

**176th WESTERN PACIFIC FISHERIES MANAGEMENT COUNCIL MEETING
MARCH 19-21, 2019**

AGENDA ITEM NO. 6A

**STATE OF HAWAII, DEPARTMENT OF LAND AND NATURAL RESOURCES,
DIVISION OF AQUATIC RESOURCES**

REPORTING PERIOD: SEPTEMBER 2018 – JANUARY 2019

1. FISHERIES

BOTTOMFISH FISHERIES

In January 2019, the Board of Land and Natural Resources approved the DLNR-DAR request to re-open BRFA C (Poipu, Kauai), BRFA F (Penguin Banks), BRFA J (Hana, Maui), and BRFA L (Leleiwi, Hawaii Island); and request to delegate to the Chairperson the authority to implement the decision. DLNR-DAR took the precautionary approach to propose opening only four of the twelve BRFAs. One of the condition is to monitor bottomfish landings in the re-opened BRFAs. DLNR-DAR is consulting with bottomfishers to revise the commercial area fish charts to improve the reporting of bottomfish landings in the re-opened areas. DLNR will announce when the four BRFAs will be officially re-opened.

PELAGIC FISHERIES

No report

2. RESOURCE PROTECTION

MARINE LIFE CONSERVATION DISTRICTS (MLCDs)

MLCDs and control sites are surveyed for fish and habitat. Routinely the fish surveys are conducted two to four times a year. During this period, nine of the 10 MLCDs were surveyed for fish.

ARTIFICIAL REEFS

Efforts continue to develop an updated environmental document (Environmental Assessment or Environmental Impact Statement) for artificial reefs. Surveys were conducted at the Maunalua Bay artificial reef only due to high winter surf at the other locations.

3. ECOSYSTEM & HABITAT

FISH AGGREGATION DEVICES (FADs)

During the period of September 2018 to January 2019 activity was moderate for the FAD Program.

During September 2018, one FAD was discontinued as detailed below:

LA – Lahaina, Maui (discontinued on 9/1)

During October 2018, one FAD was reported missing as detailed below:

EK – Hanalei, Kauai (missing on 10/22)

During November 2018, one FAD was reported missing as detailed below:

M – Hana Bay, Maui (missing on 11/16)

During December 2018, four FADs were reported missing as detailed below:

KH – Kehena, Hawaii (missing on 12/7)

FF – Pukaulua Pt., Maui (missing on 12/7)

D – Kumukahi, Hawaii (missing on 12/7)

HO – Hoolawa Pt., Maui (missing on 12/7)

During January 2019, five FADs were reported missing as detailed below:

HS – Halona Pt., Kahoolawe (missing on 1/25)

WK – Wailua, Kauai (missing on 1/25)

CK – Makaheuna Pt., Kauai (missing on 1/25)

BO – Barbers Pt., Oahu (missing on 1/25)

V – Makua, Oahu (missing on 1/25)

COASTAL AREAS, REEFS

U. S. Coral Reef Task Force (USCRTF)

The U.S. All Islands Committee (AIC) and 41st USCRTF meetings have been rescheduled and now will be held in March 31st – April 1st and April 2nd – 5th, 2019.

CORAL REEFS ECOSYSTEM MANAGEMENT

West Hawaii Shallow Water Resource Fish Surveys

DAR Kona continued nearshore fish and invertebrate surveys at 25 sites along the West Hawaii coast completing Rounds #90 (September) and #91 (November).

These surveys, currently conducted 4 times/year, are part of a continuous monitoring program (since 1998) along the coastline from Lapakahi (North Kohala) to Manuka (Kau).

The total abundance of nearshore fishes on these mid-depth surveys (30-40') has shown a positive trend in all management areas across West Hawaii since 2003–

MPAs (+29%), FRAs (+36%), and Open Areas (+35%) –. Herbivorous fishes, which are important for reef resilience, constitute roughly 50% of total fish biomass in the region. Herbivore biomass has not changed in Open Areas or FRAs in the past 14 years.

Data analysis was completed for Shallow Water Resource Fish Surveys (SWRF), which were conducted at 72 sites in the spring of 2018. The objective of the surveys was to document the abundance of adult resource fish species in shallow water habitats (6-20') along the coastline where they are typically most abundant during the day. Surveys were then compared to similar surveys conducted in previous years.

The biomass of herbivores at the shallow water sites decreased by 48% from 2008 to 2018 largely driven by a decrease (69%) in surgeonfish biomass. The most dramatic decline was observed in abundance of Achilles Tang which decreased 90% from 2008 to 2018. Achilles Tang were observed on 73% of transects in 2008 but only on 38% in 2018. Decline of Achilles Tang populations in West Hawaii is also evident from our other fish surveys where they declined over the last two decades in both FRAs (-28%) and Open Areas (-58%). Achilles Tang recruitment in West Hawaii has been low over the past two decades with a mean Young-of-Year density of only 0.11/100m². Substantial numbers of larger fish (i.e., 'breeders') are known to be taken for human consumption. The biomass of parrotfish significantly increased from 2009 to 2011 and 2018, respectively, but these differences were mainly driven by a limited number of sites and by two species (Bullethead Parrotfish and Redlip Parrotfish).

Investigation into coral recruitment along the west coast of Hawaii Island has been conducted since 2004. Eight terra-cotta tiles at nine sites, have been recovered and replaced twice a year for spatial and temporal comparisons. Although not significantly, recruitment rates have steadily declined since 2004 and the west coast of Hawaii has lower recruitment rates compared to the rest of the state, excluding Oahu.

Monthly fish surveys were conducted at Keei (South Kona) at a long-term monitoring site. These surveys, which began in 1977, provide a historical framework for interpreting monitoring data.

DAR Kona met with community members from the village of Hookena to discuss progress on their future management strategies for opelu. The DAR Kona team also participated in numerous community and management meetings (the South Kohala Coastal Partnership Action Plan updates, trainings with the Hawaiian Island Humpback Whale Marine National Sanctuary for humpback whale disentanglement, as well as several West Hawaii Fishery Council meetings, and others) to help stay informed and inform resources management in West Hawaii.

DAR Kona also participated in the Division of Aquatic Resources Aha Pilina symposium, where staff presented on topics specific to West Hawaii, including the West Hawaii Aquarium Project, the West Hawaii Coral Recruitment Project, Shallow Water Resource Fish Surveys, and Benthic Monitoring.

4. SUBSISTENCE & RECREATIONAL

HAWAII MARINE RECREATIONAL FISHING SURVEY (HMRFS)

The HMRFS program continues to collect non-commercial fisheries data for the State of Hawaii. For the reporting period September 2018 through January 2019, 1,119 angler intercepts were completed for both the shoreline and private boat modes from Kauai, Oahu, Maui, Molokai and Hawaii. One surveyor was hired in October 2018 to fill an Oahu vacancy.

The MRIP Workshop scheduled for January 22-24, 2019 was cancelled due to the Federal shutdown and subsequently rescheduled for May 28-30, 2019. Survey design changes to the current HMRFS survey as well as transition plans will be the primary focus of the workshop. Agency reps from the Western Pacific Territories will also be in attendance to discuss survey strategies currently employed in each respective area and to plan for more formal reviews with MRIP in the future.

5. OTHER ISSUES

STATISTICAL UNIT ACTIVITIES

Commercial Marine Licenses

DLNR revoked about 50 Commercial Marine Licenses in November 2018 because licensees did not comply with the fishing report requirement. The licenses are revoked for a 6-month period. The commercial fishers can regain license eligibility after the revocation period by complying with the reporting requirements and Administrative Proceeding Office obligations.

Commercial Fisheries Reports

The main Hawaiian Islands Deep-7 bottomfish landings for the current 2018-2019 fishing year began on September 1, 2018 with an annual catch limit (ACL) of 492,000 pounds. As of 2/15/2019, 255 licensed fishers made 1,189 trips and landed 117,812 pounds, or 23.9% of the ACL.

Commercial Dealer Reports

In December 2018, WPacFIN completed developing a MySQL database application function to import an electronic file of the auction's dealer transaction report records for insertion into the permanent annual MySQL dealer report

database. This function will be implemented when the online dealer report (ODR) system is implemented later this summer.

After implementing the dealer's Weekly Report Period report submission requirement on July 1, 2018, nearly 50 of the initial 250 primary dealers opted to not participate in the updated dealer report requirement. DLNR-DAR is conducting an outreach campaign to get primary dealers familiar and used to submitting the dealer purchase report on a weekly basis. Every week reminder notices are sent to primary dealers who did not comply with the Weekly Report Period requirement. Thus far, approximately 40% of the dealer reports are submitted by the submission deadline. Overall, 77% of the dealer reports have been submitted. DLNR-DAR will begin enforcing the dealer Weekly Report Period submission requirement using the Civil Resources Violation System with monetary fines when the ODR is implemented this summer.

AQUATIC INVASIVE SPECIES (AIS) MANAGEMENT

AIS Strategic Plan

The AIS team held a Strategic Planning Steering Committee Workshop to update the 2003 AIS Management Plan in December. The outcomes of the workshop will be a new five-year actionable plan to help guide the Program's decision-making process.

Kaneohe Bay AIS Control, Monitoring, and Restoration Efforts

Invasive algae management continues in the bay in the form of monitoring and sea urchin out-plantings. All priority patch reefs have been stocked to the desired capacity with urchins, and efforts have now shifted to stocking urchins on the invasive algae on fringing reefs. To prevent or minimize vessel strikes 62 PVC reef identification markers have been placed on 33 different patch reefs. Annual reef monitoring surveys are scheduled for the last week(s) of March.

Kauai *Salvinia molesta* eDNA Project

The AIS team completed Phase 3 in assessing the distribution of *Salvinia molesta* on Kauai using the environmental DNA (eDNA) sampling techniques. Water samples were collected at stream with known *Salvinia* present to test detection limitations. Various water size samples, increasing distances from visible *Salvinia* patches, and water flow characteristics were taken at each sampling location. The results will help determine the reliability of using this technology in future surveys.

Vessel Incidental Discharge Act

The Vessel Incidental Discharge Act, affecting commercial ships, was signed by Pres. Trump Dec 4th 2018. The Ballast Water and Biofouling Biosecurity Program Coordinator is working with partners to orchestrate a smooth transition where the enforcement authority on ballast water and biofouling biosecurity is transferred to the USCG and numerical compliance standards for each vector is

delegated to EPA. In the next 4 years, the Program plans to work with commercial maritime industry partners to survey their vessels' ballast water and biofouling organisms to support consultation to the EPA during their compliance standard development phase.

Vessel in-water cleaning capture system testing

The vessel in-water cleaning capture system test results that occurred in Alameda, CA last fall have been drafted into a report, distributed to the Alliance for Coastal Technologies (ACT) Core Testing Team and will be made public following a lengthy review and input by the ACT Advisory Committee.

Harbor Artificial Reef Monitoring Structures – Harbor ARMS

With the help of DAR teams, DOBOR rec harbors and DOT commercial harbors from Oahu and neighboring islands as well as the vessel operators, we were able to successfully deploy two ARMS within Honolulu Harbor, Barber's Pt Harbor, Nawiliwili Harbor, Kahalui Harbor, and Hilo Harbor as well as deploy two ARMS just outside the harbor mouths of each harbor. The purpose of the project is to monitor for presence and absence of current and new introductions of aquatic alien species, as harbors act as an aquatic alien species hub which are generally associated with unmanaged ballast water discharge and vessel biofouling (attachment of organisms to submerged bottoms of vessels). Furthermore, the data collected may be able to serve as helpful reference material for aquatic invasive species response plans. In the next few months (basically a 6-month mark), we plan on revisiting the ARMS to check for organism recruitment as well as continue to perform pilot study surveys using transect tape on harbor structures (ie: pilings) and reefs near where the ARMS have been deployed. Ideally this will give us a broader and more quantitative perspective of what's growing in the harbor and the pilot studies will allow us to continue to optimize our survey methods. Around the end of this year, we will begin retrieving the ARMS from each harbor and sorting the organisms for species identification via morphological and genetic (DNA) analysis.

LEGISLATIVE REPORT

Below you will find a list of proposed bills relevant to fishing in Hawaii.

HB0321 Fishing; Kaimana Beach-Waikiki Area; Prohibited

Prohibits line-and-hook or net fishing at any time in the Kaimana Beach-Waikiki Shoreline Fisheries Management Area, which includes the portion of the submerged lands and overlying waters beginning at the high-water mark on the shoreline to a distance of 300 yards or to the seaward edge of the fringing reef if one occurs beyond 300 yards, and between the Outrigger Canoe Club and the Waikiki War Memorial Natatorium.

HB0355 Commercial Marine Licenses; Department of Land and Natural Resources

Requires commercial marine license applicants to appear in person before the department of land and natural resources. Prohibits the department from issuing or renewing a commercial marine license to an alien crew member who has not been granted permission to land temporarily pursuant to federal law.

HB0446 Near Shore Fishing Tour Guides; License

Establishes a near shore fishing tour guide license requirement. Expands permitted fishing areas for near shore fishing tour guides.

HB0776 Commercial Marine Licenses

Authorizes the DLNR to create different types of commercial marine licenses. Clarifies that commercial marine licenses are required of all charter and guide services regardless of whether they are tied to a vessel. Exempts commercial marine licenses from the licensing sanctions for student loan default.

HB0794 Hauula Beach Park; Marine Life Conservation District; Prohibition

Requires the Department of Land and Natural Resources to establish the Laniakea Beach Marine Life Conservation District. Prohibits certain ocean recreation activities within the District.

HB0795 Laniakea Beach; Marine Conservation District; Prohibition

Requires the Department of Land and Natural Resources to establish the Laniakea Beach Marine Life Conservation District. Prohibits certain ocean recreation activities within the District.

HB0808 Sharks; Rays; Prohibitions; Exemptions

Establishes penalties and fines for any person who knowingly captures, takes, possesses, abuses, or entangles any shark, whether alive or dead, or kills any shark, within state marine waters. Makes it a misdemeanor to knowingly capture, taking, possession, abuse, or entanglement of any shark, whether dead or alive, or killing of any shark, within state marine waters. Expands the existing prohibition on knowingly capturing or killing a manta ray to include all rays. Expands the prohibition regarding rays to cover knowingly capturing, taking, possessing, abusing, or entangling a ray, whether alive or dead, or killing a ray, within state marine waters. Provides certain exemptions.

HB0851 Aquatic Life; Commercial Aquarium Purposes; Prohibition

Prohibits the commercial capture of aquatic life for aquarium purposes.

HB853 Sharks; Rays; Prohibitions; Exemptions

Establishes penalties and fines for the knowing capture, taking, possession, abuse, entanglement, or killing of sharks in state marine waters. Expands existing prohibition on knowingly capturing or killing manta rays to include all rays and to include taking, possession, abuse, and entanglement of rays.

HB1023 Aquatic Resources; Commercial Marine Licenses

Clarifies that the Department of Land and Natural Resources has the authority to establish different types of commercial marine licenses, including but not limited to commercial marine vessel licenses, fishery and gear-specific commercial marine licenses, and full-time and part-time commercial marine licenses. Requires any person providing fishing charter or guide services, whether vessel-based or shore-based, to first obtain a commercial marine license.

HB1034 Natural Resources; Inspection

Clarifies that any police officer or agent of the Department of Land and Natural Resources upon whom the Board of Land and Natural Resources has conferred police powers may, in the performance of their primary duties, inspect certain items for compliance with title 12, chapters 6D, 6E, and 6K, Hawaii Revised Statutes, and any rule adopted thereunder, relating to the protection and conservation of natural resources.

HB1075 Fishing Regulations; Spiny Lobster; Kona Crabs; Samoan Crabs; Taking; Bag Limits

Repeals the statutory prohibition of taking or killing female spiny lobsters, Kona crabs, and Samoan crabs.

HB1123 Fishing; Stock Assessments; DLNR

Requires the Department of Land and Natural Resources to perform a stock assessment on the fish species in the affected area prior to adopting any new rules to regulate fishing.

HB1181 Department of Land and Natural Resources; Maunalua Bay Resource Management Study

Requires the Department of Land and Natural Resources to conduct a ten-year study of Maunalua Bay.

HB1410 BLNR; Fishing; Boating; Appointment; Qualifications

Adds a member to the Board of Land and Natural Resources who has demonstrated knowledge of the State's boating and fishing communities.

SB99 Department of Land and Natural Resources; Nuuanu Reservoir Recreational Fishing Program; Fisheries Technician IV Positions; Appropriation
Appropriates funds to establish two permanent full-time equivalent fisheries technician IV positions and for operating expenses for the Nuuanu reservoir recreational fishing program at Nuuanu reservoir number four.

SB0329 Commercial Marine Licenses; Department of Land and Natural Resources

Requires commercial marine license applicants to appear in person before the department of land and natural resources. Prohibits the department from issuing or renewing a commercial marine license to an alien crew member who has not been granted permission to land temporarily pursuant to federal law.

SB0489 Sharks; Rays; Prohibitions; Exemptions

Establishes an offense of knowingly capturing, taking, possessing, abusing, entangling, or killing a shark in state marine waters, along with penalties and fines. Expands the existing prohibition on knowingly capturing or killing a manta ray in state marine waters to apply to all rays and to also include knowingly taking, possessing, abusing, or entangling a ray. Provides certain exemptions.

SB0931 Marine Aquarium Fishing

Prohibits all commercial capture of aquatic life for aquarium purposes, regardless of the method of collection.

SB1136 Scuba; Spearfishing; Night; Prohibition; Aquatic Life

Prohibits scuba spearfishing at night for the purpose of taking aquatic life, except through a permit.

SB1249 Aquatic Resources; Commercial Marine Licenses

Clarifies that the Department of Land and Natural Resources has the authority to establish different types of commercial marine licenses, including but not limited to commercial marine vessel licenses, fishery and gear-specific commercial marine licenses, and full-time and part-time commercial marine licenses. Requires any person providing fishing charter or guide services, whether vessel-based or shore-based, to first obtain a commercial marine license.

SB1260 Natural Resources; Inspection

Clarifies that any police officer or agent of the Department of Land and Natural Resources upon whom the Board of Land and Natural Resources has conferred police powers may, in the performance of their primary duties, inspect certain items for compliance with title 12, chapters 6D, 6E, and 6K, Hawaii Revised Statutes, and any rule adopted thereunder, relating to the protection and conservation of natural resources.

SB1371 Fishing; Lay Nets; Prohibition

Prohibits the use of lay nets for fishing, except under a permit obtained by the department of land and natural resources. Establishes the use of lay nets for fishing as a misdemeanor offense with a mandatory minimum period of imprisonment of one day.