

### CDFA Nitrogen Management Training Program

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California agriculture plays a vital role in providing food on a national and international scale. Over 400 specialty crops are grown throughout the state, many in sensitive ecosystems. For example, tree and cole crops are grown in sandy and loamy soils in the Central Valley and Central Coast regions; these soil types allow nutrients to readily move through the soil. Movement of nutrients, particularly nitrogen, from irrigated agricultural lands into California waterways has contributed to high concentrations of nitrates in some areas.

The California Department of Food and Agriculture (CDFA) is actively engaged in obtaining research data on nutrient management through the Fertilizer Research and Education Program (FREP). FREP was established in 1990 through Food and Agricultural Code (FAC) Section 14611 (b) authorizing a mill assessment on the sale of fertilizing materials “to provide funding for research and education regarding the use and handling of commercial and organic fertilizers, including, but not limited to, any environmental effects.” In 2012, Assembly Bill 2174 further clarified the purpose of FREP to focus on three core areas: technical education for users of fertilizing materials, research to improve nutrient management practices, and education and outreach to increase awareness of the agronomically sound use of fertilizing materials. FREP serves growers by providing decision support tools and current research to facilitate the efficient application of fertilizers, thus reducing the environmental impacts associated with their use.

FREP, in collaboration with the University of California, Agricultural and Natural Resources (UC ANR) is developing a Nitrogen Management Training Program (NMTP) for the California Certified Crop Advisers (CA CCA). The CA CCA program has been identified as an ideal resource to assist growers with developing nitrogen management plans and implementing best management practices. The CA CCA program is a voluntary certification program administered by the American Society of Agronomy; advisers certified through the CCA program provide advice to growers regarding crop management. The additional training provided by the NMTP will enhance CCA’s ability to advise growers on nitrogen management issues, specific to the unique regions and agricultural practices across California.

The NMTP will be a CDFA program administered by CA CCA with a Steering Committee comprised of stakeholders from government, industry, and academia.



Curriculum modules developed by subject matter experts will provide CCAs with the necessary information to assist growers with developing and implementing nutrient management plans. Curriculum development teams began in April of 2013, drafting, editing and finalizing education material.

The main goal of the training program is to facilitate CA CCA’s understanding of sound nitrogen management practices and make informed recommendations to growers, thereby improving environmental performance relative to Nitrogen management for crop production agriculture. The expected outcome of the NMTP is to enhance economic and environmental benefits through improved management of agricultural use of nitrogen and irrigation water.

## CCA UPDATE

The training program will occur over the course of two days, with the first day being a general session focused on identifying the key objectives, nitrogen cycle in crop production systems, nitrogen sources, irrigation and nitrogen management, nitrogen budgeting and future resources. The second day will have concurrent sessions with emphasis on annual and perennial crops; each session will address current practices, the use of best management practices, and will include a nitrogen management planning exercise and concluding with a synopsis from both the annual and perennial crops subject matter experts.

The nitrogen management training sessions will take place from January 2014 through March 2014. The California Association of Pest Control Advisers (CAPCA) will manage registration, attendance, and tracking of continuing education units related to the training. Additional trainings beyond March 2014 will be evaluated based upon demand and emerging regulatory activities pertaining to managing

the agricultural use of nitrogen.

These nitrogen management training sessions are a part of CDFAs ongoing commitment to provide growers and CCAs with decision support tools, technical education, access to high quality and timely research, and education to increase awareness of more agronomically sound use of fertilizing materials to minimize the environmental impacts resulting from their use. 🌱



### 2013 FREP/WPHA Conference Managing Agricultural Nutrients

**October 29th and 30th, 2013  
DoubleTree Hotel, Modesto, CA**

**October 29, 2013 9:00 AM to 4:30 PM  
October 30, 2013 8:15 AM to 12:00 NOON**

**Cost:**

**Registration before 10/1/13 \$80 per day or \$150 for both days  
student fee is \$45 per day or \$80 for both days.  
Registration after 10/1/13 \$90 per day or \$175 for both days  
student fee is \$50 per day or \$90 for both days.**

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