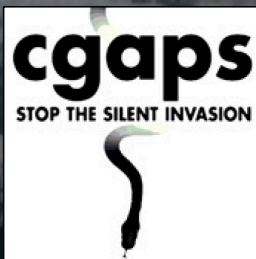


# HISC & CGAPS 2025 Strategy:

In Support of the Hawaii Interagency Biosecurity Plan (HIBP)



*Photo: Diane Cook and Len Jenshel*

# A shared vision...

*Hawai'i's natural environment, agriculture, economy, and the health, lifestyle, and culture of its people are protected from the impacts of invasive species.*





## HISC MISSION

*Provide strategic policy and fiscal direction, coordination, and planning among state departments and other stakeholders to address invasive species issues in a science-based, culturally and socially conscious way*



## CGAPS MISSION

*To coordinate and catalyze action among government and non-government partners to prevent and manage invasive species in Hawai'i, as well as communicate key issues to the public*



**STRATEGY 1: PREVENTION & EARLY DETECTION/RAPID RESPONSE (Terrestrial)**  
Keep Hawaii's top invasive species threats from arriving and establishing in the state, by identifying and addressing high-risk pathways and major modes of introduction, and by improving early detection/rapid response.



*Photos: Maui Guidebook, Royal Hawaiian Movers, News4Jax*



## Key Actions

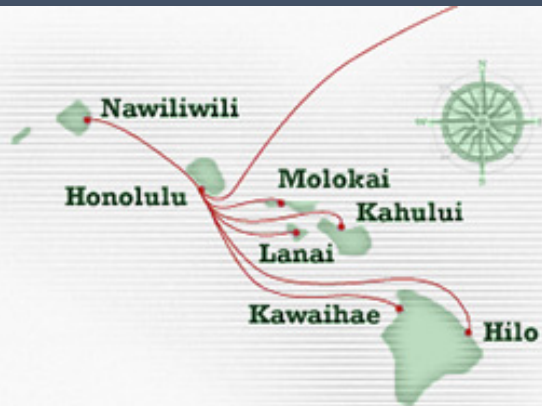
1. HDOA, HISC, and other partners collaborate on generating a **non-regulatory Hawaii Prevention Priority List** to guide prevention and rapid response.
2. Assess **capacity to detect, mitigate and/or treat each species on the HI Prevention Priority List**, including procedures, training, and technology.  
Identify pathways and feasible mitigations for the HI Prevention Priority List species.
3. Conduct **risk analyses and risk assessments** along known & high potential pathways for invasive species introductions.
4. Address **regulatory gaps** for terrestrial invasive species in Hawai'i to address high-risk pathways and other modes of introduction.
5. Continue to support adoption and implementation of **Myrtaceae import restriction** (domestic and foreign) and apply this approach for the protection of additional key native plant species.
6. Fund and **fill key positions in HIBP** to enforce existing and new Administrative Rules & Hawai'i Revised Statutes. *[link to Obj 6]*
7. Support HDOT to make the **Māmalu Poepoe airports pilot project** permanent to enhance monitoring and detection of the Federal Aviation Administration approved list of invasive species (disease spreading mosquitos, fire ants, coconut rhinoceros beetle, and Africanized bees). *[link to Obj 2]*

## Key Actions (continued)

8. Identify and provide **Best Management Practices** (BMPs) for reducing pest risk at critical control points in systems, such as airports, harbors, and procurement contracts.
9. Strengthen **early detection and rapid response capacity** on each island for regulatory agencies and partnership projects, including mobilizing species-specific teams for high-risk terrestrial incursions.
10. Support HDOA in implementing **transitional inspection facilities** and opportunities to inspect other high-risk commodities.
11. Support HDOA to promote and achieve **clean nursery operations** (e.g., treatment requirements, incentives). *[link to Obj 2 & 7]*
12. Maintain and strengthen Pest Risk Committee and other mechanisms for **federal and state agencies to share data, effective practices, lessons learned** and informal observations.
13. Track and **report annually on status of HI Priority Prevention List species** (e.g. not established, prevented at source; detected & intercepted, established). *[link to Obj 2]*



**STRATEGY 2: PREVENT MOVEMENT OF INVASIVE SPECIES WITHIN HAWAII (Terrestrial)**  
Keep Hawaii's top inter/intra-island invasive species threats from spreading within Hawai'i (between and across islands), by identifying and addressing high-risk sources, pathways and major modes of introduction and spread, and by improving early detection/rapid response for new populations.



*Photos: Aloha Marine Lines, Maui Guidebook*

## Key Actions

1. HDOA, HISC and other partners collaborate on generating a **Hawai'i Limited Distribution Priority List** of high-impact localized invasive species to address inter-island and intra-island movement.
2. Include an assessment of the HI Limited Distribution Priority List in supporting HDOA in developing and executing a **clean nursery program** to reduce inter/intra-island of invasive species. *[link to Obj 1]*
3. Conduct **risk analyses and assessments** to identify and prioritize pest pathways and high-risk gaps for movement of terrestrial invasive species within Hawaii.
4. Identify and implement **cost-effective tools, technologies, and methods** that improve management of priority pathways by state agencies and private companies.
5. Clarify HDOA authority and determine capacity needed to assess, inspect **high-risk non-agricultural commodities and cargo** and develop voluntary initiatives to mitigate risk.



## Key Actions (continued)

6. Work with ISCs to increase **County** support for prevention and rapid response of invasive species not known to occur on their island(s). *[link to Objective 6]*
7. Support **HDOT** implementation and 2022 update of the Statewide Noxious and Invasive Pest Program Strategic Plan in cooperation with public and private stakeholders.
8. Create standardized contract language for BMPs to minimize the spread of invasive species and incorporate into contracts by state agencies and other partners.
9. Promote the use of the State Pest Reporting System. *[link to Objective 7]*
10. Track and **report annually on status of species on the HI Limited Distribution Priority List** (e.g. prevented at source, detected & removed, established, other).



### STRATEGY 3: AQUATIC BIOSECURITY

Prevent the introduction and spread of aquatic non-native species (ANS) into, between, and around the Hawaiian Islands by reducing species movement through ballast water, biofouling, intentional import and release, and other unintentional modes of introduction.

*Photo: Marinelink.com*



## Key Actions

1. Conduct **risk assessments** to identify and prioritize aquatic pest pathways and risks into and within Hawaii.
2. Develop aquatic rapid response plans to address high-risk vessels.
3. Establish a vessel inspection program in State harbors in partnership with the maritime industry, including a framework for the State to **co-regulate commercial vessels** related to ANS as incidental discharges regulated under VIDA.
4. Develop framework and associated rules to manage AIS risks from **non-commercial vessels** (those not exempted and not covered under VIDA).
5. Fund and establish an **aquatic biosecurity team** to perform vessel ballast water and biofouling risk assessments within Hawaii. *[link to Obj 6]*

## Key Actions (continued)

6. Identify and implement **tools, technologies, and methods** that improve detection and/or management of priority species and pathways. *[link to Obj 1 & 2]*
7. **Increase awareness of** key private stakeholders of their role and opportunities to help address aquatic invasive species introduction and spread. *[link to Obj 7]*
8. Research and develop a ***list of high-risk aquatic animals*** and prohibit their introduction to HI.
9. Establish a **baseline** for aquatic biosecurity and initial measures for **tracking** effectiveness at preventing introduction and spread of ANS.



#### STRATEGY 4: LARGE-SCALE CONTROL OF HIGH-IMPACT INVASIVE SPECIES

Implement **at least one new large-scale control or eradication project** for an invasive species population with highly significant ecological, economic, and/or health impacts in Hawai'i, and build momentum for action on other widespread high-impact species (e.g. mosquitoes, rats, marine algae).

*Photo: West Hawaii Today*

## Key Actions

1. Identify and **prioritize at least five established invasive species** (aquatic or terrestrial vertebrates, invertebrates or plants) whose populations have highly significant ecological, economic and/or health impacts and large-scale projects could be implemented in the next 10 years (e.g. mosquitoes, rodents, marine algae).
2. Research and identify **tools, technologies, and methods** that are proven effective (or have high potential) for large-scale control or eradication of at least three priority invasive species by 2021.
3. Select **first pilot/demonstration large-scale eradication project** and identify political, regulatory, funding, social, cultural, and other barriers/opportunities to implementation with possible ways to reduce barriers and leverage opportunities.
4. Develop and implement a **model community engagement plan** (BMP) for the first large scale control or eradication project(s) and make it available for future large-scale projects. *[link to Obj 7]*



## Key Actions (continued)

5. Work with partners to **implement** at least one large-scale project and initiate planning for at least one more.
6. Ensure the **large-scale impact is sustained**, including regular monitoring and follow-up. *[link to Obj 6]*
7. Assist lead agencies to **evaluate** the large-scale project(s), including model community engagement, evaluation and follow-through.



### STRATEGY 5: PACIFIC REGIONAL BIOCONTROL & CONTAINMENT CENTER

Increase the capacity and scope of biocontrol work in Hawai'i by creating a **Pacific Regional Biocontrol & Containment Center with core staff, planning for a new containment facility and base funding in place.** Release biocontrol agents for at least three top priority established invasive species (invertebrates, weeds, and/or pathogens) and annually assess, prioritize, and advance critical biocontrol projects.

## Key Actions

1. Build a **broad coalition** to support the building and long-term maintenance of the Pacific Regional Biocontrol & Containment Center.
2. Develop a **feasibility assessment** for raising capacity for a new Pacific Regional Biocontrol and Containment Center for Congressional delegates and agency use.
3. Identify and secure lines of potential **funding, site and designs for a climate-resilient containment facility** to house the Pacific Regional Biocontrol Center that can test potential classic biocontrol organisms across the different taxonomic groups. *[link to Obj 6]*
4. Explore feasibility of an **emergency containment facility on Hawaii Island**.
5. Maintain and develop new **regional and international partnerships** to strengthen regional biocontrol capacity and success of exploration missions.

## Key Actions (continued)

6. Secure funding and increase **biocontrol staff** for both state and federal biocontrol projects. *[link to Obj 6]*
7. Test at least eight **biocontrol agents**, and release five by 2025.
8. Evaluate and harmonize the **biocontrol regulatory process** for greater efficiency.
9. Build and maintain **public support** for 21<sup>st</sup> century biocontrol practices. *[link to Obj 7]*
10. Measure **effectiveness of released biocontrol agents** over time (>5 years) and track the number of biocontrol agents in pipeline and released annually.





### **STRATEGY 6: INCREASED & DIVERSIFIED FUNDING for INVASIVE SPECIES PRIORITIES**

Increase & diversify funding for invasive species priorities to **provide at least \$100M annually through county, state, federal, regional, and private sources**, including \$90M for operational and personnel requirements and \$10M for essential facilities.

## Key Actions

1. Work with a diverse group of advocates to increase **State general funds** to DLNR, HDOA, UH, HDOH and HDOT for implementing HIBP actions (e.g. staff, electronic databases, adopting new technologies).
2. Secure additional **HISC project funding** to support specific critical new initiatives in the HIBP and 2025 Strategy, including risk assessments.
3. Secure a funding mechanism (public and/or private) to provide **at least \$1 million annually for emergency response** to new terrestrial or aquatic incursions.
4. Increase annual support from **all four counties** to ensure stable and effective Invasive Species Committees (ISCs), ROD response and other priority invasive projects.
5. Double ***private discretionary funding*** to support CGAPS' ongoing and new invasive species initiatives. (est. \$700K per year)

## Key Actions (continued)

6. Build a relationship with **visitor industry** decision-makers and develop mutually beneficial projects.
7. Investigate existing and new lines of **federal funding** for invasive species work.
8. Identify invasive species management as a priority use for **DLNR's forest carbon offset program** and secure annual commitment in addition to annual appropriations to HISC funds and WPPG.
9. Secure **capital funding** for essential facilities. *[link to Obj 5]*
10. Repeat **funding analysis** conducted by LRB in 2015 to assess progress.



## STRATEGY 7: ENGAGED & SUPPORTIVE COMMUNITY

Raise or maintain **strong awareness and support (70%+ in polls)** for key invasive species issues and expand, diversify and mobilize a **network of allies** to achieve 2025 Joint Strategies.



## Key Actions

1. Provide **quality, timely, accessible information** to community, decision-makers and allies.
2. Develop **resonant/targeted messages** (related to the core values of the audiences) and use effective methods/channels to help key audiences:
  - **value** Hawaii's natural environment, agriculture, economy, and the health, lifestyle, and culture of its people
  - **understand the threats** posed by invasive species and related compounding issues, such as climate change, and
  - **respond to a call to action** to address these threats.
3. Increase public awareness at ports of entry, specifically airports. *[link to Objectives 1 & 2]*
4. Identify and engage **influencers in different sectors**, industries, and groups who can champion invasive species priorities.

## Key Actions (continued)

5. Increase CGAPS & partner understanding and use of social science and raise capacity for the effective use of **social science concepts and social marketing** for invasive species messages.
6. Increase **political will** to support policy and funding needs.
7. **Coordinate statewide or regional strategies and messages** across lead agencies and partners; provide communications/coordination support for agencies and partners for key issues.
8. **Evaluate** effectiveness of communications periodically and use these lessons to improve future initiatives.

## STRATEGY 8: INCREASE HISC ENGAGEMENT ACROSS SECTORS

Improve HISC's engagement and support across key sectors (agriculture, conservation, economy, health, tourism, transportation, and culture/way of life) and systems (terrestrial and aquatic), as measured by engagement in HISC activities and effective use of HISC tools (e.g., funding, policy resolutions, testimony).

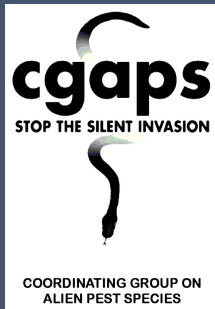


## Key Actions

1. Formalize and establish **liaison roles within each agency** to identify priorities that HISC can actively support (e.g., policies, resolutions, strategies, projects, research questions, communications, joint workday opportunities).
2. Improve engagement and interaction with **HISC Council members**.
3. Submit **HISC testimony** on bills that are important invasive species priorities, as requested by Council members. (*Historically, HISC regularly testified on bills within DLNR's scope. By 2025, the staff hopes to work more closely with all its member agencies on legislative priorities.*)
4. Review and reconvene **HISC Working Groups** to reflect 2025 strategies and address balance amongst sectors.
5. Increase participation in **Hawaii Invasive Species Awareness Month** across all sectors.
6. Develop and use a **tracking system to assess balance across sectors** for HISC tools (e.g., quantifying the number of resolutions, testimonies, funded projects relevant to each sector).

## STRATEGY 9: STRENGTHEN & EXPAND CGAPS NETWORK

Include **representatives** across the diverse invasive species community of practice in the CGAPS Network and actively engage **all partners** needed to implement this 2025 Joint Strategy statewide.





## Key Actions

1. Continue to engage and support CGAPS partners by assessing and improving current **network communications**, including general meetings, listserve, website, information sharing and other Network activities.
2. Provide and socialize a simple description of **what CGAPS does** and how it relates to HISC with all CGAPS Network participants, especially Steering Committee members.
3. Challenge the **CGAPS Steering Committee** to actively lead, implement and/or support elements of the 2025 Joint Strategies (Objectives and/or Key Actions) most relevant to their positions and agencies.
4. Identify and **recruit additional public and private sector partners** needed to implement the 2025 Joint Strategies, using various meeting formats, venues and other engagement mechanisms.
5. Track member participation and periodically gather input on their satisfaction with the CGAPS Network and opportunities for adaptive management.

## STRATEGY 10: STABLE CGAPS FUNDING & STAFFING

Secure **committed consistent annual contributions** from **CGAPS partners** to provide core support for two staff and core operations (est \$250K per year, excluding project funds).



## Key Actions

1. Review CGAPS funding needs with **Steering Committee** and request/secure annual contribution commitments from all SC members.
2. Work with the CGAPS Steering Committee to **assess the potential core funding mechanisms**, contributors, and amounts to ensure CGAPS financial security and continuity after 2021 (when HMLF 10-year commitment ends).
3. Secure additional annual commitments from **active CGAPS partners** outside the Steering Committee.
4. Present CGAPS “value proposition” and funding needs to the **Environmental Funders Group** to seek core funding and/or project support. *(discuss with HMLF)*
5. Explore feasibility of **permanent funding for one CGAPS position** in a partner institution’s budget (e.g. as a faculty specialist at UH).
6. Provide **annual CGAPS financial report** to Steering Committee, especially tracking core support from partners.

# Mahalo



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