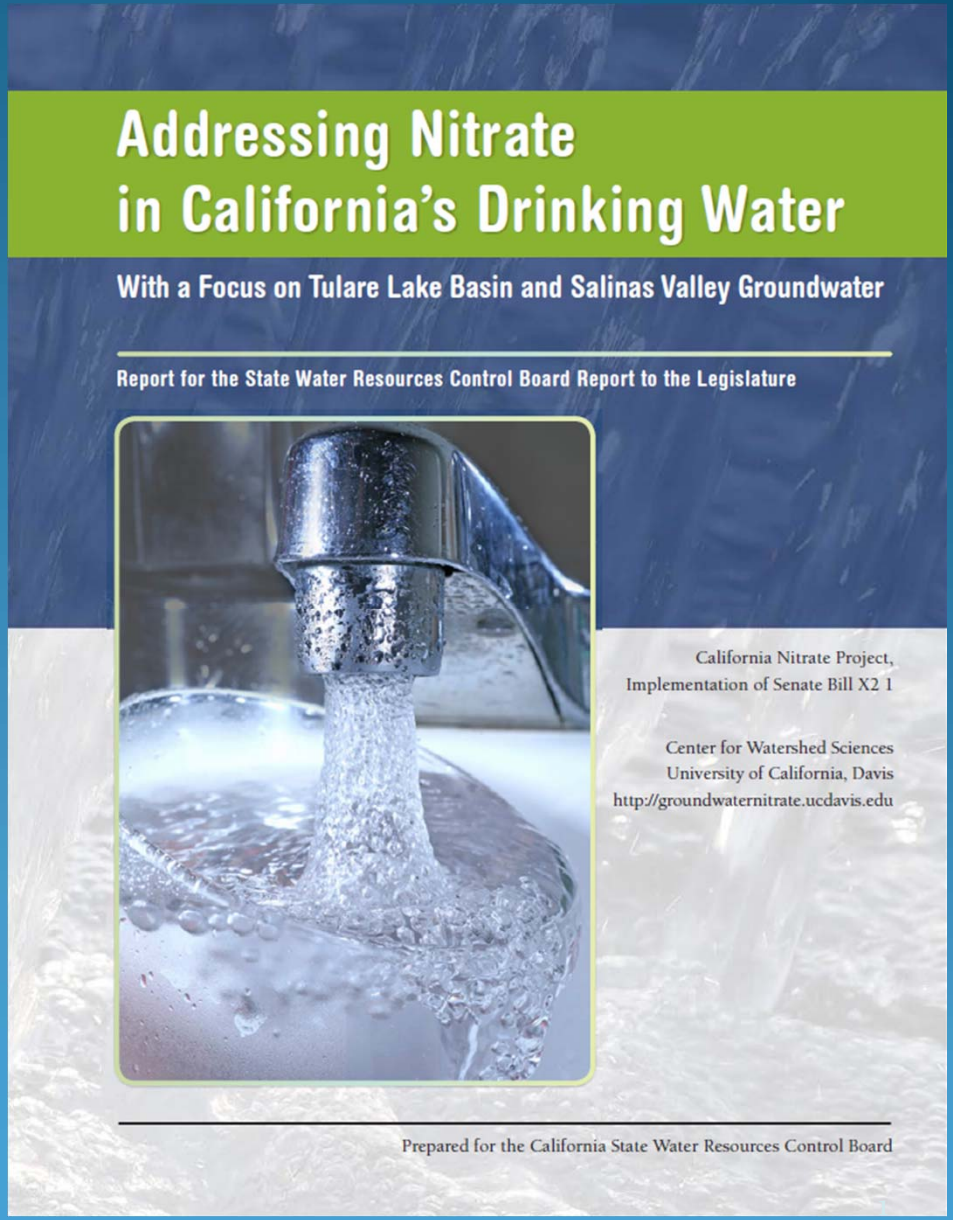
SBX2-1

State Water Board

May 23 workshop for recommendations to the State Legislature

"Nitrate contamination is widespread and increasing."



Source of Nitrate

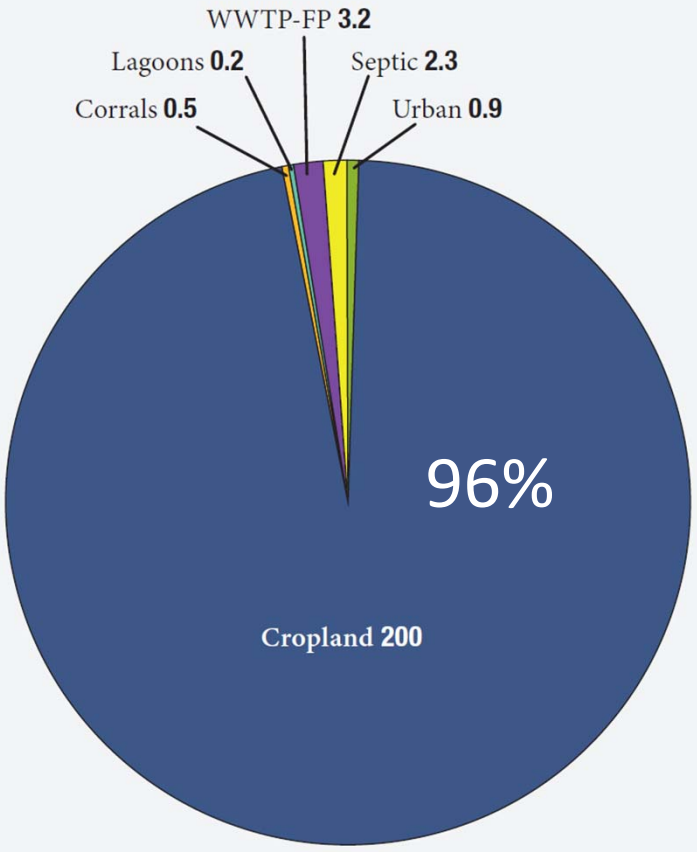


Figure ES-1. Estimated groundwater nitrate loading from major sources within the Tulare Lake Basin and Salinas Valley, in Gg nitrogen per year (1 Gg = 1,100 t).

This study shows

- Problem more severe than we estimated
- ~ 66% of all wells above background
- ~ 33% of wells in some areas above drinking water standard
- 51% of total applied nitrogen leaches to groundwater
- Significant loading reductions are achievable
- Need for ongoing regional scale monitoring

Significant Threats & Costs

- Domestic/small water systems – most at-risk
  - 254,000 people at risk of polluted water supply
- Community water systems
  - raw water contaminated for 57% of population
    - **Will increase to 80% by 2050 at current trends**
- Water supply costs of $20 to $36 million per year
- Small communities at economic disadvantage
- Conventional remediation cost: $13 to $30 billion

Failed Historical Strategies

- Call to action
  - 1978 AMBAG study
  - 1988 State Board nitrate report to the Legislature
- Focus on task forces and technical advisory committees
- Focus on voluntary programs, research, education and outreach
- Lacked regulatory component to ensure accountability
- Lacked short- and long-term strategies with goals and ongoing performance evaluation to:
  - Protect public health
  - Reduce pollution

Key Elements of Success

1. Protecting Public Health
   - Address and protect most at-risk population
2. Source Control
   - Requirements with clear goals and objectives
3. Monitoring and Assessment
   - Relevant data to measure tangible improvement
4. Funding & Programmatic Realignment
   - Long-term funding and programmatic commitments

What are we doing?

- Protecting Public Health
  - Local agency coordination
  - Domestic well outreach and sampling
  - Replacement water
- Source Control
  - Agricultural Order
- Monitoring and Assessment
  - Ag Order electronic NOI and reporting
  - CCAMP-GAP (Groundwater Assessment & Protection)
- Funding & Programmatic Realignment

Recommendations to the Legislature

- Revise Health and Safety Code to include more protective drinking water sampling requirements for:
  - domestic wells
  - local small and state small water systems
- Provide financial support for small & Disadvantaged Communities to deal with nitrate pollution.
- Require the implementation of a state-wide nitrogen use reporting program
- Require nitrogen fertilizer or water use fee/tax

Recommendations to State Water Board

- Increase funding and staffing for ILRP & GAMA:
  - Revise Agricultural and Irrigated Lands Fee Schedule
  - Include ambient monitoring surcharge
- Develop statewide requirements with clear goals and objectives to reduce loading
- Require statewide enrollment

Recommendations to Ca Dept. of Food and Agriculture

- Ramp up Fertilizer Research and Education Program
- Increase/double fertilizer mill tax
  - Fertilizer Research and Education Program (FREP)
  - Nitrogen Use Reporting

Recommendations to Ca Dept. of Public Health

- Require electronic reporting of drinking water data for:
  - Domestic wells
  - Local small and state small water systems
- Provide technical and financial support to small & Disadvantaged Communities

Recommendations to State Agencies

- Get Organized – interagency coordination
- Report (every one/two years) to Legislature on the progress and efficacy of actions

Conclusions

- The nitrate problem is significant
- Health threats and societal costs will increase
- Loading reductions are necessary and achievable
- It is our collective duty to act
- We all need to be accountable