# CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE (CDFA) ENVIORNMENTAL FARMING ACT SCIENCE ADVISORY PANEL

Stanislaus County Agricultural Commissioner Office 3800 Cornucopia Way Room G Modesto, CA 95358

February 23, 2016

#### **MEETING MINUTES**

# Panel Members

Don Cameron, Member and Chair Jocelyn Bridson, MSc., Member David Mallory (ARB), Member Jeff Dlott, PhD., Member (phone) David Bunn, PhD. (Natural Resources Agency), Member Doug Parker, PhD., Subject Matter Expert Luana Kiger, MSc., Subject Matter Expert (phone)

### State Agency Staff

Amrith Gunasekara, PhD., CDFA Geetika Joshi, PhD., CDFA Bailey Smith, MSc., ARB Cari Anderson, MBA, ARB

#### AGENDA ITEM 1 - Introductions

The meeting was called to order at 10:05 AM by the Chair, Mr. Don Cameron. Introductions were made. Present at the meeting were all the members noted above under "Panel Members". A quorum was established.

### AGENDA ITEM 2 - Updates

# <u>Minutes</u>

Chairman Cameron introduced the minutes from the July 17, 2015 meeting. A motion was made by Ms. Bridson to accept the minutes as presented by CDFA staff and the motion was seconded by Dr. Bunn. The motion was moved by all members present and accepted without further changes.

#### **Healthy Soils Initiative**

Dr. Gunasekara provided an update to panel members on the status of the Healthy Soils Initiative including a CDFA Healthy Soils Program. The Healthy Soils Program will be designed to provide incentives to farms and ranchers to build carbon and reduce

greenhouse gases on agricultural lands. Also discussed was that CDFA is working to develop compost application rates to support a CDFA Healthy Soils Incentive program since none currently exist. Dr. Gunasekara noted that CDFA, "the Department", is awaiting funding (July 1, 2016) to move forward on a Healthy Soils Program. Members of the panel noted that having a framework developed prior to July 1, 2016, would be useful and would facilitate making funds immediately available to growers as incentives. Members also noted that having the framework for a Healthy Soils Program vetted and discussed at the next Science Panel meeting, including facilitating public comment, would be useful. Dr. Gunasekara stated that consistent with the panel recommendations, a framework for the new program will be developed in coordination with the Air Resources Board and presented at the next Science Panel meeting.

# AGENDA ITEM 3 - The State Water Efficiency and Enhancement Program (SWEEP)

#### Update on program

Dr. Gunasekara provided an update on the State Water Efficiency and Enhancement Program (SWEEP) including the most recent status of the ongoing drought, which is now in its fifth year. Dr. Gunasekara noted the announcement of the next solicitation for applications was previously announced in November 2015 with a closing data for applications on January 8, 2016. A total of \$16 million is available with another \$19 million becoming available in May or June of 2016. Aggregated greenhouse gas and water savings from the first three rounds of SWEEP funding were presented including new requirements for post verification of greenhouse gases and water savings.

#### ARB QM Methodology and Tool

Ms. Smith and Ms. Anderson were present at the meeting from the Air Resources Board (ARB) to present new requirements for calculating greenhouse gases and water savings. ARB is required to develop quantification methodology (QM tool) for all programs funded by the Greenhouse Gas Reduction Fund (GGRF). SWEEP is funded by GGRF and therefore required to comply with quantification methodologies developed by ARB. ARB worked with CDFA to develop the new tool. The QM tool was presented to the Science Panel for agronomic feedback and public comment. Members were pleased with the use of the Excel platform as many in the agricultural community are familiar with its use. Public comments included having more examples on how the QM tool should be used for drip irrigation and sensors. Suggestions to improve the QM tool were made by members and the public including having units of pressure in pounds per square inch (PSI). Members recommended creating a video of how to use the QM tool for future SWEEP applicants. It was noted by ARB that the new QM tool required a pump test. These new requirements would be included in the next solicitation for applications.

# <u>Opportunities for Additional Enhancements – Subsurface Drip Irrigation in Field</u> Crops

Dr. Gunasekara provided background information on the need to incentivize subsurface drip irrigation in field crops to save water and potentially save greenhouse gases. The potential water savings could be significant since field crops such as alfalfa and corn

use flood or furrow irrigation and California has significant acreage of these crops. Dr. Munk and Dr. Putnam, from the University of California, provided presentations to the members to inform and highlight the benefits and limitations of this irrigation technology. Discussions ensued? and included cost of this technology, salinity issues, yields, greenhouse gas reduction potential, experimental plot results and rodent control. Mr. Silas Rosso from California Ag Solutions provided his experiences with using SDI in field crops.

# **AGENDA ITEM 4 – Public Comment**

Public comment and further discussion ensued. Members noted that SDI in field crops is a beneficial technology for water savings and is not exempted from the current SWEEP application process. Dr. Gunasekara inquired if a specific allocation of funds should be made available for this technology in field crops as part of the next SWEEP solicitation and call for applications. Members noted that the current and next SWEEP solicitation does not exclude SDI in field crops and that a specific funding allocation should not be made as part of the next call for SWEEP applications. Other concerns noted that CDFA should not allocate funding amounts to different crop types and there should be wide flexibility on the crops that should be funded by SWEEP.

Members noted that CDFA should highlight that SWEEP considers SDI in field crops and also work with academia to inform growers of SWEEP opportunities. Dr. Gunasekara noted that CDFA will work to provide greater outreach on SDI and field crops in relation to SWEEP.

Public comments were made on the need for technical assistance to assist growers in completing SWEEP applications. CDFA staff noted that there are some potential funding sources outside the GGRF that can support technical assistance and CDFA is working to secure funds for technical assistance. Dr. Gunasekara noted that GGRF funds cannot be used for technical assistance.

# AGENDA ITEM 5 - Next Meeting and Adjournment

The data and location of the next meeting will be determined by CDFA and based on member availability. Chair Cameron adjourned the meeting at 3:40 PM.

Respectfully submitted by:

Amrith Gunasekara, Ph.D.

Date