

Attachment 3: Work Plan

Attachment 3 consists of the following:

✓ **Work Plan**

The following Work Plan has been prepared to document all necessary details to show the process by which the Upper Mokelumne River Watershed Authority (UMRWA) and the Northeastern San Joaquin County Groundwater Banking Authority (GBA) will complete the Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program.

MOKELUMNE WATERSHED INTERREGIONAL SUSTAINABILITY EVALUATION (WISE) PROGRAM

Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

March 9, 2012



MOKELUMNE WATERSHED INTERREGIONAL SUSTAINABILITY EVALUATION (WISE) PROGRAM

Contents

Introduction.....	4
Current Status in Meeting IRWM Plan Standards.....	5
ESJ and MAC Interregional Conflicts and Synergies.....	7
Mokelumne River Forum.....	9
Grant Work Plan Content for the Mokelumne WISE Program.....	10
TASK 1: PROGRAM DEVELOPMENT PROCESS.....	11
Subtask 1.1: Mokelumne WISE Program Collaborative Decision Making Process.....	12
Subtask 1.2: Understanding Stakeholder Groups’ Needs.....	13
Subtask 1.3: Program Development Process.....	14
TASK 2: PROGRAM ASSESSMENT PARAMETERS AND MEASURES.....	14
TASK 3: WATER SUPPLY AVAILABILITY ANALYSIS.....	15
TASK 4: DEVELOP MOKELUMNE WISE PROGRAM ALTERNATIVES.....	17
TASK 5: ASSESS MOKELUMNE WISE PROGRAM ALTERNATIVES.....	17
TASK 6: OPPORTUNITIES AND CONSTRAINTS ANALYSIS.....	18
Subtask 6.1: Technical Feasibility.....	18
Subtask 6.2: Surface Water Availability and Water Rights Determination.....	18
Subtask 6.3: Environmental Resources.....	19
Subtask 6.4: Cultural Resources.....	20
Subtask 6.5: Program Costs.....	21
Subtask 6.6: Economic Impacts (Benefits and Costs).....	21
Subtask 6.7: Allocation of Benefits and Costs.....	22
TASK 7: SELECT PREFERRED PROGRAM ALTERNATIVE.....	23
TASK 8: PUBLIC AND DAC OUTREACH.....	23
Subtask 8.1: Public and DAC Outreach Plan.....	23
Subtask 8.2: Public and DAC Outreach Implementation.....	24
TASK 9: IMPLEMENTATION PLAN AND IRWM PLAN INTEGRATION.....	24
Subtask 9.1: Implementation Plan.....	24
Subtask 9.2: IRWM Plan Integration.....	25
TASK 10: GRANT ADMINISTRATION.....	26
Subtask 10.1 – DWR Prop 84 Funding Agreement Administration.....	26

**Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program
Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3**

Subtask 10.2 – Consultant Contract Administration 27

Subtask 10.3 – Reporting (Quarterly and Final Report) 27

Additional IRWM Plan Work 27

Appendices

Appendix A: IRCUP Description in the California Water Plan 2009 Update 28

Appendix B: Mokelumne WISE Program Work Plan, Budget, and Schedule Scope of Work..... 30

Appendix C: Bear River Reservoir Expansion Project, Preliminary Feasibility Study Scope of Work . 32

Appendix D: MOCASIM Model Extension Scope of Work 34

MOKELUMNE WATERSHED INTERREGIONAL SUSTAINABILITY EVALUATION (WISE) PROGRAM

Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

INTRODUCTION

This interregional planning grant application was developed by a diverse group of stakeholders representing water supply, water quality, and environmental interests in the Mokelumne River watershed. Although the Mokelumne-Amador-Calaveras (MAC) and Eastern San Joaquin (ESJ) Integrated Regional Water Management (IRWM) Regions are separate, water agency and other stakeholders from the adjoining regions have been engaged in regular coordination and communication through the Mokelumne River Forum for more than six years regarding common interests and potential mutually beneficial opportunities. Through this regular dialogue, stakeholders of these two regions have recognized the importance of interregional coordination in evaluating potential opportunities and establishing multi-benefit interregional programs and projects. The two regions also realize that working together, rather than independently, is the more promising approach to addressing critical water resource issues that span the two adjoining regions.

The MAC and ESJ IRWM Regions are currently updating their respective IRWM Plans to meet current Plan Standards. While each of the IRWM Plans focuses on meeting needs within the individual region, the different water resource characteristics of the two regions pose a unique opportunity to meet a broader range of needs and provide greater benefits through interregional cooperation. Specifically, because the MAC Region has predominantly surface water supplies, and the adjacent ESJ Region has predominantly groundwater supplies with available basin capacity, working cooperatively may result in identification of water resource management opportunities that would further the goals of each Region's IRWM Plan.

This interregional planning grant application seeks funding to implement the Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program. This application represents the culmination of years of collaboration by a varied group of stakeholders in the MAC and ESJ IRWM regions to identify comprehensive and sustainable approaches to water resources management in the Mokelumne watershed. This Program builds upon earlier interregional project concepts, including the Inter-Regional Conjunctive Use Project (IRCUP). Despite being featured in the 2009 California Water Plan as a model interregional project, the IRCUP's relatively narrow scope and strong focus on water supply benefits were limiting. The concept did not promote a thorough, holistic evaluation of the wide array of water sources and strategies that could be implemented to balance water supplies and demands while minimizing environmental impacts. In contrast, the proposed Mokelumne WISE Program will provide greater benefits than the IRCUP concept by identifying a more sustainable approach to optimizing water resources in the MAC and ESJ Regions that fully accounts for potential environmental impacts and integrates environmental protection and enhancement among the primary program objectives.

This Attachment is organized into the following sections:

- **Current Status in Meeting IRWM Plan Standards:** This section briefly describes the programs in place to update the MAC and ESJ IRWM plans to comply with the IRWM Plan

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

standards and justifies the need for the proposed work. This section also explains how the stakeholders, through the Mokelumne River Forum, have evolved the initial, but narrowly focused, IRCUP concept to a more comprehensive interregional water resource program. Also summarized are the MAC and ESJ interregional conflicts and synergies that created this opportunity for an interregional program that can fulfill a broader range of needs and provide greater benefits than either region could fulfill independently.

- **Grant Work Plan Content for the Mokelumne WISE Program:** This section presents specific work plan tasks to be performed as part of the grant proposal, including the submittal of progress reports, a final report, and other deliverables expected to be generated during performance of the proposal. Work items that facilitate and support the involvement of disadvantaged communities (DACs) are presented as a separate task (Task 8 – Public and DAC Outreach).
- **Additional IRWM Plan Work:** Because no work will be performed beyond the grant scope of work, this section does not apply.

Completion of the Mokelumne WISE Program is essential to developing a mutually beneficial, multi-benefit water resources program that will help the MAC and ESJ IRWM Regions better manage their water and environmental resources, and meet their associated IRWM Plan goals and objectives. Additional detail is provided in the following sections.

CURRENT STATUS IN MEETING IRWM PLAN STANDARDS

The Mokelumne-Amador-Calaveras (MAC) Integrated Regional Water Management (IRWM) planning Region and the Eastern San Joaquin (ESJ) IRWM Region are currently in the process of updating their respective IRWM Plans to meet current Plan Standards. The MAC and ESJ regions each separately applied for and received IRWM planning grant funding during the Proposition 84 (Prop 84), Round 1 solicitation to update their existing IRMW Plans. The Upper Mokelumne River Watershed Authority (UMRWA), the official Regional Water Management Group (RWMG) of the MAC region, is updating the original MAC IRWM Plan adopted in 2006. The Northeastern San Joaquin County Groundwater Banking Authority (GBA), the RWMG of the ESJ region, is updating the original ESJ IRWMP, adopted in 2007.

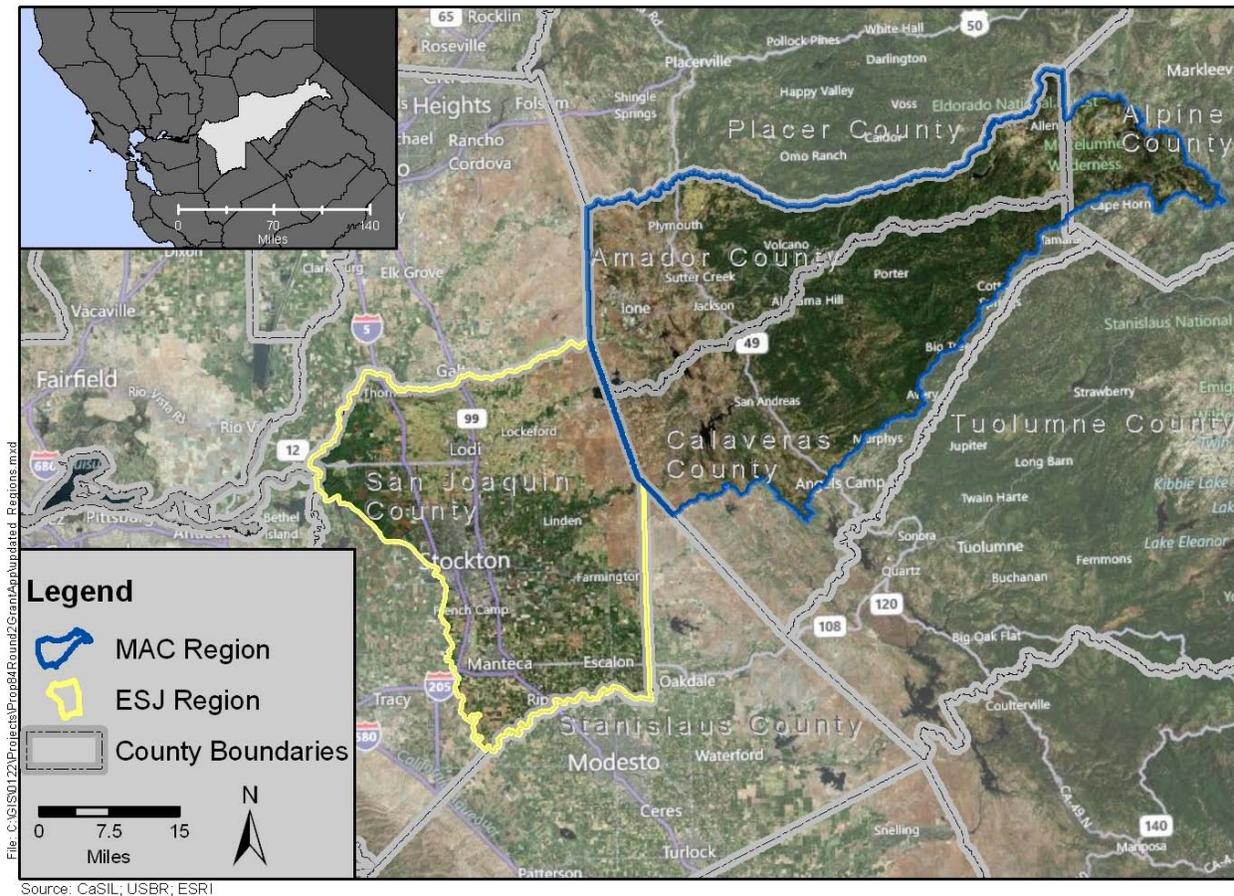
The 2006 MAC IRWM Plan and the 2007 ESJ IRWM Plan were first completed based on the Proposition 50 Guidelines. In order to meet the current IRWM Plan Standards, as described in the *Proposition 84 & Proposition 1E IRWM Guidelines* (August 2010), multiple sections of the existing IRWM Plans are currently being updated and new sections are being developed. The MAC Plan will be updated to comply with the current Plan Standards and will be adopted by the UMRWA Board of Directors by March 2013. The ESJ IRWMP will be revised to comply with Prop 84 Plan Standards and will be adopted by the GBA in April 2013.

No additional funding is being requested to create IRWM Plans that comply with the Proposition 84 IRWM Plan Standards. Instead, UMRWA and GBA have come together to submit this joint, interregional planning grant application in order to strengthen their respective IRWM Plans by jointly determining a preferred water resource management program to the mutual benefit of both regions and the State as a whole. The preferred program will be selected through a facilitated, interregional, stakeholder-driven process that evaluates water supply, conjunctive use options, groundwater recharge options, environmental opportunities and constraints, and technical, social, institutional, and economic feasibilities. The proposed interregional stakeholder planning process is designed to:

**Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program
 Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3**

- Identify, through a holistic water resources sustainability evaluation, a preferred approach to implementing a broadly accepted, integrated water supply and groundwater recharge program that employs a variety of supply alternatives and recognizes the need for a long-term balance of supply and demand.
- Provide benefits to both the MAC and ESJ regions that can only be achieved through the interregional cooperation enabled by the proposed grant.

Figure 1: MAC and ESJ IRWM Regional Boundaries



As shown in Figure 1, the eastern border of the ESJ region is the western border of the MAC region. The county line between Amador County and San Joaquin County, and the county line between Calaveras County, Stanislaus County, and portions of San Joaquin County, constitute the interface between the two regions. The two IRWM regions have remained separate because of the differing water supply issues, with the ESJ region predominately focused on groundwater and the MAC region on surface water. In addition, the significant number of agencies and non-governmental organizations interested in water resource issues in both the valley and the foothills and the significant physical distance between the outlying areas of the two regions would impede effective stakeholder participation. Although they are separate regions, some of the participants of the MAC and ESJ regions have been engaged in regular coordination and communication (through the Mokelumne River Forum) for more than six years regarding their common interests and issues, with the goal of evaluating interregional opportunities to enhance integrated water management efforts. Through the regular dialogue that has taken place over this time, the two regions have recognized a

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

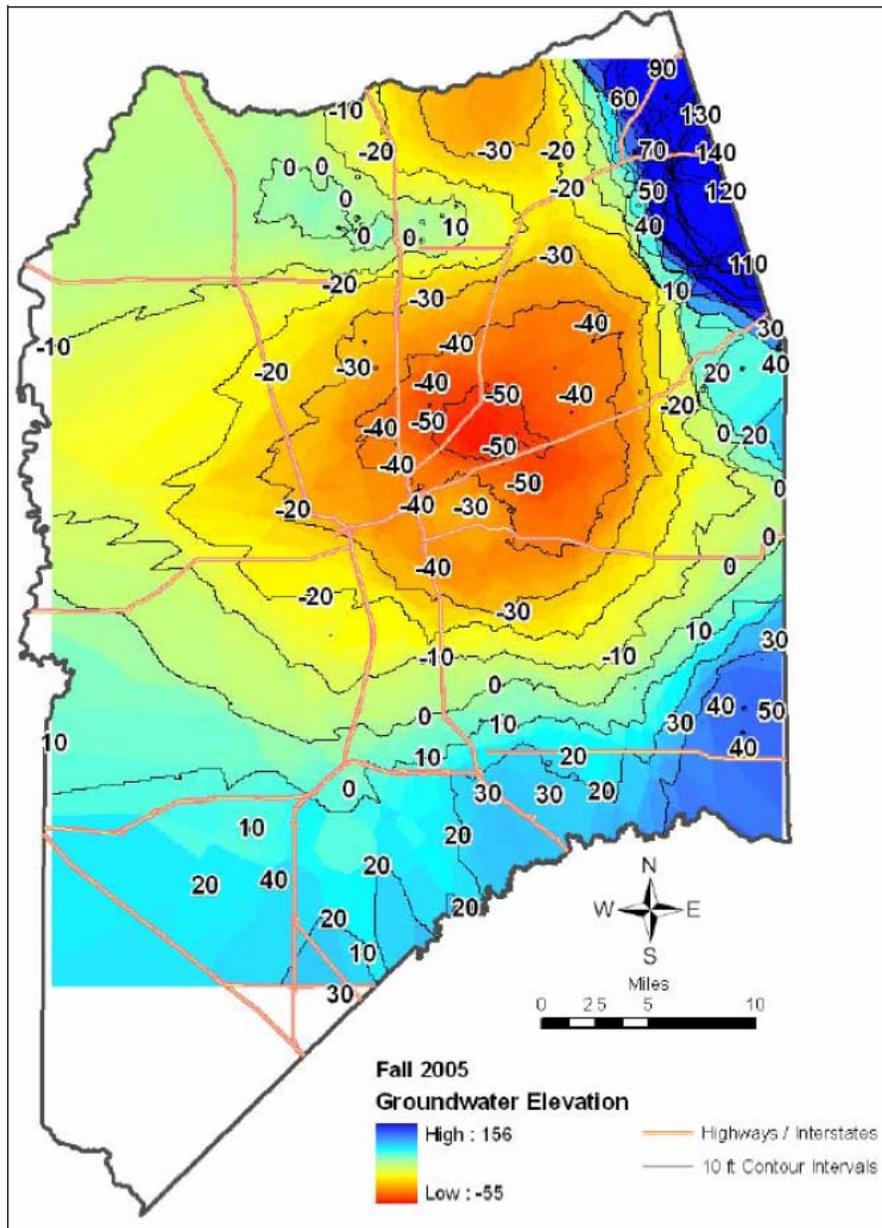
need for effective interregional coordination as the basis for evaluating potential opportunities and establishing multi-benefit interregional programs and projects. The two regions realize that working together, rather than independently, is the most promising approach to addressing critical water resource issues spanning the two adjoining regions. They also understand that broad and diverse stakeholder agreement is key to the success of any interregional project.

ESJ and MAC Interregional Conflicts and Synergies

Because the ESJ and MAC IRWM regions are adjacent and share common interests and issues, the two IRWM Plans include a joint chapter regarding interregional projects. One of these interregional projects, called the IRCUP (Inter-regional Conjunctive Use Project), is featured as an example of interregional collaboration in the California Water Plan 2009 Update (see Appendix A). The proposed project, the Mokelumne WISE Program, represents the culmination of six years of collaboration on the part of a diverse group of stakeholders in the Mokelumne River watershed. Despite being featured in the 2009 California Water Plan as a model interregional project, IRCUP's relatively narrow scope and strong focus on water supply benefits precluded a thorough, holistic evaluation of the wide array of water sources and strategies that could be implemented to balance water supplies and demands while minimizing environmental impacts. In contrast, the proposed Mokelumne WISE Program will provide greater benefits than the IRCUP concept by identifying a sustainable approach to optimizing water resources in the MAC and ESJ Regions that fully accounts for potential environmental impacts and integrates environmental protection and enhancement among the primary program objectives.

While each of the respective IRWM Plans focuses on meeting needs within the individual region, the different water resource characteristics of the two regions pose a unique opportunity to meet a broader range of needs and provide greater benefits through interregional cooperation. Specifically, because the MAC Region has predominantly surface water supply, and the adjacent ESJ Region has predominantly groundwater supply with available basin capacity, working cooperatively may result in identification of conjunctive use opportunities that would further the goals of each Region's IRWM Plan. The overall concept is to store a portion of available water supplies in the Eastern San Joaquin Groundwater Basin for subsequent regional and interregional use to meet the diverse needs of the project partners and stakeholders. San Joaquin County currently relies on groundwater for 60% of its supplies and surface water for the remaining 40%. The Eastern San Joaquin groundwater sub-basin is overdrafted at a rate of 150,000 to 200,000 AFY. As shown in Figure 2, as of fall 2005, there was significant groundwater overdraft throughout the sub-basin, with the greatest depression east of the City of Stockton. Degradation of water quality due to saline migration threatens the long-term sustainability of the groundwater basin and in the near-term, users face failing groundwater wells, reduced pumping rates, and poor water quality.

Figure 2: Fall 2005 Groundwater Levels in the Eastern San Joaquin Groundwater Sub-Basin



Source: 2007 ESJ IRWMP

Numerous conjunctive use projects have been proposed to restore the groundwater aquifer in the San Joaquin Basin. Initially, the IRCUP was conceptualized to bank surplus surface water from the Mokelumne River in the San Joaquin Groundwater Basin and recharge the aquifer. Over the past several years, through close coordination with a broad array of stakeholders from both regions, IRCUP has evolved to include a more robust evaluation of the wide range of benefits and impacts of a potential interregional project. The evolved concept has come to be referred to as the Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program.

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

The purpose of the Mokelumne WISE Program is to provide interregional water supply, water quality, and environmental benefits in Amador, Calaveras, and San Joaquin Counties, and within the East Bay Municipal Utility District (EBMUD) service area. The Mokelumne WISE Program will demonstrate the feasibility of incremental conjunctive management of the Eastern San Joaquin Groundwater Basin and could serve as the basis for future projects statewide. The Program will further the GBA's groundwater basin management objectives by contributing to the goal of solving the groundwater overdraft in the critical areas within San Joaquin County. In the Eastern San Joaquin Groundwater Basin Groundwater Management Plan (GWMP) (September 2004), the GBA identifies a conjunctive use program as a key element in fulfilling the purpose of its GWMP to ensure the sustainability of groundwater supplies in Eastern San Joaquin County. Completion of an interregional watershed sustainability evaluation, specifically the Mokelumne WISE Program, is essential to developing a mutually beneficial, multi-benefit conjunctive use program that will help the MAC and ESJ IRWM Regions better manage their water and environmental resources, and meet their associated IRWM Plan goals and objectives.

Mokelumne River Forum

The interregional sections of both Plans identify the Mokelumne River Forum (MRF) as the appropriate venue for working with stakeholders to develop potential interregional projects that improve water resources management within the two adjacent planning regions. Since 2005, the MRF has been the vehicle for both regions to coordinate beyond IRWM regional boundaries. The MRF provides an opportunity for ongoing coordination and exploration of potential interregional water resource project alternatives, specifically for agencies that rely on the Mokelumne River as a water supply. The MRF aims to improve water reliability by:

- Developing regionally-supported projects
- Creating long-term, cooperating working relationships among Mokelumne water interests
- Maintaining and improving regional economic health
- Preventing environmental degradation that can affect water quality

The MRF is an open stakeholder process intended to resolve conflicts and improve water supply availability and reliability in the Mokelumne River basin. In April 2005, members of the MRF signed a Memorandum of Understanding (MOU) and agreed to work cooperatively to develop mutually beneficial solutions to meet water supply and related needs of the region that can be widely accepted. MOU signatories include:

- The State of California Department of Water Resources (DWR)
- Alpine County, Amador County
- Amador Water Agency
- Calaveras County Water District
- Calaveras Public Utilities District (CPUD)
- The City of Lodi
- The City of Stockton
- East Bay Municipal Utility District (EBMUD)
- Jackson Valley Irrigation District (JVID)
- North San Joaquin Water Conservation District
- San Joaquin County Flood Control and Water Conservation District
- Mokelumne River Water and Power Authority

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

- Stockton East Water District
- Central San Joaquin Water Conservation District
- Woodbridge Irrigation District
- The San Joaquin Farm Bureau Federation.

The MRF is also open to other organizations and groups that are not MOU signatories but have a direct interest in the Forum's goals. A collaborative planning process is underway in which MRF participants are coordinating various water resources planning efforts across regional boundaries with respect to river hydrology, facilities, infrastructure and institutional arrangements required for the interregional projects. The MRF has been very effective in developing improved understanding and expanded purpose among the valley interests (within the ESJ region) and the foothill interests (within the MAC region). Indeed, the MRF has been instrumental in brokering a more comprehensive approach to integrated management of the Mokelumne River to extend beyond the confines of a conjunctive use project.

This improved understanding is evidenced by an MOU between the two regions to move forward with this grant application for the Mokelumne WISE Program. UMRWA and the GBA entered into an MOU (included in Attachment 1) on October 10, 2011 agreeing to prepare and submit this joint Proposition 84 interregional planning grant application to seek funding for investigating interregional opportunities that further the water supply, water quality, and environmental stewardship objectives of each region.

Given the nature of water resources in the MAC and ESJ Regions--with the MAC region largely dependent on surface water and the ESJ region largely dependent on groundwater-- evaluating water supply, water quality, and environmental stewardship opportunities within a single region limits each region's ability to optimize water resources for maximum benefit. As described in the Grant Work Plan Content section, completing the proposed assessment will strengthen both IRWM Plans by providing a comprehensive understanding of opportunities and alternatives for enhanced integrated water resource management. Joint determination of a preferred program and implementation plan will further provide the blueprint for achieving bi-regional consensus with respect to conjunctive use of surface water and groundwater resources. Clearly, completion of the Mokelumne WISE Program will contribute to achieving the goals and objectives identified for the MAC and ESJ Regions to a far greater degree than would be possible by either region individually.

The work plan to complete the Mokelumne WISE Program is described in the following section. This work plan aligns with the tasks described in Attachment 4 – Budget and Attachment 5 – Schedule.

GRANT WORK PLAN CONTENT FOR THE MOKELUMNE WISE PROGRAM

The Mokelumne River flows westward from the Sierra Nevada through the foothills (the MAC Region) into the Sacramento-San Joaquin River Delta (the ESJ Region) and provides water for the environment, agriculture, hydropower generation, and communities in both the upper and lower watersheds. Water is also exported for use in the EBMUD service area. As previously described, the MRF, a facilitated collaborative of water, environmental and other interests, has met since 2006 to discuss how to meet water management needs in the Sierra foothills, San Joaquin County, and the East Bay while addressing environmental and natural resource concerns. The result of those discussions is a concept called the Mokelumne WISE Program.

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

The Mokelumne WISE Program will:

- 1) Evaluate alternatives for integrated water management on an interregional scale, with the potential to provide water supply and environmental benefits to a broad range of Mokelumne River basin stakeholders
- 2) Identify a mutually preferred program alternative
- 3) Develop a bi-regional plan to implement the preferred alternative

Envisioned program benefits include:

- Storage and supplies for drought protection and to meet the future water needs of the citizens of Amador and Calaveras Counties.
- Long-term drought protection for areas of Alameda and Contra Costa Counties that are served by EBMUD.
- Drought protection and water quality protection and enhancement through creation of a hydraulic barrier to prevent further salinity intrusion in the Eastern San Joaquin Groundwater Basin.
- Replenishment of the groundwater basin by storing wet weather flows and then using that stored water to meet the supply and environmental needs of the citizens overlying the Eastern San Joaquin Groundwater Basin.
- Maintained and improved environmental and natural resource conditions within the watershed, including Mokelumne River fisheries.
- Long-term balance of water supply and demand.
- Resolution of long-standing regional and interregional conflicts, which in turn could lead to cooperative approaches and funding for demand management, water use efficiency, water reclamation and reuse, watershed protection and improvement, aquatic and terrestrial habitat improvement, and recreational benefits across jurisdictional boundaries.

The Mokelumne WISE Program will develop and evaluate alternatives to optimize water resources management within the MAC and ESJ Regions and achieve the objectives outlined above. As part of Mokelumne WISE Program, interregional conjunctive use alternatives would be explored, in which potential excess water supply would be captured and diverted to groundwater recharge facilities in San Joaquin and Western Calaveras counties. In dry years, this stored water would be extracted to supplement available surface water supply. Groundwater recharge associated with Mokelumne WISE Program alternatives could fully or partially mitigate overdraft conditions in San Joaquin County and saline intrusion from Delta.

The ultimate purpose of this interregional planning project is to develop a broadly supported preferred water resources program that meets both regions' needs as well as the needs of regional stakeholders and interest groups. The documents and analyses performed under this scope of work will be incorporated into the MAC and ESJ IRWM Plan updates, currently underway.

TASK 1: PROGRAM DEVELOPMENT PROCESS

Under this task, one procedural and one educational element will be addressed. The procedural element (Subtask 1.1) is the identification of stakeholders, as well as the development and adoption of a facilitated discussion/ negotiation process and the associated organizational requirements.

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

Following Subtask 1.1 the educational element (Subtask 1.2) will be implemented. This element will assist stakeholders in understanding one another's needs and motivations as they relate to a Mokelumne interregional conjunctive use program, with the goal of developing a shared understanding of what each participant hopes to achieve through the planning process.

The third subtask (Subtask 1.3) is provided to ensure the overall program development process is managed to a successful conclusion. This subtask includes regular coordination between and communication with the sponsoring RWMGs (the GBA and UMRWA), key local government agencies, stakeholders, consultants and, as needed, legal counsel.

Subtask 1.1: Mokelumne WISE Program Collaborative Decision Making Process

This subtask includes developing the Mokelumne WISE work plan, budget, and schedule, as well as negotiating and adopting a Mokelumne WISE Collaborative Decision-Making Process and organizational structure to be used in decision-making through a stakeholder process. The Mokelumne WISE work plan, schedule, and fee have been developed through completion of the scope of work included in Appendix B, and through past in-kind services including assistance with the development of the work plan, schedule, and fee, and preparation for and attendance at three Mokelumne River Forum meetings.

This task also includes development of a mutually-agreeable governance structure for the planning process that addresses representation, the convening of a Mokelumne WISE Program stakeholder group based on that structure, and the adoption of mutually acceptable process guidelines for participation and decision-making. The stakeholder group will jointly develop alternative programs and ultimately a mutually preferred program. The stakeholder group to facilitate Mokelumne WISE Program decision-making may be the MRF or a new stakeholder forum-like group. The decision-making process and organizational structure developed under this subtask will be applied and followed in completing all subsequent tasks.

Initially, a series of small group meetings and/or interviews will be conducted to identify key interests related to decision making and developing collaborative decision-making process options, as well as potential forums for facilitating and managing the Mokelumne WISE Program among local watershed stakeholders invited to or interested in participating in the open process.

Following the initial small group meetings and/or interviews, the Collaborative Decision-Making Process options and Organization Structure options, which will detail proposed decision-making processes, organization, and participation methods, will be summarized in a draft technical memorandum (TM) for review by the stakeholder groups. The TM will be presented to the stakeholder group in a workshop setting, where the proposed draft process and structure options will be reviewed to identify and agree upon a preferred process and structure. The workshop will also allow for discussion and identification of any stakeholders that may potentially be missing from the process. The draft TM will be updated and finalized to reflect the preferred Collaborative Decision-Making Process and Organizational Structure based on input received in the meeting. A charter will be developed for the organization structure; if the MRF is the preferred structure, its existing charter will be updated to reflect any changes necessary. A draft charter (or draft changes to the existing MRF charter) will be prepared for review by the stakeholder group and will be finalized based on stakeholder input.

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

Subtask 1.1 Deliverables:

- *Structured interviews and small group meetings to identify process and decision-making interests and develop recommendations.*
- *Draft TM summarizing process options and recommendations.*
- *One stakeholder workshop to review options and agree upon preferred Collaborative Decision-Making Process and Organizational Structure, and to identify any stakeholders that may be missing from the process.*
- *Final TM summarizing process and structure options and the preferred Collaborative Decision-Making Process and Organizational Structure.*
- *Draft and Final charter for the preferred organizational structure (or draft and final updates to the existing MRF charter) for stakeholder approval.*

Subtask 1.2: Understanding Stakeholder Groups' Needs

There are a minimum of three stakeholder groups that will participate in the Mokelumne WISE Program: GBA, UMRWA, and an environmental/conservation focused subgroup of the MRF. Other subgroups may be added as additional key stakeholders are identified or express interest in participating in the process. Each group will meet internally to:

- Develop program objectives for the Mokelumne WISE Program
- Prepare a PowerPoint presentation that summarizes their specific goals and needs for the project

A fourth, joint meeting will be held to allow each group to present its goals and objectives for the Mokelumne WISE Program. A facilitated discussion of the key program objectives will develop a common set of joint program objectives that builds upon the individual objectives of each stakeholder group. The purpose of the meeting will be for each stakeholder group to better understand **all** of the key stakeholders' needs and motivations as they relate to the Mokelumne WISE Program.

The joint program objectives will integrate the water resource interests of the MAC Region, the water resource interests of the ESJ Region, the environmental and conservation interests of both regions, and other stakeholders who participate in the process. Together, these will serve as the joint program objectives, providing a road map for what the Mokelumne WISE Program will accomplish.

Subtask 1.2 Deliverables:

- *Meeting materials and notes from three meetings to support development of draft program objectives by each stakeholder group.*
- *Meeting materials and notes from a combined stakeholder meeting to view the three sets of program objectives and to review and discuss the associated materials and water resource issues.*
- *Meeting materials and notes from two facilitated stakeholder meeting to develop joint program objectives for the Mokelumne WISE Program.*
- *Joint program objectives for Mokelumne WISE Program.*

Subtask 1.3: Program Development Process

This subtask provides for communication and coordination among the stakeholders, consultants, and GBA and UMRWA Boards of Directors involved in the Mokelumne WISE Program. Work to be conducted under this subtask includes, but is not limited to:

- General coordination of project development, completion and production
- Meetings and conference calls regarding project status, schedule and/or budget.
- Quarterly reports and presentations to GBA and UMRWA Boards of Directors regarding policy and procedural matters, project status, and deliverables.
- Regular communication with stakeholder participants regarding program development and completion.
- Counsel review of any work products with legal implications to GBA and UMRWA (e.g. governance options, CEQA compliance).
- Coordination of Implementation Plan adoption by participating agencies and stakeholder groups.

Subtask 1.3 Deliverables:

- Monthly or as-needed project coordination meetings and/or conference calls.
- Quarterly progress reports to Board Advisory Committee and Board of Directors.
- CEQA determination by Authority Counsel.
- Supplemental CEQA documentation (if required).
- Presentation materials and meeting attendance to facilitate plan adoption by participating agencies.

TASK 2: PROGRAM ASSESSMENT PARAMETERS AND MEASURES

The purpose of Task 2 is to establish the desired outcomes that will be used to analyze and assess Mokelumne WISE Program alternatives, and to define how those outcomes will be measured. The outcomes will be based on the objectives established under Subtask 1.2 and will be characterized as benefits to be achieved by the program or consequences to be avoided, minimized and/or mitigated by the program.

A stakeholder meeting will be conducted to brainstorm and identify the benefits to be achieved and consequences to be avoided. Benefits to be achieved through the Mokelumne WISE Program may include, but are not limited to:

- Groundwater basin restoration
- Water supply reliability enhancements (what, when, where, how much)
- Water quality protection and enhancement
- Environmental resource protection and restoration
- Expanded programs for water efficiency and reclamation
- Climate change adaptation and / or mitigation benefits
- Long-term balance of water supply and demand
- Creation of an environmentally, socially, and economically acceptable alternative

Similarly, consequences to be avoided may include, but are not limited to:

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

- Harm to fish and wildlife and their habitat, including potential upstream restoration habitat for salmon and steelhead
- Negative impacts to current and potential future recreational use
- Harm to cultural and historical resources
- Conflicts with existing licenses and agreements
- Water quality degradation
- Negative changes to volume and timing of instream flows

The list of identified benefits and consequences (i.e. outcomes) will be compiled and organized, and performance measures will be identified for each outcome. For example, performance measures may be developed that focus on groundwater levels, withdrawal rates, timing, and diversion amounts; wildlife and fish impacts; timing and quantity of river flows and water temperatures; and others. The outcomes and measures will be summarized in a draft TM for review by the stakeholder groups. A facilitated meeting will be held to review the draft outcomes and measures. The TM will be finalized based on stakeholder comments.

Task 2 Deliverables:

- *First WISE Program stakeholder meeting to identify preliminary benefits and outcomes.*
- *Draft Mokelumne WISE Program Outcomes and Measures TM.*
- *Second WISE Program stakeholder group to review and adopt final benefits and consequences.*
- *Final Mokelumne WISE Program Outcomes and Measures TM.*

TASK 3: WATER SUPPLY AVAILABILITY ANALYSIS

In order to accurately develop a program that optimizes water supply, water quality, and environmental stewardship on an interregional conjunctive management basis, key background information must first be developed. A critical piece of information to be determined is the amount of water that is potentially available in wet years from the Mokelumne River and from other potential sources. Additionally, the storage capacity available in the Eastern San Joaquin groundwater basin in wet and dry years will need to be determined, as well as potential expansion of surface water storage opportunities. Some work has been completed to date, including a preliminary study evaluation of the potential expansion of the Lower Bear Reservoir (located in the upper Mokelumne River watershed), which is currently underway and will feed into completion of this Task (refer to the scope of work provided as Appendix C).

Available sources of water supply to be included in the analysis shall include, but not be limited to:

- The Mokelumne River
- Increased in-Delta diversions
- Water made available by improved groundwater management
- Treated, disinfected municipal wastewater
- Treated stormwater runoff
- Water savings from higher levels of municipal and agricultural water use efficiency and wastewater reuse
- Desalination

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

The analysis will consider the consequences to be avoided as determined in Task 2, as well as any biological or geomorphic impacts associated with reducing high flood flows in wet years. Previous work completed by Environmental Defense Fund (EDF) for the Mokelumne Watershed Environmental Benefits Program on the watershed's restoration needs and opportunities, as well as previous analyses by others will be used and considered. The analysis will include, but not be limited to:

- Benefits of high flows in the lower Mokelumne River and the Delta
- Benefits of reduction of invasive aquatic plants
- Benefits to outmigration of salmonids from the Mokelumne River
- Improved hydrodynamics that reduce the Delta impacts of reverse flows
- Benefits to riparian vegetation
- Enhanced salmonid rearing habitat
- Improved water temperatures
- Floodplain inundation near the mouth of the Cosumnes
- The potential for new floodplain habitat that would require high flows

A Water Supply Availability Analysis methodology will be developed, discussed, and approved by the stakeholder groups in a facilitated meeting setting.

A key aspect of defining the methodology will be developing a mutually agreeable definition of "available water." For example, this could be any water above and beyond human and environmental demands, or it could be water above and beyond existing water rights and other regulatory constraints. Following approval of the methodology, the analysis will be completed and summarized in a draft TM, which will be distributed to at least two recognized, independent experts acceptable to the stakeholders for peer review. The peer reviewers will review the methodology and study results, which will include analysis of the potential benefits from high flood flows in wet years, any potential detrimental impacts to the environment from reduced river flows, and the availability of alternative water supply sources. This will be closely coordinated with Subtask 6.3: Environmental Resources; any input received from the peer reviewers will also help contribute to completion of the environmental resources evaluation completed during that subtask. The peer reviewers will provide comments that will be presented to the stakeholder groups in a facilitated workshop setting. Based on the discussion and stakeholder input, the TM will be finalized for stakeholder review and approval. The workshop will provide an opportunity for stakeholders to ask questions and provide input on the draft TM. Following the workshop, the TM will be finalized to reflect stakeholder comments and returned to the stakeholders for final approval.

Task 3 Deliverables:

- *Draft Mokelumne WISE Program Water Availability Analysis and Methodology TM.*
- *First WISE Program stakeholder meeting to review draft and approve the Mokelumne WISE Program Water Availability Analysis and Methodology.*
- *Draft TM documenting results of Water Availability Analysis.*
- *Comments from peer reviewers*
- *Second WISE Program stakeholder meeting to review peer reviewer comments, and approve draft Water Availability Analysis.*
- *Final TM documenting approved Water Availability Analysis.*

TASK 4: DEVELOP MOKELUMNE WISE PROGRAM ALTERNATIVES

This task will facilitate the development of up to five Mokelumne WISE Program alternatives (and a minimum of three). The alternative programs will consider the amount of water potentially available as determined in Task 3 and be designed so they fulfill to varying degrees the stakeholder objectives established under Task 1.2. The alternatives will be evaluated under Task 5. Each alternative developed will have a unique set of benefits and consequences, and will be developed by the stakeholders.

In developing the Program Alternatives, the following conjunctive use water storage, transmission, treatment and recharges elements may be considered.

1. Existing river storage and conveyance systems, aqueducts, drainage channels, etc.
2. Existing and planned municipal wastewater treatment plants
3. Additional storage and/or diversion sites if needed
4. New facilities including treatment plants, monitoring wells, etc.
5. Potential recharge sites and/or well fields (injection/extraction wells)

The stakeholders will develop the Mokelumne WISE Program alternatives at a facilitated, face-to-face meeting. A draft and final TM will be prepared to summarize the alternatives identified. A meeting and / or conference call will be conducted to discuss the draft TM and solicit comments; the draft TM will be revised and finalized based on stakeholder comments.

Task 4 Deliverables:

- *Meeting materials for one WISE Program stakeholder meeting to brainstorm and identify Mokelumne WISE Program Alternatives*
- *Draft TM that describes the major components of the Program Alternatives in sufficient detail to facilitate the comprehensive assessment as described in Task 5.*
- *Second WISE Program stakeholder meeting to review and approve the draft TM.*
- *Prepare final TM documenting the approved Program Alternatives.*

TASK 5: ASSESS MOKELUMNE WISE PROGRAM ALTERNATIVES

In this task, each of the program alternatives developed in Task 4 will be assessed based on the Program Outcomes and Measures developed in Task 2.

A preliminary assessment of the Program Alternatives will be completed to determine the extent to which each provides the benefits identified in Task 2, in addition to the extent to which each avoids, minimizes and/or mitigates the consequences identified in Task 2. Based on benefits and consequences identified for each alternative, the top three preferred alternatives will be selected and carried forward for further evaluation. A Mokelumne WISE Program stakeholder meeting will be conducted to present the results of the preliminary assessment and top three preferred alternatives. The preliminary results will also be summarized in a draft TM for review by the stakeholder groups. The TM will be provided to the groups electronically for review prior to a meeting to further discuss the results of the analysis and approve the draft assessment. Based on input received at the meeting, the alternatives analysis TM will be finalized and returned to the stakeholder group for approval.

Task 5 Deliverables:

- *Draft preliminary assessment of Program Alternatives.*
- *First WISE Program stakeholder meeting to review preliminary assessment and select top three preferred alternatives.*

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

- *Draft TM of assessment of selected alternatives.*
- *Second WISE Program stakeholder meeting to review and approve draft assessment TM.*
- *Final TM.*

TASK 6: OPPORTUNITIES AND CONSTRAINTS ANALYSIS

Under this task, the opportunities and constraints associated with each of the Program Alternatives will be determined. The three preferred alternatives identified in Task 5 will be carried forward for evaluation in Task 6. This opportunities and constraints evaluation will address the technical (legal, engineering and operations), water availability and rights, environmental resources, cultural resources, program costs, economic benefits, and allocation of benefits and costs of each of the alternatives.

Subtask 6.1: Technical Feasibility

Feasibility-level engineering design will be performed for the three Program Alternatives. The objective of this task will be to define Alternative Program components, sizes, configurations, and other details necessary to perform operations modeling and impact analyses. This task will also be essential for preparing feasibility-level cost estimates (Subtask 6.5).

Feasibility-level drawings (10% design) will be prepared for each Program Alternative. The drawings will contain sufficient detail to convey the Program Alternatives to the stakeholders, elected officials, and members of the public, and will serve as a basis for cost estimating. A draft TM will be prepared summarizing the major components, size, configuration and operations of the three Program Alternatives. The draft TM will be discussed during a WISE Program stakeholder meeting conducted during Subtask 6.2. The stakeholder groups will have the opportunity to review the draft TM and provide comments prior to the draft document being finalized. It will then be returned to the stakeholder group for final approval.

Subtask 6.1 Deliverables:

- *Draft Technical Feasibility TM describing the major components, size, configuration and operations and 10% engineering drawings for each of the three Program Alternatives.*
- *Final TM.*

Subtask 6.2: Surface Water Availability and Water Rights Determination

Building on the Water Availability Analysis conducted in Task 3, available water supply for conjunctive management will be more precisely determined through inter-related investigations of water rights, Mokelumne River hydrology, existing regulatory constraints, and evaluation of potential expansion of surface water storage. The intent is to define potentially available water supply in terms of water rights holders (or potential for acquiring additional rights) and associated volume, timing, and reliability. The following water rights issues will be reviewed to determine suitability for the Program Alternatives.

- Existing water rights — Currently unused increments of existing water rights or contracts, considering changes over time based on growth in demand within right-holders' service areas.
- Existing water rights — Potential water availability through Mokelumne River storage system re-operation taking existing FERC license requirements into account.

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

- Additional surface water rights secured by Amador County and Calaveras County water purveyors through their 1927 State Filings in accordance with Water Code Section 10500, et seq.
- Mokelumne River Water and Power pending water rights applications (1990).
- Other new and/or additional water rights.

To conduct hydrologic analysis, the Mokelumne-Calaveras River Simulation Model (MOCASIM) and/or EBMUDSIM simulation models may be used. In order to be usable for this analysis, the MOCASIM model must first be updated and expanded to include portions of the Upper Mokelumne River Basin necessary to fully evaluate interregional conjunctive use alternatives. The work to update the model has been completed after September 30, 2008, and is being proposed as a portion of the project funding match. The full scope of work to update the model is provided as Appendix D.

This subtask will include reviewing the assumptions and basis for each potential modeling tool to determine which model(s) will be used to complete the analysis. A description of both models and associated assumptions will be summarized in a draft TM. The TM will be presented to the stakeholder group for discussion and to solicit comments and questions. The TM will be finalized and the group will meet once more to reach consensus on which model to proceed with. This water supply analysis will:

1. Provide an inventory of potential sources of water for conjunctive management
2. Critically evaluate, quantify, and define potential scenarios for water availability
3. Document the region's projected water supply and demand outlook

Upon completion of the surface water availability analysis, a draft TM will be prepared summarizing the results for review and input by the stakeholder group at a facilitated workshop. The draft Technical Feasibility TM will also be discussed during this facilitated workshop. Upon receipt of comments the draft TM will be finalized and returned to the stakeholders for approval.

Subtask 6.2 Deliverables:

- *Draft TM summarizing the MOCASIM and EBMUDSIM models and assumption applied within each model.*
- *Mokelumne WISE Program stakeholder group meeting to discuss draft Technical Feasibility TM (completed in Subtask 6.1) and to review and discuss the draft Models Summary TM.*
- *Final Model Summary TM.*
- *Mokelumne WISE Program stakeholder group meeting to reach consensus on model to use for the analyses.*
- *Draft TM documenting the water supply analysis including an inventory of potential sources of water and associated water rights considerations for each of the alternatives.*
- *Mokelumne WISE Program stakeholder meeting to review and approve draft TM.*
- *Final Surface Water Availability and Water Rights TM.*

Subtask 6.3: Environmental Resources

This task will include an assessment of the impacts of the Program Alternatives on aquatic ecology, special status species, wildlife, fisheries and aquatic habitat, and riparian and upland vegetation. Habitat mapping using aeriels and other information will be used to assess potential wildlife habitat that may be affected. Potentially-occurring special status plant and animal species will be identified

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

as part of this task. The evaluation will include identification of biological resources that would require permits, agreement, and/or mitigation as part of project implementation (CEQA requires mitigation for “rare” species, not just protected ones) and the presence of existing conservation easements intended to protect wildlife and plant resources. The California Natural Diversity Database (CNDDDB) will also be used to identify reported sightings of special status species within the study area. The occurrence of any special status species will be noted. The evaluation will consider relevant information and findings from existing and available related studies (e.g. the Mokelumne Watershed Environmental Benefits Program). A draft TM will be prepared to summarize the methodology for evaluating potential impacts of the Alternative Programs. This TM will be reviewed and discussed during a WISE Program stakeholder meeting to reach agreement on the proposed methodology prior to moving forward with the analysis. Once agreement has been reached on the methodology, the TM will be revised and expanded to include the results of the analysis. The revised and expanded TM will be reviewed and discussed during a second WISE Program stakeholder meeting. The TM will then be finalized based on stakeholder feedback and returned to the stakeholders for approval.

Subtask 6.3 Deliverables:

- *Draft Environmental Resources TM that documents the proposed methodology for evaluating potential environmental impacts of the Alternative Programs.*
- *First WISE Program stakeholder meeting to review and approve the proposed methodology.*
- *Revised / expanded draft Environmental Resources TM that documents the potential environmental impacts of the Alternative Programs.*
- *Second WISE Program stakeholder meeting to review and approve the revised / expanded draft Environmental Resources TM.*
- *Final TM.*

Subtask 6.4: Cultural Resources

A cultural resources analysis will identify areas of high sensitivity that may be affected by construction of any required new Program Alternative element (i.e., recharge facility, treatment plant, diversion structure, transmission pipes, storage facility). Existing data records and information will be reviewed, and both federally recognized and currently unrecognized Native American tribes within the regions will be consulted.

As part of the MAC IRWM Plan Update currently underway, focused outreach to Native Americans within the MAC Region has been completed. There are three federally recognized tribes within the MAC Region including:

- The Ione Band of Miwok Indians
- The Jackson Rancheria Band of Miwok Indians
- The California Valley Mikwok Tribe, generally known as the “Sheep Ranch Tribe”

The identification and contacts to tribal communities in both the MAC and ESJ Regions will be furthered through completion of this subtask. The results of previous cultural resource studies and recorded cultural resources in the records search area will be plotted on 7.5-minute topographic quadrangles. Based on this analysis, an assessment will be prepared to address the sensitivity of each Program Alternative with respect to cultural resources. Upon completion of the analysis, a draft TM will be prepared, summarizing the results. A Mokelumne WISE Program stakeholder meeting will be

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

conducted to discuss the draft Cultural Resources TM. The TM will be finalized based on stakeholder feedback and returned to stakeholders for final approval.

Subtask 6.4 Deliverables:

- *Draft Cultural Resources TM that documents the potential cultural resource impacts of each Program Alternative.*
- *WISE Program stakeholder meeting to review and approve the draft Cultural Resources TM.*
- *Final TM.*

Subtask 6.5: Program Costs

Feasibility-level capital and operation and maintenance (O&M) cost estimates will be prepared for each Program Alternative. Cost per acre foot of average yield, and the assumed construction approach, energy requirements, operation requirements, and maintenance requirements will be developed for each alternative. A draft TM will be prepared to summarize expected Mokelumne WISE Program costs. The draft TM will be discussed along with economic benefits and costs during a Mokelumne WISE Program stakeholder workshop conducted during completion of Subtask 6.6. The TM will be finalized based on stakeholder group feedback and returned to stakeholders for final approval.

Subtask 6.5 Deliverables:

- *Draft Program Costs TM that documents the capital and O&M costs of each Alternative Program*
- *Final TM*

Subtask 6.6: Economic Impacts (Benefits and Costs)

Implementation of each Program Alternative will result in a unique set of economic impacts to the local area (San Joaquin County), the Foothill Counties (Amador and Calaveras), EBMUD, and the two regions (ESJ and MAC) generally. The economic impacts for each of the three Program Alternatives will be estimated for the following categories:

- Municipal and industrial water supply
- Agricultural irrigation water supply
- Recreation
- Hydropower generation
- Nature tourism
- Energy costs
- Flood reduction
- Local economic effects
- Environmental /habitat/ species
- Land acquisition
- Water rates

Impacts in each of the categories above will be estimated for each Program Alternative over an agreed-upon program lifecycle to allow for proper accounting of timing and ramp-ups in the realization of impacts. In addition, the estimated impacts will also be compared with project costs of

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

impacts and benefits over the program life. Costs and benefits will be discounted over the program life to calculate a benefit cost ratio using present value costs and benefits. This analysis will determine:

- Present value of project costs
- Present value of project benefits
- Average annual value
- Cost-benefit ratio
- Return on investment

In addition, available information on willingness to pay for program benefits such as improved water supply reliability, enhanced water quality, and ecosystem function will be compiled. This information will provide context in which costs, impacts, and benefits will be presented to provide a more complete understanding of the willingness of a “typical” customer to pay for benefits such as those posed by the Program Alternatives.

These analyses will be summarized in a draft Economic Impacts TM, which will be discussed during a facilitated Mokelumne WISE Program stakeholder workshop; the draft Program Costs TM will also be reviewed and discussed at this meeting. The draft Economic Impacts TM will then be finalized based on stakeholder input and returned to stakeholders for final approval.

Subtask 6.6 Deliverables:

- *Draft TM that documents the estimated economic benefits of each Alternative Program.*
- *WISE Program stakeholder meeting to review and approve the draft Program Costs TM and the draft Economic Benefits TM.*
- *Final TM.*

Subtask 6.7: Allocation of Benefits and Costs

The benefits and costs associated with each Program Alternative will accrue to varying degrees to each of the two regions (ESJ and MAC). Under this task, a methodology will be developed to determine the benefits to each region generally, and to stakeholder water agencies specifically; and to apportion the associated costs to the identified beneficiaries. A preliminary methodology for allocating costs will be developed and presented to stakeholders in a facilitated meeting to secure consensus on the approach prior to completing this task. Following stakeholder approval of the methodology, benefits and costs will be allocated to the ESJ and MAC regions, and the results of this analysis will be summarized in a draft TM. The TM will be finalized based on stakeholder feedback and returned to stakeholders for final approval.

Subtask 6.7 Deliverables:

- *Draft Allocation of Benefits and Costs methodology.*
- *First WISE Program stakeholder meeting to review and approve methodology.*
- *Draft TM with preliminary results of the analysis.*
- *Second WISE Program stakeholder meeting to review and approve analysis.*
- *Final TM*

TASK 7: SELECT PREFERRED PROGRAM ALTERNATIVE

A two-step procedure will be followed under this task. First, the participating stakeholders will select their preferred Program Alternative or create a mutually preferred hybrid Program, taking into account known institutional barriers to program implementation. The second step will involve soliciting the formal endorsement of the stakeholders' selection by the IRWM regions and the governing boards of the participating organizations. Decision-making will be conducted in accordance with the Mokelumne WISE Program Collaborative Decision Making Process developed in Subtask 1.1.

Two facilitated meetings will be held to select a preferred Program Alternative. The first meeting will provide an opportunity to present the details of each alternative and initiate stakeholder discussion so that an alternative may be selected at the second meeting. This will allow for valuable discussion regarding the three potential alternatives and help the stakeholders come to an agreement on an existing alternative, or to develop a new, hybrid alternative. Once the stakeholders have reached consensus on a preferred Mokelumne WISE Program Alternative, presentations will be made to the following IRWM planning groups to educate the regions on the work completed through this process:

- The MAC Region IRWM stakeholder group
- The GBA Region Stakeholder Group

In addition, presentations will be made to the governing boards of each participating stakeholder group for the purposes of obtaining formal endorsement for the selected alternative. For budgeting purposes three Board meeting presentations are assumed; one for the UMRWA Board of Directors, one for the GBA Board of Directors, and one for an environmental stakeholder group.

Task 7 Deliverables:

- *Materials and notes for a total of two stakeholder meetings to discuss and agree upon alternative.*
- *Materials and notes for two IRWM stakeholder meetings (one for the MAC region, and one for the ESJ region).*
- *Materials and notes for three Board meetings (UMRWA, GBA, and an environmental group to be determined).*
- *Report documenting the stakeholder participants' selection of the preferred Program Alternative.*

TASK 8: PUBLIC AND DAC OUTREACH

This task involves developing and implementing a plan to conduct outreach to the community, with a focus on disadvantaged communities (DACs), to solicit input to the Mokelumne WISE Program. A key objective of the outreach effort will be to gauge level of social acceptance of the Program.

Subtask 8.1: Public and DAC Outreach Plan

Through this subtask, a Public and DAC Outreach Plan will be developed to identify actions for educating the public about the Mokelumne WISE Program and solicit input throughout the process. The public outreach plan will focus on identifying and engaging members of the general community throughout the MAC and ESJ Regions, as well as members of DACs in the regions. The draft Public and DAC Outreach Plan will be finalized based on stakeholder input. It is expected to cover two project phases: (1) Mokelumne WISE Program development and (2) preferred Program Alternatives.

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

The first phase will educate the public at large about the Program evaluation, the purpose of Mokelumne WISE Program, and the way in which they can participate. The second phase will be more specific to the Program Alternatives and allow for public input.

Subtask 8.1 Deliverables:

- *Draft Public and DAC Outreach Plan.*
- *Final Public and DAC Outreach Plan.*

Subtask 8.2: Public and DAC Outreach Implementation

Through this subtask, the Public and DAC Outreach Plan developed in subtask 8.1 will be implemented. For the purposes of budgeting, it was assumed that this subtask includes the following activities.

- Preparation of meeting agendas, presentations, public notices, and meeting notes for five facilitated public workshops held in DACs.
- Preparation of public outreach materials, including three newsletters and one project fact sheet.
- Preparation of two press releases suitable for posting on the agency websites.
- Summary of DAC issues to be addressed by the preferred Program Alternative.

Subtask 8.2 Deliverables:

- *Meeting agendas, presentations, public notices, and meeting notes from 5 facilitated public workshops held in DACs.*
- *Preparation of public outreach materials, including 3 newsletters and 1 project fact sheet and materials for electronic posting and distribution.*
- *Preparation of 2 press releases suitable for posting on the agency websites.*
- *Summary of DAC issues to be addressed by the preferred Program Alternative.*

TASK 9: IMPLEMENTATION PLAN AND IRWM PLAN INTEGRATION

Task 9 will culminate with the development of an Implementation Plan for the preferred Program Alternative identified in Task 7, and a clear definition of the IRWM program benefits provided by the preferred alternative.

Subtask 9.1: Implementation Plan

This subtask will involve identifying the actions needed to implement the preferred Program, including a mutually-acceptable governance structure/arrangement, a description and schedule of identified implementing actions (including any necessary to address known institutional barriers to program implementation), budget, and a financing strategy. A draft TM will be prepared that summarizes options and analyses of alternative governance structures/arrangements, implementation actions, schedules, budgets, and revenue. The draft TM will be discussed at a facilitated WISE Program stakeholder group meeting. Based on input from the stakeholder group on the options for implementing the Program, an Implementation Plan will be drafted. A second WISE Program stakeholder group meeting will be facilitated to discuss the draft Implementation Plan. Upon receipt of all comments, the Plan will be finalized and distributed for adoption by stakeholder organizations.

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

Subtask 9.1 Deliverables:

- *TM summarizing options and analyses of alternative governance structures/arrangements, necessary implementing actions and schedules, and alternative program budgets and revenue options necessary to realize the preferred Program Alternative selected in Task 7.*
- *First WISE Program stakeholders meeting to review and provide input on the TM.*
- *Draft Mokelumne WISE Program Implementation Plan.*
- *Second WISE Program stakeholders meeting to review and approve the Implementation Plan.*
- *Final Mokelumne WISE Program Implementation Plan.*

Subtask 9.2: IRWM Plan Integration

This subtask will build upon the work completed in Tasks 1 through 8 to develop a road map for integrating the preferred Program Alternative into the MAC and ESJ Region IRWM Plans. Specifically, the following information will be developed for the preferred alternative, with recommendations for how the material may be incorporated into the respective plans:

- **Governance** – the governance structure developed through the Mokelumne WISE Program Collaborative Decision Making Process will be described to supplement the Governance sections of the existing plans.
- **Region Description** – enhanced information on water supply, water quality, and environmental resources developed through Mokelumne WISE Program will be summarized to augment the information included in each IRWM Plan.
- **Objectives** – the Program Objectives developed for the Mokelumne WISE Program will be summarized with respect to the MAC and ESJ Region IRWM Objectives
- **Resource Management Strategies (RMS)** – the RMS incorporated by the preferred Program Alternative will be summarized to supplement discussions contained within each existing IRWM Plan.
- **Integration** – stakeholder and RMS integration achieved through the Mokelumne WISE Program effort will be described to supplement integration activities occurring at the regional level through the MAC and ESJ IRWM planning processes.
- **Project Review Process** – information will be developed, including project application forms, if applicable, to allow the preferred Program Alternative to be prioritized by the MAC and ESJ Region IRWM project review processes.
- **Impact and Benefit** – impacts and benefits of the preferred Program Alternative will be summarized to supplement the MAC and ESJ IRWM Plan impacts and benefits discussions.
- **Plan Performance and Monitoring** – the proposed approach for monitoring effectiveness of the preferred Program Alternative, including performance measures and desired outcomes, will be summarized to supplement the Plan-level performance and monitoring discussions.
- **Data Management** – approaches for managing data developed through the Mokelumne WISE Program, as well as data generated by implementation and tracking of the preferred alternative, will be summarized.
- **Finance** – the approach to financing the preferred alternative will be summarized for inclusion in the respective IRWM Plans.

**Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program
Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3**

- Technical Analysis – the technical feasibility analysis of the preferred Program Alternative will be summarized.
- Relation to Local Water Planning – the preferred Program Alternative will be reviewed for consistency with local water planning; the results of this analysis will be summarized to augment discussions in the MAC and ESJ IRWM Plans.
- Relation to Local Land Use Planning – the preferred Program Alternative will be reviewed for consistency with local land use planning; the results of this analysis will be summarized to augment discussions in the MAC and ESJ IRWM Plans.
- Stakeholder Involvement – the stakeholder involvement efforts implemented as part of Mokelumne WISE Program will be summarized, including the outcomes from the Public and DAC Outreach Implementation effort (Task 8.2).
- Coordination – the processes used to coordinate water management of participating local agencies and local stakeholders to avoid conflicts and take advantage of efficiencies, as well as the process of cooperating between adjacent IRWM planning efforts will be discussed. Opportunities for State agency assistance in implementation of the preferred Program Alternative will be identified.
- Climate Change – potential climate change adaptation and/ or mitigation benefits associated with the Mokelumne WISE Program, including estimated greenhouse gas (GHG) emissions impacts, will be defined.

This information will be summarized in an IRWM Plan Integration TM. Because the existing MAC and ESJ IRWM Plan updates are currently underway, this TM will be formatted such that it can be appended to the existing IRWM Plans as either a standalone chapter or an appendix. Specific information could be pulled into individual chapters of the existing MAC and ESJ Plans during future IRWM Plan updates. The TM will be finalized based on feedback from the stakeholder group and returned to the stakeholders for approval.

Subtask 9.2 Deliverables:

- *IRWM Plan Integration TM that summarizes the results from Tasks 1-8 in a format suitable for incorporation into the existing MAC and ESJ IRWM Plans.*

TASK 10: GRANT ADMINISTRATION

Task 10 encompasses all administrative subtasks required for successful implementation of the proposed work plan. Included in this task are contracting and invoice activities; efforts for tracking and reporting project progress, budget status, and scheduling; identifying and troubleshooting program development process conflicts; communicating with DWR, and other similar project management functions.

Subtask 10.1 – DWR Prop 84 Funding Agreement Administration

Subtask 10.1 encompasses all direct project and funding agreement administration activities that will be required for successful execution and implementation of a funding agreement between UMRWA and DWR. Work to be completed under this subtask includes, but is not limited to:

- Coordination of funding agreement execution.
- Ongoing communications with DWR.
- Coordination of invoices from other entities and disbursement of funds.
- Preparation and submittal of claims requests.

Mokelumne Watershed Interregional Sustainability Evaluation (WISE) Program Proposition 84, Round 2 Planning Grant Work Plan, Attachment 3

- Maintenance of project files as it relates to funding agreement implementation.
- Project management activities.
- Project close-out activities, including preparation of files for future storage.

Subtask 10.1 Deliverables:

- *Funding agreement.*
- *Claims (20 anticipated).*

Subtask 10.2 – Consultant Contract Administration

Under this subtask, the UMRWA/GBA Project Manager will provide direct oversight of the consultants retained for completion of the proposed scope of work. Work to be conducted includes, but is not limited to:

- Preparation and execution of contracting agreements.
- Consultant management and communication.
- Invoice processing.
- Payment coordination.
- Budget and schedule monitoring and updating.
- Coordination of work product quality control reviews.

Subtask 10.2 Deliverables:

- *Consultant contracts.*
- *Consultant invoices reviewed and processed.*

Subtask 10.3 – Reporting (Quarterly and Final Report)

As will be required by the executed funding agreement, the UMRWA/GBA Project Manager will prepare and submit quarterly reports documenting work completed during the quarter, budget expenditures, schedule updates, invoicing and accounts receivable, and project performance. The quarterly reports will also be an opportunity to identify any potential problems that may be foreseen in completion of the proposed scope of work. Following completion of the proposed scope of work, the UMRWA project manager will prepare and submit a final report as required by the funding agreement. It is anticipated that this report will summarize the project goals and objectives, describe the work that was conducted, document the outreach that was completed as part of the project, and provide a summary of the project effectiveness.

Subtask 10.3 Deliverables:

- *Quarterly reports (8 reports in total).*
- *Final report.*

ADDITIONAL IRWM PLAN WORK

Because no work will be performed beyond the grant scope of work, this section does not apply.

**Appendix A: IRCUP Description in the California Water
Plan 2009 Update**

Box 4-13 Mokelumne River Forum and Interregional Conjunctive Use

A forum made up primarily of water agencies and local governments with an interest in the Mokelumne River has met since 2005 to discuss how to meet water management needs in the Sierra foothills, San Joaquin County, and the East Bay while resolving long-standing water rights disputes. The result of those discussions is a concept called the Mokelumne River Inter-Regional Conjunctive Use Project (IRCUP).

The IRCUP envisions conjunctive use on an inter-regional scale, with the potential to provide water supply and environmental benefits to a broad range of Mokelumne River basin stakeholders. Benefits would include:

- Storage and supplies for drought protection and to meet the future water needs of the citizens of Amador and Calaveras Counties.
- Long-term drought protection for areas of Alameda and Contra Costa Counties that are served by the East Bay Municipal Utility District (EBMUD).
- Drought protection, replenishment of water to reverse groundwater basin overdraft, and water to serve as a means to create a hydraulic barrier to prevent further salinity intrusion for the citizens of San Joaquin County.
- Replenishment of the groundwater basin by storing wet weather flows and then using that stored water to meet the supply and environmental needs of the citizens overlying the Eastern San Joaquin Groundwater Basin.

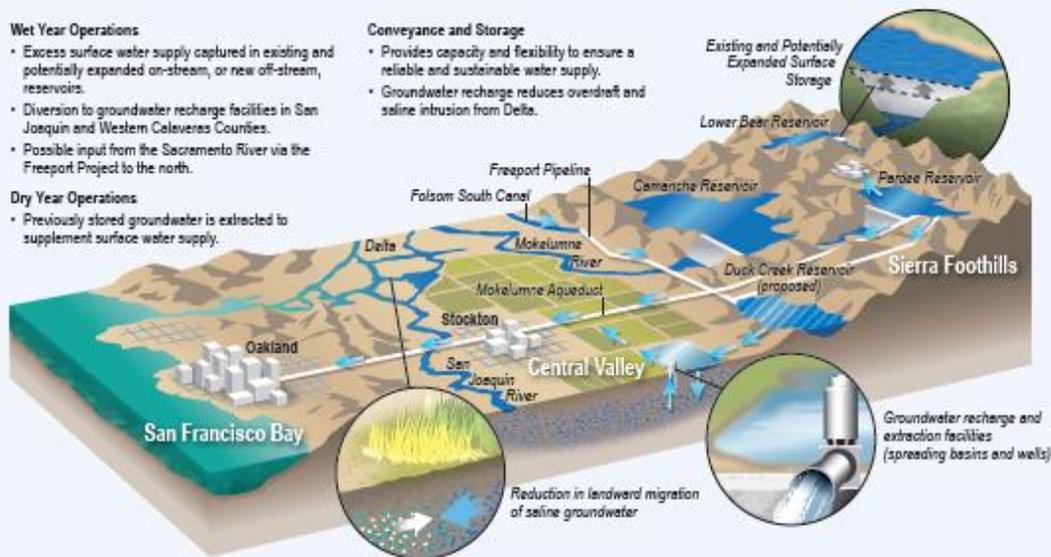
The forum has recently begun to expand its discussions to consider environmental principles and alternative water management solutions, such as demand-side management and the use of treated storm water and disinfected wastewater for groundwater recharge.

The Mokelumne River flows from the western Sierra Nevada into the Sacramento-San Joaquin River Delta and provides water for the environment, agriculture, hydropower generation, and communities in the watershed. Water is also exported for use in the EBMUD service area.

Mokelumne River Forum Members

- Alpine County
- Amador County
- Amador Water Agency
- Calaveras County Water District
- Calaveras Public Utility District
- California Department of Water Resources
- City of Lodi
- City of Stockton
- San Joaquin County Flood Control and Water Conservation District
- Mokelumne River Water and Power Authority
- East Bay Municipal Utility District
- Jackson Valley Irrigation District
- North San Joaquin Water Conservation District
- Stockton East Water District
- Woodbridge Irrigation District

Elements of the Mokelumne River Integrated Regional Conjunctive Use Project



**Appendix B: Mokelumne WISE Program Work Plan,
Budget, and Schedule Scope of Work**

CONSULTING SERVICES AGREEMENT

THIS CONSULTING SERVICES AGREEMENT ("Agreement") is entered into as of October 7, 2011 by and between the UPPER MOKELUMNE RIVER WATERSHED AUTHORITY, a joint powers agency formed pursuant to the laws of the State of California ("Authority") and RMC WATER AND ENVIRONMENT, a California corporation (the "Contractor").

RECITALS

A. Authority desires to obtain professional assistance to prepare and submit a Proposition 84 Planning Grant on behalf of the Authority and the Northeastern San Joaquin Groundwater Banking Authority.

B. Contractor is in the business of providing professional services related to watershed assessments, water quality and watershed planning.

C. Authority desires to engage Contractor, and Contractor desires to be hired by Authority, to perform certain consultation services upon the terms and conditions set forth in this Agreement.

NOW THEREFORE, in consideration of the performance of the covenants herein contained, the parties agree as follows:

1. SERVICES TO BE RENDERED BY CONTRACTOR.

1.1 Contractor shall perform all consulting tasks described in Exhibit A, Scope of Work and Schedule, attached and incorporated by this reference (the "Work"). All services shall be rendered with the care and skill ordinarily used by members of Contractor's profession practicing in this geographical region, and shall be in accordance with regulatory requirements of any state or federal agencies having jurisdiction over the subject matter of this Agreement. Contractor acknowledges the Work may be funded by grant agreements secured by the Authority and/or the Contractor, as directed. Contractor shall be responsible for the technical accuracy of its services and documents resulting therefrom and Authority shall not be responsible for discovering deficiencies therein. Contractor shall correct such deficiencies without additional compensation unless such deficiency is directly attributable to defects in information furnished by Authority.

1.2 Contractor is authorized to proceed with Work upon receipt of a Notice to Proceed and as directed by Authority. Contractor agrees to commence performance forthwith and to complete the Work in general conformance with the Schedule in Exhibit A. All work shall be completed no later than the dates required by the Proposition 84 Planning Grant application rules and schedule.

2. SERVICES TO BE RENDERED BY AUTHORITY. Authority agrees to make available to Contractor background and other data and information known to Authority and applicable to the Work.

3. CHANGES IN SCOPE OF SERVICES. Only the Authority's Board of Directors or its designees have the authority to agree to any extension of time, change order, change in the scope of work, change in the contract price, or other term or condition affecting either Contractor's or Authority's duties set forth herein. Adjustments in compensation shall be determined through negotiation between the parties to the Agreement. Contractor acknowledges that no Authority staff person or Authority officer other than the Board of Directors or its designees directly authorized to negotiate this Agreement or any changes thereto have the power to amend the terms and conditions of this Agreement. Any change not so authorized in advance in writing by the Board of Directors or such designee shall be null and void.
4. TERMINATION OF AGREEMENT. Authority reserves the right to terminate this Agreement with or without cause on seven (7) days' written notice to Contractor. In the case of such early termination, Contractor shall be paid for all services rendered in accordance with the terms and provisions of this Agreement up to the effective date of termination, up to the maximum fee prescribed for any task.
5. COMPENSATION TO CONTRACTOR. Contractor shall submit monthly invoices indicating hours of work expended and progress toward completion of each task. Invoices are to be sent to Rob Alcott, PO Box 383, The Sea Ranch, CA, 95497. Compensation to Contractor shall be paid on a time-and-materials basis for hours actually spent in performance of the Work plus direct costs as shown on Exhibit B, in accordance with compensation set forth in Exhibit B, RMC Fee Estimate, attached and incorporated by this reference. In no event shall compensation for completion of the Work exceed the Total Fee amount of **\$30,000** as set forth in Exhibit B.
6. SUPERVISION OF THE WORK.
 - 6.1 Contractor shall be solely responsible for all methods, techniques, sequences and procedures, and shall coordinate all portions of the Work. Authority shall deal only through Contractor, who shall be responsible for the proper execution of the entire Work.
 - 6.2 Contractor shall be responsible to Authority for the acts and omissions of Contractor's employees, subcontractors, and their agents and employees, and any other persons performing any of the Work under a contract with Contractor.
7. ASSIGNMENTS. Contractor may not assign, subcontract, or transfer its interest in this Agreement without the written consent of Authority.
8. CONTRACTOR NOT EMPLOYEE OF AUTHORITY. It is understood that Contractor is not acting hereunder as an employee of Authority but solely as an independent contractor. Contractor, by virtue of this Agreement, has no authority to bind or incur any obligation on behalf of Authority. Except as expressly provided in this Agreement, Contractor has no authority or responsibility to exercise any rights or power vested in Authority. It is understood by both Contractor and Authority that this Agreement shall not under any circumstances be construed or considered to create an employer-employee relationship or a joint venture.

9. LICENSES, ETC. Contractor represents to Authority that it or its principals have all licenses and qualifications, of whatsoever nature that are legally required for Contractor to practice its profession and to perform the Work. Contractor agrees that Contractor shall, at its sole cost and expense, keep in effect at all times during the term of this Agreement any license that is legally required for Contractor or its principals to practice its profession and perform the Work. Contractor further agrees that any subcontractor engaged by Contractor to perform a portion of the Work shall similarly possess all licenses and qualifications of whatsoever nature that are legally required for the subcontractor to perform the portion of the Work that is the subject of the subcontract at issue.

10. INSURANCE.

10.1 Contractor shall take out and maintain at all times during the performance of any work to be done under the terms of this Agreement a policy or policies of insurance as follows:

10.1.1 General Liability - Commercial General Liability Insurance of not less than One Million Dollars (\$1,000,000) combined single limit per occurrence for bodily injury and property damage, including but not limited to endorsements for the following coverage: Premises, personal injury, products and completed operations, blanket contractual and independent contractors liability.

10.1.2 Automobile Liability - Automobile Liability Insurance of not less than One Million Dollars (\$1,000,000) combined single limit per occurrence for bodily injury and property damage is required in the event motor vehicles are used by Contractor in the performance of the Agreement.

10.1.3 Professional Liability - In the event Contractor is a licensed professional, and is performing professional services under this contract, professional liability insurance is required with a limit of liability not less than \$1,000,000 per occurrence.

10.2 Contractor shall furnish a certificate of insurance satisfactory to the Authority's Executive Officer as evidence that the insurance required above is being maintained. Contractor agrees that the insurance required above shall be in effect at all times during the term of this Agreement. In the event said insurance coverage expires at any time or times during the term of this Agreement, Contractor agrees to provide at least 30 days prior to said expiration date a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of the term of this Agreement or for a period of not less than one year.

10.3 Certificates of insurance must include the following provisions:

10.3.1 The insurer will not cancel the insurance coverage without 30 day prior written notice to the Authority; and

10.3.2 The Authority, its officers, officials, and employees are included as additional insured but only insofar as the operations under this Agreement are concerned. This provision shall apply to all liability policies *except* workers' compensation and professional liability.

10.4 Contractor's commercial general and automobile liability insurance coverage shall be primary insurance as respects the Authority, its officers, officials, and employees. Any such insurance or self-insurance maintained by the Authority, its officers, officials, and employees shall be in excess of Contractor's insurance and shall not contribute with it.

11. WORKERS' COMPENSATION INSURANCE. In accordance with the provisions of Article 5, Chapter 1, Part 7, Division 2 (commencing with Section 1860), and Chapter 4, Part 1, Division 4 (commencing with Section 3700), of the Labor Code of the State of California, Contractor is required to secure the payment of compensation to his employees and shall for that purpose obtain and keep in effect adequate Workers' Compensation Insurance. Contractor is aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for workers' compensation or to permissibly self-insure in accordance with the provisions before commencing the performance of the services of this Agreement.

12. OWNERSHIP OF DOCUMENTS.

12.1 Contractor agrees to maintain in confidence and not disclose to any person or entity, without Authority's prior written consent, any trade secret or confidential information, knowledge or data relating to the products, process, or operation of Authority. Contractor further agrees to maintain in confidence and not to disclose to any person or entity, any data, information, technology, or material developed or obtained hereunder by Contractor during the term of this Agreement, except as directed by Authority. The covenants contained in this paragraph shall survive the termination of this Agreement for whatever cause.

12.2 The originals of all computations, drawings, designs, graphics, studies, reports, manuals, photographs, videotapes, data, models, computer files, software, and other documents prepared or caused to be prepared by Contractor or its subcontractors in connection with these services shall be delivered to and shall become the exclusive property of Authority if requested by Authority. Authority is licensed to utilize these documents for Authority applications on other projects or extensions of this project, at its own risk. Contractor and its subcontractors may retain and use copies of such documents, with written approval of Authority.

13. RETENTION OF RECORDS. Pursuant to Government Code section 8546.7, the performance of any work under this Agreement is subject to the examination and audit of the State Auditor at the request of County or as part of any audit of County for a period of three years after final payment under the Agreement. Each party hereto shall retain all records relating to the performance of the Work and the administration of the Agreement for three years after final payment hereunder.

14. INDEMNIFICATION. Contractor agrees to indemnify, defend (upon request of Authority) and hold harmless Authority and Authority's agents, board members, elected and appointed officials and officers, employees, and authorized representatives from any and all losses, liabilities, charges, damages, claims, liens, causes of action, awards, judgments, costs, and expenses (including, but not limited to, reasonable attorney's fees of Authority Counsel and counsel retained by Authority, expert fees, costs and staff time, and investigation costs) of whatever kind or nature (collectively "Claims"), to the extent caused or alleged to be caused by any negligent or willful error, act or omission of Contractor or Contractor's officers, agents, employees, independent contractors, subcontractors, or authorized representatives, unless such Claim arises out of the negligence or willful misconduct of Authority or its agents or employees.
15. NON-DISCRIMINATION. Contractor agrees that, in the performance of services under this Agreement, Contractor will not discriminate or permit discrimination against any person or class of persons by reason of race, color, creed, sex, or national origin in any manner prohibited by Title VI of the Civil Rights Act of 1964 or any applicable State enactments, as said regulations may be amended.
16. NOTICES. All notices herein provided to be given, or which may be given, by either party to the other, shall be deemed to have been fully given when made in writing and deposited in the United States Postal Services, certified with return receipt requested, with postage prepaid and addressed as follows:

To Contractor: RMC Water and Environment
Alyson Watson, Project Manager
2001 North Main Street
Walnut Creek, CA 94596

To Authority: Upper Mokelumne River Watershed Authority
Rob Alcott, Executive Officer
P.O. Box 383
Sea Ranch, CA 95497

With a copy to:

Martha Shaver, Authority Counsel
810 Court Street
Jackson, CA 95642

The address to which notice shall or may be mailed, as aforesaid, to either party shall or may be changed by written notice given by such party or the other, as hereinbefore provided, but nothing herein contained shall preclude the giving of any such notice by personal service.

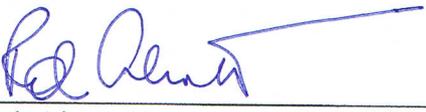
17. PROJECT PERSONNEL. Contractor shall not change key project personnel without the approval of Authority. Key project personnel are defined for purposes of this Agreement as the Project Manager Alyson Watson.
18. CONFLICT OF INTEREST. Contractor represents that it presently has no interest and covenants that it will not acquire any interest, direct or indirect, that represents a financial conflict of interest under state law or that would otherwise conflict in any manner or degree with the performance of the Work. Contractor further agrees that in the event the Contractor hires anyone with a conflict during the performance of this Agreement proper precautions will be taken to segregate the work so that the person with the conflict has no knowledge of or influence over the performance of the work under our contract.
19. CONTRACT EXECUTION. Each individual executing this Agreement on behalf of Contractor represents that he or she is fully authorized to execute and deliver this Agreement.
20. CONSTRUED PURSUANT TO CALIFORNIA LAW. The parties hereto agree that the provisions of this Agreement will be construed pursuant to the laws of the State of California.
21. INCORPORATION OF AGREEMENTS AND AMENDMENTS. This Agreement contains all agreements of the parties with respect to any matter mentioned herein. No other Agreement or understanding pertaining to any such matter shall be effective unless in writing signed by the party to be charged. This Agreement may be modified by the parties hereto only in writing and signed by both parties.
22. SEVERABILITY. The invalidity of any provision of this Agreement, as determined by a court of competent jurisdiction, shall in no way affect the validity of any other provision hereof.
23. TIME OF ESSENCE. Time is hereby expressly declared to be the essence of this Agreement and of each and every provision thereof, and each such provision is hereby made and declared to be a material, necessary, and essential part of this Agreement.
24. SEPARATE MEMBER ENGAGEMENTS. The parties hereto recognize that the Agreement is between the Authority and Contractor and not between Contractor and any Member or Members of the Authority. The parties hereto agree, however, that the Authority may engage the Contractor on behalf of any Member of the Authority (including Alternate Members) to perform additional watershed assessment work as may be requested by a Member. Accordingly, prior to the Authority's engagement of Contractor to perform said additional work, the Member and Contractor shall negotiate the scope of work to be performed by the Contractor and Member shall file with the Authority a written commitment to fully reimburse Authority for the additional agreed-upon work. Authority shall be invoiced by the Contractor for the additional work performed by Contractor and shall directly compensate the Contractor for such work.
25. INFORMATION PROVIDED BY CONTRACTOR. Contractor shall be entitled to reasonably rely upon the information provided by Authority, Authority's representatives, or from generally accepted sources without independent verification except to the extent such verification is expressly included in the scope of services; provided, however, that Authority

reserves the right to require verification if Authority has good cause to believe that Contractor's sources are incorrect.

26. INVOICING AND PAYMENT. Contractor shall submit to the address noted in paragraph 5 above monthly invoices for work performed and expenses incurred during the preceding month. With each invoice the Contractor will submit a monthly Progress Report which indicates the budget status of each task and subtask, and describes for each individual who performed work the tasks performed and the date and time spent on each task during the billing period. No retention shall be required. Payment for all undisputed charges shall be made by the Authority within 45 days of receipt of the invoice. Disputed charges, along with supporting documentation which demonstrates the reasonableness of the dispute, must be communicated to the Contractor within 30 days of receipt of the invoice. In the event payment for undisputed charges has not been made within 45 calendar days from the date of the invoice, Contractor may, giving 7 calendar days written notice and without penalty or liability of any nature, and without waiving any claim against Authority, suspend all or part of the services. In order to defray carrying charges resulting from delayed payments, simple interest at the rate of 1.5 percent per month, not to exceed the maximum rate allowed by law, may be added to the unpaid balance of each invoice, after 90 calendar days from the date of the invoice.

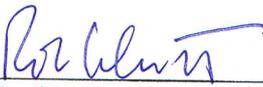
IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

UPPER MOKELUMNE RIVER
WATERSHED AUTHORITY

BY: 
Rob Alcott, Executive Officer

APPROVED AS TO FORM:

AUTHORITY COUNSEL

BY: 
Martha Shaver
for (approved 7 Oct 2011
Board of Directors)

CONTRACTOR:
RMC WATER AND ENVIRONMENT, a
California corporation

BY: 
Executive Vice President
Senior
Federal Tax I.D. No.: 943295096

ATTEST:

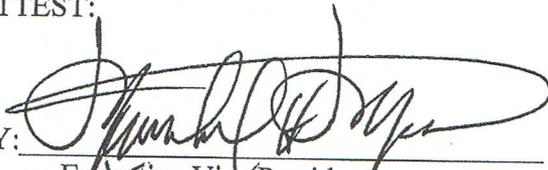
BY: 
Executive Vice President
Senior

EXHIBIT A: SCOPE OF WORK AND PROJECT SCHEDULE

SCOPE OF WORK

RMC will assist UMRWA and the GBA in preparing a planning grant application through completion of the following tasks.

Task 1: Grant Application Checklist

RMC will prepare Table 3 (the Grant Application Checklist) using information and data contained in the Sept 2010 UMRWA and GBA Planning Grant applications and other information provided by UMRWA. We will incorporate Authorizing and Eligible Applicant Documentation provided by the Authority. The Grant Application Checklist will be provided to UMRWA and the GBA for review and comment; comments will be incorporated into the final version for submittal to DWR.

Assumptions

1. Previous Planning Grant Applications will be made available to RMC by UMRWA
2. UMRWA and GBA will prepare Authorizing and Eligible Applicant Documentation and provide such documentation to RMC
3. Draft and final versions will be distributed electronically

Deliverables

1. Draft and Final Grant Application Checklist (electronic copies)

Task 2: Work Plan

RMC will prepare the Work Plan based on the Inter-regional Conjunctive Use Project (IRCUP) work plan developed and provided by the Mokelumne River Forum. The Work Plan will be provided to UMRWA and the GBA in draft form for review. Comments will be incorporated into the final version for submittal to DWR.

Assumptions

1. The Mokelumne River Forum will prepare and provide RMC with a draft Work Plan that identifies all tasks in sufficient detail for inclusion in the Planning Grant application
2. Draft and final versions will be distributed electronically

Deliverables

1. Draft and Final Work Plan Attachment (electronic copies)

Task 3: Budget

RMC will prepare a detailed line item budget, consistent with the Work Plan and Schedule, for inclusion in the grant application. The draft Budget attachment will be provided to UMRWA and GBA for review and comment; comments will be incorporated into the final version for submittal to DWR.

RMC will prepare and provide UMRWA and the GBA with a table to be completed with detailed information supporting the in-kind services to be included in the budget. Based on the information collected, RMC will prepare a local funding match budget to be included in the Budget attachment that reflects in-kind services, federal grant dollars, and/or local agency funds.

Assumptions

1. UMRWA and GBA will provide supporting information on agency in-kind services to be provided, including identifying specific staff who will be involved in completing work plan tasks,

- the work plan tasks being completed by each staff person, the estimated hours that will be spent by each staff person on each task, and the hourly rates of specific staff persons
2. Draft and final copies will be distributed electronically

Deliverables

1. Draft and Final Budget Attachment, including in-kind services line items (electronic copies)

Task 4: Schedule

RMC will prepare a detailed schedule, consistent with the Work Plan and Budget, for inclusion in the grant application. The draft Schedule attachment will be provided to UMRWA and GBA for review and comment; comments will be incorporated into the final version for submittal to DWR.

Assumptions

1. UMRWA and GBA will provide information related to critical schedule needs and drivers
2. Draft and final versions will be distributed electronically

Deliverables

1. Draft and Final Schedule Attachment (electronic copies)

Task 5 Planning Grant Application

RMC will compile a complete Planning Grant Application for hard copy submittal to DWR and upload to the online Bond Management System (BMS). RMC will prepare a complete draft version of the planning grant application, which will be distributed to UMRWA and the GBA electronically via email. RMC will incorporate comments on the draft application into the final version that is submitted to DWR.

Assumptions

1. RMC will submit draft documents to UMRWA and the GBA electronically
2. RMC will prepare four hard copies and one CD of the application package for submittal to DWR, one hard copy and one CD of the full application package for submittal to the GBA, and one hard copy and one CD of the full application package for submittal to UMRWA

Deliverables

1. Draft Grant Application for review (electronic copies)
2. Submittal of Hard Copies and CDs to DWR, UMRWA, and the GBA
3. Online submittal of the Planning Grant Application via DWR's BMS

SCHEDULE

The Draft PSP is expected to be released in October 2011, and the grant application is expected to be due in early February 2012. Depending upon DWR timelines, the schedule could extend beyond February 2012. Given that the timeframe for completing the grant application will not be in our complete control, and we will be relying on information provided by the project partners, we will be relying on UMRWA and the GBA to furnish all of their in-kind service information and project data in a timely manner to enable the project team to meet its schedule and budget obligations. RMC will endeavor to drive the schedule and communicate its expectations about delivery of materials clearly and regularly throughout the project period.

Exhibit B: Fee Estimate

Preparation of the Proposition 84 Planning Grant Application for UMRWA and GBA

# Task	RMC Labor										ODCs		Total Fee
	Princ	PM	Strategic Advisor	PE	Graphic Artist	Proj Asst.		Total Labor Hours	Total Labor Costs (1)	ODCs	Total ODCs (3)		
	Dave Richardson	Alyson Watson	Leslie Dumas	Lindsey Clark	Linda Woodrow-Gray	Erin Payne	120						
1 Grant Application Checklist	2	4	\$ 215	\$ 175	\$ 125	8	1	15	\$ 2,910	\$ -	\$ -	\$ 2,910	
2 Work Plan	2	10	4	24	4	1	45	\$ 8,390	\$ -	\$ -	\$ 8,390		
3 Budget	2	12		24		1	39	\$ 7,470	\$ -	\$ -	\$ 7,470		
4 Schedule	2	4		8		1	15	\$ 2,910	\$ -	\$ -	\$ 2,910		
5 Planning Grant Application	4	9	4	20	4	1	42	\$ 7,980	\$ 300	\$ 330	\$ 8,310		
Total	12	39	8	84	8	5	156	\$ 29,660	\$ 300	\$ 330	\$ 29,990		

1. The individual hourly rates include salary, overhead and profit.
2. Subconsultants will be billed at actual cost plus 10%.
3. Other direct costs (ODCs) such as reproduction, delivery, mileage (rates will be those allowed by current IRS guidelines), and travel expenses, will be billed at actual cost plus 10%.
4. RMC reserves the right to adjust its hourly rate structure and ODC markup at the beginning of the calendar year for all ongoing contracts.

**Appendix C: Bear River Reservoir Expansion Project,
Preliminary Feasibility Study Scope of Work**

**AGREEMENT BETWEEN
AMADOR WATER AGENCY
AND
URS CORPORATION
FOR
THE BEAR RIVER RESERVOIR EXPANSION PROJECT, PRELIMINARY
FEASIBILITY STUDY**

THIS AGREEMENT is made this 5TH day of July, 2007, in Sutter Creek, California, between **Amador Water Agency** ("Agency") and **URS CORPORATION, a Nevada Corporation dba URS CORPORATION AMERICAS** ("Consultant") concerning services.

WITNESSETH:

WHEREAS, the Agency desires to retain the services of Consultant, for The Bear River Reservoir Expansion Project, Preliminary Feasibility Study ("Project"); and

WHEREAS, Consultant desires to perform the services requested by the Agency, regarding the ("Project"), on the terms and conditions set forth below;

NOW, THEREFORE, the parties agree as follows:

1. Description of Work

Consultant shall perform Project Tasks as described within **Exhibit A** attached hereto and incorporated herein by this reference.

Consultant shall provide all labor, equipment, material and supplies required or necessary to properly, competently, and completely perform the work or render the services under this Agreement. Consultant shall determine the method, details and means of doing the work or rendering the services.

2. Compensation

The total cost of the work described in paragraph 1 hereof shall not exceed \$ 120,000, per **Exhibit A** attached hereto and incorporated herein by this reference. Compensation is based on the Hourly Rate Fee Schedule attached hereto as **Exhibit B**, and incorporated herein by this reference; however, total compensation shall not exceed \$120,000 without prior written authorization by the agency.

3. Term of Agreement

This Agreement shall become effective on the date above-stated and will continue in effect until the services or work provided for herein have been completed, unless sooner terminated as provided in paragraph 9.

4. Payment for Services

Consultant shall submit to the Agency monthly itemized bills for the services rendered. If the work is satisfactorily performed, the Agency shall pay such bill within thirty (30) days of its receipt. Should the Agency dispute any portion of any bill, the Agency shall pay the undisputed portion within the time stated above, and at the same time, advise the Consultant in writing of the disputed portion.

5. Compliance with Laws

Consultant agrees that it shall conduct its work and perform its services in compliance with all laws and regulations of County of Amador, State of California, and any officer, department, or agency thereof, as well as other laws and regulations as may be applicable thereto.

6. Labor Codes 1720 and 1770

The following provisions apply to all work undertaken in the construction of a public works project, including all categories of work performed during the design and pre-construction phase of the construction, including, but not limited to, inspection and land surveying work, and which are subject to Labor Code sections 1720 and 1770 et seq. If the Consultant is unsure as to the applicability of these sections, the Agency recommends that the Consultant contact the Department of Industrial Relations for clarification.

(1) **Prevailing Wages.**

The prevailing rates of per diem wages shall be those determined by the Department of Industrial Relations, Division of Labor Statistics and Research, Prevailing Wage Unit. If the prevailing wage for a category of work subject to the State prevailing wage laws has not been established by the Department of Industrial Relations' Prevailing Wage Unit, it shall be the Consultant's responsibility to obtain such a determination from the Unit at its expense.

Consultant agrees to pay all workers employed on this work not less than the general prevailing rate of per diem wages for work of a similar character in the locality of Agency, and not less than the general rate of

per diem wages for holiday and overtime work, as established pursuant to the California Labor Code and regulations and orders issued there under. A copy of the applicable prevailing rate of per diem wages is available to any interested person at the administrative offices of the Agency, or from the Department of Industrial Relations, Division of Labor Statistics, Prevailing Wage Unit. Consultant shall obtain and post a copy of such prevailing wage rates at the job site. Consultant shall also comply with the provisions of California Labor Code section 1775, including provisions which require to Consultant to (a) forfeit as penalty to Agency not more than \$50 for each calendar day or portion thereof for each worker (whether employed by Consultant or any subcontractor) paid less than the applicable prevailing wage rates for any work done under this Agreement in violation of the provisions of the California Labor Code, and (b) pay each worker the difference between the prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which said worker was paid less than the prevailing wage.

The Agency will not recognize any claims for additional compensation because of the payment of the wages set forth in the Agreement. The possibility of wage increases is one of the elements to be considered by the Consultant in determining its compensation, and will not under any circumstances be considered as the basis of a claim against the Agency.

(2) Eight-Hour Day Limitation

Consultant agrees that eight (8) hours labor shall constitute a day's work, and no worker, in the employ of the Consultant, or any subcontractor, doing or contracting to do any part of the work under this Agreement, shall be required or permitted to work more than 8 hours in any one calendar day and forty (40) hours in any one calendar week; provided that subject to California Labor Code section 1815, a worker may perform work in excess of 8 hours per day or 40 hours per week at not less than one and one-half times the basic rate of pay.

Except as provided above for overtime, Consultant shall forfeit as a penalty to Agency the sum of \$25 for each worker employed in the execution of this Agreement by it or by any subcontractor under it for each calendar day during which such worker is required or permitted to work more than 8 hours in any one day and 40 hours in any one calendar week in violation of California Labor Code sections 1810 through 1815.

(3) Payroll Records

Consultant and each subcontractor shall keep an accurate payroll record showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journey person, apprentice, worker, or other employee employed in connection with the work, and shall make such payroll record available for inspection, in accordance with the requirements of California Labor Code section 1776. Consultant shall be responsible to ensure compliance with section 1776, whose provisions are incorporated herein by this reference.

(4) Employment of Apprentices.

Consultant shall comply with, and take such actions as necessary to effectuate, the employment of apprentice's requirements as set forth at California Labor Code sections 1777.5, 1777.6, and 1777.7.

7. Errors and Omissions Insurance

Consultant shall have such errors and omissions insurance as shall protect the Consultant, its officers, officials, directors, employees and agents from claims based on alleged errors or negligent acts or omissions which may arise from Consultant's operations or performance under this Agreement, whether claims be made during or subsequent to the term of this Agreement, and whether such operations or performance be by Consultant or its employees, consultants, agents or anyone else directly or indirectly employed by any of the foregoing. The amount of this insurance shall not be less than \$1,000,000.

Said policy shall be continued in full force and effect during the term of this Agreement and for a period of five (5) years following the completion of the services provided for in this Agreement. In the event of termination of said policy, new coverage shall be obtained for the required period to insure for the prior acts of Consultant during the course of performing services under the terms of this Agreement.

Consultant shall provide to the Agency a certificate of insurance on a form acceptable to the Agency indicating the expiration date of said policy, and shall provide renewal certificates within ten (10) days after expiration of each policy term.

8. General Insurance

Consultant at its sole cost and expense shall procure and maintain for the duration of this Agreement the following types and limits of insurance:

<u>Type</u>	<u>Limits</u>	<u>Scope</u>
General liability	\$1,000,000 per occurrence	at least as broad as ISO CG00 01
Automobile liability	\$1,000,000 per occurrence	at least as broad as ISO CA00 01 (any auto)
Workers' compensation Statutory limits		
Employers' liability	\$1,000,000	

The general and automobile policy(ies) shall be endorsed to name the Agency, its directors, officers, officials, employees, volunteers and agents as additional insureds regarding liability arising out of the services rendered pursuant to this Agreement. Consultant shall provide the Agency with ISO CG 2010 endorsement form or equivalent. The coverage shall contain no special limitations on the scope of protection afforded to the Agency, its directors, officers, officials, employees, agents or volunteers. Consultant's coverage shall be primary and shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability. Agency's insurance, if any, shall be excess and shall not contribute with Consultant's insurance. The workers' compensation policy shall be endorsed to include a waiver of subrogation against the Agency, its directors, officials, officers, employees, volunteers and agents.

The insurance is to be placed with insurers with a current A.M. Best's rating of A:VII or better unless otherwise acceptable to Agency. Prior to commencing the services provided for herein, Consultant shall provide to Agency original endorsements evidencing this insurance signed by a person authorized to bind coverage on behalf the insurer(s). The certificates and policies shall provide that thirty (30) days' written notice of any material change, reduction of coverage or cancellation of the insurance policies will be provided to the Agency. The requirements as to the types, limits, and the Agency's approval of insurance coverage to be maintained by the Consultant are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Consultant under the Agreement. In addition, in the event any change is made in the insurance carrier, policies or nature of coverage required under this Agreement, Consultant shall notify the Agency prior to making such changes.

9. Indemnification and Hold Harmless.

Consultant shall protect, indemnify, hold harmless and defend the Agency, its directors, officials, officers, employees, volunteers and agents, from and against any and all suits, actions, judgments, legal or administrative proceedings, arbitrations, claims, demands, causes of action, damages, liabilities, interest, attorney's fees, fines, penalties, losses, costs and expenses of whatsoever kind or nature, including but not limited to those arising out of injury to or death of Consultant's employees, to the extent that such arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant, its employees, agents or sub consultants.

Neither termination of this Agreement nor completion of the acts to be performed under this Agreement shall release Consultant from its obligations to indemnify, as to any Claims, so long as the event upon which such Claims is predicated shall have occurred prior to the effective date of any such termination or completion and arose out of or was in any way connected with performance or operations under this Agreement by Consultant, its employees, agents or consultants, or the employee, agent or consultant of any one of them

Submission of insurance certificates or submission of other proof of compliance with the insurance requirements in this Agreement does not relieve Consultant from liability under this indemnification and hold harmless clause. The obligations of this indemnity article shall apply whether or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages.

The Agency may withhold from payment due Consultant hereunder such amounts as, in the Agency's opinion, are sufficient to provide security against all loss, damage, expense, penalty, fine cost, claim demand, suit, cause of action, judgment, or liability covered by the foregoing indemnity provision.

In any and all claims against the Agency, or its directors, officers, officials, directors, employees, volunteers or agents, by any employee of the Consultant, any subconsultant, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Consultant or any subconsultant under Worker's Compensation acts, disability benefit acts or other employee benefit acts.

Consultant reserves the right to terminate this Agreement upon 30 days written notice in the event of non-payment or other material breach by Agency.

10. Termination

This Agreement may be terminated at any time and for any reason by the Agency upon five (5) days advance written notice. In the event of such termination, Consultant is to be fairly compensated for all work performed to the date of termination as calculated by the Agency based on paragraph 2 hereof; provided that such compensation shall not in any case exceed the maximum sum set forth in paragraph 2 hereof. Compensation under this paragraph shall not include costs related to lost profit associated with the expected completion of the work or other such payments relating to the benefit of the bargain.

11. Attorney's Fees

In the event that any arbitration, litigation or other action or proceeding of any nature between the Agency and Consultant becomes necessary to enforce or interpret all or any portion of this Agreement or because of an alleged breach by either party of any of the terms hereof, it is mutually agreed that the losing or defaulting party shall pay the prevailing party's reasonable attorney's fees, costs, and expenses incurred in connection with the prosecution or defense of such action or proceeding.

12. Entire Agreement

This writing constitutes the entire Agreement between the parties relative to the services specified herein, and no modifications hereof shall be effective unless and until such modification is evidenced by a writing signed by both parties to this Agreement. There are no understandings, agreements, conditions, representations, warranties, or promises with respect to the subject matter of this Agreement except those contained in or referred to in this writing.

13. Independent Contractor

It is expressly understood and agreed by the parties hereto that Consultant's relationship to the Agency is that of an independent contractor. All persons hired by Consultant and performing the work shall be Consultant's employees or agents. The Agency shall not be obligated in any way to pay any wages or other claims by any such employees or agents or any other person by reason of this Agreement. Consultant shall

be solely liable to such employees and agents for losses, costs, damage, or injuries by said employees or agents during the course of the work.

14. Successors and Assignment

This Agreement shall be binding on the heirs, successors, executors, administrators, and assigns of the parties; however, Consultant agrees that it will not assign, transfer, convey, or otherwise dispose of this Agreement or any part thereof, or its rights, title or interest therein, or its power to execute the same without the prior written consent of the Agency.

15. Severability

If any provision of this Agreement is held to be unenforceable, the remainder of this Agreement shall be severable and not affected thereby.

16. Waiver of Rights

Any waiver at any time by either party hereto of its rights with respect to a breach or default, or any other matter arising in connection with this Agreement, shall not be deemed to be a waiver with respect to any other breach, default or matter.

17. Remedies not Exclusive

The use by either party of any remedy specified herein for the enforcement of this Agreement is not exclusive and shall not deprive the party using such remedy of, or limit the application of, any other remedy provided by law.

18. Notices

All notices, statements, reports, approvals, or requests or other communications that are required either expressly or by implication to be given by either party to the other under this Agreement shall be in writing and signed for each party by such officers as each may, from time to time, authorize in writing to so act.

All such notices shall be deemed to have been received on the date of delivery if delivered personally or three (3) days after mailing if enclosed in a properly addressed and stamped envelope and deposited in a United States post office for delivery. Unless and until formally notified otherwise, all notices shall be addressed to the parties at their addresses shown below:

Amador Water Agency 12800 Ridge Road Sutter Creek, CA 95685 (209) 223-3018	URS Corporation Americas 1333 Broadway, Suite 800 Oakland, CA 94612 (510) 893-3600	(209)257-5281 fax	(510) 874-3268 fax
---	---	-------------------	--------------------

19. Sub consultants

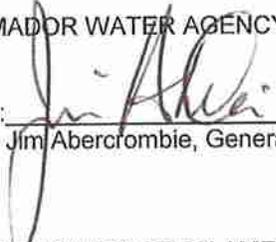
No subcontract shall be awarded or an outside consultant engaged by Consultant unless prior written approval is obtained from the Agency. Any approved subconsultant shall comply with the insurance requirements of paragraph 7 and 8 hereof or be covered by Consultant's insurance.

20. Waiver of Consequential Damages

Neither Party shall be liable to the other for consequential or special damages, including, without limitation, loss of use or loss of profits, incurred by one another or their subsidiaries nor successors, regardless of how such damages are caused.

IN WITNESS WHEREOF, the parties execute this Agreement on the day and year first above written.

AMADOR WATER AGENCY

By:  _____
 Jim Abercrombie, General Manager



URS CORPORATION AMERICAS

By:  _____
 Louis Armstrong, Vice President

BEAR RIVER RESERVOIR EXPANSION PROJECT
PRELIMINARY FEASIBILITY (FATAL FLAW) STUDIES
SCOPE OF WORK

Task 1 – Preliminary Project Definition and Description

Budget = \$5,000

Objectives

The objective of this task is to develop a Preliminary Project Description (PD) that will serve as: (1) a means to establish a common understanding of the purpose and scope of the project; and (2) a basis for defining the key elements of preliminary feasibility studies.

Approach

- We will prepare a Preliminary PD that will include a *Draft Purpose and Objective* statement and the scope of the proposed project.
- The partnership team, as defined by AWA, will receive meeting notices and draft documents intended for revision and comment.
- The *Draft Purpose and Objective* statement will be based on input from AWA and partnership team.
- The scope will include descriptions of both the built elements and any potential reservoir operations changes of the proposed project based on existing published reports and input from AWA and partnership team.
- The Preliminary PD will be 3 to 4 pages and will include one to two figures.

Assumptions

- A draft of the Preliminary PD will be prepared and submitted to AWA and partnership team for review.

Deliverables

The work product will be a Preliminary Project Description as described above.¹

□

□ Unless specified otherwise, all submittals will include five hard copies and one electronic copy (pdf).

Task 2 – Data Collection

Budget = \$10,000

Objectives

The objective of this task is to acquire available information or work products associated with the proposed project.

Approach

We propose to obtain copies of the following:

- PG&E application for re-licensing Project 137, as originally submitted by PG&E in 1990 including a 32-foot raise of Lower Bear (from AWA files).
- FERC Re-license as issued without the raise, but including stream maintenance and other requirements (from AWA, PG&E or FERC).
- Design and modifications drawings and results of safety inspections of Lower Bear and Cole Creek Dams (from Division of Safety of Dams records).
- Any documents that would affect feasibility from an institutional viewpoint, including agreements between or among various governmental and non-governmental agencies and private parties regarding licensing, leases, system operations etc.
- If made available from PG&E, studies associated with Lower Bear Raise, including engineering, environmental, and economic investigations.
- If made available from PG&E, operational computer model of the Mokelumne system for use in reviewing the benefits of additional storage to water yield and to power production.
- Other data as provided by AWA including applicable environmental review or comments provided by others during the FERC relicensing period.

Assumptions

- AWA (or URS) is able to sign a confidentiality agreement for use of PG&E data.

Deliverables

The work product will be a summary listing of available project data, in a form designed for ease of use.

Task 3 – Data Gap and Need Analysis

Budget = \$10,000

Objectives

The objective of this task is to review the data collected under Task 2 and identify any data gaps and needs that are critical for the preliminary feasibility studies that are to be performed under Task 4.

Approach

- Our lead engineers and scientists who will be performing Task 4 will review the data collected under Task 2.
- Considering the objective of this preliminary feasibility study and the proposed budget, we will identify additional data, if any, that are critical and should be collected as part of the current study.
- We will then propose and review with AWA and the partnership team a work plan for Task 4 that will prioritize the efforts of collecting additional data and conducting additional environmental, engineering and economic feasibility studies in accordance with the proposed budget.

Assumptions

- A meeting with AWA to review the results of this task and our proposed work plan for Task 4.
- The budget for meeting is covered under Task 7.

Deliverables

The work product will be a technical memorandum summarizing the result of the data gap and needs analysis and our proposed work plan for Task 4.

Task 4 – Supplemental Investigation and Analysis

Budget = \$50,000 (to be assigned among Task 4.1 through 4.3 based on the results of the data gap and needs analysis and proposed Task 4 work plan as approved by AWA under Task 3)

Task 4.1 – Environmental Studies

Objectives

The objective of this task is to conduct supplemental environmental studies to address data needs identified in Task 3.

Approach

We propose to develop and implement focused environmental studies in coordination with AWA. These studies will include:

- Reconnaissance field visit for biological and cultural resources to identify and characterize sensitive habitats and potential jurisdictional wetlands in the project area;
- Cultural resource record search of the project area and vicinity to identify any updated records not included in the existing data gathered in Task 2. The cultural resource record search would include the Peddler Hill, Bear River Reservoir, and Calaveras Dome 7.5 minute quadrangles.
- Coordination with U.S. Forest Service, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California Department of Fish and Game and the Regional Water Quality Control Board. URS would contact environmental specialists at these agencies to refine and update the data collected in Task 2.
- Depending on AWA's desires, the work may also include contact with the Foothill Conservancy, ERC and other local groups to gain insight into specific concerns.

Assumptions

- AWA will arrange for access to the project area for the reconnaissance site visit;
- One biologist and one cultural resource specialist would conduct a two-day reconnaissance site visit.
- Formal surveys for special status species or wetlands, if needed, would be identified in the data gap analysis.
- Agency coordination would be conducted by telephone.

Deliverables

We will prepare a technical memorandum that will summarize the environmental considerations that have been identified for the proposed project. It is anticipated that these considerations would include water quality, special status species, wetlands, and cultural resources.

Task 4.2 – Engineering Studies

Objectives

The objective of this task is to perform engineering studies to evaluate raising the Lower Bear Dams, spillway and appurtenant works. This task will be directed to check for potential fatal flaws.

Approach

We propose to conduct the following engineering studies based on the results of Task 2 (Data Collection) and Task 3 (Data Gap and Need Analysis):

- Visit the site (one-day duration) to observe conditions at the dam, spillway, outlet, power intake shaft, access roads, quarry, and other features.
- Make an overall assessment of the topographic, geologic, and seismic conditions, and the condition of the dam and appurtenant works. This assessment will include evaluation of performance of the dam (settlement, seepage, etc.), and the condition of the concrete face, spillway and other features.
- Develop basic conceptual figures for the plan and sections of the raised dam and spillway to support quantity estimates.
- Locate haul/access roads for construction, and estimate volume of rock available within the quarry limits.
- Locate commercial sources for sand, gravel and aggregates, and concrete plants in the site vicinity.
- Estimate construction quantities for the dam and appurtenant works.
- Investigate possible copper leachate from dam and/or rocks that could be entering the Mokelumne River.
- Prepare an updated conceptual-level construction cost estimate and construction schedule, with supporting back-up documentation.
- Recommend engineering studies for future design development, including a larger increase in height, possible removal of Upper Bear Dam, or other possible configuration for increasing storage for Bear River Reservoir.

Assumptions

- Our work will be performed based on best-available topographical maps of the dam site.
- AWA will arrange for any required access permits and will accompany URS staff on the one-day site visit.

Deliverables

The work product will be a technical memorandum summarizing the findings from the engineering studies, and will present the conceptual-level construction cost estimate and construction schedule.

Task 4.3 – Economic Studies

Objectives

The objective of this task is to estimate the value of project benefits and, considering methods of financing, compare the benefits to costs.

Approach

We propose to:

- Estimate the average annual and dry year increase in water yield.
- Estimate the change in on-peak, shoulder peak and off-peak generation that would be possible based on re-operation of the system of reservoirs and power plants on the Mokelumne system.
- Determine appropriate economic values for water and power that could be generated by the project. If multiple options were identified in task 4.2 for increasing storage capacity, each would be evaluated for its economic value.
- Review options for financing the project.

Assumptions

- URS (or PG&E) is able to utilize an existing PG&E model or other existing models (such as the Upper Mokelumne River Watershed Authority Model) of the system to estimate water and power benefits.

Deliverables

The work product will be a technical memorandum summarizing the findings from the economic studies. It will present results of the benefits assessment, options for financing the project and conclusions regarding economic viability.

Task 5 – Public Outreach

Budget = \$15,000

Objectives

The objective of this task is to assist AWA in maintaining open dialogue and cooperation with all stakeholders interested in the project, and to assist AWA in keeping the public informed and engaged in advancing the project.

Approach

- Our approach to the public outreach program is to share information, provide updates and provide access to project information through interactions to existing Mokelumne River interest groups, such as Mokelumne River Forum.
- To the extent that this project may already have been publicly discussed, we will work with AWA to review and summarize prior public discussions, input and written comments.
- We will work with AWA to develop a stakeholder contact list And conduct telephone or in-person interviews with up to 12 key stakeholders.
- We will facilitate three targeted stakeholder group meetings. If it is appropriate, we will conduct two of these stakeholder meetings as invitation only workshops. Meetings may be coordinated with and be held in conjunction with MAC, IRWMP, Moke River Forum, Bear River Workshop meetings in Amador County.
- We will prepare presentation materials and assist AWA in presenting the project, providing the technical backup and answering questions at these meetings.
- Based on results of this initial outreach, we will develop a public involvement plan to be included in the Project Implementation Work Plan.

Assumptions

- AWA will assist us with the list for the targeted stakeholder group meeting.
- AWA will arrange and provide all meeting facilities.

Deliverables

Deliverables will include materials and input summaries for the stakeholder meetings.

All known potentially interested parties would be identified with expected area of concern or interest and contact information.

Task 6 – Proposed Project Implementation Work Plan

Budget = \$5,000

Objectives

The objective of this task is to develop a Project Implementation Work Plan outlining the strategy and steps towards further planning, permitting, design and construction of the proposed project.

Approach

- As part of the Project Implementation Work Plan, we will develop a flow chart and timeline that will outline the major milestones and activities in order to implement the proposed project, including public and stakeholder outreach.
- The work plan will be a road map of the major project tasks, associated costs and schedule. The work plan will identify major decision points for implementation of the project and it will provide budget level estimates for advancing the project.
- To the extent possible and proper, the work plan will also identify other regional water supply programs being considered and describe how this project will relate to the other regional programs.
- To the extent possible and proper, the work plan will identify any opportunities for incorporation of a restoration, mitigation and/or environmental enhancement component a part of the overall project development.

Assumptions

- AWA will provide us with updates of other on-going regional water supply programs.

Deliverables

The work product will be a draft and final versions of the Project Implementation Work Plan.

Task 7 – Preliminary Project Prospectus

Budget = \$10,000

Objectives

The objective of this task is prepare a Preliminary Project Prospectus that can be used to communicate with project partners, stakeholders, resource agencies and interested public.

Approach

- We propose to prepare a Preliminary Project Prospectus that will summarize the key aspects of the project, including purposes, proposed new construction and reservoir operations, benefits, challenges and finances, and the proposed implementation plan.
- The Prospectus will be written and presented in a format (text and graphics) that **can be quickly reviewed by the resource agencies or easily understood by the public or elected officials who may not have the detailed technical knowledge of projects such as our proposed project.**

Assumptions

- **Two rounds of draft submittals for review by AWA and the partnership.**

Deliverables

The work product will be the Preliminary Project Prospectus. The final submittal will include a “camera-ready” final suitable for mass reproduction and a set of slides for use in PowerPoint presentations.

Task 8– Project Management and Meetings

Budget = \$15,000

Objectives

The objective of this task is to provide communication and project management of the proposed preliminary feasibility studies.

Approach

- ***We will maintain frequent and regular communication with AWA through e-mails and phone calls.***
- We are proposing a monthly conference call with AWA and other invited stakeholders to report on the progress of the studies and respond to any questions.
- ***We are proposing two project meetings/workshops at AWA's office: the first one will be at the end of Task 3; and the second one will be at the end of either Task 4 or Task 5.***

Assumptions

- ***We are assuming that the proposed studies presented herein will be completed in a period of nine months.***

Deliverables

The work product will include a monthly progress report and conference call summaries.

Exhibit B

OAKLAND OPERATIONS 2007 SCHEDULE OF FEES AND CHARGES (AWA)

The following describes the basis for compensation for services performed during the fiscal year 2007. This Schedule of Fees and Charges will be adjusted annually on January 1 of each subsequent year to reflect merit and economic salary increases, and changes in the expected level and mode of operations for the new year. The new Schedule of Fees and Charges will apply to existing and new assignments.

PERSONNEL CHARGES

The charge for all time required in the performance of the Scope of Services, including office, field and travel time, will be at the Unit Price Hourly Rates set forth below for the labor classifications indicated.

<u>Labor Classification</u>	<u>Hourly Rate</u>
Word Processing/Pro. Asst./Jr. Designer*	\$ 65
Sr. Graphics/Sr. Designer*	85
Jr. Editor	78
Sr. Editor	121
GIS Technician	78
GIS Manager	121
Staff Scientist/Engineer	78
Scientist/Engineer	88
Sr. Scientist/Engineer	121
Sr. Project Scientist/Engineer	136
Sr. Consultant/Scientist/Engr/Project Manager	154
Senior Project Manager	183
Principal Professional/Project Director	213

Charges for contract personnel under URS supervision and using URS facilities will be made according to the hourly rate corresponding to their classification. When staffs are performing field work on projects, a minimum daily charge of 4 hours will apply.

When URS staffs appear as expert witnesses at court trials, arbitration hearings, and depositions, their time will be charged at \$293.00 per hour.

Overtime (hours worked in excess of eight hours per day) by exempt personnel will be charged at the above straight time hourly rate. Overtime by non-exempt personnel (classifications identified with an asterisk "**") will be charged at 1.3 times the above hourly rates.

Special project accounting reporting and financial services, including submission of invoice supporting documentation, will be charged at the rate of a clerk.

URS LABORATORY SERVICES

The charges for laboratory testing performed at URS facilities are set forth in the Schedule of URS Laboratory Testing Charges.

OTHER PROJECT CHARGES

Subcontracts and Other Non-Salary Expenses

The cost of services subcontracted by URS to others and other outside costs incurred by URS that are directly identifiable to the project, will be charged at cost plus 20% and 10%, respectively.

Computers

The charge for use of Computer-Aided Design and Drafting (CADD), graphics generation, modeling applications, Geographic Information Systems (GIS), and similar technical computing is \$25.00 per hour.

In addition to the above, the following charges will apply to plots generated by the CADD and GIS systems:

<u>Plot Size</u>	<u>Paper</u>	<u>Mylar</u>
Smaller than D-size	\$3.00	\$9.00
D-size	\$6.00	\$18.00
Larger than D-size	\$1.00/ft ²	\$3.50/ft ²

Document Reproduction

In-house reproduction will be charged at \$0.10 per page for black and white, \$1.75 per page for premium color and \$1.00 per page for standard color.

Specialized Equipment

The use of specialized URS equipment (including cellular phones) will be the fixed rental rates consistent with prevailing market rates.

Vehicles and Mileage

The mileage charge for personal vehicles used on project assignments will be the current mileage rate established by the Internal Revenue Service.

URS owned vehicles used on project assignments will be charged at \$85.00 per day, with a minimum charge of one-half day.

This fee schedule contains confidential business information and is not to be copied or distributed for any purpose other than the use intended in this contract or proposal.



Appendix D: MOCASIM Model Extension Scope of Work

SOLICITATION / CONTRACT / ORDER FOR COMMERCIAL ITEMS
OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30

1. REQUISITION NUMBER 10203000040		PAGE 1 OF 19 <i>105 (L)</i>	
2. CONTRACT NO.	3. AWARD/EFFECTIVE DATE 08/12/2010	4. ORDER NUMBER R10PX20169	5. SOLICITATION NUMBER R10PS20169
7. FOR SOLICITATION INFORMATION CALL: a. NAME Kara A. Fleming		b. TELEPHONE NUMBER (No collect calls) (916) 978-5132 ext.	
		8. OFFER DUE DATE/ LOCAL TIME 07/12/2010 10:00 am	

9. ISSUED BY MP-3800 - Division of Acquisition Services 2800 Cottage Way, Room E-1815 Sacramento, CA 95825-1898 TEL: () - ext FAX: () - ext.	CODE 00020	10. THIS ACQUISITION IS <input checked="" type="checkbox"/> UNRESTRICTED SET ASIDE: 0.00% FOR <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> HUBZONE SMALL BUSINESS 8(A) NAICS: 541512 SIZE STANDARD: Over 17,000,000	11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE	12. DISCOUNT TERMS 10 days % 20 days % 30 days % days %
		13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)		
		13b. RATING		
		14. METHOD OF SOLICITATION <input checked="" type="checkbox"/> RFQ <input type="checkbox"/> IFB <input type="checkbox"/> RFP		

15. DELIVER TO Bureau of Reclamation - MP - Regional Office 2800 Cottage Way, Room E-1606 Sacramento, CA 95825-1898 Attn: Tom Vang	CODE 00020	16. ADMINISTERED BY Bureau of Reclamation - MP - Regional Office 2800 Cottage Way, Room E-1815 Sacramento, CA 95825-1898	CODE 00020
--	------------	---	------------

17a. CONTRACTOR/OFFEROR DOTAN, AVRY 15 SULLIVAN DRIVE MORAGA, CA 94556-1209 TELEPHONE NO. (925) 631-9890 ext.	CODE *	FACILITY CODE	18a. PAYMENT WILL BE MADE BY Bureau of Reclamation - MP - Regional Office 2800 Cottage Way, Room E-1815 Sacramento, CA 95825-1898 Sacramento	CODE 00020
---	--------	---------------	--	------------

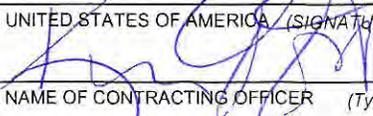
17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER	18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM
---	---

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
(Use Reverse and/or Attach Additional Sheets as Necessary)					

25. ACCOUNTING AND APPROPRIATION DATA - - A10 - 2030000 - - 252R - - 19841000 - - - 00000000 - - - - -	26. TOTAL AWARD AMOUNT (For Govt. Use Only) \$ 250,000.00
---	--

<input checked="" type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4, FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA	<input checked="" type="checkbox"/> ARE	<input type="checkbox"/> ARE NOT ATTACHED
<input checked="" type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4, FAR 52.212-5 IS ATTACHED. ADDENDA	<input checked="" type="checkbox"/> ARE	<input type="checkbox"/> ARE NOT ATTACHED

28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 1 COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.	29. AWARD OF CONTRACT: REF. <u>Your Quote</u> OFFER <input checked="" type="checkbox"/> DATED <u>07/07/2010</u> , YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS <u>1 thru 4</u>
---	---

30a. SIGNATURE OF OFFEROR/CONTRACTOR	31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER) 		
30b. NAME AND TITLE OF SIGNER (Type or print)	30c. DATE SIGNED	31b. NAME OF CONTRACTING OFFICER (Type or print) Kimberly J. Ford	31c. DATE SIGNED <u>12 Aug 2010</u>

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT

32a. QUANTITY IN COLUMN 21 HAS BEEN
 RECEIVED INSPECTED ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: _____

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32c. DATE	32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
--	-----------	---

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE
	32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NUMBER <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	34. VOUCHER NUMBER	35. AMOUNT VERIFIED CORRECT FOR	36. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	37. CHECK NUMBER
--	--------------------	---------------------------------	--	------------------

38. S/R ACCOUNT NUMBER	39. S/R VOUCHER NUMBER	40. PAID BY
------------------------	------------------------	-------------

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT	42a. RECEIVED BY (Print)	
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER	41c. DATE	42b. RECEIVED AT (Location)
		42c. DATE REC'D (YY/MM/DD)
		42d. TOTAL CONTAINERS

Line Item Summary	Document Number R10PX20169	Title MORE Project MOCASIM Model	Page 3 of 19
--------------------------	--------------------------------------	--	------------------------

Total Funding: \$250,000.00

FYs	Fund	Budget Org	Sub	Object Class	Sub	Program	Cost Org	Sub	Proj/Job No.	Sub	Reporting Category
	A10	2030000		252R		19841000			0000000		
Division	Closed FYs		Cancelled Fund								

Line Item Number	Description	Delivery Date (Start Date to End Date)	Quantity	Unit of Issue	Unit Price	Total Cost (Includes Discounts)
------------------	-------------	---	----------	---------------	------------	------------------------------------

0001	MORE Project MOCASIM Model Extension		1.00	LS	\$250,000.000	\$ 250,000.00
------	--------------------------------------	--	------	----	---------------	---------------

The Contractor shall provide all labor, materials, equipment, transportation, and supervision necessary to perform this requirement to expand the Mokelumne-Calaveras River Simulation Model (MOCASIM) to include the portions of the Upper Mokelumne River Basin necessary to evaluate the Mokelumne River Storage and Conjunctive Use Project (MORE Project) to be in compliance with Public Law 111-8, for more information see the attached Statement of Work.

Performance Period: Date of Award to December 31, 2011.

Ref Req No: 10203000040

Total Cost: \$250,000.00

**Contract Level
Funding Summary**

Document Number
R10PX20169

Title
MORE Project MOCASIM Model

Page
4 of 19

- - A10 - 2030000 - - 252R - - 19841000 - - - 0000000 - - - - -

\$250,000.00

Reference Requisition: 10203000040

Total Funding: \$250,000.00

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 5 of 19
--	----------------------------	--	--------------

TABLE OF CONTENTS

COMMERCIAL CLAUSES

1	Pricing Schedule	6
---	------------------	---

SECTION 1 -- Contract Clauses

1	52.212-4 Contract Terms and Conditions--Commercial Items	7
2	52.212-5 Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items	12
3	WBR 1452.223-82 Protecting Federal Employees and the Public from Exposure to Tobacco Smoke in the Federal Workplace -- Bureau of Reclamation	15
4	WBR 1452.237-80 Security Requirements--Bureau of Reclamation	15
5	WBR 1452.211-80 Notice of Intent to Acquire Metric Products and Services -- Bureau of Reclamation	18

ATTACHMENT

1	Attachment #1 Statement of Work	20
1	Attachment #2 Authorities and Delegations	25

COMMERCIAL CLAUSES

1 PRICING SCHEDULE

Pricing Schedule
Dated: May 05, 2010

Item Number	Description	QTY	Unit of Issue	Unit Price	Total Price
0000	Contractor shall perform various Task described in the Statement of Work required to expand the Mokelumne-Calaveras River Simulation Model (MOCASIM). Pricing shall include all labor, materials, equipment, transportation, and supervision necessary to perform this requirement.				
0001	Geographic Coverage	1	Lump Sum	\$50,000.00	\$50,000.00
0002	Hydrologic Period	1	Lump Sum	\$50,000.00	\$50,000.00
0003	System Operation	1	Lump Sum	\$112,500.00	\$112,500.00
0004	Optimization	1	Lump Sum	\$37,000.00	\$37,500.00
	Grand Total				\$250,000.00

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 7 of 19
--	----------------------------	--	--------------

COMMERCIAL CLAUSES

1 52.212-04 CONTRACT TERMS AND CONDITIONS--COMMERCIAL ITEMS JUNE 2010

(a) Inspection/Acceptance. The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. If repair/replacement or reperformance will not correct the defects or is not possible, the Government may seek an equitable price reduction or adequate consideration for acceptance of nonconforming supplies or services. The Government must exercise its post-acceptance rights-

(1) Within a reasonable time after the defect was discovered or should have been discovered; and

(2) Before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) Assignment. The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727). However, when a third party makes payment (e.g., use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) Changes. Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) Disputes. This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) Definitions. The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) Excusable delays. The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) Invoice.

(1) The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include-

(i) Name and address of the Contractor;

(ii) Invoice date and number;

(iii) Contract number, contract line item number and, if applicable, the order number;

(iv) Description, quantity, unit of measure, unit price and extended price of the items delivered;

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 8 of 19
--	-----------------------------------	---	---------------------

(v) Shipping number and date of shipment, including the bill of lading number and weight of shipment if shipped on Government bill of lading:

(vi) Terms of any discount for prompt payment offered:

(vii) Name and address of official to whom payment is to be sent:

(viii) Name, title, and phone number of person to notify in event of defective invoice; and

(ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision, contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer-Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer-Other Than Central Contractor Registration), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(2) Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) prompt payment regulations at 5 CFR part 1315.

(h) Patent indemnity. The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) Payment. - (1) Items accepted. Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract.

(2) Prompt payment. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and prompt payment regulations at 5 CFR part 1315.

(3) Electronic Funds Transfer (EFT). If the Government makes payment by EFT, see 52.212-5(b) for the appropriate EFT clause.

(4) Discount. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(5) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall-

(i) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the-

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 9 of 19
--	-----------------------------------	---	--------------

(A) Circumstances of the overpayment (e.g., duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment):

(B) Affected contract number and delivery order number, if applicable;

(C) Affected contract line item or subline item, if applicable; and

(D) Contractor point of contact.

(ii) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(6) Interest.

(i) All amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 611 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in (i)(6)(v) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(ii) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(iii) Final decisions. The Contracting Officer will issue a final decision as required by 33.211 if-

(A) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt within 30 days;

(B) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(C) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see 32.607-2).

(iv) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(v) Amounts shall be due at the earliest of the following dates:

(A) The date fixed under this contract.

(B) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

(vi) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on-

(A) The date on which the designated office receives payment from the Contractor;

(B) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 10 of 19
--	----------------------------	--	---------------

(C) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(vii) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(j) Risk of loss. Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) Taxes. The contract price includes all applicable Federal, State, and local taxes and duties.

(l) Termination for the Government's convenience. The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) Termination for cause. The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) Title. Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) Warranty. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) Limitation of liability. Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) Other compliances. The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) Compliance with laws unique to Government contracts. The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. 3701, et seq., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.

(s) Order of precedence. Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order:

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 11 of 19
--	----------------------------	--	---------------

(1) The schedule of supplies/services.

(2) The Assignments, Disputes, Payments, Invoice, Other Compliances, and Compliance with Laws Unique to Government Contracts paragraphs of this clause.

(3) The clause at 52.212-5.

(4) Addenda to this solicitation or contract, including any license agreements for computer software.

(5) Solicitation provisions if this is a solicitation.

(6) Other paragraphs of this clause.

(7) The Standard Form 1449.

(8) Other documents, exhibits, and attachments.

(9) The specification.

(t) Central Contractor Registration (CCR). (1) Unless exempted by an addendum to this contract, the Contractor is responsible during performance and through final payment of any contract for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(2)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in FAR Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the CCR database;(B) comply with the requirements of Subpart 42.12; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (t)(2)(i) of this clause, or fails to perform the agreement at paragraph (t)(2)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(3) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database.

Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(4) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at <http://www.ccr.gov> or by calling 1-888-227-2423 or 269-961-5757.

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 12 of 19
--	----------------------------	--	---------------

2 52.212-05 **CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS** **JULY 2010**

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

- (1) 52.222-50, Combating Trafficking in Persons (FEB 2009) (22 U.S.C. 7104(g)).
 ___ Alternate I (AUG 2007) 52.222-50 (22 U.S.C. 7104(g)).
- (2) 52.233-3, Protest after Award (AUG 1996) (31 U.S.C. 3553).
- (3) 52.233-4, Applicable Law for Breach of Contract Claim (Oct 2004) (Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

- X (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (Sept 2006), with Alternate I (Oct 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).
- (2) 52.203-13, Contractor Code of Business Ethics and Conduct (APR 2010) (Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).
- X (3) 52.203-15, Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (June 2010) (Section 1553 of Pub. L. 111-5). (Applies to contracts funded by the American Recovery and Reinvestment Act of 2009.)
- (4) 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards *JUL 2010) (Pub. L. 109-282) (31 U.S.C. 6101 note).
- (5) 52.204-11, American Recovery and Reinvestment Act-Reporting Requirements (JUL 2010) (Pub. L. 111-5).
- (6) 52.219-3, Notice of Total HUBZone Set-Aside (JAN 1999) (15 U.S.C. 657a).
- (7) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JULY 2005) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).
- (8) [Reserved]
- (9)(i) 52.219-6, Notice of Total Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).
 ___ (ii) Alternate I (OCT 1995) of 52.219-6.
 ___ (iii) Alternate II (MAR 2004) of 52.219-6
- (10)(i) 52.219-7, Notice of Partial Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).
 ___ (ii) Alternate I (OCT 1995) of 52.219-7.
 ___ (iii) Alternate II (MAR 2004) of 52.219-7
- (11) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637(d)(2) and (3)).
- (12)(i) 52.219-9, Small Business Subcontracting Plan (JUL 2010) (15 U.S.C. 637(d)(4)).
 ___ (ii) Alternate I (OCT 2001) of 52.219-9.
 ___ (iii) Alternate II (OCT 2001) of 52.219-9.
 ___ (iv) Alternate III (JUL 2010) of 52.219-9
- (13) 52.219-14, Limitations on Subcontracting (DEC1996) (15 U.S.C. 637(a)(14)).
- (14) 52.219-16, Liquidated Damages - Subcontracting Plan (JAN 1999) (15 U.S.C. 637(d)(4)(F)(i)).
- (15)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (OCT 2008) (10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).
 ___ (ii) Alternate I (JUNE 2003) of 52.219-23.
- (16) 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting (OCT 1999) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

	Document No. RI0PX20169	Document Title MORE Project MOCASIM Model	Page 13 of 19
--	-----------------------------------	---	---------------

- ___ (17) 52.219-26, Small Disadvantaged Business Participation Program-Incentive Subcontracting (Oct 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
- ___ (18) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (May 2004) (15 U.S.C. 657 f).
- _X_ (19) 52.219-28, Post Award Small Business Program Representations (APRIL 2009) (15 U.S.C. 632(a)(2)).
- _X_ (20) 52.222-3, Convict Labor (JUNE 2003) (E.O.11755).
- _X_ (21) 52.222-19, Child Labor-Cooperation with Authorities and Remedies (JUL 2010) (E.O. 13126).
- _X_ (22) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).
- _X_ (23) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).
- ___ (24) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).
- _X_ (25) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).
- _X_ (26) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).
- ___ (27) 52.222-54, Employment Eligibility Verification (Jan 2009). (Executive Order 12989). (Not applicable to the acquisition commercially available off-the-shelf items or certain other types of commercial items as prescribed in 22.1803.)
- ___ (28)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (AUG 2000) (42 U.S.C. 6962(c)(3)(A)(ii)).
- ___ (ii) Alternate I (AUG 2000) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)).
- ___ (29) 52.223-15, Energy Efficiency in Energy-Consuming Products (DEC 2007)
- ___ (30)(i) 52.223-16, IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products (DEC 2007) (E.O. 13423).
- ___ (ii) Alternate I (DEC 2007) of 52.223-16.
- ___ (31) 52.225-1, Buy American Act-Supplies (JUNE 2003) (41 U.S.C. 10a-10d).
- ___ (32)(i) 52.225-3, Buy American Act-Free Trade Agreements-Israeli Trade Act (JUNE 2009) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub.L. 108-77,108-78, 108-286, 109-53, 109-169, 109-283, and 110-138).
- ___ (ii) Alternate I (JAN 2004) of 52.225-3.
- ___ (iii) Alternate II (JAN 2004) of 52.225-3.
- _X_ (33) 52.225-5, Trade Agreements (AUG 2009) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).
- ___ (34) 52.225-13, Restrictions on Certain Foreign Purchases (June 2008) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).
- ___ (35) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (NOV 2007) (42 U.S.C 5150).
- ___ (36) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (NOV 2007) (42 U.S.C 5150).
- ___ (37) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 307(f)).
- ___ (38) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).
- _X_ (39) 52.232-33, Payment by Electronic Funds Transfer-Central Contractor Registration (OCT 2003) (31 U.S.C. 3332).
- ___ (40) 52.232-34, Payment by Electronic Funds Transfer-Other than Central Contractor Registration (MAY 1999) (31 U.S.C. 3332).
- ___ (41) 52.232-36, Payment by Third Party (FEB 2010) (31 U.S.C. 3332).
- ___ (42) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).
- ___ (43)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631).
- ___ (ii) Alternate I (APR 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

- ___ (1) 52.222-41, Service Contract Act of 1965, as Amended (NOV 2007) (41 U.S.C. 351, et seq.).
- ___ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- ___ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act-Price Adjustment (Multiple Year and Option Contracts) (SEP 2009) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- ___ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act-Price Adjustment (SEP 2009) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 14 of 19
--	----------------------------	--	---------------

___ (5) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (NOV 2007) (41 U.S.C. 351, et seq.).

___ (6) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services-Requirements (FEB 2009) (41 U.S.C. 351, et seq.).

___ (7) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations (MAR 2009) (Pub. L. 110-247).

___ (8) 52.237-11, Accepting and Dispensing of \$1 Coin (SEPT 2008) (31 U.S.C. 5112(p)(1)).

(d) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records-Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e)(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in this paragraph (e)(1) in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause-

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (APR 2010) (Pub.L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

(ii) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$550,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iii) [Reserved]

(iv) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).

(v) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).

(vi) 52.222-36, Affirmative Action for Workers with Disabilities (JUNE 1998) (29 U.S.C. 793).

(vii) [Reserved]

(viii) 52.222-41, Service Contract Act of 1965 (NOV 2007) (41 U.S.C. 351, et seq.).

(ix) 52.222-50, Combating Trafficking in Persons (FEB 2009) (22 U.S.C. 7104(g)).
___ Alternate I (AUG 2007) of 52.222-50 (22 U.S.C. 7104 (g)).

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 15 of 19
--	-----------------------------------	---	---------------

(x) 52.222-51. Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (NOV 2007) (41 U.S.C. 351. et seq.).

(xi) 52.222-53. Exemption from Application of the Service Contract Act to Contracts for Certain Services-Requirements (FEB 2009) (41 U.S.C. 351. et seq.).

(xii) 52.222-54. Employment Eligibility Verification (Jan 2009)

(xiii) 52.226-6. Promoting Excess Food Donation to Nonprofit Organizations (MAR 2009) (Pub. L. 110-247). Flow down required in accordance with paragraph (e) of FAR clause 52.226-6.

(xiv) 52.247-64. Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241 (b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor may include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

**3 WBR 1452.223-82 PROTECTING FEDERAL EMPLOYEES AND THE PUBLIC FROM DECEMBER 2009
EXPOSURE TO TOBACCO SMOKE IN THE FEDERAL WORKPLACE
-- BUREAU OF RECLAMATION**

(a) In performing work under this contract, the contractor shall comply with the requirements of Executive Order 13058, dated August 9, 1997, which prohibits the smoking of tobacco products in all interior space owned, rented, or leased by the executive branch of the Federal Government, and in any outdoor areas under executive branch control in front of air intake ducts.

(b) In addition, pursuant to Federal Management Regulation (FMR) Bulletin 2009-B1, effective December 22, 2008, smoking is prohibited in courtyards and within 25 feet of doorways and air intake ducts on outdoor space under the jurisdiction, custody or control of GSA.

(End of clause)

4 WBR 1452.237-80 SECURITY REQUIREMENTS--BUREAU OF RECLAMATION OCTOBER 2006

(a) General Security Requirements:

(1) This clause addresses security requirements, including general procedural requirements, information security requirements, contractor employee suitability requirements, identification card requirements, site security requirements, and information technology security requirements. Within this clause, COR means Contracting Officer's Representative. If there is no COR appointed and identified to the Contractor, the term instead will mean the Program Manager or any other authorized individual responsible for technical oversight under the contract. "Work site" means the Government facility, office, construction site, and any other area within the Government office or facility that the Contractor must access to accomplish work under this contract.

(2) The work performed under this contract shall only be accomplished by individuals (in the employment of the Contractor or any subcontractors) whose conduct and behavior is consistent with the efficiency of the Federal Service and the requirements of this contract, and who are acceptable to the CO. If Reclamation finds a Contractor employee to be unsuitable or unfit for his or her assigned duties, the CO will direct the Contractor to remove the individual from the contract and access to the Federal facility at which the contract activities are occurring.

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 16 of 19
--	-----------------------------------	---	---------------

(3) The Contractor's employees governed by this contract may need access to sensitive information and/or may need access to designated Controlled Access Areas (CAAs). The Federal Government (Government) reserves the right, in its sole discretion, to determine suitability of Contractor personnel and deny access to any sensitive information or project specific area to any personnel for any cause.

(4) The Contractor is responsible for informing and ensuring compliance by its employees with any applicable security procedures of the Government facility where work may be performed under this contract.

(5) Any Contractor employee that will have access to a Federally-controlled facility or information system will be required to have a Government-issued identification card consisting of either a Personal Identity Verification (PIV) Card, a temporary identification card, or a visitor badge. During performance of the contract, the Contractor shall keep the COR apprised of any changes in personnel, or changes in personnel access or duration, to ensure that performance is not delayed by compliance with credentialing processes.

(6) A Contractor employee will not be provided access to a Government facility or information system until a Government PIV Card, temporary identification card, or visitor identification badge has been issued to the Contractor employee. For those individuals that will be receiving a PIV Card, the Government may, at its discretion, issue a temporary identification card or visitor identification badge after the background investigation forms have been received and the investigation is initiated.

(7) All Contractor employees shall access the facility via the facility's entry screening system and visibly display the Government-issued PIV Card, temporary identification card, or visitor identification badge at all times. Contractor employees must visibly wear the Government-issued identification card at all times they are on Government facilities. Contractor employees are responsible for the safekeeping of all Government-issued identification cards, whether on-site or off-site. Cards that have been lost, damaged, or stolen must be reported to the COR within 24 hours. The Contractor shall return all identification cards and card keys and any other Government property and information upon completion of performance or when personnel depart permanently or for a period of 7 days or more. The Contractor may be required to turn in access control cards or identification cards on a daily basis.

(8) Misuse or loss of access control or identification cards, or failure to comply with required surrender of such cards may, at Government discretion, result in Contractor personnel being denied access to the work site, at no cost to Government. The Contractor may be charged up to \$500 for each occurrence for any required replacement of Government-issued access control or identification cards due to loss or misuse. At the end of contract performance, or when a Contractor employee is no longer working under this contract, the Contractor shall ensure that all access control and identification cards are returned to the COR.

(9) All Contractor personnel, including subcontractor personnel, with access to the work site shall be U.S. citizens or foreign individuals legally residing in, or legally admitted to, the U.S. At the direction of the COR, the Contractor shall provide to the COR, in writing, the name and nationality of all non-U.S. citizens working under this contract. For those individuals with access to the work site, the Contractor shall also provide documentation that the foreign individual is legally residing in, or has been legally admitted to, the U.S.

(10) The Contractor shall report all contacts with entities, individuals, and counsel/representatives (including foreign entities and foreign nationals) who seek in any way to obtain unauthorized access to sensitive information or areas. The Contractor shall report any violations of contract provisions, laws, executive orders, regulations, and guidance to the CO. The Contractor shall report any information raising a doubt as to whether an individual's eligibility for continued employment or access to sensitive information is consistent with the interests of National Security and the Public Trust.

(11) Unsanctioned, negligent, or willful inappropriate action on the part of the Contractor (or its employees) may result in termination of the contract or removal of some Contractor employees from Reclamation facilities at no cost to the Government. These actions include, but are not limited to, exploration of a sensitive system and/or information, introduction of unauthorized and/or malicious software, or failure to follow prescribed access control policies and/or security procedures. Failure to comply with Reclamation policies, procedures, or other published security requirements may result in termination of

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 17 of 19
--	-----------------------------------	---	---------------

the contract or removal of some contracted employees from Reclamation buildings and/or facilities at no cost to the Government.

(12) All provisions of this clause shall equally apply to all subcontractors. The Contractor shall incorporate the substance of this clause in all subcontracts.

(13) These security requirements apply to all sections of this Contract including Contract Drawings and other Contract Specifications as applicable. Related documents include other general provisions of Construction or Operations and Maintenance type Contracts, including FAR clauses by reference or as amended by related documents.

(b) Information Security Requirements.

(1) The term "sensitive information" means any information which warrants a degree of protection and administrative control as defined by Reclamation or that meets the criteria for exemption from public disclosure set forth under Sections 552 and 552a of Title 5, United States Code; the Freedom of Information Act and the Privacy Act. Sensitive information is generally categorized as FOR OFFICIAL USE ONLY (FOUO) information, but in some cases may include other unclassified information. (The protection of National Classified information is beyond the scope of this clause. If any work on classified information is required under this contract, it is addressed under other contract clauses.) The Contractor shall protect this type of information from unauthorized release into public domain, or to unauthorized persons, organizations, or subcontractors. Information which, either alone or in aggregate, is deemed sensitive by Reclamation shall be handled and protected in accordance with Reclamation Directives and Standards for Identifying and Safeguarding FOR OFFICIAL USE ONLY (FOUO) Information, which is available at <http://www.usbr.gov/recman/DandS.html#sle>.

(2) Any Government-furnished information/material does not become the property of the Contractor and may be withdrawn at any time. Upon expiration of the contract, all documents released to the Contractor and any material created using data from such documents shall be returned to the COR for final disposition. Only with prior authorization from the CO may the Contractor retain the material. The Contractor or subcontractor shall not disclose or release the materials provided to the Contractor to any individuals of the Contractor's organization not directly engaged in providing services under the contract or that do not have a valid need-to-know. All technical data provided to the Contractor by the Government shall be protected from public or private disclosure in accordance with the markings printed on them. All other information relating to the items to be delivered or the services to be performed under this contract shall not be disclosed by any means without prior approval of the CO. Prohibited dissemination or disclosure includes, but is not limited to: permitting access to such information by foreign nationals or by immigrant aliens who may be employed by the Contractor, publication of technical or scientific papers, advertising, and disclosure to Contractor staff not investigated and deemed acceptable at the appropriate contract/information sensitivity level, or any other proposed public release. The Contractor shall maintain, and furnish upon demand of the CO, records of the names of individuals who have access to sensitive material in its custody. All questions regarding information security, access, and control shall be referred to the COR.

(3) The Contractor shall not release to anyone outside the Contractor's organization any sensitive, or otherwise protected information, regardless of medium in which it is contained (for example, film, tape, document, electronic), pertaining to any part of this contract or any Reclamation program or activity, unless the CO has given prior written approval. This includes, but is not limited to, news releases, marketing promotions, articles, interviews, reports, and any other media releases. Requests for approval shall identify the specific information to be released, the medium to be used, the purpose for the release, and a description of the need-to-know. The Contractor shall submit its request to the CO before the proposed date for release. Subcontractors shall submit requests for authorization to release through the prime Contractor to the CO.

(4) The Contractor shall notify the COR immediately when known or suspected loss/compromise of sensitive information or other documents, notes, drawings, sketches, reports, photographs, exposed film or similar information which may affect the security interests of Government has occurred. This requirement extends to employees and other personnel working on behalf of the Contractor, and expands responsibility to include prompt reporting of security issues, including observed or subsequently discovered efforts by unauthorized persons to gain unauthorized access to sensitive information.

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 18 of 19
--	-----------------------------------	---	---------------

**5 WBR 1452.211-80 NOTICE OF INTENT TO ACQUIRE METRIC PRODUCTS AND SERVICES - MARCH 1993
- BUREAU OF RECLAMATION**

(a) Metric Transition Plan. The Department of the Interior on December 6, 1991, issued a Metric Transition Program (Part 758 Department Manual Chapter 1) to establish and describe the program's policies and responsibilities. The Bureau of Reclamation (Reclamation), has developed a Metric Transition Plan to implement metrication in Reclamation. This plan describes Reclamation's overall strategy for using the metric system, defines general requirements and procedures for carrying out the transition, and details the tasks with milestones for Reclamation offices to complete.

(b) The Omnibus Trade and Competitiveness Act of 1988 (Trade Act).

(1) Section 5164 of Public Law 100-418, the Trade Act, amended the Metric Conversion Act of 1975 and designated the metric system of weights and measures for United States trade and commerce.

(2) The Trade Act establishes September 30, 1992, as the implementation date (to the extent economically feasible) for Federal agencies to use the metric system of measurement in its procurements, grants, and other business-related activities.

(3) The Trade Act permits exceptions to the use of the metric system to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms, such as when foreign competitors are producing competing products in non-metric units.

(4) As a result of the Trade Act, the President issued Executive Order 12770 dated July 25, 1991, to implement the congressional designation of the metric system as the preferred system of weights and measures for United States trade and commerce.

(c) Bureau of Reclamation Implementation. As a result of the Trade Act, Reclamation will, to the maximum extent practicable, use hard conversion and soft conversion metric systems in designing its construction projects, eventually phasing out use of the soft conversion metric system. Exceptions to this policy will only be made when such use is impractical, produces inefficiencies or market losses, or is not economically feasible.

(d) Expected Results. Reclamation expects its support of the metric system to result in increased use of the metric system by U.S. contractors, thereby increasing their ability to compete in the international marketplace. Increasing use of the metric system by U.S. contractors will eliminate possible restrictions on their bidding in the international marketplace and will eliminate any impact of economic blocks by metric countries restricting the acceptance of non-metric products.

	Document No. R10PX20169	Document Title MORE Project MOCASIM Model	Page 19 of 19
--	-----------------------------------	---	---------------

ATTACHMENT

1 ATTACHMENT

Attachment #1 – Statement of Work – 5 Pages

Attachment #2 – Authorities and Delegations – 1 Page

STATEMENT OF WORK
MORE Project MOCASIM Model Extension
May 5, 2010

Part A – General Information:

1. Purpose: This Statement of Work describes tasks required to expand the Mokelumne-Calaveras River Simulation Model (MOCASIM) to include the portions of the Upper Mokelumne River Basin necessary to evaluate the Mokelumne River Storage and Conjunctive Use Project (MORE Project). Authorized by P.L. 109-338, Title V, Section 501, October 12, 2006, and amended by P.L. 111-8, March 10, 2009.

2. Background: The MORE Project is located within the Mokelumne River Basin and includes parts of Calaveras, Amador, and San Joaquin Counties. The study includes water agencies that receive a significant portion of their water supply from the Mokelumne River Basin. The purpose of the project is to capture unappropriated high flows from the Mokelumne River and regulate this supply to an integrated system of conjunctive use projects to provide additional water supply and reliability for the region.

The project would divert up to 110,000 acre-feet per year by direct diversion off the Mokelumne River and store up to 434,000 acre-feet per year through off-stream surface storage and groundwater recharge. Although the water would not be available in all years, estimates have shown an annual yield of 90,000 acre-feet when combined with surface storage.

Reclamation completed an Appraisal Report and Plan of Study with the non-Federal cost-sharing partner. The Appraisal Study found potential Federal interest in a groundwater recharge/conjunctive use project in the Eastern San Joaquin Groundwater Basin. Restoring the aquifer to sustainable levels would have local and regional benefits for CVP contractors and others in the study area.

A potentially feasible groundwater recharge/conjunctive use project, which helps restore the Eastern San Joaquin Groundwater Basin to sustainable levels, is critical to the agricultural and economic viability of the region. Additionally, a project which potentially improves water supply reliability in the region is an objective consistent with Reclamation's mission.

On October 12, 2006, the President signed Public Law 109-338 authorizing the Secretary through the Bureau of Reclamation to complete "a study to determine the feasibility of constructing a project to provide additional water supply and improve water management reliability through the development of new water storage and conjunctive use programs" and identifying the Mokelumne River Water and Power Authority as the non-Federal cost-sharing partner for the study.

Public Law 111-8 amended the feasibility study authorization to expand the study area to include the entire Mokelumne River drainage basin and those who depend on the Mokelumne River for a water supply so that inter-regional water management solutions are evaluated.

3. Point of Contacts: Technical: Sharon McHale, Division Planning, 916-978-5086; Contractual: Ms. Annette Fleming, Contract Specialist, 916-978-5132.

4. Period of Performance: This purchase order shall be performed from Date of Award through December 31, 2011.

5. Invoices and Payments:

a. The Contractor shall be paid at the completion of specified services for the amount of work accomplished. Invoices shall be verified by the Technical Point of Contact before payment can be authorized.

b. All invoices shall be sent in accordance to block 18a of the Standard Form 1449 (SF 1449). All invoices shall reflect purchase order number and the final invoice shall be marked "FINAL".

c. All payments are made monthly in arrears. Final payment shall be authorized when the Government receives all requested services.

Part B – Work Requirement:

1. General Information: Reclamation's primary focus is development of MOCASIM to be capable of simulating the range of alternatives necessary for compliance with laws and regulations. As it is currently configured, the MOCASIM model is not capable of simulating the range of alternatives that are needed to comply with PL 111-8, environmental compliance, or feasibility determination. In addition, many agencies are attempting to develop water supplies on the Mokelumne River and MOCASIM will need to simulate the action of the MORE Project along with combinations of actions by other entities in the basin. The work is to expand the existing MOCASIM simulation model thus enabling modeling of future developments in the basin, including: Enlarged Lower Bear Reservoir, Raised Pardee Dam and MORE Water Project in compliance with PL 111-8.

The Expanded MOCASIM shall allow assessment of the additional water supply benefits and power generation resulting from these proposed developments.

For the water supply benefits, the expanded MOCASIM could be used to evaluate the overall system non-appropriated water that could be managed in the additional storage created by the Enlarged Lower Bear Reservoir, Raised Pardee Dam and/or the off-stream storage reservoir at Duck Creek (MORE Water Project). These storage facilities could be operated in any sequence of development. Therefore, the expanded MOCASIM shall allow for the examination of the incremental benefits obtained from each project. Water stored in these new facilities could be diverted at various points throughout the system for beneficial use including groundwater recharge.

For the hydropower benefits, the expanded MOCASIM could be used to evaluate the additional generation of Project 137, resulting from the Enlarged Lower Bear Reservoirs, as well as the additional changes in generation from the Pardee and Camanche power plants.

Each task shall include the corresponding Project Management resources to complete the identified work, in addition to any specific Project Management related functions/activities mentioned in that task. Accordingly, the Contractor's estimate shall include commensurate hours for Project Management for each major task.

2. Performance and Technical Requirements: The Contractor shall have knowledge and experience with modeling and the Mokelumne River Basin. The Contractor shall have the capability to:

- a. Compile historical hydrology data for inclusion in a river simulation model.
- b. Modify and develop river simulation models.
- c. Compare simulation results to historical data.

3. The following information below are the tasks that shall be performed by the Contractor in a timely manner and in accordance with the terms and conditions of this requirement.

Task 1- Geographical Coverage: The geographical coverage in the current version of MOCASIM extends from the Mokelumne Hill Gage upstream of Pardee Reservoir, downstream to the Bay-Delta. MOCASIM shall be expanded to include representation of the Upper Mokelumne River Basin upstream of the Mokelumne Hill Gage. The flow regime in upper basin is primarily dominated by the operation of PG&E Project 137. Project 137 consists of two reservoirs and five hydroelectric power plants: Salt Springs and

Lower Bear reservoirs and Salt Springs #1 & #2, Tiger Creek, West Point and Electra powerhouses (see schematic profile in Figure 1 below). PG&E operates these facilities with consideration to power generation objectives, instream flow requirements mandated by the Federal Energy Regulatory Commission, and in accordance with the Lodi Decree¹.

In the current version of the model starts with historical inflows to Pardee, all operational considerations in the Upper Mokelumne River Basin are implicit in the flow data obtained from the Mokelumne Hill Gage. The Contractor shall expand MOCASIM to incorporate the physical characteristics of the upper basin including PG&E reservoirs, water ways and power plants as well as all applicable operational rules for these facilities.

Task 2 - Hydrological Period: The Contractor shall develop hydrological data for the Upper Mokelumne River Basin to cover the period 1954 through 2009. The Contractor shall develop hydrological data to extend the simulation period in MOCASIM though 2009 (currently from 1954 to 2003).

For the purpose of modeling the Upper Mokelumne Basin, the Middle Fork and South Fork Mokelumne Rivers will be combined and represented by a single input node, as these rivers are not regulated by storage facilities. The hydrology of the North Fork Mokelumne will be represented by Project 137 releases, as explained above, as well as local runoff.

Extending the simulation period to 2009 will also entail the development of the hydrological data for the Lower Mokelumne River, Duck Creek and the available water from the American River²

Task 3 - System Operation: The current version of MOCASIM is designed to simulate the operation of the existing facilities in the Lower Mokelumne River system in accordance with current water rights permits and agreements as well as the proposed MORE Project. MOCASIM runs in two passes. In the first pass the model operates the system without MORE and then defines the magnitude and duration of non-appropriated water in the system (i.e., spills to the Bay-Delta). In the second pass the model simulates the operation of the existing system in conjunction with MORE, i.e., diverting water to MORE while ensuring that deliveries to all existing water rights holders, as computed in the first pass, are kept whole. The current model can also simulate the operation of Raised Pardee Dam (with or without MORE).

However, the current model is not designed to compute the additional yield resulting from Raised Pardee Dam and Enlarged Lower Bear Reservoir as it lacks the mechanism to differentiate between "old" water (existing supplies) and "new" water (attributed to the additional storage in the system). This is a complex issue that cannot be solved by simply subtracting two cases (i.e., with and without the new storages) as it involves tracking the amount of "old" and "new" water at any given time and applying different demands and water rights priorities rules to these two categories of water.

The Contractor shall expand MOCASIM to keep track of "old" and "new" water, thus allowing quantification of the new yield from each facility. The Contractor shall structure the model to enable sequencing of the implementation of the proposed development and, as such, evaluation of the incremental benefits obtained from each project. The Contractor shall also incorporate in the expanded MOCASIM the ability to quantify the contribution to groundwater recharge.

Task 4 - Optimization: One of the features in the current version of MOCASIM is the ability to optimize deliveries of water from various sources (i.e., diversion from the Mokelumne River via Pardee, Camanche and Lower Mokelumne and imports from American or Calaveras Rivers) to MORE (Duck Creek), on a monthly basis. In the expanded MOCASIM, the Contractor shall enhance this algorithm to allow optimizing

1. The Lodi Decree is a series of court decisions from the 1940's and 50's that mandate average monthly outflow from Salt Springs and Lower Bear reservoirs as function of reservoirs' storage
2. MOCASIM uses CALSIM II data for the American River. If CALSIM II data is not available for the extended period, it will have to be estimated, or alternatively, the simulation period will be truncated to match the available data from CALSIM II.

the deliveries from the various sources on an annual basis. This is closer to a real-time operation in which operators consider longer forecasting horizon than one month.

4. Deliverables:

a. The primary deliverable for this work will be a functional computer model of the Expanded MOCASIM, available to use for operational and feasibility studies in connection with Enlarged Lower Bear Reservoir, Raised Pardee Dam and MORE Water Project.

b. Updated user's manual of the model expanded to reflect the new features in the model.

c. Model validation analysis comparing historical operational data (flow and power and storage) for the Upper Mokelumne River to those simulated with MOCASIM.

5. Deliverables/Required Reports: The deliverables are described in the tasks. The documents shall vary in length and shall include, but are not limited to, any graphics needed to depict the study area and features of any of the alternatives discussed.

In general, the Contractor shall use the latest Microsoft Suite Version as the platform for tabular, schedule, text, database and photographic submittals. The electronic deliverables are to include digital copies of all files, and all supporting topographic data used. Electronic deliverables shall be submitted on compact disk (CD) in both the native and *.pdf formats. Examples of native formats are:

a. Tabular data is to be in spreadsheet (Excel) format.

b. Appropriate information is to be compatible for GIS format.

c. Text shall be submitted in Microsoft Word format.

d. Figures and maps shall be submitted in *.pdf (Adobe portable document format).

e. Digital photographs shall be delivered in *.tif or *.jpg format.

6. Schedule/Deliverables:

Task No.	Deliverable	Due Date after award of contract
1	Geographic Coverage	January 2011
2	Hydrologic Period	January 2011
3	System Operation	December 2011
4	Optimization	September 2011

Part C – Supporting Information:

1. Government Furnished Property and Services: None.

2. Security Access: Access to Reclamation-owned land will need to be cleared with Reclamation. The Contractor shall provide Reclamation with a 14-day advance notice of any field visits. On Reclamation land other than public access, Reclamation will provide an escort for the Contractor.

ATTACHMENT 2: AUTHORITIES AND DELEGATIONS (MAY 2010)

- (a) The Contracting Officer is the only individual authorized to enter into or terminate this contract, modify and term or condition of this contract, waive any requirement of this contract, or accept nonconforming work.
- (b) The Contracting Officer will designate a Contracting Officer's Representative (COR) at time of award. The COR will be responsible for technical monitoring of the contractor's performance and deliveries. The COR will be appointed in writing, and a copy of the appointment will be furnished to the Contractor. Changes to this delegation will be made by written changes to the existing appointment or by issuance of a new appointment. The COR for this contract will be:

As distinguished in the COR Designation Letter provided at award.

- (c) The COR is not authorized to perform, formally or informally, any of the following actions:
 - (1) Promise, award, agree to award, or execute any contract, contract modification, or notice of intent that changes or may change this contract;
 - (2) Waive or agree to modification of the delivery schedule;
 - (3) Make any final decision on any contract matter subject to the Disputes Clause;
 - (4) Termination, for any reason, the Contractor's right to proceed;
 - (5) Obligate in any way, the payment of money by the Government.
- (d) The Contractor shall comply with the written or oral direction of the Contracting Officer or authorized representative(s) acting within the scope and authority of the appointment memorandum. The Contractor need not proceed with direction that it considers to have been issued without proper authority. The Contractor shall notify the Contracting Officer in writing, with as much detail as possible, when the COR has taken an action or has issued direction (written or oral) that the Contractor considers to exceed the COR's appointment, within 3 days of the occurrence. Unless otherwise provided in this contract, the Contractor assumes all costs, risks, liabilities, and consequences of performing any work it is directed to perform that falls within any categories defined in paragraph (c) prior to receipt of the Contracting Officer's response issued under paragraph (e) of this clause.
- (e) The Contracting Officer shall respond in writing within 30 days to any notice made under paragraph (d) of this clause. A failure of the parties to agree upon the nature of a direction, or upon the contract action to be taken with respect thereto, shall be subject to the provisions of the Disputes clause of this contract.
- (f) The Contractor shall provide copies of all correspondence to the Contracting Officer and the COR.
- (g) Any action(s) taken by the Contractor, in response to any direction given by any person acting on behalf of the Government or any Government official other than the Contracting Officer or the COR acting within his or her appointment, shall be at the Contractor's risk.