

MINUTES OF THE MARCH 31, 2017 NATURAL AREA RESERVES SYSTEM COMMISSION (NARSC) MEETING, HONOLULU, O‘AHU

COMMISSIONERS PRESENT:

Draft subject to approval

Dr. John Sinton, Chair

Dr. Jonathan Price, Vice Chair

Dr. Carl Christensen

Ms. Michelle Clark

Dr. Thomas Ranker

Ms. Robin Newbold

Mr. Nathan Yuen

Dr. Sheila Conant, for President, University of Hawai‘i (UH)

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:

Ms. Hi‘ilei Kawelo

Mr. Ronald Rapanot, Sr.

STAFF:

Ms. Betsy Gagné, DOFAW Administrative Office (Admin.)

Ms. Kristy Lam, DOFAW Admin.

Ms. Emma Yuen, DOFAW Admin.

Ms. Charmian Dang, DOFAW Admin.

Ms. Tanya Rubenstein, DOFAW Admin.

Mr. Nicholas Agorastos, DOFAW Hawai‘i

Ms. Jacqueline Gaudioso-Levita, DOFAW Hawai‘i

Ms. Marigold Zoll, DOFAW O‘ahu

Ms. Jaime Radvenzel, DLNR/Ka‘ena

Mr. Talbert Takahama, DOFAW O‘ahu

Ms. Katie Ersbak, DOFAW Admin.

Ms. Kirsty Gallaher, DOFAW Admin.

Mr. James Cogswell, DOFAW Admin.

Dr. David Sischo, DOFAW Admin.

Ms. Irene Sprecher, DOFAW Admin.

VISITORS:

Mr. Trae Menard, The Nature Conservancy

Mr. John Vetter, US Fish and Wildlife Service (USFWS)

Mr. Jay Nelson, USFWS

Mr. Michelle Bogardus, USFWS

Mr. Bryce Masuda, San Diego Zoo Global (SDZ)

Mr. Glenn Bauer, Geological Nominee to the NARSC

Mr. Pomaika‘i Kaniaupio-Crozier, Maui Land and Pineapple Company, Maui

ITEM 1. Call to order: Chair Sinton called the meeting to order at 9:02 a.m., Commissioners introduced themselves, followed by staff and others present. Chair Sinton then said there was a request for move-ups.

MOTION: Newbold/Ranker moved that the Natural Area Reserves System Commission move up Item 4.a. by request, followed by item 4.f. by request, then resume the agenda in order. Motion carried unanimously.

ITEM.4.a. Renewal request for continued work by San Diego Zoo Global (SDZG) to continue to work on the release of ‘alalā (*Corvus hawaiiensis*) back into the wild at Pu‘u Maka‘ala Natural Area Reserve, island of Hawai‘i.

Mr. Bryce Masuda, SDZG Site Manager, gave a power point presentation summarizing activities over the past permit period and discussing what was being considered for the second year of the project. He first identified members of the ‘Alalā Working Group: Department of Land and Natural Resources/Division of Forestry and Wildlife, U. S. Fish and Wildlife Service, San Diego Zoo Global, Three Mountain Alliance, Kamehameha School, National Park Service, and U. S. Geological Survey.

Summary of the issues: The current permit is approved to be within the Kulani section of Pu‘u Maka‘ala Natural Area Reserve (NAR). Infrastructure includes: 1) Flight conditioning aviary, which is a temporary structure that allows ‘alalā to develop flight muscles and stamina; located in a previously disturbed site as per guidance from NARS Manager; 2) Release aviary (some refer to as a hack tower) on site prior to release, it has now been taken down and dismantled to go to another location for future releases; 3) Release candidate selection: this is a learning process as the project progresses with the young of the year (not territorial, similar to 1990s, more wild), inbreeding coefficient, founder representation, sex ratio, weight, age, rearing method, siblings, spring/summer when eggs are laid, Cohort 1 was five males, the second Cohort two males and five females, on October 11, 2016 five males were moved from Kilauea Bird Conservation Center (KBCC) to the NAR; 4) Wild food training 5) Light weight transmitters for monitoring; 6) Veterinarian exams for pre-transfer and pre-release (physical exam, blood, fecal, weight, vaccination, west nile virus testing to be sure not present, transmitter, color bands; 7) Predator aversion training: Panaewa Zoo provided use of a live ‘io to confront the ‘alalā and to play warning calls so that they would associate those calls with ‘io and danger, known as aversive stimuli; 8) Predator control for mongoose, cats and other small mammals was done in coordination with NARS staff to locate openings of traps near the ground so that ‘alalā could not get in to the traps; 9) Release in November/December 2016; 10) post-release, birds were tracked with their transmitters, they returned and fed on supplemental food supplied, but also foraged on endemic fruit and bark flaked for insects, all stayed within about 500 meters of the release site for the entire time.

Post-release: three mortalities all within the first 3 weeks (‘Ike on December 17, Kau‘ikauikalani on December 20, Pewa on December 22, 2016). The two remaining birds were brought back into the aviary on December 22, 2016.

Revised release strategy was the next step to consider: 1) New release site chosen north of the Kulani facility, based on the following reasons: fewer ‘io detections in this site; area was determined by SWOT analysis, a higher elevation, more complex habitat, more complex forest structure, more mature plants, worked with NARS Manager in the re-application process to find best site; 2) Larger release cohort of 11 birds, including from the 2016 hatch and possibly the 2017 hatch year; 19 fledglings in 2016, 4 will remain at breeding centers; 3) Refined predator aversion training including testing stimuli on non-release birds to determine what is most effective, increase visibility; live interactions directly with ‘io; more closely delineating difference between different calls on recordings and how to link them with the distress calls/avoidance to be sure they are getting the message soon enough to avoid being hit by ‘io, and to watch ‘io capture and kill prey.

Tentative revised timeline: **December 2016 to present:** decision-making, permitting, finalizing Revised Introduction Plan, record distress calls, secure use of ‘io for aversion training, captive methods trials. **April 2017** move birds to KBCC temporarily and modify aviary and ‘io compartment. **May 2017** start to build new hack tower, finalize transmitter design and aversion training stimuli, test telemetry towers. **June 2017** attach dummy transmitters, finish building hack tower. **July 2017** conduct first anti-predator training. **August 2017** move birds to hack tower, conduct second anti-predator training. **Late August/Early September 2017** release the cohort.

New request in the application: temporary camping area: use of the old, Mauna Loa Boy’s Home (built back in the 1960’s and long abandoned) as a place to re-locate infrastructure to be closer to the new release site. It is a remote site, secure, and staff could put up tents in the area and have solar panels, batteries, water system, and contained sanitation. All equipment would be installed only with the guidance and approval of the NARS Manager and removed when no longer needed.

Requested permit conditions, following the existing permit: Access Pu‘u Maka‘ala along roads by 4 x 4 vehicle; continue to utilize existing flight aviary; build one or more release aviaries; provide supplemental food; lightweight transmitters for tracking; monitor remotely as much as possible; install and utilize automated VHF towers; monitor ‘alalā only as needed, and following fences, roads, transects and existing paths as much as possible; date collection for research purposes, to better understand the ‘alalā and to inform and guide future release strategies (for example survival, dispersal and movements, foraging behavior, and frequency to forage on supplemental food), additional date will be collected on the vocalizations of the ‘alalā; remove sick or injured ‘alalā, or if the removal will be beneficial to the well-being of the bird; collect deceased ‘alalā and send to San Diego Zoo for necropsy analysis, following existing permits; decontaminate footwear and equipment before and after each trip; vehicles will be clean;

follow Rapid 'Ōhi'a Death prevention measures. There will be a maximum of 7 assistants/staff, particularly in the beginning, possibly as low as 5; that may change.

Member Conant reiterated what she said last April: if you do not try, you do not get anywhere; despite the trauma, we have to keep trying. Chair Sinton replied that this is one year later and they have come back to the NARSC, the first year was a learning experience. He asked Staff Agorastos is he and his staff were supportive of renewal. Staff Agorastos said that while he is supportive of renewal, this had taken a large amount of staff time and there have been short term impacts on resources; but in the long term having 'alalā in the wild is worth it. There are still concerns of can it or can it not be done in the NAR; what is the role in protecting the NAR and others in the NARS versus protecting one species ('alalā) versus NEON (National Ecological Observatory Network), which wants to install a large observation tower (still pending). This has been an arduous journey for staff, particularly for Jackie Gaudioso-Levita, our 'Alalā Project Coordinator on DOFAW staff. Deputy Director Kaluhiwa asked about the new location and if they had to access through the prison; then as they move mauka, they will abut Kamehameha School (KS) lands; and if so, are you working with them. Mr. Masuda replied that the access will be through the NAR without the need to cross prison facilities. Deputy Director Kaluhiwa asked how many people would be on site daily. Mr. Masuda explained that five to seven people per day for initial monitoring will be most important to start; there could be less people over time.

Staff Gaudioso-Levita explained that they are working on a right of entry agreement with KS. They started working on this 10 months ago, but KS will not approve the entry until a location is found for the bird release.

Michelle Bogardus, explained further that USFWS is working with DOFAW; have gone out for public review and within the next few months will go to the ESRC (Endangered Species Recovery Committee) then to the Board by summer.

Staff Fern Duvall (Maui Nui) was unable to attend the meeting, so sent in a statement for the record of his concerns: "I am concerned about the requests to the NARSC to allow to have 'alalā, which die upon release into the wild state, be evaluated by less than the very best, and most appropriate institution and trained persons. While I fully admire and support the effort by SDZG to release and re-establish 'alalā on Hawai'i Island, and noting the newspaper evaluations of the recent mortalities of the first cohort, I question why the SDZG in CA, and not the National Wildlife Health Research Center's Hawai'i Field Station (Dr. Thierry Work specifically) and its affiliation to the National Laboratory in Madison, OR secondarily to the US Forensics Laboratory of/used by/through USFWS-Law Enforcement do not get to do primary analysis of any mortalities of the released birds? As I would understand it, the birds are/remain the property of the State of Hawai'i/USFWS – especially once released- and that they should by default be collected and sent to necropsy channels we (State) use for all of our ES wildlife. Dr. Work is stationed in Hawaii, could be notified immediately of any mortality/moribund situation in a released 'alalā, and could have the specimen in quicker instance in in-State facilities to

do the necropsy work-up(s). Also, why is the USFWS Enforcement Office (Keith Swindle) not brought into the picture for determination where and who does the work? It is crucial that we understand the mortalities and what caused them. This time if 'alalā mortalities should occur again (hope not) we should definitely consider the request that a “second opinion” by having NWHRC – HFS be the primary recipient of collected dead birds. Sincerely and with Aloha. Me ke aloha mai Maui-Nui, Fern”

Former DOFAW staff member John Vetter, now with USFWS replied: “perhaps, but San Diego Zoo has been doing necropsies and health checks on the 'alalā for the last 17 years. To infer that they wouldn't be experts on the species is a little misguided in my opinion. And yes, they are the State's birds, so if DLNR decides to make the change, then that's fine. I am happy to have Thierry involved and collaborating in the project, especially if it helps speed up the findings, though that is not really up to me anymore.”

Chair Sinton thanked everyone for their views, agreed that was a matter for staff to coordinate those impacts. What is on the agenda today is to approve a second year of the release project in the NAR, and called for a motion.

MOTION: CONANT/YUEN moved that the Natural Area Reserves System Commission approve continued work by San Diego Zoo Global to continue with the release of 'alalā (*Corvus hawaiiensis*) back into the wild at Pu'u Maka'ala Natural Area Reserve, island of Hawai'i, for the second year of this multi-year project. Motion carried unanimously.

ITEM 4.f. Special Use Permit Application for Hawaiian Electric Company to study the possibility of relocating a portion of the existing Mikilua 4 Circuit at Mount Ka'ala, Wai'anae, O'ahu, TMK 6-7-003: 018 and 025 portions.

Staff Gagne explained that while an application had not been received at this time; DOFAW staff and USFWS staff are actively working with HECO and she felt an update by Dr. David Sischo, Coordinator of the DOFAW Snail Extinction Prevention Program (SEPP), would be useful for Members and staff. Dr. Sischo gave a brief of summary how the present approach has changed over the years.

In the 1990's HECO acquired the electrical installations on Mt. Ka'ala that source power to the FAA facility on the summit of the mountain. In 2011 HECO unfortunately widened the trail along one of their access routes and inadvertently caused “take” (damage to habitat and harm to individuals) of the endangered tree snail *Achatinella mustelina*, which occur along this trail. After several years of negotiation with DLNR and USFWS, HECO decided to donate \$200,000 to DLNR to rebuild the pahole predator-proof snail enclosure in the Pahole NAR, as mitigation for the damages they caused on Ka'ala, in lieu of civil penalties for violation of the ESA (Endangered Species Act). Since the incident all HECO installations, including poles and trails leading to poles, have been surveyed by the SEPP and a HECO biologist to identify rare or endangered snail colonies around HECO installations.

Since the incident HECO has instituted a snail protection policy (approved by DLNR and USFWS) that involves a notification procedure whereby HECO notifies DLNR and USFWS two weeks prior to any work on Mt. Ka'ala. This notification includes a description of the work and dates. The notification procedure allows DLNR and USFWS to intervene and/or guide HECO to prevent take of endangered snails during their routine activities.

The 2011 incident and resulting mitigation has prompted HECO to look critically at their infrastructure on the mountain to identify improvements that would eliminate all chances of take of endangered species in the future. HECO has initiated informal discussions with DLNR and USFWS regarding the possibility of updating their pole systems on the mountain so that the entire system is realigned to follow the road, instead of to continue down ridges through sensitive habitat (which may also contain other species not currently listed as endangered). The process of realigning the poles would require HECO to seek an incidental take permit through the HCP (Habitat Conservation Plan) process to conduct the pole removal and realignment. As of right now HECO has not formally entered in to an HCP process; however they will do so should they decide to realign their poles.

ITEM 1.a. Recommendations to governor on possible candidates for NARSC Chair (from appointed members) to replace Chair Sinton whose term ends June 30, 2016. Chair Sinton said that current Vice Chair Jonathan Price had agreed to be considered; he asked if anyone else was interested. Also needed would be a member of the NARSC to serve on the Legacy Land Commission (per statute) and selection of a Vice chair at a future meeting.

ITEM 1.b. Recognition of Trae Menard, former NARSC member. Staff Gagne explained that it would be good for him to attend this meeting so that members and staff could thank him for his years of service. She also wanted to thank him for his long and active and continuing service in conservation biology, and presented him with a vintage 1970s original photograph by Bill Mull of an *Achatinella* with keiki (for your children and their children, as he put it), that was part of the nomination by Alan Hart to list the entire genus as endangered under the ESA. Trae has played a key role in securing habitat, and this is a small way of sharing this with him and his family; along with the Wao Akua book from DOFAW.

Trae said that he appreciated serving on the Commission, and realized it was an opportunity to understand day to day challenges that staff face; to help make suggestions, to help push the envelope of protection, to deal with lots of things from'alaalā to windfarms, unexploded ordnance, drones, to commercial use. He felt that this should be taken seriously on the vanguard of conservation in the State, and that it was an honor to serve on the Commission. Members and staff present all applauded him.

Chair Sinton called for a short recess at 10:50 a.m.; reconvening at 11:15 a.m.

ITEM 1.c. Selection of one to two members to participate in the Joint Consultation between the Natural Area Reserves System Commission and the Forest Stewardship Advisory Committee, set for May 25, 2017. Chair Sinton asked for volunteers to serve. Member Conant said she would be interested in continuing to serve, but would be unable to drive that day (there were volunteers to pick her up); Member Price felt that it would be useful for him to attend. No further volunteers; Chair Sinton thanked them both.

ITEM 2. Approval of the Minutes of the April 6, 2016 Natural Area Reserves System Commission Meeting. Chair Sinton noted a few minor spellings, no one else had any further corrections.

MOTION: members PRICE/NEWBOLD moved that the Natural Area Reserves System Commission approved the minutes of April 6, 2016 as corrected. Motion carried unanimously.

ITEM 3. Deferred until later in the meeting due to presenter not being able to attend meeting until later; resume regular agenda until his arrival.

ITEM 4. b. Recommendation for continued closure of Kahauale‘a Natural Area Reserve (NAR), island of Hawai‘i, due to on-gong volcanic hazards, 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, 2017 – July 24, 2019). Staff Agorastos said that in their letter they imply rather than directly recommend continued closure; he supports continued closure but feels it is an easy way out for the Division/Department. For discussion, he felt there were some alternatives to consider for the long-term. There is an increasing demand by visitors and residents alike to see active volcanism. He has been involved in a contested case hearing for commercial activity uses in Kahauale‘a; however the rules are too loose to allow enforcement of the rules. Current NARS Rules prohibit commercial use; but perhaps there needs to be further discussion of other suitable options.

Chair Sinton said yes, groups being arrested is an issue; people go anyway, even with signs warning area is closed due to hazards, there are rescues, there are deep cracks, and it is easy to get lost trying to find the trail again; yes, that is a problem and yes, keeping it closed is the easy way out; however, things can change very suddenly with volcanic activity. At the same time we do need to consider alternatives.

Member Conant asked if the biggest problem is the rules. Staff Agorastos replied that signage is the biggest problem. DOCARE (Division of Conservation and Resource Enforcement) and the Prosecutor’s Office say we do not have enough appropriate signage. The County is not willing to prosecute because we did not have enough signage; but much of that is due to signs not being visible due to dense vegetation.

The contested case Hearing Officer asked why there was no appropriate signage; how did we determine they were in the NAR, even if it is the only area with active lava. Then the area was under 4 feet of lava; so signage can be difficult to maintain. Because this area is not adjacent to the National Park we need lots of signage.

Member Christensen asked if tour operators or individuals are specifically notified that the area is closed due to volcanic hazards; they should be notified, then they know. Staff Agorastos said that they cannot plead ignorance, but that it is still being debated, and made that point in the contested case. Member Christensen asked if it was a civil or criminal case. Staff Yuen replied that it was the Land Board, and the case is not resolved and not gone to the Land Board yet. Staff Agorastos said that the County is hands-off.

Member Christensen: ask the AG (Attorney General) if can or cannot go, but they say they did not see signs. Chair Sinton felt that once a trail or activity is in the guidebooks, demand increases to visit these areas, closed or not. Member Christensen asked what happens if commercial operators are stopped.

O'ahu Branch Manager Marigold Zoll asked about other options. Staff Agorastos talked with Na Ala Hele staff to consider removing the trail from the NAR so commercial operators making a living can operate; this supports the visitor industry, and individuals that want to hike. He said as a civil servant, he needed to look at other alternatives. Na Ala Hele allows commercial use of select trails and gives special responsibility to commercial operators; but this is an on-going issue.

Member Conant asked what sort of help is needed to figure out use of this area. Staff Agorastos replied by asking if the NARSC members think this is worthwhile to go out and look at alternatives. Commercial use is the key; increasingly over the years. Member Christensen: if there is a serious safety issue, but cannot justify closure, there is the potential for liability. Staff Agorastos replied that people go anyway; if go with guided tours (with latest air quality information; reputable professionals, etc. that would be better). Staff gets applications for Special Use Permits to conduct research in the area and hunters go in after feral pigs. We just cannot rubber stamp closure every two years; we need to also look at alternatives.

Former Member Trae Menard said that a few years ago, the NARSC looked at commercial use and tours and formed a subcommittee; perhaps that should be reconvened. If allow commercial activity/tours, who will manage this practice in dangerous areas. Is there a way to have the operators help to drive this? Staff Agorastos said that economics are a driver; there are also film and research permits, and increased need of increased signage. Member Christensen said that the level of liability also needs to be considered. Member Conant: if we approve commercial use permits then we would be liable. Member Christensen responded: Permit Holder holds insurance and indemnification; the State, no (they are self-insured).

Member Newbold felt that commercial activity within the NARS was a difficult road. Member Christensen said that rulemaking should consider including commercial tour policy as something new, with pressure to change rules piece by piece. Chair Sinton said perhaps the Commercial Use Subcommittee should revisit this. Member Newbold had liability concerns, such as UXO (unexploded ordnance) at 'Āhihi-Kina'u and the volcanic hazards in Kahauale'a. Former Member Menard asked about liability if closed versus operators and not seeing signage; is that different? Member Christensen suggested seriously

looking into authority: if we have the authority to authorize commercial use or not, and the liability issues.

Member Price said he went out last night (March 30, 2017) to view old lava in Kalapana and there were people all over the place. There are commercial tours on that side, but not in the National Park; the NPS enforces, there is no one on the Kalapana side for enforcement. There is a barricade and signs but people still go right over and around them. There are also issues with drones flying around (they are banned from the National Park but there is no enforcement on the Kalapana side).

Chair Sinton said that legal and enforcement and regulatory bodies, including Na Ala Hele, should all get together to address the trail to Pu'u O'o (Captain's Trail) through the NAR; people still use the trail, and there is still a problem.

Member Christensen said that drones are not currently regulated under the State; it is the jurisdiction of the FAA (although the NPS bans them from National Parks after one crashed into one of the iconic hot springs at Yellowstone).

Glenn Bauer, former State Geologist at CWRM (Commission on Water Resource Management) referred to the landslide at Sacred Falls State Park and the many safety and warning signs, but people kept saying they did not see them. They now have a sign with a rock on top of someone's head...slightly more graphic, in hopes that the message will be heard this time. Social media is also a big problem as people continue to trespass.

Staff Zoll said that rescues have increased markedly, but social media and commercial use for visitors and residents alike is a continuous problem; they need to be taught responsible use of our resources. Christensen agreed that is a concern all around the state.

Staff Agorastos said he was not advocating for commercial use; just that it is the lowest hanging fruit from other alternatives, including pulling the trail out of the NAR and putting it under the jurisdiction of Na Ala Hele; it is almost like a freeway. Member Newbold felt it is an issue of attractive nuisance. Staff Agorastos replied that public safety issues still are there, that need to be considered. Member Christensen felt that the

NARSC if not able to resolve this now, would need to look at what is permissible or not. Staff Yuen said that permits regulate what is permitted in an area if otherwise prohibited.

Chair Sinton said that the Department is faced with the current closure expiring July 24, 2017, and need to approve this continued closure as recommended in the submittal to the NARSC.

MOTION: CONANT/PRICE moved that the Natural Area Reserves System Commission recommend continued closure of Kahauale‘a Natural Area Reserve, island of Hawai‘i, for a two year period from July 25, 2017 to July 24, 2019, to the Board of Land and Natural Resources, due to continuing volcanic hazards.

Member Christensen approved the 2- year closure but simultaneously commercial and non-commercial policies should be reviewed this year; removing the trail from the NAR is a separate issue. **Motion carried unanimously.**

Chair Sinton suggested the Commercial Use Subcommittee be reconstituted (need to find new members) to re-visit. Staff Yuen suggested working with staff for recommendations. Chair Sinton said that he looked forward to hearing from staff.

ITEM 4.c. Request to approve delegation of authority to temporarily close or restrict public use of the natural geological, or cultural resources of the area or the safety and welfare of person or property, to the Administrator of the Division of Forestry and Wildlife, Department of Land and Natural Resources. Staff Yuen said that currently we cannot close areas for up to two months on short notice; we have to go through the special step including NARSC and BLNR. But, if we need to for safety, we need to have the power/authority to close an area on a temporary basis, when there is insufficient time to go to both NARSC and BLNR. That would allow time to assess whether a longer closure is needed, then call in the NARSC and BLNR. Member Conant asked if we were delegating authority to the Administrator. Staff Yuen replied that his role is to recommend to the Board to approve; staff will go to the Board following this meeting.

Member Asuncion asked whether the Commission had the authority to do so. Member Christensen said that the public and changes in their legal rights is a concern; what is legal today may not be tomorrow; the NARSC is advisory only; the Board adopts. Staff Yuen said that we go to the Board and they say yes or no. Chair Sinton said the NARSC makes recommendations to the Board. Member Asuncion asked whether DOFAW or other entities have similar authority in their rules. Staff Yuen said that Forest Reserve Rules and others have similar authority in their rules; for Forest Reserves the Board delegated authority to the Administrator to close. Member Newbold had trouble with the language for recommendations. Staff Yuen said that it was for one month or less. Member Christensen said you are required to go to the Board to authorize delegation; he suggested amending the first sentence in the submittal to recommend to the Board that they (the Board) approve the delegation.

Chair asked about the cover letter, for periods of up to two months or would you recommend three? Staff Yuen agreed that yes, it could be for more; up to three months. Chair Sinton agreed with two or more; but then two months is enough time to call a NARSC Meeting. Staff Yuen explained that it also has to go to the Board, and that is what takes the time; that is why staff is asking for delegation to the Administrator from the Board. Chair Sinton felt delegation authority to staff not necessarily a good thing. Glenn Bauer asked if it was in the case of a natural disaster only. Staff Yuen replied not necessarily, but say we find rare snails in the middle of a trail and need to take action immediately. Chair Sinton agreed in the need to protect natural resources. Former Member Menard asked about closures due to hurricanes on Kaua'i; perhaps in that case something so serious that the Governor could close. Member Price said that localized landslides, or fire, etc., where management actions need to be taken could be done; such actions would not be made lightly; but are being done to solve it immediately and probably should make this clear to the public. Staff Yuen said that it was for hurricane and other safety concerns. Member Price said that the area would be closed only up to that time period.

Staff Yuen said that the Rules say the action or permission is being requested, with the approval of the NARSC, to go to the Board for final approval. Member Newbold asked if the Board approves the delegation; she had trouble with those two sentences. Christensen said to check the language in the rules, as we are just advisory; however the Board cannot approve without the NARSC approval (and if the NARSC recommends denial, then the submittal is returned to the applicant to correct, resolve, and resubmit to the NARSC before it can go to the Board for final adoption.)

Member Conant suggested a request from staff to the Board that they (the Board) approve delegation of authority to close for up to two months. Staff Yuen said we need to get out of the loop of existing rules. Member Conant asked if the NARSC can delegate authority for temporary closure; that we approve delegation of authority and then they approve delegation of authority. Staff Yuen said that the board submittal will state that the NARSC recommends temporary closure to the Board and requests that the Board delegate authority for such temporary closures to the Administrator. The suggestion was also made to increase it to up to ninety days; not two months.

MOTION: CHRISTENSEN/CONANT moved that the Natural Area Reserves System Commission recommend to the Board of Land and Natural Resources, delegation of authority to temporarily close or restrict public use in Natural Area Reserves, pursuant to HAR 13-209.4.5, for up to ninety days (three months) for the protection of the natural, geological, or cultural resources of the area or for the safety and welfare of person or property, to the Administrator of the Division of Forestry and Wildlife.

Motion carried unanimously.

ITEM 4.d. Grant of Term, Non-excusive Easement to the United States of America, Department of Navy for Communication Facility Purposes; Kamananui, Waialua, O'ahu, Tax Map Key: (1) 6-7-003: portion of 025, located within Mount Ka'ala Natural Area Reserve; action by the Natural Area Reserves System Commission to recommend to approve, defer, make other recommendations, or deny recommendation to the Board of Land and Natural Resources. Member Christensen said that it was not a housekeeping measure per the submittal from the Land Division. Two steps of enforcement action need to be taken: 1) remove the encroachment (Navy facility) 2) or amend the lease to authorize use of the site within the Natural Area Reserve. It is a broader issue of how the State responds to encroachments by any user without authorization; it is not a housekeeping measure. Member Christensen is not necessarily recommending denial; but the decision to do this or not, that is the issue: does the Board have statutory abilities.

Staff Takahama agreed that this is not a housekeeping issue. He felt it was important to convey to the NARSC and to the BLNR a pattern of behavior. To exempt the Navy for not surveying correctly; it is actually a part of the NAR. The Land Division is wrong about the FAA lease; their interpretation is within the 100 foot easement; that is ok, but it is not. The FAA cannot transfer any part of the land.

Member Conant asked why they do not just apply for a permit. Staff Takahama replied that the Navy should be given opportunity to review this first. Member Christensen said that it is important for a clear understanding what is being asked for here. The tenant violated terms of the lease; violations will not be ignored.

Chair Sinton agreed; but if not, should the NARSC ask the Land Division to come back at a future meeting to clarify. Member Christensen said it was appropriate to reject and resubmit and to respond to concerns, and urged denial to elevate the issue. Chair Sinton agreed. Member Conant felt it should be denial with clarification and re-submittal. Member Christensen said there is no penalty for doing this right.

MOTION: Christensen/Price moved that the Natural Area Reserves System Commission deny this proposal and return it to the Land Division for a legal analysis and re-submit.

Motion carried unanimously.

ITEM 4.e. Special Use Permit Application for the Army to land on the helipad outside the fenced enclosure at the summit of Ka'ala, which staff has determines lies within the Natural Area Reserve (NAR), while the Army claims that the helipad is not in the NAR. Information received after the agenda was posted has been reviewed and accepted by Staff Takahama as not being in the NAR; therefore not needing a permit; therefore this item is for information only; no further action is needed by the Commission or Board at this time.

Chair Sinton called for a one hour break at 11:34 a.m. for lunch at this time; and that there would still be a quorum maintained after the break. Chair Sinton reconvened the meeting at 12:35 p.m.

ITEM 3. Review and approval of the re-authorization of funding for Pu‘u Kukui Watershed Management: Pu‘u Kukui Watershed Preserve, island of Maui, during FY 18-24 for continued enrollment in the Natural area Partnership Program and approval of the Pu‘u Kukui Watershed Preserve Long Range Management Plan.

Mr. Pomaika‘i Kaniaupio-Crozier, Maui Land and Pineapple Company and Pu‘u Kukui Watershed Preserve Manager, gave a quick summary of the new Long Range Management Plan that covers the new 6 year funding cycle from FY 18 to FY 24. Over the past six years, there have been discoveries of numerous rare plants and animals that have been seen that will help to inform and drive management over the next six year period, including the endemic land sail *Newcambia cumingi*. They received a Grant from the Department of Health (DOH) for fence construction through the Watershed Partnership Program with Emma Yuen and Katie Ersbak (Watershed Partnership Coordinator); almost the entire Preserve will be fenced and closed to ungulates after this.

Member Christensen asked why DOH; he replied that it is about keeping water up-country and taking action to keep erosion/runoff from reaching the reefs. There is a marine conservation area at Honolua Bay that does have runoff; but it is not from higher elevations. There is also a Forest Stewardship Project that is helping to address runoff by improving the vegetation cover, and using hydro mulching. The commitment is to protect habitat mauka to makai. Member Newbold said there were numerous brown water warnings at Honolua; he responded by stating that the Makana development graded a big area, which is where the runoff starts.

They are building their first snail enclosure for the *Newcambia cumingi*; they have learned a lot from others, particularly O‘ahu Army Natural Resources (OANR) staff where and how to build enclosures based on their own experiences. It was especially important to learn from Joby and his staff what does not work; very important to know. They are doing large-scale habitat protection and individual support of rare plants and animals. Fern Duvall and others are assisting with input on managing sea birds.

Member Conant asked what the biggest threat was; he replied the biggest is ROD: it is currently still known only from the Big Island, but since the majority of upcountry forests in the Preserve and other Maui lands are comprised of ‘ōhi‘a, it could absolutely devastate our forests. We practice de-contamination before and after field work. Also, more and more species are being listed as endangered, and that is also a concern.

MOTION: CONANT/MATSUNAGA moved that the Natural Area Reserves System Commission approve the re-authorization of funding for Pu‘u Kukui Watershed Preserve, island of Maui, during FY 18-24 for continued enrollment in the Natural Partnership Program and approval of the Pu‘u Kukui Watershed

Preserve Long Range Management Plan, to the Board of Land and Natural Resources for final approval.

Discussion continued with points made that a lot more turbidity is below the fence; hunting and traps are below the fence; some areas have been pig-free for five years; others have more to go. Game cameras to deal with trespassers have also been established, and they learned techniques at IUCN meeting from the White Rhino Program in Africa.

The heavy rains have been a big problem, especially November – February, when rain patterns changed; now in a 100 year cycle more than usual. Protected areas doing well, but more open areas have problems with poachers. Randy Bartlett (first manager) built up community relations, getting local buy-in, which staff have built on. The taro lo'i is being re-stabilized down lower which helps control run-off but also contributes to cultural connections and practices, and habitat for damsel flies and other native insects.

Member Clark asked about pigs on the outside. He replied that they are both within and outside the Preserve. Staff catch the 'dummies' and small ones first; the wily ones take longer and require the most effort; now focusing on the bottom area of the Preserve. Staff Zoll said that they saw ingress during a fire event; but containment was done and they got them all. Staff Yuen said that there would be a new section and new narrative added before it goes to the Board; nothing substantial requiring further NARSC review.

Chair Sinton then called for the vote. **Motion carried unanimously.**

ITEM 5. Update on final adoption of HAR Chapter 209, Rules governing authorized or prohibited activities in Natural Areas. Staff Yuen said that the rules for finally adopted by the Land Board on March 10, 2017, with additional language on towing of vehicles and having drug prohibition language aligned with other rules on the same subject for consistence and enforcement per DOCARE staff suggestions. The rules are currently at the Governor's Office. Traffic violations bill has died; if people are cited for parking violations there could be a big problem, including jail time. Member Christensen asked if there were any objections; Staff Yuen replied none.

Members Conant and Price were excused at 1:55 p.m.; quorum was still maintained.

ITEM 6. U. S. Forest Service Forest Legacy Program Assessment of Needs (FLP AON) review for any input from NARSC members. Irene Sprecher, new Forestry Program Manager for DOFAW Administrative Office gave a short presentation, for members for their information, on a view of landowner programs that have a different, but often times complementary uses to the existing NARS and NAPP. As supported by the US Forest Service, these are working forests, which may include conservation and other uses; the AON was first developed in 1994. The current AON, was developed a decade later, and it is now up for review, giving everyone an opportunity to review

priorities; to add or subtract or revise the current list, and to complement the State's existing Forest Action Plan, including an acquisition strategy. Staff is currently in the process of reaching out to partners to provide letters for them, identifying four items to address: 1) Describe top issues that affect private landowners to maintain and manage their forests (resource conversion); 2) General trends such as converted or highly threatened or other concerns; i.e. an upswing in coffee plantations replacing dry to mesic forest; also macadamia plantations, which have replaced a number of forests in the past; 3) Compatible uses; especially for Forest Legacy, with working forests for conservation and economics; but not all uses are compatible; and gray areas depend on highly managed systems; 4) Set broad eligibility: but not too broad or not enough; but be strategic in how spend resources; we need to determine our priority limits.

The following update looks at 1) changes in eligibility (combination of 4 areas: Watershed Partnerships, land in the Conservation District, habitat protection, and private forest lands). But, review has determined that areas not in the Conservation District are more threatened; so need to change a bit and do away with the conservation district specifically, and use USGS assessment by forest type (alien grassland, shrub land, ag lands; etc. (referring to the map handed out and scanned in as part of the minutes to follow this presentation). Private landowners can sell land to the state; we work to find funding for purchase and management. Wish Conservation Easements, can development rights, also reforestation; we work in partnership with landowners; our two major programs are the 1) Forest Stewardship Program where management plans are prepared by program participants, at the State level, and 2) Forest Legacy Program, which is a different type of management over a longer term. Forest Legacy is a program that has bi-partisan support across the States, which may just survive all the cuts now going on under the new administration.

Member Newbold asked if they work with others; yes, she replied, we work in partnership. Member Newbold asked about carbon credits; yes, there are some, but it is difficult to process those types; however with a conservation easement, can use carbon credits.

Prioritization: where to go and to protect this or that, such as Ag land in South Kona (see map), 2) lands where known stands of sandalwood still exist, restore or expand these areas and hold down forest conversion. 3) Watershed Partnership projects in adjacent areas or designated critical habitat targeting lowland, dry forest, and forest recreation and all newer criteria to be considered, to help generate more applications from other potential partners.

The review has taken place about once a decade; so this presentation is being made at the meeting today to help get the message out for other possible suggestions. Member Clark said there was not much native vegetation on Kaua'i; yes, she agreed that it seems on Kaua'i to be that way due to qualifications.

Chair Sinton thanked Staff Sprecher for her presentation.

ITEM 7 and 8. Legislative/Budget Updates: Staff Yuen combined the two, since they are intertwined; and said that \$50 million in CIP for watershed conservation is being requested; refer to copy of current projects; part of the 2030 sustainability goals' 30% of priorities for protection for areas of highest recharge value for the watershed is step one to stay on goal. However, the Senate and House versions differ, so this will go to the Conference Committee; any help and support

is welcome. House and Senate conversion of the budget from the NARF (Natural Area Reserve Fund where a portion of the conveyance tax was deposited but taken away by the Legislature two years ago); we now undergoing conversion to the General Fund for added stability for the program; however funding is at \$4 million, which is \$340 less than what we need; but still not sure what final numbers will be; have to wait then see; probably not until end of the legislative session. The Invasive Species Committee funding of \$4 million was also converted to the General Fund. The House added \$260k for mosquito control, \$750 k for ROD for one year and \$550 k for ROD in the next FY. Also \$400k for the Watershed Partnership Program; have to be able to increase operating money to support more partners, but this is up in the air. The Department supports the bill to create the Hawaii Invasive Species Authority and place it within the State Department of Agriculture.

Member Yuen asked about money in the General Fund. Staff Yuen replied that since the conveyance tax portion was cut from the NARF, there was a two year window when they did make up the difference in funds cut through the General Fund to replace those funds; however that time is up, now we are considering what to do in the long run, so trying to get into the General-based Fund budget. There are some benefits/stability to being there, including core programs not going up or down with conveyance tax.

Member Christensen asked about special funds; losing them without funding.

ITEM 9. Announcements. Staff Agorastos gave an update of timely issues on the Big Island: ROD is now in 5 NARs, but not in Kohala yet. He is in support of strawberry guava biocontrol work including in NARs. The application has not yet moved forward, however. This is being done through the US Forest Service/Dr. Tracy Johnson. Member Christensen said that in the past there was a lot of controversy in biocontrol complying with Chapter 343 (environmental assessments). Staff Yuen replied that yes, they did an Environmental Assessment. Member Matsunaga explained that Tracy is the PI, but DOFAW staff is also helping with this. Member Christensen was still concerned due to past Dept of Agriculture decision on Euglandina control with little or no review and subsequent environmental disaster; and wanted to be sure this time there would be more review and oversight. It was the best documentation of a biocontrol gone wrong with respect to non-target species.

Member Matsunaga replied that multiple agencies are involved in the preparation. Member Christensen asked if they went through the 343 process; Staff Yuen replied that yes, they went through 343. Staff Agorastos said it is a scale insect, not a silver bullet, but the best control option at this time.

Staff Agorastos had a meeting with First Deputy Kaluhiwa (also present as the Chair's designee at the NARSC meeting) to discuss on-going issues on Mauna Kea, with offerings at Waiau in the NAR, introduction of water from mainland bodies of water to Lake Waiau, increased visitation to the NAR and summit area in general; how this can all be enforced needs to be considered.; need to monitor and bring these concerns to the Commissions at a future meeting, just introducing them here. Also, large groups on Mauna Kea: perhaps there needs to be a maximum group size. While 10 or more people does trigger a permit; large groups of 25 to 30 or more can be damaging to the resources as large groups mill around, are more likely to step off the trail, etc. The area also has been used for high elevation hiking by the military; helicopter landing for training Army purposes (for it high elevation similarity to Afghanistan); but not digging and fox holes or other ground disturbance. The larger increase of visitors has largely been the past few years; now more than ever before with each year.

Member Newbold asked about needs. Staff Agorastos said that basic NARS rules need to be strengthened and clarified. The Mauna Kea Rangers through the Office of Mauna Kea Management have been a big help in asking visitors where they are going and education them about the fragile nature of the area; however they do not have enforcement powers. First Deputy Kaluhiwa is working with DOCARE on how to proceed with the unauthorized water introductions, and considering stationing DOCARE officers further up the mountain so they could respond to calls from the Rangers more quickly.

Member Christensen said that cultural and traditional practices need to be considered and what the State can or cannot do to enforce the protection of the resources in the face of other uses, without being discriminatory. Federal law is clearer: that protection of the resources can be done solely without any other consideration. It needs to be regulated fairly; Mauna Kea is getting 'loved to death'.

First Deputy Kaluhiwa said that in the old days the summit of Mauna Kea, considered to be the Wao Akua, was essentially off limits to all but a very few people. The TMT contested case has made it such a sensitized issue that it is difficult to consider how to proceed, especially when all the laws in the world may not mean anything to some; more outreach is needed in this. Staff Agorastos said that this is a cumulative impact of all the visitations to the NAR and summit area.

Chair Sinton asked about rules to deal with group size and other concerns. Staff Agorastos replied that he recently recommended denial to a group of 30 planning on hiking to Waiau; they did not have sufficient leaders to oversee such a large group and it would create a strain on the resources; he invited them to reapply with smaller group size.

Chair Sinton thanked Staff Agorastos for the updates, which he felt were essential not only for members, but for other staff and the public. Which brings up setting the next NARSC Meeting. It has been nearly one year (April 6, 2016) since the last meeting, too long between and there is a need to be informed/hearing from staff but not meeting only once per year. Realizing that the end of the FY is June; old and new members used to meet, and there was an annual summary from staff; however he realizes that it is impractical to meet then, and suggested staff consider working towards a meeting in August or September to address some of today's issues and to consider new issues. If the NARSC is to continue, then it needs to meet; however he recognized that it does not meet just to meet.

Staff Yuen said that meetings are for actionable items; the budget cannot justify meeting just to meet, nor flying staff over; require action items to meet helps justify meetings. Staff can provide updates such as an e-mail blast; rather than reporting about them at meetings; which frees up time for actionable items.

Chair Sinton agreed, but felt that discussion and face time between members and staff is valuable. There will be 4 new members in the new fiscal year. He greatly appreciated the update by Staff Agorastos and if budget allows it, recommended the need to meet and hear such updates in person.

Member Newbold asked about other updates; she was particularly concerned about the new parking lot at 'Āhihi-Kina'u; she gets lots of calls from those upset about its presence. Staff Yuen said that the Advisory Group was the venue to address those specific concerns on Maui. Chair Sinton asked about NEON (National Ecological Observatory Network).

First Deputy Kaluhiwa felt that August was the best time for a meeting; after session, before new legislative internal deadlines. The Governor signs off on the budget at the end of July, and then we will have a better idea of what we face. Also, it is near the time of the 'alalā release so could have an update of that as well.

Chair Sinton thanked members and staff for their insights and asked if there were any other announcements or concerns

ITEM 10. Adjournment. Chair Sinton adjourned the NARSC Meeting at 2:05 p.m.