Wood for Salmon Working Group Meeting Summary

Date: January 21, 2016

Location: North Coast Regional Water Quality Control Board, Santa Rosa, CA

Attendees: Jonathan Warmerdam, NCRWQCB

Dave Wright, TNC

Joe Pecharich, NOAA RC Cheryl Hayhurst, CGS Wes Stokes, DFW

Emily Lang, Lyme Redwood Forest Co.

Lisa Bolton, TU

John Green, Gold Ridge RCD

Cliff Harvey, SWRCB Allan Renger, DFW Erik Schmidt, SusCon Erika Lovejoy, SusCon

Tasha McKee, Sanctuary Forest

Brad Valentine, DFW (RA) Ryan Bey, NCRWQCB Brett Leonard, CCC Cathy Barr, CCC John Button, CCC Alan Ader, CCC

Pete Cafferata, CAL FIRE

Participating by Conference Line:

Kevin Shaffer, DFW Anna Halligan, TU Scott Monday, DFW Trevor Tollefson, DFW

Agenda Items

This Wood for Salmon Working Group (WFSWG) meeting focused on the following topics: (1) wood and fisheries restoration-related announcements; (2) a summary of WFSWG accomplishments from 2010 to the present; (3) the Mendocino Coast Large Wood Augmentation Grant, and (4) a presentation on groundwater recharge and habitat restoration in the Mattole River watershed.

Action items are shown in BOLD font

1. Wood and Fisheries Restoration-Related Announcements

 Cliff Harvey provided a brief update on the proposed revision of the 2012 Small Habitat Restoration Project General Order for Section 401 Water Quality Certification. SWRCB staff has conducted extensive outreach to stakeholders statewide since June 2015 for the revision and many comments have been received. They are working with DFW and Regional Board staff to incorporate their comments in the new SHRP general order. While most people are using the permit on the North Coast, the revision will be made workable for the entire state. When that step is completed, the draft will be made available for public comment, which will be accepted for 45 days. WFSWG participants will be informed as soon as the public draft is released. Questions should be sent to Cliff; letters of support are welcome. Training and guidance will be provided when the final version is approved.

- Kevin Shaffer gave the WFSWG a short update on where DFW staff is on revising the California Salmonid Stream Habitat Restoration Manual (http://www.dfg.ca.gov/fish/Resources/HabitatManual.asp). He stated that a small DFW team has begun revision work. The document will be structurally different than in the past, organized by major themes. The first chapter being developed will address instream restoration, including how to evaluate feasibility and risk for projects. The goal is to have a draft chapter for internal DFW review by April 2016. This will be followed by co-manager review, a scientific review, and finally CEQA review (agency and public review). Gary Flosi is the lead for the first chapter, with assistance from Trevor Tollefson, Margaret Paul, Marjorie Caisley, and Mark Smelser. Once the first chapter is in review, the second chapter will be started, and so forth. Large wood enhancement projects will be included in the instream restoration chapter. Sean Gallagher will lead a second group addressing instream habitat monitoring. Assisting this effort will be Michael Lacy, Kevin Shaffer, and likely other co-authors.
- Emily Lang updated the group on the Pudding Creek BACI large wood experiment. Campbell/Hawthorn sold their timberlands in western Mendocino County in January to Lyme Redwood Forest Company, including the Pudding Creek watershed. Emily stated that Lyme Redwood will continue the BACI study in a similar manner, but that there could be small changes. There are three years of pre-project data, prior to large wood entry during the summer of 2015 (treating 7.5 mi of stream channel at 200 sites). Trout Unlimited funds from an FRGP grant are available for post project monitoring through 2017, but a 3-4 month gap exists before the next funding cycle.
- Dave Wright, Emily Lang, and Allan Renger reported on preliminary coho salmon spawner numbers for the winter of 2015-16. This included 595 fish at the SF Noyo River Egg Collection Station (highest number since hatchery production stopped), the highest number of coho in Caspar Creek in five years, approximately 100-150 fish in Pudding Creek, and good numbers in the Ten Mile River watershed (actual numbers were difficult to determine with high streamflows). MRC staff has also found coho spawners in the SF Garcia River watershed. Adult fish have been able to travel high up into the watersheds, fully seeding these systems.

Erika Lovejoy and Erik Schmidt provided an update on AB 2193—Habitat Restoration and Enhancement Act, sponsored by Sustainable Conservation. It was signed into law in September 2014, became effective in January 2015, and allows a simplified and expedited DFW permitting process for small restoration projects. There are two pathways available for project proponents: (1) no SWRCB 401 Certification (60 day approval); and (2) SWRCB 401 Certification obtained (streamlined review—covers LSAA and CESA; review in 30 days). Erika reported that DFW staff is working hard to implement the Act (see: https://www.wildlife.ca.gov/Conservation/Environmental-Review/HRE-Act). Five applications were received in 2015 and four were approved, all using the 60 day approval process. DFW and SusCon staff is anticipating several more applications in 2016. SusCon has been reaching out to potential applicants, encouraging them to use this pathway. Their website provides considerable assistance, including an application guidance/FAQ document (see: http://suscon.org/acceleratingrestoration/HREAct.php). They recommend that project proponents pre-consult with DFW regional staff prior to submitting an application. SusCon staff is providing a number of presentations on streamlined permitting through AB 2193 at conferences, including an upcoming presentation to the California Coastal Conservancy on March 28th (webinar slots are available).

2. Summary of WFSWG Accomplishments from 2010 to the Present

Jonathan Warmerdam provided a PowerPoint presentation summarizing WFSWG accomplishments from 2010 to the present. He began by providing background information on legacy logging and stream clearance work that occurred on the North Coast, and its implications for large wood loading. Anadromous salmonid recovery plan strategies emphasize the need for increased wood in coastal streams and the benefits of large wood in these types of channels is well documented. In late 2009, Bill Snyder, then Deputy Director for CAL FIRE, Jonathan Ambrose, NMFS, and other agency representatives recognized that complex permitting requirements from multiple agencies were greatly hindering wood enhancement projects in California. To improve this situation, NMFS, CAL FIRE, DFW, NCRWQCB, CGS, and USACE formed an ad hoc committee in 2010 to address this problem. Several NGOs, non-profits, and consultants rapidly joined the effort.

The WFSWG has had several accomplishments over its six year history, including development of a mission statement along with seven specific objectives. A multiagency signatory letter was written in April 2011 to the Director of DFW to reduce the 1600 fee schedule for large wood and other habitat improvement projects, expand the LSAA project definition, and develop a new permitting mechanism for restoration projects. Guidance documents have been written for understanding the permitting process, and large wood project development tools have been produced (e.g., project size calculator). The Nature Conservancy has hosted a website for WFSWG meeting notes, PowerPoints, references, reports, tools, videos, and other types of information related to wood placement; **Dave Wright will look into updating this site**:

https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/United States/california/salmon/woodforsalmon/Pages/default.aspx).

Other accomplishments have been made as well. Numerous presentations have been provided to agencies and Boards (e.g., CRT, BOF, NOAA, SRF) to provide information on the WFSWG and the products it has produced. A draft consolidated permitting document was developed for improved efficiency, synchronizing permitting needs from multiple agencies into one form. While that process never gained final approval, the Coho HELP Act and the Habitat Restoration and Enhancement Act have been enacted that have partially addressed this need. These new restoration pathways have been supported by the WFSWG, as has the Mendocino County RCD permit coordination process and use of the CAL FIRE/BOF ASP Section V forest practice rule (e.g. Mill-Smith THP). Funding assistance and guidance to project proponents has also been provided. In summary, this group has been an important venue for collaboration and information sharing; important progress has been made since 2010; and these efforts for improved restoration opportunities will continue in the future.

3. The Mendocino Coast Large Wood Augmentation Grant

Lisa Bolton provided a PowerPoint presentation on the Trout Unlimited Mendocino Coast Hydrologic Unit Large Wood Augmentation Grant, which totals \$569,005. Funds were obtained from the 2016 Timber Regulation and Forest Restoration Fund (TRFRF), through a grant from the SWRCB, with a three year term. Jonathan Warmerdam will be the grant manager for the project on behalf of the North Coast Water Board. There are 552 miles of coho streams in the Mendocino Coast Hydrologic Unit, with 406 miles presenting an opportunity for large wood augmentation on private lands (State Parks and JDSF will also be considered). Lisa explained the 11 main grant tasks: (1) TU grant management and administration, (2) kickoff meeting, (3) creation of an abbreviated compilation of existing recovery and habitat documents, (4) formation of a Technical Advisory Committee (TAC), (5) development of a Large Wood Technical Restoration Field School (2 days in fall 2017), (6) holding stakeholder meetings, (7) completing environmental compliance and permitting for wood projects selected (MCRCD coordinated permit process to be used), (8) pre-implementation data collection on a subset of selected projects (long profiles, etc.), (9) large wood augmentation implementation (2 projects in 2017, at least 3 in 2018), (10) post-implementation data collection on a subset of selected projects, and (11) final report and invoice preparation. Lisa also showed a video of steelhead spawning in Ryan Slough draining into Humboldt Bay.

4. Groundwater Recharge and Habitat Restoration in the Mattole River Watershed

Tasha McKee, Sanctuary Forest, delivered a PowerPoint presentation on a groundwater recharge and habitat restoration project located in the Mattole River watershed. She began by stating that coho salmon are only found upstream of Whitethorn in the Mattole River where water temperatures are sufficiently low. Legacy land use practices were explained as being responsible for reduced summer base flows

and entrenched stream channels disconnected from historic floodplains. The goal of the current projects is to reconnect the channel to the floodplain, with lessons learned from numerous sources (johads of Rajasthan, India; beaver ponds in the PNW; historic Mattole instream ponds). These examples all illustrate the concept of using surface water in a pond to raise the local water table, storing water in the ground. Considerable data exist that beaver dams can change intermittent streams into perennial streams.

The Baker Creek project in the Mattole River watershed is a collaborate project between the BLM, Sanctuary Forest, Mattole Salmon Group, USFWS, and NOAA Fisheries Northwest Fisheries Science Center. Baker Creek is a coho stream located in the headwaters of the Mattole basin on BLM ownership. The project is based on a "beaver dam analogue", and uses large wood to restore channel and floodplain functions, increasing sediment retention and groundwater storage. The basic concept is that channel spanning logs can retain upstream surface water and increase groundwater storage, similar to beaver ponds. The project had three main goals: (1) to create more winter habitat by raising the streambed to connect flows with the floodplain and off-channel habitat, (2) to create more instream pool habitat by promoting gravel and wood accumulation to create pools, and (3) to increase late summer stream flow by raising groundwater levels.

Michael Pollock, NOAA Fisheries, designed the project using 2 ft x 24 ft log weirs with fish passage to create a series of 17 log step pools/check dams spanning 1300 feet of Baker Creek. In 2012, logs were trenched into the stream banks 10 ft and anchored with boulders. The goal was to increase gravel storage behind the check dams, raising both the stream bed and water surface elevation. The hypothesis was that a maximum of four million gallons of groundwater storage (and 23 gpm average over 120 days) could be added with this project, but in actuality only approximately one million gallons of storage is estimated to have occurred due to greater bedrock in the valley bottom than was anticipated. The coho salmon response has been good, however, with six coho redds observed in 2015/2016. Coho had not spawned here in 10 years prior to 2012, but they have returned every year since the project was constructed, except in 2013 during drought conditions. More details and photos of the project are available on these websites: http://sonomalandtrust.org/pdf/forest-

conference/Managing_for_Aquatic_Resources_McKee.pdf http://www.sanctuaryforest.org/wp-content/uploads/2014/12/The-Baker-Creek-Project.pdf

A newer pilot project upslope of the groundwater recharge site on an alluvial terrace is also being planned. This project will consist of five ponds with a capacity of 2.8 million gallons of water. Ponds are designed to be approximately 100 ft wide x 200 ft long. The plan is to use the AB 2193 30 day permitting process (with SWRCB 401 Certification obtained).

Tasha finished her presentation by listing challenges and opportunities facing Mattole River watershed headwater coho recovery projects. Challenges include lack of funding, permitting, and designing projects for both summer flow and winter habitat.

Opportunities include restoring natural stream functions needed to prevent extirpation, a high likelihood of success, and using a collaborative design process. She stated that obstacles in 2016 include (1) funding for innovative projects, and (2) cost sharing for project development, monitoring, and engineering.

Next WFSWG Meeting Date

The next WFSWG meeting was tentatively planned for March or April. Pete Cafferata will send out a Doodle poll with possible dates.