

# Meeting Notes for Friday, March 18th, 2022

Location: Virtual Zoom Meeting

# **Regular Meeting**: 9:00 AM – 11:00 AM

**In Attendance:** Dana Guinn (MSI), Aaron Kimple (MSI), Herb Grover (WAS), Kyle O'Neill (NRCS), Matt Ford (Clean Forest Energy), Brian Gideon (Forestry Division Head for Southern Ute Tribe), Bill Trimarco (WAP), Warren Brown (Archuleta County Commissioner), Jimbo Buickerood (SJCA), Adam Tlachac (SJNF Pagosa), Todd Weaver (Archuleta County Attorney), Jean Zirnhelt (WAS), Larry Lynch (PLPOA), Josh Peck (SJNF Pagosa Ranger District), Mandy Eskelson (MSI, WEP), Keith Bruno (Audubon Rockies), Jake Kurzweil (MSI), Matt Tuten (USFS R2 State and Private Forestry), Estevan Vega (CSFS), Austin Rempel (American Forests), Tim Leishman (SJNF).

# **MEETING NOTES**

#### Watershed Enhancement Partnership (WEP) Project Engagement

- WEP works to identify projects that will positively impact our watershed and are ready to be funded
  - Background information and project list available on <u>WEP Website</u>
    - Protecting water supplies and infrastructure is a key component of Headwaters work, but they did not want to pursue an SMP or WMP as a group
  - Aaron Kimple and Mandy Eskelson are the masterminds behind WEP's priority project list for the Integrated Water Management Plan (IWMP), along with WEP Steering Committee
    - WEP and Lotic are drafting priority project "cutsheets" that can easily be added to and shared with regional and state water plans:
      - Southwest Basin Implementation Plan's list of Identified Projects and Processes (IPP)
        - Adding WEP's cutsheets to the IPP may make projects more eligible for state water funding and more likely to be prioritized, funded, and implemented.
      - Colorado Water Plan
        - Governor's Wildly Important Goals "challenges each of the eight basins to identify at least 20 projects that have sufficient data – including costs estimates – that are ready to launch (Tier 1) as well as pipeline of critical basin projects that are moving forward (Tier 2)
    - Cutsheets and projects are based on Phase 2 conducted by WEP, Lotic, and the San Juan Conservation District
    - WEP is already launching some pilot projects to demonstrate action

- Finishing IWMP planning process this summer, hoping to continue after to move projects forward through local and regional collaboration
- WEP is building an IWMP to reflect the interests of all stakeholders in four areas of concern:
  - Agriculture
  - Wildlife and biodiversity
  - Wildfire and forest health + Drinking water
  - Angling + whitewater boating
- WEP has come to SJHFHP to get feedback on the Wildfire and Forest Health category
   Merge thinking around forest management and WEP planning in SMP
  - Ultimately, this IWMP could be used as a model for other plans in different areas.
- Timeline for WEP activities in phase 3

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March	April	Мау	Future
<ul> <li>Revisions/additions to WEP's draft project list.</li> <li>Contact Seth Mason to add details or create new project, process or plan</li> </ul>	<ul> <li>Prioritize projects at April 7 WEP workshop</li> <li>Sessions for each category-Wildfire &amp; Forest Health</li> </ul>	<ul> <li>Finalize Water Plan</li> <li>Get resolution of support from County &amp; Town</li> </ul>	<ul> <li>WEP works to become own nonprofit/fiscal agent</li> <li>If awarded, WEP will hire coordinator and some project funds</li> </ul>
<ul> <li>WEP applying for future coordinator &amp; potentially project design, engineering, implementation</li> </ul>	Public Comment     Period for Water Plan     (with project list)	<ul> <li>Any entity can refer to/use plan to progress projects, not just WEP</li> </ul>	

- Area of concern: Wildfire and Forest Health
  - o Two broad needs in the Wildfire and Forest Health category
    - WF-1: Improve the understanding of the relationships between climate change, forest succession, forest management, and water stress in forests in mid and highelevation forests
    - WF-2: Increase the geographies and stream miles covered by risk reduction and wildfire response plans that contemplate future impacts of post-fire flooding and debris flows on infrastructure and environmental steam attributes
    - Want to host specific actions and projects within these to address these needs
  - Additionally, two specific projects have been identified within the Wildfire and Forest Health Category:
    - Project 8: Watershed function research and monitoring station network
    - Project 9: Banded Peak Ranch fuels reduction
    - Are there additional projects that fit into this category that are important to include? Do we want to add details to the existing projects listed?
      - 416 fire and lessons learned about debris flows related to agricultural waterways (ditches, headgates). There are likely several projects in the Pagosa area that should be included in relation to how we prevent debris flow for getting into major waterways
        - Many Phase 2 assessments focused on sedimentation and what would happen after a fire in addition to wildfire risk
        - Upper Blanco and Upper Navajo are most at risk based on this
        - Tying to community would also provide a lot of benefit

- SJHFHP has identified that Fourmile landscape area around Plumtaw are potential high-risk areas
  - Connections to Stevens Lake Reservoir and all Pagosa Lakes including Hatcher Reservoir.
  - Dutton pipeline (primary water delivery system to Hatcher) runs through this area from the Fourmile drainage to Hatcher with an additional pipeline that can deliver water to Stevens.
  - $\circ$  Snowball pipeline is also in this area.
  - $\circ$  All drains into the San Juan naturally.
  - Large landscape could be impacted by a relatively small fire.
- SJHFHP has suggested that snowtography be used to answer questions surrounding watershed function in project 8. This would involve creating a network of snowtography sites that are managed by community partners to better understand impacts of forest management activities and structure on snow accumulation, retention, and water availability.
  - Things to consider:
    - <u>Snowtography handbook</u>
    - What are the ideal locations for sites (public and/or private land, recent forest treatment areas, etc.)?
      - Multi benefit projects to forest health, municipal and agricultural water infrastructure
      - Focus studies in areas adjacent to communities so we can tie combined benefits of fire mitigation and potential water impacts
      - 2 or 3 projects likely to be funded for forestry restoration through NRCS and landowners may be interested in participating in something like this on their property if they fall into priority areas of interest. Connect with Kyle O'Neill
    - Sites must be in an easily accessible location.
      - o 1x/week partner visits if want to measure SWE
    - MSI can help in synthesis and analysis of data, but we may need more capacity to process data.
    - If creating a network of metrological sites ideally would wrap them into one project and plan appropriate placement across the landscape. Can still pay for and install at different times.
      - Strategically plan sites to answer specified questions
    - Consider research permit timeline with SJNF
  - Keep in mind that it is not yet determined what the effects of forest treatments are on water yield
    - Integrated hydrologic modeling to play with complex relationships
    - Invite Keith Moser to present research to Headwaters
  - Existing snowtography site in chicken creek on the Dolores district in the Ponderosa, could be valuable to have more sites in the Pagosa area given differences in precipitation and forest types.
  - How can we tie this effort into what's already happening at SW Basin RT, SW Water Conservation District, San Juan Water Conservation District and others?
    - Can we add sites to existing studies rather than creating new?
- Fuels reduction (project 9)

- WEP is open to applying fuels reduction in areas other than/in addition to the BPR based on partner feedback
- Completing the right work and considering leaching impacts
  - CSFS and CDPHE funding to help understand stream buffers
    - CSFS has established a buffer zone for forest Tx work and want to understand the effectiveness of these zones for protecting water quality (Stream Management Zones)
    - Set up a water quality monitoring plan directly tied to forest treatments, measure before and after and see whether buffer is effective
    - Consider monitoring protocols and make inferences about overall effectiveness of buffers for broader application
  - FS has stream management zones also
    - Regional coordination with CFRI on a way to monitor this across a broader area. Check in with CFRI about this
  - Often discuss how fuels reduction has potential watershed quality improvement benefits, but only if follow BMPs, if we don't it could be harmful
    - Some research suggests that if you complete mastication is completed and debris is left on the ground, the teabag effect can cause acidification through leaching
    - o <u>Plantation impacts</u>
- Are there other fuels reduction projects that can and should be included in this project list under the WF-2 objective?
- Questions for SJHFHP from WEP:
  - Are there other broad needs Headwaters would like to add to the list?
  - Do Headwaters partners want to refine any of the drafted language for current projects outlined?
  - Do Headwaters partners want to add new projects to the list?
    - For all questions above connect with: <u>dana@mountainstudies.org</u>, <u>mandy@mountainstudies.org</u>, and <u>seth@lotichydrological.com</u>
    - WEP want to capture shovel ready and pipeline projects for current implementation and future planning
  - Will SJHFHP help rank projects at any session of the WEP Public Workshop on April 7?
    - In person at CSU Extension/Archuleta County Building
    - 4 1-hour sessions based on categories
    - Stand by for ranking criteria
  - Will the SJHFHP comment on the draft IWMP and project list in April?

# • Next steps:

- Headwaters provides feedback on cut sheets by March 31
  - Broad information will be useful
    - Work with SJHFHP to develop a snowtography site network
    - Can headwaters and WEP together apply for funding to get this installed and in place?
  - Opportunities to coordinate between WEP and headwaters in the future
  - Time to build out more details as water plan and project lists are drafted in April
- April 7 WEP Public Workshop

- In person in the CSU Extension/Archuleta County Building in Pagosa Springs.
- Project ranking
- Opportunity to learn from DWRF processes
  - Explore field trip opportunities to Chicken Creek Snowtography site with group of planning partners
- o Discuss ideal locations for snowtography sites with SJHFHP
  - Identify what information we are primarily interested in as a partnership and community
  - Get a small group together with maps of the area to identify ideal locations for monitoring sites
    - Varied forest types
    - Focus in areas where forest restoration Tx have occurred? Controls?
    - Some of public land, some on other jurisdictions
    - Jimbo, Matt F., FS rep, ToPS and/or County opportunity
  - Seek out funds to support network development, installation and maintenance
    - Can be a portion of a larger SW CO network
    - Ability to pair with Meteorological stations
    - Previous work done to identify critical watershed areas
      - Refer to old maps and coordinate with WEP projects
  - Opportunity to include this information in SW CO multiparty monitoring plan associated with CFLR
- Populate priority project areas of the WEP as a layer on SJHFHP online map

# **Bird Monitoring Program and Partnership**

- Project overview: Weminuche Audubon Society (WAS)
  - Coordinators: Herb Grover, Jean Zirhnhelt and Keith Bruno
  - Objectives:
    - Investigate response of bird community to wildland fuel reduction treatments.
    - Promote a better understanding of the role of fire in Ponderosa Pine forest ecology.
    - Provide opportunities for participants to improve their birding skills.
    - Help participants gain a better understanding of how field studies are conducted.
    - Strengthen the sense of community among members of the WAS chapter.
  - WAS has had over 40 volunteers in the three years of the project with over 600 volunteer hours every year.
  - Sites:
    - Turkey Springs: prescribed fire in late May/early June 2019
    - Fawn Gulch: prescribed fire, then mastication in 2017
    - Jackson Mountain: un-treated
  - Field season:
    - 2<sup>nd</sup> week of May: initial field visits/orientation
    - 3<sup>rd</sup> week of May-2<sup>nd</sup> week of July: sample season
    - Goal: visit each site 10 times in each sample season.
- Major findings:
  - Bird species richness and abundance declines after prescribed fire but recovers quickly (within two years). This is a response to foliage height diversity.
  - Issues of commonness vs. rarity of bird species.
    - In total, 82 bird species identified with over 5,000 birds counted.

- There tend to be more uncommon species than common species, but we see more of the common birds than the uncommon birds.
- Ground-brush foraging bird species were most common, which suggests that the condition of the understory is critical to the diversity of birds.
- Cavity nesting bird species were important.
- Some bird species observed are of special concern due to population declines.
- Results from third year of study:
  - Third year report is on <u>Research Gate</u>, and all reports can be found on the <u>WAS website</u>
    - <u>YouTube video</u> provides and overview
    - Learn more from Herb Grover's talk at the <u>FLC Lifelong Learning Series</u>
  - Jackson Mountain has the highest ENS (Effective Number of Species) in all three years. Turkey Springs and Fawn Gulch trade off as the second most diverse. Again, this is a function of foliage height diversity.
  - Ground-brush foraging (GBF) species were most predominant at all three sites.
    - Lowest relative abundance at Turkey Springs.
    - Jackson Mountain shows a decline in GBFs.
  - Flycatchers were most abundant at Fawn Gulch site, likely due to the open canopy at this site.
  - $\circ$  20-45% of birds counted at all three sites are cavity nesting species.
    - Primary cavity nesters (excavators) create habitat for secondary cavity nesters (opportunistic). Primary cavity nesters are considered a keystone species.
    - A single snag may host many different species of birds.
    - The USFS Wildlife Tree Program provides signage to post on snags to discourage their removal. WAS is attempting to acquire some of these signs.
- Conclusion:
  - Fuel reduction treatments simplify forest composition and structure in the short term, but birds tend to return as the shrub layer recovers.
  - Inter-annual variability needs to be better understood.
  - Protecting standing snags for cavity nesters is critical.
  - All species should be regarded as important, regardless of how common or uncommon they are.
  - Landscape heterogeneity favors resilience of bird community in response to fire and thinning.
- Options for next steps (will be discussed in April 20<sup>th</sup> WAS meeting):
  - Continue study for a 4<sup>th</sup> year to better understand inter-annual variability.
  - Better quantify forest structural characteristics, especially shrub and understory.
  - Expand study to ASCC sites.
  - Integrate field methodology and data collection with other CFLRP projects.
  - Email <u>kbruno@audubon.org</u> if you're interested in volunteering
- Discussion:
  - Does birding by sound necessity at Jackson Mountain self-select for species that are more vocal? Is there research that defines the ratio of species that are likely to be identified by vocalization?
    - Participants are trained to identify vocalizations and are collecting information at a point and trying to only identify species by sight/sound that are within a 75' radius of the point

- Some birds may be heard from further than this (Flicker, chipping sparrow), but quieter songs (Vireos, Juncos, Towhees, etc.) are usually captured within the radius
- Why might Jackson have the highest species diversity?
  - Mixed-con transition at this site vs. Larger Ponderosa component at Turkey and Fawn Gulch?
- Forest management impacts
  - Reducing ladder fuel continuity while also promoting diversity in foliage height/canopy structure
  - Heterogeneity and mosaic clumping
  - Educate homeowners about the importance of standing snags for bird habitat.
    - CSFS forest management plans provided to private landowners address the need to retain 2-5 snags per acre
- Incorporate bird monitoring project into CFLRP monitoring for SW CO and Rio Chama
  - Front Range CFLRs and Bird Conservancy of the Rockies research via Quresh Latif

# **News and Updates**

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- Warren Brown voted into Colorado Counties Incorporated steering committee for public lands in January.
  - Part of voting delegation, willing to hear issues regarding forest health and water.
  - Part of National Association of Counties
  - Send messaging bullet points to Commissioner Brown
- MSI and SJNF will likely share a summer intern.
- Recent CFLRP governance meeting:
  - Dana and Jimbo are on the governance board, facilitated by Peak Facilitation
    - Reach out to either or both for updates and information
  - Expectations that the Forest Service has for collaborative partners.
  - Expectations that collaborative partners have for the Forest Service.
  - Discussed governance structure and representation in the context of CFLRP (communication, transparency, diversity, etc.).
  - Follow-up meeting on April 7<sup>th</sup> open to the public.
  - To be a specific engagement point where ask for feedback on our structure by May
- The Rio Chama CFLRP is moving quickly towards being funded. We have less information about the Southwest Colorado CFLRP.
  - PRD to provide an update at April meeting about CFLR projects on the docket for Pagosa area if funding is in place
  - MPM plan in development since last fall for Rio Chama
- Full 2-3-2 partnership meeting in the first week of May. This meeting will hopefully be in person in the Santa-Clara pueblo or in the Taos area.
- The Forest Service will communicate about additional opportunities to be involved with Jackson Mountain planning.
  - Check out the piece on Jackson Mountain in the spring <u>Partnership Peaks Newsletter</u>
  - Story map in process
- Price Lakes to be discussed at April meeting
- Infrastructure Bill
  - Budget has passed
  - CFLR funds to move into the system

- Stimulus funds coming through the pipe
  - Regions hosting round tables to better understand how to manage and utilize funds
  - CO state is moving stimulus dollars also
- Consider messaging regarding the fact that wildfire risk and mitigation isn't always about saw logs
- Important to ensure equity in how funds are dispersed and into what communities
- Consider coordination and planning work to support strategic use of funds
- Emphasis on local voices and values for fund application