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## FY16 Summary Report of Hawaii Invasive Species Council Projects Supporting the Regional Biosecurity Plan for Micronesia and Hawaii

Since its completion in 2015, the Regional Biosecurity Plan for Micronesia and Hawaii (RBP) has served as one of the guiding documents for the planning, implementation, and funding of projects dealing with invasive alien species. Each year, the Hawaii Invasive Species Council (HISC) receives requests for funding from local agencies and partners. In FY16, HISC was able to provide financial support to 35 different projects. As part of the proposal process, HISC required that each request state its applicability to the HISC 2015-2010 Strategic plan and to the RBP. The following is a summary and comparison of how HISC funded projects directly support the recommendations outlined within the Regional Biosecurity Plan for Micronesia and Hawaii.

#### **Aquatics**

Five projects that received funding stated that they were in support of the various aquatics recommendations.

#### **Regional Coordination**

Eight projects that received funding stated that they were in support of the various regional coordination recommendations.

#### **Pre-border/Border**

Five projects that received funding stated that they were in support of the various preborder/ border recommendations.

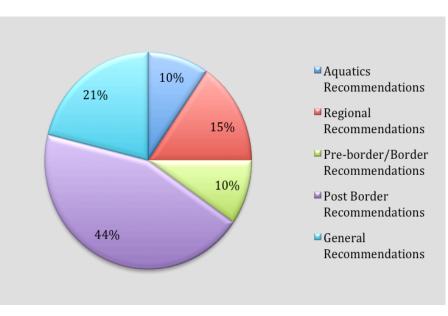


Figure 1: HISC Funded projects in relation to RBP

#### Post-border

23 projects that received funding stated that they were in support of the various post-border recommendations.

#### <u>General</u>

10 projects that received funding stated that they were in support of the various general recommendations.

As many projects are in support or multiple recommendations; funding amounts reflect the total amount received for each individual project. During FY16, HISC released a total of \$3,877,956.00 USD to qualifying projects.

## **Aquatics Recommendations**

- 1. Establish and enforce biofouling standards
  - <u>Department of Aquatic Resources</u> Minimizing the introduction and spread of aquatic invasive species in Hawaii \$73,645
- 2. Increase marine system protection from invasive species
  - <u>Department of Aquatic Resources</u> Expansion of Aquatic Invasive Species Program -\$8,586
  - <u>Kauai Invasive Species Committee</u> Public Outreach & Education in Kaua'i County FY2016 \$58,152
  - <u>Department of Aquatic Resources</u> Minimizing the introduction and spread of aquatic invasive species in Hawaii \$73,645
  - <u>Kahoolawe Island Reserve Commission</u> Biosecurity Implementation Plan for the Island of Kaho'olawe \$40,066
- 3. Establish and enforce ballast water standards
  - <u>Department of Aquatic Resources</u> Minimizing the introduction and spread of aquatic invasive species in Hawaii \$73,645

# **Regional Coordination Recommendations**

- 1. Improve regional coordination regarding biosecurity and IAS
  - <u>Hawaii Department of Agriculture; Plant Pest Control Branch</u> Multi-Agency Proposal for Coconut Rhinoceros Beetle Response, Outreach and Public Information and Control \$445,882
  - <u>Department of Aquatic Resources</u> Minimizing the introduction and spread of aquatic invasive species in Hawaii \$73,645
- 2. Support regional agreements to limit the movement of known harmful species
  - <u>Big Island Invasive Species Committee</u> Early detection of invasive pests on Hawaii Island \$103,082
- 3. Improve regional communication on invasive species and biosecurity issues and support of jurisdictional and regional efforts
  - <u>Hawaii Ant Lab</u> Hawai`i Ant Lab Core Funding \$177,181
  - <u>Kahoolawe Island Reserve Commission</u> Biosecurity Implementation Plan for the Island of Kaho'olawe \$40,066

- 4. Support the establishment of a regional invasive species coordination office. The regional IAS coordination office would serve as a focal point, coordinating body, communication and information center, and training resource for biosecurity activities throughout the region.
- 5. Support regional biosecurity and invasive species control efforts
  - <u>Hawaii Ant Lab</u> Hawai`i Ant Lab Core Funding \$177,181
  - <u>Oahu Invasive Species Committee</u> Detection and Control of Invasive Species on O'ahu \$528,506
  - <u>Coordinating Group on Alien Pest Species</u> Core support for CGAPS Projects & Outreach - \$47,000
  - <u>Waianae Mountain Watershed Partnership</u> Student Based LFA Surveys, Outreach and Education \$4,543
- 6. Ensure that the RBP remains relevant by updating recommendation components on a regular basis (add new recommendations and remove completed elements)

## **Pre-border/Border Recommendations**

- 1. Increase biosecurity surveillance measures and interception at both military and commercial airports and harbors including all entry points and screening check points.
  - <u>Hawaii Department of Agriculture; Plant Pest Control Branch</u> Multi-Agency Proposal for Coconut Rhinoceros Beetle Response, Outreach and Public Information and Control \$445,882
- 2. Improve biosecurity for the movement of vehicles, equipment
  - <u>Maui Invasive Species Committee</u> Invasive Species Detection & Control in Maui County - \$504,339
- 3. Improve mail biosecurity
- 4. Improve capacity to detect pests in wood packaging material
- 5. Improve intra-state biosecurity and foreign arrivals at ports other than the main air and sea ports
  - <u>Hawaii Ant Lab</u> Hawai`i Ant Lab Core Funding \$177,181
- 6. Improve capacity to regulate the importation of live organisms
  - <u>Big Island Invasive Species Committee</u> Early detection of invasive pests on Hawaii Island \$103,082
- 7. Improve pre-border biosecurity
  - <u>Hawaii Pacific Weed Risk Assessment</u> Continued Support of the Hawaii-Pacific Weed Risk Assessment FY16 – \$78,688

### 8. Reduce risk associated with live traded species

• <u>Big Island Invasive Species Committee</u> - Early detection of invasive pests on Hawaii Island - \$103,082

## Border Recommendations

#### 1. Improve early detection and rapid response capacity

- <u>Big Island Invasive Species Committee</u> Early detection of invasive pests on Hawaii Island \$103,082
- <u>Big Island Invasive Species Committee</u> Big Island Invasive Vertebrate Detection and Response Program – \$86,041
- <u>Hawaii Ant Lab</u> Hawai`i Ant Lab Core Funding \$177,181
- <u>Kauai Invasive Species Council</u> Kaua'i Island Invasive Species Detection and Control FY2016 \$282,808
- <u>Kauai Invasive Species Council</u> Kaua'i Island Mongoose Detection FY2016 \$24,987
- <u>Kauai Invasive Species Council</u> Koke'e Resource Conservation Program Watershed Incipients - \$21,649
- <u>Oahu Invasive Species Committee</u> Cane Ti (Tibouchina herbacea) Detection and Control \$28,431
- <u>West Maui Mountain Watershed Partnership</u> Early Detection and Response of Australian Tree Fern and Mule's Foot Fern \$29,931
- <u>Hawaii County Department of Research and Development</u> County of Hawai'i Little Fire Ant Control Program - \$90,682
- <u>Coordinating Group on Alien Pest Species</u> Core support for CGAPS Projects & Outreach \$47,000
- <u>Kauai Invasive Species Committee</u> Public Outreach & Education in Kaua'i County FY2016 - \$58,152
- <u>United States Forest Service</u> The ecology and management of Rapid 'Ōhi'a Death across forests of Hawaii: development of tractable, science-based solutions \$99,000

## 2. Increase management and control of established invasive species

- <u>Department of Forestry and Wildlife</u> Control and maintenance of Kahili ginger (Hedychium gardnerianum) population in Wailau Valley \$31,802
- <u>Department of Forestry and Wildlife</u> Oahu Release of Strawberry Guava Biological Control Agent - \$46,989
- <u>Big Island Invasive Species Committee</u> Implementing an Albizia Hazard Mitigation Plan for the Island of Hawaii - \$142,653
- <u>Big Island Invasive Species Committee</u> Early detection of invasive pests on Hawaii Island \$103,082
- <u>Hawaii Ant Lab</u> Hawai`i Ant Lab Core Funding \$177,181
- <u>Ko'olau Mountain Watershed Partnership</u> Eradication of feral goats from the Ko'olau Range, O'ahu \$34,414
- <u>Maui Invasive Species Committee</u> Invasive Species Detection & Control in Maui County - \$504,339

- <u>West Maui Mountain Watershed Partnership</u> Early Detection and Response of Australian Tree Fern and Mule's Foot Fern \$29,931
- <u>Hawaii County Department of Research and Development</u> County of Hawai'i Little Fire Ant Control Program - \$90,682
- <u>College of Tropical Agriculture and Human Resources</u> Garden study to test susceptibility of different naio populations to naio thrips in Hawaii \$8,920
- <u>College of Tropical Agriculture and Human Resources</u> Science and Technology Based Management of Incipient Miconia (Miconia calvescens DC) Utilizing Herbicide Ballistic Technology (HBT) - \$117,212
- <u>United States Forest Service</u> Biocontrol of Invasive Melastomes \$50,156
  o Increase management and control of established invasive species
- 3. Improve efforts to restore native ecosystems and species
  - <u>Department of Forestry and Wildlife</u> Oahu Release of Strawberry Guava Biological Control Agent - \$46,989
  - <u>West Maui Mountain Watershed Partnership</u> Early Detection and Response of Australian Tree Fern and Mule's Foot Fern \$29,931
  - <u>College of Tropical Agriculture and Human Resources</u> Garden study to test susceptibility of different naio populations to naio thrips in Hawaii \$8,920

# **General Recommendations**

- 1. Improve agriculture biosecurity and food security
- 2. Address climate change linkages to invasive pests
- 3. Improve statewide biosecurity and coordination
  - <u>Maui Invasive Species Committee</u> Invasive Species Detection & Control in Maui County - \$504,339
  - <u>United States Forest Service</u> The ecology and management of Rapid 'Ōhi'a Death across forests of Hawaii: development of tractable, science-based solutions \$99,000

## 4. Improve laws and regulations

- <u>Maui Invasive Species Committee</u> Invasive Species Detection & Control in Maui County - \$504,339
- <u>Big Island Invasive Species Committee</u> Hawai'i Island Invasive Species Education and Outreach 2016 \$61,646
- 5. Evaluate social, cultural, economic, and ecological values that may be impacted by invasions by non-native species.
  - <u>Big Island Invasive Species Committee</u> Hawai'i Island Invasive Species Education and Outreach 2016 \$61,646

#### 6. Identify knowledge gaps for existing IAS concerns

- <u>Hawaii Department of Agriculture; Plant Pest Control Branch</u> Multi-Agency Proposal for Coconut Rhinoceros Beetle Response, Outreach and Public Information and Control \$445,882
- <u>Big Island Invasive Species Committee</u> Hawai'i Island Invasive Species Education and Outreach 2016 \$61,646

### 7. Increase outreach and education on biosecurity and invasive species

- <u>Hawaii Department of Agriculture; Plant Pest Control Branch</u> Multi-Agency Proposal for Coconut Rhinoceros Beetle Response, Outreach and Public Information and Control \$445,882
- <u>Hawaii County Department of Research and Development</u> County of Hawai'i Little Fire Ant Control Program - \$90,682
- <u>Department of Aquatic Resources</u> Aquatic Invasive Species Outreach Program Support - \$3,625
- <u>Big Island Invasive Species Committee</u> Hawai'i Island Invasive Species Education and Outreach 2016 \$61,646
- <u>Oahu Invasive Species Committee</u> Invasive Species Outreach on the Island of O'ahu \$86,050
- <u>Waianae Mountain Watershed Partnership</u> Student Based LFA Surveys, Outreach and Education \$4,543
- <u>Maui Invasive Species Committee</u> Invasive Species Outreach & Education in Maui County – \$73,598
- <u>Kahoolawe Island Reserve Commission</u> Biosecurity Implementation Plan for the Island of Kaho'olawe \$40,066

# 8. Improve communications and ability to address biosecurity concerns between US DoD and civilian government agencies