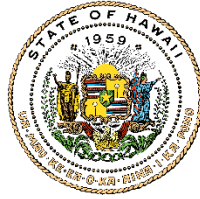
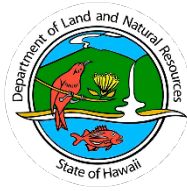


JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621
HONOLULU, HAWAII 96809

Testimony of
DAWN N. S. CHANG
Chairperson

Before the Senate Committees on
JUDICIARY
and
WAYS AND MEANS

Tuesday, April 4, 2023
10:00 AM
State Capitol, Conference Room 211

In consideration of
HOUSE BILL 1200, HOUSE DRAFT 1, SENATE DRAFT 1
RELATING TO THE CONSERVATION AND RESOURCES ENFORCEMENT PROGRAM

House Bill 1200, House Draft 1, Senate Draft 1, proposes to: 1) require the Department of Land and Natural Resources (Department) to establish an unmanned aircraft systems program; 2) authorize Conservation and Resources Enforcement Officers to use unmanned aircraft systems (UAS); and 3) require the Department submit an annual report of the effectiveness of the UAS program to the Legislature. **The Department supports this bill, provided that its passage does not replace or adversely impact priorities indicated in the Executive Budget request, and sufficient additional funds are provided.**

The Department acknowledges the potential for a UAS program to aid its Division of Conservation and Resources Enforcement (DOCARE) in carrying out its mission. Such a program can increase the effectiveness of the Department's limited number of enforcement officers by enabling them to survey, monitor, investigate, and obtain evidence more efficiently, especially in difficult to reach areas.

The Department appreciates the amendment as provided in the current House Draft 1 to extend the deadline to establish a UAS program in DOCARE to June 30, 2025. The Department believes this additional time will assist with successful implementation of a UAS program.

In consideration of a potential funding amount to establish a UAS program, the Department is aware of other agencies in the United States that have established a UAS program with a cost of approximately \$275,000.00. Should the Legislature provide a similar amount to establish DOCARE's program, we believe this funding could be used toward the following components of a UAS program:

DAWN N.S. CHANG
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MANAGEMENT
LAURA H.E. KAAKUA
FIRST DEPUTY
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CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

- Purchase of UAS Aircraft and Equipment: \$100,000.00
- Training of DOCARE UAS Pilots statewide: \$100,000.00
- License and Certification Fees: \$50,000.00
- Administrative Support: \$25,000.00

Without sufficient funding, the Department would not be able to establish a viable UAS program. To sustain a UAS program once established, DOCARE will need a slight increase in annual funding for training and certification renewals, and administrative support.

Mahalo for the opportunity to provide testimony in support of this measure.



Testimony Before The
Senate Committee on Ways and Means and
Committee on Judiciary

IN SUPPORT OF HB 1200 HD1 SD1

April 4, 2023, 10:00AM, Room 211

My name is Kevin Chang and I am the Executive Director of [Kua'āina Ulu 'Auamo \(or KUA\)](#). KUA works to empower grassroots rural and Native Hawaiian mālama 'āina groups to celebrate their places and pass on their traditions to better Hawai'i and achieve 'āina momona— an abundant, productive ecological system that supports community well-being.

KUA supports HB 1200 HD1 SD1 as an incremental step towards 'āina momona. This bill require the Division of Conservation and Resources Enforcement of the Department of Land and Natural Resources (DLNR-DOCARE) “to 1) require the Department of Land and Natural Resources (Department) to establish an unmanned aircraft systems program; 2) authorize Conservation and Resources Enforcement Officers to use unmanned aircraft systems (UAS); and 3) require the Department submit an annual report of the effectiveness of the UAS program to the Legislature. **We further request if this bill is passed that it does not replace or adversely impact DOCARE's current capacity trajectory and that sufficient additional funds are provided.**

KUA employs a community-driven approach that currently supports a statewide network of 36 mālama 'āina community groups collectively referred to as E Alu Pū (moving forward together), 40 fishpond projects and practitioners called the Hui Mālama Loko I'a, and a growing group of over 60 Limu practitioners and supporters called the Limu Hui. Members of these networks and future generations need a more skilled, objectively certified and resourced DOCARE and it is encouraging to see bills that will support this.

Today a number of our network participants partner with DOCARE through growing community-based co-management initiatives from mauka to makai including community-based subsistence fishing areas and Makai Watch programs all of which originated in the collaboration between many of our network communities and government. DOCARE officers are often the first representation community members get of DLNR. In many significant places it has long been known and lamented that there is an absence of almost any DLNR presence. A UAS system would deeply expand and compliment DOCARE's recent growth capacity to be present even where its was once seen as impossible. Such a program would also increase awareness, presence and ability to gather and produce evidence, a deterrence in itself.

The communities we work with are committed to ensuring the long-term health of our biocultural resources. They have depended on them for generations. We believe our environment, the foundation of our very existence, is about long-term investment and a vision of 'āina momona. To get there it requires among other things greater skill and capacity, new and more innovative career pathways, mindsets, relationships and resource flows for mālama 'āina. This definitely includes a properly technology enhanced and properly resourced DOCARE. Passing this bill out of your committee will open a pathway toward reaching this vision.

Mahalo for this opportunity to testify in support. Aloha 'Āina Momona.



Mālama Pūpūkea-Waimea
Post Office Box 188
Hale'iwa, HI 96712

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Educational Programs &
Makai Watch Coordinator*

Federal Nonprofit Organization
501(c)(3) FEIN 27-0855937
www.pupukeawaimea.org

April 3, 2023

Re: **HB1200 HD1 SD1, WAM/JDC Hearing April 3, 2023, Room 211, 1:00pm**

Aloha Senate Committee on Ways and Means and Senate Committee on Judiciary,

Mālama Pūpūkea-Waimea (MPW) is a Hawai'i non-profit organization founded on the North Shore of O'ahu in 2005. Our mission is "working to replenish and sustain the natural and cultural resources of the Pūpūkea and Waimea ahupua'a for present and future generations through active community stewardship, education, and partnerships." For eighteen years, we have focused our stewardship and education efforts on the Pūpūkea Marine Life Conservation District (MLCD), one of only three MLCDs on O'ahu.

MPW strongly supports HB1200 HD1 SD1. Since 2006, MPW has been an official "**Makai Watch**" partner (the first on O'ahu) with the State Department of Land and Natural Resources (DLNR), Division of Conservation and Resources Enforcement (DOCARE). We actively work with DOCARE to increase community engagement in marine stewardship, act as the "**eyes and ears**" for DOCARE in the Pūpūkea MLCD area and offer training to the public annually with DOCARE on education, intervention, monitoring, and reporting. We recently started an **Ocean Education Ambassador** program to expand our efforts to educate new visitors about the rules and regulations of the Pūpūkea MLCD.

Currently, **only two DOCARE officers** are assigned to our large rural district. And while they are both wonderful, these officers are stretched thin, covering mauka to makai from Ka'ena to Wahiawa to Kawela – a **huge area that has many inaccessible and hard to observe areas** along the shoreline as well as mauka.

A DOCARE drone program, as authorized under HB1200 HD1, would be a **significant benefit** to community and DOCARE efforts to monitor and protect areas like the Pūpūkea MLCD. We often observe – and report – potential illegal activities in the MLCD that occur in areas that are **inaccessible to officers** on foot or vehicle. Poachers know how to hide from DOCARE – under cliffs, behind boulders, and along steep shorelines – and to do their illegal activities during the "off hours."

If DOCARE had drones, it would allow officers to monitor much larger areas, much more efficiently, boost overall coverage, deter sneaky behavior, and reduce violations. Drones also allow more effective evidence gathering, such as clear photos of the scene,

the violator, and vehicle and boat registration numbers. These challenges are currently real barriers to prosecution of sometimes blatant violations.

When DOCARE develops the proposed drone program, we understand that an **appropriation** is necessary, as well as certain **policy safeguards** to ensure the program is FAA compliant, protects privacy rights, and maintain **appropriate records** that can be shared with the Legislature and public.

With the Legislature's support, a new DOCARE drone program will be a **transformative new tool** in the enforcement toolbox for the outstanding women and men who serve as our State DOCARE officers.

We **SUPPORT HB1200 HD1 SD1** and look forward to working with DOCARE on this exciting new program.

Mahalo nui,



Jenny Yagodich
Director, Educational Programs &
Makai Watch Coordinator
Mālama Pūpūkea-Waimea

**Testimony of The Nature Conservancy
Supporting HB 1200 HD1 SD1, Relating to the Conservation and Resources Enforcement
Program**

**Committee on Water and Land
March 13, 2023, 1:00 PM
Conference Room 229 via Videoconference**

Aloha Chair Inouye, Vice Chair Elefante, and Members of the Committee:

The Nature Conservancy (TNC) supports HB 1200 HD1, Relating to the Conservation and Resources Enforcement Program, which would require the Department of Land and Natural Resources (DLNR) to establish an unmanned aircraft systems (UAS) program. It authorizes the Division of Conservation and Resources Enforcement (DOCARE) officers to use unmanned aircraft systems and requires DLNR to submit a biennial report of the effectiveness of the unmanned aircraft systems program to the legislature.

Hawai'i's environment is the engine that drives our economy and a natural, recreational, and cultural treasure that supports our island lifestyle and livelihoods. At the same time, our native forests and nearshore reefs and fisheries are threatened by local stresses from overharvest, sedimentation, and invasive species, as well as impacts from global climate change, including increasing storms, sea levels, and temperatures. DLNR is charged with protecting our natural environment, with DOCARE enforcing our natural resource protection laws. Enforcement is vital to ensure that the work to manage the environment is successful and sustainable.

DOCARE needs all possible tools to enforce our conservation laws. UAS, commonly known as drones, are used for conservation and enforcement purposes here in Hawai'i, nationally, and around the world. For example, TNC currently use drones to be more efficient by helping detect invasive species in our remote native forest preserves. DOCARE could similarly utilize the technology to monitor areas they are unable to easily access.

Explicitly authorizing this program, along with the requirements for licensing and privacy protections under complementary state and federal laws, will allow for DOCARE to responsibly utilize drones to enforce laws to protect our 'āina.

Mahalo for the opportunity to provide testimony on HB 1200 HD1 SD1.

The Nature Conservancy of Hawai'i and Palmyra is a non-profit organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll. We manage 40,000 acres in 13 nature preserves and work in over 50 coastal communities to help protect and restore the nearshore reefs and fisheries of the main Hawaiian Islands. We forge partnerships with government, private parties, and communities to protect forests and coral reefs for their ecological values and for the many benefits they provide to people.

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HB-1200-SD-1

Submitted on: 4/1/2023 4:38:18 PM

Testimony for WAM on 4/4/2023 10:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Cynthia Punihaole Kennedy	Individual	Support	Written Testimony Only

Comments:

I am in strong support of this measure.

HB-1200-SD-1

Submitted on: 4/2/2023 8:12:01 PM

Testimony for WAM on 4/4/2023 10:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Dara Yatsushiro	Individual	Oppose	Written Testimony Only

Comments:

STRONG OPPOSITION!!!

Someone needs to set up penalties & fines for unmanned aircraft violating personal property space! Last week, a girl on a motorcycle pulled up into my driveway saying a drone had been following her & she was scared, could she stay with me for a moment - who do we call to report that? And there is a drone/s that hovers above my property, esp positioning outside of my bathroom window at night. There needs to be PENALTIES set up for this, NOT programs!!!

HB-1200-SD-1

Submitted on: 4/3/2023 8:42:57 AM

Testimony for WAM on 4/4/2023 10:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Olan Leimomi Fisher	Individual	Support	Written Testimony Only

Comments:

Aloha mai kakou,

Nui ka'u kako'o no keia Pila Hale 1200 HD1 SD1 no kona palena papaha nui e ho'omalua ai i ko Hawai'i aloha nui. I strongly support HB1200 as a much-needed tool to better protect our dwindling beloved plants, animals, & resources here in Hawai'i. The recent display last month of **33 swimmers caught aggressively harassing our nai'a through the use of NOAA drones** just further emphasizes the critical need for this technology to aid our State DOCARE officers in enforcing of our laws. (<https://www.npr.org/2023/03/31/1167295322/33-swimmers-dolphins-hawaii>)

Please pass HB1200 HD1 SD1!!!

Mahalo nui for considering my testimony,

Olan Leimomi Fisher, Pupukeya, O'ahu

Denise Antolini
59-463 Alapio Road
Pūpūkea, HI 96712

Re: HB1200 HD1 SD1, JDC/WAM Hearing Apr. 4, 2023, Conference Room 211, 10:00 am

Aloha JDC Chair Rhoads and Vice Chair Gabbard, WAM Chair Dela Cruz and Vice Chair Keith-Agaran, and Members of the Committees,

I write in **strong support of HB1200 HD1 SD1** – “Drones for DOCARE”!

DOCARE has enormous responsibility to oversee the enforcement of the laws that protect our State’s natural and cultural resources -- across **one million** acres of state land and **three million** acres of state ocean waters. An unmanned aircraft system (UAS), or drone, program would add significant capacity to DOCARE, allowing new methods for monitoring, investigating, and evidence gathering with modern, efficient, and cost-effective technology.

Given the exponential increase in the use of drones in Hawai‘i and across the U.S. (and world) in recent years by individuals, businesses, and governments, it makes sense for the Legislature to support a drone program for our State natural resources law enforcement agency. **Drone can be a very effective fact-gathering tool, used within appropriate policies and legal boundaries.**

Last week, reports of DOCARE collaborating with NOAA over the “**30 swimmers harassing Spinner dolphins**” at Hōnaunau Bay [hit the news](#). The article mentions the importance of drone footage taken by law enforcement for collecting evidence – which makes perfect sense given the harassment occurred out in the bay with numerous swimmers. Under this bill, DOCARE would have a strong program to utilize that powerful tool, capacity, and expertise to deploy statewide.



In my last testimony to the Water & Land Committee, I pointed out another vivid example of how drones can help DOCARE regarding the grounding of the **luxury yacht Nakoa** at Honolulu on Maui. Without drones (or an expensive helicopter or boat), the DOCARE officers are basically stuck standing on the shoreline with binoculars and cameras as evidence gathering tools. In contrast, a drone (as seen in the *Honolulu Advertiser* photo and video link below) could extend the photographic and real-time evidence capacity of DOCARE officers on the scene (and allowed remote viewing by DOCARE supervisors and other DLNR divisions) and helped all the agencies involved working urgently to resolve the yacht grounding crisis and document ongoing violations.



Left photo: <https://spectrumlocalnews.com/hi/hawaii/news/2023/02/22/luxury-yacht-runs-aground-in-maui--pumps-diesel-into-water>; Right photo: https://www.youtube.com/watch?v=tboAGT0Kvco&feature=youtu.be&ab_channel=Star-Advertiser

As a law professor devoted to environmental protection and a community member involved in marine stewardship programs, I have worked on various projects to assist DOCARE build capacity and its enforcement toolkit. Recently, as a way to further build DOCARE's capacity, through my position as the volunteer President of Mālama Pūpūkea-Waimea (MPW), two Richardson law students, Sophia Morgan and Kanani Smull, analyzed the potential for DOCARE to develop a drone program. We reviewed drone programs recently established by law enforcement agencies in Alaska,¹ Florida,² California,³ and Texas,⁴ and also found that the Honolulu Police Department adopted a drone policy in 2021.⁵ These programs provide excellent yet diverse models for a new DOCARE drone program.

In my view, to keep up with modern law enforcement methods, and to match the methods of increasingly clever and elusive violators of our state natural resources laws, a drone program is extremely important for DOCARE. I believe DOCARE *could* legally establish a drone program without a specific legislative authorization but as a matter of good public policy, it is best for DOCARE to have **express statutory authority**. The program must be **funded**, and **transparent** to ensure public confidence and support. The proposed appropriation in HD1, requested by DOCARE at \$275,000, is a very good launching point for a long-term DOCARE drone program.

Mahalo nui loa for passing this important bill!

Best regards,

Denise Antolini

¹ Alaska Stat. Ann. § 18.65.902.

² Fla. State. Ann. § 934.50(4).

³ See, e.g., Drone Program, City of Chula Vista Police Department (July 2, 2022), <https://www.chulavistaca.gov/departments/police-department/programs/uas-drone-program>.

⁴ Texas Parks and Wildlife Department, Law Enforcement Division, 2019-2020 Small Unmanned Aircraft Systems Legislative Report (Dec. 31, 2020), <https://tpwd.texas.gov/warden/media/final-2019-2020-uas-report.pdf>.

⁵ Small Unmanned Aircraft System (sUAS) Policy, HPD Policy Number 2.73, 1 (May 19, 2021), <https://www.honoluluupd.org/wp-content/uploads/2021/05/HPD-Policy-273-05-19-2021.pdf>.

HB-1200-SD-1

Submitted on: 4/3/2023 9:20:21 AM

Testimony for WAM on 4/4/2023 10:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Kanani Smull	Individual	Support	Written Testimony Only

Comments:

Aloha JDC Chair Rhoads and Vice Chair Gabbard, WAM Chair Dela Cruz and Vice Chair Agaran, and Members of the Committees,

I strongly support HB 1200 HD1 SD1.

I am a third-year law student at the William S. Richardson School of Law, and I am studying environmental law. I was a summer 2021 law extern for Mālama Pūpūkea-Waimea. As part of my externship’s projects, I conducted legal research and writing regarding the use of drones for conservation law enforcement.

My research focused on the potential concerns about privacy and admissibility of evidence obtained through a DOCARE drone program. Based on my research, potential violators could not likely succeed on a privacy violation claim because in public spaces, they do not have a reasonable expectation of privacy and activities are “in plain view.”

The use of drones will equip DOCARE officers with the tools they need to properly monitor public spaces where natural resource violations are frequently occurring. The drone program proposed by HB1200 HD1 SD1 contemplates drones being used only in public spaces, such as state parks, wilderness areas, and marine life conservation districts (MLCDs).

In this way, the establishment of such an operation will not infringe on the public’s right to privacy.

The program will provide an effective and efficient means by which DOCARE officers may deter natural resource violations and obtain evidence of violations occurring in hard to reach spaces of Hawai‘i’s public beaches and other conservation areas.

The drone footage would be admissible in court under the normal rules of evidence such as relevance, authentication, and chain of custody, similar to the admission of photo evidence.

Thank you for supporting HB1200 HD1 SD1.

Sincerely,

Kanani Smull, J.D. Candidate Class of 2023

HB-1200-SD-1

Submitted on: 4/3/2023 9:44:01 AM

Testimony for WAM on 4/4/2023 10:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Sophia Morgan	Individual	Support	Written Testimony Only

Comments:

Aloha JDC Chair Rhoads and Vice Chair Gabbard, WAM Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committees,

I write in **strong support of HB 1200 HD1 SD1.**

I am a second-year environmental law student at the University of Hawai'i at Mānoa William S. Richardson School of Law. I was a 2022 summer law extern for Mālama Pūpūkea-Waimea. As part of my externship project, I conducted legal research regarding the use of drones for natural resource law enforcement.

During my research, I found that several states have successfully implemented UAS programs for law enforcement, including conservation agencies. For example, Texas Parks and Wildlife Department Law Enforcement Division established a UAS program specifically to accomplish their mission of “the conservation of natural resources and protection of human life and property.” Within two years, the UAS program ran over 7,000 missions for law enforcement investigation and surveillance, conservation management, and wildlife damage assessment and survey. Texas Parks and Wildlife Department Law Enforcement Division, 2019-2020 Small Unmanned Aircraft Systems Legislative Report (Dec. 31, 2020), <https://tpwd.texas.gov/warden/media/final-2019-2020-uas-report.pdf>.

Another example comes from Alaska, where Alaska statute permits law enforcement to gather evidence in criminal investigations and other specific circumstances, as long as the drone use does not violate personal privacy rights and adheres to FAA guidelines. Alaska Stat. Ann. § 18.65.902. For example, Alaska’s Fish and Wildlife Service has implemented use of UASs to help aid in wildlife surveillance and animal recovery efforts. 2018 Alaska Fish and Wildlife Fund Grant Awards, AFWF (2018), <https://www.nfwf.org/sites/default/files/2020-04/2018-afwf-grant-slate.pdf>.

In Florida, law enforcement agencies are also permitted to use drones to gather evidence under specific circumstances. Fla. State. Ann. § 934.50(4). Florida has the fifth greatest number of public safety agencies implementing drones in the US: most of which consist of law enforcement agencies. For example, the Tuscaloosa County Sheriff's Office has 30 certified pilot deputies, a fleet of 13 small and 2 large drones, and a mobile drone command unit. Stephen Dethrage, Sheriff's Office Donates Its Helicopters to Tuscaloosa Police in Switch to Drone Program,

Tuscaloosa Thread (May 4, 2022), <https://tuscaloosathread.com/sheriffs-office-donates-its-helicopters-to-tuscaloosa-police-in-switch-to-drone-program/>.

In California, many county law enforcement agencies run drone programs. For example, since its first drone operation on October 22, 2018, City of Chula Vista Police Department (CVPD) has responded with drones to 11,375 calls, assisted in 1,324 arrests, been first on scene 6,467 times, and avoided the need to dispatch a patrol unit 2,874 times. Drone Program, City of Chula Vista Police Department (July 2, 2022), <https://www.chulavistaca.gov/departments/police-department/programs/uas-drone-program>. CVPD posts information on each flight publicly and provides public forums to involve their community in the program. Id. Chief Roxana Kennedy has called the Drone Program “one of her most important tools in improving situational awareness, de-escalating dangerous situations, and protecting her officers and community.” Id. See also UAS-Unmanned Aerial Systems, Placer County Sheriff’s Office (last visited July 1, 2022), <https://www.placer.ca.gov/5822/UASUnmanned-Aerial-System>.

Mahalo nui loa for your time and consideration of my testimony!

Best regards, Sophia Morgan