

Item 10

Russian River Pathogen TMDL Early Implementation & Monitoring Efforts

an update to the
North Coast Regional
Water Quality Control Board

Rebecca Fitzgerald & Charles Reed

November 3, 2011

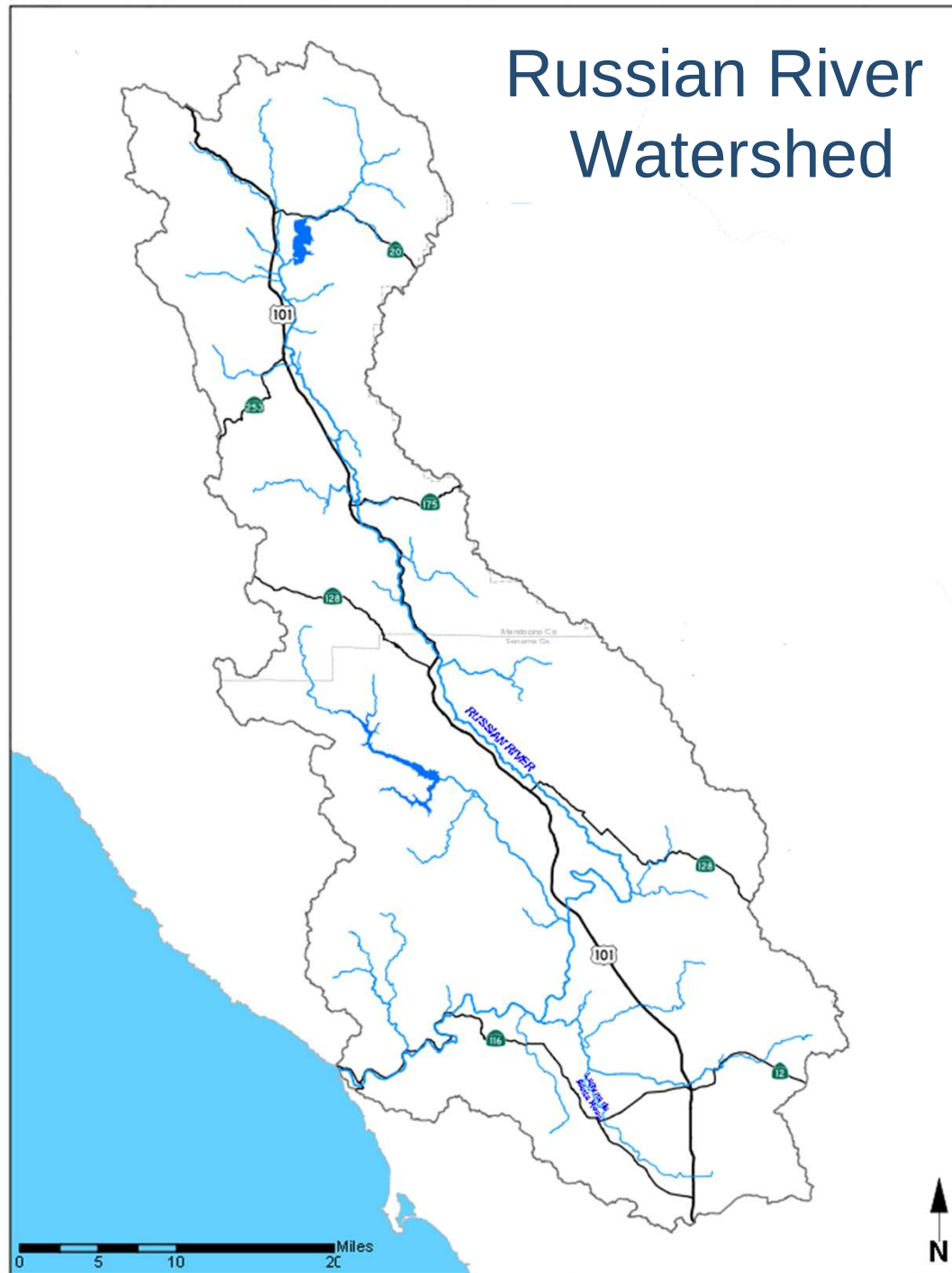


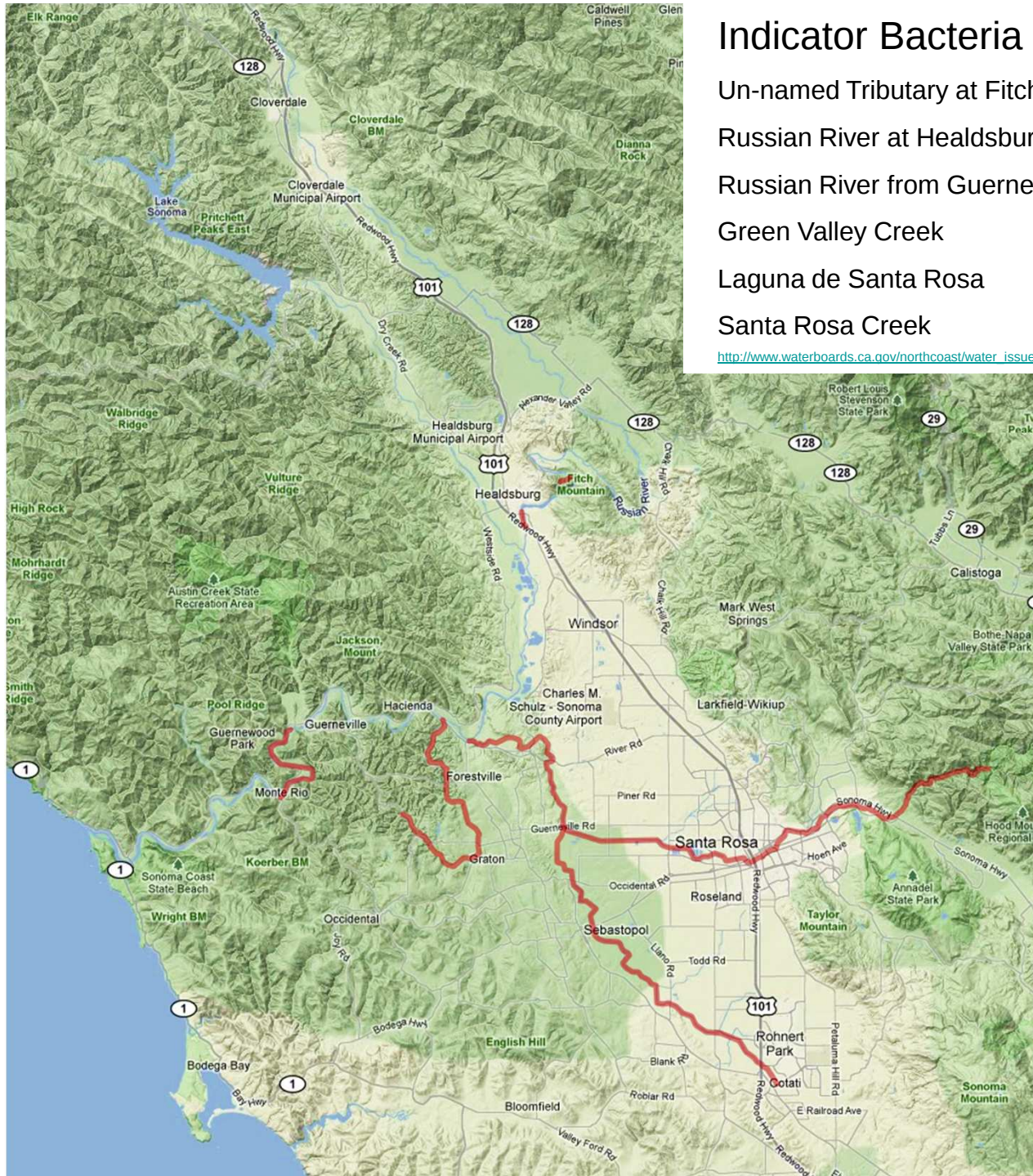
Topics



1. Background
2. Early Implementation
3. OWTS Policy
4. Monitoring Efforts

Russian River Watershed





Indicator Bacteria Impairments:

Un-named Tributary at Fitch Mountain

Russian River at Healdsburg Memorial Beach

Russian River from Guerneville to Monte Rio

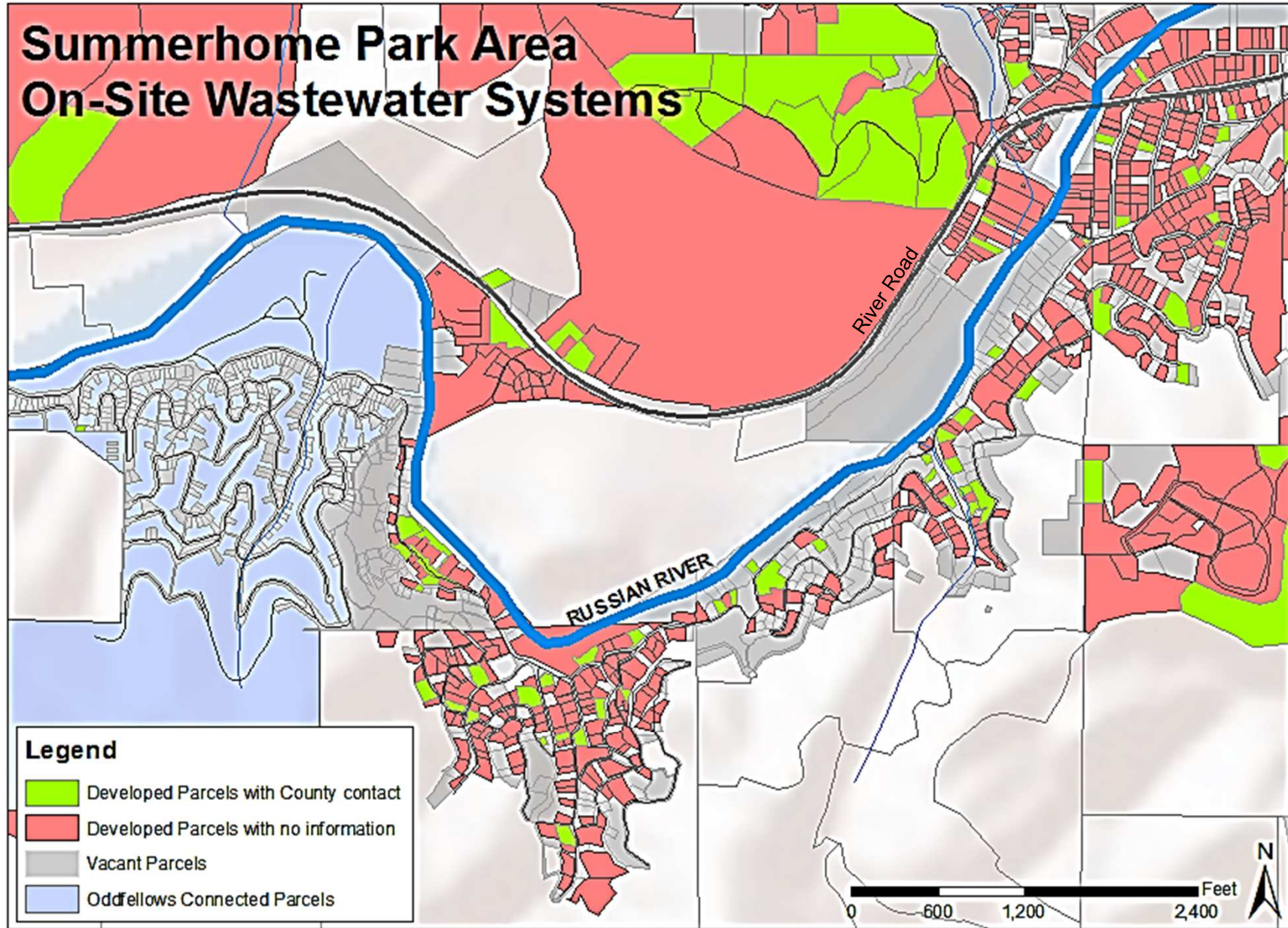
Green Valley Creek

Laguna de Santa Rosa

Santa Rosa Creek

http://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/russian_river/

Summerhome Park Area On-Site Wastewater Systems





Early Implementation Efforts

Onsite Wastewater Treatment Systems

Ongoing Coordination with Sonoma County:

- with Permit & Resource Management Department and Department of Health Services
- discussing the TMDL, septic systems, and implementation of OWTS Policy
- Regional Water Board presentation to Board of Supervisors on November 15, 2011



Draft Onsite Wastewater Treatment System Policy

- Assembly Bill 885 (2000)
- Draft Statewide Policy
- Establishes Risk-Based Tiers
- Tier 3 for Russian River Watershed
- Wastewater Management Plan
- Public Workshop on November 2, 2011

Early Implementation Efforts

Recreation along the River

1. Working on Portable Toilets with Sonoma Co Water Agency
2. Coordination with Sonoma Co Recreation Task Force
 - Ours to Protect Signs
 - Russian River Guide



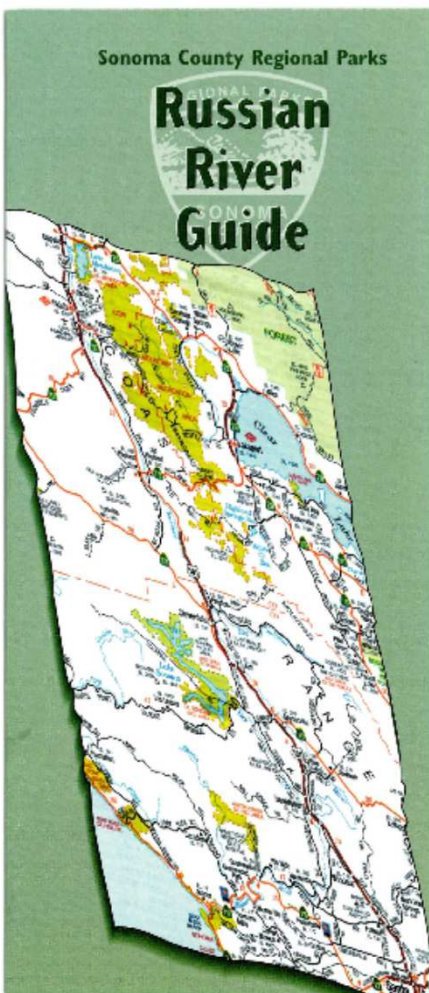
Early Implementation Efforts



Locations:

- Cloverdale River Park
- Alexander Valley Campground
- Del Rio
- Steelhead Beach
- Burke's Canoes
- Mom's Beach
- Sunset Beach
- Johnson's Beach
- Vacation Beach
- Cassini's
- Jenner Visitor Center (coming soon)

Early Implementation Efforts



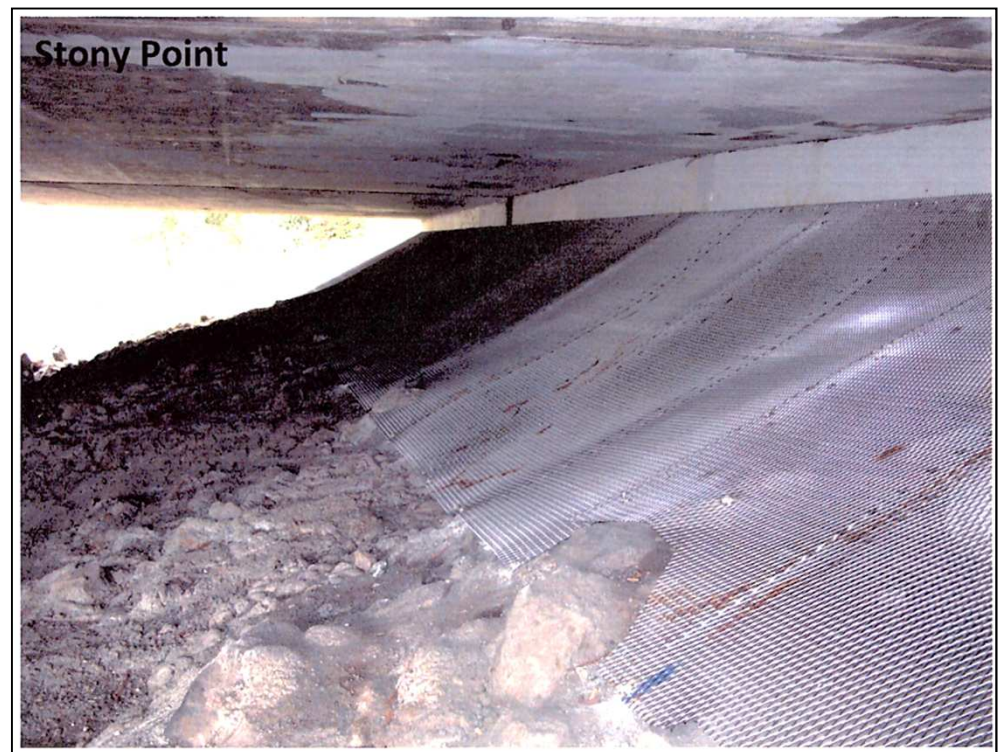
Recreation along the River

- Update to the Russian River Guide

Early Implementation Efforts

Homeless Encampments

- Exclusionary fencing installed under 3 bridges along Santa Rosa Creek
- Via a Supplemental Environmental Project





Early Implementation Efforts

Ongoing Regulatory Program Staff Work

- Facility Inspections
- Municipal Storm Water Program
- Dairy Permit Program Development

Pathogen & Bacteria Monitoring

- Purpose:
 - Inform the TMDL
 - Continue sampling at swimming beaches
- Timing:
 - May 2011 to Spring 2012



Russian River & Tributary Monitoring

E. Coli

Enterococcus

Total Coliform:

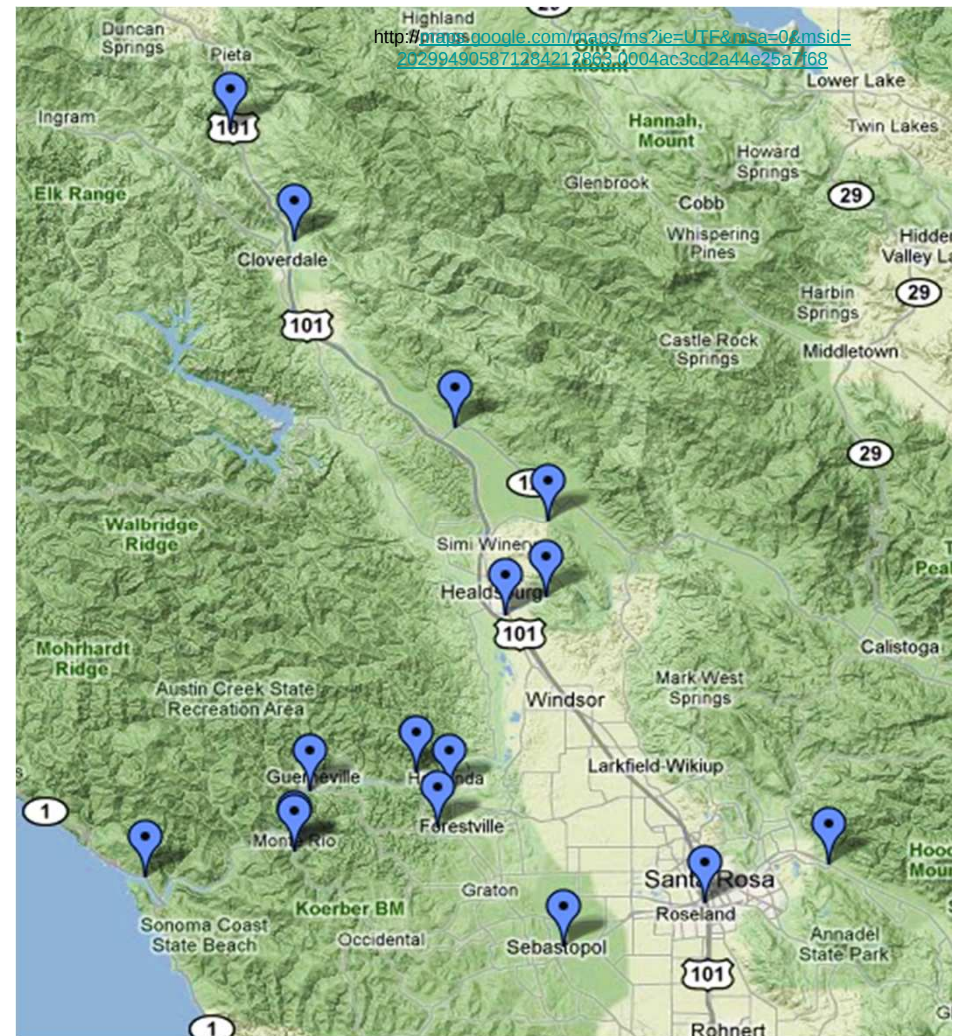
- Samples collected weekly
May - September 2011
- Samples collected 5 times
Winter 2011/2012.

Bacteroides

Stable Isotopes of Nitrate

PhyloChip:

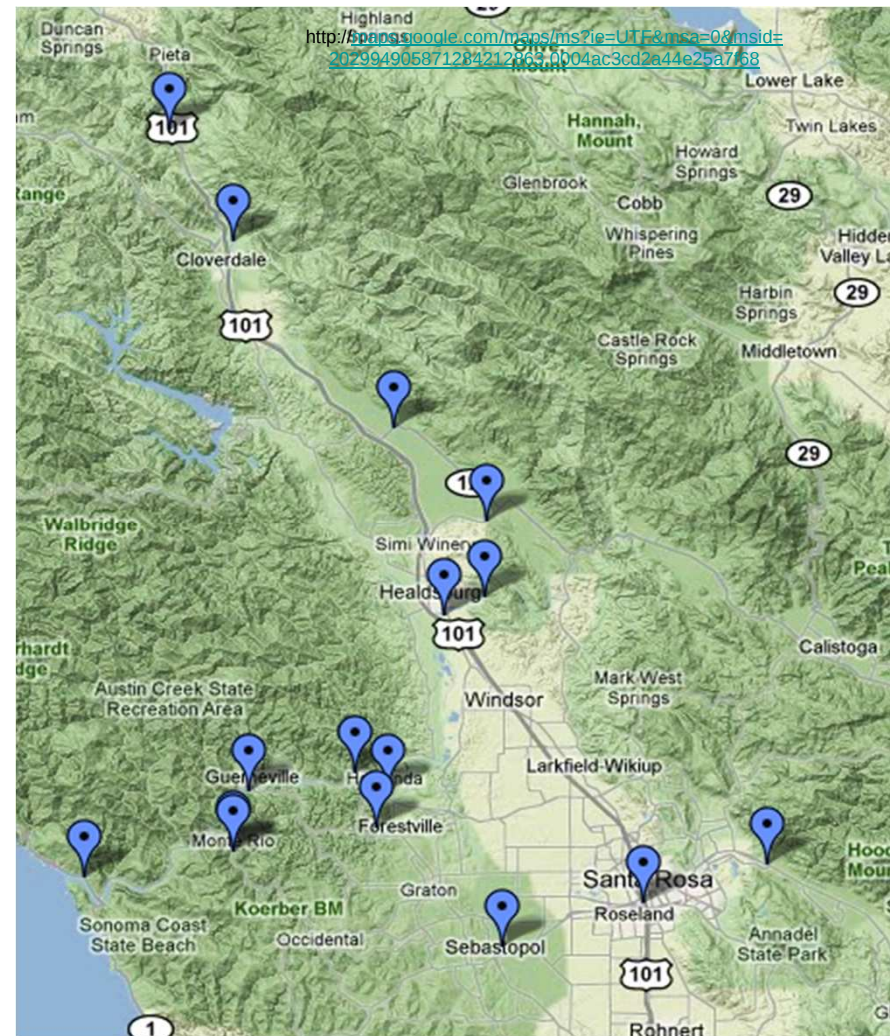
- Once in August 2011
- Once in Winter 2011/2012



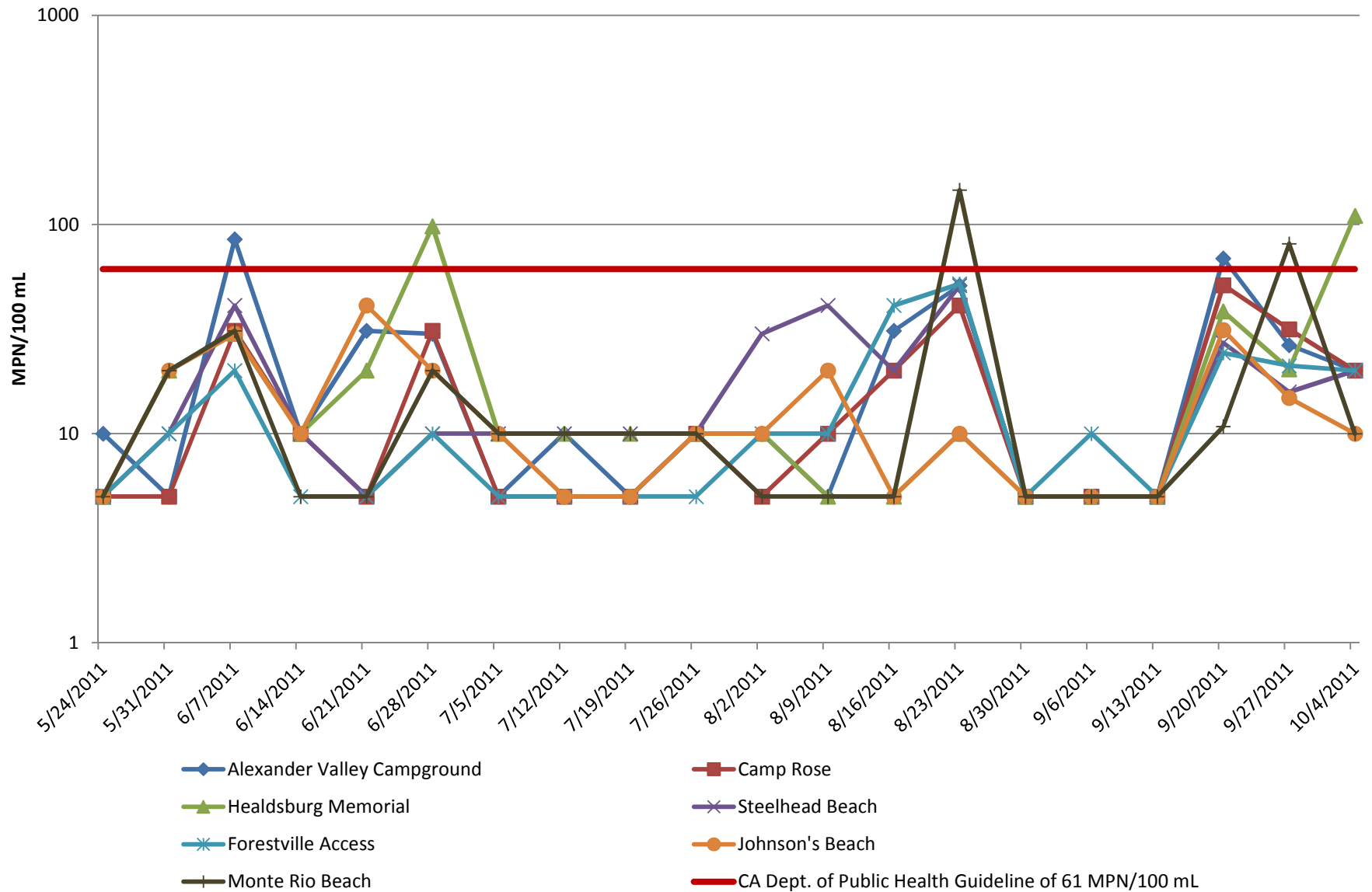
Russian River & Tributary Monitoring

Locations:

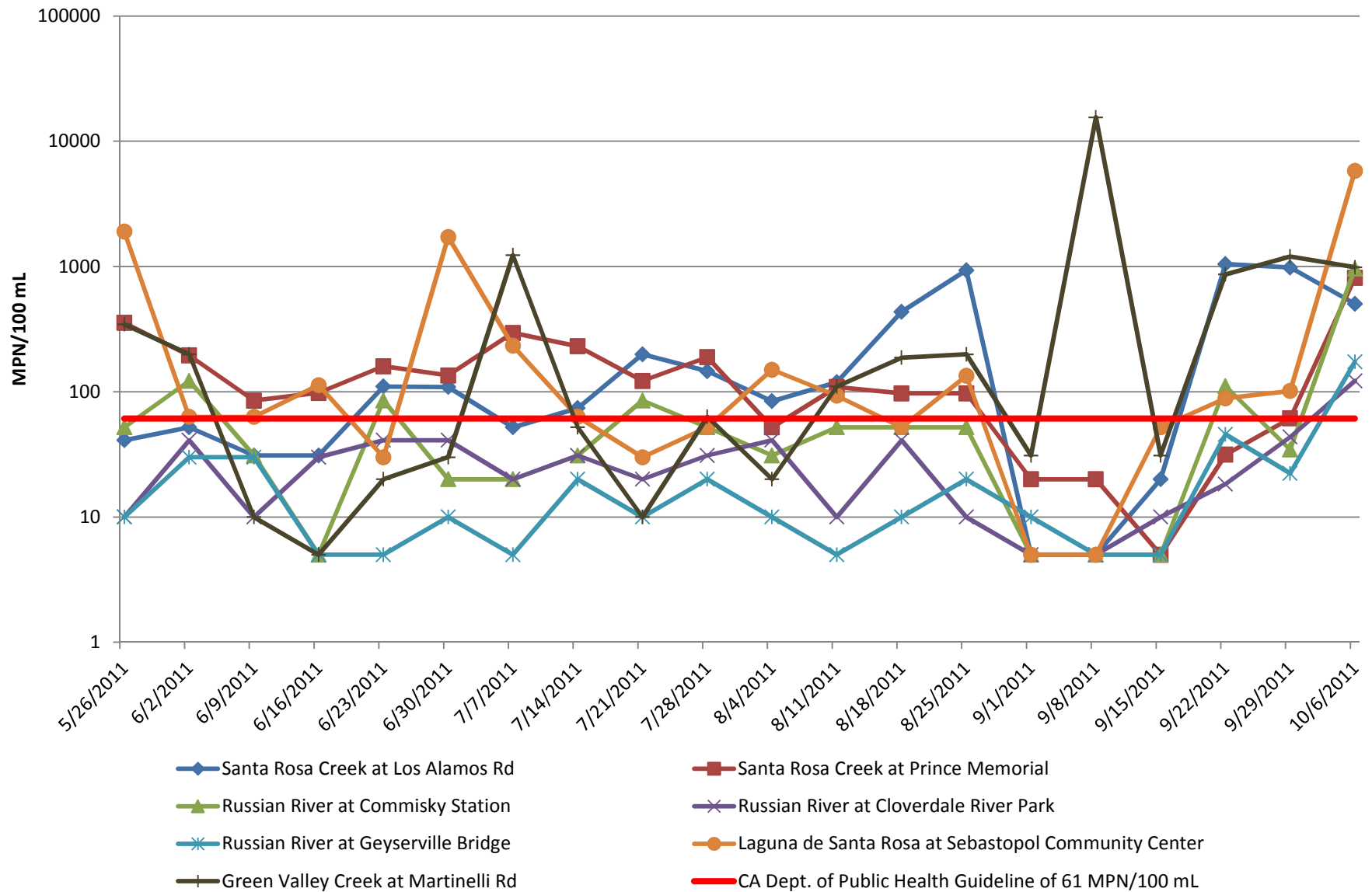
- Commisky Creek
- Cloverdale River Park
- Geyserville Bridge
- Alexander Valley Campground
- Camp Rose
- Healdsburg Memorial Beach
- Steelhead Beach
- Forestville Access Beach
- Johnson's Beach
- Monte Rio Beach
- Jenner Boat Ramp
- Santa Rosa Ck at Los Alamos Rd
- Santa Rosa Ck at Prince Memorial Greenway
- Laguna at Sebastopol Community Cntr
- Green Valley Ck at Martinelli Rd
- Dutch Bill Ck at Fir Rd



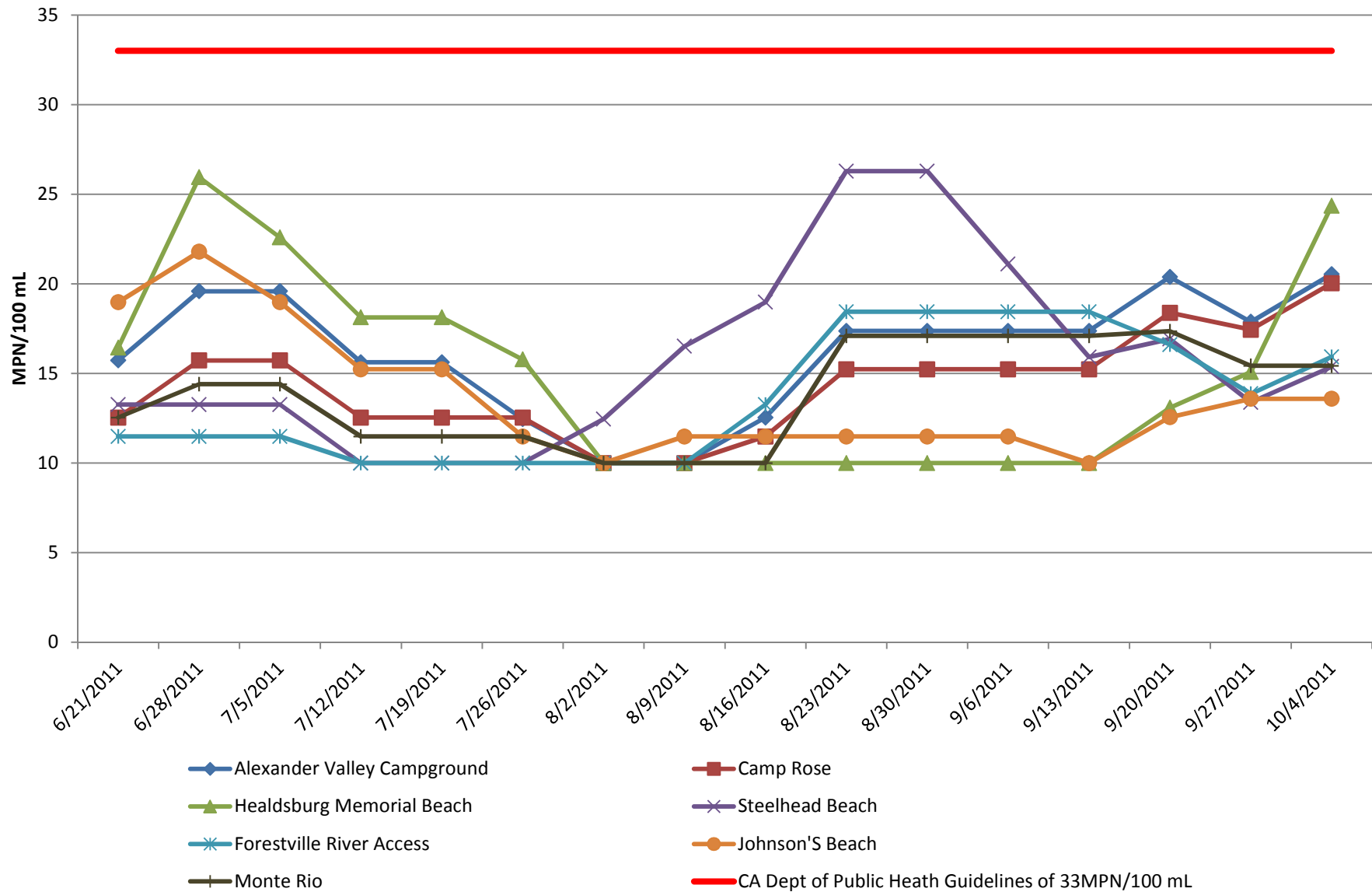
***Enterococcus* Single Sample Data - Preliminary** **Mainstem Russian River Sites (Tuesday sites)**



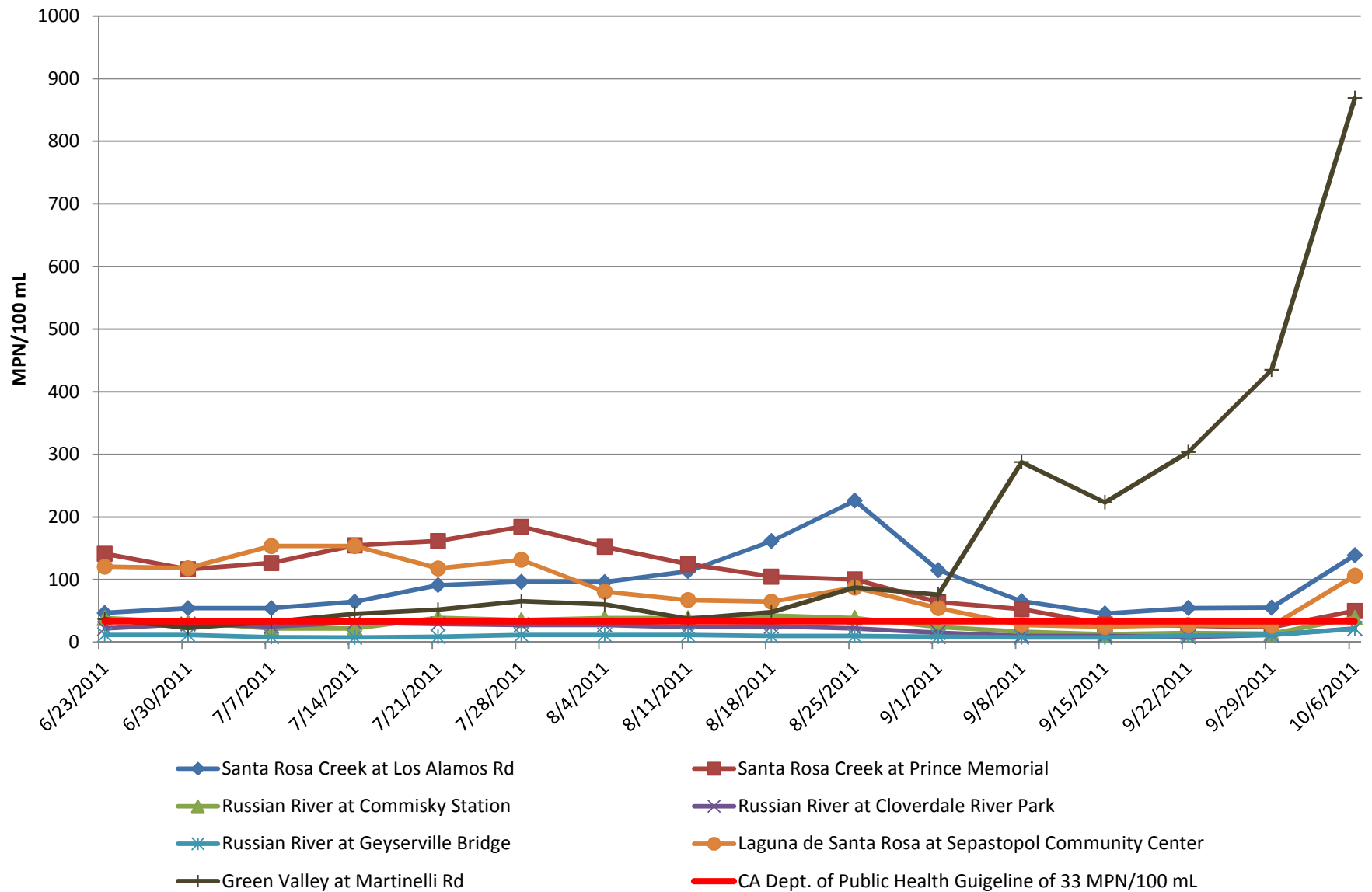
***Enterococcus* Single Sample Data - Preliminary Mainstem & Tributary Sites (Thursday sites)**



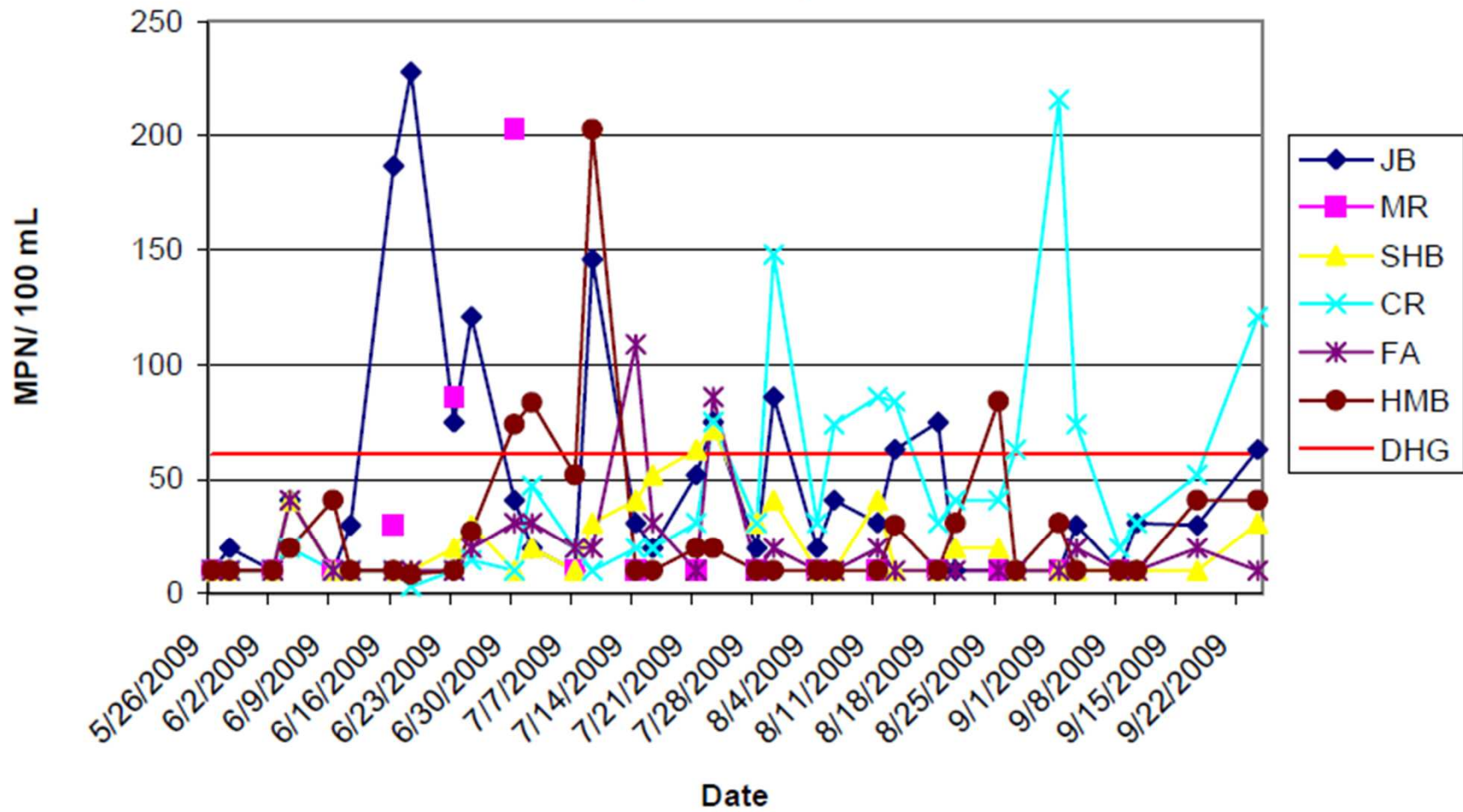
Enterococcus 30 Day Geometric Mean Data - Preliminary Mainstem Russian River Sites (Tuesday sites)



Enterococcus 30 Day Geometric Mean Data - Preliminary Mainstem & Tributaries Sites (Thursday sites)



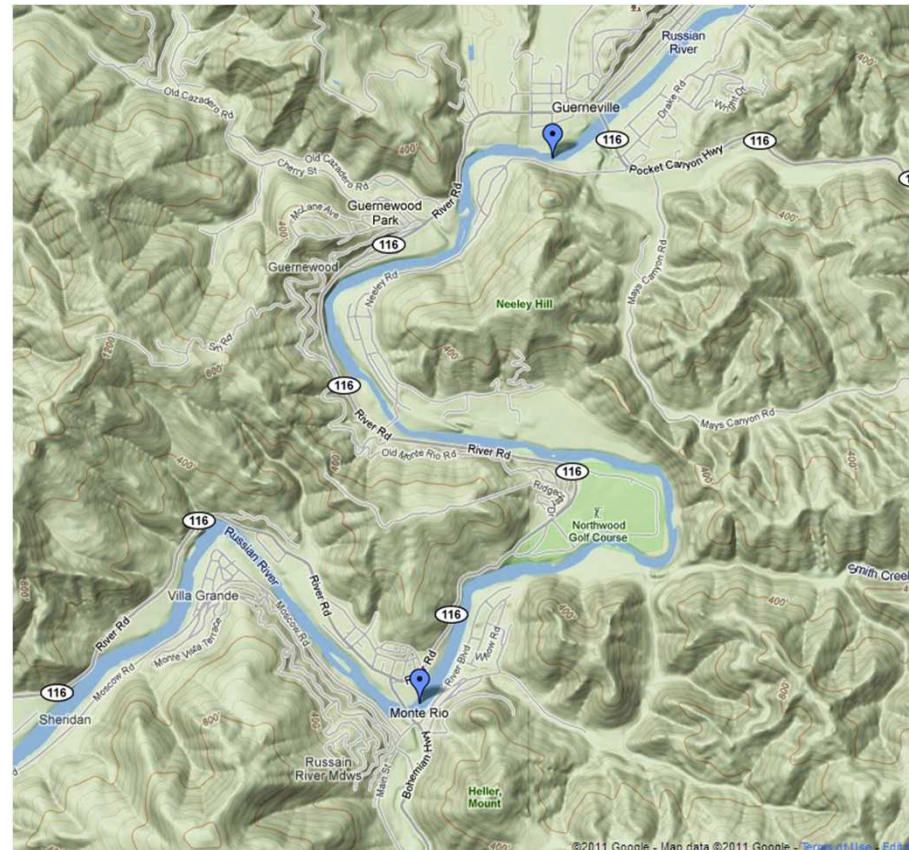
Russian River Summer 2009 Enterococcus



Beach Use Impacts Monitoring

E. Coli
Enterococcus
Total Coliform
Bacteroides
Stable Isotopes of Nitrogen
Phylochip:

- Samples collected every day
September 21-28, 2011
- During Russian River Jazz & Blues Festival



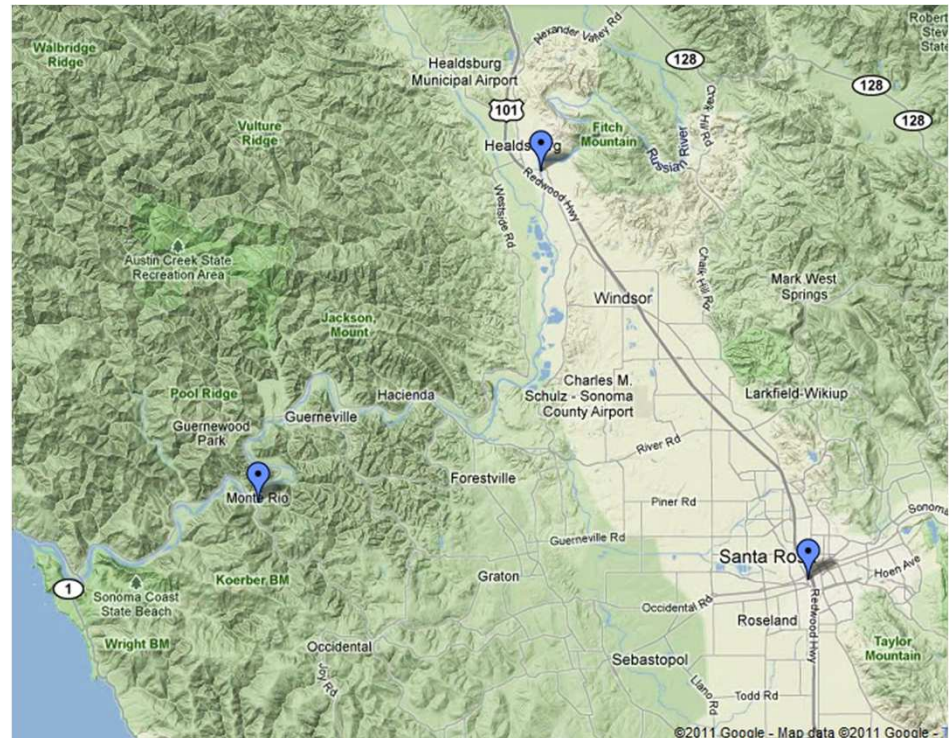
Site Variability Monitoring

E. Coli

Enterococcus

Total Coliform:

- Samples collected
Aug 30 - Sept 1, 2011
- Samples collected along:
3 different transects
3 points along each transect
3 samples at each point





Land Use Monitoring

E. Coli

Enterococcus

Total Coliform:

- Samples collected 3 times
Dry Weather 2011-2012
- Samples collected 3 times
Wet Weather 2011-2012

Bacteroides

Stable Isotopes of Nitrate

PhyloChip:

- Once in Dry Weather
- Once in Wet Weather

15 Sites

Locations
TBD



Russian River & Tributary Monitoring

Quality Assurance Project Plans
and More Information at:

[http://www.waterboards.ca.gov/northcoast/
water_issues/programs/water_quality_sampling/](http://www.waterboards.ca.gov/northcoast/water_issues/programs/water_quality_sampling/)



Russian River Pathogen TMDL Schedule

Activity	Timeframe
Sample collection	May 2011 – Spring 2012
Monitoring Plan Report	Summer 2012
Draft Technical TMDL Analyses	Winter 2012/13
Implementation Plan Development	Spring-Summer 2013
Public Review	Winter 2013/14
Regional Board Consideration	Spring 2014

Contact Information

Webpage:

http://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/

Mailing List:

http://www.waterboards.ca.gov/resources/email_subscriptions/reg1_subscribe.shtml

Phone:

(707) 576-2220

E-mail:

Rebecca Fitzgerald, TMDL Unit Supervisor
Charles Reed, Russian River TMDL Project Manager
Steve Butkus, Russian River Technical Specialist



rfitzgerald@waterboards.ca.gov
creed@waterboards.ca.gov
sbutkus@waterboards.ca.gov