

UPPER FEATHER RIVER
INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM
Regional Water Management Group

Sharon Thrall, Plumas County Flood Control and Water Conservation District
Paul Roen, Sierra County
Terry Swofford, Plumas County
Russell Reid, Feather River Resource Conservation District
Bill Nunes, Sierra Valley Resource Conservation District
Jim Roberti, Sierra Groundwater Management District
Roger Diefendorf, Plumas County Community Development Commission
Trina Cunningham, Maidu Summit Consortium
Jeffrey Greening, Public Member
Joe Hoffman, Plumas National Forest (Advisory)
Carol Thornton, Lassen National Forest (Advisory)
Quentin Youngblood, Tahoe National Forest (Advisory)

**AGENDA FOR REGIONAL WATER MANAGEMENT GROUP MEETING OF
JANUARY 22, 2016 TO BE HELD AT 1:00 P.M. IN THE
PLUMAS COUNTY PLANNING CONFERENCE ROOM, 555 MAIN STREET, QUINCY, CALIFORNIA**

www.featherriver.org

AGENDA

The Regional Water Management Group of the Upper Feather River Integrated Regional Water Management Program welcomes you to its meetings, which are regularly held on the fourth Wednesday of every other month, and your interest is encouraged and appreciated.

Any item without a specified time on the agenda may be taken up at any time and in any order.

Any person desiring to address the Board shall first secure permission of the Regional Water Management Group Chair. Any public comments made during a regular Regional Water Management Group meeting will be recorded. Members of the public may submit their comments in writing to be included in the public record.

CONSENT AGENDA: These matters include routine administrative actions. All items on the consent calendar will be voted on at some time during the meeting under "Consent Agenda." If you wish to have an item removed from the Consent Agenda, you may do so by addressing the Chairperson.



REASONABLE ACCOMMODATIONS: In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting please contact Randy Wilson at 530-283-6214. Notification 72 hours prior to the meeting will enable the County to make reasonable arrangements to ensure accessibility. Auxiliary aids and services are available for people with disabilities.

STANDING ORDERS

1:00 P.M. **CALL TO ORDER/ROLL CALL**

ADDITIONS TO OR DELETIONS FROM THE AGENDA

PUBLIC COMMENT OPPORTUNITY

Matters under the jurisdiction of the RWMG, and not on the posted agenda, may be addressed by the general public at the beginning of the regular agenda and any off-agenda matters before the RWMG for consideration. However, California law prohibits the RWMG from taking action on any matter which is not on the posted agenda unless it is determined to be an urgency item by the RWMG. Any member of the public wishing to address the RWMG during the "Public Comment" period will be limited to a maximum of 3 minutes.

ANNOUNCEMENTS/REPORTS

Brief announcements.

CONSENT AGENDA

These items are expected to be routine and non-controversial. The RWMG will act upon them at one time without discussion. Any RWMG members, staff member or interested party may request that an item be removed from the consent agenda for discussion.

A) RWMG

Approve RWMG Meeting Summary for the regular meeting held on October 23, 2015.

ACTION AGENDA

1. PROJECT STATUS UPDATE

Update on project schedule, task and budget. Informational.

2. STAKEHOLDER OUTREACH UPDATES

- a. Tribal outreach updates. Informational.
- b. Workgroup updates. Informational.

3. DISADVANTAGED COMMUNITY CAPACITY BUILDING PRESENTATION AND DISCUSSION

Presentation and discussion led by Katie Burdick, Burdick and Associates, of upcoming Proposition 1 disadvantaged community (DAC) funding opportunities and building capacity within DACs in the region. Information and discussion.

4. RESOURCE MANAGEMENT STRATEGIES – PRESENTATION BY AGRICULTURAL LAND STEWARDSHIP WORKGROUP

Presentation of draft resource management strategy recommendations by the Agricultural Land Stewardship Workgroup. Request for discussion and/or direction to staff.

5. RESOURCE MANAGEMENT STRATEGIES – PRESENTATION BY UPLANDS AND FOREST WORKGROUP AND TRIBAL ADVISORY COMMITTEE

Presentation of draft resource management strategy recommendations by the Uplands and Forest Workgroup and Tribal Advisory Committee. Request for discussion and/or direction to staff.

6. **RESOURCE MANAGEMENT STRATEGIES – PRESENTATION BY TRIBAL ADVISORY COMMITTEE**
Presentation of draft resource management strategy recommendations by the Tribal Advisory Committee. Request for discussion and/or direction to staff.
7. **PLAN PERFORMANCE AND MONITORING**
Presentation and discussion of draft options for IRWM Plan performance measures and monitoring. Request for discussion and direction to staff.
8. **SIERRA NEVADA WATERSHED IMPROVEMENT PROGRAM**
Consider endorsement of the Sierra Nevada Conservancy Watershed Improvement Plan. Request for consideration and approval.
9. **NEXT MEETING**
Schedule and tentative topics for next RWMG meeting. Request for discussion and direction to staff.

ADJOURNMENT

Upper Feather River IRWM Regional Water Management Group

DRAFT SUMMARY MINUTES

October 23, 2015

Meeting materials and video recording link are available on the website at:

http://featherriver.org/rwmg_meetings/

Call to Order and Roll Call

Sherrie Thrall called the meeting to order on October 23, 2015 at 1 pm at the Plumas County Planning Conference Room, 555 Main Street, Quincy, California.

Members Present:

Sherrie Thrall, Plumas County Flood Control and Water Conservation District

Jim Roberti, Sierra Groundwater Management District

Terry Swofford, Plumas County

Trina Cunningham, Maidu Summit Consortium

Roger Diefendorf, Plumas County Community Development Commission

Jeffrey Greening, Public Member

Joe Hoffman, Plumas National Forest (Advisory)

Members Absent:

Paul Roen, Sierra County

Bill Nunes, Sierra Valley Resource Conservation District

Russell Reid, Feather River Resource Conservation District

Quentin Youngblood, Tahoe National Forest (Advisory)

Carol Thornton, Lassen National Forest (Advisory)

Staff Present:

Randy Wilson, Plumas County Flood Control and Water Conservation District

Uma Hinman, Uma Hinman Consulting

Paul Lackovic, Deer Creek Resources, Inc.

Leah Wills, Uplands and Forest Management Workgroup Coordinator

Terri Rust, Floodplains, Meadows, and Waterbodies Management Workgroup Coordinator

Additions or Deletions from the Agenda

None noted

Announcements / Reports

None noted

CONSENT AGENDA

(Video 1, 00:3:15)

a. RWMG Approval of Meeting Minutes for September 23, 2015

Upon motion by Roger Diefendorf and second by Trina Cunningham, the RWMG Meeting Minutes for September 23, 2015 were unanimously approved.

REGULAR AGENDA**1. Project Status Updates****(Video 1, 00:3:45)**

Uma Hinman presented an overview of task progress and an update on schedule and budget. We are in month 17 of the 2-year project, have completed approximately 52 percent of project tasks, and expended approximately 42 percent of the overall budget. The project remains on target to finish by June 2016. Sherrie Thrall noted we have a tight schedule for the remainder of the project.

2. Stakeholder Outreach Updates**(Video 1, 00:4:45)**

Trina Cunningham provided an update of Tribal outreach efforts and meeting attendance. Trina attended a Governor's Office of Planning and Research (OPR) meeting with topics including rural capacity building and groundwater storage (Proposition 1 water storage funding). There was some discussion about bringing in the municipal connections to address limited resources in the rural regions, for example, to tie together operations and maintenance fees for recognized storage areas (groundwater storage) within the region. Another topic discussed was rural advocacy needs such as polling and regulations to overcome voting disparity. Trina also attended a Mountain Counties Water Resources Agencies (MCWRA) meeting.

Trina also recommended Daniel Wildcat's book on Traditional Ecological Knowledge (TEK) as a resource for learning more about the topic. The Tribal Advisory Committee will be meeting in the next couple of weeks.

Randy Wilson shared that Elizabeth Bettencourt contacted him about being involved in OPR's Water and Land Use Planning efforts. (00:09:30).

Uma Hinman provided an update on workgroup efforts, which include development of resource management strategy (RMS) recommendations and further development of project submittals. The Workgroup Coordinators continue to support project proponents to ensure the applications address the required review factors and include completed climate change assessments. Sherrie Thrall commended the Coordinators on their significant efforts and professionalism.

3. Resource Management Strategies – Floodplains, Meadows, Waterbodies Workgroup**(Video 1, 00:12:20)**

The Floodplains, Meadows, Waterbodies Workgroup drafted resource management strategy recommendations for each assigned RMS:

- RMS-3: Flood Management
- RMS-8: Conjunctive Management
- RMS-9: Precipitation Enhancement
- RMS-13: Surface Storage – Regional/Local
- 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

Carl Felts, Chair of the Floodplains, Meadows, and Waterbodies Workgroup, directed the RWMG to the draft RMS contained in the agenda packet for Item No. 3 and asked if there were any questions. The workgroup's approach was similar to other workgroups; the Coordinator, Terri Rust, put together a list of draft recommendations for the workgroup to review and use. Terri, Carl Felts, and Cindy Noble (Alternate) then met to review and further refine the recommendations, which were then shared with the workgroup for consideration and finalizing.

Carl noted that the Lake Almanor Watershed Group (LAWG), an advisory committee to the Plumas County Board of Supervisors, addressed many of these strategies and will continue to do so. There are a lot of other strategies in the document that LAWG and Mountain Meadows Conservancy have addressed and will be reviewing.

Sherrie Thrall noted that the strategies are lofty goals and it will be interesting to see how the implementation process unfolds.

Uma noted the schedule for the next workgroup presentations:
Uplands/Forest & Tribal Advisory Committee – December 2015
Agricultural Lands Stewardship – December 2015

4. Sierra Nevada Conservancy Watershed Improvement Program and Grant Opportunities (Video 1, 00:16:50)

Lynn Campbell, Sierra Nevada Conservancy (SNC) North-Central Subregion Representative, presented an introduction to the SNC and various current and upcoming funding opportunities through the SNC.

Lynn provided an update on the Proposition 1 funding. SNC is focused on forest management and how it relates to water – upper watershed issues. SNC has \$25 million in funding to promote a collaboration of public and private landowners to affect landscape-scale forest health, such as fuel reduction, replanting burned areas, reducing meadow encroachment, etc. There is a December 1, 2015 deadline and a March 1, 2016 deadline for funding. There are two funding opportunities: category 1 (implementation) and category 2 (planning and design).

Lynn introduced colleagues Andy Fristensky, Mount Lassen Area Manager, and Christy Hoffman, North Subregion Representative. Lynn announced that SNC will be setting up an office in Quincy to better serve the region.

Sherrie Thrall noted that a common hindrance to obtaining and implementing grants is capacity (planning, design, permitting, etc.). Lynn confirmed that there is SNC funding available to help with those costs.

Andy presented on the Sierra Nevada Watershed Improvement Program (WIP), started under an MOU between the Region 5 U.S. Forest Service and SNC. The WIP is focused on a landscape approach of watershed restoration and forest health. Goals of the WIP are to create and track watershed assessment, finding new funding, policy implementation, and enhancing communication. The SNC is looking for endorsements for the WIP.

Randy Wilson asked about what policies the WIP is looking to revise/implement and at what level – local, state, federal? Andy's response was on all levels.

Sherrie Thrall noted that anyone can endorse the WIP – the RWMG, counties, RCDs, individuals. Randy Wilson noted he would put the WIP on the Plumas County Board of Supervisor’s agenda for consideration. Sherrie requested that we also include the WIP endorsement on the next RWMG meeting agenda.

Sherrie asked about types of outreach to more urban areas that don’t know where their water is coming from. This is crucial--to raise awareness of the importance of investing in headwater regions. Terri noted that Rob Wade’s “Plumas to the Sea” educational program may serve as a template for such an outreach program. Lynn noted that they get requests for watershed information all the time.

Trina Cunningham noted that the WIP is landscape-scale based and asked how smaller projects will be integrated into that effort. That is the kind of collaboration the WIP is hoping to promote. Reforming groups at a community level can be an objective to bring folks together to address the landscape scale instead of piece-mealing projects and efforts. Trina noted that there are so many committees and groups that it makes it difficult to be involved in all these efforts.

Leah Wills noted that groundwater storage, and the role of the landscape-scale approach in that storage, is critical. The current drought is the opportunity to look at this potential connection.

5. Climate Change Technical Study and Chapter

(Video 2, 00:01:30)

Chris Read, PMC/Michael Baker International, and Michael Prezler, ECORP Consulting, presented the Climate Change Technical Study and draft chapter. The objectives of the presentation were to provide context, background, and overview of climate change and related items, and to discuss how climate change will be incorporated into the IRWM Plan. Chris described how stakeholder input provided during the August 21, 2015 climate change workshop was incorporated into the assessment and chapter and provided an overview of the content of the chapter itself. Michael presented climate change vulnerabilities in the region, both observed and projected. In most cases, historical data was culled from Gary Freeman’s work.

Jim Roberti asked if the historic data took into consideration that over the last 100 years, more uses in agriculture are taking water that would have otherwise gone to Lake Oroville. Michael confirmed yes, all upstream impairments have been included. (Video 2, 00:14:55)

Leah Wills brought up the Middle Fork Project noting that there is water input coming from the Diamond Mountains, which appears to be a large groundwater aquifer. There is also water input coming from the volcanic region in the North Fork, which has a 10 year cycle. The project is looking at how much water can be used to recharge the Sierra Valley Basin during big water years. The Middle Fork project won’t be completed in time to incorporate into the IRWM Plan, but it is a large comprehensive effort that will have far-reaching planning implications.

Jeffery Green cautioned about getting locked into vulnerabilities and trends in light of extreme events such as the potential of an El Nino year.

Four data gaps were identified in the analysis: climate effects on catastrophic wildfires, 200-year floodplain mapping, increased understanding of snowpack, and local greenhouse gas emissions. (Video 2, 00:35:40)

Leah Wills noted that the Middle Fork Project will map the 200-year floodplain in the Sierra Valley for the purposes of measuring infiltration into the groundwater basin. Randy noted that the 200-year floodplain was considered in the Plumas County General Plan Update. However, establishment of the 200-year floodplain standard would impact most development in Plumas County. Once the 200-year floodplain is identified, insurance will be required for all development within the 200-year standard. Chris assured that it is not the intent of their work to identify the 200-year floodplain for the purposes of flood insurance mapping. The intent is to identify critical infrastructure hazards. Sherrie stated that it is important not to saddle the entire region with adaptation/issues/mitigation recommendations that apply to only one area, such as the Middle Fork Project.

Chris stated that it would be good to have a comprehensive assessment of greenhouse gas emissions to use as a common denominator/baseline to aid future assessments and funding opportunities. Sherrie noted that catastrophic wildfires will have a huge effect on GHGs.

Leah stressed the importance of shading the snowpack to cement the snowpack so that it can hold the spring rains coming out of the Middle Fork Project.

Chris went over the climate change project assessment tools including the climate change assessment and GHG calculator. The tools have been shared with the workgroups. Training has been offered, if needed. Also, the Climate Change chapter is out for stakeholder review and comment.

Carl Felts asked if PMC/ECORP had created the GHG worksheet. Chris responded that they took existing tools and modified them to meet the needs of the project. Carl commended them on the tool.

Jeffrey Green asked if, in the prior awarding of grants, was the input on climate change a greater factor on the successful grants. Lynn Campbell noted that it needs to be addressed in project development and review. Chris confirmed that all state grants require a climate change assessment/component.

The climate change tools are to assess impacts/benefits to the projects. The RMS chapter will include suggestions to address climate vulnerabilities as well.

Sherrie noted that PG&E is doing a lot of work on climate and weather modeling in the Middle Fork drainage. Randy mentioned Dr. Kavass's study that incorporates findings of four climate change models and goes to a scale of three miles.

11. Next Meeting

(Video 2, 1:06:00)

The next meeting is scheduled for Friday, December 4, 2015 at 1 pm.

Adjournment

(Video 2, 1:08:00)

The meeting was adjourned at 3:45 pm.

**Upper Feather River
Integrated Regional Water Management**

**RWMG Meeting No. 8
January 22, 2016**

To: Upper Feather River Regional Water Management Group
From: Uma Hinman, Uma Hinman Consulting
Subject: UFR IRWM Plan Update Project Schedule, Task and Budget Update
Date: January 11, 2016

SCHEDULE

Based on the contract date between DWR and the Plumas County Flood Control and Water Conservation District, we are currently in the 18th month of the 2-year project. All Workgroups have held at least five meetings; consistent with the grant work plan. The next few months will be focused on the projects and chapter development. See attached schedule.

MEMORANDUM OF UNDERSTANDING (MOU)

The MOU is posted on the website and has been presented at each of the Workgroup meetings. Additionally, copies have been provided to requesting agencies and organizations through the Workgroups. To date, 34 signed MOUs have been returned.

On September 16, 2015, Randy Wilson, Uma Hinman, and Trina Cunningham met with Butte County representatives to discuss an MOU to address planning and management in the overlap area, determine areas of responsibility, and provide for appropriate consultation as needed. The MOU has been drafted and is currently being reviewed by Plumas County counsel.

BUDGET AND TASK UPDATE

The overall expenditures on the grant project to date are consistent with the project accomplishments, and demonstrate very efficient use of funds.

In October 2014, Plumas County and its partners provided documentation of \$237,489 in matching funds, which fulfills the match requirement for the grant contract in its entirety. To date, Uma Hinman Consulting has submitted 15 invoices to DWR totaling \$389,090.77 in reimbursable services, equipment purchases, and operating expenses. Approximately 58 percent of project work has been completed and

the \$357,180.29 invoiced to date for professional and consultant services represents 59 percent of the \$605,708 budget for those services. Additionally, the total grant amount invoiced to date includes county equipment and operating costs, for an overall billing of 57 percent of the total grant budget. See attachment 2 for budget summary.

Most of the services and budget expenditures have been allocated to Tasks one, three, six, and seven. The following are summaries of work completed or initiated by task.

Task 1: Stakeholder Outreach/RWMG/Workgroups/Tribal Engagement/IRWM Coordination

The Stakeholder Outreach efforts have included coordinating, publicizing, and preparing outreach materials and presentations for—and conducting—the first five regular RWMG meetings; conducting a special meeting to review, discuss and approve the Draft Monitoring Policy and the Draft Project Selection and Scoring Criteria; and reviewing and vetting the first phase of Conceptual Project Summary submittals. Past tasks and efforts have included developing the Stakeholder Outreach Plan (SIP); drafting the stakeholder contact lists and an MOU; updating the tribal contact list and drafting the Tribal Engagement Plan; developing and discussing the draft Project Eligibility Worksheet to vet Conceptual Projects; reviewing and discussing project selection and ranking criteria; and coordinating and scheduling individual workgroup meetings. The workgroups have held five to six meetings, focused recently on developing projects proposed for implementation in the IRWM region and recommending resource management strategies. In addition a fifth working group was recognized in May: the Tribal Advisory Committee has held six meetings to date.

The first Joint Workgroup Integration Workshop/Climate Change Workshop was held August 21, 2015 from 9am to 4:30pm in the Mineral Building at the Plumas County Fairgrounds. The workshop had excellent attendance and very productive discussion/participation in both the morning and afternoon sessions.

Staff continues to post articles of interest under the NEWS section on the website, and maintains the calendar and meeting pages with meeting schedules and materials. Please remember to check the website periodically for new posts and information. On the website, DRAFT IRWM PLAN, a subcategory under the section, DOCUMENTS, contains the staff Draft Plan chapters for review and includes deadlines for comments.

Task 2: Baseline Technical Study

The administrative draft Baseline Technical Study has been posted on the website and includes a database of background materials collected and catalogued to date. The draft report is available at <http://featherriver.org>. Staff continues to update the document database as the project progresses. The consultant team has developed a database that is linked via GIS to a map that provides a visual catalog of studies and projects in the region. Time was spent compiling, categorizing, summarizing, and uploading baseline studies. The administrative draft Baseline Technical Study Report was presented at the March 27, 2015 RWMG meeting.

Task 3: Data Management Strategy, System Development and Implementation

The website/web portal of the UFR IRWM Project (<http://featherriver.org/>) is up-to-date and kept current. The RWMG meeting agendas, packets, and archived videos of the meetings are and will be available on the site, as will project information and updates.

During May and June 2015, consultants attended the emergency planning committee meeting regarding the Feather River geographic response plan and communicated with California Department of Fish and Wildlife (CDFW) about parallel data collection efforts; added a Tribal Advisory Committee Workgroup page to the website; and wrote a manual on how to record and video stream meetings. Staff tasks included incorporating new layers into maps (such as land managers, precipitation, fire hazard and severity zone, and fire threat layers).

The consultant team has developed an online, map-based catalog of studies and projects in the region. The database is linked via GIS to a map that provides a visual catalog of studies and projects in the region (similar to the SWIM site). Time was spent compiling, categorizing, summarizing, and uploading baseline studies. The catalog is available on the website at: <http://featherriver.org/catalog/index.php>.

The Step 2 project submittal data have been incorporated into an online map, <http://featherriver.org/proposed-projects/>. The database includes a summary of the information submitted for each project.

Task 4: Climate Change

The August 21, 2015 Climate Change Workshop consisted of a working session to present and discuss climate change scenarios, regional vulnerabilities, and recommended adaptation strategies. The workshop had excellent attendance and very productive discussion/participation in both the morning and afternoon sessions. Workgroup comments, and those received during the August 21, 2015 workshop, were incorporated into the vulnerability assessment. The Consultant team has completed the vulnerability to climate change assessment, a project worksheet for calculating GHG emissions, and the draft climate change chapter.

Task 5: Project Development Process

The deadline for the first stage of the project submittal process was June 1, 2015 at 5:00 p.m. Approximately 80 conceptual projects submittals were received. The eligible conceptual project proposals were reviewed by the RWMG during a special meeting on June 15, 2015.

The deadline for Step 2 IRWM Project Information Forms was Monday, August 3, 2015 at 5:00 p.m. Eight-one (81) projects were received. The Step 2 project submittals were discussed during the August 21, 2015 Workgroup Integration and Climate Change Workshop with a focus on recommendations for project integration.

Workgroup Coordinators continue to support project proponents in the further development of the project applications. Staff remains in contact with project proponents, providing updates on process and

next steps. The Workgroup Coordinators are working with project proponents to ensure project applications address the required review factors and include completed GHG emission worksheets. We anticipate having a summary of the project review process and results for the next RWMG meeting.

Task 6: IRWM Plan Update

The following table indicates the status and progress of chapter development: Water and Land Use Chapter, Region Description, Governance/Stakeholder Involvement/Coordination, and Finance. Based on collected information and what is generated through the workgroup meetings, chapters will be drafted by staff and reviewed by workgroups and the RWMG.

Chapter Review

The first staff draft Plan chapters have been released for review and comment: Governance, Stakeholder Involvement, and Coordination; Climate Change; and Region Description. Comments are due by 5:00pm on the date indicated in the table below. All comments should be submitted to UFR.contact@gmail.com. Chapters and timelines are posted on the website: <http://featherriver.org/draft-irwm-plan/>.

| Staff Draft Chapter | Release Date/Status | Deadline for Comments |
|---------------------------------------------------|----------------------------|------------------------------|
| Governance, Stakeholder Involvement, Coordination | October 8, 2015 | November 11, 2015 |
| Climate Change | October 14, 2015 | November 13, 2015 |
| Region Description | December 7, 2015 | January 11, 2016 |
| Regional Water Issues, Integration and Capacity | In process | |
| Resource Management Strategies | In process | |
| Impacts and Benefits | In process | |
| Plan Implementation, Performance and Monitoring | In process | |
| Goals and Objectives | | |
| Project Development and Review Process | | |
| Plan Development Process | | |
| Finance | Drafted | |
| Water and Land Use Planning | Drafted | |
| Technical Analysis | Drafted | |

Task 7: Grant Administration

Work under Task 7 has included the documenting of matching funds and polishing invoicing and reporting procedures. We have submitted 15 project progress reports and invoices to date.

SPECIAL STUDIES

Forest-Water Balance Study: Work on the Forest-Water Balances Study is expected to be completed in the next couple of months. A memorandum from Plumas Geo-Hydrology, dated February 16, 2015, draws attention to the significance of groundwater recharge related to forest canopy thinning. The

memorandum indicates that forest management practices to reduce forest canopy closure will increase groundwater recharge, and thereby increase base flow in streams. It is anticipated that an update will be presented at the next RWMG meeting.

Community/Well Vulnerability Study: The Community Vulnerability Study is intended to better identify drinking water pollution risks for the approximately 40 percent of groundwater-dependent households in the region. In preparing the study, Plumas Geo-Hydrology will assess nitrate pollution risks to municipal and domestic drinking water in high groundwater table areas with septic systems and agricultural livestock production. There are also significant outreach efforts to Disadvantaged Communities (DAC) and Tribal communities associated with this study. The timeframe for this study is January through March 2016.

DAC Assessment: Sierra Institute is continuing to work on refining the DAC assessment. This is important work that will address some of the data gaps in DWR's DAC identification methodology and mapping. We anticipate having a draft assessment to present to the RWMG at the next RWMG meeting.

REQUEST

Informational.

Attachments: Schedule
Budget Summary

IRWM Round 2 Planning Grant Upper
Feather River IRWM Plan

| | 2014 | | | | | 2015 | | | | | | | | | | | | 2016 | | | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|-----|------|------|
| | August | September | October | November | December | January | February | March | April | May | June | July | August | September | October | November | December | January | February | March | April | May | June | July |
| TASK 1: UFR IRWM Program Public and Stakeholder Involvement | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.1 Develop Session Initiation Protocol (SIP) | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2.1 RWMG Meetings | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2.2 Workgroup Meetings | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2.3 Other Meetings | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.3 DAC Outreach | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.4 Tribal Outreach | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.5 Interregional Outreach | | | | | | | | | | | | | | | | | | | | | | | | |
| TASK 2: Baseline Technical Study | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.1 Data Collection and Review | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 Issue "Call for Papers, Studies, Data" | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.4 Develop Information Summaries | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.5 Draft Baseline Technical Study | | | | | | | | | | | | | | | | | | | | | | | | |
| TASK 3: Data Management Strategy, System Development and Implementation | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.1 Develop, activate and host UFR IRWM Website | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.2 Develop UFR IRWM Document Web Library/Data Management | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.3 Develop Project GIS Database and Mapping | | | | | | | | | | | | | | | | | | | | | | | | |
| TASK 4: Climate Change Technical Study and Plan Chapter | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.1 Describe Legislative and Policy Context | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.2 Vulnerability to Climate Change | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.3 Discuss Adaptation to Climate Change | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.4 Recommend Data Collection Improvements and GHG Calculation Tools for Future IRWM Plan Updates | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.5 Identification of Next Steps for Future IRWM Plan Updates | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.6 Prepare Climate Change Technical Study and Plan Chapter | | | | | | | | | | | | | | | | | | | | | | | | |
| TASK 5: Project Development Process | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.1 Evaluate Existing Water Management Projects and Objectives in Existing IRWMP and Update Plan Objectives to Reflect New Water Management Priorities | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.2 Develop Project Selection Criteria | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.3 Project Integration and Prioritization Workshop | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.4 Project Evaluations and Project Prioritization including DAC and Tribal Effects | | | | | | | | | | | | | | | | | | | | | | | | |
| TASK 6: UFR IRWM Plan Update | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.1 Prepare Draft Plan Chapters/ Consistency with New Plan Standards | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.2 Present Draft Plan Chapters to the RWMG and Workgroups for Comments | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.3 Prepare Draft Plan | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.4 Present Draft Plan to the RWMG | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.5 Conduct Two Public Hearings on Draft Plan | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.6 Present Final Plan to the RWMG for Adoption and Posting on the Website | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.7 Present Final Plan to the MOU Entities and Agencies for Adoption | | | | | | | | | | | | | | | | | | | | | | | | |
| TASK 7: Grant Administration | | | | | | | | | | | | | | | | | | | | | | | | |

Milestones:

◇ = Monthly Report

• = Draft Project Completion Report

• = Project Completion Report

blue identifies original schedule

→ Purple arrows indicate progress and schedule

★ indicate public hearings

Agreement No.: 4,600,010,066.00

Grantee: Plumas County Flood Control and Water Conservation District

Awarding Body: California Department of Water Resources

Program: Prop 84

Encumbrance FY: 2012

| Award Budget | Match |
|--------------|--------------|
| \$679,657.00 | \$237,489.00 |

| Line Item | Prop 84 Allotments | Personnel Services | Operating Expenses | Equipment | Professional/Consultant Services | Total | 10% Withholding | Overhead | Match Total |
|---------------------|--------------------|--------------------|--------------------|-----------|----------------------------------|--------|-----------------|----------|-------------|
| Invoice No. | Billing Period | | | | | | | | |
| 1 | 10/1/08-9/30/14 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 2 | 9/1/14-10/31/14 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 3 | 9/1/14-11/30/14 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 4 | 12/1/14-12/31/14 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 5 | 10/1/14-1/31/15 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 6 | 7/1/14-2/28/14 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 7 | 11/1/14-3/31/15 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 8 | 3/1/15-4/30/15 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 9 | 3/1/15-5/31/15 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 10 | 9/1/14-6/30/15 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 11 | 6/1/15-7/31/15 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 12 | 3/1/15-8/31/15 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 13 | 1/1/15-10/31/15 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 14 | 9/1/15-10/31/15 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 15 | 8/1/15-11/30/15 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Total Amount Spent | | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Allotment Remaining | | \$ | \$ | \$ | \$ | \$ | | | |
| % Budget Invoiced | | 37.02% | 70.99% | 97.12% | 58.97% | 57.25% | | | |

**Upper Feather River
Integrated Regional Water Management**

**RWMG Meeting No. 8
January 22, 2016**

To: Upper Feather River Regional Water Management Group
From: Uma Hinman, Uma Hinman Consulting
Subject: Stakeholder Outreach Update
Date: January 11, 2016

INTRODUCTION

The following is a summary of stakeholder updates for the Upper Feather River IRWM Plan Update.

TRIBAL ENGAGEMENT

An update will be provided during the meeting.

WORKGROUPS

The workgroups have all held their fifth meetings and are working their way through the final stages of project development and finalizing their assigned resource management strategy recommendations.

Project Development

Workgroup Coordinators continue to support project proponents in the further development of the project applications. Staff remain in contact with project proponents, providing updates on process and next steps. The Workgroup Coordinators are working with project proponents to ensure project applications address the required review factors and include completed GHG emission worksheets. We anticipate having a summary of the project review process and results for the next RWMG meeting.

Resource Management Strategies

The remaining workgroup presentations on resource management strategies (RMS) will be on January 22, 2016 with the Agricultural Land Stewardship Workgroup, the Uplands and Forest Workgroup, and the Tribal Advisory Committee presenting their recommendations. The Floodplains, Meadows, Waterbodies Workgroup presented their draft RMS recommendations to the RWMG on October 23, 2015 and the Municipal Services Workgroup presented draft RMS recommendations to the RWMG at the September 23, 2015 RWMG meeting. The next step will be to share the combined recommendations with the workgroups and stakeholders for review and comment.

Assignment/Task Strategy

A total of eight workgroup meetings are identified in the Plan Update work program over the course of the two-year project; two are intended to be workgroup integration workshops. The first integration workshop was held on August 21, 2015. It is anticipated that the remaining integration workshop will be focused on project integration and lists and Plan content.

The following table summarizes workgroup meeting schedules.

| Workgroup | Chair | Alternate | Meeting Schedule |
|--------------------------------------|------------------|------------------|-----------------------------------------------------------------------------------------------------------------|
| Agricultural Land Stewardship | Willo Vieira | | January 22, 2015 March 11, 2015 May 26, 2015 July 20, 2015 November 16, 2015 |
| Floodplains, Meadows and Waterbodies | Carl Felts | Cindy Noble | December 5, 2014 February 13, 2015 April 24, 2015 June 26, 2015 October 16, 2015 |
| Municipal Services | Frank Motzkus | Robert Meacher | November 20, 2014 February 19, 2015 April 17, 2015 June 17, 2015 July 15, 2015 November 19, 2015 |
| Uplands and Forest | Mike DeLasaux | John Sheehan | January 29, 2015 March 13, 2015 April 24, 2015 June 30, 2015 November 5, 2015 |
| Tribal Engagement Committee | Trina Cunningham | | January 13, 2015 March 20, 2015 May 18, 2015 July 13, 2015 November 2015 January 8, 2016 |

The remaining workgroup meetings will be scheduled as needed for chapter reviews and implementation projects.

REQUEST

Informational.

**Upper Feather River
Integrated Regional Water Management**

**RWMG Meeting No. 8
January 22, 2016**

To: Upper Feather River Regional Water Management Group

From: Uma Hinman, Uma Hinman Consulting

Subject: Disadvantaged Community Capacity Building Discussion

Date: January 11, 2016

INTRODUCTION

This discussion item will be presented by Katie Burdick of Burdick and Associates, and will be focused on options for building capacity for disadvantaged communities (DAC) to position eligible DAC entities for Proposition 1 IRWM funding. Ms. Burdick has worked with numerous IRWMs and DACs from the Upper Pit River IRWM to CABY IRWM (Cosumnes America Bear Yuba) and has extensive experience with DACs and project development. She will present information and her insights into the Proposition 1 funding and some options for consideration that may help the UFR IRWM region position for DAC funding.

BACKGROUND

The first two rounds of Proposition 1 IRWM funding will be targeted to DAC involvement and implementation (projects); each has been allocated 10 percent of the funding regions' total. Round 1 will be focused on DAC involvement and is expected to be released in late March 2016. The intent of this first round is to help ensure involvement of DACs, economically disadvantaged areas (EDAs), or underrepresented communities with the regions.

| Bond Allocation | Funding | Schedule | Notes |
|-------------------------------------|----------------|--------------------------|-------------------------------------------------------------------------------------------------------------|
| Mountain Counties Funding Region | \$13 million | | Minus \$910,000 for program delivery and bond administration costs |
| DAC Involvement (Round 1) | \$1.3 million | Spring 2016 | Intended to ensure involvement of DACs, EDAs, and/or under- represented communities within regions |
| DAC Implementation (Round 2) | \$1.3 million | Summer 2016 | |
| Implementation Grants (Round 3?) | \$9.49 million | FY 2017/18 FY 2019/20 | |

Source: http://www.water.ca.gov/irwm/grants/docs/P1Index/Proposition1IRWMGrantProgramPublicScopingMeeting_Final.pdf

DISCUSSION

Rather than implementing a competitive bid process, the Department of Water Resources (DWR) will assign funding for Round 1 DAC Involvement. DWR intends its staff to tour and interview each IRWM region's RWMG to discuss DAC involvement needs within the region. Based on their interviews, DWR staff will decide who will receive what funding within each funding region (e.g., Mountain Counties). The guidelines are still being developed by DWR staff with a first public review draft expected in January and final guidelines by March 2016. In order to be ready for that process, it would benefit the regions to scrutinize its DACs and their needs.

A possible application of Round 1 funds could be to help each DAC prepare a capital improvement plan (CIP)/needs assessment so as to realistically prioritize their projects, with the intent of putting DACs on an even par with other groups and entities within the region for future funding opportunities. An option to achieve this goal could be the development of a core team to work with the DACs and EDAs in the region to develop the CIPs/needs assessments, which would then be used to help prioritize projects within each DAC. Priority projects would then be technically advanced with the assistance of the core team to be ready for upcoming funding opportunities.

It will be important to identify a systematic, consistent, and egalitarian process to identify priority projects that also educates DACs members and the RWMG on the process and purpose. The process should be transparent and readily replicated.

REQUEST

Information and discussion.

**Upper Feather River
Integrated Regional Water Management**

**RWMG Meeting No. 8
January 22, 2016**

To: Upper Feather River Regional Water Management Group

From: Uma Hinman, Uma Hinman Consulting

Subject: Resource Management Strategies Presentation – Agricultural Land Stewardship Workgroup

Date: January 11, 2016

INTRODUCTION

The intent of developing resource management strategies (RMS) specific to the region is to intentionally find ways to diversify the region's water management portfolio. The RMS selected for inclusion in the Plan should support and be consistent with the issues identified within the region and Plan objectives.

The Agricultural Land Stewardship Workgroup was assigned responsibility for developing recommendations for ten resource management strategies (RMS), identified as follows:

- RMS-1: Agricultural Water Use Efficiency
- RMS-5: Conveyance – Local/Regional
- RMS-8: Conjunctive Management
- RMS-13: Surface Storage – Regional/Local
- RMS-17: Pollution Prevention
- RMS-20: Agricultural Land Stewardship
- RMS-23: Land Use Planning and Management
- RMS-25: Sediment Management
- RMS-28: Outreach and Engagement
- RMS-31: Other Strategies

The Agricultural Land Stewardship Workgroup Chair, Willo Vieira, will present the Workgroup's draft recommendations (attached).

REQUEST

Information, discussion and/or direction to staff.

Attachment: Agricultural Land Stewardship Workgroup Draft RMS recommendations

DRAFT Resource Management Strategy Recommendations

UFR Agriculture Land Stewardship Workgroup Selections

The Agricultural Land Stewardship Workgroup were assigned the following resource management strategies for which to develop recommendations.

- RMS-1: Agricultural Water Use Efficiency
- RMS-5: Conveyance – Local/Regional
- RMS-8: Conjunctive Management
- RMS-17: Pollution Prevention
- RMS-20: Agricultural Land Stewardship
- RMS-23: Land Use Planning and Management
- RMS-25: Sediment Management
- RMS-28: Outreach and Engagement
- RMS-31: Other Strategies

Agriculture Land Stewardship Project Submittals:

| | |
|--------|-----------------------------------------------------------------------------------------------|
| ALS 1 | Taylorsville Mill Race Dam Resurfacing |
| ALS 2 | Water Quality & Infrastructure Upgrades on Working Lands (FRRCD) |
| ALS 3 | Enhanced Management of Livestock Grazing (FRRCD/SVRCD) |
| ALS 4 | Invasive Weed Management (Agriculture Commissioner) |
| ALS 5 | Sierra County Ag Stock Well, Fire Storage, Drought Reduction Project (Sierra Co. Roads Dept.) |
| ALS 6 | Sierra Valley Ag Water Diversion Efficiency/Imp. (conduit/repair on Little Truckee) (SVRCD) |
| ALS 7 | Sierra Valley RCD Resource Management Plan (SVRCD) |
| ALS 8 | UFR Weather Monitoring Infrastructure (FRRCD) |
| ALS 9 | Soil Health Assessment (UCCE) |
| ALS 10 | SV Groundwater Sustainability Plan (SVGMD) |
| ALS 11 | Cold Stream Ag & Fire Storage Impoundment (SVRCD) |
| ALS 12 | Alfalfa Alternative (SVRCD/UCCE) |
| ALS 13 | Little Last Chance Lake (SVRCD/SWCF) |

RMS 1 – Agricultural Water Use Efficiency

RMS 1 Definition: The efficient management of water resources for beneficial uses, preventing waste, or accomplishing additional benefits with the same amount of water.

RMS 1 Draft Recommendations:

Education, Data and other Technical Assistance

1. Explore and identify techniques to improve overall agricultural water use efficiency. ([ALS 2, 3, 7, 9, 10, 12, 13](#))
2. Expand water efficiency information, evaluation programs and on-site technical assistance reaching water suppliers, farmers and ranchers, through academic institutions, including

agricultural extension services, resource conservation districts, independent crop advisors, and other agricultural outreach efforts. [\(See ALS 2, 3, 8, 12\)](#)

3. Agricultural, water and environmental stakeholders develop community educational and motivational strategies for conservation activities to foster water use efficiency. [\(ALS 2, 7, 9, 10, 12\)](#)
4. Resource Conservation Districts and Groundwater Districts in Agricultural areas collect and UC Cooperative Extension and Plumas-Sierra Agriculture Departments document promising practices and plans for droughts and other water shortages. [\(ALS 2, 3, 7, 10\)](#)
5. Develop sources of real-time data to provide irrigators and water managers with better information with which to make water management/irrigation decisions, such as:
 - a) Local meteorological/weather data [\(ALS 8\)](#)
 - b) Soil moisture data (meters) [\(ALS 3, 8\)](#)
 - c) Water application/use monitoring [\(ALS 10\)](#)
 - d) Surface water depth and flow data
 - e) Surface to groundwater depth [\(ALS 10\)](#)
 - f) Groundwater modeling [\(ALS 10\)](#)
6. Develop methods to quantify and communicate water savings and costs associated with hardware upgrades, water management, and evapotranspiration reduction projects. [\(ALS 2, 3, 7, 12\)](#)
7. Develop consistent, watershed-wide methodology for collecting and reporting water use information by users and suppliers (groundwater and surface) – consistent with state requirements. [\(ALS 3, 7, 10\)](#)
8. Comprehensive educational, informational, and awareness effort regarding sustainability of consumption of local products in the water-use efficiency programs for growers, water suppliers, post-harvesting processors, consumers, and others. Encourage reducing long-distance commodities transporting and importing commodities and thus, reduce energy use and greenhouse gas emissions.

Use of Promising Practices

9. Steward soil and wetland areas for increased groundwater holding and recharge, as well as sediment management. [\(ALS 2, 3, 7, 9, 10, 13\)](#) [\(also applies to RMS 25-Sediment Management\)](#)
10. Employ flood management capacities of agricultural land to support groundwater recharge, reduce infrastructure damage, control erosion and sedimentation of waterways and improve downstream water quality. [\(ALS 7\)](#)
 - a) Explore diversion of flood/high season water to above-ground storage areas? [\(ALS 11, 13\)](#)
 - b) Employ flood easements to compensate farmers/ranchers who allow fields to be flooded during extreme events.
11. Utilize conservation easements and proven (or promising) practices to protect water supplies and water quality [\(ALS 2, 3, 4, 7\)](#)
12. Adjust irrigation schedules and methods to decrease the amount of water used or applied, including possible use of Low Energy Precision Application (LEPA) for center pivots. [\(ALS 13\)](#)
13. Provide help to convert to more drought-resistant or less-water-consumptive cropping. [\(ALS 12\)](#)

14. Identify appropriate water efficiency methods, encourage pilot/demo projects, track water efficiency measures and resulting savings – publicly available, consolidated at regional level – e.g., by Valley (IV, AV, SV, MM) – to preserve privacy. (ALS 7, 10)
15. Facilitate use of available recycled water that otherwise would not be used beneficially, e.g., use of treated wastewater from mills, treatment plants, etc. for irrigated pasture; widespread use of graywater. (ALS 10)
16. Implement source water protection measures. (ALS 2, 10)

RMS 5 – Conveyance – Regional/Local

RMS 5 Definition: The conveyance or distribution of water from locally developed sources to the end users located within the same watershed or river system.

UFR RMS 5 Draft Recommendations:

1. Improve aging infrastructure, increase existing capacities, and/or add new conveyance facilities. (ALS 1, 2, 5?, 7)
2. Add fish ladders and state-of-the-art fish screens to conveyance structures. (ALS 1?)
3. Establish a baseline hydrology and enhanced description of present water management system components. (ALS 3)
4. Replace or improve canal structures to improve the ability of irrigation districts, water companies and other entities to manage and control water in the region and reduce spillage. (ALS 1, 2, 6)
5. Invasive weed controls to improve flow, reduce spread of weeds and reduce sedimentation and bank erosion/degradation. (ALS 4, 7)
6. Evaluate conveyance infrastructure for risk from earthquake and flood and role they could play in flood control. Plan for needed improvements. (ALS 1? 6?)

RMS 8 – Conjunctive Management

RMS 8 Definition: The coordinated and planned use and management of both surface water and groundwater resources to maximize the availability and reliability of water supplies.

UFR RMS 8 Draft Recommendations:

1. Assess the connection between groundwater, spring and surface water sources and recharge areas to better understand their interactions. (ALS 7, 10)
2. Identify tools and data sharing needed to improve surface, groundwater and conjunctive water management: (ALS 2, 3, 7, 8, 10)
 - a) Develop and make available to public a consolidated map of groundwater basins, recharge areas, CASGEM monitoring wells, state websites (e.g., Groundwater Ambient Monitoring and Assessment Program (GAMA)) and data for all groundwater basins in UFR watershed
 - b) Regular monitoring of surface and groundwater levels and quality throughout watershed with publicly accessible data:
 - Hydrogeologic characterization of the aquifers
 - Changes in groundwater levels
 - Groundwater flow (interbasin + to/from streams)

- Groundwater quality
 - Land subsidence, if any
 - Surface water flow
 - Surface water quality
 - Interaction of surface and Groundwater
3. Implement a program to promote public education about groundwater and its relation to surface water, including: [\(ALS 2, 3, 8, 10\)](#)
 - a) Interconnection of surface water and groundwater.
 - b) Benefits of recharging groundwater with surface water and recycled water.
 - c) Importance of protecting groundwater quality and recharge areas.
 - d) Seasonal versus long-term changes in groundwater levels.
 - e) Potential impacts of climate change on groundwater resources
 - f) Organizations with management responsibility – contact info, responsibilities, etc.
 - g) Data sources
 4. Coordinate surface and groundwater management where local agencies overlap geography. [\(ALS 3, 7, 10\)](#)
 5. Preparation and execution of sustainable groundwater management plans for all groundwater basins (not just Sierra Valley), that protect groundwater elevation and quality, surface water-groundwater interaction and groundwater ecosystem services. [\(ALS 10\)](#)
 6. Increase local and regional groundwater recharge and storage to reduce groundwater depletion. [\(ALS 2, 3, 5, 7, 10\)](#)
 7. Monitor and possibly execute on developments if/when SWRCB creates “measures whereby agencies proposing to use peak surface water flow for groundwater recharge are not subject to potential protest of their existing water right, in order to stipulate groundwater recharge as a reasonable beneficial use of their surface water right.”
 8. Improve and repair infrastructure supporting conjunctive use of surface and groundwater. [\(ALS 1, 2\)](#)
 9. Explore, map and conduct overall evaluation of potential for groundwater banking

[DRAFT UFR MEADOWS GROUP RECOMMENDATIONS FOR RMS 8:](#)

- *Implementation of monitoring, assessment and maintenance of baseline groundwater levels. [\(ALS 10\)](#)*
- *Encourage local water management agencies to coordinate with tribes and other agencies involved in activities that might affect long-term sustainability of water supply and quality. [\(ALS 3, 7, 10\)](#)*
- *Local groundwater monitoring and management activities and feasibility studies to increase the coordinated use of groundwater and surface water. [\(ALS 3, 7, 10\)](#)*
- *Restore wet meadows to full biological function to enhance storage and more continuous release of shallow groundwater. [\(ALS 9, 13\)](#)*
- *Implement a program to promote public education about groundwater and surface water connectivity.*

RMS 17 – Pollution Prevention

RMS 17 Definition: Reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less toxic substances, the implementation of practices or conservation techniques including activities that reduce the generation and/or discharge of the pollutants, and the application of innovative and alternative technologies which prevent pollutants from entering the environment prior to treatment.

UFR RMS 17 Draft Recommendations:

1. Regional, tribal, and local governments and agencies should establish drinking water source and wellhead protection programs to shield drinking water sources and groundwater recharge areas from contamination.
2. Riparian area livestock fencing to reduce or prevent water-borne pathogens. (ALS 2, 3, 7, 10)
3. Sediment controls from dirt roads, fires/burned areas and agricultural operations. (ALS 2, 3, 7)
4. Community composting – made available to increase carbon sequestration in soil.
5. Reduction in invasive species. (ALS 4)
6. Resource Conservation Districts providing technical support for agricultural practices and crop systems that result in lower greenhouse gas (GHG) emissions. (ALS 9)
7. Addressing improperly destroyed, sealed and abandoned wells that can serve as potential pathways for groundwater contamination.
8. Manage/monitor and control 303(d) listing constituents (sediment, temperature, DO, pH, nutrients) through:
 - a) Improved systems for irrigation return water
 - b) Irrigated Lands Regulatory Program (ILRP) implementation Cattle exclusions (ALS 7)
 - c) Point source exclusions (ALS 2, 3, 7)
 - d) Best management practices for timber harvest and catastrophic wildland fire rehabilitation
 - e) Restoring wet meadows (ALS 2, 7, 9, 10, 13)
 - f) Roads decommissioning and restoration
 - g) Reduce sedimentation into watersheds (ALS 2, 3, 7, 9)
 - h) Control pesticide and herbicide contamination

DRAFT UFR MEADOWS GROUP RECOMMENDATIONS FOR RMS 17:

- *Developing proper land management practices that prevent sediment and pollutants from entering source waters and waterbodies. (ALS 2, 3, 7)*
- *Restore degraded riparian habitats re 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. (ALS 2, 7, 10)*
- *Identify abandoned mines throughout the region and assess the level to which these sites contaminate regional waters.*
- *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. (ALS 10)*
- *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 20 – Agricultural Land Stewardship

RMS 20 Definition: Farm and ranch landowners producing public environmental benefits (conservation of natural resources and protection of the environment) in conjunction with the food and fiber they have historically provided while keeping land in private ownership.

RMS 20 Draft Recommendations:

1. Cultivate state payments for ecosystem services programs that compensate landowners for their stewardship while reducing the cost of regulatory compliance and delivering measurable conservation benefits. (ALS 7?, 9?)
2. Maintain working lands employing conservation easement programs for wildlife, agricultural land, grasslands, forestlands, floodplains, and scenic and recreational open space, with preference for those that protect the highest priority resource lands and that the protected lands are conserving multiple values simultaneously. (ALS 7, 10, 13)
 - Educate landowners about the tax relief, estate planning, and other benefits of agricultural conservation easement.
3. Develop on-farm irrigation ponds and practices that provide off-stream capture of winter stormwater for summer use. Evaluate benefits for economic viability, local water supply, watershed management, flood control, groundwater recharge, mitigation of climate change, wildlife habitat, etc. (ALS 5, 11, 13)
4. Implement promising agricultural practices and strategies that reduce net GHG emissions and increase carbon sequestration. (ALS 3, 5, 7, 9, 13)
5. Inventory of soil organic carbon content. (ALS 7, 9)
6. Explore opportunities for farmer-to-farmer education, demonstration, and outreach on successful conservation programs. (ALS 2, 3, 7, 8, 9, 10)
7. For grant-funded projects, document project success and share lessons learned and successes with other growers. (All)
8. Protect wildlife habitat on working lands to benefit pollinators and migration routes. (ALS 13)
9. Stabilize stream banks and improve riparian forestation to slow bank erosion and filter drainage water from the fields. (ALS 2, 3, 7, 13?)
10. Utilize proven or promising grazing, forest and brush management practices to reduce catastrophic wildfire risk, where appropriate. (ALS 3, 7)
11. Employ recreational opportunities that benefit preservation and sustainability of working/Agriculture lands. (ALS 7, 13)
12. Resource Conservation Districts, Natural Resources Conservation Service (NRCS), Sierra Nevada Conservancy, Upper Feather River Watershed Group, UC Cooperative Extension and other public

and private agencies to educate and support agricultural producers around grants and other incentives available to support agricultural strategies outlined in this plan. [\(ALS 2, 7\)](#)

13. Support development or continuance of agriculture-supportive and preservation language in county general plans, such as:
 - a) Preservation of agriculture lands
 - b) Encouraging new producers
 - c) Right-to-farm ordinances
 - d) Healthy locally produced food supply
 - e) Support for farmers markets
 - f) Public awareness of the value of agriculture, including educational curriculum
 - g) Efficient ag permit procedures
 - h) Supports for economic viability of ag producers
 - i) Market supports for local ag products
14. Leverage local, state and federal agricultural conservation entity support for agricultural infrastructure investments, marketing assistance and land stewardship practices and strategies. [\(ALS 13?\)](#)
15. Develop alternative and/or flexible cropping systems/patterns for repeat dry-year scenarios and predicted decrease in overall snowpack and changes in precipitation patterns. [\(ALS 3, 7, 12\)](#)
16. Develop channels for gathering and sharing ag-related climate change mitigation practices. [\(ALS 3, 7, 9, 10\)](#)
17. Manage working agricultural land to build or maintain carbon sequestration capacity, while maintaining productivity for food/fiber production. [\(ALS 3, 7, 9\)](#)

RMS 23 – Land Use Planning and Management

RMS 23 Definition: The orderly and planned use of land, resources, facilities and services with a view to securing the physical, economic and social efficiency, health and well-being of urban and rural communities.

1. Develop or continue agriculture-supportive and preservation goals and strategies in county general plans, such as:
 - a) Preservation of ag lands
 - b) Encouraging new producers
 - c) Right-to-farm ordinances
 - d) Healthy locally produced food supply
 - e) Support for farmers markets
 - f) Public awareness of the value of agriculture, including educational curriculum
 - g) Efficient ag permit procedures
 - h) Supports for economic viability of ag producers
 - i) Market supports for local ag products
2. When conducting general plan updates, address relevant water management issues including water supply, water quality, water affordability, flood risk reduction, sedimentation and adequacy of services for residents.
3. Identify and assess groundwater recharge areas for ground water supplies and limit development in those locations. [\(ALS 7, 10, 13\)](#)

4. Plan for urban green zones, community gardens, school gardens, rainwater catchment, graywater and similar water conservation and management strategies.
5. Encourage compact and sustainable development patterns; discourage urban sprawl. (ALS 2, 7, 10)
6. Collaboration between agencies and local governments to identify opportunities to maximize water conservation, groundwater recharge, storm water capture, and other water management strategies that rely on local land use planning for effective implementation. (ALS 2, 7, 10)
7. Coordination in plan development between water management districts, flood control districts, Resource Conservation Districts, county and city governmental bodies, regional water masters, watershed managers and others around water and related resource management strategies. (ALS 2, 7, 10, 13)
8. Continued use of the CEQA process to mitigate the significant impacts of new development on resources including, but not only, agricultural land, wildlife habitat, open space, floodplains, recharge areas, wetlands, and water supply.

DRAFT UFR MEADOWS GROUP RECOMMENDATIONS FOR RMS 23:

- *Increase communication between land use planners and water managers. (ALS 2, 7, 10)*
- *Plan for growth in a way that considers water resource features such as streams, wetlands, and groundwater recharge areas, water quality and flooding. (ALS 2, 7, 10)*
- *Direct development away from undeveloped mountain meadows.*

UFR MUNI GROUP RECOMMENDATIONS FOR RMS 23:

- *Planning for more compact and sustainable communities which will assist in reducing reliance on the state's water supply.*
- *Planning for growth in a way that considers availability of water supplies, water resource features, wetlands, groundwater recharge areas, and policies and regulations about water quality, drainage, flooding, and storage. (ALS 2, 7, 10)*
- *Increased and enhanced communication between land use planners and water managers. (ALS 2, 7, 10)*

RMS 25 – Sediment Management

RMS 25 Definition: The management of fine solid fragmented material such as silt, sand, and clay, which is suspended in or settled on the bottom of a water body; sediment is used for beach restoration, renewal of wetlands and coastal habitats, maintenance of spawning beds and riparian habitat, and is useful in agricultural applications—but excessive sediment can lead clouded water, degraded wildlife habitat, barriers to navigation, and decreased storage capacity on reservoirs, among other things.

1. Outreach and education on erosion and sediment management, new state requirements for irrigated land sediment management and promising practices. (ALS 2, 3, 5?, 7, 9)

2. Evaluation of strategies for management of fine solid fragmented material such as silt, sand, and clay, which is suspended in or settled on the bottom of water bodies for use in agricultural applications, wetland establishment and other beneficial re-uses. [\(ALS 13\)](#)
3. Evaluation and coordinated management of agricultural water delivery systems for sediment build-up and mitigation needs. [\(ALS 5, 6, 7, 9, 11, 13\)](#)
4. Evaluation and management of areas such as dirt roads, burned areas, insufficient-capacity culverts and bare channels in UFR susceptible to creating excessive sedimentation. [\(ALS 2, 3, 5, 6, 7, 11, 13\)](#)
5. Remediation of sedimentation of Feather River and other Upper Feather River drainage dams
6. Evaluate and plan for potential remediation of contaminated sediments.

RMS 28 – Outreach and Engagement

RMS 28 Definition: The use of public communication tools and practices by water agencies that provide the opportunity for public groups and individuals to contribute to positive water management outcomes.

1. Utilize both electronic and conventional media for outreach and engagement. [\(ALS 2, 3, 4, 7, 8, 9, 10, 12, 13\)](#)
2. Engage public in creation of water and resource management plans. [\(ALS 1?, 2, 3, 4, 5, 7, 8, 9, 10, 11, 13\)](#)
3. Conduct outreach and education around available water management data sources; local agencies, their functions and contact information; and priorities from the UFR IRWMP. [\(ALS 2, 7, 9, 10\)](#)
4. Explore and coordinate common project goals and areas of need across organizations and agencies for more robust and integrated funding proposals. [\(All\)](#)
5. Conduct outreach and engagement with stakeholders to advocate for policy change supportive of UFR IRWMP. [\(All\)](#)
6. Field trips, tours and education around projects, promising management practices for youth and adults. [\(All\)](#)
7. Encourage use of the Ranch Water Quality Planning Short Course, which promotes the California Rangeland Water Quality Management Plan, to generate common understanding, discourse and action. [\(ALS 2, 3, 7, 10\)](#)
8. Board, leadership and management training for agencies and organizations in the UFR. [\(All\)](#)

RMS 31 – Other Strategies

RMS 31 Definition: Management strategies that can potentially generate benefits that meet one or more water management objectives, but have limited capacity to strategically address long-term regional water planning needs.

1. Snow fences/ Windbreaks along roadways
2. Reestablish historic wetlands where appropriate [\(ALS 13\)](#)
3. Explore rainfed agriculture opportunities for UFR region

**Upper Feather River
Integrated Regional Water Management**

**RWMG Meeting No. 8
January 22, 2016**

To: Upper Feather River Regional Water Management Group
From: Uma Hinman, Uma Hinman Consulting
Subject: Resource Management Strategies Presentation – Uplands and Forest Workgroup
Date: January 11, 2016

INTRODUCTION

The intent of developing resource management strategies (RMS) specific to the region is to intentionally find ways to diversify the region's water management portfolio. The RMS selected for inclusion in the Plan should support and be consistent with the issues identified within the region and Plan objectives.

The Uplands and Forest Workgroup coordinated with the Tribal Advisory Committee (TAC) in developing the recommendations in the attached document. The Uplands and Forest Workgroup was assigned responsibility for developing recommendations for eight resource management strategies (RMS), identified as follows:

- RMS-21: Ecosystem Restoration
- RMS-22: Forest Management
- RMS-23: Land Use Planning and Management
- RMS-25: Sediment Management
- RMS-26: Watershed Management
- RMS-27: Economic Incentives
- RMS-28: Outreach and Engagement
- RMS-31: Other Strategies

The Uplands and Forest Workgroup Chair, John Sheehan, will present the Workgroup's draft recommendations (attached).

REQUEST

Discussion and/or direction to staff.

Attachments: Uplands and Forest Workgroup Draft RMS recommendations

DRAFT Resource Management Strategy Recommendations

UFR Uplands and Forest Workgroup Selections

The Uplands and Forest Workgroup was assigned responsibility for developing recommendations for eight resource management strategies (RMS), identified as follows:

- RMS-21: Ecosystem Restoration
- RMS-22: Forest Management
- RMS-23: Land Use Planning and Management
- RMS-25: Sediment Management
- RMS-26: Watershed Management
- RMS-27: Economic Incentives
- RMS-28: Outreach and Engagement
- RMS-31: Other Strategies

RMS 21. Ecosystem Restoration

Definition: Improvement of modified natural landscapes and biological communities to provide for their sustainability and for their use and enjoyment by current and future generations

Recommendations

1. Support programs of work that:
 - a. Maintain and restore a diversity of historic habitats.
 - b. Connect and expand important habitat areas.
 - c. Protect habitats and habitat connectivity from catastrophic wildfire.
 - d. Protect riparian habitats and habitat connectivity from catastrophic wildfire.
 - e. Protect habitats and habitat connectivity from catastrophic wildfire to maintain natural filtering of pollutants and for the recharging of aquifers.
 - f. Implement climate resiliency plans.
 - g. Benefit ecosystems, water, and flood management by protecting habitats and habitat connectivity from catastrophic wildfire.
 - h. Reintroduce managed fire where and when appropriate.
 - i. Restore the forest hydrograph. This can be accomplished by reducing unnatural, fire suppression-caused conifer densification and species imbalance, and thereby restoring natural base flows and pulse flows in streams and rivers.
 - j. Control non-native invasive plant and animal species.
 - k. Conserve springs as water supply sources. Springs are valuable ecological and spiritual resources in the region. Protect spring and wetland habitats from catastrophic wildfire.
 - l. Minimize areas of excessive erosion and sedimentation through implementation of Best Management Practices, watershed management, and through reduction of catastrophic wildfire.

- m. Reduce road culvert barriers to fish and amphibian migration in rivers and streams by assessing culverts for adequate passage of aquatic organisms. Prioritize passage improvement work as appropriate.

RMS 22. Forest Management

Definition: The application of forestry principles, practices, and business techniques to the management of a forest to achieve the owner's objectives; different forest landowners have different goals and objectives and different strategies to accomplish them; the water produced by these forests has economic value that equals or exceeds that of any other forest resource.

Recommendations

1. Support a program of work on connections between forest management and restoring the surface and groundwater hydrograph in forested landscapes. Include integrated research and implementation projects for assessing:
 - a. The effects of landscape scale fuels reduction for enhancing beneficial uses of water.
 - b. The effects of vegetation and fuels management on soil moisture, groundwater recharge, and streamflows.
 - c. The quantification of both the short and long-term effects of prescribed fire water cycling and the cycling of soil nutrients.
 - d. The determination of the impacts of burn frequency and intensity on infiltration, percolation, surface runoff, and groundwater discharge.
 - e. The effects of different severity wildfires on water quantity, water quality, and aquatic organisms.
 - f. The role and magnitude of groundwater storage in mountain meadows and surrounding forests including effects on streamflows and flood flows.
 - g. The quantification of sediment sources and erosion processes in unmanaged, managed, and "high-severity" burned forests.
 - h. The effects of riparian forests in maintaining stream and groundwater hydrology, water quality and nutrient cycling.
 - i. The habitat effects of different forest and meadow conservation strategies.
 - j. The effects of urban trees in reducing non-point source pollution.
 - k. The effects of managed forestland fuels in reducing GHG emissions from catastrophic wildfire
 - l. The effects of high severity fire conversion of mature forests to brushfields and resulting effects on carbon sequestration, groundwater storage, and the volume and timing of streamflows.
 - m. The effects the brushfield reburning cycle on carbon sequestration, groundwater storage, and the volume and timing of streamflows.
 - n. The regionally specific and pre-fire suppression extent of brushfields and mature forest habitats for specific forest species.

- o. The effects of increasing conifer densities on the surface and groundwater forest hydrograph.
 - p. The short and long term effects of timely post-fire rehabilitation and restoration strategies. Evaluate effects on forest health, GHG emissions, water quality, and public safety.
2. Support a program of work that includes monitoring and research on watershed trends.
 3. Support the long-term monitoring is needed to understand hydrologic changes resulting from climate change and management actions. Support more data collection stations in order to accurately determine how changes in hydrology and water quality are related to climate change and forest management activities:
 - a. Additional stream gauges are needed throughout the forested regions of California to adequately represent the existing range of hydroclimatic and geologic conditions. In particular, gauges would be helpful in both managed and “pristine” watersheds.
 - b. Additional precipitation stations and snow courses are needed to increase the accuracy of determinations of climatic trends and evaluations of effects of management activities.
 - c. Additional water quality and sediment monitoring stations are needed to quantify the effects of climate change and forest management activities on surface water quality.
 - d. Additional long-term monitoring wells and aquifer infiltration, isotope, and recharge studies would be useful for understanding groundwater resources in forested watersheds.
 - e. Additional projects and studies to characterize regional surface water, groundwater and aquifer interactions on public, private, and tribal lands.

RMS 23. Land Use Planning and Management

Definition: The orderly and planned use of land, resources, facilities and services with a view to securing the physical, economic and social efficiency, health and well-being of urban and rural communities.

Recommendations

1. Increase communication between land-use planners and water managers.
2. Plan for growth in a way that conserves water resources such as streams, wetlands, springs, groundwater recharge areas, natural floodways, and water quality.
3. Direct development away from undeveloped mountain meadows, floodplains, and alluvial fans
4. Develop watershed information and strategies to update local land use decision makers on opportunities for maintaining and improving watershed functions

RMS 25. Sediment management

Definition: The management of fine solid fragmented material such as silt, sand, and clay, which is suspended in or settled on the bottom of a water body; sediment is used for beach restoration, renewal of wetlands and coastal habitats, maintenance of spawning beds and riparian habitat, and is useful in agricultural applications – but excessive sediment can lead clouded water, degraded wildlife habitat, barriers to navigation, and decreased storage capacity on reservoirs, among other things.

Recommendations

1. The Natural Resources Agency and California Environmental Protection Agency should support an integrated approach to achieve the maintenance of stable watersheds where sediment yield

mimics the natural sediment production that would occur in the absence of anthropogenic conditions.

2. Federal and State governments should support development of guidelines to identify when geomorphic assessments of streams for watershed stability are appropriate to prevent undue delays in processing permits and ensure that studies are scaled to project size.
3. Where required, all responsible agencies should utilize a common GIS mapping framework and support sediment and flow monitoring programs to determine the sediment yields from a watershed and sediment budgets for downstream areas that include consistent monitoring protocols for scientifically defensible data of comparable quality throughout the state.
4. Post burn assessments and actions should include sediment and erosion remediation.

RMS 26. Watershed Management

Definition: The process of creating and implementing plans, programs, projects, and activities to restore, sustain, and enhance watershed functions.

Recommendations

1. Support a program of work for implementing projects that:
 - a. Develop Traditional Ecological Knowledge (TEK) tracking and reporting methods.
 - b. Create and maintain scientifically valid tracking and reporting methods to document hydrograph and precipitation changes in the watershed.
 - c. Establish scientifically valid means of tracking and reporting baselines and trends in watershed condition. Employ LIDAR and archival photo records to display and differentiate the net effects of management against the background of a more variable precipitation regime.
 - d. Restore and preserve stream channel morphology to provide access by floods to the historic floodplains.
 - e. Restore and preserve stream channel morphology to encourage stable banks and channel form for the regeneration of riparian vegetation.
 - f. Assess the performance of watershed projects and programs by integrating TEK and tribal restoration approaches with other metrics.
 - g. Develop landscape scale projects that coordinate multiple RMS strategies.
 - h. Maintain and enhance ecosystem functions in a changing precipitation regime.
 - i. Integrate peak flood attenuation with protecting habitats and migration corridors from catastrophic wildfire.
 - j. Advance the use of managed fire for enhancing watershed function and resilience.
 - k. Assist property owners in implementing watershed management activities.
2. Involve forest managers in integrated water and land management.
3. Develop science for informing the determination of objectives and strategies for forested meadows

4. Use expanded interagency agreements to allow federal, state, tribal, and non-governmental agencies and entities to share expertise, staff time, and funding across jurisdictional boundaries for the purposes of landscape-scale watershed and water quality protection and improvement.
5. Use expanded interagency agreements where federal, state, and non-governmental agencies and entities share expertise, staff time, and funding across jurisdictional boundaries at landscape scales for the reintroduction of controlled fire and for the incorporation of tribal traditional ecological knowledge (TEK).
6. Develop a science-based public education campaign directed at water users and communities in the Central Valley, Bay Area, and Southern California to increase support for forest management.
7. Develop integrated state and federal watershed resource enhancement and conservation climate adaptation plans for the forested headwaters areas and for urban forestry.
8. Involve federal agencies as partners with tribal, state, and local entities for grant programs, and allow federal funds and in-kind services to be used as grant matches.
9. Streamline vegetation and fuels management projects that reduce the risks of catastrophic wildfires with net beneficial effects on groundwater storage, surface water flows, and on water quality.
10. Work to reduce liabilities and other barriers to managed burning.

RMS 27 Economic incentives

(Note: Economic incentives are also incorporated into RMS 21, 22, 26, and 28)

Definition: Financial assistance, water pricing, and water market policies intended to influence water management; economic incentives can influence the amount of use, time of use, wastewater volume, and source of supply.

Recommendations

1. Develop programs for supporting biomass utilization, enhancing groundwater recharge, reducing catastrophic fire, and reducing GHG emissions as integrated as essential elements of restoring forest ecosystem health across California's forestlands.
2. Develop Traditional Ecological Knowledge (TEK) and other scientific evaluations for implementing such programs at the landscape scale in key watersheds of statewide importance.
3. Assist with developing the capacity of landowners and local organizations and programs to carry out RMS implementation.
4. Work with federal, state, and local legislators, agencies and entities, to reduce liabilities and other barriers to managed burning.

RMS 28. Outreach and Engagement

Definition: The use of public communication tools and practices by water agencies that provide the opportunity for public groups and individuals to contribute to positive water management outcomes.

Recommendations

1. Support projects that incorporate outreach and education into project implementation.

2. Support and expand existing education programs such as, but not limited to, tribal education programs, the Forest Institute Training for teachers “FIT” program, the “Learning Landscapes” program, the Butte Firesafe Council’s 6th grade “fire aware” Charter School field training program, the Feather River Watercourse: “Plumas to Pacific” and other exemplary outdoor education programs by pre-school through junior college education entities and other entities in the UFR Region.
3. Support work with adjacent and downstream landowners to improve understanding of benefits that result from large scale and coordinated watershed projects.

RMS 31. Other Strategies

Definition: Management strategies that can potentially generate benefits that meet one or more water management objectives, but have limited capacity to strategically address long-term regional water planning needs

Recommendations

The workgroup reviewed the “Other Strategies” identified in the 2013 California Water Plan and determined that they were not applicable to the forested portions of UFR region. The UF Workgroup then developed forest-specific “other strategies,” as follows:

1. Fire and fuels management and strategically located fire breaks for ridgeline lightning, roadway, and railroad ignitions.
2. Fire and fuels management for the protection of critical habitats.
3. Snow zone fuels and fire management.
4. Wildfire liability reduction.
5. Wildland-Urban Interface (WUI) management.
6. Traditional Ecological Knowledge (TEK) to reintroduce historic fire regimes.
7. Community recharge area management to protect of domestic and agricultural wells from catastrophic wildfire and from reduced groundwater infiltration or excessive siltation.
8. “All-scale” biomass utilization including community and tribal biomass projects
9. Landscape-scale forest and fuels management that includes multiple (#1-#8) fire and fuels management strategies.

Tribal (TAC) RMS Strategy Recommendations

1. Increase landscape productivity by increasing ecosystem diversity and resilience through low and moderate intensity fire.
2. Increase landscape and climate change resilience through low and moderate intensity fire to increase fire succession mosaics.
3. Collaboratively develop projects and studies utilizing TEK as a monitoring tool of water quantity and quality over time.
4. Assess effects of fire succession in reducing invasive species and re-establishing fire adapted native species through collaborative projects and studies using TEK.

**Upper Feather River
Integrated Regional Water Management**

**RWMG Meeting No. 8
January 11, 2016**

To: Upper Feather River Regional Water Management Group
From: Uma Hinman, Uma Hinman Consulting
Subject: Resource Management Strategies Presentation – Tribal Advisory Committee
Date: January 11, 2016

INTRODUCTION

The intent of developing resource management strategies (RMS) specific to the region is to intentionally find ways to diversify the region's water management portfolio. The RMS selected for inclusion in the Plan should support and be consistent with the issues identified within the region and Plan objectives.

The Tribal Advisory Committee (TAC) coordinated with the Uplands and Forest Workgroup in developing RMS recommendations. In addition, the TAC also developed the recommendations identified below. The TAC have provided recommendations on the following RMS:

- RMS-16: Matching water quality to water use
- RMS-23: Land use planning and management
- RMS-29: Water and culture
- RMS-31: Other strategies

The Tribal Outreach Coordinator, Sherri Norris, and TAC liaison, Trina Cunningham, will present the TAC's draft recommendations (below).

General Beneficial Use Goal

Beneficial uses of water including but not limited to those that support fish consumption, aquatic and wildlife habitat for plant and animal species, recreation and the water quality and quantity to support such systems and activities. This includes those uses that support the cultural, spiritual and traditional lifeways of California Indian Tribes, Tribal communities and families.

TEK Goal

Integrate and apply Traditional Ecological Knowledge in collaboration with Tribes, Tribal organizations, and cultural traditional ecological practitioners. The UFR RWMG recognizes the ethical responsibility of project proponents to collaborate for the inclusiveness of the whole community and therefore to reach the Maidu family(s) with traditional responsibility to the project location.

REQUEST

Discussion and/or direction to staff.

**Upper Feather River
Integrated Regional Water Management**

**RWMG Meeting No. 8
January 22, 2016**

To: Upper Feather River Regional Water Management Group
From: Uma Hinman, Uma Hinman Consulting
Subject: Plan Performance, Implementation and Monitoring
Date: January 13, 2016

INTRODUCTION

In order to ensure that the objectives of the Plan are met, the IRWM Plan must contain a method for evaluating and monitoring the RWMG's ability to meet the objectives and implement the projects in the IRWM Plan.

Per the IRWM Guidelines, the intent of the Plan Performance and Monitoring Standard is to ensure:

- The RWMG is efficiently making progress towards meeting the objectives in the IRWM Plan.
- The RWMG is implementing projects listed in the IRWM Plan.
- Each project in the Plan is monitored to comply with all applicable rules, laws, and permit requirements.

The following narrative is designed to provide guidance and suggestions to assist in developing a protocol for monitoring Plan performance and for development of project-specific monitoring plans (PSMP) for the Upper Feather River IRWMP.

PLAN PERFORMANCE MONITORING

Monitoring performance should be closely related to the implementation of projects. Details related to implementation of specific projects in the IRWM Plan are not necessary. Rather, the IRWM Plan needs to contain the criteria that will be used to evaluate the progress to meet Plan objectives and the process that will link project completion to IRWM Plan implementation.

The IRWM Guidelines identify a number of factors that must be considered in developing the Plan performance and monitoring protocol. The following table includes DWR-recommended factors to consider and suggestions for the RWMG's consideration.

| Plan Performance Factor | Suggestions for Consideration |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Plan performance measures | <ul style="list-style-type: none"> • How robust has the IRWMP process been after Plan development (number of RWMG meetings held vs. identified benchmarks for evaluating the Plan) • Number and range of attendees targeted by the RWMG (need to set benchmarks) • Amount of additional funding for and employment associated with projects identified in the Plan • Reduction of conflicts identified in the Plan, as measured by implementing systems for greater collaboration, and by qualitative perceptions of stakeholder participants • How well the projects are implemented and address objective metrics • Number of projects funded/implemented |
| What group within the RWMG will be responsible for IRWMP implementation evaluation? | <ul style="list-style-type: none"> • RWMG appointed representative • Representative will evaluate and report to RWMG on Plan performance, including Plan performance measures (above), objective metrics, and implementation of projects and outcomes |
| How often will the RWMG's performance at implementing projects in the Plan be evaluated? | <ul style="list-style-type: none"> • Meet annually, at a minimum, to evaluate Plan performance • With each successive IRWM implementation grant solicitation, release of updated guidelines, or updated regulations, or other opportunities to improve the Plan • Formal review, revision, re-adoption every 5 years, if funding is available |
| How will IRWMP implementation be tracked with the data management system? | <ul style="list-style-type: none"> • RWMG-appointed representative identified to host and maintain the online data management system (county representative?) • Annual Plan performance evaluations written and posted on website |

PROJECT MONITORING

Monitoring Plan performance is tied directly to project implementation. Projects outcomes, which will be evaluated when they become either partially or wholly funded and implemented, contribute to achieving the Plan objectives.

All projects that enter the development phase and are receiving funding under the IRWM grant program must submit a Project-Specific Monitoring Plan (PSMP). Sponsors of existing and future projects will be expected to provide measures and outcomes for their projects which provide specific quantitative measures, based on a set of general measures. Project sponsors will submit relevant information about projects and project performance for inclusion in the RWMG's preferred data management system. The

RWMG has discussed using the existing website (featherriver.org) as a repository for project monitoring data, which will need to be formalized.

Either the RWMG, or a specific committee, such as a Project Review Committee, should evaluate the monitoring plans at a specified interval to inform Plan progress. Monitoring outcomes and plans likely will also be evaluated by the respective funding source. As findings and the resulting lessons learned from monitoring become available, they will be valuable tools in improving project design in the future, amending resource management strategies, and altering objectives to be more responsive to watershed needs.

Both outputs (what the project consisted of, e.g., tank replaced) and outcomes (what the project accomplished in terms of Plan goals and objectives, e.g., water supply improved for a DAC for the life of the project) should be addressed where possible. In other words, monitoring needs to address not only that the project was achieved, but what it accomplished toward achieving Plan goals and objectives.

Although project-specific monitoring plans (PSMP) will ultimately be guided by specifications required by the funding, the IRWM Guidelines contain recommendations for typical contents of a PSMP (included in the table below).

The IRWM Guidelines identify a number of factors that must be considered in developing the PSMP protocol. The following table includes DWR-recommended factors to consider and suggestions for the RWMG's consideration.

| Project-Specific Monitoring Plan Factor | Suggestions for Consideration |
|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Who has primary responsibility for development of project-specific monitoring plans (PSMP) and activities | <ul style="list-style-type: none"> • Project proponents will have primary responsibility for developing PSMPs, tracking progress, and coordinating with RWMG • Identification of third-party to perform monitoring (<i>RWMG Monitoring Policy – 6/15/15</i>) <i>OR</i> • Statement in PSMP that monitoring will be conducted by a third party |
| Who has primary responsibility for review of PSMPs? | <ul style="list-style-type: none"> • The RWMG or its designee |
| At what stage of development will PSMPs be prepared? | <ul style="list-style-type: none"> • At project application to a funding source |
| Minimum content of PSMP | <ul style="list-style-type: none"> ▪ Clearly and concisely (in a table format) describe what is being monitored for each project ▪ Measures to remedy or react to problems encountered during monitoring ▪ Location of monitoring ▪ Monitoring frequency ▪ Monitoring protocols/methodologies, including who will perform the monitoring ▪ Data Management System (DMS) or procedures to keep track of what is monitored. Each project's monitoring plan will also need to address how the |

| | |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>collected data will be or can be incorporated into statewide databases</p> <ul style="list-style-type: none"> ▪ Procedures to ensure that the monitoring schedule is maintained and that adequate resources (including funding) are available to maintain monitoring of the project throughout the scheduled monitoring timeframe |
| How will “lessons learned” from project-specific monitoring efforts be used to improve implementation of future projects? | <ul style="list-style-type: none"> • Review/amend RMS recommendations • Review/amend UFR IRWM objectives • Improve future project design |

As a reminder, the RWMG adopted a policy on June 15, 2015, regarding project monitoring requirements, which will apply to implementation of the PSMPs:

RWMG Policy (6/15/15): Although project monitoring requirements will vary by grant solicitation, it is the position of the Upper Feather River Regional Water Management Group that project monitoring for IRWM-sanctioned projects should be objective, transparent, available to the public, required to be conducted by a third party, and science-based.

REQUEST

Discuss and provide direction to staff.

**Upper Feather River
Integrated Regional Water Management**

**RWMG Meeting No. 8
January 22, 2016**

To: Upper Feather River Regional Water Management Group
From: Uma Hinman, Uma Hinman Consulting
Subject: Sierra Nevada Watershed Improvement Program
Date: January 12, 2016

INTRODUCTION

Andy Fristensky Lynn Campbell of the Sierra Nevada Conservancy presented information about the Sierra Nevada Watershed Improvement Program at the October 23, 2015 RWMG meeting. The Sierra Nevada Watershed Improvement Program (WIP) is a coordinated, integrated, collaborative program to restore the health of California's primary watershed through increased investment and needed policy changes. The effort is organized and coordinated by the State's SNC and the federal USFS, in close partnership with other federal, state and local agencies, and diverse stakeholders. The SNC is requesting endorsement of the WIP.

The RWMG requested that endorsement of the WIP be placed on the agenda for consideration at the next RWMG meeting.

REQUEST

Approve formal endorsement of the Sierra Nevada Watershed Improvement Program.

Attachments: Sierra Nevada WIP Fact Sheet
Sierra Nevada WIP Endorsement Form

FUNDING THE

PUBLIC BENEFITS

OF WATER STORAGE



With the passage of **Proposition 1** (the Water Bond) the **California Water Commission** is implementing the Governor's Water Action Plan by developing the competitive public process to allocate **\$2.7 billion** in funding for the **public benefits** of water storage projects. The Commission invites your participation as we develop regulations to define methods for the quantification and management of public benefits of water storage projects, and funding program guidelines that will define and guide the process.

Funding available for the public benefits of water storage projects

\$2.7 billion

Projects eligible to receive funding:

- CALFED Surface Storage
- Groundwater Storage and Groundwater Clean-up
- Conjunctive Use and Reservoir Reoperation
- Local and Regional Surface Storage

Benefits that can be funded:

- Ecosystem Improvement
- Water Quality Improvement
- Flood Control
- Emergency Response
- Recreation

Maximum State Cost-Share for **Funded Public Benefits**



50%

Ecosystem Benefits must be

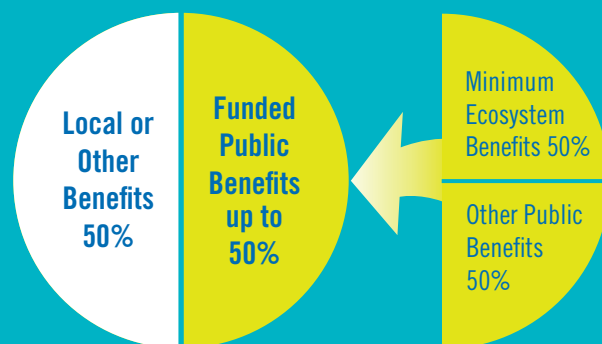
50%

of the funded public benefits



TOTAL BENEFITS

Funded Public Benefits



GET INVOLVED

Participate in Public Meetings

The Commission will engage with stakeholders to get ideas and input as we develop the draft regulations, guidelines, and funding program.

Attend Commission Meetings

We invite public participation at all Commission meetings.

Provide Public Comment

The Commission will hold workshops and invite public comment as we refine the draft regulations and guidelines. There will also be opportunities to comment during the formal Office of Administrative Law (OAL) rulemaking process.

TIMELINE




[HOME](#) [ABOUT US](#) [OUR BOARD](#) [OUR REGION](#) [OUR WORK](#) [GRANTS AND FUNDING SOURCES](#) [PRESS ROOM](#)

Sierra Nevada Watershed Improvement Program Online Endorsement Form

INSTRUCTIONS

Endorse the [Sierra Nevada Watershed Improvement Program](#) by filling out the form below. Supporters of the Sierra Nevada Watershed Improvement Program will be featured on the [Supporters page](#).

If endorsing the Sierra Nevada Watershed Improvement Program requires approval by a board or leadership committee, download a Word version of the Statement of Endorsement [here](#). Return to this page and fill out the form below, or email the completed statement to Autumn.Hutchings@sierranevada.ca.gov.

STATEMENT OF ENDORSEMENT



California is on the brink of losing significant benefits from one of its most important ecosystems, the Sierra Nevada Region. Without immediate action, our [primary watersheds](#) – providers of more than 60 percent of California's developed water supply and the primary source of fresh water that flows into the Sacramento-San Joaquin Delta – will be dramatically transformed forever.

The Sierra Nevada Watershed Improvement Program (WIP) is the solution. The Watershed Improvement Program will restore the health of California's primary watersheds through an integrated and collaborative program of increased investment and needed policy changes, and will facilitate the implementation of the on-the-ground, ecologically sound restoration required to return our watersheds to a state of resilience. This program is organized and coordinated by the Sierra Nevada Conservancy and the U. S. Forest Service, Pacific Southwest Region, in close [partnership](#) with state, federal, and local agencies and diverse stakeholders spanning the range of Sierra interests.

As stewards of the Sierra Nevada Region, we, the undersigned, endorse the Sierra Nevada Watershed Improvement Program. We are committed to working with other WIP partners in identifying the level of ecologically sound restoration activities needed to return Sierra Nevada watersheds to a state of resilience, and quantifying the cost of implementing these activities. We will work collaboratively and in good faith to overcome barriers to large scale landscape restoration; increase state, federal, and private investment in restoration activities; and secure support from those who benefit from the variety of resources that the Sierra Nevada provides to all of California.

Organization: *

Contact Person Name: *

Contact Person Email: *

Contact Person Phone: *

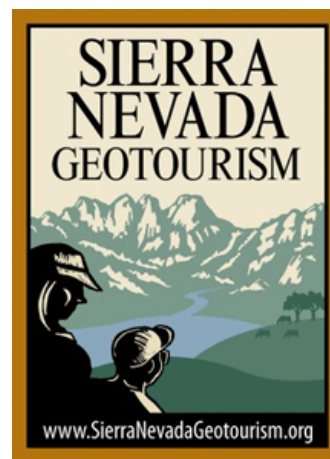
Mailing Address: *

Website: *

55 of 57

QUICK LINKS

- [Board Meetings](#)
- [Staff Directory](#)
- [Grants and Funding Sources](#)
- [Our Region](#)
- [Our Offices](#)



http://www.example.com

Description of Organization:

SNC and the U.S. Forest Service, Pacific Southwest Region, will continue to act as the primary coordinators of the Watershed Improvement Program, but, given the scope and scale of this program, we are heavily reliant on the active engagement and participation of our partners.

Please select your main interests as our partner in the WIP:

- ☐ Work with partners in the development of ecologically sound projects needed to restore the watersheds of the Sierra Nevada to a state of resilience.
- ☐ Work with partners to focus existing funding, and identify and secure new funding sources for projects needed to restore Sierra Nevada watersheds to a state of resilience.
- ☐ Work with partners in the collection, synthesis, or development of scientific research to help overcome policy barriers to large-scale restoration, increase investment in the Sierra Nevada, and implement ecologically sound projects to restore its watersheds to a state of resilience.
- ☐ Join a communications network that will positively impact barriers to large-scale watershed restoration and bring more resources into the Region to implement restoration projects.
- ☐ Work with partners to overcome policy barriers to large scale watershed restoration and bring more resources into the Region to implement ecologically sound restoration projects. (If you have interest in a specific barrier, please list it below.)

Please indicate which watershed assessment area's, if any, in which you have a particular interest:

A map of the watersheds assessment areas is available here
(WIPWatershedAssesmentAreaMap.jpg)

- ☐ Sierra-wide
- ☐ Pit River Watershed
- ☐ Upper Sacramento River Watersheds
- ☐ Feather River Watershed
- ☐ Eastern Sierra Watersheds
- ☐ Yuba/Bear River Watersheds
- ☐ American River Watershed
- ☐ Mokelumne River Watershed
- ☐ Calaveras River Watershed
- ☐ Stanislaus River Watershed
- ☐ Tuolumne River Watershed
- ☐ Merced River Watershed
- ☐ San Joaquin River Watershed
- ☐ Kings/Kaweah/Tule/Kern River Watersheds
- ☐ Owens River Watershed

If you would like your organization or agency logo to appear on our Supporters page, please upload it here:

Organization/Agency logo

No file chosen

.jpg or .png only, 2MB file size or less

If your board or leadership acted to endorse the Sierra Nevada Watershed Improvement Program, please upload the signed document here.

Signed Endorsement Letter

No file chosen

.doc, docx, pdf

Submit

**Upper Feather River
Integrated Regional Water Management**

**RWMG Meeting No. 8
January 22, 2015**

To: Upper Feather River Regional Water Management Group
From: Uma Hinman, Uma Hinman Consulting
Subject: Next Meeting Date and Topics
Date: January 11, 2016

INTRODUCTION

Regular Meeting

Suggested dates for the ninth regular RWMG meeting are either February 26 or March 4.

Topics recommended for the next RWMG meeting – Meeting No. 9:

1. Workgroup updates
2. Plan objectives metrics
3. Draft DAC Assessment
4. Draft Implementation Project lists
5. Draft Governance, Stakeholder Involvement, Coordination Chapter
6. Draft Region Description chapter

Future topics:

- Draft Water Issues, Integration and Capacity chapter
- Presentation on Community Vulnerability Study
- Presentation on Forest-Water Balance Study
- Remaining Draft Chapters

REQUEST

Discuss and approve the next meeting date, time and tentative content.

Calendar for year 2016 (United States)

January

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

☉: 2 ☿: 9 ♀: 16 ☊: 23 ♄: 31

February

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | | | | | |

☿: 8 ♀: 15 ☊: 22

March

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

☉: 1 ☿: 8 ♀: 15 ☊: 23 ♄: 31

April

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

☿: 7 ♀: 14 ☊: 22 ♄: 29

May

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

☿: 6 ♀: 13 ☊: 21 ♄: 29

June

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | | |

☿: 4 ♀: 12 ☊: 20 ♄: 27

July

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

☿: 4 ♀: 11 ☊: 19 ♄: 26

August

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | | | |

☿: 2 ♀: 10 ☊: 18 ♄: 24

September

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | |

☿: 1 ♀: 9 ☊: 16 ☊: 23 ♄: 30

October

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | | | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | | | | | |

☉: 9 ☊: 16 ♀: 22 ☿: 30

November

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | | | |

☉: 7 ☊: 14 ♀: 21 ☿: 29

December

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | | | | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

☉: 7 ☊: 13 ♀: 20 ☿: 29

Holidays are listed on the following page.

Calendar for year 2016 (United States)

| | | | | | |
|--------|-----------------------------|--------|------------------|--------|--------------------------|
| Jan 1 | New Year's Day | May 8 | Mother's Day | Oct 31 | Halloween |
| Jan 18 | Martin Luther King Day | May 30 | Memorial Day | Nov 8 | Election Day |
| Feb 14 | Valentine's Day | Jun 19 | Father's Day | Nov 11 | Veterans Day |
| Feb 15 | Presidents' Day | Jul 4 | Independence Day | Nov 24 | Thanksgiving Day |
| Mar 27 | Easter Sunday | Sep 5 | Labor Day | Dec 24 | Christmas Eve |
| Apr 13 | Thomas Jefferson's Birthday | Oct 10 | Columbus Day | Dec 25 | Christmas Day |
| | | | | Dec 26 | 'Christmas Day' observed |
| | | | | Dec 31 | New Year's Eve |