Requirements And Strategies For Manure And Nutrient Management On Dairies

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Impact on irrigated lands

- Surface and ground water quality regulated
- Waivers or Waste Discharge Requirements (WDR) issued by Regional Water Quality Control Boards

Nitrogen Management Overview

- Regulatory process to protect water resources
- Impacts on irrigated lands
- Implementation of the Dairy General Order
- The importance of water

Irrigated Lands Programs

- Existing conditional waivers expired January 1, 2003 (SB 390)
- Los Angeles, Central Coast, Central Valley, and San Diego adopted comprehensive conditional waivers; modifications continue

Water Quality Concerns

- State Nitrogen Task Force ripple effects

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Increased reporting requirements and need to document N application and removal ratios

Nutrient Management Plan
- Maps
- Field identification information
- Wastewater agreements
- Sampling and analysis plan
- Nutrient budget
- Setbacks, buffers, and other alternatives to protect surface water
- Field risk assessment
- Record-Keeping
- Nutrient Management Plan Review

Implementation of the Dairy General Order
- Issued May 3, 2007
- MRP modified February, 2011
- GO reissued October 3, 2013

Each land application area is like a castle surrounded by a moat:

Nutrient Management Plan
- ATTACHMENT C
- Contents Of A Nutrient Management Plan
- And Technical Standards For Nutrient Management For Existing Milk Cow Dairies

- Develop plan by 7/1/09
- Complete modifications by 7/1/11

Calculate what was applied—
- Amount
- Concentration
- Area
- Pounds of Nutrient Applied per Acre
**Facility inspections**
- Occur approximately every three years
- Increased scrutiny on record keeping results and physical infrastructure
- Violation notices are sent if violations exist

**Challenges with drought**
- Less or no water means
  - Less cultivated land
  - Less feed grown for cattle
  - Less land available for nutrient uptake
  - Economic challenges
- Yet, the cows are still there
- Alternative opportunities for manure

**CDQAP**
- California Dairy Quality Assurance Program
- Instrumental in educating dairy producers on how to comply
- Provided tools for compliance

**As dairy goes so will irrigated lands**
- Attention to record keeping and nitrogen application rates is increasing
- Numerous groups are interested in protecting groundwater quality (including growers)

**Thanks**

Questions?