



# Community Clean Water Institute

## Lower Russian River Water Quality Fact Sheet 1- Jenner and Austin Creek

**Dear Resident of the Lower Russian River Watershed,**

Community Clean Water Institute (CCWI) has performed water quality testing and monitoring on the Lower Russian River since 2002. The monitoring is part of a study encompassing 9 sites over 13 miles from Dutch Bill Creek in Occidental to the river mouth at Jenner. This Fact Sheet describes the monitoring performed on the Russian River at the river mouth in Jenner and just upstream of the mouth of Austin Creek.

This fact sheet provides some information about the current status of water quality on the river in your area including things you can do to preserve water quality in your watershed, such as becoming a citizen monitor. We encourage you to become an advocate for clean water in your community and to use this fact sheet as a starting point for implementing best management practices in your household and in your watershed. Thank you for your interest in learning more about the Russian River and in supporting clean water in your community.

Sincerely,

*The Community Clean Water Institute*



**Citizen Monitors John Pendergraft and Annie Mills use a specially designed pole to monitor water quality near the confluence of Austin Creek and the Russian River.**

## Water Quality Monitoring on the Lower Russian River

RUS010 is the site near the river mouth in Jenner & RUS030 is the site just upstream of the mouth of Austin Creek. Both sites are monitored on a monthly basis by citizen monitors for the following parameters:

- ◆ Temperature (air & water)
- ◆ pH
- ◆ Electrical Conductivity
- ◆ Turbidity
- ◆ Dissolved Oxygen
- ◆ Phosphate
- ◆ Nitrate



The Lower Russian River Water Quality Monitoring Project is funded by a grant from the State Water Resources Control Board. For more information, contact CCWI at (707) 824-4370 or info@ccwi.org.

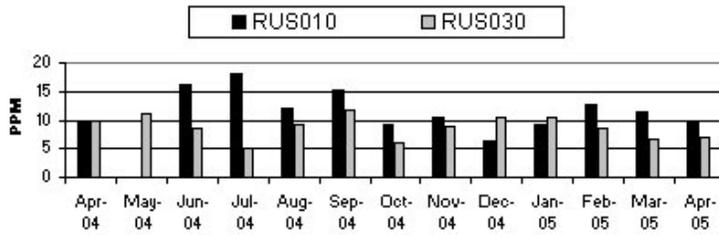
Site Name	GPS	Site Description
RUS010	38°26.946"N 123°06.920"W	Near Boat House in Jenner
RUS030	38° 27.744"N 123°02.616"W	Ryan's Beach near mouth of Austin Creek

# Local Water Quality Overview

The Russian River is listed on the EPA's 303d list as impaired for the following criteria: sedimentation, siltation, turbidity, bank erosion, impaired spawning and rearing habitat, increased rate and depth of flooding due to sediment in the river and its tributaries. Water quality concerns include sedimentation, high turbidity during storm events, temperature for salmon and steelhead, discharges from agriculture, and stormwater runoff.



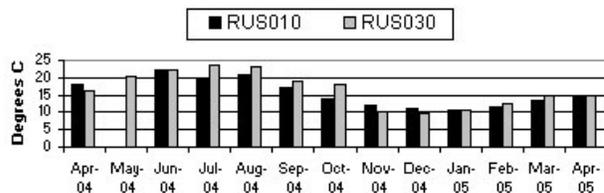
**Dissolved Oxygen  
2004-2005**



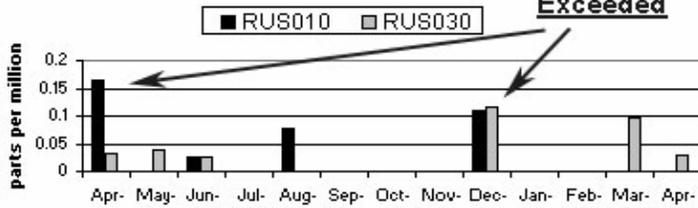
Most aquatic organisms need oxygen to survive and grow. Substances such as yard clippings, sewage, oil, and dead organic material reduce the amount of dissolved oxygen (DO) when they break down. An overabundance of algae can also lower the DO available to aquatic organisms. To support most fish life, levels should be between 5-8 parts per million (ppm). Salmonids need levels greater than 6 ppm. Readings on the Russian River main stem are generally in this range, with some low summertime readings.

Temperature affects water chemistry and the functions of aquatic organisms. Two possible causes of high temperature are the removal of streamside vegetation, and reduction of stream flow. Maximum temperature for salmonid survival is 22°C and optimum temperature for spawning is 10°C and below. All measurements at both sites reached or exceeded the recommendations for survival or spawning. The data suggest the sites are dangerous for salmonids.

**Water Temperature  
2004-2005**



**Orthophosphate  
2004-2005**



Phosphate stimulates the growth of aquatic plants, providing food for larger organisms, including fish and mammals. Phosphate enters watercourses through lawn and agricultural fertilizers, partially treated and untreated sewage, laundry detergent and commercial cleaning fluids, and through permitted industrial discharges. Too much phosphate increases plant growth, choking waterways and decreasing dissolved oxygen. The EPA recommends levels below 0.1 parts per million (ppm). RUS010 exceeded this limit in both April and December 2004. RUS030 met or exceeded the limit in December 2004 and March 2005. Months with no data indicate undetectable levels.

## Conclusions & Recommendations

This study is part of an ongoing monitoring project in order to better understand the Russian River watershed. Since the major issues involve non-point source pollution, where there is no single source, it is important for all stakeholders to become involved in protecting their watershed. CCWI recommends that local governments, regulatory agencies, and non profit organizations partner to continue water quality monitoring, with the goal of increasing citizen involvement. Opposite is a list of Best Practices that anyone can do to protect the important resources of the Lower Russian River.

# Watershed Best Practices– How You Can Help

*These best management practices can help preserve water quality in the Russian River.*

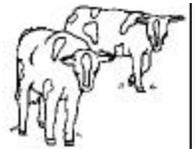
## Residents

- ◆ Save water with low flow toilets, washing machines, showerheads, and drip irrigation.
- ◆ Use phosphate-free laundry and dishwashing detergents.
- ◆ Stop soil erosion using hay, rocks and gravel to stabilize roads.
- ◆ Limit paved surfaces. Use permeable bricks, rock, and gravel. Pavement increases runoff, leads to flooding, and decreases water quality.
- ◆ Landscape with nature. Use drought resistant, native plants for landscaping. Irrigate during cooler hours of the day, and limit fertilizer applications on lawns and gardens. Do not spray chemicals within 50 feet of a waterway.
- ◆ Maintain your septic system, which reduces costs over time and preserves water quality downstream.
- ◆ Store and dispose of chemicals properly. Do not pour toxic chemicals down the drain. Call the County Waste Management Agency for guidelines on disposal of hazardous waste.
- ◆ Re-align ditches and culverts to drain to vegetated buffer zones or riparian areas along creeks & streams.
- ◆ Protect the forests forever, put a conservation easement on your land. Call Landpaths (707) 544-7284, Bodega Land Trust (707) 876-1806, or Sonoma Land Trust (707) 526-6930 for more information.



## Agriculture

- ◆ Preserve and restore a shady riparian corridor along streams, rivers and creeks. Do not convert forests to vineyards or other development.
- ◆ Reduce the use of pesticides.
- ◆ Use drip irrigation to improve water use efficiency.
- ◆ Fence livestock to prevent them from walking through the creek.
- ◆ Develop a manure management plan for livestock to reduce water pollution.
- ◆ Manage livestock to prevent overgrazing.
- ◆ Contact local resources for more information: the Natural Resources Conservation Service Petaluma field office for both professional services and funding assistance at (707) 794-1242 x3, or Gold Ridge Conservation District 823-4662, UC Cooperative Extension 565-2621, Sonoma County Agricultural Commissioner 565-2371.



## Become a Citizen Monitor

Citizen monitoring is monitoring of the environment by community volunteers interested in watershed protection. Citizen monitors collect water quality data and evaluate stream health. CCWI has an ongoing citizen monitoring program with residents and neighborhood groups in the Lower Russian River. If you live in this watershed, you can become a citizen monitor. Monitoring your watershed is a great way to get to know your local creeks. Get your feet wet! To find out more, contact the CCWI office at (707) 824-4370 or visit our website at [www.ccwi.org](http://www.ccwi.org).

**If you suspect water pollution in your area, contact Russian RiverKeeper (707) 433-1958, Regional Water Quality Control Board at (707) 576-2220, the County Department of Environmental Health at (707) 565-6565.**



NONPROFIT ORG  
US POSTAGE  
**PAID**  
OCCIDENTAL, CA  
PERMIT # 58

**Community Clean Water Institute**

c/o Town Hall Coalition  
6741 Sebastopol Ave #140  
Sebastopol, CA 95472

## *Local Resources for Water Quality on the Lower Russian River*

**Community Clean Water Institute**

6741 Sebastopol Ave #140  
Sebastopol, CA 95472  
(707) 824-4370  
info@ccwi.org  
www.ccwi.org

CCWI Board of Directors

Don Frank  
Margaret Howe  
Judith Olney  
Lynn Hamilton  
Chris Poehlmann

CCWI Staff

Mike Sandler, Program Coordinator  
Beth Robinson, Program Associate

Jenner Community Website  
[www.mcn.org/e/jenner/](http://www.mcn.org/e/jenner/)

Stewards of the Coast and Redwoods (707) 869-9177  
[www.stewardsofthecoastandredwoods.org](http://www.stewardsofthecoastandredwoods.org)

Russian RiverKeeper (707) 433-1958  
[www.russianriverkeeper.org](http://www.russianriverkeeper.org)

Forests Unlimited (707) 632-6070

To report water pollution, or find out about beach closures:

County Department of Environmental Health (707) 565-6565  
[www.sonoma-county.org/health/index.htm](http://www.sonoma-county.org/health/index.htm)

Regional Water Quality Control Board (707) 576-2220  
[www.waterboards.ca.gov/northcoast](http://www.waterboards.ca.gov/northcoast)

**Community Clean Water Institute (CCWI)** is a non-profit 501(c)(3) organization, based in Sebastopol, California. CCWI's mission is to protect water resources and public health by identifying sources of pollution through water testing programs, public outreach and education programs. Funding for the Lower Russian River Water Quality Monitoring Project has been provided in part through an Agreement with the State Water Resources Control Board (SWRCB) pursuant to the Costa-Machado Water Act of 2000 (Proposition 13) and any amendments thereto for the implementation of California's Nonpoint Source Pollution Control Program. The contents of this document do not necessarily reflect the views and policies of the SWRCB, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.