your operations require the use of cages, nets, ropes, trays, or any object (structure) other than the organism to be grown directly on the bottom or buoys to mark the corners of the lease site, you must submit gear drawings and maximum structure schematics (information below). This section is intended to provide accurate plans depicting the physical structures to be placed in the proposed area. All dimensions need to be labeled with the appropriate units (i.e. 10ft, 10in). If you are proposing a bottom lease (no gear), please skip to question “F. Marking”.

Note: You may embed the schematics within the document or attach them to the end of your application. If you attach the schematics, please label them according to the instructions provided below.

A. Gear Information

Directions: Include a drawing of an individual piece of gear for each of the gear type(s) you plan to use. Include units referenced (i.e. 10in, 10ft, etc.).

1. **Gear Drawing:** Please include the following for each gear type that will hold organisms to be cultured (e.g. Polar circles, marine algae longlines, oyster cages) and label as “Gear Drawing”. This view must show the following:
 - Length, width, and height of each gear type.
2. **Gear Table:** List and describe each individual gear type that you will use in the table below. (e.g. Polar circles, marine algae longline, oyster cages, moorings, mooring lines, buoys, etc.).

Specific Gear Type (e.g. soft mesh bag)	Dimensions (e.g. 16"x20"x2")	Time of year gear will be deployed (e.g. Spring, Winter, etc.)	Maximum amount of this gear type that will be deployed on the site (i.e. 200 cages, 100 lantern nets, etc.)	Species that will be grown using this gear type
Hexcyl Baskets	29"x10 5/8"x5 7/16"	Year around	49 string lines with a total of 29,400 baskets	Eastern oysters, Quahogs, Surf Clams
Algae longline	1/2" poly line	Year around	5 lines	Kelp
SeaFloor Cages	Appr. 3'x3'x4'	Year around	100	Surf clams, Quahogs, oysters
Lantern Nets	20"x49"	Year around	100	scallops
Ear Hanging		Year around	Up to 5 lines	scallops

B. Maximum Structure and Mooring System Schematic

Directions: Include drawings of your maximum gear layout. Include units referenced (i.e. 10in, 10ft, etc.).

1. Overhead View. Please include the following and label as “Overhead View”:
 - Maximum layout of gear, including moorings.
 - Length and width of project.
 - Approximate spacing between gear.
 - Lease boundaries and the location of proposed corner markers and any additional gear markers that would be present.

2. Cross-Section View. Please include the following and label as “Cross-Section View”:
 - The sea bottom.
 - Profile of gear in cross-section as it will be deployed.
 - Label gear with dimensions and materials.
 - Show mooring gear with mooring type, scope, hardware, and line type and size.
 - Depth of gear in relation to the water’s surface at mean low water and mean high water (if applicable).

Note: Please include an additional Cross Section View, depicting the elements listed below, if there will be seasonal changes to gear layout (i.e. over wintering).

C. On-Site Support Structures

1. Describe structures such as barges, sheds, etc., to be located on-site. Provide a schematic and indicate the dimensions, including height above sea level, materials, etc.
Work raft or work barge
2. Describe the storage and use of oil, gasoline or other hazardous materials on this facility. If petroleum products are to be stored on site, provide a spill prevention plan.
No oil, gas or hazardous materials will be at this site.

D. Gear Color

Provide the color of the gear and structures proposed to be used at the lease site.
The gear is black and low profile.

E. Equipment Layout

Provide schematic or photographic renderings of the generalized layout of the equipment as depicted from two vantage points on the water. Provide the locations of the two vantage points.

F. Marking

Will you be able to mark your site in accordance with DMR regulations, Chapter 2.80? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If you answered no, explain why and suggest alternate markings.

Note: If a lease is granted, you will also be required to mark the site in accordance with appropriate US Coast Guard Regulations. If you have questions about US Coast Guard Regulations contact: 1st Coast Guard District, Aids to Navigation Office ((617)-223-3293).

8. PRODUCTION ACTIVITIES

Directions: If you are cultivating more than one species, you will need to provide information for each species. Please attach additional pages if needed.

A. Please explain your proposed seeding activities. What months will seeding occur and how often will you be onsite to seed during this time.

Oysters seed will be placed in gear over approximately 1 week in the spring expected in June. All clam seed will be placed in gear on the day it is received from supplier and expected in July through September.

Scallop seed will be placed in gear on the day when received from the supplier and expected in August.

Kelp lines will be placed in November and will take about one week to set the lines.

B. Please explain your proposed tending/maintenance activities.

Farm work will occur approximately 5 days per week from April 1 until January 1 for flipping to control for biofouling, filling the gear and emptying the gear as needed for all oysters, clams, and scallops. Harvesting will occur year around approximately 2 to 3 times per week which includes all oysters, clams and scallops. The kelp seed lines will be set during the early winter months and they will be harvested and removed over a 2 to 3 week period in early spring. Gear and line will be regularly inspected and repaired as required in order to ensure security and safety.

Tumble/sorting of oysters may take up to 4 weeks and will occur in June and possibly again in August if needed.

C. How frequently will you visit/tend the site for routine tending/maintenance (i.e. flipping cages, etc.)?

Work will occur on the farm approximately 5 days per week for performing all farm tending/maintenance activities as noted above. Flipping for biofouling control will take about 2 hours per day and occur twice per week. Harvesting will take about 2 to 4 hours per day and will occur about 2 to 3 times per week. Filling and emptying gear as needed for oysters, clam species, and scallops will occur up to 5 days per week as needed. Seeding and setting kelp lines will occur daily for about 1 month in early winter as weather dictates and harvesting and removing the kelp lines will occur over about 2 to 3 weeks in the early spring as weather dictates.

D. Describe the harvesting techniques you will use. If you plan on using a drag, please provide the dimensions.

A skiff will pull alongside the string line of baskets and the baskets will be emptied into the boat. There will be no noise pollution. No dragging will be done.

E. How often will you be at the site during harvesting periods?

Harvesting is expected to be 2-3 times weekly for approximately 2-4 hours per harvest.

F. Will gear be on the site year-round? Yes No

G. Describe any overwintering or “off season” plans for the site. For example, will you remove gear from the site and/or deploy gear in different areas within the proposed site? Please include where gear or product will be located if removed from the site.

The gear will remain in place for the winter. Ice does not form in this part of the bay so sinking will not be necessary.

H. Please provide details on any predator control techniques you plan to employ, including the use of bird deterrents. Will you use commercially available or custom equipment? If commercially available equipment, please include the brand and model names. If custom equipment, please attach a detailed schematic that includes the dimensions, materials, and function of the equipment.

None.

9. NOISE AND LIGHT

Directions: If a question does not pertain to your proposed operations, please write “**not applicable**” or “**N/A.**”

A. What type of boats will be used on the site? When and how often will these vessels be on the site?

Small 19' to 30' skiffs will be used for regular site visits and work approximately 5 days per week. A larger boat or raft or barge will be transported to the site for temporary use over a 4 week period for the tumbling/sorting. The barge will be used for the month of June and August during the tumble/sort and will be removed afterward. The raft that is being proposed for this site may be used instead of a barge and in this case a barge would not be used on the site.

B. What type of powered equipment (e.g. generator, power washer, grading equipment, barges, etc.) will be used on the site? When and how often will the equipment be used?

A small 2500 watt quiet generator will be used in combination with a flat deck boat or raft or barge for the tumbling/sorting. Tumbling/sorting will occur 1 or 2 times per year in June and August. Either the proposed work raft or a barge will be used for the tumble/sort. If a barge is used then it will be on the site during the tumble/sort in June and August and then it will be removed.

C. Specify how you intend to reduce noise levels from the boats and other powered equipment.

The generator and tumbler/sorter that I will be using at this proposed site were used for tumble/sorting at my farm at lease CASELMx and the noise was not detected by or a problem for nearby riparians. This proposed site has no nearby riparians. The sound of the oysters rolling in the tumbler cylinder emit a low noise volume that is not likely to be a problem. It is unlikely that the generator noise will elicit complaints by recreational boaters but if it does then I will design a housing module to aid in supressing the noise. The FlipFarm Growing System which has no engines or noise generation will be used to grow oysters and clam species. The only moving parts included in the FlipFarm Growing System are an electric line hauler and electric conveyer which make undetectable noise. The scallops and kelp require no noise producing equipment.

D. Provide the number, type (whether fixtures are shielded), wattage and location of lights, other than those used for navigation or marking, that will be used at the proposed lease site.

None.

E. Indicate under what circumstances you might work at your site beyond daylight hours.

Never.

10. CURRENT OPERATIONS

Directions: If a question does not pertain to your proposed operations, please write “not applicable” or “N/A.”

A. Describe your existing aquaculture operations, including the acronyms of all active leases and/or licenses.

I have operated a farm in Casco Bay near Moshier Island using leases CASMIx and CASELMx.

B. What are your plans for any existing leases and/or Limited Purpose Aquaculture (LPA) licenses if the lease is granted? Will any existing leases and/or LPA licenses be relinquished if the lease is granted? If so, please indicate which ones.

No changes.

11. ENVIRONMENTAL CHARACTERIZATION

Directions: Using your knowledge of the area, describe the environment of the proposed lease site. Be sure to include units of measurement in your answers (i.e. feet, cm/s).

A. What are the approximate depths at mean low water?

The proposed site has a large variability of depth from east to west. The eastern perimeter of the proposed lease is at approximately 11' MLW with a steady and mostly consistent slope downward resulting in a western perimeter of approximately 59' MLW. The center point of the proposed lease is approximately 36' MLW.

B. What are the approximate depths at mean high water?

The proposed site has a large variability of depth from east to west. The eastern perimeter of the proposed lease is at approximately 21' MHW with a steady and mostly consistent slope downward resulting in a western perimeter of approximately 69' MHW. The center point of the proposed lease is at approximately 46' MHW.

C. Provide the approximate current speed and direction during the ebb and flow.

0.5 knots current speed
Flow NW
Ebb SE

D. The following questions (D.1 through D.6) may be answered in writing or by submitting a video. If you plan to submit a video, please contact the Department prior to video collection.

1. What are the bottom characteristics (mud, sand, gravel, rock, ledge or some mix, etc.)?

Mix of mud and rock

2. Describe the bottom topography (flat, steep rough, etc.).

Mostly flat with a slope from east to west dropping from 10' MLW to approximately 25' MLW.

<p>3. Describe marine organisms by species or common names. Based on your personal observations or other sources of information, are these species abundant, common, or rare?</p>
<p>Lobsters, crabs and some finfish are common species in this area. There is no abundance of any particular species. Commercial lobstering is not prevalent within the proposed boundaries.</p>
<p>4. Are there shellfish beds or fish migration routes in the surrounding area? If so, please describe.</p>
<p>No.</p>
<p>5. Describe the presence and extent of submerged aquatic vegetation, i.e. eelgrass, within the proposed lease area. Please include the date of this observation along with the method of observation. If submerged aquatic vegetation is observed, please also describe the abundance below and sketch the limits of the beds in the vicinity map.</p>
<p>No aquatic vegetation was observed.</p>
<p>6. Describe the general shoreline and upland characteristics (rocky shoreline, forested, residential, etc.)</p>
<p>The shoreline is rocky with protected forest land and no residential homes. All homes and population on the island are on the opposite side of the island. This site was chosen because of the minimal impact that it has on riparian owners, commercial fisheries, and recreational boaters.</p>

<p>E. Is your proposed lease located within a Maine Department of Inland Fisheries and Wildlife designated Essential Habitat?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>

Note: The location of Essential Habitats in the State of Maine, along with information on how projects within these areas are reviewed, can be found here: <https://www.maine.gov/ifw/fish-wildlife/wildlife/endangered-threatened-species/essential-wildlife-habitat/index.html>

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If a project is located within an Essential Habitat, applicants are strongly encouraged to contact the MDIFW Environmental Review Coordinator (John.Perry@maine.gov, phone: 207-287-5254) prior to application submission.

12. EXISTING USES

<p>A. Describe the existing uses of the proposed area in questions A.1 through A.5 below. Please include the a) type; b) time of year the activity occurs; c) frequency; and d) proximity to the lease site.</p>
<p>1. Commercial Fishing</p>
<p>No commercial finfish or scallops are fished in this area. Very few lobster traps have been observed during the summer months and none in the winter. This site was selected with the help of The Maine Family SeaFarms Cooperative members and after considerable observation.</p>
<p>2. Recreational Fishing</p>
<p>This location is not a common fishing spot but it is possible that occassional striper fishing may occur nearby along the shoreline which is not within the proposed lease.</p>
<p>3. Boating Activities (please also include the distance to any navigable channel(s) from your proposed site at low water).</p>
<p>Recreational motorized boating and sailing is common in this area of the bay during the summer months. There is a wide navigable channel of deep water in this area measuring a distance of approximatley 3,000' across from Lower Goose Island to Bustin's Island. The western perimeter of the proposed lease protrudes approximately 700' into deep water (49' MLW) that continues at these depths for another 2,300' of available navigable channel.</p>
<p>4. Riparian Ingress/Egress</p>
<p>Riparian ingress/egress is not impacted by the proposed lease.</p>
<p>5. Other uses (kayaking, swimming, etc.):</p>
<p>Although swimming is not observed in this area, this proposed lease would not prevent anyone from swimming in the area. Kayaking will not be impeded in anyway.</p>

<p>B. Are there private docks, moorings, or other access points within 1,000 feet of the proposed lease? If yes, please include approximate distance from the proposed lease.</p>
<p>No.</p>

C. Are there public beaches, parks, docking facilities or federally, state, or municipally conserved lands within 1,000 feet of the proposed lease site? If yes, please describe and include approximate distances from proposed lease.

No.

13. EXCLUSIVE USE

If your lease is granted, what activities would you request be excluded from occurring within the boundaries of the lease site? In your answer please address applicable commercial and recreational fishing, boating activities, and other activities you listed in the 'Existing Uses' section of this application.

All activities are welcome around the proposed boundaries. Boat propellers may damage the aquaculture gear and rope which could result in disconnected and lost gear. Therefore operating an engine within the lease boundaries is not appropriate.

14. RIPARIAN LANDOWNERS AND SITE ACCESS

A. If your lease is within 1,000ft of shorefront land (which extends to mean low water or 1,650 ft. from shore, whichever is less), the following supporting documents are required:

1. A labeled copy of a tax map(s) depicting the location of the proposed lease site and including the following elements:
 - Label the map “Tax Map: Town of (name of town).”
 - Legible scale
 - Tax lot numbers clearly displayed
 - The boundaries of the proposed lease
2. Please use the Riparian Landowner List (included on the next page) to list the name and address of every shorefront landowner within 1,000ft of the proposed lease site. Have the tax collector or clerk of the municipality certify the list.
3. If any portion of the site is intertidal, you need to complete the steps outlined in the section titled: “19. Landowner/Municipal Permission Requirements”.

B. Will your access to the lease area be across riparian land?

Yes No

Note: If you selected yes, you will need to complete the landowner permission requirements included in “19. Landowner/Municipal Permission Requirements” of this application.

C. How will you access the proposed site?

Access via boat

D. How will your proposed activities affect riparian ingress and egress?

No effect on ingress/egress. The property on Lower Goose Island within 1,000’ of the proposed lease is a nature preserve with no homes or structures of any kind. The majority of the population of Lower Goose Island is accessed from the opposite (eastern) side of the island. This site was selected because there are no nearby homes.

RIPARIAN LANDOWNER LIST

THIS LIST MUST BE CERTIFIED

On this list, please show the current landowners' names and mailing addresses as listed in the municipal tax records for all riparian shorefront parcels within 1,000 feet of the proposed lease site along with the map and lot number for each parcel. **It is the applicant's responsibility to assemble the information for the Town Clerk to certify.** The Town Clerk *only* certifies that the information is correct according to the Town's records. Once you have completed the form, ask the Town Clerk to complete the certification section below. If the parcels are within more than one municipality, provide a separate, certified riparian list for each municipality.

TOWN OF: HARPSWELL

MAP #	LOT #	Landowner name(s) and address(es)
77	1-2	Maine Coast Heritage fund 1 Bandon Mill Island suite 201 Topsham ME 04086
77	3	Violetta Otis, 17 Foreside Rd. Falmouth, ME 04105

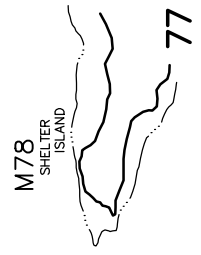
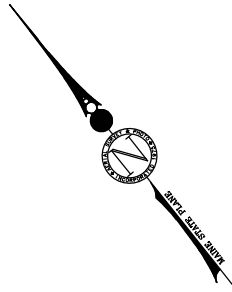
Please use additional sheets if necessary and attach hereto.

CERTIFICATION

I, Catherine J Doughty Town Clerk for the Town of HARPSWELL certify that the names and addresses of the property owners listed above, as well as the map and lot numbers, are those listed in the records of this municipality and are current as of this date.

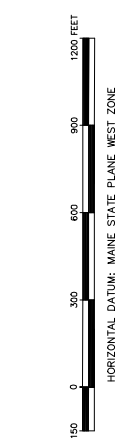
SIGNED: Catherine J Doughty DATE: 9-24-2021





M78 SHELTER ISLAND

PROPERTY MAP
TOWN OF HARPSWELL
 CUMBERLAND COUNTY, MAINE
 SCALE: 1"=300' APRIL 1, 2020

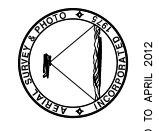


LEGEND:

PARCEL AREA	20,000 SF or 7,000 AC
SUBDIVISION LOT NO.	⑨
SHORELINE (HIGH TIDE)	—
ADJACENT MAP	M14
STATE HIGHWAY / TOWN ROAD / PRIVATE WAY	—

PREPARED BY: AERIAL SURVEY & PHOTO, INC.
 AIRPORT ROAD, NORRIDGEWOCK, MAINE
 (207) 634-2006
 BASED ON PHOTOGRAPHY DATED: 05-07-96

NOTE: The data on this map was prepared by aerial photography and ground survey by private owner and official sources and are not to be considered legal locations of property boundary lines. The Town of Harpswell assumes no responsibility for the accuracy of individual parcels. For assessment purposes only. Not to be used for correspondence or legal description.



15. TECHNICAL CAPABILITY

Provide information regarding professional expertise. Attaching resume or documentation of practical experience necessary to accomplish the proposed project would satisfy this requirement.

I have operated an oyster farm for over seven years in Casco Bay.(CASMIx, CASELMx, and LPAs BUTT-114, BUTT-214, BUTT-314, BUTT-414). The LPAs were not renewed as a result of the CASELMx lease approval.

16. FINANCIAL CAPABILITY

A. Financial Capability

Please provide documentation to show you have the financial resources to implement the proposal. For example, you may submit a letter from a financial institution or funding agency indicating that you have an account in good standing, or their willingness to commit funds.

Note: Any financial information you submit with your application is part of the public record. Please exercise discretion when submitting financial information.

B. Cost Estimates

Please provide cost estimates of the proposed aquaculture activities.

The gear and rope for the 20 string lines of hexcyl baskets at the proposed site will cost approximately \$300,000. The additional 5 winter kelp lines cost approximately \$2,500. The installation of the gear with anchoring will cost approximately \$20,000. As the farm matures and the additional 24 tandem lines are added then the additional cost will be approximately \$360,000.

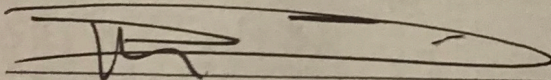
17. ESCROW ACCOUNT OR PERFORMANCE BOND

Check the category that describes your operation:

Check Here	Lease Category	Amount of Required Escrow or Performance Bond
<input type="checkbox"/>	No gear/structure, no discharge	None
<input type="checkbox"/>	No gear/structure, discharge	\$500.00
<input type="checkbox"/>	≤ 400 square feet of gear/structure, no discharge	\$1,500.00
<input checked="" type="checkbox"/>	>400 square feet of gear/structure, no discharge	\$5,000.00*
<input type="checkbox"/>	Gear/Structure, discharge	\$25,000.00

*DMR may increase the bond/escrow requirements for leases with more than 2,000 square feet of structure.

I, (printed name of applicant) Keith Butterfield have read DMR Aquaculture Regulations Chapter 2.64(10) (D) and if this proposed lease is granted by DMR, I will either open an escrow account or obtain a performance bond, in the amount determined by the lease category.



10/22/2021

Applicant Signature

Date

Note: Add title if signing on behalf of a corporate applicant.

ADDITIONAL APPLICANTS: Each applicant must sign this section indicating that they will open an escrow account or obtain a performance bond. Use the space below for additional persons listed on the application. You may attach additional pages, if necessary.

I, (printed name of applicant) _____ have read DMR Aquaculture Regulations Chapter 2.64(10) (D) and if this proposed lease is granted by DMR, I will either open an escrow account or obtain a performance bond, in the amount determined by the lease category.

Applicant Signature

Date

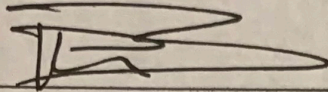
Note: Add title if signing on behalf of a corporate applicant.

18. APPLICANT SIGNATURE PAGE

I hereby state that the information included in this application is true and correct. I have also read and understand the requirements of the Department's rules governing aquaculture and the application instructions pertaining to the standard lease process.

Printed name: Keith Butterfield

Title (if corporate applicant): _____

Signature:  _____ Date: 10/22/2021

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

Note:

- All applicants must sign and date this page. Please use the space below, if additional signatures are required.
- Corporate applicants, please be sure to include the title(s) (i.e. President, Treasurer, etc.) of the individual(s) signing on the company's behalf.

Additional Applicant:

Printed name: _____

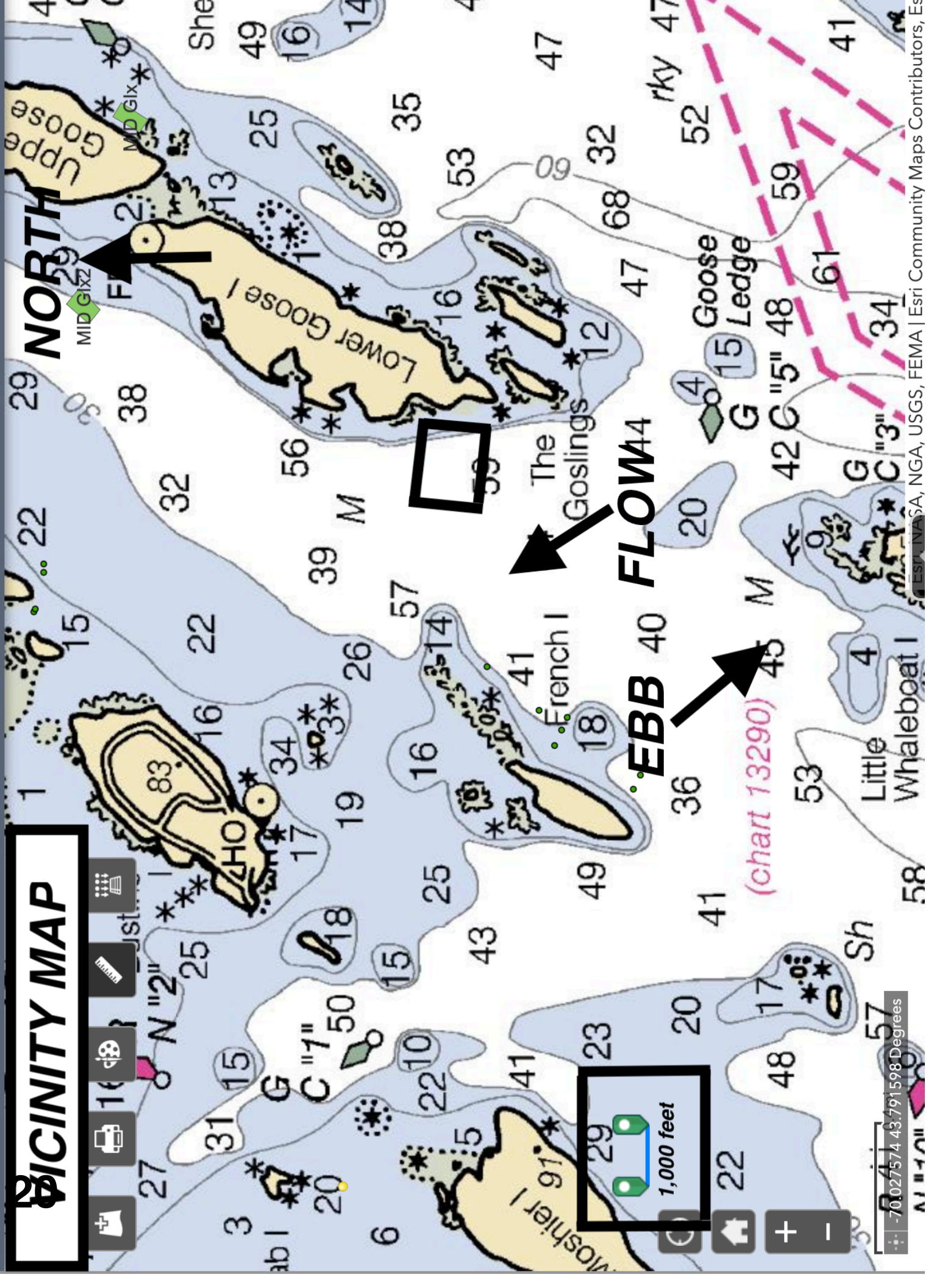
Title (if corporate applicant): _____

Signature: _____ Date: _____



NEIGHBORHOOD MAP

A toolbar containing icons for home, back, print, location, and zoom controls.



A scale bar showing 1,000 feet and two green location markers with a blue line between them.

BOUNDARY DRAWING



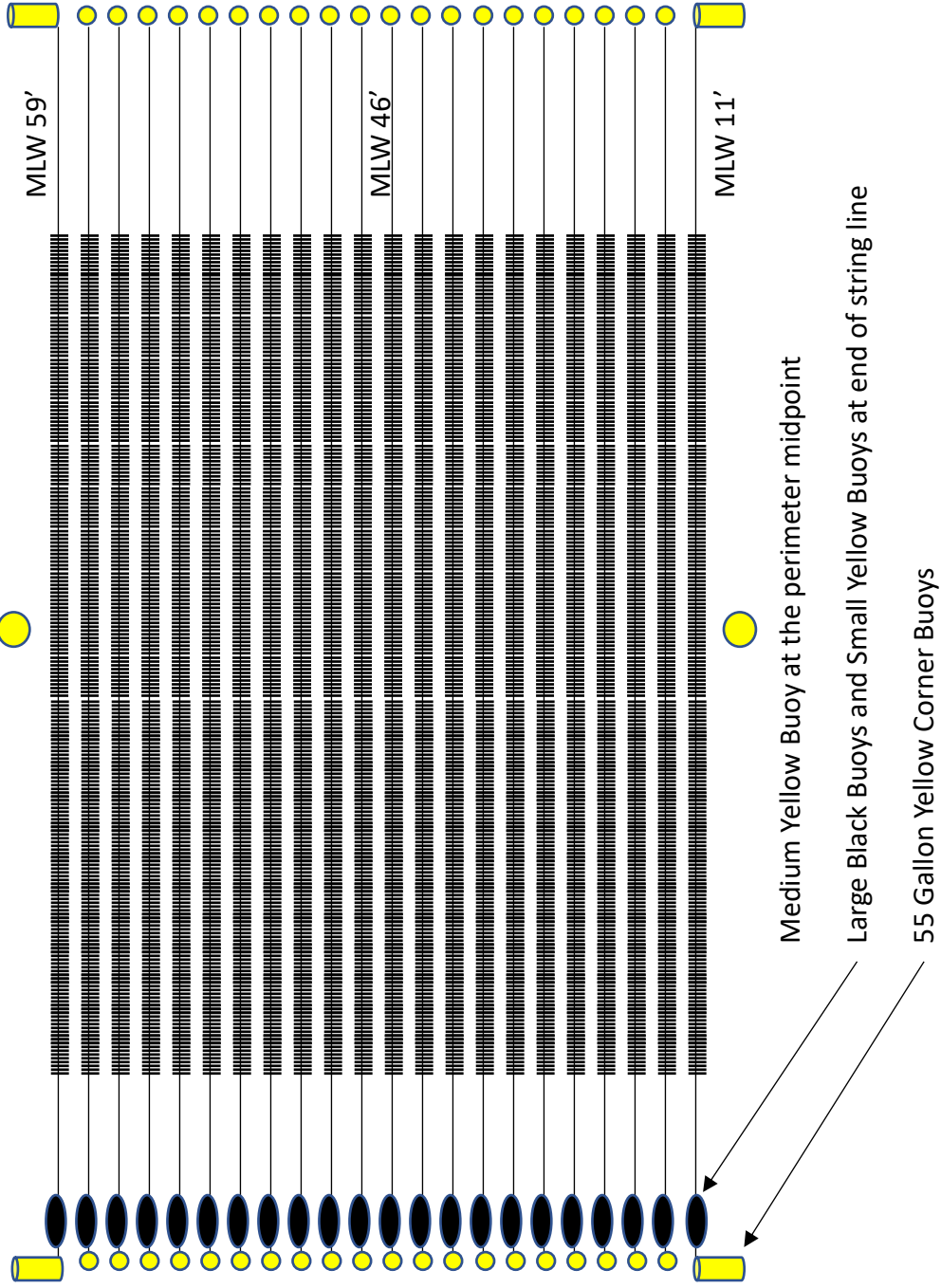
Lower Goose Island

The Goslings Preserve
The Goslings

OVERHEAD VIEW

(appr. 1,000' x 1,000')

Appr. 400 to 600 Hexcyl FlipFarm Baskets per line



25 String lines at 40' spacing. As the farm matures, an additional 24 "tandem" lines may be added 5' away from existing lines and the 40' corridor space will be reduced to 35'.

Maximum of 15,000 baskets with 25 string lines and maximum of 29,000 baskets if 5' tandem lines are added.

Max 5 kelp lines at approximately 2' to 5' below the surface may be installed in the winter from November to April.

String lines 15/16" PolySteel appr. 450' to 700' and sinking haul lines 7/16" EsterPro appr. 450' to 700' attached to same anchor line.

Anchor lines 15/16" Polysteel appr. 84' to 276' length (4:1 scope). The eastern most anchor line will be appr. 84' and the western most will be appr. 276'.

Anchor holding power requirement is appr. 3,500 lbs. One Helical anchor (8"x10") at end of each string line providing appr. 10,000 lbs holding power. If rock bed prevents use of helical anchor then 650 lbs pyramid anchor providing appr. 6,500 lbs holding power will be used.

- Medium Yellow Buoy at the perimeter midpoint
- Large Black Buoys and Small Yellow Buoys at end of string line
- 55 Gallon Yellow Corner Buoys

Structure Dimensions



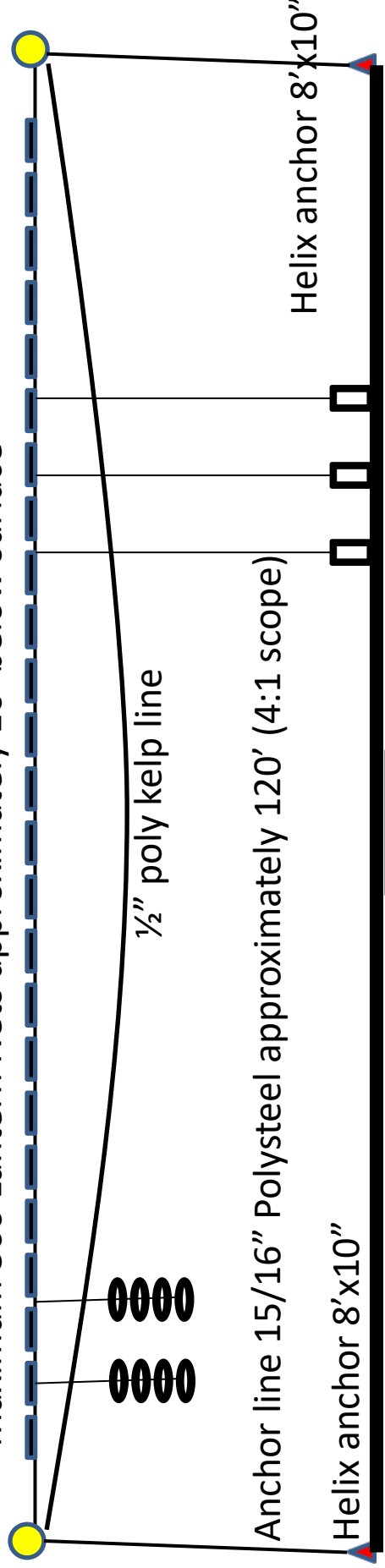
Work Raft or barge approximately 12'x30' will be moored on the southeastern corner of the proposed lease. This work raft will be occasionally moved from the mooring and onto the lease for various work functions.

Cross Section View

String line 720' 15/16" Polysteel
Haul Line 720' 7/16" EsterPro

Yellow Buoy

Maximum 500 Lantern Nets approximately 10' below surface



Anchor line 15/16" Polysteel approximately 120' (4:1 scope)

Helix anchor 8'x10"

11' MLW on eastern perimeter of the proposed lease with a steady slope to 59' MLW on the western perimeter

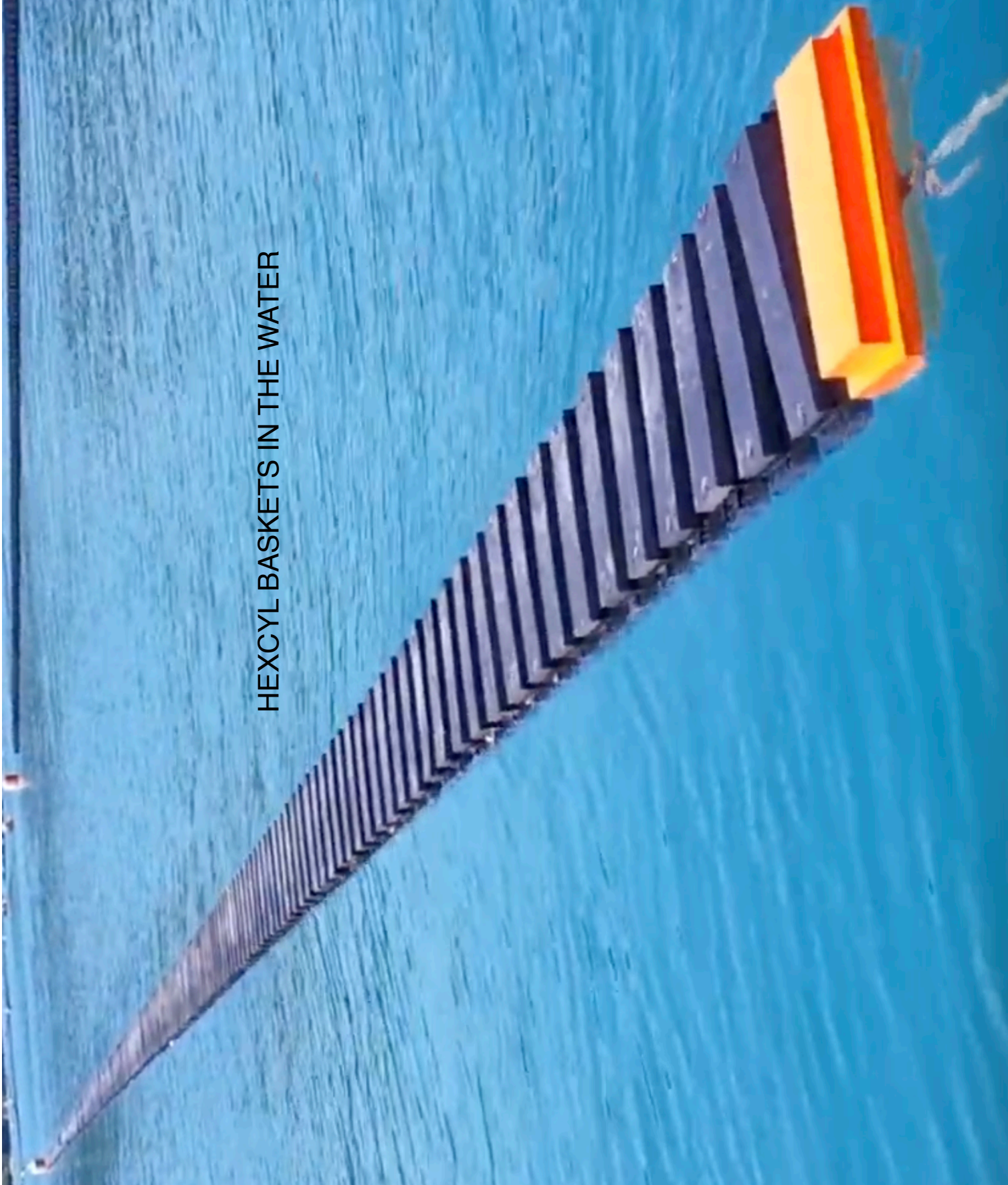
Maximum 100 Seafloor Cages

21' MHW on eastern perimeter of the proposed lease with a steady slope to 69' MHW on the western perimeter

Kelp lines approximately 2'-5' below the surface

SeaFloor

HEXCYL BASKETS IN THE WATER





Flipping mechanism is a metal track attached to the side of the boat that turns over the Hexacyl baskets as the boat drives forward. It is not motorized and it is quiet.

HEXCYL BASKET SPECIFICATIONS

HEXCYL SHELLFISH BASKETS

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	Hexcyl Pro 0304	Hexcyl Pro 0507	Hexcyl Pro 1014	Hexcyl Pro 1521	Hexcyl Pro 2028	Hexcyl HD 1521
FIVE SIZES Click on images						
Mesh Size	3mm (1/8") 5mm (3/16") minimum	5mm (3/16") 10mm (7/16") minimum	10mm (7/16") 20mm(3/4") minimum	15mm (5/8") 40mm(1-1/2") minimum	20mm (3/4") 70mm(2 3/4") minimum	15mm (5/8") 40mm(1-1/2") minimum
Shellfish Size						
Volume	25 litres (6.6 gallons)					
Dimensions	732mm (29") long 270mm (10 5/8") wide 140mm (5-7/16") high					

MATERIAL SPECIFICATIONS

Our baskets and clips will outperform other plastic baskets because we use a specially developed Ultra High Impact Resistant materials known for sub zero temperature performance. All materials have the highest possible Ultra Violet resistance. We have had product in the field for over 10 years.

HEXCYL Basket/Lid



Ultra high Impact grade Material

Food Grade - When used in accordance with FDA application guidelines, this product meets the requirements of FDA 21 CFR 177.1520 (c) 3.1a and AS2070-1999 section 4.1.1(a).

Flamability - DIN 4102 B2: normal combustibility similar to wooden pallets.

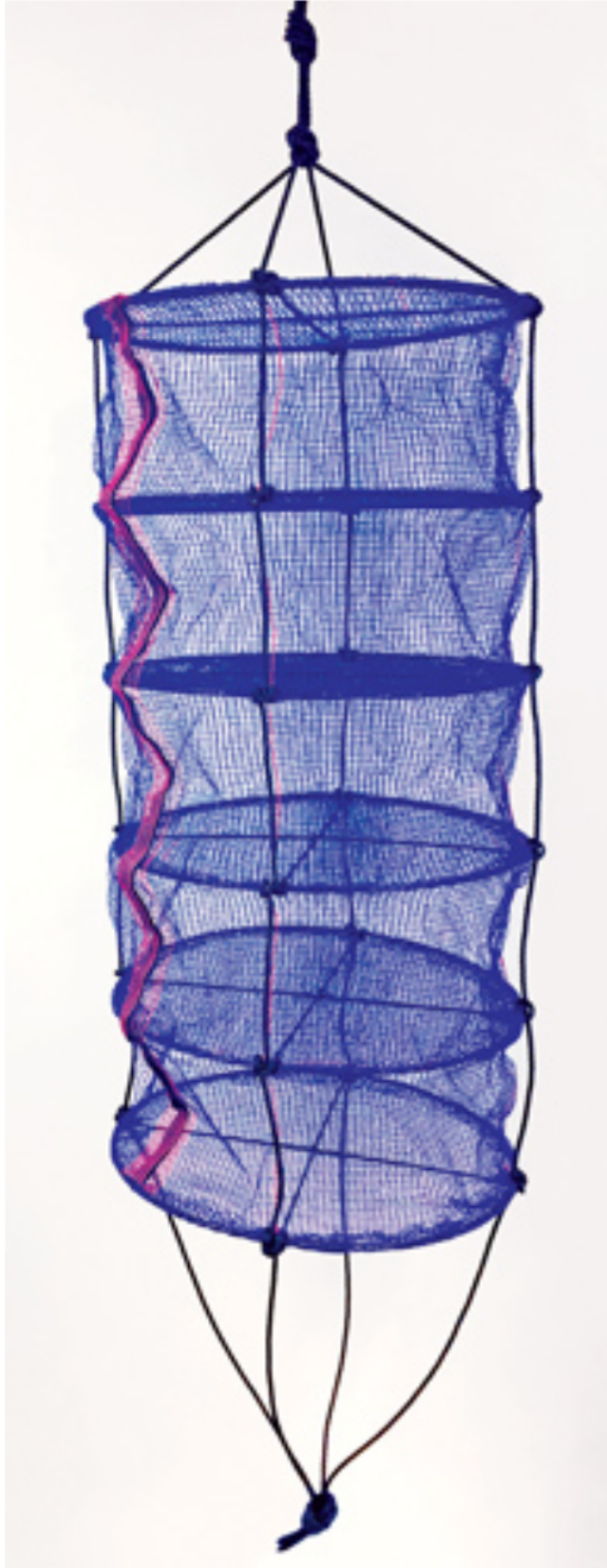
HEXCYL Clips



Ultra high impact grade, UV Stable material

PACKING and TRANSPORT

Adelaide Shipping Port is 13 km(13 minutes) from our manufacturing and container loading site at Wingfield, South Australia, 5014



Lantern Net
appr. 20''x50''

SEAFLOOR CAGE
36" X 35" X 45"

