

Upper Feather River IRWM
Uplands Forest Workgroup



Meeting Summary
November 05, 2015

Participants: 14 (excluding the Coordinator and Consultant team)

Summary of the RWMG meeting:

Randy Wilson, Program Manager for the IRWM Plan update, provided a brief summary of the September 23rd and October 23rd RWMG meetings.

Presentation of the Chairs Draft RMS Recommendations:

The UF and Tribal TAC workgroup representatives discussed the draft recommendations and provided edits that highlighted opportunities for integrations between the two workgroups. The edits were re-circulated with the TAC and with the UF workgroup chairs and the final version is attached.

Discussions among workgroup members continued after the November 05, 2015 meeting on biomass and managed fire. These post-meeting conversations are captured in the discussion sections below and also represented as specific TAC RMS Recommendations.

It is important to note that the UF Chairs support the TAC-specific RMS Recommendations. However, because the group at the November 05 meeting did not discuss them, they are presented as separate rather than joint RMS Recommendations for procedural clarity.

Presentation by the Plumas and Butte Firesafe Councils:

Chuck Marshall Darla Niemi, Brenda Rightmyer and Nils Lundner shared presentations about the Butte and Plumas County programs. Both programs are uniquely innovative while sharing common priorities and challenges.

Lack of a robust biomass market and small greenwaste capabilities is significant shared challenge because lack of processing infrastructure greatly inflates the costs of fuels treatments for small landowners in the WUI across the UFR region.

Both firesafe programs are working towards integration with larger scale fuels treatment projects along shared WUI boundaries by increasing outreach to adjoining commercial forestland owners and with the Forest Service. Collaboration with County, utility, and CALTRANS in "right of ways" is another larger landscape priority.

As Chuck described the BCFSC approach, *One of our biggest accomplishments this past year has been doing the PRC 4291 defensible space clearing for the elderly/disabled/low income residents of Butte County. We were able to use the Butte County Sheriffs "alternative work*

program" crew at no cost and tie this into the chipper program which is a "no cost to the homeowner". We were able to treat 80-100 homes with in the WUI around the county. A large portion was funded with a grant from PG&E which allowed us to hire a private contractor to do the work. A portion of these were individuals that failed the CALFIRE inspection and had nowhere to turn to get the work done. We were able to help all that were referred to us by CALFIRE. Besides the sheriff crew, I was able to use the "continuation high school" students that had signed up for extra credits. This class covered all manner of topics and one of them was fire prevention so doing the hands on fit the course curriculum. These students were paired up with at least one or two CCC corpsmen per outing and the CCC provided the clothing and tools needed. Besides the residential clearance work, this class did multiple days doing rehab work on a fuel break we just put in along a reservoir. This work was designed to prevent soil erosion and turbidity entering the reservoir.

Challenges for firesafe programs in the region include struggling with ways to finance greenwaste chipping or hauling for all WUI projects and securing funding for ongoing public and homeowner "firewise" education

The PCFSC has been recognized for providing the Sierra Nevada Conservancy with a model GHG calculation template for fuels work in the WUI and for its award winning "all lands" fuels reduction projects within the County-established- WUI which is more at the "fired" scale in comparison to most WUI designations. See the WUI map @ featherriver.org

Both programs are involved with tribes either in education, or on pilot treatments involving managed fire, or through contracts with tribes for fuels treatment crews and for biomass processing.

Presentation by Deer Creek Resources on wildfire in the WUI:

The Firesafe Council discussion transitioned to the Deer Creek Resources presentation about introducing managed fire into the WUI in the Klamath region. The "managed fire in the WUI" effort builds on and is integrated with, the larger forest and watershed restoration collaboration in the region.

As Zeke described the program and approach,
Lessons from landscape-scale planning in the Klamath Mountains, NW California.

The Western Klamath Restoration Partnership is an open group comprised of the Federal, Tribal, and Non-governmental Organization (NGO) participants with the inclusion of facilitators and additional invitees when entering the phase of initiating the US FLN facilitated Open Standards Process.

Invitations were extended to all potentially interested parties from local, state, federal and tribal entities within the planning area, and meeting minutes are shared with a listserve that continues to grow.

This diverse group is currently in Phase 2, building broad based support for upslope restoration actions that will expedite the creation of fire resilient communities and forests.

GIS Overlay Assessment Combines Social, Cultural, Environmental, and Economic Factors

24+ layers were incorporated into a GIS overlay assessment with existing data and data created through the Western Klamath Restoration Partnership to prioritize where forest restoration work should be focused.

The resulting map represents the WKRP group's basic zone of agreement for all treatment types, and was used as a guide to planning and prioritizing projects on the landscape scale.

Factors considered included:

Structure Buffers (100' and 500')

Public/Private Boundary Buffers

Access Route/Road/Fireline/Trail Buffers

Past Treatments/Wildfires by Age

Upper 1/3rd of Slope

Insolation/Solar Aspect

Managed and Mid-Mature Dense Stands

Crown Fire Potential

Potential Elk Winter Range

Critical Northern Spotted Owl Habitat

Vegetation Types Impacted by Fire Exclusion

Cultural Areas

A vigorous discussion followed on the roles of managed fire and biomass infrastructure in the UFR region. It was noted that the UF RMS Recommendations mentions fire and biomass but do they go far enough?

The discussion did not produce additional RMS recommendations on November 5th. Key discussion points were:

- In the UFR region, landscape-scale managed burning will most likely occur by burning downslope from ridgelines on federal lands.
- Due to prohibitive liability risks for non-federal forest owners and managers, managed burning on non-federal lands will occur more intermittently, and more at project scales for fuelbreak maintenance or for other landowner objectives, including establishing study plots.
- Understanding reburning sequences on severely burned land across forest ownerships is important for all forest managers.
- Burning on federal lands in this region could be broadly initiated to follow the retreating snow line as depicted in the "probable snow courses above 5000ft.elevation and 6000 ft. "elevations" map (on the IRWM Plan's "featherriver.org" website) to enhance climate resiliency in the forestlands of the UFR region.

The Tribal TAC has developed 4 Tribal RMS Recommendations relating to forests; beneficial uses of water, and reintroducing managed fire.

UF Workgroup projects development and collaborative project integration with the Tribal Advisory Committee and other workgroup projects:

Trina Cunningham led the discussion of Tribal-Uplands and Forests workgroup projects integration.

Trina introduced the TAC's TEK region-wide proposal and discussed opportunities for integration of TEK into three UF Step 2 proposals: the region-wide fuels reduction and forest hydrograph enhancement project, and the two meadow conifer release projects.

Trina described the value added opportunities associated with including TEK in the three projects, including funding scoring advantages and other opportunities to share resources.

The joint workgroup members in attendance and the project proposal authors accepted the invitation to collaborate on the further development of these three proposals.



Tribal Integration

- **Summary:** The Upper Feather River Tribal Review Project provides a mechanism for relevant Upper Feather River (UFR) Tribe(s), the Maidu Summit Consortium and/or Tribal Review Committee to evaluate and provide recommendations to each project submitted to the UFR RWMG to incorporate Traditional Ecological Knowledge (TEK). Project reviewers will be comprised of Tribal Environmental Directors, Tribal Elders, and other persons with knowledge of Traditional Practices and sustainability.
- **Organization:** Maidu Summit Consortium
- **Contact:** Trina Cunningham

The Tribal TAC has developed a TAC Tribal Beneficial Uses definition to expand the benefits of collaborating with tribes beyond the extremely narrow definition of tribal benefits for drinking water and wastewater needs in Proposition 84 to the full range of ecosystem beneficial uses of water as embraced by Tribes within a TEK framework.

The other Tribal TAC RMS Recommendations address the use of managed fire in multiple ways as described below. They highlight opportunities for developing the connections and applications of TEK and managed fire into the further project development.

The UF workgroup had no new suggestions about an implementation entity for the region wide fuels reduction project. It was noted that the Feather River Stewardship Council “was a promising development” and that the boundary should be expanded by 1% to include the areas served by the Butte and Lassen Firesafe Councils.



The slide features a decorative header with wavy lines in shades of blue, green, and yellow. The title "Regional thinning project" is prominently displayed in a large, dark font. Below the title, a "Summary" section outlines the project's purpose and goals in a bulleted format. Further down, a paragraph describes the project's phased and cooperative nature. At the bottom, the "Organization" and "Contact" information are provided.

Regional thinning project

Summary: The purpose of the project is to:

1. Reduce catastrophic wildfire in overstocked forests through forest thinning
2. Restore the forest hydrograph by reducing the rate of conifer evapotranspiration, and
3. Reduce conifer interception of rain and snow and enhance the infiltration of soil moisture by increasing spacing of dominant and codominant overstory trees.

The phased, cooperative project will be designed and implemented at a broad, multi-ownership, landscape level.

Organization: Soper Company
Contact: Ryan J. McKillop

The conversation about further development of the regionwide fuels reduction and forest hydrograph restoration proposal also included a discussion about the phasing of work across time and space. The Firesafe Councils are positioned to take early advantage of funding being highly organized and highly mobilized to reduce catastrophic fire risks in the WUI, which is a concern for all forestland managers. Commercial private forestland managers have interest in collaborating along property boundaries and are able to integrate with WUI scale projects and landscape scale projects on federal lands as those projects reach implementation readiness.

Forest/meadow restoration

- **Organization:** Collins Pine Company
- **Contact:** Jay Francis
- **Summary:** This study will use a before/after control intervention (BACI) study design to study the hydrologic change conifer removal from a historic meadow (Rock Creek Meadow). We will be measuring soil moisture, groundwater levels, and soil hydric characteristics for two years prior to meadow restoration and two years following meadow restoration.

TAC RMS Recommendations that could be incorporated into the three UF-TAC projects:

- *Increase landscape productivity by increasing ecosystem diversity and resilience through low and moderate intensity fire.*
- *Increase landscape and climate change resilience through low and moderate intensity fire to increase fire succession mosaics.*
- *Effects of fire succession in reducing invasive species and re-establishing fire adapted native species.*
- *Projects and studies utilizing TEK as a monitoring tool of water quantity and quality over time.*

Forest/meadow restoration

- **Organization:** Cal Poly – San Luis Obispo
- **Contact:** Christopher Surfleet
- **Summary:** Quantifying the response of meadow restoration assists forest, range, and agricultural land managers determine the effect of their investment in meadow restoration. This study is using a before after control intervention (BACI) study design to study the hydrologic change conifer removal from a historic meadow (Marian Meadow). We have been measuring soil moisture, groundwater levels, and soil hydric characteristics for two years prior to meadow restoration and currently have funding for study one year following meadow restoration.
- This application is requesting funding to increase the length of study by two years.

Step 2 Project proposals from other workgroups were identified based on the following criteria.

- Projects from other workgroups that specifically mentioned "forest management" or forests were considered potentially linked, e.g., MS-2 (Turner Springs), MS-32 (Quincy CSD), ALS-4 (Invasive Weeds), ALS (fire water storage), TAC-2 (Humbug vegetation).
- Uplands-Forest workgroup projects that mentioned municipal water supplies, meadows, waterbodies, etc. (e.g. UF-6 (municipal) & UF-1 and UF-2 for meadows, and UF-12 (regional scale) for municipal, meadows and waterbodies.)
- Another potential linkage was project level studies or monitoring/data collection in workgroup proposals that could be incorporated into to regional monitoring and data proposals, (e.g. Lidar (UF-13), Watershed monitoring (FWM-6), Groundwater monitoring (MS-13), TEK (TAC-6), and weather stations (ALS-8), etc..
- Workgroup based public education proposals such as FMW-9 and TAC-5 also depending on their educational content and focus

Introduction of GHG Emissions Toolkit for Projects, The Goodrich Creek Biomass Project:

Ryan Hilburn, project proponent, introduced the analysis.

I had to improvise as none of the equipment that is typically used to complete these types of operations was listed.

These types of projects will produce electricity but not annually so I felt that I could not check that box as it asks for an annual number. If allowed it would may be worthwhile to take the total amount of electricity produced and average it over a 10 to 20 year period as that may be a reasonable re-entry interval

**The Goodrich
Creek Biomass
Project:**

GHG Emissions Summary

Construction and development will generate approximately:	670	MTCO ₂ e
In a given year, operation of the project will result in:	-17,640	MTCO ₂ e

When asked about the results, Ryan said that the CARB protocol would have resulted in “a wash” for benefits because the onus on the applicant to “defend” all credits. The GHG emissions credits are probably there but are not worth defending given the constraints embedded into the CARB accounting methodology.

This has precipitated some “offline” discussion after the meeting about what GHG emission criteria should apply for forest and fire management in a water plan instead of a narrowly defined “air “ plan.

Discussions continue on including “black carbon” accounting in GHG reduction calculations for landscape scale fuels thinning that can produce biomass energy while reducing catastrophic wildfire GHG emissions, conserving carbon sequestration in mature forests, and restoring the forest hydrograph.

Introduction to the Sierra Nevada Conservancy (SNC):

Lynn Campbell our regional SNC representative introduced herself and the SNC and encouraged project applicants to work with her to develop competitive projects for future rounds of SNC funding related to Proposition 1.

Next Steps:

The group discussed meeting topics for the next meetings of the workgroup and decided to undertake IRWM Draft Chapter review as individual workgroup members and MOU signatories rather than as a workgroup exercise. There is interest in further development of the Step 2 proposals and on further exploring green energy and GHG emissions reductions in forest in the context of a water plan.

RWMG Recommendation: Another discussion item related to further project development was the ongoing need and cry for implementation capacity development by all the workgroups. The UF workgroup members made the recommendation that the RWMG take up capacity building and implementation of IRWM projects as part of an upcoming RWMG meeting. The UF workgroup also requested that the RWMG solicit suggestions from NGO and member groups in the UFR IRWM region that have been less involved in the workgroup process.

No workgroups meetings are scheduled as yet. The Chairs will present this summary at the next RWMG meeting in January, when it is scheduled.

Thanks for your participation.

UF Workgroup Contacts

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Tribal TAC Contacts

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For more information, visit <http://featherriver.org>