

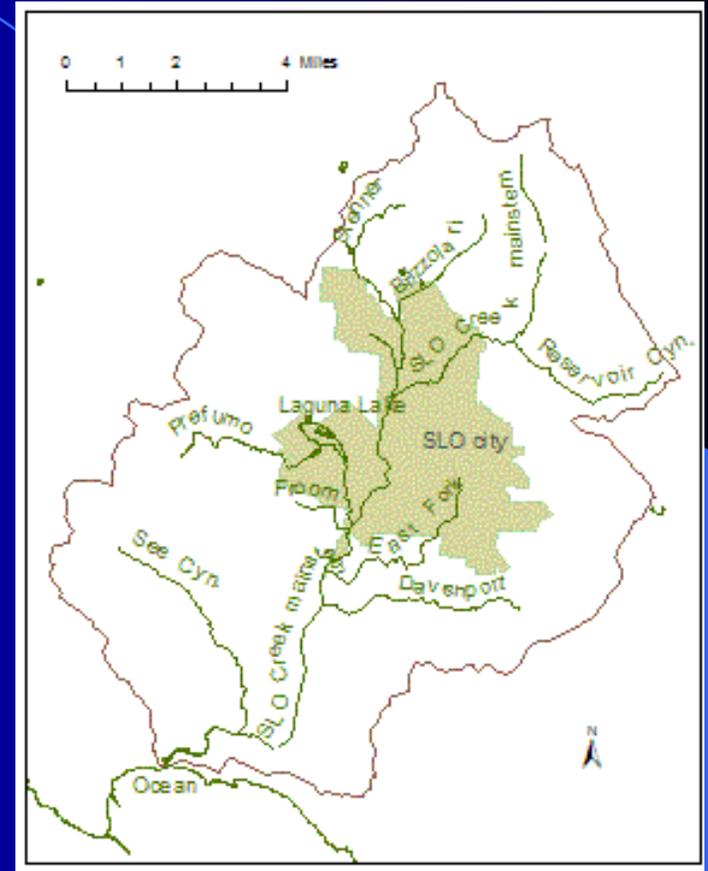
# San Luis Obispo Creek TMDL For Nitrate-nitrogen

Agenda Item 8

Presented by  
Michael Buckman

# Overview

- Intro
- Target
- Source Analysis
- Allocations
- Implementation
- Issues

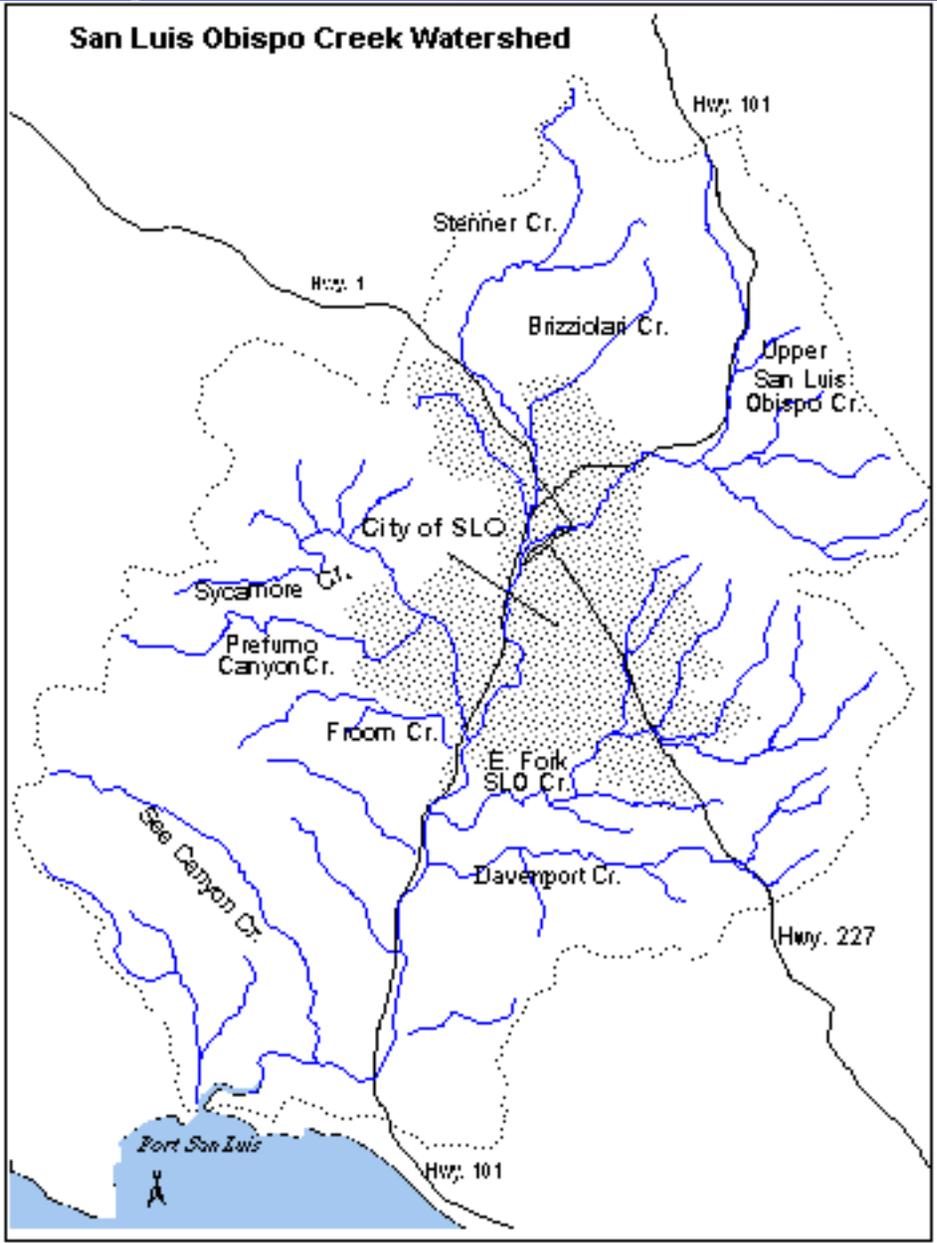


# Intro

- 1994 303(d) listing: Nutrients
- Impairment: Nitrate ( $\text{NO}_3$ )
- Water Quality Objective: 45mg/L- $\text{NO}_3$
- Impairing: Municipal and Domestic Supply (MUN)

# TMDL Target

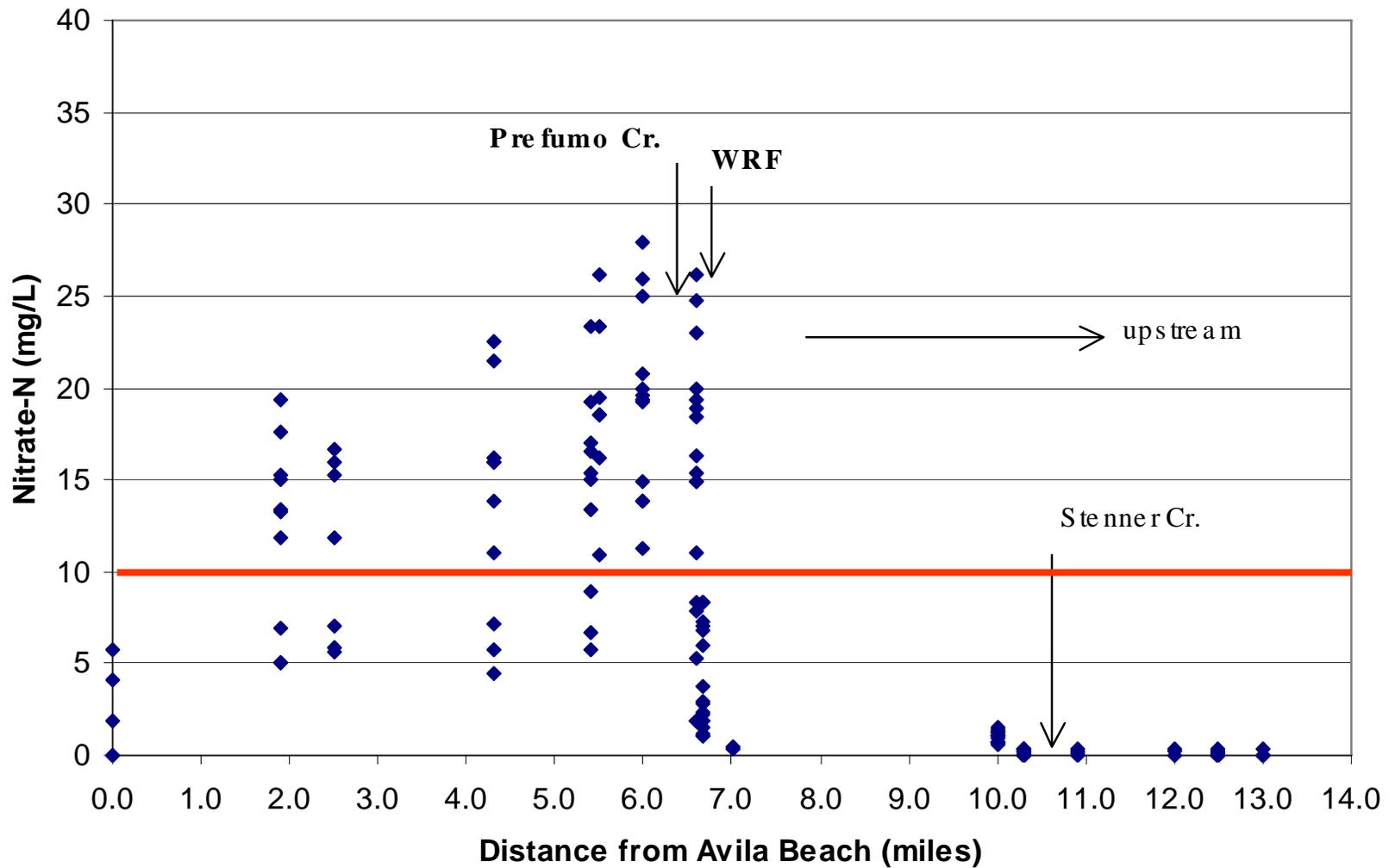
- Water Quality Objective = Numeric Target
- 45 mg/L- $\text{NO}_3$  = 10 mg/L-N
- Numeric target: 10 mg/L-N
- Nitrate as  $\text{NO}_3$ - N vs. Nitrate as  $\text{NO}_3$ -  $\text{NO}_3$ 
  - Identical analysis
  - $\text{NO}_3$ - N More common reference
  - Different Unit of Measure ie Miles-Meters



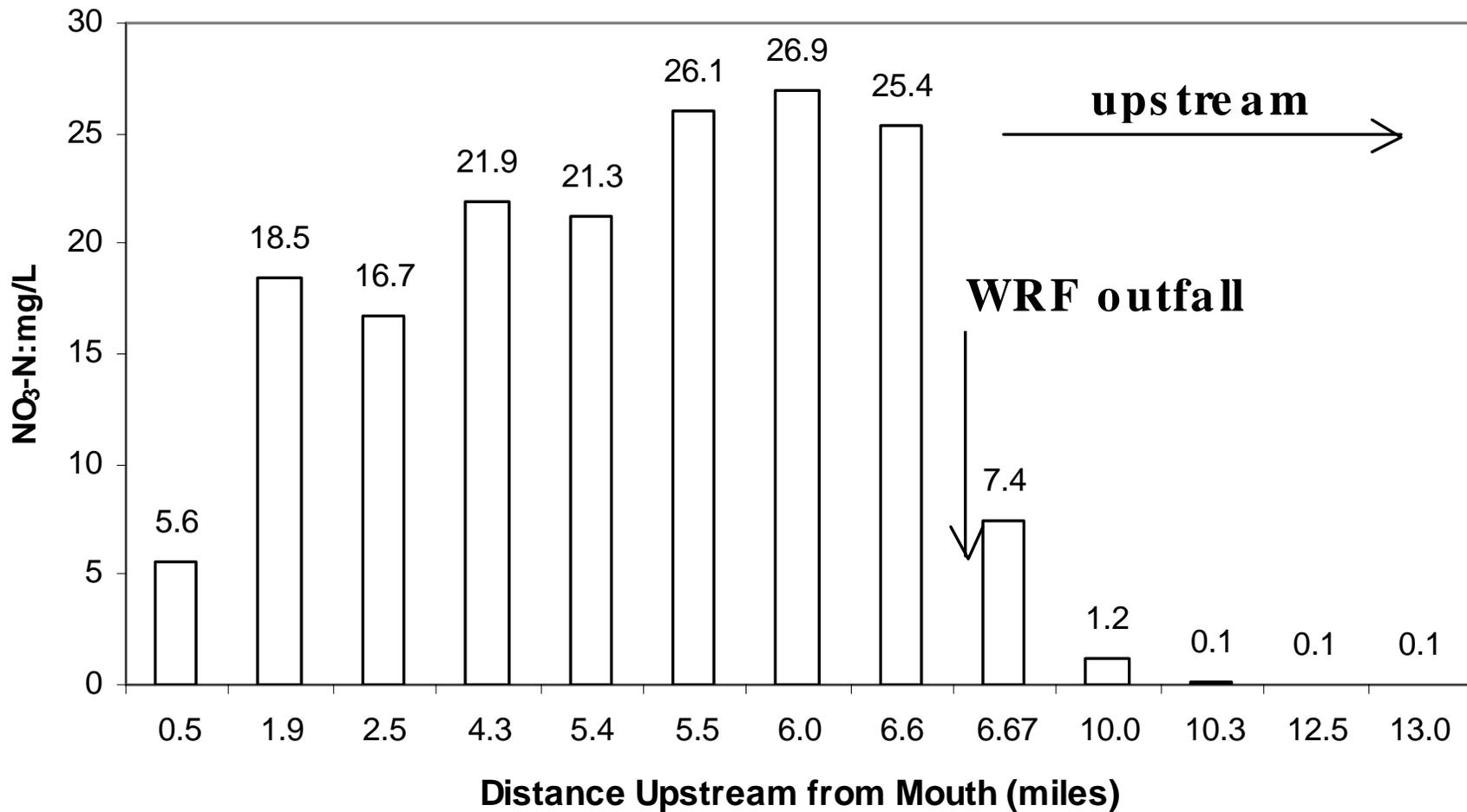
# Source Analysis

- Exceedance of numeric target downstream of WRF outfall and Prefumo Creek tributary.
- Decreasing order of nitrate-N contribution
  - **Water Reclamation Facility**
  - **Croplands**
  - **Background**
  - **Reservoirs**
  - **Residential**

# Nitrate f(Distance upstream) from March 2001 to April 2002



## San Luis Obispo Creek Average: Average Nitrate Levels for Sept/Oct 2000 and 2001



# Allocations

- WRF effluent limit:
  - Monthly mean nitrate-N  $\leq 10$  mg/L-N
- Croplands receiving water allocation:
  - Discharge shall not cause nitrate to exceed 10 mg/L-N
- Other sources (urban sources, reservoirs, background):
  - Equal to current loading

# Implementation

- Water Reclamation Facility
  - NPDES permit
    - May 2007
  - Addition of effluent limit
    - Cease and Desist
    - Time Schedule (life of permit)

# Implementation (Cont.)

- Croplands
  - Conditional Waiver for Irrigated Lands
- Urban Sources (incl. residential )
  - Currently meeting allocation
  - Stormwater permits

# Issues



# Questions

