



moving water in new directions

IRRIGATION TRAINING & RESEARCH CENTER

California Polytechnic State University

San Luis Obispo, CA 93407-0730

Phone: (805) 756-2434 FAX: (805) 756-2433 www.itrc.org

TECHNICAL MEMORANDUM

Date: June 13, 2014
To: Darrin Polhemus, State Water Resources Control Board
From: Dr. Stuart W. Styles, ITRC Director
Sarah Crable, ITRC Engineer
Subject: Expert Panel Meeting Minutes – June 9, 2014

State Water Resources Control Board Nitrate Expert Panel

Expert Panel Chair, Dr. Charles Burt called the meeting of the Expert Panel to order at approximately 8:00 a.m. on Monday, June 9, 2014 in San Luis Obispo.

1. Introduction – Expert Panel Members

- Dr. Lowell Zelinski
- Till Angermann
- Dr. Charles Burt
- James duBois
- Bill Brush
- Robert Hutmacher
- Daniel Munk
- Mark McKean

2. Expert Panel Charge.....Dr. Charles Burt, Panel Chair

- Public comment process

**3. Clarification Item #1..... Darrin Polhemus,
State Water Resources Control Board**

- Clarified what the State Board is asking the Panel for in terms of solid recommendations
- Clarified Question #2 for Expert Panel: The question is referring to farms, rather than “broad-brush areas”

4. **Discussion: Question 2**..... **Expert Panel**
 - Discussed definitions of “risk” and “vulnerability”
 - Discussed irrelevance of size of farming operation
 - Discussed relevance of NHI
 - Discussed nitrogen mass balance
 - Discussed difficulties in quantifying nitrogen applied and removed
 - Discussed objectives of recommendations and concentrating on surface practices rather than groundwater monitoring

5. **Discussion: Question 1**..... **Expert Panel**
 - Discussed NDVI techniques
 - Discussed effective rainfall
 - Discussed tracking of nitrogen applications as reported by farmers
 - Discussed using data to track progress over multiple years, rather than as a “snapshot” tool
 - Discussed crop variations and nitrogen requirements
 - Discussed potential farmer objections to reporting

6. **Discussion: Questions 3-4**..... **Expert Panel**
 - Panel requested further clarification from State Board on Questions 3, 4, and 11, especially concerning surface waters.

7. **Public Commenter #1** **Steve Shimek, The Otter Project**
 - Commented on backflow prevention devices
 - Commented on wetlands and riparian habitat for treatment of agricultural waters

8. **Public Commenter #2** **George Adam, Innovative Produce**
 - Commented on nitrate reporting of irrigation water
 - Promoted “pump and fertilize”
 - Commented that Region 3 would not accept 3rd party coalitions

9. **Public Commenter #3** **Jennifer Clary, Clean Water Cares**
 - Commented on nitrogen reporting requirements

10. **Public Commenter #4** **Claire Wineman, Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties**
 - Commented on risk assessment
 - Commented on 3rd party coalitions
 - Commented on variability in crop types and soils in relation to nitrogen use reporting

11. **Public Commenter #5** **Kirk Schmidt, Central Coast Water Quality Control Board**
 - Commented on Region 3 cooperative monitoring of surface water in response to panel question

12. Discussion: Questions 5-6..... Expert Panel

- Discussed what farmers need to keep track of in terms of timing and uniformity of water and nitrogen applications
- Discussed data that needs to be collected and reported by farmers
- Emphasized importance of 3rd party coalitions
- Emphasized importance of “spoonfeeding” and “pump and fertilize” techniques
- Discussed farmer education and offering a “menu” of management practices as options, rather than recommendations or requirements

Dr. Charles Burt adjourned the meeting at approximately 5:00 p.m. on June 9, 2014. The next scheduled Expert Panel meeting will be held on June 23, 2014 in San Luis Obispo.