Synopsis

USFS representatives from both the Regional (R5) and National offices joined the BHCCFWG for a partner meeting, field tour, and review of Collaborative CFLR progress. At the partner meeting, Collaborative members discussed the opportunities and challenges they have experienced as beneficiaries of the Collaborative Forest Landscape Restoration Program (CFLRP). The subsequent field tour encouraged conversation about forest management in light of landscape change; the effects of drought, wildfire, and tree mortality were discussed by USFS staff and private landowners working directly in the area. The notion of capacity building was a common theme throughout the day; planning processes (NEPA) and grant writing were identified as areas of need for the Collaborative.

Attendees

USFS Washington Office

Lindsay Buchanan [CFLR Coordinator, Forest Management] Frank Fay [Fire Ecologist, FAM] Dick Fleishman [Acting Presale, Stewardship, Good Neighbor Authority]

USFS Region 5

John Exline [Region Director for Ecosystem Management] Christine Haupt [Technology Project Specialist]

Lassen National Forest

Heather Blevins [Forest Engineer] Debra Cesmat [Forest Budget Officer]

Hat Creek Ranger District (Lassen National Forest)

Crystal Danheiser [Forester] Ann Grasso [District Ranger] Greg Mayer [Timber Management Officer] Debbie Mayer [District Fire Management Officer]

BHCCFWG

Germain Boivin [Floral Native Nursery] Kaily Bourg [Sierra Institute for Community and Environment] Michelle Coppoletta [Ecologist, Plumas National Forest – Mt. Hough] Andy Fristensky [Sierra Nevada Conservancy] Pam Giacommini [Shasta County Supervisor] Ryan Hadley [Sierra Pacific Industries] Kristy Hoffman [Sierra Nevada Conservancy]

Other Participants:

Ryan Gregg [Strategic Planning, Budget, Accountability] Luanne Lohr [National Lead for Economics, Research & Development] Jim Smalls [NEPA, EMC]

Joe Sherlock [Regional Silviculturist]

Joyce El Kouarti [Public Affairs Officer] Dave Hays [Forest Supervisor]

Dale Newby [District Fuels Officer] Aaron Rieffanaugh [Wildlife Biologist] Shawn Wheelock [Hydrologist]

Bobette Jones [Ecologist, Lassen National Forest – Eagle Lake] Jonathan Kusel [Sierra Institute for Community and Environment] Dean Lofthus [Fruit Growers Supply] Jeff Oldsen [W.M. Beatty & Associates] John Owen [Sierra Institute for Community and Environment] Patricia Puterbaugh [Lassen Forest Preservation]

Sarah LaPlante [Deputy District Ranger – Sierra National Forest] Kathleen McIntyre [PhD Candidate at Colorado State University]

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Partner Meeting

- History of the Burney-Hat Creek Community Forest and Watershed Group (BHCCFWG)
 - In 2009, The Shasta Resource Advisory Committee (RAC) proposed funding a "legacy" project that would involve local stakeholders with management of federal and other lands.
 - The Fall River Resource Conservation District submitted a full proposal that led to the formation of the BHCCFWG.
 - The project was intended to have a lasting impact and improve the social, economic, and environmental conditions in the Burney Creek and Hat Creek watersheds.
- P. Giacomini referenced the first major project of the BHCCFWG Burney Gardens.
 - The project consisted of approximately 2,500 acres of meadow restoration and density management across multiple private land ownerships.
 - The collaborative effort enabled the project plan a Timber Harvest Plan to pass through the California regulatory system quickly despite its complexity.
- Early Collaborative challenges
 - Previously, strong personalities led to conflicts and interest was waning in the group and its work.
 - The Sierra Institute for Community Environment was asked to return to facilitate the group in August 2015, and interest and action increased.
 - The first projects of the Collaborative involved <u>Herger-Feinstein Quincy Library Group Forest</u> <u>Recovery Act</u> projects. Collaborative members felt excluded from much of the planning for these projects largely because they were established before the group came together; they were taken on because the NEPA process was already completed.
- Current Focus of the Collaborative
 - The Crossroads project is a Categorical Exclusion (CE) as defined in the 2014 Farm Bill.

- Crossroads includes high hazard areas, communities, private land, McArthur-Burney Falls State Park, the Pacific Crest Trail, and two major highways. The project area is a natural choice for the Collaborative.
- Wildlife and botanical surveys have limited the pace of implementation.
- Fluctuations in the biomass market have been another challenge for this and other projects.
- A WO Representative inquired about the organizational structure of the group. Is there a charter?
 - The group does have a <u>charter</u>. J. Kusel noted that when collaborative groups are running efficiently, there is a tendency to overlook establishing a charter, but members agreed it important to have a formal document to fall back on.
 - The charter includes a list of organizations eligible for voting. The voting procedure is enacted when there is lasting opposition to approve a group decision.
- Current Collaborative Challenges
 - T. Puterbaugh discussed USFS staff turnover. Also, fires and other incidents divert USFS resources away from the CFLR. Without USFS staff dedicated to the CFLR, the Collaborative's progress is often limited.
 - A. Grasso noted that the district is hiring a Partnership Coordinator to address this problem. Collaborative members have been asked to sit on a hiring panel to assess the candidates. Two collaborative members have agreed to serve on the panel.
 - A WO Representative asked if the Collaborative was able to engage with USFS regarding fire activity.
 - The Collaborative had extensive conversations regarding fires in the area; however, fire activity happens quickly. Environmental Assessments (EA) are expedited and the Collaborative may not be able to respond in the same way as other projects. The frustration comes with the pace and scale of activities moving across boundaries.
 - A WO Representative inquired about capacity gaps that affect the Collaborative.
 - USFS staffing and turnover is a capacity gap; turnover equates to a lack of continuity and familiarity with the landscape for USFS staff.
- A WO Representative inquired about the impact the CFLRP has had on the BHCCFWG and Lassen National Forest (LNF).
 - S. Wheelock stated from a USFS hydrology perspective, things have improved significantly. There are more resources available for hydrologic analysis and monitoring; for this reason, the Collaborative has a growing interest in hydrologic monitoring.
 - LNF's spatial analysis is becoming more relevant and creating more opportunities to communicate tracking, perform animal surveys, etc. There is a progression towards aggregating spatial data and looking at the whole landscape.
 - M. Coppoletta and G. Mayer agreed that monitoring has been solidified as a priority for LNF.
- L. Buchanan asked how the Collaborative might operate without the CFLR.
 - T. Puterbaugh emphasized that the Collaborative worked together before the CFLR program and there is little reason to anticipate the group dissolving after the CFLR expires.
 - J. Kusel noted that the group had recently completed a short and long term visioning exercise; the general feeling is that the group is independent of the CFLR and participation will continue.
 - D. Hays said the CFLR has undoubtedly been important for funding; however, harnessing other funding opportunities will be a necessity for the future regardless of the CFLR continuing. The future success of the Collaborative will depend on the ability of the group to form new partnerships and create leverage to accomplish projects.
- G. Mayer inquired about the impact CFLR has had on the local economy. Before the CFLR award for Burney-Hat Creek, Shasta County unemployment was approximately 22%.

- J. Kusel indicated that a more in-depth analysis is needed to determine the impact on the local economy; however, the current state of the biomass market has negatively affected the ability to complete projects and affects restoration and local employment opportunities.
- Collaborative Capacity
 - J. Oldsen discussed the Collaborative's grant writing capacity. More grant writing is needed to see projects through. Although Burney Gardens was initially successful in permitting, the implementation requires more funding; the Timber Harvest Plan (THP) is likely to expire before all of the intended work is completed.
 - Collaborative members agree that grant writing is a capacity gap. The group's main grant writing partner, Fall River RCD, has limited resources.
- Categorical Exclusion
 - T. Puterbaugh raised the issue of a CE compared to an EA. The Collaborative anticipated the Crossroads CE process would be much faster.
 - J. Smalls stated that a CE is typically 180 days for documentation and approval. In comparison, an EA process takes approximately 600 days. The CE is always going to be faster; it does not require the same considerations of cumulative effects, alternatives, and other factors required for an EA.
 - A. Grasso stated that implementing the Crossroads CE has been interrupted by wildlife and botanical surveys. The delays are not a result of the CE process, but the documentation required by conditions on the landscape. The planning was not optimal in this case, but the Crossroads project has provided valuable lessons for future CE's.
- NEPA
 - J. Smalls communicated the WO's ideology concerning NEPA. The WO is trying to advance different strategies for maintaining flexibility within the NEPA process. Currently, Records of Decision are often made with specific project timelines, limiting the ability to adapt or extend the project it is not ideal. For comparison, an agency would not write NEPA for a building with the expectation of changing it in the future; the same principle should apply to forest projects.

Stop 1: Cornaz Lake, Eiler Fire perimeter

- D. Mayer discussed the area's fire regime. Historically, the area has had frequent stand replacing fires. The inconsistent fire regime within the last century has created hazardous fire conditions.
- The Eiler Fire (2014), began at an inopportune time. Much of the USFS resources were focused on the Day Fire in Klamath National Forest.
 - More information on Eiler fire conditions and impact can be found in Appendix A.
- D. Lofthus is a forester for Fruit Growers Supply Company (FGS), a private timber management firm, and a member of the BHCCFWG; he detailed FGS' actions following the Eiler Fire.
 - The Eiler Fire burned approximately 30% of FGS land in the area.
 - FGS put significant investment into infrastructure following the fire to enable salvage operations. Around \$400k was put towards permitting and constructing roads.
 - FGS utilized "emergency notices" to procure salvageable timber in the area. Emergency notices enable a quick reaction to conditions threatening the value of forest resources and can be in effect for up to one year. FGS had 17 emergency notices covering the extent of the salvage area.
 - FGS was able to salvage the majority of the material within 9 months following the fire.

- P. White noted that USFS activities post-fire, in comparison, were much slower than FGS. NEPA required to address the effects of the Eiler Fire took over one year to complete.
- USFS Reforestation and Monitoring
 - An outline of the Eiler Fire Study Design can be found in Appendix B.
 - M. Coppoletta described the USFS plans for reforestation. The ultimate goal is to restore the area and encourage resilience to better account for future disturbances.
 - One monitoring strategy includes monitoring and enhancing the existing Baker cypress. Baker is a fire adapted cypress species endemic to northern California; its reproduction has been limited by fire suppression.
 - USFS has a soil scientist utilizing aerial photography to monitor the impact of salvage activities on soil conditions in the area.
 - B. Jones has contacted Malcom North, plant ecologist at the Pacific Southwest Research Station, regarding planting strategies. M. North indicated that many of the National Forests in California are asking the same question.
 - The reforestation strategy for the Eiler Fire area includes a mixture of 5 different tree species. Competition is controlled through manual release (i.e. physical removal of plants). It was noted that competing plants are advancing beyond the rate of removal; to illustrate, with 300 trees per acre, there is an expected loss of about half to competition.
 - o Reforestation and research efforts in the Eiler area are funded through CFLR.

noon break

- A WO representative asked if the Collaborative has a restoration strategy or a set of restoration principles.
 - The Collaborative does not have a formal strategy; however, there are large scale watershed assessments that are used as guiding documents. The Fall River RCD received grant funding to complete a Burney and Hat Creek watershed plan in 2007.

Stop 2: Crossroads (HFRA CE)

- C. Danheiser stated the importance of the Crossroads project. It is significant for both the LNF and the Collaborative. The units were derived through collaborative input and overlap previous treatment sites.
- D. Newby, District Fuels Officer, described current treatments in the area.
 - There are archaeological (arc) sites throughout the area. The district has a Master
 Stewardship Agreement (MSA) with the Pit River Tribe; a tribal crew has contributed to hand
 thinning approximately 60-70 acres within the area.
 - The green leaf manzanita is very prevalent. If an area is opened up too much, the manzanita takes over and limits the use of prescribed burning. Intensive treatments are required to introduce fire back into the landscape.
- P. White referenced previous activities within the Crossroads area (also referred to as Four Corners)
 - The previous Four Corners EA accounted for 2,000 acres of biomass removal (trees less than 10" diameter). The Biomass Crop Assistance Program (BCAP) enabled the removal of 1150 acres of biomass at a cost of \$1/acre.

- The biomass market today will not support such a cost effective removal of biomass but it is a necessity for the Crossroads project.
- Landscape planning/desired condition
 - S. LaPlante asked if the Collaborative has a subgroup/committee dedicated to landscape planning.
 - BHCCFWG does not have a landscape planning subgroup.
 - D. Fleishman is a member of the Four Forests Restoration Initiative (4FRI), a Collaborative in northern Arizona. 4FRI operates at a large scale by maintaining flexibility in the NEPA decision. Determining the desired condition for the forest is the first step to having an adaptive NEPA document that accounts for future disturbances.
- D. Lofthus discussed the increase in tree mortality; the area is in transition and the outlook for timber stands is uncertain.
- F. Fay asked if private firms have the ability to manage at lower densities.
 - D. Lofthus indicated that there are stocking standards in place that are too high for the area; however, the State Board of Forestry has recently been granted license to adjust the stocking standards.
- J. Sherlock asked if there are limitations to introducing short fire intervals into the area.
 - There are limited fire windows (times acceptable for prescribed burning). The NEPA for the area covers 53,000 acres of prescribed burning but there are multiple airsheds to consider. The town of Burney, Johnson Park, and McArthur-Burney Falls State Park all must be considered when developing smoke management plans.

Stop 3: Ferry Crossing, Lake Britton

- J. Sherlock proposed a question for LNF and Collaborative members. Can there be a collaborative effort to manage densities at a large scale?
 - B. Jones discussed this type of management at the Eagle Lake Ranger District in LNF. The reduced densities have increased moisture availability in the soil.
 - T. Puterbaugh inquired about the science of density management; is it proven to be effective?
 - There was consensus among participants that reducing density contributes improved drought resilience.
 - J. Oldsen supported the idea of large scale density management; however, he expressed concern over USFS capacity (staff, resources) to implement such a large project.
 - C. Danheiser expressed concern over the continued interest and motivation of Collaborative members should a large project go forward. There will be significant downtime that may discourage members from participating in the collaborative process.
 - D. Mayer supports the density management; however, he does not believe there is enough time to implement a large project that is effective. Tree mortality may be moving too quickly to approach the issue in this manner.
- Good Neighbor Authority (GNA)

- GNA was discussed as a strategy or tool that can be a part of all-lands management. GNA involves an agreement between the USFS and a state agency to implement projects on federal land. The state agency is typically responsible for the required NEPA documentation. The state agency may hire subcontractors to carry out the work, so long as they abide by the laws, regulations, and policies set forth by the USFS; this could potentially benefit local employment.
- The Wyden Authority is a similar mechanism that allows the USFS to enter into cooperative agreements with different partners outside of the agency. Wyden Authority provides an opportunity to accomplish work on private lands that would benefit national forests. At this time, CFLR funding cannot be used on lands outside of the National Forest System.
- NEPA Challenges
 - A. Grasso discussed ongoing challenges for planning including:
 - Funding and staff to complete the NEPA process; CFLR funding cannot be used for this purpose
 - Proactive implementation of wildlife and botanical surveys
 - A. Grasso anticipates the Partnership Coordinator will alleviate some, but not all, of these planning concerns.
 - A WO representative described a national IDIQ for NEPA services; this allows a forest to participate in the contracting process to procure NEPA services.
 - Enterprise teams are skilled and effective at completing NEPA documentation. They are relatively expensive and are currently unavailable.
 - J. Kusel suggested looking inward to address the issue of NEPA documentation. There may be an opportunity to pilot a local team that can provide environmental review services.
- "Tools" to fund planning processes
 - Partnerships are critical to raise and leverage funds. There are new opportunities emerging.
 For example, the National Fish and Wildlife Foundation has strengthened their partnership with the USFS to advance the agencies stewardship of forest species and ecosystems.
 - Fire Settlement Funds were discussed; these funds are intended to reverse ecosystem degradation, restore ecosystem health and resilience, rehabilitate damaged infrastructure, and prepare fire impacted landscapes for the effects of changing climates and human use patterns. These funds can be used for the NEPA process.
- J. Exline talked about challenges within the USFS. Specifically, the willingness of the agency to let go
 of control over project planning and implementation; embracing partnerships will ultimately increase
 the pace and scale of projects.
- J. Smalls indicated that forest management innovation is locally driven; there is an opportunity for individual forests/districts to find creative ways to combat the effects of drought, tree mortality, climate change, and other challenges.
 - Collaborative members noted that while an individual forest/district can enact changes relatively quickly, USFS staff ultimately rely on the region for guidance and approval for changes to policy.

- Sierra to California All-Lands Enhancement (SCALE) is an example USFS Region 5 supporting creativity and shared learning amongst collaborative groups.
 - Region 5 is exploring establishment of a new method for awarding contracts that would benefit local contractors and economies. Without the Region's support, this type of innovation would be unlikely.
- F. Fay noted significant improvements in the progress of the Collaborative since the time of the last WO visit in 2014. Previously, the Collaborative was not working well together, USFS staff were largely stuck in their thinking, and partnership development was stagnant. Most, if not all, of these issues have greatly improved over the last two years.
 - J. Kusel believes there has been a culture shift amongst USFS staff they are ultimately more engaged in the collaborative process.
- Partnerships were further discussed. Southern California Mountains Foundation (SCMF) is a nonprofit that works directly with the San Bernardino National Forest. Annually, SCMF has 200 volunteers donate approximately 30,000 hours to help sustain the forest. Much of the volunteer base is formed out of recreational vehicle (OHV) users.
- Concerning NEPA, a WO representative asked if the Collaborative has engaged with regulatory agencies – US Fish and Wildlife, for example.
 - R. Hadley noted that the Collaborative has a CAL FIRE member, but no other regulatory agencies are represented.
 - For the Burney Garden Project, regulatory agencies were regularly involved in field meetings.

Appendix A

Eiler Fire Facts:

Eiler fire occurred in the southern cascades. Research has showed that the southern cascades tend to have larger fires than the Sierra Nevada's, but the Sierra Nevada's have more fires. Topography is the driver (no rock to stop fires) in the southern cascades.

Eiler fire started on 7/31/2014. Acres: 33,637

Bald fire started on 7/30/2014. Acres: 39,926

The Eiler fire was the third large fire in 72-96 hour time frame in the local area. Day started first and threated homes, Bald started and threatened Little Valley and then Eiler. Before any of these three fires started the Klamath already had multiple fires. Resources were in short supply or non-existent.

Weather: Rain year runs July1 thru June 30th.

Fall River Mills: Average (1923-2010): 18.20 High (1998): 31.65 Low (1932): 8.38

Location	Year	Inches	
Fall River Mills	2015-2016	23.43	
	2014-2015	16.31	
	2013-2014	14.27	
	2012-2013	16.07	
	2011-2012	12.18	
	2010-2011	24.70	
	2009-2010	16.85	
	2008-2009	14.77	
	2007-2008	12.44	
	2006-2007	12.13	
	2005-2006	27.29	

Appendix B

Eiler Fire Study Design:

May 2016

Objective: To evaluate different salvage treatments and tree planting strategies on regeneration survival and growth, understory diversity and cover, and fuel dynamics.

- Salvage treatments: None, Biomass removal, Merchantable removal, and Biomass/Merchantable combined (n = 4)
- Planting treatments: None, Regular 12 by 12 foot spacing, clustered, and high-density clumps. The same number of trees are to be planted in each plot but there spatial arrangement will vary. (n=4)
- Competing vegetation treatment: 10-15 years after initial planting, the 3 blocks within each salvage treatment will have no treatment, mastication or prescribed burn applied. (n=3)

Measurements:

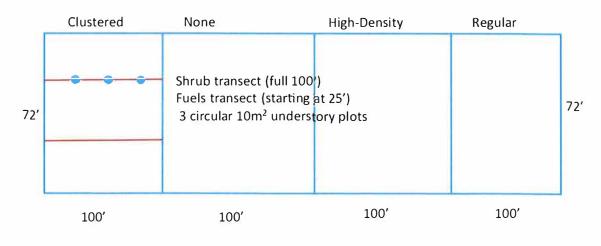
Height and diameter at ground of each planted tree.

Natural recruitment- once a seedling is ≥ 10 cm tall, it should be tagged and annually measured.

Shrub cover (point intercept) calculated along 2 transects 100 ft long at the 24 and 48 ft line along the 72' axis.

Fuels—along these same transects, starting 25 ft in from the plot edge, sample fuels using the Brown's protocol.

Understory plants—along these fuel/shrub transects, at 25, 50 and 75 feet visually assess understory plant cover within a circular plot with a 1.78 m radius (10m²). Cover is by species excluding shrubs. Bare ground is also estimated.





The Eiler Fire started on July 31, 2014 and covered approximately 33,000 acres. The topography of the Southern Cascades was a large contributor to the extent of the fire; there is an absence of rock formations to disrupt the spread. While the Sierra Nevada has more frequent fires, the fires of the Southern Cascades tend to be larger.



Dean Lofthus of Fruit Growers Supply Company (FGS) describes the management actions his company took following the Eiler Fire. FGS invested heavily in infrastructure to begin salvage operations quickly; the majority of salvage was completed within 9 months. 11



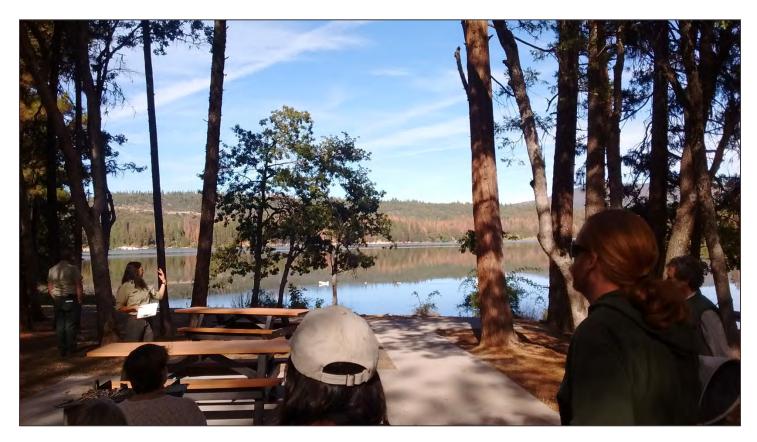
The Crossroads Project is significant for both the Lassen National Forest and the Collaborative. The units were derived through collaborative input and overlap previous treatment sites.



The Hat Creek District has a Master Stewardship Agreement (MSA) with the Pit River Tribe; a tribal crew has hand-thinned approximately 60-70 acres in the area shown above.



The final stop was at a PG&E (California based Investor Owned Utility) campground; PG&E is one of the many land ownerships comprising the Burney-Hat Creek CFLR. The view across Lake Britton (pictured above) is evidence of increasing tree mortality in the area.



Participants from the USFS and Collaborative shared their thoughts on landscape-scale projects. The group generally agreed that the landscape is in transition and a significant effort to increase resilience is required.