

Teri Jo Barber – Surface Water Hydrologist
DBA Ridge to River
Registered Professional Hydrologist PH# 00-H-1535
P.O. Box 229
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Curriculum Vitae

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Teri Jo Barber is the proprietor of Ridge to River Watershed Sciences, Restoration and Resource Management. Ms. Barber is a Registered Certified Professional Hydrologist PH# 00H-1535 with American Institute of Hydrology and a professional member of the International Erosion Control Association (#4484), Watershed Management Council, Trees Incorporated, and the Salmonid Restoration Federation of California. Ridge to River is a Small Business certified with California Office of Small Business and DVBE Certification, # 0028140.

Present Projects

After closing 2 large, multi-year projects in April, 2006, I am between large projects and am actively involved in 3 small projects (below) to be completed in May, 2006.

Prepare CEQA (California Environmental Quality Act) Initial Study for 2 water districts in Northern California to renew water right permits. Privately funded by Water Districts.

Prepare a restoration plan for trespass across State Park land in the course of neighboring timber harvest operations. Privately funded by Trust for Wildland Communities.

Prepare a water quality monitoring plan to assess effectiveness of river restoration project on Garcia River, Mendocino, California. Funded by State Water Resources Control Board through Bioengineering Associates, Mendocino County California.

Education

Masters of Science, Watershed Management
College of Natural Resources and Science
Humboldt State University
Arcata, CA 95521

Completed 12/97
GPA = 3.43

Bachelor of Science, Water Quality/Fisheries
College of Natural Resources and Science
Humboldt State University
Arcata, CA 95521

Completed 1990
GPA = 3.85

HSU Masters Thesis: Hetten and Tompkins Paired Watershed Study; Turbidity and Suspended Sediment Concentration from Paired Managed and Unmanaged Watersheds. 1997.

“Managed” Thompkins Creek experienced timber harvest with even and uneven-age silviculture on several units in the watershed upstream of the monitoring station. Results indicated that post-treatment turbidity and suspended sediment concentrations did increase beyond that predicted by the unmanaged basin and beyond error bands. This phenomena was attributed especially to “first flush”. The treatment effect dissipated into the error bands after 3 years post-treatment.

Ms. Barber participates annually in workshops, conferences, symposia. These forms of education aid in keeping current in state of the art science and restoration. Conference topics includes Water quality Monitoring, riparian ecosystems, bioengineering, hydrology (AIH), erosion control (IECA, CDF and Pacific Watershed Associates), and Salmon Restoration Federation.

Professional Goal: improve quality and availability of freshwater resources by working at watershed scale to balance human needs with fish and wildlife using scientific methods.

Completed Projects as Ridge to River: Hydrology, Fisheries, Watershed Restoration, Erosion Control

Establish 100-year flood elevation for Zone-A FEMA designated floodzone on Digger Creek, CA. for Mendocino County Building and Planning Department. April, 2006.

Forsythe Creek Watershed Assessment in the Russian River Watershed. Restoration Hydrologist managed Road Sediment Inventory Field Crew for 100 miles of road in the Forsythe Creek Watershed to identify active and potential controllable erosion and sedimentation to Russian River (TMDL for excessive sedimentation). Watershed Assessment managed by Bioengineering Associates funded by CDFG and Bureau of Indian Affairs through Mendocino County Resource Conservation District. Multi-year project completed March, 2006.

Turbidity Threshold Monitoring on 5 tributaries of the Garcia River. Constant Recording Instream Digital Turbidity Sensors and Pressure Transducers similar to Caspar Creek project by USFS Redwood Sciences Lab. Garcia River has a TMDL for excessive sedimentation. Project funded through Mendocino County Resource Conservation District by California Department of Forestry and the California State Water Resources Control Board. Multi-year project 2003-2005. Initial Draft report completed January, 2006. Final Report to CDF to be completed in May, 2006.

Road Sediment Inventory on private vineyards, ranchlands, and rural subdivision, Mendocino County, California. 14 miles of road inventoried, stream crossings evaluated for fish passage via longitudinal and cross-section surveying. Funded by California Coastal Conservancy. 2005.

Streambank stabilization and revegetation bioengineering project on Robinson Creek near Anderson Creek confluence in Boonville, Ca. Mendocino County RCD funded by DWR Urban Streams program. Included pre-and post treatment channel cross-section and longitudinal profiles, recontouring of streambanks, and construction of live willow siltation baffles, rock toe trench with willow poles, floodplain creation and revegetation. 2004.

100-year culvert and channel designs and installations on Indian Creek diverted tributary, tributary to Navarro River at Philo, + other similar stream crossing designs for other creeks. Private and government funded 2004, 2005.

Lake Hennessey Erosion Control and Rehabilitation Plan for Washwater Creek and two unnamed tributaries confluencing at drinking water sludge storage site. City of Napa. 2003
Sanitary Survey for Municipal Water Suppliers as required by California Department of Health Services (AWWA outline): Yountville Veterans Home (2003), Elk County Water District (2003), Westport County Water District (1997).

Project Manager for Bluewaterhole Creek Sediment Reduction Project. Rehabilitating 10 miles of road adjacent to Bluewaterhole Creek, a Garcia River tributary. Through Mendocino County Resource Conservation District, with funding by Northcoast Regional Water Quality Control Board. 2003.

Forest and Ranch Roads Video and DVD Project A guide to rehabilitating wildland roads for the benefit of fish, humans, and water quality a joint project with Pacific Watershed Associates (PWA) through Mendocino County Resource Conservation District funded by California Department of Forestry and Fire Protection. 2003 (video), 2005 (DVD).

Watershed Assessment for Little River (Mendocino County). DFG funded. 2002.

Road and Sediment Inventories for road based erosion control in rivers hosting salmonids: Mendocino Woodlands 2003; Big River Haul Road 2002 (California State Parks), Broadus Creek 2003 (private property with California Department of Fish and Game), Little River Mendocino County 2002 (for DFG and State Parks)

Point Cabrillo Bioengineered Gully Erosion Control and Revegetation. 2002, + other gully repairs.

Large Woody Debris and diverted stream re-connections in Wages Creek. 2001

Work Experience as an Employee

Hydrological Technician (Mike Furniss and Dr. Robert Ziemer) 1992-1996
USFS Region 5 Pacific Southwest Research Station aka Redwood Sciences Lab
Bayview Drive
Arcata, CA

Analyzed and interpreted suspended sediment, turbidity, and streamflow data in two mountain streams comparing modern timber harvest practice and resulting freshwater impact.

Fisheries Biologist (Supervisor Nan Ober-Reck) 1991-1992
USFS Lower Trinity Ranger District
Willow Creek, CA

Population estimate of Rainbow Trout in Grouse Creek, tributary to S. Fork Trinity River
Temperature Study on Willow Creek, tributary to Trinity River. Monitoring habitat enhancement structures at Horse Linto Creek, Spawning surveys, Direct observation of juvenile salmonids

Fisheries Biologist (Supervisors Gary Peterson, Jack Monschke) 1991
Jack Monschke Watershed Management
Point Arena, CA

Population Estimation of juvenile salmonids, Direct Observation and tally, Garcia River

Fisheries Biologist (Supervisor David Simpson) 1990-1991
Mattole Restoration Council Salmon Support Group
Petrolia, CA

Fish use study of lower 8 miles of Mattole River for California Coastal Conservancy including population estimates by direct observation, habitat typing, and photo documentation

Biological Technician (Supervisor Angela Dillingham) 1989-1990
USFS Chetco Ranger Station
Brookings, OR

Remote habitat typing and direct observation of juvenile salmonids, report writing

Planter (Supervisor George Waller) 1988-1991
Wetland Management Systems
McKinleyville, CA

Application and Installation of Wetland Plants (bulrush, willow, sedge) to Wastewater Treatment Applications. Duties included planting the marsh, Ecological Interpretation, and Landscape Design

Volunteer Activities

Member Navaro By-the-Sea Center for River and Estuarine Research 2002-present
Watershed Restoration Project Leader, SRF and Coho Confab, Jug Handle Farm 2002 and 2003
Release of juvenile Coho and King salmon into Wages Creek and Mattole River, respectively
Tree planting.

Chair Person of Westport School Site Council

Secretary of Salmon Restoration Association in Fort Bragg, Ca (1997-1999)

Secretary of Mattole Restoration Council Salmon Support Group (1991-1992)

Director of Salmonid Restoration Federation of California (2000-2002)

Program Co-Director HSU Campus Center for Appropriate Technology (1988-1989)

Completed Manuscripts, Projects, and Relevant Papers

- Erosion Control and Habitat Restoration Plan for Lake Hennessey. 2003. City of Napa. Napa, Ca.
- Sanitary Survey of the Rector Creek Watershed. 2003. Water quality survey for Elk, California as municipal water supply. Prepared for Department of Veterans Affairs for Veterans Home of California. Yountville, Ca.
- Erosion Prevention Plan for Mendocino Woodlands. 2003. California State Parks
- Big River Haul Road Road based Sediment Source Inventory. 2002. Mendocino Land Trust
- Watershed Analysis of Little River. 2002. Mendocino California. For California Department of Fish and Game.
- Sanitary Survey of Greenwood Creek. 2002. Water quality survey for Elk, California as municipal water supply. Prepared for the Elk County Water District.
- 50-year flood estimation for Little River, Mendocino County. For Van Damme State Park, Mendocino California.
- Garcia River Instream Monitoring Project, Co-authored with Michael Maahs. 2000. California Department of Forestry and Fire Protection Monitoring Subcommittee
- Hetten and Tompkins Creeks Paired Catchment Study: Modern U.S. Forest Service Timber Harvest Effects on Suspended Sediment and Turbidity. 1997. Masters Thesis Humboldt State University, Arcata CA.
- Sanitary Survey of Wages Creek. 1997. Documenting water quality in municipal water supply for the community of Westport, California. Prepared for California Department of Health Services and Westport County Water District.
- "Hetten and Tompkins Paired Watershed Study; Turbidity and Suspended Sediment Concentration from Paired Managed and Unmanaged Watersheds". 1996. Published in Watershed Management Council Newsletter, Summer, 1996.
- Symposium on Riparian Form and Function, Co-producer. 1994. Coordinated presentations, advertisements, and Hosted all-day event at Humboldt State University with presentations by Researchers, Professors, Private Industry Representatives, and Independent Contractors.
- A Sediment Budget for The Coyote Creek Basin, Humboldt County, California . 1993. Co-written with T. Gamron, F. Levitan, W. Lydgate, and W. Smith for Redwood National Park.
- "Water Temperatures and Effects on Anadromous Salmonids in Willow Creek, Tributary to Trinity River". 1993. Lower Trinity Ranger District, Willow Creek, CA.
- Lower Mattole River and Estuary: Photo-documentary and Habitat Typing with anadromous fish population estimates. 1991. Mattole Restoration Council and California Coastal Conservancy.

References

Dr. Bill Trush, advisor (707) 826-7794
McBain and Trush Consultants
P.O. Box 663
Arcata, CA 95521

Tom Schott (707) 468-9223 X3
Mendocino County Res. Cons. District
USDA Natural Resources Svc
405 S. Orchard Ave
Ukiah, CA 95482

Renee Pasquinelli (707) 937-5804
California State Parks System
P.O. Box 440
Mendocino CA 95460

Pete Cafferata – Hydrologist (916) 653-9455
California Department of Forestry and Fire Protection
Sacramento, CA

Patty Madigan
Navarro River Project Manager
Mendocino County Resource Conservation District
405 S. Orchard Avenue
Ukiah, CA 95482
(707) 937-3082

Evan Engber (707) 984-8333
Bioengineering Associates
PO Box 1355
Laytonville, CA 95454

Guy Schott, P.E. (707)576-2732
State Health Department
Drinking Water Operations
50 D Street, Suite 200
Santa Rosa, CA 95404

Charlie Acker (707) 877-3274
Water Operations Mgr.
Elk County Water District
Elk, CA

Mike Furniss -Hydrologist
US Forest Service
3200 Jefferson Way
Corvallis, Oregon 97331

Teri J. Barber

**List of Completed College Coursework - Humboldt State University
in Arcata, California**

BS in Water Quality 1990, College of Natural Resources GPA 3.85

MS in Watershed Management 1997 GPA 3.43

Biological Sciences total units = 20

General Biology

General Botany

General Zoology

General Ecology

Aquatic Plants

Freshwater Aquatic Invertebrates

Chemistry total units = 16

General Chemistry

General Chemistry II

Organic Chemistry

Biochemical Toxicology

Environmental Resources Engineering total units = 10

Water Quality

Water Quality Analysis

Whole Earth Engineering

Environmental Health

Fisheries total units = 14

Limnology

Water Pollution Biology

Directed Study

Wastewater Reuse Systems

Ecology of Freshwater Fishes

Coastal Stream Management

Limnology of Flowing Waters

Geology total units = 13

General Geology

Hydrology

Geomorphology

Sediment Budgets

Natural Resources total units = 20

Conservation

Introduction to Soils

Public Land Management

Biometry

Symposium on Riparian Ecology

Water Law

General Oceanography

Mathematics total units = 15

Calculus I

Calculus II

Biostatistics

Sampling Theory

Miscellaneous Coursework in addition to General Education

North American Water Resources

Introduction to Computer Science

Thesis units