

Upper Feather River Integrated Regional Water Management Plan

Regional Water Management Group

October 23, 2015

(Meeting No. 7)

Project Status Update

Agenda Item No. 1

Project Updates

- Budget
 - Approximately 42% billed
- Schedule
 - Month 17 (65%)
 - Work approximately 50% complete
 - Target date: May 2016
- Remaining Tasks
 - Climate Change Technical Study
 - Forest-Water Balance Study
 - Community Vulnerability Study
 - DAC Identification
 - Draft Plan

Stakeholder Outreach Updates

Agenda Item No. 2

Stakeholder Outreach Updates

- Tribal Engagement
- Workgroups have met at least four or five times
- Next tasks
 - RMS recommendations
 - Project development
 - Project integration recommendations
 - Chapter review

Chapter Review

- 30 days, rounded to the next workday
- <http://featherriver.org/draft-irwm-plan>

Staff Draft Chapter	Release Date	Deadline for Comments
Governance, Stakeholder Involvement, Coordination	October 8, 2015	November 11, 2015
Climate Change	October 14, 2015	November 13, 2015

RMS – Floodplains, Meadows, Waterbodies

Presentation by Carl Felts, Floodplains/Meadows/Waterbodies
WG Chair

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FMW RMS Recommendations

- RMS 3: Flood management
- RMS 8: Conjunctive management
- RMS 9: Precipitation enhancement
- RMS 13: Surface storage – local/regional
- RMS 17: Pollution prevention
- RMS 21: Ecosystem restoration
- RMS 23: Land use planning and management
- RMS 24: Recharge area protection
- RMS 26: Watershed management
- RMS 30: Water-dependent recreation
- RMS 31: Other strategies



RMS 3 – Floodplain management

- Floodplain function restoration to preserve and/or restore the natural ability of undeveloped floodplains to absorb, hold, and release floodwaters

RMS 8 – Conjunctive management

- Implementation of monitoring, assessment, and maintenance of baseline groundwater levels
- Encouraging local water management agencies to coordinate with tribes and other agencies involved in activities that might affect long term sustainability of water supply and water quality
- Local groundwater monitoring and management activities and feasibility studies to increase the coordinated use of groundwater and surface water
- Restore wet meadows to full biological function to enhance storage and more continuous release of shallow groundwater.
- Implement a program to promote public education about groundwater and surface water connectivity.



RMS 10 – Precipitation enhancement

- Collect data and evaluate existing California precipitation enhancement projects within the UFR region on their effectiveness and impact on water quality and human health.
- Collaborate with academic institutions, agencies, and local citizen groups on research.

RMS 13 – Surface storage – regional/local

- Increase surface storage and timed releases for agricultural and natural resource purposes.
- Increase water-holding capacity of riparian vegetation and wetlands.
- Development of a comprehensive methodology for analyzing project benefits and costs by local agencies
- Continued studies, research, and dialogue to identify a common set of tools for determining costs and benefits of local surface storage projects, and assess need for determining need for future projects.

RMS 17 – Pollution prevention

- Developing proper land management practices that prevent sediment and pollutants from entering source waters and waterbodies
- Restore degraded riparian habitats where elevated sediment or turbidity cause nuisance or adversely impact beneficial uses per the Basin Plan
- Assess the costs and impacts of current water quality management activities and use this assessment to guide future implementation programs
- Identify abandoned mines throughout the region and assess the level to which these sites contaminate regional waters

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- Construct and maintain livestock exclusions around sensitive meadow and riparian habitats, particularly in areas that are important for groundwater recharge or source water protection.
- Assess and Identify source(s) of pollutants to waterbodies
- Establish monitoring protocol for marinas and recreational boating facilities
- Establish criteria for preventing/monitoring invasive aquatic species introduction to waterbodies
- Identify where recreational development has harmed water quality in the region and take action to remediate it



RMS 21 – Ecosystem restoration

- Creating programs that support and fund the identification of stream flow needs
- Establishing biological reserve areas that connect or reconnect habitat patches
- Expanding riparian habitat
- Devising climate change adaptation plans that benefit ecosystems, water, and flood management
- Reproducing natural flows in streams and rivers
- Controlling non-native invasive plant and animal species
- Filtering of pollutants and recharging aquifers

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- The protection and preservation of springs as water supply sources as well as valuable ecological and spiritual resources in the region
- Encourage a natural sediment transport regime through minimizing areas of excessive erosion and sedimentation and encouraging the transport of substrate through habitat restoration and changes in reservoir and hydrologic system management
- Remove barriers to fish migration in rivers and streams; assess culverts for adequate passage of aquatic organisms as appropriate

RMS 23 – Land use planning and management

- Increase communication between land use planners and water managers.
- Plan for growth in a way that considers water resource features such as streams, wetlands, and groundwater recharge areas, water quality and flooding.
- Direct development away from undeveloped mountain meadows

RMS 24 – Recharge area protection

- Restore and, where possible, protect meadows as recharge areas.
- Encourage the preparation of and implement groundwater basin management objective plans to monitor and/or minimize water transfers to protect groundwater supplies and recharge zones.
- Encourage science-based ecological restoration on public and private lands to maximize watershed function and recharge.
- Identify and inventory actual and potential recharge areas throughout UFR region.

RMS 26 – Watershed management

- Creating a scientifically valid tracking and reporting method to document changes in the Watershed
- Establish a scientifically valid means of tracking and reporting changes in the UFR region's major sub-watersheds that provide reliable, current information to local communities, State and federal agencies, and others, regarding the net effects of management against the background of external change.
- Restore and preserve stream channel morphology to provide floodwaters access to the floodplain and to encourage stable banks and channel form.

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- Assessing the performance of projects and programs
- Providing watershed information to better inform local land use decision makers on how to maintain and improve watershed functions
- Using watershed approaches in which all RMS strategies are coordinated
- Preserve habitats and ecosystems that provide functions essential to water management. These include:
 - erosion prevention, healthy sedimentation levels, water temperature preservation, and the provision of a cold-water pool in the summertime
 - Promote conservation of terrestrial and aquatic habitat connectivity
 - Protect, preserve, and restore, where appropriate, the riparian zone

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- Identify where noxious weeds may become a serious problem for recreational use, water quality, ecosystem integrity, or other reasons and manage those infestations accordingly
- Improve data collection and sharing amongst/between watershed stakeholders and outside entities
- Increase levels of community knowledge regarding their watershed and encourage responsible stewardship and protection
- Coordinate with and between stakeholders where appropriate
- Build regional capacity through stakeholder partnerships and collaboration

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- Assess the connection between groundwater and spring and surface water sources to better understand their interactions
- Proactively address the recovery of special-status species, at both watershed and population scales, and incorporate measures to avoid future listing of other at-risk species
- Protect soil resources and restore the functions of drastically disturbed soils, to slow runoff and increase rainfall infiltration.
- Retain intact floodplain and other wetlands, to the extent possible, to maintain or increase residence time of water in the watershed.

RMS 30 – Water dependent recreation

- Developing invasive species prevention measures.
- Enhance the educational qualities of recreational activities throughout the region
- Work with a variety of stakeholders (USFS, power providers, educational institutions, non-profits) to identify recreational and educational opportunities
- Ensure that current and future recreational developments do not endanger water quality and/or environmental characteristics

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- Develop a plan to resolve legacy pollution impacts on recreational waters.
- Develop best management practices guidance for reducing recreation-based water quality impacts, including impacts from recreation vehicles — such as reduced pollution of marine engines and parking lot runoff.
- Test surface water quality more often and make real-time water quality information for surface waters more accessible online and at recreation sites.

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- Educate residents and businesses in the watershed about their role in protecting water quality and recreational opportunities. Explain water quality issues to the public in more understandable and compelling ways
- Restore sustainable populations of native and/or game fish.
- Maintain and restore vegetation along rivers and streams that support and enhance outdoor recreation.
- Participate in the National Water Trails System.

Next Steps

- Next workgroup presentations (November/December):
 - Uplands/Forest & Tribal Advisory Committee
 - Agricultural Lands Stewardship

Sierra Nevada Conservancy

Agenda Item No. 4

Climate Change Technical Study

Agenda Item No. 5

Next Meeting

Agenda Item No. 6

Meeting Date and Time

- November/December 2015
- Tentative Topics
 1. Workgroup updates
 2. Tribal Outreach updates
 3. RMS – ALS Workgroup Presentation
 4. RMS – UF/TAC Workgroup Presentation
 5. Plan Performance and Monitoring
 6. Draft Implementation Project lists