



**A Proposal to the
Hau'oli Mau Loa Foundation
for
2020 CGAPS Invasive Species Prevention Projects**

Introduction

This past year has been the eighth year of our ten year partnership to protect Hawaii's environment through projects that enhance our ability to prevent new invasive species from becoming established and causing harm. As such, it was a good year to conduct strategic planning for CGAPS, and we are grateful for the Foundation's support that enabled us to contract Audrey Newman to guide us in this process. As we did in 2014 for our previous strategic plan, we embarked on the planning process in tandem with the Hawaii Invasive Species Council (HISC), with the intention of identifying ways to support the implementation of the Hawaii Interagency Biosecurity Plan. We believed we would start together, then diverge to create a plan for CGAPS, while HISC would have a separate plan. However, it became clear over the course of the year that HISC and CGAPS have the same priorities and agree on the necessary key actions in the next five years. The only difference will be at the task level, which will detail the steps that either CGAPS, HISC or both will undertake, based on the unique strengths of each entity's framework, network, and staff. The *HISC and CGAPS 2025 Strategy in support of the Hawai'i Interagency Biosecurity Plan* is expected in January, 2020.

Concurrent to the planning process, we worked with Sheila Sarhangi to identify priority big-picture projects that are shovel-ready, but that could benefit significantly from the use of the detailed and intensive strategic communications approach. Two proposed projects have been identified and a 2018 HISC grant to CGAPS is supporting the final high-level scoping which will result in a detailed communications plan. Support for the implementation of that plan is part of this proposal.

Work on ballast water and biofouling shifted significantly at the end of 2018 with the federal preemption of states' authority to regulate these two vectors and in-water cleaning of hulls. Since that time, the CGAPS PIO, Planner, and Aquatic Legal Fellow have focussed on raising state capacity to co-enforce new federal standards and regulations when they are finalized in December 2022, and in shaping those federal standards. Continued HMLF support for these positions is deeply appreciated,

The end of 2019 also marks the end of the 2017-2019 Rapid 'Ōhi'a Death Strategic Response Plan, and a new 2020-2025 plan is nearing completion. Through this process, it has become clear that federal budget allocations to a variety of agencies will result in cuts to important programs locally and across the nation. Therefore, the CGAPS Steering Committee and ROD Strategic Response is requesting funds to support half the costs for two positions, which will help leverage other funds.

As in past years, there are several projects which would benefit from no-cost extensions, and a separate request will be sent in the coming week. Mahalo for your consideration of these requests, and for your tremendous support of our work. Mahalo nui loa!

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Project 1: CGAPS Invasive Species Law Fellowship Program (Goal 1, Actions 1, 2, 4, 6; Goal 3, Action 2)

Executive Summary

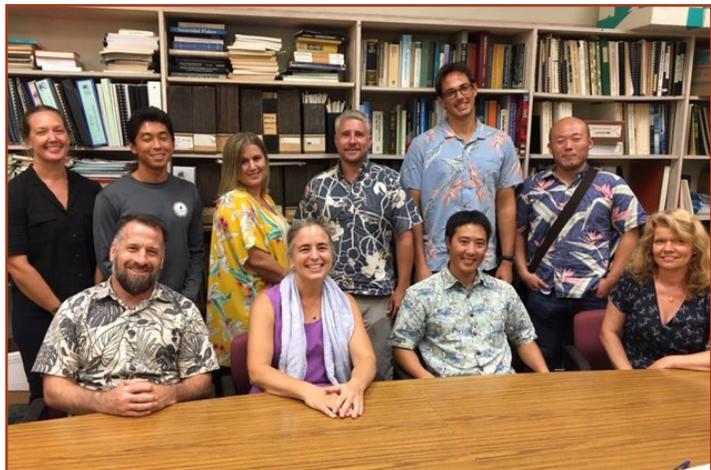
Funding for this project will provide continued salary and operational support for two full-time William S. Richardson School of Law Legal Fellows, and up to two interns to work in collaboration with CGAPS in reviewing invasive species prevention-related statutes and rules, providing internal analyses, and drafting improved statutes and rules for consideration.

Background

The CGAPS Law Fellowships continue to provide critical support and services in the area of invasive species prevention, the magnitude of which is difficult to convey. Andrew Porter continues to assist the Department of Land and Natural Resources-Division of Aquatic Resources (DLNR DAR) on ballast water and biofouling issues at the local and national level. As anticipated, the passage of a new federal law in December 2018 has resulted in extra work at the national, regional, and local level, to meet the new standards and regulations that are being developed by December 2022. At that time, states will be preempted from setting ballast water, biofouling, and in-water hull cleaning regulations that differ from new federal standards and regulations. CGAPS staff continue to provide critical support to build state capacity to co-regulate and in working with federal agencies.

In June, Stephanie Easley joined CGAPS to focus on terrestrial invasive species prevention issues identified in the Hawai'i Interagency Biosecurity Plan and by CGAPS Steering Committee members. Stephanie quickly drafted several prevention memos in support of key actions identified in the new HISC and CGAPS Strategic Plan, and continues to work on others. Stephanie's experience includes seven years as a resource management biologist for federal agencies, followed by nearly eighteen years with the US Senate Office of Legislative Council. Her analyses have provided us with a better understanding and additional perspectives on agency authorities and rulemaking processes.

In addition to this work, the Legal Fellows also participate in occasional UH William S. Richardson School of Law classes and workshops in their areas of



UH William S. Richardson School Associate Dean for Academic Affairs & Professor of Law Denise Antolini (front, second from left) meets monthly with CGAPS Legal Fellow Drew Porter (back row, center) and Stephanie Easley (right), and the other environmental legal fellows.

expertise, to foster the understanding of invasive species issues with the learning community.

Existing funds are projected to last until the middle of July, 2020. Therefore, this request is for \$105,000, which would support two FTE from mid-July through January 2021, with salary and fringe, travel, materials, and supplies, plus up to two University of Hawai'i William S. Richardson School of Law interns.

The legal fellows are responsible for continuing work on the following issues:

- Support DLNR DAR on creating a programmatic and regulatory framework for ballast water and biofouling inspection/in-water cleaning that could work at the federal and state level
- Assist DLNR DAR and Pacific Coast state counterparts in analyzing areas where states retain authority and should regulate to address ballast water, biofouling & in-water cleaning
- Support HDOA Plant Quarantine in reviewing intrastate and interstate prevention rules
- Assist CGAPS in petition/s for rulemaking to restrict domestic importation of certain invasive plants, and subsequent request to USDA for federal rulemaking for foreign importation
- Address gaps in quarantine action authority for federal agencies when human health vectors are found in international cargo or conveyances
- Address DAR policy gaps regarding aquaculture, including permitting for culture, facilities inspection (for biosecurity purposes), and compliance
- Support the implementation of the new HISC and CGAPS 2025 Strategy

Deliverables

The deliverables will consist of regular reports and a year-end final report on progress towards these and other priority issues.

Budget: \$105,000 (\$5,250 UHF)

Project 2: Capacity Support for CGAPS PIO and Planner *(Advance all Goals and Actions)*

Executive Summary

Funds are requested for up to six months of salary plus operating support for the CGAPS Statewide Invasive Species Public/Community Relations Coordinator (shortened to PIO), and five and a half months of salary plus operating costs for the CGAPS Planner. The goals of the PIO are to facilitate engagement and inter- and intra-agency communication; to coordinate and catalyze collaborative projects towards the goals outlined in the HISC and CGAPS 2025 Strategy; to promote key outreach messages; to educate decision makers, special interest groups, and the public about invasive species in order to effect a change in perception, actions, rules, or funding for invasive species issues. The CGAPS Planner goals are to plan and carry out projects

and tasks in support of the HISC and CGAPS 2025 Strategy, to assist in coordinating the CGAPS partnership, and strengthen communication networks. As a project of the University of Hawaii's Pacific Cooperative Studies Unit (UH PCSU), CGAPS staff also conducts and coordinates research, works with UH faculty to provide learning opportunities for students, and functions as a connector between the University's knowledge base, resource management agencies, and the community.



Audrey Newman (left) and Sheila Sarhangi (back, third from left) help HISC and CGAPS staff prepare for the Invasive Species Strategy Workshop. Clockwise from the left is Elizabeth Speith, Lara Reynolds, Ambyr Mokiao-Lee, Andrew Porter, Randy Bartlett, Josh Atwood, and Chelsea Arnott.

Background

The University of Hawai'i is a key resource in the effort to protect Hawai'i's natural resources, economy, and residents from the threats posed by invasive species. Under the direction of PCSU Director Dr. Shaya Honarvar, with continuing guidance from Director Emeritus Dr. David Duffy, and in partnership with the CGAPS Chairs, this project will benefit the University of Hawai'i by integrating faculty, researchers, and students in Hawai'i's biosecurity programs. Close collaboration between biosecurity agencies and the University also provide research and outreach capacity where there are currently gaps, and in turn, greater integration between the University and Hawai'i's biosecurity programs will enable faculty to identify job training and research pathways.

The role of CGAPS as a federal, state, and non-government organization partnership is to identify gaps in Hawai'i's biosecurity framework and programs, and work to bridge or fill these gaps. A core function of the CGAPS staff is to either catalyze, coordinate, and in some cases, implement projects or initiatives that improve our ability to prevent or address invasive species. In addition to coordinating agencies and filling gaps, the CGAPS PIO and Planner (along with the ROD Statewide Outreach Coordinator) are based at the University of Hawai'i at Mānoa and serve as informational resources and collaborators for the UH community.

Support is requested for six months of salary and fringe, and for operating funds to support the CGAPS PIO through January 2021. Contributions from the Hawai'i Invasive Species Council, National Park Service, U.S. Fish and Wildlife Service, and U.S. Forest Service also support the salary, fringe, and operating costs of this position, and additional funds are being sought. Support is also requested for five and a half months of salary and fringe, and operating costs for the CGAPS Planner. Although currently vacant, this key position is expected to be filled by mid-January. With existing and requested funds, the position would be funded through January 2021.

CGAPS is able to conduct its work through the help of the Pacific Cooperative Studies Unit, which provides assistance in the areas of human resources, budget/ accounts tracking, purchasing, reimbursements, and the tracking of grants and other

paperwork through the various UH offices. A nominal amount of grant funds also supports these functions.

Deliverables

Progress reports are provided to the CGAPS Steering Committee and funders at quarterly meetings, and a final report will be produced and shared at the end of the year. Measures of effectiveness are included for projects where appropriate.

Budget: \$120,000 (\$6,000 UHF)

Project 3: Support for the Hawai'i Green Growth *(Goals 3 & 5)*

Executive Summary

Funds are again requested to provide support for Hawai'i Green Growth (HGG) leadership and work on 2020 partnership goals, including the implementation of the Hawaii Interagency Biosecurity Plan, natural resource protection, and Hawaii's implementation of the United Nation's Sustainable Development Goals through the Aloha + Challenge.

Background

Funds are requested to help support HGG and its multi-sectoral approach to catalyze action across government, private sector, and civil society to promote a culture of sustainability through the Aloha+ Challenge 2030 sustainability goals, the Hawai'i Sustainable Business Forum, and high-level engagement with the United Nations on the Sustainable Development Goals. Through participation in HGG, CGAPS taps into a broader network for shared messaging and support for addressing invasive species issues, and for the interrelated Sustainable Development Goals.

Financial support for HGG is shared among multiple agencies and entities. Funding is requested to provide partial support to HGG for core operations and projects, administered through the O'ahu Economic Development Board.

Deliverables

With continued support, HGG will be able to engage leaders in meeting the Aloha + Challenge. HGG will provide updates and a year-end report.

Budget: \$25,000 (\$1636 OEDB)



HGG convenes business and agency leaders and decision makers to advance the sustainability goals in the Aloha + Challenge.

Project 4: Strategic Communications Plan Implementation (Goal 3)

Executive Summary

This project will build from work conducted in 2019 with Sheila Sarhangi during strategic planning for HISC and CGAPS, and the intensive scoping of the two potential projects that will culminate in April 2020 with a detailed implementation plan for one of the projects as the primary focus for implementation. This project would support a contract for strategic communications implementation costs through December 2020.

Background

Some of the priorities that have been identified in a number of invasive species plans over the years are really big or complex projects that require an added level of organized effort. The use of strategic communications in identifying and aligning support to achieve a goal is not a new concept for CGAPS or HISC. However, contracting a deeply skilled specialist to focus on and guide the effort with extreme attention to detail would take collective efforts to a new level.

Several potential projects were discussed over the course of the year with a handful rising to the top because they are complex, they address multiple priorities, they are ready or nearly ready to start, and are timely or time-bound (there is a timeline that must be met). The current HISC-supported phase of work through March 2020 is to conduct targeted discussions with high-level officials on the two or three potential projects to better identify the steps that will be necessary to achieve the goal, and the timeline for implementation. Support from the Foundation would enable CGAPS to continue working with Sheila Sarhangi on implementation through the end of 2020.

Deliverables

The contractor will start with the detailed strategic communications plan and will provide written updates in July and October, followed by a final report at the end of 2020. The October report will also include next steps for 2021. The Scope of Work will contain more specifics on billing and deliverable dates and information, and will be filed with Hawai'i Conservation Alliance Foundation as our fiscal sponsor for this project.

Budget: \$75,000 (\$7,500 HCAF)



Sheila Sarhangi presented an overview of the use of strategic communications at the Invasive Species Strategy Workshop.

Project 5: Preventing New Invasive Plants *(Goal 1, Action 6)*

Executive Summary

This project continues to utilize data generated from the invasive plant project funded by HMLF in 2014 and completed in 2017. This project would contract an invasive species specialist to draft and submit federal petitions to USDA Animal and Plant Health Inspection Service (USDA APHIS) to list up to forty plants as Not Approved (for importation into the US) Pending Pest Risk Analysis (NAPPRA).

Background

The process of creating a proposed restricted plant list for Hawai'i consisted of several steps. First, lists of plants that are regulated by other nations were gathered, and those not occurring in Hawai'i were selected then evaluated using the Hawai'i-Pacific Weed Risk Assessment, which resulted in a list of plants that are a high risk for becoming invasive in Hawai'i. CGAPS used this data to file a state petition in 2019 to restrict their import from domestic sources and will continue to pursue rulemaking. However, even when a state restriction on these plants is in place, those same plants could still be imported from foreign sources. CGAPS staff have not had the capacity to draft and submit the NAPPRA petitions and follow up with communications. Therefore, we propose contracting an invasive plant specialist to utilize the source information provided to CGAPS in 2017, to draft and submit the petitions for up to forty plants, and to be the point of contact to follow up and answer any questions from USDA APHIS. Funds would be administered through the Hawai'i Conservation Alliance Foundation.

Deliverables

The selected contractor will provide copies of all of the petitions submitted, and will provide short updates quarterly, with the final report summarizing the status of the petitions and any communications with USDA APHIS personnel. The Scope of Work will be filed with the Hawai'i Conservation Alliance Foundation and will detail deliverables and billing points.

Budget: \$25,000 (\$2,500 HCAF)

Rapid 'Ōhi'a Death (ROD) Supplemental Request: ROD Prevention Outreach & Diagnostics *(Goal 3; Goal 1, Action 1)*

Executive Summary

The two pathogens that cause Rapid 'Ōhi'a Death (ROD) can be spread through environmental carriers that aren't fully understood, and through the movement of the

disease spores by people. Supplemental funding would support half of the salary and operating costs for the ROD Statewide Outreach Coordinator to continue to engage outreach specialists on islands where ROD is not established, and to provide outreach to key communities as prioritized by the ROD Outreach Team. Funding would also provide support for a laboratory technician in the USDA Agricultural Research Service (USDA ARS) lab to conduct diagnostics on the many 'ōhi'a samples submitted from across the state, as well as the diagnostics on the many environmental samples (frass, soil, beetles, etc.). These two key positions are currently funded through a variety of federal and state funding sources, although an anticipated reduction in the amount of federal funds in 2020, combined with an unknown level of state support in the 2020 legislature have elevated the importance of this request.

Background

The multi-agency & NGO response to ROD is continuing, and the University of Hawai'i plays a major role in the research, response, community outreach, and strategic planning related to ROD. This project would provide partial support for outreach and diagnostic work that are two critical control points for the spread of ROD, and support the entire framework of the ROD Strategic Response.

The ROD Outreach Team is largely comprised of either UH or Research Corporation of the University of Hawai'i staff. This project would provide approximately half of the salary and operating costs for the ROD Statewide Outreach Coordinator, who focuses on engaging partners and potential partners to increase outreach capacity and reach across the state, and on conducting direct outreach to key audiences. This position has been funded through multiple federal, state, and private foundation grants, including initial funding from HMLF. However, US Forest Service funds will decrease nationwide in 2020, and the ROD Strategic Response will be one of many local projects that will be impacted. In addition, budget figures going into the 2020 state legislative session would support half of the budgetary need in the new 2020-2025 ROD Strategic Response Plan (to be released in December, 2019).

This project would also provide partial support for a diagnostic lab technician in the USDA ARS lab. This lab is responsible for testing all 'ōhi'a wood samples to determine which of the two pathogens are present (or if they are absent), including the testing of 'ōhi'a logs for shipment in support of the HDOA quarantine rule, and samples from suspected ROD trees sighted during statewide aerial surveys. The diagnostic lab technician also tests for the presence of the pathogens in environmental samples such as soil, ambrosia beetles, and boring saw-



A ROD Science Symposium held in Hilo in May, 2019 provided an opportunity to discuss what we have learned, remaining research questions, and the response framework which set the stage for drafting the plan for the next five years.

dust from the beetles, in support of research on the environmental pathways that spread ROD.

Both of these positions are currently funded by multiple grants to UH, with Drs. Michael Melzer and J.B. Friday of UH CTAHR as the Principal Investigators.

Deliverables

Updates and a final report on the work and results for these two key positions will be provided.

Budget: \$89,000 (\$4,450 UHF)

Rapid ‘Ōhi‘a Death (ROD) Supplemental Request: Survey of Public Awareness and Opinions on ROD

(Goal 5)

Executive Summary

Through the support of HMLF, CGAPS worked with Ward Research to conduct a survey of Hawai‘i residents in 2017 on a number of invasive species topics, including ‘ōhi‘a lehua and ROD. The results of the survey showed that 92% of Hawai‘i island residents had heard of ROD while on average 43% of residents in Maui county, Kaua‘i, and O‘ahu had heard of ROD. This project would support work with a survey company to repeat some of the questions asked in 2017 about ‘ōhi‘a lehua, ROD, and related invasive species issues.



Public outreach and media on ROD have focused on communicating how people can reduce the chance of accidentally spreading the ROD pathogens or putting healthy ‘ōhi‘a at risk.

Background

CGAPS has worked with companies to conduct professional surveys and focus groups since 2003 (see reports and a 2018 summary presentation, <https://www.cgaps.org/studies/>). Results from these studies and qualitative work have guided messaging and project implementation needs, and questions related to ‘ōhi‘a and ROD were incorporated into the September 2017 telephone survey. The results were as expected: awareness is high on Hawai‘i island where ‘ōhi‘a is abundant and ROD is present, and marginal everywhere else.

A significant amount of time and effort has gone into creating outreach materials, conducting outreach to key audiences, and engaging partners on each island to help raise awareness and minimize the activities that put ‘ōhi‘a at risk. Several public reports

of sick or dead ‘ōhi‘a have led to the discovery of the first (and so far only) ROD tree on Maui, and on O‘ahu. While these reports are good indicators of awareness and concern, a professional survey of residents would provide a good measure of progress, and additional insights on ROD messaging and communication methods. Funding is requested to support a small contract to conduct some survey work, administered through the Hawai‘i Conservation Alliance Foundation.

Deliverables

As with other survey work, the reports will be posted on the CGAPS website. Analyses and recommendations will be used by the ROD Outreach Team.

Budget: \$11,000 (\$1,100 HCAF)

2020 Budget

Item	Projects	Term	Admin	Direct	Overhead	Total
1	Legal Fellowship Support. Partial salary & operating support for two legal fellows + 2 interns	12/31/2021	UHF	\$ 99,750	\$ 5,250	\$ 105,000
2	CGAPS Core Support. Partial salary & operating support for PIO and Planner, projects, PCSU project support	12/31/2021	UHF	\$ 114,000	\$ 6,000	\$ 120,000
3	Support for Hawai‘i Green Growth. Annual support for multi-sector approach to sustainability, incl. invasive species priorities	12/31/2020	OEDB	\$ 23,364	\$ 1,636	\$ 25,000
4	Strategic Communications. Implement year 1 @ est. 20 hrs/mo, materials, travel, etc. for HISC/CGAPS priority/ies	12/31/2020	HCAF	\$ 67,500	\$ 7,500	\$ 75,000
5	Preventing New Invasive Plants. Contract for invasive plant specialist to draft and submit NAPPRA petitions, follow up on communications	12/31/2020	HCAF	\$ 22,500	\$ 2,500	\$ 25,000
Total						\$ 350,000

Item	ROD Supplemental Projects	Term	Admin	Subtotal	Overhead	Total
1	ROD Prevention Outreach & Diagnostics	12/31/2021	UHF	\$ 84,550	\$ 4,450	\$ 89,000
2	Survey of Public Awareness and Opinions on ROD	12/31/2020	HCAF	\$ 9,900	\$ 1,100	\$ 11,000
Total						\$ 100,000