



California Department of Food and Agriculture (CDFA)
Fertilizer Research and Education Program (FREP)
Technical Advisory Subcommittee (TASC)

HYBRID TELECONFERENCE MEETING

Room 180-537, Baker Science Building, Cal Poly, San Luis Obispo, CA, 93410

May 19, 2023
9:00 AM
MINUTES

MEMBERS PRESENT

Dr. Charlotte Decock
Dr. Jairo Diaz
Dr. Jan Hopmans
Dr. Mike Almasri
Dr. Rob Mikkelsen
Dr. Tom Bottoms
Dave McEuen
Daniel Rodrigues
Edgar Macias

MEMBERS ABSENT

Dr. Ben Faber
Dr. Sebastian Saa

CDFA STAFF

Dr. Amadou Ba
Dr. Emad Jahanzad
Dr. Martin Burger
Karen Adler
Mark Cady
Nicole Nunes

WELCOME AND INTRODUCTIONS

Dr. Tom Bottoms, Chair, called the meeting to order at 9:03 AM. Introductions were made, and a quorum was established.

REVIEW AND APPROVE MINUTES

Dr. Bottoms requested the subcommittee review the minutes of the January 31, 2023, meeting.

MOTION: Dr. Mike Almasri moved to approve the January 31, 2023, meeting minutes as submitted; Dr. Jairo Diaz seconded. The motion passed unanimously with a vote of 7- 0.

DEPARTMENT, DIVISION, AND BRANCH UPDATES

Dr. Amadou Ba delivered updates for the Division and Branch, commencing with revisions to the Bagley-Keene Act concerning remote meetings. Due to the pandemic, there is presently an exemption permitting virtual attendance at public gatherings; however, this provision is scheduled to expire on July 1, 2023. A legislative proposal has been put forth to permanently allow remote participation, but its passage remains uncertain. If unsuccessful, the TASC will be obliged to resume conventional in-person meetings, as was the case prior to COVID, where the establishment of a quorum would be required at the physical meeting location.

Furthermore, Dr. Ba reminded both staff and TASC members to duly complete the annual Form 700 and partake in the relevant trainings.

Moreover, Dr. Ba addressed the recent floods in the Kings and Tulare basins and their ramifications on California's agriculture. Based on evaluations, specific crops such as almonds, corn, pistachios, sunflowers, wheat, and tomatoes may be impacted. CDFA has identified one prominent feed facility and nine fertilizer plants in the region that could be affected if the current trend of snow melt persists.

In addition to these concerns, the state's budget shortfalls, with a staggering \$32 billion deficit, will inevitably impact certain CDFA programs funded through the general budget. However, Dr. Ba assured the TASC that industry-supported initiatives like FREP will remain unaffected.

Shifting focus, CDFA, in collaboration with the University of California (UC) Davis College of Agricultural and Environmental Sciences, recently organized the State of the Science Summit at UC Davis (May 2-3, 2023). With 300 attendees and international guests, the summit aimed to address strategies to mitigate enteric methane emissions in livestock feeding practices. Its objective was to pinpoint opportunities for collaboration and research that can assist the dairy and beef industries in achieving their climate goals.

During the discussion, Dr. Bottoms inquired about the funding availability for FREP projects in the current year. Dr. Ba indicated that within this cycle, as many as seven to eight comprehensive proposals could be funded by FREP.

PROGRAM UPDATES

Mark Cady announced the time and date for the Annual FREP Nutrient Management Conference, which will be held in Modesto Nov. 8-9, 2023. Cady also provided updates on CDFA-FREP grower training program, which helps growers in the Central Valley and Ventura County to comply with Irrigated Lands Regulatory Program requirements. He also provided updates on a user-friendly platform for the training program, which is in

transition and will be available online after some security issues and challenges have been addressed.

Cady provided updates on the Nitrogen and Irrigation Initiative (NII), a collaboration with UC Agriculture and Natural Resources (UCANR) and UC Davis to help growers improve their irrigation and nitrogen management practices and comply with regulations. Cady provided updates on work progress and activities, hiring staff, and the recently assembled stakeholder advisory committee who meet quarterly to provide feedback on the NII workplan and activities. The NII stakeholder advisory committee consists of local coalitions, commodity boards, resource conservation districts, and certified crop advisers.

2023 REGULAR FULL PROPOSALS

Dr. Bottoms led the discussion in reviewing and voting on the 11 submitted full proposals. After discussing each full proposal, seven were recommended to be funded:

- No-till planting of rice into existing soil moisture to conserve irrigation water and ensure the sustainability of rice systems-*Bruce Linquist*.
- Estimating mineralization and nitrogen utilization from banded compost applications in drip irrigated sweet potatoes and processing tomatoes-*Daniel Geisseler, et al.*
- Facilitating grower adoption of cover crop nitrogen scavenging to minimize residual nitrogen discharge and comply with the irrigated lands water quality protection program (Ag Order 4.0) on the central coast of CA-*Sacha Lozano, et al.*
- Improving nitrogen and potassium management in almond orchards with hulls and shells as a soil amendment and off ground harvest-*Sat Darshan Khalsa, et al.*
- Optimizing K Fertilization Management in Almond and Pistachio Orchards-*Yufang Jin, et al.*
- Evaluating Strategies for Increased Adoption of Nutrient and Irrigation Management for Central Coast Vegetable Production-*Valerie Perez*.
- Nitrogen movement out of root-zones in Central Valley irrigated lands: a multi-scale management, monitoring, modeling, and outreach project-*Isaya Kisekka, et al.*

TASC voted No on the following full proposals:

- Monitoring soil bulk electrical conductivity to detect and manage leaching- *Shawn Ashkan, et al.*
- Using Surfactants to Improve Water and Nitrogen Use Efficiency of Subsurface Drip Irrigated Processing Tomatoes-*Isaya Kisekka, et al.*
- Evaluation of frass as a soil amendment and fertilizer for vegetable production in California-*Marco Gebiola, et al.*
- Integrating smart tillage, cover cropping and variable-rate technologies into climate-adaptive soil management strategies to improve nitrogen use efficiency of vegetable production in the Lower Colorado Basin-*Pedro Andrade-Sanchez, et al.*

PUBLIC COMMENTS

No public comments.

AGENDA ITEMS FOR FUTURE MEETINGS

TASC Bylaws revisions, TASC member applications review and recommendation for appointment, reviewing program priorities for next grant cycle.

NEXT MEETING

The meeting will be scheduled for late August or early September 2023, before the autumn Fertilizer Inspection Advisory Board meeting.

ADJOURN

MOTION: Dr. Jan Hopmans moved to adjourn the meeting; Dr. Mike Almasri seconded the motion. The meeting was adjourned at 12:22 PM.

Respectfully submitted,

ORIGINAL SIGNED BY MARK CADY

Mark Cady
Senior Environmental Scientist (Supervisory)
Fertilizer Research and Education Program

Date: 05/22/2023