

Application for Change in Gear and Species Authorization

FREN PI4

Frenchman Bay, south of Preble Island, Sorrento

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

James West and Springtide Seaweed, LLC applied to the Department of Marine Resources (DMR) to change the gear and species authorization for existing standard lease FREN PI4, located south of Preble Island, Town of Sorrento, Hancock County, Maine.

1. THE PROCEEDINGS

The application was submitted to DMR on February 25, 2022. The application was deemed complete by DMR on April 6, 2022. Notice of the application and the 14-day public comment period were provided to other state agencies, riparian landowners within 1,000 feet, the Town of Sorrento and its Harbormaster, and members of DMR's GovDelivery Aquaculture list. No public comments were received. The evidentiary record before DMR regarding this lease amendment application includes ten exhibits (see exhibit list below).

LIST OF EXHIBITS¹

1. Application for a change of gear and species authorization, deemed complete April 6, 2022²
2. Original lease application, deemed complete February 2, 2009
3. Original lease decision signed May 21, 2009
4. Original executed lease document for FREN PI4 signed May 27, 2009
5. DMR letter authorizing gear changes signed October 29, 2013
6. Five-year lease renewal decision signed October 1, 2020
7. Renewal lease executed December 28, 2020
8. Transfer application, deemed complete March 5, 2021
9. Executed lease transfer, signed October 27, 2021
10. Case file

¹ Exhibits 1-9 are cited as: Amendment Application – “App”, Original Standard Lease Application for FREN PI4 – “Exhibit 2”, DMR Original Decision for Lease FREN PI4 - “Exhibit 3”, Executed lease for FREN PI4 – “Exhibit 4”, Gear authorization letter – “Exhibit 5”, Five-year lease renewal – “Exhibit 6”, ‘Renewal lease – Exhibit 7’, Transfer application for Lease FREN PI4 – “Exhibit 8”, Executed lease transfer – “Exhibit 9” and Case File – “CF”.

² Page numbers are cited using the PDF page number, and not the page number written on the application.

2. STATUTORY CRITERIA & FINDINGS OF FACT

Approval of standard aquaculture lease amendments is governed by 12 M.R.S.A. § 6072 and Chapter 2.44 of DMR regulations. The statute and regulations provide that the Commissioner may grant amendments for the use of specific gear, species, and/or operational modifications on an existing lease site provided the proposed changes are consistent with the findings on the underlying lease application, do not materially alter the findings of the original decision, and would not result in a change to the original lease conditions.

A. Original Lease Decision

On May 27, 2009, DMR granted lease FREN PI4 to GreatBay Aquaculture of Maine, LLC and James West for a 35.66-acre farm (measuring 1006.4 feet by 1469.1 feet by 1025.8 feet by 1593.1 feet) (Exhibit 4). DMR's Findings of Fact, Conclusions of Law, and Decision, henceforth referred to as "the original decision", found that the evidence in the record supported the conclusion that the aquaculture activities proposed by GreatBay Aquaculture of Maine, LLC and James West met the requirements for granting a Standard aquaculture lease as set forth in 12 M.R.S.A. § 6072 (Exhibit 3, page 13).

The original decision provided authorization to cultivate Atlantic cod (*Gadus morhua*), Atlantic halibut (*Hippoglossus hippoglossus*), blue mussels (*Mytilus edulis*), sea scallops (*Placopecten magellanicus*), and marine algae (*Laminaria saccharina*, *Porphyra umbilicalis*, and *Palmaria palmata*) on 35.66 acres located southeast of Preble Island in Frenchman Bay, in the Town of Sorrento (Exhibit 3 – page 13). The decision authorized a total of ten pens in a mooring system grid of two rows of five pens each. One Aquapod submersible cage was authorized to be tested at the site with the remainder approved as 70-meter circumference polar circle cages. Additionally, the decision authorized suspended culture of the marine algae (Exhibit 3 – page 3).

In the original decision (Exhibit 3, page 13), the Commissioner established conditions governing the use of FREN PI4, as is allowed pursuant to 12 M.R.S.A § 6072 (7-B). The following conditions were imposed in the original lease:

1. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
2. Navigation outside the mooring grid is permitted on the lease site.
3. The use of mobile fishing gear on the lease site, including, but not limited to, drags, dredges, trawls, and seines is prohibited. Other forms of fishing are permitted on the lease site, outside the mooring grid. No person or gear is permitted to make physical contact with any equipment or gear on the site or to gain access to the fish on the site without prior authorization from GreatBay Aquaculture of Maine, LLC or its authorized representatives.

In the original executed lease document, the lease term was set for ten years, beginning on May 22, 2009 and ending on May 21, 2019 (Exhibit 4, page 1).

B. Gear Amendments

On October 29, 2013, DMR issued a letter authorizing the use of two 1,000-foot longlines, deployed at a depth of seven feet and attached to anchors and surface buoys, for kelp cultivation.

In correspondence dated October 2, 2015, the Department authorized the addition of a nori net rack and three additional horizontal longlines. Both gear modifications predated the Department's issuance of amendments for gear changes (DMR Chapter 2 Rule 2.44, April 1, 2019).

C. Lease Renewal

On March 13, 2019, James West submitted an application for lease renewal (Exhibit 5). The application was deemed complete on October 23, 2019. The applicant requested the removal of Atlantic cod (*Gadus morhua*) and Atlantic halibut (*Hippoglossus hippoglossus*) cultivation and the conversion to a non-discharge lease. Additionally, James West requested the removal of GreatBay Aquaculture, LLC as a leaseholder. On October 1, 2020, DMR issued a decision granting a lease renewal for a non-discharge facility with a 5-year term, ending on May 21, 2025 (Exhibit 6, page 7). The decision removed Conditions #2 and #3 from the lease (Exhibit 6, page 7) as well as removing GreatBay Aquaculture, LLC. as a lessee. The renewed lease was executed on December 28, 2020 (Exhibit 7).

D. Lease Transfer

On January 25, 2021, James West submitted an application to add Springtide Seaweed, LLC as a leaseholder to FREN PI4 (Exhibit 8). The transfer application was accepted as complete on March 5, 2021. On September 9, 2021, DMR issued a decision granting the request to add Springtide Seaweed, LLC. The term of the lease was not affected by the transfer. The updated lease was executed on October 27, 2021 (Exhibit 9).

E. Proposed Changes to Gear Layout and Findings

The site currently employs nine submerged horizontal longlines for the cultivation of macroalgae in a 5 x 4 configuration (App), secured by 20 moorings. The leaseholder requests an increase to a maximum of 16 longlines arranged in a 10 x 6 grid pattern, secured by a maximum of 60 moorings (1000-pound concrete blocks and 200-pound mushroom anchors). The applicant proposes to space north-south lines at 170-foot intervals, and east-west lines will be placed 200-feet apart. The leaseholder also requests a series of 11 year-round deep water (submerged greater than 10 feet) longlines for lantern nets and shellfish units (bags/cages) in the southern portion of the site (App). Algae cultivation (September to July) is proposed for the entire farm, with year-round shellfish and sea urchin cultivation on the deep water longlines.

The lantern nets will measure 20-inches in diameter and 50-inches tall. Shellfish units will measure 18-inches by 35-inches by 4-inches (bags) and 33-inches by 10-inches (cages). Approximately 200 lantern nets will be deployed east-west on each of the 1000-foot parallel lines, and 40 nets will be deployed on north-south cross lines at four-foot spacing. Approximately 300 shellfish units will be deployed east-west on the 1000-foot lines, with 50 units on the north-south cross lines at three-foot intervals. At maximum build-out, the farm would have 1800 shellfish cages and 640 lantern nets in addition to the algae cultivation (App).

No new bird deterrent measures are proposed as the only features above the surface will be mooring balls and buoys. No new sources of noise generation aside from site tending have been identified (App).

The proposed gear change was review by the Maine Department of Inland Fisheries and Wildlife (MDIFW). In its comments, MDIFW stated that minimal impacts to wildlife are anticipated.

The additional gear, with the proposed configuration and spacing, would exceed the lease dimensions. The parallel north-south lease dimensions measure 1469 feet and 1593 linear feet. The gear configuration of ten lines at 170-foot spacing would measure 1530 feet. Therefore, the Department finds the leaseholder must eliminate one (1) north-south longline or decrease spacing between the lines to ensure the gear is fully contained within the lease boundaries.

As DMR Rule Chapter 2.44 (1) states that “the Commissioner shall not amend a lease in such a way that it materially alters the findings of the original decision, or would result in a change to the original lease conditions”, this amendment proposal will be considered in light of the original decision and lease conditions. The additional longlines are similar to the gear approved in the 2013 amendment (Exhibit 5). Notwithstanding the addition of buoys and mooring balls, no increase in surface gear is proposed. As the site was originally approved for floating net-pens, the proposed configuration is less impactful when viewed from the surrounding waters. The cultivation window will remain unchanged from the original lease decision. As no significant changes to existing conditions or habitat are proposed, and because no

public comments concerning the proposal were received by the Department, the proposed change is consistent with the findings on the underlying lease application and would not materially alter the findings of the original decision provided that the leaseholder meets the requirement of the condition below.

E. Proposed Changes to Species and Findings

The leaseholder is requesting the addition of green sea urchin (*Strongylocentrotus droebachiensis*), American oyster (*Crassostrea virginica*), quahog (*Mercenaria mercenaria*), winged kelp (*Alaria esculenta*), Irish moss (*Chondrus crispus*), and horsetail kelp (*Laminaria digitata*) to the lease (App, page 2).

These species will be cultured using the gear discussed in section 2.E of this decision. Green sea urchins (*S. droebachiensis*) will be sourced from the University of Maine Center for Cooperative Aquaculture Research, located in Franklin, Maine or Springtide Seaweed, LLC, located in Gouldsboro, Maine. American oysters (*C. virginica*) will be sourced from Muscongus Bay Aquaculture, located in Bremen, Maine or Mook Sea Farm, located in Walpole, Maine. Quahogs (*M. mercenaria*) will be sourced from Muscongus Bay Aquaculture or the Downeast Institute, located in Beals, Maine. Winged kelp (*A. esculenta*), Irish moss (*C. crispus*), and horsetail kelp (*L. digitata*) will be sourced from Springtide Seaweed, LLC. All are approved sources of stock by DMR.

As the proposed sources of stock are all approved by DMR, and because the gear proposed to culture these species has been found to be permissible via section 2.D of this decision, the proposal is consistent with the findings of the underlying lease application, would not materially alter the findings of the original decision, and would not result in a change to the original lease conditions.

3. CONDITIONS

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities, pursuant to 12 MRSA §6072 (7-B)³ Conditions are designed to encourage the greatest multiple compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the lease.

As condition #1 was deemed duplicative in, and conditions #2 and #3 were removed by, the lease renewal decision (Exhibit 6), no historic conditions remain on the lease.

The following new condition shall be incorporated into the lease:

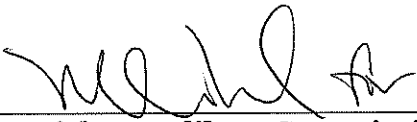
The leaseholder shall eliminate one (1) north-south longline, or minimize line spacing, to ensure the gear deployment is contained fully within the lease boundaries at all times and tidal stages.

³ 12 MRSA §6072 (7-B) states: "The commissioner may establish conditions that govern the use of the leased area and limitations on the aquaculture activities. These conditions must encourage the greatest multiple, compatible uses of the leased area, but must also address the ability of the lease site and surrounding area to support ecologically significant flora and fauna and preserve the exclusive rights of the lessee to the extent necessary to carry out the lease purpose."

4. DECISION

Based on the foregoing, the Commissioner grants the request from James West and Springtide Seafood, LLC for the authorization to cultivate six additional species, and to add the appropriate cultivation gear, at FREN PI4.

Dated: 6/23/22


Patrick C. Keliher, Commissioner
Department of Marine Resources

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

James West, Transferor

Aquaculture Lease Transfer Application

Lease FREN PI4

James West and Springtide
Seaweed LLC, Transferees

September 9, 2021

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

1. THE PROCEEDINGS

James West applied to the Department of Marine Resources (“DMR”) to add Springtide Seaweed LLC as a leaseholder on the 35.66 acre aquaculture lease FREN PI4, located in the coastal waters of the State of Maine in Frenchman Bay, south of Preble Island in Sorrento, Hancock County, Maine. The completed application from Mr. West indicates he does not want to be removed as a leaseholder, and only wishes to add Springtide Seaweed LLC as an additional leaseholder. FREN PI4 was originally issued to Great Bay Aquaculture and James West on May 27, 2009 for the cultivation of Atlantic cod (*Gadus morhua*), Atlantic halibut (*Hippoglossus hippoglossus*), Blue mussels (*Mytilus edulis*), sea scallops (*Placopecten magellanicus*), and marine algae (*Laminaria saccharina*, *Porphyra umbilicalis*, and *Palmaria palmata*), and was most recently renewed in 2020 for a period of 5 years. The 2020 renewal removed Great Bay Aquaculture as a leaseholder and removed Atlantic cod and Atlantic halibut from the species approved for the site. As such, Lease FREN PI4 is currently held by James West and authorized to culture blue mussels (*Mytilus edulis*), sea scallops (*Placopecten magellanicus*), and three species of marine algae (*Laminaria saccharina*, *Porphyra umbilicalis*, and *Palmaria palmata*) using suspended culture techniques; the lease expires on May 21, 2025.

The transfer application was accepted as complete on March 5, 2021. The Department provided a notice of the application and of the 14-day comment period to the Town of Sorrento and its Harbormaster, state and federal agencies, and the Department’s general mailing list of interested persons. A notice of the application and comment period was published in *The Ellsworth American* on April 1, 2021. No comments were received.

2. STATUTORY CRITERIA & FINDINGS OF FACT

Lease transfer requests are governed by 12 M.R.S §6072 (12-A) and DMR Rule 2.60. They provide that the Commissioner of DMR may grant a transfer upon determining that:

- a. the change in the lessee's identity does not cause any of the original criteria for issuing a lease to be violated;
- b. the transfer is not intended to circumvent the preference guidelines for treatment of competing applications;
- c. the transfer is not for speculative purposes; and
- d. the transfer will not cause the transferee to be a tenant in more than 1,000 acres of aquaculture leases in Maine.

A. Effect of Lessee Change on Lease Criteria

The transferee has met the same requirements for providing information about financial and technical capacity as is required for an applicant for a standard lease. Springtide Seaweed, LLC has experience in marine algae aquaculture and is acquainted with Maine's aquaculture laws and rules. According to the transfer application, the transferee plans to continue seaweed farming on the lease site and no changes have been proposed. According to the completed application, seaweed culture has taken place on the site since 2013, but the application provided no details on if culture of the other approved species has occurred on the site.

No comments on this transfer application were received by the Department. There is no evidence that the change in the identity of the lessee will affect any of the statutory criteria for issuing an aquaculture lease.

THEREFORE, I FIND that the change in the identity of the lessee does not violate any of the lease issuance criteria set forth in 12 M.R.S. §6072 (7-A).

B. Effect on Preference Guidelines

There are no competing applications for this lease site, so the preference guidelines are not relevant to this application.

THEREFORE, I FIND that the lease transfer is not intended to circumvent the preference guidelines for treatment of competing applications as set forth in 12 M.R.S. §6072 (8).

C. Speculative Purposes

DMR Rule 2.60 provides that in considering whether a transfer is being conducted for speculative purposes, the Department must consider “whether the current lessee has conducted substantially no research or aquaculture in the lease areas during the previous lease term.” The completed application indicated that seaweed farming has occurred on the site since 2013. However, the 2020 renewal decision stated that for a lease in excess of 35 acres, and that has been in operation for over ten years, DMR would have expected to see harvests that exceed those reported by the applicant in their annual reporting. While DMR does not require a certain amount be produced, it was unclear at the time of renewal if a lease of 35.66 acres was needed by the leaseholder, giving DMR concerns that the lease may be held for speculative purposes. However, there appeared to be interest from Mr. West at the time of renewal to scale up and diversify operations on the site in the coming years as the completed renewal application included a request to add several additional species to the lease, including additional species of marine algae. DMR renewed FREN PI4 for a period of 5 years instead of the requested 20, and indicated in the renewal decision that if at the end of the five-year term, the leaseholder has not conducted substantial aquaculture, or cannot sufficiently demonstrate that there is a reasonable plan to scale up operations to utilize the entire acreage, the lease acreage may be reduced, or the lease may not be renewed for a subsequent term. The transfer application to add Springtide Seaweed, LLC as an official leaseholder, but not to remove Mr. West from the lease, indicates to the Department that Mr. West has plans to continue using the site and may be planning to increase the amount of seaweed aquaculture conducted on the site.

THEREFORE, I FIND that the lease transfer is not for speculative purposes.

D. Acres Leased by Transferee

The statute and rule require that in order to grant the lease transfer, the Commissioner must find that “the transfer will not cause the transferee to be a tenant of any kind in leases covering an aggregate of more than 1,000 acres.” According to DMR records, Springtide Seaweed LLC holds lease FREN STA2 (20.02 acres), which is approved for the suspended culture of marine algae. Mr. West holds only lease FREN PI4 (35.66 acres).

THEREFORE, I FIND that the lease transfer will not cause the transferees to be a tenant of any kind in leases covering an aggregate of more than 1,000 acres.

3. CONCLUSIONS OF LAW

Based on the above findings, I conclude that:

- a. The change in the identity of the lessee does not violate any of the lease issuance criteria set forth in 12 M.R.S. §6072 (7-A);
- b. The lease transfer is not intended to circumvent the preference guidelines for treatment of competing applications as set forth in 12 M.R.S. §6072 (8);
- c. The lease transfer is not for speculative purposes; and
- d. The lease transfer will not cause the transferee to be a tenant of any kind in leases covering an aggregate of more than 1,000 acres.

These findings of fact and conclusions of law having been made as required by 12 M.R.S. §6072 (12-A) and by DMR rule 2.60, this lease transfer may be granted.

4. DECISION

Based on the foregoing, I grant the request to add Springtide Seaweed LLC to lease FREN-PI4. The term of the lease is not affected by the transfer, so the new lease will expire on the same date as the current lease (May 21, 2025).

All provisions of the existing lease shall continue in full force and effect, including all conditions on the lease, as noted below. The lessee shall pay the State of Maine rent in the amount of \$100.00 per acre per year. The lessee shall post a bond or establish an escrow account pursuant to DMR Rule 2.40 (2) (A), conditioned upon its performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

5. CONDITIONS

Pursuant to 12 M.R.S. §6072 (7-B), the Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities. Conditions are designed to encourage the greatest multiple compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the lease. There are no conditions on lease FREN PI4.

6. REVOCAION OF LEASE

The Commissioner may commence revocation procedures if it is determined that substantial aquaculture has not been conducted within the preceding year or that the lease

activities are substantially injurious to marine organisms. If any of the conditions or requirements imposed in this decision, in the lease, or in the law is not being observed, the Commissioner may revoke the aquaculture lease.

Dated: 9/15/01

A handwritten signature in black ink, appearing to read 'PCK', written over a horizontal line.

**Patrick C. Keliher, Commissioner
Department of Marine Resources**

**STATE OF MAINE
DEPARTMENT OF MARINE
RESOURCES**

Suspended culture of marine algae, blue
mussels, and sea scallops in Frenchman Bay,
Sorrento

James West

FREN PI4

October 1, 2020

**AQUACULTURE LEASE RENEWAL, LEASE FREN PI4
FINDINGS OF FACT, CONCLUSIONS OF LAW, & DECISION**

James West applied to the Department to renew the aquaculture lease FREN PI4 for a period of 20 years to May 21, 2039. The 35.66-acre lease is issued for the suspended culture of Atlantic cod (*Gadus morhua*), Atlantic halibut (*Hippoglossus hippoglossus*), Blue mussels (*Mytilus edulis*), sea scallops (*Placopecten magellanicus*), and marine algae (*Laminaria saccharina*, *Porphyra umbilicalis*, and *Palmaria palmata*) located in the Frenchman Bay, south of Preble Island, in Sorrento, Hancock County, Maine.

FREN PI4 was initially issued to Great Bay Aquaculture and James West on May 27, 2009. In his renewal application, Mr. West indicated that he wished for cod and halibut to be removed from the lease because Great Bay Aquaculture is no longer part of the aquaculture operation, and all gear associated with growing finfish has been removed from the site. Because finfish are no longer cultured on this site, and the site will only be used for marine algae and shellfish, any renewed lease will be for a non-discharge lease.

In his application to renew FREN PI4, Mr. West indicated he also plans to culture soft shell clams (*Mya arenaria*), northern quahogs/hard clams (*Mercenaria mercenaria*), American oysters (*Crassostrea virginica*), green sea urchins (*Strongylocentrotus droebachiensis*), Atlantic surf clams (*Spisula solidissima*), and many species of marine algae. This is in addition to the marine algae species, scallops, and mussels already approved for the site.¹ DMR contacted Mr.

¹ Normally, requests to add or remove species or gear types, or to modify lease operations, are made by filing an application for lease amendment on forms prescribed by the Commissioner. Because Mr. West's requests were made as part of the lease renewal application, the Department will also treat the renewal application as a lease amendment request. The standards that apply to lease amendments in Chapter 2.44(4)(A) (the lease amendment does not violate any of the lease issuance criteria in 12 M.R.S.A. §6072-A and is consistent with the Commissioner's findings on the underlying lease application in accordance with Chapter 2.37(A)) and (B) (the lease amendment does not violate any of the conditions set forth in the original lease) apply to the lease amendment separate from the criteria of lease renewal.

West asking for clarification on how he intends to use the site². Initial follow up information submitted by Mr. West indicated the goal is to use the site to culture scallops, mussels, American oysters, clam seed and kelp, but which species of clams and kelp were not specified³. According to Mr. West's completed renewal application, the species of marine algae he intends to culture on the site includes: sugar kelp, skinny kelp, winged kelp, horsetail kelp, *nori/laver*, dulse, and Irish moss. After further requests for clarification, Mr. West provided a list that indicates he intends to grow the following species⁴:

- Marine algae
 - sugar kelp (*Saccharina latissima*)
 - horsetail kelp (*Laminaria digitata*)
 - skinny kelp (*Saccharina angustissima*)
 - winged kelp (*Alaria esculenta*)
 - dulse (*Palmaria palmata*)
 - nori (*Porphyra umbilicalis*)
 - Irish moss (*Chondrus crispus*).
- Shellfish
 - American oyster (*Crassostrea virginica*)
 - Northern quahog/ hard clam (*Mercenaria mercenaria*)
 - Soft shell clam (*Mya arenaria*)
 - Blue Mussel (*Mytilus edulis*)
 - Sea Scallop (*Placopecten magellanicus*)
 - Atlantic Surf Clam (*Spisula solidissima*)
- Echinoderm
 - Green Sea Urchin (*Strongylocentrotus droebachiensis*)

Of the species referenced above, Mr. West is only currently approved for blue mussels (*Mytilus edulis*), sea scallops (*Placopecten magellanicus*), and three species of marine algae (*Laminaria saccharina*, *Porphyra umbilicalis*, and *Palmaria palmata*).

² DMR staff member E. Wilkinson first reached out to Mr. West via the phone on June 18, 2020 and then via email and phone multiple times between June 22- August 11, 2020.

³ Email exchange between E. Wilkinson and J. West July 8, 2020- August 11, 2020.

⁴ Email from J. West to E. Wilkinson on August 11, 2020.

Because Mr. West applied to add additional species to the lease in his renewal application, and because finfish are no longer cultured on the site, additional information on what gear would be deployed on the lease site was requested. According to the completed renewal application, marine algae would be grown on submerged horizontal longlines, and shellfish and urchin farming will be done on horizontal longlines. According to follow up information submitted by Mr. West⁵, half of the lease would be used to culture mussels in eight, 40x40 foot mussel rafts. Longlines with 10-foot dropper lines would be used to culture marine algae on approximately 10 acres of the site and the remainder of the lease site would be used to culture oysters and scallops using cages. Information on the number of marine algae longlines, or how far below the surface lines would be deployed was not provided. Follow up information submitted stated that the cages for oysters measure 2'x2'x4' but did not include specifics as to how many total cages would be deployed, or how they would be distributed on the site.

Information submitted stated that clams would be cultured on longlines with dropper lines, like the approach for marine algae.⁶ Where on the site clams would be cultured was not provided. Green sea urchins were also included on the list of species for which authorization was requested to be cultured on the site during the renewed lease term. However, it was unclear how the leaseholder would culture urchins. No details were provided as to how urchins would be cultured beyond a statement in the application that shellfish farming would occur on longlines.

DMR contacted Mr. West multiple times to try and obtain information about his plans for the lease site. Because Mr. West did not provide enough specifics for DMR to properly evaluate how gear will be deployed on the site, or how much of specific gear types will be used, the request to amend the lease to add species and gear is denied. Based on the information provided, DMR is unable to determine that the lease amendment in this regard satisfies the standard for approval in Chapter 2.44(4)(A) and (B). Accordingly, the lease renewal application will only be considered for the species authorized during the preceding lease term, less finfish species, for which the amendment requested be deleted from the lease is approved. If Mr. West would like to add additional species to the lease, he may do so by submitting a separate gear and species amendment request and providing adequate gear layouts and descriptions for all species included

⁵ Email exchange between E. Wilkinson and J. West. July 15, 2020 -August 11, 2020.

⁶ Email exchange between E. Wilkinson and J. West. July 15, 2020 -August 11, 2020

in any amendment application that are sufficient for DMR to evaluate the request in accordance with Chapter 2.44(4) of DMR's rules.

Because finfish are no longer cultured on the site, and authorization for the culture of finfish is being removed from the lease, consideration of the renewal application is limited to the following species: blue mussels (*Mytilus edulis*), sea scallops (*Placopecten magellanicus*), and three species of marine algae (*Laminaria saccharina*, *Porphyra umbilicalis*, and *Palmaria palmata*). If Mr. West intends to possess, transport, or sell whole or roe-on scallops, he will need to obtain a Memorandum of Understanding from the DMR Bureau of Public Health and may be responsible for covering all costs associated with any biotoxin testing that may be required. In addition, at present, it is not legally permissible to possess, transport, or sell whole or roe on scallops without a special license from DMR. If the leaseholder intends to pursue this, he must contact DMR.

1. PROCEDURE

Notice of the application for lease renewal and the 30-day public comment period, including the opportunity to request a public hearing, was published in the *Ellsworth American* on November 7, 2019. Personal notice was given to the municipality and to riparian landowners within 1,000 feet of the lease site. No comments and no requests for a hearing on this application were received from members of the public, or other stakeholders during the comment period.

2. STATUTORY CRITERIA

Applications for aquaculture lease renewals are governed by 12 M.R.S. §6072(12) and by Chapter 2.45 of the Department's rules, which provide that an aquaculture lease shall be renewed if: the lessee has complied with the lease agreement during its term; the Commissioner determines that renewal of the lease is in the best interest of the state; the renewal will not cause the lessee to be a tenant of any kind in leases covering an aggregate of more than 1,000 acres; and the lease is not being held for speculative purposes.

A. Compliance with lease

The review of the records of this lease indicates that all annual reports have been filed, and the site has passed inspection conducted by the Department. The rent is paid to date, and

there are no outstanding complaints regarding this lease. The leaseholder included proof that their bond was current at the time the renewal application was submitted. However, it appears that bond expired on February 20, 2020. Before any renewal lease agreement is finalized, proof of a current bond will be required.

While there are no outstanding complaints regarding this lease, Mr. West has failed to pay the rent on time. The lease agreement between DMR and Mr. West and Great Bay Aquaculture, that was executed on May 27, 2009, states that rent is due on or before October 1st throughout the term of the lease. Based upon review of the case file, it appears that at times, Mr. West's rent was more than a year behind. To collect rent on FREN PI4, DMR has had to repeatedly remind Mr. West to pay his rent, and has had to take alternative actions, including withholding Mr. West's commercial fishing license until rent has been paid. While Mr. West has ultimately paid his rent in full, DMR has had to spend significant time to acquire the rent on this lease. The history of untimely rent payments, and the amount of DMR staff effort required to collect past due rents have cause, ground exist for the renewal application to be denied. However, discretion exists to grant the lease renewal in light of the circumstances of non-compliance in this case. In the exercise of this discretion this lease will be renewed, but for a reduced term of 5 years, instead of the requested 20. The shorter 5-year lease term will allow for an assessment to be made regarding Mr. West's compliance with the lease requirements going forward. If the leaseholder requests to renew his lease again after 5 years and rent has continued to not be paid on time or he has not faithfully complied with all other lease terms, the lease may not be renewed for a subsequent term.

Therefore, I find that, although the applicant has not fully complied with the lease agreement during its term, the lease renewal may be granted for a reduced term of 5 years, provided he meets the remaining requirements for lease renewal under 12 M.R.S. §6072(12) and Chapter 2.45.

B. Best interest of the State of Maine

In determining whether it is in the best interest of state to renew the lease, the Department takes into consideration, among other things, the potential for conflict with other new or existing uses of the area which the Commissioner determines to be a higher use of the area from the perspective of the public interest. There is no evidence of conflicts with other new or existing uses of the area. Upon reviewing the renewal application, the Maine Department of Inland

Fisheries and Wildlife commented that “minimal impacts to wildlife are anticipated for this project.”⁷

Therefore, I find that it is in the best interests of the State of Maine to renew this lease.

C. Aggregate lease holdings

According to DMR records, the lessee holds only lease FREN PI4 (35.66 acres).

Therefore, I find that the renewal of this lease will not cause the lessee to be a tenant of any kind in leases covering an aggregate of more than 1,000 acres.

D. Speculative purposes

Chapter 2.45(2)(A) of the Department’s rules provide that in determining whether a renewal is being conducted for speculative purposes, the Commissioner must consider “whether the current lessee has conducted substantially no research or aquaculture in the lease area during the previous lease term.”

According to annual reports, Mr. West has harvested marine algae from the lease in previous years. However, for a lease in excess of 35 acres, and that has been in operation for over ten years, DMR would expect to see harvests that exceed those reported by the applicant. While DMR does not require a certain amount be produced, it is unclear if a lease of 35.66 acres is needed by the leaseholder giving DMR concerns that the lease may be held for speculative purposes. Given the interest from the applicant to add additional species to the lease, he may have plans to scale up or diversify operations on the site in the coming years. However, in order to evaluate the request to add additional species and to understand how gear would be deployed on the site, Mr. West must submit a request for a lease amendment containing sufficient information for DMR to determine whether the amendment approval requirements of Chapter 2.44(4) of DMR’s rules are met.

As discussed in section 2.A of this document, the lease will only be renewed for a period of five years. If at the end of the five-year term, the leaseholder has not conducted substantial aquaculture, or cannot sufficiently demonstrate that there is a reasonable plan to scale up operations to utilize the entire acreage, the lease acreage may be reduced, or the lease may not be renewed for a subsequent term.

Therefore, by only renewing this lease for five years, and only for the species currently listed on the lease, **I find** that the lease is not being held for speculative purposes.

⁷ Email from Rebecca Settele to Cindy Burke on November 6, 2019.

3. LEASE CONDITIONS

The following conditions were applied to the lease by the original decision:

1. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR rule 2.80.
2. Navigation outside the mooring grid is permitted on the lease site.
3. The use of mobile fishing gear on the lease site, including, but not limited to, drags, dredges, trawls, and seines is prohibited. Other forms of fishing are permitted on the lease site, outside the mooring grid. No person or gear is permitted to make physical contact with any equipment or gear on the site or to gain access to the fish on the site without prior authorization from Great Bay Aquaculture of Maine, LLC or its authorized representatives.

The first condition above reflects a regulatory requirement for leaseholders, regardless of if it is expressly conditioned in a lease or not. As such, the first condition is duplicative and will not be included in the renewed lease. The second condition was specific to the mooring grid related to fish pens, and the third condition was originally included to limit potential interaction with the fish pens. Because finfish species are no longer authorized to be cultured on the lease site, and because there is no longer any gear related to finfish aquaculture on the site, conditions 2 and 3 will be removed from the lease. No new or other conditions will be included on the lease in the renewed term.

4. DECISION

The Commissioner of Marine Resources grants the application of James West to renew aquaculture lease FREN PI4 for a period of 5 years, to May 21, 2025. The renewed lease is subject to the same terms, conditions, and obligations as set forth in the original lease, except as modified by this decision. The request to amend the lease to remove authorization to culture finfish and to utilize gear associated with finfish is granted.

5. REVOCATION OF LEASE

The Commissioner may commence revocation procedures upon determining pursuant to 12 M.R.S. §6072(11) that no substantial aquaculture has been conducted within the preceding

year, that the lease activities are substantially injurious to marine organisms, or that any of the conditions of the lease or any applicable laws or regulations have been violated.

6. DATE AND SIGNATURE

Dated: October 1, 2020



**Patrick C. Keliher, Commissioner,
Department of Marine Resources**

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
Standard Aquaculture Lease Application
Off Preble Island, Frenchman Bay, Sorrento, Maine
Net-pen culture of finfish; suspended culture
of shellfish and seaweed

GreatBay Aquaculture of Maine, LLC
and James West
Docket # 2009-02
Lease FREN PI4
May 21, 2009

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

On January 14, 2009, the Department of Marine Resources ("DMR") received an application from GreatBay Aquaculture of Maine, LLC, a Maine corporation, and James West of Sorrento, Maine, for a standard aquaculture lease on 35.66 acres located in the coastal waters of the State of Maine, southeast of Preble Island in Frenchman Bay, in the Town of Sorrento in Hancock County, for the purpose of cultivating Atlantic cod (*Gadus morhua*), Atlantic halibut (*Hippoglossus hippoglossus*), Blue Sea Mussels (*Mytilus edulis*), Sea Scallops (*Placopecten magellanicus*), and Seaweed (*Laminaria saccharina*, *Porphyra umbilicalis*, *Palmaria palmata*), using net-pen and suspended culture techniques. The application was accepted as complete on February 2, 2009. There were no intervenors. A public hearing on this application was held on May 12, 2009, in Sorrento, Maine.

1. THE PROCEEDINGS

Notices of the hearing and copies of the application and DMR site report were sent to numerous state and federal agencies for their review, as well as to a number of educational institutions, aquaculture and environmental organizations, the Town of Sorrento and the Sorrento Harbormaster, members of the Legislature, representatives of the press, riparian landowners, and other private individuals. They were also posted on DMR's web site. Notice of the hearing was published in the *Ellsworth American* on April 9 and April 30, 2009 and in the *Commercial Fisheries News* May 2009 edition.

Sworn testimony was given at the hearing by the applicants, represented by George Nardi, Mark Kesselring, and James West; and by DMR's Aquaculture Environmental Coordinator, Jon Lewis. Mr. Kesselring presented described the proposed project and showed a computer slide presentation. Mr. West testified about his participation in the project. Mr. Lewis presented his site report, including a video presentation showing the sea bottom on the site.

Each witness was available for questioning by the Department, the applicants, and members of the public. The hearing was recorded by DMR. The Hearings Officer was Diantha Robinson.

The evidentiary record before the Department regarding this lease application includes four exhibits introduced at the hearing (see exhibit list below) and the record of testimony at the hearing itself. The evidence from all of these sources is summarized below.¹

LIST OF EXHIBITS

1. Case file, #2009-02 (cited below as "F").
2. Application signed and dated January 9, 2009 (cited below as "A" with page number).
3. DMR site report dated April 6, 2009 (cited below as "SR" with page number).
4. Paper copy of GreatBay's Power Point presentation dated May 12, 2009 (cited below as "PP" with page number).

2. DESCRIPTION OF THE PROJECT

A. Site History

The proposed lease site lies in the northeastern portion of Frenchman Bay, south of Preble Island in the Town of Sorrento. The applicants currently hold two leases within the same footprint as that of the proposed site. James West holds lease FREN PI2, a 35.66-acre suspended lease for blue mussels and sea scallops, which is identical to the proposed site in its size and location (SR2). Mr. West and Great Bay Aquaculture, LLC, of Portsmouth, New Hampshire, also hold a 1.86-acre experimental net-pen and suspended lease for cod, halibut, and mussels, FREN PI3, which lies within the boundaries of Mr. West's mussel lease. The site was originally used for salmon cultivation and is marked on NOAA charts as "Fish Pens".

The experiment in raising cod on FREN PI3 has progressed to the point at which more fish pens are needed, hence this application, which proposes to transform Mr. West's mussel-and-scallop lease site into a net-pen and suspended lease for cod, halibut, mussels, scallops, and seaweed. With the granting of the proposed lease, the experimental lease FREN PI3 will be terminated, and Mr. West will also terminate his lease FREN PI2, but he will remain as a co-lessee of the new site.

The identity of the corporate lessee will also change with the granting of the proposed lease, from Great Bay Aquaculture, LLC of Portsmouth, N.H. (co-lessee of the experimental lease FREN PI3, issued in 2008) to GreatBay Aquaculture of Maine, LLC (co-lessee of the proposed standard lease FREN PI4, to be issued in 2009). The two corporations share a common owner and management, but they are separate limited-liability corporations.

¹ [NOTE: The reference (Smith/Jones) means testimony of Smith, being questioned by Jones.]

B. Proposed Operations²

The applicants propose to continue to grow cod on the lease site, and cod culture is the focus of the application. They will grow halibut if sufficient stocks of cod are not available, and they will eventually culture mussels, scallops, and seaweed, as well (A4). The applicants propose to increase the number of pens from the four authorized in the current experimental lease to a total of ten in a mooring system grid of two rows of five pens each. One of the pens will likely be an Aquapod submersible cage to be tested at the site (PP10); the others will be 70-meter polar circle cages.

The equipment to be used on the site, according to the application, has been commonly used in aquaculture for raising salmon and has “proven reliable to withstanding the weather and sea conditions anticipated at this location.” This equipment is standard in Maine and New Brunswick and meets the Code of Containment of the Maine Aquaculture Association (A14). The applicants “intend to build upon the experience of the salmon aquaculture industry in equipment and techniques and make adaptations as required to suit the variations in rearing cod as opposed to rearing salmon.” They hope this project will be “a leader in developing the best available technology specific to the rearing of cod”, and this is the reason they intend to experiment with the Aquapod cage, which they believe may be “the best cage structure for future cod farms in more exposed locations” (A17).

Mr. West testified that while he has not grown mussels on the site for some time, he plans eventually to resume suspended mussel culture there. Mussels and scallops are authorized species on his current lease, and the applicants wish to continue to have authority to grow them as a potential means of “reducing environmental impacts while increasing profitability” of the project (A4). Mr. Kesselring and Mr. West both testified that the omission of scallops from the application as an authorized species was an oversight and that they wish to have scallops included in the lease (Kesselring/Robinson; West/Robinson).

As an additional part of this potential exploration of multi-trophic aquaculture, the applicants seek authority to culture three species of seaweed. Details of the culture techniques are not complete at present, although Mr. Kesselring testified that some form of suspended culture would be employed (Kesselring/Robinson). GreatBay might seek permission to add other species for suspended or net pen culture at some future time, but there are no plans now for bottom culture on this site (Nardi/Robinson).

The applicants will add an additional 150,000 cod to the lease site in 2009, in addition to the 100,000 cod currently stocked, for a total stock of 250,000 fish (A18). GreatBay and Mr. West believe that the risk of stocking multiple-year classes of fish on the same site is mitigated in this case by the lack of other finfish farms in the area, the low stocking numbers involved, and the

² This description of the proposed operations summarizes information contained in the application and presented at the hearing. DMR relies on this information as indicative of how the applicants intend to operate the project on the lease site.

rigorous biosecurity, fish health testing, and monitoring practices they maintain at the site. They believe that these circumstances and practices will keep the fish health risk “minimal and manageable until such time as the economic viability of cod farming can be proven and further lease sites can be obtained.” They do not intend to continue this practice as a “long-term method of operation” (A3).

Fish will be grown out in pens on the site, with additional pens added gradually as needed. The maximum stocking density is “a cautious limit” of 15kg/M³ for grow-out. Fish in cages approaching the stocking density limit will be sorted, graded, and re-distributed to other cages; this process will also direct slower-growing fish to the live market at 2-3 lbs. Faster-growing fish will be grown on longer for the fresh slaughter market at 6-7 lbs. (A17).

The fish will be fed one to five times per day, less often as they grow larger and the weather changes. Feeding will be done both by hand and with blowers; the applicants will monitor feeding with underwater cameras. Feed will be stored on-site and also be transported to the site daily (A18). A veterinarian will inspect the fish and supervise the use of any antibiotics.

Vessels tending the site will include one 20-ft. boat with an outboard motor and a 15' x 40' steel work barge with a diesel engine. Both vessels will travel daily to the site, transporting personnel, feed, and gear. They will serve as work platforms for various aspects of the operation.

Harvesting will begin in the fall of 2009, when the applicants plan to harvest 50% of the crop for the live market by hand-dipping (possibly pumping) fish into tanks and transporting them to shore for processing. Harvesting will continue once a week, depending on the market. Fresh slaughter will begin in late summer, 2010; fish will be hand-dipped, stunned, cut, and bled on a table at the site, then placed in tanks and transported to shore (A16). If harvest numbers increase, a fish pump might be used instead of hand dipping. A shore processing facility has not yet been identified.

The fish pens will be protected from predators by an extra net suspended from the outside of each pen and by bird nets on top of the pens. A diver will remove dead fish from the pens at least once a week and will inspect the nets. Dead fish will be composted in an approved facility or disposed of in another approved manner. GreatBay will minimize the amount of excess feed on the site to discourage predators. Antifouling coating on nets will reduce biofouling. Nets will be changed once a year and re-treated.

The applicants utilize various local facilities in Sorrento and the surrounding area to reach their boats, convey feed and gear to the site, transfer fish stocks, construct cages, and store feed and equipment (A18).

According to both Mr. Kesselring and Mr. Lewis, the cages presently deployed as part of the experimental lease project are not located within the boundaries specified for that site. According to Mr. Kesselring, an error in calculation occurred when the coordinates for the experimental site were adapted to the positioning program used to set the moorings. In addition,

one of the buoys marking the larger site had apparently been moved, unbeknownst to the applicants. They relied on its location in setting the mooring grid, which compounded the error.

Because the site is located in open water, the error was not apparent until the site was surveyed in the course of preparing this application. At that time, the weather was unsuitable for moving the cages and re-setting the mooring grid; however, that work is now being undertaken, and all pens and gear are in the process of being moved to their proper location (Kesselring/Robinson).

C. Site Characteristics

DMR biologists are well-acquainted with the proposed site, having made site visits there in August, 2001; November, 2007; June, 2008; and March, 2009 in connection with various lease applications and related activities (SR2). Underwater videos of the bottom were obtained in 2001, 2008, and 2009; a SCUBA dive inspection was made in 2001.

According to the site report, the bottom of the site slopes gently downward from north to south. Small burrows of wry-mouth eels occur on the site bottom. Larger burrows, likely of lobsters, occur to the east of the proposed site, near the existing (off-site) pens (SR3). The site is located south of Preble Island. Currents in the area run north-south and are tidally driven. The velocity is low, and the sea floor is composed of very fine sediments; the site report notes that "If the lease were to be granted, the operators of the farm would need to pay strict attention to feeding practices as dispersion from currents under the farm would likely be negligible" (SR3).

Wind velocities at the site are likely to be high, because this site is completely open to the south. The site is not expected to ice over in winter (SR3). Minimum depths at the site are approximately 65 feet, leaving "adequate clearance between the net-pen bottoms and the sea floor" (SR4).

Water quality at the site is classified by DMR as Open/Approved. Toxic algae blooms in the area monitored by DMR in 2008 did not penetrate into Frenchman Bay north of the Bar Harbor Bar, well to the southwest of the site (SR8). Other information about the site is discussed below.

3. STATUTORY CRITERIA & FINDINGS OF FACT

Approval of standard aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides that a lease may be granted by the Commissioner of DMR if s/he determines that the project will not unreasonably interfere with the ingress and egress of riparian owners; with navigation; with fishing or other uses of the area, taking into consideration the number and density of aquaculture leases in an area; with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; or with the public use or enjoyment within 1,000 feet of beaches, parks, docking facilities, or conserved lands owned by municipal,

state, or federal governments. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site; that the lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site; and that the lease will be in compliance with visual impact criteria adopted by the Commissioner relating to color, height, shape and mass.

A. Riparian Access

According to both the application and the site report, the nearest land to the site, Preble Island, is well over 1,000 feet away, so there are no issues regarding riparian access to consider in this proceeding (A20, SR6).

Therefore, I find that the aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.

B. Navigation

The proposed lease site is located in the open waters of Frenchman Bay, some 1200 feet south of Preble Island and 2400 ft. southeast of Navigational Bell "SH" (SR8). Water depths between the site and the island range from 20 ft. to 70 ft., according to the application. Approximately 100 pleasure boats per day navigate between the site and Preble Island in summer, generally parallel to shore (A20). The site report notes that while vessel traffic is likely to occur in the vicinity of the site, the water is open, with few hazards, so that the floating gear will probably need to be marked for navigational purposes, particularly at night and in periods of low visibility. The applicants are required to obtain a permit from the U.S. Army Corps of Engineers and to consult the U.S. Coast Guard, Boston, Office of Private Aids to Navigation, for marking requirements.

According to the Sorrento Harbormaster, Mr. Louis Sutherland, the proposed lease will not interfere with navigation in the area, nor with the use of moorings or storm anchorages (F). During the year that the experimental cod-farming project has been in existence at the site, DMR has received no complaints regarding the operation (SR8). No moorings are deployed within the vicinity of the lease site (other than those belonging to the applicants). The nearest moorings are located in Sorrento Harbor, a half-mile northwest of the site. The lease site itself is too deep and exposed for vessel moorings (SR8).

The evidence shows that the proposed operations at this site will not interfere with navigation. There is clearly ample room for vessels to move around the site in its open location in the bay. The mandatory application for marking requirements will ensure that the site is marked as the Coast Guard sees fit to warn mariners of its location.

Therefore, I find that the aquaculture activities proposed for this site will not unreasonably interfere with navigation.

C. Fishing & Other Uses

During three site visits to this location in 2001, 2007, and 2009, DMR staff have never observed fishing activity within the boundaries of the proposed lease site.

In 2001, lobster buoys were observed to the northwest of the site, between Preble I. and the 60-ft. contour line. In 2007, lobster buoys were observed surrounding the site, but not within its boundaries. No fishing activity was observed in the vicinity in March of 2009, although the site report acknowledges that this is not a peak fishing time. The Sorrento Harbormaster noted that the proposed fish farm will not interfere with the "limited lobster and recreational fishing" in the area (SR8). Mr. Lewis testified that it is unlikely that anyone would drag the soft bottom, because there are no harvestable species there (Lewis, testimony).

According to the application, while the site has been leased for mussel culture, it has not been used in recent years, other than for the experimental cod farm, and there is no commercial fishing on the site.

Exclusivity. The applicants have requested that dragging be prohibited on the site, to avoid entanglement with the moorings. While they have no objection to other forms of fishing on the site outside of the pens, they stress that for biosecurity reasons, there must be no physical contact with or access to the fish pens without prior authorization from the lessees. Mr. Kesselring testified that GreatBay plans to post signs at the site, indicating that it is a private fish farm (Kesselring/Robinson).

Other aquaculture leases. According to the site report, there are currently three other aquaculture leases in the vicinity: FREN SB (1.4 mi. west, suspended culture of mussels); FREN BI (1.7 mi. northwest, bottom culture of mussels); and FLAN WN (1.5 mi. northeast, bottom culture of mussels). The site report concludes that "The proposed activities are unlikely to negatively impact existing aquaculture operations in the area" (SR8).

The evidence, including repeated site visits by the Department over eight years plus the Harbormaster's statement, as well as information in the application, shows an absence of commercial fishing activity in the area of the site. Other aquaculture leases in the area are all well over a mile distant and will not be affected by this project. The applicants' request to exclude dragging and to prohibit physical contact with or access to the fish pens are reasonable, given the nature of the project, and these will be included as conditions in the lease³. Besides excluding dragging, in order to protect the mooring grid, the use of mobile fishing gear, including, but not limited to, drags, dredges, trawls, and seines will be prohibited. Navigation and other forms of fishing will be permitted on the lease site, outside the mooring grid, but no person or gear will be

permitted to make physical contact with any equipment or gear on the site or to gain access to the fish on the site without prior authorization from GreatBay Aquaculture of Maine, LLC or its authorized representatives.

The lease must be marked in accordance with DMR Rule 2.80.⁴

Therefore, considering the number and density of aquaculture leases in the area, I find that the aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area.

D. Flora & Fauna

Flora and fauna observed during the 2001 and 2009 site visits were very similar, including sand shrimp, blue mussels (found under the pens), wry-mouth eels, common sea stars, and *Beggiatoa* (found under the pens). According to the site report, the benthic ecology of the area has changed very little since the initial DMR inspection eight years ago (SR5). During the 2009 site visit, both the area beneath the off-site pens and the area of the proposed site were inspected. There was “a light scattering of *Beggiatoa* under the two pens, one of which had been stocked with juvenile cod in the spring of 2008 and the other with larger juveniles in the fall of 2008; the site report concludes that “Overall conditions under the pens appeared to be acceptable” (SR 4).

According to the site report, there are no Essential or Significant Habitats within one-quarter mile of the site (SR8).

The current velocity in the area is low, and the sea floor is composed of very fine sediments; the site report notes that “If the lease were to be granted, the operators of the farm would need to pay strict attention to feeding practices as dispersion from currents under the farm would likely be negligible” (SR 3). Mr. Lewis testified that the bottom of the site is the softest he

⁴**2.80 Marking Procedures for Aquaculture Leases**

1. When required by the Commissioner in the lease, aquaculture leases shall be marked with a floating device, such as a buoy, which displays the lease identifier assigned by the Department and the words SEA FARM in letters of at least 2 inches in height in colors contrasting to the background color of the device. The marked floating device shall be readily distinguishable from interior buoys and aquaculture gear.
2. The marked floating devices shall be displayed at each corner of the lease area that is occupied or at the outermost corners. In cases where the boundary line exceeds 100 yards, additional devices shall be displayed so as to clearly show the boundary line of the lease. In situations where the topography or distance of the lease boundary interrupts the line of sight from one marker to the next, additional marked floating devices shall be displayed so as to maintain a continuous line of sight.
3. When such marking requirements are unnecessary or impractical in certain lease locations, such as upwellers located within marina slips, the Commissioner may set forth alternative marking requirements in an individual lease.
4. Lease sites must be marked in accordance with the United State’s Coast Guard’s Aids to Private Navigation standards and requirements.

has ever seen and that there is very little marine life on the proposed lease site now. He videotaped the bottom under both of the existing (off-site) fish pens and on the site of the proposed lease. His underwater video showed some patches of *Beggiatoa* under the pen with 80,000 fish and some fecal matter under the pen with 20,000 fish, but overall, he testified, the bottom is in relatively good condition under the existing pens (Lewis, testimony). The nature of the bottom in both locations is similar.

Mr. Kesselring said that the low stocking density used by the company is a way to deal with the vulnerability of the site. GreatBay is aware of the potential problem of accumulating material under the pens, which could cause a violation of the standards in the company's MEPDES permit. He noted that there will be adequate space on the site, even with ten pens deployed, so that GreatBay can move the cages to a different position on the site if necessary (Lewis/Kesselring).

The evidence shows that there are no species of flora or fauna on the site or in its vicinity that will be adversely affected to any significant degree by the proposed aquaculture operation. The applicants are clearly aware that the nature of the sea bottom makes it particularly vulnerable to the buildup of debris from their operation, and they will monitor the site as required by their MEPDES permit.

Therefore, I find that the aquaculture activities proposed for this site will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

E. Public Use & Enjoyment

According to both the application (A20) and the site report (SR6), there are no government-owned beaches, parks, docking facilities, or conserved lands within 1,000 feet of the proposed lease site.

Therefore, I find that the aquaculture activities proposed for this site will not unreasonably interfere with the public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities or certain conserved lands owned by municipal, state, or federal governments.

F. Source of Organisms

The application indicates that the sources of stock for this proposed lease site are as follows: cod will come from Great Bay Aquaculture, LLC, in Portsmouth, New Hampshire; halibut will come from the Center for Cooperative Aquaculture Research (CCAR) in Franklin, Maine; mussels (and presumably scallops) will come from locally-collected spat; and seaweed will be obtained from Maine Coast Sea Vegetables.

Therefore, I find that the applicants have demonstrated that there is an available source of stock to be cultured for the lease site.

G. Light

The application says that no lighting will be used at the site, except possibly for navigation, and that there will normally be no work beyond daylight hours (A18). Mr. Kesselring testified at the hearing that, while there are no plans to use light manipulation at the site, if it were to be employed, the lights would be submerged and have no effect on the surrounding area (PP16).

The site report notes the following: "No light sources other than for required navigational aids are proposed at this time. Finfish growing sometimes require[s] the use of underwater husbandry lighting to extend the photoperiod during winter months. The lights are suspended underwater and are projected into the cages to prevent early maturation of fish. Salmon farms sometimes utilize this type of lighting and cod farms in other parts of the world have reported the need to use these lights. These lights would not be projected above the surface and therefore visibility from surrounding areas would be minimal" (SR7).

DMR Rule 2.37 (1) (A) (8) requires applicants to demonstrate that all reasonable measures will be taken to mitigate light impacts from the lease activities. No use of light is planned now as part of the lease operations. Any lighting required for navigation by the U.S. Coast Guard will clearly be a reasonable use of light. Underwater husbandry lights, if used at this site, would have minimal impact on the surrounding area.

Therefore, I find that the aquaculture activities proposed for these sites will not result in an unreasonable impact from light at the boundaries of the lease site.

H. Noise

Noise-producing equipment proposed for use at the lease site includes: small boats with outboard motors, a diesel work barge, commercial feed blowers, feed blowers adapted from leaf blowers, a pressure washer, a small generator, and possibly a fish pump (A18). According to the application, all power equipment will be used with manufacturers' mufflers "installed and maintained" (A18).

The site report notes that "leaf blowers are considered by most to be noisy and some consideration of noise outputs in relation to time of day and in relation to quiet, calm days should be given" (SR7). Mr. Kesselring testified that the leaf-blower-adapted feed blowers have been used on the site for the past year, that they are muffled, and that no complaints have been received. He said that GreatBay will be using commercial blowers as the site expands

(Kesselring/Robinson).

DMR Rule 2.37 (1) (A) (9) requires applicants to “demonstrate that all reasonable measures will be taken to mitigate noise impacts from the lease activities.” It provides that “All motorized equipment used during routine operation at an aquaculture facility must be designed or mitigated to reduce the sound level produced to the maximum extent practical.”

The equipment will be muffled and maintained as such and will be used during daylight hours only. The site is located well over 1,000 ft. from the nearest land, which should, as the site report suggests (SR7), “minimize noise impacts to adjacent shorefronts”. Noise generated by operations on the site is unlikely to have a significant effect at the boundaries of the lease; nevertheless, the Department encourages the applicants to maintain awareness of the surrounding circumstances when using especially noisy equipment.

Therefore, I find that the aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease.

I. Visual Impact

Mr. Kesselring showed photographs of the fish pens now on the site as seen from the water (PP8). The cages and netting are black, and the low profile of the pens, as well as their dark color, reduces their visual impact. No permanent on-site support structures will be used on the lease (A15).

Compensator buoys used in the mooring grid will be yellow. Marking buoys required by DMR and any navigation lighting required by the U.S. Coast Guard should be visible by their nature.

DMR Rule 2.37 (1) (A) (10) requires that equipment colors blend in with the surrounding area and that buoy colors do not compromise safe navigation or conflict with U.S. Coast Guard requirements. The black pens and nets blend with the surroundings. Navigation markings will be reviewed by the Coast Guard. The lease operations as proposed will meet the requirements of the visual impact criteria in DMR Rule 2.37 (1) (A) (10).

Therefore, I find that the proposed lease will comply with the visual impact criteria contained in DMR Regulation 2.37 (1) (A) (10).

4. CONCLUSIONS OF LAW

Based on the above findings, I conclude that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.

2. The aquaculture activities proposed for this site will not unreasonably interfere with navigation. Navigation will be permitted on the lease site, outside the mooring grid. The lease site shall be marked in accordance with U. S. Coast Guard requirements.

3. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area, taking into consideration the number and density of aquaculture leases in the area. The lease boundaries must be marked in accordance with the requirements of DMR Rule 2.80. The degree of exclusivity requested by the applicants is reasonable, and the use of mobile fishing gear, including, but not limited to, drags, dredges, trawls, and seines will be prohibited. Other forms of fishing will be permitted on the site outside the mooring grid, but physical contact with or access to the fish pens will be prohibited. These restrictions will be included as conditions in the lease.

4. The aquaculture activities proposed for this site will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

5. The aquaculture activities proposed for this site will not unreasonably interfere with the public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by municipal, state, or federal governments.

6. The applicant has demonstrated that there is an available source of Atlantic cod (*Gadus morhua*), Atlantic halibut (*Hippoglossus hippoglossus*), Blue Sea Mussels (*Mytilus edulis*), Sea Scallops (*Placopecten magellanicus*), and Seaweed (*Laminaria saccharina*, *Porphyra umbilicalis*, *Palmaria palmata*) to be cultured for the lease site.

7. The aquaculture activities proposed for this site will not result in an unreasonable impact from light at the boundaries of the lease site.

8. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease site.

9. The aquaculture activities proposed for this site will comply with the visual impact criteria contained in DMR Regulation 2.37(1)(A)(10).

Accordingly, the evidence in the record supports the conclusion that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072.

5. DECISION

Based on the foregoing, the Commissioner grants the requested lease of 35.66 acres to GreatBay Aquaculture of Maine, LLC, a Maine corporation, and James West of Sorrento, Maine, for ten years for the purpose of cultivating Atlantic cod (*Gadus morhua*), Atlantic halibut (*Hippoglossus hippoglossus*), Blue Sea Mussels (*Mytilus edulis*), Sea Scallops (*Placopecten magellanicus*), and Seaweed (*Laminaria saccharina*, *Porphyra umbilicalis*, *Palmaria palmata*) using net pen and suspended culture techniques. The applicant shall pay the State of Maine rent in the amount of \$100.00 per acre per year. The applicants shall post a bond or establish an escrow account pursuant to DMR Rule 2.40 (2) (A) in the amount of \$ 25,000.00, conditioned upon their performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

6. CONDITIONS TO BE IMPOSED ON LEASE

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities, pursuant to 12 MRSA §6072 (7-B)⁵ Conditions are designed to encourage the greatest multiple compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the lease.

The following conditions shall be incorporated into the lease:

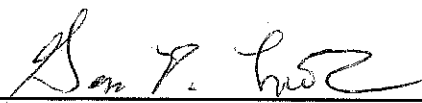
1. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
2. Navigation outside the mooring grid is permitted on the lease site.
3. The use of mobile fishing gear on the lease site, including, but not limited to, drags, dredges, trawls, and seines is prohibited. Other forms of fishing are permitted on the lease site, outside the mooring grid. No person or gear is permitted to make physical contact with any equipment or gear on the site or to gain access to the fish on the site without prior authorization from GreatBay Aquaculture of Maine, LLC or its authorized representatives.

⁵ 12 MRSA §6072 (7-B) states: "The commissioner may establish conditions that govern the use of the leased area and limitations on the aquaculture activities. These conditions must encourage the greatest multiple, compatible uses of the leased area, but must also address the ability of the lease site and surrounding area to support ecologically significant flora and fauna and preserve the exclusive rights of the lessee to the extent necessary to carry out the lease purpose."

7. REVOCATION OF LEASE

The Commissioner may commence revocation procedures if s/he determines that substantial aquaculture has not been conducted within the preceding year or that the lease activities are substantially injurious to marine organisms. If any of the conditions or requirements imposed in this decision, in the lease, or in the law is not being observed, the Commissioner may revoke the aquaculture lease.

Dated: 22 May 2009



George D. Lapointe (Commissioner)
Department of Marine Resources