



AGENDA

1. Call to order
2. Introductions
3. Approval of minutes from August 17, 2016 meeting
4. Submittal: Requesting a resolution endorsing the Hawaii Interagency Biosecurity Plan 2017-2027 and committing to implementation
5. Submittal: Requesting a resolution supporting evaluation and implementation of technologies for landscape-scale control of mosquitoes, with a focus on mitigating both human and wildlife health risks
6. Submittal: Requesting a resolution recognizing the Rapid Ohia Death Response organizational structure and supporting close collaboration with the Hawaii Invasive Species Council and its staff.
7. Staff Presentation and discussion: HISC participation in the International Union for the Conservation of Nature's Honolulu Challenge
8. Partner presentation: Report from Lori Buchanan (Molokai Invasive Species Committee manager) on role of culture and indigenous peoples in invasive species management
9. Discussion of HISC agencies' requests in the 2017 regular session of the Hawaii State Legislature
10. Public Comments
11. Adjournment

What's at Risk?



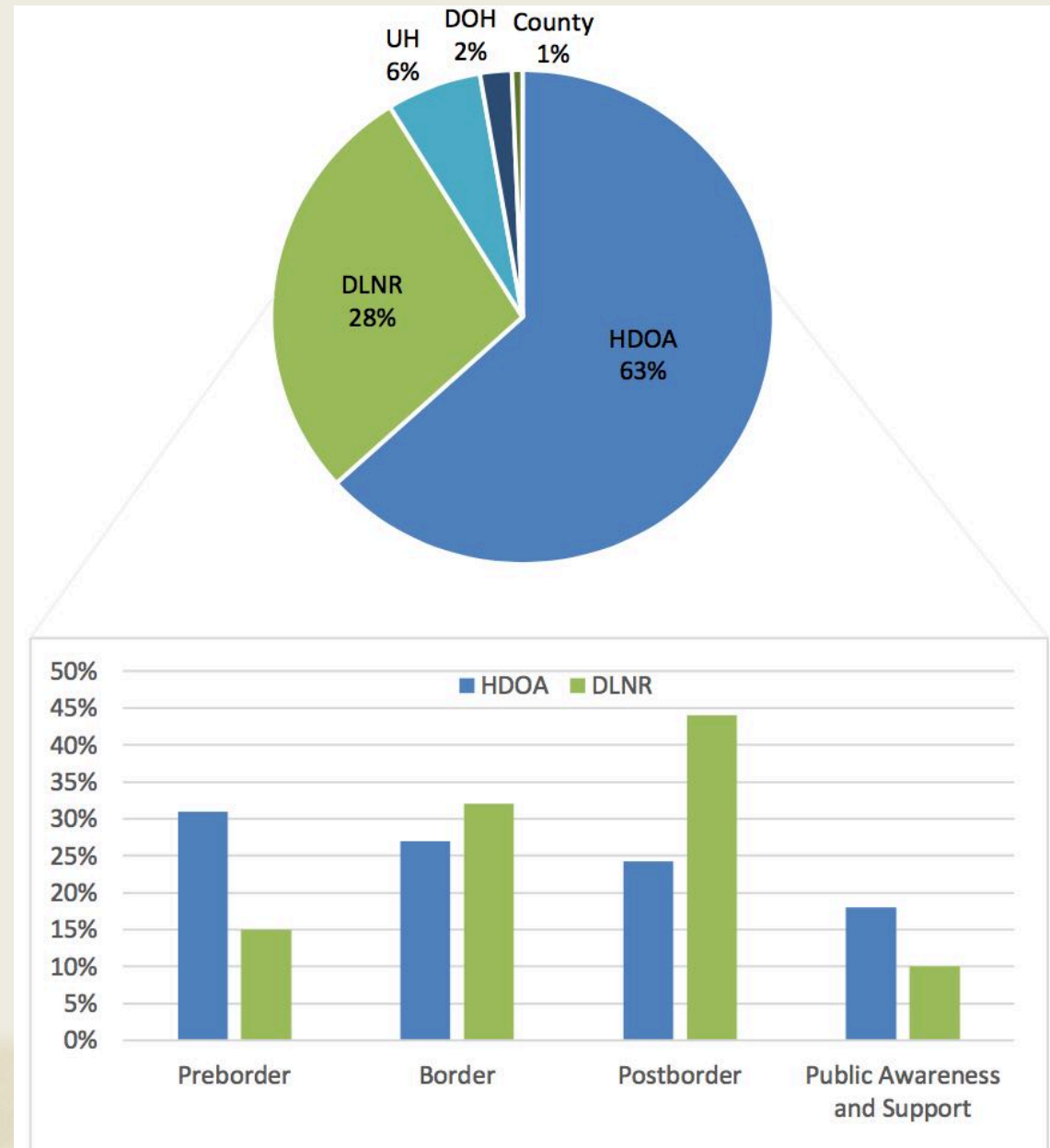
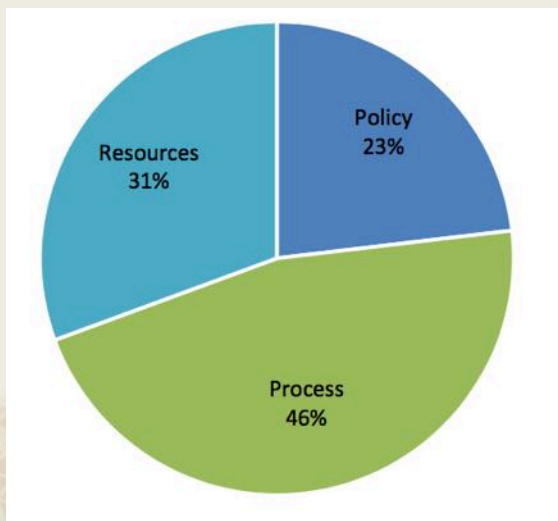
Hawaii Interagency Biosecurity Plan
2017–2027

- Year-long, collaborative process
- Interagency analysis of comprehensive biosecurity system, including
 - Pre-border
 - Border
 - Post-border
 - Outreach
- Outcomes are primarily focused on actions led by HDOA, DLNR, UH, DOH, and the counties, with support from other state, federal, and county agencies



HIBP Outcomes

- 147 action items prioritized, assigned to agencies, and placed on timeline
- 69% are no-cost “process” or “policy” actions
- \$378M to implement all actions over 10 years
- \$283M for Priority 1 actions alone



Priorities and Costs

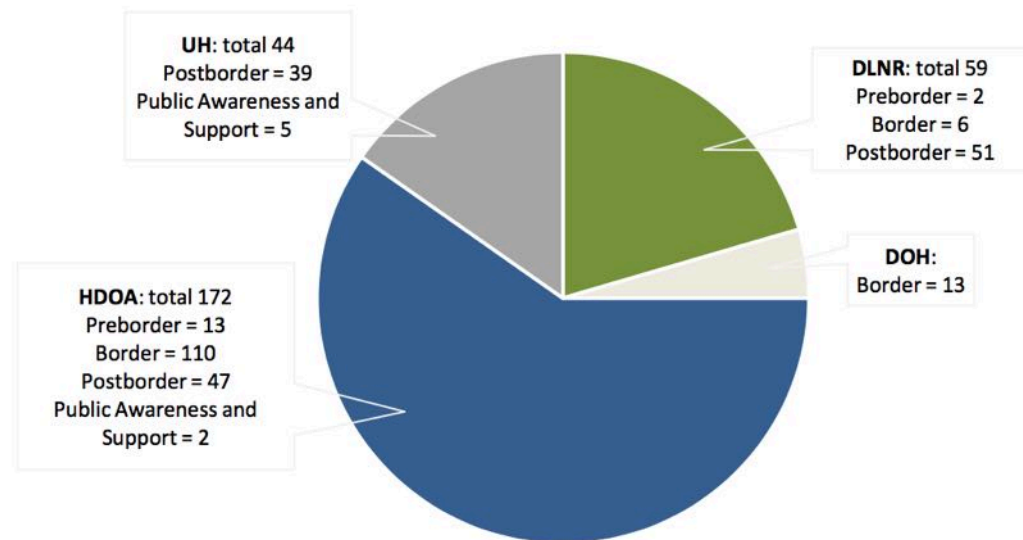
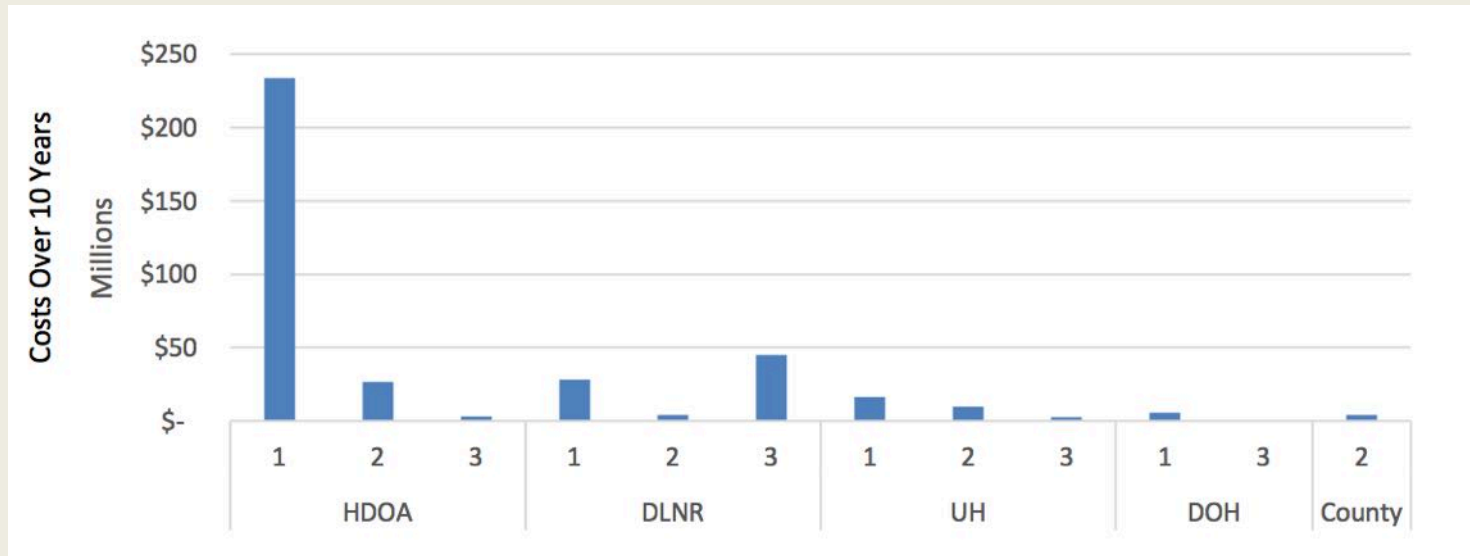


Figure 4.7. Staffing Needed to Implement the Hawaii Interagency Biosecurity Plan by Agency



Submittal: Requesting a resolution endorsing the Hawaii Interagency Biosecurity Plan and committing to implementation

Recommends that the HISC adopt a resolution that:

1. Endorses the Hawaii Interagency Biosecurity Plan as the State's guiding strategy for biosecurity and invasive species efforts over the next decade (2017-2027),
2. Commits generally to facilitating timely implementation of the HIBP action items, and
3. Commits specifically to initiate implementation of the highest priority action items for which HISC agencies are designated as the lead and for which the implementation timeline begins in the first biennium of the plan (2017-2018).



HISC Agency Priority 1 Actions, 2017-19

Shared Implementation Tasks	Relevant HIBP Tasks	Timeline
Develop best management practices that agencies, industry, and private individuals can follow or require for actions on their lands.	PosPro1.6	2018–2027

Total cost: \$0

DOH Implementation Tasks	Relevant HIBP Tasks	Timeline
Add remaining positions to restore the Vector Control Branch	BorTifs1.5	2019–2027

Total cost: \$979,100

UH Implementation Tasks	Relevant HIBP Tasks	Timeline
Hire four agricultural extension agents to facilitate areawide control of pests on farms, nurseries, and ranches.	PosTifs1.12	2018–2027
Hire two aquaculture extension agents, one extension specialist, and one researcher to conduct research, develop screening, quarantine and management protocols	PosTifs1.13	2018–2027
Hire four agricultural diagnosticians to provide for rapid screening, diagnostic testing, and identification of insects and diseases	PosTifs1.14	2018–2027
Utilize CTAHR Office of Communications Services to develop new statewide comprehensive education and outreach materials targeted at specific audiences,	PwsTifs1.6	2018–2027

Total cost: \$2,060,000



HISC Agency Priority 1 Actions, 2017-19

DLNR Implementation Actions	Relevant Tasks	HIBP	Timeline
Amend HAR 13-76 to make it consistent with USCG ballast water regulations , including minimum ballast water discharge standards	PrePol1.6		2017–2021
Hire/contract two biologists to conduct aquatic risk assessments for hull fouling, ballast water, aquaculture, and aquarium issues.	PrePro1.7, PreTifs2.5, BorTifs3.4		2017–2027
Propose legislation to authorize DLNR to inspect vessels and regulate hull-fouling threats , with penalty provisions for noncompliance. Create a database to house data from inspections and inform risk assessments. Hire/contract four biologists, one technician, and one data management specialist to support this work.	BorPol1.6, BorPro2.3, BorTifs3.1, BorTifs3.2, BorTifs3.3, PwsTifs1.5		2018–2019
Write protocols for statewide field response to unexpected AIS arrivals , such as materials transported by a tsunami	PosPro4.1		2017–2018
Provide training and logistical support to local community organizations to effectively control and eradicate established aquatic pests.	PosPro4.7		2018–2027
Increasing base funding of competitive grants for Watershed Partnerships from the current \$2 million per year to \$6 million per year.	PosPro3.3		2018–2027
Hire four forest health specialists and one forestry pathologist to conduct monitoring, detection, and control for high-risk pests and pathogens in forest	PosTifs1.8		2018–2027
Hire 9 invasive species technicians per biennium (45 total by 2027) to detect, monitor, remove, and control invasive species in DOFAW's protected areas.	PosTifs1.10		2018–2027

Total cost: \$11,054,304 (incl \$8M for WPPG)



HISC Agency Priority 1 Actions, 2017-19

HDOA Implementation Actions	Relevant HIBP Tasks	Timeline
Amend HRS §150A-5 to enable HDOA to screen and inspect nonagricultural commodities	PrePol1.1	2017–2019
Policy amendments to implement a comprehensive emanifest system , implemented by 2020	PrePol1.2, PrePro1.1	2017–2019
Implement a biosecurity database system to record emanifest actions, input from risk assessments and survey data. Hire four data management specialists to support this system.	PrePro1.4, PreTifs2.3	2017–2025
Conduct risk analyses of terrestrial plants, pests, diseases, commodities, and pathways to prioritize screening and inspections. Hire three entomologists, two plant pathologists, and two botanists to support this work.	PrePro1.2, PreTifs2.2	2018–2027
Propose legislation to enable HDOA oversight of third-party transitional facilities for freight inspection and quarantine. Write minimum specifications and operational protocols that would constitute HDOA's certification program for operating transitional facilities in Hawaii. Enter into public-private partnerships to operate these facilities.	BorPol1.1, BorPol1.2, BorPro1.2, BorPro1.3	2017–2019
Implement inspections by state detector dogs	BorPro1.1	2017–2027
Develop a comprehensive approach to minimize the interisland movement of plant pathogen and pests (e.g., amend and update HAR Chapter 4-72 for stricter regulation of interisland movement of pests and pathogens, enter into compliance agreements, or develop an interisland nursery certification program).	PosPol1.3	2018–2020
Build new office complex to house the PPC Branch , including new biocontrol facilities and chemical/mechanical pest control facilities.	PosTifs2.1	2018–2027
Restructure the HISC as the Hawaii Invasive Species Authority (HISA) . Fund the HISA's operations and an annual grant program for interagency projects	PosPol2.1, PosTifs1.1	2017–2019
Propose legislation to create a biosecurity emergency response fund to support multiagency emergency responses and allocate money on an annual basis to this fund.	BorPol1.3, BorTifs1.4	2018–2019
Hire/contract policy analysts to write necessary rules and regulations listed in this plan. Hire a natural resource economist to analyze the costs of inaction on high-profile biosecurity threats.	PreTifs2.1, PwsTifs1.2	2018–2027
Enter MOAs with DOD to allow for the inspection and clearance of military vessels and related cargo	PrePro3.2	2018–2027
Add 15 Animal Industry positions to implement an expanded livestock disease detection monitoring program .	BorTifs1.2	2018–2027
Align the notifiable disease list with internationally and nationally recognized lists of existing threats to domestic livestock (terrestrial and aquatic).	PrePol3.3	2017–2020
Create working group to develop effective solutions that address carcass disposal , including carcasses of marine animals.	PosPro3.2	2018–2027

Total cost: \$64,100,000 (incl \$35M for PPC facilities, \$21M for HISA)



Submittal: Requesting a resolution endorsing the Hawaii Interagency Biosecurity Plan and committing to implementation

Recommends that the HISC adopt a resolution that:

1. Endorses the Hawaii Interagency Biosecurity Plan as the State's guiding strategy for biosecurity and invasive species efforts over the next decade (2017-2027),
2. Commits generally to facilitating timely implementation of the HIBP action items, and
3. Commits specifically to initiate implementation of the highest priority action items for which HISC agencies are designated as the lead and for which the implementation timeline begins in the first biennium of the plan (2017-2018).



Submittal: Requesting a resolution supporting evaluation and implementation of technologies for landscape-scale control of mosquitoes, with a focus on mitigating both human and wildlife health risks

- Hawaii has no native mosquitoes
- Six species impact humans and wildlife, primarily from two genera: *Aedes* and *Culex*. Associated diseases include:
 - Dengue fever, vectored by *Aedes* mosquitoes
 - Zika, vectored by *Aedes* mosquitoes
 - Chikungunya, vectored by *Aedes* mosquitoes
 - Yellow fever, vectored by *Aedes* mosquitoes
 - West Nile Virus, primarily vectored by *C. quinquefasciatus*
 - Avian malaria, primarily vectored by *C. quinquefasciatus*



Submittal: Requesting a resolution supporting evaluation and implementation of technologies for landscape-scale control of mosquitoes, with a focus on mitigating both human and wildlife health risks

New technologies for landscape-scale control:

- Sterile Insect Technique
- Incompatible Insect Technique
- Self-limiting Genetic Technique
- Gene Drive



Submittal: Requesting a resolution supporting evaluation and implementation of technologies for landscape-scale control of mosquitoes, with a focus on mitigating both human and wildlife health risks

Recommendation that the HISC adopt a resolution that:

1. Recognizes landscape-scale control of mosquitoes to be an important, cross-sector invasive species goal
2. Supports evaluation of technologies for landscape-scale control of mosquitoes in Hawaii, including sterile insect technique, incompatible insect technique, and genetic tools
3. Encourages researchers to take a cross-sector approach to evaluating technologies and wherever possible pursue research that benefits both human health and the health of native wildlife
4. Supports implementing evaluated technologies that are scientifically demonstrated as safe, effective control methods for mosquitoes



Submittal: Requesting a resolution recognizing the Rapid Ohia Death Response organizational structure and supporting close collaboration with the Hawaii Invasive Species Council and its staff.

Recommendations

- That the HISC adopt a resolution recognizing the Rapid Ohia Death Response Team as the lead entity for the Rapid Ohia Death response and supporting close collaboration between the HISC and the ROD response at all levels. The HISC also requests that the Response Team identify agency representatives for the agencies discussed in the submittal.





Multiply efforts to develop and enact **effective biosecurity policies** and programmes for countries and islands



Enforce effective measures to address **priority pathways** of invasions, including efforts to strengthen collaboration with relevant sectors in particular agriculture and health

Greatly increase the number and scale of invasive alien species **eradications**, especially on islands and in other priority sites; by 2020 there shall be a doubling of commitments to achieve this goal



Substantially increase resources for invasive alien species management and **control**



Invest in the development, application and sharing of innovative technologies, and other **solutions** to prevent further invasions, and eradicate or control invasive alien species

Integrate invasive alien species into planning and management for **Protected Areas** and **Key Biodiversity Areas**



Institutionalise invasive alien species programmes **across government ministries**, cooperating with the private sector, NGOs, indigenous peoples and local communities, and other stakeholders on programme implementation



Support assessments on the social and economic impacts of invasive alien species

Engage with relevant sectors and civil society to **raise awareness** of the negative impacts of invasive alien species, including the compounded impacts under climate change, and increase **public support** for potential solutions.



Work with public and private financial institutions to **increase international financial flows** and **mobilise domestic resources** for addressing biological invasions.

Enable enhanced knowledge on invasive alien species, their impacts and pathways of invasion, through **investment in data** collection, standardization, sharing and open access.



Honolulu Challenge Supporters



Commitments to Date



*The New Zealand Government commits to making New Zealand **predator free by 2050.***



*The Australian Commonwealth Scientific and Industrial Research Organisation commits to **doubling of long term co-investment with partners into invasive species management.***



Department
for Environment
Food & Rural Affairs

*The UK Government commits to **spending £2.75 million on assisting its Overseas Territories to develop comprehensive biosecurity for invasive non-native species as well as making***



*The Grupo de Ecología y Conservación de Islas, A.C. (GECI) commits to **remove invasive mammals from all islands of Mexico by 2030.***



*Island Conservation commits to **protect more than 100 threatened species at risk from invasive species on 40 Islands by 2020.***



*The BirdLife partnership aims to **remove invasive alien threats from at least a further 35 high biodiversity islands worldwide by 2020.***

Partner Presentation

- Report from Lori Buchanan (Molokai Invasive Species Committee manager) on role of culture and indigenous peoples in invasive species management



Discussion of HISC agencies' requests in the 2017 regular session of the Hawaii State Legislature



2017 Hawaii Biosecurity Package Multi-agency requests from the Hawaii Interagency Biosecurity Plan (2017-2027)

Governor Ige's opening remarks at the IUCN World Conservation Congress announced the development of the Hawaii Interagency Biosecurity Plan, a 10-year, multi-agency roadmap that strategically enhances Hawaii's biosecurity and invasive species programs. The plan includes over 150 action items, centered around 10 key themes:

Off-shore compliance: Agreements with other jurisdictions to adopt preshipping inspection and control policies	Better coordination and participation by industries: Expansion of the Hawaii Invasive Species Council into the Invasive Species Authority to provide industry a seat at the table and better interagency coordination to monitor, detect, and control invasive species
E-manifest and intelligence gathering: New technology to track what is coming in, what is high risk, and what is low risk (for faster release)	Renewed focus on human health: A fully restored DOH Vector Control Branch to detect vectors of dengue, Zika, and more
Inspection facilities: Well-lit, secure areas for efficient inspections, refrigerated areas for produce	Enhanced control of established pests: Adequate field staff at HDOA, DLNR, DOH, and UH to control established invasive species, improved laboratories to support effective biocontrol
Inspection of nonagricultural items: Provide HDOA the authority and staff to inspect high-risk nonagricultural items	Minimized interisland spread: Increased staff and inspections for interisland goods, support to local farms and nurseries through certification programs and import substitution programs
Emergency response capacity: Interagency plans, protocols, and funding in place for timely and effective response to new pest incursions	Engaged and supportive community: Targeted outreach to different stakeholder groups to increase awareness of and engagement in biosecurity programs

The action items in the Biosecurity Plan are time-specific, with each action assigned a target biennium for implementation over the next decade. Of the policy and infrastructure actions requiring legislative approval, those that are ready for implementation in 2017 are listed below and have been submitted via the Governor's administrative package.



Hawaii Department of Agriculture 2017 Biosecurity Requests

Policy

- **Restructure the HISC as the Hawaii Invasive Species Authority:** Replace or amend HRS 194 to convert the HISC into the Hawaii Invasive Species Authority (HISA). The HISA would build on the HISC model by adding new board seats and the ability to hire support staff. New board seats would represent non-governmental conservation

The Hawaii Interagency Biosecurity Plan is part of the Governor's Sustainable Hawaii Initiative and details the administration's approach to achieving portions of the Aloha+ Challenge



Aloha+ CHALLENGE



Department of Land and Natural Resources 2017 Biosecurity Requests

Positions

- **Marine Resource Specialist:** The DLNR Division of Aquatic Resources seeks funding to implement this previously-approved position to coordinate ballast water and hull fouling activities in Hawaii, two primary pathways for aquatic invasive species.

Funding

- **Funding for watershed protection:** The Governor's budget includes \$7,500,000 for construction of fences to protect watershed forests from invasive ungulates. (PosPro3.1)
- **Sustained funding for interagency "gap-filling" invasive species projects:** DLNR administers the Hawaii Invasive Species Council (HISC) and is requesting a conversion of \$4M from Act 84, SLH 2015 to the base budget, with an additional \$500,000 to better address current need for interagency projects. DLNR also supports the HDOA request to convert the HISC into the Hawaii Invasive Species Authority, which, should it pass with associated funding, would replace this request for HISC funding. (PosTifs1.1)
- **Rapid Ohia Death:** DLNR requests funding for continued research and mitigation relating to Rapid Ohia Death, including control operations on Hawaii Island and early detection and monitoring on other islands.



Department of Health 2017 Biosecurity Requests

Positions

- **Vector Control Capacity:** In 2016 the Department requested the restoration of the Vector Control Branch for the detection and mitigation of disease vectors such as mosquitoes. Twenty positions were provided in 2016. The Department is requesting the remaining twelve positions in 2017.

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Aloha+ CHALLENGE





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