Carbon Farming Task Force

MINUTES

Tuesday, January 30, 2018: 9:10 am to 11:10 am Land Use Commission, 4th Floor Conference Room Leiopapa A Kamehameha Building 235 S. Beretania Street, Honolulu, Hawaii 96813

ATTENDANCE

- Members Present: Leo Asuncion, Susan Crow, Jonathan Deenik, Scott Glenn, Danya Hakeem, Philipp LaHaela Walter, Diane Ley, Michael Madsen, Robert "Rocky" Mould, Joshua Silva, Ben Sullivan, Stephanie Whalen, Earl Yamamoto and Kenneth Yamamura
- Members Excused: Rep. Chris Lee
- Office of Planning Staff: Sandy Ma
- Other Present: Henry Curtis (Life of the Land), Julius Fischer (Hawaii Green Growth), Hannah Hubanks (UH Mānoa), Nick Krueger (UH Mānoa), Colin Lee (Office of Rep. Chris Lee), Keith McFall (Department of Health), Zea F. P. Nauta (Na Ko'oko'o), Joseph Shacat (Grace Pacific / Environmental Council) and Adriene Unpingco (Office Sen. Mike Gabbard)

DISTRIBUTED MATERIAL

- Carbon Farming Task Force Meeting Agenda for January 30, 2018
- Draft Minutes for September 15, 2017 Carbon Farming Task Force Meeting

I. Call to Order

Chair Leo Asuncion called the meeting to order at 9:10 am and welcomed everyone. Chair Asuncion announced there was quorum to start the meeting. The Task Force's January 30, 2018 meeting notice was published on January 16, 2018, according to public meeting notice requirements. The Task Force has 16 members and there are at least 9 members present for quorum to start the meeting.

II. Welcoming Remarks

Chair Asuncion announced that the Task Force was established by Act 33, SLH 2017, and is subject to Hawaii Revised Statutes Chapter 92, Sunshine Law. Chair Asuncion thanked the Land Use Commission for allowing the Task Force to use its conference room for the meeting.

III. Introduction of Task Force Members and Alternates and All Attendees

Task Force members introduced themselves and attendees introduced themselves.

IV. Review and Approval of the September 15, 2017 Meeting Minutes

Chair Asuncion reminded Task Force members that the draft minutes of the September 15, 2017 meeting were sent out in October 2017 and copies are also available. Members were given time to review the draft minutes of the September 15, 2017 meeting and then approve or adopt the minutes from September 15, 2017.

A motion to approve the draft minutes from September 15, 2017 meeting as circulated was made and seconded. There was no other discussion. Chair Asuncion announced if there are any errors in the minutes that people notice, then they may bring to our attention and we can still amend the adopted minutes. All members present voted in favor of adopting the draft minutes from the September 15, 2017 meeting and there were no members voting nay. The draft minutes from the September 15, 2017 meeting are therefore approved and adopted.

V. Public Comments

No public comments except Attendee Curtis stated that he looked forward to an exciting meeting.

VI. Hawaii Greenhouse Gas Emissions Update for Agriculture, Forestry and Other Land Uses Sector

Member Madsen's Power Point Presentation on Hawaii Greenhouse Gas Emissions Update for Agriculture, Forestry and Other Land Uses (AFOLU) Sector may be found on the Task Force <u>website</u>. Member Madsen is with the Department of Health Clean Air Branch (CAB). He is an environmental engineer currently working to develop and implement CAB's Greenhouse Gas, Regional Haze, and Emissions Inventory Programs.

Hawaii's GHG rules are required by Hawaii Act 234, which specify a Hawaii GHG emissions limit of 1990 levels by 2020 excluding international bunker fuel and aviation emissions (i.e. planes and ships traveling to and from foreign countries) and includes carbon sinks (i.e. forest or urban trees absorbing CO₂ emissions). CAB has a contractor – ICF -- providing statewide GHG emissions inventory so that we can determine whether or not we are complying with our statewide GHG emissions limit. AFOLU is an important part of the GHG emissions inventory and consists of emissions and sinks. Sinks will offset emissions. CAB will need to present annual reports to track progress.

For AFOLU for 2015, for agricultural soil carbon is the highest emitter due to CO₂ emissions from land tilling operations. Second highest emitter is enteric fermentation, which is methane emissions from livestock. Third highest emitter is agricultural soil

management, which is nitrous oxide emissions from fertilizers. Fourth highest emitter is forest fires that involves CO₂, methane and nitrous oxide emissions.

As for sinks for AFOLU for 2015, forest carbon is the greatest sink, followed by urban trees, and the smallest is landfill, yard treeing and food scrapes. Sinks have increased from 1990 to 2015 due primary to decrease in forest fires. Forest carbon is the largest source to offset GHG emissions.

In the second half of 2018, CAB is expecting updated emissions inventory for 1990, 2007 2010, and 2015 and 2020 projections and 2025 projections. Annual progress reports will be posted on the CAB website once reviewed. The emissions inventory for 2016 will be available in 2019 and the emissions inventory for 2017 will be available in 2020. An emissions inventory may possibly be done for 2005 (to match with Paris Agreement).

There is no breakdown of emissions and sinks by island and is only statewide but ICF may be able to breakdown by island.

CAB – ICF data may be used to formulate baseline for GHG emissions for Task Force needs.

CAB – ICF has technical support documents to show the methodology, sampling of how the data was gathered. CAB – ICF used state inventory and projecting tool.

Since 2007, Hawaii has been increasing its sinks because of decreasing forest fires.

Due to Hawaii Cane & Sugar (HCS) shutting down in 2016, AFOLU emissions should be less in 2017 and going forward. The lands (about 5,000 acres) are being converted to perennials and grazing.

Member Glenn stated that the purpose of the Task Force is to promote agricultural practices to sequester carbon and promote food production.

According to Member Madsen, right now agricultural soil carbon is a source but it can be a sink.

Member Whalen stated that for HCS lands they were only plowing every other year or longer but they could be plowing every year.

Attendee Krueger asked if ranching is part of the CAB-ICF measurements. Member Madsen said that ranching is part of livestock.

Member Deenik stressed the importance of reviewing the technical reports, which may be found on the Task Force <u>website</u>.

Member LaHaela Walter is surprised by the forest fire data because the forest fires are increasing in the State. Percentage of land area burned is equal or higher than other state.

VII. Report on Major Established Carbon Registries and Practicalities of Measuring Carbon Sequestration Values

Office of Planning's Power Point Presentation on Major Established Carbon Registries and Practicalities of Measuring Carbon Sequestration Values may be found on the Task Force <u>website</u>.

Member LaHaela Walter stated that it will take a certain amount of effort to have Hawaii projects registered given that Hawaii soils are uncharted.

Member Mould stated that industry buys credits either for P.R. or business purposes to offset their emissions.

Member Glenn stated that DLNR has been working with California's system because Hawaii is too small of a market to generate the level of credits and emissions to justify setting up a system for everyone to play in and California has already done that work and if we do our own then we would replicate California's system and California's system is rapidly becoming the North American system.

Member Glenn stated the question becomes can Hawaii fit into California's system using a small scale approach, i.e. jurisdictional approach. California has been receptive to working with us.

Attendee Curtis is concerned with forestry being carbon neutral given that it may involve cutting of trees.

Member Whalen raised the concern that the farming in Hawaii does not exist in California. Large farms in Hawaii is small farms in California. California refers to Hawaii as micro-farming. The registries are not affordable or doable and joining California with the biggest agriculture in the nation without State incentives is not compatible with Hawaii farmers. There is no one that has farming like we have in Hawaii given our variety of soils and size of farms.

Member LaHaela Walter agrees that in the end it comes down to the incentive that farmers have. There are other models to effect change – such as payment for ecosystem services. This occurred in Costa Rica but there was a lot of money to support this from fossil fuel taxes. Costa Rica payed farmers money to maintain their forests and then paid for storing carbon and water replenished and biodiversity. There is also a carbon tax.

Attendee Shacat stated that an incidental benefit of soil health is reduction of nutrient runoff and an opportunity with Clean Water Branch to create a nitrogen runoff trading system for industrial pollutants for storm water discharges and can be selling multiple credits.

Member Whalen stated that there was a barrel tax created decades ago for agriculture and energy. The Task Force should review the use of the barrel tax and use its funds for its intended purpose. Member Whalen asked for a briefing on Costa Rica's direct incentives to farmers. Member Glenn stated that a portion of the barrel tax revenues goes to the Department of Transportation and the Tax Review Commission has a draft report out recommending a carbon tax. Member Whalen stated that the State keeps creating these special funds and then they get misused.

Attendee Krueger inquired about the inclusion about the ranching community. Member Hakeem stated that ranchers were integral in starting the Task Force and Act 33's passage. Chair Asuncion stated that where opportunities come up we want to accelerate what we have planned. We need to come up with a five year game plan and how much money we need. We should try to bring ranching in either statutorily or as a component we need to address.

VIII. Formation of Working Groups:

Chair Asuncion stated that the Task Force meets quarterly. We can form permitted interaction groups, i.e. working groups, which can meet more frequently, to move all of this – economics, science, public outreach, and legal – forward. The tasks of the working groups are from Act 33. Members should not be on every working group. Working groups should report back to the Task Force. The nitty gritty work occurs in the working groups. The working groups can meet on their own but coordinate through OP so that OP may facilitate. It would be good not to have more than 9 members on any working group so there is not Task Force quorum on any working group. The working group composition and meetings should be on the website.

IX. Announcements:

A. North American Carbon World Conference April 4-6, 2018 in San Francisco

Task Force may send up to four members to the conference. It would be helpful to have one person from each working group attend.

B. Task Force Website and Various Reports Pertinent to the Task Force

Three reports to be published on the Carbon Farming Task Force website as suggested by Member LaHaela Walter:

1. Conservation International's "Hawai'i Carbon + Natural Capital A Policy + Institutional Analysis for Payment for Ecosystem Services (PES) Approaches in Hawai'i" provides a great overview and analysis of potential financing mechanisms for carbon Hawaii.

2. World Agroforestry Centre's "How Agroforestry Propels Achievement of Nationally Determined Contributions" outlines the significance of agroforestry

systems to climate change adaptation and mitigation from an international perspective.

3. Griscom et al "Natural Climate Solutions" gives an introduction to the climate mitigation potential of 20 natural pathways including agriculture and grasslands.

Chair Asuncion, on behalf of the Task Force, will be speaking to the Waimanalo Agricultural Association on March 8, 2018 regarding the Task Force purpose and activities.

Members Crow and Deenik were awarded USDA National Institute of Food and Agriculture grant related to soil health and carbon sequestration for their proposal to "Put the farmer in the driver's seat: Integrative web tool for improved soil health and carbon assessment, monitoring, and planning." OP wrote a support letter for them.

Hawaii Center for Food Safety is working on an educational series of videos (3-4 minutes) on soil health and carbon sequestration to release in March 2018 highlighting agricultural, ranching, agroforestry and farming projects in Hawaii. This could be shared with the public outreach working group.

C. Next Meeting Date and Time

At the previous Task Force meeting we decided to set the meetings with the Climate Commission meetings. The next Climate Commission meeting is February 27, 2018. For the Climate Commission meetings, it will be scheduling the meetings three months after February 27, 2018. The goal is to try to meet every quarter for the Task Force.

Member Glenn suggested meeting immediately after the North American Carbon World Conference.

Member Sullivan prefers to sync with the Climate Commission, i.e. having the next Task Force meeting in late May or early June.

Member Whalen prefers having the next meeting immediately after the North American Carbon World Conference, i.e. 2nd or 3rd week in April.

The members agree to sync with the Climate Commission. The Task Force would like a doodle to remind of the meetings instead of by email.

X. Adjournment

Chair Asuncion adjourned the meeting at 11:10 a.m.