

Forest Stewardship Advisory Committee Meeting Minutes

In Person and Virtual Meeting (Hybrid)

1151 Punchbowl St., Room 325

Honolulu, HI 96813

December 12, 2023

Present: Malia West (Chair), J.B. Friday, Kalena Blakemore, Bart Potter, Kirk Derasin, Scott Fisher, Aileen Yeh, Natalie Kurashima, Timothy Flynn, Jordan Jokiel, Cheri Mardon, Jennifer Grimm (Ex-Officio)

Staff: Tanya Rubenstein, Marissa Zhang, Brittany Lawton, Katie Friday (U.S. Forest Service)

Guests: Greg Hendrickson (Kealakekua Mountain Reserve (KMR)), Keliikanoe Mahi (KMR- Hiki Ola), Daniel Bowman (Natural Resource and Conservation Service (NRCS)), Michael Constantinides (NRCS), Toni Bissen (Pū‘ā Foundation), Eric Kaponu (Pū‘ā Foundation), Irene Sprecher (Forest Solutions, Inc.), Aviva Gottesman (Forest Solutions, Inc.)

1. Call to order

- The meeting was called to order at 9:07 am.

2. Review and approval of August 14, 2023, meeting minutes

- The Forest Stewardship Advisory Committee (FSAC) reviewed the meeting minutes from the August 14, 2023, meeting.

Motion to approve the August 14, 2023, FSAC meeting minutes. Moved by Member Fisher; seconded by Member Blakemore.

Approve: Flynn, Kurashima, Derasin, West, Fisher, Blakemore, Grimm, Friday, Jokiel, Potter: Oppose: none; Abstain: Yeh, Mardon.

Motion passed.

3. Forest Stewardship Program (FSP) Management Plans - Committee will vote to recommend approval of submitted management plans.

3.1 Kealakekua Mountain Reserve (KMR) Multi-Resource Management Plan and Agroforestry Management Plan, South Kona District, Hawaii

- Staff Rubenstein introduced the multi-resource management plan which is a requirement for the Forest Legacy Program (FLP). A conservation easement (CE) held by the state was put on Kealakekua Ranch in 2011 for 9,018 acres. The FLP requires an update to the forest management plan every 10 years, which is to be approved by the CE holder (Division of Forestry and Wildlife (DOFAW)). Staff Rubenstein clarified that the plan would need to be reviewed and recommended for approval by the FSAC and would be approved by DOFAW. As of 2018, Doterra became the new landowner, however they are still operating under the original plan done in 2013. Staff Rubenstein added that the CE does allow for timber harvests with certain restrictions. Under Doterra's ownership, the property has been more intensively managed, with major investments in fencing and ungulate control/removal, and tree planting.

- Guest Hendrickson gave an overview of KMR's goals, values, and mission outlined in the management plan. He also outlined the first pillar of conservation goals as developing the marketing of ecosystem services not only for Doterra, but other organizations with the same goal

(i.e. carbon sequestration and other revenues associated with conservation). The plan also addresses threats such as wildfires, pests, and invasive plants on the property and surrounding land. The second pillar is the restoration of the former pastureland on the property to increase forest extent. The structure of restoration is around building a forested ecosystem with appropriate age classes rather than a plantation. The third pillar is facilitating self-sustaining forest health. Guest Hendrickson also mentioned that community engagement and access to the property are an important factor, which is implemented through KMR's non-profit Hiki Ola.

- Guest Sprecher gave a brief overview of the management and agroforestry plans. She outlined the primary values of the conservation easement on KMR as 1) forest ecosystems, 2) forest resources and products, 3) open space, and 4) recreation, research, and education. Updates to the 2013 management plan include significant restoration investments, more information on wildlife surveys, inventory information, community engagement opportunities, and new forest management and harvest provisions. Guest Sprecher mentioned that since Doterra's ownership in 2018, there have been significant investments in reforestation, ungulate removal, fencing, transition from livestock management across the property, reinvigoration of the on-site nursery that produces plants for the project and community, and responsible use of forest products as a means to support restoration activities. There have also been many research projects on the property regarding sandalwood by PhD and high school students. Guest Sprecher also reported that with the partnership with Hiki Ola, 1,922 community members were hosted on the property between 2022 and 2023. Significant revisions have been made to the management plan related to silvicultural prescriptions and forest product resources, which are based on the most recent forest inventory from 2018 (focusing mostly on koa and sandalwood resources). An additional section on the management of koa and sandalwood is based on current forest inventory information and updated knowledge on koa/sandalwood growth.

- Member Jokiel asked what koa planting density KMR was using for forest products plantings. Guest Sprecher shared they have been planting 200-250 trees per acre for koa in more open areas and 120 trees per acre in existing forest. Guest Hendrickson shared that 300 stems per acre are the highest planting density, with 50% of those plants being koa. Member Jokiel asked what the projected total harvest of koa per acre was as many landowners are interested in similar forest product production. Guest Hendrickson shared that the conservation easement caps the potential harvests. KMR projects that once the forest is fully stocked, they anticipate harvesting close to the limits set forth by the restrictions of the conservation easement.

- Member Potter asked where the harvested koa was going since he hadn't seen it on the local market and if the sandalwood was only being processed into oil. Guest Hendrickson shared that the koa logs were being sold into the local market on Hawaii Island, to mainland buyers, and Paniolo Tonewoods. They also have inventory scaled, graded, and decked logs stored on-site to sell into the market through KMR's distribution channels through Doterra. The sandalwood that has been harvested has been distilled into essential oil.

- Member Potter asked if the cubic foot of harvested sandalwood for essential oil distillation is referring to the aromatic hardwood of the tree or the total volume of wood. Guest Hendrickson shared that the numbers in the management plan relate to the total raw volume of wood. Member Potter questioned whether the projected time from planting to harvest of sandalwood and koa would be sustainable over time. Guest Sprecher shared that there is data from other Pacific regions on sandalwood production and that the timelines in the plan reflect that research. There will also be a lot of monitoring to fine-tune the timing for sustainable harvest. Guest Hendrickson added that they don't expect to harvest a planted tree within the next 15-20 years and that sandalwood and koa do not support all of the operating costs of the property. The project does not anticipate any financial contributions to operations for at least 20 years. Guest Hendrickson also mentioned that the agroforestry on the property may be a potential income stream.

- Member Grimm asked how the project plans to balance proprietary research information and interest from the community. Guest Hendrickson shared that the research has been made available to the public, but there will be sensitivity around the economics and proprietary processes related to distillation techniques and approaches. However, research on the forest and growing techniques for plant species used in restoration will be made available to the public.
- Member Friday asked why KMR wasn't getting a safe harbor agreement now before they plant trees and if it would be harder to get one in the future if endangered species begin inhabiting the property. Guest Hendrickson answered that they did not want to delay the reforestation and that they were still learning about the property. The risk is low since trees are young and are not providing habitat yet.
- Member Friday asked about the recreational opportunities on the property and if Hiki Ola would be facilitating that access or with ecotour operators. Guest Hendrickson answered that they will likely not lease out to ecotour operators. Hiki Ola provides tours and educational opportunities while KMR provides access and opportunities to Doterra customers. People interested in going to the property have been granted access and guided by KMR staff. There are still hunting concessions that work with KMR on the property.
- Member Friday asked if the agroforestry is being viewed as a garden/demonstration site or for economic production. Guest Hendrickson answered that it was a blend. Hiki Ola leases land and will use some sites as a demonstration site for outreach to connect community members with NRCS and its programs. The other agroforestry sites will be more for production and commercial use.
- Member Kurashima asked about how KMR determines priorities for sandalwood harvest. Guest Sprecher answered that damaged trees with rot and bark stripping were not ideal for harvest. The plan's goal is to harvest trees before they get to that undesirable point. Sprecher added that the diameter of the tree may not be a good measurement or indicator of oil quality or quantity.
- Member Kurashima asked how KMR plans to handle the ecological balance if larger and older trees are better for essential oil. Guest Sprecher answered that they are still planning on leaving a substantial quantity of older trees on the property for future study and as a seed resource. Guest Hendrickson added that the conservation easement has significant restrictions on harvests.
- Member Kurashima asked about the protocols around endangered species not being impacted by harvests. Guest Sprecher answered that while there are no endangered species documented on the property, botanical reviews and surveys will be done before harvests. The forest bird surveys on the property will be used to inform future prescriptions on the property if there are planned harvests around forest bird populations. Sprecher added that harvest periods will not be conducted during nesting seasons.

Motion to recommend approval of the KMR Multi-Resource Management Plan and Agroforestry Management Plan with incorporated comments from the committee. Moved by Member Jokiel; Seconded by Member Fisher.

Approve: West, Potter, Kurashima, Fisher, Blakemore, Yeh, Mardon, Flynn, Grimm, Jokiel; Oppose: none; Abstain: Derasin, Friday.

Motion passed.

4. Forest Stewardship Program (FSP) Project Proposals - Committee will be reviewing and voting to recommend approval of submitted project proposals.

4.1 Punahoa Heritage Forest (Pū'ā Foundation), South Hilo District, Hawaii

- Staff Rubenstein introduced the 2,000-acre project in Hilo on Hawaii Island. Two parcels on the

property are part of an initiative called the Punahoa Heritage Forest, which is made up of the United Church of Christ, The Nature Conservancy, and Pū‘ā Foundation. On a site visit to two sections of the property, staff were surprised at the quality of the forest given the low elevation. There is a spring on the property that feeds into Hilo with a nice ohia and koa canopied forest. There were observed disturbances, especially in the kipuka with signs of feral pigs and rapid ohia death (ROD). Rubenstein added that the challenge for the plan will be meshing the organization’s overall plan for the 2,000 acres with intensive management of the 10-acre stewardship site.

- Guest Bissen gave background on the history of the land and the Pū‘ā Foundation, which was created as an apology and reconciliation initiative by the United Church of Christ for their complicity in the illegal overthrow of the Hawaiian Kingdom. The Pū‘ā Foundation is a non-profit out of the church that focuses on “trauma to transformation” and works with incarcerated women, who are overrepresented by Native Hawaiians. To align with the vision of the foundation, there is an initiative to address the trauma that is happening to ohia in regard to ROD.

- Member Yeh asked about the mulching component of the proposal and what methods would be used to produce mulch. Yeh also asked if any archaeological surveys have been done and what the land was historically used for. Guest Bissen said they are not certain if mulching will be necessary for the site and may not be included in the management plan. The land was given to the church by Kamehameha III for the mission in 1820, and remained forested and was not used for agriculture. The Pū‘ā Foundation plans to work with organizations such as Noho Papa to do a thorough review of the property.

- Member Yeh asked where the project would be sourcing its seed and plants since it was not planning on using commercial nurseries. Guest Bissen shared that they plan to look at and develop seed banking and sourcing on the property since there is an abundance of propagule resources present.

- Member West commented on the pruning component of the proposal since that practice is associated with timber production. She recommended only using practices that apply to the goals and objectives of the management plan.

- Member West commented that the area is large and that while the management plan may encompass a multitude of practices, not all of those actions may be supported by the Forest Stewardship Program and its funding partners. West asked about what the expectation was for the level of detail in the management plan and what the committee would be supporting. Guest Bissen replied that the management plan would mention an overview of the whole 2,000 acres but they plan to start intensive management on 10 acres as an example for the rest of the property.

- Member Flynn asked about how the planting list would be generated, if passive restoration would be a tactic, and if non-native plants would be included as “la‘au la pa‘au” species. Guest Bissen answered that UH students did a report of species in the area and listed plants in the proposal came from that report. The project does not intend to introduce species that are not already found there or historically known from the area.

- Member Friday commented that chipping trees on site for mulch has a different impact than bringing in mulch from other sites in terms of introducing incipient pests and plants.

- Member Friday commented on the use of heavy machinery on the property and the potential negative impacts of ROD, but also the balance of needing machinery for large-scale restoration projects. Member Friday also commented on the correlation between feral ungulates on ROD and the use of fencing.

- Staff Friday reminded committee members that this project is in the proposal phase and that details of the management practices will be discussed in the management plan. Staff Friday also encouraged the Pū‘ā Foundation to address the full context of the property even if the management

plan focuses on 10 acres.

- Member Flynn asked about the proposed windbreak practice, if it was necessary, and what species are being considered. Guest Bissen commented that the windbreak practice was preliminary and may not be incorporated into the management plan.

- Member Potter asked about the strawberry guava on the property and interest in its use. Guest Bissen commented that there is community interest in guava wood for lomi and hula instruments. Staff Rubenstein added that the Tectococcus biocontrol is present on the property.

Motion to recommend for approval of the Punahoa Heritage Forest Proposal with DOFAW finalization of cost-share with applicant for management plan development. Moved by Member Blakemore; Seconded by Member Flynn.

Approve: West, Flynn, Yeh, Fisher, Kurashima, Blakemore, Grimm, Jokiel, Mardon, Potter; Oppose: none; Abstain: Friday, Derasin.

Motion passed.

5. Forest Stewardship Advisory Committee (FSAC) - Committee will vote to recommend approval of applicants to be on the FSAC.

5.1 Daniel Bowman

- Guest Bowman introduced himself and his relevant work experience that aligns with the FSP. Bowman shared that he routinely reviews, provides guidance to landowners, and helps with the implementation of management plans similar to those presented to the FSAC. Bowman commented that because NRCS works closely with a lot of approved FSP projects, it is important that an NRCS representative have a seat at the table with the FSP process.

- Member West commented that an NRCS representative is a priority to have on the committee and the Guest Bowman would fulfill that empty staff.

Motion to recommend for approval of Daniel Bowman to the Forest Stewardship Advisory Committee. Moved by Flynn. Seconded by Blakemore.

Approve: Flynn, West, Yeh, Fisher, Friday, Kurashima, Blakemore, Derasin, Grimm, Jokiel, Potter, Mardon; Oppose: none; Abstain: none.

Motion passed.

- Staff Zhang reminded Members West and Blakemore that their membership will expire after the December 12, 2023 meeting and that they would need to reapply for a second term before the next meeting. Zhang also reminded Members Potter and Derasin that their memberships will expire at the end of 2024. Zhang also informed that Member Friday's term ends at the end of the meeting, and he will need to wait one year before being eligible to apply for FSAC membership.

6. Forest Legacy Program and Projects Update – Committee will be provided with status updates on the following ongoing land acquisition projects.

- FY17 Haloa Aina
- FY18 Kamehamenui Forest, Kula, Maui

- FY21 Na Wai Eha, Wailuku, Maui
- FY22 Hana Highway Rainforest, Hana, Maui
- FY23 Kaneohe Pali, Kaneohe, Oahu
- FY24 Maunawili Forest, Kailua, Oahu
- FY25 South Kona Forest, Hawaii

- Due to limited time, the agenda item was deferred to next meeting

7. Announcements.

7.1 New Funding - Natural Resource Conservation Service Regional Partnership Conservation Program Alternative Funding Arrangement Request for Proposals

- Staff Rubenstein announced that NRCS has put out a request for proposals for new funding, which would be a good opportunity for Forest Stewardship projects with approved management plans that have not yet received state funds.

7.2 Discuss upcoming Forest Stewardship Advisory Committee meeting dates.

- Staff Rubenstein informed the committee that the next meeting will tentatively be in-person and in April or May. Rubenstein also informed committee members that DOFAW staff will communicate and coordinate the next meeting in the following months.

Motion to adjourn the meeting. Moved by Member Potter; seconded by Member Flynn.

Approve: West, Friday, Kurashima, Fisher, Potter, Derasin, Blakemore, Grimm, Yeh, Mardon, Jokiel; Oppose: none; Abstain: none.

Motion passed.

8. Adjournment

- The meeting was adjourned at 11:34 am.