



C-AGG October 2018 Arlington, VA

Meeting Summary

Tuesday 9 October – Wednesday 10 October 2018
 Crystal City Marriott, Arlington, VA

Presentations and materials available: <https://www.c-agg.org/event/2018-october-arlington-va>

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Meeting Overview

C-AGG participants met October 9 – 10, 2018 for C-AGG’s annual DC-area meeting, held in Arlington, VA. C-AGG Executive Director Debbie Reed opened and facilitated the 2-day meeting. Sally Rockey, Executive Director, Foundation for Food and Agriculture Research (FFAR), provided the keynote address highlighting resilient agricultural systems and research initiatives. Representatives from Danone (Chris Adamo), Mars Incorporated (Brad Figel), and Nestlé USA (Molly Fogarty) discussed the genesis of and plans for the Sustainable Food Policy Alliance (SFPA) and how C-AGG can engage with the Alliance moving forward. Sara Via, Professor and Climate Extension Specialist, University of Maryland, presented on the Maryland Healthy Soils Initiative and her work identifying pathways for greenhouse gas (GHG) reductions from carbon sequestration practices in Maryland. Sandy Ma, State of Hawaii Office of Planning, and Danielle M. Bass, State of Hawaii Sustainability Coordinator, provided an overview on the development of Hawaii’s Greenhouse Gas Sequestration Task Force and Climate Change Legislation. Julie Cerquiera, Executive Director of the U.S. Climate Alliance (USCA), provided an overview of the origins and goals of the USCA and shared ideas on how C-AGG participants and stakeholders can collaborate to support the work of the USCA Natural and Working Lands (NWL) Initiative. Joe Fargione and Pipa Elias from The Nature Conservancy presented a new report detailing US climate mitigation potential from various land-based pathways and included analyses at the regional level, national level, and global level. Rod Snyder, President, Field to Market: The Alliance for Sustainable Agriculture (FTM), spoke on the development of FTM’s 2019 – 2021 Strategic Plan and the evolving landscape for supply chain sustainability efforts. Shefali Mehta, Executive Director, The Soil Health Partnership (SHP), provided an update on the SHP’s activities and plans for their upcoming strategic planning process. Trevor Anderson, Policy Manager, Climate Action Reserve and Amy Hughes, Senior Manager for Sustainable Agriculture, Environmental Defense Fund gave updates on carbon offset market protocols for the agricultural sector and Campbell Ingram, Executive Officer, Sacramento-San Joaquin Delta Conservancy, highlighted the state of California wetlands and the potential to sequester carbon through these lands. The final meeting session focused on collaborative engagement and how the C-AGG community can work with the USCA NWL Initiative to advance integrated landscape approaches to ecosystem services from natural and working lands. It was led by Jad Daley, President and CEO, American Forests; Jimmy Daukas, Senior Program Officer, American Farmland Trust; Debbie Reed, C-AGG; and Thayer Tomlinson, Project Manager, C-AGG.

Key Findings and Outcomes

- According to keynote speaker Sally Rockey, “the next 35 years is not just the most important 35 years in the history of agriculture. It is the most important 35 years there will ever be in the history of agriculture.” With limited recent federal funding for agriculture research, initiatives such as the Foundation for Food and Agriculture Research (FFAR) spur research innovations by funding public-private-partnerships and bring strong federal funding back to agriculture research. Because agriculture is so vulnerable to the effects of climate change, and agricultural systems so greatly effect climate, strong research funding initiatives like FFAR are vital to creating more resilient and innovative low emission agriculture systems.
- Organizations and partnerships such as the Sustainable Food Policy Alliance (SFPA), Field to Market (FTM), the Soil Health Partnership (SHP) have strong agriculture sector engagement through different routes. The SFPA is comprised of four large food companies (Nestlé USA, Danone North America, Mars Inc., and Unilever) and brings the power of the companies as an Alliance to lobby for issues around climate and nutrition. FTM defines, measures, and advances the sustainability of commodity crop production in the US and provides agriculture the opportunity to track key environmental outcomes around major commodity crops. The SHP, an initiative of the National Corn Growers Association, is a farmer-led partnership that looks to transform agriculture through improved soil health.
- After the Trump Administration made the decision to remove the United States from the Paris Climate Accord, the US climate policy leadership has been led by states. The US Climate Alliance (USCA) is a group of 16 states and Puerto Rico which have pledged to meet the Paris targets at their individual state levels. USCA states such as Maryland and Hawaii have engaged their natural and working lands to help the states meet their climate targets. Although MD and HI are taking different routes to meet their goals, both noted the importance of strong scientific backing when developing agricultural policy.
- With the increased role for natural and working lands at the state level within the USCA, there is an accompanying increased opportunity for the agriculture and forestry sectors to collaborate. These sectors have worked together in the past on climate issues, but the formation of the USCA Natural and Working Lands (NWL) Initiative gives forestry and agriculture a platform to examine those issues that may be cross-cutting between their sectors. The NWL Initiative also provides C-AGG and our participating organizations a unique avenue to engage the agriculture sector in climate-specific initiatives, policy, and technical support as the USCA states work through strategic planning and implementation. C-AGG will continue to engage our participating organizations through annual meetings, announcements, and workshops to most fully involve the agricultural sector expertise in the NWL Initiative.
- Although there has a great possibility to create agriculture offsets, the markets have not been significant to date in terms of creating agricultural offset credits. These programs can become more successful by making offsets less costly for program participants/developers, expanding the scope of protocols to include more crops and practices as well as ecosystem services, and helping both educate and then find buyers for agriculture credits.

Tuesday, October 9, 2018

Welcome & Introductions

[Debbie Reed, C-AGG Executive Director](#), welcomed participants and introduced C-AGG. She highlighted C-AGG's work with ecosystem services to drive agreement, harmonization, standardization, and increase confidence in those services. Reed highlighted the two meeting themes: 1. that agricultural and food production systems are foundational to sustainability and resilience and 2. that natural and working lands are key to combat climate change. She announced that in June 2018, C-AGG signed an MOU with the USCA NWL Initiative to support the Initiative as a partner NGO and through this, C-AGG is looking at how to best engage the C-AGG community. Reed announced the next C-AGG meeting will take place April 9 – 10, 2019 in Sacramento, CA at the Hyatt Regency.

Session 1: Keynote Address: Research for Resilient Agricultural Systems

[Sally Rockey, Executive Director, FFAR](#), provided the keynote address on research for resilient agricultural systems by stressing the timeliness of this topic due to the publication of the recent [Intergovernmental Panel on Climate Change \(IPCC\)](#) report. She stated that agriculture is often highlighted as a climate change problem, but there are many agricultural solutions which the community can promote—especially in terms of methane reduction opportunities (from animal production). Rockey noted that agricultural systems are complex and therefore require scientific systems-based approaches for emissions reductions. Although agricultural sciences have progressed enormously through data and analytics, GPS, block chain, decision support, etc., federal funding has not kept up. To support agricultural and ecosystem services research through federal funding, the 2014 Farm Bill (through bipartisan congressional support) created FFAR. This program complements US Department of Agriculture (USDA) science and research while engaging with communities through Public Private Partnerships (PPP). FFAR is required to spend their budget through supporting PPPs which results in new partnerships with the shared goals and objectives of funding science for agriculture. The organization can deploy funds quickly if ideas, white spaces, and gaps are identified; it is governed by a diverse group of advisory committees and scientists. FFAR has worked with (through funding and partnerships) over 150 organizations and found incentives for both the private and public sector to work in research partnerships. Rockey highlighted that PPPs are successful because the participants must share goals and values, agree on responsibilities and rules of engagement, have trust, work in synergy, share responsibility for successes and failures, and engage with partners outside their community. She noted the biggest threat to the future of the planet is not agriculture, but the inability to work together with solutions at hand to solve problems. Rockey closed with “the next 35 years is not just the most important 35 years in the history of agriculture. It is the most important 35 years there will ever be in the history of agriculture.” Participants asked how to engage with FFAR and Rockey recommended they attend public meetings, answer calls for proposals, or contact the organization directly. Rockey noted that the issue of quantification in ecosystem service markets is huge—especially in getting data from the field through analytics and artificial intelligence—machine-based learning to increase quantification for market-based opportunities is an opportunity. FFAR is the largest funder for soil health in the US through support to the Soil Health Partnership, the Soil Health Initiative, and the Nature Conservancy.

Session 2: The Sustainable Food Policy Alliance: Introduction to C-AGG

Chris Adamo, Danone North America; Brad Figel, Mars Incorporated; and Molly Fogarty, Nestlé USA, held a panel discussion on the [Sustainable Food Policy Alliance \(SFPA\)](#) which was formed in July 2018. The SFPA is made up of four companies—the three above and Unilever—that focus on five issues: environment, nutrition, consumer transparency, people and communities, and food safety. Although each participating company may have different commitments to issues like climate and nutrition and each may have different customer engagement strategies, all the companies have similar sustainability commitments. Therefore, they formed the SFPA for greater impact. The panel noted that there is a lot of innovation that goes into their programs and therefore their policy lobbying; the Obama Administration’s policy and regulatory efforts forced the food industry to develop innovative solutions. Figel said that some companies initially fought against the policy and regulatory efforts, but then realized that they were better served by proactively working towards constructive solutions. Since inception, the SFPA has sent a letter to USDA advising the USDA eliminate GMO labeling inconsistencies in the marketplace and sent a letter to EPA supporting the Clean Power Plan and the Paris Climate Accord. The panel members highlighted that instead of reacting to government policy, they focus on creating a proactive agenda regardless of the administration or which party leads Congress. Adamo noted that Danone is also engaged with climate policy at the international level and is refining their own international commitments; Danone set a goal of carbon neutrality by 2050 (over half their emissions are from farming). Participants had a lively discussion with the panel focusing on:

- Support to the Clean Power Plan. The SFPA signed on to support the Clean Power Plan, even though it would likely cost each company more to operate, because each company saw the Clean Power Plan as a route to help them meet their longer term emissions reduction goals. The panelists noted that the food industry is highly vulnerable to climate change impacts and welcome any opportunities to proactively reduce emissions. They said that the SFPA will likely become more active on carbon pricing and climate change issues in general; they do not focus on single policies but overall initiatives.
- Methane reduction activities. With many of the SFPA companies producing food with dairy and rice as primary ingredients, methane emissions are a large portion of their GHG emissions profile. To move towards carbon neutrality, the SFPA companies are looking at innovative dairy feed, manure treatment, and new uses for manure to manage and reduce methane emissions using a systems-wide approach.
- Educating the public. All panelists agreed that part of the work for the food sector is educating consumers on where food comes from and how it is made so consumers have a better understanding of food production issues and linkages to farmers.
- Water Sustainability. Nestlé has a bottled water business and bottled water has been criticized for the large amount of packaging and waste associated at a time when people should trust that they can turn on their tap water for a clean source of water. Nestlé is having broader conversations about water infrastructure and water pricing to ensure their water business is as sustainable as possible.

Session 3: Developing an Incentive Program for Agricultural Carbon Sequestration to Help Meet Maryland's GHG Reduction Goals

[Sara Via, Professor and Climate Extension Specialist, University of Maryland](#), presented on the Maryland Healthy Soils Initiative and her work identifying pathways for GHG reductions from carbon sequestration practices in the state. She provided a review of the Maryland Healthy Soils Program and highlighted that MD is a leader in healthy soils practices which are key for the Chesapeake Bay water quality; at this time in MD, 70% of corn and soybeans are grown with no till systems and 50% of the acres available for cover crops are in cover crops. She discussed the science behind soil carbon sequestration and reviewed the process of how she is working with MD to identify research-based practices for sequestering carbon in soils. The goal of practices identification is to ensure that any policies recommended to the state have a scientific basis. She highlighted that in identifying research-based practices, she reviewed scientific literature and reports to align with Natural Resources Conservation Services (NRCS) practices and discovered that many are already used to measure water quality impacts in the state. Using COMET-Planner, Via developed a list of practices with sequestration potential for MD. She found that by taking no till and cover crops into consideration, MD soils are already sequestering a significant amount of carbon. Via highlighted that farmers are encouraged to use these NRCS practices in their nutrient management plans so the nutrients can be captured before they flow into the Chesapeake Bay. Via also reviewed management practices that may be possible for soil carbon sequestration in MD such as rotational grazing and replacing nitrogen fertilizer with organic amendments, but due to lack of data and on-farm use, she would not yet recommend them. Via closed by highlighting how agriculture can contribute a great deal to MD's GHG reduction goals through expanding practices already in place and quantifying their effects, but more research and outreach are required. Participants asked about how to deal with the reversibility and impermanence of these practices and Via noted that those issues need to be acknowledged up front and that the message needs to be that some of the practices may be impermanent—even if you assume that the tree is cut down after 25 years, you still have had a carbon benefit for the 25 years that the tree was alive. Participants also recommended Via refer to the Conservation Innovation Grant on the use of the 4R program for more details on nitrogen management.

Session 4: Hawaii's Greenhouse Gas Sequestration Task Force & Climate Change Legislation

[Sandy Ma, State of Hawaii Office of Planning, and Danielle M. Bass, State of Hawaii Sustainability Coordinator](#), provided an overview on the development of Hawaii's Greenhouse Gas Sequestration Task Force and Climate Change Legislation. Ma noted that HI's governor signed Act 015, SLH 2018 into law in 2018—this sets up a Greenhouse Gas Sequestration Task Force (GHGSTF). The Task Force will work to (among other things): establish a baseline for GHG emissions within HI with short- and long-term benchmarks for increasing GHG sequestration in NWLs; identify criteria to measure increased GHG sequestration, soil health improvement, and agricultural productivity improvement; and develop incentives and funding mechanisms to implement these policies. Ma noted that there are now 19 task force members charged with determining how to make HI GHG neutral by 2045. They are challenged in that although HI has approximately 7,000 farms, the small farm size (the median farm is five acres) makes large-scale programs more difficult to implement. Most farmers lease rather than own their land and the majority do not speak English as their first language. Additionally, HI has 10 of the 12 recognized soil types making it difficult to estimate and measure opportunities for soil carbon sequestration on any sort of scale since the soil types are in small sections

distributed throughout all the HI Islands. The HI Islands possess at least 10 zones of the Koppen Climate Classification System (out of 14), the most widely used method adopted by climatologists for identifying and defining worldwide climate zones. Even with these challenges, HI believes that it can accurately map baseline soil carbon stocks. The GHGSTF looks to fund the creation of a statewide soil carbon map and land use geographic information system (GIS) layer for natural and working lands. In looking at these activities, HI believes it can reach GHG neutrality by 2045 through agriculture and natural environment carbon reduction/sequestration activities as well as through state forestry offset projects. Bass highlighted the state's work outside natural and working lands which focuses on energy transformation through a GHG emissions limit that will be equal to/below statewide GHG emissions in 1990 by 2020. The energy transformation can be achieved through policies such as the HI Clean Energy Initiative, 100% Renewable Portfolio Standard by 2045, Energy Efficiency Portfolio Standard, Energy Efficiencies and Environmental Standards for State Facilities and Motor Vehicles, the Sustainable Schools Initiative, and the University of Hawaii Net-Zero Goal. HI is also looking to establish a Carbon Offset Program in concert with the natural and working lands initiatives.

Session 5: US Climate Alliance: Natural and Working Lands

Julie Cerqueira, Executive Director of the [U.S. Climate Alliance \(USCA\)](#) opened the presentation noting that the new IPCC report shows that the world has a huge challenge in terms of emission reductions and stressed the need to focus on both technological solutions and land-based solutions. She gave an overview of the USCA, highlighting that it was launched after the United States decided to withdraw from the Paris Climate Accord. Since the USCA began 18 months ago, 16 states and Puerto Rico have joined with the following commitments: to implement policies that advance the goals of the Paris Agreement, aiming to reduce GHG emissions by at least 26 – 28 percent below 2005 levels by 2025; to track and report progress to the global community in appropriate settings, including when the world convenes to take stock of the Paris Agreement; and to accelerate new and existing policies to reduce carbon pollution and promote clean energy deployment at the state and federal level. The USCA accelerates implementation towards climate priorities through eight initiatives: Natural and Working Lands (NWL), Short-Lived Climate Pollutants (SLCP), Green Banking, Grid Modernization, Solar Soft Costs, Appliance Efficiency Standards, Building Resilient Communities and Infrastructure, and Deploying Clean Transportation. The USCA is now in the process of developing a 3-year strategic plan on working with states to build strategies under these initiatives. Noting that the USCA is entirely state-led, Cerqueira highlighted opportunities for collective action. For agriculture, this includes working with the NWL and the SLCP initiatives. There are 450,000 farms in USCA states and the pathways the states are investigating can have a huge impact on climate mitigation. At the September 2018 Climate Summit, USCA released a [SLCP Reduction Roadmap](#) which is a framework for emissions reductions. Because US livestock operations are already very efficient, these strategies can provide implemental improvement over time. The challenge is to achieve economically feasible methane reductions to create new and diverse revenue streams for farmers. Cerqueira led a discussion on opportunities for C-AGG participating organizations to discuss how work with USCA; this focused on how to bring the agriculture sector to the table, using the C-AGG engagement model of convening many types of organizations to highlight agriculture-led solutions in the NWL and SLCP Initiatives, harmonizing data collection and inventory work, and highlighting the types of technical and policy resources as well as stakeholder groups that states and regions can utilize to meet their commitments.

Session 6: TNC's Report on Land-based Climate Mitigation Potential

Joe Fargione and Pipa Elias from The Nature Conservancy (TNC) presented new research on the climate mitigation potential from land-based pathways at the global, national, and regional levels. Fargione highlighted the 2017 paper, [Natural Climate Solutions](#), that examined how three land management practices—protect intact ecosystems, restore native ecosystems, and improve practices on working lands—can affect the climate mitigation potential on four land types—forests, grasslands, agricultural lands, and wetlands. The constraints the authors added to the analysis of natural climate solution (NCS) opportunities were that any land use changes were consistent with meeting the demand for food and fiber and that there was no harm to biodiversity. The authors found that although some land management practices have great potential for climate mitigation (such as reforestation), when the filter of cost per ton was applied, practices such as avoided forest conversion, nutrient management in agriculture, and use of conservation agriculture practices show the greatest promise for cost-effective solutions. The authors found that NCS can play a large global role in meeting the targets of the Paris Climate Accord (37% of needed emissions by 2030) but the carbon price/ton needs to be much higher to make these affordable on a large scale. Fargione noted that climate mitigation is not the only benefit provided by NCS—they also provide a wide range of ecosystem services and social and economic benefits. Fargione highlighted a 2018 study entitled [Natural Climate Solutions for the United States](#) which included the same variables and constraints as the 2017 global study and found that NCS have a potential mitigate up to 1.3 Pg CO₂e yr⁻¹ in the US. The practices that stand out in the US study when price/ton factors are included are use of cover crops and improved nutrient management. The paper also quantified air, biodiversity, soil, and water co-benefits from NCS. Elias spoke on how the NCS research ties into TNC's work to promote soil health by giving farmer advisors, crop advisors, and farmers clear information on the value of NCS. TNC is also working with companies to help them figure out how to implement their sustainability commitments; they are working to increase the adoption of soil health practices on rented land. When participants asked why tillage practices were not included in the assessment Fargione noted that there is not enough data on whether the benefits are additive compared to cover crops with no till. TNC has not yet not quantified the flood mitigation potential from improved soil health.

Wednesday 10 October 2018

Session 7: Field to Market's 2019 – 2021 Strategic Plan: An Evolving Landscape for Supply Chain Sustainability Efforts

[Rod Snyder, President, Field to Market \(FTM\): The Alliance for Sustainable Agriculture](#), provided an overview of FTM's work to date and their strategic planning process for 2019 – 2021 activities. FTM focuses on defining, measuring, and advancing the sustainability of commodity crop production in the US and has 143 members across the food and agriculture supply chain. Snyder reviewed the guiding principles of FTM and described FTM's Supply Chain Sustainability Program through which FTM publishes the [National Indicators Report](#) to track key environmental outcomes around major commodity crops in the US. He highlighted that FTM will soon launch Version 3.0 of the [Fieldprint Platform](#)—their online tool to help growers evaluate their farming decisions and see correlations between management practices and sustainability outcomes. Version 3.0 includes eleven crop types and refined metrics on GHG, energy use, biodiversity, and soil conservation to incorporate the best available science. An additional pillar under the Supply Chain Sustainability Program is

catalyzing continuous improvement through Fieldprint Projects across 32 states, through farmer facing fact sheets, and through the Sustainability Programming for Ag Retailers and Crop Consultants (SPARC) Initiative which equips trusted farmer advisers with tools and resources to help farmers deliver continuous improvement in sustainability outcomes. FTM enables members to make specific claims based on continuous improvement. Snyder provided an overview of FTM's strategic planning exercise which is now in process—the FTM Strategic Plan is not yet public but will be available soon. He responded to participant questions on how to balance data privacy with access to information by highlighting FTM's work using anecdotes and lessons learned from projects. He noted that although FTM is a voluntary program for growers, they see the largest incentive for farmers to participate when they have a strong relationship with buyers/markets that incentivize sustainability. FTM is looking to more fully engage tenant farmers to increase their participation in the program.

Session 8: The Soil Health Partnership: What is Next for SHP

[Shefali Mehta, Executive Director, The Soil Health Partnership \(SHP\)](#), provided an update on SHP's activities since their 2014 founding and discussed the next steps for the organization. Mehta is new to the organization and ready to lead the SHP team of fourteen which is comprised of more than 50% women and more than 50% millennials. SHP is now working with 140 – 150 organizations and their network spans 14 states. In 2019, they expect to include new states and expand the breadth of services within their existing states and to innovate and broaden to meet the demand for improved soil health. This includes adding new partners, starting the Associate Program, expanding to other commodities (wheat has joined and the SHP is in discussions with soy, dairy, pork, and cotton), and expanding their territory to new sites in existing states and adding new states. Mehta highlighted that the SHP has been waiting to share data and analysis until they had enough statistically significant year-over-year data for comparisons. SHP's data set includes 165 variables for each partner farm over the five years the farm is enrolled—and at this time, they have over 26,000 soil samples from participating farms during 2014 – 2018. They are working to build off-the-shelf automation and integrate tools and data collection methods to show farmers how their choices impact environmental and economic sustainability. SHP uses aggregate stability as a main indicator of soil health and finds increased productivity with increased aggregate stability, but Mehta notes that they see that soil type does matter—they are also working on how to explain data sets and outcomes to farmers. Field days and farmer outreach are a core part of SHP to engage more closely with farmers on the ground. Mehta noted that carbon market development will have a big impact on monetizing soil health and SHP has a carbon insetting project that they are completing. Participants asked Mehta on how to engage farmers when there are many carrots and few sticks; she noted that farmers would say there are a lot of sticks and few carrots and so engagement is most productive when farmers may already philosophically believe in sustainability. She also highlighted that to expand and scale their work to new acres given the data-heavy work, SHP is relying on the Associate Programs which the SHP will heavily promote to farmers in the next few months in order to increase enrollment in the program.

Session 9: Updates to Carbon Offset Market Protocols for the Agricultural Sector

[Amy Hughes, Senior Manager for Sustainable Agriculture, Environmental Defense Fund \(EDF\)](#) highlighted why agricultural offsets matter and noted that although there is great possibility for agriculture offsets (especially in avoided grassland conversion), the markets have not been significant to date. One of the most successful agriculture protocol areas is manure—the two manure-based protocols have generated over 5,000,000 offsets. She highlighted three offset protocol features that can reduce costs for programs: 1. simplify and standardize data management to reduce complexity and ensure accuracy; 2. randomize site visits to reduce visit frequency and cost to individual projects; and 3. bundle projects to enable site-visit cost sharing, improve modelling accuracy, and decrease the modelling burden on developers.

[Trevor Anderson, Policy Manager, Climate Action Reserve](#) (CAR) gave an update on the Nitrogen Management Project Protocol (NMPP) Version 2.0 development process as well as the Grassland Project Protocol (GPP). In June 2012, the NMPP Version 1.0 was adopted with the purpose to reduce N₂O emissions by adopting practices that further improve Nitrogen Use Efficiency (NUE) beyond what is projected to typically happen, absent any incentives provided by a carbon market. Through funding from a Conservation Innovation Grant (CIG), CAR updated the NMPP to Version 2.0 which includes: expanded applicability to additional activities (for example, the inclusion of irrigation and tillage practices), crops (the number of eligible crops has grown from two to ten), and regions (eligibility went from solely Midwestern states to county-level eligibility around the US); enhanced usability (allows for in-project aggregation) and simplified quantification (Colorado State University developed a simple excel-based quantification tool); and maintained scientific accuracy and GHG accounting best practices. They have their first project in the pipeline that is about 50,000 acres. Anderson highlighted that the CAR Grassland Project Protocol (GPP), which avoids conversion of grassland to cropland, was updated in the last year through CIG funding. At this time, 44,660 acres have been protected through the GPP. Participants asked why the CAR GPP requires site visits while the American Carbon Registry grasslands protocol does not; Anderson noted that the site visit requirement was added to comply with CA Air Resources Board requirements, but added that many of the grasslands that use the GPP also have a conservation easements which already require a site visit.

[Campbell Ingram, Executive Officer, Sacramento-San Joaquin Delta Conservancy](#) provided an update on the state of California's wetlands and how they play a role in the carbon cycle. He highlighted the CA water supply system and how that water has been diverted from the Sacramento San Joaquin Delta wetlands for irrigation agriculture. As the Delta wetlands are diverted for agriculture, peat soil is exposed to oxygen which causes oxidation and releases large amounts of carbon. The CA Delta area is responsible for about one-third of CA's overall plant-based agricultural emissions and therefore protection of existing wetlands to avoid further carbon emissions is key. However, CA agriculture depends on the Delta water for irrigation and will likely continue to do so with droughts. Ingram highlighted how the Conservancy is creating a protocol to measure how to protect and restore the Delta wetlands for credits on the voluntary market. Their objective is to get as many projects up and running as possible and then enter the CA compliance market. Their analysis shows that they can generate about \$40/acre on the voluntary market; this would increase to \$80/acre on the compliance market. The Conservancy found that the price needs to be over \$100/acre for the credits to incentivize projects. They are building a coalition of organizations in the Delta which can pool resources to access the CA Greenhouse Gas Reduction Fund for wetland construction funding. The ultimate goal is landscape-scale change in the Delta.

Session 10: Collaborative Engagement: Working Towards Integrated Landscape Approaches to Ecosystem Services from Natural and Working Lands

Jad Daley, American Forests; Jimmy Daukas, American Farmland Trust; Debbie Reed, C-AGG; and Thayer Tomlinson, C-AGG led a discussion on how C-AGG participating organizations can work with the USCA NWL Initiative. Reed opened the session with a background on how C-AGG became engaged with the NWL Initiative. Daley presented on the [Natural and Working Lands Climate Partnership](#) and the Forest-Climate Working Group, a coalition focused on GHG reductions in forestry (which is similar to C-AGG's work with agriculture). He highlighted that the USCA NWL Initiative is made up of seven NGO partners and assists USCA states with mitigation pathway practices along the premise that technical assistance starts with practices rather than policy mechanisms. Practices include both offense (sequestration efforts) and defense (adaptation efforts); states already have many levers to incentivize practices and many places to look for additional levers (such as through voluntary offsets, impact investing, grants, etc.). Daley highlighted the technical support that NWL partners have provided USCA states to date: creating 12 "pathways" to organize land sector mitigation opportunities; developing state-specific "Opportunity Assessments" by pathway (lead by TNC and the World Resources Institute); and hosting state delegations at a July 2018 learning lab to lead states through creating state-specific finance and policy strategies based on key mitigation pathways. As an NWL partner, C-AGG identified and facilitated the engagement of agriculture experts to support state teams at the learning lab. Daley finished the presentation by reviewing the types of technical support that the NWL partners look to continue providing states as the states work through strategic planning and implementation. Meeting participants had the opportunity ask questions and discuss how to most fully engage agricultural sector expertise in the NWL Initiative. Key discussion points included:

- **Measurement Methodologies:** USCA is a unique opportunity to examine how to best track progress over time, but defining baseline measurement methodologies across states can be difficult. The USCA is working with the Rhodium Group to marry state inventories with the national inventory to track the overall emissions trajectory; it is important to harmonize methodologies through the land sector.
- **Data:** Companies already work with farmers to collect data, but do not necessarily harmonize the data collection and inventory work to engage other players in the industry. A useful endeavor would be to match company needs with state requirements—the NWL partners could survey companies that participate in sustainable supply chain efforts to determine if they have interest engaging with USCA efforts. Additionally, although there are initiatives coordinating and standardizing soil sampling strategies, the data coming from soil sampling initiatives (such as Danone's soil samples on 50,000 acres and the SHP work) could be better utilized to inform policy development at the state level.
- **Engagement:** Discussing climate change with the agriculture sector can be difficult due to the political nature of climate change messaging in the US. It would be useful to investigate successful avenues to mobilize the agriculture sector to ensure the Initiative includes an agricultural voice. Understanding how land access, land tenure, and land affordability impact the potential to achieve GHG reductions and how states can ensure new policies and programs support disadvantaged farmers/tenants is key.
- **C-AGG role:** With funding, C-AGG plans to organize a NWL-specific steering committee, include USCA-focused sessions at its two annual meetings, organize topic specific workshops, highlight opportunities to engage within different states on their work teams, and develop a timeline and plan of activities to help groups plan on how and when to engage with the work. C-AGG will coordinate this with other efforts, convenings, organizations, and initiatives.