



**Upper Feather River IRWM
 Proposition 84 Planning Grant Proposal
 Attachment 3: Work Plan**

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I. Status Meeting Current IRWM Plan Standards

As requested in the Proposal Solicitation Package (PSP) for the Round 2 Planning Grants for Integrated Regional Water Management Plans (IRWM Plans or IRWMP), this section which describes *Work Plan Status Meeting Current IRWM Plan Standards* begins with the Background, Part I.A. which provides a brief context and overview for the reader to understand the genesis of the Upper Feather River IRWM Program (Program), need and intent of the RWMG to prepare a revised IRWM plan that is both standards compliant and meets the changing water management dynamics of the Upper Feather River Watershed. Part I.B. of this section then summarizes the current status in meeting each of the IRWM Plan standards. The status of the current IRWM Plan's compliance with the Proposition 84 and 1E IRWM Planning guidelines is described, along with the necessary additional steps and content that will be required that will result in a fully compliant IRWM Plan.

A. Background

1. The Region

The IRWM regional boundary is the Upper Feather River watershed, which provides an invaluable resource to millions of water users throughout California. The Upper Feather River watershed is part of the northern Sierra Nevada mountain range, which encompasses the area from the headwaters of the Feather River to Lake Oroville downstream to. Lake Oroville is the principal reservoir of the California State Water Project, which stores and delivers water to over two-thirds of California's population and agricultural users. The Upper Feather River region encompasses 2.3 million acres, including

parts of seven counties and three National Forests. Figure 3-1 shows the watershed boundary and major hydrologic features, and Figure 3-2 shows the watershed boundary with key jurisdictional boundaries including counties, National Forests, and population centers. The region was accepted in the 2009 Regional Acceptance Process (RAP); the RAP Application submitted to DWR is provided as Appendix A for reference.

Given the limited population and municipal infrastructure in the region, coupled with the extensive water supply and hydroelectric resources afforded by the Upper Feather River, regional water management challenges have been predominantly landscape-scale and deal with watershed, forest management, and groundwater management issues with significant implications for the downstream beneficiaries of flood control, water supply, and hydroelectric generation activities. The watershed boundary of the Upper Feather River region reflects the "watershed" and landscape-scale issues that predominate in the region and provides a logical IRWM region boundary by affording a workable geographic scale for addressing those issues in an effective, efficient, and integrated manner.

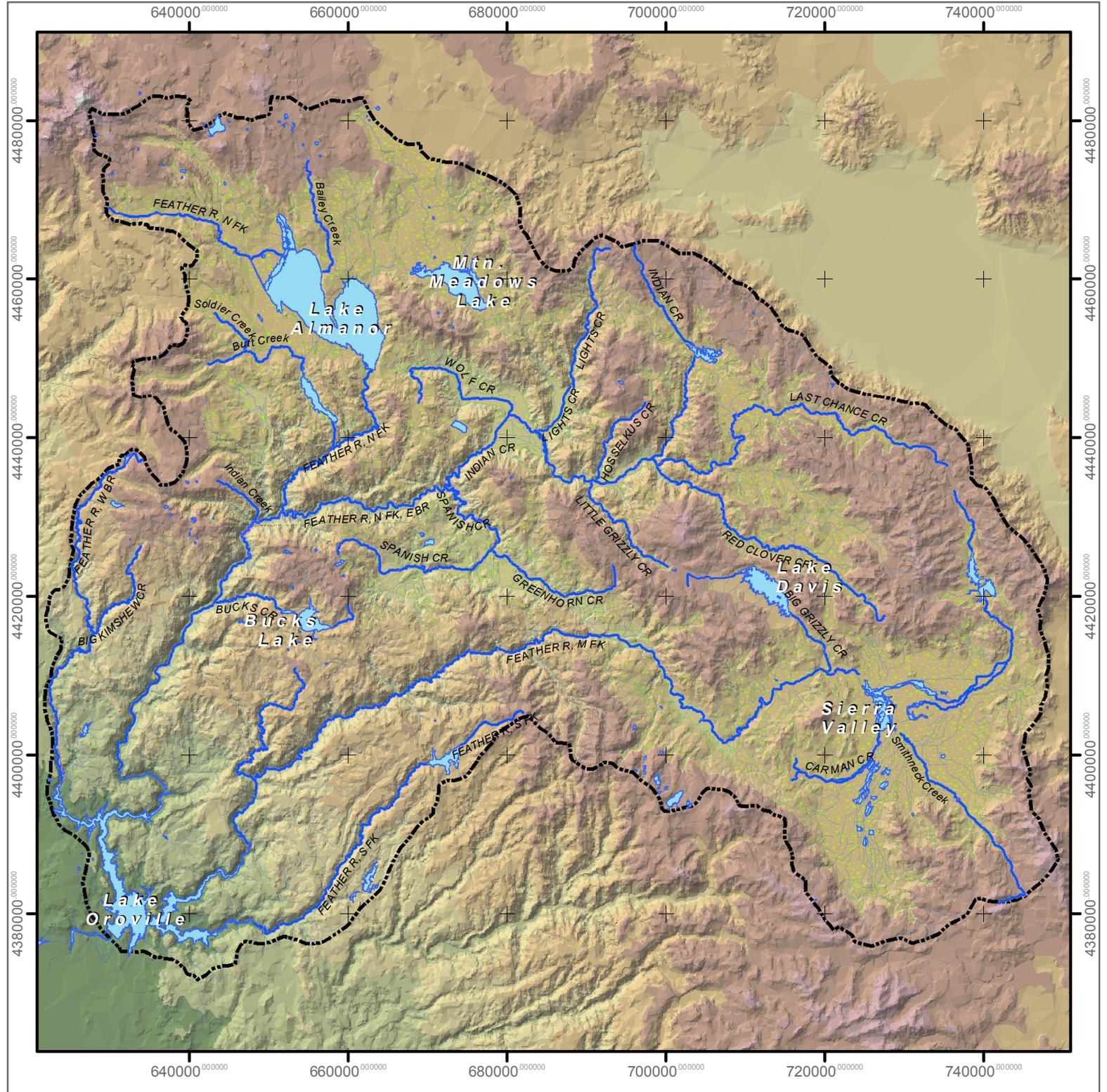
2. Regional Water Management Group (RWMG)

The present Upper Feather River Regional Water Management Group (RWMG) was created through a Memorandum of Understanding (MOU) executed June 1, 2009 (see Appendix C). The MOU provides the guiding tenets and structure to prepare the IRWM Plan update. The current signatories to the MOU include numerous local water agencies, governments, community service districts, resource conservation districts and other similar local agencies. Additionally, the



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Legend

- Streams
- Lakes and reservoirs
- Rivers
- Watershed Boundary

Elevation (m)

- 2719.143 - 3169
- 2269.286 - 2719.143
- 1819.429 - 2269.286
- 1369.571 - 1819.429
- 919.714 - 1369.571
- 469.857 - 919.714
- 20 - 469.857

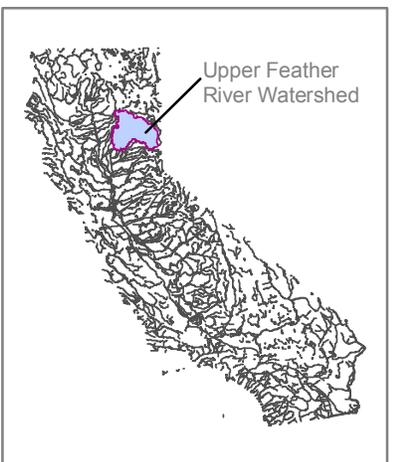
FIGURE 3-1
UPPER FEATHER RIVER WATERSHED

Watershed base map depicting elevation, major rivers, tributaries, streams, lakes and reservoirs.

N

0 2 4 8 12 Miles

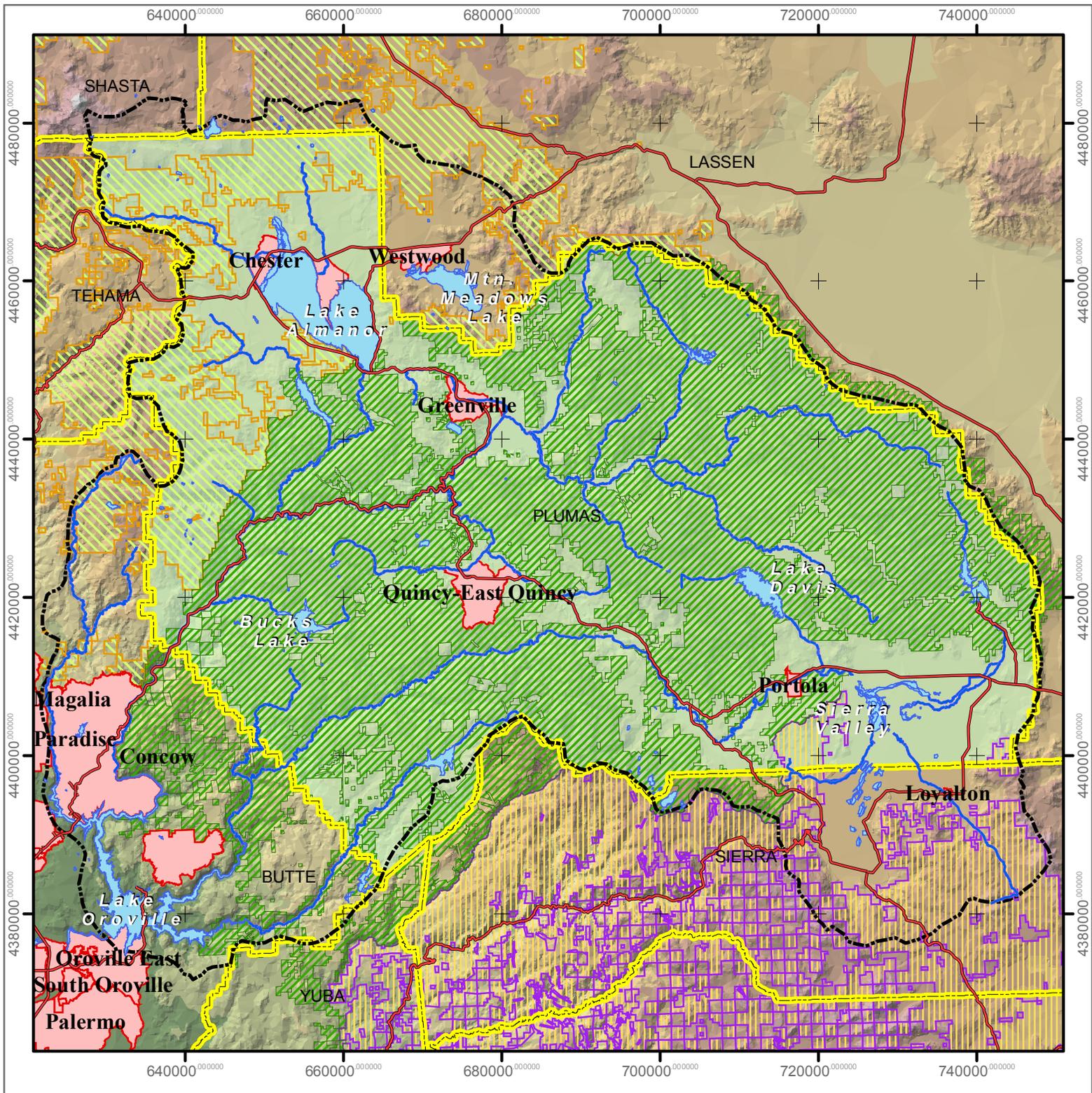
GIS Metadata Information
 Rivers, streams, lakes and reservoirs shapefiles:
 California Spatial Information Library CASIL
 Feather River Watershed Elevation Grid:
 Ecosystem Sciences





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Legend

- Lakes and Reservoirs
- Rivers
- Watershed Boundary
- Plumas County
- Highways
- Urban
- Plumas Nat. Forest
- Lassen Nat. Forest
- Tahoe Nat. Forest
- County Boundary

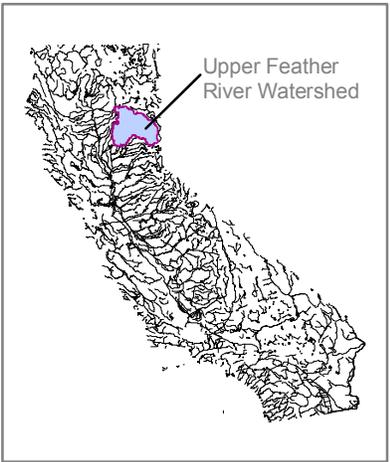
FIGURE 3-2
UPPER FEATHER RIVER WATERSHED
Political Boundaries and Urban Areas

Watershed base map depicting cities, towns, political boundaries, major highways and elevations.

GIS Metadata Information
 Rivers, streams, lakes, counties and cities shapefiles:
 California Spatial Information Library CASIL
 National Forest Boundary Shapefiles:
 Plumas National Forest and CASIL
 Feather River Watershed Elevation Grid:
 Ecosystem Sciences

N

0 2 4 8 12 Miles





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MOU was executed by the U.C. Cooperative Extension, federal agencies, non-governmental organizations and tribal representatives. Any local agency or non-governmental organization that executes the MOU is a “Member” of the RWMG and is charged with carrying out the Program. The RWMG has a process whereby a Steering Committee of eight members is appointed to administer the program with powers to oversee the finance and administration as well as to resolve policy issues when the Members (of the RWMG) fail to reach consensus.

Federal and State agencies that execute the MOU agreed to designate liaisons from their organizations to facilitate coordination between the Program and their agency’s own planning and resource management responsibilities.

The Members of the RWMG meet as necessary but in no event less than every four months. The Steering Committee meets as necessary, but in no event less than every three months. An annual meeting is conducted in each of the watersheds (North Fork, Middle Fork and East Fork of the North Fork of the Feather River) in designated towns once per year. It is anticipated that the frequency of meetings of the Steering Committee will be increased to approximately once per two months during the Plan update.

As may be needed, planning workgroups will be appointed by the RWMG to carry out specific tasks in support of the program. Workgroup meetings and participation are open to all interested parties. Initial workgroups include; a) Community Watershed Education and Outreach, b) Floodplain and Meadow Management, c) Irrigated Lands, d) Municipal Services, e) Project Prioritization, f) Science and Monitoring and g) Uplands and Forest Management.

New members to the RWMG must be approved by the Steering Committee or the RWMG at a

duly convened meeting. The Plumas County Flood Control and Water Conservation District is (currently) the designated Fiscal Agent for the IRWM Program.

3. Existing IRWM Plan

In 2005, the initial IRWM plan was developed for the Upper Feather River region in accordance with Prop. 50 guidelines through matching grant contributions from the Ecosystem Sciences Foundation and Plumas County. The two general options under the Prop. 50 guidelines for development of an IRWM Plan were to rely upon an existing "functionally equivalent" plan or to develop a new, stand-alone document. The Upper Feather River region adopted a hybrid approach, creating a "new" IRWM Plan that attempted to inventory, reconcile, and identify gaps in a number of existing plans, while remaining consistent with the fundamental water management objectives of each document. The following plans and authorities were the building blocks for the IRWM plan:

- Feather River Coordinated Resource Management Plan
- Feather River Watershed Management Strategy
- FERC Project 1962 Settlement Agreement
- FERC Project 2105 Settlement Agreement
- Herger-Feinstein Quincy Library Group Forest Recovery Act
- Monterey Settlement Agreement
- Plumas National Forest Land and Resource Management Plan Sierra Valley Groundwater Management District Act



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The "formal" regional water management group was based upon an MOU between four entities adopting the IRWM plan and agreeing to collaborate on regional water management:

- Plumas County
- Plumas County Flood Control & Water Conservation District
- Plumas National Forest
- Sierra Valley Groundwater Management District

While there were only four formal parties to the initial MOU, the roles played by those parties in integrating existing watershed management efforts through the Feather River Coordinated Resource Management (CRM) and the Plumas Watershed Forum had the practical result of a much larger web of increased coordination to obtain common goals. Under the IRWM MOU, meetings of the IRWM group were held in conjunction with meetings of the Plumas Watershed Forum. As a result of that practical collaboration, projects funded under a Prop. 50 implementation grant received in 2007 were sponsored by a number of state and local water management entities throughout the region.

4. Need for an IRWM Plan Update

In retrospect, there were two significant areas where the IRWM preparation process undertaken by the region in compliance with the Proposition 50 IRWM guidelines need to evolve. While the consolidation of existing plans resulting in a functional-equivalent document was an efficient and practical approach to an initial IRWM plan, that course of action did not provide much opportunity to search for potential new stakeholders and consider new perspectives. Also, the governance and operation of the initial IRWM structure relied heavily upon informal relationships which

inhibits transparency and accessibility to a broad range of interests and perspectives. In view of those lessons and considering the new requirements of Proposition 84 and the IRWM Planning Act of 2008, the structure and function of the Upper Feather IRWM Program is progressing towards these desired ends, in the proposed robust public participation and stakeholder involvement tasks that are included in the proposed update of the IRWM Plan.

Since the completion of the earlier IRWM Plan the governance structure was also changed through the addition of numerous new stakeholders, as well as instituting a more formal setting for deliberations and decision-making. As a result of those factors, coupled with a significant economic downturn for the region, the ability of the existing IRWM Program to meet anticipated desires of the participants in the Plan required a new focus away from a focus on improving the natural infrastructure of watersheds and more towards inclusion of the work needed to improve and integrate the man-made infrastructure of the region with watershed health. Numerous problems were identified and associated with the ability of a region-wide Disadvantaged Community (DAC) to address critical issues related to public water related services has also emerged as a critical priority. The existing community capacity of the older IRWM governance structure was inadequate to incorporate the larger issues associated with addressing man-made infrastructure challenges.

These various changing conditions and factors led to the decision to restructure the decision-making process for the program, change the focus of the Plan and to approach problem solving with a priority of serving the most economically distressed communities within a region-wide DAC setting.



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Thus, the focus of the new plan is to be on resolving significant problems with water supply systems (efficiency, reliability and quality) and wastewater treatment systems. Both are beset by the challenge of aging infrastructure and more stringent regulatory standards. The overarching challenge of resolving these problems in the most efficient fashion, within the existing limits of DAC community capacity, could best be dealt with in the form of an Integrated Resources Management Plan update.

B. Status Meeting IRWM Plan Standards

The Upper Feather River IRWM Plan adopted in 2005 has served as a functionally equivalent plan, currently meets all of the former Proposition 50 IRWM Guidelines, as well as meeting some of the new Proposition 84 Guidelines. Through this IRWM Planning Grant application, funds are being requested to update and the plan for those Proposition 84 Standards that need further refinement; specific development and attention to the climate change standard which will result in updates throughout the Plan; and specific development and attention to the development of IRWM Plan objectives related to providing sustainable and reliable water supply for domestic water users and resolving wastewater treatment issues, for the region-wide DAC conditions of the Upper Feather River watershed.

The following discussion identifies, by Proposition 84 Standard, where the 2005 Plan needs updating in order to become a compliant plan. This is also summarized in Table 3-1. Since the RWMG is already aware that the 2005 Plan does not comply with Proposition 84, the objective of this section is to demonstrate how the current plan meets the new standards, and areas where updates will be made in the new

plan to meet the remaining standards. References to where the information can be found within the 2005 Plan (Appendix B) and Region Acceptance Process (RAP) application (Appendix A) are provided as demonstrable evidence that progress has been made towards Proposition 84 compliance. The objective of this section is to identify areas that require updating and refinements within the existing plan, so that the work plan tasks can effectively meet those deficiencies.



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Table 3-1: How the Upper Feather River IRWM Plan Meets the Current Proposition 84 Standards

Proposition 84 Standard	Reference	Update Needed	Work Plan Task
Governance	IRWMP – Page 1-7 and 7-1	Incorporate RAP and MOU language into IRWMP	Task 6
	RAP – Questions 2 and 5 Responses	Identify governance structure for plan implementation.	
	MOU		
Region Description	IRWMP – Chapters 1 and 4	Incorporate RAP language, current social and cultural makeup, local water infrastructure, and climate change	Task 6
	RAP – Questions 6 and 7 Responses		
Objectives	IRWMP – Chapter 2	Reconfirm objectives, add planning metrics. Include local water needs and climate change.	Task 6
Resource Management Strategies	2009 CWP	Consider RMS based on 2009 CWP. Include climate change.	Task 6
Integration	IRWMP Chapter	Consider the benefits of project integration to meet the new standard using existing Plan and new	Tasks 5 and 6
Project Review Process	Not included in existing documents.	Develop a quantifiable project review and prioritization process. Include climate change.	Task 5
Impacts and Benefits	IRWMP Chapter 7	Update the IRWM to include plan implementation, actions shared between regions and actions affecting DACs and Tribal Communities.	Task 2
Plan Performance and Monitoring	IRWMP Chapter 7	Create a DMS to track implementation and store data from monitoring efforts. Update IRWM Plan narrative based on the RAP.	Task 3



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Proposition 84 Standard	Reference	Update Needed	Work Plan Task
Data Management	IRWMP Chapter 7	Develop DMS to increase data availability and easy integration of data into existing State databases. Include QA/QC for data.	Task 3
Finance	Not included in existing documents.	Discuss list of funding sources and programs.	Task 6
Technical Analysis	IRWMP – Chapter 4	Conduct a baseline technical study and Climate Change Technical Study. Create a plan to fill in any identified data gaps.	Task 2,3
Relation to Local Water Planning	IRWMP – Chapter 1	Update local planning portion of current IRWMP. Incorporate Climate Change Studies from Local Planning Documents.	Task 6
Relation to Local Land Use Planning	IRWMP – Chapter 1	Update Plan to ensure consensus with local/State/Federal Land Use Planning	Task 6
Stakeholder Involvement	IRWMP – Chapter 3 RAP – Questions 3 and 4	Incorporate RAP language. Expand outreach to incorporate needs of broadened RWMG. Outreach will focus on DAC and Tribal interests.	Task 1
Coordination	IRWMP – Chapter 3 RAP – Question 8	Document coordination between federal, state, and local agencies. Incorporate RAP language, include climate change.	Task 1
Climate Change	RAP – Question 7	Revisions throughout the IRWMP	Task 4

1. Governance

The Upper Feather River IRWM Program governance structure has evolved considerably from the earlier “grassroots” governance form (see Upper Feather River RAP submittal to DWR April 24, 2009) to the present consensus-based decision-making structure. The Memorandum of Understanding signed June 1, 2009 (Appendix C) includes the commitments of signatories from 31 local agencies, water and wastewater municipalities, watershed management coalitions, the University of

California Cooperative Extension, tribal interests, as well as state and federal agencies to reinvigorate the IRWM Program in the Upper Feather River Region. This change in governance reflected the need to enlarge the number of local agency participants and institute a more formal decision making entity based on communications with the DWR.

In addition, by broadening the interest spectrum of the program those specific interests within the region could be better represented and assist in the development of a more comprehensive



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IRWM Plan update. Changes to the governance structure that have been memorialized in the MOU will be incorporated into the governance narrative of the updated IRWM Plan.

Additionally, the existing governance document will be reviewed, discussed, and, if necessary, updated to ensure that governance will be suitable to administer the plan, provide for plan amendments and technical updates, and guide the Program's implementation.

It is anticipated that the new governance structure will also provide the region with a more inclusive point for deliberations to address DAC priorities and meet local community needs regarding water related resources.

The RWMG anticipated that the review for potential updates to the governance structure would also address the methods whereby the IRWM Plan (once completed) may be technically updated and/or formally amended. The RWMG expects that the IRWM Plan will be a "living" document and as new information or data become available it could be incorporated into the Plan. Additionally, where new projects are proposed they could also be considered for inclusion in the Plan. The RWMG supports distinguishing between technical updates to the IRWM Plan as opposed to significant formal amendments to provide flexibility in the Plan update process through project implementation.

2. Region Description

The Region Description contained within the existing IRWM Plan, supplemented with the recent descriptive narrative of the Region provided in the RAP application, together meet the majority of the new standard. The 2005 Plan will also be updated with the ongoing efforts within the watershed and information obtained from adjacent planning regions. In particular, the current region description will be expanded

with a renewed focus on the social and cultural makeup of the region, and the major water infrastructure and challenges of municipalities that serve water and collect and treat wastewater. In order to accomplish this effort, a Baseline Technical Study as described in work Task 2 will be completed to document the regional infrastructure and water supply reliability needs over the 20 year IRWM Planning horizon.

The region description will be updated to document changes and revisions to the major water-related needs and challenges that have become more pressing in the current depressed economic conditions of the region and as the availability of alternative funding vehicles have diminished. Interregional coordination efforts will be described, particularly with agencies and other Stakeholders from the Butte County portion of the Feather River watershed, and particularly from the North Sacramento Valley IRWM Region who will be invited to regularly attend and provide input to meetings of the Upper Feather River Watershed Region. Likewise, representatives from the Upper Feather River Region will engage in an open dialogue with the North Sacramento Valley region and five other adjacent IRWM regions. A new land use map will also be prepared building on the anticipated adoption of the General Plan update in the coming year. In order to be complete, the region description also requires a discussion of the potential effects of climate change on the region.

3. Objectives

The existing IRWM Plan goals, objectives, actions, and strategies discussion needs to be updated in order to define quantifiable metrics to measure achievement of the objectives, and to fully address the revised list of major water-related challenges and opportunities described



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in the region description. Strategies to prioritize objectives will be considered and documented in the IRWM plan. In addition, the revised objectives must address adapting to changes in the amount, intensity, timing, quality and variability of runoff and recharge and to identify suitable adaptation measures. Therefore, the 2005 Plan will be updated with the results from the Climate Change Technical Study described in Task 4.

The overarching theme of the current IRWM Plan objectives is an improvement in watershed health including meeting water quality objectives, increasing local water retention, improving flood protection, and promoting restoration of conditions for improved ecosystem conditions, such as salmonid fisheries. Each of these objectives are vital to the overall condition of the Upper Feather River watershed, and will continue to be vital to IRWM Plan implementation, along with additional objectives that meet the current water resources related needs of the communities and people within the region.

4. Resource Management Strategies

The existing IRWM Plan evaluated the 24 water management strategies contained within the California Water Plan. Since the release of the 2009 Update of the California Water Plan, the following Resource Management Strategies have been added, which will be considered in the IRWM Plan Update: Forest Management, Land Use Planning and Management (formerly Urban Land Use Management), and Improve Flood Management. There are the additional “Other Strategies”, that will also be reviewed, which include: Crop Idling for Water Transfers, Dewvaporation or Atmospheric Pressure Desalination, Fog Collection, Irrigated Land Retirement, Rainfed Agriculture, and Waterbag Transport/Storage Technology.

The IRWM Plan must also identify and implement “No-Regrets” Adaptation Strategies to the general effects of climate change, such as riparian, meadow and forest restoration, enhancing flood plain function, forest fire hazard reduction and community wildfire protection, and water reuse and use efficiency. The Climate Change Technical Study described in Task 4 will help to identify the “No-Regrets” Adaptation Strategies that will be most effective and appropriate for this Region.

5. Integration

The 2005 Plan developed a successful framework of Integrated Watershed Actions to ensure collaboration between entities and integration of projects so as to achieve multiple benefits. The IRWM Plan Update will consider the benefits of project integration to meet the new standard by continuing to use this successful framework for integration, along with alternative approaches that may provide enhanced benefit to the stakeholders.

6. Project Review Process

The MOU Signatories (the RWMG) during the Plan update will develop a more transparent and quantifiable project review and prioritization process. The 2005 Plan did not lay out a step-by-step prioritization process with ranked criterion, as is commonly practiced today. Initially the Plan signatories integrated the project and planning priorities from within their entities to achieve broad water and watershed management strategies on an ad hoc basis. In 2007, the implementation project selection list came from within the signatory agencies and their partners and reflected internal prioritization processes.

A project review process consistent with the new standard will be developed in an open and transparent process with the larger more



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comprehensive participation of regional stakeholders including tribal and DAC community representatives to ensure an equal consideration of water management needs across the region. The IRWM Plan update will include preparation of written documentation and narrative of the process performed in Task 5 to review projects using criteria developed by the RWMG with assistance by the IRWM Plan facilitator. This IRWM Plan Project Review section will describe:

- Procedures for submitting a project to the IRWM Plan;
- Procedures for review of projects for implement in the IRWM Plan;
- Procedures for communicating the list(s) of selected projects, as well as, describe how factors for project review will be implemented; and
- How stakeholder input will be incorporated in project review and prioritization.

In order to be complete, the Project Review Process must also include: contribution of the project to adapting to climate change, contribution of the project in reducing Greenhouse Gas (GHG) emissions as compared to project alternatives, and CEQA project-level analysis with respect to GHG emissions, if appropriate. While IRWM plans are not required at this stage to implement sophisticated tools to calculate GHG emissions on a project-by-project basis, they are required to begin the process of evaluating climate change at an analytical level. Therefore, the Project Review Process will be updated with the results from the Climate Change Technical Study. The technical studies are anticipated to include assessments of reducing GHG emissions through the reduction of catastrophic wildfire reduction and

identifying best management practices for carbon sequestration in meadows and forests.

7. Impacts and Benefits

The impacts and benefits discussion contained within the existing IRWM Plan meets the majority of the new standard. However, the IRWM Plan will be updated to include the discussion of impacts and benefits of plan implementation, implementation actions shared between regions, as well as those directly affecting DAC and Environmental Justice related concerns, and Native American tribal communities including the benefits of environmental stewardship and reducing mercury pollution exposure.

8. Plan Performance and Monitoring

The IRWM Plan will be updated with a Data Management System (DMS) that will help track and document the progress of IRWM Plan implementation and for storing and disseminating data from monitoring efforts. The Data Management System will also serve to support the actions outlined in the 2005 IRWM Plan to develop a “coordinated data warehouse and resource mapping” utility to provide a quantitative means for ensuring the plan objectives are met. A discussion of how findings or “lessons learned” from project-specific monitoring efforts will be included to improve the RWMG’s ability to implement future projects in the IRWM Plan. A table will be provided identifying who has the primary responsibility for development of project-specific monitoring plans, who is responsible for project-specific monitoring activities, the stage of project development that a project-specific monitoring plan should be prepared, and the generally required contents of such plans.



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The plan performance and monitoring discussion contained within the existing IRWM Plan, will also be updated with the recent descriptive narrative of plan performance provided in the RAP application and a discussion of policies and procedures that promote adaptive management with respect to the effects of climate change that ensure measurable benefits to disadvantaged communities and tribes in the region.

9. Data Management

The IRWM Plan will be updated with a Data Management System (DMS) that will help manage efficient Task use of available data, dissemination of data, and integration of data into existing State databases. The Data Management strategy and system development is discussed in detail in Task 3 of Section II of this attachment. Procedures for stakeholder contribution of data to the DMS and a procedure for the continued maintenance of the system, including local capacity building such as training and technology upgrades will be discussed. In order to meet the Data Management standard, the section will also include a discussion of data validation or quality assurance/quality control measures that will be implemented by the RWMG for data generated and submitted for inclusion into the DMS, as well as an explanation of how data collected for the IRWM Plan can be shared with state and federal agencies, within the watershed and with adjacent planning regions.

10. Finance

The IRWM Plan does not currently meet most of the new finance standards instead primarily relying on the availability of IRWM grant and Monterey Settlement funding to administer and implement the plan on an ongoing basis. Since 2005, these monies have not been sufficient to

ensure full plan implementation. Additionally, the discussion requires an explanation of how operation and maintenance (O&M) costs for projects that implement the IRWM Plan would be covered and the certainty of O&M funding in order to meet the standard completely. Therefore, the IRWM Plan will be updated to include this discussion and a comprehensive list of funding sources and programs, and an analysis of the certainty and longevity of funding alternatives for IRWM implementation will be provided.

11. Technical Analysis

The IRWM Plan includes a detailed listing and categorization of the documents used to develop the baseline information and technical analyses for the development of the IRWM Plan. Since the adoption of the IRWM Plan in 2005, some of these technical resources have undergone revisions or updates that should be reflected in this IRWM Plan update. Therefore, the baseline technical documents will be reviewed and the IRWM Plan will be updated while continuing to ensure congruency with regional watershed management efforts.

One of the key new additions to the updated IRWM Plan will be the consideration of local water and wastewater infrastructure and water supply reliability needs especially in priority DAC areas. In order to accomplish this assessment, numerous data gaps must be filled as described in detail in Section II, work Task 4. The baseline technical study will reaffirm the existing and future conditions documented in the IRWM Plan, include an evaluation of quality and sustainable quantity of the primary source of drinking water in the region: groundwater. Additionally, information describing where wastewater infrastructure is in critical need of repair and/or replacement to protect water quality and human health will be captured in the



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baseline technical study and inform project selection criteria in the updated plan.

New technical data regarding climate change plans, policies, adaptation and mitigation will also be included within this section. These documents will be identified as part of the Climate Change Study being prepared as part of this IRWM Plan update. Also to be included will be an enhanced discussion of the data, technical methods, and analyses used in selection of the water management strategies, and why this information was appropriate for selecting the strategies within the Region. Some of the data deficiencies stakeholders identified during the development of the 2005 Plan are documented within the IRWM Plan. Given the new Standards, the expanded scope of the technical analysis, and review of current planning documents, an updated report on IRWM Plan deficiencies, priority for filling the gaps in the IRWM Plan data, and plan to address them will be provided in the Update.

12. Relation to Local Water Planning

This standard requires update of the 2005 IRWM Plan to evaluate the wide range of local water planning documents prepared by agricultural and forestry managers, community water and wastewater agencies and districts, and federal and state water management agencies. Those documents related to local water planning efforts most critical to the Upper Feather River Region's Plan preparation will be reviewed and summarized within this IRWM Plan section. For example water master plans, LAFCO Municipal Services Reviews, optimization plans and feasibility studies will be valuable resources for both water demand estimates and water supply availability evaluation in relation to projected population changes.

The IRWM Plan will build on past efforts and discuss how other key elements of water planning efforts (e.g., water master plan, groundwater management, agricultural water management, flood management, watershed management, resource management, etc.) will be extracted to describe regional planning efforts in the Upper Feather River Region. In order for the Plan to meet the requirements the Climate Change Standard, the IRWM Plan will consider and incorporate the water management issues and climate change adaptation and mitigation strategies from local plans and will discuss these topics in the Climate Change Technical Study.

Meeting discussions will include how water management/climate change is being addressed in local plans. In addition, limits (e.g., water supply and/or water quality) and management tools/criteria for water management in local plans will be reviewed during these meetings for applicability and inclusion to the IRWM Plan. It is anticipated that through these meetings, the RWMG will collaborate/integrate their individual local water planning efforts to develop a regionalized water management plan as part of the IRWM Plan preparation. The results of the meeting discussions will form the basis for the narrative of this section of the IRWM Plan.

13. Relation to Local Land Use Planning

Plumas County has nearly completed its General Plan update, which will include consideration of changing land use patterns, forestry and agricultural needs, and associated water use planning considerations. Land use planning decisions within the region are also made at the state and federal levels, for example the Sierra Nevada Forest, Forest Plan Amendment. For this reason, the IRWM Plan will be updated to ensure consistency with the General Plan, especially the discretionary and new water,



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agriculture and forestry elements to meet the Local Land Use Planning Standard.

The IRWM Plan will be revised to document the water management decision making process, the current and desired relationship between land use planning entities and water agencies in the region. Many water users in the region are self-supplied off individual groundwater wells, therefore the relationship between the land use agency and self-suppliers is critical to ensuring sustainable and safe management of the groundwater basins. Including a vulnerability assessment of individual water and wastewater systems, the relationship between the land use agency planning and individual on-site wastewater systems will also be examined. The IRWM update will be consistent with the Plumas County General Plan, the Bay-Delta Basin Plan and the Forest Land and Resource Management Plans for the three National Forests in the region.

In addition, in order for the Plan to meet the requirements of the Climate Change Standard, the IRWM Plan will include a discussion of the region's demonstrated information sharing and collaboration with regional land planning efforts being undertaken in order to:

- manage multiple water demands throughout the state (as described in the California Water Plan 2009),
- adapt water management systems to climate change, and
- potentially offset climate change impacts to water supply in California.

The climate change adaptation and mitigation strategies discussed in the Climate Change Technical Study that is being conducted as part of this IRWM Plan Update will be used to help with update of this section.

14. Stakeholder Involvement

As described in the RAP application, the existing IRWM Plan was developed in a public process. Likewise, the IRWM plan update will be developed in a substantially broader public process focused on an active outreach process including meetings, community events, direct emails, mailings, internet access and face-to-face interaction to maintain Stakeholder involvement. Stakeholders, including DACs, and tribal interests will particularly be encouraged and assisted in directly interacting with the IRWM process by adding input throughout plan development and submitting projects to the list of Candidate Projects for implementation of the IRWM Plan. Chapter 3 of the existing IRWM Plan, supplemented with the recent descriptive narrative of the Region provided in the RAP application, together meet the new standard for Stakeholder Involvement.

Disadvantaged Community Involvement

The Upper Feather Watershed IRWM Region Plan update will need to more thoroughly examine DAC needs for programs, studies, and projects and develop a project selection criterion that values and prioritizes those specific areas. From the perspective of “economically disadvantaged” communities, Plumas County and Sierra County on the aggregate each have median household incomes that are less than 80 percent of the median California income. Individual communities with income levels below the 80-percent threshold were identified in the RAP process and are listed on Appendix A of Attachment 3. The challenge for the Plan process will be to identify those DAC areas with the most critical needs regarding existing man made infrastructure as it relates to a clean, affordable and reliable water supply as well as a safe, compliant and sustainable wastewater treatment system.



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15. Coordination

Chapter 3 of the 2005 Plan, supplemented with the recent descriptive narrative of coordination provided in the RAP application together meet the majority of the new standard. In order to be complete however, the Coordination discussion must include: mention of California Natural Resource Agency's (CNRA) California Adaptation Strategy process and the RWMG's consideration of membership in the California Climate Action Registry (CCAR), <http://www.climateregistry.org/>.

The 2005 Plan will also be updated with the ongoing efforts from other adjacent planning regions. To engage other IRWM Regions in an area where travel is limited by poor roads, extreme winter conditions of snow, ice and landslides will involve using other more efficient forms of communications, coordination and cooperation. Thus, protocols for the "three C's" will be established with adjoining IRWM Regions. These protocols will involve an attempt to not only identify areas of cooperation on each individual plan but to attempt to find

symbiotic interregional activities for two or more regions to pursue. It is anticipated much of this work will involve ongoing review of documents, electronic communications and occasional face-to-face interaction between regions.

Additionally, the IRWM representatives will participate in relevant other venues, including continued participation in the regular updates to the State Water Plan (Bulletin 160) through both the Advisory Council and Regional Forums and including updates to the Central Valley Regional Water Quality Control Board's Basin Plan and the Forest and Land Management Plans for the three National Forests in the region.

16. Climate Change

As part of this IRWM Plan Update, a climate change technical study is being commissioned to address the requirements of the new standard. Please see Work Task 4, Climate Change Technical Study, in Section II of this Work Plan.



Upper Feather River IRWM Proposition 84 Planning Grant Proposal **Attachment 3: Work Plan**

I. Grant Work Plan Content

The work plan that follows describes the task and sub-tasks necessary to complete update of the IRWM Plan. As described in the Background Section I, even though the Upper Feather River has an existing IRWM plan, there are significant updates required to the IRWM Plan for it to be Proposition 84 standards compliant. The RWMG has also considerably revamped the governance process since 2009, which will alter the threads of water management outreach and activities throughout the region. Below is an outline of the tasks for the IRWM Plan Update. Each task and sub-task is described in greater detail within this section.

Task 1. Stakeholder Involvement

- Subtask 1-1: Develop Stakeholder Involvement Plan
- Subtask 1-2: Stakeholder Outreach
- Subtask 1-3: Stakeholder Meetings
 - Subtask 1-3-1: Steering Committee Meetings
 - Subtask 1-3-2: RWMG Meetings
 - Subtask 1-3-3: Workgroup Meetings
 - Subtask 1-3-4: Public Information Meetings
 - Subtask 1-3-5: DWR and Interregional Meeting Participation
- Subtask 1-4: DAC Outreach
- Subtask 1-5: Tribal Outreach
- Subtask 1-6: Interregional Outreach

Task 2. Baseline Technical Study - Existing and Future Conditions

- Subtask 2-1: Collect and Evaluate Post 2005 Data
- Subtask 2-2: Update IRWM Assumptions and Technical Analyses
- Subtask 2-3: DAC Groundwater Vulnerability Needs Assessment
- Subtask 2-4: Prepare Baseline Technical Study

Task 3. Data Management Strategy, System Development and Implementation

- Subtask 3-1: Develop a Phase 1 Data Management Strategy
- Subtask 3-2: Implement Phase 1 Data Management System
- Subtask 3-3: As-needed Support

Task 4. Climate Change Technical Study

- Subtask 4-1: Describe Legislative and Policy Context
- Subtask 4-2: Identify Vulnerability to Climate Change
- Subtask 4-3: Discuss Adaptation to Climate Change
- Subtask 4-4: Recommend Data Collection Improvements and GHG Calculation Tools for Future IRWMP Updates
- Subtask 4-5: Identification of Next Steps for Future IRWMP Updates
- Subtask 4-6: Prepare Technical Study

Task 5. Project Development Process

- Subtask 5-1: Develop Project Selection Criteria
- Subtask 5-2: Evaluate Status of Projects from Existing IRWMP
- Subtask 5-3: Call for New Projects, Project Integration, and Project Presentations
- Subtask 5-4: Project Evaluation and Technical Analysis

Task 6. IRWM Plan Update

- Subtask 6-1: Address New Plan Standards and Update Existing Plan
- Subtask 6-2: Integrate Technical Studies into Plan
- Subtask 6-3: Prepare Draft and Final Plan

Task 7. Grant Administration

- Subtask 7-1: Manage Grant Administration
- Subtask 7-2: Track In-Kind Contributions



Upper Feather River IRWM Proposition 84 Planning Grant Proposal **Attachment 3: Work Plan**

- Subtask 7-3: Prepare DWR Invoices
- Subtask 7-4: Prepare Quarterly Progress Reports
- Subtask 7-5: Prepare Final DWR Report

Task Descriptions

Task 1: Stakeholder Involvement

The Upper Feather River (UFR) stakeholders within the region prepared the existing IRWM Plan in 2005 and completed the successful RAP Application including the development of a governance structure and execution of a MOU signed by 31 members. The MOU established RWMG, whose role includes reaching out to and reestablishing stakeholder participation to support the preparation of this IRWM Plan Update. The RWMG met on 23 February 2012 to confirm support for this Planning Grant Proposal and the proposed activities.

Stakeholder involvement will be managed through a set of structured meetings building on the existing MOU policies. A qualified IRWM facilitator, along with the IRWM Plan development consultant will be retained to participate in meetings throughout the process to ensure meetings stay focused, productive, and equally consider issues and challenges throughout the region. The Public Outreach effort will also be supported by outside consultants where appropriate for DAC's, Tribal communities and Interregional outreach to adjacent IRWM Regions. In addition, a series of public information meetings will be used to extend awareness of the IRWM Plan Update encouraging a broad stakeholders' interest in the update. The approach to stakeholder involvement is described in more detail as follows:

Subtask 1.1: Develop Stakeholder Involvement Plan

A Stakeholder Involvement Plan (SIP) will be developed based on the program described in this application. The plan includes the reestablishment of the active participation of the interested RWMG membership to reflect the interests within the MOU signatories. The SIP will describe extending an invitation for participation to Regional stakeholders not signatory to the plan including the agricultural lands interests, Pacific Gas and Electric, and environmental organizations such as California Trout. In addition, the SIP will include a series of public informational meetings distributed between approximately seven (7) sites reflecting the major hydrologic sub-basins within the Region. The seven sites will be selected through discussions with the RWMG building on established meeting protocols of the Community Services Districts and other Brown Act public meetings.

Subtask 1.2: Stakeholder Outreach

Stakeholder outreach will include the development of an e-mail contact list for distribution of informational materials, meeting notifications and meeting notes. Non-RWMG stakeholders will be included on the e-mail list as requested and participation will be encouraged through public information meetings throughout the seven (7) hydrologic sub-basins as described in Subtask 1.2.1.

Subtask 1.3: Stakeholder Meetings

Subtask 1.3.1: Steering Committee Meetings

A total of twelve (12) Steering Committee (SC) meetings will be held approximately every six weeks to two months for the IRWM Plan preparation during the period from Fall 2012



Upper Feather River IRWM Proposition 84 Planning Grant Proposal **Attachment 3: Work Plan**

through Winter 2014 when the plan is expected to be adopted. Table 3-2 outlines the proposed meeting topics and order for each SC meeting, with a focus on documenting and developing plan content, and reviewing plan sections in preparation for RWMG meetings described in Subtask 1.2.1.

The Steering Committee will be appointed by the RWMG and will report the activities of the Workgroups during the proposed quarterly RWMG meeting. The Steering Committee will convene the Workgroup member participation and recommendations to the RWMG for designation of a Workgroup Chair by the RWMG. The workgroups will focus on the specific elements to be addressed in updating the IRWM Plan.

The Steering Committee meetings may include conference calls and/or face to face meetings as appropriate to support the participation of DAC's and member participation within the large geographic area of the Region. Meeting Agendas and notes will be provided in an Appendix to the IRWM Plan to support Task 1. The results of the Steering Committee meetings will be described and documented in the Coordination section of the IRWM Plan.

Subtask 1.3.2: RWMG Meetings

A total of 8 quarterly RWMG meetings are planned for the IRWM Plan preparation period from Fall 2012 through Winter 2014. The RWMG meetings will be open and public with opportunity for stakeholder input. Agendas, meeting minutes and links to video recordings of meetings will be provided in an Appendix to the IRWM Plan to support Task 1 as well as made available to the public on the IRWM Plan website. The results of the stakeholder meetings will be described and documented in the relevant section of the IRWM Plan.

Subtask 1.3.3: Workgroup Meetings

The existing MOU established a workgroup structure that classifies issues and responsibilities into different categories. The MOU provides that the RWMG will designate a Chair for each planning workgroup. The RWMG will work through the Steering Committee to develop the workgroup participation. The meetings for each Workgroup will occur on an as needed basis in support of the Plan Update efforts. Planning workgroups responsibilities are wide ranging and include review technical content, assist with development of plan sections, support public education and outreach, facilitate data management efforts, and review proposals for plans, projects, and any other actions and provide input to the respective Workgroup Chairs. It is expected that each workgroup will meet a minimum of four (4) to a maximum of eight (8) times over the course of the plan update. The number and frequency of the meetings will depend on the magnitude of issues identified and participation garnered in each workgroup. The Workgroup Chairs will report back to the Steering Committee who will in turn update the RWMG at the quarterly meetings.

Below are the identified workgroup categories:

- (a) Community Watershed Education & Outreach: The Community Watershed Workgroup shall address issues including public education, public affairs, public relations, private landowner education and financial assistance, and community involvement and opportunities for volunteer participation in watershed stewardship activities.

Upper Feather River Regional Water Management Group (RWMG)
 Integrated Regional Water Management (IRWM) Planning Grant Application
 Planned Meeting Schedule

		IRWM Plan Development Meeting Topic Summary																			
		IRWM Grant Period																			
IRWM Plan/Meeting Topic	Specific Items to Discuss/Notes	SC Mtg 1	RWMG Mtg. 1	SC Mtg 2	RWMG Mtg. 2	SC Mtg 3	SC Mtg 4	RWMG Mtg. 3	SC Mtg 5	SC Mtg 6	RWMG Mtg. 4	SC Mtg 7	SC Mtg 8	RWMG Mtg. 5	SC Mtg 9	RWMG Mtg. 6	SC Mtg 10	SC Mtg 11	RWMG Mtg. 7	SC Mtg 12	RWMG Mtg. 8
Governance	Review and update existing governance section per revised MOU, include how plan will be updated and implemented in short and long term, and discuss balance of access/opportunity to stakeholders. Combine with Finance discussion.	X		X		X							X	X							
Finance	Review and update existing finance plan. Combine with Governance discussion. Discuss towards end of planning period.						X intro					X high level	X		X						
Regional Description	Identify important cultural/social values to regional community and important economic trends. Confirm conflicts/issues.	X issues & conflicts		X outline			X			X											
Objectives	Update of measurable IRWM Program/Plan objectives addressing water-related issues and conflicts of the region. Prioritize objectives or determine why prioritization is not appropriate.			X update		X			X						X						
Stakeholder Involvement/DACs	Identify additional ways to involve DACs and tribal community and assign members to perform identified outreach tasks. Discuss DAC and Tribal Outreach Plan	X				X update			X update			X update			X update		X	X			
Coordination	Identify coordination/cooperation with other IRWM efforts/groups and State/Federal agencies for proposed planning and implementation projects.	X		X		X			X update			X update			X update		X	X			
Relation to Local Land Use Planning	Evaluate current relationship between local land use planning and regional water issues/objectives (including flood management, water quality, septic), determine needed projects, update of policies/procedures and future planning to be included in plan.								X	X			X update								
Relation to Local Water Planning	Presentation of individual agency and regional water planning efforts including projected water supply and demands and summary of agency planning documents to be used for plan development and how the documents support regional efforts.					X			X	X											
Data Management	Determine how and what data will be collected, stored, disseminated, updated and managed with the Science & Monitoring Workgroup (SMW). Set up data collection protocols and begin collecting/managing data.	X				X			X				X update								
Baseline Technical Study	Review list of available data/technical analyses and determine which will be reviewed/used for plan development. Determine if additional technical analysis/data needs to be performed/collected and develop future plan projects to address needs.	Intro		X		X						X	X								
Climate Technical Study	Establish how likely effects of climate changes will be determined for region, vulnerabilities of region, and potential adaptive responses. Consider ways to reduce greenhouse gas emissions.			X		X			X presentation	X											
Resource Management Strategies (RMS)	Identify which RMS will be incorporated into the plan.	X overview				X high level			X	X			X								
Project Selection Criteria Process	Develop project selection criteria.					X preliminary				X update		X	X								
Integration	Discuss/determine/update Regional and Inter-regional project planning and implementation					X							X		X						
Project Identification Presentations	ID projects and present proposed regional and Inter-regional projects for implementation, technical analysis, and other planning.									call for projects		X	X								
Project Selection/Ranking	Implement Project Selection Process to select and rank projects to be included in plan.								X			X	X		X						
Impacts and Benefit	Determine plan/project potential impacts and benefits to Region, other regions, DACs and tribal community. Include with every project presentation.								X			X	X								
Plan Performance and Monitoring	Combine with Benefits and Impacts discussions.												X		X		X				
Review of Draft Plan	Consultant to summarize review comments, and group to resolve conflicting comments. The Science and Monitoring Workgroup (SMW) will help assure review is completed.					X				X		X	X				X	X			
Review/Approval of Final Plan	Approve and adopt final plan for submittal to DWR.																X	X		X	

- Notes:
 1. RWMG meeting topics will include the information prepared during the preceding Steering Committee Meetings.
 2. SC - Steering Committee

Legend	
X	Focus of Meeting
X	Update/Review of Topic



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- (b) Floodplain & Meadow Management: The Floodplain and Meadow Workgroup shall address stream and meadow restoration projects as well as coordination with County general plans to manage floodplains, alluvial fans, and riparian areas.
- (c) Irrigated Lands: The Irrigated Lands Workgroup shall address matters related to the Irrigated Lands Regulatory Program, including coordinating any required water quality monitoring with other monitoring programs; identifying and assisting in the implementation of best management practices; and providing assistance to private landowners with irrigated lands.
- (d) Municipal Services: The Municipal Services Workgroup shall address municipal water and wastewater services and groundwater management, including supply and demand management, water use efficiency, and coordination of the provision of municipal services with County general plans.
- (e) Project Prioritization: As project proposals are advanced by other workgroups, the Project Prioritization Workgroup shall consider project prioritization across the Upper Feather River IRWM Program.
- (f) Science & Monitoring: The Science & Monitoring Workgroup shall serve as a venue to share information and research and identify and prioritize information and research needs in the region.
- (g) Uplands & Forest Management: The Uplands & Forest Management Workgroup shall address issues and projects related to the interconnection

between upland and forest management and water supply and water quality.

Subtask 1.3.4: Public Information Meetings

This task includes conducting a series of 7 public informational updates distributed between approximately seven (7) sites reflecting the major hydrologic sub-basins within the Region. The seven sites will be selected through discussions with the RWMG, building on regular stakeholder organization meetings, using established meeting protocols of the Community Services Districts and other Brown Act public meetings.

Subtask 1.3.5: DWR and Interregional Meeting Participation

In order to ensure consistency with statewide priorities, DWR direction on IRWM Plan development, and to identify areas for collaboration between neighboring regions, members of the RWMG will participate in up to four (4) periodic meetings with DWR and neighboring IRWM Regions. Stakeholders that participate in these meetings will be encouraged to submit a brief report to the applicable Workgroup and the workgroup chair will report the participation to the Steering Committee.

Subtask 1.4: DAC Outreach

As described in the Background, the majority of the UFR Region is considered a Disadvantaged community. The RAP (Appendix A), submitted in 2009, contains a list of specific communities within the Region that are considered DACs, with regard to their representative Median Household Income (MHI). MHIs are considerably lower than the 80% of the statewide MHI for these communities, ranging from a low of \$6,042 to \$37,500. To date, it has been a challenge for the UFR Region to engage directly with the DACs because the DACs often



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lack the resources to organize and participate in water management efforts such as the IRWM Program. Therefore, the DAC outreach is a high priority in this plan update process.

The outreach program includes a targeted effort using a consultant to reach out to DAC communities, from non-profit and community-based organizations, to individual self-supplied stakeholders, to small community public water agencies to identify and incorporate their water-related needs into the IRWM plan. As an example, the following water and wastewater agencies, representing DACs, are participating or have been invited to participate in the RWMG and represent future outreach targets:

- City of Loyalton (water and wastewater) **DAC**
- City of Portola (water and wastewater) **DAC**
- American Valley Community Services Authority (water and wastewater) **DAC**
- Chester Public Utility district (water and wastewater) **DAC**
- East Quincy Services District (water and wastewater) **DAC**
- Grizzly Lake Resort Improvement District (water and wastewater) **DAC**
- Indian Valley Community Services District (water and wastewater) **DAC**
- Quincy Community Services District (water and wastewater) **DAC**

The RWMG also recognizes that even within DAC communities, there may be populations that are more severely disadvantaged and may require additional support. For example, community members with language barriers may not readily participate in IRWM planning meetings. Identifying these “hidden”

disadvantaged communities will be part of the proposed DAC outreach effort.

This subtask will:

- a. Identify up to 3 potential DAC Outreach targets in addition to those identified above.
- b. Initiate telephone contact with up to 11 identified DAC Outreach targets. Each entity will be contacted up to three (3) times to gather information, especially with regard to DAC water needs. The information from the phone contact will be incorporated into the IRWM Plan as part of Task 4.
- c. Attend up to four (4) follow-up meetings with groups of DAC Outreach targets. Follow-up meetings will likely be necessary to obtain additional information from the DAC Outreach targets since it is unlikely that many will be able to attend the UFR Region’s monthly meetings. These DAC meetings will be used to discuss DACs issues and concerns, DAC water-related needs, and to identify opportunities to improve conditions in the DAC. The DAC meetings will also be used to assist DACs in developing projects for inclusion in the Plan.
- d. Assist DACs with completing Project Information Forms for consideration in the IRWM Project Review Process. Task 5 includes preparation of Call for Projects. Often, DAC and those who serve them lack technical resources to gather and prepare information to support project development. This item is intended to provide DACs with technical resources sufficient to develop up to eight (8) projects for inclusion in the IRWM Plan. It is expected that



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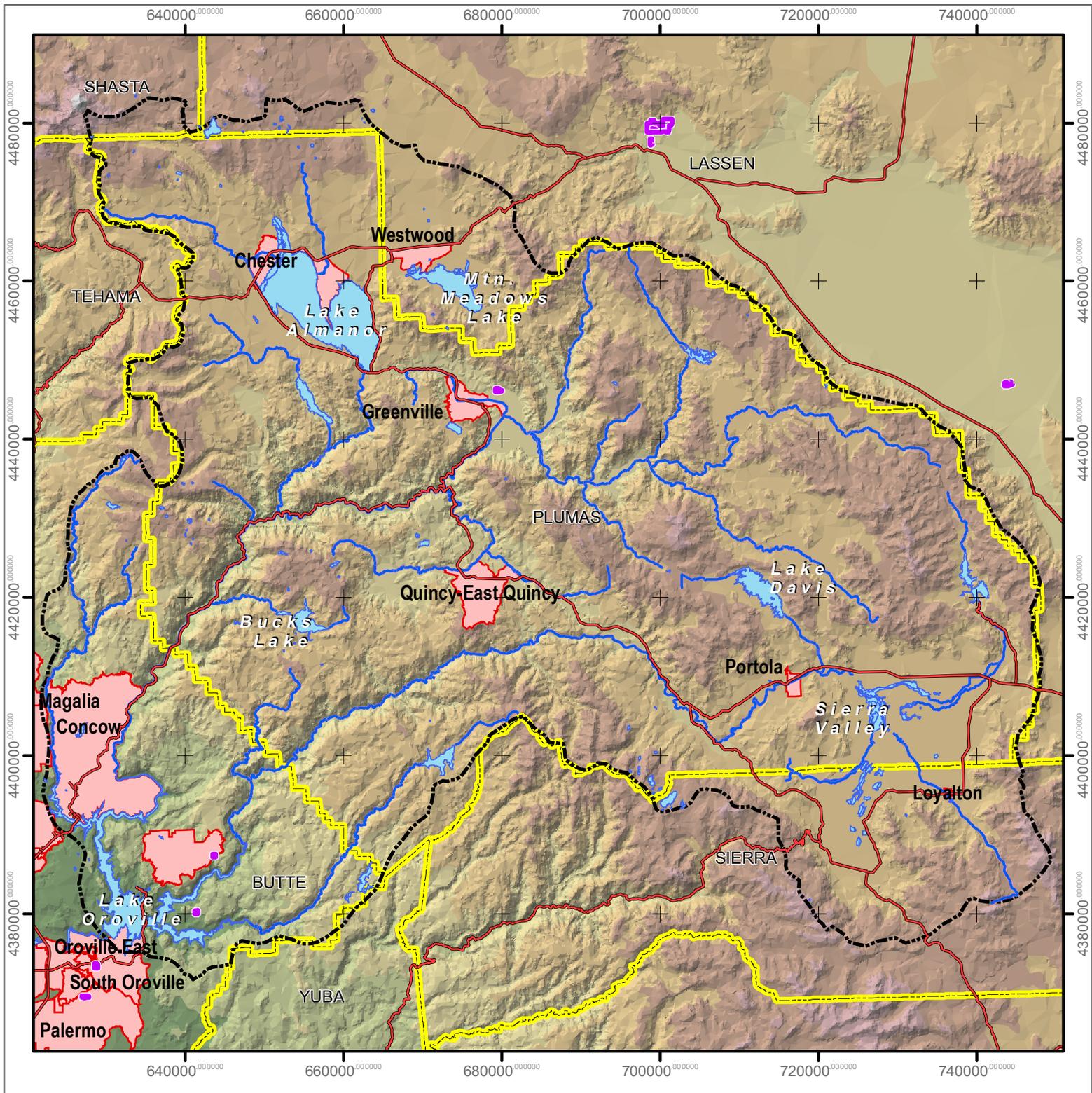
project development will include activities such as identifying action items to implement the proposed project, preparing an initial technical analysis, and preparation of budget estimates for project implementation.

Subtask 1.5: Tribal Outreach

Outreach to Native American tribes is also an essential component of the IRWM program. While there are some dedicated tribal lands (Rancherias and trust lands) within the region as shown in Figure 3-3, Tribal members for the most part still live within their ancestral homeland without dedicated access to their traditional cultural use areas and sacred sites. The RWMG has consulted with the California Native American Heritage Commission, has included Tribal representation in the RWMG membership and governance structure, and is committed to enhancing tribal representation in the IRWM Plan update and in the IRWM Project development and prioritization process.

The Maidu Indians live within the UFR Region. Three groups of closely related peoples are referred to as the Maidu: the Maidu of Plumas and Lassen counties, the Konkow of Butte and Yuba counties, and the Nisenan of Yuba, Nevada, Placer, Sacramento, and El Dorado counties. Approximately 1,500 Maidu people remain. A few families live on the Greenville Rancheria, but most are scattered around the traditional lands in the watershed, and around Oroville and Redding. Initial contact and participation has been made by the RWMG. This task will expand the outreach to the representatives of the Maidu Tribes and result in identification of water-related issues and concerns, as well as, identification of potential opportunities to address these water-related issues and concerns. Specifically, this task will:

- a. Develop a Tribal engagement plan to integrate Tribal concerns throughout the IRWM Plan update process. The engagement plan will include a set of interview questions that will be used to identify needs in order to increase Tribal participation.
- b. Contact tribal leadership of the Maidu and intertribal entities. Each of the four Maidu and intertribal groups will be contacted up to two (2) times to gather information, especially with regard to Tribal water concerns. The information from the phone contact will be incorporated into the IRWM Plan.
- c. Attend up to two (2) follow-up meetings with Maidu and intertribal leadership. Follow-up meetings will likely be necessary to obtain additional information from the tribal council leadership since it is unlikely that many will be able to attend the IRWM public meetings. These meetings will be used to discuss tribal issues and concerns, tribal water-related needs, and to identify opportunities to improve conditions for the tribe. The meetings will also be used to assist tribal council leadership in developing projects for inclusion in the plan as will occur in Subtask 2-3.c.



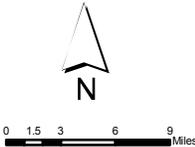
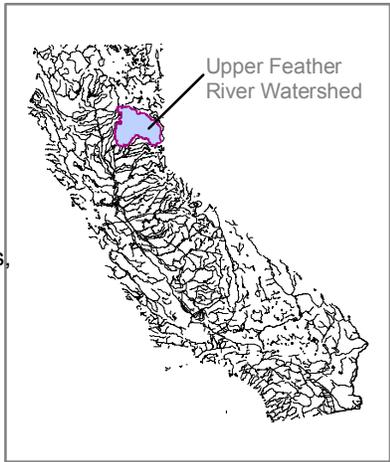
Legend

- Tribal Land
- Lakes and Reservoirs
- Rivers
- Watershed Boundary
- Highways
- Urban
- County Boundary

FIGURE 3-3
UPPER FEATHER RIVER WATERSHED
Native American Tribes

Watershed base map depicting tribal lands, cities, towns, political boundaries, major highways and elevations.

GIS Metadata Information
 Rivers, streams, lakes, counties and cities shapefiles:
 California Spatial Information Library CASIL
 US Census - Tribal Lands
 Feather River Watershed Elevation Grid:
 Ecosystem Sciences





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Assist tribal leadership with responding to the Call for Projects for inclusion in the IRWM Plan. Task 5 includes preparation of Call for Projects. This item is intended to provide tribal leadership with technical resources sufficient to develop up to three (3) projects for inclusion in the plan. It is expected that project development will include activities such as identifying action items to implement the proposed project, preparing an initial technical analysis, and preparing budget estimates for project implementation.

Subtask 1.6: Interregional Outreach

Interregional outreach will occur on a range of levels to a variety of organizations as a result of the relatively complex water relationships that the UFR Region has as described in Section I.b of the Background discussion. Interregional outreach will occur to the following types of organizations:

- Adjoining IRWM regions, shown in Figure 3-4 such as Cosumnes American Bear Yuba (CABY) to the south and Upper Pit River to the north,
- Overlapping IRWM regions such as Northern Sac Valley – Four County (Four County) to the west,
- IRWM Regions that have common water interests, but are not geographically connected, such as Sacramento funding region IRWMs involved in the mercury control program for the Bay-Delta Watershed,
- Emerging IRWM Regions that are not yet funded such as Tahoe-Sierra and Lahonton Basins to the east, and/or

- Entities with facilities within the IRWM Region such as PG&E, and the State Water Project Contractors.

The outreach will be tailored to the needs of the IRWM Region, the interregional organization, and the level of relationship that has already been established with the organization. The specific outreach that is planned to occur for each organization is described in greater detail as follows:

- a. Adjoining/Overlapping IRWM regions: Communication/coordination/consultation/cooperation with adjoining/overlapping IRWM Regions will include:
 - Review meeting agendas/minutes for past year of CABY, Upper Pit, Northern Sac Valley IRWM, and Tahoe-Sierra IRWM, and consult with IRWM RWMG members in Sierra County to identify items of mutual interest from meetings.
 - Build on the existing relationship between the Plumas County Planning Director with Butte County to update an existing informal agreement into an MOU that outlines coordination of projects within the overlapping area between the UFR Region and the North Sacramento Valley Region that addresses planning and management in the overlapping area, determines areas of responsibility, and provides for appropriate consultation on certain matters.
 - Coordinate with CABY, Upper Pit, and Tahoe-Sierra Regions and conduct up to two (2) follow-up telephone calls to get updates and discuss topics of mutual interest.

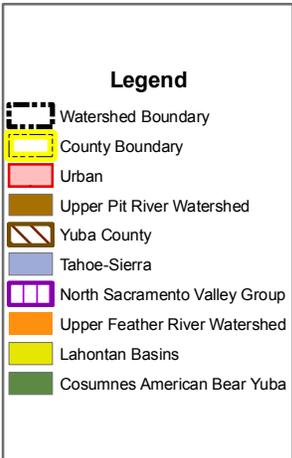
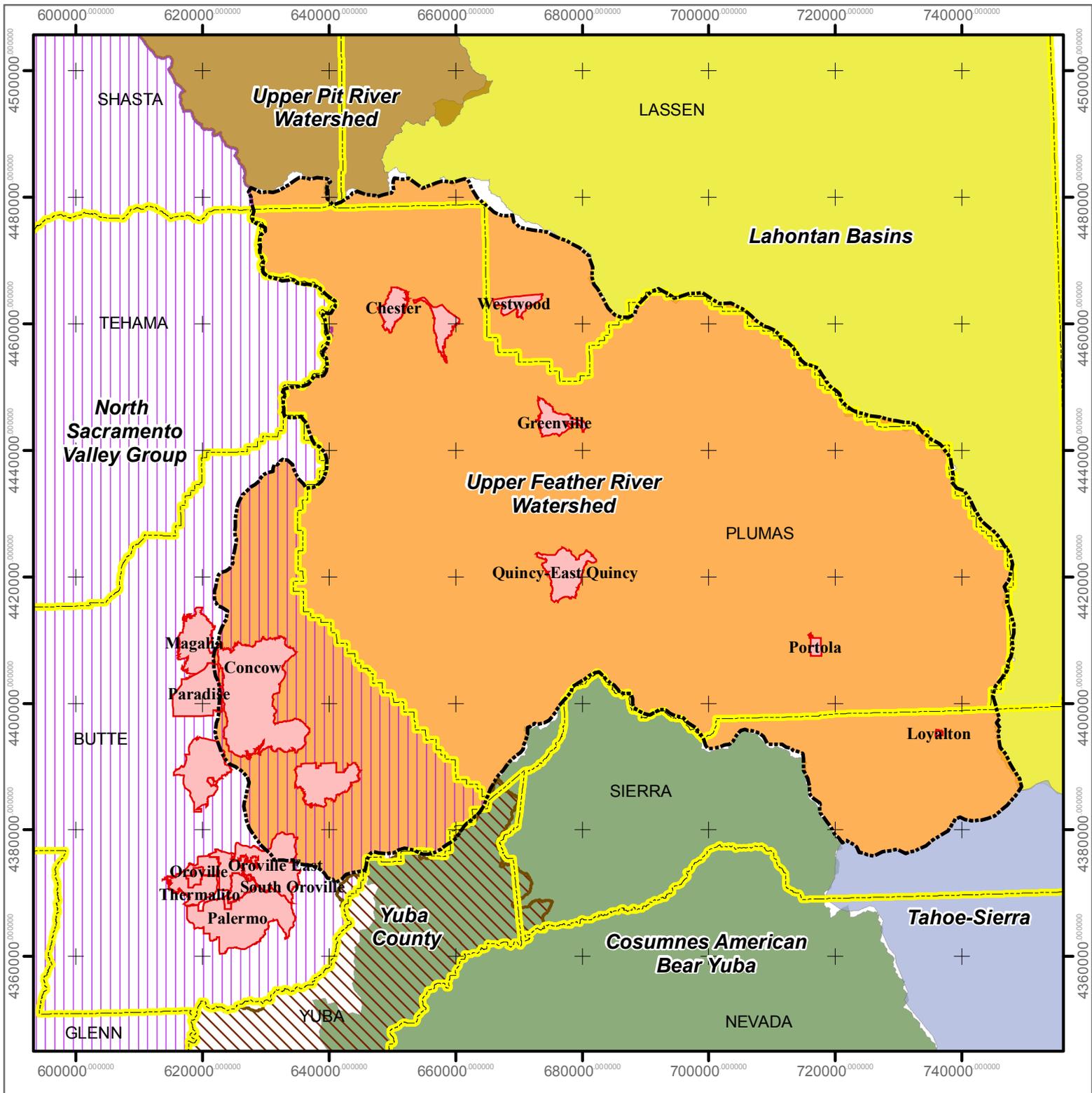
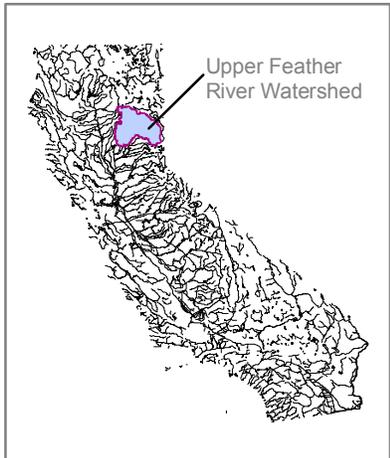
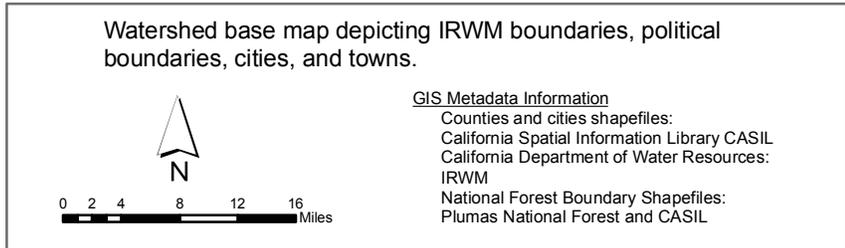


FIGURE 3-4
UPPER FEATHER RIVER WATERSHED
Neighboring IRWM Sub-Regions





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- Information developed through the MOU, reviews and phone calls/meetings will be incorporated into the ongoing monthly meetings, as well as, into the IRWM Plan in Task 6.
- b. Emerging IRWM Regions: There is one likely region that will have activity during the IRWM Plan preparation period which is the Lahonton Basins IRWM Region to the east of the UFR Region. For this emerging region, the following activities are planned for the UFR Region IRWM interregional coordinator:
- Review meeting agendas/minutes that may occur during the Fall 2012 through Winter 2014 time frame and identify items of mutual interest from meetings.
 - Conduct up to four (4) follow-up telephone calls and two (2) meetings to the emerging IRWM region to get updates and discuss topics of mutual interest.
 - Information developed through the review and phone calls/meetings will be incorporated into the ongoing monthly meetings, as well as, into IRWM Plan in Task 6.
- c. Entities with Interests and facilities within the UFR Region: As with the other interregional outreach activities, the outreach to these entities needs to be tailored to the mutual interests and is based on the level of interaction since 2009. It is expected that one of the key interests will be PG&E, which has hydroelectric power generation facilities in the Region. Information developed

through these phone calls/meetings will be incorporated into the ongoing monthly meetings, as well as, into IRWM Plan in Task 6.

Task 2: Baseline Technical Study - Existing and Future Conditions

It is essential that the IRWM Plan update is built upon a foundation of a well-established technical analysis. For this reason, a Baseline Technical Study effort at the beginning of the IRWM Plan update process will provide a vehicle for stakeholders and the RWMG to compile data that presents an accurate. This task consists of five (5) subtasks to create a baseline for existing conditions in the Region as well as future conditions.

Subtask 2.1 Collect and Evaluate Post-2005 Data

The current IRWM Plan will serve as the baseline for technical information within the Region; however, other watershed management documents and data will be compiled and reviewed as part of this subtask. This collection will focus on the documents needed to align the current Plan with the Proposition 84 standards, focusing on changes that have occurred over the past seven (7) years since plan adoption.

Many watershed activities over the past several years have generated additional water data that must be incorporated into the updated IRWM Plan. For example, the Lake Almanor Basin Watershed Management Plan and water quality monitoring provides essential information to understanding the current and desired conditions of this key surface water body. This recently completed work is further described in Section III – Additional IRWM Plan Work. The ongoing Federal Energy Regulatory Commission (FERC) relicensing efforts of PG&E which serve as two of the seven “mandatory” IRWM documents have generated



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extensive new data, which will be reviewed to include relevant information for the UFR IRWM Plan update.

Additionally, many RWMG members have developed new information and materials as a result of project implementation activities or technical evaluations in support of other programmatic priorities. Finally, state and federal agencies have also developed data since 2005 that is relevant to a discussion of the UFR region and will help augment and focus the issue identification and project development efforts.

As an initial component of this task, each of the RWMG members and key non-signatory stakeholders, as well as adjacent IRWM regions will be contacted to identify new reports, studies, data sets, evaluations, and/or technical memoranda relevant to water management issues within the region. Previous experience has shown that a simple request for data via email does not result in identifying the full range of available materials. Therefore, individual phone calls and face-to-face meetings will be used to gather data and ensure that the collection efforts also fully support Task 4 Data Management Strategy, System Development, and Implementation.

A primary screening criterion for collected data will be its relevance to water-related issues, locations, or resources within the UFR region. The identified data will be collected electronically (and in hard copy, as necessary) and evaluated by the Science and Monitoring Workshop, the consultant team, and RWMG members to determine the relevance of the data to the region description and other data-dependent IRWM components. The data and document obtained from this task will be disseminated to RWMG members and interested stakeholders using the Data Management System described in Task 4.

Subtask 2.2 Update IRWM Assumptions and Technical Analyses

This task will include review of the existing IRWM Plan assumptions and technical analyses. The existing data will be reviewed to determine whether the information is up to date or whether more recent data is available for incorporation into the plan. Additional needed data, collected under Subtask 2.1, will be compiled and incorporated into the technical analysis when updating the Current and Future Conditions of the region as part of this Subtask.

The information compiled will be used to update the data in the current Plan to reflect current conditions of the region. Estimated population, water demands and supply availability, groundwater and surface water quality are examples of data that will require update. Data not included in the previous Plan, but necessary under the Proposition 84 Guidelines will be added to reflect current conditions.

This subtask will include projections of future conditions within the area to reflect the IRWM Planning Horizon. The current Planning Horizon goes to the year 2035. Local planning documents such as General Plans will be reviewed to determine future urban and industrial growth throughout the Region. Additionally local agencies will be contacted for other pertinent sources that can be used for projecting future conditions within the Region as they relate to water management.

Subtask 2.3 DAC Groundwater Vulnerability Needs Assessment

The RWMG will work with Plumas County Environmental Health Department to reach out to DAC's throughout the region to complete a groundwater supply vulnerability needs assessment. The RWMG will assist small



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community water systems and domestic well owners, and to provide them with information and possible solutions to domestic well and wastewater water needs. This task includes developing a written vulnerability assessment report that will be incorporated into the IRWM Plan. The purpose of this study is in recognition that a high proportion of residents in the UFR Region (which is a DAC Region) use individual household water and wastewater system to meet their water and wastewater needs and have historically been left out of the IRWM process. Conduct a basin-by-basin analysis identifying residential densities dependent on Owner Wastewater Treatment Systems (OWTS or “septic systems”) (\$2,000 for consultation, data collection, GIS map preparation, etc)

- Assess local conditions including seasonal high groundwater tables and the location, age, and construction of individual water supply wells in each of these regions and identify those conditions or factors that may provide an increased vulnerability for groundwater contamination such as conduit for vertical contaminant migration
- Identify and prepare GIS mapping for existing public or community wells and data currently collected that may be useful to assess regional groundwater conditions
- Identify gaps where no data is collected or where the data is not representative of groundwater basin conditions.
- Prepare recommendations for ways to fill the gaps using existing infrastructure such as through increases data collection of public/community systems (frequency or constituents), monitoring of private wells, or other means.

- Develop two IRWM Project proposals to address vulnerability assessment needs identified in report infrastructure needs such as installation of dedicated monitoring wells to provide known and representative sampling locations for ongoing regional water quality assessment.
- Develop IRWM Project proposal to provide funding for DAC households the ability to replace poorly located or poorly constructed individual wells that adversely impact drinking water supplies.

Subtask 2. Prepare Baseline Technical Study

This task includes synthesizing the information from Subtasks 2.1 through 2.3 into a baseline technical study to document the foundational assumptions, methods, and results of the current and future conditions for the UFR Region. The Baseline Technical Study will be included as an appendix in the Updated IRWM plan. This subtask includes development of a Draft Technical Study submitted to the Steering Committee and Science and Monitoring Workgroup that will be revised based on their comments. The Final Draft will be used as the basis for updating the Region Description and identifying major water-related issues and conflicts. The development and findings of the baseline technical study will be reviewed with the steering committee at Meetings #2 and #3, and at RWMG Meeting #2.

Task 3: Data Management Strategy, System Development and Implementation

As described in the Existing IRWM Plan, there is an extensive body of work that encompasses many areas of water quantity, water supply, water quality and environmental data. It is the intent of this task to not only update the existing



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data in the IRWM Plan, but to identify additional relevant data and to define a data management strategy and implement a Phase 1 data management system that will allow for an updated baseline data analysis to occur during the UFR Region's IRWM Plan Update.

In summary, the third task of the IRWM Plan Update effort will be to:

Subtask 3.1: Develop a Phase 1 Data Management Strategy which includes:

- Defining a data management vision and objectives
- Obtaining data from previous plan
- Identifying additional available spatial data
- Defining how data updates will be incorporated and analyzed so that “course corrections” to the IRWM Plan Update will be incorporated

Subtask 3.2: Implement a Phase 1 Data Management System which includes:

- Customizing existing Geographic Information System (GIS) GeoDatabase web-viewer to the identified IRWM data needs
- Uploading and linking documents and GIS data into the system

Subtask 3.3: Data Management System Maintenance by Consultant

- 100 hours of budget for the Consultant to update the DMS as needed over a 3-year period
- Steering Committee to determine whether the Consultant will upkeep the DMS after 3-years or if it will be transferred to an RWMG member with training

Each of these subtasks is detailed as follows.

Subtask 3.1: Develop Phase 1 Data Management Strategy

Given the large volume of existing information that is available to support this IRWM effort, such as the data available in the previous IRWM Plan, it is expected that Data Management will have to be approached in phases. Phasing also allows for adaptive management strategies to be implemented for Data Management. This Phase 1 Data Management Strategy is intended to provide some preliminary insights on future data management needs for subsequent IRWM Plan updates and project implementation review. This task includes several steps that will occur in parallel and can be summarized as follows:

- a. Formation of Science and Monitoring Workgroup (SMW) of the RWMG that will be charged with defining a data management vision, objectives, and first phase data management strategy, selecting data to be managed in the first phase, identifying data update and analysis/reporting strategies, and identifying both current and future data that may need to be managed. The SMW will likely have up to three (3) data management-focused meetings outside of the scheduled Science and Monitoring workgroup sessions. It is anticipated that the SMW, working with the IRWM Plan facilitator and consultant will:
 - i. Define an overall vision for data management for the IRWM. At a minimum, based on discussion with the RWMG, the existing data needs to be consolidated and easily accessible and available to be used as a decision-making tool for the RWMG agencies.



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- ii. Present the data vision and data management objectives to the Steering Committee (SC) for discussion and consensus in Meetings # 4 and/or #5 as part of the program objectives discussion.
 - iii. Review available data from subtask 4-1.b. below and select data to be managed within the first phase of the data management system.
 - iv. Define a first phase of data management strategy that meets data management objectives including:
 - Identification of data update mechanisms;
 - Development of data analysis/reporting strategies including data quality evaluation, how data will be analyzed and reported to document results of implementation of IRWM projects, benefits, lessons learned, adaptive management strategies that will be implemented, frequency of reporting, and how to incorporate data management results into future IRWM Plan updates;
 - Determination of how data will be incorporated into ongoing State data management programs (e.g., GAMA, SWAMP, IWRIS, SBX7 6 CASGEM, etc.); and
 - Development of an outline for future data management needs and phases.
 - v. Present Phase 1 Data Management Strategy to RWMG for discussion and consensus in Meeting #3 as described in Task 3.
 - b. Preparation of a data request and data inventory, as well as, identification of the GIS and Information Technology (IT) capabilities of the various RWMG participants in order to identify where the T-S Region's future data management systems will reside.

Concurrent with the activities of the SMW, the IRWM Plan consultant will prepare a data request that will be completed by the RWMG and other stakeholders. The data request is expected to identify existing data structures and data availability within stakeholders including the following:

 - GIS Data available from previous IRWM;
 - Water quality data (spreadsheet, database, and Supervisory Control and Data Acquisition [SCADA] outputs);
 - Water quantity data (gaging station data, meter data, diversion data, etc.);
 - Water levels for California Statewide Groundwater Elevation Monitoring (SBX7 6 CASGEM), if any,;
 - Water rights data;
 - GIS coverages and attribute data;
 - Hydrologic, operations and other models as relevant, etc.);
 - Identified local flood hazard areas.
- The responses to the data request will be tabulated into a summary spreadsheet for consideration in the Data Management Strategy to be developed by the SMW and used in development of the Baseline Technical Study described in Task 2.



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Subtask 3.2: Implement Phase 1 Data Management Strategy

A GIS Web Viewer Data Management System that allows access to maps, attribute data such as water levels, water quality and stream gage data, as well as, a document library is planned for a Phase 1 Data Management System (Phase 1 System) implementation. Initially, this Phase 1 System and the data will be developed and hosted by an IRWM Plan consultant.

This task includes several steps that involve the GeoDatabase, a GIS Web Viewer, and linked documents and supporting data to meet the needs and objectives of the IRWM Program. This subtask includes the following:

- a. Uploading and linking available GIS spatial and attribute data, documents, etc. to create a UFR Region GeoDatabase, which is the common data storage and management framework for ArcGIS™. The GeoDatabase will combine geographic data (spatial) with descriptive data (attributes) to create a central data repository for management and technical decision support.

Data stored in the GeoDatabase and visible through GIS Web Viewer will include, but are not limited to the following:

- Base map layers will have county and city boundaries, water district boundaries, major roads, water supply or conveyance facilities, land use, IRWM planning boundaries, etc; Map layers will be in California State Plane Coordinate System (feet) using the North American Datum of 1983 (NAD 83) for horizontal data and the North American Vertical Datum of 1988 (NAVD 88) for

vertical data. Metadata will be compliant with Federal Geographic Data Committee (FGDC) requirements;

- USGS surface water watershed boundary layers;
 - Water quality sampling locations (e.g., from agencies and Stream Team);
 - Stream gage locations;
 - Local flood hazard areas;
 - DAC data based on Census Tract/Block Maps and Median Household Income attribute data;
 - Document library listing reports/documents; and
 - Other data identified during Subtask 4-1.b. and deemed relevant for the purposes of the IRWM Plan preparation in Subtask 4-1.a. Up to 100 reports will be uploaded initially. Up to 100 hours for 20 layers of GIS data are assumed to be sufficient for uploading this Phase 1 data collection effort.
- b. Standardizing GeoDatabase design and configuring it to be as secure as the organization needs it to be is a vital step in developing a Data Management System. It will be fully secured within the local network, and partially accessible to the public for outreach purposes. The GeoDatabase will also have secured access with user names and passwords assigned to levels of authorized access for RWMG members.
 - c. Customizing a template for the GIS Web Viewer based on GIS coverage and data



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identified in Subtask 4-1. The standardized GeoDatabase design as described above will be utilized to facilitate deploying GIS information to the Web. The Web Viewer will be compatible to ESRI, Google, or Bing mapping formats while the Microsoft Access database software will be used to manage water quality, water quantity, and other text or numerical data. In addition, links to Adobe Acrobat PDF reports will also be provided. The standardized Web Viewer design includes basic map navigation and content identification functions.

- d. Uploading and linking implementation project information to the GIS Web Viewer to allow RWMG members to view project location, status, and other detailed information and location specific to each proposed and implemented project. The project information module will also provide a means for the RWMG to monitor progress towards meeting the IRWM Plan objectives.

Subtask 3.3: As-Needed Support

Besides the initial data loading effort, reserves an as-needed budget for future loading of data as new needs come up over the next three years will be reserved for the Consultant. The budget contains 100 hours and will be used as new data comes in on a time and materials basis. Once exhausted, this budget may need to be replenished if additional needs arise.

The DMS will be hosted by the Consultant who will provide all hardware and software required for hosting the DMS. For the first three years, the Consultant will charge a hosting fee of \$200 per month which will include hardware and operating system maintenance, file storage

space, backups and general IT infrastructure requirements. The hosting fee does not cover edits, maintenance or upgrades of the DMS. The hosting agreement will be revisited at the end of the first three years at which time the Steering Committee may decide to either take over hosting internally, or have the Consultant continue the hosting at the applicable hosting rates at that time.

The DMS will be accessible through Internet Explorer v7 or higher. No other web browsers are supported at this time.

It is recommended that additional budget be reserved for as-needed maintenance and support of the DMS to address modifications and/or upgrades to the DMS functionality and contents (e.g. modifications of database query screens, map buttons, output formats etc.). This budget would be used on an as-needed time and materials basis.

Task 4: Climate Change Technical Study

Subtask 4.1: Describe Legislative and Policy Context

This task will identify the main pieces of policy and legislation of importance regarding the State's response to climate change, management of water resources, and include a description of how IRWM planning efforts will eventually analyze climate change at a project level. Included in the discussion will be: Executive Order (EO) S-3-05 and the California Global Warming Solutions Act of 2006 (AB 32; amending California Health and Safety Code Division 25.5, §38500, et seq.); Senate Bill 97; and EO S-13-08.



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Subtask 4.2: Identify Vulnerability to Climate Change

- **Identify the UFR IRWM Plan Region's Vulnerability to Climate Change:** This work will identify the potential vulnerabilities to water resources in the Upper Feather River Region to projected climate change in accordance with the qualitative checklist found in the Climate Change Handbook for Regional Water Planning published by DWR in 2011. Review of Climate Change Documents, including a recently completed quantitative climate change assessment developed specifically for Upper Feather River Region and for similar Sierra Nevada mountain range areas will be conducted as a baseline analysis.
- **Develop Climate Change Scenarios:** This work will collect available data using the California climate change portal, <http://cal-adapt.org/> to obtain projected changes in average air temperatures and precipitation ratios downscaled to the region level for a variety of global climate models and global greenhouse gas emission scenarios. These data will be used to develop an array of climate change scenarios for the region (e.g., a warmer, drier future condition) for regional water resources. These scenarios will be consistent with the most recent scenarios used by the Department of Water Resources (DWR) for projecting climate change for the State Water Project.
- **Define Vulnerable Watershed Characteristics:** This work will define the watershed characteristics that may be vulnerable to the climate change scenarios developed for the region. These characteristics include hydrology, watershed landscape, water supply and demand,

groundwater recharge, habitat, and other characteristics such as weather (air characteristics, precipitation patterns, and evaporation), vulnerabilities include potential changes in the amount, intensity, timing, quality, and variability of runoff and recharge, and increased air temperature effects on water quality and ecosystem health.

- **Assess vulnerability sectors/variables:** This work will provide a qualitative vulnerability assessment that includes (as appropriate) a hydraulic analysis, a demand analysis, a reservoir analysis, an ecological analysis, a groundwater recharge analysis, and other analyses that address water quality changes and potential impacts of extreme events including extended droughts, high precipitation events, flooding, and wildfires.
- **Rank Vulnerabilities:** This work will use the results of the vulnerability analyses to identify the most critical water resources vulnerabilities and rank them by importance for various climate change scenarios considered. The results of this task will be used to develop adaptive strategies to respond to potential climate change impacts. A discussion of the highest ranked vulnerabilities will be provided in the objectives section of the IRWM Plan.

Subtask 4.3: Discuss Adaptation to Climate Change

- **Discuss Impacts from Climate Change Scenarios:** This work will discuss the potential impacts of the various climate change scenarios considered on stream flows, reservoir levels, flood plain and groundwater recharge, and watershed landscape, and their relationship to water



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supply reliability, water quality, and ecosystem health.

- **Develop Adaptive Strategies:** This task will develop adaptive water management strategies to address the potential impacts of climate change. Initially, these will be “no regrets” strategies (e.g., water conservation and efficiency programs, flood plain protection, water recycling projects) that would be done. As vulnerability assessments and tools become more refined, additional adaptation strategies that are appropriate will be considered. These “no regrets” strategies will be incorporated into the IRWM Plan as appropriate.
- **Evaluate Adaptive Strategies:** This task will “generally” evaluate the adaptive strategies developed for the region. Eventually the goal of the climate change evaluation is to be able to evaluate projects at an individual level, whereby projects included in the IRWM Plan, and additional projects deemed necessary, will be assessed for their ability to adapt to potential climate change impacts and for the benefits the projects will provide. However, analysis on a project-by-project level is beyond the scope of this evaluation, but will be required in the near future. Therefore, discussions of how groupings of adaptation projects can potentially contribute to the benefits of watershed resources will be provided. For example, flood management projects and/or water supply projects may maintain and enhance ecosystem processes. The results of this evaluation will be used to identify both short term “no regrets” projects and long term projects that may depend on future assessments of climate change impacts. The adaptation strategies will be ranked in order of importance for implementing the adaptive management strategy.

Subtask 4.4: Recommend Data Collection Improvements and GHG Calculation Tools for Future IRWM Plan Updates

This section will review the data collection process and recommend ways for the RWMG to collect the necessary data for the next update. As models and climate scenarios and GHG estimation tools are developed, DWR expects those tools to be incorporated into this region’s IRWM Plan in future updates and into the implementation projects. This task will also discuss the type of tools that should be created to better calculate the GHG emission impacts of various projects.

Subtask 4.5: Identification of Next Steps for Future IRWM Plan Updates

As previewed in the “Incorporating Climate Change into Integrated Regional Water Management Plans” presentation by the EPA/DWR, IRWM plans will still require significant updating to incorporate appropriate climate change analyses. This task will describe what should be included in future updates:

- Evaluate adaptive strategies on a project level
- Establish GHG intensity factors
- Establish/calculate GHG emissions for each project
- Identify project components that may support carbon sequestration
- Identify best management practices and GHG mitigation measures for each project
- Discuss project contributions to adaptation strategies
- Establish CEQA Threshold of Significance



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- Develop Climate Change Implementation Plan and methodology for implementation under uncertainty

Subtask 4.6: Prepare Technical Study

This task involves the consultant team preparing a draft technical study that summarizes the results of Subtasks 4.1-4.5 and providing recommendations for incorporating climate change analyses into the IRWM Plan. The study will be submitted to the RWMG for review and comment. The draft Study will be revised with comments received and one (1) final Study will be submitted to the RWMG as a PDF on CD.

Task 5: Project Development Process

Subtask 5.1: Develop Project Selection Criteria

The updating of the 2005 Plan to the new IRWM standards and the incorporation of the Climate Change Technical Study may result in changes to the IRWM Plan objectives, updating of regional priorities, and updated water management strategies. The uncompleted Candidate Projects within the IRWM Plan, as well as new projects submitted for evaluation will need to reflect and integrate this new information.

The 2005 Plan had a successful framework to ensure collaboration between entities and integration of projects so as to achieve multiple benefits, but did not establish a defined project review process or put in place procedures for considering future projects. For this reason, Project Selection Criteria will be developed based upon the needs and priorities of the RWMG as part of the IRWM Plan Update to include consideration of the following factors: .

- How the project contributes to the IRWM Plan objectives

- How the project is related to the resource management strategies
- Technical feasibility of the project
- Specific benefits to critical DAC water issues
- Specific benefits to critical water issues for Native American tribal communities
- Environmental Justice considerations

Subtask 5.2: Evaluate Status of Projects from Existing IRWM Plan

Projects described in the existing IRWM Plan will be reviewed to determine the status. Projects will be identified as having been completed, not completed and still consistent with the update IRWM Plan, or no longer consistent with the IRWM Plan. Projects that are not completed and remain consistent with the IRWM Plan will be incorporated into the project evaluation and Technical Analysis process in Subtask 5.4. This approach will ensure that the efforts and ideas that went in to developing the 2005 IRWM Plan will be brought forward with this plan update.

Subtask 5.3: Call for New Projects, Project Integration, and Project Presentations

Once projects from the previous plan have been evaluated and the project selection criteria are confirmed, a specific Call for New Projects will occur. This will include preparation and issuance of a Project Information Sheet that will be completed by project sponsors to describe their project ideas and concepts. Projects from the existing plans may also require issuance of a Project Information Sheet to provide for equivalent and/or updated data information for prioritization purposes. The Call for Projects will be followed by a structured Project



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Presentation to the RWMG to allow all participants to ask questions and assist in project refinement. The projects will then be evaluated in Subtask 5.4 that follows. The specific Call for Project and Project presentation process is described more fully as follows:

- a. Prepare Call for Projects information sheet for completion by project sponsors – The information will include relevant information regarding the proposed project. It will include a written project description, maps/graphics, a description of cooperating entities, a description of how the project integrates with other projects within the UFR Region and interregional opportunities (if applicable), a summary of work completed to date, project implementation budgets and schedules, a summary of project benefits and issues (especially quantifiable benefits), and a matrix for project selection criteria, Program Preferences, Statewide Priorities, integration, etc. The information sheet will be presented to and reviewed by the RWMG.
- b. Once the Call for Projects is issued, project sponsors will likely have four to six (4-6) weeks to complete and submit project information sheets. Questions related to the data to include in the Call for Projects information sheet will be answered during this time period. This is the time period during which assistance will be provided to the DAC and Tribal communities to prepare project information sheets for their projects as described in Task 1 above.
- c. Following submittal of the project information sheets by the project sponsors, the information will be compiled and summarized in a matrix

for evaluation in Subtask 5-4. The project information sheets will be provided in an Appendix of the UFR Region's IRWM Plan.

- d. Project sponsors will then have an opportunity to describe and present their projects in a structured Project Presentation during Meeting #5. If necessary, this meeting may be extended to two consecutive days (or within a single week) so as to provide ample time for the presentations and not lose continuity in the process. A presentation template will be prepared and provided to project sponsors so that similar information is provided for consideration by the RWMG. During the project presentation, meeting participants can ask questions of the project sponsor so that the most complete picture of the proposed project will be provided.

Subtask 5.4: Project Evaluation and Technical Analysis

Once projects to be considered for inclusion in the UFR Region's IRWM Plan are identified in Subtask 5.3, the project evaluation and technical analysis phase will begin. It is proposed that a separate Project Prioritization Workgroup (PPW) be identified to provide a more in-depth review and evaluation than could be provided by all of the RWMG members. Ideally, the PPW will be identified prior to Meetings #5 so that the PPW will be present for all of the project presentations. The PPW will apply the Project Selection Criteria and develop a preliminary project ranking for consideration by the RWMG. The individual steps are outlined in greater detail as follows:

- a. Identify Project Prioritization Workgroup of up to four (4) members of



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the RWMG. The individuals will be committed to attending all of the meetings including project presentations, project evaluation, as well as project ranking.

- b. With the assistance of the facilitator and the IRWM Plan consultants, the PPW will conduct an evaluation of the projects submitted using the Project Selection Criteria, the Call for Projects information sheet, and information presented in the Project Presentations. The evaluation will occur during RWMG Meeting #6 and will be open to any member of the public.
- c. The PPW will arrive at preliminary project rankings by the end of RWMG Meeting #5 or, if for some reason it cannot arrive at a project ranking, the PPW will return to the RWMG for additional direction and guidance. It is expected that the PPW will not only arrive at preliminary project rankings, but will also make recommendations for consolidation of projects and make suggestions to improve projects. These recommendations and suggestions will be made during SC Meeting #9.
- d. It is anticipated that preliminary project rankings will be appealed to the RWMG membership and consensus around revised preliminary rankings will be obtained.
- e. A final ranking of projects will be presented to the RMWG in Meeting #6 and RWMG consensus for project ranking will be gained during this same meeting.

The many activities of this task will be documented in the IRWM Plan in Task 6.

Task 6: IRWM Plan Update

Subtask 6.1: Address New Plan Standards and Update Existing Plan

Sections I.B.1 through I.B.16 detail the updates that are needed within the 2005 Plan in order to be compliant with the new Proposition 84 IRWM Plan Standards. The updates are also summarized in Table 3-1.

Subtask 6.2: Integrate Technical Studies into Plan

The IRWM Plan Update will incorporate the technical information from the Climate Change Technical Study (Task 3) as a section within the Region Description of the IRWM Plan, with the technical study attached within an Appendix.

Subtask 6.3: Prepare Draft and Final Plan

A Public Review Draft IRWM Plan Update will be prepared and submitted to the RWMG, posted to the IRWM Plan website and made available to participating entities for review and comment. After incorporating RWMG and participating Stakeholder comments, the Final IRWM Plan will be prepared and submitted to the RWMG and posted to the IRWM Plan website. After submittal of the Final IRWM Plan to the RWMG and participating Stakeholders, the IRWM Plan shall be adopted by the necessary public agency entities in a timely manner to support identified funding opportunities.

Task 7: Grant Administration

This grant administration tasks will include invoicing, cost and match allocation, and preparation and submittal of quarterly reports/invoices, final report, and other written documents. These tasks are detailed as follows



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Subtask 7.1: Manage Grant Administration

This subtask includes preparing and gathering information for grant administration including tracking when grant deliverables are due (e.g., invoices, progress reports, draft and final IRWM Plan); maintaining electronic files of the deliverables, maintaining and updating the overall project schedule, etc.

Project administrative and management tasks will include: managing staff; coordinating with the RWMG; monitoring the scope, schedule, and budget; planning and monitoring project activities; and preparing the Draft and Final Reports. Monthly email status reports will be provided in a format specified by the RWMG.

Subtask 7.2: Track In-kind Contributions

This subtask includes tracking of matching costs including in-kind services and supporting documentation for invoice preparation.

Subtask 7.3: Prepare DWR Invoices

This subtask includes preparing invoice spreadsheet provided by DWR with costs for the specific time period for the invoice. Invoices will include tracking by task/sub-task for consultants and facilitator efforts as well as in-kind services provided by the RWMG and stakeholders. Back-up documentation (e.g., pay stubs to document labor/overhead rates, etc.) to support the invoice will be provided by each RWMG member/Stakeholder. This will also include review of back-up documentation for consistency with the time period, as well as, completeness for submittal to DWR to document in-kind services. It is expected that the invoicing will occur quarterly and that up to eight (8) invoices will be prepared during the duration of the IRWM Plan preparation.

Subtask 7.4: Prepare Quarterly Progress Reports

Quarterly Progress Reports will include preparation narrative to document progress made in the reporting period and consistency with invoice request, anticipated progress in future, if necessary changes to schedule including impact to the overall schedule, and other information requested by DWR.

Subtask 7.5: Prepare Final DWR Report

The Final DWR Report will include discussion of overall project preparation schedule, deviations from original schedule, transmittal of final work products, and other information requested by DWR.

III. Additional IRWM Plan Work

The IRWM update process will identify opportunities for coordination and consultation for consistency with the IRWM Plan and the core documents as the required planning, data, and implementation updates and revisions are undertaken by planning agencies under their statutory authorities. The following work is ongoing by members of the RWMG and provides fundamental data, development of planning objectives, and identification of water management initiatives that will be incorporated to the update of the IRWM Plan.

Plumas County General Plan Update –

Summary: The Plumas County General Plan Update incorporates recommendations to more closely align land use planning with watershed management in the County that were provided in the 2005 IRWM Plan. As a result, Plumas County electively decided to prepare the discretionary Water, and Agricultural and Forestry Elements of the General Plan. These



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two elements align with the Conservation Element and integrated Climate Action Plan in providing direction for the County for making informed water management decisions going forward. The IRWM Plan Update will incorporate the guidance provided in the General Plan.

Estimated Completion Date: June 2012

Funding Sources: Plumas County

Lake Almanor Watershed Management Plan –

Summary: The Lake Almanor Basin is located at the intersection of the Sierra Nevada and Cascade mountain ranges in northeastern California. The basin forms the headwaters of the North Fork of the Feather River and is a key component of the State Water Project and hydropower production for Northern California. This management plan was developed to help protect water quality, critical habitat, and quality of life in the Almanor Basin in light of the multitude of threats outlined in a watershed assessment. The objectives and issues identified in this plan will be incorporated into the Upper Feather River IRWM Plan update.

Estimated Completion Date: Completed 2009

Funding Sources: Plumas County and Federal Title III Grant

Lake Almanor Water Quality Monitoring Program –

Summary: The Lake Almanor Water Quality Monitoring Program provides essential surface water data that will be incorporated into the technical baseline conditions study as described in Section II, Task 2 of the Work Plan. The water quality monitoring is completed on an annual basis under the oversight of the Almanor Basin Watershed Advisory Committee and includes measurement of parameters such as temperature, dissolved oxygen, turbidity, zooplankton and phytoplankton to ensure that a healthy ecosystem is being maintained at the lake and North Fork of the Feather River.

Estimated Completion Date: Ongoing - annual monitoring.

Funding Sources: Set and funded on an annual basis by the Almanor Basin Advisory Committee from private landowner contributions