Attachment A – Land Acknowledgement

Land Acknowledgement Statement

We should take a moment to acknowledge the land on which we are gathered. For thousands of years, this land has been the home of Patwin people. Today, there are three federally recognized Patwin tribes: Cachil Dehe Band of Wintun Indians of the Colusa Indian Community, Kletsel Dehe Band of Wintun Indians, and Yocha Dehe Wintun Nation.

The Patwin people have remained committed to the stewardship of this land over many centuries. It has been cherished and protected, as elders have instructed the young through generations. We are honored and grateful to be here today on their traditional lands.

Approved by Yocha Dehe Tribal Council (July 23, 2019)

Attachment B – 2023.05.22 YCCAC Meeting Minutes

MEETING MINUTES
Yolo County Climate Action Commission
May 22, 2023 | 4:00 PM – 6:30 PM

COMMISSION MEMBERS:
Suzanne Reed, District 1 Appointee
Robin Datel, District 2 Appointee
Mark Aulman, District 3 Appointee
Andrew Truman Kim, District 4 Appointee (**VICE-CHAIR**)
Adelita Serena, District 5 Appointee
Chris White, Technical Lead
NJ Mvondo, Environmental Justice Lead (**CHAIR**)
Bernadette Austin, Climate Scientist/Subject Matter Expert
Pelayo Alvarez, Climate Scientist/Subject Matter Expert *(arrived at 4:25)*
Mica Bennett – At Large
Ken Britten – At Large

EX-OFFICIO MEMBERS:
Sarah Morgan, Yocha Dehe Wintun Nation
Camille Kirk, UC Davis

SUPERVISORS:
Supervisor Lucas Frerichs, Yolo County Board of Supervisors, District 2
Supervisor Jim Provenza, Yolo County Board of Supervisors, District 4

MEETING MINUTES

1. **Land Acknowledgement** *(read by R. Datel)*

2. **Approval of the Agenda**

   Decision: Approve
   Approved By / Seconded By: S. Reed, K. Britten
   Ayes: S. Reed, R. Datel, M. Aulman, A. Kim, A. Serena, C. White, NJ Mvondo, B. Austin, M. Bennett, K. Britten
   Noes: None
   Abstain: None
   Absent: P. Alvarez

3. **Public Comment**
    - A commenter encouraged the Commission to continue looking for grants and funding to keep climate action in momentum.

4. **Approve April 24, 2023 Meeting Minutes**

Decision: Approval with amendment to the attendance list.
Approved By / Seconded By: S. Reed, R. Datel
Ayes: S. Reed, R. Datel, M. Aulman, A. Kim, A. Serena, C. White, NJ Mvondo, B. Austin, M. Bennett, K. Britten
Noes: None
Abstain: P. Alvarez
Absent: None

Additional Comments/Action Items:
- Staff will correct a Commission Member's attendance on last month's minutes from "absent" to "late arrival".

5. **Staff Announcements/Reports** (Staff)
    - Staff shared that the last meeting involved a robust discussion on AB-117. The hearing on this legislation was pushed out by a year.
        - It was stated that the bill was delayed and will not be moved forward until January at the absolute earliest.
    - Staff shared that the County has opened the application process for Community-Based Organization (CBO's) Partnerships as an extension of the County's Climate Action and Adaptation Plan Outreach efforts.
        - A question was asked if there have been any applications already submitted, and whether CBO's must be based in Yolo County.
        - Staff responded that it is important for the CBO's to be deeply engaged with Yolo County, ideally with ties to the unincorporated parts of the County.
        - A question was asked whether the selection process is strictly dependent on organizations' numerical score as determined by the scoring criteria.
        - It was asked whether churches are eligible.
            - Staff responded yes.
    - Staff shared that the County is recruiting two CivicSpark fellows for the 2023-2024 service year.
    - Staff shared that the YoloCAAP.org portal is now live.
        - A comment was made that the coloration on Item #3 of the timeline made it seem as if that is where the County is on the process.
        - A suggestion was made to strengthen the language surrounding Yolo County coordinating with cities on the FAQ page regarding why Yolo County is developing a CAAP.

- It was asked whether the link is live and ready to be shared.

Public Comment:

- A comment was made regarding on the possibility of the Board of Supervisors using remaining American Rescue Plan (ARP) funds for projects that have already been approved by the Commission, particularly the decarbonization of County buildings since the implementation of that can take time.
  - Staff responded that those funds are being held for potential match fund needs until the status of the ARP fund timeline is confirmed.
- A comment was made that there is a CDFA Healthy Soils Pilot Program Grant with an application deadline of June 19th that Yolo County may be eligible for.
  - Staff responded that the Sustainability Division has not applied for this grant.
  - A question was asked regarding whether the grant includes technical assistance.
  - A suggestion was made to be conservative with spending funds.
  - Staff concluded that the Commission is in favor of spending the funds unless they are at risk of being pulled out. It was added that if flexibility is maintained then spending will remain conservative.
- A commenter asked whether there are any updates on the Climate Compact.
  - Staff responded that they are discussing the future vision of the Climate Compact internally and will follow-up in the coming months.

6. Update on Technical Advisory Committees (TACs)

- Equity & Engagement (E&E) TAC Update *(B. Austin)*:
  - It was shared that the E&E TAC has finalized the agenda for the first CAAP Workshop being held on June 20th, 2023.
  - A question was asked whether TAC meetings are open to the public and when they take place.
    - Staff responded that the E&E TAC meet every third Wednesday of the month from 4:30 PM - 6 PM.
- Natural and Working Lands (NWL) TAC Update (*K. Reza, H. Nichols*):
  - It was shared that April & May are busy months for farmers and growers, so the May NWL meeting was cancelled. It was added that the sequestration strategies survey is near completion in both its online and paper formats.
  - It was added that anyone interested in supporting outreach to farmers in the county should reach out.

7. Review and Provide Feedback on First In-Person Climate Action and Adaptation Plan Workshop Agenda | Tuesday, June 20th from 6:00 – 8:00 PM (Attachments G, H)

- Staff shared that the first in-person workshop will be primarily focused on getting the word out about the CAAP, explaining what it is, and getting preliminary feedback. The County is looking for volunteers to answer questions

and MC the workshop. The second round of workshops will be a deeper dive on strategies along with conversations with priority populations of the County. The third and final round of workshops will focus on receiving and providing feedback on the CAAP draft. It was asked of the Commission to review whether the focus areas and table discussions for the first workshop feel relevant, useful and efficient.

- A comment was made that the language used regarding the County goals could be stronger to express to County residents more clearly how the County is to achieving a net-negative.
  - Staff responded that the second round of workshops will focus on prioritization and will allow for a deeper-dive on these subjects.
  - Staff added that the goal of community resilience is phrased to make the plan tangible for community members.
- A commenter agreed that the time constraints might not allow for enough time during breakout sessions. It was added that there could be agendas for each breakout session to help the facilitator.
  - Staff responded that there will be facilitator's guides for the entire workshop agenda along with each of the breakout sessions.
- A comment was made that facilitating carpooling or even a bus could better ensure residents from unincorporated parts of the county can get there.
  - Staff responded that there is an RSVP function on the CAAP portal, and Staff will discuss capacity for organizing a carpool system.
- It was asked what the location will be and how multilingual breakout sessions will work.
  - Staff responded that it would take place at the Woodland Community Center with four rooms booked. There will also be activities for children.
- Staff added that there will be physical posters, social media posts, newsletter stories, and possibly radio ads to blast out information on the workshop.

Public Comment:

- A comment was made that two hours is a long time for many members of the public to pull from their week.
  - A response was made that participants should fill out the survey at the beginning of the workshop just in case participants have to leave early.
  - It was asked whether the geographic scope of the first round of workshops could be expanded.
  - Staff responded that there is a possibility of offering a fully virtual workshop during the first round of workshops. It was asked what the physical capacity is for the in-person workshop.
  - Staff shared that there is capacity for over 100 participants.
    - It was asked what next steps are.

        - Staff responded that they will meet this week internally and with the Dudek Team to discuss these points and the possibility of a virtual workshop.

8. Review and Provide Input on Expanded Climate Action and Adaptation Plan Survey

- Staff shared that there is a new 20+ question survey that expands on the preliminary survey that was developed. There were over 170 physical responses to the preliminary survey which led to guidance on how to shift language and focuses. Understanding the opinions of the community and who has responsibility to act, understanding lived experience, and actions that community members are willing to take all inform future policy recommendations and feed into the County's next round of outreach and funding decisions. It was suggested for Dudek to look into how best to receive a random sampling pool.
    - Staff responded that since the survey is not required, there is likely going to be a bias from the survey pool. It was added that Staff will discuss with Dudek on how to achieve a more random selection of respondents.
- A comment was made that a six-page survey is not accessible and suggested narrowing the survey down to one page.
    - Staff responded that the second round of workshops would be to prioritize strategies, which would be informed by a baseline understanding of what strategies are prioritized by the community. It was added that the purpose of this survey is to gauge what the opinions of the community are before conducting outreach and engaging with the community in a workshop setting.
- A question was asked regarding whether there could be consultation with the outreach partner groups before the survey goes live.
- It was added that the Natural and Working Lands Technical Advisory Committee is also developing a survey with focus on producers in the county. It was asked whether these two surveys are complementary, or redundant together.
    - Staff responded that the Ag-Specific strategies are not included in this survey since it is a targeted conversation with county growers. It was added that this survey could include a reference to the Ag survey while this survey can refer to other elements of living operations.
- Staff asked what information would be most helpful or persuasive for County officials to push forward climate legislation.
    - A commenter responded that the survey could be shortened but does not need to be mostly deleted.

Public Comment:

- A comment was made that the length of the survey should be shortened, though the survey should remain an outreach tool to reach more members of the community than workshops would be able to do alone. It was added that there

are concerns about the ability for survey participants to answer questions anonymously.
    - Staff responded that there will be no requirement to provide contact information.
- A comment was made that surveys are useful for documenting where the community is, though there will be a bias to those who fill out the survey. It was suggested to think of other strategies for engaging with rural communities.

9. Commission Member Reports, Comments, Future, Future Agenda Items

- It was shared the Davis Girl Scouts' Club invited NJ Mvondo to speak on Yolo County's CAAP. Youth asked what local governments are doing for climate change, where emissions are coming from, what young people can do to help the CAAP process and reduce carbon emissions.
- It was asked whether there are any updates on the Valley Clean Energy concerns that were brought up at the April Commission Meeting.
    - Staff responded that Valley Clean Energy cost concerns are out of the scope of this Commission and Staff followed up internally to address this issue with the Valley Clean Energy dysgg.

10. Long Range Calendar

- No comments at this time.

11. Adjournment

- Meeting adjourned at: 6:30 PM.

Attachment C - Summary of First Round of CAAP Workshops

WORKSHOP SERIES #1 SUMMARY

OVERVIEW OF WORKSHOPS

On June 20, 21, and 22, 2023, the Yolo County Sustainability Division, the Yolo County Climate Action Commission, and the Equity and Engagement Technical Advisory Committee hosted the first round of public workshops for the Climate Action and Adaptation Plan (CAAP). Approximately 40 community members participated in the series, providing input on how Yolo County communities are experiencing climate impacts, what actions community members feel the County should take to address climate change, and what actions individuals are willing to take to reduce their own emissions. This document provides a high-level summary of the key takeaways from the first round of workshops.

To learn more about the CAAP and to stay involved, visit www.YoloCAAP.org.

Participant Concerns

- **DISPROPORTIONATE COMMUNITY IMPACTS:** Participants identified that climate changes impact the social fabric, cultural practices, and economic stability of communities in Yolo County. Participants identified that marginalized communities often bear a disproportionate burden of these frequent climate impacts. Participants requested that the climate resilience measures of the CAAP be built in collaboration with community partners, recorded and reported transparently, driven by an inclusive decision-making process that integrates the diverse voices of Yolo County, and tailored to the needs of marginalized communities.
- **EXTREME WEATHER EVENTS:** Storms and extreme heat are the climate impacts of greatest concern. Participants cited concerns regarding the following:
  - Flooding and infrastructure damage due to storms
  - Power outages and droughts due to extreme heat
  - Wildfires

- **ECOSYSTEM DEGRADATION AND LOSS:** Participants shared that they have seen noticeable habitat loss, biodiversity decline, and decreased wildlife sightings in Yolo County.
- **INFRASTRUCTURE LIMITATIONS:** Participants shared concerns around limited broadband reliability in the unincorporated area, limited/unequal access to public transportation and electric vehicle (EV) charging infrastructure, and unsafe bike routes throughout the County. These infrastructure and community resource limitations impact community resilience, wellbeing, and participation in public processes.

Coping Mechanisms and Community Engagement

- **INDIVIDUAL ACTIONS:** Many participants shared that they are already/willing to electrify homes, utilize public transportation, bike, recycle, and switch to sustainable products.
  - Participants expressed frustration with the emphasis on individual actions that can't be completed without infrastructural support (example: utilizing public transit, making home electrification easier to access). See **Climate Resiliency Requests** below.
- **COMMUNITY SUPPORT REQUESTS:** There was a strong emphasis on respecting the unique needs and perspectives of unincorporated and disadvantaged/marginalized communities. Participants requested support and resources tailored to their specific circumstances.
  - **Community Collaboration:** Respondents emphasized the importance of collaboration and partnership between the County and various interested parties, including community organizations, businesses, and educational institutions, to implement effective climate change policies and projects.
    - The Yocha Dehe Wintun Nation faces challenges from extreme heat, drought, and flooding, impacting agriculture, economic stability, and air quality for farmworkers. The tribe seeks inclusion in the CAAP to address community needs.

- **Data Transparency:** Participants expressed a lack of clear understanding of the County's jurisdictional power, which limits the ability of community members to support climate action planning.
- **Sector-Specific Requests**

  SCHOOLS:

  — Request that schools be more walkable.

  — Request that school climate goals align with the County's.

  AGRICULTURE:

  — Request for hazard pay (ex: 1.5x) when weather conditions are dangerous, like when air quality is poor due to wildfires.

  — Request that mass transit be incentivized.

  — Overarching request for better engagement with farmers to incentivize behavioral changes and sustainable agricultural practices.

Climage Resiliency Requests

◢ INFRASTRUCTURE IMPROVEMENTS

- **Electrify Yolo:** Many participants expressed a willingness to transition to home electrification but don't have access (some folks shared barriers to electrifying, particularly in the unincorporated areas).

  — Request that electrification be more accessible by providing additional technical assistance, outreach, and support in the unincorporated areas.

  — Request that electricity come from local clean energy to help buffer the power outages during extreme weather events.

  — Request for more electric vehicle charging stations.

- **Support Public Transit:** Many participants shared that they are willing to bike or utilize public transportation or mass transit to work/school.

  — Request that bike lanes be expanded.

— Request that mass transit be incentivized to improve traffic management on I-80.

— Voiced concern that schools are not accessible by current modes of public transportation.

- Request for **flood control** and **stormwater management** infrastructure.
- **Building Upgrades:** Participants requested that building codes be revised to promote energy efficiency and solar generation.

— Recommend that building standards be "Zero Code."

— Request that the increased cost of upgrades doesn't disenfranchise low-income families.

ECOSYSTEM PROTECTION

- **Habitat Conservation:** Participants were concerned about decreased wildlife sightings and habitat loss.

— Request for wildlife corridors and protection of natural habitats.

— Request to plant native oaks along county roads as a carbon sink opportunity.

COMMUNITY PREPAREDNESS

- Request for resilience hubs, cooling centers, and backup generators/alternative energy sources.
- Request for targeted outreach and educational campaigns to raise awareness about actions that can make a difference, resources for sustainable living, and proactive behavioral changes.
- Identified barriers around lack of funding, technical expertise, and fear of change.

— Request for internet infrastructure and digital literacy support. Identified lack of computers or internet access as a barrier to participate in the CAAP.

— Participants cited that the CAAP workshops may be more accessible online than in person, and that word-of-mouth on the workshop has the greatest access.

— Request for ASL accessibility at workshops.

— Identified inequity in participation in CAAP due to lack of awareness regarding institutions/resources, basic needs not being met, transient nature of Yolo County, lack of community resources to participate, intimidation factor, and disconnect between scientific facts and daily life.

SUSTAINABLE RESOURCE MANAGEMENT

- Request for increased landfill access for frequent toxic waste disposal.
- Request for support to local clean energy initiatives.
- Request for enhanced water conservation practices.

Attachment D - Staff Report on AER Program Timeline

STAFF REPORT

DATE: July 24th, 2023

TO: Yolo County Climate Action Commission

FROM: Gretchen James, CivicSpark Fellow

Kristen Wraithwall, Sustainability Manager

RE: Update on Agricultural Equipment Replacement Program Timeline

RECOMMENDED ACTION

1. Receive Update on Agricultural Equipment Replacement Program Timeline.

REASON FOR RECOMMENDED ACTION

This report provides an update to the Yolo County Climate Action Commission (Commission) regarding the Agricultural Equipment Replacement (AER) Early Action Project, which was approved by the Yolo County Board of Supervisors (Board) in May 2023. County Staff have since held discussions with the Yolo-Solano Air Quality Management District (YSAQMD) to develop a timeline for the program which is expected to launch in November 2023.

BACKGROUND

In May 2023, the Board unanimously approved an updated description of the Yolo Agricultural Equipment Replacement (AER) Program, one of seven Yolo County Early Action projects. The AER project creates an electric Utility Task Vehicle (UTV) replacement program for Yolo County farmers, prioritizing American Rescue Plan (ARP) funding to socially disadvantaged farmers/ranches and projects with the greatest GHG emission reduction impact. The Board approved an allocation of $130,000 in ARP funds for UTV replacements, making possible the funding of 10-15 replacement projects depending on the selected applicants' choice of electric UTV (eUTV) model. This project will be a partnership between Yolo County and YSAQMD, with YSAQMD administering the program utilizing the Funding Agricultural Replacement Measures for Emissions Reductions (FARMER) program as a resource, providing detailed calculations to the Commission on GHG reductions, and coordinating outreach efforts with the Yolo County Farm Bureau and other organizations. In June 2023, YSAQMD received approval from

the District Board to work with Yolo County and the Commission on the implementation of this project.

YSAQMD is currently working on draft application materials based on the approved AER program description. The final application materials are scheduled to go to the YSAQMD Board for approval on September 13th, 2023.

AGRICULTURAL EQUIPMENT REPLACEMENT PROGRAM TIMELINE

The timeline for the AER Program is as follows:

1. **Outreach (Fall 2023):** Yolo County will engage in focused outreach efforts in coordination with the YSAQMD. This effort will seeks to spread awareness of the AER program and provide an opportunity for questions prior to program launch.
2. **Program Opens (November 2023):** The Agricultural Equipment Replacement Program solicitation will tentatively open in November 2023. At this stage, eligible participants will be able to submit applications for the replacement of gas-powered UTVs with eUTVs.
3. **Application Period (November 2023-February 2024):** The application period for the AER Program will begin in November 2023 and close in February 2024.
4. **Technical Assistance:** Throughout the application period and beyond, technical assistance will be provided to the applicants. County Staff and YSAQMD will be available to support applicants in understanding program requirements, completing application forms, and addressing any questions or concerns related to the equipment replacement process.

NEXT STEPS

Yolo County will work with YSAQMD to finalize grant guidelines and develop focused outreach efforts to ensure successful engagement with the agricultural community. County Staff will continue to monitor and report on the program's developments and further updates will be provided to the Commission as the program advances into implementation.

Attachment E - Summer Tabling and Event Schedule

Yolo County Climate Action & Sustainability Outreach Events

Updated July 12, 2023

Events Calendar is subject to change on a monthly basis

July 2023:

22nd from 9:00 AM – 12:00 PM: Woodland Farmer's Market Health & Safety Fair

29th from 9:00 AM – 12:00 PM: Davis Farmer's Market

August 2023:

5th from 8:00 AM – 12:00 PM: Yolo County Children's Alliance (YCCA) Backpack Giveaway and Family Resource Fair

5th from 9:00 AM - 12:00 PM: International Rescue Committee New Roots Farmstand Volunteer Day

9th from 10:30 AM – 11:30 AM: Children's Storytime, Esparto Branch Library

9th from 4:00 PM – 8:00 PM: Davis Farmer's Market Picnic in the Park

12th from 9:00 AM – 12:00 PM: Woodland Farmer's Market

13th from 4:30 PM – 5:30 PM: End of Summer Concert, Mary L. Stephens Davis Branch Library

16th from 4:00 PM – 8:00 PM: Davis Farmer's Market Picnic in the Park

16th - 20th (*time TBD*): Yolo County Fair, Yolo County Fairgrounds

26th from 10 AM - 3 PM: Cruisin' Into the Next Chapter Classic Car & Truck Show, Yolo County Library

Attachment F - Staff Report on Working Lands Survey Outreach

STAFF REPORT

DATE: July 24th, 2023

TO: Yolo County Climate Action Commission

FROM: Gretchen James, CivicSpark Fellow

Kristen Wraithwall, Sustainability Manager

RE: Update on Climate Action and Adaptation Plan Working Lands Survey

RECOMMENDED ACTION

1. Receive Update on Climate Action and Adaptation Plan (CAAP) Working Lands Outreach Survey.

REASON FOR RECOMMENDED ACTION

This Staff Report provides an update on the progress of the CAAP Working Lands Outreach Survey. The survey aims to gather valuable input from Yolo County growers to ensure the needs of the agricultural community are incorporated into the County's CAAP. County Staff and Yolo County Resource Conservation District (RCD) have been actively involved in the outreach and implementation of the survey in collaboration with the Natural and Working Lands (NWL) Technical Advisory Committee (TAC) and the Dudek Team. Links to the survey and sequestration surveys in both English and Spanish can be found on the County's website[1]. PDFs of the final paper surveys and sequestration strategies can be found as Attachments in this agenda packet (*Attachments G and H*).

BACKGROUND

Yolo County is preparing a Climate Action and Adaptation Plan (CAAP) to help achieve our carbon negative goal—capturing more carbon in soils than we're emitting—by 2030. To ensure that the needs and priorities of the Yolo agricultural community are incorporated into the CAAP, the county is working with the Yolo Resource Conservation District (RCD) to complete a Working Lands Outreach survey to understand what sustainable strategies are currently in practice, identify those that are feasible, and address potential challenges to implementation. Survey responses will ensure that the CAAP and future funding programs, policies, and technical assistance offerings are

[1] https://www.yolocounty.org/government/general-government-departments/community-services/climate-action-sustainability/yolo-county-climate-action-commission/cap-technical-advisory-committees-tacs/working-lands-outreach-survey#!/

tailored to the specific needs of Yolo County's agricultural community and the goals of the region.

The survey has been made available in both English and Spanish. A dedicated webpage has been created where growers can easily find and access the survey online. Hosting this information on the Yolo County website (as opposed to the CAAP portal alone) and including the main County, RCD, and CAAP logos clearly underscores that this is anficial County effort, something that is important to build buy-in and trust among the agricultural community.

WORKING LANDS SURVEY TIMELINE AND OUTREACH PLAN

The Resource Conservation District (RCD) is leading outreach efforts, using existing relationships to engage directly with local growers, partners, and associations to encourage participation in the survey. To reach a broader audience, County Staff is developing informational flyers and sharable social media posts to promote interest in the survey online. The survey's launch and details were also featured in our monthly newsletter, distributed widely across the County, and a press release will be developed. The survey will remain open until October 13, 2023.

NEXT STEPS

County Staff and RCD will continue to monitor survey responses and conduct direct outreach via email and at in-person presentations. Once the survey closes, data will be analyzed and incorporated into the development of the CAAP and used to inform a series of Roundtable Conversations with the agricultural community this November. The valuable insights provided will play a critical role in formulating effective strategies, resources, and programs to promote sustainable agricultural practices to support Yolo County growers and help the County achieve its net-negative goal.

Attachment G - Final Working Lands Outreach Survey and Sequestration [ENGLISH]

Yolo County Climate Action and Adaptation Plan
Working Lands Outreach Survey

PURPOSE

Yolo County is preparing a Climate Action and Adaptation Plan (CAAP) to help achieve a carbon negative goal—capturing more carbon in soils than we're emitting—by 2030. To ensure that the needs and priorities of the Yolo agricultural community are incorporated into the CAAP, the County is working with the Yolo Resource Conservation District (RCD) to complete the following survey to understand what sustainable strategies are currently in practice, identify those that are feasible, and to address challenges to implementation.

Participation in this survey is voluntary and the **responses are anonymous**. Detailed responses to the questions below will ensure that the CAAP and future funding programs, policies, and technical assistance offerings will be tailored to the specific needs of the Yolo County agricultural community and to the region's goals. Please provide responses to the questions below to the best of your ability, ensuring information for each site/operation is submitted only once.

Thank you so much for your time!

CARBON STORAGE AND GREENHOUSE GAS EMISSIONS REDUCTIONS PRACTICES (See Attached Table for Practice Descriptions)

Outreach Question	Response					
1. Carbon Storage Practices						
1a. Do you <u>currently implement</u> any of the following practices on your operations within Yolo County? (Circle those that apply and describe)	A. Conservation Crop Rotation	B. Cover Crops	C. Mulching	D. Nutrient Management	E. Soil Carbon Amendments	Description (list applicable practice letter and extent for your operations [i.e., widespread, limited, or estimated acreage]):
	F. Reduced Till	G. No Till	H. Prescribed Grazing	I. Prescribed Burning	J. Range Planting	
	K. Silvopasture	L. Hedgerows	M. Windbreaks-Shelterbelts	N. Riparian Forest Buffer	O. Riparian Herbaceous Cover	
	P. Grassed Waterway	Q. Filter Strip	R. Other			
1b. Would any of the following practices <u>be feasible</u> for your operations within Yolo County? (Circle those that apply and describe)	A. Conservation Crop Rotation	B. Cover Crops	C. Mulching	D. Nutrient Management	E. Soil Carbon Amendments	Description (list applicable practice letter and extent for your operations [i.e., widespread, limited, or estimated acreage]):
	F. Reduced Till	G. No Till	H. Prescribed Grazing	I. Prescribed Burning	J. Range Planting	
	K. Silvopasture	L. Hedgerows	M. Windbreaks-Shelterbelts	N. Riparian Forest Buffer	O. Riparian Herbaceous Cover	
	P. Grassed Waterway	Q. Filter Strip	R. Other			

CARBON STORAGE AND GREENHOUSE GAS EMISSIONS REDUCTIONS PRACTICES (See Attached Table for Practice Descriptions)

Outreach Question	Response					
2. Greenhouse Gas Reduction Practices						
2a. Do you currently implement any of the following greenhouse gas emissions reduction practices for your operations within Yolo County? (Circle those that apply and describe)	A. Energy Efficient Agricultural Operations	B. Reduce Fossil Fuel Consumption in Field Equipment	C. Reduce Energy Use in Agricultural Irrigation Pumping	D. Increase Use of Biofuels or Low-Carbon Fuels in Field Equipment	E. Other	Description (list applicable practice letter and describe):
2b. Would any of the following greenhouse gas emissions reduction practices be feasible for your operations within Yolo County? (Circle those that apply and describe)	A. Energy Efficient Agricultural Operations	B. Reduce Fossil Fuel Consumption in Field Equipment	C. Reduce Energy Use in Agricultural Irrigation Pumping	D. Increase Use of Biofuels or Low-Carbon Fuels in Field Equipment	E. Other	Description (list applicable practice letter and describe):
3. Water Use Efficiency Practices						
3a. Do you currently implement any of the following irrigation practices for your operations within Yolo County? (Circle all that apply and describe)	A. Drip irrigation system	B. Automated Irrigation controls including soil moisture sensors	C. Decrease or increase in amount of irrigation water used.	D. Changes in irrigation water supply.	E. Other changes to irrigation management.	Description (list applicable practice letter and describe):
3b. Would any of the following irrigation practices be feasible for your operations within Yolo County? (Circle all that apply and describe)	A. Drip irrigation system	B. Automated Irrigation controls including soil moisture sensors	C. Decrease or increase in amount of irrigation water used.	D. Changes in irrigation water supply.	E. Other changes to irrigation management.	Description (list applicable practice letter and describe):
4. Barriers or challenges with implementing carbon storage or greenhouse gas emissions reductions practices	Description:					

CARBON STORAGE AND GREENHOUSE GAS EMISSIONS REDUCTIONS PRACTICES (See Attached Table for Practice Descriptions)

Outreach Question	Response
5. Incentives or resources needed to implement carbon storage or greenhouse gas emissions reductions practices	Description:
6. Other feedback/input	Description:

GENERAL INFORMATION

Outreach Question	Response
7. Your operation's typical crop type(s) or livestock type(s) in Yolo County	Description:
8. Approximate acreage of your operations in Yolo County	Description:

Thank you so much for taking the time to complete this survey. Your responses will help shape the Climate Action and Adaptation Plan and ensure that future funding programs, policies, and technical assistance offerings will be tailored to the specific needs of the Yolo County agricultural community.

If you are interested in learning more about implementing carbon storage practices on your farm, visit https://tinyurl.com/YoloWorkingLands or scan the QR code below to learn more about the Yolo Carbon Farming Partnership and upcoming training opportunities for farmers and ranchers from the Center for Land Based Learning.

POTENTIAL PRACTICES					
Practice	**NRCS CPS Code[1]**	**Where Practice Applies**	**Description**	**Producer Benefits**	**Funding / Incentives[2]**
Carbon Storage Measures					
A. Conservation Crop Rotation: Decrease Fallow Frequency or Add Perennial Crops to Rotations	328	This practice applies to all cropland where at least one annually planted crop is included in the crop rotation.	A planned sequence of crops grown on the same ground over a period of time. This practice results in an increase in soil carbon.	• Reduce sheet, rill, and wind erosion • Improve or maintain soil health • Improve or maintain soil organic matter • Reduce water quality degradation by utilizing excessive soil nutrients • Improve soil moisture retention • Reduce weed pressures and break pest cycles • Provide feed and forage for domestic livestock	A, D
B. Cover Crops	340	All lands that require seasonal vegetative cover for natural resource protection or improvement.	Grasses, legumes, and other plants grown for seasonal vegetative cover. This practice helps to reduce erosion and maintain or increase organic matter content.	• Reduce sheet, rill, and wind erosion • Improve or maintain soil health • Improve or maintain soil organic matter • Reduce water quality degradation through metabolic uptake of excessive soil nutrients • Suppress excessive weed pressure and break pest cycles • Improve soil moisture retention • Minimize soil compaction	D
C. Mulching	484	This practice applies to all lands where mulches are needed.	Applying plant residues or other suitable materials to the land surface. This practice improves plant productivity and health and maintains or increases organic matter content.	• Improve soil moisture retention • Potential to reduce energy use and irrigation cost • Reduce erosion along farm-edge water conveyance channels • Potential to protect groundwater • Reduce sheet, rill, and wind erosion • Reduce weed pressure	A, D
D. Nutrient Management	590	All fields where plant nutrients and soil amendments are applied. Does not apply to one-time nutrient applications for the	Manage rate, source, placement, and timing of plant nutrients and soil amendments by developing a system to track soil nutrients. Amendments can include organic and inorganic	• Potential to reduce fertilizer costs • Improve plant health and productivity • Minimize excess nutrients that percolate into surface and groundwater	A, D

POTENTIAL PRACTICES					
Practice	**NRCS CPS Code[1]**	**Where Practice Applies**	**Description**	**Producer Benefits**	**Funding / Incentives[2]**
		establishment of permanent vegetation.	fertilizers, pulverized rock minerals, and biochar. This practice improves or maintains soil organic matter.	• Improve or maintain soil organic matter	
E. Soil Carbon Amendments (SCA)	336	This practice applies to areas of Crop, Pasture, Range, Forest, Associated Agriculture Lands, Developed Land, and Farmsteads where organic carbon amendment applications will improve soil conditions.	Soil carbon amendments (SCA) are materials derived from plants or animal byproducts that are applied to the soil to improve or maintain soil organic matter, sequester carbon and enhance carbon stocks, improve soil aggregate stability, and/or improve habitat for soil organisms. SCAs include compost, biochar, and other regionally-appropriate carbon-based materials (e.g., waste plant materials, wood chips, pulverized paper, bagasse, or distillation residue). Whole Orchard Recycling (WOR) is a type of SCA where orchard trees are chipped and incorporated into the field in which they were grown (i.e., wood chips not exported off-site). SCA can also include improving soil biology by using beneficial soil inoculants such as rhizobia and mycorrhizae.	• Improve or maintain soil organic matter • Improve soil structure for water infiltration, moisture retention and nutrient availability • Improve soil health, boost crop yields, reduce the need for synthetic fertilizers, and sequester CO_2	A, C, D
F. Residue and Tillage Management: Reduced Till	345	This practice applies to all cropland.	Managing the amount, orientation, and distribution of crop and other plant residues on the soil surface year-round while limiting soil-disturbing activities used to grow and harvest crops in systems where the field surface is tilled prior to planting. This practice improves soil health and maintains or increases organic matter content.	• Improve or maintain soil health • Improve or maintain soil organic matter • Reduce energy use and associated costs	A, B, D
G. Residue and Tillage Management: No Till	329	This practice applies to all cropland.	Limiting soil disturbance to manage the amount, orientation, and distribution of crop and plant residue on the soil surface year-	• Improve or maintain soil health • Improve or maintain soil organic matter • Increase plant-available moisture • Reduce energy use and associated costs	A, B, D

POTENTIAL PRACTICES					
Practice	**NRCS CPS Code[1]**	**Where Practice Applies**	**Description**	**Producer Benefits**	**Funding / Incentives[2]**
			round. This practice improves soil health and maintains or increases organic matter content.		
H. Prescribed Grazing	528	This practice applies to all lands where grazing and/or browsing animals are managed.	Managing the harvest of vegetation with grazing and/or browsing animals with the intent to achieve specific ecological, economic, and management objectives. This practice reduces soil erosion and maintains or improves soil health.	• Improve or maintain quantity and/or quality of forage for grazing and browsing animals' health and productivity • Improve or maintain desired species composition, structure, and/or vigor of plant communities • Improve or maintain surface and/or subsurface water quality and/or quantity • Reduce soil erosion • Improve or maintain soil health • Reduce wildfire hazards from biomass accumulation	B
I. Prescribed Burning	338	All lands as appropriate.	Planned fire applied to a predetermined area to manage undesirable vegetation, improve plant community structure and composition, reduce wildfire hazards, improve and maintain habitat for soil organisms, and enhance soil health.	• Manage undesirable vegetation to improve plant community structure and composition • Reduce noxious invasive weed species • Reduce wildfire hazards from biomass accumulation • Improve forage production	
J. Range Planting	550	All range lands as appropriate. This practice is applied where desirable vegetation is below the acceptable level for natural reseeding to occur or where the potential for enhancement of the vegetation by management of herbivory is unsatisfactory.	The seeding and establishment of herbaceous and woody species for the improvement of vegetation composition and productivity of the plant community to meet management goals. This practice increases and/or stabilizes carbon balance and sequestration.	• Provide or improve forages for livestock • Restore hydrologic function through increased water infiltration and soil moisture retention	B, D
K. Silvopasture	381	This practice may be applied on any area that is suitable for the desired forages, trees, and livestock.	Deliberate integration of trees and grazing livestock operations on the same land unit, intensively managed for both forest products and forage. This practice improves soil quality and increases carbon storage.	• Provide forage, shade, and/or shelter for livestock • Improve water quality • Improve soil health	B, D

POTENTIAL PRACTICES					
Practice	**NRCS CPS Code[1]**	**Where Practice Applies**	**Description**	**Producer Benefits**	**Funding / Incentives[2]**
				• Provide both short- and long-term income sources	
L. Hedgerows	422	All lands as appropriate.	Establishment of dense vegetation (e.g., trees, shrubs, perennial grasses, forbs, rushes, sedges) in a linear design surrounding a farm field. This practice increases carbon storage in biomass and soils.	• Integrated pest management by providing habitat to beneficial insects • Enhance crop pollination • Reduce chemical drift • Visual screens and barriers to dust • Enhance pollen, nectar, and breeding habitat for pollinators • Enhance cover, nesting, and food sources for birds, mammals, and other native wildlife	B, D
M. Windbreak-Shelterbelt Establishment and Renovation	380	This practice may be applied in any area where linear plantings of woody plants are desired and suited for controlling wind and visual resources. Use other tree/shrub practices when wind and visual problems are not concerns.	Establishment, enhancement, or renovation of windbreaks, also known as shelterbelts, which are single or multiple rows of trees and/or shrubs in linear or curvilinear configurations. This practice increases carbon storage in biomass and soils.	• Reduce soil erosion from wind • Protect plants from wind-related damage • Provide visual screens • Delineate property and field boundaries • Enhance cover, nesting and food sources for birds, mammals, and other native wildlife	B, D
N. Riparian Forest Buffer	391	Apply riparian forest buffers on areas adjacent to permanent or intermittent streams, lakes, ponds, and wetlands where channels and streambanks are sufficiently stable.	An area predominantly covered by trees and/or shrubs located adjacent to and up-gradient from a watercourse or water body.	• Reduce transport of sediment to surface water, and reduce transport of pathogens, chemicals, pesticides, and nutrients to surface and groundwater. • Enhance cover, nesting and food sources for birds, pollinators, mammals, and other native wildlife	B
O. Riparian Herbaceous Cover	390	This practice applies to land adjacent to water courses, water bodies, and wetlands where natural riparian vegetation has been altered and bank stability is adequate to support the practice.	Grasses, sedges, rushes, ferns, legumes, and forbs tolerant of intermittent flooding or saturated soils, established or managed as the dominant vegetation in the transitional zone between upland and aquatic habitats.	• Reduce transport of sediment to surface water, and reduce transport of pathogens, chemicals, pesticides, and nutrients to surface and groundwater	B

POTENTIAL PRACTICES					
Practice	**NRCS CPS Code[1]**	**Where Practice Applies**	**Description**	**Producer Benefits**	**Funding / Incentives[2]**
				• Enhance cover, nesting and food sources for birds, pollinators, mammals, and other native wildlife • Restore, improve, or maintain the desired plant communities	
P. Grassed Waterway	412	This practice is applied in areas where added water conveyance capacity and vegetative protection are needed to prevent erosion and improve runoff water quality resulting from concentrated surface flow.	A shaped or graded channel that is established with suitable vegetation to convey surface water at a nonerosive velocity using a broad and shallow cross section to a stable outlet.	• Reduce maintenance of farm edge waterways • Convey runoff from terraces, diversions, or other water concentrations without causing erosion or flooding • Prevent gully formation • Protect/improve water quality	B
Q. Filter Strip	393	Filter strips are established where environmentally sensitive areas need to be protected from sediment, other suspended solids, and dissolved contaminants in runoff.	A strip or area of herbaceous vegetation that removes contaminants from overland flow.	• Reduce suspended solids and associated contaminants in runoff and excessive sediment in surface waters • Reduce suspended solids and associated contaminants in irrigation tailwater	B
GHG Emission Reducing Measures					
A. Energy Efficient Agricultural Operation	374	This practice applies to nonresidential structures, equipment, and other energy-using systems that support agricultural production and related enterprises except where another NRCS Conservation Practice Standard (CPS) is more appropriate.	On-farm facilities, equipment, and management strategies that provide increased energy efficiency.	• Improve energy efficiency for facilities, equipment, and/or processes • Reduce operational costs	F, G, H, I
B. Reduce Fossil Fuel Consumption in Field Equipment	-	All lands where diesel offroad equipment is used.	Reduce fossil fuel use through one or more of the following: 1. Routine maintenance of existing equipment, 2. Efficient operation of existing equipment (*e.g., optimizing drawbar load*), 3. Engine and equipment upgrades to more efficient models.	• Improve energy efficiency • Reduce operational costs	G, H, I

POTENTIAL PRACTICES					
Practice	**NRCS CPS Code[1]**	**Where Practice Applies**	**Description**	**Producer Benefits**	**Funding / Incentives[2]**
C. Reduce Energy Use in Agricultural Irrigation Pumping	-	Croplands	Transition to more efficient irrigation systems which could include: 1. Solar Irrigation Return Pumps, 2. Maintenance of pump bowl components to increase efficiency.	• Improve energy efficiency • Reduce operational costs	G, H
D. Increase Use of Biofuels or Low-Carbon Fuels in Field Equipment	-	All lands where diesel offroad equipment is used.	Replacing conventional gasoline and diesel fuels with biofuels or low-carbon fossil fuel alternatives.	• Improve energy efficiency • Reduce operational costs	-

[1]U.S. Department of Agriculture Natural Resources Conservation Service - Conservation Practice Standards, https://www.nrcs.usda.gov/resources/guides-and-instructions/conservation-practice-standards

[2] Potential funding sources and incentive programs are itemized here; however, Yolo County will also evaluate developing other funding sources or programs that could be used to incentivize actions at the County-wide scale. Therefore, although these existing incentives are currently available (although not all programs may currently be open or have available funding this cycle), additional funding sources may become available with implementation of the CAAP in order to meet the goals and priority strategies identified.

Specific funding sources and incentive programs:

A – NRCS Environmental Quality Incentives Program (EQIP), Conservation Incentive Contract (CIC), California, https://www.nrcs.usda.gov/conservation-basics/conservation-by-state/california/environmental-quality-incentives-program

B – NRCS Conservation Stewardship Program (CSP), https://www.nrcs.usda.gov/programs-initiatives/csp-conservation-stewardship-program

C – Yolo-Solano Air Quality Management District, Agricultural Chipping Program, https://www.ysaqmd.org/incentives/agricultural-chipping-program/

D – CDFA Healthy Soils Incentives Program, https://www.cdfa.ca.gov/oefi/healthysoils/IncentivesProgram.html

E – NRCS Agricultural Land Easement Program (ALE), https://www.nrcs.usda.gov/programs-initiatives/ale-agricultural-land-easements

F – NRCS EQIP On-Farm Energy Initiative, https://www.nrcs.usda.gov/programs-initiatives/on-farm-energy-initiative

G – Yolo-Solano Air Quality Management District, Carl Moyer Program, https://www.ysaqmd.org/incentives/moyer/

H – Yolo-Solano Air Quality Management District, Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program, https://www.ysaqmd.org/incentives/farmer-program/

I – California Air Resources Board, California Clean Off-Road Equipment Voucher Incentive Project (CORE) https://californiacore.org/resources/

Attachment H - Final Working Lands Outreach Survey and Sequestration [SPANISH]

Plan de Acción y Adaptación Climática del Condado de Yolo
Tierras de Trabajo - Cuestionario de Encuesta de Alcance

PROPÓSITO

El Condado de Yolo está preparando un Plan de Acción y Adaptación Climática (CAAP) para ayudar a lograr una meta de carbono negativo - capturando más carbono en los suelos de lo que estamos emitiendo - para 2030. Para asegurar que las necesidades y prioridades de la comunidad agrícola de Yolo se incorporen en el CAAP, el Condado está trabajando con el Distrito de Conservación de Recursos de Yolo (RCD, por sus siglas en inglés) para completar la siguiente encuesta y comprender qué estrategias sostenibles se están implementando actualmente, identificar las que son factibles y abordar los desafíos para su implementación.

La participación en esta encuesta es voluntaria y las **respuestas son anónimas**. Las respuestas detalladas a las preguntas a continuación garantizarán que el CAAP y los futuros programas de financiamiento, políticas y ofertas de asistencia técnica se adapten a las necesidades específicas de la comunidad agrícola del Condado de Yolo y a las metas de la región. Proporcione respuestas a las preguntas a continuación de la mejor manera posible, asegurando que la información para cada sitio/operación se envíe solo una vez.

¡Muchas gracias por su tiempo!

PRÁCTICAS DE ALMACENAMIENTO DE CARBONO Y REDUCCIÓN DE EMISIONES DE GASES DE EFECTO INVERNADERO
(Consulte la Tabla Adjunta para las Descripciones de las Prácticas)

Pregunta de Divulgación	Respuesta					
1. Prácticas de Almacenamiento de Carbono						
1a. ¿Implementa actualmente alguna de las siguientes prácticas en sus operaciones dentro del Condado de Yolo? (Seleccione las que correspondan)	A. Rotación de cultivos de conservación	B. Cultivos de cobertura	C. Mulch/Astilla de madera	D. Gestión de nutrientes	E. Enmienda orgánica o mineral	Descripción (indique la letra de la práctica aplicable y la extensión para sus operaciones [es decir, amplia, limitada o superficie estimada]):
	F. Labranza reducida	G. Sin labranza	H. Pastoreo Prescrito	I. Quema Prescrita	J. Siembra de Rango	
	K. Silvopastura	L. Setos	M. Cortinas Rompevientos-Cinturones de Protección	N. Franja de Bosque Ribereño	O. Cubierta Herbácea Ribereña	
	P. Vía de Agua con Vegetación	Q. Franja de Filtro	R. Otros			

PRÁCTICAS DE ALMACENAMIENTO DE CARBONO Y REDUCCIÓN DE EMISIONES DE GASES DE EFECTO INVERNADERO
(Consulte la Tabla Adjunta para las Descripciones de las Prácticas)

Pregunta de Divulgación	**Respuesta**					
1b. ¿Alguna de las siguientes prácticas <u>sería factible</u> para sus operaciones dentro del condado de Yolo? (Seleccione todas las que correspondan).	A. Rotación de cultivos de conservación	B. Cultivos de cobertura	C. Mulch/Astilla de madera	D. Gestión de nutrientes	E. Enmienda orgánica o mineral	Descripción (indique la letra de la práctica aplicable y la extensión para sus operaciones [es decir, amplia, limitada o superficie estimada]):
	F. Labranza reducida	G. Sin labranza	H. Pastoreo Prescrito	I. Quema Prescrita	J. Siembra de Rango	
	K. Silvopastura	L. Setos	M. Cortinas Rompevientos-Cinturones de Protección	N. Franja de Bosque Ribereño	O. Cubierta Herbácea Ribereña	
	P. Vía de Agua con Vegetación	Q. Franja de Filtro	R. Otros			
2. Prácticas de Reducción de Gases de Efecto Invernadero						
2a. ¿<u>Implementa actualmente</u> alguna de las siguientes prácticas de reducción de emisiones de gases de efecto invernadero para sus operaciones en el condado de Yolo? (Seleccione todas las que correspondan)	A. Operaciones agrícolas eficientes en energía	B. Reducción del consumo de combustibles fósiles en equipos de campo	C. Reducción del consumo de energía en el bombeo de riego agrícola	D. Incrementar el uso de biocombustibles o combustibles de bajo carbono en equipos de campo	E. Otro	Descripción (enumerar la letra de la práctica correspondiente y describir):
2b. ¿<u>Sería factible</u> implementar alguna de las siguientes prácticas de reducción de emisiones de gases de efecto invernadero dentro del Condado de Yolo? (Seleccione todas las que correspondan)	A. Operaciones agrícolas eficientes en energía	B. Reducción del consumo de combustibles fósiles en equipos de campo	C. Reducción del consumo de energía en el bombeo de riego agrícola	D. Incrementar el uso de biocombustibles o combustibles de bajo carbono en equipos de campo	E. Otro	Descripción (enumerar la letra de la práctica correspondiente y describir):

PRÁCTICAS DE ALMACENAMIENTO DE CARBONO Y REDUCCIÓN DE EMISIONES DE GASES DE EFECTO INVERNADERO
(Consulte la Tabla Adjunta para las Descripciones de las Prácticas)

Pregunta de Divulgación	**Respuesta**					
3. Prácticas de Eficiencia en el Uso del Agua						
3a. ¿Actualmente implementa alguna de las siguientes prácticas de riego para sus operaciones en el Condado de Yolo? (Seleccione todas las que correspondan)	A. Sistema de riego por goteo	B. Controles automatizados de riego que incluyen sensores de humedad del suelo	C. Reducción o aumento en la cantidad de agua de riego utilizada	D. Cambios en el suministro de agua de riego	E. Otros cambios en la gestión del riego	Descripción (enumerar la letra de la práctica correspondiente y describir):
3b. ¿Sería factible implementar alguna de las siguientes prácticas de riego en sus operaciones dentro del Condado de Yolo? (Seleccione todas las que correspondan)	A. Sistema de riego por goteo	B. Controles automatizados de riego que incluyen sensores de humedad del suelo	C. Reducción o aumento en la cantidad de agua de riego utilizada	D. Cambios en el suministro de agua de riego	E. Otros cambios en la gestión del riego	Descripción (enumerar la letra de la práctica correspondiente y describir):
4. Barreras o desafíos para implementar prácticas de almacenamiento de carbono o reducción de emisiones de gases de efecto invernadero	Descripción:					
5. Incentivos o recursos necesarios para implementar prácticas de almacenamiento de carbono o reducción de emisiones de gases de efecto invernadero	Descripción:					
6. Otro comentario o aporte	Descripción:					

Información General

Pregunta de Divulgación	Respuesta
7. Tipo(s) de cultivo(s) o tipo(s) de ganado típicos en el condado de Yolo	Descripción:
8. Aproximado de superficie en acres de las operaciones en el condado de Yolo	Descripción:

Muchas gracias por tomarse el tiempo para completar esta encuesta. Sus respuestas ayudarán a dar forma al Plan de Acción y Adaptación Climática y garantizarán que los futuros programas de financiación, políticas y ofertas de asistencia técnica se adapten a las necesidades específicas de la comunidad agrícola del condado de Yolo.

Si está interesado en obtener más información sobre la implementación de prácticas de almacenamiento de carbono en su granja, visite https://tinyurl.com/YoloWorkingLands o escanee el código QR a continuación para obtener más información sobre Yolo Carbon Farming Partnership y las próximas oportunidades de capacitación para agricultores y ganaderos del Center for Land Based Learning.

PRÁCTICAS POTENCIALES					
Práctica	**Código CPS de NRCS[1]**	**Dónde se Aplica la Práctica**	**Descripción**	**Beneficios para el Productor**	**Financiamiento /Incentivos[2]**
Carbon Storage Measures					
A. Rotación de cultivos de conservación: Reducir la Frecuencia de Barbechos o Agregar Cultivos Perennes a las Rotaciones	328	Esta práctica se aplica a todos los terrenos de cultivo donde se incluye al menos un cultivo anual en la rotación de cultivos.	Una secuencia planificada de cultivos sembrados en el mismo terreno durante un período de tiempo. Esta práctica da como resultado un aumento en el carbono del suelo.	• Reducir la erosión laminar, en surcos y por viento • Mejorar o mantener la salud del suelo • Mejorar o mantener la materia orgánica del suelo • Reducir la degradación de la calidad del agua mediante el uso de nutrientes excesivos en el suelo • Mejorar la retención de humedad del suelo • Reducir la presión de malezas y romper los ciclos de plagas • Proporcionar alimento y forraje para el ganado doméstico	A, D
B. Cultivos de cobertura	340	Todos los terrenos que requieren cobertura vegetal estacional para la protección o mejora de los recursos naturales.	Hierbas, leguminosas y otras plantas que se cultivan como cobertura vegetal estacional. Esta práctica ayuda a reducir la erosión y mantener o aumentar el contenido de materia orgánica.	• Reducir la erosión laminar, en surcos y por viento • Mejorar o mantener la salud del suelo • Mejorar o mantener la materia orgánica del suelo • Reducir la degradación de la calidad del agua mediante la absorción metabólica de nutrientes excesivos en el suelo • Suprimir la presión excesiva de malezas y romper los ciclos de plagas • Mejorar la retención de humedad del suelo • Minimizar la compactación del suelo	D
C. Mulch/Astilla de madera	484	Esta práctica se aplica a todos los terrenos donde se necesitan acolchados.	Aplicar residuos de plantas u otros materiales adecuados en la superficie del suelo. Esta práctica mejora la productividad y salud de las plantas y mantiene o aumenta el contenido de materia orgánica.	• Mejorar la retención de humedad del suelo • Potencial para reducir el uso de energía y los costos de riego • Reducir la erosión a lo largo de los canales de conducción de agua en los bordes de las fincas • Potencial para proteger el agua subterránea	A, D

PRÁCTICAS POTENCIALES					
Práctica	**Código CPS de NRCS[1]**	**Dónde se Aplica la Práctica**	**Descripción**	**Beneficios para el Productor**	**Financiamiento /Incentivos[2]**
				• Reducir la erosión laminar, en surcos y por viento • Reducir la presión de malezas	
D. Gestión de nutrientes	590	Todos los campos donde se aplican nutrientes vegetales y enmiendas de suelo. No se aplica a aplicaciones de nutrientes únicas para el establecimiento de vegetación permanente.	Controlar la cantidad, fuente, colocación y tiempo de los nutrientes vegetales y enmiendas del suelo mediante el desarrollo de un sistema para rastrear los nutrientes del suelo. Las enmiendas pueden incluir fertilizantes orgánicos e inorgánicos, minerales de roca pulverizada y biochar. Esta práctica mejora o mantiene la materia orgánica del suelo.	• Potencial para reducir los costos de fertilizantes • Mejorar la salud y productividad de las plantas • Minimizar el exceso de nutrientes que se infiltran en las aguas superficiales y subterráneas • Mejorar o mantener la materia orgánica del suelo	A, D
E. Enmienda orgánica o mineral (SCA)	336	Esta práctica se aplica a áreas de cultivo, pastizales, terrenos forestales, terrenos agrícolas asociados, terrenos desarrollados y fincas donde las aplicaciones de enmiendas de carbono orgánico mejorarán las condiciones del suelo.	Las enmiendas de carbono del suelo (SCA) son materiales derivados de plantas o subproductos animales que se aplican al suelo para mejorar o mantener la materia orgánica del suelo, secuestrar carbono y mejorar las existencias de carbono, mejorar la estabilidad de los agregados del suelo y / o mejorar el hábitat para organismos del suelo. Las SCA incluyen compost, biochar y otros materiales a base de carbono apropiados para la región (por ejemplo, materiales de plantas de desecho, astillas de madera, papel pulverizado, bagazo o residuos de destilación). Whole Orchard Recycling (WOR) es un tipo de SCA en el que los árboles del huerto se astillan e incorporan al campo en el que crecieron (es decir, astillas de madera que no se exportan fuera del sitio). Las SCA también pueden incluir la mejora de la biología del suelo mediante el uso de	• Mejorar o mantener la materia orgánica del suelo • Mejorar la estructura del suelo para la infiltración de agua, retención de humedad y disponibilidad de nutrientes • Mejorar la salud del suelo, aumentar los rendimientos de los cultivos, reducir la necesidad de fertilizantes sintéticos y secuestrar CO2	A, C, D

PRÁCTICAS POTENCIALES					
Práctica	**Código CPS de NRCS[1]**	**Dónde se Aplica la Práctica**	**Descripción**	**Beneficios para el Productor**	**Financiamiento /Incentivos[2]**
			inoculantes beneficiosos del suelo como rizobios y micorrizas.		
F. Manejo de Residuos y Labranza: Labranza reducida	345	Esta práctica se aplica a todos los terrenos de cultivo.	Manejar la cantidad, orientación y distribución de los residuos de cultivos y otras plantas en la superficie del suelo durante todo el año mientras se limitan las actividades que perturban el suelo utilizadas para cultivar y cosechar cultivos en sistemas donde la superficie del campo se ara antes de la siembra. Esta práctica mejora la salud del suelo y mantiene o aumenta el contenido de materia orgánica.	• Mejorar o mantener la salud del suelo • Mejorar o mantener la materia orgánica del suelo • Reducir el uso de energía y los costos asociados	A, B, D
G. Manejo de Residuos y Labranza: Sin labranza	329	Esta práctica se aplica a todos los terrenos de cultivo.	Limitar la perturbación del suelo para controlar la cantidad, orientación y distribución de los residuos de cultivos y plantas en la superficie del suelo durante todo el año. Esta práctica mejora la salud del suelo y mantiene o aumenta el contenido de materia orgánica.	• Mejorar o mantener la salud del suelo • Mejorar o mantener la materia orgánica del suelo • Aumentar la disponibilidad de humedad para las plantas • Reducir el uso de energía y los costos asociados	A, B, D
H. Pastoreo Prescrito	528	Esta práctica se aplica a todos los terrenos donde se manejan animales de pastoreo o ramoneo.	Manejo de la cosecha de la vegetación con animales de pastoreo y/o ramoneo con el objetivo de lograr objetivos ecológicos, económicos y de gestión específicos. Esta práctica reduce la erosión del suelo y mantiene o mejora la salud del suelo.	• Mejorar o mantener la cantidad y/o calidad del forraje para mejorar la salud y productividad del ganado que pasta y se alimenta • Mejorar o mantener la composición, estructura y vigor de las comunidades de plantas deseadas • Mejorar o mantener la calidad y/o cantidad de agua superficial y/o subterránea • Reducir la erosión del suelo • Mejorar o mantener la salud del suelo • Reducir los riesgos de incendios forestales debido a la acumulación de biomasa	B

PRÁCTICAS POTENCIALES					
Práctica	**Código CPS de NRCS[1]**	**Dónde se Aplica la Práctica**	**Descripción**	**Beneficios para el Productor**	**Financiamiento /Incentivos[2]**
I. Quema Prescrita	338	Todos los terrenos según corresponda.	Fuego planificado aplicado a un área predeterminada para manejar la vegetación no deseada, mejorar la estructura y composición de la comunidad de plantas, reducir los riesgos de incendios forestales, mejorar y mantener el hábitat para los organismos del suelo y mejorar la salud del suelo.	• Gestionar la vegetación indeseable para mejorar la estructura y composición de la comunidad de plantas • Reducir especies de malezas invasoras nocivas • Reducir los riesgos de incendios forestales debido a la acumulación de biomasa • Mejorar la producción de forraje	
J. Siembra de Rango	550	Todos los terrenos de pastizales según corresponda. Esta práctica se aplica cuando la vegetación deseable está por debajo del nivel aceptable para que ocurra la resiembra natural o cuando el potencial de mejora de la vegetación mediante el manejo de la herbivoría es insatisfactorio.	La siembra y establecimiento de especies herbáceas y leñosas para mejorar la composición de la vegetación y la productividad de la comunidad de plantas para cumplir con los objetivos de manejo. Esta práctica aumenta y/o estabiliza el equilibrio y la captura de carbono.	• Proporcionar o mejorar los forrajes para el ganado • Restaurar la función hidrológica mediante una mayor infiltración de agua y retención de humedad en el suelo	B, D
K. Silvopastura	381	Esta práctica se puede aplicar en cualquier área que sea adecuada para los forrajes deseados, los árboles y el ganado.	Integración deliberada de árboles y operaciones de ganado de pastoreo en la misma unidad de tierra, gestionada intensivamente tanto para productos forestales como para forraje. Esta práctica mejora la calidad del suelo y aumenta el almacenamiento de carbono.	• Proporcionar forraje, sombra y/o refugio para el ganado • Mejorar la calidad del agua • Mejorar la salud del suelo • Proporcionar fuentes de ingresos a corto y largo plazo	B, D
L. Setos	422	Todos los terrenos según corresponda.	Establecimiento de una vegetación densa (por ejemplo, árboles, arbustos, hierbas perennes, hierbas, juncos, ciperáceas) en un diseño lineal que rodea un campo de cultivo. Esta práctica aumenta el almacenamiento de carbono en la biomasa y los suelos.	• Manejo integrado de plagas mediante la provisión de hábitats para insectos benéficos • Mejorar la polinización de los cultivos • Reducir la deriva de productos químicos • Pantallas visuales y barreras contra el polvo • Mejorar el hábitat de polen, néctar y reproducción para los polinizadores • Mejorar la cobertura, nidificación y fuentes de alimento para aves, mamíferos y otras especies silvestres nativas	B, D

PRÁCTICAS POTENCIALES					
Práctica	**Código CPS de NRCS[1]**	**Dónde se Aplica la Práctica**	**Descripción**	**Beneficios para el Productor**	**Financiamiento /Incentivos[2]**
M. Establecimiento y Renovación de Rompevientos y Cinturones de Protección	380	Esta práctica se puede aplicar en cualquier área donde se deseen plantaciones lineales de plantas leñosas y sean adecuadas para el control del viento y los recursos visuales. Utilice otras prácticas de árboles/arbustos cuando el viento y los problemas visuales no sean una preocupación.	Establecimiento, mejora o renovación de cortinas rompevientos, también conocidas como cinturones de protección, que son una o varias filas de árboles y/o arbustos en configuraciones lineales o curvilíneas. Esta práctica aumenta el almacenamiento de carbono en la biomasa y los suelos.	• Reducir la erosión del suelo causada por el viento • Proteger las plantas de daños relacionados con el viento • Proporcionar pantallas visuales • Delimitar los límites de la propiedad y los campos • Mejorar la cobertura, nidificación y fuentes de alimento para aves, mamíferos y otras especies silvestres nativas	B, D
N. Franja de Bosque Ribereño	391	Se establecen franjas ribereñas en áreas adyacentes a corrientes permanentes o intermitentes, lagos, estanques y humedales donde los canales y las orillas de los arroyos sean lo suficientemente estables.	Un área predominantemente cubierta por árboles y/o arbustos ubicada adyacente y aguas arriba de un curso de agua o cuerpo de agua.	• Reducir el transporte de sedimentos a aguas superficiales y reducir el transporte de patógenos, productos químicos, pesticidas y nutrientes a aguas superficiales y subterráneas • Mejorar la cobertura, nidificación y fuentes de alimento para aves, polinizadores, mamíferos y otras especies silvestres nativas	B
O. Cubierta Herbácea Ribereña	390	Esta práctica se aplica a terrenos adyacentes a cursos de agua, cuerpos de agua y humedales donde la vegetación ribereña natural ha sido alterada y la estabilidad de las orillas es adecuada para soportar la práctica.	Hierbas, juncos, ciperáceas, helechos, leguminosas y hierbas tolerantes a la inundación intermitente o suelos saturados, establecidos o gestionados como la vegetación dominante en la zona de transición entre hábitats terrestres y acuáticos.	• Reducir el transporte de sedimentos a aguas superficiales y reducir el transporte de patógenos, productos químicos, pesticidas y nutrientes a aguas superficiales y subterráneas • Mejorar la cobertura, nidificación y fuentes de alimento para aves, polinizadores, mamíferos y otras especies silvestres nativas • Restaurar, mejorar o mantener las comunidades de plantas deseadas	B
P. Vía de Agua con Vegetación	412	Esta práctica se aplica en áreas donde se necesita una capacidad adicional de conducción de agua y protección vegetal para prevenir la erosión y mejorar	Un canal moldeado o nivelado que se establece con la vegetación adecuada para conducir el agua superficial a una velocidad no erosiva utilizando una sección transversal amplia y poco profunda hacia una salida estable.	• Reducir el mantenimiento de los canales de borde de campo • Conducir el escurrimiento de terrazas, desvíos u otras concentraciones de agua sin causar erosión o inundaciones • Prevenir la formación de cárcavas	B

PRÁCTICAS POTENCIALES					
Práctica	**Código CPS de NRCS[1]**	**Dónde se Aplica la Práctica**	**Descripción**	**Beneficios para el Productor**	**Financiamiento /Incentivos[2]**
		la calidad del agua de escorrentía resultante del flujo superficial concentrado.		• Proteger/mejorar la calidad del agua	
Q. Franja de Filtro	393	Las franjas filtrantes se establecen donde se necesitan proteger áreas ambientalmente sensibles de sedimentos, otros sólidos suspendidos y contaminantes disueltos en la escorrentía.	Una franja o área de vegetación herbácea que elimina contaminantes del flujo superficial.	• Reducir los sólidos en suspensión y los contaminantes asociados en el escurrimiento y el exceso de sedimentos en las aguas superficiales • Reducir los sólidos en suspensión y los contaminantes asociados en el agua de desecho del riego y el exceso de sedimentos en las aguas superficiales	B
Medidas para la Reducción de Emisiones de Gases de Efecto Invernadero					
A. Operaciones agrícolas eficientes en energía	374	Esta práctica se aplica a estructuras no residenciales, equipos y otros sistemas que utilizan energía y que respaldan la producción agrícola y actividades relacionadas, excepto cuando exista otro Estándar de Práctica de Conservación (CPS) del NRCS más apropiado.	Instalaciones agropecuarias, equipos y estrategias de gestión en la explotación agrícola que brindan una mayor eficiencia energética.	• Mejorar la eficiencia energética de instalaciones, equipos y/o procesos • Reducir los costos operativos	F, G, H, I
B. Reducción del consumo de combustibles fósiles en equipos de campo	-	Todos los terrenos donde se utiliza equipo diésel fuera de carretera.	Reducción del uso de combustibles fósiles a través de una o más de las siguientes opciones: 1. Mantenimiento regular de los equipos existentes, 2. Operación eficiente de los equipos existentes (por ejemplo, optimización de la carga de tiro), 3. Actualización de motores y equipos a modelos más eficientes.	• Mejorar la eficiencia energética • Reducir los costos operativos	G, H, I

PRÁCTICAS POTENCIALES					
Práctica	**Código CPS de NRCS[1]**	**Dónde se Aplica la Práctica**	**Descripción**	**Beneficios para el Productor**	**Financiamiento /Incentivos[2]**
C. Reducción del consumo de energía en el bombeo de riego agrícola	-	Terrenos de cultivo.	Transición a sistemas de riego más eficientes que podrían incluir: 1. Bombas de retorno de riego solares, 2. Mantenimiento de los componentes del tazón de la bomba para aumentar la eficiencia.	• Mejorar la eficiencia energética • Reducir los costos operativos	G, H
D. Incrementar el uso de biocombustibles o combustibles de bajo carbono en equipos de campo	-	Todos los terrenos donde se utiliza equipo diésel fuera de carretera.	Reemplazo de los combustibles convencionales de gasolina y diésel con biocombustibles o alternativas de combustibles fósiles de bajo carbono	• Mejorar la eficiencia energética • Reducir los costos operativos	-

[1]Servicio de Conservación de Recursos Naturales del Departamento de Agricultura de los Estados Unidos - Normas de Prácticas de Conservación, https://www.nrcs.usda.gov/resources/guides-and-instructions/conservation-practice-standards

[2] Las fuentes potenciales de financiamiento y los programas de incentivos se detallan aquí; sin embargo, el Condado de Yolo también evaluará el desarrollo de otras fuentes de financiamiento o programas que se puedan utilizar para incentivar acciones a nivel del condado. Por lo tanto, aunque estos incentivos existentes están actualmente disponibles (aunque no todos los programas pueden estar abiertos actualmente o tener fondos disponibles en este ciclo), pueden surgir otras fuentes de financiamiento con la implementación del Plan de Acción y Adaptación Climática del Condado de Yolo (CAAP) para cumplir con los objetivos y estrategias prioritarias identificadas.

Fuentes específicas de financiamiento y programas de incentivos:

A - Programa de Incentivos para la Calidad Ambiental (EQIP) del Servicio de Conservación de Recursos Naturales (NRCS) de los Estados Unidos, Contrato de Incentivos para la Conservación (CIC), California, https://www.nrcs.usda.gov/conservation-basics/conservation-by-state/california/environmental-quality-incentives-program

B - Programa de Conservación del Agricultor (CSP) del NRCS, https://www.nrcs.usda.gov/programs-initiatives/csp-conservation-stewardship-program

C - Distrito de Gestión de la Calidad del Aire de Yolo-Solano, Programa de Astillado Agrícola, https://www.ysaqmd.org/incentives/agricultural-chipping-program/

D - Programa de Incentivos para Suelos Saludables del Departamento de Alimentación y Agricultura de California (CDFA), https://www.cdfa.ca.gov/oefi/healthysoils/IncentivesProgram.html

E - Programa de Servidumbres Agrícolas (ALE) del NRCS, https://www.nrcs.usda.gov/programs-initiatives/ale-agricultural-land-easements

F - Iniciativa de Energía en la Granja del EQIP del NRCS, https://www.nrcs.usda.gov/programs-initiatives/on-farm-energy-initiative

G - Distrito de Gestión de la Calidad del Aire de Yolo-Solano, Programa Carl Moyer, https://www.ysaqmd.org/incentives/moyer/

H - Distrito de Gestión de la Calidad del Aire de Yolo-Solano, Programa de Financiamiento de Medidas de Reemplazo Agrícolas para Reducción de Emisiones (FARMER), https://www.ysaqmd.org/incentives/farmer-program/

I - Junta de Recursos del Aire de California, Proyecto de Incentivos de Vales para Equipos Limpios Fuera de la Carretera de California (CORE), https://californiacore.org/resources/

Attachment I - Staff Report on Expanded Climate Action and Adaptation Plan Survey

STAFF REPORT

DATE: July 24th, 2023

TO: Yolo County Climate Action Commission

FROM: Kristen Wraithwall, Sustainability Manager

Julia Olsen, Associate Administrative Services Analyst

RE: Update on Climate Action and Adaptation Plan Extended Survey

RECOMMENDED ACTION

1. Receive Update on Extended Climate Action and Adaptation Plan (CAAP) Survey and Outreach Plan.

REASON FOR RECOMMENDED ACTION

At the May 2023 Yolo County Climate Action Commission (Commission) Meeting, the Commission reviewed and provided feedback on the extended CAAP Survey. Following the meeting, staff reviewed and considered feedback and created a final CAAP Survey that reflects the input received at that meeting. Staff are prepared to officially launch the survey and wish to provide an update to the Commission and receive input on any gaps in the outreach strategies.

BACKGROUND AND TIMELINE

Yolo County Staff are preparing to officially launch the Extended CAAP Survey on Tuesday, July 25th. County Staff will be sending out a dedicated email blast, social media posts, and distributing a social media toolkit to partners to aid in spreading the word about this effort. As a preview, the links to the English and Spanish language surveys are below:

- Spanish: https://www.surveymonkey.com/r/GYBJDGP
- English: https://www.surveymonkey.com/r/2SFZ3VH

We expect this survey will take approximately 10 minutes to complete. Survey participants will have the opportunity to be entered into a drawing for gift cards and other prizes.

The CAAP Surveys will be open through Friday, September 22nd. This deadline will give Dudek the time needed to analyze the survey data and prepare summaries for discussion

at the next round of workshops (which we are referring to as “Community Conversations”) to take place in October.

CAAP SURVEY OUTREACH STRATEGIES

County Staff discussed the CAAP Survey Outreach Strategies with the Equity and Engagement Technical Advisory Committee (E&E TAC) at the TAC’s July 19 meeting. A summary of strategies discussed includes:

- Publish Countywide Press Release
  - Planned for the week of July 24th
- Paid Newsletter Advertisements
  - Valley Voice
  - Clarksburg Community Church Chimes
- Tabling Events
  - Events to have paper surveys and QR codes to online form. See ***Attachment E*** for list of upcoming tabling events.
- Present at the Sustainable Advisory Committee Meetings within Cities
- Present at Community Advisory Committee (CAC) Meetings in Unincorporated Area
  - Capay (*in Guinda*) - Wednesday, September 6th, 7-9PM
  - Clarksburg - Thursday, September 7th, 7-9PM
  - Esparto - Tuesday, September 19th, 7-9PM
  - Dunnigan - Wednesday, September 20th, 7-9PM
- Send Email Blast to Supervisors for Inclusion in District Newsletters
- Landfill Flyer Distribution
  - Distribute QR codes to customers at check-in booth so they can fill out survey while they are waiting in line.
- Social Media
  - Will be developing a social media toolkit in English and Spanish with flyers, newsletter blurbs, social media images/captions.
  - Plan to share social media toolkit widely the week of July 24th.
  - Run paid advertisements on Yolo Sustainability’s Facebook and Instagram pages.
  - All posts will be cross-posted on County social media accounts.
- Advertising at Libraries
  - Hard-copy flyers and electronic displays (where available) at all branch locations.
- Direct Email Campaign
- Spanish-Language Media Advertisements
  - Radio
  - Television
- Posting Flyers Around County
  - Bus Stops
  - Supermarkets
  - Schools

- Laundromats
- Places of Worship
- Municipal Buildings/Administrative Offices
- Post Offices
- Businesses
- Restaurants

NEXT STEPS

Once the Survey officially launches on July 25th, County Staff and RCD will continue to monitor survey responses and conduct direct outreach via the strategies outlined above. Staff will continue to meet with the E&E TAC to track progress and adjust strategies as necessary. The data collected from this survey will be analyzed and incorporated into the development of the CAAP and used to inform the agenda and materials for the Community Conversation workshop series to take place this October.

Attachment J - Technical Memorandum GHG Inventory Methodology

Michael Hendrix Consulting

MEMORANDUM

DATE: July 24, 2023

TO: Yolo County Climate Action Commission

FROM: Michael Hendrix

SUBJECT: Yolo County Climate Action and Adaptation Plan Greenhouse Gas Emissions Inventories Methodologies

Three types of greenhouse gas (GHG) emission inventories will be developed for the forthcoming Yolo County Climate Action and Adaptation Plan (CAAP), including community-wide, municipal, and consumption-based. Each inventory type serves a unique purpose within the CAAP and will require individual methodology for development. This memorandum summarizes the purpose of each inventory and the methods that will be used for the development of each inventory type.

1. Purpose of GHG Emission Inventories

Generally, GHG emission inventories are developed to provide a baseline from which GHG emission reductions can be measured. These inventories provide information on the sources of GHG emissions, including the magnitude of each source type and diversity of sources within the jurisdictional area of the CAAP. GHG source identification is integral in the development of reduction measures. GHG emission inventories also provide a baseline on which reduction targets are developed, and success (or the lack thereof) in reducing emissions is monitored. Finally, GHG emission inventories provide a baseline on which forecasts of GHG emission growth into the future is developed for the CAAP.

The three types of GHG emission inventories being developed for the Yolo County CAAP include the following:

- **Community-wide Inventory**, which includes emissions from all residential, commercial, industrial, and agricultural land uses within the unincorporated County;
- **Municipal Inventory**, which is limited to County owned facilities, vehicles, and employee commutes; and
- **Consumption Inventory Narrative**, which focuses on life-cycle emissions associated with the activities, goods, and services provided to households within the unincorporated County area.

Additional information, including the purpose for each of these inventories is discussed further in the following sections.

1.1 Community-Wide Inventory

The Community-wide GHG Emissions Inventory is the most commonly used inventory within CAAPs and is the easiest to understand. This type of inventory includes emission sources from all the

meaningful emission sources within the County's direct or indirect jurisdictional control within the unincorporated area of the County and is often shown in terms of the different land uses within the unincorporated County (i.e., residential, commercial, industrial, agricultural, and institutional). This type of inventory can be easily correlated with Statewide efforts to reduce GHG emissions. For this reason, the primary purpose of the Community-wide GHG Emissions Inventory is to provide a baseline of emissions for the unincorporated area of the County in which the Reduction Targets are set and the majority of reduction measures are developed and measured.

1.2 Municipal Inventory

The Municipal Inventory is limited to the facilities, equipment, vehicles, and employees that the County owns and/or operates. Much of the Municipal Inventory will overlap with the Community-wide Inventory. In particular, all of the facilities, equipment and vehicles owned by the County that are within the unincorporated County will be included in the Community-wide Inventory. However, the Municipal Inventory will also include the County offices and facilities that are located within the cities of Yolo County. For this reason, there is not a perfect correlation between the Community-wide and the Municipal inventories. The Municipal Inventory tends to be small in comparison to the Community-wide Inventory. On average, total GHG emissions within a Municipal Inventory is approximately one to three percent of the total emissions of the Community-wide Inventory. For this reason, it is not appropriate for a CAAP to only include a Municipal Inventory. To properly assess GHG emissions within the unincorporated County area, a Community-wide Inventory is required. By contrast, Municipal Inventories are not required in a CAAP, but are encouraged to be able to address County controlled emission sources that are within the cities of Yolo County. The Primary purpose of a Municipal Inventory is to "lead by example," and develop reduction measures associated with County activities and operations.

1.3 Consumption-Based Inventory

The Consumption-based Inventory Narrative is a completely different way of assessing GHG emissions. The Consumption-based inventory is based on a full life-cycle analysis of the emissions generated by the production, shipping, use, and disposal of each product consumed in Yolo County, regardless of where the GHG emissions were released to the atmosphere. The Consumption-based inventory estimates emissions for several hundred categories of products within the five basic areas of transportation, housing, food, goods, and services. This type of inventory is best used to assist households in determining emissions associated with their own activities and consumption habits. Because full quantification of a consumption-based inventory would be time consuming and costly, the County chose to focus on a narrative in describing to the residents the consumption-based inventory, rather than spend a lot of time and effort in trying to quantify in detail the full life cycle of the emissions associated with the production, shipping, use and disposal of all the products. Fortunately, the Dudek Team was able to obtain a raw dataset for the Consumption-based inventory from EcoDataLab (who will be recognized in the CAAP acknowledgement for their contribution), which will be used in the graphs and charts for the Consumption-based Inventory Narrative.

Because Consumption-based Inventories provide insight into the GHG emissions for households, the purpose of the Yolo County Consumption-based Inventory Narrative is to educate the residents of unincorporated Yolo County and encourage them to reduce their own GHG emissions. In this way, everyone can do their part in reducing emissions. It's not just County staff and County processes that

are implementing the CAAP, it is everyone working together to reduce emissions. The purpose of the Consumption-Based Inventory Narrative is to mobilize all the residents to take part in the CAAP.

2. Methods for Developing GHG Emission Inventories

The development of the GHG inventories in the CAAP will use the methods found in The Climate Registry (formerly the California Climate Action Registry (CCAR) General Reporting Protocol (version 3.0, May 2019)[1]. The General Reporting Protocol (GRP) offers a unified GHG emissions accounting system that allows accurate, consistent, and verifiable reporting across all sectors of emissions.

The GRP categorizes GHG emissions into three categories as follows:

- **Scope 1 Emissions** includes all "direct" sources of GHG emissions from sources that are owned or controlled by the County including (but not limited to) production of electricity, heat, or steam in owned or controlled boilers, furnaces, etc.; transportation using County fleet vehicles; and fugitive emissions (from area source or unintentional leaks of GHGs directly into the atmosphere).
- **Scope 2 Emissions** account for "indirect" sources of GHG emissions from the generation of purchased utilities consumed by the County. A purchased utility is defined as one that is bought or otherwise brought into the jurisdictional authority of the local government, but not physically generated in power plants owned and/or operated by the local government. Scope 2 emissions physically occur at locations outside of the jurisdictional boundaries and direct control of the local government, and thus are separated from direct emissions reported by the utility company or local government in order to avoid double counting.
- **Scope 3 Emissions** is considered an optional reporting category that allows for the treatment of all other "indirect emissions." Scope 3 emissions are a consequence of the activities of the local government but occur from sources not owned or controlled by the local government. Typical Scope 3 emission sources include employee commutes as one example.

The GRP requires that GHG emission inventories report Scope 1 and Scope 2 annual emissions, measured in metric tons aggregated as carbon dioxide equivalents (CO_2e)[2] for each of the prescribed GHG emissions in order to provide consistency in inventories. Scope 3 annual emissions may also be included as an option by the reporting entity. The prescribed GHG emissions include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3).

[1] General-Reporting-ProtocolV3.pdf (wpengine.com)

[2] CO2e accounts for the potency of each GHG type based upon the atmospheric life of each type of GHG emissions setting carbon dioxide as a measure of one metric ton. Each GHG is prescribed a global warming potential (GWP) value based upon the atmospheric life of the GHG molecule. The GWP for each type of GHG is determined by an international group of scientists within the United Nations Intergovernmental Panel on Climate Change (IPCC).

The combustion of fuel is the most common source of GHG emissions. Combustion leads to the formation and emittance of three types of GHG emissions: CO_2, CH_4, and N_2O. The GRP has a six-step process for calculating the metric tons of CO_2e emissions associated with combustion sources.

1. Determine annual consumption of each combusted fuel or annual energy consumption;
2. Determine the CO_2 emission factor for each fuel or unit of energy consumption;
3. Determine CH_4 and N_2O emission factors for each fuel or unit of energy consumption;
4. Calculate CO_2 emissions by multiplying the emission factor by annual fuel or energy consumption;
5. Calculate CH_4 and N_2O emissions by multiplying emission factors by annual fuel or energy consumption; and,
6. Convert CH_4 and N_2O emissions to CO_2e using the GWP of each. Add the CO_2 emissions with the CO_2e values for CH_4 and N_2O emissions to get the complete CO_2e value for the combustion process being evaluated.

The above process is how combustion source GHG emissions are calculated in all the inventories. Additional methods are provided in the GRP to calculate other sources of GHG emissions.[1]

The specific methodology proposed for development of each of the three GHG emission inventories for the CAAP is discussed in the following sections.

2.1 Community-Wide Inventory Method

The development of the Community-wide GHG inventory will follow the United States Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (ICLEI, version 1.2, July 2019).[2] In combination with the California Supplement to the United States Community-wide GHG Emissions Protocol (AEP 2013)[3] developed by the Climate Change Committee of the Association of Environmental Professionals (AEP) to better develop a Community-wide Inventory that complies with AB 32 and other climate change related laws and regulations in California. The Community-wide GHG Emissions inventory may also relay upon relevant portions of the California Community-wide Greenhouse Gas Baseline Inventory Protocol (AEP 2011)[4] and Forecasting Community-wide Greenhouse Gas Emissions and Setting Reduction Targets (AEP 2012)[5] developed by AEP. AEP is currently drafting a White Paper titled AB 1279 – Is Zero the Law (AEP 2023), due for publication in the summer of 2023. This document will provide insight into how the Yolo County CAAP can be AB 1279 compliant with a net carbon neutral Reduction Target.

Note that the team developing the Yolo County CAAP Inventories includes three members of the AEP Climate Change Committee including the Committee Chair and the Secretary. These individuals have

[1] General-Reporting-ProtocolV3.pdf (wpengine.com)
[2] US Community Protocol | ICLEI USA
[3] California_Supplement_to_the_National_Protocol.pdf (califaep.org)
[4] Microsoft Word - Final Draft CompiledWhitePaper_GHGProtocol (califaep.org)
[5] Forecasting_and_Target_Setting.pdf (califaep.org)

authored the protocols developed by AEP and provided input into various Statewide and national GHG reduction efforts including the California Air Resources Board 's (CARB's) 2022 Scoping Plan, International Council of Local Environmental Initiatives--Local Governments for Sustainability (ICLEI's) United States Community Protocol, and the California of Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity[1]. Having these individuals assisting the County in the development of the inventories will ensure that the Yolo County CAAP will be developed with up-to-date methods, emission factors, GWP, and protocols.

Using the Protocols listed above the Community-wide Inventory will include the following sectors:

- **On-Road Transportation**: Emissions from on-road transportation will be assessed using vehicle miles traveled (VMT) associated with all vehicles that have an origin, destination, or both within the unincorporated County area. The VMT data will be developed using the regional Sacramento Area Council of Governments (SACOG) SACSIM19 travel forecasting model developed for the SACOG 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)[2].

  Following the AEP California Supplement protocol, VMT for vehicle trips that have and origin or destination within the unincorporated County area but the complement to that trip is outside of the unincorporated area will be multiplied by 0.5. The rational of this is that half the VMT associated with these trips are assigned to the County with the other half assigned to the jurisdiction where the complement of the trip is located.

  The VMT associated with vehicle trips that have an origin and destination within the unincorporated County area will be multiplied by 1.0, given that the County is responsible for and has the opportunity to reduce emissions associated with vehicle trips through land use changes at both locations (i.e., the ability to provide transit connecting both locations and other methods of VMT reduction).

  Alternatively, VMT associated with vehicle trips that pass through the unincorporated County area without stopping at a location within the unincorporated County area (often called pass-through trips), will be multiplied by 0 and not included in the Inventory. As described in the Protocol, the County does not have the jurisdictional authority to reduce VMT associated with pass-through trips and therefore, should not be responsible for the emissions associated with them.

  The Protocol also elaborates that pass-through trips have an origin and destination for these trips within other jurisdictions and the jurisdictions that the origin and destination of those trips bear the responsibility for the emissions and have the opportunity to apply measures that would reduce the VMT associated with the trips.

[1] Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (airquality.org)

[2] 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy - Sacramento Area Council of Governments (sacog.org)

Once the VMT is appropriately allocated, on road transportation emission factors (EFs) will be developed using the CARB EMFAC model that will assign an EF based on speed bins and vehicle types. The SACSIM19 travel forecasting model will also assign the VMT by speed bins and vehicle types.

- **Off-Road Mobile Equipment**: The CAAP Inventory development team will work with Yolo County Agricultural Commission, and the County's Resource Conservation District (RCD) to better articulate the types and quantities of farm equipment operating in the County and obtain equipment operating data and develop EFs from the CARB OFFROAD model for the County. The Off-road portion of the Community-wide Inventory will be informed by and reconciled with the U.S. Department of Agriculture (USDA) National Agricultural Statistical Service's (NASS) 2017 Census of Agriculture[1] and 2018 Census of Irrigation for Yolo County[2] so that the inventory can be updated with each five-year release of the censuses. (In addition, the team will explore whether the State Board of Equalization still reports red-dye diesel sales by county.)
- **Energy**: Consumption of natural gas (measured in therms per year) and electricity (measured in kilowatt hours per year, kWh/year) for residential and non-residential land uses within the unincorporated County will be collected from Pacific Gas and Electric (PG&E) and the Valley Clean Energy Alliance (VCEA). This data will be multiplied by the EFs for each utility following the protocols.
- **Water Conveyance and Wastewater Treatment**: Water consumption and wastewater generation data for residential, commercial, industrial, institutional, and agricultural land uses within the unincorporated County area will be collected from the various water districts and community service areas. Emissions associated with water convenience are the result of the electricity used to pump (convey) the water. The protocols provide EFs for imported water and the local utility EFs for PG&E and VCEA would be applied to locally pumped water. Wastewater also includes EFs associated with methane off-gassing during the wastewater treatment process.
- **Solid Waste**: Waste disposal rates for residential, commercial, industrial, institutional, and agricultural land uses within the unincorporated County area will be used to develop emissions for this sector of emissions. Note that the emissions associated with this sector within the Community-wide emissions inventory will be a subset of the broader Waste Management emissions within the Municipal Inventory. However, this information will be useful in determining waste generation by land use type to improve waste diversion strategies the County is already employing.
- **Natural and Working Lands**[3]: In coordination with the Yolo County Resource Conservation District (RCD), the team will develop an inventory of the natural and working lands (NWLs) emissions by type to be incorporated into the Community-wide Inventory. Anticipated

[1] 2017 Census of Agriculture Data Now Available | USDA

[2] 2018 Irrigation and Water Management Survey (usda.gov)

[3] Note that this sector is new within CAAPs, and the development of the NWLs sector of emissions may change based on protocols that are currently in development for this sector of emissions (both sources and sinks).

sources of agricultural emissions include, residue burning, livestock, rice cultivation, irrigation pumps that are not accounted for in the water conveyance sector, pesticide application, fertilizer application, lime application, urea application, etc. Additional sources may be included if deemed necessary and appropriate in coordination with RCD staff and the relevant partners.

The inventory team will also support RCD to develop an analysis of Countywide sequestration potential using the results of the Working Lands Outreach Survey, recent regional scale (County) GIS land use data, and SACOG crops data and potentially other data together with land-use specific sequestration potential metrics (i.e., metric tons of carbon [MT C] per acre). This information will primarily be used in developing NWLs sequestration strategies to take full advantage of the sequestration potential as part of the CAAP reduction strategies toward achieving net carbon neutrality.

2.2 Municipal Inventory Method

The development of the Municipal inventory in the CAAP will use the methods found in The Climate Registry's Local Government Operations Protocol (LGOP, Version 1.1, May 2010).[1] The Local Government Operations Protocol (Protocol) is designed to provide a standardized set of guidelines to assist local governments in quantifying and reporting GHG emissions associated with their government operations.

The Protocol was developed in partnership by the CARB and ICLEI, in collaboration with The Climate Registry and dozens of stakeholders. Through this Protocol, the partners have sought to enable local governments to measure and report GHG emissions associated with government operations in a harmonized fashion. The Protocol facilitates the standardized and rigorous inventorying of GHG emissions, which can help track emissions reduction progress over time and in comparison to GHG reduction targets.

The Protocol provides the principles, approach, methodology, and procedures needed to develop a local government operations GHG emissions inventory. It is designed to support the complete, transparent, and accurate reporting of a local government's GHG emissions. The Protocol guides participants through emissions calculation methodologies and reporting guidance applicable to all U.S. local governments. The Protocol is meant to be a "program neutral" guidance document available for use by any local government engaging in a GHG inventory exercise. It brings together GHG inventory guidance from a number of existing programs, namely the guidance provided by ICLEI to its Cities for Climate Protection campaign members over the last 15 years, the guidance provided by The Climate Registry through their General Reporting Protocols, and the guidance from CARB's mandatory GHG reporting regulation under AB 32.

Under this Protocol, local governments should quantify and report all sources of GHG emissions within their operations. For Yolo County, the Municipal inventory is anticipated to include the following:

[1] Local Government Operations Protocol Table of Contents (wpengine.com)

- **On-Road Transportation**: Fuel consumption and milage from County owned and operated vehicle fleets.
- **Off-Road Mobile Equipment**: Fuel consumption and hours of operation for County-owned or operated construction equipment and other mobile equipment not part of the County's vehicle fleet.
- **Energy**: Consumption of natural gas and electricity from County-owned or operated buildings, facilities, and County-owned streetlights/traffic lights.
- **Water Conveyance and Wastewater Treatment**: Water consumption and wastewater generation from County-owned or operated buildings, facilities, and parks.
- **Solid Waste Management**: Waste disposal operations, including waste disposal, methane capture and flaring, greenwaste disposal or composting, recycling programs, any specialty stationary equipment, and mobile offroad equipment not within the Off-Road Mobile Equipment list above.
- **Optional Scope 3 Sector of Municipal Emissions**: Emissions from employee commutes will be included in the Municipal Inventory even though it is not a mandated sector of emissions under the LGOP but is useful in evaluating employee trip reduction programs or baselining an employee trip reduction program. To develop this sector of emissions an employee commute survey will be used.

Of note, emissions related to Solid Waste Management, which is primarily due to landfill off-gassing of methane, may dominate the Municipal Inventory given that the County is responsible for the deposition of all solid waste throughout the County. Jurisdictions in similar situations include Riverside County and San Bernardino County, which had landfill off-gassing representing 56 percent in 2010 and 79 percent in 2008 of their respective municipal inventories.

A lot has changed since 2008, including mandatory methane collection systems at all landfills which is significantly reducing landfill off-gassing. However, it is anticipated that Solid Waste Management may still dominate the Yolo County Municipal Inventory. Given this, we may show the Municipal Inventory in one, two, or three formats.

The first format would include all emission sources including those associated with Solid Waste Management in order to have a full accounting of emissions in the Municipal Inventory. The second format would exclude Solid Waste Management in order to better see the other categories of emissions. The reason for the second format is to be able to assess and develop reduction measures for sources of emissions other than Solid Waste Management. The third format may be a more detailed look at emissions associated with Solid Waste Management emissions only, to better assess and develop reduction measures associated with Solid Waste Management. The determination of having one, two, or three formats will depend on the results of the Solid Waste Management Municipal Inventory.

2.3 Consumption-Based Inventory Method

The Consumption-based GHG Emissions Inventory Narrative is new, and the science and protocols are still being developed. The Yolo County CAAP will be the first Climate Action Plan to have a Consumption-based GHG Emissions Inventory Narrative included within the body of the CAAP and be used in the development of consumption-based GHG reduction strategies. Other CAAPs have had Consumption-based inventories assigned to the technical appendices and only used to inform, not develop reduction strategies. Because the Yolo County CAAP is the first to employ a Consumption-based Inventory in this way, there are not published protocols to follow. However, the inventory team has employed the same methodology used in the development of other Consumption-based Inventories. As such, the Consumption-based GHG Emissions Inventory Narrative will rely upon the work developed by the Berkeley Energy and Climate Institute (BECI) at the University of California, Berkeley[1] and also used by the Cool Climate Network.[2]

BECI used the proprietary IMPLAN model to estimate household consumption and IMPLAN relies exclusively on income to differentiate consumption between local and national scales. A major problem of the income-only approach is households of different income levels in the United States are also different in other fundamental ways. High income households tend to live in low density, suburban neighborhoods with more people per household, living in larger, owned homes. The IMPLAN model assumes consumption to be the same at similar income levels, regardless of these other factors, which may also influence consumption. Addressing the effect of significant demographic, geographic and physical drivers of consumption is critical for accurate consumption-based inventories. A number of methodological improvements were made. First, BECI conducted econometric analysis of micro data from the Consumer Expenditures Survey (CE)[3], the National Household Travel Survey (NHTS)[4] and the Residential Energy Consumption Survey (RECS)[5] to uncover main drivers of all aspects of consumption in the United States. Variables include demographics (income, household size, race, education), home characteristics (home size, home ownership, structure type, heating fuel), travel behavior (vehicle ownership, commute mode, commute times), geographic variables (population density, weather) and economic data (energy prices). Because those variables are known for each Census Tract and the city overall, we are then able to estimate household expenditures for detailed categories of goods and services for San Francisco at Tract-level. In order to see changes in physical consumption over time, we adjust expenditures using the Consumer Price Index for each product category. BECI also developed detailed models of electricity and natural gas consumption, VMT traveled, updated GHG emission factors.

The principal methodology used in the Consumption-based GHG Emissions Inventory Narrative is life cycle emissions assessment (LCA)[6]. LCA seeks to identify the major sources of environmental impacts at each stage of product supply chains. This approach is useful for identifying potential interventions at each stage. The life cycle analysis "Production" includes all emissions associated with mining,

[1] Energy and Climate Change (escholarship.org)
[2] coolclimate.berkeley.edu/publications
[3] Public Use Microdata (PUMD) : U.S. Bureau of Labor Statistics (bls.gov)
[4] National Household Travel Survey (ornl.gov)
[5] Residential Energy Consumption Survey (RECS) - Energy Information Administration (eia.gov)
[6] Consumer-oriented Life Cycle Assessment of Food, Goods and Services (escholarship.org)

refining, manufacturing, farming, assembly, storage, and business-to-business transport to the factory gate or farm gate. For U.S. products, the production phase accounts for 90 percent of cradle-to-consumer emissions from food, 95 percent from services, and 60 percent from goods. Emissions from transporting products to market are generally quite small relative to full life cycle emissions (Weber and Matthews 2008). Transporting products to market accounts for about one percent of emissions from food and four percent for goods. The wholesale and retail phases in the United States are also considerably larger for manufactured products (27 percent) than for food (9 percent). The use phase is only relevant to certain products, such as motor vehicles, major appliances, and cooked food. The use phase is a considerably larger portion of emissions in the United States (35 percent) compared to Yolo County (20 percent), which benefits from low-carbon sources of electricity, California's low carbon fuel, and efficiency standards for automobiles, and a portfolio of energy and climate policies. All products have emissions associated with end-of-life management, such as recycling or disposal, accounting for about 2 percent of total consumption-based emissions, assuming average U.S. recycling rates and waste management practices.

3. Accuracy and Limitations

Because each type of GHG emissions inventory sets the baseline in predicting the future growth in emissions, development of reduction measures, and monitoring the reduction of emissions, it is important that each GHG inventory is as accurate as possible and is including all meaningful sources of GHG emissions within the jurisdictional authority of the County. To provide a better understanding of inventory development and goals, the importance of "accuracy", "meaningful sources", and "jurisdictional authority" are discussed further below.

3.1 Accuracy

While it would be ideal to have perfect information (data) that is entirely complete, the reality is that the data used in developing GHG inventories is not perfect or complete. The best example is on road transportation where we use regional traffic demand models (and the traffic counts embedded within those models) to estimate the vehicle miles traveled (VMT) that is driven within the County. From a data point of view, it would be better to monitor all the odometers of vehicles within the County and glean the VMT information that way. However, that is not possible. Therefore, the inventory calculations use regional traffic demand models to estimate annual VMT (one data point in assessing on-road transportation emissions). Another data point used in on-road transportation is the vehicle type generating the VMT. Each type of vehicle has different amounts of GHG emissions per mile. Again, we use the regional traffic demand model that includes some information (but not all) in the different types of vehicles being used within the County.

3.2 Meaningful Sources

A meaningful source is a source of GHG emissions that is of enough quantity to show up in an inventory (not within the margin of error or rounding of numbers), and the source of emissions is within the authority of the County to develop reduction measures. An example is sulfur hexafluoride (SF_6), which is an extremely potent GHG, but used in very small amounts by electric utilities in arc suppression in electric equipment within utility switchyards. Because the use of SF_6 is within airtight portions of switching equipment, the amount of SF_6 that leaks into the atmosphere is extremely small.

In addition, because the source of SF_6 within the County is entirely under the jurisdiction of PG&E, the County would be unable to develop reduction measures for SF_6. Fortunately, the State requires PG&E to develop SF_6 specific reduction measures which includes the proper monitoring and maintenance of switching equipment to ensure that any leaks are detected and repaired immediately, capturing SF_6 gas when making repairs to equipment that require the evacuation of gases, and evacuating SF_6 gas out of equipment that is outdated and being replaced. Because the amount of SF_6 within the County is so small and the County does not have the jurisdictional authority to reduce SF_6, SF_6 is not a meaningful source of GHG emissions to include in the County's GHG inventories.

3.3 Jurisdictional Authority

The County has limits on what and how it can reduce GHG emissions within the County which is promulgated upon the jurisdictional authority of the County. As an example, the County cannot inventory GHG emissions or develop reduction measures for emissions sources within a military facility. The County has no jurisdictional authority within a military base even if that base is within the County (although this is not an issue in Yolo County). Further, because of national security issues, military bases will not provide any data that could be used in developing a GHG emissions inventory that included sources within a military base. For this reason, sources of emissions within military facilities are not included within a County-level GHG emission inventory.

This does not mean that the County cannot include sources of emissions it does not have direct or indirect jurisdictional control over the source of those emissions. There are opportunities for the County to influence the reduction of GHG emissions within areas it does not have jurisdictional control. As an example, the County can collaborate with the cities within the County to develop regional GHG emission reductions even though the County does not have jurisdictional control over most of the GHG emissions sources within the cities. Also, the County may not have jurisdictional authority to prohibit people from driving on the roadways and highways within the County, but the County can try to influence drivers to reduce their VMT and drive cleaner vehicles such as electric vehicles through incentives and education programs. Therefore, the issue of including or not including GHG emission sources within the County is not solely based on jurisdictional authority to reduce the emissions but is dependent upon whether or not the County's jurisdictional authority allows the County to collect the data needed to include the emission sources within the inventories.

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Attachment K - Staff Report on ICARP RRGP Letter of Support

STAFF REPORT

DATE: July 24, 2023

TO: Yolo County Climate Action Commission

FROM: Kristen Wraithwall, Sustainability Manager

RE: Consider Support for Governor's Office of Planning and Research Regional Resilience Grant Application

RECOMMENDED ACTION

1. Receive update on Yolo County's planned application to the Governor's Office of Planning and Research (OPR) Integrated Climate Adaptation and Resiliency Program (ICARP) Regional Resilience Grant Program (RRGP).
2. Vote to:
    a. Support the Yolo County application to the ICARP RRGP.
    b. Authorize Chair and Co-Chair to draft and submit a letter of support on behalf of the Yolo County Climate Action Commission (Commission).

REASON FOR RECOMMENDED ACTION

Staff from Yolo County, the Yocha Dehe Wintun Nation, the University of California at Davis (UC Davis), and the County's incorporated cities (together, Regional Partners) have been discussing the development of a grant proposal for the ICARP RRGP. The goal of the grant proposal would be to build capacity to address regional resilience by improving Countywide collaboration, aligning resilience priorities, and collectively undertaking projects that address climate risks impacting the County's vulnerable communities. As increasing alignment and collaboration amongst Regional Partners has been a priority of the Yolo County Climate Action Commission (Commission), staff are asking that the Commission consider voting to support this grant application. Staff are asking for support while the application is still in draft format, as the grant application is due on August 29th, too soon after the August Commission meeting (August 28th) to turn around a letter of support at that time.

BACKGROUND

The ICARP RRGP will fund public entities, California Native American tribes, Community-Based Organizations, and academic institutions that form regional partnerships to plan and implement projects that advance climate resilience and respond to the greatest climate risks in their region.[1] The Regional Partners are considering a grant application

[1] https://opr.ca.gov/climate/icarp/grants/regional-resilience-grant.html

that will engage the community to 1) identify shared climate resilience priorities related to climate risks, including wildfire, extreme heat, drought, and flooding, 2) create a governance structure, tentatively called the Yolo County Regional Resilience Collaborative (Collaborative), to achieve these shared priorities, and 3) develop a funding and implementation strategy—which may include securing resources such as grant writing support and/or staff time—to facilitate ongoing collaborative climate action work in Yolo County, including implementation of climate-resilient projects. The Regional Partners will work to develop shared priorities that address climate risks impacting vulnerable communities, as well as ensure vulnerable communities have an equitable role in the Collaborative.

The Collaborative would build capacity for Regional Partners to align shared goals and priorities across existing plans, such as the emerging Yolo County and West Sacramento Climate Action and Adaptation Plans (CAAPs) and the City of Davis's recently completed CAAP. Building capacity to collaborate—and identifying a funding stream to fund this collaborative effort moving forward—will maximize the opportunities for success in achieving regional emission reduction targets and will ensure priority mitigation and adaptation projects can transition from planning to implementation. Additionally, this Collaborative would build on existing Countywide efforts and partnerships, including the Yolo Climate Compact, the Yolo County Climate Action Commission, and other relevant local Boards and Commission, to ensure that these bodies are not only informed of existing regional efforts, but can proactively coordinate on project development and implementation, securing funding, maximizing staff time, and more.

This grant would provide funding to conduct community outreach (as a compliment to existing CAAP outreach efforts), identify regional resilience priorities, develop a collaborative governance structure for Regional Partners and Yolo County community-based organizations, and create a funding and implementation strategy to ensure long-term success of this effort. Such formalized collaborative efforts have led to transformative climate action and the acceleration of climate resilience projects in Counties such as Santa Barbara[2], Santa Clara[3], and Los Angeles[4]. The Regional Partners believe this effort could be similarly transformative in Yolo County, where limited staffing and funding often prevent climate action implementation at the scope and scale we desire. Likewise, we regularly see climate grant funding being directed to larger jurisdictions with more resources. An intentional, formal collaborative structure will enable Yolo County to be more proactive and competitive with future funding opportunities, pool resources to build collective capacity, and bring critical climate resilience funding to Yolo County's most vulnerable communities.

[2] https://sbco.mysocialpinpoint.com/sbcollaborative
[3] https://www.climatecollaborativescc.org/
[4] https://www.laregionalcollaborative.com/

Attachment L – Commission Correspondence

Climate Commissions Distracted from real action

Alan Hirsch <ahirsch@dcn.org>

Sun 6/18/2023 3:07 PM

To:Alan Hirsch <ahirsch@dcn.org>

To Chair or Staff Liaison of 4 Yolo City and also Yolo County's Climate Action Commission

Please forward to Chair and members of your city/county Commissions overseeing your climate action adaption plans. Due to timeliness of subject, please forward immediately and not in the next agenda packet..

Thank you.

Letter to editor:

City/ County Commissions distracted from addressing climate change.

https://www.dailydemocrat.com/2023/06/18/letter-to-editor-volunteers-distracted-from-addressing-climate-change/

By Woodland **DAILY DEMOCRAT** Sunday June 18, 2023, at 11:30 a.m.

This week the well-meaning volunteers of Yolo County's Climate Action Committee will be hosting three open houses to collect public input.

However, I think these volunteers,-like climate committee volunteers on 4 other Yolo County cities, are being distracted from the elephant in the room.

Each of the five Yolo government's Climate Act Plans note we need a plan to reduce auto driving if we want to address our greenhouse gases (GHG), the source of for example 65% of Woodland GHG.

For example, the city of West Sacramento plan set a goal of reducing driving 40% by 2045 by a shift to transit and active modes.

Yet, the proposed widening of the I-80 Freeway is projected by UC Davis researchers to do the opposite: encourage more driving and longer commutes forecasting 177.9 million more miles of driving each year. This means an increase in the county's carbon footprint by 3%- larger than the entire City of Winters.

UC Davis research also demonstrated, like all past widening, this $380 million project one won't fix congestion for long: the freeway is 100% certain to re-congest after a few years due to more car travel the widening it itself encourages.

Yet not one of these five climate commissions have discussed this project and its tradeoffs or have a plan to provide input to Draft Environmental Impact Report (DEIR) in July.

It is not the volunteers on these committee's fault: it about city and county staff who haven't put it on their agendas.

This is accomplished by the freeway advocates embedded in government who claim to want public input but actually discourage it by spin:

Inevitability Spin: Yolo Transportation District (YoloTD) Planning Director has stated regardless of EIR findings, he expects Caltrans will go forward by issuing a statement of "overriding consideration" so it's too late for public to change anything.

Greenwashing Spin: YoloTD has a flier claiming a wider freeway will be "environmentally sustainable."

Silo Spin: Davis City Manager decided the project only involved transportation and expressly forbid its climate committee from reviewing it even though the citizen on the NRC Commission were anxious to provide feedback. Thought it violated the city council charter for commissions scope, he instructed review of the EIR to done by the Bicycle and Transportation Commission.

"Open Meeting" Spin: If staff fails to put it on the Commission Agenda for July meeting, staff can argue under Brown Act the commission will not be able to talk about the widening during the short Draft EIR comment period that ends early in August. And even if they do have it on the July agenda, they need staff to agree to a special commission meeting to review draft comment for submission before Draft EIR deadline closes. Staff will no doubt remind commissioner they are block as individuals from meeting together- or even email-- to discuss the Draft EIR outside the supervision of city staff.

I am hopeful there is still time for the climate commissions to question this project and its design, even if they miss the EIR deadline. They might begin with by asking project cheerleaders in Yolo County why Caltrans itself rates this project design last on its 24 statewide projects list to improve mobility.

By Alan Hirsch, Davis CA

UC Prof: I-80 widening won't work

Alan Hirsch <ahirsch@dcn.org>
Sun 6/25/2023 4:21 PM
To:Alan Hirsch <ahirsch@dcn.org>

To Chair or Staff Liaison of 4 Yolo City and also Yolo County's Climate Action Commissions

Please forward to Chair and members of your city/county Commissions overseeing your climate action adaption plans.

This is a letter on I-80 Yolo widening by Professor Susan Handy of UC Davis Director of the **National Center for Sustainable Transportation**, She has studied extensively the issue of "induced travel"-- how adding capacity to roadways fails to alleviate congestion for long because it actually increases vehicle miles traveled (VMT).
I encourage Commissions like yours to review the largest capitol project in Yolo County...and largest single source of GHG currently.

Ask: If it's not going to fix congestion, why are we spending the money, and taking the GHG hit to our climate action plans?

Why do D EIR alternative only focus on road widening and none on robust transit alternatives—And why do EIR alternative not include offering travel/transit choices to residents in not just Yolo, but Solano and Bay Area where most the causeway congestion is coming from.

==========

Dear Chairman Tom Stallard and Members of the Yolo County Transportation District:

I support CTC staff recommendation to **not** fund the Yolo 80/US 50 Corridor Improvement Project at this time**. I oppose this project** based both on my expertise as one of the top transportation researchers in the country and as a long-time resident of Davis.

Academic studies have convincingly and conclusively established that increases in highway capacity lead to increases in vehicle miles of travel (VMT). The work by my team at the Institute of Transportation Studies at the University of California, Davis shows that traditional methods for evaluating highway widening projects consistently underestimate the increase in VMT that such projects generate, thereby over-estimating their benefits with respect to congestion reduction and under-estimating their impacts with respect to greenhouse gas emissions and other environmental impacts. Increased emissions associated with the increase in VMT swamps any reduction in emissions stemming from what will inevitably be a temporary improvement in traffic flow. In short, highway widening projects are inconsistent with the state's goal for reducing greenhouse gas emissions.

As a solution to congestion, highway widening projects are ineffective, as research as well as historical experience demonstrate. This is true whether the project is a conventional lane or a managed lane open to private vehicles. The only proven way to reduce congestion is to combine congestion pricing with substantial investments in alternatives to driving, particularly high-quality transit service. Investments in transit as a *mitigation* for the highway widening rather than a replacement for it are also ineffective, in that the highway widening reduces the incentive to use transit. Any attempts to mitigate the increase in VMT short of implementing a pricing strategy is likely to fall short.

As a Davis resident I regularly observe traffic on I-80 when bicycling to south Davis and when driving to Sacramento at various times of day. Yes, traffic slows in Davis but it rarely reaches extreme levels except on Friday afternoons. This level of congestion can only be considered a problem because we have set unrealistic standards for travel time and because we have given people few alternatives to driving. The solution is not to persist in a century-old approach that has proved unsuccessful time and time again. The solution is a new way of thinking about transportation.

Dr. Susan Handy
516 Hermosa Place
Davis, CA 95616

Attachment M – 2023 Long Range Calendar

Yolo County Climate Action Commission

Long Range Calendar 2023

UPDATED – July 19, 2023

Month	Topics
January	Update on Yolo County Storm Response and Recovery
February	Discussion on Outreach Materials to Agricultural Community (*Interview Questions and Sequestration Strategies*) Discussion on Carbon Sequestration Methodology Discussion on Consumption-Based Inventory
March	Establishing Technical Advisory Committees Discussion on Equity Engagement Strategy and Communications Plan Outline Revisit Yolo Agricultural Equipment Retrofit Program Early Action Project
April	Begin In-Person Outreach Events for Climate Action and Adaptation Plan Update on Outcomes of First Round of Tabling Events Introduce Equity and Engagement (E&E) Technical Advisory Committee (TAC) Introduce Natural and Working Lands (NWL) TAC
May	Update to Board of Supervisors (BOS) on ARP Progress Yolo Agricultural Equipment Retrofit Program Early Action Project to BOS Solicitation for Community Outreach Partners Launches Review CAAP Online Portal Review Expanded CAAP Survey Review Agenda for In-Person CAAP Workshops
June	Commission Meeting Cancelled Solicitation for Community Outreach Partners Closes First CAAP Workshop Series | June 20, 21, and 22
July	Second Round of CAAP Tabling Events Launches Expanded CAAP Survey Launches Working Lands Outreach Survey Launches Discussion of Greenhouse Gas Inventory Methodology Consider Support for Regional Resilience Planning Grant Application
August	Second Solicitation for Community Outreach Partners Opens CAAP Table of Contents Discussion on Commission Term Renewals and Leadership Discussion on Food System and Connection to Consumption-Based Inventory
September	Expanded CAAP Survey Closes – September 22nd
October	Second CAAP Workshop Series – Community Conversations Working Lands Outreach Survey Closes – October 13th
November	Agricultural Community Roundtables Discuss Second Round of Early Action Projects
December	