

## STAFF SUMMARY FOR APRIL 18-19, 2018

**5. THE ABALONE FARM KELP HARVEST PLAN UPDATE (CONSENT)****Today's Item**Information Action 

Approve The Abalone Farm, Inc.'s updated five-year kelp harvest plan required for mechanical harvest of kelp.

**Summary of Previous/Future Actions**

- |  |                                 |
|--|---------------------------------|
| • FGC adopted new kelp regulations               | Nov 6, 2013; La Quinta          |
| • FGC received draft kelp harvest plan           | Dec 3, 2014; Van Nuys           |
| • FGC approved kelp harvest plan                 | Feb 11, 2015; Sacramento        |
| • <b>Today approve updated kelp harvest plan</b> | <b>Apr 18-19, 2018; Ventura</b> |

**Background**

New kelp regulations adopted by FGC in Nov 2013 require FGC-approved kelp harvest plans for all mechanical kelp harvest of giant kelp (*Macrocystis pyrifera*) (Sections 165(c)(6) and 165.5(b)(2), T14, CCR). In accordance with the new regulations, The Abalone Farm, Inc. submitted a kelp harvest plan for leasable and open kelp administrative beds, including four leasable beds and four open beds, which FGC approved in Feb 2015 for a period of five years.

Subsequently, the Abalone Farm, Inc. requested to renew its kelp harvesting lease for administrative kelp beds 204 and 207, which FGC is scheduled to approve under Agenda Item 4 (this meeting). An updated kelp harvest plan (Exhibit 1) is proposed to align the plan time period with that of the lease renewal period. DFW reviewed the draft updated plan, determined that it meets all requirements, and recommends approval (Exhibit 2). The aligned timelines of the lease and harvesting plan terms will provide for administrative efficiency.

**Significant Public Comments (N/A)****Recommendation**

**FGC:** Under a motion to adopt the consent calendar, approve The Abalone Farm, Inc.'s kelp harvest plan for a period of five years, as presented in Exhibit 1.

**DFW:** Approve the updated kelp harvest plan as proposed for a five-year period.

**Exhibits**

1. ["Kelp Harvest Plan for The Abalone Farm, Inc.," revised Jan 18, 2018](#)
2. [DFW memo, received Mar 28, 2018](#)

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission adopts the consent calendar, items 3-7.

**Kelp Harvest Plan for The Abalone Farm, Inc.**  
**Revised January 18, 2018**

The Abalone Farm, Inc. (AFI) owns and operates a mechanical kelp harvester for the purpose of harvesting Giant Kelp (*Macrocystis pyrifera*) to use as abalone feed. The kelp harvester, the “Ocean Rose”, is a converted 1968 LCM-6. It is 56 feet long by 15 feet wide, with a gross tonnage of 37 tons. Maximum fuel capacity is 450 gallons. Maximum payload of harvested kelp is 20 tons.

AFI harvests kelp on a weekly basis, typically three times per week if weather conditions allow. Average annual harvest from January 2007 to December 2017 was 2,450 tons per year, or 204 tons per month. Anticipated harvest for the next 5 years is the same.

AFI harvests primarily from 2 leased beds, numbers 204 and 207, located near its facility in Cayucos (see details below). However, these beds often suffer deterioration due to large storms during the winter months, so the Ocean Rose is typically relocated to the Santa Barbara port during the months of January-March, and kelp is harvested from open beds nearby (see details below). However, our kelp harvesting methodology is the same no matter where we are harvesting.

Kelp canopy moves away from the holdfasts with the current. The Ocean Rose harvests the downstream edges of the canopy. The cutter is 8’ wide and removes a swath from the edge of the bed. At the end of each pass, a 180 degree turn is executed in open water in order to minimize damage to the kelp from the boat propellers, and another pass is made in the opposite direction. Areas with a significant amount of Bull Kelp are avoided altogether, as are areas with congregations of sea otters. Kelp harvesting activity is spread amongst the various kelp beds within the CDF&W administrative bed designation. The Ocean Rose seldom visits the exact same area on back to back harvests, thereby minimizing the repetitive harvest of individual kelp plants. After the kelp is cut by the cutting mechanism, it travels up a conveyor belt and falls into a net bag draped in the front of the hold. When the bag is full, which is approximately 1 ton of wet kelp, the net is pursed, lifted with an on board crane, and placed in the back of the hold. A new bag is suspended in the front of the hold, and harvesting resumes until it is full. This process is repeated until the harvest goal is met. Typically, the Ocean Rose harvests 18-20 tons per trip.

Upon returning to port, the kelp is loaded into a Volvo 3-axle crane truck with a waterproof cargo box. The truck is owned and operated by AFI exclusively for hauling kelp. Each bag is individual weighed using a Sherline Suspended Hydraulic Crane scale. The bag is then placed in the cargo hold of the truck. Full capacity of the truck is 12 tons, so two trips are required to completely offload the Ocean Rose. Bag weights are recorded by the skipper of the Ocean Rose, and then submitted to the corporate office of

AFI, located at 5010 Cabrillo Highway, Cayucos, CA. All kelp royalties are then paid monthly by the corporate office.

The Abalone Farm, Inc. has had various licenses and registrations with the CDFW for more than 35 years. The Company has always paid all of the monies owed to the department in a timely manner. I believe this long track record should suffice as evidence of our continuing ability to pay our required fees in the future.

### **Leased Kelp Beds 204 and 207**

AFI leases two kelp “beds” from the CDF&W. All bed descriptions and areas are from the “Informational Digest to the Regulations Governing the Harvest of Kelp and other Marine Algae in California”, published by the CDF&W, April, 2014.

Bed 204 is described as: This bed extends from Pismo Beach Pier to Point San Luis, defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed:  
35° 08.311' N. lat. 120° 38.636' W. long.; 35° 08.259' N. lat. 120° 38.803' W. long.;  
35° 08.259' N. lat. 120° 45.369' W. long.; and 35° 09.600' N. lat. 120° 45.369' W. long.  
Area is 0.72 square miles. Average annual harvest from January 2007 to Dec 2017 was 420 tons, or 35 tons per month. Anticipated harvest for the next 5 years is the same, which would total 2100 tons for the 5 year period. Kelp harvested from Bed 204 is unloaded and weighed on the Harford Pier in Port San Luis, CA.

Bed 207 is described as: This bed extends from Morro Rock to Point Estero, defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted:  
35° 22.161' N. lat. 120° 52.228' W. long.; 35° 22.161' N. lat. 120° 55.921' W. long.;  
thence northwestward along the three nautical mile offshore boundary to 35° 24.609' N. lat. 121° 00.704' W long.; and 35° 27.621' N. lat. 121° 00.173' W. long.  
Area is designated as 1.46 square miles. Average annual harvest from January 2007 to Dec 2017 was 1,538 tons, or 128.2 tons per month. Anticipated harvest for the next 5 years is the same, which would total 7,690 tons for the 5 year period. Kelp harvested from Bed 207 is unloaded and weighed at the South T Pier, Port of Morro Bay, Morro Bay, CA. Bed 207 is the closest kelp to AFI, and to the Port of Morro Bay, and is therefore the preferred harvest location.

### **Open Beds**

Due to the exposed nature of the coastline found in Beds 204 and 207, the kelp canopy is often severely reduced during the winter months as a result of storm activity. In addition, the local harbors can be quite treacherous during this same time. Therefore, AFI often relocates the Ocean Rose to the Port of Santa Barbara during the winter, typically from January through March. During this time we harvest from open beds in the area, remaining clear of Marine Protected Areas. Harvest methodology remains the same as

described above. Kelp harvested in this area is offloaded and weighed at the main wharf in the Port of Santa Barbara, Santa Barbara, CA. Typical beds harvested are:

Bed 20; This bed extends from Rincon Pt. to Loon Pt., defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted: 34° 22.376' N. lat. 119° 28.671' W. long.; 34° 19.818' N. lat. 119° 30.669' W. long.; thence northwestward along the three nautical mile offshore boundary to 34° 21.817' N. lat. 119° 35.552' W. long.; and 34° 24.749' N. lat. 119° 34.600' W. long. Designated area 0.24 square miles. Harvest occurred in six out of the eleven years from January 2007 to Dec 2017. Average annual harvest during that time was 79 tons, or 6.6 tons per month. Anticipated harvest for the next 5 years is the same, which would total 395 tons for the 5 year period.

Bed 21; This bed extends from Loon Pt. to Edgecliff Pt., defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted: 34° 24.749' N. lat. 119° 34.600' W. long.; 34° 21.817' N. lat. 119° 35.552' W. long.; thence westward along the three nautical mile offshore boundary to 34° 21.929' N. lat. 119° 38.626' W. long.; and 34° 24.953' N. lat. 119° 38.415' W. long. Designated area 0.19 square miles. Harvest occurred in four out of the eleven years from January 2007 to Dec 2017. Average annual harvest during that time was 43 tons, or 3.6 tons per month.. Anticipated harvest for the next 5 years is the same, which would total 215 tons for the 5 year period.

Bed 23; This bed extends from the tip of the Santa Barbara Breakwater to the Santa Barbara Lighthouse, defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted: 34° 24.187' N. lat. 119° 41.520' W. long.; 34° 24.187' N. lat. 119° 41.506' W. long.; 34° 24.290' N. lat. 119° 41.266' W. long.; 34° 21.150' N. lat. 119° 40.483' W. long.; thence westward along the three nautical mile offshore boundary to 34° 20.703' N. lat. 119° 44.181' W. long.; and 34° 23.734' N. lat. 119° 43.369' W. long. Designated area 0.10 square miles. Harvest occurred in three out of the eleven years from January 2007 to Dec 2017. Average annual harvest during that time was 5 tons, or .42 tons per month. Anticipated harvest for the next 5 years is the same, which would total 25 tons for the 5 year period.

Bed 25; This bed extends from Rogue Creek (Arroyo Burro) to Hope Ranch Creek, defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted: 34° 24.183' N. lat. 119° 44.590' W. long.; 34° 21.056' N. lat. 119° 45.509' W. long.; thence northwestward along the three nautical mile offshore boundary to 34° 21.626' N. lat. 119° 47.085' W. long.; and 34° 24.875' N. lat. 119° 46.801' W. long. Designated area 0.18 square miles. Harvest occurred in six out of the eleven years from January 2007 to Dec 2017. Average annual harvest during that time was 156 tons, or 13 tons per month. Anticipated harvest for the next 5 years is the same, which would total 780 tons for the 5 year period.

Bed 28; This bed extends from Coal Oil Pt. to the middle of Gato Canyon, defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted: 34° 24.413' N. lat. 119° 52.687' W. long.; 34° 21.675' N. lat. 119° 54.268' W. long.; thence northwestward along the three nautical mile offshore boundary to 34° 24.045' N. lat. 120° 00.375' W. long.; and 34° 26.989' N. lat. 119° 59.304' W. long. Designated area 0.60 square miles. Harvest occurred in six out of the eleven years from January 2007 to Dec 2017. Average annual harvest during that time was 128 tons, or 10.66 tons per month. Anticipated harvest for the next 5 years is the same, which would total 640 tons for the 5 year period.

Bed 17. Leaseable bed, currently unleased. This bed extends from Pt. Dume to Pt. Mugu, defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted: 34° 00.026' N. lat. 118° 48.330' W. long.; 33° 56.897' N. lat. 118° 48.604' W. long.; thence westward along the three nautical mile offshore boundary to 34° 02.348' N. lat. 119° 05.122' W. long.; and 34° 05.136' N. lat. 119° 03.701' W. long. Designated area is 0.62 square miles. Harvest occurred in one out of the eleven years from January 2007 to Dec 2017. Average annual harvest during that time was 1.4 tons, or 0.12 tons per month. Anticipated harvest for the next 5 years is about the same, which would total 7 tons over the 5 year period. Kelp harvested from this bed is off loaded and weighed at Channel Islands Harbor.

Bed 18. Open bed. This bed extends from the mouth of Ventura River to Pitas Pt., defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted: 34° 16.442' N. lat. 119° 18.425' W. long.; 34° 13.835' N. lat. 119° 20.389' W. long.; thence northwestward along the three nautical mile offshore boundary to 34° 16.413' N. lat. 119° 25.172' W. long.; and 34° 19.071' N. lat. 119° 23.379' W. long. Designated area is 0.15 square miles. Harvest occurred in two out of the eleven years from January 2007 to Dec 2017. Average annual harvest during that time was 6.9 tons, or 0.57 tons per month. Anticipated harvest for the next 5 years is about the same, which would total 34.5 tons over the 5 year period. Kelp harvested from this bed is off loaded and weighed at Channel Islands Harbor.

# Memorandum

2018 MAR 28 AM 9:16

Date: March 27, 2018

To: Valerie Termini  
Executive Director  
Fish and Game Commission

From: Charlton H. Bonham  
Director



Subject: **Consent Item for the April 18-19, 2018, Fish and Game Commission Meeting: The Abalone Farm, Inc. Kelp Bed Lease Renewal Request and Updated Kelp Harvest Plan**

The Abalone Farm, Inc. has requested a five year lease renewal of Administrative Kelp Beds (Kelp Bed) 204 and 207, totaling 0.72 and 1.46 square miles, respectively, in San Luis Obispo County for the exclusive harvest of giant kelp (*Macrocystis pyrifera*) to provide food for aquacultured abalone. The Abalone Farm, Inc. is to provide a royalty rate of \$1.71 per ton of wet kelp harvested, as per Section 165.5(c)(2) and (g), Title 14, California Code of Regulations (CCR).

In addition, The Abalone Farm, Inc., submitted a Kelp Harvest Plan (KHP) for leasable beds 17 (Los Angeles and Ventura counties), 20, 21 (Santa Barbara county), 204, 207 (San Luis Obispo County), and open beds 18 (Ventura county), and 23, 25, and 28 (Santa Barbara county) as required by regulations for mechanical harvesters of giant kelp (*Macrocystis pyrifera*) [Sections 165(c)(6) and 165.5(b)(2), Title 14, CCR].

The Department of Fish and Wildlife (Department) has reviewed the application letter, financial capability information, and the KHP in accordance with subsections 165.5(b)(2) through (b)(4) and (c), Title 14, CCR. The Department has determined that the Abalone Farm, Inc. has met the standards necessary for obtaining a lease and recommends the Commission approve leases for Kelp Beds 204 and 207 and the KHP for a five-year period.

If you have any questions regarding this item, please contact Dr. Craig Shuman, Regional Manager of the Marine Region, at (916) 445-6459 or by email at [Craig.Shuman@wildlife.ca.gov](mailto:Craig.Shuman@wildlife.ca.gov).

Attachments

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Valerie Termini, Executive Director  
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