

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 <small>[submitted before scoping session session]</small>		<input type="checkbox"/> Final Application <small>[submitted after scoping session]</small>
Dates	Pre-Application Meeting: 8/16/2021	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

5. VICINITY MAP

Note: Please label as: ‘Vicinity Map’.

Directions: Using a NOAA Chart or USGS topographic map, show the area within a minimum of one-half mile of the proposed lease site.

The map needs to display the following:

- The waters, shore lands, and lines of mean high and mean low water within the general area of the lease
- An arrow indicating true north
- A scale bar
- The approximate lease boundaries

6. BOUNDARY DRAWING

Note: Please label as: ‘Boundary Drawing’.

Directions: Depict the boundaries of the proposed lease site. Provide a drawing with all corners, directions, and distances labeled. Provide coordinates for each corner as follows:

- Coordinate Description
Provide geographic coordinates for each corner of the lease site in latitude and longitude as accurately as possible (e.g., to the nearest second or fraction of a second). Identify the datum from the map, chart, or GPS unit used to develop these coordinates. The datum will be shown on the map or chart you are using. The Coordinate Description may be provided separately from the Boundary Drawing.

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. <i>soft mesh bag</i>)	Dimensions (e.g. <i>16"x20"x2"</i>)	Time of year gear will be deployed (e.g. <i>Spring, Winter, etc.</i>)	Maximum amount of this gear type that will be deployed on the site (i.e. <i>200 cages, 100 lantern nets, etc.</i>)	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.

Two site visits per week for biofouling control (1-2 hours per visit).
Two site visits per week for harvesting (2-4 hours per visit).
Filling of gear with oysters and occasionally changing stocking quantities will occur regularly Monday through Friday during the season.
Approximately one month of tumbling/sorting in June. A second tumble/sort may occur in August depending on need.

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

2 days per week for flipping (about 2 hours per day) and 2 – 3 days per week for harvesting (about 2 to 4 hours per day) is expected.

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. It is possible depending upon weather severity that the Hexcyl Baskets will be sunken partially on their existing string lines and anchors.

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. A larger boat or raft or barge will be transported to the site for temporary use for the tumbling/sorting. The barge will be used for the month of June 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 have been using at CASMIX is low volume and limited to June and August. Low noise systems will be used at this proposed lease. Specifically, the FlipFarm Growing System will be used. The only moving parts included in the FlipFarm Growing System are an electric Line Hauler and electric conveyor which make undetectable noise.

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?

Approximately 25' at MLW. The proposed site has a large variability of depth.

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

Approximately 59' at MHW. The proposed site has a large variability of depth.

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>

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

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.
1. Commercial Fishing
No commercial fish or scallops are fished in this area. Very few lobster traps have been observed. This site was selected with the help of The Maine Family SeaFarms Cooperative members and after considerable observation.
2. Recreational Fishing
Some recreational fishing may occur and it can continue to occur.
3. Boating Activities (please also include the distance to any navigable channel(s) from your proposed site at low water).
The proposed site does not interfere with navigable channels as there is substantial space for boating traffic to make passage and the proposed lease does not limit egress in any way to the island.
4. Riparian Ingress/Egress
Riparian ingress/egress is not affected at all.
5. Other uses (kayaking, swimming, etc.):
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.
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.
No.

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

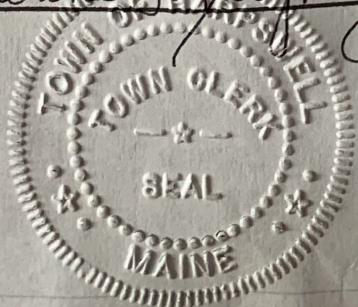
Please use additional sheets if necessary and attach hereto.

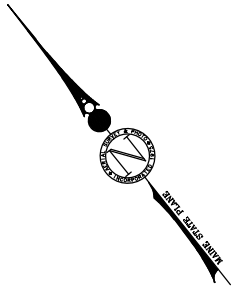
CERTIFICATION

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.

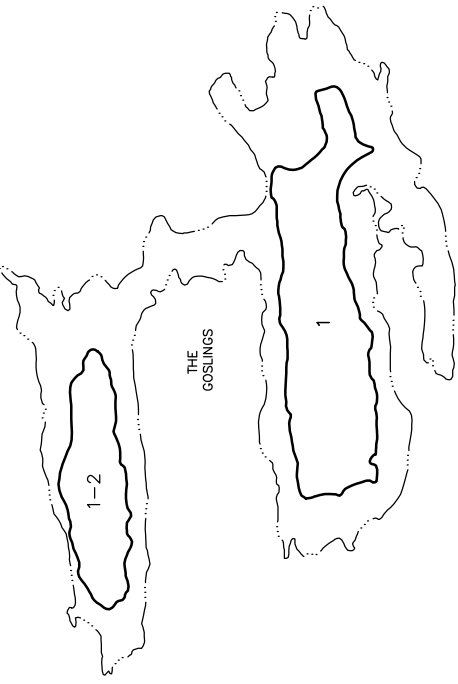
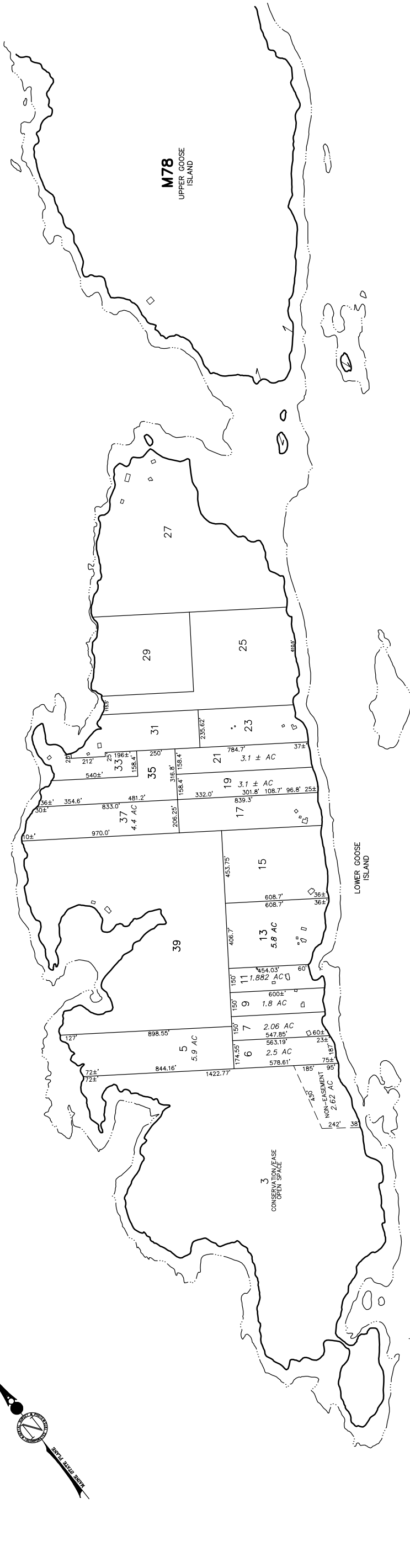
SIGNED: Catherine J Doughty

DATE: 9-24-2021





MEREPOINT BAY



MIDDLE BAY



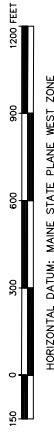
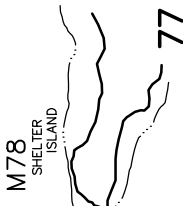
PREPARED BY: AERIAL SURVEY & PHOTO, INC.
 AIRPORT ROAD, NORRIDGEWOCK, MAINE
 (207) 634-2006
 BASED ON PHOTOGRAPHY DATED: 05-07-96

NOTE: The data on this map was derived from aerial photography 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.

LEGEND:

PARCEL NUMBER	.....	388	PARCEL AREA	.....	20,000 SF or 7,000 AC
SURVEY OR DEED DIMENSION	.....	161.21'	SUBDIVISION LOT NO.	.....	(9)
BUILDING	.....		SHORELINE (HIGH TIDE)	.....
MATCH LINE	.....	---	ADJACENT MAP	.....
			STATE HIGHWAY / TOWN ROAD / PRIVATE WAY		

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



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*) _____ 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.

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: _____

Title (*if corporate applicant*): _____

Signature: _____ Date: _____

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: _____