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

HYBRID MEETING

MINUTES

Date: Tuesday, October 6, 2026
9:00 AM – 5:00 PM

Location: Center for Analytical Chemistry
3292 Meadowview Road
Sacramento, CA 95823
(916) 262-1434

MEMBERS PRESENT	MEMBERS ABSENT	CDFA STAFF
Chris Shogren*	Ehsan Toosi	Dr. Emad Jahanzad
Dan Cook		Jenna Leal
Daniel Rodrigues	**INTERESTED PARTIES**	Jennifer Harmon
Dave McEuen	Kerri Steenwerth	Madison Goodman
Devin Clark*	Angelica Carrazco	Natalie Jacuzzi
Dr. Jairo Diaz*	Gary Silveria	
Dr. Mike Almasri	Martin Burger	
Dr. Sebastian Saa	Xia Zhu-Barker*	
Dr. Tom Bottoms		
Franklin Gaudi*		
Gina Bella Colfer		

*Attended remotely

WELCOME AND INTRODUCTIONS

Dr. Tom Bottoms, Chair, called the meeting to order at 9:08 AM. Introductions were made and a quorum was established.

REVIEW AND APPROVE JUNE 18, 2026, MEETING MINUTES

Dr. Bottoms requested TASC review the minutes of the June 18, 2026, meeting.

MOTION: Dan Rodrigues moved to approve the June 18, 2026, meeting minutes as submitted. Dave McEuen seconded; the motion passed unanimously with a vote of 11-0.

DEPARTMENT / DIVISION / BRANCH UPDATES

Jenna Leal, Branch Chief, discussed the changes and preparation for the upcoming transition of a new incoming CDFA Secretary and Governor; including staffing changes in CDFA's Executive Office.

Leal informed TASC the Branch has three active fertilizer litigations, highlighting one case that is being heard through Merced County Superior Court. It is believed to be fertilizer synthetically derived and being sold and marketed as organic.

Leal also discussed the Division budget and FREP's reserve account, including funds available for grant funding.

PROGRAM UPDATES

Natalie Jacuzzi, Senior Environmental Scientist (Supervisory), updated the TASC on the upcoming FREP Conference at the Hilton Stockton on October 28-29, 2026, urging members to attend the conference and the pre-conference tour on October 27 at the Port of Stockton. Jacuzzi highlighted scheduled conference speakers and the two panels. Jacuzzi updated TASC on the field visits staff conducted regarding FREP-funded research projects since January 2026.

DISCUSSION AND RECOMMENDATION OF 2026 FULL PROPOSALS

Regular Request for Proposals (RFP) Full Proposals

Dr. Bottoms led discussion in reviewing and voting on eight full proposals submitted from FREP's most recent Request for Proposal (RFP):

TASC voted '*yes'* on the following full proposals:

- Evaluating the phosphorus needs of mature almond trees – *Gordon, P.*
- Optimizing Irrigation and Nitrogen Management of Broccoli and Bell Pepper Across Contrasting Soils in Southern California – *Verdi, A.*
- Supporting Small Farm ILRP Compliance and Nitrogen Management in the San Joaquin Valley – *Teiken, C.*

TASC voted '*no'* on the following full proposals:

- Standardizing Farm-Scale Nitrogen Accounting for Sustainable Nutrient Management – *Kortman, S.*
- Pistachio field trials demonstrating fertilizer value of irrigation water nitrate and residual soil N – *Culumber, M.*
- Do Nitrogen Management Programs Improve Water Quality? Evidence from California's Central Valley – *Porse, E.*
- Development of Crop Conversion Coefficients and Analysis of Nitrogen Management for California's Cut Flower Industry – *Volk, E.*

- Validating alternative cover cropping and fertilizer strategies for annual crop production Systems – *Xu, S.*

CA Air Resource Board NOx Proposal Funding
Kerri Steenwerth and Angelica Carrazco, California Air Resources Board (CARB), provided TASC with a brief presentation on CARB's NOx funded research for 2027.

Discussion ensued regarding the proposal.

NOx Proposals
Following CARB's presentation, Dr. Bottoms led discussion to review two full proposals submitted from FREP's solicitation for NOx.

Two NOx subject matter experts, Martin Burger and Xia Zhu-Barker also attended the afternoon portion of the meeting to assist TASC with questions regarding the two full NOx proposals received.

- Annual and inter-annual monitoring and characterization of soil NOx emissions from California's Central Valley cropland: Linking cropping systems an agricultural management – *Bambach, N.*

- Soil Nitrogen Emissions: A measurement and model synthesis for farming and fertilizer practices in the SJV – *Cohen, R.*

MOTION: Dr. Bottoms moved that FREP staff work with Principal Investigators (PI) Nicolas Bambach and Cristina Lozcano, to revise the NOx proposal to incorporate suggested changes.

If the PI is amicable to revise the proposal, TASC will review it at the upcoming meeting and make a recommendation to FIAB. Dr. Mike Almasri seconded the motion; the motion passed unanimously with a vote of 11-0.

DISCUSSION AND RECOMMENDATION OF TASC MEMBER APPLICATIONS
FREP received seven applications for the term that commences on January 1, 2027, which includes four current TASC members reapplying.

MOTION: Dr. Tom Bottoms moved to approve the reappointment of current members Dan Cook, Sebastian Saa, Dan Rodrigues and Franklin Gaudi. Dave McEuen seconded; the motion passed with a vote of 7-0.

PUBLIC COMMENTS
No public comments.

AGENDA ITEMS FOR FUTURE MEETINGS
Revised NOx proposal review.

NEXT MEETING
The next meeting will be scheduled via Doodle Poll in late October or early November 2026.

ADJOURN
MOTION: Dr. Mike Almasri moved to adjourn the meeting; Gina Colfer seconded the motion. The meeting was adjourned at 4:26 PM.

Respectfully submitted,

ORIGINAL SIGNED BY NATALIE JACUZZI
Natalie Jacuzzi, FREP Date: 10/6/2026
Senior Environmental Scientist (Supervisory)
Feed, Fertilizer, and Livestock Drugs Regulatory Services