

Forest Stewardship Advisory Committee Meeting Minutes

1151 Punchbowl St. Room 322C

Honolulu, HI 96813

February 28, 2020

Present: Nicholas Koch (Chair), Janet Britt (Chair-elect), Irene Sprecher (Ex-Officio), Greg Hendrickson, Trae Menard, Jordan Jokiel, Eva Blumenstein, Seana Walsh, Bart Potter, Michael Constantinides, J.B. Friday

Staff: Tanya Rubenstein, Marissa Chee, Katie Friday (U.S. Forest Service), Jade Rhodes

Guests: Chad Durkin (Hi‘ipaka LLC), Nickolas Dudley (Kamananui), Lacy Lyons, Dana Lyons, Malia Nanbara (FWS)

1. Call to order

The meeting was called to order at 10:30am. Members and guests were welcomed and introduced.

2. Review and Approval of October 4, 2019 Meeting Minutes

- The Forest Stewardship Advisory Committee (FSAC) reviewed the meeting minutes from the October 4, 2019 meeting.
- Member Sprecher informed the FSAC that she provided minor technical edits to Staff Chee.

Motion to approve the October 4th, 2019 FSAC meeting minutes. Moved by Member Britt; seconded by Member Sprecher.

Approve: Koch, Britt, Sprecher, Hendrickson, Menard, Jokiel, Blumenstein, Walsh, Potter, Constantinides; Oppose: none; Abstain: J.B Friday.

Motion Passed.

Forest Stewardship Program (FSP)

3. Management Plans

3.1 Waimea Valley Forest Stewardship Plan Revision, Ko‘olauloa District, Honolulu County

- Staff Rhodes introduced the proposed revisions to the Hi‘ipaka LLC’s Waimea Valley management plan, which was originally approved in 2014. The revisions are only to the implementation schedule for years 6-10, and do not include changes to overall scope, management practices, or budget.
- Guest Durkin, Conservation Manager for Hi‘ipaka LLC, presented the accomplishments from the first 5 years of the project and provided additional information on the proposed revisions.
- Property wide, they have been monitoring insipient weeds, maintaining trails and roads, conducting ungulate management, and installing fuel breaks. They are looking into monitoring incipient weeds with drone technology.
- Guest Durkin explained that the Kalahe‘e Reforestation Area, comprised of 67 acres across 5 management units, is their main restoration area. Some of the fences that have already

been built to cover multiple management units which is causing some issues. They have decided to not change the way the management units are laid out but will install the fences in the way that makes the most sense for them. They are working with Natural Resource Data Solutions to track their activities by area. One of the biggest issues is soil degradation, so they are also enrolled in the Conservation Reserve Enhancement Program and Environment Quality Incentive Program.

- Guest Durkin explained that they are proposing to postpone the fencing of the lama and Eugenia areas because there is not a lot pig pressure or recruitment, so they feel that fencing is not a high priority at this time. Guest Durkin also felt that installing a fence may be disruptive. No revisions are proposed for the wetland or mauka restoration areas.
- Member J.B. Friday asked about the condition of the *Eugenia koolauensis*. Guest Durkin responded that they are being impacted by the Puccinia rust and there has not been much recruitment, though they are fruiting occasionally. Invasives have not been an issue and as of now and ungulates are not a threat. He added that they are only monitoring the population. They have tried propagating *Eugenia* in the greenhouse but it is slow growing.
- Member Sprecher asked if the management strategy for the Eugenia or lama areas will be revised in the future. Guest Durkin said they will be getting technical assistance and may make changes as necessary.
- Staff Rubenstein mentioned that the Division of Forestry and Wildlife (DOFAW) has recently aquired land in Waimea and surveying the area could ensure room for partnership with Hi'ipaka LLC. DOFAW would like to start doing surveys collaboratively.
- Guest Durkin explained that the mauka area of the property was previously in pineapple owned by Dole and later became cattle land. Most recently, it was used as a dirtbiking area, which caused the land and soil to become damaged and increased the pressure of invasive species. Resident koa and ohia are doing well in this area.
- Member Blumenstein inquired about how the non-native trees are being managed and balanced in the managed areas of the property. Guest Durkin explained that in one of the 1-acre areas they are working in, they have left several java plum trees in place and would like for the koa to create a canopy before removing them. The java plum do not appear to be spreading much and the rust is starting to affect them. They are worried that removing java plums now will be harsh on koa outplantings.
- Member Constantinides inquired if Guest Durkin could provide the net effect of change in fencing for the project. Guest Durkin reiterated that only the timeline would change and not the physical fencing.
- Member Britt asked if hunters have access to wash their car tires for Rapid Ohia Death (ROD) prevention. Guest Durkin responded that as of now, this measure is not in place, however; hunters are limited to Waimea Valley. Chad continued that cinder used from the Big Island could be a potential threat.
- Member J.B. Friday clarified that cinder is not a ROD threat but can bring in fire ants and nematodes.

Motion to accept and approve the Waimea Valley management plan revisions. Moved by Member Hendrickson; seconded by Member Britt.

- Member Sprecher added that the FSAC will be interested to learn about the long term vision is for the Lama Forest and Eugenia area.

Approve: Koch, Britt, Sprecher, Hendrickson, Menard, Jokiel, Blumenstein, Walsh, Potter, Constantinides, Friday; Oppose: none; Abstain: none.

Motion Passed.

3.2 Kamananui Forest Stewardship Plan, Waialua District, Honolulu County

- Member Rubenstein introduced the management plan and project representative Nickolas Dudley. The stewardship area is 869 acres, 200 of which will be intensively managed via reforestation activities. The remaining acreage will focus on enhancing native species through low intensity management. There is also critical habitat in the upper portions of the property.
- Guest Nick Dudley commented that the ranch was purchased 18 months ago. Based on the complexity of site, they felt that doing koa reforestation would be the best place to start. They are also working with Hawai'i Agricultural Research Center to support a seed orchard site. He said they are expected to partner with the Natural Resource Conservation Service, US Fish and Wildlife Partners Program, and O'ahu Army Natural Resource Protection Program. He added that there is a master agricultural plan on file.
- Member Sprecher asked if public access is going to be allowed in the management areas and how will it be managed. Guest Dudley responded that it is still being developed because the agricultural plan must be executed to the degree that is acceptable to the Department of Planning before recreational activities can commence.
- Guest Dudley said there will be a recreation plan in the future, and that hiking and mountain biking are the two major components of the vision. They are also interested in coordinating the hiking system with the Na Ala Hele program. Member Sprecher commented that having this type of partnership has been a priority for DOFAW.
- Member Jokiel asked if there is a commercial forestry component in the plan. Guest Dudley replied that it will be primarily demonstration and aesthetic forestry, not commercial. If wood is harvested, it would be used on property. They want to highlight the restoration components and then trail system. There will eventually be a coordinated recreation component.
- Member Sprecher inquired about fire management strategies. Guest Dudley responded that they are in close consultation with the Pacific Fire Center and the DOFAW Fire Protection Forester. They anticipate there will be a wildfire management plan as a component of the project.
- Member Britt inquired if there will there be wild cattle and horses on property. Guest Dudley commented that working with wild animals can be potentially dangerous. There is a rancher that is interested in leasing the property and bringing cattle stock that are more docile and tame. Guest Dudley continued that there are populations of wild cattle, horses, pigs on the property that they plan on removing. He said that fenced areas will be managed in sections and to date, there has been no control of current populations.
- Member Blumenstein commented that managament plan should not include snaring practices if it is not necessary. Staff Rubenstein said they will likely have to include language that states they will use legally acceptable humane animal control measures.
- Member Walsh asked for clarification if access, outreach, and wildlife control are not included in the funding request. Guest Dudley explained that their first step is to establish a native forest, and address other issues including ungulate removal over time with other

partners. Member Sprecher said the plan should outline general parameters for recreation, access, and ungulate management, and how those might be managed in relation to the restoration and reforestation.

- Member Britt asked about the mentioning of archaeological sites in the management plan. Guest Dudley commented that archaeological sites are located on the valley floor and not near forestry or recreation sites. He emphasized that archaeological sites are not apart of the plan.
- Member Hendrickson asked Guest Dudley to elaborate on the tree establishment plan in terms of density and the three-year thinning. He also asked why they feel fertilization is necessary. Guest Dudley responded that the landowner wants to do weed control without chemicals/herbicides, so they want to establish a high density koa overstory at high growth rate to and shade out invasive plants.
- Member Hendrickson asked if there will be a closed koa canopy in three years. Guest Dudley responded that this method has been done within 24 months before. He felt the best way to compete with invasive weeds is to utilize intensive site preparation, fertilization, and planting in high densities.
- Member Jokiel asked if practices will only take place in the 200 acres. Guest Dudley responded that the plan describes intensive management that will take place in the 200 acres. There will be less intensive management in the remaining 600 acres in patches with lama, sandalwood areas, and in the critical habitat areas where they anticipate partnering with the US Fish and Wildlife Service.
- Member J.B. Friday asked if the plan would be revised and if other sources of funding will be sought as the other components are worked out. Guest Dudley responded that he anticipates that modifications will be made and that eventual “gate” revenue will go to conservation efforts.
- Member Potter asked for more detail on the intensive planting of Fusarium resistant cultivars. Guest Dudley responded that there are over 30 mother trees from the northern end of the Wai‘anae mountain range.
- Member Walsh asked if annual koa monitoring is apart of the study and how the results will be used. Guest Dudley said they are interested in survival by family, growth performance, and potentially selecting for denser canopy koa to shade out understory. The results will guide future planting efforts.
- Member Menard asked about the effectiveness of mulching against weeds like guinea grass. Guest Dudley responded that will need to have a depth of mulch across the site to smother. They will also likely need other tools such as organic weed control sprays, hot steam sprays, and supplemental propane burners. Member J.B. Friday recommended he visit Rich von Wellsheim’s property to learn about the organic treatments he used.
- Chair Koch commented that fire mitigation is included in the budget, but more detail is needed in the narrative to justify the costs. More detailed is needed on ungulate removal as well.
- Member Constantinides commented that more clarity on the existing fence and firebreak is needed.
- Member Menard inquired if army firefighting recourses can be used. Guest Dudley responded that they have access to an old army road where the firebreak will likely be installed.
- Member J.B. Friday felt that the plan sounds like a commercial tree farm that is trying to

demonstrate if conservation can pay for itself. The narrative doesn't say that though and an economic model should be done. An environmental assessment (EA) would also be needed.

- Guest Dudley commented that the landowner does not plan to harvest on a commercial level, and that only incidental wood would be taken. They only want to demonstrate reforestation on highly modified sites with native species, and they feel that koa will enhance visitor experience on the property.
- Member Constantinides responded to Guest Dudley that the intent of the project needs to be very clearly stated in the plan for the protection of owner and the State of Hawaii's interest.
- Guest Dudley asked how commercial vs. non-commercial is determined. Member J.B. Friday said that there is no clear answer to that. The landowner needs to be clear about their intentions. If they intend to only use koa to reclaim the site from guinea grass and maintain the koa canopy, that would likely not trigger the need for an EA.
- Member Sprecher commented that the landowner must be clearer on intention and must show positive environmental effects. This may be exempt from an EA.
- Member Blumenstein commented that mentioning groundwater recharge could build a better case for restoration efforts.
- Guest Dudley mentioned that seed sourcing must be onsite and that the objective is not commercial koa but a space for recreation such as hiking and biking.
- Member J.B. Friday recommended they potentially integrate native species with sandalwood to create a more conservation/restoration based plan. He also inquired if insecticide will be used.

Motion to defer the plan, provide comments to the applicant, and encourage them to resubmit. Moved by Member Sprecher; seconded by Member Britt.

Approve: Koch, Britt, Sprecher, Hendrickson, Menard, Jokiel, Blumenstein, Walsh, Potter, Constantinides; Oppose: none; Abstain: J.B. Friday.

Motion Passed.

3.3 Lyons Forest Stewardship Plan, Puna District, Hawai'i County

- Staff Chee introduced the 19 acre project in the Mountain View area on Hawai'i Island. The objectives include installing a fence for pig control, enhancing the existing native forest, some agroforestry, and volunteer and educational programs.
- Guest Lacy Lyons commented that they are currently doing an 8 week program with a school partner, environmental education projects, and working with a job preparation group for 'āina based jobs and projects at the property. They host both younger and high school students.
- Member Britt asked about practices for ROD prevention. Guest Lacy Lyons commented that ROD is already on the property, which she believes is caused from pig damage. Wild dogs also enter the property.
- Member Sprecher asked why they are fencing only a portion of the property. Guest Lacy Lyons said the cost would be extremely high given the terrain and need for pāhoehoe removal and bulldozing.
- Member J.B. Friday asked for a description of the proposed fence line. Guest Lacy Lyons said the fence will go where the existing trail is.

- Member Menard asked about the need for bulldozing on property. Guest Lacy Lyons responded that bulldozing is needed because of the pahoehoe substrate and clearing of uluhe.
- Member Jokiel commented that cost and maintenance control is important to the management plan.
- Member Sprecher asked what pig control measures will be taken outside of the fence. Guest Lacy Lyons responded that pig control is conducted once a week outside the fencing area by hired hunters.
- Member Potter felt that the chainsaw rental is very expensive and it may be more cost effective to purchase one. Guest Lacy Lyons explained that items have been stolen from their property, so rental may be more suitable. Member Jokiel commented that it may be better to compartmentalize costs and hire a contractor to do chainsaw work on the property. Guest Lacy Lyons said there is a company sponsor and volunteer once every four months, but they eventually want services done biweekly.
- Member J.B. Friday recommended that the Lyons prioritize controlling yellow raspberry and get proper permits for grading and grubbing.
- Member Walsh expressed concerns regarding the invasiveness of coffee, mountain apple, and guava in that climate and next to native forest. Member J.B. Friday responded that guava may be fine because it is on pasture land.
- Chair Koch commented on the very unique medicinal plant components and use of non-timber forest products in the management plan.
- Member J.B. Friday commented on the difference between commercial vs. cultural use in the FSP guidelines, and reiterated that the FSAC cannot support orchards.
- Member J.B. Friday said that they should check that all herbicides proposed for use are labeled for use in forests.
- Member Britt asked the Lyons if the subdivision will expand and become more occupied. Guest Lacy Lyons responded that the area is becoming increasingly occupied, and that she wants to administer ROD outreach for their neighbors.
- Member Sprecher requested more detail on potential food crop trees.

Motion to approve the plan. Moved by Member Britt; seconded by Member Sprecher.

Approve: Britt, Sprecher, Hendrickson, Menard, Jokiel, Blumenstein, Walsh, Potter, Constantinides; Oppose: none; Abstain: J.B. Friday and Koch.

Motion Passed.

4. Forest Stewardship Plan Prioritization Matrix

- Staff Chee explained changes made to the prioritization matrix and that they are asking the FSAC for their review and approval. She reminded the FSAC that all plans to this point were not written with matrix in mind. The scoring range has been reduced from 1-10 to 1-5 with more detailed scoring guidelines. Staff Chee continued that guidance for economic impact was rewritten and landscape management guidelines will have more examples. Threat mitigation, public benefits, and adjusted weighting for most sections were also added.
- Member Hendrickson commented that he likes the changes but recommended a few categories be prescored by staff, including Priority Watershed and FSP priority areas. He recommended the breakdown be feasible and sustainable at 40%, cost effectiveness at 20%, and threat

management and sustainability combined at 10%.

- Member Hendrickson also recommended that public benefit and community outreach to be combined into one category at 10% and omit the category of underserved area. He also commented that cost effectiveness should be discussed further as a group.
- Member Jokiel suggested that the average cost per acre should be included in plans as well.
- Member Britt commented that there should be more transparency of acreage of managed land versus total property size.
- Member Blumenstein inquired about the current funding situation and if there were examples of objectives for scoring. Member Rubenstein responded that at the end of the fiscal year, funding numbers will be available.
- Member Jokiel was concerned that conservation is prioritized over commercial forestry in the matrix. Member J.B. Friday responded that tree farms score high in the economic section but low in biodiversity/environment. He continued that it may be viable to check matrix again to fill the gap in commercial forestry.
- Guest Nanbara commented that it may cause an issue of applicants trying to cover all of the matrix points.
- Member Menard suggested that there should be two tracks of biodiversity and commercial for the matrix.
- Member J.B. Friday asked about the percent of economic productivity in the matrix. He suggested that staff run 3 economic based projects and 3 conservation to see how they rank.
- Chair Koch commented that some items could be eliminated or combined to make a more focused matrix. Member Rubenstein responded that the categories are aligned with the FSP statutes. She also emphasized that this matrix is a tool, and is needed to be transparent to landowners about what we are looking for. She continued that the matrix will be used in July of 2020.
- Member Menard commented that there is a need to add a better definition of priority watershed along with maps.
- Member Rubenstein said that the matrix is a complex topic, but we can have a tentative draft that can be revised. She proposed to practice scoring with two plans using the draft matrix.
- Member Constantinides commented that he likes the idea of a supplemental document as a guiding tool.

The FSAC decided to not vote on this item at this time.

5. Forest Stewardship Priority Lands

- Member Tanya discussed the background of priority lands for FSP. A spatial layer of priority lands must be provided to the US Forest Service. FSP is also in need of internal priority areas to focus program efforts. Staff Chee presented maps that show the existing priority areas, and other data layers to help with discussion.
- Member J.B. Friday asked what percent of land is private versus public. Member Sprecher said approximately 58% of the state is in private land.
- Staff Rubenstein commented that the priority lands can be refined to specific areas.
- Member Hendrickson commented that we should distinguish between eligible versus strategic areas.

- Staff K. Friday explained that for Hawai'i, "wildlife" could include native plants, threatened and endangered species, and economics.
- Member Britt suggested adding the names of communities and major roads to the maps.
- Member Hendrickson suggested creating criteria and picking minimum rainfall and maximum elevation.
- Member Sprecher recommended potentially using the same priority criteria that was used to develop the priority areas in the Assessment of Need.

6. Report from Permitted Interaction Group (PIG) on Agroforestry for FSP Program

- Member J.B. Friday summarized the report from the Agroforestry PIG. He explained that requirements for diversity were included to avoid orchards. The PIG also discussed other types of agroforestry systems that could be allowed under the program. Staff Rubenstein added that the intent was to keep the agroforestry guidelines more general and flexible.

Motion by Member Hendrickson to approve and accept the agroforestry criteria; seconded by Member Britt.

Continued discussion:

- Member Blumenstein asked for clarification on the coffee that was noted in the Lyons management plan. Staff Rubenstein explained that the coffee has already been planted, and they will just need to keep an eye on it to ensure it does not spread. Member J.B. Friday added that FSP would not provide cost-share for coffee, but would cost-share overstory trees for a coffee farmer who wants to move to an agroforestry system and provide shade for their coffee trees.
- This information will be incorporated as agroforestry guidelines in the FSP handbook.

Approve: Britt, Sprecher, Hendrickson, Menard, Jokiel, Blumenstein, Potter, Constantinides, J.B. Friday and Koch; Oppose: none; Abstain: Walsh.

Motion Passed.

7. FSAC New Member

- Staff Chee reminded the FSAC what organizations and areas of expertise should be on the FSAC. Staff Rubenstein added that staff are working to stagger the terms of existing members.
- Member Constantinides is officially resigning from the FSAC, so the FSAC is considering one application for the open spot. Member Constantinides provided background information on the applicant, Jennifer Higashino, and highly recommended her be voted on to the committee.

Motion to accept the applicant, Jennifer Higashino, to the FSAC by Member Britt; seconded by Member Blumenstein.

Approve: Britt, Sprecher, Hendrickson, Menard, Jokiel, Blumenstein, Walsh, Potter, Constantinides, J.B. Friday and Koch. Oppose: none; Abstain: none

8. FSAC New Chair and Chair-Elect

- Member Britt is currently the Chair-elect and automatically becomes the next Chair.

Motion to nominate J.B. Friday for position of Chair Elect by Member Jokiel; seconded by Member Britt.

Approve: Britt, Sprecher, Hendrickson, Menard, Jokiel, Blumenstein, Walsh, Potter,

Constantinides, Koch, J.B. Friday. Oppose: none; Abstain: none.

Motion Passed.

Forest Legacy Program (FLP)

9. Ongoing Forest Legacy Projects Update

FY17 Helemano, Waialua, Honolulu County

- The Helemano celebration and community event will occur on February 29th. Consultants are working on phase 1 of the management plan which will include community visioning and stake-holder input.

FY17 Ho‘omau, South Kona, Hawai‘i County

- Member Hendrickson noted that he will receive a draft easement by the week of March 2nd.

FY18 Haloa ‘Aina, South Kona, Hawai‘i County

- An additional 1.5 million will be awarded from the second FLP proposal for a total of \$3 million. Staff Rubenstein noted that this project is rated number 2 by the County of Hawai'i's Public Access, Open Space, and Natural Resources Preservation (PONC).

FY18 Kamehamenui Forest, Kula, Maui County

- Staff Rubenstein said DOFAW is working to fix complications from a flawed 2002 survey.

Waimea Native Forest, Ko‘olauloa District, Honolulu

- Waimea Native Forest is located above the Waimea Valley FSP project. The acquisition closed in December and will become part of the State Forest Reserve System.

FY21 Submitted Projects (Na Wai Eha, Hawai‘i Koa Forest, Kealakekua Inholding)

- Staff Rubenstein noted that the Hawai‘i Koa forest is close to receiving full funding.
- Member Britt commented that the Amy Greenwell Ethnobotanical Garden reopens February 29th and is the first community forest in the Pacific Islands.

10. 2020 Legislative Proposals Affecting Forest Management

- Member Sprecher reported that the Forest Stewardship bill will likely not be considered, however, language may be inserted in other tree planting bills. She continued that there are a few tree planting bills such as the bill proposing to plant 1 million trees. FSP is mentioned in that bill as one of the programs that can help achieve that goal. It would also benefit Kaulunani Forestry Program.
- Staff Rubenstein explained that state leased lands are allowed to participate in FSP. The Forest Stewardship bill attempts to make that language clearer in the statute.
- Member Sprecher said that are bills related to climate change mitigation through tree planting, such as a bill that offsets state employee travel through tree planting.
- In addition, the Forest Reserve statutes bill was resurrected. This bill updates fines for timber trespass and harvesting without a permit and allows for issuance of a ticket penalty instead of court.
- Regarding the million tree bill, Member Constantinides commented that it might be worth looking into if there is a mechanism that allows for an expedited procurement process to work with contractors.
- Member Sprecher lead the discussion for the Agriculture Land bills related to Act 90 of

2003 pertaining to land transfer from the Department of Land and Natural Resources (DLNR) to Department of Agriculture (DOA). This regards potential access sites to Forest Reserves and pasture land with native forest features. One bill is a force transfer of remaining DLNR land to DOA, to which DLNR is opposed. DOA has additional legislative authority that the DLNR does not have, such as limited solicitations, direct negotiation, and longer term leases.

- Member J.B. Friday commented that the strategic response plan for ROD is doing well.

11. Announcements and Travel.

- The next potential meeting dates discussed were May 15th and September 18th, 2020.

Motion to ajourn the meeting by Member Britt; seconded by Member Menard.

Approve: Britt, Sprecher, Hendrickson, Menard, Jokiel, Blumenstein, Walsh, Potter, Constantinides, J.B. Friday and Koch. Oppose: none; Abstain: none.

Motion Passed.

12. Adjournment

- The meeting adjourned at 2:48 p.m.