

Nitrogen Management Training for Growers

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Overview

- How did we get here?
- CCA Nitrogen Management Training Program
- Central Valley Grower Training Program in 2015-16
- Looking forward

How did we get here?

13. ** N Applied (Units/Acre)		19. Available N in Manure/Compost (lbs/ac estimate)	
14. Notes:		20. Total Available N Applied (lbs per acre)	
15. ** N Removed (lbs N/ac)		21. Nitrogen Credits (est)	
		22. Available N carryover in soil; (annualized lbs/acre)	
		23. N in Irrigation water (annualized, lbs/ac)	
		24. Total N Credits (lbs per acre)	
		25. Total N Applied & Available	
28. CERTIFIED BY:	PLAN CERTIFICATION		
DATE:	29. CERTIFICATION METHOD		
	30. Low Vulnerability Area, No Certification Needed		
	31. Self-Certified, approved training program attended		
	32. Self-Certified, UC or NRCS site recommendation		
	33. Nitrogen Management Plan Specialist		X

** Your Coalition will provide the method to be used to estimate N Removed.
Provided by the Central Valley Water Board 23 December 2014.

CCA Nitrogen Management Training Program

A cooperative effort by

UC ANR

CAPCA

CDFA

2014 - 2016, 9 training sessions

Over 800 CCAs completed training



CCA Nitrogen Management Training Program

Day One Agenda:

- Nutrient Management Regulations
- Nitrogen Forms, Transformations, Function, and Management in Agriculture
- Nitrogen Fertilizer Management
- Irrigation and Nitrogen Management
- Nitrogen Budgeting
- Nitrogen Management Tools and Resources

CCA Nitrogen Management Training Program

Day Two Agenda:

- Nitrogen Management in Permanent Crops
 - Region Specific: Almond, Walnut, Citrus, Avocado, etc.
- Nitrogen Management in Annual Crops
 - Region Specific: Cool Season Vegetables, Wheat, Processing Tomatoes, etc.

CCA Nitrogen Management Training Program

2017 CCA training meeting
Tentatively March 7-8, 2017
Check the FREP website for
updates:



https://www.cdfa.ca.gov/is/ffldrs/frep/Outreach_Ed.html

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PLAN CERTIFICATION

29. CERTIFICATION METHOD

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Grower Nitrogen Management Plan self- certification training

Curriculum Development

CCA training program condensed and adapted by **Terry Prichard** and **Larry Schwankl**
– *UC Davis/UC Cooperative Extension*

- One-half-day training curriculum
- Two Case Study Modules – Annual (Silage Corn) and Perennial (Walnut)
- Test Questions
- Grower study guide

University of California
Nitrogen Management Training
for Grower Nitrogen Management Plan Self-certification

A training program developed in cooperation with:

California Department of Food and Agriculture – Fertilizer Research and Education Program
and
University of California



Grower Nitrogen Management Plan self-certification training

Curriculum

- Nitrogen and Groundwater Quality Issues
- Nitrogen in Crop Production Systems—The Nitrogen Cycle
- Nitrogen Fertilizers and Management
- Irrigation and Nitrogen Management
- Farm Practices and Nitrogen use Efficiency
- Nitrogen Management Plan
- Resources for Nitrogen Application and Management Practices

Grower Nitrogen Management Plan self-certification training

Trainer the Trainer

- Coordinated by CURES with support from CDFA/FREP
- CCA's learn the curriculum and prepare to deliver it to growers
- 3 CCA training sessions in 2015
- 30 CCA's attend



Grower Nitrogen Management Plan self-certification training

2015-16 Outcomes

- CURES coordinates training sessions with Ag Water Quality Coalitions
- 31 sessions held in 21 locations
- 1916 growers attend
- Curriculum continuously improved



Grower Nitrogen Management Plan self-certification training

2015-16 Outcomes

- **Testing:**
 - 70% correct answers to pass
 - Average score: 79%
 - Average pass rate across sessions: 82%
 - 19 retake sessions at Coalition offices
- **Quality control**
 - Test question responses analyzed
 - Post-session evaluation forms analyzed



Looking Forward from 2016

- 2016-17 Training season
- Possible changes to the Irrigated Lands Regulatory Program

2016-17 Training season

- Similar number of grower training sessions (~30?)
- Updated Curriculum and Study Guide
- Updated training for CCA trainers
- Additional CCA–Trainer recruitment



Possible changes to the Irrigated Lands Regulatory Program

- Irrigation reporting
- No vulnerability designation?
 - Central Valley Certification needs
 - Certifications Statewide

NITROGEN MANAGEMENT PLAN WORKSHEET

1. Crop Year (Harvested): _____	4. APN(s): _____	5. Field(s) ID	
2. Member ID# _____			
3. Name: _____			

CROP NITROGEN MANAGEMENT PLANNING		N APPLICATIONS/CREDITS	26. Recommended Planned N	27. Actual N
6. Crop		15. Nitrogen Fertilizers		
7. Production Units		16. Dry/Liquid (lbs/ac)		
8. Projected Yield (Units/Acre)		17. Foliar N (lbs/ac)		
9. N Recommended (lbs/ac)		18. Organic Material N		
10. Acres		19. Available N in Manure/Compost (lbs/ac estimate)		
Post Production Actuals				
11. Actual Yield (Units/Acre)		20. Total Available N Applied (lbs per acre)		
12. Total N Applied (lbs/ac)		21. Nitrogen Credits (est)		
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Nitrogen Management Training for Growers

The Team

CURES

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University of California

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Questions?



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