

State of California
Regional Water Quality Control Board
North Coast Region

Bernadette Reed
January 27, 2011

EXECUTIVE OFFICER'S SUMMARY REPORT
8:30 A.M., Thursday, January 27, 2011
Regional Water Quality Control Board
David C. Joseph Hearing Room
5550 Skylane Blvd., Ste. A
Santa Rosa, CA 95403

Item: 14

Subject: Update on Salmon Creek Watershed Habitat Rehabilitation

Presented by: Lisa Hulette, Executive Director
Gold Ridge Resource Conservation District

John Green, Lead Scientist,
Gold Ridge Resource Conservation District

Liz Prunuske,
Founding Principal, Prunuske Chatham, Inc

Joe Pecharich
Fisheries Biologist, National Oceanic and Atmospheric
Administration Restoration Center, Region 1

Background

About the Presenters:

Established in 1941, the Gold Ridge Resource Conservation District (GRRCD) has been a pioneer in promoting stewardship of the natural resources of western Sonoma County for the past 63 years. Since its establishment, GRRCD has been providing educational, technical, and funding support to landowners in the following watersheds: Salmon Creek, Estero Americano, Dutch Bill Creek, Atascadero Creek, Green Valley Creek, Laguna de Santa Rosa, Willow Creek, and other associated tributaries to the Russian River. The RCD was been awarded the Environmental Protection Agency's (EPA) 2009 Environmental Achievement Award. This is in large measure due to the successful implementation of conservation and resource protection projects such as the one proposed. Similarly, GRRCD is the recipient of the 2008 National Association of Conservation District's (NACD) award for Successful Collaborative Partnerships for the entire Pacific Region of the United States.

Lisa Hulette is the current Executive Director of GRRCD and has been in that position since 2003. Lisa' past experience includes working for the North Coast Regional Water Quality Control Board as an Environmental Scientist III in both the Timber and Non-Point Source Units and was the lead staff in charge of drafting the implementation for the Garcia River TMDL.

John Green is Lead Scientist and Project Manager with GRRCD, and is managing the implementation of the Save Our Salmon program. He holds a Master of Science degree in Fluvial Geomorphology from the University of Oregon, and has extensive experience in salmonid habitat protection and restoration. He previously worked as a Senior Geomorphologist with Pacific Watershed Associates, and headed PWA's San Francisco Bay Area office. He lives in the Dutch Bill Creek watershed in western Sonoma County.

Prunuske Chatham Inc., (PCI) performed much of the planning, final field design and specifications, and parts of the construction associated with the Save Our Salmon program. PCI is an environmental design, planning, and construction firm with a strong focus on finding ways for people to live and work well as responsible participants of their local ecosystems.

The Salmon Creek Watershed

Background

The Salmon Creek Watershed covers approximately 35.3 square miles in coastal Sonoma County and is a salmonid-bearing stream that drains to the Pacific Ocean immediately north of the Bodega Marine Life Refuge Critical Coastal Area (CCA). Salmon Creek has 6 major north-south trending tributaries: Finley, Fay, Tannery, Nolan, Thurston, and Coleman Valley Creeks. The watershed also contains 17 unnamed, smaller tributaries. From its highest point at 797 feet, the mainstem of Salmon Creek runs south through Occidental and makes a westerly curve near Freestone before reaching the ocean 3 miles north of Bodega Bay. The watershed's terrain is characterized by steep topography and soils that are highly erosive and sensitive to disturbance. Vegetation occurring in the watershed is a combination of deciduous and mixed coniferous forests and grasslands.

The Salmon Creek Watershed is almost completely privately owned (95%). Primary land uses include rangeland, viticulture, timber, rural residential, and urban. Current and historic land-use activities have degraded the natural environment, impaired water quality and aquatic habitat, and increased the rate and amount of sedimentation. The watershed once had a thriving anadromous fish population, vibrant stands of vegetation, and exceptional water quality. The precipitous decline in salmonid populations in the watershed has all but decimated the local fishery, once a key local industry. Although Salmon Creek is not on the federal Clean Water Act §303(d) list of impaired waterbodies, it is an important Coho salmon (*Oncorhynchus kisutch*) and steelhead trout (*Onchorhynchus mykiss*) stream. The SWRCB's Watershed Management Initiative (WMI) states that "concerns have been raised by the public regarding

increased sedimentation, water temperature, nutrients, and salmonid habitat” in Salmon Creek. However, the California Department of Fish and Game (CDFG) considers Salmon Creek a fully restorable salmonid stream (CDFG 2004d). In both December 2008 and 2009, CDFG reintroduced approximately 500 adult coho salmon into the creek as part of their broodstock program.

The Save Our Salmon (SOS) – Salmon Creek Habitat Rehabilitation Program

Although their range once stretched inland along more than 250 miles of California’s central coast, Coho salmon (*Oncorhynchus kisutch*) are on the brink of extinction, with only a few central coast watersheds now supporting more than remnant populations. The decline of the central coast Coho has resulted in their listing as endangered under both the California and Federal Endangered Species Acts.

In an effort to aid the recovery of Coho populations by improving spawning and rearing habitat conditions, the Gold Ridge Resource Conservation District (GRRCD) and our partners – Prunuske Chatham, Inc. and Dragon Fly Stream Enhancement – have focused restoration efforts on the Salmon Creek watershed, near Bodega, CA. Salmon Creek supports a fledgling Coho salmon population, and is protected as part of the Sonoma Coast State Marine Conservation Area.

With funding provided by NOAA Fisheries through the American Recovery and Reinvestment Act of 2009, GRRCD implemented Phase I of the Save Our Salmon program – a suite of projects with the goal of attaining self-sustaining Coho populations in the Salmon Creek watershed. Restoration efforts are focused on four key habitat factors:

1. Enhancement of riparian vegetation
2. Installation of large in stream wood structures
3. Stream flow augmentation,
4. Reduction of fine sediment.

SOS provides both short and long-term economic benefits to the community of Bodega. In addition to providing employment for local restoration and construction professionals, the program will support the local agricultural economy by providing drought relief for some agricultural operations. It demonstrates sound practices for water conservation and management, helping local ranchers, growers, and dairy operators stay in business. And in the long run, restoration of the Coho will help to revive the local fishery, which has been decimated by the collapse of salmon populations.

PRELIMINARY STAFF

RECOMMENDATION: This is an informational item only.