

**MINUTES OF THE April 27, 2015 NATURAL AREA RESERVES SYSTEM  
COMMISSION (NARSC) MEETING, HONOLULU, O'AHU**

**COMMISSIONERS PRESENT:**

**DRAFT Subject to approval**

Dr. John Sinton, Chair  
Ms. Marie Bruegmann, Vice Chair  
Mr. Trae Menard  
Mr. Ronald Rapanot, Sr.  
Ms. Robin Newbold  
Dr. Carl Christensen  
Dr. Jonathan Price  
Mr. Kekoa W. Kaluhiwa for Chair, Board of Land and Natural Resources  
Ms. Janis Matsunaga for Chair, Board of Agriculture  
Mr. Leo Asuncion, Director, Office of Planning

**COMMISSIONERS ABSENT:**

Mr. Nathan Yuen  
Dr. Sheila Conant, for President, University of Hawai'i

**STAFF:**

Ms. Linda Chow, Deputy Attorney General (AG)  
Ms. Amanda Weston, Deputy AG  
Mr. Randall Kennedy, Native Ecosystem Protection and Management (NEPM) Section  
Leader, Division of Forestry & Wildlife, Administrative Office (DOFAW Admin.)  
Ms. Betsy Gagné, DOFAW Admin.  
Ms. Emma Yuen, DOFAW Admin.  
Ms. Charmian Dang, DOFAW Admin.  
Ms. Tanya Rubenstein, DOFAW Admin.  
Ms. Kirsten Gallaher, DOFAW Admin.  
Ms. Afsheen Siddiqi, DOFAW Admin.  
Mr. Nicholas Agorastos, DOFAW Hawai'i NARS Manager  
Mr. Christopher Mottley, DOFAW Kaua'i NARS Manager  
Ms. Marigold Zoll, DOFAW O'ahu NEPM Manager  
Dr. Fern P. Duvall, DOFAW Maui Nui NEPM Manager  
Mr. Jared Char, DOFAW O'ahu  
Ms. Mapuana O'Sullivan, DOFAW Kaua'i  
Mr. Virgil Torres, DOFAW O'ahu  
Ms. Katie Ersbak, Department of Land and Natural Resources (DLNR), Commission on  
Water Resource Management (CWRM)

**VISITORS:**

Mr. Edwin Misaki, TNC, Moloka'i  
Ms. Alison Cohan, TNC, Maui  
Dr. Norbert Schorghofer, University of Hawai'i Mānoa  
Mr. Fritz Klasner, Resource Management, Office of Mauna Kea Management, University  
of Hawai'i Hilo (UHH)  
Mr. Dan Purcell, Public  
Mr. Matthew Ramsey, National Oceanic and Atmospheric Agency (NOAA)

**ITEM 1. Call to order:** Chair Sinton called the meeting to order at 9:00 a.m., Commissioners introduced themselves, followed by staff and others present. Chair Sinton then recognized two newly reappointed members, Marie Bruegmann and Ronald Rapanot.

Chair Sinton then recognized Randy Kennedy and thanked him on behalf of the Commission for his years of service as the Native Ecosystem Protection and Management Section Leader for over twenty years and all that he has done to secure funding, explain the budgetary system, and provide support for management and protection across public and private lands; presenting him with a *hala lei*. Chair Sinton then asked for any move up items.

**MOTION: RAPANOT/BRUEGMANN moved that the Natural Area Reserves System Commission approve move up of Item 8, following Item 2, so that Staff Kennedy could make an early presentation since he had to leave the meeting shortly. Motion carried unanimously.**

**ITEM 2. Approval of the June 9, 2014 NARSC Meeting Minutes.**

**MOTION: RAPANOT/CHRISTENSEN moved that the Natural Area Reserves System Commission approve the minutes as amended. Motion carried unanimously.**

**ITEM. 8. Administrative Updates 8 a. Budget and 8.b. Legislative.** Staff Kennedy asked to go first with a quick summary, since budget and legislative summaries are tied tightly together this session; and before having to leave the meeting shortly. He first wanted to acknowledge Kekoa Kaluhiwa, DLNR First Deputy, attending the meeting today for newly appointed DLNR Director Suzanne Case; starting her first day today. He then went on to explain that special funds are under attack this session, and while they have been under close scrutiny and previous attempts to close out the Natural Area Reserve Fund (NARF), this year it is in real jeopardy, with legislators seeking to end all special funds in an attempt to gain control over how funds are expended. Senate Bill 1299 zeroes out funding for the NARF. The problem with the conveyance tax is that real estate activity has gone up and down; it is now way up, and we would like to increase our spending cap, but the money committees would like to fund Kaho'olawe Island Commission, 'Aha Moku Advisory Committee, and other projects. The spending cap is a battle each year, we provide detailed legislative reports on how and where funds are expended, how they are leveraged, have gone through numerous audits, and feel we have been transparent then funds in the General Fund. The final bills will be decked by Thursday.

Staff Kennedy then wanted to introduce the new NEPM Manager for Maui Nui, Dr. Fern Duvall, and Ms. Katie Ersbak, new Watershed Planner (replacing Lisa Ferentinos) for DOFAW Admin; currently with CWRM, but anticipated to start sometime in early June 2015. Also, while he and Lisa Hadway have been DLNR leads for the upcoming IUCN World Conservation Congress with the departure of First Deputy Esther Kia'aina; new

First Deputy Kekoa Kaluhiwa will be the new DLNR lead. He thanked everybody that helped to ensure our bid as host city for this September 2016 event.

**ITEM 3.a. Recommendation to the Board of Land and Natural Resources for approval for authorization of funding for The Nature Conservancy for \$663, 600 during FY 16-21 for continued enrollment in the Natural Area Partnership Program and acceptance and approval of the Kapunakea Preserve Long Range Management Plan, TMK 4-4-7:01, 4-4-7:03, Lahaina, Maui.** Ms. Alison Cohan, TNC Maui, gave a power point overview of the Preserve and planned activities for the next six year funding cycle. The 1,264 acre Kapunakea Preserve is located on West Maui, ranging in elevation from 1,200 to 5,450 ft. It was enrolled in the NAPP in 1992 with a conservation easement held in perpetuity by TNC; the Preserve has changed ownership over the years, TNC continued to hold the conservation easement and did the management (managing partner). It became a member of the West Maui Mountains Watershed Partnership (WMMWP), which promoted management actions across boundaries with all the partners. TNC ultimately has contracted WMMWP to do the day to day management of the Preserve. Kapunakea contains a number of rare resources including representation of 11 native plant communities with 24 rare plant species, 6 PEPP species (Plant Extinction Prevention Program), native land snails, and numerous insects and other arthropods. There are no pigs above 3200 feet, thanks to fences and removal of any remaining ungulates inside the fence; a total of 63 pigs were removed. Principal weeds threats are *Tibouchina herbacea*, *Clidemia hirta*, and *Psidium cattleianum* (strawberry guava). James Leary has helped develop herbicide ballistic techniques to control these invaders in remote areas. On-going monitoring has located numerous new rare taxa. With the upper half pig free since 1999, focus is on continued monthly monitoring and maintenance to ensure there are no fence breaches. It appears that retrofitting fences to protect against axis deer invading West Maui is considered to be a priority.

The preserve is adjacent to the Honokōwai Section of West Maui Natural Area Reserve, and managers work within this area as well. It is most important to treat outliers of *Tibouchina* and to keep on top of blackberry and other weeds such as broom sedge and fire weed. Volunteers help to control strawberry guava along Waihe'e Ridge Trail; using photo analysis to find them and then remove them by herbicide or hand pulling.

There will be a 15% reduction over the next six year funding period (\$660k over 6 years with 65k TNC match).

Chair Sinton asked members if they had any further questions. Member Bruegmann asked about vegetation monitoring, specifically about rare plants. Ms. Cohan replied that the crew monitors for rare plants at least one time per year and recently found 2 new locations for the PEPP species *Platanthera* (rarest of only 3 known endemic orchids), not seen in the Preserve since 1992. Member Bruegmann asked if Hank Oppenheimer (Maui PEPP Coordinator) was monitoring for only PEPP species; Ms. Cohan said that is his primary duty; but he keeps his eye out for all rare species.

**MOTION: RAPANOT / CHRISTENSEN moved that the Natural Reserves System Commission recommend approval to the Board and Land Natural Resources for authorization of funding for The Nature Conservancy of Hawaii for \$663,000 during FY 16-21 for continued enrollment in the Natural Area Partnership Program and acceptance and approval of the Kapunakea Preserve Long Range Management Plan, TMK 4-4-7:01, 4-4-7:03, Lahaina, Maui.**

**Motion carried by all members except Member Menard, who recused himself from the vote.**

**ITEM 3.b. Recommendation to the Board of Land and Natural Resources approval for authorization of funding for The Nature Conservancy of Hawaii for \$470, 802 during FY 16-21 for continued enrollment in the Natural Area Partnership Program and acceptance and approval of the Pelekunu Long Range Management Plan, TMK 5-4-3:32, 5-9-6:11, Moloka'i.** Mr. Edwin Misaki, TNC Moloka'i gave an over view of the history of Pelekunu from the late 1980's before there were any Management Plans for the Natural Area Reserves System (NARS). Pelekunu is flanked by two NARs: Pu'u Ali'i and Oloku'i. Today is to address the 6 year Long Range Management Plan for Pelekunu. In 1986 TNC acquired the majority of the valley primarily for the stream ecosystem (there were a number of small in-holdings and it took a long time to get those sorted out). Along with the adjacent NARs, it has the highest sea cliffs in the state rising up to 3500 ft., and access to Pelekunu is very difficult. Member Rapanot agreed, saying he knew that area well having taken volunteer hunters in to help remove ungulates from the valley over the years.

Mr. Misaki said that today, these areas are all part of the East Moloka'i Watershed Partnership, which was formed to enable management across the landscape and various owners, including Kalaupapa National Historical Park, Wailau Valley (State of Hawai'i), and other private landowners.

Pelekunu is considered to be one of the top continuous perennial streams in the State, and the top on Moloka'i, with an abundance of native stream life, no diversions and a healthy watershed to further enhance and protect the stream. Unfortunately, the Tahitian prawn (*Macrobrachium lar*) was introduced into lower Pelekunu in the 1960's, according to Bill Puleloa (now retired from the Division of Aquatic Resources, DAR). While they remain in the lower reaches, they are still a threat to native stream fishes as their young (*hinana*) gather in the lower reaches after passing their larval stage in the sea. All of the native stream fish are represented in Pelekunu including 'o'opu *nākea* (most common); 'o'opu *nōpili*; and the endemic 'o'opu *'alamo'o*. There are also the fresh water mollusks (*hīhīwai*, *hapawai*, and *pīpīwai*) and shrimp (generically known as 'ōpae). The native 'o'opu *'akupa* (*Eleotris sandwicensis*), also feeds on *hinana*, but is restricted to the lower reaches of streams.

Key to the continued protection of Pelekunu is support of Maui Nui NARS from its aerial animal control program to protect Oloku'i and Pu'u Ali'i NARs from feral ungulates (primarily goats and pigs; but also axis deer). This helps to keep ground disturbance at a minimum and helps to prevent weed invasions (notably kahili ginger and blackberry). The health of the stream is linked to the overall health of the watershed that minimizes silt in the stream with fewer ungulates to disturb the ground, among other factors.

Stream monitoring for both native and introduced species is generally done at least every other year; Tahitian prawns are particularly monitored. Monitoring follows point quadrat sampling protocols developed by DAR staff, so can compare with the health of other State streams; populations have generally been stable from 2008 – 2013; however *hihiwai*, the most esteemed of the mollusks, went down in numbers this past year; so now engaging the local community to help protect and not over harvest; and get them to share this information by talking to others as well. Other TNC staff and families help out, and with the leveraging of partners, which is so important, costs have been able to be reduced by \$30 k per year; also thanks to increased efficiency in operations.

Chair Sinton asked if there were any further questions or comments. Member Newbold said it was a great presentation. Member Christensen said it was great to be involving kids. Mr. Misaki replied that having them help with stream monitoring helps give them ownership. Member Newbold noticed a decline in 2011; Mr. Misaki replied that there was a great drought, but though numbers were down the stream still maintained its full complement of native species.

**MOTION: NEWBOLD/RAPANOT moved that the Natural Reserves System Commission recommend to the Board of Land and Natural Resources approval for authorization of funding for The Nature Conservancy of Hawaii for \$470,802 during FY 16-21 for continued enrollment in the Natural Area Partnership Program, and acceptance and approval of the Pelekunu Long range management Plan, TMK 5-4-3:32, 5-9-6:11, Moloka'i.**

**Motion approved by all Commissioners present; Member Menard recused himself.**

**ITEM 4. Recommendation for continued closure of Kahauale'a Natural Area Reserve (NAR), Hawai'i Island, due to safety and other concerns: discussion and recommendation to the Board of Land and Natural Resources that the Reserve remain closed for another two years (July 25, 2015 – July 24, 2017).** Staff Nicholas Agorastos, Hawai'i Island NARS Manager, gave an update of the continuing eruption of Kilauea, with shifting areas of activity, which still prompt Hawaiian Volcanoes Observatory (HVO) and Civil Defense (CD) to recommend that the reserve remain closed due to the unpredictability of activity, as well as earth cracks and harmful fumes. The Branch supports the continued closure, but also has other concerns like tours going in to the NAR; there is an active market as many people, visitors and locals alike want to go and interact with lava.

Chair Sinton noted that there were letters from both HVO and CD recommending continued closure. Member Menard felt it was an issue with tour companies responding to the demand and continuing to leading tours; he also wondered if all tour operators are aware that the Reserve is closed; and a solid closure of longer than two years is needed. Staff Agorastos replied that two years at a time is the maximum closure under current Administrative Rules.

AG Chow explained that there is no way to increase the time without a rule change, so current closure time is 2 years; but can allow for limited, controlled public access under specific conditions. Tour operators know that the area is closed; the rules allow for permits; however the area does not lend itself well to structure safe tours, but on a case by case basis they can be considered, based on existing factors.

Member Price said that different areas in the NAR are further away from volcanic activity, but activity can shift at any time. Staff Agorastos said that hunters are allowed access mauka of Captain's Trail to assist with animal control. Last year, over 400 meters of trail was lost due to active lava flows. There is a mixed message if some (hunters) can go in but no one else; however there have been several permits granted to researchers in conjunction with the eruption; all reviewed and approved by HVO as well. Member Christensen felt that hunters were different from tourists from Ohio who did not have overall knowledge of the area.

AG Chow said that you simply have to close off all or a portion of a NAR due to Administrative Rules. Member Price asked what portions of the trail. Staff Agorastos replied that from a practical standpoint it could be easy enough, but we could not do enough to protect from frivolous and or other claims. Mauka portions near Thurston Lava Tube in the National Park are "ok", but hard to put a line on the ground. Active lava is the attraction, and it is not in the mauka portions right now (of the NAR). Member Menard asked about trespass fines. Staff Agorastos replied that currently, the Division of Conservation and Resource Enforcement (DOCARE) has been focused on Mauna Kea and their small staff is stretched very thin. AG Chow said that with the CO2 concerns (it is odorless unlike SO2, and be fatal after only a very few minutes of exposure; one of the reasons for closure of the road into Kilauea Crater due to high, but unpredictable pockets of CO2), among other hazardous emissions, that is a very serious concern. Rescuers have also had to search for lost hikers; the area is not conducive to a lot of public access.

**MOTION: RAPANOT/CHRISTENSEN Moved to recommend to the Board of Land and Natural Resources for continued closure of Kahauale'a Natural Area Reserve (NAR), Hawai'i Island, due to safety and other concerns and that the Reserve remain closed for another two years (July 25, 2015 – July 24, 2017).**

**Motion carried unanimously.**

Chair Sinton called for a short recess to set up next item; called the meeting back to order at 10:33 a.m.

**ITEM 5. a. Special Use Permit Application from Dr. Norbert Schorghofer for Mauna Kea Ice Age Natural Area Reserve (NAR), Hawai'i Island, to conduct an investigation for possible presence of perma frost: discussion and recommendation to the Board of Land and Natural Resources that this permit be approved subject to any further conditions.** Dr. Schorghofer, from University of Hawai'i Mānoa gave copies of his power point presentation to members. Back in the early 1970's perma frost was documented, but the question of it still remaining has not been definitively answered. It was documented in Pu'u Wekiu (the cinder cone which holds Lake Waiau) but no one knows if it is still there. Temperature has been increasing at higher elevations with global climate change and this can very definitely affect perma frost health. Perma frost was also documented in Pu'u Hau Kea. Dr. Schorghofer and his team have been working in the Mauna Kea Science Reserve, under review and permission from the Office of Mauna Kea (with review by Kahu Ku Mauna Council); they have been using minimal impact Ground Penetrating radar (GPR) to determine the existence or potential existence of perma frost without entailing drilling or other disturbing methods. He is seeking to conduct similar work within the NAR, using the same techniques, and in fact presented proposed work in the NAR to Kahu Ku Mauna Council. A resistivity survey in the Science reserve October 2014 concluded that perma frost had disappeared; possibly melting faster than expected.

The most important locations in the NAR to consider, that are rumored to have perma frost: Pu'u Pohaku (small outlier section of the NAR), Pu'u Hau Kea, and Pu'u Waiau. Member Menard asked about resistivity impacts, because there could be ground-disturbance. Member Price asked how many sensors; Dr. Schorghofer replied 24. Member Newbold asked if there were any objections raised to the other studies; he replied no. Chair Sinton asked why the concentration on Waiau Cinder Cone; Dr. Schorghofer replied that it is the south – facing area above the lake that is of prime concerns as that is generally the coldest portion of an cone. Member Asuncion asked about the duration of the project; Dr. Schorghofer replied 1 day per site. Member Kaluhiwa asked if OMKM was in support and if the cultural resources were protected.

Mr. Fritz Klasner, Resource Manager for OMKM, replied that Kahu Ku Mauna Council had reviewed and approved the project two years ago; in fact, OMKM gets a lot of inquiries to study in the NAR, which is outside of OMKM jurisdiction; however all proposals within the NAR, particularly with the potential for ground disturbance are also run by the Council for their review and input. The Resources Management Program is also to conduct invasive species management, which further helps protect native species.

Chair Sinton said that answering the question of what any water is perched on under the lake via the least invasive means is best. Staff Agorastos asked about timing; whether it is possible to do with snow pack still on the mountain; Dr. Schorghofer replied that could be. Staff Agorastos felt that with snow pack there might be less of a disturbance to the area.

Mr. Dan Purcell asked for a copy of the presentation so he could share it with Mauna Kea cultural practitioners.

Member Price asked if Kahu Ku Mauna Council discussed this with respect to Waiau; Mr. Klasner replied that the entire proposed project across the Science Reserve and the NAR was presented two years ago, but that he would go back to the Council to update them on work done so far and proposed fieldwork schedule. Data on temperature is shared with school children so that they can learn more. Member Kaluhiwa wanted to clarify for the minutes that Kahu Ku Mauna had supported this project. Mr. Klasner said that it would also be on the next Kahu Ku Mauna Council agenda as a matter of courtesy so they are aware of the planned field work.

Chair Sinton felt that support of this non-invasive manner, with no equipment left behind, was permissible. He thanked Mr. Klasner for being here to help explain and support the proposal, as well as thanked Dr. Schorghofer for his presentation.

**MOTION: RAPANOT/MENARD moved that the Natural Area Reserves System Commission recommend to the Board of land and Natural Resources that this permit be approved, subject to any further conditions.**

**Motion carried unanimously.**

**ITEM 5.b. Discussion on requests for core samples of fragile areas in various reserves; possible recommendation for future actions.** Staff Gagne said that this item will be deferred to the next meeting. Chair Sinton agreed, that coring in Eke and other sensitive areas needed more discussion and planning. Member Bruegmann, who has worked extensively in the remote bogs on Kaua'i felt that there should be a permit condition to wear snow shoes (bog walkers) to lessen damage to fragile areas; she and her assistants have been able to keep disturbance at a minimum.

**MOTION: NEWBOLD/PRICE moved that the Natural Area Reserves System Commission move up ITEM 7. Motion carried unanimously.**

**ITEM 7. Revision of Administrative Rules (HAR Chapter 13-209): Discussion and recommendation to the Board of land and Natural Resources approval of the revisions to Chapter 13-209, Hawai'i Administrative Rules, rules regulating activities in Natural Area Reserves.** Staff Yuen requested creation of a task force of NARSC Members and staff to look into reviewing commercial rules, including daily activities, limits of acceptable change; and to determine if the rules should then go straight to the Board of Land and Natural Resources or first go back to the NARSC. She explained that the rules are being driven by developing parking rules for 'Āhihi-Kīna'u, to better help manage visitors, and we do not want to delay; but do not want to do two separate rule revisions. Staff Yuen suggested the first set of rules (housekeeping) and recommended approval of them now if alright, to prohibit activities such as possession and use of drugs and alcohol, to make them standard with Forest Reserve and other Rules

in DOFAW. Again, this is being driven primarily by 'Āhihi-Kina'u and after hours activities.

Staff Yuen also suggested revising Special Use Permits (SUP) for government agencies to more than the current one year at a time; also we can permit multi-year permits to non-government agencies. The application fee was taken out of the rules, but parking fees were added for cars (visitors without a Hawai'i Driver License); this will also make it easier for DOCARE to enforce parking.

Member Bruegmann asked where the money would go; Staff Yuen replied into the Natural Area Reserve Fund (NARF), because the 'Āhihi-Kina'u Management Plan supports parking fees. Member Newbold asked if there was a specific Reserve Fund; Staff Yuen explained that fees would all go into the NARF, and be able to track the amount to be put back into Reserve management.

Member Menard asked if funds could be earmarked. Member Christensen wondered if it was a fee or a tax, since the General Fund is specifically generated from taxes and distributed by legislative appropriations. Staff Yuen said that the State Park Special Fund combined all State Park fees into one Fund.

AG Chow said that rules provide for deposit into the NARF; if will have the NARF or not sure after this legislative session. It is hard to delineate between a fee or a tax; however it is a user fee not a tax, and fees help with overall management in a Reserve.

Staff Yuen said we need flexibility so as not to pit one Reserve over another. Member Newbold asked if the Special Fund could have different accounts to track. AG Chow replied that statutes and rules may not allow special funds anymore. Member Christensen asked about Hawai'i residents after the City got sued by local Hanauma Bay users saying they did not have to pay for parking. AG Chow said that Hawai'i residents pay taxes that help to pay for management of the area, so they do not pay the parking fee, but non-residents do. Member Bruegmann asked about charging \$5 per car. Staff Duvall said that 'Āhihi-Kina'u has from one to two thousand cars per day, which is a lot of money; and we are talking about gating roads to better manage the area.

Chair Sinton asked about rules specific to 'Āhihi-Kina'u, do a rule change and then do a separate chapter or section for Ka'ena. Staff Yuen said there would be increased public protest if we tried that now. AG Chow said that authorization to charge parking fees can be put into effect with signs that would allow parking in other NARs so it would be accomplished with signage and notice and not more rule making; however, according to present rules, commercial activity is prohibited.

Staff Rubenstein said that most of Ka'ena Point is actually under State Parks. Member Newbold asked about charging for a place to park, and a general statement on parking. AG Chow said that the State can impound cars but you do not want to do that, rather to tow cars instead; but be prepared for contested cases for towing. For example, Ala Wai

Small Boat Harbor tows if vehicles are disobeying. There are different ways to address the issue.

Staff Yuen recommended parking fees as an option for all Reserves where signage is in place, not just for 'Āhihi-Kīna'u; asking the NARSC to approve in concept. Member Christensen suggested tinkering with parking fees. Staff Yuen said that we need to go to BLNR to ask permission to hold hearings then back to the BLNR and others, including Small Business Regulatory Council.

**MOTION: BRUEGMANN/MENARD moved that the Natural Area Reserves System Commission approves in concept, the revision of Hawai'i Administrative Rules (HAR Chapter 13-209), as submitted except permitting parking fees at all Natural Area Reserves where appropriately signed and modifying the process for towing and vehicles in violation of the rules to match other Division's rules, and recommends that the Board of Land and Natural Resources approve them as well.**

**Motion carried unanimously.**

Staff Yuen thanked members and now wanted to hold discussion of commercial use within the rule changes. (Member Brueggemann was excused from the meeting for remainder of day).

Commercial use is prohibited in Wild Life Sanctuaries but the State feels that commercial operators can be charged, but with restrictions. The fees are generally \$5 per person; \$25 for 3 people and on up on a sliding scale; there also need to be limits to numbers of visitors each day; and which Reserves or portions could be considered and a daily limit for each; also a fee schedule: by vehicle or by head; and should this process be considered by the whole NARSC, or formation of a task force or a subcommittee.

AG Chow said that the criteria for issuing Special Use Permits needs to say no to commercial use; by being detrimental to the ecosystem, impacts exceed limits of acceptable change, or other considerations. Member Menard asked about insurance requirements. Member Christensen felt that they should be covered and cover the State. Staff Yuen said that fees would be deposited in the NARF. AG Chow said would have to justify carrying capacity and number of people per day. Member Menard said that the reason for controlling this was not to stop or curtail someone's livelihood but to curtail the amount of daily access to areas high in demand. AG Chow said that it is not taking away anything if permits are granted on an annual or specific basis. Member Christensen commented that the alternate to managing people is people unmanaged.

Chair Sinton asked mentioned that a commercial operator wanting to conduct organized commercial tours to Ka'ena was turned down by the NARSC. He wondered if there were others out there. Member Menard said that kayak tours on Kaua'i are a real problem. Staff Duvall said with Na Ala Hele on Maui, it is first come first serve up to a limit (not NARs). Member Newbold asked about a process for commercial operators for commercial use. Chair Sinton asked if this was to approve in principal for fees. Staff

Yuen said that three things need to be considered: 1) approve in principal to have staff run with it; 2) smaller task force of NARSC members to work with staff but not come back to NARSC; and 3) come back to next NARSC meeting with recommendations. AG Chow suggested a fourth: the task force and staff draft rules.

Member Asuncion asked if need to form a Task Force; AG Chow suggested that it be a subcommittee that worked on the draft and then brought it back to the NARSC and then to the BLNR. Chair Sinton felt the Subcommittee should work with staff. Staff Yuen suggested meeting within the next two months, and when to schedule it.

Staff Zoll said that commercial activities are happening in many Reserves and there is increased demand. Staff Agorastos says his gut instinct is no commercial use; the original intent of the NARS was to keep areas as unmodified as possible; that commercial use could be a Pandora's box. Member Menard said that his concerns should be taken to the subcommittee. Staff Agorastos said he was happy to work with the subcommittee. Member Christensen asked how can regulate activities. Member Menard referred to AG Chow to establish how to handle. AG Chow said that natural carrying capacity needs to be determined. Staff Yuen said that Wildlife Sanctuaries list numbers and off shore islands such as 50 per day at Goat Island, Kawainui Marsh 100/day; others up to 200 per day, where allowed.

Staff Duvall said that it is sort of "seat of the pants" as far as commercial use in Wildlife Sanctuaries; most Sanctuaries are closed. 'Āhihi-Kina'u NAR is the only one with commercial use. Member Menard asked AG Chow if the subcommittee can set limits now then change them if see the resources getting beat up. AG Chow replied that yes, but have to put carrying capacity in rules as well as permit; terminating permits can be done, but if challenged could be a problem; the devil is in the details how to do this and whether it is all or nothing; have to treat people equally; perhaps permits with annual renewals could have a review period and based on criteria not be renewed.

Member Christensen asked if an Environmental Review needed to be prepared by commercial operators, per operator. AG Chow said that was a good question; if so, probably by specific location, as cannot do a programmatic assessment, since each area is so different. Staff Yuen asked about exemptions. Member Christensen felt that particular activities at particular sites would warrant Chapter 343 review (Environmental Assessment). AG Chow said that minor actions could be covered under exemptions; but if significant impact then Chapter 343 would be triggered.

Chair Sinton asked if need to form a Commercial Use Subcommittee today, and meet over the next couple of months. Member Christensen asked if commercial use would be broader in definition. Staff Yuen said it would focus on use in Ka'ena, 'Āhihi-Kina'u, Pahole, and Poamoho. Staff Agorastos said that commercial use is also a factor for Mauna Kea and Kahauale'a.

Member Newbold was concerned specifically with 'Āhihi-Kina'u which currently is relatively pristine with the current closure; but if a lot of commercial use happens again,

the pressure on the place will be worse; need to think long and hard about this. At the last Advisory Group Meeting on Maui there was discussion about the cleanup by the Army Corps of Engineers and the possibility of 1) no action, 2, \$10 million to clean up the accessible trails only; and 3) totally clean the Reserve; but insufficient funding to do so. Staff Duvall said that they had discussions with Wildlife Sanctuary staff and they felt it best to keep the area closed. Member Newbold said that the assumption she got was that there were a large number of people pushing to reopen the Reserve; do we want to have people all over the place again, was her and others biggest concern. State and National Parks have different purposes. Staff Yuen said we need to decide which areas, form a subcommittee, or table it. Member Christensen felt input from a subcommittee was important, especially to look at future commercial use. Chair Sinton felt that the subcommittee could be formed.

Mr. Dan Purcell, representing the public said that this has evolved into a discussion; the group has not met for 10 months, there is no video of the meeting for the other islands. He felt the group should meet at least quarterly. He filed a sunshine law protest against the Office of Environment and Quality Control (OEQC) which has not published reviews or comments for proposed exemptions. He suggested putting together a task force that had to come back to the body with a publicly noticed agenda. Commercial use is long term; vendors will have to feed families.

Chair Sinton asked for volunteers for the Commercial Use Subcommittee: Members Christensen, Menard, Christensen, Newbold, Price, AG Chow, Staff Zoll, Duvall, Agorastos, Mottley, and Yuen. Staff Duvall said he would have Scott Fretz, Maui Branch Manager attend the first meeting. Everyone agreed to aim to meet before the end of May. Staff Yuen asked for dates; then said that staff will organize/convene the meeting.

Mr. Dan Purcell objected, saying the Chair approves the agenda and the subcommittee needs to have a NARSC Member be Chair. Member Menard volunteered to be Chair.

**MOTION: CHRISTENSEN/RAPANOT moved that the Natural Area Reserves System Commission establish a Commercial Use Subcommittee consisting of Members Christensen, Menard (Chair), Newbold and Price; along with AG Chow, Staff Zoll, Duvall, Agorastos, Mottley, and Yuen.**

**Motion carried unanimously.**

Chair Sinton called for a lunch break at 12:30; until 1:15 p.m. Member Asuncion was excused for the remainder of the meeting; quorum still maintained.

Chair Sinton reconvened meeting at 1:20 p.m. AG Chow was excused for remainder of meeting.

**ITEM 6. a. Draft Management Plan for Nakula NAR, Maui Island: for review, discussion and approval in concept.** Staff Rubenstein gave a quick summary of how

the Division has worked in Nakula since Bob Hobdy tried 20 years ago to protect the area, which became a Natural Area Reserve in 2011. Located on the south slope of Haleakalā, Nakula is 1500 acres of very steep sloped lands ranging from 3600 to 9200 feet. Pu'u Ali'i cone is the main feature of the Kula flow at the 8000 foot level. There is a fence that creates a cooperative management area not exclusive to the NAR. Koa is the dominant native forest tree. There is a partnership between the Department, Haleakalā National Park, Haleakalā Ranch, Leeward Haleakalā Watershed Partnership, and Department of Hawaiian Home Lands, to work towards a holistic and collaborative approach to managing an area larger than just the NAR. The fire plan will be overarching, along with restoration, threat abatement for both weeds and fire; along with research and survey teams, along with interns and volunteers. Management will be goal oriented, focused on ungulate control, *Bocconia frutescens* (tree poppy) control, and building fences. The Division has conducted ungulate management across the Forest and Natural Area Reserves; only a few goats remain. There are still scars from grazing; but there is an active volunteer program to out plant within fenced areas. The Maui Forest Bird Recovery Project (MFBRP) has taken on this task as part of the effort to restore former habitat for the endangered *kiwīkiu* (Maui Parrotbill or MAPA) for future translocation as part of its Recovery Plan. Boom spraying is being done to remove non-native grass and replace it with native plants (māmane, koa, 'a'ali'i, naio, 'ōhi'a, 'ōhelo) that will limit or prevent invasive grasses from dominating the area. Forest Enhancement Volunteers have been working in the area since February 2014 helped by two groups from Kupu and that have planted 8-9 thousand plants. Staff and volunteers from MFBRP have planted over 10,000 plants to really help towards the projected 80% recovery needed. Maui NARS staff member Bryon Stevens masterminded this, with help from Maui NARS staff member Peter Landon. Part of the research efforts will track which species do best to better help with recovery. The long range plan is to translocate MAPA from Waikamoi Preserve to Kahikinui; as stated in the Recovery Plan. The idea is to bring back the core functions into the NAR, including restoration of associated invertebrates that MAPA feed upon.

Access is by primarily by helicopter, which make any efforts very expensive. There is a small establish camp ("Camp Releaf") which helps to provide important infrastructure so that everything does not have to be flown in and out each time. Additional species that will ultimately benefit include will be 'ōpe'ape'a (native bat; our only known living native land mammal), nene, 'āpāpāne, 'u'a'u (Hawaiian petrel), Koa bugs and others. The sea birds such as 'u'a'u can build burrows again now that grazers are gone. Predator control (rats, cats, mongoose) will also need to be done.

Dr. Robert Peck (USGS/Hawai'i Field Office) has been conducting arthropod studies to determine which invertebrates are present as part of the restoration effort. The crew also works with PEPP staff too, as some plants are only known from the area. Being protected by the ungulate fence allows for greater plant recovery actions.

Staff Duvall said that most successful plants so far appear to be koa, 'ōhelo and 'ōhi'a. It took six missions to remove ungulates from the fenced unit.

**MOTION: RAPANOT/PRICE moved that the Natural Area Reserves System Commission approve the Draft Management Plan for Nakula Natural Area Reserve, Maui Island, in concept.**

**Motion carried unanimously.**

**ITEM 6. b. Draft Management Plan for Laupāhoehoe Natural Area Reserve, Hawai'i Island: for review, discussion, and approval in concept.** Staff Agorastos gave a quick background: Laupāhoehoe has been part of the Hawai'i Tropical Experimental Forest (HTEF) under the US Department of Agriculture/ US Forest Service (USDA/USFS since 2010, with community guidance. There have been 10 public meetings between 2012 and 2014 to discuss the Draft Management Plan and it was further refined with the Hunter Working Group, with more revisions and turnover of advisory group members; also two members now serve on the County Game Commission, with different advice from the Game Commission and Advisory Group. The most opposition to the Draft Management Plan is from the hunters. Staff Rubenstein and HETF Staff Melissa Dean tried to include as many comments as possible; this document will be the basis of an Environmental Assessment in June/July; it has gone through many reviews since it is a more heavily used area than Nakula.

**MOTION: MENARD/PRICE moved that the Natural Area Reserves System Commission approve the Draft Management Plan for Laupāhoehoe Natural Area Reserve, Hawai'i Island, in concept.**

**Motion carried unanimously.**

**ITEM 9. Staff Updates.**

**ITEM 9.a. Hawai'i:** Nick Agorastos thanked Fritz Klasner, Resource Manager for OMKM and the Mauna Kea Rangers, who are up on the mountain day and night; they help keep an eye on Mauna Kea Ice Age Natural Area Reserve, and have been sending us images of the returning waters in Lake Waiau, among other images, which he showed. The reserve carries that name because it has some of the best examples of evidence of the former glacier (including glacial tills, and glacial stations on the rock worn smooth by passing ice). The fine grained basalt that makes up Kenakāko'i (adze quarry) is the result of an eruption under the glacier, and the site is one of the largest most significant features of its kind in the Pacific. There are numerous upright stones and other cultural features. There is a plaque along the Humu'ula Trail that passes through the Reserve that indicates that it is on the National Register of Historic Places. There was even a pig that made it up to high elevation to check things out! The water level of Waiau returned to its more normal levels, even overflowing this past winter. Also, for the first time in a long time, there was standing water in Pu'u Pohaku, the large cone that is an outlier of the NAR. It was one of the areas believed to once harbor perma frost.

There is a request in for CIP (Capital Improvement Project) funds for Manukā fencing, thanks to Staff Rubenstein; eventually the entire 25,509 acres will be fenced; this is being done by management units.

Staff is still having problems with three miles of fence at Pu'u Maka'ala being repeatedly damaged. Chair Sinton asked if Kulani had returned to Correctional Center status. Staff Agorastos said there were 184 inmates. They have a work line supervisor through UHH that takes inmates back out to manage resources and fences; they are a very important partner.

**ITEM 9. b. Maui Nui:** Fern Duvall gave his first update as the new manager. Current staff includes 4 NARS IV: Bryon Stevens, Peter Landon, Bill Evanson, and David Quisenberry (who recently moved to mainland so position currently stands vacant); NARS III Casey Stewman; one FWT IV Joe McDonald. The PCSU (Pacific Cooperative Studies Unit) crew includes the recently hired Jeff Bagshaw as Information and Education Associate; James Espaniola is based on Moloka'i and he and Tracen Oania, also help with Lana'i; T J Shimabukuro and two Kupu interns Kalani Carel and Amy Mahel round out the crew.

**'Āhihi-Kina'u:** The National Coastal Wetlands grant is funding a fence along the access corridor (road) that divides the Reserve into the mauka and makai units. While there are plans to ultimately fence the entire perimeter of the Reserve, the priority area and funding is directed at fencing/protecting the makai portion with its unique anchialine pool ecosystem. Staff and volunteers are removing invasive plants to restore the area, along with coordination of education and outreach by Jeff Bagshaw. Staff is in the process of upgrading remote cameras due to increased vandalism. There is also an increased DOCARE presence (paying two staff) with random patrols after dark. Staff Yuen asked how much was being paid out of the NARS budget; Staff Duvall replied that he was unsure; but they are also being paid overtime. The cattle panel fence (as opposed to less rigid hog wire) will follow along on the makai side of the road, 6-8 ft high to exclude goats and deer; it is largely invisible in most places (visual concerns).

Only two members of the public showed up at a public meeting held by the US Army Corps of Engineers (USACE) to review their progress to date on the Unexploded Ordnance (UXO) and planned remediation buffers. Alternative 3 is the preferred alternative, with 30 ft. buffers around the anchialine pools, 100 per cent cleared along with trails. Staff and the public will have to be re-educated which areas that can go or not. Cost of this cleanup would be approximately \$1.8 million versus \$8.6 for whole Reserve; but still not certain due to decrease in available funding. The USACE will finalize their plan and present it to BLNR (date still to be determined).

Member Newbold asked if it is alright for people to be out there. Staff Duvall said that the Advisory Group has been involved in the process, and surveys did not find any more large ordnance like what Staff McDonald found which triggered this process. The question remains: what part of this Reserve should stay closed or not. Member Menard asked about blow in place (BIP). Mr. Matt Ramsey, former A-K Coordinator (now with

NOAA) explained that 2 were blown in place and some moved off site; there was no apparent damage to geology; these were not in the main anchialine pools. Member Menard wondered if it was possible to minimize BIP. Staff Duvall replied that the Advisory Group would like to develop information on where can and where cannot go, with a series of information kiosks. Certain trails **may** be open. Member Newbold asked **should** the trails be open; why spend the money to clear. Staff Duvall said that since the area has been identified as a Munitions Response Site (MRS); once ordnance was discovered then the challenge was to determine where safe to go Staff still needs to manage the reserve). Member Newbold asked about parking for the trails. Staff Duvall said there is no more roadside parking; everyone will need to park in the designated parking lot. The fence will already be installed; there will be gates allowing access. Member Menard wanted to know about public as well as staff access. Staff Duvall said that these issues are currently being addressed by the Advisory Group and he will bring recommendations back to the NARSC.

**ITEM 9.c. O'ahu:** Marigold Zoll gave a quick overview of the highlights from the past year: staff is currently at 6 Specialists, 4 Technicians, one intern, and recently gained via AmeriCorps, an Education Specialist for the entire Branch. Predator control is now handled by a former Kupu intern. At Ka'ena there were 97 Laysan albatross nest attempts, a record high; over half of them are currently surviving. The predator fence sustained some wind damage from severe weather and metal corrosion; working with Xcluder (New Zealand fence company) to see if they will cover it since the material was supposed to last longer. Over 1900 vehicular access permits have been issued by State Parks, with the gate combination changed weekly. This has stemmed the mud buggers and is slowly getting people accustomed to driving on designated road way.

On lower slopes of Ka'ala, have a goat collar project, tracking them by GPS to see how they move around and habitat types they range in. Member Menard asked if they are herding with other goats; she said yes. The fence will run along the road and separate the west side from the north shore, as separate management units. Ka'ala finally has an up and functioning climate station collecting fog drip, through fall and other data; this is a cooperative endeavor between DOFAW staff, Dr. Tom Giambelluca, Jim Juvik, and John Delay. Data is downloaded monthly by John Delay and his students, with assistance from staff. Sphagnum control is ongoing with staff and volunteers, and there is a restoration project at the start of the boardwalk, trying to figure out how to reclaim this heavily impacted area full of weeds.

Pahole had a first sighting of the damsel fly *Megalagrion hawaiiense* (widely distributed on other islands, but now rare on O'ahu and cause for celebration) along the stream, where outplanting of native species is being done to protect and enhance the stream corridor.

Kaluanui has lots of rare plants; there is a fence contract out to build a Poamoho and Kaluanui fence to enclose about 700 acres of rare plant habitat. Pono Pacific is working in other areas, and using a spray ball to hit *Angiopteris* (large invasive non-native tree fern). There is also *Tibouchina herbacea* in Poamoho; control is being done with OISC

(O'ahu Invasive Species Committee) using a Weather Port to enable longer time in the field. Monitoring of biocontrol agents on strawberry guava is also being done; however the agent only slows the rate of fruiting, it does not kill the whole plant, but at least slows down the rapid spread.

DOFAW Forestry Program Manager Sheri Mann got a US Forest Service grant to revamp the DOFAW nurseries for better support of restoration efforts for more common native species. O'ahu Branch recently hired Laura Chapman as a propagation specialist. Sheri is planning on having seed storage capabilities as well; a new day for DOFAW.

**ITEM 9. d. Kaua'i:** Chris Mottley thanked Staff Yuen and Rubenstein for CIP funding for the Hono O Nā Pali NAR boundary fence, which will be installed away from the boardwalk for Pihea. This fence will be 3.3 miles; eventually would like to fence the entire boundary, as well as strategic fences within the NAR. There is now more animal control within the Reserve. Establishment of a Weather Port will be a help for future fieldwork and animal control. Australian tree fern is continuing to spread; the more you look, the more you find. The Reserve fence will have gates that are step-overs, with warning signs posted for use of snares. Met with hunters ahead of time and gave them one year to get as many animals out as they could; however access and the terrain made it difficult. White tape was placed on top of the fence to scare off petrels. Staff supported Koke'e Conservation groups in ginger control on 27 acres at Pihea to Kilohana removing approximately 227,000 kahili ginger and some strawberry guava.

Predator control within the Reserve continues with 48 snares to protect petrel colonies from cats and rats for animal control as well as mitigation. Have the Branch Manager's support for fencing; it is easier to control within fenced areas.

Ku'ia has an enclosure and Weather Port for remote fieldwork. Fences are made of cattle panels. The area is too sloping for conventional fencing; frequent landslides make maintenance an ongoing issue. There is a small enclosure for the endangered island endemic *Pteralyxia kauaiensis* (kaulu; a member of the family that includes maile and the introduced plumeria). Over 100 fruits were collected off of trees just outside of the Reserve boundary, for propagation and eventual outplanting into protected units. Weeding continues in some units; ginger, guava and lantana are the main target weeds.

The Pa'aiki restoration plots are progressing; between March 2014 and April 2015 have tried not to plant any old thing to restore the burned area; would prefer to not rush to plant. Kupu interns are helping out in the 1.5 – 2 acre area to out plant with 'a'ali'i, koa, native sedges, and native *Rumex*. Chippers have been used to chip up invasive species on site to help lower the fire threat. We continue to do consistent weed sweeps and outplanting one time a month whenever we go to weed. The chipper will be removed when done; there is enough duff on the ground so there is not too much worry about runoff.

Member Rapanot asked how many snares were set; he replied 250. Member Rapanot wanted to know how often they were checked; he replied every other week to be sure no

animals left to suffer; have hired someone to just check snares of the 4 new staff hires. They had considered corral trapping, but need to talk with seabird folks first. Member Menard said that it does not work well for pigs and corn does attract rats.

**ITEM 10. Announcements.** Staff Gagne said that the Joint Consultation between the NARSC and Forest Stewardship Advisory Committee is set for May 28, 2015 in DOFAW Conference Room 323. Staff Yuen said she would set the subcommittee meeting as close to that date as possible and would be contacting members as to their availability. Member Menard said that May 27 would work better for him since he would already be in town, and he agreed again to be the Chair. Chair Sinton asked about NARS staff input; if can ask AG Chow if staff can call in with issues.

Dan Purcell interjected that the meeting could not end yet it has been 10 months since a meeting and should. Be at least quarterly. Senator Thielen and Randy Kennedy both agreed with him. Also, the Chair puts the agenda together and approves it, not staff, and he wondered why there was nothing on the agenda about IUCN. Staff Yuen said that staff is working with the IUCN Host Committee; NARSC is not a player, and there is nothing new to brief members on. Just because something is not on the agenda does not mean that stuff is not happening.

**ITEM 11. Adjournment.** Chair Sinton adjourned the NARSC Meeting at 3:22 p.m.

Respectfully submitted,



Betsy Harrison Gagné, Executive Secretary  
Natural Area Reserves System Commission