



Tuolumne-Stanislaus Integrated Regional Water Management Plan

MEETING LOGISTICS: Wednesday, January 18, 2012
9:00 a.m. – 12:00 p.m.

LOCATION: Tuolumne Utilities District Office
18885 Nugget Blvd., Sonora

MEETING PURPOSE:

To develop a Prop 84 compliant Integrated Regional Water Management Plan for the Upper Tuolumne, Upper Stanislaus, and Little John Creek Watersheds.

MEETING GOALS:

- Introduce and Discuss IRWM Plan Objectives
- Review Region Description Outline
- Data Management System Demonstration
- Update Schedule
- Discuss IRWM Round 2 IRWM Planning Grant

TIME	AGENDA ITEM	PRESENTER(S)
15	I. Meeting Opening <ul style="list-style-type: none"> • Introductions • Agenda Review • Member Identification Form • Homework/Binder Reminder 	Carolyn Lott
5	II. Welcome MOU and Payment Update Collect In-Kind Tracking Sheets	Tom Scesa
5	III. Approval of November Meeting Summary	Carolyn Lott
75	IV. Regional Description Discussion <ul style="list-style-type: none"> • Draft IRWM Plan Objectives (Handout #1) • Review Updated Draft Regional Description Outline (Handout #2) 	Sachi /Sean
15	V. Data Management System Demonstration	Sachi/Sean
10	VI. IRWM Plan Preparation Schedule Review (Handout #3)	Sachi/Sean
5	VII. Funding Leveraging Opportunities Overview <ul style="list-style-type: none"> • Tuolumne River Trust 	Patrick Koepele
5	VIII. Interregional Coordination	John Mills

10	IX. Committee Reports <ul style="list-style-type: none"> • DAC Outreach • Tribal Outreach • Data Management (Previously covered under Item V) 	Sachi
20	X. Round 2 IRWM Planning Grant Application	Sachi/John
5	XI. Public Comment	Carolyn
5	XII. Meeting Recap Action Items February Meeting Agenda Topics	Carolyn Sean Sachi

MEETING HANDOUTS:

- Agenda
- Meeting Summary
- Handout #1: Draft IRWM Plan Objectives*
- Handout #2: Draft Updated Region Description Outline*
- Handout #3: IRWM Plan Preparation Schedule*

* To be distributed at meeting and posted to web site following meeting.

Meeting Videos, Agendas, Summaries, Documents, and Approved Draft Plan Sections Available Online at:

http://www.tudwater.com/project_development/integrated-regional-water-management-plan.htm

**Tuolumne-Stanislaus IRWM Plan
Handout 1: Draft IRWM Plan Objectives
18 January 2012**

The IRWM Proposition 84 Guidelines leave it to the discretion of the RWMG to develop Objectives that are appropriate to the Region. That said, there are requirements for the breadth of content that all IRWM plans must cover including:

- Basin Plan Objectives
- 20x2020 water use efficiency goals
- Requirements of California Water Code 10540(c):
 - Protection and improvement of water supply reliability, including identification of feasible agricultural and urban water use efficiency strategies.
 - Identification and consideration of the drinking water quality of communities within the Plan.
 - Protection and improvement of water quality within the area of the plan consistent with relevant basin plan.
 - Identification of any significant threats to groundwater resources from overdrafting.
 - Protection of groundwater resources from contamination.
 - Identification and consideration of water-related needs of disadvantaged communities in the area within the boundaries of the Plan.
 - Protection, restoration, and improvement of stewardship of aquatic, riparian, and watershed resources within the region.

The guidelines further clarify that the above list is not required to be included in the objectives, but the points should be considered. The objectives will be used to refine the list of applicable Resource Management Strategies to the Region, and ultimately to identify projects.

The following table presents draft objectives that have been derived from the Major Regional Water-Related Needs and Conflicts identified by the PGC and stakeholders. Additional objectives are encouraged to the extent that they are covered within the IRWM Planning framework, and are introduced in the Major Water-Related Needs and Conflicts identification process. Over the course of the next 1- 2 meetings, it is intended that the PGC and stakeholders also develop measurable planning targets as the Prop 84 IRWM Guidelines state: "Objectives must be measurable by some practical means so achievement of objectives can be monitored."

Table 1: DRAFT Objectives

Priority	Objective	Measurable Planning Targets
A.	Use Water and Energy Efficiently	
	A1. Increase current and future water use efficiency (WUE) in municipal (residential and commercial) and agricultural settings.	
	A2. Maximize beneficial use of recycled water.	
	A3. Increase green energy production and energy efficiency.	
B.	Protect and Improve Water Supply Reliability	
	B1. Develop sufficient reliable and affordable water supplies to meet region demands.	
	B2. Increase communication and coordination with senior water rights holders	
	B3. Increase water storage/supply capacity to provide sufficient water supply for a multi-year drought scenario.	
	B4. Position the region to adapt to potential climate change impacts	
	B5. Provide alternate water supply sources to areas within the region that have declining groundwater quantity/quality.	
C.	Increase Water Management Operational Efficiency	
	C1. Increase the protection and reliability of single supply sources from surface contamination and interruption from man or nature-caused disasters.	
	C2. Resolve land use conflicts with water supply ditches.	
	C3. Improve efficiency of water conveyance systems.	
	C4. Reduce the risks of localized flooding.	
	C5. Evaluate water transfer opportunities.	
D.	Improve Water Quality Conditions	
	D1. Protect natural streams and reservoirs from contamination.	
	D2. Reduce erosion and sedimentation of natural streams and reservoirs.	
	D3. Provide drinking water that meets customer expectations.	
	D4. Incorporate low impact development standards into land use planning requirements.	

Priority	Objective	Measurable Planning Targets
	D5. Address policies that allow construction of septic or groundwater systems in areas that could likely exacerbate contamination of groundwater and/or surface waterways.	
E.	Enhance Watersheds Condition	
	E1. Improve the condition and ecosystem function of meadows within the region closer to their natural potential.	
	E2. Increase implementation of forestry management plans	
	E3. Improve protection for special aquatic features (such as springs, bogs, and vernal pools).	
	E4. Improve protection for listed and endangered native fish and amphibian species in the region.	
	E5. Encourage the removal of non-native invasive plant species that affect water quality and riparian habitat.	
	E6. Identify, preserve, and promote the regeneration and restoration of native riparian habitat.	
	E7. Reduce negative impacts of stormwater, urban runoff, and nuisance water.	
	E8. Improve integrated land use planning to support watershed management.	

Section	Topic	Key Reference Source(s)
2.1	Introduction	
2.2	Tuolumne-Stanislaus Region Overview and Historical Context	<ul style="list-style-type: none"> • Tuolumne County Foothill Watershed Assessment, 2007 • Tuolumne County Historical Society website (http://tchistory.org/) • U.S. Census Bureau, 2010 Data
2.2.1	Establishment of The Region Boundary	<ul style="list-style-type: none"> • IRWM RAP Planning Grant Application
2.2.2	Climate	<ul style="list-style-type: none"> • Western Regional Climate Center (WRCC) • California Irrigation Management System (CIMIS)
2.2.3	Land Use	<ul style="list-style-type: none"> • Stanislaus National Forest Plan-Forest Plan Direction, 2010 • Stanislaus National Forest Land and Resource Management Plan and Environmental Impact Statement • Calaveras County Future Land Use, 2008 • Tuolumne County Land Use, 2011 • Calaveras Big Trees State Park General Plan, 1989 • Tuolumne County General Plan, 1996 (currently under revision) • Calaveras County General Plan, 1996 (currently under revision) • City of Sonora General Plan, 2007 • City of Angels Camp General Plan, 2009 • CCWD 2010 UWMP • Septic System/Water Quality Study, 2002
2.2.4.1	Population	<ul style="list-style-type: none"> • U.S. Census Bureau, 2010 Data • Calaveras County General Plan, Housing Element • Tuolumne County General Plan, Housing Element
2.2.4.2	Socioeconomic Conditions	<ul style="list-style-type: none"> • Calaveras County General Plan, Housing Element • Tuolumne County General Plan, Housing Element • American Community Survey, 5 yr. 2006-2010 Data • The State of the Sierra, 2007 Sierra Business Council
2.2.4.3	Disadvantaged Communities	<ul style="list-style-type: none"> • U.S. Census – 5-year American Community Survey
2.2.4.4	Social and Cultural Values	<ul style="list-style-type: none"> • Tuolumne and Calaveras County General Plans, various
2.2.4.5	Native American Tribes	<ul style="list-style-type: none"> • Tuolumne Band of Me-Wuk Indians Website (http://www.mewuk.com/cultural/language_preservation.htm) • Tuolumne County Foothill Watershed Assessment, 2007
2.3	Water Resources	

Handout#2 - List of Major Sources by Section

Section	Topic	Key Reference Source(s)
2.3.1	Watershed Characteristics	<ul style="list-style-type: none"> • Tuolumne County Foothill Watershed Assessment, 2007
2.3.1.1	Upper Tuolumne River Watershed	<ul style="list-style-type: none"> • Tuolumne County Foothill Watershed Assessment, 2007 • RAP
2.3.1.2	Upper Stanislaus River Watershed	<ul style="list-style-type: none"> • Tuolumne County Foothill Watershed Assessment, 2007 • RAP
2.3.1.3	Upper Rock Creek-French Camp Slough Watershed	<ul style="list-style-type: none"> • RAP
2.3.2	Groundwater Characteristics	<ul style="list-style-type: none"> • DWR Bulletin 118
2.3.3	Water System Infrastructure	<ul style="list-style-type: none"> •
2.3.3.1	Water Agencies	<ul style="list-style-type: none"> • RAP
2.3.3.2	Surface Water Infrastructure	<ul style="list-style-type: none"> • SFPUC 2010 UWMP • TUD 2010 UWMP • Draft Environmental Impact Statement for Hydropower Licenses-Stanislaus River Projects, 2004 • http://www.ncpahydro.com/ • http://tid.com • TUD Ditch Sustainability Project
2.3.3.3	Groundwater Infrastructure	<ul style="list-style-type: none"> • Tuolumne County Foothill Watershed Assessment, 2007
2.3.3.4	Wastewater Collection and Treatment Infrastructure	<ul style="list-style-type: none"> • LAFCO Draft MSR – Calaveras County • Tuolumne County Foothill Watershed Assessment, 2007 • TUD 2010 UWMP • Calaveras County Local Agency Ground Water Protection Program, 2004
2.3.3.5	Recycled Water Infrastructure	<ul style="list-style-type: none"> • LAFCO Draft MSR – Calaveras County • TUD UWMP and SCWG Planning Docs • GCSD UWMP • CCWD UWMP
2.3.3.6	Drinking Water Supply (Treatment and Distribution) Infrastructure	<ul style="list-style-type: none"> • UWMPs • LAFCO Draft MSR – Calaveras County • LAFCO 2007 MSR's – Tuolumne County
2.4	Water Resources Evaluation	
2.4.1	Water Demands	

Handout#2 - List of Major Sources by Section

Section	Topic	Key Reference Source(s)
2.4.1.1.	In-Region Municipal and Agricultural Demands	<ul style="list-style-type: none"> • TUD 2010 UWMP • CCWD 2010 UWMP • GCSD 2010 UWMP • LAFCO Draft MSR – Calaveras County
2.4.1.2	Non-Consumptive Demands – Power Generation	<ul style="list-style-type: none"> • Draft Environmental Impact Statement for Hydropower Licenses-Stanislaus River Projects, 2004
2.4.1.3	In-Stream Flows	<ul style="list-style-type: none"> • Tuolumne River – Habitat Restoration Plan • Stanislaus River – USBR Interim Action Plan
2.4.1.4	Exports from the Region	<ul style="list-style-type: none"> • SFPUC, MID/TID, SSJID/OID UWMP and websites
2.4.2	Water Supply Availability	<ul style="list-style-type: none"> • TUD 2010 UWMP • CCWD 2010 UWMP • GCSD 2010 UWMP
2.4.3	Comparison of Water Demand and Supply	<ul style="list-style-type: none"> • N/A
2.5	Flood Management	<ul style="list-style-type: none"> • Various (limited focused discussions have been located)
2.6	Water Quality	
2.6.1	Current Conditions	<ul style="list-style-type: none"> • 2010 UWMPs • 303(d) 2010 List of Impaired Water Bodies • RWQCB Central Valley Basin Plan • 2007 Foothill Watershed Assessment • 2006 Stanislaus River Sanitary Survey
2.6.1.1	Surface Water Quality	<ul style="list-style-type: none"> • Same as above • TCRCD Stream Team 2008-09 Water Quality Monitoring Report • CSERC Water Quality Sampling Study 2009 and 2010
2.6.1.2	Groundwater Quality	<ul style="list-style-type: none"> • GAMA Report – Sierra Nevada Study Unit
2.6.1.3	Water from Storage	
2.6.2	Watershed Water Quality Goals and Objectives	<ul style="list-style-type: none"> • 2007 Tuolumne County Water Quality Plan • Basin Plan
2.6.3	Matching Water Quality to Use	
2.7	Ecological Processes and Environmental Resources	

Handout#2 - List of Major Sources by Section

Section	Topic	Key Reference Source(s)
2.7.1	Forest Management	<ul style="list-style-type: none"> • CSERC 2009 Road Survey Report • Central Stanislaus Watershed Analysis • Sierra Nevada Adaptive Management Project
2.7.2	Watershed Management	<ul style="list-style-type: none"> • Central Stanislaus Watershed Analysis • Clavey River Watershed Action Plan
2.7.3	Riparian Habitat Restoration	<ul style="list-style-type: none"> • Tuolumne River Habitat Restoration Plan
2.7.4	Endangered and Listed Species	<ul style="list-style-type: none"> • EPA
2.7.5	Fisheries	<ul style="list-style-type: none"> • TBD
2.7.6	Water-Dependent Recreation	<ul style="list-style-type: none"> • TBD
2.8	Potential Climate Change Impacts	<ul style="list-style-type: none"> • SFPUC 2010 UWMP • CCWD 2010 UWMP • Sierra Nevada Adaptive Management Project
2.9	Relationships with Neighboring and Overlapping IRWM Regions	<ul style="list-style-type: none"> • RAP and Planning Grant
2.10	Major Water-Related Objectives and Conflicts	<ul style="list-style-type: none"> • Various

Tuolumne - Stanislaus Regional Water Management Group (RWMG)
 Integrated Regional Water Management (IRWM) Planning Grant Application Project
 Planned Master Meeting Schedule for T-S Region's IRWMP
 12/16/11 Revision

IRWM Plan/Meeting Topic	Specific Items to Discuss/Notes	T-S Region's Monthly Stakeholder's Meeting Topic Summary																							
		Sep-11 Mtg 1:	Oct-11 Mtg 2:	Nov-11 Mtg 3:	Dec-11 Mtg 4:	Jan-12 Mtg 5:	Feb-12 Mtg 6:	Mar-12 Mtg 7:	Apr-12 Mtg 8:	May-12 Mtg 9:	Jun-12 Mtg 10:	Jul-12 Mtg 11:	Aug-12 Mtg 12:	Sep-12 Mtg 13:	Oct-12 Mtg 14:	Nov-12 Mtg 15:	Dec-12 Mtg 16:	Jan-13 Mtg 17:	Feb-13 Mtg 18:	Mar-13 Mtg 19:	Apr-13 Mtg 20:	May-13 Mtg 21:	Jun-13 Mtg 22:	Jul-13 Mtg 23:	Aug-13 Mtg 24:
Governance	Review and update existing governance, include how plan will be updated and implemented in short and long term, and discuss balance of access/opportunity. Combine with Finance discussion.	X																					X	X	X
Finance	Review and update existing finance plan. Combine with Governance discussion. Discuss towards end of planning period.		X																				X	X	X
Regional Description	Identify important cultural/social values to regional community and important economic trends. Confirm conflicts/issues. Majority of this section in the Plan will be developed using Grant Application description	X issues & conflicts	X issues & conflicts	X		X	X																		
Objectives	Determination 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	X	X									X	X	X						
Stakeholder Involvement/DACs	Identify additional ways to involve DACs and tribal community and assign members to perform identified outreach tasks.	X					X update	X update		X update				X			X	X	X						
Coordination	Identify coordination/cooperation with other IRWM efforts/groups and State/Federal agencies for proposed planning and implementation projects	X					X update			X update		X update	X			X	X	X							
Project Selection Criteria Development (CCP Grant Work - Not IRWM Grant)	Process will be developed in 9 months period under the \$30k DWR grant. Will review developed process prior to project presentations and Project Selection/Ranking meeting under the IRWMP Grant.								X	X	X	X review only		X	X							X review only			
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																
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																	
Data Management	Determine how and what data will be collected, stored, disseminated, updated and managed with the Data Management Committee (DMC). Set up data collection system and begin collecting/managing data.	X Select DMC				X Presentation				X update												X update		X update	
Technical Analysis	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.			X							X	X		X			X	X	X						
Climate Change	Determine how effects of climate changes will be established for region, vulnerabilities of region, and potential adaptive responses. Determine ways to reduce greenhouse gas emissions.							X						X		X	X	X	X	X					
Resource Management Strategies (RMS)	Identify which RMS will be incorporated into the plan.		X Overview	X High Level				X									X	X	X	X	X				
Integration	Discuss/determine/update Regional and Inter-regional project planning and implementation												X	X		X	X	X	X	X					
Project Presentations	Presentation of proposed regional and Inter-regional projects for implementation, technical analysis, and other planning													X		X	X								
Project Selection/Ranking	Implement Project Selection Process to select and rank projects to be included in plan																	X	X	X					
Impact 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	X	X	X	X	X	X			
Plan Performance and Monitoring	Combine with Benefits and Impacts discussions																	X	X	X	X	X			
Review of Draft Plan	Consultant to summarize review comments, and group to resolve conflicting comments. A IRWM Plan Review Committee (PRC) will be formed to help assure review is completed.	X Select PRC		X			X			X			X		X		X				X	X	X		
Review/Approval of Final Plan	Approve and sign final plan for submittal to DWR																								X

Bold Xs indicate topic(s) are focus of Stakeholder Meeting
 Non bold Xs indicate update on topics/or supplemental topics of main focus of Stakeholder Meetings

- Deliverables**
- Section 1 - Introduction
 - Section 2 - Region Description
 - Section 3 - Relation to Local Planning
 - Section 4 - Goals and Objectives
 - Section 5 - Resource Management Strategies
 - Section 6 - Project Identification and Prioritization Process
 - Section 7 - Potential Impacts and Benefits
 - Section 8 - Technical Analysis and Data Management
 - Section 9 - Plan Implementation Framework

Legend	
	No meeting
	Meeting has occurred
X	Focus of Meeting
X	Update/Review of Topic

**Upper & Lower Stanislaus Water Resources Stewardship and Sustainability
Planning Grant Proposal
Phase I
Tuolumne - Stanislaus IRWM Region**

DRAFT CONCEPT OUTLINE

The Upper & Lower Stanislaus Water Resources Stewardship and Sustainability planning grant application would conduct Phase 1 of a multiphase planning effort to evaluate the use of existing Stanislaus water resources and existing facilities to determine their potential to achieve the following likely local, regional and interregional benefits:

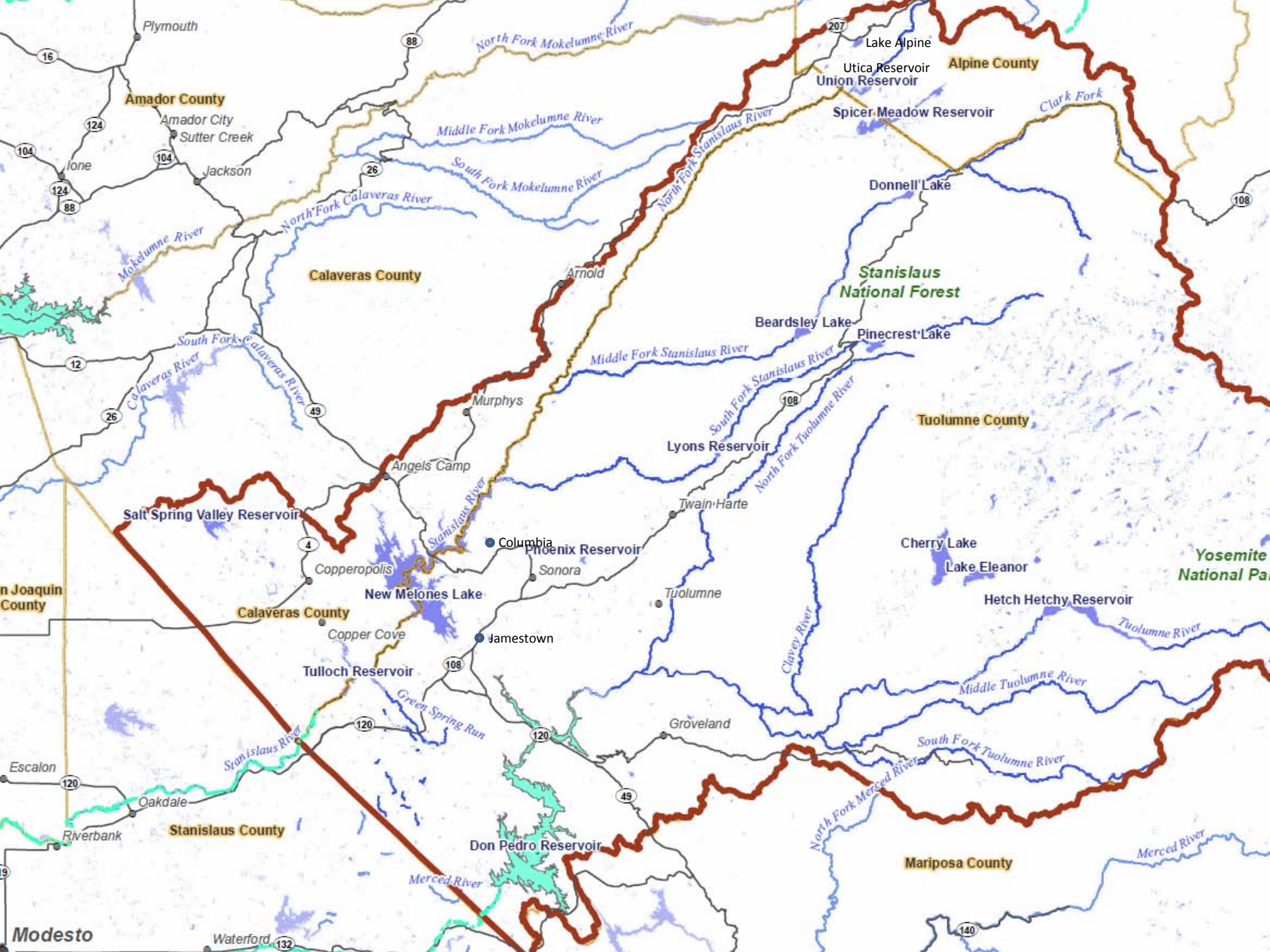
1. Increase in-region water supply reliability to the Tuolumne - Stanislaus Region through sharing of rights and facilities.
2. Improved resilience to the Tuolumne - Stanislaus Region water supply reliability in response to future uncertainty associated with climate change influences as well as additional groundwater availability through improved management of existing resources.
3. Opportunities for conjunctive use projects within the "East Stanislaus" IRWM Region that could provide for increased supply reliability and water banking to benefit both the Tuolumne-Stanislaus and East Stanislaus IRWM Regions.
4. Potential to reduce nearly exclusive dependence within the County of Tuolumne upon a single-source surface storage system and diversify its water supply portfolio.
5. Opportunities for environmental enhancements as an overarching component including but not limited to; terrestrial habitat improvement, fisheries flows, water quality improvements and stewardship programs.
6. Opportunities for area of origin water rights and/or contracts.

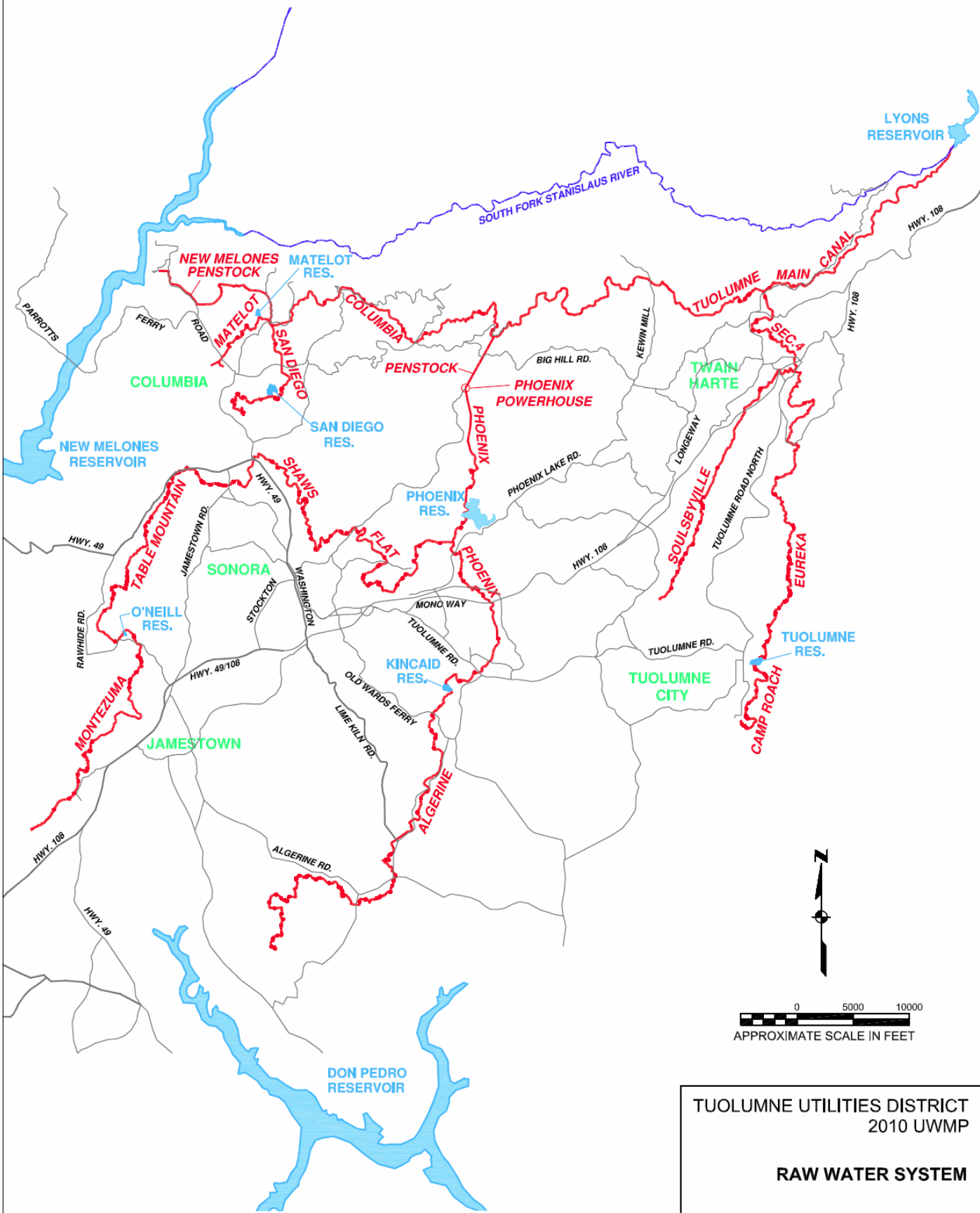
The proposed program would evaluate the use of existing water resources, secured through existing water rights, in a planning venue intended to examine methods to more efficiently and sustainably use those resources to achieve the benefits outlined above. The program would be funded through the Department of Water Resources (DWR) Proposition 84 Planning Grant, Round 2 process.

The total project budget is estimated to be between \$250,000 to \$300,000. Local match would come (primarily) through “in-kind” staff and consultant time from the Calaveras County Water District and Tuolumne Utility District. Previous work carried out by Calaveras County Water District in Stanislaus River modeling will also be included to meet the local cost total estimated at \$62,500 to \$75,000 over a 12 to 24 month period.

All planning grant application work and costs will be borne by Kennedy-Jenks Consultants and the Offices of John S. Mills in support of the Tuolumne-Stanislaus IRWM Program.

The application would be developed by the consultant team in coordination with a small working group of the Planning Grant Committee. The application would be submitted by the March 9, 2012 deadline to the DWR. It is estimated that actual award of grants would be during the fall of 2012 with contracts to be executed in the winter of 2012. Work would commence immediately upon execution of contracts.





LEGEND

-  DITCH
-  ROAD

TUOLUMNE UTILITIES DISTRICT
2010 UWP
RAW WATER SYSTEM

JUNE 2011

FIGURE 2-3