

## **Wood for Salmon Workgroup Field Meeting Summary**

**Date:** March 20, 2015

**Location:** Jackson Demonstration State Forest and Hawthorne Timberlands, managed by Campbell Global, LLC

On March 19, 2015, the California Department of Fish and Wildlife and The Nature Conservancy hosted a one-day workshop in Caspar at the Jughandle Creek Nature Center to provide an overview of the permitting process for restoration projects that qualify for the DFW's Coho HELP Act. The following day on March 20<sup>th</sup>, a field tour of existing large wood augmentation projects took place in the Fort Bragg area that was hosted by Trout Unlimited, Campbell Global, Jackson Demonstration State Forest, and Christopher Blencowe and Associates.

Members from the Wood for Salmon Working Group (WFSWG) presented information during the workshop relative to the state and federal permitting requirements and available guidance and tools. The tour on March 20<sup>th</sup> served as a field meeting of the Wood for Salmon Working Group. Our next WFSWG office meeting will take place sometime in the Spring of 2015. Approximately 40 people attended the indoor workshop and 25 participated in the field tour. Brief descriptions and photos of the four field stops are provided below.

### **Stop 1. 2010 Kass Creek Accelerated Recruitment Instream Wood Project**

Salmon Restoration Association (SRA) and FRGP grant funds were used to install unanchored wood along 2.6 miles of Kass Creek, a tributary of the South Fork Noyo River owned by Hawthorne Timber Company and managed by Campbell Global, LLC. Lisa Bolton, Chris Blencowe, and Dave Wright explained how a failing log stringer bridge was replaced as part of this project, as well as the wood placement work (140 pieces at 60 sites). Total cost of the project, including the value of the logs, was \$225,000 (\$175,000 without the log value). Migratory bird limitations and windows for large wood work were discussed at this site. Partners for this project included Hawthorne Timberlands, Campbell Global, Trout Unlimited, DFW, and Blencowe Watershed Management (Figures 1, 2, and 3).

### **Stop 2. 2013 SF Noyo River Accelerated Recruitment Instream Wood Project**

Much larger wood was required for the South Fork Noyo River installations observed on Jackson Demonstration State Forest, due to the wide bankfull channel width and high streampower present (Figures 4 and 5). Soft anchoring was used, wedging trees felled between standing trees. Work was completed in October 2013; 95 pieces were placed in the channel at 52 sites spanning three miles. Approximately two-thirds of the wood pieces were directly felled in the channel; other pieces were salvaged logs or rootwads. FRGP, JDSF, and NOAA funded the project, with an operating cost of \$122,000 (total cost \$140,000). A recent steelhead redd was observed just upstream from the structure shown in Figures 4 and 5. Partners for this project included JDSF, Trout Unlimited, DFW, and Blencowe Watershed Management.

### **Stop 3. 2012 NFSF Noyo River Large Wood Project with Traditional Anchoring**

The first two stops were contrasted with the next field site along the North Fork of the South Fork Noyo River, where California Conservation Corps (CCC) crews installed mostly anchored wood structures in 2012 along a 3000 foot reach on JDSF. A culvert and two bridges are located downstream, necessitating a largely anchored approach. A total of 72 sites have been located, with approximately 135 pieces of wood to be installed by hand labor (e.g., grip hoists, blocks). Currently, the CCC crews have completed roughly 80% of the sites. The large wood sites observed (Figures 6, 7, 8, 9, and 10) are performing well, changing the channel configuration, adding complexity, and collecting a considerable amount of floating wood. Partners for this project include JDSF, CCC, and DFW.

### **Stop 4. 1996 Parlin Creek Unanchored Instream Large Wood Pilot Project**

The last field stop was along Parlin Creek on JDSF, the site of a pilot project for unanchored large wood. Unanchored wood was installed by Anderson Logging, Inc. as part of a JDSF timber sale agreement in 1996 for \$5000. Wood was placed along 2.5 miles of the channel approximately 19 years ago. Considerable improvement in channel conditions were observed and discussed (Figures 11, 12, and 13). The wood structures have produced a dynamic system—bank cutting has led to additional large recruitment (Figure 12). Barry Collins, DFW (retired) documented initial monitoring results in a detailed report produced in 2000. Barry found that unanchored wood at least two times bankfull channel width was mostly stable after three winter periods, while smaller wood was prone to movement downstream.



Figure 1. Steel bridge that replaced a failing log stringer bridge in 2010, located in the Kass Creek watershed on timberland managed by Campbell Global. Chris Blencowe, Blencowe Watershed Management, explains the project to tour participants.





Figure 2. Unanchored large wood introduced into Kass Creek in 2010 (soft anchoring allows wood to move).



Figure 3. Four participants observing large wood introduced in the Kass Creek drainage using the accelerated recruitment method.





Figure 4. Large wood project on the South Fork Noyo River, Jackson Demonstration State Forest, implemented in 2013. Soft anchoring was used to slow log movement downstream (photo: Jonathan Warmerdam, NCRWQCB).



Figure 5. Streamside-view of the large wood structure shown in Figure 4 in the South Fork Noyo River watershed. A fresh steelhead redd was observed just upstream of this site.





Figure 6. North Fork of the South Fork Noyo River—instream large wood project with traditional anchoring, implemented in 2012 by CCC crews from Ukiah. Considerable wood has collected on the original structure.



Figure 7. North Fork of the South Fork Noyo River—upstream view of the instream large wood project shown in Figure 6 (photo: Brian Barrett, CAL FIRE-JDSF).





Figure 8. North Fork of the South Fork Noyo River—view of a large wood site installed by CCC crews on Jackson Demonstration State Forest (photo: Brian Barrett, CAL FIRE-JDSF).



Figure 9. View of anchored wood structures installed in 2012 by CCC crews in the North Fork of the South Fork Noyo River on Jackson Demonstration State Forest.





Figure 10. Anchored structure at NFSF Noyo River (photo: Jonathan Warmerdam, NCRCRWQB)



Figure 11. Large wood site on Parlin Creek, Jackson Demonstration State Forest. Unanchored wood was installed in 1996 as part of a Timber Sale along 2.5 miles of the stream channel. Note the amount of material collecting on the original installed logs.





Figure 12. Large Douglas-fir tree that was naturally undermined approximately 60 feet below the Parlin Creek large wood installation site shown in Figure 11, illustrating the dynamic system created by wood input.



Figure 13. Unanchored large wood site lower down in the Parlin Creek drainage, installed in 1996. Considerable wood has collected at this site over the past 19 winters.