SACRAMENTO VALLEY

BASINWIDE AIR POLLUTION CONTROL COUNCIL

	Vice Chair		Chair					
Butte	Colusa	Feather River	Glenn	Placer	Sacramento	Shasta	Tehama	Yolo-Solano

MEETING NOTICE

Date: February 2, 2024

Time: 10:00 AM

Location: Shasta County AQMD 1855

Placer Street, Suite 101 Redding, CA 96001 and

Zoom

Location:

Alternate Butte County AQMD Location: 629 Entler Avenue, Suite 15

Chico, CA 95928

Colusa County APCD 100 Sunrise Blvd, Suite F Colusa, CA 95932

Feather River AQMD 541 Washington Yuba City, CA 95991

Glenn County APCD 720 N Colusa Street Willows, CA 95988

Sacramento-Metropolitan AQMD 777 12th Street, 3rd Floor Sacramento, CA 95814

Placer County APCD 110 Maple Street Auburn, CA 95602

Tehama County APCD 1834 Walnut Street Red Bluff, CA 96080

Yolo-Solano AQMD 1947 Galileo Court, Suite 103 Davis, CA 95618

Zoom: Alternate meeting locations will join via Zoom Conference using the following information:

Join Zoom Meeting https://us02web.zoom.us/j/88455534942? pwd=NXc0R3NyTEtJdFZyd0h5aUZiSmluQT09

Meeting ID: 884 5553 4942

Passcode: 162376

Phone: +1-669-900-9128 (San Jose)

AGENDA

ITEM NO.

1. Call To Order/ Roll Call

2. Period of Public Comment

3. Elect 2024 Chair and Vice Chair

4. Approval of Minutes from the December 1, 2023 BCC Meeting

Approval of Minutes from the December 1, 2023 BCC Meeting

5. Financial Status Reports

Financial Status Report

6. Status Reports

Basinwide Control Council (BCC) Members Report Council Members

California Air Pollution Control Officers Association

CAPCOA Board Member

(CAPCOA) Report

Broader Sacramento Area (BSA) Report BSA Member

California Air Resources Board (CARB) Liaison

CARB Representative

Report

Technical Advisory Committee (TAC) Report TAC Chair

Smoke Management Program (SMP) Report SMP Coordinator

7. 2023 Intensive Fall Burn Season Report

Receive SMP Coordinator Kai Tawa's report of the 2023 Fall Intensive Rice Burn.

8. Biomass Energy Report

Hear updates from work group for potential action items related to Biomass Energy.

9. Climate Pollution Reduction Grants (CPRG)

Hear updates from TAC regarding potential CPRG projects.

10. Agricultural Biomass Conference Final Report

Receive final report about October 2023 Biomass Energy Conference.

11. Communications and Reminders

FPPC filing date for Form 700 is April 1, 2024.

12. Set Next BCC Meeting Agenda – April 5, 2024 Hosted by: Tehama County APCD

13. Adjourn Meeting.

MEETING AGENDAS ARE POSTED BY EACH MEMBER AIR DISTRICT OF THE SACRAMENTO VALLEY BASIN AND AT THE SVBCC WEBSITE LISTED BELOW.

Questions, comments, and correspondence may be directed to:

Sacramento Valley Basinwide Air Pollution Control Council Laurie LaGrone, Secretary-Treasurer 629 Entler Avenue, Suite 15 Chico, CA 95928 530-332-9400 ext. 105

^{*}Meeting information can be viewed at www.airquality.org/SVBCC

bcctacsecretary@gmail.com

Sacramento Valley Basinwide Air Pollution Control Council

Title: Approval of Minutes from the December 1, 2023 BCC Meeting

Presenter:BCC/TAC Secretary-Treasurer

Motion needed.

ATTACHMENTS:

Description Upload Date Type

2023-12-01_BCC_Meeting Mnutes_DRAFT 1/30/2024 Supporting Documents

SACRAMENTO VALLEY

BASINWIDE AIR POLLUTION CONTROL COUNCIL

			Chair	Vice-Chair				
Butte	Colusa	Feather River	Glenn	Placer	Sacramento	Shasta	Tehama	Yolo-Solano

Meeting Minutes – December 1, 2023

1. Call to Order/ Introductions

A regular meeting of the Sacramento Valley Basinwide Air Pollution Control Council was called to order at 10:02am by Chair Grant Carmon and quorum established. Those present were as follows:

PRESENT: Butte County AQMD: Tami Ritter, BCC Member

Colusa County APCD: Gary Evans, BCC Member Feather River AQMD: Matt Conant, BCC Member Glenn County APCD: Grant Carmon, BCC Member Placer County APCD: Scott Alvord, BCC Member Sacramento-Metro AQMD: Eric Guerra, BCC Member Shasta County AQMD: Patrick Jones, BCC member Tehama County APCD: Pati Nolen, BCC Member Yolo-Solano AQMD: Angel Barajas, BCC Member

Butte County AQMD: Patrick Lucey, alternate TAC member

Colusa County APCD: Anastacia Allen, TAC member Feather River AQMD: Chris Brown, TAC Member Glenn County APCD: Marcie Skelton, TAC Member Placer County APCD: Erik White, TAC Member

Sacramento-Metro AQMD: Amy Roberts, alternate TAC Member

Shasta County AQMD: Rob Stahl, TAC Member

Tehama County APCD: absent

Yolo-Solano AQMD: Gretchen Bennitt, TAC Member

Smoke Management Plan Coordinator: absent

CA Air Resources Board: absent

BCC Secretary-Treasurer: Laurie LaGrone

2. Period of Public Comment

Mr. Carmon opened the meeting to public comments. Hearing none, the item was closed.

3. Approval of Minutes from the October 6, 2023 BCC Meeting

MOTION: Ms. Ritter moved to approve the minutes of the October 6, 2023 meeting. Seconded by Mr. Barajas, the minutes were approved through a roll call vote with no abstentions and one absence.

4. Financial Status Report

Ms. LaGrone provided a summary of the financial status report as of October 31, 2023. MOTION: On a motion from Mr. Conant, seconded by Mr. Jones, the financial status report was approved through a roll call vote with no abstentions and one absence.

5. Investment Options – Amy Roberts

Ms. Roberts explained the findings of an initial inquiry into investment options for BCC monies. Two options included a 6-month Certificate of Deposit and a money market account. Final recommendations will be made to the board in the spring of 2024, prior to the next budget proposal. No vote was required.

6. Status Reports

- Basinwide Control Council (BCC) Members Report no report.
- CA Air Pollution Control Officers Association (CAPCOA) Report Mr. White reported on CAPCOA's concerns and activities, including grant funding in 2024 and a recent presentation made to the group by NASA on the ability of satellites to provide emissions data from space.

Tehama County APCO Joseph Tona will serve as Vice Chair in 2024.

Mr. White recounted the CAPCOA Fall Conference.

- Broader Sacramento Area (BSA) Report no report.
- CA Air Resources Board (CARB) Report no report.
- Technical Advisory Committee (TAC) Report Shasta County will chair TAC in 2024.
- Smoke Management Program (SMP) Report no report.
- << Ms. Nolen joined the meeting during Status Reports >>

7. Fall Rice Straw Burn Mid-Season Report – BCC Secretary

Ms. LaGrone provided Mr. Tawa's mid-season report. Mr. Tawa provided notes which Ms. LaGrone will email to the board following the meeting.

8. Biomass Energy Work Group Report – Chris Brown

Mr. Brown explained the formation of a work group to plan a follow-up conference and to keep biomass energy at the forefront of discussion. The group's goals include

- 1. Ensuring that agricultural biomass is on the list of potential state projects for funding, and
- 2. Bringing an ag biomass project to the implementation phase.

9. Biomass Conference Summary Report – Amy Roberts

Ms. Roberts summarized the report and discussed next steps. The finalized report will be presented at the February 2024 BCC meeting. Several board members expressed support for the conference and the urgency of taking action soon.

10. CPRG Letter from BCC to CARB – Amy Roberts

Ms. Roberts presented a letter to CARB from the BCC for approval.

MOTION: Mr. Jones moved to authorize the sending of the letter to CARB; Ms. Nolen seconded the motion. The motion was unanimously approved through a roll call vote with no abstentions or absences.

11. Resolution for Ann Hobbs – Erik White

Ms. Hobbs was thanked for over two decades of work in the Sacramento Valley on agricultural burning issues and burning alternatives. Her great work was recognized upon her retirement and board members offered their thanks.

MOTION: Mr. Alvord moved to approve a resolution recognizing Ann Hobbs' exceptional service to the Sacramento Valley Air Basin upon her retirement. Ms. Nolen seconded the motion, and the motion was unanimously approved through a roll call vote with no abstentions or absences.

12. 2024 BCC and TAC Meeting Schedules

MOTION: Mr. Jones moved to accept the 2024 BCC and TAC meeting schedules as presented; Ms. Nolen seconded the motion, and the motion was unanimously approved through a roll call vote with no abstentions or absences.

13. Set Next BCC Meeting Agenda – February 2, 2024 Hosted by: Shasta County AQMD

14. Adjourn Meeting

Mr. Carmon adjourned the meeting at 10:40am

Respectfully submitted by: Laurie LaGrone, BCC Secretary-Treasurer

BCC:11

Sacramento Valley Basinwide Air Pollution Control Council

Title: Financial Status Report

Presenter: BCC/TAC Secretary-Treasurer

Receive Financial Status Report as of December 31, 2023 (motion needed).

ATTACHMENTS:

Description	Upload Date	Type
Financial Report - Bank Account Register 12-31-2023	1/30/2024	Supporting Documents
Financial Report - Profit & Loss Budget vs Actual 12-31-2023	1/30/2024	Supporting Documents
2023-12-20_BCC_Reconciliation_Detail	1/30/2024	Supporting Documents

2:38 PM 01/12/24
Accrual Basis

Sacramento Valley Basinwide Air Pollution Control Council Bank Accounts Register As of December 31, 2023

Туре	Date	Num	Name	Split	Debit	Credit	Balance
Tri Co	unties Bank						35,373.52
Bill Pm	07/01/2023	1018	Hotel Winters	Accounts Payable		4,212.23	31,161.29
Bill Pm	07/19/2023	1019	SDRMA	Accounts Payable		2,882.81	28,278.48
Bill Pm	07/19/2023	1022	Butte County AQMD	Accounts Payable		1,322.50	26,955.98
Bill Pm	07/19/2023	1020	Western Weather Group	Accounts Payable		4,283.33	22,672.65
Bill Pm	07/19/2023	1021	Western Weather Group	Accounts Payable		814.67	21,857.98
Deposit	07/19/2023		-	Undeposited Funds	11,500.00		33,357.98
Deposit	08/16/2023			-SPLIT-	33,788.00		67,145.98
Deposit	08/16/2023			Undeposited Funds	7,549.00		74,694.98
Deposit	08/16/2023			Undeposited Funds	15,726.00		90,420.98
Genera	08/16/2023	Jrnl 5		Tri Counties Bank	,	2.00	90,418.98
Genera	08/16/2023	Jrnl 5		Tri Counties Bank	2.00		90,420.98
Bill Pm	08/16/2023	1023	Butte County AOMD	Accounts Payable		1,322.50	89,098.48
Bill Pm	08/16/2023	1026	Hotel Winters	Accounts Payable		4,212.23	84,886.25
Bill Pm	08/16/2023	1024	Western Weather Group	Accounts Payable		4,283.33	80,602.92
Bill Pm	08/16/2023	1025	Western Weather Group	Accounts Payable		814.67	79,788.25
Deposit	08/21/2023			Sacramento Metropolitan			79,788.25
Deposit	09/15/2023			-SPLIT-	24,929.00		104,717.25
Deposit	09/15/2023			-SPLIT-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		104,717.25
Bill Pm	09/20/2023	1028	Butte County AOMD	Accounts Payable		1,322.50	103,394.75
Bill Pm	09/20/2023	1031	Hotel Winters	Accounts Payable		8,282.26	95,112.49
Bill Pm	09/20/2023	1027	Richardson & Company	Accounts Payable		6,100.00	89,012.49
Bill Pm	09/20/2023	1029	Western Weather Group	Accounts Payable		4,283.33	84,729.16
Bill Pm	09/20/2023	1030	Western Weather Group	Accounts Payable		814.67	83,914.49
Bill Pm	10/18/2023	1032	Butte County AQMD	Accounts Payable		1,322.50	82,591.99
Bill Pm	10/18/2023	1033	Western Weather Group	Accounts Payable		4,283.33	78,308.66
Bill Pm	10/18/2023	1034	Western Weather Group	Accounts Payable		814.67	77,493.99
Bill Pm	10/18/2023	1035	Lux Bus America	Accounts Payable		2,252.50	75,241.49
Bill Pm	10/26/2023	1036	Hotel Winters	Accounts Payable		2,203.00	73,038.49
Bill Pm	11/15/2023	1037	Butte County AQMD	Accounts Payable		1,322.50	71,715.99
Bill Pm	11/15/2023	1038	Western Weather Group	Accounts Payable		4,283.33	67,432.66
Bill Pm	11/15/2023	1039	Western Weather Group	Accounts Payable		814.67	66,617.99
Deposit	12/13/2023			Undeposited Funds	11,500.00		78,117.99
Bill Pm	12/20/2023	1040	CA Special Districts Assn	Accounts Payable	,	500.00	77,617.99
Bill Pm	12/20/2023	1041	Butte County AQMD	Accounts Payable		1,322.50	76,295.49
Bill Pm	12/20/2023	1042	Western Weather Group	Accounts Payable		4,283.33	72,012.16
Bill Pm	12/20/2023	1043	Western Weather Group	Accounts Payable		814.67	71,197.49
Total T	ri Counties Bar	nk			104,994.00	69,170.03	71,197.49
U.S.B Total U	s ank J. S. Bank						
TOTAL					104,994.00	69,170.03	71,197.49

2:39 PM 01/12/24 **Cash Basis**

Sacramento Valley Basinwide Air Pollution Control Council Profit & Loss Budget vs. Actual July through December 2023

	Jul - Dec 23	Budget	% of Budg
Ordinary Income/Expense			
Income			
Annual District Assessments			
Butte AQMD	12,529.00		
Colusa APCD	7,549.00		
Feather River	16,026.00		
Glenn APCD	23,000.00		
Placer AQMD	6,327.00		
Sacramento Metropolitan AQMD	15,726.00		
Shasta AQMD	6,350.00		
Tehama APCD	5,085.00		
Yolo-Solano AQMD	12,400.00		
Total Annual District Assessments	104,992.00		
Total Income	104,992.00		
Expense			
Insurance	2,882.81		
Professional Services			
Administrative Services	7,935.00		
Ag Burn Services	25,699.98		
Financial Audit	6,100.00		
Meteorological Services	4,888.02		
Total Professional Services	44,623.00		
Special Department Expense			
Memberships	500.00		
Total Special Department Expense	500.00		
Total Expense	48,005.81		
Net Ordinary Income	56,986.19		
Other Income/Expense			
Other Expense			
Biomass Energy Conference	21,162.22		
Total Other Expense	21,162.22		
Net Other Income	-21,162.22		

2:13 PM 01/12/24

Sacramento Valley Basinwide Air Pollution Control Council Reconciliation Summary Tri Counties Bank, Period Ending 12/20/2023

	Dec 20, 23	
Beginning Balance Cleared Transactions		67,942.49
Checks and Payments - 1 item Deposits and Credits - 1 item	-1,322.50 11,500.00	
Total Cleared Transactions	10,177.50	
Cleared Balance		78,119.99
Uncleared Transactions Checks and Payments - 5 items	-6,922.50	
Total Uncleared Transactions	-6,922.50	
Register Balance as of 12/20/2023		71,197.49
Ending Balance		71,197.49

Sacramento Valley Basinwide Air Pollution Control Council

Title: 2023 Intensive Fall Burn Season Report

Presenter: Kai Tawa

Receive SMP Coordinator Kai Tawa's report of the 2023 Fall Intensive Rice Burn.

ATTACHMENTS:

Description Upload Date Type

2023 Intensive Fall Burn Season Report 1/30/2024 Supporting Documents

Smoke Management Program Intensive Fall Burn Season 2023 Summary Report



The Smoke Management Program is an air quality program that was developed to manage agricultural burning by allocating acreage to Air Districts based on the quality of overall meteorological conditions pertaining to smoke dispersion. The quality of conditions is determined by numerous factors such as average basinwide PM_{2.5} measurements, inversion strength, wind speed and wind direction, among others. If conditions are poor, the California Air Resources Board (ARB) and/or the Smoke Management Program Coordinator (SMPC) may reduce acreage allocations or issue a No Burn Day. For superior ventilation conditions, they may allocate significantly more acreage assuming conditions are safe and public impact is not expected.

The 2023 Fall Burn Season took place between September 15 and November 30, 2023. In stark contrast to the prior year, drought conditions were absent from the Sacramento Valley Air Basin (SVAB) due to historic precipitation received over the 2022-2023 winter. Planted rice acres rose accordingly to 555,739 acres, up from only 258,446 acres in 2022, or more than a doubling. This was the highest planted acreage since 2016.

The weather conditions throughout the season can be summarized as unsettled and active. Compared to the past 6 years, the season saw a below-normal seasonal average PM_{2.5} concentration and saw the second-lowest average inversion strength, only to be bested by 2021, which featured the highest seasonal rainfall observed in the program's modern history, i.e., since 2002. 2023 saw the 3rd highest rainfall in the past 6 years at 1.28", which is still below average compared to the entire program's historical average of roughly 3.00".

These unsettled conditions yielded 57 Permissive Burn Days with no restrictions, the highest number in nearly 20 years. There were also 3 Extended Burn Days, which is now the highest number in the program's modern history. There were also 6 Wet Days, 6 Restricted Fields Days, 0 Prunings-Only Days, and 5 No Burn Days.

While these initial statistics would seem to indicate a relatively easygoing burn season, a total of 26 complaints were received, the highest number in 10 years. Most of the complaints occurred in the Shasta County Air District (SCAQMD) and the Yolo/Solano Air District (YSAQMD), with both Districts accumulating 10 complaints each. The Districts and the SMPC worked together to compile the following information.

In the YSAQMD, 10 complaints were received from 5 separate burns. Air quality conditions that resulted in complaints featured both operational as well as meteorological complicating factors. Meteorologically, a combination of high atmospheric stability and northerly winds resulted in some smoke impacts from outside the District while also preventing local burns from dispersing well. Next season, Western Weather Group (WWG) plans to place extra emphasis on these conditions in the forecasts and ensure that less acres are allocated in these meteorological regimes. Operationally, the District believes that air quality was most negatively impacted by overnight smoldering of burn

piles, rice burns that exceed amounts authorized by the District, and unpermitted/unauthorized burns. The District plans to reduce the number of complaints next season by ensuring the regulated community understands District rules prohibiting overnight smoldering, continuing outreach to advise burn permit and authorization requirements, and continuing to conduct rice straw inspections, active field observations, and accurate accounting of rice stubble burns.

In Shasta County, all 10 complaints were received on October 27th due to issues with a prescribed burn conducted by the United States Forest Service. The Green Mountain area where this burn occurred has a long history of very large prescribed burns and on October 25th, was prescribed with a plan to burn 3,500 acres in favorable south winds. Unfortunately, wind speeds increased beyond prescription parameters, forcing a shutdown of ignitions with only 1,500 acres complete. With a Fire Weather Watch now in effect for October 28th and a Red Flag Warning in effect for the 29th due to forecast strong north winds, a decision was made to finish the burn in lighter north winds on October 26th to avoid potential spotting hazards if burning had continued into the 28th and 29th. Burns were completed on the 26th and accelerating north winds on the 27th pushed smoke into the SVAB and other populated areas of Shasta County, resulting in 10 complaints and a significant degradation of air quality throughout the area on the 28th. PM_{2.5} concentrations exceeded federal attainment standards on this day.

WWG was not included in the weather forecasting or consulting processes of this burn. Due to a significant loss of staff at SCAQMD earlier in the year, a knowledge gap developed between the departing staff and their replacements. The newest staff were not aware of the procedures specific to the Intensive Fall Burn Season, including the requirement to request additional acres if exceeding the daily allocation for burns occurring at or below 2,000 feet and/or the daily variable elevation, as well as the availability of WWG to provide more detailed and customized spot forecasts for planning purposes. Since then, SCAQMD and the SMPC have reviewed these procedures and are excited to work together more closely next season, especially during the pre-season training period. This renewed communication will greatly reduce the likelihood of similar impacts next season.

In words, 17,652 acres of rice straw were burned in the SVAB, or about 14% of the allowable burn acres. This is both the greatest amount of rice straw burned and the highest percentage of allowable acres burned in 7 years. The season was very prolific outside of rice burning as well, featuring a total burned acreage of 38,449 acres, the highest amount in 12 years. The season also featured the highest-ever number of prescribed fire acres at 7,365 and the second-highest number of orchard waste acres at 12,328. See the tables and charts below for more information.

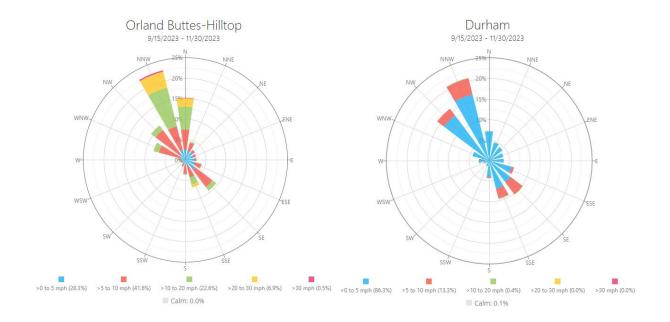
2023 Smoke Management Program Intensive Fall Burn Season Statistics

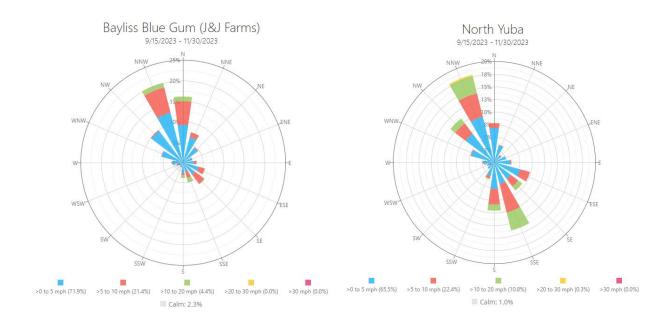
		Acres
County	Complaints	Burned
Butte	2	6697
Colusa	0	7965
Glenn	0	6072
Placer	0	179
Sacramento	1	162
Shasta	10	6280
Sutter	3	4688
Tehama	0	1813
Yolo/Solano	10	2705
Yuba	0	1887
Total	26	38449

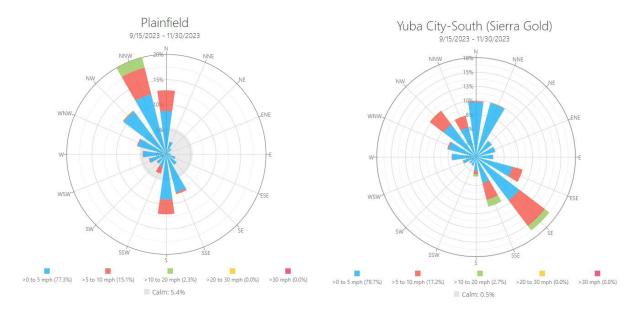
Meteorological Parameter	Value
12am-6am avg. PM _{2.5}	9.0μg/m ³
500mb Height	5729m
Avg 6am Inversion	9.2°F
Avg ARB Wind Speed	10.2mph
Total Rainfall	1.28"

County	Rice	Other Crops	Orchard	Prescribed Burning	Misc.	Total
Butte	1902	107	3883	803	3	6698
Colusa	7151	29	557	188	40	7965
Glenn	3792	16	2139	21	104	6072
Placer	166	0	0	0	13	179
Sacramento	0	0	112	40	10	162
Shasta	0	0	0	6280	0	6280
Sutter	3141	171	1190	0	186	4688
Tehama	0	0	1813	0	0	1813
Yolo/Solano	110	110	2248	0	237	2705
Yuba	1390	0	386	33	78	1887
Totals:	17652	433	12328	7365	671	38449

2023 Fall Burn Season - Wind Roses

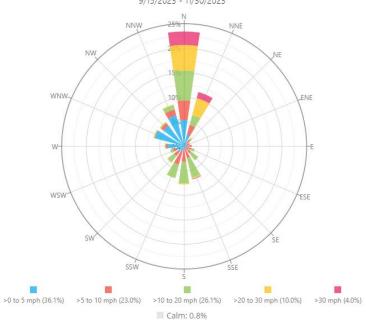








9/15/2023 - 11/30/2023





Sacramento Valley Basinwide Air Pollution Control Council

Title: Agricultural Biomass Conference Final Report

Presenter: Amy Roberts

Receive final report about October 2023 Biomass Energy Conference.

ATTACHMENTS:

Description Upload Date Type

Final Biomass Conference 2023 Summary Report 1/31/2024 Supporting Documents











Sacramento Valley Basinwide Air Pollution Control Council

AGRICULTURAL BIOMASS CONFERENCE

Opportunities & Challenges of Agricultural Biomass Utilization October 5-6, 2023

SUMMARY REPORT

February 2024

Background

For several years, biomass has been a discussion topic for the Sacramento Valley Basinwide Air Pollution Control Council (BCC) and the Technical Advisory committee (TAC). Facilities that use biomass for energy or other bioproducts have been closing over the past decade, yet there is an ever-increasing need for biomass operations for several reasons. Tree mortality from drought, disease, and wildfires have created tons of forest biomass. Left on the forest floor or as standing dead wood can increase climate pollution and enhance the risk of catastrophic wildfire and smoke impacts that further deteriorate air quality. Agricultural biomass is ubiquitous in the northern Sacramento Valley and is typically burned as a waste biproduct resulting in



basinwide air quality impacts. Any reduction in smoke from agricultural or prescribed burning would be a benefit to the region's communities and overall air quality attainment goals.

In 2023, the BCC decided to highlight the many economic and air quality co-benefits that can be realized by utilizing biomass as a resource instead of a waste byproduct. It was determined the conference would focus on agricultural biomass because the BCC basin is predominately agricultural and because forest biomass already has significant attention from state and local agencies. The conference would also serve as a mechanism to bring BCC members together in-person for the first time since January 2020 and underscore their role in the region to a broader audience.

Planning & Logistics

A planning committee was formed in March 2023 consisting of seven staff members from various air districts in the BCC (see Table 1). The committee was responsible for researching and determining venue, agenda and speakers, and all other conference logistics. The committee met biweekly for the first four months and then weekly in the final two months leading up to the conference. Decisions related to conference date, venue and expenses were brought forward to the TAC and BCC for approval. The TAC also reviewed conference planning efforts during their monthly meetings and provided guidance and suggestions to the planning committee.

Table 1. Biomass conference planning committee members

Name	District
Amy Roberts	Sacramento Metropolitan Air Quality Management District
Bruce Springsteen	Placer County Air Pollution Control District
Christiana Darlington	CLERE Inc.; Placer County Air Pollution Control District
Gretchen Bennitt	Yolo Solano Air Quality Management District
Paul Hensleigh	Yolo Solano Air Quality Management District
Peter Angelonides	Feather River Air Quality Management District
Sondra Spaethe	Feather River Air Quality Management District

It was decided the conference would be a two-day event that included a field trip to see a biomass energy project and an evening networking reception for conference attendees. The BCC meeting would

be held after the conference on the second day. The target audience for the conference included state and local government agencies, policymakers, academia, consultants, non-profits, and agricultural businesses and growers to inspire discussion at all levels necessary for positive action for agricultural biomass utilization. Outreach graphics and themes were created for the conference and a webpage was also developed to showcase conference information (www.airquality.org/biomass). All conference outreach and registration advertisements were done via Constant Contact. Three separate emails were sent out to an email list of approximately 500 people on June 30, August 4, and September 1.

The agenda included a variety of session types – speakers, panels, break-out groups. Speakers were recruited from a mix of state and local government agencies, academic and research institutions, and consultants, lobbyists, and businesses actively engaged in biomass from different knowledge, advocacy and economic angles. The agenda and overall conference theme was meant to start with a big picture perspective and then move into more local and on-the-ground viewpoints, highlighting challenges and opportunities throughout. The field trip was held at Dixon Ridge Farms to showcase a biomass project jointly operated between a landowner, Russ Lester, and SynTech Bioenergy that converts walnut shells to energy and other bioproducts. The networking session occurred after the field trip and allowed for additional conversations to occur amongst attendees. See conference agenda and speaker information handouts for additional details (Attachment 1).

Conference Expenses

The conference was held at the Hotel Winters in Winters, CA on October 5 and 6, 2023. Winters was selected because of its location within the agricultural region of the northern Sacramento Valley while still being close to Sacramento and able to draw attendance from State agency staff and legislators. The BCC entered into a contract with Hotel Winters for use of their ballroom and courtyard for the conference and networking session, meals for all conference sessions, and audio-visual set up. Other expenses came from transportation to and from the Field Trip location using a private bus service. The total cost for the conference was \$21162.22 (Table 2). Planning committee staff time is estimated at approximately 600 hours.

Table 2. Biomass conference expenses

Category	Description	Cost*
Conference Spaces	Orchard Ballroom, Railroad Courtyard	\$2,224.36
Food	Meals, Coffee, Tea, Day 1 cookies, reception appetizers	\$14,984.37
A/V Resources	Projector, Screen, Microphone Kit	\$1,243.03
Networking Reception	Cash Bar set-up and Bartender	\$457.96
Transportation	Lux Bus America (2 buses)	\$2,252.50
Total		\$21,162.22

^{*}All Hotel Winters costs included a service charge and sales tax.

Conference Attendance

The number of people who registered for the conference exceeded the attendee goal of 125 people. Actual attendance was approximately 65% of registered attendees (Table 3).

Table 3. Biomass Conference registration and actual number of attendees

Conference Session	Registered Guests	Actual Attendees	% Actual Attendance
Day 1 Conference	130	90	67
Day 2 Conference	104	70	65
Field Trip	75	45	59
Networking Reception	61	34	55

A wide variety of stakeholders joined the conference including local and state government agencies (30%), businesses (30%), consultants and non-profits (8%), and academia (8%). Elected officials (16%) were well represented by the BCC and other local city council members and county supervisors. Only a handful of staffers for state and federal legislators were present.

Table 3. List of elected officials that participated in the Agricultural Biomass Conference.

Name	Representation
David Morgan	Office of U.S. Representative Doug LaMalfa – California District 1
Creighton Kauss	Office of CA Senator Brian Dahle - California Senate District 1
Samuel Perkins	Office of CA Senator Brian Dahle - California Senate District 1
Daurice Kalfsbeek-Smith	Colusa County Supervisor, District 2
Gary Evans	BCC Member, Colusa County Supervisor, District 4
Mat Conant	BCC Member, Sutter County Supervisor, District 5
Monica Rossman	Glenn County Supervisor, District 2
Jim Yoder	Glenn County Supervisor, District 4
John Vasquez	Solano County Supervisor
Lucas Frerichs	Yolo County Supervisor, District 2
Angel Barajas	BCC Member, Yolo County Supervisor, District 5
Humberto Izquierdo	Yolo County Ag Commissioner
Carol Scianna	Councilmember City of Winters, Board Member Yolo-Solano AQMD
Michael Pasquale	Councilmember, Yuba City, District 3
Rose Tyron	Vice-Mayor Town of Paradise
Tami Ritter	Butte County Commissioner
Greg Janda	BCC Member (alternate), Rocklin Vice Mayor
Eric Guerra	BCC Member, CARB Board Member, City of Sacramento Vice-Mayor and City Councilmember
Sarah Aquino	Councilmember City of Folsom, Board Member Sac Metro AQMD
Taylor Kayatta	Sutter County Deputy County Administrator, Sacramento City School Board Member
Pati Nolen	BCC Member, Tehama County Supervisor, District 3

Conference Takeaways & Feedback

The conference was well attended, and robust conversations occurred between the variety of stakeholders present during breaks, lunch, the field trip, the networking reception, and the final session of the conference, a Breakout Session that allowed for open dialogue and brainstorming for participants. Both positive and critical comments were made by speakers and attendees alike. The BCC also had an opportunity to provide feedback during their post-conference meeting. The following is a summary of some of the main highlights and comments received:



Figure 2. Conference attendees at Hotel Winters on October 5, 2023

- For biomass utilization to increase, especially ag biomass, there needs to be more emphasis in state programs to economically support biomass utilization, e.g., increase bioproduct and biofuel production and use, reauthorize BioRAM program, expand BioMAT program, institute requirements for bio-based product use (e.g., AB857), require utilities sign power purchase agreement with biomass facilities, provide funding support for small-scall biomass projects, biofuel and CO2 sequestration projects.
- Keep biomass industries local and incentivize local use of biofuels and bioproducts to capitalize on local economic and workforce opportunities and reduce transportation and environmental impacts at the same time.
- Focus attention on regional planning efforts and establish upland-lowland and rural-urban partnerships and industry connections to facilitate biomass utilization.
- The conference was too focused on government and State agencies and should have focused more on growers to move toward biomass solutions. Recommendations for future conference efforts to include grower-specific panels.
- Incentives are key to transition to alternatives to open burning because the equipment replacement solutions are often very costly. The State budget should include funding for biomass, agnostic subsidy programs for both old and new biomass facilities, and incentives to increase biomass use.
- Moving away from agricultural burning requires significant work to build relationships with stakeholders and growers, performing outreach, and funding demonstration projects.
- Concerns and pushback from environmental justice groups has decreased discussion, legislative
 action, and State support for biomass projects. There needs to be a balance between environmental
 justice concerns and the benefit from operation and development of biomass facilities.
- California government agencies should de-emphasize their focus on electric vehicles and utilize biomass to a much larger scale and support composting and other bioproduct business efforts.
- Local officials will have to contend with benefits of biomass and the concerns and complaints that can be raised by residents due to biomass projects that create odors.
- The State legislature has fewer rural voices at this point in time, but current leadership are from more rural areas of California (Salinas, Humboldt) and may prove helpful for working on biomassrelated legislation or funding programs.

- There needs to be more advocacy and more voices to push for biomass-related legislation and funding to support biomass facilities and new programs. If air district leadership can get behind a common message of support for biomass, this would go a long way to supporting biomass utilization.
- A biomass coalition of communities, biomass facilities, air quality regulators and local elected officials would be very helpful for strong advocacy of biomass utilization.
- While the state aims for a zero-emission future, biomass can serve as a bridge during the energy transition. Biomass should not be removed from renewable energy definitions, e.g., by the California Energy Commission.
 Figure 3. Conference attendees at Dixon Ridge Farms for a field trip to observe a bioenergy project.
 Figure 3. Conference attendees at Dixon Ridge Farms for a field trip to observe a bioenergy project.
- Local, community choice aggregation programs serve to keep power portfolios local and use power generation from renewable resources while keeping costs down for local customers. These programs could increase the use of biomass energy.
- Solutions should be found to keep programs local to reduce transportation emissions and reduce the transport of pests and disease between regions. New Source Review permitting restrictions should allow for onsite composting projects. Composting should be designated as an Essential Public Service.
- Regulations are some of the biggest barriers to finding local solutions that will have overall benefits
 for jobs, reducing emissions, and tackling waste issues. Legislators and regulators would benefit
 greatly from education on farming processes and techniques.
- Education, outreach and multi-stakeholder advocacy is needed to make progress on biomass and other common-sense, local solutions.
- Broad, umbrella regulations don't work well for different regions, especially rural areas of California that don't have resources and infrastructure of larger urban areas. There needs to be more regional solutions to solve the issues facing California.
- Regulations should encourage local, sustainable biomass usage and small distributed energy generation facilities.
- Air quality regulators (e.g., QEEPS) should collaborate and listen to biomass small operators and review and identify reasons for permit denials for biomass facilities to see if there are any commonsense solutions.
- Biochar is a valuable bi-product that has the potential to reduce NO2 emissions by 50-80% when incorporated into the soil and could be a good way to sequester carbon emissions. A standardization for the definition of biochar is needed.
- We need to bring attention back to biomass in a new way Biomass 2.0 that moves the conversation away from combustion and highlights non-combustion processes, e.g., gasification and pyrolysis and production of hydrogen and other beneficial products.



Outcomes & Next Steps

The 2023 Agricultural Biomass Conference was a successful event that raised awareness for those in attendance and sparked a desire for continued attention and action toward increasing biomass utilization to capitalize on the many benefits increased use would have in the northern Sacramento Valley. From the feedback received during and post-deliberations from BCC and TAC members, several near- and long-term next steps emerged.

NEAR-TERM ACTIONS

- 1) The federal government is investing heavily in clean energy projects through the Inflation Reduction Act and the associated Climate Pollution Reduction Grant (CPRG). On behalf of California, the California Air Resources Board (CARB) is submitting a Climate Action Plan in Spring 2024 with potential projects that could be funded by the CPRG. To take advantage of this rare funding opportunity, the BCC will submit a letter to CARB requesting the BCC be included in their submittal to fund non-combustion biomass energy projects in the northern Sacramento Valley Region.
- 2) Develop a biomass workgroup within the TAC to continue conversations and actions related to biomass utilization.
- 3) Form a coalition and focus attention on current legislators that would be willing to work on agricultural biomass legislation over the next two years.

LONG-TERM ACTIONS

- Increase BCC-member contributions to hire a lobbyist that would push for legislative actions, state programs and funding that are supportive of agricultural biomass utilization, e.g., BioRAM program flexibility and inclusion of agricultural biomass, price support measures (\$/mile for transportation expenses to biomass facility).
- 2) Establish pilot biomass program that will provide data that supports utilization of biomass.
- 3) Develop education campaigns, fact sheets and broad coalition to increase education and attention on the benefits of biomass projects for workforce development, air quality, climate, energy and waste solutions.
- 4) Create model rules that can be used by air districts for biomass projects.
- 5) Hold a biomass-focused workshop that expands coalition to include other partners, e.g., SJVAPCD.

CONCLUSION

The 2023 Agricultural Biomass Conference was the first such event hosted by the BCC. The conference highlights the BCC's role in the region that extends beyond the Smoke Management Program, but as a coordinating entity that can bring attention to topics and further goals important to northern Sacramento Valley communities. While significant cost and staff effort was involved in the conference development, it was a worthwhile endeavor that has provided new direction and energy for the BCC and their respective air districts. Resultant actions inspired by the Biomass conference will serve to advance clean air and climate goals, tackle future air quality attainment challenges, and bring about workforce and economic opportunities to the broader BCC region.

ATTACHMENT 1

Biomass Conference Agenda & Speaker List

Sacramento Valley Basinwide Air Pollution Control Council

Agricultural Biomass Conference

The Opportunities & Challenges of Agricultural Biomass Utilization

OCTOBER 5-6, 2023 - Winters, CA

AGENDA



THURSDAY, OCTOBER 5, 2023

Orchard Ballroom, Hotel Winters

7:30 am – 8:30 am Registration & Continental Breakfast

8:30 am – 8:45 am Welcome

Angel Barajas (Supervisor, Yolo County)

8:45 am – 9:00 am Opening Remarks

Shannon Douglass (Vice President, California Farm Bureau Federation)

9:00 am – 10:15 am Session 1: Why are we talking about agricultural biomass?

Moderator: Dr. Alberto Ayala (Executive Director, Sac Metro Air District)

Alicia Adams (Supervisor, California Air Resources Board)

Cara Morgan (Deputy Director, CalRecycle)

David Shabazian (Director, California Department of Conservation)

Dr. Glenda Humiston (University of California Agriculture & Natural Resources)

10:15 am - 10:30 am Break

10:30 am – 11:45 am Session 2: Big Picture Challenges & Solutions for Biomass

Moderator: Erik White (APCO, Placer County APCD)

Dr. George Peridas (Science & Policy Officer, ZuCO2)

Karen Warner (Chief Executive Officer, BEAM Circular)

Virginia Jameson (Deputy Secretary, California Department of Food and Agriculture)

Dr. Ami Gunasekara (Director of Science & Research, California Farm Bureau Fed.)

David Shabazian (Director, California Department of Conservation)

11:45 pm – 1:00 pm Lunch (Orchard Ballroom)

1:00 pm – 2:00 pm Session 3: Legislation & Policy on Biomass

Moderator: Gretchen Bennitt (APCO, Yolo Solano AQMD)

Sheraz Gill (Deputy APCO, San Joaquin Valley Air Pollution Control District)

Julee Malinowski-Ball (Executive Director, California Biomass Energy Alliance)

Michael Boccadoro (President, West Coast Advisors)













Moderator: Paul Hensleigh (Deputy APCO, Yolo Solano AQMD)

Mitch Sears (Executive Director, Valley Clean Energy)
Matt Summers (Chief Operating Officer, West Biofuels)
Wayne McFarland (CEO & Chairman, SynTech Bioenergy)

3:00 pm – 3:15 pm Break

3:15 pm – 5:30 pm Field Trip

Dixon Ridge Farms (SynTech Bioenergy)

Group Transportation provided to and from Dixon Ridge Farms

5:30 pm – 6:30 pm Networking Reception (Hotel Winters Railroad Courtyard)



Friday, October 6, 2023

Orchard Ballroom, Hotel Winters

8:00 am – 8:45 am Registration & Hot Breakfast

8:45 am – 9:00 am Opening Remarks

Eric Guerra (Vice-Mayor, City of Sacramento)

9:00 am - 10:30 am Session 5: Opportunities & Successes of Ag Biomass Use

Moderator: Anastacia Allen (APCO, Colusa County APCD)

Dr. Somayeh Nassiri (Associate Professor, UC Davis)

Evan Edgar (Principal Engineer and President, Edgar & Associates, Inc.)

Raymond Baltar (Director of the Sonoma Biochar Initiative, Sonoma Ecology Center)

Dan Pronsolino (General Manager, Dunnigan Hills Hulling and Shelling)
Greg Giguiere (Director of Vineyard Operations, Matchbook Wines)

10:30 am - 11:00 am Break

11:00 am – 12:00 pm Session 6: Breakout Session: Where do we go from here?

Moderator: Marcie Skelton (APCO, Glenn County APCD)

Stuart Gilchrist (Marysville City Council Member)

12:15 pm Lunch on own (not included in conference registration)

1:30 pm – 3:00 pm Basinwide Control Council Meeting (Orchard Ballroom)

BCC Members / Open to the Public







THANK YOU FOR JOINING THE AGRICULTURAL BIOMASS CONFERENCE!

Sacramento Valley Basinwide Air Pollution Control Council

Agricultural Biomass Conference

The Opportunities & Challenges of Agricultural Biomass Utilization

OCTOBER 5-6, 2023 - Winters, CA

SPEAKERS & PANELISTS













Shannon Douglass is the first vice president of the California Farm Bureau Federation, the director of the Glenn County Farm Bureau, and former chair of the CFBF Young Farmers and Ranchers State Committee. She and her husband are the owners of Douglass Ranch in Orland, CA where they raise beef cattle, forage crops, sunflowers, pumpkins and specialty seeds. She also founded CalAgJobs, an online listing of employment opportunities in California agriculture. Douglass serves on the Glenn County Fair Board of Directors and was a former director of the Glenn County Resource Conservation District.



Ali Adams is the Manager of the Central Valley Air Quality Planning Section at the California Air Resources Board, responsible for air quality planning for California's Central Valley, including the San Joaquin Valley, and certain other areas of the State, as well as for broader, statewide particulate matter (PM) planning and analysis efforts. Her team is lead in the review and preparation of State Implementation Plans (SIPs) for PM and ozone for select areas of the State, the California Regional Haze Plan, and the analysis of PM-related technical and policy issues. Additionally, her work focuses on data analysis related to air quality planning, including assessing the interrelation of PM air quality data, meteorology, and emissions in support of regulatory and policy directives designed to meet State and National Ambient Air Quality Standards (NAAQS). The team also reviews particulate matter data associated with exceedances of air quality standards resulting from natural events for exclusion of those data from regulatory determinations.



Dr. Glenda Humiston became vice president of UC Agriculture and Natural Resources in 2015. Glenda was raised on a cattle ranch, an active member of 4-H and brings over 30 years of experience working on public policy development and program implementation supporting sustainability. She served as a Peace Corps volunteer in Tunisia, as executive director of a nonprofit organization advocating farmland preservation and value-added agriculture development, and several years as a consultant on environmental and agricultural issues throughout the West. She served President Clinton as deputy undersecretary for natural resources and environment at USDA from 1998 to 2001 and managed the Sustainable Development Institute at the 2002 World Summit for Sustainable Development in South Africa and the 2006 World Water Forum in Mexico City. In 2009, Humiston was appointed by President Obama to serve as the California State Director at the USDA Rural Development. She produced a widely acclaimed guidebook on "Access to Capital" and has led efforts to bring rural issues to the forefront of the state's Economic Summit and policymakers throughout California. Humiston earned her Ph.D. from UC Berkeley in Environmental Science, Policy and Management, a master's degree in international agricultural development from UC Davis and a bachelor's degree in animal science from Colorado State University.



David Shabazian was appointed by the Governor as the Director of the Department of Conservation in October 2019. From working the soil with his hands to leading policies for working lands, David is a lifelong champion for natural resource stewardship. His career is built on bringing diverse stakeholders together with innovative methods to protect both the ecological and economic value of our natural and working lands. David grew up on a family farm in California's Central Valley that grew hay and grain for local dairies. David received a bachelor's degree in Agricultural Economics from UC Davis and a master's degree in Transportation Technology and Policy from UC Davis. He worked for the Sacramento Area Council of Governments for close to two decades, leading programs that were nationally recognized. David is a member of the Sacramento Food Bank and Family Services board of directors and has served on numerous other boards and committees centered around healthy foods, agriculture, and working lands.



Cara Morgan is the Deputy Director leading the Materials Management and Local Assistance division at CalRecycle. Cara has worked extensively on implementing the new organics recycling laws in an effort to fast track the fight against climate change. Cara has many years of experience successfully implementing and building the Circular Economy in California.



George Peridas has been working on carbon capture, removal and storage for almost two decades. He is a mechanical engineer and holds a Masters in Engineering and a PhD from the University of Oxford, as well as a Masters in Environmental Science and Policy from Imperial College. He began his career in academia in materials research, and then switched to energy markets consulting for the international firm Pöyry. George came to the U.S. in 2006 to join the environmental NGO movement and spent twelve years at NRDC working on climate change advocacy and specifically carbon capture and storage science, regulation and policy. He joined Lawrence Livermore National Laboratory in 2019, where he authored and co-authored reports on the regulation and economics of carbon capture, removal and storage, as well as in-depth analyses of how California and other jurisdictions can achieve carbon neutrality. Starting in October, 2023, George joined ZuCO2, a company founded by community members and landowners in the California Delta to pursue responsible carbon storage projects for the benefit of the climate and the greater Delta region.



Karen Warner is the founder and CEO of BEAM Circular, a new hub for the circular bioeconomy in California's North San Joaquin Valley that is transforming waste into environmental solutions and economic opportunity for disinvested communities. Born and raised in the Central Valley of California, Karen began her career in global health and has served in a variety of nonprofit, governmental, and private sector roles focused on cross-sector partnerships and scaling social innovation. In 2018 she moved back to the Central Valley and served as District Chief of Staff for Congressman Josh Harder, before transitioning to a focus on regional projects at the intersections of inclusive economic development, agriculture, and climate. Karen has a BA in Human Biology and MBA from Stanford University, and a MPA from the Harvard Kennedy School of Government. She is currently an Emerson Collective Fellow and a member of the Stanislaus County Commission for Women Board of Directors. She lives in Modesto with her husband and two young children.



Virginia Jameson was appointed Deputy Secretary for Climate and Working Lands at the California Department of Food and Agriculture in November 2021. She previously served as Climate and Conservation Program Manager at the California Department of Conservation. Prior to that, she was Deputy State Director for the American Farmland Trust, Management Specialist for the Monterey County Agricultural Commissioner's Office, a Board Aide for Monterey County Office of District 4 Supervisor Jane Parker, and Associate Director of the Ag Land Trust. Jameson holds dual Master of Arts degrees in International Affairs and Natural Resources and Sustainable Development from American University and a bachelor's degree in Environmental Studies from the University of California, Santa Cruz.



Dr. Amrith Gunasekara recently joined the California Bountiful Foundation as its new Director of Science and Research. He will conduct and support scientific studies on critical matters affecting California agricultural communities. Dr. Gunasekara previously served as the Science Advisor to California Agriculture Secretary Karen Ross, and as Environmental Program Manager for the Office of Environmental Farming and Innovation at CDFA, which specialized in environmental incentive programs and climate change issues. At 16-years-old, Gunasekara came to the United States from Sri Lanka where food security was an issue. He says that gives him an appreciation for what California's farmers and ranchers do for their communities on a daily basis that we often take for granted.



Sheraz Gill is the Deputy Air Pollution Control Office at the San Joaquin Valley Air Pollution Control District (SJVAPCD). Sheraz has over 22 years of air quality experience working with a wide variety of stakeholders both within the San Joaquin Valley and around the state. He has worked directly on a variety of high-profile air pollution issues including developing State Implementation Plans, transportation growth challenges, the inclusion of agricultural into air quality permitting and wildland fire mitigation efforts. Within SJVAPCD, he currently oversees the planning efforts required by the federal and state governments, rule development, technology advancement, air quality analysis, air quality modeling, air monitoring, incentives and grants programs. He has been at the forefront of providing the public with the most up to date air quality information and in developing the most stringent regulations. He graduated with a BS in mechanical engineering at California State University Fresno.



Julee Malinowski-Ball is a Partner and lobbyist at Public Policy Advocates, LLC with over 20 years of hands-on lobbying and consulting experience in Sacramento at the Legislature and regulatory agencies, including the Natural Resources Agency (CAL FIRE), California Environmental Protection Agency, California Energy Commission, California Air Resources Board and California Public Utilities Commission. Over this period, she has represented clients on many resources-based issues such as air quality, climate change, tree mortality, power plant siting procedures, renewable energy, distributed generation, alternative transportation fuels, water quality, supply and distribution, and transportation and other infrastructure issues. Julee has represented the California Biomass Energy Alliance for over a decade and more recently also serves as its Executive Director. Julee holds a BA in Political Science from the University of California, Santa Barbara, and an MA in Government Studies from California State University, Sacramento.



Michael Boccadoro has worked extensively for more than forty years in public affairs and government relations. As Executive Director of the Agricultural Energy Consumers Association, Mr. Boccadoro is responsible for overseeing the association's regulatory and legislative affairs before the Public Utilities Commission, California Energy Commission, California Air Resources Board, and the California state Legislature. Mr. Boccadoro has been deeply engaged in California's climate, energy, and environmental policy debates on behalf of the state's agriculture industries. He has also been instrumental in the development of California's distributed-renewable energy programs related to bioenergy. Mr. Boccadoro received his B.A. in economics and political science from the University of California, Davis.



Mitch Sears is the Executive Officer of Valley Clean Energy (VCE) and was instrumental in launching VCE. He has contributed his depth of experience to VCE gained through nearly 28 years with the City of Davis serving in various staff and management roles. Most recently he served as the City's Sustainability Manager for over a decade, leading comprehensive efforts to address climate change, including implementation of community energy projects. Prior to that, he oversaw Davis's Agricultural Land Conservation Program, helping permanently preserve over a thousand acres of Yolo County farmland.



Dr. Matthew Summers leads the technical development and research operations of West Biofuels. Dr. Summers has managed the planning, engineering, and construction of the Woodland Biomass Research Center. He supervises numerous staff and contractors and all aspects of technology development of the West Biofuels advanced reforming system. Dr. Summers has many years of experience as a technical consultant on the engineering, economic and environmental performance of biomass-to-energy technologies. Dr. Summers earned a Ph.D. in Biological Systems Engineering from University of California, Davis and holds a M.S. in Mechanical Engineering from Stanford University. He is a recognized expert in energy conversion, holds several patents, and has authored numerous reports on the subject of biomass-to-energy development, biomass and synthesis gas conversion technologies, emissions controls, and engineering design.



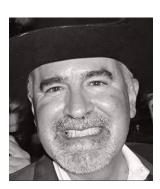
Wayne McFarland has spent the last 15 years in the field of renewable energy focused on finding solutions for converting biomass and other problematic global waste streams into carbon negative clean energy. His current focus is on how to deliver immediate solutions to some of the world's most troubling energy, environmental, economic, social and political problems. Wayne founded SynTech BioEnergy, LLC, with a mission to be a leader in meeting the challenge of climate change through delivering renewable, carbon negative clean energy and end-of-waste solutions on a global scale. Wayne's expertise in environmental law & policy, global manufacturing, renewable energy and retail energy markets, coupled with his inner drive to better the environment, has been fundamental to his leadership of SynTech. He now serves as Chairman and CEO of SynTech PCo, LLC, parent of all related SynTech entities. Prior to SynTech, he served as Managing Member, CEO and Chairman of Admiral Energy, LLC, and as Chairman, CEO and Managing Member of Native American Tribal Energy Company, LLC. Wayne holds a bachelor's degree in political science from Lewis University and a J.D. degree with honors from the IIT/Chicago Kent College of Law.



Vice Mayor Eric Guerra represents the southeastern part of the City of Sacramento, including the areas of Campus Commons, Tahoe Park and Little Saigon. Vice Mayor Guerra grew up a farm worker in rural yolo county the went on to become a proud Sacramento State Hornet, he graduated in 2003 with a BS in Electrical and Electronic Engineering and a MA in Public Policy and Administration in 2008. Prior to his election to the City Council in 2015, Councilman Guerra served as the Governor appointee to the California State University Board of Trustees, President of the Tahoe Park Neighborhood Association, Chairman of the Sacramento County Planning Commission, and has over fifteen years of experience in the California State Legislature in numerous roles. While serving as Councilmember, he has served as Chairman for the Sacramento Metro Air Quality Management District and for Regional County Sanitation District. In January 2023, he was appointed by Governor Gavin Newsom to represent the Sacramento Region Air Districts on the California Air Resources Board.



Dr. Somayeh Nassiri is a faculty member at the University of California Pavement Research Center (UCPRC). She is interested in pavement materials and structural design techniques to improve pavement sustainability. These strategies include using more sustainable materials and construction practices for long-lasting and durable pavements. Others are to improve pavement structural design for new and rehabilitation projects and to optimize repair jobs in terms of materials, timing, and construction to extend the life cycle of pavements, among others. Dr. Nassiri teaches courses on the materials, design, repair, rehabilitation, and management of asphalt and concrete pavements.



Evan W.R. Edgar has thirty-three years of experience in all aspects of solid waste management as a registered civil engineer. He is the Principal of Edgar & Associates, Inc., a lobbying firm and environmental engineering firm based in Sacramento and established in 1997. Mr. Edgar also cofounded the California Compost Quality Council and the California Compost Coalition, a statewide compost market development project and Lobbying Coalition, respectively. Mr. Edgar has advocated for green energy incentives, compost market development, greenhouse gas reductions policies, and practical regulations in front of legislative committees, regulatory agencies, and local commissions involving the collection, hauling, processing, and composting of urban green and yard wastes. Mr. Edgar has advised private industry companies, state and local government, and non-governmental organizations on recycling and organic waste project development issues including technical feasibility, collection options, land use compatibility, site design, operations, grant and loan funding, business development, and market development issues.



Greg Giguiere is no stranger to the Dunnigan Hills, he is the son of Karl and Vicki Giguiere and spent the first 10 years of his career grape farming here for R.H. Phillips and JK Vineyards. Greg then spent 8 years working in the vineyards of Oregon and Washington state. In 2017, Greg came home and rejoined the family business, bringing back all the secrets of the vineyards from the Pacific Northwest. Greg is a UC Davis Viticulture and Enology graduate and passionate about growing exceptional wine grapes. He is especially interested in conservation and is active on local conservation boards. When he is not out in the vineyards, Greg enjoys spending time with his family and four children, Declan, Aisling, Caitlin and Roslynn, in the great outdoors – camping, hiking, skiing and exploring the Mount Shasta region.



Dan Pronsolino is the General Manager at Cortina Hulling and Shelling, which owns and operates both Cortina Hulling and Shelling and Dunnigan Hills Hulling and Shelling.



Raymond Baltar is the Biochar Projects Manager and Director of the Sonoma Biochar Initiative at the Sonoma Ecology Center. He is a sustainability consultant, local businessman, and professional photographer is focused on integrating business principles with energy conservation and environmental sustainability. Mr. Baltar served on the Executive Committee of the Sierra Club, Redwood Chapter and on the Steering Committee for Solar Sonoma County. He completed a "Green MBA" graduate degree in Sustainable Enterprise from Dominican University in 2011.



Stuart Gilchrist is a Marysville City Council Member and Board Chair for the Feather River Air Quality Management District. Mr. Gilchrist is a 4th generation northern Californian, born and raised in Marysville in a family of working farmers. He is an artist, designer and small business owner and is engaged with his community by participating in many organizations and projects such as the South Yuba County Rotary, Yuba Water Agency's Education Center Development Steering Committee, City of Marysville Downtown Turnaround Pilot Program through SACOG, a Founding Member of Neighborhood Association of Chinatown. He also partnered with the City of Marysville's chosen Environmental Planner as designer of various parks and is a designer of two local interactive memorials through Yuba Sutter Regional Arts Council (The Arboga Assembly Center Japanese Internment Camp and Cotton Rosser Monument in Plaza Park).