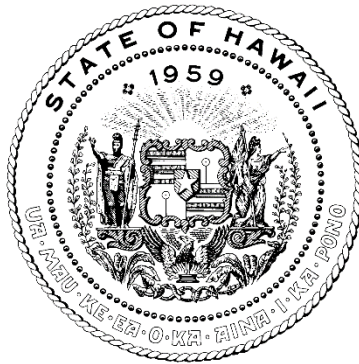


**REPORT TO THE THIRTY-THIRD LEGISLATURE
STATE OF HAWAI‘I
2026 REGULAR SESSION**

**RELATING TO THE NATURAL AREA RESERVES SYSTEM,
NATURAL AREA PARTNERSHIP PROGRAM, AND
THE FINANCIAL CONDITION OF THE
NATURAL AREA RESERVE FUND**



Prepared by

**THE STATE OF HAWAI‘I
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE**

In Response to Section 195-6.6, Hawai‘i Revised Statutes

Honolulu, Hawai‘i
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**RELATING TO THE NATURAL AREA RESERVES SYSTEM,
NATURAL AREA PARTNERSHIP PROGRAM, AND
THE FINANCIAL CONDITION OF THE
NATURAL AREA RESERVE FUNDⁱ**

Section 195-6.6, Hawai‘i Revised Statutes (HRS), requires a report on the Natural Area Reserves System (NARS), the Natural Area Partnership Program (NAPP) and the financial condition of the Natural Area Reserve Fund (NARF). This report also covers other programs within LNR 407 and a portion of LNR 402, including the Watershed Partnerships Program, Hawai‘i Invertebrate Program, Rare Plant Program, and the Information and Education Program.

The Natural Area Reserve and Watershed Management Program (LNR 407) is well positioned to implement the goals of the Green Fee (Act 96, SLH 2025). The program is submitting Green Fee proposals to achieve landscape-level improvements to upland forests and coastlines. These projects will significantly reduce drought, flooding, erosion, and wildfire risk while protecting the plants, wildlife, and natural areas that make Hawaii an iconic visitor destination. The main activities of the program include fencing and controlling hoofed animals such as cattle, sheep, deer, and pigs; managing other invasive species (weeds, non-native predators); reforestation; monitoring, propagating, and reintroducing rare plants and wildlife; fire prevention and suppression; maintaining infrastructure; and public outreach. These efforts also respond to wildfires and natural disasters and involve maintaining roads, shelters, signs, and helipads.



Division of Forestry and Wildlife staff fighting the Kunia wildfire in September 2025.

FY 25 Accomplishments at a glance

11	110,103	45	19,986	24,666
Miles of fence constructed	Trees and shrubs planted	Interns mentored	Acres of invasive plant control	Volunteer hours donated

Programs

Natural Area Reserves: State lands that preserve in perpetuity specific land and water areas that support communities, as relatively unmodified as possible, of the natural flora and fauna, as well as geological sites, of Hawai‘i.

Watershed Partnerships: Voluntary alliances of public and private landowners committed to protecting over two million acres of Hawaii's most important watershed lands. Organizations and agencies compete for funding, and State funds leverage Federal, County, and private monies on a 1:1 basis, doubling the impact of the State’s investment.



A new predator-proof fence has been installed in Pu‘u O ‘Umi Natural Area Reserve in Kohala to protect an endangered ua‘u (Hawaiian Petrel) seabird nesting site. Federal grants support many of these types of projects, and ongoing State funds provide the ability to maintain infrastructure.

Rare Plant Program (RPP): Protects Hawai‘i's unique native plants. In FY 25, state funds were matched more than four to one by federal dollars. The RPP supports plant nurseries and seed storage facilities on Kaua‘i, O‘ahu, Maui, and Hawai‘i Island. These facilities grow thousands of threatened and endangered plants each year to restore native plant communities in protected habitats. The RPP also manages Hawai‘i’s Plant Extinction Prevention Program (<http://www.pepphi.org/>), which focuses on 273 of the rarest native plant species, each with fewer than 50 individuals left in the wild. Nearly 10% of Hawai‘i’s native plants have gone extinct. Together, these programs serve as a safety net to prevent further extinction of plant species found nowhere else in the world.

Hawai‘i Invertebrate Program: Insects and other invertebrates are experiencing critical declines worldwide, affecting native ecosystems and communities. Hawai‘i is no exception. The Hawai‘i Invertebrate Program (HIP) works to stabilize and restore rare native invertebrate species through captive breeding, translocations, habitat enhancement, research, and policy initiatives. HIP collaborates with the U.S. Fish and Wildlife Service and includes the Snail Extinction Prevention Program. Estimates suggest that over 100 snail species face imminent extinction.

Natural Area Partnerships: Private lands permanently dedicated to conservation. State funds are matched with private funds, providing long-term protection, financial support, and management to preserve, restore, and enhance unique natural resources.

Information and Education Program: Connects with communities through press releases, community events, presentations, websites, social media, field trips, classroom visits, volunteer trips, and educator support. An FY25 Education Report is included as an appendix to this report,

showing 2.6 million "direct contacts" (defined by the National Association of State Foresters as in-person and online outreach with a known audience size). This figure includes approximately 42,000 people attending in-person events, 94,000 targeted email communications, 586,000 users viewing content on social media, and 1.9 million website pageviews.

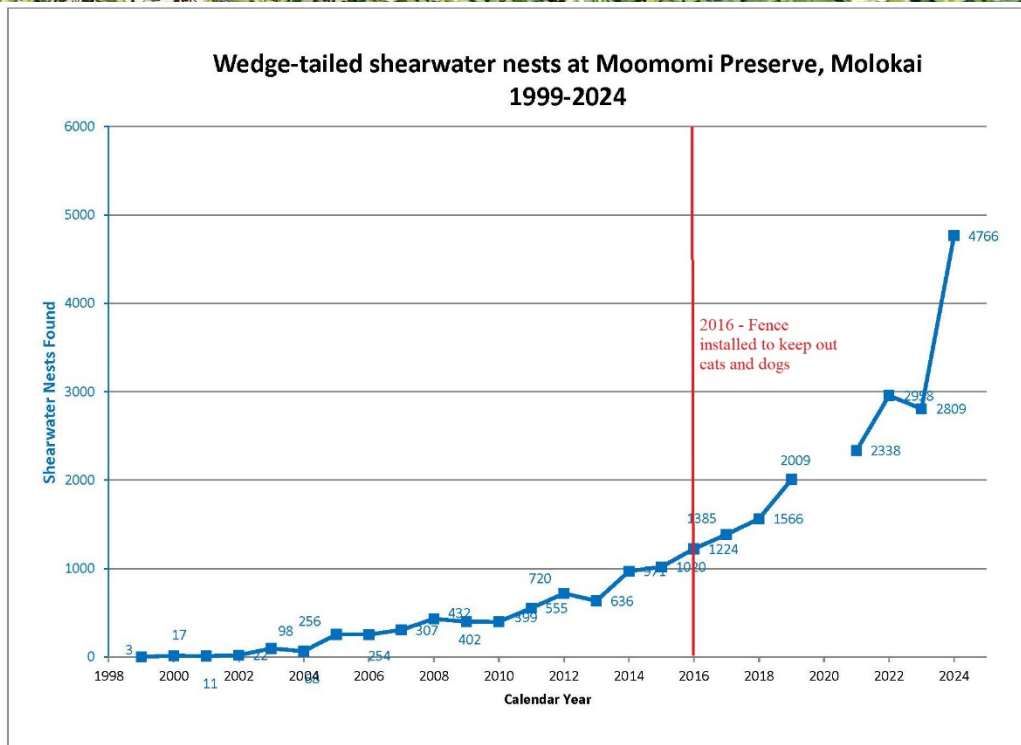
This program also promotes workforce training through the Youth Conservation Corps (YCC) and its sustainability subgroup, the Green Jobs Youth Corps (GJYC). These programs allow young adults to gain entry-level experience working with natural resource professionals. In FY25, funding directed through this program supported many members working across conservation and sustainability organizations, with about 45 members placed at DLNR Forestry & Wildlife and related projects.



DLNR offers volunteer opportunities to learn about unique areas and give back to these treasured places. Here, students from the Kawaikini Charter School are shown planting natives and removing invasive species in Hono O Na Pali Natural Area Reserve, Kaua'i.

Highlights

This was a record year for Wedge-tailed shearwater nesting at Mo‘omomi Preserve, Moloka‘i, with nearly 5,000 nests—representing a fivefold increase since a predator-proof fence was installed in 2016. In the 1990s, no nesting birds were known to occur at this site. Decades of predator removal and the fence have paid off, making this the largest nesting colony on the island. Photo: Anna Vallery, U.S. Fish and Wildlife Service.



LNR 407 programs focused on clearing strategic firebreaks. Staff also combat wildfires across the state. These programs are seeking Green Fee funds for projects to reduce the wildfire threat.

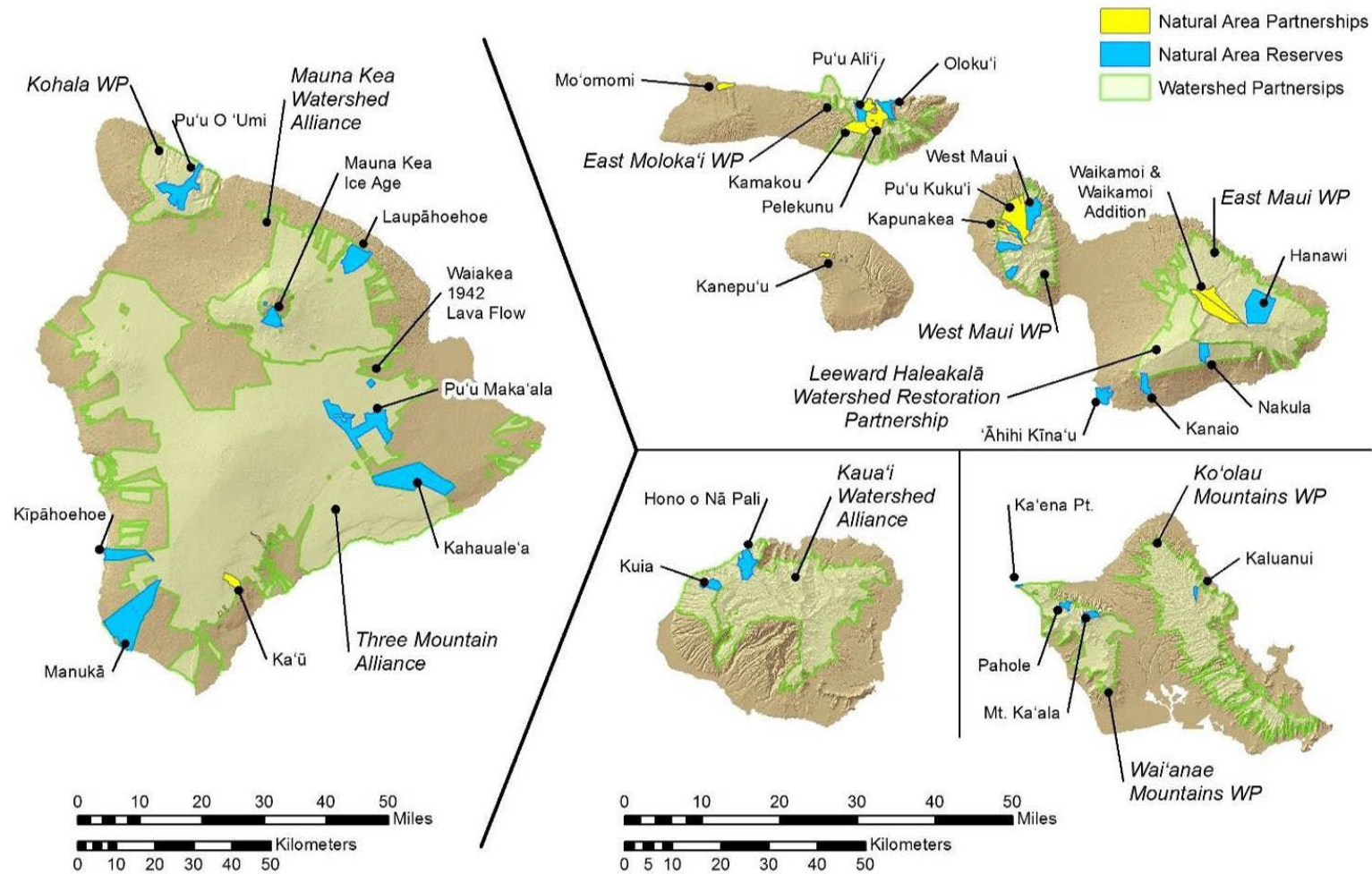


Several large fence units were completed this year, including the Wai'ilikahi unit in Kohala (left) and replacements in Ka'ū (right). These fences help the State stay on track to achieve its goal of protecting 30% of the priority watershed forests by 2030. The Department is requesting \$5 million for the Watershed Protection and Initiatives, Statewide CIP, in the FY27 supplemental budget.





Natural Area Reserves, Natural Area Partnerships, and Watershed Partnerships



Locations of project sites detailed in this report. WP: Watershed Partnership.

FY 25 Accomplishments		Prog.	Invasive plants search & control	Protected from hooved animals	Planting common and T&E species	Volunteer Contributions	Fence (new constructed)	Fence (maintained) *
Location			Acres	Acres	Number	Hours	Miles	Miles
Kaua'i	Hono O Nā Pali	NAR	17	3,578	885	384	-	5.40
	Kuia	NAR	26	133	1,363	192	-	4.81
	Lihue Kōloa Forest Reserve	NAR		23	9	-	-	0.15
	Honopu	NAR	5	238	-	336	-	2.50
	Kauai Invasive Species Committee	WP	280	-	-	-	-	-
	Kaua'i Watershed Alliance	WP	250	9,000	-	-	-	13.17
O'ahu	Pahole	NAR	60	650	1,371	1,477	-	7.00
	Ka'ena Point	NAR	8	65	551	386	-	0.40
	Mt. Ka'ala	NAR	15	1,526	88	689	0.09	9.75
	Poamoho (Ewa Forest Reserve)	NAR	20	1,300	-	-	-	-
	Kaluanui	NAR	2	540	-	-	-	4.50
	Pia	NAR	-	-	284		-	-
	Various other locations	NAR	-	741	430	5	0.10	<1
	O'ahu Invasive Species Committee	WP	20	-	-			-
	Wa'anae Mountains WP	WP	120	-	-	5,829	-	10
	Ko'olau Mountains WP	WP	1,250	2,306	500	2,862		5.60
Maui, Moloka'i, and Lanai	'Āhihi-Kīna'u	NAR	-	626	-	16	0.60	4.40
	Hanawī	NAR	-	6,411	-	-	-	14.30
	Nakula	NAR	-	1,500	-	16	-	8.90
	Kanaio	NAR	-	1,450	-	64	-	7.60
	West Maui	NAR	-	5,461	-	48	1.25	8.00
	Pu'u Ali'i & Oloku'i	NAR	-	2,950	-	-	-	6.65
	Mauna Kahalawai (West Maui)	WP	40	9,512	-	-	-	7.12
	East Maui	WP	305	11,650	-	-	-	6.40
	East Moloka'i, Kamakou, Pelekunu	WP/NAPP	350	15,947	-	-	1.75	18.30
	Auwahi***	WP	184	184	1,158	ND	-	ND
	Malama Haleakala***	WP	100	ND	185	ND	-	ND
	Mo'omomi	NAP	8	175	-	-	-	3.75
	Pu'u Kukui	NAP	15	4,750	2,555	6,684	-	10.00
	Waikamoi, Kapunakea, Kanepu'u***	NAP	253	7944	174	1,791	-	15.00
Hawaii	Mauna Kea Ice Age	NAR	-	3,894	-	-	-	0.81
	Pu'u O 'Umi	NAR	139	4,392	-	-	1.22	19.13
	Laupāhoehoe	NAR	13	17	-	-	-	1.12
	Kahauale'a	NAR	1.35	150	-	-	-	2.77
	Kīpāhoehoe	NAR	118	4,099	-	-	-	16.79
	Pu'u Maka'ala & proposed extension	NAR	358	12,802	345	241	1.26	56.40
	Manukā	NAR	3,639	25,550	-	-	-	29.69
	Waiea	NAR	1	36	-	-	0.95	0.21
	Pu'u Wa'awa'a Sanctuary	NAR	161	3,748	615	-	-	15.53
	Koai'a Corridor Sanctuary	NAR	61	222	3,165	-	-	2.90
	Various other locations	NAR	130	187	842	-	0.58	11.25
	Three Mountain Alliance	WP	11,643	34,477	10,000	3,000	-	73.00
	Kohala	WP	22	1,834	2,000	200	-	6.00
	Mauna Kea Watershed Alliance	WP	50	1,100	500	-	-	5.78
	Parker Ranch various locations ***	WP	297	1,384	82,630	ND	2.90	13.20
TOTAL			19,986	184,552	110,103	24,666	11	437



Nukui 'iwi, a critically endangered plant found in Ka 'ū

Acronyms:

WP: Watershed Partnership

NAR: Natural Area Reserve

NAP Natural Area Partnership

ND: No Data

**Co-managed Poamoho with KMWP.

***Reporting period from 4/1/24-3/31/25

Additional Statewide Accomplishments

Hawaiian Mid-Elevation Rare Plant Facilities:

- DOFAW's Rare Plant Program uses a comprehensive approach to protect native plants in their natural habitats, employing specialized nurseries for cultivation and seed banks to store seeds. Ongoing research focuses on the propagation and preservation of native plant seeds. Over the past year, these efforts have collected and stored hundreds of native plant specimens, ensuring their safety until needed for species recovery projects aimed at reintroducing them into protected environments.



Endangered plants are collected, grown in nurseries, and planted in protected areas.

- Plant nursery facilities house living collections of Hawai'i's rarest plants and grow thousands of young plants for ongoing restoration and reforestation efforts. Last year, more than 10,000 plants of 150 endangered species were cultivated for restoration projects across the state. These plants were relocated to protected habitats to help them reestablish in native ecosystems and prevent extinction. Other plants remain in the nursery for breeding and seed production.





Botanists from Hawai‘i’s Plant Extinction Prevention Program work in remote areas to protect native plants and help them recover and thrive in healthy ecosystems

- Supported by DOFAW’s Rare Plant Program, the Seed Conservation Lab at the University of Hawai‘i’s Lyon Arboretum maintains more than 40 million seeds of native Hawaiian plants, making it the largest collection of its kind globally. Over the past year, 1,072,464 seeds from more than 590 collections of 137 rare species were processed and stored. Additionally, nearly 13 million ‘ōhi‘a seeds are now secured at Lyon Arboretum, providing a crucial safeguard against Rapid ‘Ōhi‘a Death.
- Lyon Arboretum’s Micropropagation Lab maintains over 37,600 germplasm cultures of threatened and endangered plants. Over the past year, they received 171 new collections from four different species and distributed hundreds of individual plants for restoration projects across the state. DOFAW’s Rare Plant Program supports these efforts at Lyon.

Plant Extinction Prevention Program:

The impacts of the Coconut Rhinoceros Beetle (CRB) invading O‘ahu are becoming clear, with individuals of all five of O‘ahu’s native palm tree species, loulu, being killed in the Wai‘anae and Ko‘olau Mountains. Part of the strategy to save these species is to collect and grow seeds that can be kept safe in plant nurseries and botanical gardens. When this invasive beetle destroys entire populations, these living collections will be the only chance to replant and restore them once CRB is no longer a threat.



Loulu, Hawai‘i’s only native palm tree (Pritchardia), is being killed by the Coconut Rhinoceros Beetle. Urgent efforts are underway to collect seeds to prevent its imminent extinction.

On Moloka‘i, *Cyanea profuga* and *Cyanea procera* have been targeted by the Moloka‘i Plant Extinction Prevention Program (MoPEPP) and their partners at the Hawai‘i Division of Forestry and Wildlife (DOFAW) and The Nature Conservancy of Hawai‘i. After a few plants were rediscovered in the 1990s, MoPEPP collected seeds, and thousands of plants have been grown and replanted in protected areas.

One of Hawai‘i’s three native orchids, *Platanthera holochila*, is critically endangered with fewer than twenty individuals remaining in the wild on Kaua‘i, Maui, and Moloka‘i. They need specific conditions to survive, so the plants face extinction once those habitats are disturbed by invasive species. Over the past few years, seeds have been gathered from the remaining plants, and a breakthrough in propagation techniques at the Lyon Arboretum has enabled them to grow several plants for reintroduction on Kaua‘i!

On Hawai‘i Island, ‘āhinahina (silverswords) grow near the summit of Mauna Kea, on the subalpine slopes of Mauna Loa in Ka‘ū, and among bogs in the forests of Waiākea. By finding niches in these tough and diverse environments, they evolved into unique forms suited to thrive from wet bogs to dry alpine summits. Over the past year, teams from DOFAW, PEPP, Hawai‘i Volcanoes National Park, Hawai‘i Silversword Foundation, and the Volcano Rare Plant Facility have replaced fencing that protects the wild populations, hand-pollinated flowers, collected seeds, planted new seedlings at reintroduction sites, and discovered new seedlings!

On Maui, *Cyanea magnicalyx*, a plant found nowhere else in the world, is approaching extinction. Its known population decreased from six individuals in 2009 to three in 2018; by 2022, no known individuals remained. Over the past year, DOFAW and PEPP botanists discovered three previously unknown plants! Although still critically endangered, these discoveries offer hope. Seeds collected from them will be used to restore the species, helping ensure its legacy continues in the forests of Mauna Kahālāwai.

Read more about the accomplishments of the Rare Plant Program here: [Hawai‘i Rare Plant Conservation Highlights 2024](#).

Hawai‘i Invertebrate Program (HIP):

- The HIP continues to stabilize and recover populations of rare, threatened, and endangered insect species, using state funds to secure federal grants.

- HIP's Insectary Facility at the DLNR Waimano Baseyard continues to host the Hawai'i Invertebrate Program's Captive Propagation Program for rare and endangered insects and related research projects.
 - Over 3,200 endangered orange-black damselflies were bred and released into the wild. The damselflies were first released at Ka'au Crater and later at Dillingham. Additionally, 300 endangered blackline damselflies were released into the Wai'anae Kai Forest Reserve.



*DOFAW-HIP, the O'ahu Army Natural Resource Program, and the Board of Water Supply collaborate to release endangered orange-black damselflies (*Megalagrion xanthomelas*) at Ka'au Crater in hopes of establishing a new population of this endangered species.*

- The native moth *Omiodes continuatalis* was reared to reestablish it on O'ahu, where it used to occur but has since been extirpated. More than 100 moths were released into Ka'ala Natural Area Reserve.
 - HIP collaborated with researchers from the University of Hawai'i at Mānoa to collect and rear endemic Kaua'i stag beetles (*Apterocyclus* spp.) for non-target host testing of coconut rhinoceros beetle biocontrol agents.
- In partnership with the University of Hawai'i at Mānoa, captive rearing continued for two highly endangered picture-wing fly species. 2,213 *Drosophila montgomeryi* and 8,380 *D. hemipeza* were reared and released at two locations: Mānoa Cliff Restoration Area and 'Ēkahanui in Honouliuli Forest Reserve.
- The HIP continued surveying nine endangered insect species, including yellow-faced bees, damselflies, and picture-wing *Drosophila* flies, on lands near U.S. Department of Defense property in the Wai'anae and Ko'olau Ranges through Army Readiness and Environmental Protection Integration (REPI) funding. These surveys discovered a previously unknown population of the endangered blackline Hawaiian damselfly in Pālolo Valley.



Surveying for endangered Hawaiian picture-wing *Drosophila* (left); Mā‘alaea *Hylaeus assimulans* and *H. flavipes* nest monitoring and research site (right).

- The HIP continued research, monitoring, and habitat restoration projects for endangered nalo meli maoli (yellow-faced bees) in critical areas.
 - o On O‘ahu, in partnership with the University of Hawai‘i at Mānoa, the U.S. Fish and Wildlife Service, and the Division of State Parks, 1,349 native plants were outplanted and 10 acres of coastal habitat were restored across five sites for endangered *Hylaeus anthracinus* and *H. longiceps*; 32 nest blocks were maintained and monitored across four sites.
 - o On Maui: In partnership with the University of Hawai‘i at Mānoa, the HIP restored 3 acres of habitat for *H. assimulans* and *H. flavipes* by removing invasive weeds and planting 1,127 native plants in west Maui. Over 5,450 nests of the endangered *H. assimulans* were identified and tagged. The largest nest groups at Mā‘alaea were monitored.

Snail Extinction Prevention Program (SEPP):



Achatinella fuscobasis is an endangered tree snail found only on O‘ahu. It was extinct in the wild until it was recently reestablished from captive rearing into a protected habitat.

- SEPP and its partners, including the Bishop Museum and Honolulu Zoo, released more than 500 imperiled snails back into the wild and protected habitats.
- SEPP established *Achatinella fuscobasis* in the Koʻolau Mountains, after likely being extinct in the wild for over 30 years.
- SEPP and partners maintained over 20,000 rare and endangered snail species in captivity, protecting them from extinction.
- SEPP continued to develop their detection dog, which now helps the team clear predator-proof fences for introduced snail predators.
- SEPP received funds from the U.S. Fish and Wildlife Service to establish public-facing captive-rearing laboratories at the Honolulu Zoo and Bishop Museum. Both lab spaces were opened in FY25.
- SEPP received funds from the U.S. Fish and Wildlife Service for a predator-proof fence on Hawaiʻi Island to protect critically imperiled snail species. The fence will be constructed in FY26.



The Snail program has trained a dog named Crash to sniff out invasive predators within fences.

STATUS OF PUBLIC HUNTING OPPORTUNITIES

Under NARS management policies, populations of non-native animals are kept at the lowest possible levels. Public hunting is allowed in many areas within Natural Area Reserves, with most lands now open year-round. Staff use animal control methods such as fencing, trapping, staff hunting, snaring, and aerial shooting as needed or as resources permit in areas where public hunting cannot sufficiently reduce impacts from hooved animals. They continue working with hunting organizations and others to meet the program's animal control goals and to provide hunting opportunities. For example, 'Āhihi-Kīna'u Natural Area Reserve is entirely state land, though some areas are closed for safety reasons. The reserve allows registered hunters to enter these closed areas to help control feral ungulates.

In the Natural Area Partnership preserves on private land, the public hunting opportunities vary:

- Kamakou Preserve is open to the public for hunting 365 days a year, with no bag limit. During extreme fire danger or unsafe road conditions, all or parts of the preserve may be closed. Kanepu‘u, Pu‘u Kukui, and Ka‘ū Preserves also offer volunteer hunt programs.
- Waikamoi Preserve’s conservation easement permits ranch employees to hunt. Public hunters may also hunt in parts of the preserve when it does not interfere with management activities, guided hikes, or ranch employees hunting.
- Mo‘omomi Preserve prohibits public hunting due to safety issues and limited staff and enforcement resources.

ANALYSIS OF THE PROBLEMS AND ISSUES ENCOUNTERED

These programs face substantial reductions in federal grants from the Readiness and Environmental Protection Integration program of the Department of Defense. In Fiscal Year 25, these grants were cut by over \$7 million compared to FY 24. Meanwhile, the state general fund appropriation for this program (LNR 407) is about \$11.7 million annually, making these federal grant cuts a significant portion of the budget. Stable funding is crucial for these programs, which require infrastructure maintenance, ongoing care for rare plants and animals that could otherwise become extinct, and repeated invasive species control.

These programs are limited due to the shortage of State civil service positions that provide the stability and specialized expertise needed to oversee large, complex projects. As the Division prepares to implement Green Fee projects, additional staff capacity is needed to manage contracts with community groups and directly carry out projects. These roles are valuable investments because they enable the Division to pursue and utilize federal grants, thereby increasing its overall impact.

FINANCIAL CONDITION OF THE NATURAL AREA RESERVE FUND (NARF)

The NARF’s spending ceiling and conveyance tax funding source were eliminated and replaced by general funds under Act 84, SLH 2015. In recent years, a spending limit of \$180,000 per year has been allocated. This funding is used for restroom facilities and visitor management at ‘Āhihi-Kīna‘u Natural Area Reserve. A parking fee at the Reserve generates revenue from non-residents.

CONTACT INFORMATION

Detailed project plans and accomplishment reports are available at <http://dlnr.hawaii.gov/ecosystems> or from the Department/DOFAW Native Ecosystem Section Manager at Emma.Yuen@hawaii.gov or (808) 587-4170.

Appendix: FY 25 Education Report

ⁱ Section 195-6.6, Hawai‘i Revised Statutes (HRS), requires a report on the Natural Area Reserves System (NARS), the Natural Area Partnership Program (NAPP) and the financial condition of the Natural Area Reserve Fund (NARF). This report also covers other programs within LNR 407 and a portion of 402, including the Watershed Partnerships Program, Hawai‘i Invertebrate Program, Rare Plant Program, and the Information and Education Program.