



Summary Report 2004

Community Clean Water Institute

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Thank you for your interest in the health of your watershed!

The data in this report was collected by:

Dennis Beall — Austin Creek
Tom Austin — Dutch Bill Creek
Steve Greek — Laguna De Santa Rosa
Bonnie Hogue — Santa Rosa Creek
Val Mulcaire and family — Mark West Creek
Doug Vincent, Lisa Vasse, Elizabeth Christie — Pocket Canyon Creek, Mid Russian River
Carol Sklar, Lucinda Dekker, Margaret Gerner, — Salmon Creek
Noel Bouck, Beth Trachtenberg, Bob Nelson, — Salmon Creek
Darlene Lamont — Salmon Creek
Phillip Gitchell, Randy Barron — Jenner Creek, Lower Russian River
Robert Feuer, John Pendergraft — Lower Russian River

and CCWI staff as part of Community Clean Water Institute's Citizen Monitoring Program. For more information, contact Community Clean Water Institute at (707) 824-4370, or info@ccwi.org

About Citizen Monitoring:

Citizen monitoring is monitoring of the environment by community volunteers interested in watershed protection. By monitoring local creeks and rivers, citizen monitors learn about their watershed, help pinpoint pollution sources, and identify widespread problems. The data can provide the information needed to develop restoration projects or pollution prevention measures.

Community Clean Water Institute (CCWI) is dedicated to promoting and protecting clean water and public health by identifying water pollution, advocating for sound water policies, and providing information to the public. CCWI works with citizen groups to develop and support citizen monitoring programs.

CCWI Permissions to Use Data:

The data in this report is intended to be used for informational and educational purposes. According to CCWI's Data Permissions Policy, Watershed Groups, Regulatory Agencies, and others interested in the protection of clean water are permitted to use data collected by CCWI under the following conditions:

- 1) All public use of data must be accompanied by the words, "This data was collected by Community Clean Water Institute. For more information, check www.ccwi.org."
- 2) Data may not be used for the purpose of litigation or lawsuits.

Site Descriptions:

Austin Creek

AUS030: Cazadero Bakery, Just upstream of large culvert

AUS020: Austin Creek Rd near second bridge

AUS010: First bridge, confluence with Russian River

Dutch Bill Creek

DBC060: East side of bridge near Graton Rd. and Main Street.

DBC050: 75 yards downstream from pump station off the Old Rd

LAN010: Lancel Creek– west side of culvert over old road

DBC030: Upstream, west corner of Camp Meeker Dam

DBC020: On Westminster Woods property at a recently placed root wad enhancement on the east bank several feet downstream of Grub Creek confluence

DBC010: Fish ladder west of Bohemian Highway

Laguna De Santa Rosa

LAG030: Near a permanent gage behind the Sebastopol Community Center

Santa Rosa Creek

SRC040: Off 3rd Street in downtown Santa Rosa. Behind the Vineyard Hotel just West of Highway 101 along the Prince George Greenway

Mark West Creek

MWC040: Near second intersection of Deerwood Drive and Hop Ranch Road, 1/4 mile downstream from bridge at Old Redwood Highway

Pocket Canyon Creek

PCC040: 50 feet upstream from bridge along Hwy 116 at May's Canyon Rd

PCC030: Near Hwy 116, across from Korbel field with zebras

PCC020: Near Hwy 116, downstream of Inn and the tank in the creek

Salmon Creek

TAN030: In Occidental, off Jennifer Lane near bridge

FAY040: Site off of Taylor Lane

SAL040: Salmon Creek School in front of the parking lot adjacent to Bohemian Hwy

SAL060: Salmon Creek at Bittner Rd at Mara Lane headwaters

WES010: Westwood Creek at Bittner Rd

THU030: Joy Woods Way off of Joy Road

Russian River

RUS049: Russian River at Johnson's Beach

RUS049A: Russian River at Odd Fellows

RUS040: Russian River at Monte Rio Beach

RUS030: Russian River at Ryan's Beach, near the mouth of Austin Creek

RUS010: Russian River near the boat house in Jenner

Jenner Creek

JEN020: Jenner Creek by the fish ladder

Statistical Analysis Definitions:

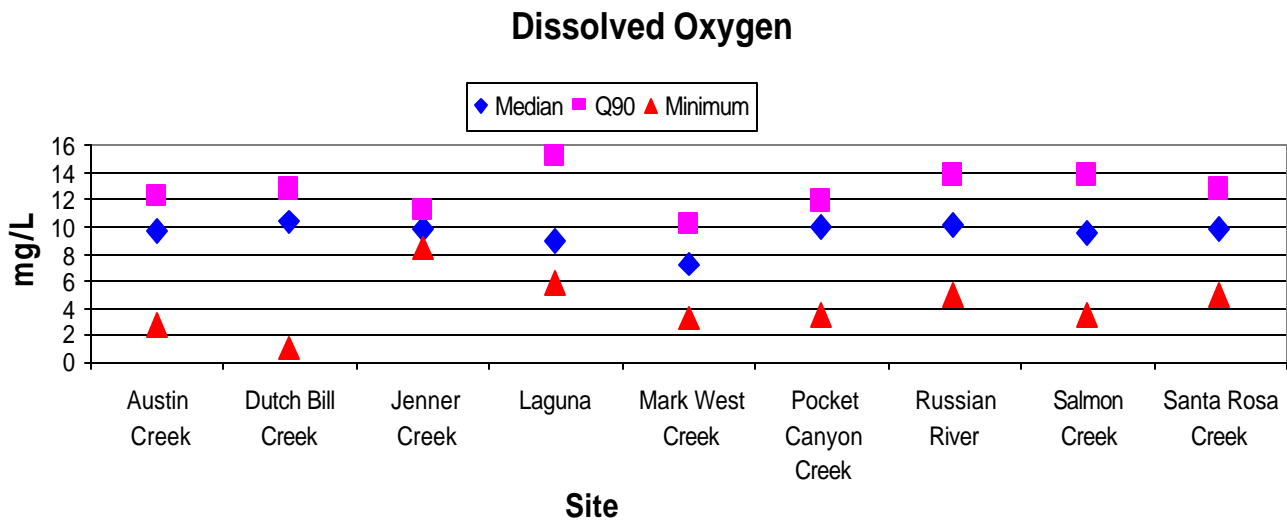
Outliers: anomalous values in the data, the unusually high or low numbers in a data set

Median: the middle of a distribution, half the data is above the median and half below. The median is used instead of the mean or average because it is less sensitive to outliers

Q90: the 90th percentile, means that 90% of the data falls below this number. The Q90 is used to eliminate the higher outliers

Minimum: the lowest number in the data set

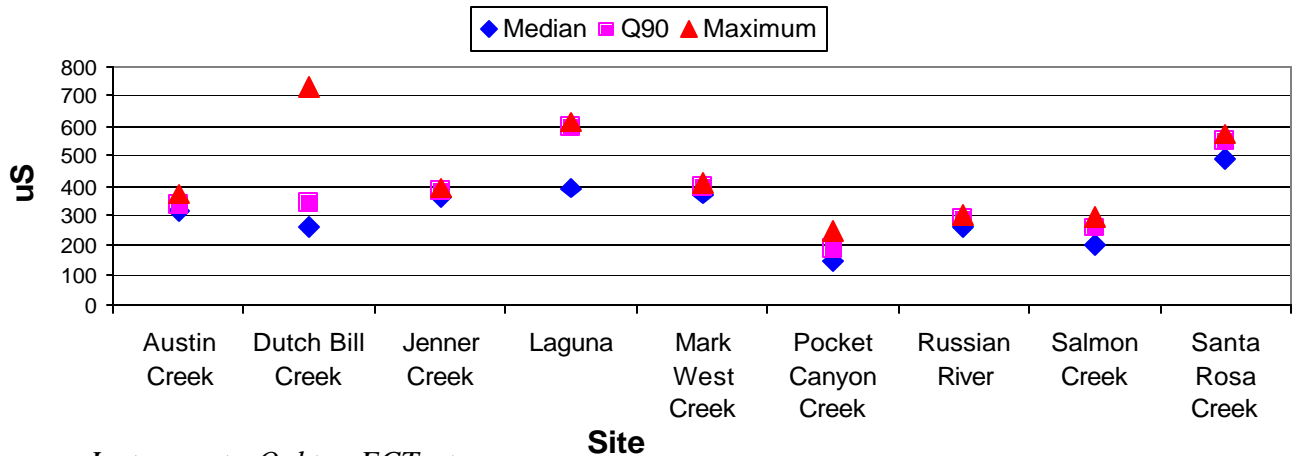
Maximum: the highest number in the data set



Instrument: ICM Portable Dissolved Oxygen Meter

Dutch Bill Creek had the highest dissolved oxygen with a median of 10.3 mg/L and Mark West Creek had the lowest with a median of 7.2 mg/L and a Q90 of 10.2 mg/L. Laguna De Santa Rosa had the highest Q90 of 15.1 mg/L. Although Dutch Bill Creek had the highest median dissolved oxygen level, it also had the lowest minimum concentration of only 1.1 mg/L. This is due to the fact that several of the Dutch Bill Creek sites dry up in the summer months

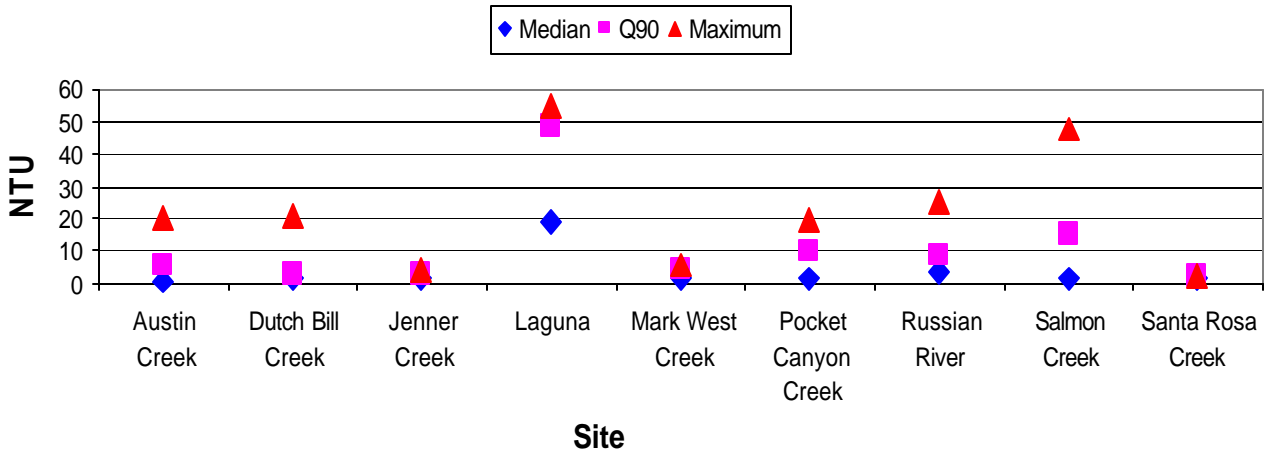
Conductivity



Instrument: Oakton ECTestr

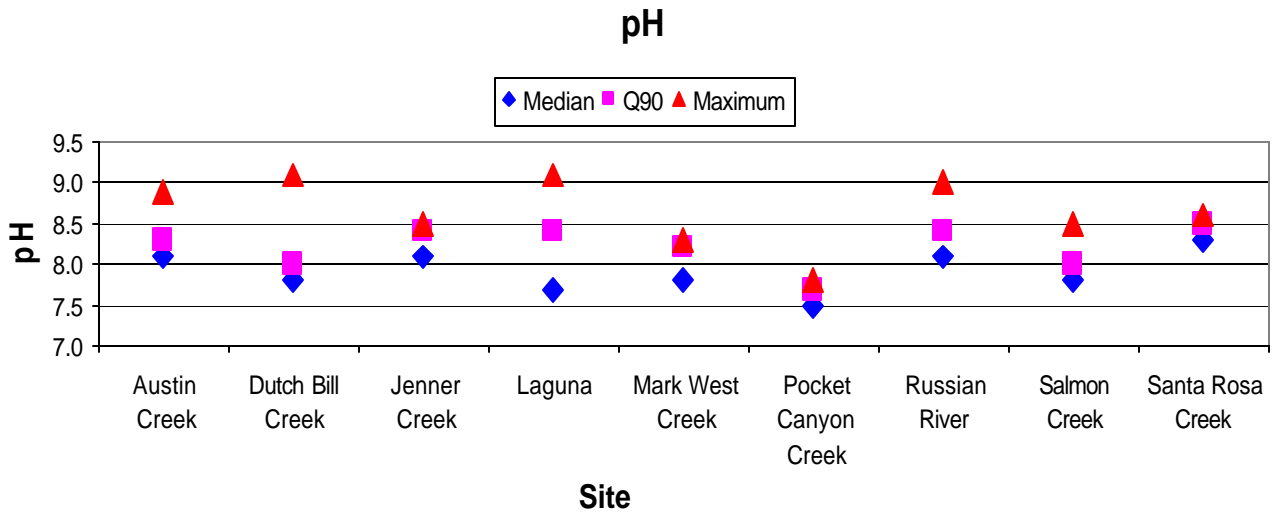
The highest conductivity was measured at Santa Rosa Creek with a median of 490 uS, but Laguna De Santa Rosa had a higher Q90 of nearly 600 uS. Pocket Canyon Creek had the lowest conductivity levels with a median of 140 uS and a Q90 of 190.

Turbidity



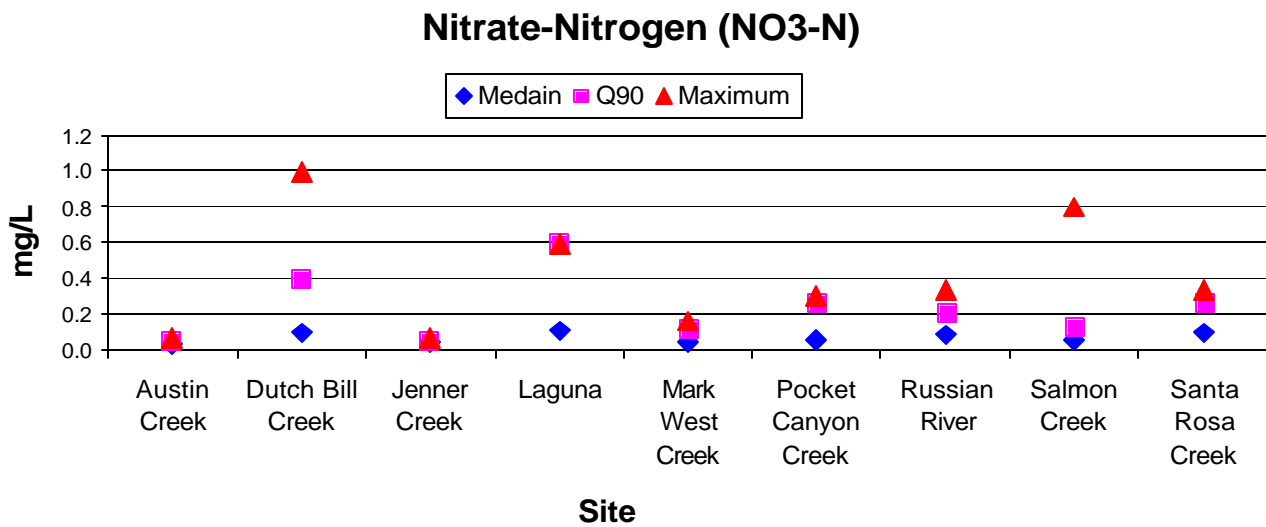
Instrument: Hach 2100P Turbidimeter

Laguna de Santa Rosa had the highest turbidity measurements with a median of 18.90 NTU and a maximum of 54.90 NTU. Salmon Creek also had a high maximum value of 48 NTU. The lowest measurements were at Austin Creek with a median of only 0.69 NTU.



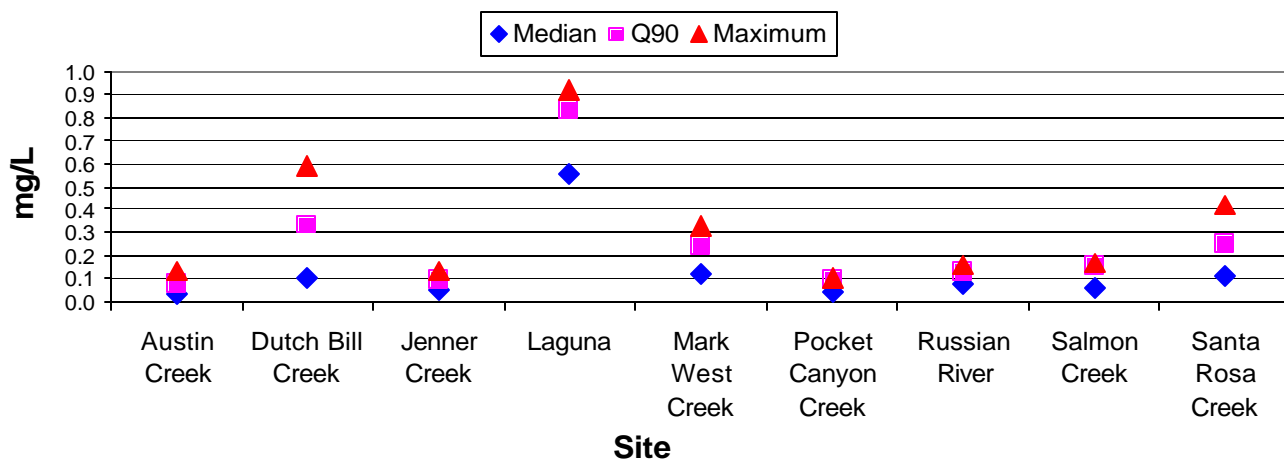
Instrument: Oakton double-junction pHTestr

The highest pH values were found at Santa Rosa Creek with a median of 8.3 and a Q90 of 8.5. Pocket Canyon Creek had the lowest pH with a median of 7.5 and a Q90 of 7.7. Dutch Bill Creek had a maximum pH of 9.1.



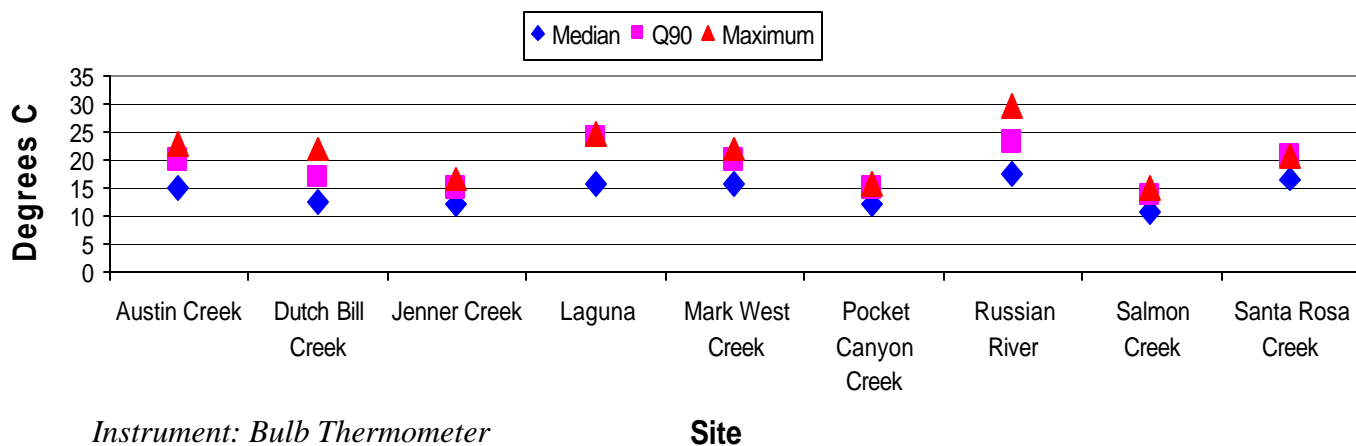
The Laguna De Santa Rosa is known for its high nutrient levels. It has the highest nitrate concentration with a median of 0.105 mg/L and a Q90 of 0.6 mg/L. Dutch Bill Creek also had high concentrations with a maximum of 1.0 mg/L. Austin Creek had the lowest concentrations with a median of only 0.03 mg/L and a Q90 of 0.05.

Phosphate-Phosphorus (PO4-P)



The Laguna De Santa Rosa had the highest phosphate concentrations with a median of 0.5544 mg/L and a max of 0.9132 mg/L. Austin Creek had the lowest concentrations with a median of 0.0326 mg/L and a max of 0.1305 mg/L.

Water Temperature



Instrument: Bulb Thermometer

The Russian River had the highest water temperature with a median of 17.5 degrees Celsius and a max of 29.5 degrees. Salmon Creek had the lowest temperature with a median of 11.0 degrees and a maximum of 15.0 degrees Celsius.