

State Greenhouse Gas Sequestration Task Force

MINUTES

Wednesday, March 16, 2022

1:30 PM

Zoom Virtual Meeting Room

ATTENDANCE

Members Present (12):

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 Hawai'i at Mānoa, WSR School of Law
8. Leah Laramee on behalf of Administrator, Division of Forestry and Wildlife, DLNR
9. Justine Nihipali as a Member of the Hawai'i Climate Change Mitigation and Adaptation Commission
10. Riley Saito as the Mayor's Representative, County of Hawai'i
11. Melissa Miyashiro of the Blue Planet Foundation as the Legislative Representative, Environmental Non-Profit
12. Alan Gottlieb of the Hawai'i Cattlemen's Council as the Legislative Representative, Agriculture/Ranching Association

Members Absent (7):

1. Vacant, researcher from College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa
2. Jonathan Deenik as extension agent from College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa
3. Benjamin Sullivan as the Mayor's Representative, City and County of Honolulu
4. Vacant, Mayor's Representative, County of Kaua'i
5. Vacant, Mayor's Representative, County of Maui
6. Ashley Lukens of the Frost Family Foundation as the Legislative Representative, Environmental Non-Profit
7. Bobby Farias of Hawai'i 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 (12):

Corinne Gallardo, Office of Hawai'i State Senator Mike Gabbard; Zoe Sims, Office of Hawai'i State Representative David Tarnas; Henry Curtis, Life of the Land; Mark Fox, National Oceanic and Atmospheric Administration (NOAA) Fisheries; Nicole Galase, Hawai'i Cattlemen's Council; An Nguyen, member of the public; Ernest Rogers, Hawai'i Green Infrastructure Authority; Neil Sims, Ocean Era, Inc.; William "Bill" Steiner, Hawai'i Oil Seed Producers, LLC; Kimberly Willis, Our Children's Trust; Julie Yunker, Hawai'i Gas; Kiera, member of the public (last name not identified)

Distributed Material:

- Greenhouse Gas Sequestration Task Force (GHGSTF) meeting agenda for March 16, 2022
 - Draft minutes for January 12, 2022 GHGSTF meeting
 - "Accessing an Online Zoom Meeting" (instructions for downloading and using Zoom)
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I. 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 1:35pm. The Task Force’s March 16, 2022 meeting notice was published on March 9, 2022. A quorum of 12 members was present of this 19-member task force.

Chair Evans completed GHGSTF member roll call and members of the public were invited to introduce themselves in the chat. Chair Evans also acknowledged Task Force member Leah Laramee in her final meeting as the GHGSTF representative for the Department of Land and Natural Resources—Division of Forestry and Wildlife (DLNR-DOFAW) and welcomed Emma Yuen (not present) as the new incoming DLNR-DOFAW representative.

MACZAC administrative assistant Brittaney Key reminded attendees of Zoom best practices and the recession 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 Bass on Zoom if technical assistance was 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.

II. Review and approval of January 12, 2022 meeting minutes

The minutes were approved as circulated.

III. Preparing the 2023 GHGSTF preliminary report to the State Legislature pursuant to Hawai‘i Revised Statutes [HRS] §225P-4(e)(1)

A. Discussion of and decision on a timeline to draft and review the preliminary report

Chair Evans explained the Sunshine Law’s 3-meeting requirement for Permitted Interaction Groups (PIGs) (one meeting to form the PIG, one meeting to receive the PIG’s report, and one meeting to take action based on the PIG’s report) and reviewed the proposed revised meeting timeline for the year:

- March 16, 2022 at 1:30pm: PIG formations for the GHGSTF
- May 18, 2022 at 1:30pm: Review of PIG reports
- June 15, 2022 at 1:30pm: Discussion of PIG reports
- August 17, 2022 at 1:30pm: Discussion and review of draft preliminary report
- November 16, 2022 at 1:30pm: Approval of final version of preliminary report
- No later than December 29, 2022: Submission of preliminary report

No comments or questions were raised regarding the timeline. Task Force member Bass moved to accept the revised meeting schedule. Task Force member David Forman seconded the motion. Task Force member Justine Nihipali noted for the record that she had conflicts with the May and November meeting dates. Task Force member Bass also asked the Chair if the timeline they were adopting would be flexible and if the dates could

change in the future. Chair Evans confirmed that the meeting dates could be modified in the future if needed. The revised timeline was accepted unanimously with no objections or reservations, with the note that dates could change if future events required flexibility.

B. Discussion and formation of proposed Permitted Interaction Groups pursuant to HRS §92-2.5(b) to begin outlining preliminary report sections

The following Permitted Interaction Groups (PIGs) were proposed on the meeting agenda: the Agriculture PIG, Aquaculture PIG, Marine PIG, and Urban Green Infrastructure PIG. However, Chair Evans received a request from the manager of the Hawai'i Department of Agriculture Aquaculture Development Program, Todd Low, to merge the Aquaculture PIG and Marine Use PIG into a single PIG. Chair Evans also noted that while an invitation had been extended to Professor Christopher Sabine from the University of Hawai'i Department of Oceanography to join the Marine Use PIG, he had to decline due to pre-existing commitments. While he would recommend a colleague if he found one who were interested, the reduced number of members on the Marine Use PIG without a Technical Expert such as Prof. Sabine led Chair Evans to consider Mr. Low's recommendation of merging the Aquaculture and Marine Use PIGs. Chair Evans asked Task Force members to keep Mr. Low's request in mind as the PIG proposals were read and during discussion.

Ms. Key read the following proposed scopes for each PIG:

Agriculture Permitted Interaction Group

- a. **Proposed scope:** To identify and make recommendations on types of agricultural practices, agricultural policies, public land policies, and on-farm/on-ranch management practices that provide greenhouse gas sequestration, build healthy soils, and tangible economic benefits to agricultural operations in Hawai'i. To identify and make recommendations to establish short-term and long-term greenhouse gas sequestration benchmarks for agricultural activities to assist the state in meeting the Zero Emission Clean Economy Target by 2045, established by HRS §225P-5, and identify the appropriate criteria to measure baseline levels and increases in greenhouse gas sequestration, improvements in soil health, and product yield. To identify and make recommendations to increase the generation and use of compost within agricultural areas, practices, and operations. To identify and make recommendations on financial incentives and funding mechanisms to encourage greenhouse gas sequestration for the agricultural sector in Hawai'i; and other relevant agricultural measures for the preliminary report as indicated in HRS Sections 225P-4(a), 225P-4(b), and 225P-4(e)(1).
- b. **Proposed membership:** GHGSTF Member Jonathan Deenik, GHGSTF Member Earl Yamamoto, and Technical Expert Nicole Galase
- c. To coordinate and consult with any other permitted interaction groups, as needed within the scope of its task and so long as there is not a quorum of the members of the Greenhouse Gas Sequestration Task Force; and
- d. With a deadline and deliverable date on May 11, 2022.

Aquaculture Permitted Interaction Group:

- a. **Proposed scope:** To identify and make recommendations on aquacultural practices that would provide greenhouse gas sequestration and tangible economic benefits to aquacultural operations in Hawai'i. To identify and make recommendations on land use and marine use policies and mitigation options that would encourage such aquacultural practices in Hawai'i. To identify appropriate criteria to measure baseline levels and increases in greenhouse gas sequestration, aquacultural product yield, and other key indicators of greenhouse gas sequestration from beneficial aquacultural practices. To identify and make recommendations to establish short- and long-term greenhouse gas sequestration benchmarks for aquacultural activities to assist the state in meeting the Zero Emission Clean Economy Target by 2045, established by HRS §225P-5. To identify and make recommendations on financial incentives and funding mechanisms for aquacultural activities that would promote greenhouse gas sequestration for the aquacultural sector in Hawai'i; and other relevant aquacultural measures for the preliminary report as indicated in HRS Sections 225P-4(a), 225P-4(b), and 225P-4(e)(1).
- b. **Proposed membership:** GHGSTF Member Christian Giardina, GHGSTF Member Ashley Lukens, and Technical Expert Todd Low
- c. To coordinate and consult with any other permitted interaction groups, as needed within the scope of its task and so long as there is not a quorum of the members of the Greenhouse Gas Sequestration Task Force; and
- d. With a deadline and deliverable date on May 11, 2022.

Marine Use Permitted Interaction Group:

- a. **Proposed scope:** To identify and make recommendations on marine use policies and mitigation options that provide greenhouse gas sequestration benefits, encourage aquacultural practices to provide greenhouse gas sequestration benefits, and provide tangible economic benefits to aquacultural operations. To establish short- and long-term benchmarks for increasing greenhouse gas sequestration in in Hawai'i's marine environment. To make recommendations that increase climate resiliency or provide greenhouse gas sequestration benefits; and other relevant marine use and marine environment measures for the preliminary report as indicated in HRS Sections 225P-4(a), 225P-4(b), and 225P-4(e)(1).
- b. **Proposed membership:** GHGSTF Member David Forman, GHGSTF Member Justine Nihipali, and Technical Expert from UH School of Ocean and Earth Sciences (*tentative*)
- c. To coordinate and consult with any other permitted interaction groups, as needed within the scope of its task and so long as there is not a quorum of the members of the Greenhouse Gas Sequestration Task Force; and
- d. With a deadline and deliverable date on May 11, 2022.

Urban Green Infrastructure Permitted Interaction Group:

- a. **Proposed scope:** To identify and make recommendations on land use policies and land use practices that promote increased greenhouse gas sequestration, build healthy soils, and increase climate resiliency within Hawai'i's urban environment. To identify and make recommendations on land use practices and policies that add trees or vegetation to expand the urban tree canopy in urban areas to reduce ambient temperatures, increase climate resiliency, and improve greenhouse gas sequestration in Hawai'i. To

make recommendations that increase climate resiliency, provide greenhouse gas sequestration benefits, or cool urban areas. To identify and make recommendations to increase the generation and use of compost; and other relevant urban area measures for the preliminary report as indicated in HRS Sections 225P-4(a), 225P-4(b), and 225P-4(e)(1).

- b. **Proposed membership:** GHGSTF Member Danielle Bass, GHGSTF Member Melissa Miyashiro, GHGSTF Member Pradip Pant, and Technical Expert Heather McMillen
- c. To coordinate and consult with any other permitted interaction groups, as needed within the scope of its task and so long as there is not a quorum of the members of the Greenhouse Gas Sequestration Task Force; and
- d. With a deadline and deliverable date on May 11, 2022

Henry Curtis noted that in the past, the GHGSTF allowed non-members to attend PIG meetings and expressed hope this practice would continue. Chair Evans acknowledged Mr. Curtis and referenced the inclusion of non-Task Force members as Technical Experts in each PIG's membership.

Bill Steiner asked if the Task Force would be investigating financial incentives such as carbon credits for producers of sequestering crops. Chair Evans confirmed that the statute does require the GHGSTF to investigate sequestration incentives but that these recommendations would likely be included in the final report.

Task Force member Riley Saito asked if hydroponics fit within the scope of aquaculture. Chair Evans clarified that hydroponics is not expressly listed in HRS §225P-4, but neither is it ruled out and asked if Task Force member Saito was requesting it be investigated. Task Force member Saito read off a definition of aquaculture and explained that hydroponics seemed to fit within "cultivation of aquatic plants" but wanted to confirm if this was an accurate understanding. Chair Evans responded that it would be up to the discretion of the members of the proposed Aquaculture PIG as well as the full GHGSTF after receiving the PIG report. Task Force member Christian Giardina also responded in the chat that it would be important early in the Aquaculture PIG process to define aquaculture as distinct from or overlapping with hydroponics and aquaponics.

Task Force member Nihipali asked if Prof. Sabine had offered any recommendations for a replacement Technical Expert on the Marine Use PIG, but Chair Evans confirmed that he had not done so yet.

Task Force member Pant asked why baselines and benchmarks were not included in the scope of the Marine Use and Urban Green Infrastructure PIGs. Ms. Key responded that the statute only required baselines and benchmarks for specific areas and so were only incorporated into the relevant PIG descriptions. Task Force member Pant recalled the statewide greenhouse gas inventories from the State of Hawai'i Department of Health (DOH) and suggested that the PIGs need not re-investigate these areas that had already been covered in another State report. Chair Evans and Ms. Key agreed and said the PIGs were welcome to utilize any existing State documents related to their scopes and reference them in their PIG reports instead of duplicating the work. Task Force member Bass added

that this is a challenge of the Task Force and it should remind policymakers in its preliminary report of existing documents such as the DOH emissions inventory that satisfy any mandates within the GHGSTF's statute. Task Force member Madsen made an aside and noted that the DOH inventory says the state will need to sequester approximately 13.4 million metric tons of carbon dioxide-equivalent emissions by 2030, and a new DOH contract will develop these projections out to 2045, the target date for the Zero Emission Clean Economy Target (HRS §225P-5).

No further questions were raised. Chair Evans asked if there was a motion to form the Agriculture Permitted Interaction Group as proposed. Task Force member Bass made the motion and was seconded by Task Force member Giardina. The motion was passed unanimously with no objections or reservations. Task Force member Laramée moved to merge the Aquaculture and Marine Use PIGs with the following amended scope:

Aquaculture and Marine Use PIG

- a. To identify and make recommendations on aquacultural practices, marine use policies, and mitigation options that would provide greenhouse gas sequestration benefits, encourage aquacultural practices to provide greenhouse gas sequestration benefits, and provide tangible economic benefits to aquacultural operations in Hawai'i. To identify and make recommendations on land use and marine use policies and mitigation options that would encourage such aquacultural practices in Hawai'i. To identify appropriate criteria to measure baseline levels and increases in greenhouse gas sequestration, aquacultural product yield, and other key indicators of greenhouse gas sequestration from beneficial aquacultural practices. To identify and make recommendations to establish short- and long-term greenhouse gas sequestration benchmarks for aquacultural activities and increasing greenhouse gas sequestration in Hawai'i's marine environment to assist the state in meeting the Zero Emission Clean Economy Target by 2045, established by HRS §225P-5. To make recommendations that increase climate resiliency or provide greenhouse gas sequestration benefits. To identify and make recommendations on financial incentives and funding mechanisms for aquacultural activities that would promote greenhouse gas sequestration for the aquacultural sector in Hawai'i; and other relevant aquacultural, marine use, and marine environment measures for the preliminary report as indicated in HRS Sections 225P-4(a), 225P-4(b), and 225P-4(e)(1);
- b. With the membership to be David Forman, Christian Giardina, Ashley Lukens, Justine Nihipali, Technical Expert Todd Low, and Technical Expert to be named from UH School of Ocean and Earth Sciences (*tentative*);
- c. To coordinate and consult with any other permitted interaction groups, as needed within the scope of its task and so long as there is not a quorum of the members of the Greenhouse Gas Sequestration Task Force; and
- d. With a deadline and deliverable date of May 11, 2022.

Task Force member Nihipali seconded the motion to merge the two PIGs into one. The motion was passed unanimously with no objections or reservations.

Task Force member Pant moved to accept the Urban Green Infrastructure PIG. Task Force

member Bass seconded the motion. The motion was passed unanimously with no objections or reservations.

Mr. Steiner asked if a bio- or geochemist or similar Technical Expert should be added to the Aquaculture and Marine Use PIG to investigate sequestration pathways in the marine environment. Chair Evans replied that since the motion had passed with a placeholder for a Technical Expert on the Aquaculture and Marine Use PIG, the GHGSTF would make note of Mr. Steiner's comments as a consideration for filling that PIG membership role.

IV. Announcements

A. Next GHGSTF meeting

The next GHGSTF meeting is tentatively scheduled for May 18, 2022 at 1:30pm. The location is to be determined, and the confirmed date and location will be announced later in May.

Task Force member Laramée asked if there were any updates regarding funding for a greenhouse gas sequestration specialist position and funding to the Task Force. Task Force member Bass responded that these items were still alive and moving through the legislative process.

Chair Evans invited Ms. Key to make a personal announcement, and Ms. Key shared that she would be departing from OPSD in the summer to pursue graduate studies as a Fulbright Student in Iceland. Chair Evans congratulated Ms. Key and acknowledged her critical support to the Task Force's functioning.

Task Force member Saito announced that the County of Hawai'i had recently completed its greenhouse gas inventory and would distribute it once the document was available online.

V. Adjournment

The meeting adjourned at 2:20pm.