



**Burney-Hat Creek Community Forest and Watershed Group**  
**Friday, December 9th, 2022; 9:00 am - 12:00 pm**

**Attendees**

Amye Osti - 34 North  
Bella Bledsoe – Sierra Institute  
Dan Ostmann - Lassen Volcanic National Park  
David Lach - ANEW  
Evan Watson - Fall River RCD  
Jason Moghaddas – Spatial Informatics Group  
Jeffrey Oldson - Cascade Resource Consultants  
Jonathan Kusel – Sierra Institute  
Michelle Coppoletta - Forest Service

Nancy Nordensten - Lassen Volcanic National Park  
Pete Johnson - Retired Timber Land Manager  
Robin Wall - Hat Creek Ranger District  
Ryan Hadley - SPI  
Sarah Oldson – Cascade Resource Consultants  
Sharmie Stevenson – Fall River RCD  
Shawn Wheelock - Hat Creek Ranger District  
Thomas Buchholz - Spatial Informatics Group  
Todd Sloat – Fall River RCD

**Approvals, Modifications, and Meeting Objectives**

Jonathan led collaborative members through introductions and entertained a motion to approve the agenda. The agenda was approved by the group. Jonathan entertained a motion to approve the meeting minutes from March, and the group approved the meeting minutes.

**Presentation from 34 North**

- Amye showed the group the new online BHC platform, which now captures any BHC projects that are active. Each project has a status and includes the proposed treatment for the project area, any monitoring photos or reports, and metadata with information such as the lead organization, total acres, or the grant ID funding the work.
- Amye is constantly adding information to the platform. 34 North plans to host a training so that group members can learn more about how to use the platform. She is going to try and find a date that works for everyone.
- Dan commented that he would like to post shapefiles of new prescribed burns in the Park; he wants to add them to the map.
- Amye responded that she can do that or can show Dan how to do it directly.
- Amye also commented that Lidar was flown this summer. 34 North is working on a proposal to DOC to do a baseline assessment of Lidar and build a baseline data set with Lidar and other data sources. The baseline dataset would show existing conditions on the ground.

**SIG/ANEW Update**

- Thomas Buchholz from SIG and David Lach from ANEW presented on a project they are working on. The goal is to quantify future climate benefits of doing fuels reduction work. Then, buyers can purchase credits and help finance forecasted fuels reduction units. Eligible activities will include prescribed burning, pre-commercial thinning, mechanical removal of biomass, and some others.
- Thomas commented that they are in the process of getting the methodology approved. Then, they will start to register projects under the protocol and quantify the climate benefits. Once they have registered these mitigation units on the platform, they will start marketing them to help channel funds back to the project.

- Those interested in buying the credits are particularly interested in CA projects. Usually, buyers are those who want to make investments in their sustainability program. There is robust demand from entities like beer companies, online retailers, and telecom companies. These are charismatic projects that we expect high demand for.
- Jason commented that this type of thing helps with building outside, stable funding sources that are not dependent on state and federal funding. This will not fix the funding issue, but it is another source to add.
- The goal is to be able to take a shapefile with relatively limited information on what the treatments are and begin marketing these projects. Hopefully, for every 1,000 acres treated-- ideally with prescribed burning-- there will be about \$250,000-\$300,000 generated. This will help get funding back to partners.
- Jonathan commented that this is another stream of funding that can lead to sustained funding over time, building in some more security.
- Jason added this is not a magic thing that pays for it all. But we are building out different tools and sources.

### **Lassen National Forest Strategic Planning Process and Program of Work with Partners**

- Robin updated the group on the Lassen National Forest Partner Meeting.
- The meeting covered program of work prioritization, and the Forest covered the project prioritization process. LNF is going to circulate meeting notes to all partners; the notes will have more details on the project prioritization criteria and process. Generally, partners will need to work with their District Ranger to draft the PIL. The District Ranger will submit the project to the leadership team for review. This will help move project prioritization from the District level to the Forest level.
- Robin said to reach out to her for Hat Creek District projects.
- Jonathan commented that it seems like there are more opportunities for collaboratives to engage with developing the program of work at the Forest level than ever before.
- Robin agreed. She commented that we (her + BHC) can work on a PIL together and take it to the Forest level. The FS is opening the program of work up to partners across the Forest.
- Todd said thanks to the Lassen for coming up with a process.
- Evan commented that he is eager to work on WUI-specific projects. Reach out to me if there are things the RCD can do to help speed up the process of WUI-focused work.

### **WUI and Corridors (Fall River RCD)**

- The RCD is hoping to do Forest-wide NEPA for WUI, linear corridors, and plantations. There is potential to combine one or two of those in the NEPA process. CEs might be available. The RCD is leaning on the collaborative and Robin to help discuss the next steps. The RCD has some funding to help get this project going. SNC has funded landscape-level WUI work through the RCD.
- Todd asked Robin if there is any specific way the Lassen is leaning towards doing this type of project.
- Robin said there has been no discussion about that at this point; she commented that more discussion is needed with the RCD about how the RCD wants this to play out.
- Todd asked if there are any thoughts from the collaborative. Should the WUI, linear corridors, and plantations project be at the District level or the Forest level?
- Sarah added that they are hoping to use a phased implementation approach. They want to do all the analysis, but the actual surveys are done pre-implementation.

- Todd commented that one option is to do this as a district-wide project. In our district, WUI is high on the list. But maybe other districts have other resources high on the list. The Great Basin Institute was contracted to do work around WUIs in burned areas. But the specifics are unclear.
- Robin said she has no specifics or details on GBI.
- Sarah commented that she thinks linear corridors and fuel breaks would be great to do Forest-wide. Perhaps plantations and WUI are done at a district level.
- The group agreed to continue the conversation.

## **Project Updates**

### **Field Tour Overview**

- Robin provided a short recap of the September BHC field tour. Robin felt the highlight was the monitoring conversation about treatment within the North 49 project. Robin hopes the group can do another field tour in the spring.
- Michelle added that the purpose of monitoring was to assess whether we did what we said we were going to do. North 49 was planned in 2009. The desired conditions for the land were set over a decade ago. Those desired conditions are not really meeting some of the objectives we have now. This is important for thinking about how we might treat the land in the future. How can we set targets a bit differently to account for future conditions?
- Jonathan added that we can't do adaptive management without good monitoring. Some of the targets and objectives we set a decade ago are not appropriate any longer. What we know now, contradicts some of the objectives lined out 12 years ago.
- Michelle said that the relative stand density target range outlined in NEPA is still pretty high. The NRV for relative stand density is still much lower. We are still not aligned with what we had historically. And the future range of variation may even need to be lower. Wildlife issues present a challenge. It is nice to see folks grappling with the complexity of the Backbone project.

### **USFS Projects: Crossroads, Badger, North 49, Plum, Hat Creek Recreation**

- Crossroads is being implemented now. March 2023 was the deadline for CCI funding. We went back to bidder, and they are not interested in the project anymore. Luckily Doug with Tubit Enterprises took the contract. We are likely going to fall short on funding for mastication.
- On Badger, there are some more stand exams happening. We might be doing some rescoping in 2023 of that project.
- The Hat Creek Recreation project analysis is in progress. We are still lacking the wildlife section of the analysis. Many of these projects have just one piece left.
- The Plum SIR was approved and signed in October. The Forest is prepping three small timber sales on the green side of Plum.

### **CCI projects: Manzanita Chutes, Backbone, Whittington-Cypress, Bald and Eiler**

#### **Reforestation**

- The Backbone project analysis is in progress. We are waiting on the wildlife portion of it. We have not been able to meet as a group in over a month, and there is no wildlife biologist at the District anymore.
- The restoration cone collection was completed, and we are prepping for replating in the spring for the Bald and Eiler Reforestation project.
- We have had a great window for pile burning. We may get up to 750-800 acres of burning this year. Very lucky to get some of these piles done.
- Manzanita Chutes is in phase one. It is being logged right now. Some of the logs are going to SPI.

## **Others: Soldier Mt., Thousand Springs**

- For Soldier Mountain and Thousand Springs, we are looking forward to start implementing these projects. There is a rancher in that area that is doing work on their property. They are excited to see us move on implementation work on the FS side.
- Lassen National Park is also doing work on Northwest Gateway. Tubit is doing the logging for the Park. On October 24th, Tubit started cutting. There were 124 acres cut. Rehab and repair work is scheduled for the spring. The Park is trying to get more funding to award additional units. Hopefully, we will be able to award another 350 acres.

## **Snow Monitoring Presentation by Shawn Wheelock**

- Shawn started by telling the group that the question that drove this research was: can downstream flows be augmented through timber harvests? As well as, which treatments retain the most water on the landscape?
- Unfortunately, when the research started, it essentially stopped snowing. A significant period of the study was in the middle of a drought. Then, there was near-record precipitation and flooding.
- The study looked at three primary types of stands:
  - The control: dense, untreated
  - Thinned
  - Seed Cut
- In general, findings showed:
  - Both thinning prescriptions had a modest and predictable impact on below canopy meteorology. Lower nighttime minimum temperatures in summer, higher wind speeds, etc.
  - The onset of soil moisture decline is governed by annual precipitation as well as stand density.
- First key finding - Micrometeorology
  - Excepting shortwave radiation, the difference in the magnitude of the changes between the seed cut and thinning prescriptions was relatively small.
  - Reducing tree density to ~15% of Control had largely the same impact as reducing it to less than 2%.
  - The hydrology and micrometeorology of southern Cascades coniferous forests may not necessarily vary in proportion to changes in stand density.
- Key Finding Two - Soil Moisture
  - In the Thinned and Control Stands, the amount of soil moisture at the end of the summer in the upper 100 cm was very similar.
  - Removing almost all of the remaining trees (seed cut) caused soil moisture to increase substantially.
- Key Finding Three—Soil Moisture Decline
  - Both treatments delayed the annual decline and increased its minimum value by the end of the season.
  - The onset was strongly tied to the magnitude of winter precipitation.
    - Dry Years: Began much earlier within Control vs. treated stands. Without snow, soil moisture was not replenished in the late spring.
    - Wet Years: Storage capacity “topped off” in all stands. → Similar timing, but later in the season.
- Key Finding Four—Seed Cuts

- Increases integrated soil moisture storage through the height of summer (over the period of the study).
- Remaining trees take advantage of this newly available water within a few seasons to grow.
- While the higher evaporative potential does not affect integrated soil moisture appreciably, it could cause surface fuels to dry out more rapidly—increasing both the risk of ignition and the rate of spread across the open patch.
- Concluding Points:
  - Showed that forest thinning can be effectively used to enhance summer soil moisture storage in the Basins Project Area.
  - Additional work is needed to generalize these findings and characterize the effects (or lack thereof) of such treatments on downstream flows.
- Michelle: This is a really important point, that thinning can increase tree growth. Sometimes trees are hanging on for 10 years and then are released by some of these treatments. Also, the difference between control-dense and thinned stands in dry and wet years is significant. In dry years, it is really important—thinned stands have a delayed onset of soil moisture depletion. Thinning treatments are related to how long soil moisture is available for these trees. This is also critical for wildfire.

## **Partner Updates**

### **Sierra Nevada Conservancy**

- In the 2022 SNC Wildfire Recovery & Forest Resilience (WRFR) Grant Round, we had 49 full proposals.
- There was \$70.1M in project proposals received / \$30M available.
- Evaluation by SNC team will be occurring in November, and we anticipate the announcement of recommendations for funding in early to mid-December.
- Awards anticipated in March 2023 (or June if not ready for March)
- We will run a similar round of funding next spring/summer (2023) and anticipate \$35M available in awards for the 2023 round. 2023 projects are anticipated to be awarded at our December 2023 board meeting. We will utilize the same guidelines as 2022 (*potential minor changes to guidelines*).

### **Fall River RCD**

- Upcoming Grant Opportunities: there is a big grant opportunity on the horizon from the Department of Energy. We are looking for partners to help lead that proposal with us. We are providing data from 34 North and SIG to help inform what we want to do in this watershed.

### **Sierra Institute**

- CERF: SI has been approved as a convener for the CERF effort and is working in partnership with Chico State. Chico State is the fiscal agent. This is a 5-million-dollar planning grant. It is a two-year grant. They have made the award and we are waiting for the contract to be completed.

### **Lassen Volcanic National Park**

- We did a 92-acre broadcast burn with huge support from LNF. We have also done some hazard tree work on the Park road system. A lot of trees are down now and decked. Hopefully, we can utilize the material. We are burning the small piles of limbs and treetops. We are also burning a bunch of suppression repair material.

### **Others?**

- Shawn is giving a full-hour presentation as part of a seminar series; this will be on January 11th.

- SPI is open to a Burney Sawmill Tour. Ryan wants to put that back on the group's radar in case there is interest.

## **Adjourn**