

**CONSERVATION DISTRICT USE PERMIT (CDUP)
HA-3497**

**KEAHOLE POINT LLC
MARICULTURE FACILITY**
Offshore of Unualoha Point, North Kona, Hawai`i

**Management Plan Section 4:
*Reporting Requirements***

**adopted July 2009
amended August 2011**

These requirements shall remain in effect for the full duration of the lease, until amended.

An original copy of all reports shall be provided to the Office of Conservation and Coastal Lands

OPERATIONAL AND EMERGENCY REPORTING PLAN

1. It is incumbent upon the permit holder to always ensure that any work or modifications undertaken at the lease area shall be in full compliance with this Management Plan.
2. The project, including moorings and anchor lines shall remain within the boundaries of the approved lease.
3. No non-native fish species shall be raised on the farm.
4. The approval of Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) shall be obtained prior to any significant modification to the grid mooring system, beyond that described above.
5. The head of DLNR's OCCL shall be notified immediately if any of the following occur:
 - a. Failure of any major component of the mooring system
 - b. Theft of materials or stock from the offshore farm site
 - c. Vandalism to the offshore farm materials or equipment
6. The permit holder shall monitor the condition of the farm site on a daily basis. When weather or surf conditions do not permit physical presence on the farm site, monitoring may be conducted from shore, or by remote camera.
7. The permit holder shall notify the Division of Aquatic Resources of any significant fish escapes (>50) or disease outbreaks.

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WATER QUALITY MONITORING AND REPORTING PLAN

1. The permit holder shall always maintain a current, valid NPDES permit for water quality monitoring and reporting, and shall comply with all requirements of that permit. The NPDES, issued by the State Clean Water Branch, with oversight from EPA, requires regular monitoring of salient water quality parameters. Monitoring methodology, sampling frequency and reporting requirements are all specified in the NPDES permit (Parts A and C, Permit No. HI 0021825, and revisions).
2. All water samples collected for routine water quality monitoring (monthly, quarterly or annual sampling) analysis shall be collected by third parties (contractors other than company employees).
3. Routine water quality monitoring data (monthly, quarterly or annual sampling) shall be made publicly available by posting on the company's web site, and through the DAR office at Honokohau Harbor.

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BENTHIC MONITORING AND REPORTING PLAN

1. The permit holder shall always maintain a current, valid NPDES permit for water quality monitoring and reporting, and shall comply with all requirements of that permit. The NPDES, issued by the State Clean Water Branch, with oversight from EPA, requires regular monitoring of benthic community assemblages. Monitoring methodology, sampling frequency and reporting requirements are all specified in the NPDES permit (Part D, Permit No. HI 0021825, and revisions).
2. Benthic monitoring shall occur at a frequency as specified in the NPDES permit,
3. Benthic monitoring reports shall be, within 28 days following the completed sampling period, provided to :
 - a. State CWB and Federal EPA offices, as specified in the NPDES permit.
 - b. Administrator, OCCL, DLNR
 - c. Kona Office, DAR, DLNR
4. Benthic monitoring reports shall also be made available through posting on the company's web site.

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FISH HEALTH MANAGEMENT AND REPORTING PLAN

1. The goal of the Fish Health Management and Reporting Plan is to ensure:
 - a. Optimum fish health is maintained among farm stocks and wild stocks
 - b. Disposal of dead fish is done in a responsible manner
 - c. Serious disease threats to fish stocks are reported in a timely manner

2. If there is an unusual morbidity or mortality event which requires additional diagnostic tests, then the company must immediately notify:
 - a. The licensed veterinarian of record for the company
 - b. The State Aquatic Health Veterinarian
 - c. Administrator, OCCL, DLNR

3. Dead fish shall not be disposed of in the surrounding water, but shall be removed from the site and disposed of at a County-approved land-fill, or shall be rendered through acid or other fermentation process to allow sustainable re-use.

4. Any therapeutic veterinary treatment of the farm stock, including vaccinations, shall be in full compliance with all salient Federal regulations. The company shall provide quarterly reports to OCCL on all aquaculture drug use and any vaccines administered. The company shall provide monthly reports to OCCL on all antibiotic use. The company will maintain past records of all aquaculture drug, vaccine and antibiotic use for a minimum of three years.

5. The applicant shall, at no expense to the State, develop and conduct a comparative sampling of ectoparasitic prevalence in both farmed and wild fish at least once each twelve months. The sampling protocol to be followed must be submitted and approved by OCCL prior to implementation. The operation will maintain past records of this annual ectoparasitic sampling for a minimum of three years.

6. The use of feeds containing supplemental hormones shall not be allowed.

7. The Hawaii State Veterinarian will be notified within 24 hours following the confirmation of any finfish disease that is listed as reportable by the World Organization for Animal Health (OIE).

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HISTORIC RESOURCES MANAGEMENT PLAN

In the event that any historic resources, such as maritime wreckages, aircraft remains, or structural remnants be discovered, construction or installation work will cease in the vicinity and both the State Historic Preservation Office and the Office of Conservation and Coastal Lands will be contacted immediately.

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SHARK MANAGEMENT PLAN

1. The goal of the Shark Management Plan is to ensure that employee safety and farm security are maintained, without causing unnecessary harm to sharks, or offending cultural traditions.
2. Operations should strive to minimize the attractant power of the net pens when sharks are present in the area by retrieving fish mortalities from the cages every day as early as possible.
3. All divers must either be tethered, or must adhere to the dive buddy principle, when working outside of the net pens.
4. If a shark is sighted, divers are to notify each other immediately. Divers are not to make any sudden movements, swim away hurriedly, splash, take photographs or flash lights at the shark. No dive is to continue if any diver feels uncomfortable or would prefer to abort. No employee is ever expected to enter the water when sharks are around the cages. Any dive undertaken when sharks have been sighted must be at the diver's sole and absolute discretion.
5. All shark encounters are to be noted in the dive log. The number of sharks, identifying features (species, length, distinguishing marks), behavior towards divers, and period of residence around the cages shall be noted in the dive log. Management must be notified of any unusual encounters.
6. If any one shark starts to exhibit behavior that is considered a danger to divers, then the dive supervisor on site at the time shall secure the site and suspend all in-water work for the day, and notify the Dive Supervisor and Offshore Farm Manager (or other responsible authority). Prior to any further action, management will first consult with the local office of Division of Aquatic Resources to determine what actions shall be undertaken. Non-terminal means shall always be first adopted, such as baiting, hooking and/or tagging the shark, in order to discourage the shark from frequenting the site.

MARINE PROTECTED SPECIES MONITORING AND REPORTING PLAN

The goal of the Monitoring and Reporting Plan is to ensure that there is no significant negative interaction between marine protected species and the farm operations.

Reporting

Report immediately to NOAA Fisheries (Hotline: 1-888-256-9840) and DAR Aquatic Biologist (587-0106):

1. Any observed or reported direct physical contact by any marine mammal or sea turtle with any part of the pen, cage or moorings.
2. Any observed or reported injured or entangled marine mammal or sea turtle within 100 meters of any part of the pen, cage or moorings.

Report within one week to DAR Aquatic Biologist (587-0106) any observed approach less than 10 meters by any marine protected species to any part of the cage or moorings.

All reports should include the following information:

1. Name of observer (and reporter, if not reported by observer)
2. Date and time of report
3. Date and time of incident
4. Contact number of observer (and reporter, if not reported by observer)
5. Marine protected species identification if possible
6. Brief incident description

Activity Modification

In the event of any significant adverse impact on marine protected species, e.g., collision, entanglement, injury, etc., DAR will coordinate a consultation as soon as possible between the permit holder and marine protected species experts to determine an appropriate course of action. DAR staff will then coordinate with OCCL to make recommendations to the BLNR. Activity modifications may range from increased monitoring to immediate project shutdown and removal of the entire structure, depending on the severity of the impact and its likelihood of reoccurrence.

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DOLPHIN MANAGEMENT PLAN

Minimize Dolphin Attractors

- Minimize the number of fish (stock, “escapes, and “morts”) that get free of the cages or other farm equipment;
- Immediately capture and remove fish that get free of the cages or other farm equipment;
- Ensure that staff and visitors never feed, attempt to feed, interact, engage, or “play” with dolphins;
- Minimize the amount of time fish remain in water during transfers, removals, etc. to and from the cages.

Report Dolphin Attractor Increases

- Immediately report large numbers (>10) of escapes and/or morts that get free of the cages or get free in any other fish farm activity over a 24-hour period;
- Immediately report increases of numbers of wild fish that congregate outside the farm structures.

Report Dolphin Behavior

- Continue weekly reporting of previously observed dolphin behaviors;
- Immediately report new and/or ‘escalating’ behaviors as defined by NMFS and/or DAR staff;
- Immediately report any increases in dolphin numbers;
- Provide underwater images of dolphins or descriptions of distinguishing markings or other characteristics for the purpose of identification of individuals.

Support Dolphin Monitoring

- Allow third-party monitors, in close association with NMFS and DAR, to accompany farm vessels on daily activities, so that monitoring can be effectively undertaken;
- Provide periodic still and video images of dolphins exhibiting behaviors of concern identified by NMFS.