

**STATE OF MAINE**

**Cooke Aquaculture USA, Inc.**

**DEPARTMENT OF MARINE RESOURCES**

Aquaculture Lease Renewal Application

**SWAN BI**

Suspended culture of finfish and blue

mussels

June 28, 2022

Black Island, Frenchboro

### **FINDINGS OF FACT, CONCLUSIONS OF LAW, & DECISION**

In 2019, Cooke Aquaculture USA, Inc. applied to the Department of Marine Resources (DMR) to renew the aquaculture lease SWAN BI for a period of 20 years. The 15-acre lease is issued for the culture of Atlantic salmon (*Salmo salar*), Atlantic cod (*Gadus morhua*), haddock (*Melanogrammus aeglefinus*), Atlantic halibut (*Hippoglossus hippoglossus*) and blue mussels (*Mytilus edulis*) using net pen culture techniques. The site is located to the west of Black Island in the Town of Frenchboro in Hancock County. This lease was initially issued on March 15, 1999 and subsequently renewed on May 27, 2009.

In 2021, Cooke Aquaculture USA, Inc. also applied to DMR to renew the aquaculture lease SWAN BIS for a period of 20 years. The 38.5-acre site is issued for the culture of Atlantic salmon, halibut, Arctic char (*Salvelinus alpinus*), Atlantic cod, and blue mussels using net pen culture techniques. The site is located to the west of Black Island in the Town of Frenchboro in Hancock County. The lease was initially granted on March 21, 2011.

Both sites are in the same municipality, are ~1,000 feet apart, and are authorized for similar operations. In addition, each site received the requisite number of requests for a public hearing during the respective comment period for each proposal. Therefore, DMR held one renewal hearing to take evidence and testimony on each application.<sup>1</sup> The following decision is specific to SWAN BI, but references may be made to SWAN BIS as necessary.<sup>2</sup>

#### **I. PROCEDURE**

Notice of the completed renewal application and the 30-day public comment period and opportunity to request a public hearing was published in the *Bangor Daily News* on October 29, 2019. Notice was also provided to riparian landowners

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<sup>1</sup> A hearing for SWAN BI was not held until 2021 due to the pandemic, which impacted DMR's ability to hold lease proceedings. There were also several proposals ahead of SWAN BI that needed to have hearings scheduled. By the time a hearing could be scheduled for SWAN BI, DMR had processed SWAN BIS, which also needed a hearing, so it made sense to schedule a single hearing on both renewal requests.

<sup>2</sup> A separate decision for the SWAN BIS renewal was processed at the same time as the SWAN BI decision.

within 1,000 feet of the site, the municipality and other state agencies. Notice was sent to subscribers of DMR's aquaculture email list-serve. During the comment period, DMR received more than five requests to hold a public hearing on the renewal request.

In accordance with 5 M.R.S.A. § 9052-A, state agencies must strive to hold a hearing in the area or areas of the State which are significantly affected by the application or which are concerned about the issue. In general, DMR tries to hold hearings in the municipality where the proposal or site is located. The Town of Frenchboro can only be accessed by ferry, which operates on a limited schedule. Given the logistical challenges associated with holding the hearing on the island, an in-person public hearing was scheduled for November 8, 2021 at the Southwest Harbor Fire Station with a remote option available for residents of Frenchboro.

Notice of the public hearing was published in the October 8 and 23, 2021 editions of the *Bangor Daily News*. Notice was also provided to the municipality, riparian landowners within 1,000 feet of the site and other state agencies. Notice was provided to subscribers of DMR's aquaculture email list-serve and published in the Maine Lobstermen's Association's event calendar. The hearing notice required persons who wanted to provide testimony or ask questions of the applicant to register to participate in the proceeding by 5:00 p.m. on October 24, 2021. Several individuals registered to participate in the proceeding by the specified deadline.

The notices also indicated that applications to intervene needed to be received by 5:00 p.m. on October 24, 2021. Crystal Canney with Protect Maine's Fishing Heritage Foundation (PMFHF) emailed DMR on October 24, 2021 requesting that her organization be registered for intervenor status. On October 25, 2021, DMR clarified that applications for intervenor status needed to be received by the specified deadline, not requested. However, DMR allowed PMFHF to apply for intervenor status, but specified that the application needed be received no later than 5:00 p.m. on October 25, 2021. PMFHF applied for intervenor status in accordance with the extended deadline.

On October 26, 2021, DMR issued a letter to PMFHF denying their request for intervenor status in the proceeding. The intervenor application did not include any specific details about how lobstermen and women who fish within the area would be substantially and directly affected by the leases if they were renewed. The other interests raised in the application, including protecting the environment and salmon, were not particularized to PMFHF.

October 27, 2021, DMR issued a Procedural Order and letter to individuals who had registered to participate by the specified deadline. The Procedural Order contained the names of persons who had registered to participate in the proceeding. On October 28, 2021, DMR received an email from Crystal Canney indicating that two individuals were not listed as participants and that the individuals were persons she had attempted to register. The following day, DMR responded to Ms. Canney and clarified that any person who needed assistance with the registration form should have contacted DMR as instructed in the applicable notice.

DMR cannot guarantee that a person is registered if they do not contact the agency and instead rely on an outside organization to register them, as what

appeared to happen in this case. DMR allowed the two persons to participate in the proceeding because they both assumed that they had been successfully registered.

The Procedural Order issued on October 27, 2021, required Cooke Aquaculture USA, Inc., and registered participants, to prefile proposed exhibits by 12:00 p.m. on November 3, 2021. The applicant, PMFHF and registered attendee Kathleen Rybarz submitted pre-filings. DMR reviewed the pre-filings and noted that three of Ms. Rybarz’s proposed exhibits, labeled #3-5, were hyperlinks to articles or documents.

On November 4, 2021, DMR notified Ms. Rybarz that hyperlinks to websites are not evidence because DMR could not discern what specific materials the hyperlinks were referencing. DMR gave Ms. Rybarz until 12:00 p.m. on November 5, 2021 to provide copies of the relevant documents or materials from those hyperlinks for admission into the administrative record. DMR further specified that if materials were not received by the deadline, the agency would only consider proposed exhibits 1 and 2. Ms. Rybarz responded to DMR’s clarification and indicated that she would submit the materials by the extended deadline. However, Ms. Rybarz did not submit materials by the deadline. Therefore, DMR only considered Rybarz pre-filings 1 and 2. Rybarz pre-filing 2 was an image titled ‘Protect Maine Photo 2021-8-28’ and appeared to be the same image that PMFHF had pre-filed with the label “Gott’s Pitt, Tremont.” Given the similarity between images, DMR only accepted Rybarz pre-filing 1 as an exhibit, which was a screen shot from Facebook.

The hearing was held as scheduled on November 8, 2021 at the Southwest Harbor Fire Station. The following persons provided testimony:

| <b>Name</b>   | <b>Affiliation</b>                 |
|---|------------------------------------|
| Jennifer Robinson, Frank Lank, and Russell Sprague  | Cooke Aquaculture USA              |
| Marcy Nelson  | Director, Aquaculture Division     |
| Crystal Canney (PMFHF), Jerilyn Bowers, Jim Hanscom, Hannah Whalen, James West, Zach Piper (PMFHF), Don Eley, and Tom Adamo | Members of the Public <sup>3</sup> |

Ms. Robinson and Messrs. Lank and Sprague described the aquaculture activities conducted over the previous lease term and operations at the sites. Mrs. Nelson described DMR’s site visit on November 3, 2021 and played a video of the bottom of each site, taken on that date. Mrs. Nelson also explained some of the

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<sup>3</sup> Members of the public who registered to testify by the deadline were given five minutes to present testimony. Messrs. Eley and Adamo (along with several other persons) did not register by the specified deadline and, before the hearing, indicated that they were unaware of the registration requirement or took exception to the requirement even though the requirement and the justification for registration were included in the notice. The Hearings Officer allowed them to testify and allotted them three minutes to provide their remarks. DMR extended that opportunity to the other persons who contacted DMR before the hearing, but Messrs. Eley and Adamo were the only ones who elected to provide testimony.

permitting and reporting requirements for finfish aquaculture sites. Members of the public raised concerns about the possible renewal of the lease sites and asked several questions of Cooke representatives and Mrs. Nelson. The Hearings Officer for the proceeding was Amanda Ellis.

The evidentiary record before DMR includes the following exhibits:

| Number: | Description:   | Submitted by:          |
|---------|--|------------------------|
| 1       | PowerPoint Presentation                                    | Cooke Aquaculture, USA |
| 2       | Image labeled "Gott's Pitt, Tremont" dated August 28, 2021 | PMFHF                  |
| 3       | MEDEP email from August 31, 2021                           | PMFHF                  |
| 4       | Screen shot from Facebook                                  | Kathleen Rybarz        |
| 5       | Case file for SWAN BI                                      | DMR                    |
| 6       | Case file for SWAN BIS                                     | DMR                    |

**II. STATUTORY CRITERIA**

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

**A. Aggregate lease holdings<sup>4</sup>**

Cooke Aquaculture USA, Inc holds the lease sites listed below. Including SWAN BI, the total acreage of these sites is 634.23 acres.

| DMR LEASE SITE ID | ACREAGE |
|-------------------|---------|
| COB BC            | 44.95   |
| COB BP            | 33.03   |
| COB CC            | 15.42   |
| COB DC            | 25.14   |
| COB HP            | 9.97    |
| COB JK            | 22.02   |

<sup>4</sup> DMR now calculates acreage using mapping software and is in the process of updating lease documents to reflect this new, highly accurate method. As a result of this new calculation method, the acreage listed in Section 2.A may be slightly different than the acreage listed in the respective lease documents. The acreage listed in each executed lease document are as follows: COB BC: 45, COB BP: 33, COB CC: 15, COB DC: 25, COB HP: 10, COB JK: 22, COB LU2: 32.14, COB MI2: 30, COB PC: 26.5, COB RN2: 32.14, COB SB: 31.88, COB TE: 15, COB TW: 15, EASTW CALF: 28, EASTW SCN: 10, EASTW SI: 10, MACH CI2: 44.7, MACH CIN: 35, MACH CW2: 35 MACH II: 40, MACH LI: 20, MACH ST: 10, SWAN BI: 15, SWAN BIS: 38.5, SWAN HS: 18.83.

|                       |                     |
|-----------------------|---------------------|
| COB LU2               | 32.13               |
| COB MI2               | 29.95               |
| COB PC                | 26.49               |
| COB RN2               | 32                  |
| COB SB                | 31.78               |
| COB TE                | 15.19               |
| COB TW                | 14.98               |
| EASTW CALF            | 28.02               |
| EASTW SCN             | 9.99                |
| EASTW SI              | 9.92                |
| MACH CI2              | 44.68               |
| MACH CIN              | 34.88               |
| MACH CW2              | 34.48               |
| MACH II               | 39.96               |
| MACH LI               | 20.09               |
| MACH ST               | 10.04               |
| SWAN BI               | 14.97               |
| SWAN BIS              | 38.54               |
| SWAN HS               | 15.61               |
| <b>TOTAL ACREAGE:</b> | <b>634.23 Acres</b> |

No evidence or testimony was provided at the public hearing to indicate that the renewal of this lease would cause Cooke Aquaculture USA, Inc to hold more than 1,000 acres.

**Therefore, I find** that the renewal of this lease will not cause Cooke Aquaculture USA, Inc to hold more than 1,000 acres.

**B. Speculative purposes**

Chapter 2.45(2)(A) of DMR’s regulations provides that in determining whether a renewal is being conducted for speculative purposes, DMR must consider “whether the current lessee has conducted substantially no research or aquaculture in the lease areas during the previous lease term.” The renewal application indicates that aquaculture activities occurred on the site during the previous lease term, which is consistent with the testimony Cooke representatives provided at the public hearing. It is also consistent with a review of Department records, which indicate aquaculture activities occurred on the site during the previous lease term. No evidence or testimony was presented at the public hearing that alleged the renewal was being conducted for speculative purposes.

**Therefore, I find** that the lease is not being held for speculative purposes.

**C. Best interest of the State of Maine**

In determining whether it is in the best interest of the state to renew a lease, DMR 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. At the public hearing, much of the testimony focused on this criterion. Some persons referenced commercial fishing, but most of the proceeding focused on a dissolved-oxygen event that resulted in a salmon mortalities. The sections that follow include relevant testimony specific to those issues.

### **1. Commercial Fishing:**

During the public hearing, Ms. Robinson, Compliance Officer for Cooke Aquaculture, testified that lobster fishing is permitted within the boundaries of the lease site. Russell Sprague, Site Manager for SWAN BI and BIS, Cooke Aquaculture, testified that the frequency of lobster fishing activity on the sites is heaviest from June to August. During this period there are 30 to 50 lobster traps deployed within the boundaries of each site.

Jim Hanscom, a fisherman, testified that 30 to 50 traps was not a significant number and speculated that there are no lobsters within the boundaries of the lease sites. Mr. Hanscom generally felt that environmental conditions around net pen sites do not support aquatic life. Zach Piper<sup>5</sup>, a fisherman, testified that he fishes for scallops in the general area. Mr. Piper dove for scallops near the site during fall 2020 and testified that he did not see a significant number of scallops. Mr. Piper testified that it was the first year he had dived in that area.

### **2. Dissolved Oxygen Event:**

In August 2021, a low oxygen event at the sites resulted in the mortality of 115,819<sup>6</sup> near market sized or market sized salmon.<sup>7</sup> During the public hearing, Ms. Robinson described what occurred at the sites in August. Ms. Robinson testified that personnel are on each of the sites seven days a week unless a storm prevents them from accessing the area. Mr. Sprague first recorded low oxygen levels at the sites on or around August 10, 2021. On August 10, 2021 the oxygen reading within a sampled pen was 6.2 mg/L.<sup>8</sup> On Saturday, August 14, 2021 and Sunday, August 15, 2021 some of the crew began observing what Ms. Robinson characterized as abnormal fish behavior. The oxygen reading within that pen on August 14, 2021 was 5.2 mg/L and on August 15, 2021 the level had dropped to 4.9 mg/L.

Abnormal fish behavior observations were reported, on August 16, 2021, to Mr. Sprague, who, that same day, dived a few of the pens and observed some mortalities. Mr. Sprague conducted another dive on August 17, 2021 to ascertain the full extent of the mortalities. Beginning August 18, 2021 through August 27, 2021, Cooke Aquaculture removed the mortalities and then focused on harvesting the

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<sup>5</sup> Mr. Piper is also the President of PMFHF's executive board.

<sup>6</sup> CF: Memorandum from MEDEP dated September 23, 2021. Mortalities at Black Island (SWAN BI) totaled 28,212 and mortalities at Black Island south (SWAN BIS) totaled 87,607.

<sup>7</sup> Although the leases authorize the culture of other species, only salmon were being cultivated on the sites.

<sup>8</sup> Cooke is not required to take oxygen readings within the pens. However, Cooke submitted readings within the pens to DMR. The readings are part of the case file.

remaining fish from the sites.<sup>9</sup> Ms. Robinson noted that the mortalities represented approximately 12% of the salmon that were being raised on SWAN BI and BIS.

Ms. Robinson testified that there are no legal requirements to report a mortality event.<sup>10</sup> However, she contacted DMR on August 23, 2021 to report the event, because she felt that low oxygen is related to fish health. DMR monitors fish health and implements regulations intended to protect aquatic animal health. On August 25, 2021, Ms. Robinson notified other agencies about the event including the U.S. Department of Agriculture and U.S. Department of Fish and Wildlife. She contacted these agencies as they also manage fish health. Ms. Robinson also notified the Maine Department of Environmental Protection (MEDEP) on August 27, 2021.

Ms. Robinson testified that, based on Cooke's analysis, it is likely that the low oxygen event was attributable to environmental conditions not management practices at the sites (Bowers/Robinson). Ms. Robinson indicated that water temperatures were much higher than normal, which can reduce the level of dissolved oxygen in the water. In consideration of the low oxygen event, Ms. Robinson testified that Cooke Aquaculture is exploring aeration or providing supplemental oxygen, so that mortalities may be avoided should a similar event occur in the future.

Following the mortality event, Marcy Nelson, Aquaculture Division Director and Marine Scientist visited each site. During the site visits, which occurred on November 3, 2021, DMR took nine videos of each of the sites, which recorded bottom conditions.<sup>11</sup> The videos were taken to determine if there had been any substantial benthic impacts associated with the mortalities and to gauge the condition of the sites after a production cycle. Visiting a site after a full production cycle can help assess the degree of nutrient enrichment within the area.

Mrs. Nelson noted that too much nutrient enrichment can lead to anoxic sediment, which can be detrimental to marine life. Mrs. Nelson played the videos and testified that she did not observe any anoxic sediments or gassing. As the videos showed and Mrs. Nelson described, a variety of marine organisms were observed on the bottom of the sites and beneath the net pens. Documented and observed organisms included crabs (*Cancer borealis*), burrowing anemones, and sea stars.

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<sup>9</sup> During cross-examination, Frank Lank clarified that a small harvest (~10,000 to 12,000) of some market sized salmon occurred the second week of August, prior to the die off event.

<sup>10</sup> During cross-examination, Ms. Robinson clarified that there is no requirement to report mortalities unless they are confirmed as being disease related. Ms. Robinson noted that fish health testing occurred at the sites on July 29, August 25, and August 30. A veterinarian visited the site during the mortality event.

<sup>11</sup> Mrs. Nelson testified that DMR tried to visit the sites earlier, but a significant storm precluded staff from visiting the area before November 3, 2021. Mrs. Nelson also clarified if the site visit occurred in August 2021 (during or shortly after the die-off), it would not have provided an indication of how that event may have impacted the bottom conditions, because the die-off would not have had an immediately noticeable impact on the area. Waiting a few months until after the event provides a better opportunity to visually assess how the area responded to the event. The videos were taken in locations up to 30 meters north and south of the cages to reflect the MEDEP permit sampling locations and directly underneath a sample of pens to visually assess the condition of the bottom and marine organisms under the pens. Marine Patrol visited the site on August 25, 2021 to observe the harvesting of mortalities. This occurred the day after DMR was notified of the event.

Mrs. Nelson testified that she also observed a pollock (*Theragra chalcogramma*) swimming through the south end of the one of the sites. Visual observations of the sites did not show signs of substantial benthic impacts or nutrient enrichment.<sup>12</sup>

Mrs. Nelson was asked to clarify the difference between a disease related event and what happened in August 2021 (Ellis/Nelson). Mrs. Nelson explained that a disease related event on a salmon farm will usually not result in abrupt mortalities over a very short period of time like those that occurred in August 2021. Disease related mortalities would likely be more gradual and prolonged as the disease moved through the population. In this case, the mortality event was sudden and limited to 12% of the total population.

Mrs. Nelson noted that what happened in August 2021 was similar to a “super chill” event that occurred in Maine, in either 2003 or 2004. During the super chill event water temperatures plummeted to levels that were lethal for salmon, resulting in an abrupt mortality event like what occurred in August 2021.<sup>13</sup> Mrs. Nelson noted that these types of events are rare and reiterated that Cooke Aquaculture, in accordance with current rules, did not have to report to DMR the August 2021 event as it was not disease related.

Mrs. Nelson also described some of the permitting requirements for net pen sites such as SWAN BI and BIS. To culture salmon or other finfish using net-pens Cooke Aquaculture USA must obtain a lease from DMR, along with other associated permits, including stocking and vessel permits. Cooke Aquaculture USA is also subject to regular biosecurity audits and monthly screening for Infectious Salmon Anemia Virus (ISAv). Many of the permits and protocols under DMR’s jurisdiction are intended to protect aquatic animal health and the environment, among other requirements and considerations as specified in DMR’s rules and laws.

Mrs. Nelson clarified that permits are also required from other state and federal agencies, including MEDEP, which conducts all benthic monitoring for net pen finfish leases through delegated authority under the Clean Water Act.<sup>14</sup> A permit is also required from the U.S. Army Corps of Engineers, whose permitting process includes but is not limited to consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

Members of the public who offered testimony cited the die-off as the reason why the leases should be not be renewed. Some members of the public felt that the die-off event violated Chapter 2.75(2) of DMR’s regulations, which specifies that a lease holder must maintain the site in a manner that avoids the creation of a public or private nuisance and substantial injury to marine organisms. Some persons who offered testimony also suggested that the die-off event was evidence of Cooke Aquaculture’s inability to maintain the sites and comply with applicable regulations.

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<sup>12</sup> Mrs. Nelson did note that MEDEP also collects benthic samples as part of their permit monitoring, which are less subjective than video.

<sup>13</sup> Super chill occurs when water temperatures drop below a level that salmon can survive. The comparison was meant to demonstrate that environmental conditions can lead to a sudden mortality event.

<sup>14</sup> Prior to 2001, DMR conducted this monitoring, but authority shifted to MEDEP.



Citing emails exchanged between DMR staff on August 23 and 24, 2021<sup>15</sup>, and MEDEP staff on August 31, 2021, Ms. Canney implied that Cooke's management practices either caused or contributed to the mortality event. These emails, which Ms. Canney obtained through a Freedom of Access Act request, note that the mortalities were the result of a lack of oxygen. The emails speculate that the low oxygen levels may have been caused by fouling on the net pens. The emails indicate that nets are typically cleaned every six weeks but suggest that cleanings may have been occurring every two weeks.<sup>16</sup> The emails indicated that fouling had been heavier than normal, and with limited staffing available crews were diverted from cleaning pens to harvesting fish.<sup>17</sup> MEDEP noted that several inspections of the sites have occurred in the past and nothing out of the ordinary was observed (Exhibit 3).

On September 29, 2021, DMR received a memorandum (memo) from MEDEP outlining their enforcement summary.<sup>18</sup> According to MEDEP's memo, Cooke Aquaculture submitted daily dissolved oxygen readings, which were collected between July 1, 2021 and August 31, 2021. The readings were taken in the 30-meter mixing zone outside of the net pens at each site.<sup>19</sup> Cooke Aquaculture is not required to take or track measurements inside the pens. Per the MEDEP permit, minimum required dissolved oxygen levels within the mixing or sampling area are 6.0 mg/L.

Between July 1, 2021 and August 31, 2021, the lowest level of dissolved oxygen was recorded on August 10, 2021. The reading for that day was 6.5 mg/L, which was within permit limits. A subsequent reading conducted on August 13, 2021 indicated levels were at 6.9 mg/L. Readings taken that weekend (August 14-15, 2021) indicated levels at 9.0 and 8.4 mg/L. When mortalities were discovered on August 16, 2021, the readings within the mixing zone at both sites were 8.1 mg/L.

Pen densities reported to MEDEP from June 2021 through August 2021 were within permitted limits. MEDEP also conducted an inspection of the site on August 31, 2021 and did not find evidence to suggest excessive fouling of the net pens.<sup>20</sup> MEDEP concluded that there were no violations of the Clean Water Act or violations of permits under their jurisdiction.

### **3. Discussion:**

#### **a. Conflict with New or Existing Uses**

The Commissioner must consider the potential for conflict with 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. No evidence was presented to suggest that new uses of the area had emerged over the previous term, or that any

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<sup>15</sup> The emails were screen shared during the public hearing, so persons participating remotely, and in-person could see them.

<sup>16</sup> CF: email from M. Nelson to M. Mendelson and P. Keliher indicate that net cleaning typically occurs every 6 weeks, but fouling had been heavier than normal. Exhibit 3, which is an email exchanged between MEDEP staff suggest that net pen cleaning was occurring every two weeks.

<sup>17</sup> CF: email from M. Nelson to M. Mendelson and P. Keliher dated August 24, 2021.

<sup>18</sup> The memo is part of the case file for both sites and is dated September 23, 2021. This is the only memo referenced in the decision.

<sup>19</sup> This is a summary of DEP's memo. The oxygen levels in the mixing zone, where Cooke is required to take readings, differ from oxygen levels in the pens where the fish are kept.

<sup>20</sup> The memo indicates that net pens were cleaned on August 27, 2021.

possible new use of the area would conflict with existing operations. Therefore, conflict with new uses is not contemplated as part of this decision. However, commercial fishing is an existing use of the area that was also contemplated in the decision that initially granted SWAN BI. During the renewal proceeding, some individuals also testified about fishing in the area.

SWAN BI is conditioned so that lobster and scallop fishing are permitted within the open areas of the sites. Cooke Aquaculture testified that lobster fishing occurs within the boundaries of the site and some fishermen testified that they have fished within the general area. The fishermen who offered testimony felt that the proposed operations had a detrimental impact on lobster populations and other marine organisms. Mr. Hanscom speculated that lobsters are not being caught within the boundaries of the lease site due to poor environmental conditions.

The lease decision that initially granted SWAN BI found that the site would not unreasonably interfere with commercial fishing activities, including lobster and scallop fishing. The record in the renewal proceeding, demonstrates that commercial fishing activities have continued to occur both around and within the lease area. While some participants speculated that operations at SWAN BI were having adverse impacts on marine organisms there was no evidence presented to suggest that is the case. Video analysis conducted by DMR indicated that there were no signs of substantial benthic impacts or nutrient enrichment. Greater impacts were observed directly under the pens versus within the mixing zone. MEDEP's permit allows for some level of impact, which would be expected with any operation of this type. These types of impacts are generally localized and temporary. DMR documented several marine organisms within the boundaries of the lease site and underneath the pens.

#### **b. Dissolved Oxygen Event:**

The Commissioner may consider other factors in determining whether renewing the lease site is within the best interest of the state. Most of the testimony at the public hearing was specific to the August 2021 dissolved oxygen event.

DMR science staff noted that these types of events are rare and very abrupt. In the cases that DMR staff could recall, they have been caused by higher or lower than normal water temperatures, which often persist for a short length of time. In this case, it is likely that a combination of factors, including higher than normal water temperatures<sup>21</sup>, decreased the amount of dissolved oxygen in the water, which led to the mortality of 28,212 market-sized salmon cultured on SWAN BI.

Natural occurrences like an increase in water temperature may impact site operations. The record indicates that the frequency of net pen cleaning may have increased as equipment fouled more quickly. Crews were diverted from cleaning to harvesting finfish. Shortly after receiving reports of the mortality event, it was speculated that fouling may have also contributed to the mortalities. While it is possible that fouling increased during this period, MEDEP did not find evidence of excessive fouling or that there were any violations of their permit.

Cooke representatives testified that the same day the site manager received

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<sup>21</sup> Cooke testified that the water temperatures were higher than normal.

reports of abnormal fish behavior, he dived the pens. During that dive and a subsequent dive, he observed increased mortalities. Once the scale of the mortalities had been determined, the lease holder took immediate action to address the issue. This included diverting staff from cleaning pens to removing mortalities and then harvesting fish from the sites. The lease holder also arranged to have the mortalities taken to a composting facility and elected to report the mortalities to state and federal officials.

In summary, testimony indicated that these types of events are rare and typically the result of natural occurrences, which may cause temporary changes to how sites are managed as lease holders respond to the issue. Cooke Aquaculture took measures to mitigate the mortality event, which MEDEP investigated as part of ensuring compliance with their permit. MEDEP did not find any violations of the permit or Clean Water Act. As DMR staff noted, the event was not disease related, Cooke's reporting to DMR was voluntary and there were no signs of resultant substantial benthic impacts or nutrient enrichment. This lease was initially issued on March 15, 1999 and subsequently renewed on May 27, 2009. The site has been operated for more than 20 years and based on DMR's records this is the first time such a mortality event has occurred on the site.

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

#### **D. Compliance with DMR's lease agreement**

Some members of the public testified that SWAN BI should not be renewed because Cooke Aquaculture has not complied with DMR's lease agreement. For example, Don Eley, President, Friends of Blue Hill Bay, testified that MEDEP has cited Cooke Aquaculture on numerous occasions for violations at both SWAN BI and SWAN BIS. Mr. Eley did not specify what provisions of DMR's lease agreement that Cooke Aquaculture had allegedly violated or what nexus the MEDEP violations had with DMR's lease agreement.

In accordance with Chapter 2.75(2) of DMR's regulations, lease holders must maintain the site in a manner that avoids the creation of a public or private nuisance and to avoid substantial injury to marine organisms. Some of the individuals who offered testimony felt that the lease should not be renewed because it violated Chapter 2.75(2). There is no evidence to indicate that the lease has been regularly operated in a manner that created a public or private nuisance or that it resulted in substantial injury to marine organisms.

The dissolved oxygen event described in Section II (C) was likely the result of a natural occurrence. The lease holder took reasonable measures to try to mitigate and address the mortalities. The lease holder arranged to have the mortalities taken to a composting facility. Video analysis conducted by DMR indicated that there were no signs of substantial benthic impacts or nutrient enrichment as a result of this event.

Based on a review of the record, DMR has determined that Cooke Aquaculture has complied with the lease agreement for SWAN BI. Furthermore, the site has not been operated in a manner that created a public or private nuisance or substantial injury to marine organisms.

**Therefore, I find** that the applicant has complied with the lease agreement during its term.

### **III. LEASE CONDITIONS**

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

- a) The lease area shall be marked in accordance with U.S. Coast Guard and Department of Marine Resources requirements.
- b) Lobster fishing and scallop diving are allowed in the open areas of the lease site.
- c) Fish processing at the site is prohibited; processing does not include the cutting of the gill and bleeding of the fish.
- d) Atlantic cod, haddock, and Atlantic halibut raised at the site shall originate from northwest Atlantic stock.
- e) A storm anchorage mooring must be placed within the southwest corner of the lease, or, if outside the lease boundaries, a mooring must be placed in compliance with the Habormasters Act for the Doering family, who are riparian landowners on Black Island and were intervenors in the original lease proceeding in 1999.<sup>22</sup>
- f) The work barge dimensions shall not exceed 30 x 60 feet and 10-12 feet in height.

If the lease is renewed, condition “a” will be removed from the lease agreement. Chapter 2.80 of DMR’s regulations specify how a lease site must be marked. In addition, lease agreements require compliance with DMR’s marking requirements.

This site is authorized for the cultivation of and blue mussels (*Mytilus edulis*) and as previously noted was jointly processed with SWAN BIS, which is also authorized for mussel cultivation. The original decision for SWAN BIS had a condition specific to mussel harvest, whereas SWAN BI has no conditions specific to mussel harvest. SWAN BI was initially issued in 1999 prior to the issuance of SWAN BIS in 2011 and during the initial proceedings for SWAN BI there were no concerns raised regarding the possible culture of mussels. In addition, rules and practices governing the harvest of shellfish have evolved since the site was initially issued and most recently renewed.

The harvest of shellfish from any lease site needs to comply with the National Shellfish Sanitation Program (NSSP), which is a federal/state partnership recognized by the U.S. Food and Drug Administration and Interstate Shellfish

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<sup>22</sup> No representatives from the Doering family participated in the lease renewal proceeding.

Sanitation Conference. The NSSP provides for the sanitary control of shellfish produced and sold for human consumption.

It is possible that mussels could be cultured simultaneously with finfish or before or after finfish culture and harvest cycles. Finfish operations may include the use of certain therapeutants, which may have implications for shellfish and persons consuming associated shellfish. Finfish sites are also operated differently from shellfish only sites, so there may be other considerations in addition to the possible use of therapeutants.

Given public health considerations, if the lease is renewed, a condition will be added so the lease holder will need to obtain written authorization from the Bureau of Public Health prior to harvesting any mussels for human consumption. This would allow the Bureau of Public Health to ensure that the harvest of mussels for human consumption complies with the provisions of the NSSP. It is recommended that the lease holder discuss their plans to culture mussels for human consumption, with DMR's Bureau of Public Health, prior to undertaking those activities. This would allow the lease holder and Bureau of Public Health to discuss any concerns in advance of mussels being deployed and cultured on the site, including establishing testing protocols if applicable.

If mussel culture occurs on the lease site and subsequent harvest is for human consumption, it is recommended that the holder contact the Bureau of Public Health about their harvest plans several months in advance. This would give the Bureau an opportunity to review the use of any therapeutants, if applicable, in the months prior to a possible harvest. It would also allow for any follow-up and the submission of any additional information requested by the Bureau, including possible testing. Since the condition would require written authorization prior to harvest, these recommendations do not need to be included as part of the condition but are described here for reference. If the lease is granted, a new condition will be added:

The lease holder must obtain written authorization from DMR's Bureau of Public Health prior to harvesting mussels for human consumption.

#### **IV. DECISION**

The Commissioner grants the application of Cooke Aquaculture USA, Inc. to renew the aquaculture lease SWAN BI for a period of twenty years. 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.

#### **V. 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.

#### **VI. DATE AND SIGNATURE**

Dated:

6/28/22



Patrick C. Keliher, Commissioner,  
Department of Marine Resources

**STATE OF MAINE**  
**DEPARTMENT OF MARINE RESOURCES**  
Aquaculture Lease Transfer Application

**SWAN BI**  
Island Aquaculture Corp, Transferor  
Phoenix Salmon US Inc. to be renamed  
Cooke Aquaculture USA, Inc., Transferee  
Docket # 2010-36T  
May 3, 2011

## **FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION**

### **1. THE PROCEEDINGS**

On September 22, 2010, the Department of Marine Resources (“DMR”) received an application from Island Aquaculture Corp. to transfer to Phoenix Salmon US Inc. to be renamed Cooke Aquaculture USA, Inc., Transferee, its 15-acre aquaculture lease SWAN BI, located off Black Island, a portion of the coastal waters of the State of Maine situated in the Town of Frenchboro in Hancock County. The lease was originally granted on March 15, 1999 and renewed on March 15, 2009 for a period of ten years for the purpose of net pen culture of Atlantic salmon (*Salmo salar*), haddock (*Melanogrammus aeglefinus*), Atlantic cod (*Gadus morhua*), Atlantic halibut (*Hippoglossus hippoglossus*), and suspended culture of blue mussels (*Mytilus edulis*). The current lease expires on March 14, 2019.

The transfer application was accepted as complete on October 29, 2010. The Department mailed a notice of the application and of the 14-day comment period to all riparian owners, the Town of Frenchboro, the general mailing list of interested persons, and the following reviewing agencies: U.S. Army Corps of Engineers, U.S. Coast Guard, National Marine Fisheries Service, Maine Dept. of Inland Fisheries & Wildlife, Maine Dept. of Conservation, and DMR Marine Patrol. A notice of the application and comment period was published in the *Mt. Desert Islander* on December 30, 2010. One comment was received. The state representative for Frenchboro asked about potential water quality issues arising from operations at the lease site. The Department explained the discharge permit and monitoring requirements, and the commenter replied that it seemed to him “like a reasonable monitoring process”.

### **2. STATUTORY CRITERIA & FINDINGS OF FACT**

Lease transfer requests are governed by 12 M.R.S.A. §6072 (12-A) (B) (1) and DMR Rule 2.60. They provide that the Commissioner of DMR may grant a transfer if s/he determines 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**

Phoenix Salmon US Inc. (“Phoenix” or “Transferee”) is a Maine corporation incorporated on May 5, 2005. Phoenix has undertaken to merge its corporate existence with the Transferor (the “Merger”) and upon completion of the Merger will be the surviving corporate entity and will operate the merged company and this lease. Upon completion of the Merger, Phoenix will change its corporate name to Cooke Aquaculture USA Inc. Phoenix is a wholly-owned subsidiary of True North Salmon US Inc., which in turn is owned by Cooke Aquaculture of Blacks Harbour, New Brunswick, Canada.

Phoenix currently operates eight other aquaculture leases in its own name (COB BC, COB BP, COB DC, COB MI2, COB SB, MACH CI2, MACH CIN, and MACH CW2) and numerous other leases through other subsidiary and affiliate corporations. Phoenix has extensive experience in finfish aquaculture and is well-acquainted with Maine’s aquaculture laws and rules. The Department is familiar with the company’s Maine management team and with its financial capability and technical capacity, which it has reviewed favorably in the past year in connection with two aquaculture lease applications, MACH CI2, granted in 2010, and SWAN BIS, granted in 2011.

According to the transfer application, Phoenix plans no changes in the aquaculture activities taking place on this lease. The lease site will be managed in the same way as before the transfer; only the name of the lessee will change.

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 MRSA §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 MRSA §6072 (8).

**C. Speculative Purposes**

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.” It is clear from annual reports filed with DMR by Transferor that aquaculture has been conducted on this lease 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, the total lease acreage held by Transferee, with this lease included, will not exceed 1,000 acres.

**THEREFORE, I FIND** that 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.

**3. CONCLUSIONS OF LAW**

Based on the above findings, I conclude that:

1. The change in the identity of the lessee does not violate any of the lease issuance criteria set forth in 12 MRSA §6072 (7-A);
2. The lease transfer is not intended to circumvent the preference guidelines for treatment of competing applications as set forth in 12 MRSA §6072 (8);
3. The lease transfer is not for speculative purposes; and
4. 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 MRSA §6072 (12-A) (B) (1) and by DMR rule 2.60, this lease transfer may be granted.

**4. DECISION**

Based on the foregoing, I grant the requested transfer of the aquaculture lease SWAN BI from Island Aquaculture Corp. to Phoenix Salmon US Inc. I approve the subsequent change of name from Phoenix Salmon US Inc. to Cooke Aquaculture USA, Inc. The lessee will be named in the new lease for this site as “Phoenix Salmon US Inc., to be renamed Cooke Aquaculture USA Inc.” If this lease is subsequently renewed, the lessee’s name will be changed to “Cooke Aquaculture USA Inc.” 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 MRSA §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.

The existing conditions on this lease, which continue in effect after the transfer, are:

1. Lobster fishing and scallop diving are allowed in the open areas of the lease site.
2. Fish processing at the site is prohibited; processing does not include the cutting of the gill and bleeding of the fish.
3. Atlantic cod, haddock, and Atlantic halibut raised at the site shall originate from northwest Atlantic stock. *(The original lease condition required that these fish be raised at the hatchery of Island Aquaculture Corp. on Swans Island. That hatchery no longer exists, so the condition has been modified accordingly.)*
4. A storm anchorage mooring must be placed within the southwest corner of the lease, or, if outside the lease boundaries, a mooring must be placed in compliance with the Harbormasters Act for the Doering family, who are riparian landowners on Black Island and were intervenors in the original lease proceeding in 1999.
5. The work barge dimensions shall not exceed 30 x 60 feet and 10-12 feet in height.
6. The lease area shall be marked in accordance with U.S. Coast Guard and Dept. of Marine Resources requirements.

**6. REVOCATION 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: 5/3/11

/s/ Norman H. Olsen  
Norman H. Olsen  
Commissioner  
Department of Marine Resources