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

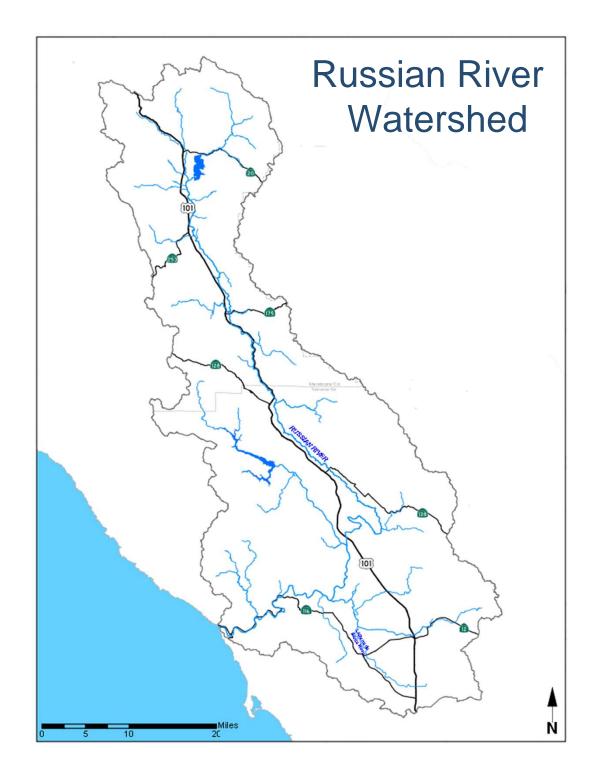


Topics

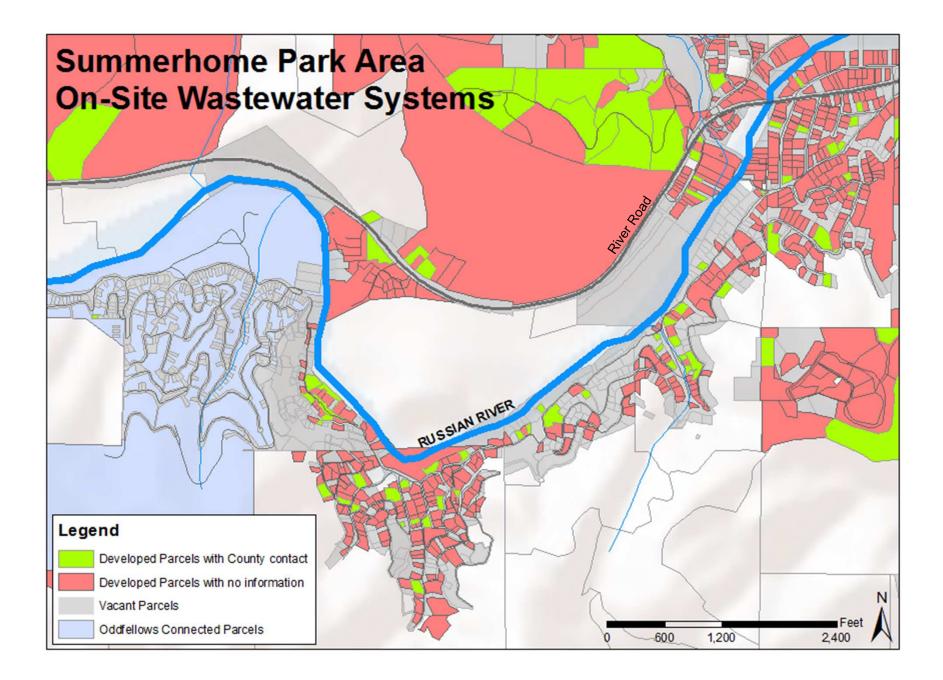


- 1. Background
- 2. Early Implementation
- 3. OWTS Policy
- 4. Monitoring Efforts









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



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







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)





Recreation along the River

- Update to the Russian River Guide



Homeless Encampments

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





Ongoing Regulatory Program Staff Work

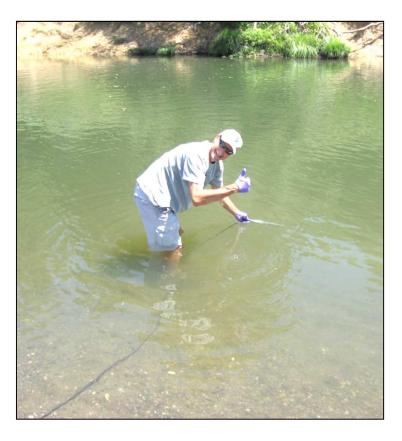
- Facility Inspections
- Municipal Storm Water Program
- Dairy Permit Program Development





Pathogen & Bacteria Monitoring

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





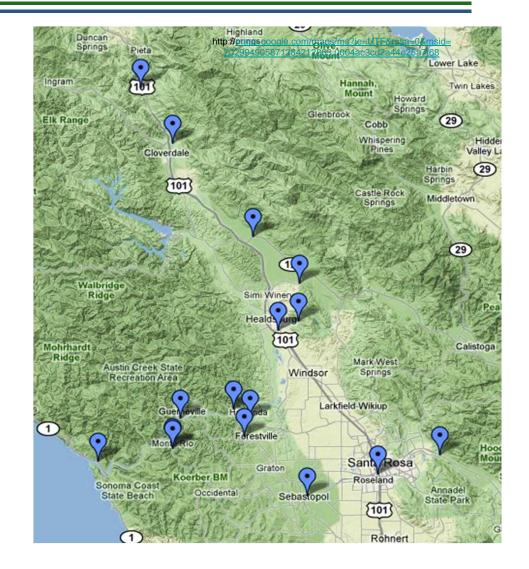
Russian River & Tributary Monitoring

E. Coli Enterococcus Total Coliform:

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

Bacteroides Stable Isotopes of Nitrate PhyloChip:

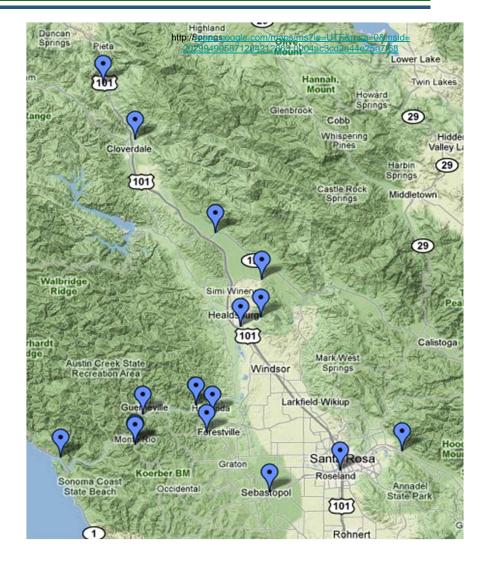
- Once in August 2011
- Once in Winter 2011/2012



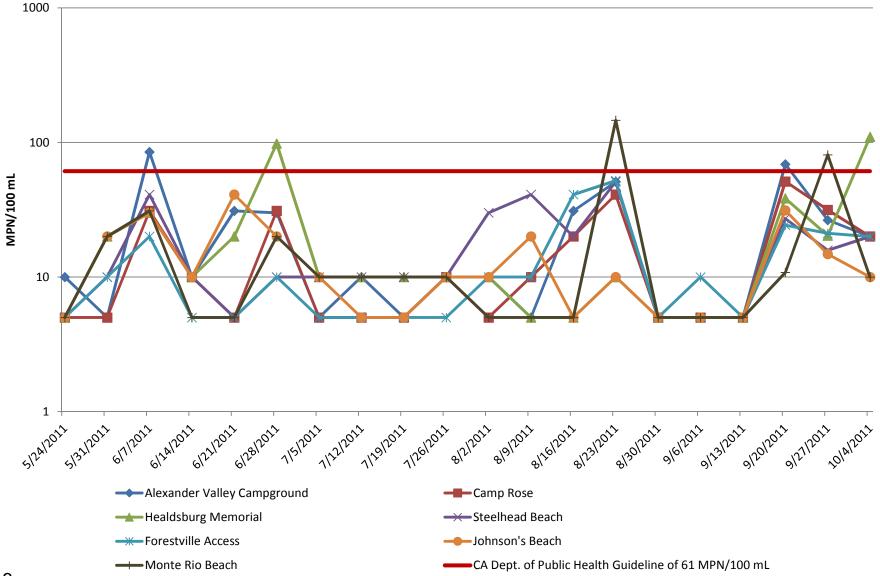
Russian River & Tributary Monitoring

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
- 15 Dutch Bill Ck at Fir Rd



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



100000 10000 1000 100 10 1 7124/2012 71212012 1/28/2012 512612022 6123/2011 613012011 117/2012 61212011 61912011 6/16/2011 81412011 8/11/2011 8/18/2011 812512011 9/1/2011 9/8/2011 9/15/2011 9/2/2011 9/29/2011 10/6/2011

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

Santa Rosa Creek at Los Alamos Rd
 Russian River at Commisky Station
 Russian River at Geyserville Bridge
 Green Valley Creek at Martinelli Rd

-----Santa Rosa Creek at Prince Memorial

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Laguna de Santa Rosa at Sebastopol Community Center

CA Dept. of Public Health Guideline of 61 MPN/100 mL

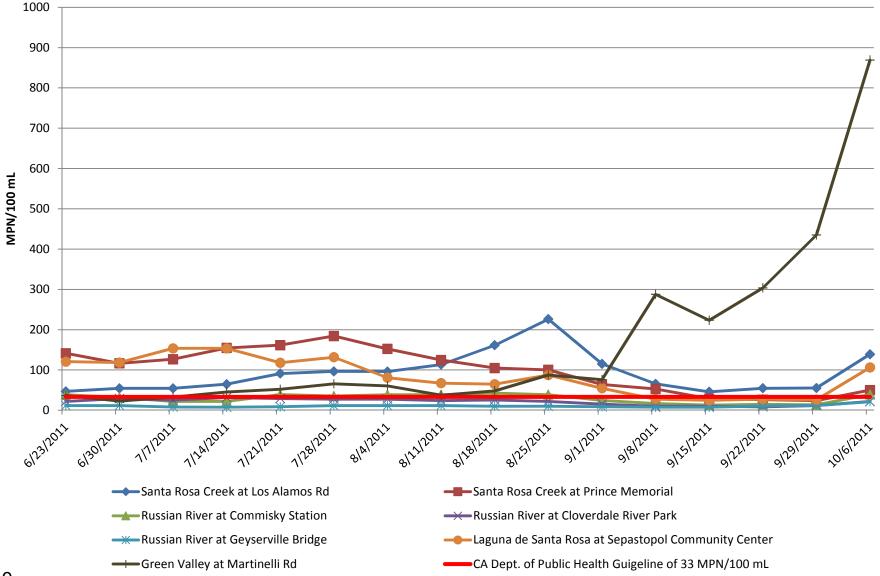
MPN/100 mL



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

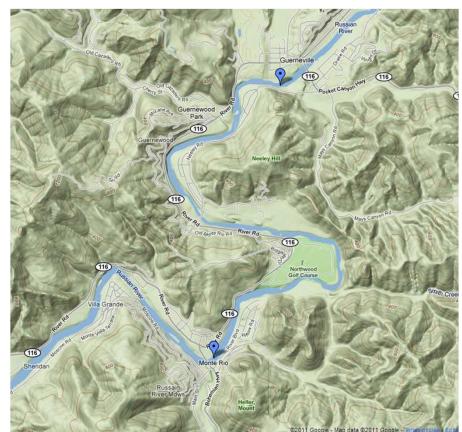
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Enterococcus 30 Day Geometric Mean Data - Preliminary Mainstem & Tributaries Sites (Thursday sites)



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

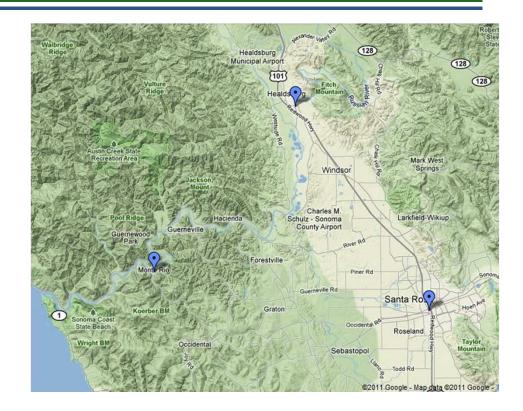




Site Variability Monitoring

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



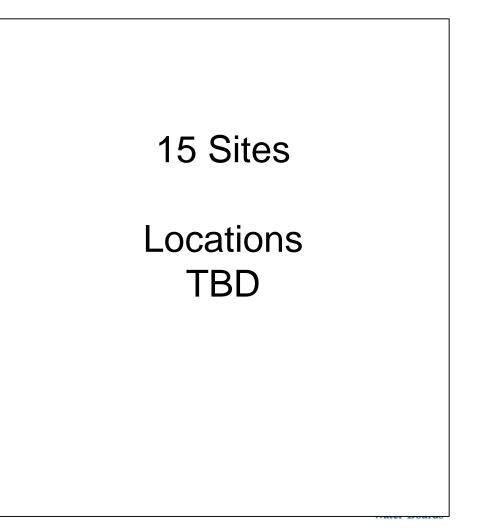


Land Use Monitoring

- *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





Russian River & Tributary Monitoring

Quality Assurance Project Plans and More Information at:

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/

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