

3 Work Plan

Grant Work Plan Outline for total grant funding request of **\$690,000**

- Task 1 Verification of Plan Update Outline and Prior Expenses Eligibility with DWR [**\$15,000**]
- Task 2 Website and Public Outreach [**\$25,000**]
- Task 3 Systematic Update Of All 16 Topic Areas Discussed In Appendix C (Related Topics Are Grouped) 16 Subtasks Integrated Into The Sub-Sections 3.1 – 3.6 [**\$205,000**]
- Task 4 Draft and Adopt Revised Plan [**\$40,000**]
- Task 5 Special Studies For Preliminary Engineering and Benefit/Cost Analysis
 - 5.1 Regional Water Supply and Flood Management Projects [**\$165,000**]
 - 5.1a) Madera Avenue Intertie
 - 5.1b) Kimberlina Road Intertie
 - 5.1c) Pond-Poso Entrance Ponds
 - 5.2 Flood Management Project Development [**\$50,000**]
 - 5.2a) Poso Creek Flood Control and Water Conservation Reservoir – Refinement of Benefit/Cost Ratio of the COE Preliminary Feasibility Study
 - 5.2b) Development of Project Descriptions and Benefit/Cost Analysis for Integration of Flood Management Projects Into Tthe Poso Creek IRWM Plan
 - 5.3 DAC Projects Feasibility Studies [**\$95,000**]
 - 5.3a) South Shafter Wastewater Project – [\$50,000]
 - 1) Update Preliminary Engineering Report
 - 2) Revenue Plan
 - 3) Form County Service Area; CSA for Purpose of Sewer Maintenance
 - 4) Environmental Compliance (Updated CEQA)
 - 5.3b) City of Delano Wastewater Effluent Discharge to Semitropic Project – [\$45,000]
 - 1) Preliminary Engineering and Cost/Benefits Analysis
 - 2) Project Description for Environmental Compliance
 - 2) Form Agreement for Accepting Effluent
 - 5.4 Project Descriptions for Water Supply and Flood Management for Environmental Compliance to Advance Project Readiness – [**\$60,000**]
- Task 6 Planning Grant Administration – [**\$35,000**]

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Introduction

The Poso Creek IRWM Plan Update and Improvement Proposal is a regional planning grant proposal to update and improve the existing Poso Creek Integrated Regional Water Management Plan (IRWMP). This Work Plan has three objectives:

- Update the IRWMP to comply with the Proposition 84 guidelines
- Integrate accomplishments in the Poso Creek Region since IRWMP adoption in 2007
- Provide an adaptable and updated Plan to guide regional water management

This work plan summarizes activities since 2007 focusing on the Standards in the current Proposition 84 Guidelines and outlines the additional work to meet the Standards. The Poso Creek Regional Water Management Group (RWMG) and Stakeholders discussed the region's existing and future planning needs as part of their ongoing work and authorized, under their existing Governance MOU, Semitropic Water Storage District (Semitropic), the Lead Agency for the Poso Creek RWMG to develop and submit this Planning Grant Proposal.

Section A presents the current status of IRWM Plan Standards, including a summary of the planning activities necessary to obtain compliance for each of the sixteen Standards. The accomplishments since Plan adoption that improve the plan and additional items needed for the Plan to be effective and adaptable in the future are also presented. Expenses incurred in the development of the sixteen Standards since 2009 are summarized. The Grant Work Plan presents the proposed tasks to be performed with grant funding. The scope of work for each grant funded task relates to the sixteen plan standards and each deliverable will provide information to update and improve the existing Plan. Section 3 provides a brief description of the additional work (not discussed or included in the Grant Work Plan), funded by the RWMG, that will be completed to update and improve the Plan. Tasks and Sub-tasks described in this Work Plan correspond with Attachment 4 – Budget and Attachment 5 – Schedule.

Background

The Poso Creek region relies on its water supplies to support the economies of its urban and agricultural communities and to maintain its environmental resources. Since the agricultural uses of the six districts (in the RWMG) equate to approximately 96-percent of the applied water in the region, the six districts came together to form the IRWM Plan with a shared interest in addressing the projected loss of approximately 14 percent, or 104,000 acre-feet, of their average annual diversion of surface water (740,000 acre-feet). (The average annual diversion of 740,000 acre-feet includes supplies delivered to the Southern San Joaquin Municipal Utility District and the six districts of the RWMG)

The projected loss of surface supplies to the Region is attributable to four issues:

- 1) Reduced reliability south of the Delta due to court-ordered constraints on pumping
- 2) Changing timing of CVP deliveries due to in-stream flow needs required by the San Joaquin River Settlement
- 3) Changes in timing of the Kern River flows due to safety-of-dam issues at Lake Isabella that affect storage of Kern River water
- 4) Expiring long-term contracts between agricultural districts and the City of Bakersfield for delivery of Kern River water

These issues were the impetus for the formation of the Poso Creek RWMG so that the districts could collectively discuss water management and consider regional assets, challenges and operations. The integration of community and environmental water users' needs into the Poso Creek IRWM Plan process has occurred due to the shared interest in managing the common groundwater resource. The role of the IRWM process in assuring sustainable water for all users in the region is discussed below.

History of Poso Creek Regional Water Management Group

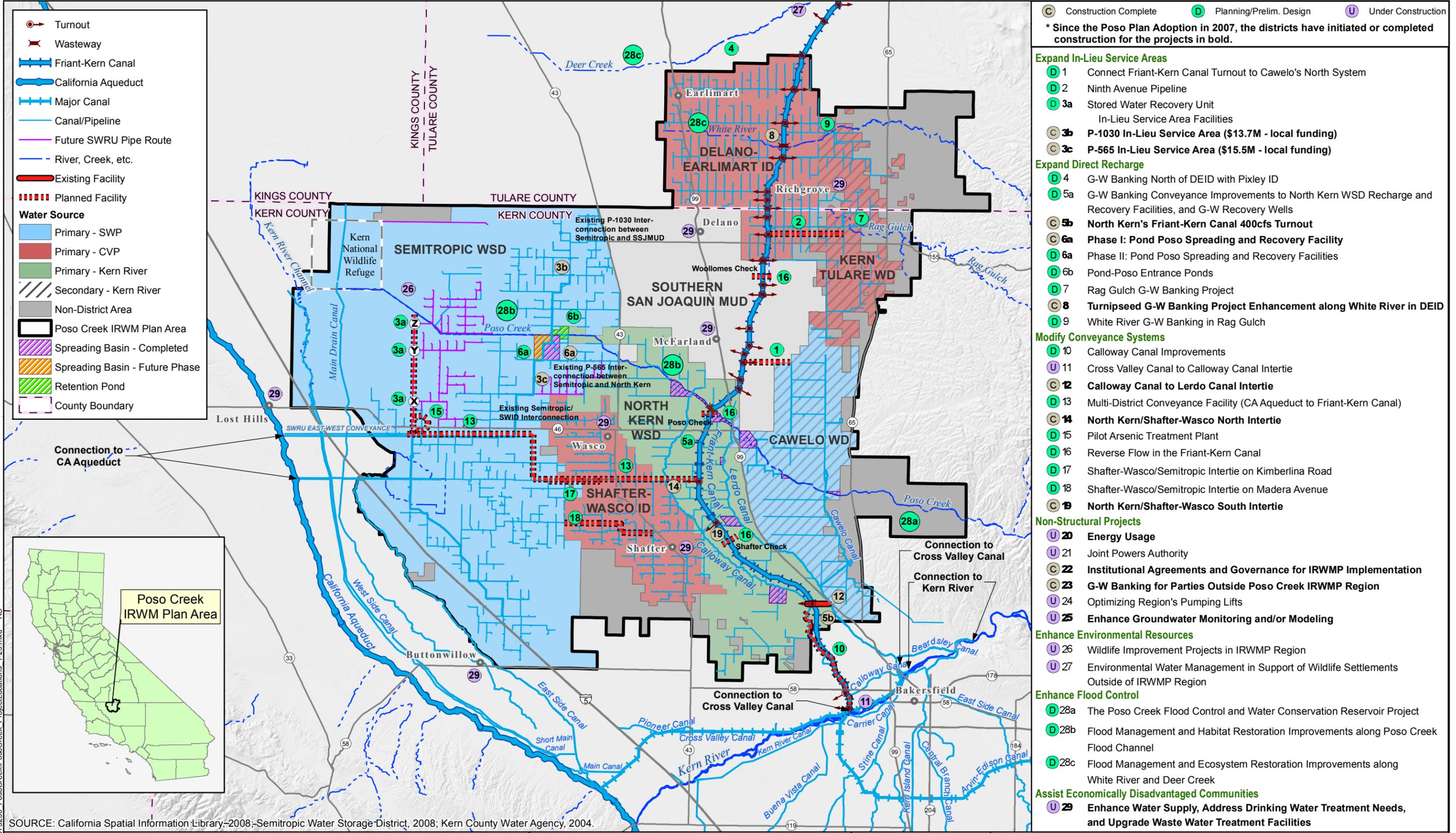
Pursuant to IRWM guidelines promulgated in 2005, the Poso Creek RWMG formulated and ultimately adopted the Poso Creek Integrated Regional Water Management Plan (IRWM Plan) in July 2007. The RWMG was comprised of six agricultural water districts and one resource conservation district at the time of plan adoption:

- Semitropic Water Storage District – Lead Agency (Semitropic)
- Cawelo Water District (Cawelo)
- Delano-Earlimart Irrigation District (Delano-Earlimart)
- Kern-Tulare Water District (Kern-Tulare)
- North Kern Water Storage District (North Kern)
- Shafter-Wasco Irrigation District (Shafter-Wasco)
- North West Kern Resource Conservation District (NWKRCDD)

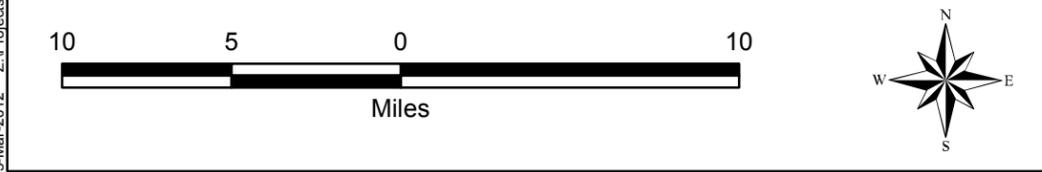
Since Plan adoption, the RWMG has continued to meet regularly to implement the IRWM Plan and to address the Proposition 84 changes to the plan standards; the RWMG maintains a monthly meeting schedule and has financed an annual budget that allows for six to ten public meetings per year, depending on need. The regular meetings allow for specific Plan activities to be accomplished, including adoption of a Governance MOU, addition of a voting DAC Representative position, and a non-voting Kern IRWMP representative position.

Purpose

The stated IRWM Plan purpose is "... to provide a framework for – (1) coordinating groundwater and surface water resource management activities [through] a cohesive set of regional water management objectives, and (2) implementing the actions necessary to meet those objectives." This IRWM Plan emphasizes planning strategies to resolve the region's water supply challenges.



SOURCE: California Spatial Information Library, 2008; Semitropic Water Storage District, 2008; Kern County Water Agency, 2004.



- C** Construction Complete **D** Planning/Prelim. Design **U** Under Construction
- * Since the Poso Plan Adoption in 2007, the districts have initiated or completed construction for the projects in bold.**
- Expand In-Lieu Service Areas**
 - D 1** Connect Friant-Kern Canal Turnout to Cawelo's North System
 - D 2** Ninth Avenue Pipeline
 - D 3a** Stored Water Recovery Unit In-Lieu Service Area Facilities
 - C 3b** P-1030 In-Lieu Service Area (\$13.7M - local funding)
 - C 3c** P-565 In-Lieu Service Area (\$15.5M - local funding)
- Expand Direct Recharge**
 - D 4** G-W Banking North of DEID with Pixley ID
 - D 5a** G-W Banking Conveyance Improvements to North Kern WSD Recharge and Recovery Facilities, and G-W Recovery Wells
 - C 5b** North Kern's Friant-Kern Canal 400cfs Turnout
 - C 6a** Phase I: Pond Poso Spreading and Recovery Facility
 - D 6a** Phase II: Pond Poso Spreading and Recovery Facilities
 - D 6b** Pond-Poso Entrance Ponds
 - D 7** Rag Gulch G-W Banking Project
 - C 8** Turnipseed G-W Banking Project Enhancement along White River in DEID
 - D 9** White River G-W Banking in Rag Gulch
- Modify Conveyance Systems**
 - D 10** Calloway Canal Improvements
 - U 11** Cross Valley Canal to Calloway Canal Intertie
 - C 12** Calloway Canal to Lerdo Canal Intertie
 - D 13** Multi-District Conveyance Facility (CA Aqueduct to Friant-Kern Canal)
 - C 14** North Kern/Shafter-Wasco North Intertie
 - D 15** Pilot Arsenic Treatment Plant
 - D 16** Reverse Flow in the Friant-Kern Canal
 - D 17** Shafter-Wasco/Semitropic Intertie on Kimberlina Road
 - D 18** Shafter-Wasco/Semitropic Intertie on Madera Avenue
 - C 19** North Kern/Shafter-Wasco South Intertie
- Non-Structural Projects**
 - U 20** Energy Usage
 - U 21** Joint Powers Authority
 - C 22** Institutional Agreements and Governance for IRWMP Implementation
 - C 23** G-W Banking for Parties Outside Poso Creek IRWMP Region
 - U 24** Optimizing Region's Pumping Lifts
 - U 25** Enhance Groundwater Monitoring and/or Modeling
- Enhance Environmental Resources**
 - U 26** Wildlife Improvement Projects in IRWMP Region
 - U 27** Environmental Water Management in Support of Wildlife Settlements Outside of IRWMP Region
- Enhance Flood Control**
 - D 28a** The Poso Creek Flood Control and Water Conservation Reservoir Project
 - D 28b** Flood Management and Habitat Restoration Improvements along Poso Creek Flood Channel
 - D 28c** Flood Management and Ecosystem Restoration Improvements along White River and Deer Creek
- Assist Economically Disadvantaged Communities**
 - U 29** Enhance Water Supply, Address Drinking Water Treatment Needs, and Upgrade Waste Water Treatment Facilities

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Implementation

The working relationships established between the RWMG and stakeholders have been enhanced by continuing regular meetings to implement IRWM Plan as the various interests have worked together to manage surface water and groundwater resources of the Region. Since Plan adoption in 2007, several U.S. Bureau of Reclamation grants have been awarded that funded the advancement of both non-structural and structural water conveyance projects that interconnect neighboring water district facilities. These regional projects have been implemented by individual districts to enhance the ability to match timing of water deliveries with demands to more effectively use and store (absorb) surface water supplies delivered into the Region. Individual communities have also been successful in obtaining State and Federal grants to construct wastewater treatment, install water metering, and improve and protect drinking water quality. In 2011, the IRWM Plan was used as a basis for a successful application for an IRWM grant pursuant to Proposition 84, Round 1 Implementation. The grant included eight projects that will benefit both small community and agricultural water users, plus enhance the environmental component of a recently constructed direct spreading facility.

One requirement of the Implementation Grant is that the IRWM Plan be revised to meet the guidelines finalized in July 2010 (*Guidelines for Proposition 81 and 1E Integrated Regional Water Management or guidelines*). Appendix C of these guidelines presents, in detail, additional IRWM requirements to those developed to implement Proposition 50. The additional requirements were contained in Proposition 84, approved in 2006, and subsequently refined by the legislature. Table 1 lists the 16 IRWM standards that must be addressed in the revised Plan.

Section A. Current Status in Meeting IRWM Plan Standards

The adopted IRWM Plan was focused on addressing the highest priority issue facing the Region - a loss of water supply reliability. The Plan identified a number of opportunities to improve water supplies to the Region. Since its adoption in 2007, the RWMG has been implementing the Plan as well as integrating additional elements such as disadvantaged community (DAC) and environmental water users' interests and projects.

Table 1. 16 Topics IRWM Plan Must Identify (Appendix C)

16 Topics IRWM Plan Must Identify	
Governance	Data Management
Region Description	Finance
Objectives	Technical Analysis
Resource Management Strategies	Relation to Local Water Planning
Integration	Relation to Local Land Use Planning
Project Review Process	Stakeholder Involvement
Impact and Benefit	Coordination
Plan Performance and Monitoring	Climate Change

Part A. Comparing Poso Creek 2007 IRWMP to DWR 2010 Guidelines

The recommendations of this work plan are based on comparison of the IRWM Plan to the July 2010 Guidelines as provided in Appendix C, *Guidance for IRWM Standards*. This comparison, summarized in Table 2, was intended to provide a basis for this scope of work, organized by IRWM Plan Standard.

Table 2. Preliminary Review of Poso Creek IRWM Plan

IRWM Plan Standard	Potential Revision and Documentation Needed
Governance	<ul style="list-style-type: none"> • Enhanced DACs relationship to RWMG and document DAC Workgroups • Enhance description of how activities/follow-through related to decision making and authority/responsibility for implementation • Enhance process/responsibility for reviewing plan and plan progress and formal process for changing/updating/revising plan (see also <i>Plan Performance and Monitoring</i> below)
Region Description	<ul style="list-style-type: none"> • Provide more discussion of DAC and environmental water needs and issues given the understanding that agriculture water is approximately 96-percent of the Region's use.
Objectives – Refine Quantities	<ul style="list-style-type: none"> • Foundation laid in Chapter 3 (Assets and Needs) for districts. • Update objectives with respect to Urban and M&I users as they share a common groundwater basin with agriculture users • Update connection to State Water Plan and Prop 84 objectives • Update quantifiable water supply objectives.
Resource Management Strategies (RMS)	<ul style="list-style-type: none"> • Update as needed based on revised objectives • Discuss changes to water supply absorptive capability under the current physical and institutional setting compared to discussion in adopted IRWMP based on Plan accomplishments • Refine each RMS discussion to include more local information for the Poso Region, for example, related existing local land use planning to the Plan
Integration	<p>Expand and update discussion of:</p> <ol style="list-style-type: none"> 1) Current integration of planning and systems (including operations), 2) Integration through the IRWM process 3) Integration of new projects identified during monthly meetings with stakeholders, such as, DACs, flood protection, flood water management, and environmental enhancement projects <p>Discussion should include both inside Region and with other regions since the Poso Creek RWMG has been actively meeting and coordinating with other IRWMPs within the Tulare Basin since early development of the Poso IRWMP.</p>
Project Review and Prioritization Process	<ul style="list-style-type: none"> • Focus to remain on characterizing projects as the first level of priority and ranking of projects a second priority to maintain implementation flexibility • Refine existing project development and review process that includes consideration of IRWM Plan objectives, cost and feasibility. • In order to provide flexibility, incorporate an explicit (and formal) plan review process that includes updating project list. • Description of updating the list should be structured so as to not commit to a full revision of plan unless otherwise mandated.
Impact and Benefit	<p>Refine discussion of regional benefits and impacts of implementing the IRWM Plan (including a <u>general</u> statement about each item on the project list).</p>
Plan Performance and Monitoring	<ul style="list-style-type: none"> • Develop and incorporate metrics to track plan implementation and measure success in meeting objective and implementing projects. • These metrics should be included in the data management program.
Data Management	<p>IRWMP Chapters 4 and 5 set framework for operations and hydrologic data</p> <ul style="list-style-type: none"> • Establish framework and system for collecting, storing and reporting information to track plan implementation and achievement of objectives • Develop a parallel tracking program for projects funded by Prop 50 and 84 grants as part of data management
Finance	<p>Document potential mechanisms to fund ongoing plan activities in addition to the existing cost sharing component of the Governance MOU.</p>
Technical Analysis	<p>Expand documentation of data sources in text and incorporate information gained in special studies.</p>
Relation to Local Water Planning	<p>Discussion included in IRWM Plan and in Region Acceptance Process (RAP), update as topic discussion and make explicit.</p>

IRWM Plan Standard	Potential Revision and Documentation Needed
Relation to Local Land Use Planning	Develop local land use planning summary and incorporate as a topic discussion in Plan update addendum.
Stakeholder Involvement	<ul style="list-style-type: none"> • Current activities acceptable. • Discuss the procedures for keeping community outreach process current (including development of website).
Coordination	Expand discussion of coordination of IRWMP implementation activities neighboring IRWMPs and with local, regional, state and federal interests.
Climate Change	New Requirement. Develop topic discussion and incorporate into IRWMP addendum.

Once awarded a grant contract, the initial evaluation of the IRWM Plan updates suggested in Table 2 will be reviewed with the RWMG to refine the focus and schedule for the tasks and subtasks outlined in Grant Work Plan. The results of this review will be provided to the DWR point of contact assigned to the Poso Creek IRWMP. Based on RWMG and DWR input, the RWMG Lead Agency will initiate the proposed work plan and schedule. The RWMG Lead Agency may make modifications to the scope, as necessary, to address DWR's input. The tasks and subtasks will be performed in the order and at the pace directed by the RWMG.

Part B. Accomplishments through Local and Grant Funding

The Poso Creek RWMG develops an annual budget for core activities and coordination with neighboring IRWMPs and for special tasks, such as review of the RWMG Governance MOU by local counsel. The RWMG has also funded the development of materials to submit to the DWR for the Regional Acceptance Process, Special Planning Studies for Rural Water, Reclamation System Ops Review, local funding for Poso Banking CEQA/NEPA, and other items. Examples of RWMG annual budgets and expense to be considered as cost match are included as Additional Information, upload to DWR's BMS as an attachment to this Proposal.

Local Funding

Table 3. Local Expenditures for 2009-2011

Governance – Development of MOU	2009 - \$3,600 for Young Woolridge 2010 – core activities budget, \$2,888 Young Woolridge
Region Description	2009 - \$57,343 for RAP submission and interview
Coordination	2009 - \$64,879 RWMG coordinated activity 2010 - \$79,505 RWMG coordinated activity 2011 - \$39,683 RWMG coordinated activity 2012 - \$40,000 RWMG coordination activity (budgeted)
Integration	2010 - \$19,163 Reclamation EA for regional Groundwater Bank Response 2011 - \$22,052 Reclamation EA for regional Groundwater Bank Response 2012 - \$21,000 proposed budget for payment to Reclamation for processing the EA for regional GW banking

In addition to the local expenditures, a System Optimization Review for Poso Region was conducted from October 2008 to September 2010, which utilized \$300,000 in federal funds provided by Reclamation.

Since the Plan was adopted, the Poso Creek RWMG has locally funded the following accomplishments that help to align the Plan with the sixteen standards per Proposition 84:

- Signed Governance MOU and cost sharing agreement
- Incorporated DAC, flood control, and wildlife enhancement projects
- Elected DAC Representative to RWMG
- Developed DAC projects with assistance from incorporated cities, districts, and Self-Help Enterprises
- Participated in coordination meetings with neighboring IRWMs in Tulare Basin
- Provided representation on Stakeholder Oversight Advisory Committee for developing the Tulare Lake Basin Disadvantaged Community Water Study
- Obtained Region Acceptance through DWR's Region Acceptance Process
- Developed CEQA and NEPA documents to allow environmental approval for the six districts within the Poso Creek Region to bank, transfer, and exchange surface supplies
- Expanded in-lieu service areas with \$29M local funding

The RWMG has implemented non-structural and structural project components of the Plan through several grant funding awards. The projects were funded by a combination of local cost share and award funds. The award funds are summarized:

- System Optimization Review for Poso Creek IRWM Plan (\$300,000)
- Conservation Improvements for Return of Banked Water, Semitropic WSD (\$300,000)
- North Intertie between North Kern WSD and Shafter-Wasco ID (\$300,000)
- South Intertie between North Kern WSD and Shafter-Wasco ID (\$300,000)
- Turnout No. 2 for North Kern WSD (\$300,000)
- Turnipseed GW Banking Project Enhancement along White River in DEID (\$1.55M)
- Pond-Poso Spreading and Recovery Facility, Semitropic WSD (\$2.2M ARRA)
- Calloway Canal to Lerdo Canal Intertie, North Kern WSD (\$5.0M ARRA)
- Groundwater Bank Improvements in Northwestern Kern County, Semitropic WSD (\$917,000)
- Bay-Delta Agricultural Water Conservation and Efficiency Project; Water Use Efficiency and Energy Improvement for Semitropic WSD Growers (\$711,000)

Projects completed by DAC communities, cities, and towns within the Region include:

- Water Meter Installation, City of Wasco
- Wastewater Treatment Plant Improvements, Buttonwillow (\$2,766,812 in SCWG, USDA & Buttonwillow CWD funds), completed in 2010.
- Shafter Wastewater Collection System extension to North Shafter
- Maple School Water Consolidation with City of Shafter to address elevated nitrate levels

Agricultural districts and DAC community Projects funded by Proposition 84 Implementation include:

- Eight Projects (\$8.25M); eligible grant start date is August 16th, 2011
 - Cross Valley Canal to Calloway Canal Intertie, North Kern WSD
 - Habitat Improvement on Pond-Poso Spreading Basins
 - On-Farm Mobile Lab, Water Use Efficiency Services
 - DAC Fund for Feasibility-Level Studies – Allensworth
 - DAC Fund for Feasibility-Level Studies – Lost Hills Utility District

- Consolidation of Bishop Acres into City of Shafter Water Supply System
- North Shafter Sewer Hook-Up Fund
- Meter Installation in DAC Service Area

Federal Grant Funding

The projects for which the RWMG has recently applied for grant funding are:

- Semitropic WSD WaterSMART 2012 project to improve recovery capacity at the Pond-Poso Spreading and Recovery Facility; submitted for two levels of funding: (1) \$300,000 and (2) \$1.5M with solar power component
- North Kern WSD WaterSMART 2012 project to line a portion of the Calloway Canal, a solar component to off-set pumpinf from regulating pit (\$1.2M)
- Bay-Delta Water Use Efficiency proposal for Cawelo WD to line a portion of Calloway Canal (\$1M)
- Bay-Delta Agricultural Water Use Efficiency proposal for Semitropic WSD for improved return capacity of Pond-Poso Canal to enhance return of stored water to Growers and Banking Partners during dry periods (\$1M)

Construction Photos

The following photos show the type and scale of the recently constructed projects:

**Photo 1. Semitropic Water Storage District
Pond-Poso Spreading and Recovery Facility**



**Photo 2. Semitropic Water Storage District
Junction Pumping Plant and Solar Photovoltaic Power Plant**



**Photo 3. North Kern Water Storage District
Calloway Canal to Lerdo Canal Intertie - Pipeline Construction**



**Photo 4. North Kern Water Storage District
Calloway Canal to Lerdo Canal Intertie - Pipeline Construction**

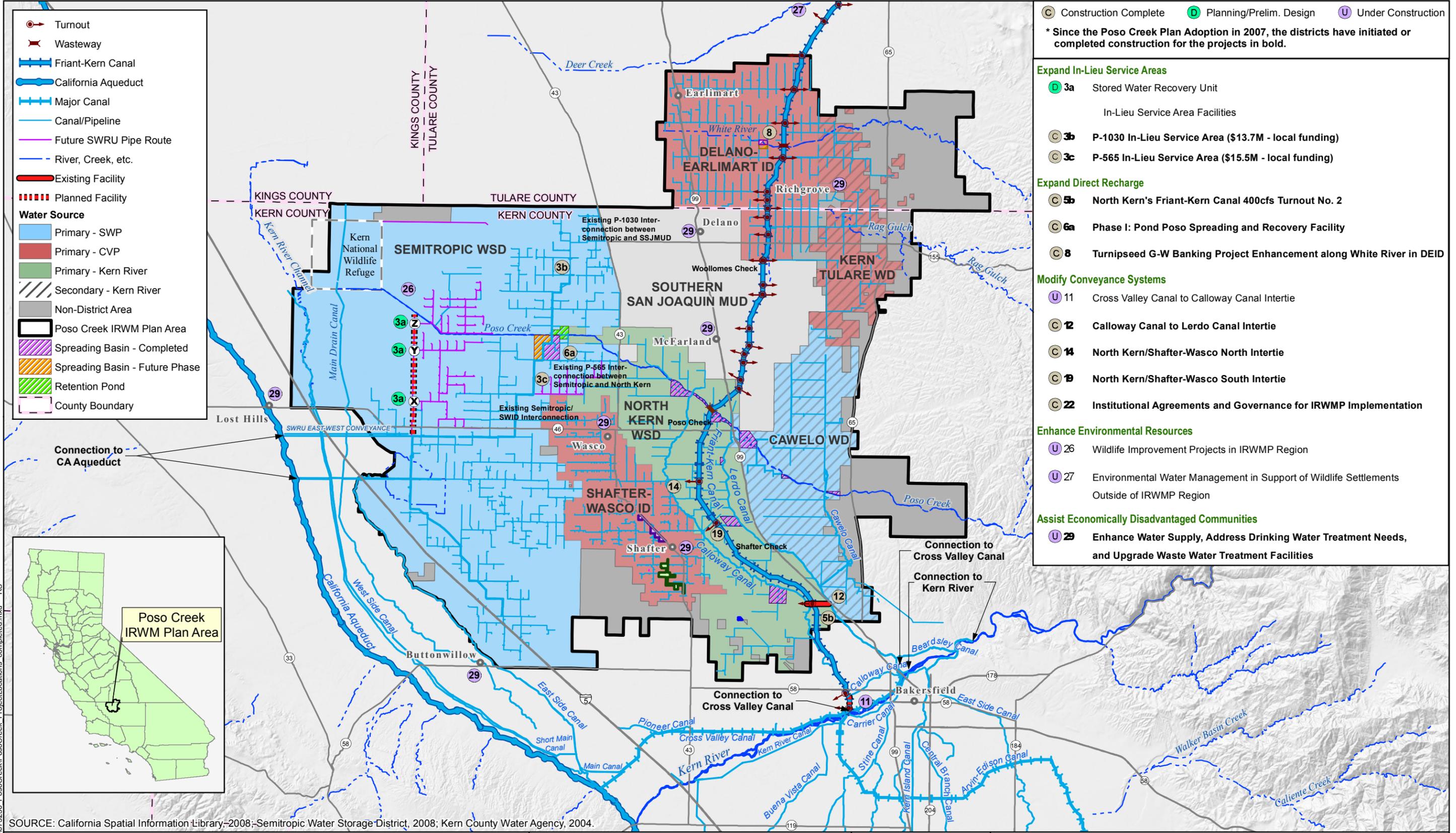


**Photo 5. North Kern Water Storage District
Calloway Canal to Lerdo Canal Intertie - Pumps and Motor Installation**



**Photo 6. North Kern Water Storage District
Calloway Canal to Lerdo Canal Intertie – Completed Pumping Plant**





Legend

- Turnout
- Wasteway
- Friant-Kern Canal
- California Aqueduct
- Major Canal
- Canal/Pipeline
- Future SWRU Pipe Route
- River, Creek, etc.
- Existing Facility
- Planned Facility

Water Source

- Primary - SWP
- Primary - CVP
- Primary - Kern River
- Secondary - Kern River
- Non-District Area

Other Features

- Poso Creek IRWM Plan Area
- Spreading Basin - Completed
- Spreading Basin - Future Phase
- Retention Pond
- County Boundary

- C** Construction Complete
 - D** Planning/Prelim. Design
 - U** Under Construction
- * Since the Poso Creek Plan Adoption in 2007, the districts have initiated or completed construction for the projects in bold.**
- Expand In-Lieu Service Areas**
- D 3a** Stored Water Recovery Unit
In-Lieu Service Area Facilities
 - C 3b** P-1030 In-Lieu Service Area (\$13.7M - local funding)
 - C 3c** P-565 In-Lieu Service Area (\$15.5M - local funding)
- Expand Direct Recharge**
- C 5b** North Kern's Friant-Kern Canal 400cfs Turnout No. 2
 - C 6a** Phase I: Pond Poso Spreading and Recovery Facility
 - C 8** Turnipseed G-W Banking Project Enhancement along White River in DEID
- Modify Conveyance Systems**
- U 11** Cross Valley Canal to Calloway Canal Intertie
 - C 12** Calloway Canal to Lerdo Canal Intertie
 - C 14** North Kern/Shafter-Wasco North Intertie
 - C 19** North Kern/Shafter-Wasco South Intertie
 - C 22** Institutional Agreements and Governance for IRWMP Implementation
- Enhance Environmental Resources**
- U 26** Wildlife Improvement Projects in IRWMP Region
 - U 27** Environmental Water Management in Support of Wildlife Settlements Outside of IRWMP Region
- Assist Economically Disadvantaged Communities**
- U 29** Enhance Water Supply, Address Drinking Water Treatment Needs, and Upgrade Waste Water Treatment Facilities



SOURCE: California Spatial Information Library, 2008; Semitropic Water Storage District, 2008; Kern County Water Agency, 2004.



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Part C. Summary of Status for Sixteen Plan Standards

1. Governance

Governance is one of the 16 Plan Standards the RWMG addressed through adoption of a MOU and Cost Sharing agreement that was signed by the RWMG on May 12, 2010. The RWMG addressed this through a Work Group assignment. The work was accomplished in 2009 and 2010 and was part of the Core Activities budget for each year. Documentation of the signed MOU and cost sharing agreement will be included in the IRWM Plan addendum as documentation for the Plan update.

2. Region Description

Considerable effort was expended in developing the Region Description, communicating the characteristics of the Region with neighboring IRWMs, and obtaining approval of the Region through the DWR's Region Acceptance Process (RAP). In the spring of 2009, the RWMG developed RAP materials and submitted them for the first round of DWR RAP review. Poso Creek Region was granted conditional approval as a Region in 2009. During 2010, the Poso RWMG worked on resolving the conditional approval conditions, added an elected DAC Representative to their Governance, conducted coordination meetings with the neighboring Kern IRWMP regarding Plan overlap, and participated in regional coordination meetings within the Tulare Basin Region to resolve boundaries and discuss inclusion of "white" space between IRWMs. In July 2011, Poso Creek Region received notice from DWR as a fully accepted Region. Documentation of the changes to the Region since Plan adoption is needed for the Plan update. This can be accomplished as part of Section 2 tasks by including a topic discussion in the addendum that captures the Region improvements.

3. Objectives

The Plan contains seven regional objectives as described in Section 1.3.1 (p. 1-21) of adopted Plan and listed following:

- 1) Maintain and improve water supply reliability;
- 2) Maintain groundwater levels at economically viable pumping lifts;
- 3) Protect the quality of groundwater and enhance where practical;
- 4) Maintain water supply costs at a level commensurate with the continued viability of the agricultural economy which has developed in the Region;
- 5) Enhance monitoring activities to meet groundwater level and water quality goals;
- 6) Maintain and/or enhance environmental resources within and outside of the Region; and
- 7) Enhance flood control in the Region.

Planning objectives 1 through 5 were selected by the RWMG based on a consensus reached during a pre-application meeting held on April 20th, 2005. During the subsequent meeting held on January 5, 2006, the RWMG added planning objective 6, and, based on stakeholder input during monthly meetings held in 2006, Planning Objective 7 was added.

The RWMG described the planning objectives as operational objectives as a means to help decide which project components, when implemented, would best meet the Region's priorities; and provide a means to measure performance of implementing each of the water management measures. Operational objectives that contain quantities related to the Resource Management Strategies are shown in Table ES-1 (p. ES-21) and in Table 8-1 (p. 8-2) of the Plan.

The adopted IRWM Plan contains quantifiable objectives that were developed with the focus to address the overarching problem of loss of surface supplies delivered to the Region. The Grant Work Plan will evaluate the need to expand and enhance the regional and operational objectives to reflect the implementation activity the RWMG has conducted since Plan adoption.

These existing regional objectives remain relevant and useful for implementing regional water supply enhancement measures. Since Plan adoption, the RWMG has coordinated planning with sixteen disadvantaged communities, integrated DAC projects into an Implementation Grant, evaluated flood related projects along Poso Creek, and implemented habitat enhancement projects with stakeholders in the Region. Additional objectives will be considered to be added to explicitly describe the additional scope of the IRWM Plan. Documentation of the consideration of additional objectives will be accomplished through a topic discussion included in the addendum to the IRWM Plan.

4. Resource Management Strategies

The adopted IRWM Plan considered water management strategies in accordance with the Proposition 50 Guidelines. Most of these strategies are already practiced in the Region to some extent; however, due to the overwhelming need to address water supply issues within the Region, the RWMG prioritized water management strategies into the following two groups:

Highest Priority Strategies Considered for Project Implementation

- Groundwater management
- Water supply reliability
- Conjunctive management of surface water and groundwater
- Water transfers and exchanges
- Water quality protection and improvement

Strategies Considered for Project Integration

- Ecosystem restoration
- Environmental and habitat protection and improvement
- Flood management
- Imported water
- Land use planning
- NPS pollution control
- Recreation and public access
- Storm water capture and management
- Surface storage
- Water conservation
- Water recycling
- Water and wastewater treatment
- Watershed planning
- Wetlands enhancement and creation

For the IRWM Plan update, the RWMG will document the Resource Management Strategies (RMS) considered under Proposition 84 Guidelines to meet the IRWM objectives and identify which RMS are to

be incorporated into the IRWM Plan Update. The potential effects of climate change on the IRWM region will also be factored into this consideration of RMS. In addition, the RMS to be considered will include the RMS found in Volume 2 of the California Water Plan Update 2009. Documentation will also capture an update of the on-going activity accomplishments in each RMS; this topic discussion will be included in the Plan addendum.

5. Integration

The adopted Plan focused on integrating four of the high priority water management strategies: 1) groundwater management, 2) water supply reliability, 3) conjunctive management of surface water and groundwater, and 4) water transfer/exchange. Based on the overwhelming need to address water supply issues within the Region, the RWMG prioritized water management strategies into two groups; (1) **highest priority strategies considered for implementation**; and (2) **strategies considered for project integration**. As projects have been implemented to meet the highest priority strategies for the Region, secondary benefits for each project are considered and integrated into the *regional* project proposals that fit funding opportunities. These benefits have included, flood management, ecosystem restoration, environmental and habitat protection and improvement, reduction in use of power and energy, DAC project development, and water quality improvements. The active project implementation has effectively integrated participants' resources, fostered relationships among various stakeholders, and developed regional operation agreements. DAC Communities and several stakeholders have been actively involved in the Plan implementation and project development since Plan adoption, these include: Self-Help Enterprises, Tulare Basin Wildlife Partners, Sequoia River Lands, Community Water Center, and The California Water Institute, CSU, Fresno. The RWMG will document the successful implementation actions and continue to integrate regional planning as it updates and improves the IRWM Plan.

6. Project Review Process

Projects are developed by project sponsors and then presented and reviewed by the RWMG and stakeholders as part of the public meetings. A topic discussion documenting the existing project review process will be included as part of the IRWM Plan Update.

7. Impact and Benefit

The adopted IRWM projected an average annual loss of surface water supplies to the Region of 104,000 acre-feet per year if no water management measures were implemented. The adopted IRWM also projected the potential water supply benefits to the region if the IRWM Plan projects were implemented. Water supply and flood benefits and preliminary engineering to estimate costs are necessary to evaluate benefits for individual water conveyance projects proposed in the IRWM Plan. Conducting special studies to estimate individual project benefits will improve the IRWM Plan by advancing projects towards implementation.

8. Plan Performance and Monitoring

Performance measures were not incorporated into the existing Poso Creek IRWM Plan; however, water banked, exchanged, stored and otherwise better managed or captured to offset the project water supply reduction is documented and quantified. Projects implemented as part of the plan have been documented as part of each project's funding requirements. The Grant Work Plan includes the incorporation of more specific performance and monitoring measures relating to implementation of the Plan as a whole.

9. Data Management

The Lead Agency maintains records of Poso IRWM Plan related activities including: the adopted Plan, meeting minutes, public outreach materials, environmental documents, legal agreements and contracts. A goal of the Grant Work Plan is to develop a Poso Creek IRWMP website to manage and make public information about the RWMG's activities. Examples of existing public outreach materials that will be updated as part of the Grant Work Plan are included in this Proposal as an attachment of additional information, electronically upload to DWR's BMS system.

10. Finance

Poso Creek IRWM activities are financed through shared contributions of the members per the MOU and cost-sharing agreement and through state and federal grant funding opportunities. The expenditures from 2009 through the present and their sources are summarized in the above sections.

The Grant Work Plan includes a task to document potential mechanisms to fund ongoing plan activities in addition to the existing cost-sharing component of the Governance MOU.

11. Technical Analysis

The Poso Creek IRWM Plan is based on technical analyses for regional reports dated back to 1979. These studies were used in the evaluation of the present and future utilization of the surface water and groundwater resources of the districts in the RWMG.

Bookman-Edmonston Engineering. 1979. Water Resource Management in the Southern Valley, California – A Study of the Physical and Institutional Management Practices for Surface and Groundwater Utilization. Bakersfield, CA. January 1979.

Associated Engineering Consultants. 1983. Report on Investigation of Optimization and Enhancement of the Water Supplies of Kern County. Bakersfield, CA. January 1983.

Additional technical studies are proposed; these are described in Section 3.3 of the Grant Work Plan.

12. Relation to Local Water Planning

Since the majority of the Poso IRWM Plan Region resides in Kern County, much of the effective integration of water management with land use planning occurs naturally through the various standing committees in Kern County, a well established network of water districts, and interaction with the Kern County Water Agency. District managers belong to a network of active water related committees as indicated in the Water Association of Kern County directory. <http://www.wakc.com>

Three incorporated communities of Shafter, Wasco, and Delano updated their UWMPs in 2011. Mike James (Public Works Director for the City of Shafter), who serves as the DAC Representative on the Poso RWMG, is participating as a stakeholder for the Oversight Advisory Committee for developing the Tulare Lake Basin Disadvantaged Community water Study. Self-Help Enterprises continues to interact with all small communities and communicate their planning needs to the Poso RWMG. The Poso RWMG will maintain the existing interaction with local water planning interests as it implements the IRWMP. The local water planning efforts will be documented as part of the Plan Update and enhanced as part of the Plan Improvements.

13. Relation to Local Land Use Planning

Regarding local land use planning, the Poso RWMG will continue to communicate with the local agencies and county representatives and County Board of Supervisors appointed committees and work groups to provide guidance on land use planning as they update and improve the Poso Plan. Land use is expected to remain primarily agricultural, intertwined with mineral resources and rural communities. The Poso Creek RWMG focus will continue to be on the protection and enhancement of water supply, particularly for agricultural lands, natural resources, and recharge areas. The update will document these efforts and describe how the efforts will continue into the future. The discussion of the interactions of the water districts and the land use agencies will be enhanced in the update.

14. Stakeholder Involvement

The RWMG stays in contact and works together with stakeholders such as municipalities, other water districts, state and federal agencies and legislative representatives at their regular public meetings. During the planning process, communication with neighboring districts occurred and discussions with a larger planning effort for the southern San Joaquin Valley commenced. Special attention will be paid to DAC involvement.

15. Coordination

The Poso Creek RWMG's primary method for coordination is through regular public meetings where they discuss action items and next steps in Plan implementation. In addition to internal coordination, the RWMG coordinates with adjacent entities such as the Kern County Water Agency, the Bureau of Reclamation, and neighboring IRWM groups.

16. Climate Change

The present IRWM Plan contains no discussion of climate change since it was not a requirement at the time the IRWM Plan was adopted. The revised plan will consider issues associated with climate change consistent with the Guidelines.

Section B. Grant Work Plan

Task 1 Verification of Plan Update Outline and Prior Expenses Eligibility with DWR

In order to assure that the update complies with the requirements of DWR, a verification step to confirm the approach is acceptable by DWR staff is necessary. In addition, the prior expenses incurred by the Poso RWMG for completed planning activity related to this scope need to be considered by the DWR for eligible cost match.

It is important to the Poso RWMG to complete the verification step with DWR at the beginning of the planning grant work. The Implementation Grant stipulates that the RWMG must update the IRWM Plan within 2 years from the time of contract approval; the anticipated signing of the Implementation Grant Agreement is to occur by April, 2012. This scope anticipates the update will occur as a series of tasks and written Technical Memorandums (TMs) or Topic Discussions that will be adopted at monthly meeting of the Poso RWMG and incorporated into the Poso IRWM Plan to update and improve the Plan. It is proposed that an Addendum to the adopted IRWM Plan in 2007 be used as the method of

documenting the Plan update. This approach is designed to be efficient with the RWMG's time and resources and allows the RWMG to focus on specific tasks over the time period allowed for the update. On behalf of the Poso Creek RWMG, Semitropic has prepared this proposal and will seek to confirm with the DWR staff that the preferred approach is an acceptable process for the IRWM Plan update to meet the DWR's requirements.

Deliverables: The Task 1 work product will be a final Plan Update Outline and a summary of prior expenses.

Task 2 Website and Public Outreach

Currently the public website for the IRWM Plan is hosted as a page on the Semitropic site. Semitropic has offered to continue hosting the IRWM Plan website. Recently, a Watershed Coordinator grant was awarded to the Tulare Basin which will allow for the Watershed Coordinator grant staff to be available to assist IRWMP groups within the Tulare Basin. In the case of Poso Creek IRWMP, the Watershed Coordinators have been added as stakeholders to the Poso Creek IRWMP. By attending a RWMG monthly meeting, this group has identified the need for a Poso Creek IRWMP website and offered to assist the Poso Creek RWMG in creating a more useful website to improve public outreach for the Poso Creek IRWMP. The structure of, and materials contained in, the current site will be reviewed, a recommendation made for updating materials at regularly scheduled public meetings, and, as appropriate, an updated structure and appearance to the Poso Creek IRWMP website. Examples of existing public materials are included in this proposal as an attachment of additional information, uploaded electronically to the DWR's BMS.

The objective of this Task 2 will be to:

- Assure current materials are available to the public

Task 2 will also provide support to the ongoing Poso Creek IRWM process through the development of public outreach materials and regular updates of the Region's website. Public outreach materials will include:

- Notice and agendas for public IRWM meetings
- Notices and communication materials for stakeholder meetings and public workshops
- Outreach materials for major projects (such as a regional intertie project)
- Systematic updates of the Region's website

Notices and agendas would be coordinated with and approved by the RWMG. Outreach materials would be reviewed and approved by the RWMG. Website updates would be performed pursuant to the procedures developed in Task 2 and would keep all posted materials current.

In order to assure timely public access to IRWM Plan related materials, Task 2 would be implemented simultaneously with Task 1.

Deliverables: The Task 2 work product will be a functional (new and improved) IRWM Plan website with up to date materials, including the 2007 adopted IRWM Plan, a place for meeting notices and summaries, and a place to communicate the progress towards the Plan update. A written procedure for future updates of the website will also be developed. All publically available materials related to the IRWM process will be available on or through the website.

Task 3 IRWM Standards Updates

Task 3 will comprise development of materials to update the IRWM Plan that meet the requirements of the Implementation Grant and are consistent with the standards discussed in Appendix C of the DWR's July 2010 Guidelines. Support provided to the RWMG in any necessary actions to incorporate these materials and procedures in the IRWM Plan and process would be considered as part of Task 4.

To allow flexibility and control the pace and level of effort, Task 3 will be broken into several subtasks. The organization provided in this scope encompasses all 16 issues that must be addressed. For the purposes of this scope of work, related standards have been grouped so they may be considered together. However, this approach will be evaluated in Task 1 and presented to the DWR, who while working with the RWMG, may establish a different relationship among the standards in the Task 3 work-plan.

Deliverables: All subtask efforts will be summarized and as appropriate, documents prepared to support revisions and other modifications to the IRWM Plan, as directed by the RWMG. Development of reports for individual agencies and other support for adoption of formal revisions to the IRWM Plan would be provided as part of Task 4.

3.1 Governance, Coordination, Stakeholder Involvement, and Financing

Based on review of Appendix C, the existing IRWM Plan, the recently developed Governance of the IRWM Plan, and coordination with neighboring IRWMPs involving overlap issues, a statement may be added to address the past and potential future role of the RWMG in development of the IRWM Plan, public noticing, Plan adoption, ensuring future plan implementation activities, decision making, and changes to the RWMG. The interests of the state, federal, local agencies and other stakeholder interests will be considered.

A statement may also be added to discuss the RWMG's approach for ongoing funding of the IRWM Plan process. Based on the evaluation of past plan development costs and project funding information, alternative funding mechanisms for consideration by the RWMG will be presented in the Plan update.

3.2 Region Description, Relationship to Water Planning, and Relationship to Land Use Planning

Preliminary review suggests the Region Description, Relationship to Water Planning, and Relationship to Land Use Planning are adequately addressed in the material prepared for the DWR's Region Acceptance Process (RAP). Within the scope of this subtask, a review of existing land use regulations within the Region and a discussion of the relationship between Land Use Regulation and water management planning within the Region will be developed. The discussion of the role of Poso Creek RWMG water districts participating on local land use committees and work groups will be enhanced in the update. A review of relevant land use planning documents from local land use agencies within the Region and review of factors outlined in Appendix C of the Guidelines will be conducted. In particular, attention to such factors as 1) long term designated land use of irrigated cropland, 2) potential for expanded water supply needs within urbanized areas 3) protection of natural resource areas and recharge areas, and 3) other factors that may influence future water supply or demand. A specific Land Use discussion of these factors and their relationship to water management will be developed for incorporation in the IRWM plan.

3.3 Objectives, Resource Management Strategies, Integration, and Technical Analysis

Review of the objectives, resource management strategies, integration, and technical analysis will occur as part of this update. This review will include coordination with the RWMG based on evaluation of the projects already implemented and anticipated needs of the region. In the adopted plan, the RWMG developed planning and operational objectives. The adopted IRWM Plan's operational objectives have measurable quantities defined, which will be updated based on available technical information. As stated previously, several DACs are actively implementing projects, including the smallest communities who have been assisted in this Region by Self-Help Enterprises, Inc. for over 30 years. Input from the RWMG and collaboration with the stakeholder groups will be considered in preparation of the revised Objectives and RMS integration. A topic discussion will be developed and included as part of the Plan update, which will describe the process used to update objectives, considered resource management strategies, integration, and basis of technical analysis.

3.4 Project Review Process and Impact/Benefit Analysis

Development of projects to address the Regions objectives is a dynamic process. Based on experience in this and other regions, the streamlined approach is to incorporate a list of projects in the IRWM Plan through the use of an Appendix that can periodically be updated and maintained. In relation to the IRWM Plan objectives, a number of specific projects at various stages of development will be categorized. The list of these potential projects may be incorporated into the IRWM Plan so that they are supported for future funding opportunities focused on the needs of the specific projects or a group of projects as part of a Proposal. Periodically, recommendations to the RWMG will include an evaluation of projects for various types of grants, which also includes developing flexible evaluation and ranking criteria. To date, the Poso RWMG, has remained focused on *regional* conveyance improvements that can benefit multiple districts in the region and not on individual district projects.

A process to evaluate the impacts and benefits of implementation of the IRWM Plan must be developed and incorporated into the Plan. Based on the Poso Creek Plan and the expectations outlined in Appendix C of the Guidelines, a proposed process and review will be developed as part of this proposal. Appendix C describes this evaluation as a "benchmark" against which plan implementation is measured; example impacts and benefits are outlined in Table 4 of Appendix C (in the DWR's Guidelines). The adopted IRWM Plan presented an impact and benefit evaluation for the region's water supply. Since specific evaluation of impacts by project depends on the sequence of implementation of projects, several of the water supplies, flood water management, and DAC projects identified to be constructed in the near term are proposed for special studies. Two DAC projects are in need of preliminary engineering, revenue planning, and development of project descriptions for environmental compliance in order to complete an evaluation for implementation of these projects. Flood Management projects, such as, the Poso Creek Flood Control and Water Conservation Reservoir feasibility analysis is also in need of advancing. Regarding the local contribution for the Reservoir feasibility analysis, it will allow the project to advance through the benefit/cost evaluation; large Poso Creek flood events pass water through a dairy prior to entering the DAC community of McFarland.

These special studies are necessary to support the project readiness and selection process of the IRWM Plan. The studies will allow for refinement of water supply and/or flood benefits, preliminary engineering to obtain costs, and pre-feasibility level assessment for each project to allow the Poso RWMG better decision making information and for the projects to be in better position to consider implementation Proposals. After review by the RWMG, revised elements of the Plan addressing the Project Review Process and an Impact/benefit Analysis will be prepared.

3.5 Plan Performance and Monitoring, Data Management

In order to demonstrate progress, the Plan must establish performance criteria and metrics for both meeting plan objectives and implementation of specific projects funded through IRWM Grants. The Poso RWMG is already engaged in considering performance criteria to track progress of several completed regional water conveyance projects. As part of the regular RWMG meetings, districts are working on “Principles of Agreement” to guide water banking, transfers, and exchange agreements among the districts that will utilize recently constructed conveyance facilities. The monitoring of regional water conveyance projects implemented in the region will focus on quantifying the amount of water delivered to the region.

In order to implement the monitoring of the IRWM Plan performance of projects that are not regional conveyance for water supply enhancement, a process to develop a reporting and tracking procedure along with a data management system is needed to allow collection and evaluation of relevant plan and project information. In consultation with the RWMG, the entity responsible for establishing and maintaining data management and reporting system and a proposed funding mechanism for plan monitoring will be established most likely as the Grantee, in contract with DWR to administer implementation Proposals. Costs for Project monitoring will be part of funding for individual projects that are part of the Implementation Proposals. Monitoring of individual projects for the Plan performance and data management for the IRWM Plan will allow fiscal reports of grant-funded projects to be developed in the detail needed to meet relevant grant requirements. A topic discussion will be developed and included in the Poso IRWM Update.

3.6 Climate Change

The present IRWM Plan contains no discussion of climate change since it was not a requirement at the time the IRWM Plan was adopted. New state initiatives outlined in Appendix C now require integrating potential effects of climate change in the IRWM Plan as well as discussion of methods of potential reduction of GHG associated with water management and projects associated with the IRWM Plan. Appendix C states that Regions must

Describe, consider, and address the effects of climate change on their regions and disclose, consider, and reduce when possible GHG emissions when developing and implementing projects

A proposed discussion of climate change issues based on discussion with the RWMG, DWR’s guiding publications, and project CEQA addendums written for project implementation will be developed. Because future requirements for climate change response is uncertain, the focus will be on a discussion that is adequate to address current requirements as outlined in Appendix C, *Table 8 – Climate Change Standard Requirements*. However, it is anticipated there is a need to integrate climate change issues in key IRWM Plan development activities including:

- Plan Objectives and Resource Management Strategies
- Characterizing the proposed projects in relation to their ability to accommodate a range of climate change impacts
- Developing the relationship with the Plan to local water planning and local land use planning
- Developing appropriate metrics in Plan Performance Monitoring to track climate change issues

This approach is intended to satisfy the requirements of the IRWM Plan updated based on current Implementation Grant conditions as well as meet requirements for the next round of IRWM grant solicitations.

Task 4 Adoption of Revised Plan

Task 4 will provide support to the RWMG and individual RWMG members during adoption of revisions to the IRWM Plan. The scope of support includes:

- Drafting elements of reports pertaining to revisions of the Plan (Task 4.1)
- Participation in DWR meetings related to the Plan update on an as needed basis
- Preparation of public information documents relating to RWMG action on Plan revisions
- Addressing public comments and revising the draft (Task 4.2)
- Producing a final document (Task 4.3)

In collaboration with the RWMG and its stakeholders, respond to specific requests for support as they result from Task 3 activities.

Deliverables: Draft Revised Plan, Public Process support for adoption of formal revisions to the IRWM Plan, and support Final Plan adoption.

Task 5 Special Studies for Preliminary Engineering and Benefit/Cost Analysis

Task 5 will provide support to the RWMG and individual RWMG members to conduct studies in order to define project feasibility and incorporation of feasible projects into the IRWM Plan. The specific studies include the following categories:

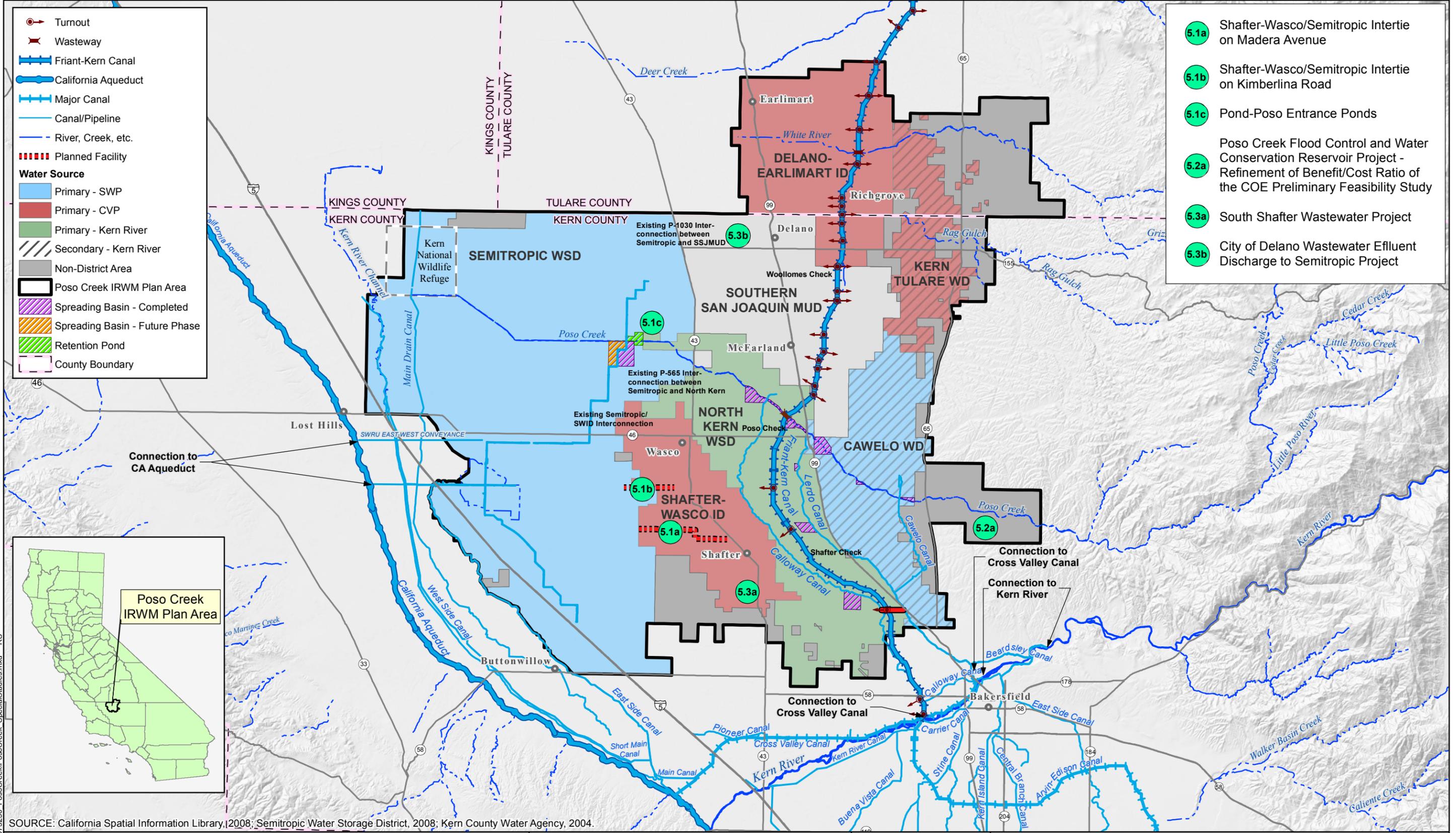
- Regional Water Supply Projects (Task 5.1)
- Flood Management Project Development (Task 5.2)
- DAC Feasibility Studies (Task 5.3)
- Water Supply and Flood Management Project Descriptions for Environmental Compliance to Advance Project Readiness (Task 5.4)

In collaboration with the RWMG and its stakeholders, RWMG members and consultants will prepare the analyses in five steps; project analyses include both feasibility studies and advanced economic analyses:

- 1) Project Administration – RWMG Staff and Consultants
- 2) Workgroup Meetings – RWMG Staff and Consultants
- 3) Project analysis – Consultants
- 4) Project write-ups – Consultants
- 5) Summary for IRWMP – Consultants

Task 6 Grant Administration

Grant administration activities include communicating with and providing regular progress reports to DWR. Formal reports and reimbursement requests will be prepared and submitted on a quarterly schedule. These will include detailed information summarizing the tasks that have been completed, tasks that are ongoing and progress since the last report. A final report will be prepared when the Grant Work Plan is completed, in accordance with the schedule (Attachment 5).



Turnout
 Wasteway
 Friant-Kern Canal
 California Aqueduct
 Major Canal
 Canal/Pipeline
 River, Creek, etc.
 Planned Facility
Water Source
 Primary - SWP
 Primary - CVP
 Primary - Kern River
 Secondary - Kern River
 Non-District Area
 Poso Creek IRWM Plan Area
 Spreading Basin - Completed
 Spreading Basin - Future Phase
 Retention Pond
 County Boundary

5.1a Shafter-Wasco/Semitropic Intertie on Madera Avenue
 5.1b Shafter-Wasco/Semitropic Intertie on Kimberlina Road
 5.1c Pond-Poso Entrance Ponds
 5.2a Poso Creek Flood Control and Water Conservation Reservoir Project - Refinement of Benefit/Cost Ratio of the COE Preliminary Feasibility Study
 5.3a South Shafter Wastewater Project
 5.3b City of Delano Wastewater Effluent Discharge to Semitropic Project



SOURCE: California Spatial Information Library, 2008; Semitropic Water Storage District, 2008; Kern County Water Agency, 2004.



7-Mar-2012 Z:\Projects\073230_PosoCreek\PosoCreek_SpecialStudies.mxd RS

Section C. Work Outside of Grant Funding

Regular meetings of the Poso Creek RWMG and stakeholders are not included in the Grant request budget for future costs. This includes costs for the consultant's to participate and facilitate these meetings and prepare any associated materials, as requested by the RWMG. In addition, the retroactive and proposed costs do not include any in-kind time for the RWMG members to participate in the meetings and implement the tasks in the proposed Grant Work Plan.

Section D. Grant Work Plan Task Number, Description, and Deliverables

Task 1 Verification of Plan Update Outline and Prior Expenses Eligibility with DWR

Deliverables: Plan Update Outline, Summary of Prior Expenses and Confirmation from DWR regarding Plan Update Outline and eligibility of Prior Expenses are acceptable.

Task 2 Website and Public Outreach

Deliverables: Develop functional website for the public to access Plan materials, update public outreach materials, and document written procedure for updating website.

Task 3 IRWM Standards Updates

Task 3.1 - Governance, Coordination, Stakeholder Involvement, and Financing

Deliverables: Technical Memorandum documenting Governance, Coordination, Stakeholder Involvement, Financing, and commitment to update IRWM Plan at 5-year intervals.

Task 3.2 - Region Description, Relationship to Water Planning, and Relationship to Land Use Planning

Deliverables: Technical Memorandum documenting the Region Description and discussion on Land Use factors as they relate to Water Planning.

Task 3.3 - Objectives, Resource Management Strategies, Integration, and Technical Analysis

Deliverables: Technical Memorandum documenting process used to update objectives, considered Resource Management Strategies (RMS), integration of primary RMS with secondary RMS, and updated technical information regarding water supply reliability for region. Integration of DAC, habitat enhancement, and flood management projects developed since Plan adoption in 2007.

Task 3.4 - Project Review Process and Impact/Benefit Analysis

Deliverables: Technical Memorandum documenting benefit and cost analysis performed in the special studies, an updated project list that includes integration of DAC, habitat enhancement, and flood management projects and the project review process used to prioritize the projects for implementation.

Task 3.5 - Plan Performance and Monitoring, Data Management

Deliverables: Technical Memorandum documenting procedures developed to track and report Plan implementation progress.

Task 3.6 - Climate Change

Deliverables: Technical Memorandum (TM) documenting the integration of climate change discussion into the Plan through integrating climate change into the discussions for objectives, RMS, project review process, impact/benefit analysis, relationship to local water planning and land use planning, and developing appropriate metrics in plan performance monitoring. In addition, the TM will document how the Plan will characterize the proposed projects in relation to their ability to accommodate a range of climate change impacts.

Task 4 Adoption of Revised Plan

Deliverables: Draft Revised Plan, public review of Draft Revised Plan, and adoption of Revised Plan

Task 5 Special Studies for Preliminary Engineering and Benefit/Cost Analysis

Deliverable: A technical memorandum will be written for each of the three regional water supply and flood management projects that include the following:

- 1) Project Description
- 2) Water Supply Assessment
- 3) Quantity of Water Supply Conserved and/or Better Managed given (wet, dry, normal) conditions
- 4) Preliminary Engineering and Alignment
- 5) Preliminary Cost Estimate for Construction
- 6) Estimate of 'other' benefits including:
 - a. Flood
 - b. Energy
 - c. Habitat
 - d. GHG Reduction and Climate Change
 - e. Alternative Water Supply
- 7) Benefits/Cost

Task 5.1 - Regional Water Supply and Flood Management Projects

- 5.1a) Madera Avenue Intertie
- 5.1b) Kimberlina Road Intertie
- 5.1c) Pond-Poso Entry Ponds

Task 5.2 – Flood Management Project Development

5.2a) Poso Creek Flood Control and Water Conservation Reservoir – Refinement of Benefit/Cost Ratio of the COE Preliminary feasibility Study [The local contribution will allow the project to advance through the benefit/cost evaluation; large Poso Creek flood events pass water through a dairy prior to entering the DAC community of McFarland.]

Deliverables: Local contribution towards Corp of Engineer’s Feasibility Analysis and summary of Feasibility Analysis.

5.2b) Development of Project Descriptions and Benefit/Cost Analysis for Integration of Flood Management Projects into Poso Creek IRWM Plan

The Work Plan items for updating the Flood Management Portions of the Poso Creek IRWMP include the following topics:

- 1) Review existing project descriptions for applicability to flood management
- 2) Identify additional flood management activities and projects
- 3) Determine flood damage reduction benefits from each project
- 4) Incorporate the final activities and projects into the updated IRWM Plan

Deliverables: Identification of Flood Management Projects, Development of Project Descriptions, limited Benefit/Cost Analysis, and Integration of Flood Management Project into Poso IRWM Plan.

Task 5.3 - DAC Projects Feasibility Studies

Deliverables: A technical memorandum will be written for each of the two DAC projects documenting the completion of the listed tasks for each feasibility study.

5.3a) South Shafter Wastewater Project

- 1) Update Preliminary Engineering Report
- 2) Revenue Plan
- 3) Form County Service Area (CSA) for Purpose of Sewer Maintenance
- 4) Environmental Compliance (Updated CEQA)

5.3b) City of Delano Wastewater Effluent Discharge to Semitropic Project

- 1) Preliminary Engineering and Cost/Benefit Analysis
- 2) Project Description for Environmental Compliance
- 3) Develop Agreement for Accepting Effluent

Task 5.4 – Project Descriptions for Water Supply and Flood Management for Environmental Compliance to advance Project Readiness

Deliverables: For each of the three regional water supply and flood management projects, a project description, suitable for use in CEQA and NEPA documents, will be developed.

Task 6 Grant Administration

Deliverables: Coordination with DWR, develop Grantee Agreement, Progress Reports, Reimbursement Reports, Quarterly reports, and Final Report.