



May 14, 2014

Dr. Charles Burt, Chair Agricultural Expert Panel c/o Jeanine Townsend, Clerk to the Board State Water Resources Control Board 1001 I Street, 24<sup>th</sup> Floor Sacramento, CA 95814

Dear Dr. Burt and Members of the Expert Panel:

Thank you for the opportunity to be a presenter to the Expert Panel on May 5, 2104. I appreciate the thoughtful questions from the panel.

While I understand my presentation has been posted on your website, I wanted submit in writing the key points that were verbally explained in greater detail.

The information beginning on page two is extracted directly from the slide presentation and covers only the points related to the questions being posed to you.

Thanks again for the chance to speak to the panel. I look forward to reviewing your draft report.

Regards,

Parry Klassen

**Executive Director** 

# Points given to the Expert Panel Parry Klassen 5-5-14

#### **Short Term**

- Encourage phasing in of any new reporting
- Coalitions need time to get member field information organized based on member's Farm Evaluation data
- Need consistent "management units" for reporting
- When/if nitrogen use reporting begins, reporting units need to be understood by growers so consistent information is collected

### Need more focused crop research before embracing nitrogen consumption ratio

- Programs in place now (almonds, strawberries, walnuts, etc.) where better crop consumption information being developed
- In the Central Valley Management Practice Effectiveness Program (MPEP), focus will be on proving practices are protective
- Use our best practices in field trails; show they are effective in protecting groundwater (intensive data gathering)
- Gain better understanding of crop nitrogen consumption, nitrate movement past the root zone.
- Potential Outcomes:
- improvements should be made to practices or
- validate existing practices are effective
- Recommendation: Start with reporting applied nitrogen per field or management unit
- Maybe work toward a "ratio approach" over next 5-10 years
- Once better information is developed
- If it is verified as useful tool

#### **Application of Management Practices**

### ... ensuring growers have the knowledge...

Coalitions are committed collaborators

ESJ will be using IPNI 4R's program in member outreach 2014/15

Seeking Grower Certification Program based on CCA program; CDFA/UC Collaboration Application of Management Practices

... Usage of paid consultants – e.g., CCAs/PCAs. ...

Grower outreach on N use/BMPs won't be successful without private industry participation Use UC Cooperative whenever possible but not always available (limited UC personnel w/agronomy training)

Hire CCA's to be part of outreach team, use in trainings in addition to UC personnel

# What management practices are expected to be implemented and under what circumstances for the control of nitrogen?

Encourage grower use of 4R approach when applying nitrogen

4R Principles apply to all crops

Right time, place, material, amount

Need to customize literature based on California crops

Need to refine crop consumption information for many crops

#### **Management Practice Effectiveness Studies**

#### Implemented by CV Coalitions under

#### **Management Practice Effectiveness Program (MPEP)**

- Confirm that management practices implemented to improve groundwater quality are working: Are agricultural management practices protective of groundwater?
- Modify practices if needed
- Proposing coordinated effort by coalitions/commodity groups to complete
- Share study expenses among coalitions willing to collaborate
- Coalition to present Water Board with phased approach
- CURES USDA project to be starting point for approach
- Literature search
- Interview experts in field
- Performing field instrument evaluation through CDFA grant

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## 10.c. Sampling of the soil profile to determine the extent to which nitrogen applied to a field moved below the root zone.

#### **Expert Panel Suggestions/Guidance on:**

- How many replicates per crop
- How many replicates per field
- How many soil types need to be tested (sand, loam, clay)
- How many methods of root zone/below root zone analysis
- Soil pore water
- Soil coring at various depths
- Surrogate measurements (i.e. EC or soil moisture)
- First encountered groundwater
- Studies need to be practical, economical (don't break the bank)
- reporting requirements to report budgeting and recording of nitrogen application...

#### Field Most Familiar Reporting Unit

#### Or Management Unit: 2+ fields managed the same

- For nitrogen/fertilizer, reporting unit may not be the same as Pesticide Use Reporting (PUR)
- PUR system (county field ID) will not always equate directly to nitrogen reporting system
  that is practical for growers
- Coalitions will be refining field ID approach with members
- Another reason to go slow when implementing any nitrogen reporting program!