



# Requesting support and engagement to conduct an update of the actions outlined in the 2017-2027 Hawai'i Interagency Biosecurity Plan

Hawai'i Invasive Species Council meeting

Tuesday, June 13, 2023; 1:00 pm

Co-presenters:

Chelsea Arnott (HISC), Darcy Oishi (HDOA), Christy Martin (UH PCSU CGAPS)



# Discussion

- Invasive Species in Hawai'i
- The Need for Statewide Coordination and Planning
- Overview of the Hawai'i Interagency Biosecurity Plan
  - Biosecurity in 2027
  - Progress so far
- The need to review, reassess, and reprioritize
- Council Recommendations

# Invasive Species in Hawai'i



*'Invasive species' is defined as, "a non-native organism whose introduction causes or is likely to cause economic or environmental harm, or harm to human, animal, or plant health." E.O. 13751, Dec. 6, 2016*



# Invasive Species in Hawai'i



- On islands, invasive species is the primary driver of **biodiversity loss**: rare and even abundant native species are being lost
- Damage to **ecosystem functions**: forests for watersheds, carbon sequestration, cooling; corals for habitat and coastal protection; loss of pollination services, etc.
- Harm to **agriculture**: affects everyone, underserved/vulnerable & major ag industries
- Impact on **public health**: direct harm from species like box jellyfish and diseases carried and spread by mosquitoes, snails & slugs; **wildfire risk** from invasive grasses
- Impact to **cultural practices**: degradation of cultural sites & loss of native species
- **Economic** harm: Little Fire Ants--\$200M annually on Hawaii island; brown treesnakes projected at \$2.14B annually if they were to arrive, incl **infrastructure damages**
- **Climate change & invasive species** synergies. Controlling invasive species is the most important & available **resilience strategy**



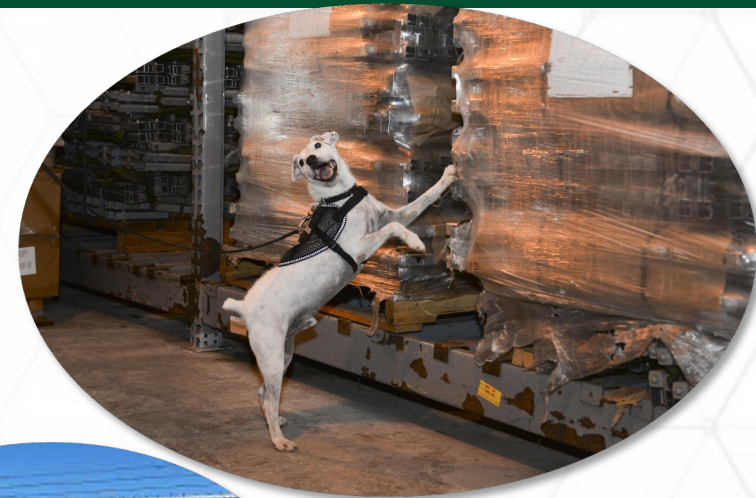
# Invasive Species in Hawai'i



- International frameworks, federal & state agencies, Counties = policy patchwork, gaps
- 1991: Island-based **Melastome Action Committees (MACs)** begin to form to address Miconia; **Watershed Partnerships** begin to form
- 1994: Multi-agency ***Alien Species Action Plan*** (ASAP) developed; group formalized as the **Coordinating Group on Alien Pest Species** to facilitate and catalyze action
- 1999: MACs begin to transition to **Invasive Species Committees** to fill multi-taxa EDRR gaps; **National Invasive Species Council** forms
- 2003: **Hawaii Invasive Species Council** legislatively established to ensure engagement of State agency leadership over time; **Aquatic Invasive Species Team** established
- 2008: **Hawaii Ant Lab** established under HDOA, in partnership with UH
- 2015: **Regional Biosecurity Plan for Micronesia and Hawaii**
- 2017-2027: **Hawaii Interagency Biosecurity Plan**

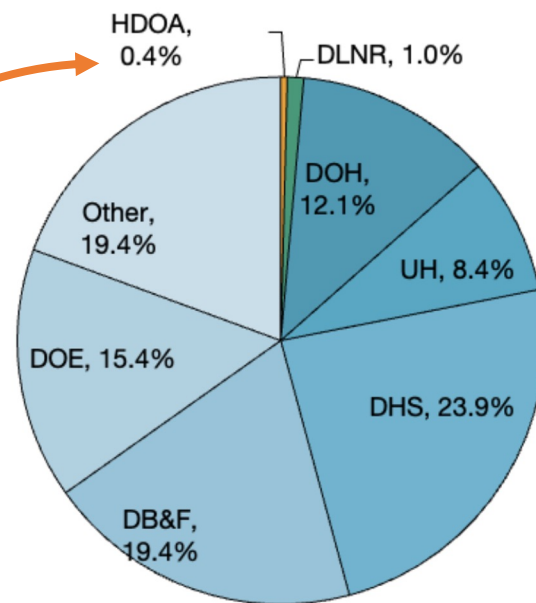
# What is Biosecurity?

- The set of measures taken to manage the risk from invasive species to the economy, environment, and health and lifestyle of the people.
- Effective Biosecurity requires a comprehensive approach that includes:
  - **Preborder** prevent invasive species from making their way to Hawaii – *USDA BTS Dog Program*
  - **Border** inspecting incoming items to ensure minimal risk of pest entry into the state – *CRB Monitoring at Airports*
  - **Post-border** detecting and responding to new incursions of invasive species and controlling established invasive species wherever possible. – *Use of natural enemies to control widespread weeds like Miconia*



# Major Gaps & Weaknesses: Biosecurity Prior to 2017

- **STAFF**
  - Increase branch capacity on each island
  - Specialist positions (pathologists, entomologists, IT)
- **POLICY**
  - Ballast water and Biofouling
  - Inspect non-Ag commodities
- **FUNDING**
  - Soft funded
  - Shrinking federal grants
  - HDOA and DLNR receive 1.4% of state budget
- **FACILITIES**
  - Transitional facilities for inspections
  - Pacific Regional Biocontrol Facilities



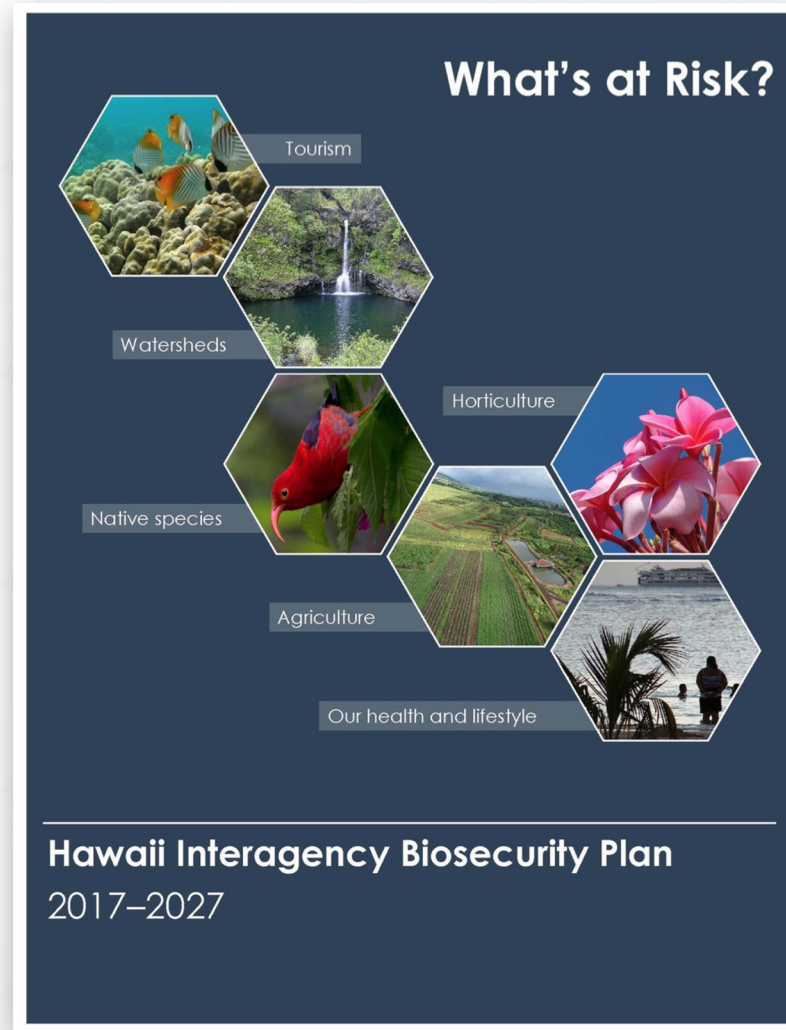


# 2017-2027 Hawai'i Interagency Biosecurity Plan



Launched by HDOA in 2017...

- ❖ Comprehensive in scope
- ❖ Collaborative & Multidisciplinary approach
- ❖ 147 action items
- ❖ A 10-year path forward



## Biosecurity in 2027

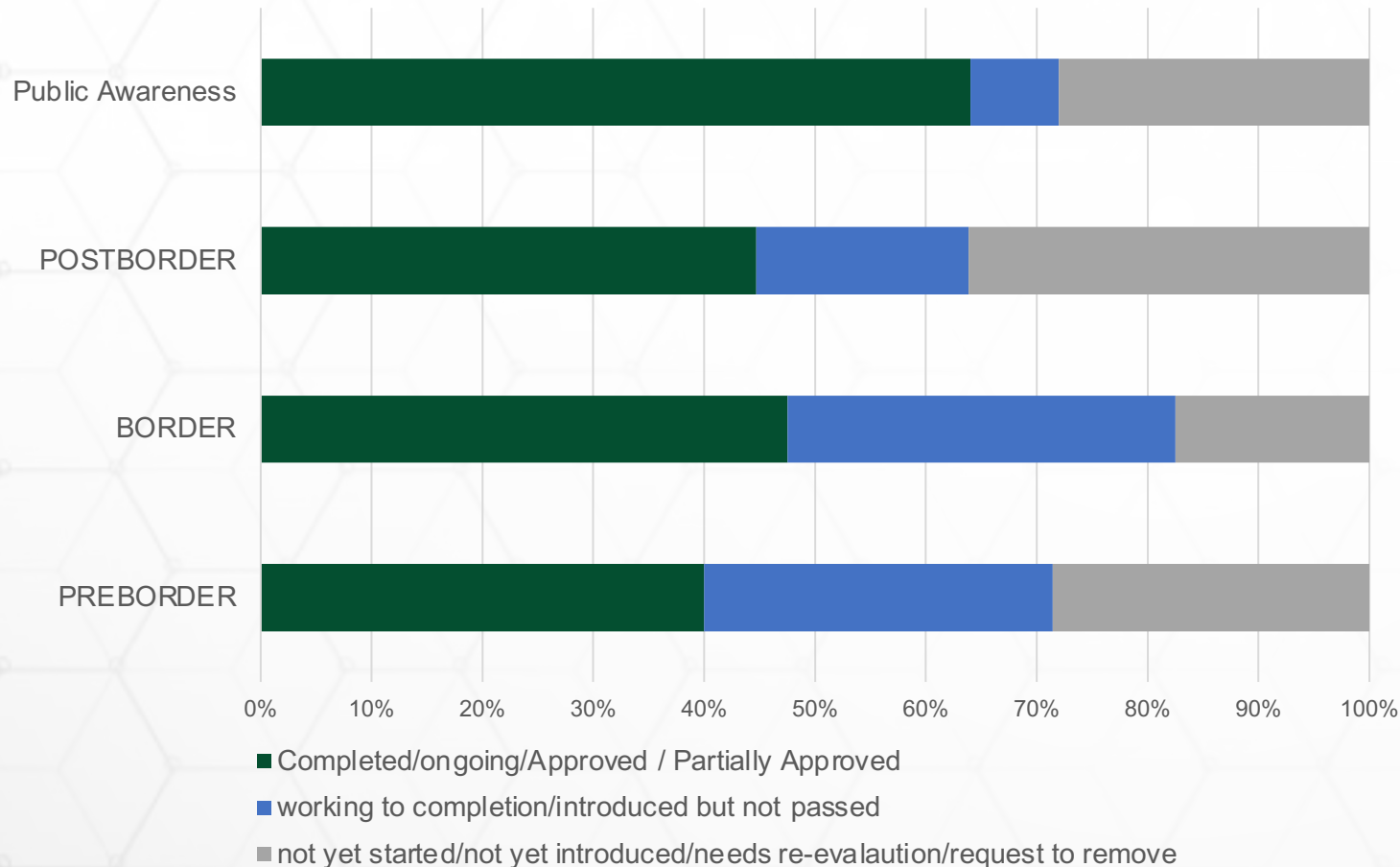
- Risk assessments and electronic manifesting
- Regulation of ballast and biofouling
- Inspection facilities
- Doubled inspection staff, for both imports and interisland shipments
- Field capacity at DLNR & DOH
- Stable funding for the ISCs
- HDOA biocontrol facility
- New outreach tools



# Progress on Implementation: Biosecurity in 2023



Implementation for 68% of actions has started



PwsTifs1.4: Collaborate with HTA to contract a professional public relations firm to create visually appealing signs and displays regarding biosecurity at airports.



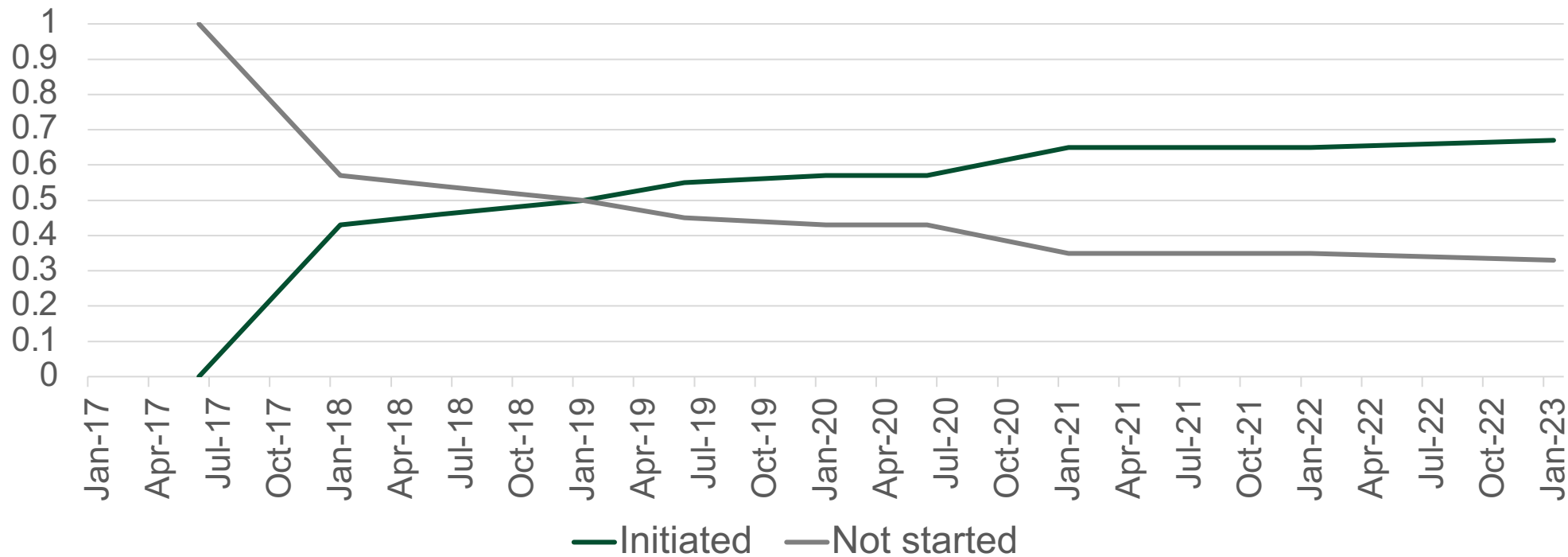
PrePro4.1: Write Hawaii-specific standards and protocols for use in compliance agreements for offshore prescreening of agricultural commodities to Hawaii. (PC: HDOA)



PwsPro3.5: Help implement HISC's state-of-the-art pest notification and reporting system, and integrate it with the biosecurity online portal.

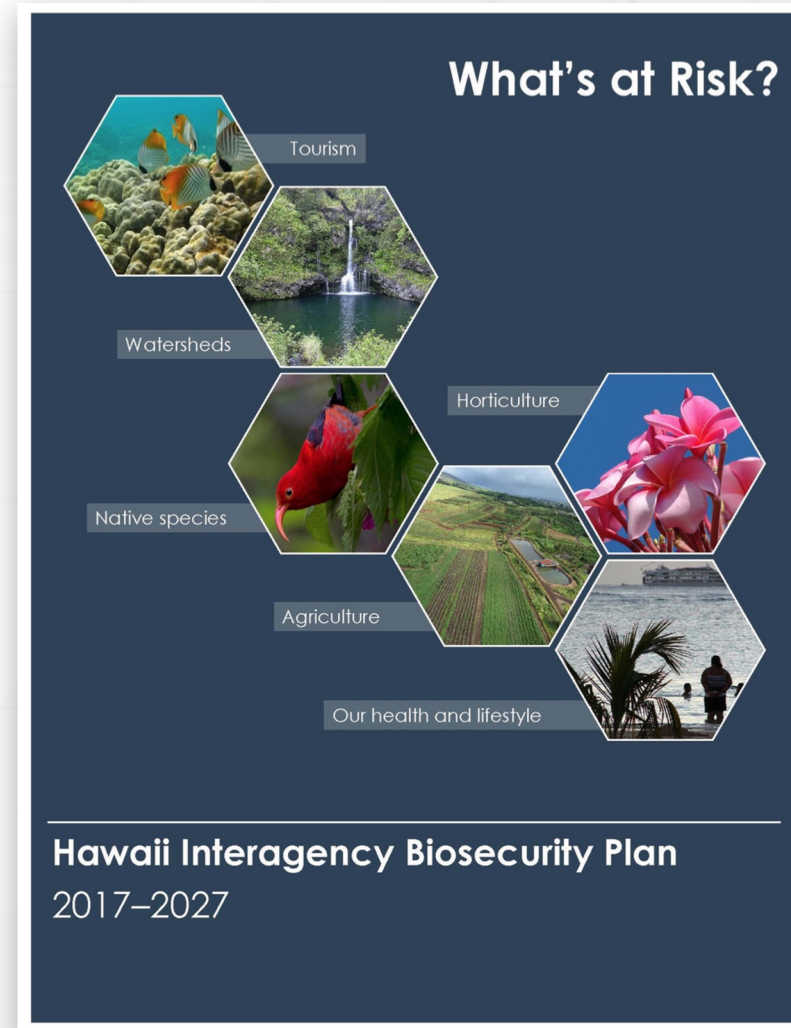
# Where are we headed?

HIBP Progress Over Time  
Jan 2017 - Jan 2023



# The Need to Review & Update Actions

1. Structural changes to improve flow and communications amongst departments and partner programs
2. Review of individual actions
3. Improved tracking & communication on the plan's implementation
4. Recommitting agency leadership & staff to implementation





# Structural changes to improve flow and communications



Assessing risk is a critical theme throughout the biosecurity plan, listing 10 actions to address this gap but without any formatting or explanation of how each action relates to the other creating challenges for implementation and communication. (PC: HDOA)

## Creating broader headings for similar actions

- Electronic Manifest System: 10 separate actions (PrePro1.1, 1.4, 2.1, PreTifs1.1, PosPol1.2, PosPro2.1 ,PrePol1.2) = ASSESSING RISK...



The Biosecurity Plan is focused on State Departments and only lists DLNR, HDOA, HDOH, & UH as leads for implementing actions. (PC: Honolulu Harbor)

## Re-Prioritizing, Recommitting & Adding New Agency Leads

- Tourism and ports of entry play a major role in biosecurity, but currently there are no actions listed for HDOT or DBEDT

# Review of Individual Actions

Actions labeled ongoing, working towards completion (have not moved in a while) or not started.

- Some of these actions need roadmaps, need to be paired down to identify goals/objectives, or other actions have occurred that have impacted the original understanding of how to achieve the overall objective/goal.
- 17 actions listed to address Ballast Water & Biofouling. Actions were developed prior to the federal Vessel Incidental Discharge Act (VIDA) that passed in 2018



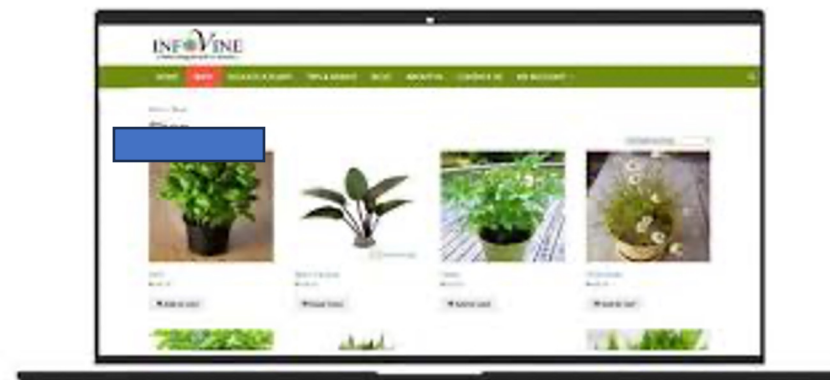
Ballast water(upper left) and biofouling (bottom) are the two main vectors for aquatic non-native species introductions. Now the threat of Stony Coral Tissue Loss Disease coming to Hawaii via one of these two pathways is cause for major concern.



# Review of Individual Actions

## Action needs re-evaluation

- These actions may need language changes, additional information or actions, etc...
  - PrePro 3.1: Setting up cooperative agreements with e-commerce to stop the sale of harmful species to Hawaii.
    - Broaden action to simply stop the sale of harmful species to Hawaii – leave the mechanism of how this is achieved to the lead agency



The world of e-commerce is constantly evolving and actions in the plan must remain flexible on this pathway is addressed in the present and future. (PC-Volusion)



# Review of Individual Actions

## Action no longer relevant

- These actions are no longer relevant or necessary to enhancing Hawaii's biosecurity
  - PosPol2.1: legislation and regulation to restructure the HISC as the Hawaii Invasive Species Authority, an autonomous interagency body to manage and administer biosecurity programs.



# Improved Tracking & Communication on Implementation

Utilize partner's networks and expertise

- Hawaii Green Growth manages large amounts of data and currently tracks the UN SDGs and the Aloha+ Dashboard
- HISC/CGAPS Joint Strategy prioritized the most pressing actions in the Biosecurity Plan to focus on in the next 5 years

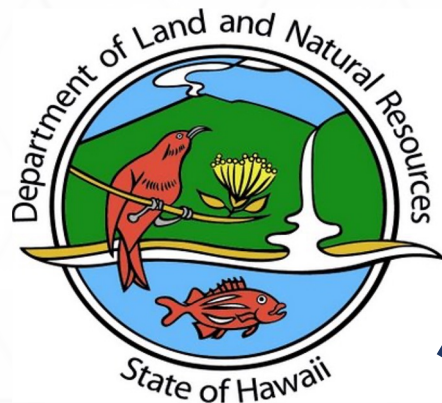


The screenshot shows the Aloha+ dashboard interface. At the top, there's a navigation bar with links: Aloha+, Aloha+ Benchmark Report, Clean Energy Transformation, Green Workforce and Education, and a More dropdown. Below this is a green header section with the text "Aloha+ CHALLENGE" and "Natural Resource Management 04 | Invasive Species Control". To the right of the text is a white icon of two mountains. Below the header, there's a quote: "By 2030, implement Hawai'i Interagency Biosecurity Plan to address priority invasive species." followed by a paragraph: "HOW WE'RE TRACKING PROGRESS: This goal is measured by tracking the implementation of 147 action items outlined in Hawai'i's Statewide Interagency Biosecurity Plan for invasive species control." At the bottom right, there's a blue button that says "Back to Top".



The cover of the "HISC & CGAPS 2025 Joint Strategy" report. The title is prominently displayed in white text on a blue background. Below the title, it says "In Support of the Hawai'i Interagency Biosecurity Plan". The cover features a collage of images related to Hawaii's environment and culture, including a beach, a flower, a person in traditional dress, a red flower, a forest, a waterfall, and a field. At the bottom, there are logos for HISC (Hawaii Invasive Species Council) and CGAPS (Coordinating Group on Alien Pest Species), along with the tagline "STOP THE SILENT INVASION".

# Recommitting Agency Leadership & Staff







# Submittal Recommendations

- Direct HISC Program Support staff to work with relevant agencies and stakeholders to update the Interagency Biosecurity Plan to reflect current needs and prioritize actions across the remaining plan's timeline.
- Commit and direct staff at their respective agencies to participate in this planning process by providing their time and expertise in related meetings and requests for information and input to meet the proposed eight-month timeline for this project.



# Questions

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