# **Irrigation and Nitrogen Management Training Program** Continuing Education Requirements and Application Instructions

# Introduction

The Central Valley Regional Water Quality Control Board requires growers to prepare Irrigation and Nitrogen Management Plan (INMP) Worksheets for land enrolled in the Irrigated Lands Regulatory Program. INMP Worksheets are designed to promote awareness of irrigation and nitrogen management practices among growers and reduce the likelihood of nitrate from entering groundwater and degrading water quality.

For land in areas designated as a high-vulnerability groundwater area, INMP Worksheets must be certified in one of the following ways:

- Certified by a specialist in Irrigation and Nitrogen Management Plans
- Self-certified by a member who attends a California Department of Food and Agriculture (CDFA) or other executive officer-approved training programs

Once a grower has completed CDFA's Irrigation and Nitrogen Management Training, they are required to participate in Continuing Education (CE) to facilitate information retention and expand on subjects covered in the training program.

# Types of Continuing Education

- I. <u>Live or In-Person Events</u>: an educational event that a grower attends in person or virtually including professional meetings, field days, workshops, seminars, college/university courses, live webinars, etc.
- II. <u>Self-Study</u>: materials or programs that are not live/real time but can be completed at the grower's leisure. These include reading materials, videos, webinars, and podcasts. Self-study CE requires a post-test to verify completion.

## **Continuing Education Course Requirements**

- I. Live or In-Person Events:
  - a. Courses must be at least 0.5 hours.
  - b. Attendance at in-person events must be recorded using sign-in sheets.
  - c. Live webinars should be conducted on a platform that can track attendee participation.
- II. <u>Self-study</u>:
  - a. Courses must be at least 0.5 hours or 1,250 words.
  - b. Participation will be measured using a post-test. Sponsors are responsible for creating the post-test.

# **Continuing Education Topic Categories**

This document is intended to guide sponsors in CE development and will be used by reviewers to determine if submitted CE applications are appropriate. However, the examples listed should not be considered as limitations and any topics outside of those listed will be considered on a case-by-case basis.

### I. <u>Nitrogen Management</u>

- a. Soil Fertility
  - Soil sampling procedures
  - Analysis, interpretation and uses of soil testing data
  - Role and fate of Nitrogen in cropping systems
- b. Plant Nutrition
  - Nitrogen uptake
  - Evaluating crop nitrogen status
  - Deficiencies, sufficiency levels, and luxury consumption
  - Tissue sampling, testing and interpretation
  - Nitrogen management planning
- c. Nitrogen Sources
  - Nitrogen in irrigation water
  - Organic amendments
  - Enhanced Efficiency Fertilizers
  - Organic matter and crop residue
- d. Nitrogen Application Methods
  - Variable-rate vs uniform-rate technology
  - Equipment calibration and uniformity
  - Field application methods

#### II. Irrigation Management

- a. Water Management
  - Irrigation scheduling
  - Irrigation Efficiency
  - Crop Water Use Efficiency
  - Distribution Uniformity
  - Irrigation System Maintenance
- b. Fertigation
  - Fertilizer injection timing
  - Fertilizer injection rates

# **Continuing Education Application Requirements**

To obtain course approval, sponsors must submit the following application materials at least 21 days before the course date. For self-study materials, approval must be received prior to advertising the availability of CEUs and expires after one year. Approval status will be sent to the contact person listed on the application within 10 business days of submission.

- I. Live or In-Person Events
  - a. A Basic Course Agenda.
  - b. A Comprehensive Course Agenda which includes the following:
    - The title of each talk
    - A 3-4 sentence description of each talk
    - The approximate start and end time of each talk
    - The name and affiliation of each speaker

#### II. Self-Study

- a. A comprehensive description of the self-study material(s) including:
  - A 3-4 sentence description of each topic discussed
  - The approximate amount of time or words dedicated to each topic (2,500 words = 1.0 hour of CE)
  - The name and affiliation of each speaker or content creator
- b. A link or upload of your reading materials, video, webinar or podcast
- c. Post-test questions. Post-test content should be sufficiently challenging and meet the following requirements:
  - 5 questions per 0.5 hours of CE.
  - Multiple choice with 3-4 alternatives.
  - Avoid using undefined alternatives such as: all the above, both a and b, and none of the above.

## **Post-Course Requirements**

- I. Live or In-Person Events
  - a. CE Course sponsors are responsible for:
    - Distributing Certificates of Completion to meeting/webinar attendees.
    - Sending an excel sheet of course participants and their associated information to FREP@cdfa.ca.gov after the event.

#### II. <u>Self-Study</u>

- a. CE Course sponsors are responsible for
  - Notifying CDFA of any updates to the courses and/or materials

# For more information or assistance completing the application, please contact Nicole Crouch at <u>FREP@cdfa.ca.gov</u>