

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

Piccadilly Inn (University)  
4961 North Cedar Avenue  
Fresno, CA 93726  
(800) 468-3587  
August 24, 2011

**Minutes**

**TASC MEMBERS**

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

**CDFA STAFF**

Rick S. Jensen  
Asif Maan  
Edward J. Hard  
Erika Lewis

**WELCOME AND INTRODUCTIONS**

The meeting was called to order at 8:30 a.m. Mr. Jack Wackerman, Chairperson welcomed the subcommittee. Self-introductions were made and a quorum was established.

**REVIEW AND APPROVE MINUTES**

**MOTION:** Mr. Wackerman requested the committee review the minutes of the March 23, 2011 meeting. Dr. Jerome Pier moved to approve the minutes as submitted. Dr. Robert Mikkelsen seconded. The motion passed unanimously.

**DEPARTMENT UPDATE AND FUTURE FREP DIRECTION**

Dr. Asif Maan gave an overview of the recent changes to the Department's executive staff and described Secretary Karen Ross and Undersecretary Sandra Schubert's backgrounds and prior experience. Dr. Maan announced the appointment of Mr. Jim Houston as Deputy Secretary of Legislation, Mr. Nate Dechoretz as Deputy Secretary, Mr. Rick S. Jensen as the Director of the Inspection Services Division, and Dr. Amrith Gunasekara as Science Advisor to the Secretary.

Dr. Maan went on to state that the new administration has a great interest in FREP and he believes there is a need for a strategic review to determine if the program is

conforming to its original intent. The review will revisit FREP's research priorities within the original context of the program and any necessary adjustments will be made. Dr. Maan explained that this review is intended to bring focus to the program, with the ultimate goals being process improvement and increased transparency.

Dr. Robert Mikkelsen inquired as to how this review will be performed and voiced his concern that FREP stakeholders should have input on the direction of the program. Dr. Maan responded that the review will be done in-house, with representation from the TASC and the advisory board.

Dr. Maan stated that internal discussions have focused on improving education and outreach. Historically, research has been FREP's strongpoint. However, the current administration is interested in determining the impacts of FREP research and how it is being used at the ground level, as well as finding ways to improve outreach efforts. In addition, Dr. Maan stated there is a need to synthesize FREP research to compile best management practices (BMPs) for various crops and areas. Dr. Maan summarized that performing a review of FREP will allow to determine if the program is accomplishing its original goals, ultimately enabling the program to better assess what types of resources FREP needs, in terms of both expertise and funding.

Dr. Mikkelsen inquired as to the timeframe of the FREP review project; Dr. Maan responded that the goal is to have the review completed within six months. Dr. Mikkelsen went on to question whether this review is being conducted because the executive office is dissatisfied with the current state of FREP; Dr. Maan responded that the executive office is not dissatisfied with FREP, but they are uncertain if FREP is accomplishing its original goals. Environmental issues, especially water quality, are a top priority for this administration; the administration wishes to establish a close connection between FREP and water quality issues. Dr. Mikkelsen voiced his concern that the administration seems to be attempting to redirect the focus of the program without input from the stakeholders. Dr. Maan reassured the TASC that the stakeholders will continue provide input for direction of the program; however, the administration wants to ensure that the program is meeting its stated goals.

Mr. Jack Wackerman inquired as to where this direction coming from. Dr. Maan responded that the direction is coming from the executive office, although the need for a review of the program has been discussed internally previously. Dr. Maan affirmed his belief that the program is on the right track, but has weaknesses in the areas of outreach and education. Mr. Tom Gerecke agreed, but stated that those kinds of weaknesses are not unique to FREP and are common among similar programs. Dr. Maan emphasized that FREP has not been singled out and this review should not be viewed as a criticism.

Dr. Mikkelsen went on to state that the Secretary's Science Advisor, Dr. Amrith Gunasekara, knows FREP fairly well. However, Dr. Gunasekara has disagreed with the TASC's decisions in the past because he felt they should be environmentally focused.

Dr. Mikkelsen cautioned that while environmental issues are important, it is also important to consider production agriculture. Dr. Maan stated that there is a need to find a balance between environmental issues and production agriculture.

### **FREP UPDATE**

Mr. Edward Hard reminded the TASC that at the March 23, 2011 meeting, there had been some discussion of possibly getting the FREP request for project submittals put online. Mr. Hard explained that he and Ms. Erika Lewis met with the State Water Resources Control Board to learn more about their Financial Assistance Application Submittal Tool (FAAST). The State Water Resources Control Board designed FAAST as an online tool to accept and store application submittals, and noted that the system is currently being utilized by CDFA for the Specialty Crop Block Grant Program.

Mr. Hard went on to describe the nature of the FAAST tool. Users log in to the system with their unique username and password and they are given a standardized set of questions to answer. Using FAAST will ensure that all applicants are subject to the same submission requirements with respect to subject matter, formatting, and character limits. Mr. Hard cautioned that the current set of guidelines for FREP project submissions may not be appropriate for use with a tool like FAAST, and that it may take about a month for staff to draft an electronic questionnaire. Cost is about \$3000 for maintenance and operations, questions, and tech support provided by the Water Board. Mr. Robert Fry stated that he has used the FAAST tool for the Specialty Crop Block Grant program and affirmed that it is convenient and has many benefits; however, he cautioned that we must be careful to get enough information to draw thoughtful conclusions. Mr. Fry volunteered to act as liaison between FREP staff and the TASC regarding the development of the electronic questionnaire.

Discussion then moved to item 4a, the agenda for the 2011 FREP Conference. Mr. Hard stated that he and Ms. Lewis have been working with Ms. Corrie Pelc at the Western Plant Health Association (WPHA) to put the conference together. This year's themes were developed by working with WPHA's Soil Improvement Committee. Mr. Hard described the themes and opened the discussion to the group for ideas. Mr. Gerecke stated that the themes seemed logical with the exception of nutrient uptake calibration procedures. Dr. Jerome Pier explained the rationale from the Soil Improvement Committee. Mr. Hard suggested that changing the title to nutrient uptake processes and techniques may be more explanatory.

Discussion then shifted to agenda item 4b, the FREP project status summary. Mr. Hard explained that some FREP projects have a significant delay, not because of the project leader but as a result of department difficulties, namely the transition from contracts to grants. Mr. Wackerman asked how much funding is available for this year, to which Mr. Hard responded \$1.2 million, with \$900,000 available for research funding. Dr. Maan explained that entire project costs are not encumbered in the current fiscal year, but rather over the duration of the project.

Mr. Hard explained that FREP is behind in invoicing due to principle investigators not submitting interim, annual, or final reports. He went on to explain that FREP receives invoices without receiving deliverables. Upon receipt of an invoice, FREP must review the corresponding report (deliverable) and match it to the scope of work; it is then reviewed by a TASC steward and undergoes an internal analysis by FREP. There are currently approximately \$500,000 in invoices that have not been approved, though they are accounted for in the budget by encumbrances. Dr. Mikkelsen voiced his support for withholding approval until deliverables are received.

Dr. Michael Cahn brought up the issue of dramatic cost increases for researchers. Discussion ensued regarding increased project costs, including research assistants, graduate student tuition, and overhead. Mr. Hard stated that this issue will need to be reexamined in the future, and adjustments may be needed. Dr. Mikkelsen suggested that as the program is undergoing review, FREP should consider the benefits of funding a few large projects, rather than a multitude of small projects. Several committee members acknowledged this as an important topic to be considered.

Discussion then moved to agenda item 4c, the 2012 FREP research priorities. Mr. Hard explained that the outline of submittal requirements was revised to improve clarity of wording. Mr. Gerecke suggested switching to a bulleted list; Dr. Pier agreed, adding that numbering the list implies hierarchy.

At this point, Mr. Rick Jensen, Director of Inspection Services, joined the meeting. TASC members introduced themselves and explained their backgrounds. Mr. Jensen introduced himself to the group and explained his background. Mr. Jensen went on to stress the importance of FREP to industry and Secretary Ross, explaining that the administration has a spotlight focused on this area.

Discussion was directed back to agenda item 4c. Discussion ensued regarding increasing the maximum grant funding amount to account for increased costs. Mr. Gerecke suggested increasing the grant limit or revising the guidelines to say "larger projects will be considered." Mr. Wackerman opposed increasing the cap, stating that based on his prior experience, applicants will automatically ask for the maximum amount regardless of what the project requires. He went on to state that projects should be evaluated on an individual basis and that in the past, FREP emphasized that projects should obtain additional funding. Dr. Mikkelsen suggested adding language explaining that preference will be given to projects with additional funding, thereby encouraging additional funding but not making it mandatory.

Mr. Fry moved to increase maximum grant funding to \$60,000 per year and encourage a 25% funding match. Dr. Pier seconded the motion. However, discussion ensued about the terminology of the recommendation. Mr. Fry proposed modifying the motion to state that preference will be given to projects with in-kind cash contributions. Dr. Ellison

disagreed with the term “preference;” Mr. Hard suggested using the word “consideration.”

**MOTION:** Mr. Robert Fry moved to revise the 2012 FREP Request for Proposal as follows: after the sentence “\$50,000 is typical, but larger projects will be considered,” an additional sentence will be added stating that “applicants are encouraged to submit projects that have in-kind cash contributions.” Dr. Jerome Pier seconded. The motion passed unanimously.

Any further thoughts or suggestions on the FREP Request for Proposal should be submitted to Mr. Hard. The document will not go to press until January 2012.

### **USDA JIM AYARS PROJECT EXTENSION REQUEST**

Discussion then moved to agenda item number five. Mr. Hard explained that the TASC must decide whether to grant additional funds to Dr. Jim Ayars’ project entitled *Improving Pomegranate Fertigation and Nitrogen Use Efficiency with Drip Irrigation Systems* (09-0583). This is the second year of a three year project; Dr. Ayars requested an additional \$180,000 in funding over the next three years.

Dr. Pier, the TASC steward for this project, stated that Dr. Ayars’ request does not follow the standard procedure. Normally, a researcher submits a final report and then submits a full proposal in another RFP funding cycle. Dr. Pier stated that it is still too soon to approve additional funding and that Dr. Ayars should submit some reports first. Mr. Hard cited Patrick Brown as an example; Dr. Brown waited until his final report was complete, then submitted another full proposal and received an extension. The committee agreed that it is too soon to approve additional funding for Dr. Ayars’ project and that an extension should come in the normal cycle of RFPs.

Recommendation: Carry out the project for the three years that were approved. To avoid a lapse in funding, Dr. Ayars should submit a full proposal for additional funding in 2012 to obtain 2013 funding.

### **REVIEW OF 2011 FULL PROJECT PROPOSALS**

Mr. Wackerman led discussion in reviewing the 2011 full project proposals. FREP received 13 full project proposals. The following seven proposals were approved for funding:

- *Determination of Root Distribution, Dynamics, Phenology and Physiology of Almonds to Optimize Fertigation Practices*  
Project Leader: Patrick Brown, UC Davis
- *Optimization of Organic Fertilizer Schedules*  
Project Leader: David Crohn, UC Riverside

- *Updating Prior Curriculum for Grades 5-8*  
Project Leader: Judith Culbertson, CFBF
- *Remediation of Tile Drain Water Using Bioreactors*  
Project Leader: Tim Hartz, UC Davis
- *CA CCA FREP Educational Project*  
Project Leader: Dan Putnam, UC Davis
- *Exploring the Potential for Using Transgenic Crops for Improved Fertilizer Use Efficiency*  
Project Leader: Charles Sanchez, University of Arizona
- *Survey of Nitrogen Uptake and Applied Irrigation Water In Broccoli, Cauliflower and Cabbage Production in the Salinas Valley*  
Project Leader: Richard Smith, UCCE

Dr. Mikkelsen, Dr. Cahn, and Mr. Gerecke volunteered to form a subcommittee to further discuss the following two projects:

- *Review of FREP Archives for Salt and Nutrient Best Management Practices (BMPs) for Irrigated Agriculture*  
Project Leaders: Parry Klassen and Rick Sandberg, CURES
- *WATERIGHT Web-based Nutrient Management Tool (WNMT)*  
Project Leaders: Kaomine Vang and William Green, CSU Fresno

The subcommittee agreed to send a comment letter to the applicants outlining areas needed for improvement and likely re-submittal to the 2012 round.

### **RECOMMENDATION OF 2011 RESEARCH PROJECTS FOR FUNDING**

Concern was voiced that there may not be enough funding to cover both the new projects and old projects. The committee then discussed how projects are funded across fiscal years. Funds must be encumbered by fiscal year to pay for projects by calendar year. For example, the standard schedule is \$25,000 for 6 months, \$50,000 for 12 months, \$50,000 for 12 months, and \$25,000 for 6 months, results in three years and \$150,000 total.

### **ADDITIONAL ITEMS**

Dr. Maan discussed vacancies on the TASC. Several members' terms will be expiring and there is one additional vacancy. In addition to current members, three individuals have applied to serve on the TASC. The department will be recommending someone to

fill the committee's CDFA vacancy. The Fertilizer Inspection Advisory Board will meet in September to vote on TASC appointments.

**NEXT MEETING**

The next meeting will be held mid-March to review 2012 project proposals. Additional details to be determined.

**MOTION:** Dr. Jerome Pier moved to adjourn the meeting. Mr. Robert Fry seconded the motion. The motion passed unanimously and the meeting was adjourned at 3:41 pm.

Respectfully submitted,

\_\_\_\_\_  
Erika Lewis, Office Technician  
Division of Inspection Services

\_\_\_\_\_  
Date