State Greenhouse Gas Sequestration Task Force

**DRAFT MINUTES**

Wednesday, June 15, 2022

1:30 PM

Zoom Virtual Meeting Room

OPSD Conference Room

State Office Tower, Floor 6

235 S. Beretania St.

Honolulu, HI 96813

**ATTENDANCE**

**Members Present (11):**

1. Mary Alice Evans, Director, Office of Planning and Sustainable Development as Chair of the Greenhouse Gas Sequestration Task Force
2. Earl Yamamoto, Department of Agriculture on behalf of the Chair, Board of Agriculture
3. Christian Giardina, U.S. Forest Service on behalf of the Chair, Board of Land and Natural Resources
4. Pradip Pant, Statewide Transportation Planning Office on behalf of the Director, Department of Transportation
5. Michael Madsen, DOH Clean Air Branch on behalf of Deputy Director, Department of Health, Environmental Health Administration
6. Danielle Bass, State Sustainability Coordinator
7. David Forman, Director, Environmental Law Program, University of Hawaiʻi at Mānoa, WSR School of Law
8. Emma Yuen on behalf of Administrator, Division of Forestry and Wildlife, DLNR
9. Justine Nihipali as a Member of the Hawaiʻi Climate Change Mitigation and Adaptation Commission
10. Riley Saito as the Mayor’s Representative, County of Hawaiʻi
11. Alan Gottlieb of the Hawaiʻi Cattlemen’s Council as the Legislative Representative, Agriculture/Ranching Association

**Members Absent (8):**

1. Vacant, researcher from College of Tropical Agriculture and Human Resources, University of Hawaiʻi at Mānoa
2. Vacant, extension agent from College of Tropical Agriculture and Human Resources, University of Hawaiʻi at Mānoa
3. Benjamin Sullivan as the Mayor’s Representative, City and County of Honolulu
4. Vacant, Mayor’s Representative, County of Kauaʻi
5. Vacant, Mayor’s Representative, County of Maui
6. Melissa Miyashiro of the Blue Planet Foundation as the Legislative Representative, Environmental Non-Profit
7. Ashley Lukens of the Frost Family Foundation as the Legislative Representative, Environmental Non-Profit
8. Bobby Farias of Hawaiʻi Meats as the Legislative Representative, Agriculture/Ranching Association

**Office of Planning and Sustainable Development Staff Present (1):** Brittaney Key, Marine and Coastal Zone Advocacy Council (MACZAC) administrative assistant

**Public Attendees (11):**

Senator Chris Lee, Hawaiʻi State Senate; Corinne Gallardo, Office of Hawaiʻi State Senator Mike Gabbard; Zoe Sims, Office of Hawaiʻi State Representative David Tarnas; Nicole Galase, Hawaiʻi Cattlemen’s Council; Todd Low, State of Hawaiʻi Aquaculture Development Program; Heather McMillen, Kaulunani Urban and Community Forestry Program; Henry Curtis, Life of the Land; Tori Spence McConnell, National Oceanic and Atmospheric Administration (NOAA) Fisheries; Kimberly Willis, Our Children’s Trust; Julie Yunker, Hawaiʻi Gas

**Distributed Material:**

* Greenhouse Gas Sequestration Task Force (GHGSTF) meeting agenda for June 15, 2022
* Draft minutes for May 23, 2022 GHGSTF meeting
* “Accessing an Online Zoom Meeting” (instructions for downloading and using Zoom)

1. **Call to order, public notice, quorum**

Chair Mary Alice Evans, Director of the Office of Planning and Sustainable Development (OPSD), called the meeting to order at 1:46pm (the meeting start was delayed while waiting for a quorum of members to arrive). The Task Force’s June 15, 2022 meeting notice was published on June 3, 2022. At roll call, a quorum of 10 members was present of this 19-member task force.

MACZAC administrative assistant Brittaney Key reminded attendees of Zoom best practices and the reconnection procedure if the meeting connection was interrupted for any reason. A link to instructions for using Zoom is available on the GHGSTF’s website, and the document was distributed via the Zoom chat. Ms. Key also informed those in attendance that they could direct message her or Task Force member Danielle Bass for technical assistance if needed.

The procedure for public comments was announced: Chair Evans would ask Task Force members for questions or comments first, and then discussion would be opened to comment from the public for each agenda item.

1. **Review and approval of May 23, 2022 meeting minutes**

The minutes were approved as circulated.

1. **Discussion and review of Permitted Interaction Group (PIG) reports**

The Agriculture PIG, Aquaculture and Marine Use PIG, and Urban Green Infrastructure PIG presented their reports for receipt at the May 23, 2022 GHGSTF meeting.

Agriculture PIG Report

Chair Evans first opened the floor to discussion and edits of the Agriculture PIG report. GHGSTF member David Forman asked if there was another way to frame agricultural benefits to reflect social benefits (in addition to economic ones), particularly ones that may encourage action for changes realized on a long-term rather than annual timescale. GHGSTF member Earl Yamamoto responded that at this time, it would be better to focus on indicators more readily available and understood as a measure of improvement. Furthermore, the Agriculture PIG specifically included the economic component in its report to balance the focus in HRS §225P-4 on sequestration and soil health with the recognition that agricultural producers also need economically viable operations if they are to implement sequestration practices. However, Member Yamamoto acknowledged Member Forman’s comments as a good direction for future consideration.

GHGSTF member Christian Giardina added that the State’s current inventory approach to GHG emissions has the potential to disincentivize local agriculture and “offshore” emissions by importing food instead to lower local emissions (a concept called “leakage”). Member Giardina recommended for future research looking at the policy incentive consequences of using a Hawaiʻi-based GHG inventory approach to determining when the state has met its Zero Emissions Clean Economy target.

Member Forman suggested that the Task Force consider emulating additional incentive opportunities in agriculture such as the USDA Natural Resource Conservation Service’s financial incentives (<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/climatechange/?cid=nrcseprd1881023>); USDA programs related to climate mitigation and adaptation in agriculture (<https://www.climatehubs.usda.gov/actions-and-resources/programs>); and/or California’s Healthy Soils program (<https://www.cdfa.ca.gov/healthysoils/>). Member Giardina agreed with Member Forman’s suggestions.

Henry Curtis referenced page 1 of the Agriculture PIG report and recommended removing the word “equitable” due to lack of evidence that disadvantaged applicants would have equitable access to the proposed cash incentive program. Chair Evans asked if the report were to address equity issues if Mr. Curtis would then find that word choice acceptable. Mr. Curtis agreed with the reservation that the report would need to be specific. Member Giardina thanked Mr. Curtis for his comment and seconded the Chair’s suggestion to develop equity language and mechanisms to address equity in the report rather than removing the term. Member Forman voiced his support for this in the chat.

GHGSTF member Mike Madsen said that the latest statewide emissions inventory includes agricultural emissions and should be included in the report. He also reminded the Task Force of the soil carbon maps from the UH CTAHR baselines and benchmarks project it sponsored.

GHGSTF member Emma Yuen asked what other elements besides the PIG reports would be going into the preliminary report. Chair Evans responded that the requirements are outlined in HRS §225P-4, and Member Bass added that while the PIG reports are intended to populate a significant portion of a draft for the preliminary report for OPSD, OPSD would provide a full draft for the Task Force to vote on before submitting the final version of the preliminary report in December.

GHGSTF member Alan Gottlieb noted a calculation error on page 3 of the Agriculture PIG report and corrected that 3.70 cubic yards would cover 200 square feet of compost at 6” of depth, rather than the provided 1 cubic yard. The final calculated number of $8,712 would thus be $32,234.40 instead. Chair Evans requested for Member Gottlieb and Member Yamamoto to discuss and revise these calculations offline. Member Yamamoto added that it would be good to revise the Agriculture PIG report to include Mr. Curtis and Member Giardina’’s suggestions regarding equity as well for the Task Force to vote on in August.

Chair Evans asked if there was a motion to adopt the Agriculture PIG report in its draft form to inform OPSD in its drafting of the preliminary report to the Legislature. Member Giardina asked to clarify if voting to approve the PIG report meant incorporating it as-is into the preliminary report, or if a vote to approve would recognize the report as being in the right direction but still in need of further edits to reach final form. Chair Evans answered that her expectation for the PIG reports was only as one step to final form rather than the finished version but clarified that her interpretation would depend on whether the majority of the Task Force agreed with it since the vote was up to the whole. Member Bass asked how deferring the vote would affect the tentative timeline outlined at the March 16, 2022 meeting. Chair Evans answered that the timeline should reflect the Task Force’s ability to arrive at a preliminary report it can support. She proposed OPSD working offline with Members Yamamoto, Giardina, and Gottlieb and Mr. Curtis to plan an interim goal whereby they could submit a revised draft to OPSD to then pass on to the full Task Force.

No further comment or motion regarding the Agriculture PIG report was made by the Task Force, and so the motion is deferred to a future meeting.

Aquaculture and Marine Use PIG Report

Chair Evans opened the floor to comments and edits of the Aquaculture and Marine Use PIG report. Member Forman suggested including an explicit statement in the introduction about the role of aquaculture in helping to meet Hawaiʻi’s food security targets in ways that do not threaten Hawaiʻi’s ecosystem health or biosecurity. He also expressed concerns about the logic of reducing the tax credit, which was proposed in the original report.

Member Giardina commented that some of the PIG report language could be modified to be more solution-oriented. He added that he and Member Forman had shared thoughts regarding language in the preliminary report as a whole, and that it could better incorporate specific, best-available science on the greenhouse gas benefits of proposed activities. He acknowledged that the PIG reports do reference these benefits, but it could be strengthened and made clearer.

Mr. Curtis referred to the table continued on page 7 and suggested that the second row, second column may have meant to say “addition” instead of “additionality.” He further noted in the chat that additionality was not defined in any of the supporting sources for the PIG report, either. Member Giardina thanked Mr. Curtis in the chat and agreed that the term should be added to the report’s glossary. Member Bass added that additionality is defined on page 26 of the *Feasibility and Implications of Establishing a Carbon Offset Program for the State of Hawaiʻi* report (“Carbon Offset Report”). Member Bass also reminded Task Force members that the preliminary report should align with the Carbon Offset Report so the State presents cohesive publications. Chair Evans responded that the Task Force would make sure to note the Carbon Offset Report in its preliminary and final reports.

GHGSTF member Pradip Pant asked if the Task Force will include a budget table similar to that on page 8 of the Aquaculture and Marine Use PIG report for all sectors in the preliminary report. Chair Evans responded that the Task Force would likely need to provide the Legislature with cost estimates in its final report, specifically for any subsidies, grants, or other incentives or programs the Task Force may recommend to support sequestration.

Ms. Key commented in the chat that the November GHGSTF meeting presentation on ocean alkalinity enhancement generated a lot of interest from members and the public. She acknowledged that it could not be included in this PIG report but suggested including a placeholder so it could be addressed in the final 2024 report. Member Giardina responded that they would revisit that chemistry manipulation category of actions.

GHGSTF member Justine Nihipali moved to accept the Aquaculture and Marine Use PIG report with a caveat of edits to respond to Mr. Curtis’s comments on additionality. Member Bass seconded the motion. The vote was unanimous in favor of approving the report.

Urban Green Infrastructure PIG Report

Chair Evans opened the floor to comments and edits of the Urban and Green Infrastructure PIG report. Member Bass shared that Daniel Dinnell (Trees for Honolulu’s Future) shared two typographical edits via email to be made to the PIG report.

Senator Chris Lee shared that in other states, one of the largest partners in sequestration efforts is often the state’s transportation department, and yet the Hawaiʻi Department of Transportation (HDOT) is not referenced in this PIG report. Member Pant clarified that some approaches used by HDOT are included in the PIG report, but acknowledged that more information could be incorporated. Member Forman said in the chat that there is a reference to HDOT on page 11 under “Carbon Dioxide Mineralization in Concrete,” but he appreciated Member Pant's willingness to incorporate additional language responsive to Senator Lee's suggestion.

Member Madsen noted that the PIG report said data was unavailable for the sequestration capacity of urban trees, but there is information on page 78 in the latest statewide GHG inventory. Chair Evans asked if increasing the urban tree canopy would then increase the amount of metric tons of greenhouse gases sequestered, which Member Madsen affirmed. Member Bass asked Member Madsen to please send her the most recent inventory report and the citations he’d like to include so she could offer them as amendments to the Urban Green Infrastructure PIG report at the next GHGSTF meeting.

Member Giardina shared a paper in the chat (<https://www.frontiersin.org/articles/10.3389/fevo.2021.603757/full>) that performed a cost-benefit analysis of tree planting. Member Giardina said the Urban Green Infrastructure PIG report could have engaged the statewide climate geographic diversity more directly. He also shared that a development in urban forestry is the importance of screening trees for imported pests or invasive species and would encourage this to be addressed in the urban forestry section of the preliminary report. Since the majority of urban trees tend to be non-native species, he would also like if the report could address opportunities for synergy between conservation and sequestration benefits in urban forestry. Urban treescapes can also influence fire risk or hazards, so fire might be good to include in analyses as well. Member Bass asked Member Giardina to send her his list of recommendations and citations for inclusion in the PIG report amendments.

Member Bass asked Senator Lee if there were any updates to legislation regarding changes to Capital Improvement Project (CIP) financing for green infrastructure so the PIG report could include policy recommendations as appropriate. Senator Lee said the current law is unclear whether CIP funds can be used for green infrastructure projects due to differing definitions, but an effort to include defining language in the law was unsuccessful in the 2022 legislative session. He expressed appreciation for any assistance the GHGSTF could provide in giving focus to these areas, and Member Bass agreed she’d like to include this in the PIG report as a policy recommendation. Member Yuen remarked that DLNR-DOFAW has tried unsuccessfully to use CIP funding in the past to plant trees and added her support to changes to CIP funding laws.

Ms. Key reminded Task Force members to ensure the final version of the preliminary report was cohesive in its citation styles and units of measurements.

Ms. Key also recalled from previous presentations from urban tree canopy presenters in 2021 the philosophy of “right tree, right place” and recommended addressing this concept directly in the preliminary and final report due to the complexity of deciding on tree use for urban green infrastructure. She said that it was the inclusion of palm trees on page 7 in the PIG report that sparked this comment. While she could understand the food security benefit of coconut palms specifically, she also understood palms overall to be poor sequesters of carbon and was therefore surprised to see all palms included as recommended species in the report without a caveat of a cost-benefit analysis. Member Bass explained that palms were included for two reasons. First, because palm trees are part of Hawaiʻi’s marketing and iconography, and second, because they serve as an example to demonstrate the importance of avoiding tree castration, a concept that PIG member Heather McMillen wanted to emphasize.

Member Giardina asked what the process would be going forward to provide further comments and edits for the revision process. Chair Evans said reminder emails would be sent out the members that had expressed interest in edits to the reports. Member Bass reminded Members Giardina and Madsen to please send her their list of edits for the Urban Green Infrastructure PIG report.

1. **Announcements**
   1. **Next GHGSTF meeting**

The next GHGSTF meeting is scheduled for August 17, 2022 at 1:30pm. The location is to be determined and will be announced closer to the date.

Senator Lee shared that Senate Resolution 130 was passed requesting HDOT to convene a task force regarding urban green infrastructure and green transportation. He thanked the GHGSTF for its efforts in this area already.

Members thanked Ms. Key for her efforts supporting the GHGSTF as this was her last meeting before departing for graduate studies in Iceland.

1. **Adjournment**

The meeting adjourned at 3:01pm.