

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

California Farm Bureau Federation  
2300 River Plaza Drive  
Sacramento, Ca 95833  
(916) 561-5500  
March 23, 2011

**Minutes**

**TASC MEMBERS**

Jack Wackerman, Chair  
Chris Simas  
David P. McEuen  
Eric H. Ellison  
Jerome Pier  
Robert Fry  
Robert Mikkelsen  
Michael Cahn  
Steve Spangler

**CDFA STAFF**

Amadou Ba  
Asif Maan  
Edward J. Hard  
Maria Hicks

**NOT IN ATTENDANCE**

Thomas Gerecke

**WELCOME AND INTRODUCTIONS**

Mr. Jack Wackerman, Chairperson welcomed the subcommittee. Self-introductions were made and a quorum was established.

**REVIEW AND APPROVE MINUTES**

**MOTION:** Mr. David P. McEuen moved to approve the July 28, 2010 meeting minutes as submitted. Mr. Jerome Pier seconded. The motion passed unanimously.

**FREP STAFF UPDATES**

Mr. Edward Hard reported two staff left the FREP Program since the last technical advisory subcommittee (TASC) meeting and that he is the only full time staff in the FREP at this time. Mr. Hard further stated that the FREP receives assistance from Ms. Maria Hicks and hopefully one other staff person who will assist in contract management.

Mr. Hard stated that Secretary Karen Ross would like the FREP to focus on water quality issues related to groundwater. Mr. Hard stated that Secretary Ross would like to have the FREP evaluated to ensure the research and education that is being conducted is assisting the growers because FREP is the only program

within CDFA that is doing fertilizer research at this time. Mr. Hard further commented that the FREP is a voluntary program; the Program does not dictate what type of management practices are being performed on farms.

Dr. Amadou Ba stated that Secretary Ross attended the Fertilizer Inspection Advisory Board meeting on March 16, 2011. Dr. Ba re-iterated that the Secretary would like FREP to address water quality issues. Dr. Ba stated that the Department and the TASC would need to be aware of emerging and existing regulations regarding water quality issues in order for FREP to consider approval of any such proposals.

Mr. Hard provided the TASC with a spreadsheet of current projects that the body approved last year that will be commencing this year, and a list of projects that were completed last year.

Discussion ensued regarding the importance of regulations and that the CDFA's FREP portion of the website has projects showing that have been completed since 1997. Mr. Hard stated that the website is being updated to accurately reflect current projects and other informational features.

Mr. Hard presented the TASC with research proposals that were determined [by TASC] for 2011 research priorities. The TASC decided that the proposals, identified below, will be discussed further after the full proposals are received, by the June 1, 2011 deadline.

### **SELECTION OF 2011 PROPOSALS TO DEVELOP INTO FULL PROPOSALS**

Mr. Wackerman led discussion in reviewing the 2011 project suggestions. FREP received 39 project suggestions and selected 19 to develop full proposals. The projects are highlighted below:

*Remediation of Tile Drain Water Using Denitrification Bioreactors*

Project Leader: Tim Hartz, UCD

*Survey of Nitrogen Uptake and Applied Water in Broccoli, Cauliflower and Cabbage Production in the Salinas Valley*

Project Leaders: Richard Smith, Michael Cahn, Tim Hartz, UCCE, UCD

*Exploring the Potential of Transgenic Vegetables for Improved Fertilizer Use Efficiency*

Project Leader: Charles Sanchez, University of Arizona

*Development Diffusive Gradients in Thin-Film (DGT) as a Tool for Accurately Assessing Phyto-Available Potassium and Phosphorus for California Soils*

Project Leader: Robert Miller, Colorado State University

*Use of Nitrogen Fertilization to Support Summer Vegetative Shoot Growth and Floral Shoot Development Stimulated by Plant Growth Regulators to Mitigate Alternate Bearing-A Proof of Concept and Possible Model for Other Tree Crops*

Project Leader: Carol Lovatt, Richard Rosecrance, UC Riverside, CSU Chico

*Enhanced-Efficiency N Fertilizer Effects on Grain Yield and Greenhouse Gas Emissions in California Rice Systems*

Project Leaders: Arlene Borbe, Bruce Linquist, Chris van Kessel, UCD

*Evaluation of a Quick Soil, CO<sub>2</sub>, Test for Estimating Potential Nitrogen Mineralization to Improve the Accuracy of Fertilizer Nitrogen Recommendations*

Project Leader: William Horwath, UCD

*Determination of Root Distribution, Dynamics, Phenology and Physiology of Almonds to Optimize Fertigation Practices*

Project Leader: Patrick Brown, UCD

*Automatic Inside-the-Plant Measurement of Nitrogen and Potassium Uptake in Corn*

Project Leaders: William Gensler, Marsha Mathews, UCCE

*Support of Central Valley Water Quality Programs to Develop Nutrient Management Training Academy*

Project Leader: Joe Karkoski, Central Valley Regional Water Quality Control Board

*Support of Central Valley Water Quality Programs to Develop Crop-Scientific Nutrient Management Plan Templates*

Project Leader: Joe Karkoski, Central Valley Regional Water Quality Control Board

*Support of Central Valley Water Quality Programs to Develop Web-based Information Management Tools*

Project Leader: Joe Karkoski, Central Valley Regional Water Quality Control Board

*Support of Central Valley Water Quality Programs to Develop Salt and Nitrate BMP's*

Project Leader: Joe Karkoski, Central Valley Regional Water Quality Control Board

*Administration and Outreach for the California Certified Crop Advisor Program*  
Project Leaders: Terry Stark, Dan Putnam, CAPCA, UCD

*Fertilizer Curriculum – Grades 2 – 8*  
Project Leaders: Judith Culbertson, Jenna Swenson, CFAITC

*Application Methods of Controlled Release Fertilizers in Containerized  
Ornamentals to Mitigate Nitrate and Phosphate Leaching out of Containers*  
Project Leaders: Donald Merhaut, Julie Newman, UC, UCCE

*Developing Best Nitrogen Management Practices for Fertigation of Blueberry*  
Project Leaders: David Bryla, Manuel Jimenez, USDA, Corvallis, Oregon and  
UCCE

*Can Foliar Nitrogen Fertilization be used to Enhance the Sustainability of Almond  
Production?*  
Project Leaders: Franz Niederholzer, Patrick Brown, Ken Giles, UCCE, UCD

*Optimization of Organic Fertilizer Schedules*  
Project Leaders: David Crohn, Marsh Mathews, UC Riverside, UCCE

### **ACCEPTANCE OF 2011 SUBMITTAL REQUIREMENTS**

Mr. Hard stated that in the past, full proposal submittals have been submitted in Word and it has made it difficult to ensure the budgets are correct. Mr. Hard stated that for 2011, a new requirement is that the budgets for the full proposals must be submitted in an Excel document. The TASC recommended a word limit for the full proposals and a formatted template to be created to ensure the proposals are uniform and are formatted correctly to meet the new requirements.

### **ACCEPTANCE OF 2011 PUBLICATION AND REPORTING REQUIREMENTS**

Mr. Hard stated that at the prior TASC meeting, discussion ensued regarding having a one to two page fact sheet. Mr. Hard provided the subcommittee with a handout of what the project factsheet must include: abstract/executive summary, methods/tasks, results, findings, and conclusions, which includes advice and practice methods. The factsheet(s) must be publication-ready when they are submitted to FREP.

Discussion ensued as to the process for publishing the factsheets. The TASC discussed CDFA conducting an internal review to ensure that all of the necessary factsheet requirements were met and then the TASC conducting the final approval after CDFA's review. It was further decided that a TASC steward as well as all TASC members must look at the publication ready fact sheet. If there

have been no responses by the stewards or inquiries by other TASC members, the factsheet will be considered approved by FREP.

After discussion, the TASC decided that the entire TASC will be the reviewers, a timetable will be set, and there will be approximately three reviewers for each document in order to publish the factsheets in a timely manner on CDFA's FREP website. The TASC has hopes that there will be also be a University of California Agriculture & Natural Resources editor available to review any factsheets from UC, prior to the posting on the web.

### **ADDITIONAL ITEMS**

Mr. Hard requested the TASC look into the Financial Assistance Application Submittal Tool (FAAST) which is used by the Federal Funds Management Office. The goal would be to have all future FREP proposals, both pre and full, be submitted online via FAAST. The Fast Program has character limits and would require specific informational questions asked in regards to the objectives, the topics and the methods of the proposals that are being submitted. This would provide uniformity and solve the issue of lengthy proposals that do not include necessary information.

Mr. Hard informed the TASC that several members have terms that will expire on September 17, 2011 and stated that the next FREP TASC meeting must be before then in order to renew and discuss future TASC terms.

The full proposals will be due to CDFA on June 1, 2011.

### **NEXT MEETING**

The next meeting will be held on August 24, 2011 in Fresno, CA at 8:30 a.m. The location of the Piccadilly Inn is preferred.

**MOTION:** Mr. Chris Simas moved to adjourn the meeting. Mr. Jerome Pier seconded the motion. The motion passed unanimously and the meeting was adjourned at 2:00 p.m.

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Edward James Hard, FREP Lead  
Division of Inspection Services

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Date