

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

June 10, 2021

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

REQUEST FOR FINAL APPROVAL TO AMEND AND COMPILE CHAPTER 13-34, HAWAII ADMINISTRATIVE RULES, PŪPŪKEA MARINE LIFE CONSERVATION DISTRICT; TO AMEND: §13-34-1 (BOUNDARIES) TO PROVIDE MORE ACCURATE GPS COORDINATES AND BOUNDARY DESCRIPTIONS; §13-34-1.1 (DEFINITIONS) TO CLARIFY AND UPDATE DEFINITIONS INCLUDING “LIMU LIPE‘EPE‘E”; §13-34-2 (PROHIBITED ACTIVITIES) TO PROHIBIT THE FEEDING OF MARINE LIFE; §13-34-3 (PERMITTED ACTIVITIES) TO §13-34-4 (EXCEPTIONS; PERMITS) FOR GRAMMATICAL AND TECHNICAL AMENDMENTS; §13-34-5 (PENALTY) TO CLARIFY THE TYPES OF PENALTIES AUTHORIZED BY STATUTE FOR VIOLATIONS OF THIS CHAPTER; TO ADOPT §13-34-6 (ASSET FORFEITURE) TO PROVIDE NOTICE OF THE STATE’S AUTHORITY TO UTILIZE CIVIL ASSET FORFEITURE AS AN ENFORCEMENT TOOL FOR VIOLATIONS OF THIS CHAPTER; LOCATED AT PŪPŪKEA, KO‘OLAULOA, O‘AHU, HAWAI‘I

Submitted for your consideration and final approval is a request to amend and compile Chapter 13-34, Hawaii Administrative Rules (HAR), to update the rules regulating the Pūpūkea Marine Life Conservation District (MLCD).

The primary purpose of the proposed action is to amend the boundaries of the Pūpūkea MLCD to include the Kapo‘o tide pools, also known as the Old Quarry tide pools. This amendment, along with other amendments described below, is intended to enhance the protection of marine resources within the MLCD. Section 13-34-1, Boundaries, is being amended to provide more accurate GPS coordinates and descriptions for the boundaries of the Pūpūkea MLCD, including coordinates delineating the boundary of the Waimea Bay zone of the MLCD. To assist in the delineation of the new MLCD boundaries, the current exhibit entitled “Map of the Pūpūkea, Oahu Marine Life Conservation District 1/10/02” is being replaced by a more accurate and up-to-date map of the Pūpūkea MLCD.

Section 13-34-1.1, Definitions, is being amended to update the definition of “limu lipe‘epe‘e” to provide clarity and ensure the rule’s enforceability. The definition of “Waimea Bay” is being removed because it is described in the amended Boundary section. The definition of “legal nets” is being removed because it is no longer necessary due to technical amendments to section 13-34-3, Permitted Activities.

Section 13-34-2, Prohibited activities, is being amended to prohibit the feeding of marine life within the MLCD. This measure will ensure that the unique and relatively pristine natural ecological habitat within the Pūpūkea MLCD is not impacted by fish feeding activities, particularly given the growing number of snorkelers and other visitors to the MLCD.

Section 13-34-5 is being amended to clarify the range of penalties authorized by statute. A new section 13-34-6 is being adopted to recognize the State's asset forfeiture authority as an enforcement tool for violations of this chapter. These amendments will facilitate enforcement of this chapter by providing the Department with the appropriate range of tools to deter violations.

On August 14, 2020, the Board of Land and Natural Resources (BLNR) approved the proposed action for public hearing.

DAR accepted public testimony on the proposed rules from December 13, 2020 to January 26, 2021 and held a virtual statewide public hearing via Zoom Meetings (Zoom) on January 19, 2021. DAR received a total of thirteen verbal and twelve written testimonies. All testimony was in full support. No testimony was received in opposition to the proposal. The minutes from the public hearing and written testimonies are attached as **Exhibit 1**.

Based on the written and oral public testimony received, DAR recommends proceeding with the proposed actions. A Ramseyer draft of the proposed amendment and compilation is attached as **Exhibit 2**.

RECOMMENDATION:

“That the Board give final approval to amend Section 13-34-1 (Boundaries) to provide more accurate GPS coordinates and descriptions for the boundaries of the Pūpūkea MLCD; to amend Section 13-34-1.1 (Definitions) to clarify and update the definition of “limu lipe‘epe‘e”; to amend §13-34-2 (Prohibited activities) to prohibit the feeding of marine life; to amend §13-34-3 (Permitted activities) to -4 (Exceptions; permits) for grammatical and technical amendments; to amend §13-34-5 (Penalty) to clarify the range of penalties authorized by statute for violations of this chapter; to adopt a new section 13-34-6 (Asset Forfeiture) to provide notice of the State's authority to utilize civil asset forfeiture as an enforcement tool for violations of this chapter; to replace the “Map of the Pūpūkea, Oahu Marine Life Conservation District 1/10/02” referenced in chapter 13-34 with a more accurate map reflecting the updated boundary coordinates and the Governor's set-aside of submerged lands in the Old Quarry tide pools; and to compile Chapter 13-34.”

Respectfully submitted,



BRIAN NEILSON, Administrator
Division of Aquatic Resources

APPROVED FOR SUBMITTAL

Suzanne D. Case

SUZANNE D. CASE, Chairperson
Board of Land and Natural Resources

Attachments:

- Exhibit 1 – Public Hearing Minutes
- Exhibit 2 – Ramseyer Draft

ITEM F-3 Exhibit 1

Public Hearing Minutes
Amendment and Compilation of Hawaii Administrative Rules
CHAPTER 13-34
Rules Regulating the Pūpūkea Marine Life Conservation District

Hearing Date,
Location, and
Scheduled Start
Time:

Tuesday, January 19, 2020
Conducted virtually via Zoom Meeting
Broadcast via YouTube

I. Introduction

A. Opening

A virtual Statewide Public Hearing was held via Zoom Meetings.

The public hearing was called to order at 5:48 P.M. Stacia Marcoux, Division of Aquatic Resources (“DAR”) Aquatic Biologist, conducted the hearing. Also present were Luna Kekoa, Casey Ching, and Ryan McDermott. There were thirteen members of the public in attendance, listed under the Public Attendance section.

This was a formal Public Hearings on the proposed amendment and compilation of HAR chapter 13-34, relating to the management of the Pūpūkea Marine Life Conservation District (“MLCD”) to update the rules and boundaries; clarify and update definitions including “limu lipe‘epe‘e; prohibit the feeding of marine life; make grammatical and technical amendments; clarify the types of penalties authorized by statute for violations of this chapter; and provide notice of the State’s authority to utilize civil asset forfeiture as an enforcement tool for violations of this chapter. The proposed rule changes intend to make it easier for the public to understand and comply with the rules in the Pūpūkea MLCD.

As required by law, the proposed rules have been drafted in Ramseyer format, and copies were available on DAR’s website in the announcement of the meeting.

B. Purpose

The purpose of these hearings is to provide the public the opportunity to provide comments in the form of oral and written testimony on these proposed amendments to the administrative rules regulating the Pūpūkea MLCD.

The hearing officer provided information on the requirements to 1) conduct the hearings, 2) make a record of the hearings, 3) receive testimonies, and 4) next steps in the hearing process.

C. Public Attendance

Virtual Meeting: Thirteen (in order of testimony) – Ann Chung; Jenny Yagodich; Palakiko Yagodich; Lehiwa McEtheny; Christy Hill; Jacque Leinau; Denise Antolini; Catherine Yamashita; Keelan Barcina; Maxx Phillips; Zaya Phillips; Gil Riviere; and Bob Leinau.

II. Background

- A. Regulations for the Pupukea MLCDD are found in section 34 of the HAR. The Department proposes to amend and compile chapter, HAR § 13-34.
- B. Approval to conduct this public hearing was obtained from the Board of Land and Natural Resources on August 14, 2020.
- C. A draft of the proposed administrative rules is available for inspection in the announcement of this hearing on DAR's website. During this hearing we want to record your thoughts on the proposed rules.

III. Notice of public hearing

- A. The Legal Notice of this public hearing was published in the December 13, 2020, Sunday issue of the Honolulu Star Advertiser. On January 08, 2021, the department issued a press release regarding this hearing.

IV. Hearing procedures

- A. This hearing will be conducted as follows:
 - 1. I will explain the proposed changes to the administrative rules.
 - 2. Then I will call on those who have signed up to testify as they are listed on the sign in sheet.
 - 3. Please keep your testimony brief and on the subject in order to allow all those who came today, the opportunity to testify. Each person providing testimony will be given 3 minutes.
 - 4. After those who signed up have presented their testimonies, I will ask if anyone else wishes to testify.
 - 5. After all persons have given their testimonies, and if you wish to add to your testimony, you will be provided an additional 3 minutes.
 - 6. We are recording this hearing to make a written record, so please state your name for the record before giving your testimony. Make sure to speak clearly into the microphone so we accurately record your testimony for the record.

7. Please remember to respect the opinions of all testifiers and that this hearing is not an opportunity for accusations or rebuttals. There may be differing opinions. Everyone will have an opportunity to voice their opinion for the department to consider.
8. All testimony should be directed to me, not to the audience. If you have a question, please direct it to me, and I will find the most appropriate person to answer.

V. Rule Explanation

Summary of Draft Administrative Rules

DAR proposes to amend and compile HAR chapter 13-34 Pupukea MLCDD to reflect the accurate coordinates of DAR's jurisdiction and boundary descriptions; to clarify and update definitions including "Limu Lipe'epe'e"; to prohibit the feeding of marine life; for grammatical and technical amendments; to clarify the types of penalties authorized by statute for violations of this chapter; to adopt to provide notice of the state's authority to utilize civil asset forfeiture as an enforcement tool for violations of this chapter; located at Pūpūkea, Ko'olauloa, O'ahu, Hawai'i.

VI. Testimonies

A. Ann Chung - Support

1. Resident of the North Shore of Oahu, a marine biologist, an avid ocean user, and a volunteer with Malama Pupukea-Waimea. Experience in the Pupukea tide pools known as kapoho: conducted master's research quantifying its biological resources
2. Kapoho's ecological and educational value
3. Threats to Kapoho: increases in human use over recent years, and-based pollution, and fishing activities.

B. Jenny Yagodich - Support

1. Lives in the ahupua'a of Pupukea since she was a child, works as the director of educational programs and the makai watch coordinator for Malama Pupukea-Waimea
2. When educating the public, difficult to communicate to used where the line is between the tide pools and the open ocean
 - a) will enable enforcement and clear education of the rules

C. Palakiko Yagodich - Support

1. Resident at Pupukea, up the hill for past 20 years, fisher part of fishing family including throw net tradition, passed from great-grandfather, to grandfather, to uncle, to him, to son
2. Taught son knowledge of fishing and about fish at Kapoho, the first place he put him in the water

D. Leihiwa Mcetheny - Support

1. Born and raised in the ahupua'a of Pupukea, enjoys the tide pool type of area at Kapoho since she was a baby, first place xperienced ocean

2. Area needs protection
 - a) Some animals are only found here,
 - b) Area acts as a nursery for fish to help repopulate surrounding waters
- E. Christy Hill - Support
1. Born and raised on north shore, mother and grandmother, family members are fishers including dad who is commercial fisher,
 2. Tidepool not being part of the MLCD is confusing, tide pools act as a nursery
 3. Year of kilo observations, seen fragility and importance of the habitat
- F. Jackie Leinau - Support
- a) Grew up in Waialua, at the tidepools learning to swim and appreciate ocean, Kids are in Malama Pupukeya-Waimea's Ka Papa Kai program
 - b) Family experiences revolve around the tidepools
 2. Observations: netting, collecting, and harassment of marine life
- G. Denise Antolini - Support
1. President of Malama Pupukeya-Waimea, one of founding individuals, testifying on behalf of the organization, mother
 2. Executive orders in 2008 by Governor Linda Lingle to put Kapoho tide pools from city into MLCD
 3. Memos and various legal work dating back to 2006 on this issue
 4. See written testimony
- H. Catherine Yamashita - Support
1. Grown up on Oahu, believes kuleana to take care of ecosystems important to biodiversity, ecology, reef and ocean resilience and health, take care of us
 2. Kapoho
 - a) 80 species of fish call kapoho their home over 20 of which are endemic to Hawaii
 - b) Puuhonua to many of the species
 3. Part of the kuleana and reciprocity of taking care of the earth to provide abundance and places that raised us
- I. Keelan Barcina - Support
1. Resident, born and raised across the street from the MLCD, advocate for marine conservation, professionally trained natural resource manager and ecologist
 2. Graduate work including story map called Kapoho Tide Pool Piko of Pupukeya
 3. MLCD is well known by the community for its heavy and mostly unregulated recreational use
 4. The rules minimize threats to ecosystem health and one step closer to achieving the state's 30 by 30 goal
- J. Maxx Phillips - Support
1. Staff attorney and director for the center for biological diversity

- a) Pupukea, pearl of North Shore, one of only three marine protected areas on Oahu, the most populated of our islands
 - 2. Enforcement issues relating to fishing in tide pools
 - a) Seen firsthand, members of the center have seen firsthand, while recreating, observing, doing scientific studies and
 - b) Boundary amendment and change would make sure that the original intent for this place is observed in the law
 - c) Fish feeding is an issue that needs to be fixed
- K. Zaya Phillips - Support
 - 1. Sharks Cove is home to amazing marine life and a lot of fish growing up, she grew up swimming there
- L. Gil Riviere - Support
 - 1. State senator representing the North Shore and Pupukea MLCD
 - 2. MLCD is successful
 - a) Aquatic life
 - b) Community support
 - 3. Ambiguity in enforcement
 - a) Will improve with new rules, DAR, and Makai Watch
- M. Bob Leinau - Support
 - 1. Lives on north shore for over 50 years, diver
 - a) Recalls the last rule amendments in 2002 saw improvement in environment: increase in number and size of fish, biomass, and diversity
 - b) Enforcement by DOCARE with new rules
 - 2. Sees problems when diving
 - 3. Moral obligation

VII. Decision-making on the proposals:

- A. Based on the testimonies presented, the Department will submit its findings and recommendations to the Board of L&NR at its April 2021 meeting.
- B. If approved by the Board, the Department of the Attorney General will conduct a final legal review. If approved, the proposed rules will be given to the Governor for his final approval.
- C. Should the Governor grant approval, certified copies will be filed with the Lt. Governor's office, and after 10 days, it becomes effective as law.
- D. Are there any questions regarding this process?

VIII. Adjournment

- A. Virtual Meeting: 6:14 P.M.; hearing was open for 26 minutes

Pūpūkea MLCD Online Public Hearing

January 19, 2021

Hearing Officer: Stacia Marcoux, Division of Aquatic Resources

Anne Chung:

Hello my name is Dr. Anne Chung. I am a resident of the North Shore of Oahu, a marine biologist, and an avid ocean user, also a volunteer with Mālama Pūpūkea-Waimea. I also have experience in the Pūpūkea tide poles known as Kapo‘o and conducted my master's research quantifying its biological resources. I know the area merits the same protections as the surrounding marine life conservation district and I am in strong support of DAR amending the rules as described in the board's middle. Kapo‘o is rich with juvenile and adult fishes, corals, and vertebrates and is a very unique, shallow, protected area along the coastline. In addition to its ecological value, the area is an educational tool, as the calm shallow waters create a unique classroom and source of inspiration for residents and visitors alike. The tide pools have become a gracious host, not just for my master's work but now several budding graduate researchers citizen science monitoring summer nature programs and keiki science and culture education for the local community. Kapo‘o also faces pressures from dramatic increases in human use over recent years, in addition to land-based pollution and fishing activities. Tide pool-like systems like Kapo‘o are relatively rare on Oahu and Hawaii in general, and there is much more to learn about the ecological role and connection the tide pools may play in relation to surrounding waters. I believe these additional protections are essential. I know they will create consistent and clear rules that will improve understanding assist our enforcement officers, benefit the rich but vulnerable tide-pool ecosystem, and ensure plentiful resources for the enjoyment of the public for years to come. Mahalo for your time on this issue. Thanks.

Jenny Yagodich:

Aloha. Aloha, Division of Aquatic Resources, administrator, and staff. My name is Jenny Yagodich and I've lived here in the ahupua'a of Pūpūkea since I was a child. I work as the director of educational programs and the Makai Watch coordinator for Mālama Pūpūkea-Waimea, the community non-profit that cares for educates about and protects the Pūpūkea marine life conservation district. I'm in strong support of the proposed amendment of Hawaii administrative rules chapters 13-34 to include the tide pools into the existing boundaries of the Pūpūkea Marine Life Conservation District. In my role as Makai Watch coordinator, I spent a lot of time educating folks about the rules and regulations pertaining to fishing in and around the Pūpūkea MLCD. Because the tide pool area is not yet included fully into the MLCD, and because DOCARE cannot yet enforce MLCD rules within the tide pools, one of the biggest challenges has been trying to communicate to resource users where exactly the line is between the tide pools and the open ocean. Kapo‘o is actually by definition not a tide pool, but rather a shallow water area that is constantly connected to the open ocean, as you can see here in the photo behind me that was taken during low tide in summer. There is confusion about which areas are prohibited, which areas are protected, and which are not. The tide pools are a necessary nursery-type habitat for many schools of juvenile and sub-adult fish, as well as many endemic and endangered species. Schools of fish such as aholehole and manini naturally move back and forth between the two areas and eventually grow and spill over into outlying areas where take is allowed. In the meantime, since there is no actual line between the two, those who fish often intentionally take from the gray area, sometimes entire schools at a time. In recent years, take has been happening further and further into the MLCD without consequence. Including the tide pools into the MLCD will enable both enforcement and clear education of the rules and regulations in place to protect our limited and fragile resources for generations to come. In conclusion, I'm in strong support of the proposed amendment of Hawaii administrative rules chapter 1334 to include the Kapo‘o tide pools into the existing boundaries of the Pūpūkea Marine Life Conservation District. Mahalo.

Palakiko Yagodich:

Hi, aloha, my name is Palakiko and I am a resident here up at Pūpūkea. I've lived up the hill for the last 20 years and I am a fishing family, I'm part of a fishing family. We throw a net and it is part of, you know, family tradition, and despite living here at Pūpūkea we know and we understand that it is important to, you know, protect the nursery, and that is why I am in support of, you know, protecting the tide pool area at Kapo'o. For me, my great-grandfather was a fisherman, you know, that knowledge was passed to my grandfather, was passed to my uncle, passed to me, and now I teach my son. The first place, my son is 17, the first place that I put my son in the ocean is here at Kapo'o., and we love this place. At this place, I got to develop his knowledge not only as a fisherman but as a fish here at Kapo'o in the tide pools. I grow my son like fish and you need fish and that's why this place is so important. It is like a laboratory and I look forward to seeing other fathers teaching their sons more about the environment and how fish move and how fish swim, and this is where we do this. And so, you know, he's 17 now and now he has that responsibility. I learned that if you mālama the ocean, the ocean going to mālama you, the ocean is going to take care of you. This is not a written law, this is written in our blood. This was taught to us by our great grandfathers, this is not you know what we do, this is how we live, and in order to continue this family legacy, we need places like this so we can continue to learn how to be fish. Mahalo, thank you very much.

Leihiwa Mcetheny:

Aloha Division of Aquatic Resources, administrator, and staff. My name is Leihiwa and I am in strong support of including the Kapo'o tidepools into the Pūpūkea Marine Life Conservation District. I was born and raised here in the ahupua'a of Pūpūkea. Pūpūkea and Waimea are special to me because they are a great learning environments and the creatures and plants bring happiness to many families and residents. Since I was a baby, I've spent many years enjoying the tide pools the type of areas of Kapo'o. This specific area is special to me because it was probably the first place that I ever went into the ocean. This area deserves protection because some of its animals are only found here, and need to have their populations grow. The last reason I further support the protection of Kapo'o is because this area acts as a nursery for fish, which helps repopulate the surrounding waters. In conclusion, I'm in strong support of the proposed amendment of Hawaii administrative rules chapter 13-34 to include the Kapo'o tide pools into the existing boundaries Pūpūkea Marine Life Conservation District. Thank you.

Christy Hill:

Aloha Division of Aquatic Resources, administrator, and staff. My name is Christy Hill and I testify today in strong support of the proposed amendment to include the Kapo'o tide pools into the Pūpūkea Marine Life Conservation District. I am born and raised here on the north shore, I've enjoyed the tide pools from when I was a child, and now as a mother of six and a grandmother of two, I have raised my 'ohana here as well. I remember this area before it was heavily influenced by human use and have unfortunately watched over the decades as more and more people come and unknowingly damage this fragile ecosystem. Most people assume the tide pools are protected, but there are definitely some who know they are not, and they take advantage of that regularly. My 'ohana are fishers and my dad is a commercial fisherman and I understand the need to provide, but I fully support the Kapo'o tide pools being included into the surrounding MLCD because we have seen an increase and in abundance that spills over to areas where we can't fish. The tide pool area not being part of the MLCD is not only confusing but is detrimental to the potential fish population because the tide pools act as a nursery for many marine creatures. The Kapo'o tide pools are known for being a snorkeling hotspot, but they are so much more than just that. I spent the last year conducting regular kilo observations within the tide poles and have seen with my own eyes just how fragile and important this habitat is. Schools of fish, many species of invertebrates, limu, even monk seals and turtles rely on this area for shelter and food. Some days we see large schools of juvenile fish and the next day they were all fished out. I can only imagine what the overall population of fish would be if these schools were able to mature and reproduce. To conclude, I am in strong support of the proposed

amendment to include the Kapo‘o tide pools into the existing boundaries of the Pūpūkea Marine Life Conservation District. Mahalo for your time.

Jacque Leinau:

Hi, aloha Division of Aquatic Resources, administrator, and staff. My name is Jacque Leinau and I am submitting this testimony in strong support of the proposed amendment of Hawaii administrative rules chapter 13-34. The amendment would include the tide pool area Kapo‘o into the existing boundaries and rules that apply to the Pūpūkea Marine Life Conservation District. As a young girl growing up in Wailua, I have fond memories of going to the tide pools to swim and wade in the shallow waters. I was not a very strong swimmer, in fact I was pretty intimidated by the ocean. Kapo‘o was a place where i was able to comfortably observe marine life and get my toes wet. Here is where i developed the confidence to learn to swim. My curiosity and appreciation of marine life blossomed here. Fast forward three and a half decades later, I'm a proud mom of two teenage children who love the ocean. When they were much younger, we took them to the shallow waters of Kapo‘o to develop and foster deep appreciation for the ocean and the life it sustains. This curiosity grew as they participated in Mālama Pūpūkea-Waimea's Ka Papa Kai program. They're known quickly that they're very fortunate to have such a place to explore in your home a treasure. Sometimes, when something is so easily accessible, we forget to see the specialness that exists before our eyes. Kapo‘o is a very popular place and is frequently visited by residents and visitors alike. This place supports cultural practices and public enjoyment of natural resources through activities such as swimming, snorkeling, and diving. During the months of high surf, we covet those days when we can observe the daily rhythms by being in the water there. In the summer months, we immerse ourselves and make observations together, creating questions of wonderment. Viable family conversations have come from our experiences at Kapo‘o. We are connected to this place, sorry getting ahead of myself, we are very connected to this place, so when we see netting, collecting, and harassment of marine life there, it just breaks our hearts. The netting we observe in the tide pools occur daily in the early mornings and early evenings during the summer months or when the waves are not a threat. We have watched as takers often start off in the tide pool, then move on as they see fit to stretch their nets beyond the tide pools, catching from the schools of fish we were just swimming with in the MLCD. It just does not seem sensible. The tide pool and the surrounding MLCD are one. There is no line in nature that divides the flow of life between the two places. Fishing and harvesting are prohibited or limited in MLCDs to allow fish populations to reproduce and replenish. The Kapo‘o tide pool should be a no-take zone. It is a safe haven and nursery for marine life, which contributes to the Pūpūkea Marine Life Conservation District and beyond. For these reasons, I am in strong support of the proposed amendment of Hawaii administrative rules chapter 1334 to include the Kapo‘o tide pools. Your time and consideration is greatly appreciated. Mahalo.

Denise Antolini:

Aloha my name is Denise Antolini. I'm the president of Mālama Pūpūkea-Waimea. I'm a resident of Pūpūkea, and was one of the individuals along with several others who founded the organization in 2005. I am testifying on behalf of the organization and we also submitted written testimony. I want to thank DAR, the administrator, also the DLNR chair, Suzanne Case, and all the staff who've been involved in this effort. I want to provide quickly a little bit of background and then explain why the amendment is needed and why it's needed now.

So, a little bit of background as it was mentioned in the preparation for this hearing, there were executive orders in 2008 by governor Linda Lingle that basically took the area that Kapo‘o tide pools back from the city and put it back to where it was always intended to be, which is part of the Marine Life Conservation District. But some of you may not know that our organization was involved in working with Laura Thielen when that happened and in reviewing for this hearing, I found old memos that date back to 2006 where Kamilee Nichols, who was the DAR fellow at the time, actually a little bit later and Richard Walsgrove, who was a law student at the time, who's now in the law faculty worked on this issue, so this issue has been around and needing

some redress since 2006. So we're very very excited that it's now come to this point and that's really through the effort of DAR, because it's not an easy thing to do. The boundary measurements, to do the research, and do the preparation, we're very appreciative. In the meantime Mālama Pūpūkea-Waimea has been very busy documenting the scientific and the cultural importance of this area. And there's no doubt you're hearing from the testimony tonight and you'll read the written testimony that the area is significant, a major contributor to the tide pools, and it's really a unique and special place. So, those administrative rules are really important to catch the status of this area up with the entire MLCD's protected status. Let me emphasize as I conclude by saying that the matter is urgent. You've heard from other testifiers that there is throw net occurring in the MLCD and we've attached to our written testimonies and pictures of that as well as very very high human use in the tide pools which leads to trampling and all kinds of uninformed misuse of the area which would be addressed through the rule amendment including and personally I've seen this fish feeding this past summer I saw a young couple who obviously didn't know any better taking big loaves of white bread and just dumping it into the tide pool so their kids could see the fish. But there are ways to enjoy the area without altering the marine life and that's what the administrative rules would provide the foundation for. It's become an enforcement nightmare. I know it's frustrating for the DOCARE officers who are unable to respond to the public's concern about obvious use of the area that's inconsistent with the rest of the MLCD, so we see throw net, fish feeding, trampling. We do have monk seals and turtles in the area so there's a whole bunch of biodiversity that really needs to be protected. Let me conclude that you know on the basis of our organizational experience over the years and my own personal experience being this area so often, also with my babies, my two sons who are now young adults from the very beginning, the area is incredibly special and adding this to the MLCD administrative rules is very consistent with the state's goals 30x30 goals and with the public trust. and with that we thank DAR and the entire team that's worked on this for many years to bringing us to a public hearing. Mahalo.

Catherine Yamashita: Aloha, I have prepared video testimony that I will share with you right now. Aloha my name is Cat Yamashita and I stand in support of DLNR's submittal for the rural amendments of Pūpūkea MLCD. Growing up on O'ahu, I have always felt so fortunate to be in a place that is surrounded by beauty and peace and sacredness, and I believe it is our kuleana to care for and protect the ecosystems that are not only such vital pieces of Hawaii's biodiversity and rich ecology and contribute greatly to our reefs and our oceans resilience and health but also which have nourished us and taken care of us for many generations before the same way that it is our responsibility, our kuleana, to do so for them. Kapo'o is a fundamental key of life for many of these creatures who are pertinent to our oceans and reefs health. 80 species of fish call Kapo'o their home over 20 of which are endemic to Hawaii. This place serves as a precious pu'uhonua to many of the species, a marine life nursery who used this place to raise their young feed and rest without the threat of predators. Recognizing Kapo'o as part of the MLCD is not only acknowledging that this is such a precious and sacred place to so many who live here but also provides an opportunity to educate others who want to appreciate the area but may not always understand the repercussions of their actions. It also serves as an excellent place to spread knowledge about Pūpūkea 's history, interwoven with the stories of our ancestors, native fisherman who understood the deep ways in which kokua for the oceans extends to every part of our islands both land and sea and use that knowledge to respect and cultivate reciprocal relationships. Mehana Vaughan writes: "Kuleana is more than a general ethic of care for the earth. Kuleana grows from reciprocity regular return cultivation of relationship and active work to nurture abundance. It encompasses distinct responsibilities to the specific places that nourish our lives." So, what are some of the ways that we pay forward our kuleana to the places that have raised us? I believe that recognizing Kapo'o as part of MLCD is one of the fundamental ways to do so. Thank you, good night.

Keelan Barcina:

Aloha Miss Stacia Marcoux and DAR staff. My name is Keelan Barcina and I am testifying in strong support of the revised rules proposal for the Pūpūkea Marine Life Conservation District. I'm a long-time

resident born and raised directly across the street from the Pūpūkea MLCD and I'm also here today as a strong advocate for marine conservation in my professional capacity as a trained natural resource manager and ecologist. It is within the boundaries of the MLCD where I fostered my passion for coastal ecology and marine conservation in Hawaii. The proposed rule amendments to the MLCD boundaries now include the Kapo'ō tide pool that is often referred to as the Pūpūkea or Sharks Cove tide pool. This three-acre tide pool was unbeknown to my younger self that this was my underwater classroom that inspired me to pursue a career in coastal resource management. And as a part of my past graduate coursework I produced a story map called Kapo'ō Tide Pool, piko of Pūpūkea that highlights the cultural and biological significance of the tide pool and to educate others on pono practices to safeguard a place that can inspire the next generation of ocean scientists. And for those interested in viewing that story map, feel free to scan the QR code just over my shoulder with your smartphone. In 2020, I assisted the north shore community nonprofit Mālama Pūpūkea-Waimea in conducting ecological surveys of the marine life in the tide pool. And this is my first time back in the tide pool as an adult and I was in complete of some place, I was only acquainted with as a child. I saw an abundance and high diversity of nearshore fishes, invertebrates, and limu, clear water conditions, shore birds, and 'auku'u, or the black crown night heron, foraging at low tide, and on my first day a Hawaiian monk seal resting on the exposed rocks. and you know this was all within the Kapo'ō tide pool and area now included in the proposed rule amendments under section 34-1. The public MLCD is well known by the community for its heavy and mostly unregulated recreational use, and I have seen firsthand fish feeding, pole and net fishing, the alteration of geologic features by ocean users in the Kapo'ō tidepool and in the surrounding MLCD. And with this revised rules we can further minimize these threats to ecosystem health that can be legally enforced upon the adoption of these amendments. During my surveys in the tide pool I witnessed the marine life's resilience to recover from the year-round pressures of human use and disturbance during the pandemic beach closures, much like that of Hanauma Bay. I also saw that the unique coastal features of the tide pool served as a nursery and refuge, a pu'uhonua for juvenile fish, the type is the powerhouse within a battery that is the Pūpūkea MLCD, if you will, which recharges open fishing areas through spillover of culturally important fish. I kindly asked that DAR protect this powerhouse through the passage of these rules which strengthens marine resilience in Pūpūkea and Waimea and it's also one step closer to achieving the state's 30x30 goal. Mahalo.

Maxx Phillips:

Aloha my name is Maxx Phillips and I am the staff attorney and director for the center for biological diversity. We stand in strong support of the proposed rule amendments concerning the Pūpūkea Marine Life Conservation District. A little-known fact about Sharks Cove, really the pearl of the north shore, is it's one of only three marine protected areas or MLCDs on O'ahu. A place that's used by visitors and tourists alike and also as the most populated of our islands. It really is crucial that we include these rule amendments and it's very pressing. As you've heard from the testimony today, there is an enforcement issue as it relates to fishing in the tide Kapo'ō. This is something that I've seen firsthand, that members of the center have seen firsthand in their times recreating there, observing, doing scientific studies and so it really would be a good boundary amendment and change to make sure that the original intent for this place is observed in the law as it stands now. Additionally, the fish feeding that's happening there currently and isn't being prohibited continues to be an issue and so the quicker that we can fix that the better. And so we just want to thank the staff for their submittal and also I'd like to take the time to have our youngest volunteer at the center at the office she wanted to give her testimony and strong support as well. Go ahead.

Zaya:

Aloha my name is Zaya. I support these new rules. Sharks Cove, it's home to so much amazing marine life and lots of growing up fish and I grew up swimming there.

Maxx Phillips:

Thank you for this opportunity to again submit the center strong support for these proposal amendments and just thank you for your time.

Gil Riviere:

Good evening and thank you for having this hearing and for listening to us about this important subject. My name is Gil Riviere, I am the state senator representing the north shore and the Pūpūkea Marine Life Conservation District. Marine life conservation district is a proven winner, it's a proven success, not only is it doing everything great for the aquatic life but we've got the strong community support as you've seen. The testimony today has been tremendous. I think they've touched all the bases. It's really important that this amendment passed so I'm speaking in strong support of amending the rules to include Kapo'ō into the enforcement part of the conservation district. There has been for too many years too much ambiguity on enforcement. I think this is going to be great that it's included and now you've got the right people with the eyes on it, you got makai watch, you got the people, you've got your division of aquatic resources involved, so thank you very much for allowing me to speak briefly and support this amendment. Good evening.

Bob Leinau:

Aloha my name is Bob Leinau and I'm speaking very strongly in support of rule amendments. I remember in 2002, well I remember in 2000, there was a meeting of the minds of a task force so how to improve the marine life conservation district. 2002 we had new rules and it was just amazing to watch the environment improve: more fish, more biomass, more diversity, larger fish. It's really exciting when you have good rules that match up. Not only that when you have the rules you can go in and do some enforcement so DOCARE is able to come in and support the rules. So we have an opportunity again right now to change the rules, make some amendments that will really improve the area a lot. When I've been diving, I've lived on the north shore well for over 50 years now, and I've been diving most of my life and in the water and to me it's just you know in parts about the fish and the environment the ecosystem but it's also very personal. I see a lot of things go down around there that upset me. There's people who just scoop up the PPP or they'll grab opala and take them out of there and just take little pieces of souvenirs. The throw nets are the big harvesters they walk off with lots and lots of things and we just ought to tighten that up. To me, I was married out on a rock off of Waimea and my children were raised swimming down there and now my grandchild is splashing around on the water down there. It's a family up there. But the personal thing isn't why to do it. The real reason is because these fish were probably swimming around in the Pacific ocean 50 million years ago when the volcanoes were popping up. This particular volcano in this area is around two and a half million years old and I'm not suggesting the fish are that old but their great great great genetic line is probably that old. And so in many ways it's a moral issue of taking care of this planet. It needs all the help it can get and thank you for orchestrating this. Aloha.

From: Karynne Morgan
Sent: Monday, January 25, 2021 3:16 PM
To: DLNR.AR.DLNR.Aquatics <dlnr.aquatics@hawaii.gov>
Subject: [EXTERNAL] SUPPORT FOR Pupukea MLCD HAR Amendments

Aquatics Division
DLNR

Mahalo for seeking testimonies regarding the Pupukea MLCD. My father purchased an acre up in Pupukea to farm papaya in the mid 1960s. Through the days of my youth after working the farm, we frequented the Pupukea coastline to swim or snorkel. It was a precious and beautiful area. Over the decades since, the number of people impacting the area grew and grew and their effect on the shoreline, reefs, and sealife was concerning. I definitely support the protective measures being proposed to clarify and better define the boundaries to include the Kapo'o Tidepools and to protect the sealife, coastline and cultural importance of the area for future generations to appreciate and enjoy.

Karynne Leimomi Chong Morgan
LeiNui@gmail.com, Mobile: 808.295.9418

From: Olan Leimomi Fisher
Sent: Monday, January 25, 2021 1:16 PM
To: DLNR.AR.DLNR.Aquatics <dlnr.aquatics@hawaii.gov>
Subject: [EXTERNAL] SUPPORT for Pupukea MLCD HAR Amendments

Aloha mai,

My family has at least 3-generations of ties to Pupukea, and I consider this place (including the beaches, & ocean animals & resources) as so special and vulnerable here on our tourist-driven island. Please pass these Hawai'i Administrative Rule amendments to better protect the Marine Life Conservation District, and to explicitly include the Kapo'o Tidepools for better protection. I have also personally seen tourists stepping on the reefs, feeding fish, and even sometimes seen locals with their spearfishing gear in this area! Let's pass these rules to better ensure that this conservation area is properly protected for future generations to enjoy, and as an essential nursery for our dwindling ocean animals and resources.

Mahalo nui for your consideration!

Olan Leimomi Fisher
Olan Leimomi Morgan Fisher

From: Sydney Covell

Sent: Monday, January 25, 2021 9:29 AM

To: DLNR.AR.DLNR.Aquatics <dlnr.aquatics@hawaii.gov>

Subject: [EXTERNAL] SUPPORT: Division of Aquatic Resources Public Hearing to establish Public Hearing Notice #0001307355-01 for Proposed Amendment of Hawaii Administrative Rules Chapter 13-34, Pupukea Marine Life Conservation District

January 25, 2021

Aloha Division of Aquatic Resources Administrator and Staff,

My name is Sydney Covell and I write this testimony in **strong support** of the proposed amendment of Hawaii Administrative Rules Chapter 13-34 to include the Kapo`o Tidepools into the existing boundaries of the Pūpūkea Marine Life Conservation District.

I am a North Shore resident and enjoy our natural areas on a daily basis. I am always looking for new ways to engage my keiki and expose them to the beauty and knowledge that the natural areas on the North Shore provide. The tidepool areas of Kapo`o are very special to us as they are part of our home and they deserve protection.

I care about this fragile ecosystem because the Kapo`o tidepools act as a nursery for fish which helps repopulate outlying areas. My keiki deserve to see how natural processes occur and how they regulate each other. By protecting the tidepools, we are able to show our keiki what happens naturally and how important it is to respect these processes.

The Kapo`o Tidepools are technically already part of the MLC, but need the boundaries to be amended so that the rules and regulations protecting it are enforceable.

I am in **strong support** of the proposed amendment of Hawaii Administrative Rules Chapter 13-34 to include the Kapo`o Tidepools into the existing boundaries of the Pūpūkea Marine Life Conservation District.

Mahalo nui loa,

Sydney Covell

Cynthia L. Hunter, Ph. D.
44-130 Mui Place, Apt. 2
Kaneohe, HI 96744

15 January 2021

Brian J. Neilson, Administrator
Division of Aquatic Resources
1151 Punchbowl Street, Room 330
Honolulu, HI 96813

Re: SUPPORT: Division of Aquatic Resources Public Hearing to establish Public Hearing Notice #0001307355-01 for Proposed Amendment of Hawaii Administrative Rules Chapter 13-34, Pupukea Marine Life Conservation District

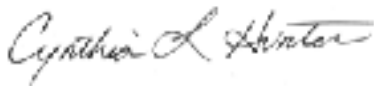
Dear Mr. Neilson:

I write this testimony in **strong support** of the proposed amendment of Hawaii Administrative Rules Chapter 13-34 to include the Kapo‘o Tidepools into the existing boundaries of the Pūpūkea Marine Life Conservation District.

I am a marine biologist and, at the request of Malama Pūpūkea, conducted biological surveys of corals, other invertebrates, and limu in the Kapo‘o Tidepools last summer with my colleague, Dr. Alan Friedlander, who surveyed the fishes. We found that these tidepools represent a unique environment that harbors a high diversity and abundance of organisms. It is an important nursery habitat for a number of species with high cultural, recreational, and food value. For these reasons, Kapo‘o Tidepools deserve the highest level of protection by the State of Hawaii, particularly as they are threatened by excessive human use, illegal fishing, invasive algae, and land-based sources of pollution.

As the Kapo‘o Tidepools are within the existing Pūpūkea MLCD, the boundaries need to be amended so that the rules and regulations that protect the entire area are enforceable. Thank you for the opportunity to provide this written testimony.

Sincerely,



Cynthia L. Hunter, Ph. D.

Sunset Beach Community Association
P.O. Box 471
Haleiwa HI 96712

January 21, 2021

Brian Neilson, Administrator
Division of Aquatic Resources
Department of Land and Natural Resources
1151 Punchbowl Street, Room 330
Honolulu Hawaii 96813

Re: Public Hearing Testimony in **Support** of Proposed Amendment of Hawai'i Administrative Rules
Chapter 13-34, Pūpūkea Marine Life Conservation District

Aloha Mr. Neilson,

The Sunset Beach Community Association offers strong support for proposed amendments by the Division of Aquatic Resources (DAR) to Amend and Compile Chapter 13-34, Hawaii Administrative Rules, Pūpūkea Marine Life Conservation District. The community supported the creation of the MLCD back in 1983, and we would like to see this amendment approved, as Kapo'o (the Sharks Cove Tidepools) deserves the full protection afforded by the State's MLCD designation. Mahalo for your consideration in this matter.

Sincerely,



Andrea Woods
Corresponding Secretary, SBCA

cc Denise Antolini, Mālama Pūpūkea-Waimea
Senator Gil Riviere
Representative Sean Quinlan

Andrea Woods
58-034 Kapuai Pl.
Haleiwa HI 96712

January 21, 2021

Brian Neilson, Administrator
Division of Aquatic Resources
Department of Land and Natural Resources
1151 Punchbowl Street, Room 330
Honolulu Hawaii 96813

Re: Public Hearing Testimony in **Support** of Proposed Amendment of Hawai'i Administrative Rules Chapter 13-34, Pūpūkea Marine Life Conservation District

Dear Mr. Neilson,

As a North Shore resident of over 40 years, I offer strong support for proposed amendments by the Division of Aquatic Resources (DAR) to Amend and Compile Chapter 13-34, Hawaii Administrative Rules, Pūpūkea Marine Life Conservation District. The community supported the creation of the MLCD back in 1983, and Kapo'o (the Sharks Cove Tidepools) deserves the full protection afforded by the State's MLCD designation. Thank you.

Sincerely,


Andrea Woods

cc Denise Antolini, Mālama Pūpūkea-Waimea
Senator Gil Riviere
Representative Sean Quinlan

DAVID Y. IGE
GOVERNOR OF
HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

January 18, 2021

Re: SUPPORT: Division of Aquatic Resources Public Hearing to establish Public Hearing Notice #0001307355-01 for Proposed Amendment of Hawaii Administrative Rules Chapter 13-34, Pupukea Marine Life Conservation District.

Dear Division of Aquatic Resources Administrator and Staff,

On behalf of the Department of Land and Natural Resources, Division of Conservation and Resources Enforcement (DOCARE), I would like to submit this letter of support for the proposed rules to Amend and Compile Chapter 13-34, Hawaii Administrative Rules, Pūpūkea Marine Life Conservation District.

The community and DOCARE have observed several fishermen that are aware of the lack of unenforceable rules in Kapo'o (aka Shark's Cove) and plan to fish there until administrative protections include the tide pools. These revised rules will reduce impacts to Kapo'o from visitations and fishing pressure. DOCARE's authority to address violations such as illegal gear possession (e.g. fishing poles, hand nets, spears), fish feeding and the collection of marine life and geological features (e.g. sand, shells) will continue to support the protection of the natural resources of Kapo'o.

We look forward to continuing to work together to align our initiatives and perspectives towards compliance and enforceability.

If you have any questions, please contact me at (808) 587-0066 or Jason.K.Redulla@hawaii.gov.

Sincerely,

A handwritten signature in cursive script that reads "Jason K Redulla".

Jason K. Redulla
Enforcement Chief



HOUSE OF REPRESENTATIVES
STATE OF HAWAII
STATE CAPITOL
HONOLULU, Hawai'i 96813

January 22, 2021

Hawai'i Department of Land and Natural Resources Division of Aquatic Resources

Kalanimoku Building
1151 Punchbowl St.
Honolulu, HI 96813

RE: The Proposed Amendment of Hawai'i Administrative Rules of Chapter 13-34, Pūpūkea Marine Life Conservation District

Dear Chair Case:

I am presenting this letter in strong support of the proposed amendment, including the Kapo'o Tidepools into the existing Pūpūkea Marine Life Conservation District.

As the Representative of the North Shore of O'ahu, my community takes great pride in the natural features that make our community unique. They are symbolic of what makes Hawai'i the place it is. My constituents have long supported this inclusion - partly because it is a technical, administrative amendment. More importantly, we support this amendment because protecting this fragile and biologically significant part of our marine ecosystem is essential to the surrounding Marine Life Conservation District's health for future generations to enjoy.

Respectfully,

A handwritten signature in cursive script that reads "Sean Quinlan".

Sean Quinlan
State Representative of House District 47

18 January 2021

TO: Brian J. Neilson, Administrator
Division of Aquatic Resources
1151 Punchbowl Street, Room 330
Honolulu, HI 96813
Sent via email to: DLNR.aquatics@hawaii.gov

FROM: Whitney Goodell

RE: SUPPORT: Division of Aquatic Resources Public Hearing to establish Public Hearing Notice #0001307355-01 for Proposed Amendment of Hawaii Administrative Rules Chapter 13-34, Pūpūkea Marine Life Conservation District

Aloha Mr. Neilson and Division of Aquatic Resources Staff,

I write this testimony in **strong support** of the proposed amendment of Hawaii Administrative Rules Chapter 13-34 to include the Kapo'ō Tidepools into the existing boundaries of the Pūpūkea Marine Life Conservation District (MLCD).

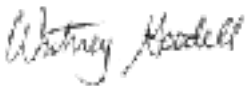
I am a marine researcher, and last summer I helped conduct ecological surveys in the Kapo'ō Tidepools with Drs. Alan Friedlander and Cynthia Hunter. These tidepools were clearly **a unique area that stands out as an ecological gem** of Oahu's North Shore. The tidepools support an incredible diversity of fishes, invertebrates, and limu, many of which are endemic to Hawai'i. It also serves as a nursery habitat for many species, marking it as an area **critical to the preservation of the cultural, recreational, and fishery value** of this coastline. With the decline of Hawai'i's marine resources, strongly protected MLCDs are essential for conserving biodiversity and benefiting adjacent fisheries. **We must ensure that MLCDs continue to protect the health of our nearshore ecosystems**, and that this protection extends to vital parts of the ecosystem.

The tidepools at Pūpūkea represent an extension of the important marine ecosystem already protected by the Pūpūkea MLCD, and **warrant the same level of protection**. This is an area of excessive human use, which can be a threat if left unchecked, but with proper management, the area can remain a valuable public space. It is evident that the tidepools serve as not only a recreational space, but an educational space as well. Children and adults alike can be observed exploring the tidepools, **learning to appreciate Hawai'i's natural resources** that are quite literally at their fingertips. But without proper protection, this area is at risk of deterioration.

I am in **strong support** of the proposed amendment to include the Kapo'ō Tidepools in the boundaries of the Pūpūkea MLCD, so this **fragile and valuable area** can be protected by enforceable regulations.

I appreciate your time on this matter. Thank you for considering my testimony.

Mahalo,



Whitney Goodell
Honolulu, HI 96816



January 19, 2020

ATTN: Board of Land and Natural Resources.
blnr.testimony@hawaii.gov

SUBJECT: BLNR Agenda - January 19, 2020 Testimony in Support of DLNR's proposed amendment of Hawai'i Administrative Rules Chapter 13-34 to include the Kapo'o Tidepools into the existing boundaries of the Pūpūkea Marine Life Conservation District.

Aloha esteemed members of the Board of Land and Natural Resources,

Kua'āina Ulu 'Auamo (KUA) submits this letter in **strong support** of the proposed amendment of Hawai'i Administrative Rules Chapter 13-34 to include the Kapo'o Tidepools into the existing boundaries of the Pūpūkea Marine Life Conservation District.

KUA works to empower communities to improve their quality of life through caring for their environmental heritage together. We employ a community-driven approach that currently supports a network of more than 36 mālama 'āina community groups collectively referred to as E Alu Pū (moving forward together), 38 fishpond projects and practitioners called the Hui Mālama Loko I'a, and a growing hui of Limu practitioners all from across our state. KUA was called into existence by the E Alu Pū Network and Mālama Pūpūkea Waimea (MPW) is a cherished and highly active member. MPW leaders also serve on the E Alu Pū Council, participate in the Limu Hui, and play a larger role in improving the way we mālama Hawai'i's nearshore environment through education, observation and outreach, and collaboration with the State's Makai Watch Program.

The Kapo'o tidepool ecosystem (Kapo'o) is a celebrated and well-known resource for the community of Pūpūkea-Waimea and to the resource users and tourists who flock there for its beauty and marine life. Kapo'o became a part of the Pūpūkea Marine Life Conservation District (MLCD) in 2009 through Executive Orders. However, the MLCD administrative rules have yet to be amended to expressly include the tidepools so fishing restrictions can be legally enforced by the Division of Conservation and Resource Enforcement (DOCARE). Including the tidepools increases transparency and efficient enforcement within the MLCD. It also adds protections to 'ōpihi and understudied invertebrate populations. We also understand that a pu'uhonua within Pūpūkea could have a "spillover" effect and contributes to the abundance of neighboring fishing areas. There are also benefits to the state from collaborations with community caretakers like MPW who provide decades of observations unachievable under current state capacity.

The work of MPW to mālama the Kapo'o tidepools and the surrounding area in partnership with the state is also a precursor to the kinds of action and collaboration we need to care for the greater Hawai'i together. Support of this amendment bolsters community efforts to help the state meet its constitutional kuleana to mālama 'āina it also adds to the places that that will help us build the kind of relationships we need to better mālama Hawai'i.



Mahalo for this opportunity to testify.

Pūpūkahi i holomua e ho'okanaka
(Let us unite to better the human condition)

A handwritten signature in black ink, consisting of stylized, overlapping letters and a long horizontal flourish extending to the right.

Co-Director



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

Board of Directors

Denise Antolini
Anne Chung
Sydney Covell
Bob Leinau
Jacqueline Leinau

Advisory Council

Athline Clark
John Cutting
Dr. Alan Friedlander
Debbie Gowensmith
Maxx E. Phillips
Bill Quinlan
Palakiko Yagodich

Staff

Jenny Yagodich, Director of
Educational Programs &
Community Outreach

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

January 19, 2021

By email to: DLNR.Aquatics@hawaii.gov

Brian Neilson, Administrator
Division of Aquatic Resources
Department of Land and Natural Resources
1151 Punchbowl Street, Room 330
Honolulu, Hawaii 96813

Re: Public Hearing Testimony **in Support** of Proposed Amendment of
Hawai'i Administrative Rules Chapter 13-34, Pūpūkea Marine Life
Conservation District

Aloha Mr. Neilson,

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 sixteen 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.

We appreciate the opportunity to express our **strong support** for proposed amendments by the Division of Aquatic Resources (DAR) to Amend and Compile Chapter 13-34, Hawaii Administrative Rules, **Pūpūkea Marine Life Conservation District**.

Kapo'o (the Sharks Cove Tidepools) **deserves the full protection afforded by the State's MLCD designation**. Executive Orders in 2008/2009 formally returned this area to State jurisdiction from its 1956 City Park designation that pre-dated the creation of the MLCD in 1983. MPW has long supported a concomitant amendment to the Hawai'i Administrative Rules (HAR) in order to implement this jurisdictional realignment of the MLCD boundaries. The proposed rule package, which also includes a handful of other changes that are essential "housekeeping" (e.g., coordinates) and modernization of the MLCD rules (e.g., ban on fish feeding, inspection), provides vital tools to allow the State Division of Conservation and Resources Enforcement (DOCARE) to enforce the protections of the MLCD in this "nursery" for marine life of the MLCD and the North Shore.

DAR Hearing Testimony

Jan. 19, 2021

Page 2

Currently, DOCARE is unable as a practical matter to enforce the MLCD rules in the tidepools. Thus, to the direct detriment of thriving marine life and undermining the public understanding of what it means to have a protected area, fishing and take of marine life is (painfully) *observed and tolerated* even if *actually illegal* -- why? Because **State enforcement cannot be effective without clear administrative rules** for DOCARE to use for education, intervention, and citation. This rule change simply makes sense – it would harmonize the Executive Orders and the H.A.R. to provide the same level of protection for Kapo’o with the rest of the MLCD.

As you will see from prior testimony submitted to the Board of Land and Natural Resources in August 2020, and other testimony at this hearing in support, highly credible scientific surveys and invaluable cultural/community observation (kilo) supports this final step in full protection of Kapo’o. MPW has initiated several scientific surveys of the tidepools, as recently as this summer, notably an extensive one-day bioassessment by Dr. Alan Friedlander, Dr. Cynthia Hunter, and Whitney Goodell, and a weekly survey by MPW Marine Science Coordinator Keelan Barcina, all of which found that Kapo’o has a high level of marine abundance and diversity, unique geophysical conditions, and strong indications that this special area acts as a pu’uhonua and nursery for the entire MLCD.

We attach for your review the report prepared for MPW by Keelan Barcina (MAS, Scripps Institution of Oceanography) that provides a compelling science and policy guide to the need to protect Kapo’o as part of the MLCD through the administrative rules change. And we commend to you Mr. Barcina’s excellent ARCGIS “Story Map” of “Kapo’o Tidepool: Piko of Pūpūkea” available at this link: <https://storymaps.arcgis.com/stories/f0e9e87fafc34e9ebe0600a01ebf995d>

In addition to strong scientific, ecological, and cultural justification, we believe that there is strong and diverse community support for this long overdue rules update. We greatly appreciate your moving this rules package forward to the public meeting and hearing stage. Your decision will contribute to the State’s important 30x30 goal and strengthen the long-lasting legacy of DLNR and its community partners to ensure healthy marine ecosystems for Hawai’i, for present and future generations.

Mahalo nui.

Best regards,



Denise Antolini
President, MPW

Attachments:

(1) Keelan Barcina, Background on Kapo’o (Pūpūkea Tidepools) (August 2020)

(2) Photos and Video of Thrownet Fishing in the Tidepools and Human Use:

Jan. 11, 2021 (taken by Anne Chung) – video here: <https://photos.app.goo.gl/gZMvz3r5C6hWFvYF8>



Nov. 15, 2020 (Jacque Leinau):



High Summer Human Use (June 16, 2018)



Photo showing marine water connection to greater MLCD (January 2021) (Denise Antolini)



Background on Kapo’o (Pūpūkea Tidepools)

Prepared by Keelan Barcina—Mālama Pūpūkea-Waimea

August 2020



Photo: Mālama Pūpūkea-Waimea

Table of Contents

INTRODUCTION.....	2
MARINE LIFE CONSERVATION DISTRICTS IN HAWAI’I.....	4
PŪPŪKEA MLCD LEGISLATIVE HISTORY.....	5
KAPO’O RESEARCH AND TIDE POOLS IN HAWAI’I	6
STATUS OF KAPO’O AND NEED FOR RULE CHANGE.....	8
CONCLUSIONS.....	9

Introduction

The coastal waters of Hawaii are known for their impressive coral reefs and other marine habitats that host a unique assemblage of native and endemic marine life. These nearshore natural resources have played important roles in the former and current lifestyle of people of in Hawai'i in several ways, including food provisions, supporting the economy and by providing recreational activities such as snorkeling and SCUBA diving that are enjoyed among residents and tourists.¹

Under increasing pressure from Hawai'i's growing population and influx of visitors, reef-associated fish have drastically declined over the last one-hundred years due to unsustainable fishing techniques, habitat destruction, and the loss of traditional management practices.² Other anthropogenic threats to nearshore environments exacerbated by human presence include erosion, pollution, and coastal development on a local scale; and globally, climate change is now having an effect on reef communities.³ There is great economic value in protecting nearshore marine resources, such as coral reefs with an estimated \$10 billion value, for future generations to enjoy because they inherently attain value from the rich biodiversity, conservation activities, and a number of ecosystem services they provide.⁴

Marine Managed Areas (MMAs) are recommended as a part of an ecosystem-based approach to deliver key conservation benefits through protection measures that conserve biodiversity, properly manage fisheries to restore and preserve ecosystem function,⁵ and to preserve historical and cultural resources.⁶ Existing MMAs in Hawaii are individually small, as well as few and far between, with a total area that covers 5% of State waters.⁷ In 2016, the State Department of Land and Natural Resources (DLNR), Division of Aquatic Resources (DAR) made a commitment to protect 30% of nearshore waters by 2030 through adaptive management approaches and stakeholder engagement in their [Marine 30x30 Initiative](#) (30x30). However, it is also important to strengthen the ecological resiliency of protected areas that currently exist to achieve the 30x30 target.⁸

¹ Cesar, H. and van Beukering, P. (2004). Economic Valuation of the Coral Reefs of Hawai'i. *Pacific Science*, Volume 58: 231-242.

² Friedlander, A.M *et al.* (2018). Human-induced gradients of reef fish declines in the Hawaiian Archipelago viewed through the lens of traditional management boundaries. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 28(1), pp.146-157.

³ Hughes, T.P. *et al.* (2017). Coral reefs in the Anthropocene. *Nature*, 546(7656), pp.82-90.

⁴ Cesar, H. and van Beukering, P. (2004). Economic Valuation of the Coral Reefs of Hawai'i. *Pacific Science*, Volume 58: 231-242.

⁵ Friedlander, A.M. *et al.* (2019) Characteristic of effective marine protected areas in Hawaii. *Aquatic Conserv: Mar Freshw Ecosyst.*, 29: 103-117.

⁶ States of Hawaii. (2020, February 13). *Marine Managed Areas*. State of Hawaii Division of Aquatic Resources. <https://dlnr.hawaii.gov/dar/marine-managed-areas/about-marine-managed-areas/>

⁷ State of Hawai'i. (June 2020). Marine Managed Areas Dashboard. <https://dashboard.hawaii.gov/en/stat/goals/5xhf-begg/4s33-f5iv/ydtj-mhwg>

⁸ State of Hawaii Division of Aquatic Resources. (2016). *World Conservation Congress Legacy Commitment: Hawai'i 30 by 30 Oceans Target*. https://dlnr.hawaii.gov/dar/files/2016/08/30x30_Effective_Mar_Mgmt.pdf

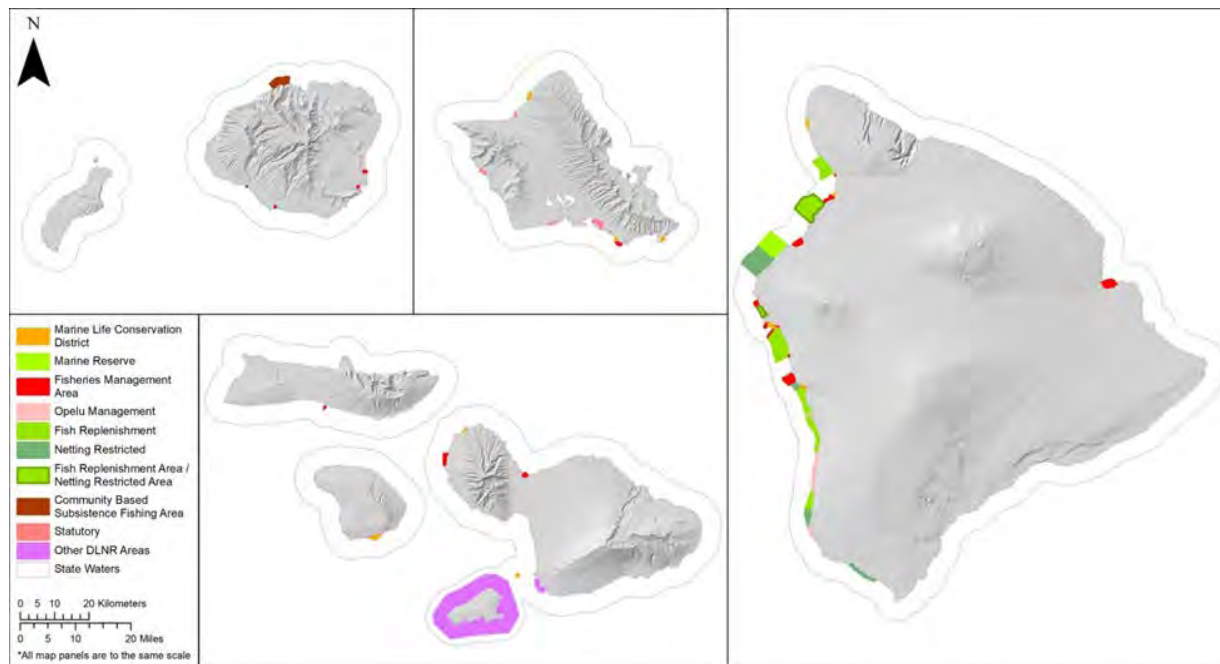


Image 1. Marine managed areas within Hawai'i State waters (0-3nm). See "Characteristic of effective marine protected areas in Hawai'i" by Alan M. Friedlander et al. (2019) for detailed map.

The Pūpūkea Marine Life Conservation District (MLCD) was established in 1983 and Kapoʻo, commonly referred to as the tide pools at Pūpūkea, became a part of the MLCD in 2009 through Executive Orders. However, the administrative rules of the MLCD have not yet been amended to expressly include the tidepools so that fishing restrictions can be legally enforced by the State of Hawai'i's Division of Conservation and Resource Enforcement (DOCARE). Potential threats to Kapoʻo's ecological resiliency include fishing, trampling of coral and disturbance of wildlife by swimmers and snorkelers, erosion and pollution exacerbated by coastal development. A 2019 study conducted in the Pūpūkea MLCD underscored the doubling of human use in the area from 2010-2019 and partially attributed the increase in human use to significant declines in species richness, biomass, and abundance. In Kapoʻo, specifically, shore-based human use during the same period had tripled.⁹ It has been over 10 years since Kapoʻo officially became a part of the Pūpūkea MLCD, and it has also been this long that the tidepools have gone unprotected in the face of increasing human pressures. MPW is a community nonprofit based on the North Shore of Oʻahu, aiming to address this timely marine issue in their mission is to replenish and sustain the natural and cultural resources of Pūpūkea through public outreach, education, and advocacy. MPW is currently garnering support to urge the Board of Land and Natural Resources to begin the rule changing process to include the tidepools, thus making MLCD rules enforceable at Kapoʻo.

⁹ Seascope Solutions LLC. (2019). Pūpūkea-Waimea MLCD Coral and Fish Assessment: 2010-2019.

Marine Life Conservation Districts in Hawai'i

There are 11 MLCDs statewide and three on the island of Oahu, of which all, vary in habitat composition, size, and levels of protection. The Wai'ōpae Tidepools MLCD was covered by a lava flow during the 2018 eruptions on Hawai'i Island. MLCDs were initially designated to offer public interaction opportunities and conserve biodiversity,¹⁰ and these locations were selected based on a 15 criteria including accessibility to the area, high biological diversity, and exposure to winds and seasonal surf.¹¹ Assessments of MLCDs have proven effective in Hawai'i with fish biomass 2.6 times greater than in open areas and greater abundance of apex predators; however, studies suggest MMAs in the State can potentially be more effective through the implementation of a statewide network.¹² A network of smaller MMAs are found to be more useful than increasing the size of an individual MMA that can often result in high socio-economic costs that hinders implementation.¹³

The Pūpūkea MLCD, in the coastal waters of the North Shore of Oahu, was established in 1983 to protect the natural and cultural marine resources that exist in this area. The Pūpūkea MLCD partially lends its uniqueness to a tidepool-like ecosystem—*Kapo'ō*—and a freshwater input from Waimea River that sets Pūpūkea apart from other MLCDs in the State. These features make the Pūpūkea MLCD an important conservation area that could potentially offer valuable insight into the interconnectedness of marine and terrestrial ecosystems in Hawai'i. Additionally, the Pūpūkea MLCD is part of the Hawaiian Islands Humpback Whale National Marine Sanctuary, and is the second most popular snorkelling destination after the world famous Hanauma Bay in East Honolulu.

Prohibited activities in the Pūpūkea MLCD include: 1) catching, taking, killing, possessing, or removing any finfish, crustacean, mollusk, including sea shell and *opihī* (limpet), live coral, or other marine life, or eggs; 2) taking, altering, defacing, destroying, possessing, or removing sand, coral, rock, or other geologic feature, or specimen; and 3) possessing in the water, any spear, trap, net, crowbar or other device that may be used for the taking, injuring, or killing of marine life, or the altering of a geological feature. Limited fishing activities are permitted in Waimea Bay only, by shore casting during certain months for *akule* (big eye scad) and *ōpelu* (mackerel scad) under Hawaii Administrative Rules (HAR) Section 13-34. Additionally, a two-pound daily limit of *limu lipe'epe'e* (*Chondrophycus spp.*) and *limu kohu* (*Asparagopsis taxiformis*) may be harvested given that they holdfast be left behind. *Kapo'ō* does not enjoy these protections rules despite its inclusion to the Pūpūkea MLCD over 10 years ago; therefore, these prohibitions cannot be legally enforced by DOCARE. Restrictions on boating and water vessel operations also exist in within the MLCD under HAR Section 13-256-63.

¹⁰ Friedlander, A.M. *et al.* (2007) Coupling ecology and GIS to evaluate efficacy of marine protected areas in Hawai'i. *Ecological Applications*. 17(3), pp. 715-730.

¹¹ Kimmerer, W.J. and W.W. Durbin. (1975). The Potential for Additional Marine Conservation Districts on Oahu and Hawaii. University of Hawaii Sea Grant.

¹² Friedlander, A.M. *et al.* (2019) Characteristic of effective marine protected areas in Hawaii. *Aquatic Conserv: Mar Freshw Ecosyst.*, 29: 103-117.

¹³ Aburto-Oropeza, O. *et al.* (2011). Large recovery of fish biomass in a no-take marine reserve. *PLoS ONE*, 6, e23601.

Pūpūkea MLCD Legislative History

In the early 1970s, the North Shore neighborhood board was approached by divers who reported a decline in fish numbers and expressed interest in better management of the area's marine resources through the implementation of a MLCD. A study in 1975 conducted by the DLNR evaluated Pūpūkea as a potential MLCD, and ranked it as the second most suitable and publicly accepted site after Kahe Beach Park on West O'ahu.¹⁴ The Pūpūkea MLCD was established in 1983, and was followed by years of management issues due to increasing human use and legal loopholes that made enforcement challenging. A community task force sought to address these concerns by proposing amendments that subsequently led to two rule revisions in 2002 and 2003 to further restrict fishing by limiting capture methods and target species, and to expand its boundaries.

In June 2009, Governor Linda Lingle signed two Executive Orders transferring Kapo'o (what was then known as the "Old Quarry") back to the State from the City & County of Honolulu, and designating the Pūpūkea MLCD and Kapo'o under the control and management of DAR. DAR and DOCARE enforce the rules of the MLCD implemented under Hawaii Administrative Rules Section 13-34. These rules, however, have not yet been amended to include Kapo'o since the jurisdictional transfer to the State. Though the tidepools have technically been a part of the MLCD for over 10 years, the lack of administrative protections over Kapo'o serves as a loophole in MLCD protections that restricts DOCARE action.

¹⁴ Kimmerer, W.J. and W.W. Durbin. (1975). The Potential for Additional Marine Conservation Districts on Oahu and Hawaii. University of Hawaii Sea Grant.



Image 3. School of āholehole in Kapoʻo. Photo: Whitney Goodell.

There is limited research that explores the role of tidepools as an important nursery habitat for reef-associated fish in Hawaiʻi; however, it is known that juvenile fish recruitment is an important factor contributing to adult fish abundance in coastal Hawaiian waters.¹⁵ Therefore, it is imperative to understand this habitat's potential function to elucidate best management practices and designating areas for protection.

Nursery habitats in the Caribbean can be characterized by seagrass meadows and mangrove forests that provide an abundance of food and structural refuge for juvenile fish, and contributes to survivorship to adulthood.¹⁶ These habitats are less common in Hawaiʻi, but research has shown that juvenile reef fish are often associated with semi-sheltered backreef habitat, coral patch-reefs, and in protected lagoons¹⁷ similar to that of Kapoʻo. Oʻahu's tidepool fish assemblage represents high endemism and low species richness, which is facilitated by a combination of harsh environmental conditions, substrate, and the isolated nature of intertidal zones in Hawaiʻi.¹⁸

¹⁵ Walsh, W. (1984) Aspects of nocturnal shelter, habitat space, and juvenile recruitment in Hawaiian coral reef fishes. Dissertation at the University of Hawaii at Mānoa, Department of Zoology.

¹⁶ Iglesias, I.S. (2012) Are Rocky Intertidal Pools a Nursery Habitat for Juvenile Reef Fish? An Investigation of the Spatial and Temporal Abundance Patterns of Juvenile Fishes Utilizing Basalt Tidepools on the Island of Oahu and a comparative growth analysis of the endemic *Kuhlia xenura*. Master's Thesis at the University of Hawaii at Mānoa, Department of Zoology.

¹⁷ DeMartini, E. (2009) Influences of wind-wave exposure on the distribution and density of recruit reef fishes at Kure and Pearl and Hermes Atolls, Northwestern Hawaiian Islands. *Environmental Biology of Fishes* 85: 319-332.

¹⁸ Cox, T.E. *et al.* (2011) Spatial and vertical patterns in the tidepool fish assemblage on the island of Oahu. *Environmental Biology of Fishes*. 90 (4): 329-342.

Additionally, the early life stages of nearshore fishes are often subject to intense predation pressures and are found to seek refuge in rugose coral and perhaps within the structural complexity of Kapoʻo. The protected, soft bottom environment that can be found in tidepools offers ideal habitat for species important for recreational fishing and consumption, such as *āholehole*, *Kuhlia xenura* and *Kuhlia sandvicensis*, that have been confirmed to exclusively utilize tidepools as juveniles.¹⁹ Understanding utilization patterns by marine life in tidepools can also inform us about the importance of protecting such areas to ensure juvenile recruitment to adulthood and spillover into open areas, and highlights the need for continued research to inform conservation efforts.

Status of Kapoʻo and Need for Rule Change

Since the increased protections and a boundary expansion in 2003, significant increases in fish biomass and resource fish abundance is more readily observed in the Pūpūkea MLCD²⁰ as well as outside its boundaries due to spillover—emigration of adult and juvenile fish to unprotected areas.²¹ The effectiveness of the Pūpūkea MLCD has shown to be successful in reef surveys conducted over the last decade with an increase in fish biomass and biological diversity.²² However, a 2019 assessment of the Pūpūkea MLCD’s coral and fish assemblages from 2010-2019 found that species abundance, biomass, and species richness had significantly declined.²³ This report noted the tripling of shore-based human use at Kapoʻo, and suggested human-disturbance may be a contributing factor to fish declines in addition to illegal fishing and land-based runoff exacerbated by coastal development.

The number of annual visitors to Oʻahu has increased by nearly 50-percent from 2010-2019,²⁴ and human use data collected from recent years by MPW confirms this increase at Kapoʻo by, both, local residents and tourists. MPW also reports year-round use of the tidepools that, historically, had minimal human use during the winter months.²⁵ On average, MPW performs 90 educational interventions a year at Kapoʻo and adjacent areas thwarting MLCD rule violations and providing educational outreach to thousands of people visiting MPW’s Saturday outreach tent at Pūpūkea Beach Park neighboring Kapoʻo.²⁶ Poaching within the Pūpūkea MLCD and Kapoʻo has also been of great concern in recent years. It is not yet known how many of the violations reported to the DOCARE are related to poaching, but observations from community members report frequent disregard of fishing restrictions in the early morning and after dark hours. It is likely that many fishermen are unaware that the Pūpūkea

¹⁹ McRae, M. *et al.* (2011) Habitats used by juvenile flagtails (*Kuhlia* spp.; Perciformes: Kuhliidae) on the Island of Hawaii. *Pacific Science*. 65 (4): 441-450.

²⁰ Friedlander, A.M. *et al.* (2019).

²¹ Stamoulis, K.A. and Friedlander, A.M. (2013) A seascape approach to investigating fish spillover across a marine protected area boundary in Hawaiʻi. *Fisheries Research*, 144, pp.2-14.

²² Rosinski, A.E. (2012) Creating Comprehensive Protected Areas: The Ecology of the Pūpūkea Tide Pools and Their Value to the Pūpūkea Marine Life Conservation District. *University of Miami Rosenstiel School of Marine and Atmospheric Science, Internship Report*.

²³ Seascape Solutions LLC. (2019). *Pūpūkea-Waimea MLCD Coral and Fish Assessment: 2010-2019*.

²⁴ State of Hawaiʻi. (May 2020). DBEDT Quarterly Tourism Forecast. Department of Business, Economic Development & Tourism. <https://dbedt.hawaii.gov/visitor/tourism-forecast/>

²⁵ Yagodich, Jennifer. (Director of Educational Programs, Mālama Pūpūkea-Waimea), in discussion with author. January 2020.

²⁶ Yagodich, Jennifer (Director of Educational Programs, Mālama Pūpūkea-Waimea), in discussion with author. May 2020.

MLCD exists; however, several fishermen that are well-aware of the lack of unenforceable rules in Kapoʻo and plan to fish there until administrative protections can expressly include the tide pools.²⁷

Increasing numbers of annual visitors to Oʻahu and to Kapoʻo, fishing pressures, in addition to coastal development in the area, underscores the need for comprehensive administrative rules to protect the tidepools. Revised rules will directly reduce impacts to Kapoʻo from visitation and fishing pressure because DOCARE can then legally address violations such as illegal gear possession (*e.g.* fishing poles, hand nets, spears) and the collection of marine life and geological features (*e.g.* sand, shells). Until administrative rules can be amended, educational outreach to inform the public about the existence of the Pūpūkea MLCD and its prohibitions is necessary to ensure that Kapoʻo's ecological resiliency in the face of poaching and potentially heavy human use.

Conclusions

There have been several studies done at Kapoʻo to assess the biological and environmental characteristics of the tidepools, and despite the limited amount of research there is an endless amount of information around the role of tidepools in Hawaiʻi that suggests Kapoʻo functions as a marine life nursery. Research detailing impacts on coastal ecosystems from recreational activities, unsustainable fishing practices, and coastal development; and the efficacy of MMAs in Hawaiʻi contributing to the spillover of marine species into open areas; provides supporting information for the administrative protection of Kapoʻo. The lack of enforceable administrative protections threatens Kapoʻo's resiliency to recover from the stresses of illegal fishing and potentially heavy human use. Without a full understanding of the magnitude of recreational impacts in Kapoʻo we could potentially lose these resources before fully understanding its ecological role in the Pūpūkea MLCD and achieving Hawaiʻi's marine resiliency goals.

²⁷ Yagodich, Jennifer. (Director of Educational Programs, Mālama Pūpūkea-Waimea, in discussion with author. January 2020.



16 January 2021

Brian J. Neilson, Administrator
Division of Aquatic Resources
1151 Punchbowl Street, Room 330
Honolulu, HI 96813

Re: SUPPORT: Division of Aquatic Resources Public Hearing to establish Public Hearing Notice #0001307355-01 for Proposed Amendment of Hawaii Administrative Rules Chapter 13-34, Pūpūkea Marine Life Conservation District

Dear Mr. Neilson:

I write this testimony in **strong support** of the proposed amendment of Hawai‘i Administrative Rules Chapter 13-34 to include the Kapo‘o Tidepools into the existing boundaries of the Pūpūkea Marine Life Conservation District.

I am chief scientist for National Geographic Pristine Seas Program and a researcher at the Hawai‘i Institute of Marine Biology who has been working in the Pūpūkea Marine Life Conservation District (MLCD) for more than 20 years. **Marine resources in Hawai‘i are in poor condition today** compared to the past^{1,2,3,4} and nowhere is this more evident than on O‘ahu, where marine resource health is significantly lower than elsewhere around the state^{4,5}. Strongly protected MLCDs, like Pūpūkea, have been shown to effectively **conserve biodiversity and support adjacent fisheries** through “spillover” yet account for **less than 1% of State waters**^{7,8}.

The Pūpūkea MLCD was created in 1983 and in 2002 was expanded from an exceedingly small area (0.11 km²) with few restrictions to 0.71 km² and restrictions on harvest were greatly increased through a largely **community-driven process**. Since that time, highly prized species such as omilu, uhu, and surgeonfishes (e.g., manini, kala, kole) have **increased dramatically**⁷. However, illegal fishing, excessive visitation, and land-based pollution **threaten this inimitable and irreplaceable area**. The Pūpūkea tidepool-like ecosystem (Kapo‘o) are an important **nursery habitat (pu‘uhonua)** for a number of important resources species such as ‘ama‘ama, aholehole, nenu, ‘iao, and nehu owing to its shelter from high wave energy and abundant small-scale habitat.

1145 17th St NW, Washington, DC 20036, USA
esala@ngs.org +1-202-6414873
www.pristineseas.org

During recent surveys, we observed over 50 fish species in the tidepools of which one-third are endemic to Hawai‘i and therefore **found nowhere else on Earth**.

Kapo‘o became a part of the MLCD in 2009 through Executive Orders; however, administrative rules have not been amended to prohibit fishing. The tidepools represent a unique environment that harbors a **high diversity** and is important to the life cycles of numerous species with **high cultural, recreational, and food value**. This nearshore habitat is critical to the function of the entire MLCD as it provides important connectivity among habitats. Activities such as fish feeding has disruptive effects on the natural dynamics of nearshore ecosystems and is already prohibited in numerous other marine managed areas around Hawai‘i, and this should include the Pūpūkea MLCD. Other activities on both land and in the sea can be highly deleterious to the tidepools and therefore the entire ecosystem. Owing to the **sensitive nature** of these tidepools, it is essential that they are afforded the greatest degree of protection possible.



Alan Friedlander, Ph.D.
Chief Scientist, Pristine Seas, National Geographic Society
Fisheries Ecology Research Lab, University of Hawaii
alan.friedlander@hawaii.edu
www.pristineseas.org

References

- ¹Shomura (1987). Hawaii’s marine fishery resources: yesterday (1900) and today (1986). Rep H-87-21. US DOC, NOAA, NMFS, SWFSC, Honolulu, Hawaii, 14 pp.
- ²Williams et al. (2008). Assessing the importance of fishing impacts on Hawaiian coral reef fish assemblages along regional-scale human population gradients. *Environmental Conservation*, 35: 261–272.
- ³Friedlander et al. (2015). Stock assessments using reference points and historical data: stock status and catch limits. Pages 91-118 In: *Applying Marine Historical Ecology to Conservation and Management: Using the Past to Manage for the Future* (JN Kittinger, LE McClenachan, K Gedan, LK Blight ed.). University of California Press.
- ⁴Friedlander et al. (2018). Human-induced gradients of reef fish declines in the Hawaiian Archipelago viewed through the lens of traditional management boundaries. *Aquatic Conservation*, 28:146-157.
- ⁵Friedlander & Brown (2019). The Hawaiian Archipelago. Pages 713-741 in: *World Seas: an environmental evaluation. Volume II: The Indian Ocean to the Pacific. 2nd Edition* (C. Sheppard, ed.). Academic Press, London, UK.
- ⁶Stamoulis KA, Friedlander AM. 2013. A seascape approach to investigating fish spillover across a marine protected area boundary in Hawai‘i. *Fisheries Research*. 144: 2–14
- ⁷Friedlander et al. (2007). Coupling ecology and GIS to evaluate efficacy of marine

1145 17th St NW, Washington, DC 20036, USA
esala@ngs.org +1-202-6414873
www.pristineseas.org

protected areas in Hawaii. *Ecol. Applications*, 17:715–730.

⁸Friedlander et al. (2019). Characteristic of effective marine protected areas in Hawaii. *Aquatic Conservation*, 29:103-117.

ITEM F-3 Exhibit 2

Amendment and Compilation of Chapter 13-34 Hawaii Administrative Rules

(date of adoption)

1. Chapter 13-34, Hawaii Administrative Rules, entitled "Pupukea Marine Life Conservation District, Oahu", is amended and compiled to read as follows:

"HAWAII ADMINISTRATIVE RULES

TITLE 13

DEPARTMENT OF LAND AND NATURAL RESOURCES

SUBTITLE 4 FISHERIES

PART I MARINE LIFE CONSERVATION DISTRICTS

CHAPTER 34

PUPUKEA MARINE LIFE CONSERVATION DISTRICT, OAHU

§13-34-1	Boundaries
§13-34-1.1	Definitions
§13-34-2	Prohibited activities
§13-34-3	Permitted activities
§13-34-4	Exceptions; permits
§13-34-5	Penalty
§13-34-6	Asset forfeiture

§13-34-1 Boundaries. (a) The Pupukea Marine Life Conservation District ~~[shall include]~~ includes that portion of the submerged lands and overlying waters bounded by a line beginning at Kulalua Point at approximately 21.654826°, -158.063347°, then extending ~~[seaward]~~ due west ~~[-270 degrees] to a point~~ for one hundred yards ~~[offshore at longitude 21_39' 44" N latitude 158_03' 89" W,~~ to a point at approximately 21.654826°, -158.064036°, then ~~[south to the most seaward exposed rock of Wananapaoa Islets on the southern side of Waimea Bay, including the Wananapaoa Islets at longitude 21_38' 60" N latitude 158_03' 50" W,~~ in a straight line in a southwesterly direction to the western edge of the westernmost Wananapaoa Islet at approximately 21.638840°, -158.070270°, then ~~[due southeast (135 degrees)]~~ in a straight line in a southeasterly direction to shore at approximately 21.637475°, -158.068906°, then northerly along the shoreline to the point of origin, as ~~[further described]~~ shown in ~~[the "Map of the Pupukea Marine Life Conservation District, Oahu 01/10/02" attached]~~ "Exhibit A. Map of the Pupukea Marine Life Conservation District", dated July 1, 2019, incorporated herein, and located at the end of this chapter.

(b) For the purposes of this chapter, Waimea Bay includes that portion of the district lying to the south of an imaginary line drawn between Waimea Point at approximately 21.643299°, -158.064967° and a point directly offshore at approximately 21.644580°, -158.068032°, as shown in "Exhibit A. Map of the Pupukea Marine Life Conservation District", dated July 1, 2019, incorporated herein, and located at the end of this chapter.

(c) For the purposes of this chapter, the shoreline shall be determined by the upper reaches of the wash of the waves on shore. Should there be a stream or river flowing into the ocean, the shoreline shall be determined by an imaginary straight line drawn between the upper reaches of the wash of the waves on either side of the stream or river. [Eff 1/13/83; am and comp 3/25/02; am and comp 9/8/03; am

and comp] (Auth: HRS §190-3) (Imp:
HRS §§190-1, 190-2, 190-3)

§13-34-1.1 Definitions. As used in this chapter, unless the context clearly indicates otherwise:

"Akule" means any fish of the species known as *Selar crumenophthalmus*. This also includes the various life stages known as pa'a'a, hahalalu, halalu, and mau.

"District" means the Pupukea Marine Life Conservation District.

"Finfish" means any of various species of marine life that uses fins to swim, not including marine mammals or sea turtles.

"Hook-and-line" means a type of fishing gear consisting of a length of fishing line, to which is attached one or more hooks or other device for capturing marine life. A weight and a pole may also be used to aid in the placement of the fishing line in the water.

~~["Legal nets" means any net that is not in violation of any law, rule or regulation.]~~

"Limu kohu" means any seaweed known as *Asparagopsis taxiformis* or a recognized synonym.

"Limu lipe'epe'e" means any seaweed known as ~~[*Lawrenceia succisa*]~~ *Chondrophyucus dotyi*, *C. succisus*, *C. undulatus*, *Palisada parvipapillata*, or a recognized synonym.

"Net" means any of various fishing devices of mesh material made into various shapes, such as but not limited to, a bag, sack, pouch, or curtain, used to entangle, surround, or concentrate aquatic life.

"Opelu" means any fish of the species known as *Decapterus macarellus* or a recognized synonym.

~~["Opihi"]~~ "'Opihi" means any mollusk of the genus ~~[*Cellana*]~~ *Cellana* or a recognized synonym. The animal is also known as ko'ele, alinalina, maka-ia-uli, and ~~[limpets.]~~ limpet.

§13-34-1.1

"Personal safety" means any defensive action that a person or persons may engage in to prevent life threatening injury or death.

"Snag" means to engage in the act of pulling on a line that is attached to one or more hooks quickly enough across a fish for the purpose of hooking the fish anywhere except by the mouth.

"Spear" means any fishing device consisting of a straight rigid shaft with one or more sharpened points at one end of the shaft, along with any device that aids in the aiming accuracy or the force of propulsion of the shaft. A spear includes, but is not limited to, spear gun, bow and arrow, Hawaiian sling, and three-prong spear. A spear also includes any similar device that is capable of impaling aquatic life to allow capture, with or without the aid of artificial propulsion.

"Take" means to fish for, catch, capture, confine, or harvest, or to attempt to fish for, catch, capture, confine, or harvest, aquatic life. The use of any gear, equipment, tool, or any means to fish for, catch, capture, confine, or harvest, or to attempt to fish for, catch, capture, confine, or harvest, aquatic life by any person who is in the water, or in a vessel on the water, or on or about the shore where aquatic life can be fished for, caught, captured, confined, or harvested, shall be construed as taking.

"Trap" means any of various fishing devices of mesh, perforated, or solid material made into the shape of a box, container, or enclosure, with one or more openings that allow aquatic life to enter into the interior of the box, container, or enclosure, but restrict exit out, thereby capturing the aquatic life within.

~~["Waimea Bay" means that portion of the district bounded by an imaginary line from, and including, the Wananapaoa Islets across the mouth of Waimea Bay to Waimea Point.]~~ [Eff and comp 3/25/02; am and comp 9/8/03; am and comp] (Auth: HRS §190-3) (Imp: HRS §§190-1, 190-2, 190-3)

§13-34-2 Prohibited activities. It is unlawful for any person to engage in the following activities within the Pupukea Marine Life Conservation District, except as may be allowed under sections 13-34-3 and 13-34-4, or other applicable law:

- (1) Fish for, catch, take, injure, kill, possess, or remove any finfish, crustacean, mollusk including sea shell and [~~opihī,~~] 'opihī, live coral, or other marine life, or eggs thereof;
- (2) Take, alter, deface, destroy, possess, or remove any sand, coral, rock, or other geological feature, or specimen; [~~or~~]
- (3) Have or possess in the water, any spear, trap, net, crowbar or other device that may be used for the [~~taking,~~] taking, injuring, or killing of marine life, or the altering of a geological feature[~~-~~]; or
- (4) Introduce any food, substance, or chemical into the water to attract marine life for any purpose other than the taking and removing of such marine life as permitted under section 13-34-3. [Eff 1/13/83; comp 3/25/02; am and comp 9/8/03; am and comp] (Auth: HRS §190-3) (Imp: HRS §§190-1, 190-3)

§13-34-3 Permitted activities. In compliance with all other state laws and rules, [A] a person may:

- (1) Take and possess any finfish with hook-and-line only from the [~~shoreline~~] shore of Waimea Bay [~~only,~~]; provided that no person may snag any akule and further provided that no person may use more than two poles with one line per pole and with no more than two hooks per line;

§13-34-3

- (2) Take and possess any opelu with [~~legal~~] nets from Waimea Bay only during August and September;
- (3) Take and possess any akule with [~~legal~~] nets from Waimea Bay only during November and December;
- (4) Possess within the [~~District~~] district any knife for the sole purpose of personal safety; and
- (5) Take and possess limu kohu and limu lipe'epe'e within the district by hand harvesting only; provided that no person shall take limu kohu and limu lipe'epe'e with the holdfast or roots attached and no person shall take or possess more than two pounds (squeezed dry) of either limu kohu or limu lipe'epe'e or a combined total of two pounds of both per day. [Eff 1/13/83; am and comp 3/25/02; am and comp 9/8/03; am and comp _____] (Auth: HRS §190-3) (Imp: HRS §§190-1, 190-3)

§13-34-4 Exceptions; permits. The department may issue permits to engage in activities within the district, that may be otherwise prohibited by law and section 13-34-2, provided that:

- (1) The permits may be issued for scientific, propagation, or other purposes as provided by law, or as reasonably necessary to protect the public health, safety, and welfare;
- (2) The board may impose terms and conditions it deems necessary to carry out the [~~purpose~~] purposes of chapter 190, HRS;
- (3) The board may revoke any permit for any infraction of the terms and conditions of the permit; and
- (4) A person whose permit is revoked shall not be eligible to apply for another permit until the expiration of a specified period

from the date of revocation as provided by law. [Eff 1/13/83; am and comp 3/25/02; am and comp 9/8/03; am and comp] (Auth: HRS §190-3) (Imp: HRS §§187A-6, 190-4)

§13-34-5 Penalty. (a) [A] Any person violating [the provisions] any provision of this [rule] chapter or the terms and conditions of any permit issued as provided by this [rule,] chapter, shall be [guilty of a petty misdemeanor, and may be] subject to [administrative penalties as provided by law.]:

- (1) Administrative penalties as provided by section 187A-12.5, HRS;
- (2) Criminal penalties as provided by section 190-5, HRS; and
- (3) Any other penalty as provided by law.

(b) Unless otherwise expressly provided, the remedies or penalties provided by this chapter are cumulative to each other and to the remedies or penalties available under all other laws of this State. [Eff: 1/13/83; am and comp 3/25/02; am and comp 9/8/03; am and comp] (Auth: HRS §190-3) (Imp: HRS §§187A-12.5, 190-5)

§13-34-6 Asset forfeiture. Any equipment, article, instrument, aircraft, vehicle, vessel, business record, or natural resource used or taken in violation of this chapter, may be seized and subject to forfeiture as provided by section 199-7 and chapter 712A, HRS." [Eff and comp] (Auth: HRS §190-3) (Imp: HRS §199-7, ch. 712A)

2. Material, except source notes and other notes, to be repealed is bracketed and stricken. New material is underscored.

3. Additions to update source notes and other notes to reflect these amendments and compilation are not underscored.

4. These amendments to and compilation of chapter 13-34, Hawaii Administrative Rules shall take effect ten days after filing with the Office of the Lieutenant Governor.

I certify that the foregoing are copies of the rules, drafted in Ramseyer format pursuant to the requirements of section 91-4.1, Hawaii Revised Statutes, which were adopted on (date) and filed with the Office of the Lieutenant Governor.



SUZANNE D. CASE

Chairperson

Board of Land and Natural
Resources

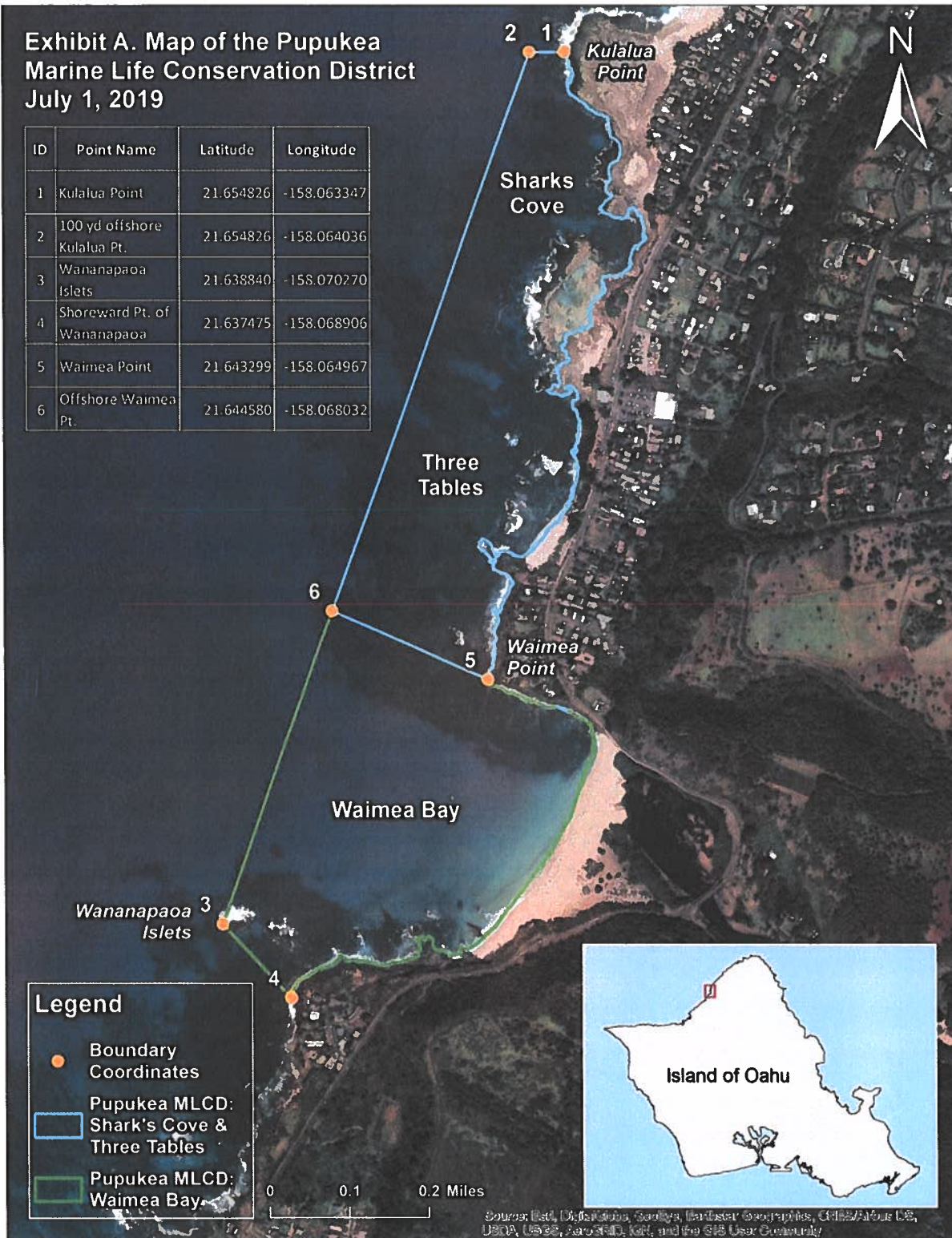
APPROVED FOR PUBLIC HEARING:



Deputy Attorney General

**Exhibit A. Map of the Pupukea Marine Life Conservation District
July 1, 2019**

ID	Point Name	Latitude	Longitude
1	Kulalua Point	21.654826	-158.063347
2	100 yd offshore Kulalua Pt.	21.654826	-158.064036
3	Wananapaoa Islets	21.638840	-158.070270
4	Shoreward Pt. of Wananapaoa	21.637475	-158.068906
5	Waimea Point	21.643299	-158.064967
6	Offshore Waimea Pt.	21.644580	-158.068032



Source: Esri, DigitalGlobe, GeoEye, Earthstar (Google), CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

