# Attachment B-1

# Mid San Joaquin River Regional Flood Management Plan Detailed Scope of Work and Tasks

## I. Introduction

The goals of the Department of Water Resources (DWR) Regional Flood Management Planning Program are to build upon flood risk management information developed through, and contained in the Central Valley Flood Protection Plan (CVFPP), and to develop a long-term vision for "a flood safe region" through the use of detailed regional information and a collaborative local planning process. Integrated Flood Management is an approach to dealing with flood risk that recognizes the:

- 1) interconnectedness of flood management actions within broader water resources management and land use planning,
- 2) value of coordinating across geographic and agency boundaries,
- 3) need to evaluate opportunities and potential impacts from a system perspective, and
- 4) importance of environmental stewardship and sustainability.

The Mid San Joaquin River Region (Region) is positioned to demonstrate these principles in practice and deliver integrated flood management planning that benefits all of California by improving public safety, reducing flood damages, enhancing water supply reliability, enhancing environmental quality, improving the resilience of wildlife populations, reducing regulatory burden and land-use conflicts, and leveraging state investments.

The Region contains a variety of stakeholder groups in urban, urbanizing and rural areas focused on a variety of environmental management challenges including flood management, stormwater and wastewater management, water supply conservation and enhancement, water quality enhancement, wildlife habitat restoration, agricultural production, and community stewardship and recreation. Flood management in this Region has historically been challenged by lack of public investment in preventative actions and competition for precious flood management funds through cost-benefit analyses at the state and federal levels that favor urban areas.

This Region also has a unique history of support for non-structural flood management and a base of stakeholders interested in multiple-benefit regional solutions to flood management challenges. The Region is bordered to the south by the San Joaquin River Restoration Program reaches —a massive public investment in water supply/habitat restoration that serves as a fundamental partner to DWR in multiple-benefit flood management and environmental enhancement in the Central Valley. The Region is bordered to the north by the Sacramento-San Joaquin Delta — an area that is critically important for the future of water management in California. The Region includes a number of west-side irrigation districts which rely upon San Joaquin River for irrigation supply as well as several east-side irrigation districts which rely upon dams for irrigation supply which are managed in concert with flood operations. The Mid-San Joaquin Region stands in a position to support and promote the objectives of DWR's FloodSAFE initiative through demonstration of integrated multiple-benefit flood management projects

within the Region, constructive collaboration with adjacent regions to develop system-wide flood management solutions, and coordination with regional and large-scale environmental enhancement initiatives with overlapping geographies to leverage State investments for broad public benefit.

Our approach to addressing the Region's flood risk management challenges includes extensive yet measurable stakeholder outreach and involvement, integration with complementary conservation and water management initiatives in the Region, and a commitment to efficiency and progress. Interested stakeholders including local governments, non-governmental organizations, natural resource management agencies, flood control agencies, irrigation districts, reclamation districts, levee maintenance agencies, and property owners are collaborating on the development of this Regional Flood Management Plan (RFMP).

The Region has identified two agencies to work collaboratively to lead the effort: Reclamation District (RD) 2092 and Stanislaus County. RD 2092 will serve as the administrator for the effort, and will share the leadership of the planning effort with Stanislaus County. These agencies have jointly hosted several stakeholder outreach meetings, developed a comprehensive list of interested parties, and have drafted a Memorandum of Understanding governing the approach to collaboration on this planning effort. Interested stakeholders will work to integrate the RFMP with projects and initiatives in the Region including the East Stanislaus Integrated Water Management Plan (IRWMP), the Westside San Joaquin IRWMP, the North Valley Regional Recycled Water Program (NVRRWP), City and County General Plans, State and federally-supported non-structural flood management efforts including the Three Amigos and Dos Rios Ranch projects, regional conservation initiatives and stakeholder processes, and local flood management projects (both old and new). By providing a forum for inclusive communication amongst the interested stakeholders, we hope to develop a flood management working group that will persist after the completion of this planning effort to collaboratively support multiple-benefit water projects in the Region.

Our approach to formulation of the RFMP will focus on defining the current state of flood risk, major environmental quality issues related to flood management, land management trends and outlooks as they relate to flood management, historic political and economic challenges to effective flood management in the Region, and growth trends for the urbanizing areas of the Region. This description of current conditions and management, which focuses broadly on the different factors that contribute to flood management challenges in the Region, will encourage the development of broadly-considered flood management solutions that fit the state's interests in multiple-benefit projects and system-wide investment, providing the basis for a broadly supported vision of a flood-safe Region. Once this vision is articulated, project ideas will be collated and prioritized, the Regional Atlas will be updated, and a financing plan will be prepared to conceptualize the implementation of broadly-supported, multiple-benefit flood management projects in the Region.

The proposed approach will involve a transparent stakeholder outreach process, supported by engineering, operational, and financial analyses. In order to provide a high degree of accessibility and transparency, the outreach effort will include a web page and active distribution of meeting notices and outcomes, work products as they become available, schedules, and briefing materials to interested stakeholders. Great care will be taken to focus the effort on progress and action to avoid stakeholder exhaustion. This approach includes substantial involvement from regional stakeholders in coordination with adjacent regions, including content sharing, meeting attendance, and plan integration. Feedback and input will be accepted throughout the planning process and incorporated into the documents as much as possible to optimize the robustness of this RFMP. Informative briefings will be hosted throughout the process to broaden the exposure of local stakeholders to DWR's interest in system-wide investments and multiple-benefit projects.

# II. Background

The Central Valley Flood Protection Plan (CVFPP) calls for DWR to work with local flood management agencies to prepare detailed RFMPs that, at a minimum, identify and articulate the following:

- Describe flood management challenges and deficiencies at the regional level including operations and maintenance practices, levee and channel inspection, and emergency response plans.
- Propose potential solutions/projects identified by local public agencies and interest groups for the region, projects' costs, and prioritization of the solutions/projects enhanced operations and maintenance, emergency response, and floodplain management.
- Propose financial strategies that identify benefits of the projects and sources of the funding for implementation of the projects.

The CVFPP promotes a State System-wide Investment Approach (SSIA) for sustainable, integrated flood risk management. One of the purposes of this regional planning effort is to inform future updates to the CVFPP by obtaining more region-specific information and local input. The regional planning effort will also inform the basin-wide feasibility studies envisioned under the CVFPP. The plan formulation process will document site-specific and regional flood system improvement needs, ensure local involvement in developing their region's long-term vision for flood management, and prepare strategies for implementation over the long term (next 25 years+/-) to achieve the region's vision for significantly reducing flood risks.

The RFMP effort will partner resource managers, local governments, levee maintenance agencies, irrigation districts, stakeholders and property owners with the DWR and Central Valley Flood Protection Board (CVFPB) to identify and prioritize the Region's needs and projects related to integrated regional flood management. The end result will be prioritized actions to reduce flood risk in urban and urbanizing areas, small communities, rural-agricultural areas and sensitive resource areas through a combination of improvements to the flood protection system. In addition, these partnerships will result in:

- updated emergency response and recovery plans,
- improved operations and maintenance practices focused on reducing costs,
- improved flood management protocols and methods,
- improved inter- and intra-regional collaboration,
- increased integration of flood management with other overlapping regional and statewide environmental and water management initiatives, and
- the development of local capacity.

## **Regional Partners**

The Mid San Joaquin River Region will work as a collaborator with the Upper San Joaquin and Lower San Joaquin / S Delta Regions due to the interconnectedness of flood management operations of the three regions and their many common challenges and interests. The geographic extent of the Region includes those Reclamation Districts identified in the Draft Regional Atlas as well as the Cities of Modesto, Ceres, Turlock, Patterson, and Newman; the community of Grayson; Patterson, West Stanislaus, El Solyo, Del Puerto, Modesto and Oakdale Irrigation Districts; Newman Drainage District, and all areas between the Merced/San Joaquin River Confluence and the Stanislaus/San Joaquin River confluence with a nexus to flood management.

Reclamation District 2092 proposes to work collaboratively with Stanislaus County, regional stakeholders and qualified consultants to develop the Regional Flood Management Plan. With assistance from DWR staff, the two agencies (Reclamation District 2092 and Stanislaus County) have co-hosted outreach to local stakeholders as well as representatives from adjacent regions. This proposal is the result of interactions amongst these leading agencies as well as other regional stakeholders. This proposal includes several sub-recipients of grant funds in order to allow for substantial involvement from local stakeholders including: Reclamation District 2063, Stanislaus County, City of Patterson, and the Tuolumne River Trust.

## **Project Administration and Consultant Selection**

River Partners as the majority landowner for RD 2092 will provide staff to administer and manage the project for the District. RD 2092 and Stanislaus County have drafted a Memorandum of Understanding regarding the shared role of project management for this effort. This MOU will be ratified after presentation to the Stanislaus County Board of Supervisors in early 2013. The draft MOU includes conflict dispute resolution language as presented below:

It is expected that RD 2092 and the County share the following principles in the resolution of conflicts:

- 1. The efficient delivery of an effective Regional Flood Management Plan is the primary goal of both parties.
- 2. The parties will focus on their common goals rather than maintain their differences.
- 3. Win/win solutions to disputes shall be sought.
- 4. Differences of opinion are acceptable.
- 5. Timely, open and honest communication is the key to avoiding and resolving conflicts.
- 6. Technical concerns should be separated from interpersonal issues.
- 7. Decisions should be made and conflicts resolved at the lowest possible level.

RD 2092 and Stanislaus County worked with Regional Partners to select a consultant to facilitate, coordinate and deliver the RFMP. The following steps were used to identify the most qualified consultant:

- A preliminary scope of work was developed in coordination with DWR and interested stakeholders to clearly articulate the expectations of the consulting team.
- This preliminary scope of work was used to draft a Request for Qualifications. This Request for Qualifications was distributed to interested stakeholders for review and approval prior to circulation.
- The approved Request for Qualifications was distributed to interested parties for response and notice was posted publicly in three locations within the District for 21 days. The period for response was 21 days (three weeks).
- A three-phase evaluation process was used to determine the most appropriate consultant from the RFQ responses:

Phase 1: a preliminary review of completeness was conducted by RD 2092. No submittals were determined to be incomplete.

Phase 2: complete responses were forwarded to interested stakeholders and ranked as highly qualified (2 points), adequate (1 point), or less-than qualified (0 points) based on the following criteria:

- local experience,
- technical capacity,
- familiarity with flood management conditions in the Mid-San Joaquin Region as well as the San Joaquin River Watershed,
- demonstrated experience leading similar planning efforts,

- demonstrated experience in stakeholder processes, and
- demonstrated experience in financial planning for infrastructure projects.

Phase 3: an interview process was waived as the interested stakeholders were able to find consensus based upon the scoring process described above. A recommendation from the interested stakeholders was submitted to RD 2092 and approved unanimously by the District in late December 2012.

RD 2092 worked with the successful consultant to develop the scope of work and project budget included here.

# III. Description of the Proposed RFMP

The Mid-San Joaquin Regional Flood Management Plan will be formulated to include all of the components described in the funding guidelines. The Plan is intended to develop a reconnaissance-level vision for a flood-safe region, thus will be formatted to provide ready access to relevant information, with appendices documenting more detailed and technical information. The Plan will include an executive summary and eight chapters as described below.

## **Executive Summary**

The Executive Summary will summarize the goals and objectives of the regional planning effort, the regional planning process, and the region-specific flood system characteristics and challenges that drive prioritization of proposed solutions. The Executive Summary will also present the outcome of the planning process, including recommended management actions/projects, financing, and other strategies for improving public safety and reducing regional flood risks while integrating flood management projects with other environmental and economic improvements. The future roles of the Regional Partners in developing and implementing priority projects and the need for a group to re-examine the RFMP prior to the next update of the CFVPP will be acknowledged. This summary section will generally describe the flood risk characteristics of the region: its current vs. planned future state (25-years planning window), flood hazards; proposed improvements, key partners, total plan cost, and significant strategies (e.g., for financing the proposed projects).

## **Chapter 1 Regional Settings**

This chapter will provide the region's flood history and describe its critical infrastructure, natural resources and assets, demographics, land use, economy, and other region-specific information. This chapter also will identify the Regional Partners who participated in the plan and their respective jurisdictions, roles, and responsibilities with respect to improving public safety and reducing both the risks and consequences of flood within the region. Special consideration will be given to soliciting involvement in the planning process from non-traditional flood management partners such as environmental, educational and recreational-focused stakeholders, as well as stakeholders focused on water quality, stormwater management, wastewater management, and water supply. Regional stakeholders recognize that flood management decisions that do not integrate a healthy local economy with equitable distribution of flood management costs are not sustainable. This chapter will describe the opportunities and constraints of further collaboration amongst the Regional stakeholders and between the regions within the San Joaquin River Watershed.

## **Chapter 2 Assessments of Flood Hazards in the Region**

This chapter will describe regional flood hazards, system deficiencies and opportunities, as well as the levees, channels, floodplains, basins, structures, easements, zoning designations and other existing

assets for managing or mitigating flood risks. This chapter will include a description of critical infrastructure and ecological health of the region as these issues relate to integrated flood management. This chapter will summarize the known flood hazards in urban and rural communities both within the region and downstream. Information collected from DWR's Urban Levee Evaluations (ULE) and Non-Urban Levee Evaluations (NULE) programs will be incorporated into this chapter.

## **Chapter 3 Emergency Response Planning**

This chapter will summarize the roles and responsibilities of the region's emergency responders and the level and quality of their readiness (indicated by adopted Emergency Plans, frequency of training and retraining of responders, stockpiling of equipment and materials needed for flood fights, etc.). This chapter will also summarize potential enhancements to regional emergency response systems and potential sources of financial and technical assistance for Emergency Response Planning. Details of such proposed enhancements will be presented in the RFMP appendices. This chapter will include a description of the State of Emergency Response readiness within the region, including lists of Emergency Response Plans in-place, the entities responsible for responding to emergencies within each region, and the extent to which the Region is capable of managing residual risk. Opportunities to integrate emergency response systems throughout the region (flood and non-flood) will be described in this chapter. Additionally, regulatory considerations related to emergency flood management actions will be described and opportunities for streamlining and collaboration with regulatory agencies will be discussed.

## **Chapter 4 Proposed Regional Improvements**

Once the current state of the flood protection systems in the region has been established, the Regional Partners will identify management actions to improve public safety and reduce flood risks, including both structural and non-structural solutions. The proposed solutions may include concept-level improvements to operations and maintenance as well as policy changes. Such conceptual solutions will be treated with a separate prioritization process apart from tangible project-level proposed solutions.

The proposed solutions will be reviewed by the consultants, DWR and interested stakeholders to ensure they are technically, politically and economically feasible. Additionally, they will be reviewed on their effectiveness in achieving the targeted improvement in public safety and reduction in flood risks while improving environmental quality and other complementary values. Proposed regional improvements will be described in the context of the San Joaquin River system including interactions with upstream and downstream regional projects. The benefits of proposed regional improvements will be described with regards to improvement of:

- Public safety
- Water supply reliability
- Water quality
- Environmental quality
- Sustainability
- Resilience to climate change and other anticipated future regional conditions
- Integration amongst complementary regional efforts
- Potential to leverage costs
- Long-term O&M funding outlooks

In most cases, proposed solutions and their benefits will be described by Regional stakeholders and reviewed and formatted by the consultant. Draft proposed improvements will be distributed to

adjacent Regional planning leads for review and comment. Descriptive project sheets will be included in the RFMP appendices; summary information will be presented in this chapter.

## **Chapter 5 Regional Priorities**

The consultant will work with the regional stakeholders and DWR to develop simple and equitable criteria that will be used to prioritize the proposed regional improvements in a manner compatible with DWR's efforts. The prioritization criteria will include risk reduction, multi-purpose objectives, benefits-to-costs, compatibility with regional and basin-wide initiatives and other identifying rational to prioritize the respective improvements as developed by the regional partners. The prioritization criteria will be consistent with the priorities identified in the CVFPP. For proposed actions that cannot be ranked (concept-level improvements and policy changes) a separate prioritization will be completed. Ranking criteria for conceptual-level improvements and/or policy changes will be qualitative in nature and reflect the potential improvement's contribution towards assisting DWR in accomplishing system-wide integrated flood management, and will include a high-level analysis of feasibility and required collaboration amongst stakeholders and regulators.

## **Chapter 6 Enhanced Operations and Maintenance**

Regional partners will work with the consultant to identify strategies for improving public safety and reducing flood risks through enhanced Operations and Maintenance (O&M). This chapter will include strategies for improving O&M in the region and how to provide sustainable funding for O&M. This chapter will examine the opportunities for regional O&M consolidation. All evaluation of proposed regional improvements will include a description of means to reduce long-term O&M and cost analyses will consider short and long-term costs.

## **Chapter 7 Regional Financial Plan**

This chapter will summarize the Regional Financial Plan for the region and list the potential sources of funding for the proposed solutions /projects (regional funding capacity). The Regional Financial Plan will address long-term capital improvement investments, as well as funding for flood emergency response operations, O&M of the region's flood management facilities, land use changes that may influence local tax base, and opportunities to leverage state and federal investment with local and non-flood funding sources. The Regional Financial Plan will collate the best available existing data on housing growth, agricultural market trends, investments in environmental improvements, and investments in flood management, water quality and water supply infrastructure for the region over a 25-year planning horizon. Based upon the outlook for each of these funding types and the funding needs identified by the region, the consultant will develop concept-level cost estimates and cost share strategies for each of the proposed improvements. This information will be summarized in this chapter and a detailed Regional Financial Plan will be presented as an appendix to the RFMP.

## **Chapter 8 Land Use and Environmental Enhancements**

Regional Partners will work to develop measures to ensure appropriate local planning to improve public safety and reduce flood risks in the Region's floodplains and will work to define opportunities for floodplain management that is compatible with large-scale flood risk reduction for the region. The city and county general plan updates that are required to incorporate data and analyses from the CVFPP will be discussed and included in this section. Additionally, regional and local efforts to improve public safety, create river parkways, enlarge wildlife habitat preserves, promote flood-compatible agricultural programs or other landscape-level conservation actions that complement floodplain planning will be described with particular focus on opportunities to integrate flood risk reduction and public safety enhancement. Local and regional environmental effects of land use planning will be assessed in this

chapter using existing data and analyses provided by DWR and other partners. This chapter will include description of strategies for resolving land use issues in providing for environmental restoration in the region.

## **Appendices**

#### Regional Atlas Update

The RFMP will include a revised Regional Atlas incorporating input from DWR, stakeholders, and adjacent regions.

#### **Project Descriptions**

The RFMP will include two-page project descriptions for proposed regional improvements that explicitly define the costs and benefits of the project, as well as the assumptions required to create cost and benefit evaluations. These project descriptions will also include an evaluation of funding sources for the project. The format of these descriptions will be developed in coordination with the other regional planning groups to ensure analyses are compatible across the Central Valley.

#### Regional Financial Plan

The RFMP will include a detailed financial plan which identifies strategies to implement the prioritized actions identified by regional stakeholders. Regional Financial Plan information included in the Regional Flood Management Plan will be summarized in a tabular format. Regional Financial Plan information included in the appendix will include assumptions, analyses, and other considerations related to identified funding sources (including eligibility, legal compatibility concerns, timelines, and other requirements). The format of this plan will be developed in coordination with the other regional planning groups to ensure analyses are compatible across the Central Valley.

# **IV. Description of Tasks**

A consultant will perform planning, coordination, and technical services related to the scope of work described below. RD 2092 and Stanislaus County will work with DWR and local stakeholders to provide relevant information to the consultant to develop the vision and financial plan for a flood-safe region. RD 2092 and Stanislaus County will provide coordination services throughout the project period to ensure robust stakeholder involvement from agricultural landowners and environmental groups to city, county and local district officials. Additionally, RD 2092 and Stanislaus County will provide document review and guidance on process throughout the project period.

This application includes the following 4 tasks:

- 1. Project Management
- 2. Coordination and Communication
- 3. Regional Atlas Update
- 4. Regional Flood Management Plan

## Task 1: Project Management

RD 2092 will manage the day to day activities for this project including providing quarterly progress reports to DWR, tracking project expenditures, communicating project developments with DWR and stakeholders, and invoicing DWR monthly. As the timeline for this planning effort is quite narrow, RD 2092 will work closely with the selected consultant to develop a Project Work Plan and Schedule that clearly identifies all opportunities and expected performance metrics for stakeholder engagement, as

well as expectations for information sharing from regional working group partners. The Project Work Plan shall include milestones with dates that will allow the successful completion of the plan. At the close of the project, a Completion Report will be submitted to DWR documenting the activities undertaken and the successful completion of the RFMP.

## **Task 2: Coordination and Communication**

Coordination and communication amongst Regional Partners is essential for accomplishing this planning effort. RD 2092 and Stanislaus County have solicited commitments from many stakeholders in the Mid-San Joaquin Region, and will continue to work closely with local interests to ensure stakeholder buy-in and information sharing. Stakeholders involved in the development of this RFMP should include: representatives of Local Implementing/ Operating, and Local Maintaining Agencies; local land use agencies (cities and counties); flood emergency responders; permitting agencies; and agricultural, tribal, and environmental interests that are knowledgeable about the flood risks and potential solutions within the flood region. Core goals of this task include:

- Active solicitation of various interest groups and perspectives in the development of the RFMP,
- Integration of proposed flood management improvements with the resource agencies responsible for regulation of the waterways of the region, and
- Leveraging existing stakeholder groups to efficiently integrate flood planning with other planning efforts for the region.

Involvement from regulatory agencies including the US Fish and Wildlife Service (USFWS), US Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), US Environmental Protection Agency (USEPA), and the Regional Water Quality Control Board (RWQCB) will be solicited directly at various stages in the development of this RFMP to ensure that projects and objectives are consistent with regulatory agency goals for the region, and to minimize potential future regulatory conflict for proposed regional improvements. RD 2092 has already presented the planning effort to regional CDFW staff and USFWS staff, and has secured a commitment from both agencies to participate as much as possible in the plan development.

The planning effort will be presented at various forums within the Region to solicit integration with overlapping and complimentary efforts. RD 2092 has already presented the planning effort informally to meetings of the East Stanislaus IRWMP and the Middle San Joaquin Watershed stakeholder group. Additional stakeholder groups and planning efforts in the region that will be targeted directly for involvement in RFMP development include:

- North Valley Regional Recycled Water Program
- East Stanislaus IRWMP
- Westside San Joaquin IRWMP
- Tuolumne River Technical Advisory Committee
- Tuolumne River Farmers
- Stanislaus River Parkway
- Tuolumne River Parkway
- USFWS Anadromous Fish Restoration Program
- Dam Relicensing processes on the Tuolumne and Merced Rivers
- San Joaquin River National Wildlife Refuge Proposed Boundary Expansion
- Coalition for Urban/Rural Stewardship (CURES)
- East Stanislaus Water Quality Coalition
- Westside Water Quality Coalition

- West Stanislaus Resource Conservation District
- East Stanislaus Resource Conservation District
- Central Valley Joint Venture
- Others TBD as the project progresses

Active participation in the development of the Upper San Joaquin and Lower San Joaquin/S Delta RFMPs is also planned here. RD 2092, Stanislaus County, and the hired consultants will communicate regularly with adjacent regional leads and identify opportunities to integrate plan development throughout the project period. RD 2092 and Stanislaus County have already begun this integration by attending small strategy meetings and broad stakeholder meetings for neighboring regions, discussing possible regional boundary revisions and mutually beneficial projects and issues with neighboring regions, and sharing documents of mutual interest with neighboring regions.

RD 2092 will work with Stanislaus County to lead the Regional Partners in the planning effort. The task of ensuring coordination and communication will be accomplished by the consultant. The following subtasks will be included in this task:

## Task 2.1 Identify a plan to engage all interested parties

The consultant will work with RD 2092 and Stanislaus County to develop a plan for coordination within the region. Existing data including a database of regional stakeholders, contacts for regional planning efforts, documents describing overlapping regional planning efforts, and a concise history of outreach performed to date will be collated and provided to the consultant by Stanislaus County and RD 2092 with the "Notice to Proceed". The consultant will develop a draft coordination plan and submit it for review by the Regional Partners at the first planning meeting. The plan will be as succinct as possible and will include at minimum:

- a list of organizations that need to participate in development of the RFMP;
- a summary of existing planning and stakeholder efforts in the region that have overlapping or complementary goals;
- the location and proposed dates of meetings, briefings, meetings of neighboring RFMP efforts, and informative workshops and field trips;
- names, contact information, and roles of various members of the consultant team;
- preliminary agendas and the main agencies and stakeholders that need to attend the meetings;
- RFMP messaging and the process for regional advertising and notification;
- the process by which regional partners and stakeholders can expect to provide information and have the information incorporated into the RFMP;
- a calendar of already planned meetings and events for overlapping efforts (as listed above);
- a plan for development and maintenance of a RFMP website (in coordination with the existing ESIRWMP website);
- a list of easily-monitored performance metrics and potential remedies should the communication plan prove ineffective (i.e. how can stakeholder involvement be monitored and communication approach adapted to ensure efficient use of project funds?).

The regional coordination plan's primary purpose is to support RFMP development and, additionally, it will provide information needed to maximize collaborative work, maximize leveraging of other regional planning and stakeholder processes, identify plan areas of overlapping subject matter, and identify strategies to ensure broad stakeholder involvement within the region and with neighboring regions. The consultant will finalize the coordination plan after receiving comments from the Regional Partners.

#### Task 2.2 RFMP planning meetings

The consultant will coordinate and conduct initial regional planning meetings to organize the regional partners and the regional planning effort. Coordination will include advertising and inviting all agencies and entities that need to participate in development of the RFMP as defined in the coordination plan, developing agendas and meeting materials. Planning meetings must be well-attended to assure appropriate involvement from regional partners. The consultant will work with RD 2092 and Stanislaus County to track RSVPs for planning meeting invitations and follow-up with regional partners to identify and remedy obstacles to their participation. At a minimum, 3 planning meetings will be held (likely in Modesto). At least one planning meeting will include interaction with neighboring regional planning leads to review timelines and opportunities for integration. Outcomes from these meetings will include:

- Review and formalization of coordination plan;
- Identification of key challenges to broad stakeholder involvement;
- Identification of uncertainties in RFMP development including data gaps, capacity limitations, and timeline challenges;
- Identification of potential governance structures or other mechanisms to ensure long-lasting stakeholder collaboration;
- Identification and review of neighboring regions RFMP process and timeline.

## **Task 2.3 RFMP workshops**

The consultant will coordinate and conduct at least 10 workshops to discuss and develop the RFMP sections. Each workshop will discuss at least two sections of the RFMP, starting one and concluding another. Each section of the RFMP will be provided to the participants in advance and presented at RFMP workshops, once in draft form and at least once in revised form. All workshops will be set up ahead of time as described in the coordination plan. There will be a due date/deadline established between the workshops for submittal of information from the Partners. This task will include collection, organization and understanding of the existing detailed regional flood management information (regional content) from the Regional Partners. As possible, RFMP workshops may be coordinated with neighboring regional plans to share data and integrate approaches. Participation in RFMP workshops will be tracked using standard methods as described in the coordination plan and reviewed regularly to ensure communication approaches can be adapted throughout the project period to achieve optimal results. Specialized communication with small interest groups, individual stakeholders and other organizations will be approved by RD 2092 and may require funding in excess of that budgeted (i.e. may need use of contingency).

## **Task 2.4 Participate in RFMP briefings**

RD 2092, Stanislaus County, stakeholders and the consultant will participate in various briefings of the regional planning effort and the RFMP. Briefings will be planned and coordinated by the regional partners on an as needed basis. The briefings anticipated in this planning effort include local governing boards and councils, local special districts, local landowners and interested groups, overlapping planning efforts as described above, Central Valley Flood Protection Board, DWR's Planning Steering Committee, DWR's FloodSAFE Ecosystem Stewardship and Statewide Resources Office, the California Wildlife Conservation Board, the Central Valley Joint Venture, the San Joaquin River Restoration Program and other entities interested in the regional planning effort. Briefing content will vary and may include challenges and opportunities within the Region, the RFMP process, integration of the RFMP with complementary efforts, and the possible implications of the RFMP for targeted groups. The consultant will support these briefings by providing presentation materials, preparing and distributing agendas, taking notes documenting the meetings, communicating outcomes with the Regional Partners, and

summarizing RFMP briefings in progress reports. This budget includes 10 briefings. Should additional briefings be required, contingency funding may need to be tapped.

#### **Task 2.5 Website and Materials**

The consultant will work with the regional partners to integrate a collection of RFMP webpages into the existing East Stanislaus IRWMP website if agreeable to DWR. This will provide a strong amount of integration between the two efforts and provide a cost savings to DWR. The budget reflects this cost savings. Documents such as meeting agendas, meeting summaries, background information and documents will be posted on the website.

#### **Task 2.6 Coordination Meetings**

RD 2092, Stanislaus County, and the consultant will participate in bi-weekly conference calls throughout the process to ensure effective communication among the all key team members and to resolve issues of concern in a timely manner.

## **Task 3: Update the Regional Atlas**

The Draft Regional Atlas will be updated with input from DWR, regional stakeholders and interested parties. The consultant will coordinate updating the Regional Atlas by the regional partners with any additional local information that results from the planning effort. The consultant will solicit additional data and data needs from the regional partners during workshops and through targeted communications, coordinate the review of the draft atlas by regional partners, update the atlas as recommended by the regional partners, and provide DWR with all the GIS layers and electronic files used in the update. It is anticipated that DWR will publish the updated Regional Atlas.

It is not anticipated that additional technical analyses will be required to update the Regional Atlas, however the consultant will work with DWR and other agencies and organizations to collect relevant spatial data that already exists. The draft revised Regional Atlas will be distributed to neighboring regions for review and comment. The budget includes resources for the consultant to solicit and collate existing data sources, assemble a draft revised Regional Atlas, collect and process comments from regional partners, and revise the Regional Atlas. Additionally, the budget includes resources for RD 2092 RD 2063 and Stanislaus County to provide Quality Control (QA/QC) for the revision.

## Task 4: Develop Regional Flood Management Plan

The selected consultant will prepare the nine sections of the RFMP. Each topic section will then be compiled into the final RFMP. The nine sections will all have different due dates as established in the project work plan. The consultant will perform research, collect information during the regional workshops, and solicit information from DWR and the regional partners in preparing each section. It is anticipated that most information included in the RFMP will be existing and little new information will be generated. RD 2092 will approve all work to develop new technical information. All sections will be distributed in draft form to regional stakeholders and neighboring regional leads for comment and review.

#### **Task 4.1 Regional Settings**

With substantial input and guidance from regional stakeholders, the consultant will write the Regional Settings section of the RFMP. This chapter will characterize flood system deficiencies and risks within the region as well as flood management integration opportunities such as erosion repair sites that may require mitigation and opportunities for mitigation provision, transient storage opportunities that are compatible with agricultural or open space land uses, need for management of recreational river access as it relates to access for maintenance and inspection, and other concept-level opportunities. The

Regional Settings section also identifies the regional partners and their respective jurisdictions, roles, and responsibilities with respect to improving public safety and reducing both the risks and consequences of flood within the region. Specific information to be included in this section to describe the region includes population density by area, zoned land uses, industry and economics, streams and rivers, existing sensitive resource areas and critical habitats that are influenced by flood management, existing easements and land use restrictions related to flooding, existing agricultural production as it is influenced by flood management (i.e. flood/seepage compatible crops and flood/seepage-threatened crops), flood history for past events, local flood management agencies and their respective jurisdictions, etc. Selected additional maps based on existing data will be developed for the Regional Settings chapter. These are expected to include known flood hazards within the cities of Modesto, Patterson, Newman, and others. Other data may include revetment maps and channel meander analyses as they inform future erosion concerns and potential preventative maintenance activities; past erosion repair locations and operations; locations and descriptions of critical infrastructure including stormwater outfalls and surface water diversion facilities; locations of known sensitive resource areas including critical habitat and protected natural areas; and others as determined by regional partners.

#### Task 4.2 Assessments of Flood Hazards in the Region

Regional stakeholders will work with the consultant team to describe the regional flood hazards and system deficiencies, as well as the levees, channels, floodplains, basins, easements, water treatment facilities, water diversion and distribution structures, critical regional infrastructure, and other existing assets for managing or mitigating flood risks. This chapter will explain the public safety setting, and define the economic and natural resource assets protected by the existing flood management system. It will also identify the locations and populations of urban, urbanizing, small and rural communities, State and or regional infrastructure, open space areas, areas of critical habitat and special-status wildlife conservation, and other regional flood assets relative to these hazards and deficiencies for the purpose of assessing the regions' flood risks.

This chapter will rely heavily on existing data and reports completed for the CVFPP including Non-Urban Levee Evaluations (NULE), Critical Repairs programs, and the Regional Atlas. Local reports and information will be reviewed and individual meetings may be conducted with stakeholders to accurately identify areas of concern. This section will include a summary of the history of Public Law 84-99 authorized investments in emergency preparedness and repairs in the region as well as private investment (as possible) for flood fighting and levee repairs. Upon DWR's release of updated design criteria for rural levees (anticipated summer 2013), this section will overlay those design considerations with known deficiencies to support prioritization of proposed solutions.

#### **Task 4.3 Emergency Response Planning**

One of the most important strategies for addressing residual risk is to improve Flood Emergency Preparedness, Response, and Recovery capabilities. This chapter will describe the current state of Emergency Response readiness within the Region, including:

- lists of Emergency Response Plans in-place,
- which entities need to update or develop Flood Emergency Response,
- the entities responsible for responding to emergencies, and
- the extent to which residual risk is capable of being addressed within the region.

This chapter will identify the roles and responsibilities of each area's emergency responders; the level and quality of their readiness (indicated by adopted Emergency Plans, frequency of training and retraining of responders, stockpiling of equipment and materials needed for flood fights, etc.). This chapter will identify potential enhancements to coordinated regional emergency response systems

resources, and assets. Additionally, this chapter will include an evaluation of implications for levee districts if eligibility for Federal assistance in the USACE Rehabilitation and Inspection Program is lost, particularly with respect to disaster recovery in the event the system loses eligibility for PL 84-99 rehabilitation assistance.

## **Task 4.4 Proposed Regional Improvements**

The consultant will write the Proposed Regional Improvements section of the RFMP. Once the current state of the flood protection systems in the region has been established, the consultant will solicit information from the regional partners to identify management actions to improve public safety and reduce flood risks, including both structural and non-structural solutions. The ultimate objective of this section of the regional planning process is to identify specific solutions (i.e., projects) that could cost-effectively improve public safety and reduce flood risks while providing a variety of additional benefits to the region including environmental enhancement, enhancement of water supply reliability and water quality, enhanced stormwater and wastewater management, community/quality of life considerations, and other integrated benefits as identified by regional partners. As the region is overlain with many complementary regional water management planning efforts, this chapter will include discussion of the potential to integrate flood management projects with other initiatives. The proposed solutions may include concept-level improvements to operations and maintenance as well as policy changes. Such conceptual solutions will be treated with a separate prioritization process apart from tangible project-level proposed solutions. The RFMP will include a summary table of Proposed Regional Improvements. Two-page project descriptions will be collated in the RFMP appendices.

Proposed regional improvements may include the following types of projects:

- Structural repairs of known levee deficiencies if supported by regulatory agencies and local stakeholders and can be done in a way that is compatible with the multiple-benefit objectives and goals of the CVFPP;
- Construction of new infrastructure to safely pass floodwaters through urban and urbanizing areas if supported by regulatory agencies and local stakeholders and can be done in a way that is compatible with the multiple-benefit objectives and goals of the CVFPP;
- Construction of new infrastructure to optimize transient floodwater storage on floodplains
  as compatible with the multiple-benefit objectives and goals of the CVFPP (i.e. water control
  structures to provide for management of inundation and draw-down to reduce flood risk,
  minimize fish entrainment, and increase residence time to retain sediments);
- Integration of flood management objectives into existing planned improvements (such as the North Valley Regional Recycled Water Program or the San Joaquin River National Wildlife Refuge Boundary Expansion Proposal);
- Development of off-channel floodwater storage for groundwater recharge;
- Removal of rock revetment that acts to hinder or confound flood-related erosion problems;
- Options to reduce future flood damages through non-structural approaches (i.e. real estate transactions, levee breaching, conversion to flood-compatible land uses, etc.)

Concept-level proposed regional improvements may include the following types of actions:

- Integration of dam operations and enhanced communication of flood management decisions amongst stakeholders;
- Clarification of permit requirements and identification of opportunities to pre-mitigate for anticipated repairs or impacts related to flood management;
- Regional consolidation of levee maintenance operations; and

• Clarification of Reclamation District responsibilities and liabilities under current and potential future regulatory scenarios.

The proposed solutions should be technically, politically and economically feasible, and effective in achieving the targeted improvement to public safety and reduction in flood risks while improving environmental quality and other complementary values. Proposed regional improvements will be described in the context of the San Joaquin River system including interactions with upstream and downstream regional projects.

The consultant will use existing information to develop costs and benefits for all proposed improvements and will work closely with the District on the need to develop new cost estimates and benefits. All assumptions will be thoroughly described. At a minimum, benefits analysis will include:

- Improvements to public safety;
- Flood risk reduction and value of protected area;
- Improvements in habitat quality and connectivity;
- Improvements in flood protection and O&M considerations for water supply infrastructure;
- Improvements in water quality and wastewater management;
- Improvements to quality of life for local residents (aesthetics; recreation opportunities; security from trespass, theft and vandalism; etc.); and
- Improvements to local economy (through outside investment, protection/enhancement of ag productivity, increase in tourism, increase in fishing and hunting opportunities, reduction in O&M costs, reduction in emergency response costs, etc.).

#### **Task 4.5 Regional Priorities**

Prioritization of regional projects will proceed by first establishing broadly supported prioritization criteria, then ranking projects as they represent the region's priorities. The consultant will develop identifying criteria that will be used to rank the respective improvements in this Region and work with the regional partners in finalizing the criteria. The ranking criteria will include risk reduction, multipurpose objectives, environmental effects (+/-), benefits-to-costs, and other identifying rational to rank the respective improvements. The ranking criteria will be consistent with the priorities identified in the CVFPP. For conceptual-level proposed improvements or policy changes, the consultant will develop, in concert with regional stakeholders, a qualitative ranking to illustrate the region's priorities without the benefit of rigorous economic and ecological evaluation where it is premature or infeasible. Regional flood management priorities will be coordinated with the regional IRWMP project lists and priorities to identify areas of overlap or opportunities for partnership.

#### **Task 4.6 Enhanced Operations and Maintenance**

The consultant will write the Operations and Maintenance section of the RFMP. The consultant will work with the regional partners to identify strategies for reducing flood risks through enhanced and integrated O&M. The consultant will solicit information from the regional partners on the level of funding, training, and other resources that may be needed to implement these recommended strategies. The consultant will draft this RFMP section and present it to the regional partners and neighboring RFMPs in draft form. The consultant will finalize this section following review and comment from regional partners. This section will include strategies for improving O&M in the region and investigate opportunities to provide sustainable funding for O&M. In addition, the plan will examine the opportunities for regional O&M consolidation and will prioritize O&M cost reduction strategies.

#### **Task 4.7 Regional Financial Plan**

Financing is a unifying factor for all elements of the RFMP. Once all proposed structural and non-structural flood management improvements are described, the Regional Financial Plan will collate costs and potential sources of funding (e.g., federal, State, and local cost-shares). The source of local funding (i.e. Prop. 218, Assessment Districts, Development Fees, etc.) will also be discussed. This task will require the integration of information from the previous sections, plus economic and financial analyses. The RFMP will look for opportunities to bundle proposed improvements that collectively can be supported by multiple sources of funding and will provide public safety, social, ecological and flood damage reduction benefits at regional level as well as system-wide. The description of cost estimates will be coordinated through DWR to insure that the Mid-San Joaquin Region is consistent with other regions for state-wide comparisons. Assumptions will be clearly described and a schedule for funding high priority projects will be developed. This section will also include a discussion of recommendations for future funding solicitations from Prop 1E for regional projects.

The RFMP will include a summary of the Regional Financial Plan, however a detailed description of the assumptions and background information that was used to prepare the summary will be appended to the RFMP. Several existing or planned floodplain improvements in this region are already underway with support from a wide variety of local, state, and federal funding sources (for example, the Three Amigos Project and the Dos Rios Ranch Project). These projects do not draw wholly upon typical flood management pools of public funding (i.e. local assessments, prior Prop 1E solicitations or directed funding actions, USACE cost-shares) thus the source interests, compatibility with other funding pools, timelines, and administration of such funding should be clearly described to provide a reference for other regions interested in leveraging similar outcomes. This level of detail is greater than what will be provided in the RFMP, but will be a valuable component of the Region's financing plan for use by other Regions and DWR. The Mid San Joaquin River Region is in almost wholly agricultural/open space land uses and boasts the largest contiguous riparian and floodplain habitat restoration in the Central Valley. The economic and financial analyses typical of the flood management community are well-developed for urban areas, but less-developed for agricultural areas and almost wholly undeveloped for sensitive habitat areas. The Regional Financial Plan RFMP appendix will detail the assumptions used to evaluate the financial considerations for agricultural and floodplain habitat land uses as they deviate from traditional flood management approaches.

## **Task 4.8 Land Use and Environmental Enhancements**

The consultant will work closely with regional stakeholders to write the Land Use and Environmental Enhancements section of the RFMP. Through the regional planning process, the consultant will solicit information from the regional partners to develop measures to ensure appropriate local planning and development of financial incentives to improve public safety and reduce flood risks in the floodplains. Environmental permitting has been identified as one of the biggest challenges to flood management in the Central Valley. This section of the RFMP will describe opportunities for regional environmental enhancements that may serve as mitigation for needed structural repairs. Such discussion will be aided substantially by the regional partners from regulatory agencies as well as discussions with interested DWR FESSRO staff and partners working on the Regional Advanced Mitigation Planning (RAMP) effort and the FloodSAFE Conservation Strategy. The consultant will also work with neighboring regions to share ideas and identify opportunities for collaboration. This chapter will also review opportunities to promote strategic agricultural and recreational economic growth that is compatible with flood management, including a variety of measures which could provide incentives for maintenance of floodcompatible cropping within floodplains and flood-prone areas. This section will include consideration of how improving riverine habitat quality and recreational opportunities for area residents can be integrated into the overall regional flood management system.

## **Task 4.9 Executive Summary and Plan Completion**

The consultant will write the Executive Summary for the RFMP. This summary section will generally describe the flood risk characteristics of the region: its current vs. planned future state (25-years planning window), flood hazards; proposed improvements, key partners, total plan cost, and significant strategies (e.g., for financing the proposed projects). The final RFMP will be delivered in both electronic & hard copy to the District, the regional partners and DWR. The budget assumes printing of 20 hard copies of the final RFMP.

## V. Deliverables

- Project Work Plan
- Quarterly progress reports
- Monthly invoicing
- Project Completion Report
- Coordination Plan
- List of organizations that participated in development of the RFMP
- ≥ 3 Planning meetings
- ≥ 10 Workshops
- ≥ 10 Briefings
- Updated Regional Atlas including GIS and other electronic files
- Draft RFMP with appendices (Electronic files only)
- Final RFMP with appendices (20 hard copies and electronic files)

# **VI. Opportunities and Constraints**

Formidable flood management constraints have long been recognized in the Mid San Joaquin River Region. Cost-benefit analyses for flood management projects in this region have rarely supported state or federal investment in levee construction, maintenance, or repair. Because of the region's lack of investment in preventative flood management actions, the flood system is in substantial disrepair. A majority of levees within this region are in need of costly repairs to maintain their function while critical infrastructure has been placed within the floodway, relying on these levees for flood protection. Emergency response is sometimes uncoordinated which has resulted in conflicts between Local Maintaining Agencies and resource agencies. Sedimentation and invasion by non-native weeds within the floodway has long been recognized as a substantial hindrance to flood conveyance in this region, yet workable sediment transport models and system-wide weed abatement initiatives have never been developed to assist in the analysis of possible solutions. Drainage of farmlands to preserve productivity has often been challenging due to extreme sedimentation in west-side streams that require costly maintenance, highlighting a need to coordinate flood management, sediment management and drainage objectives for the region. Many riverine-dependent wildlife species are on the brink of extinction and some are flood-threatened, elevating the need for coordinated flood management within the endangered species recovery community, and increasing the need for flood system repairs to meet multiple objectives.

Despite all of these constraints, the Mid San Joaquin River Region hosts tremendous opportunities to demonstrate and develop integrated flood management approaches that can provide multiple benefits to the region (from improvements in public safety to ecosystem improvements to water supply reliability enhancements). This region's floodplains host critical habitat for threatened and endangered

species which draw federal and state investment in habitat enhancement that can be developed in tandem with public safety enhancement and flood risk reduction. This region hosts substantial interest from the State Water Resources Control Board and the Environmental Protection Agency to clean up water quality for disadvantaged communities and agriculture on the west side of the County, as well as a heritage of water conservation innovation lead by landowners and federal agency partners. Finally, and perhaps most importantly, this region has a legacy of collaboration across multiple interests to find onthe-ground solutions to challenging problems. The RFMP as proposed will provide DWR with a detailed understanding of the needs of the region, but will also provide the region with a clear vision for further collaboration, coordination, and integration. The RFMP will also provide an opportunity to bring the flood management objectives of the Mid San Joaquin River Region into focus to facilitate communication with flood managers both upstream and downstream.

## VII. Completion Date

Exhibit A presents a detailed work schedule by tasks. The entire project will be completed by June 30, 2014 or 18 months from the receipt of a Letter of Commitment from DWR, whichever occurs later.

## **VIII.** Total Costs

Exhibit B presents detailed Regional Working Group costs by tasks. The expected total project cost is \$938,589.

Task/Subtask	Qt 1	Qt 2	Qt 3	Qt 4	Qt 5	Qt 6
1. Project Management						
2. Coordination and Communication						
2.1 Coordination plan						
2.2 RFMP planning meetings						
2.3 RFMP workshops						
2.4 RFMP briefings						
3. Update Regional Atlas						
4. Regional Flood Management Plan						
4.1 Regional Settings						
4.2 Assessment of Flood Hazards						
4.3 Emergency Response Planning						
4.4 Proposed Regional Improvements						
4.5 Regional Priorities						
4.6 Enhanced O&M						
4.7 Finance Plan						
4.8 Land Use & Env Enhancements						
4.9 Executive Summary and Plan Completion						

Exhibit B: Itemized Project Budget by Task

1-Feb-13	Sub-Recipients										Sub	-Contractor	In-	-Kind	Summary					
	River Partners for RD 2092 <sup>1</sup>			Stanislaus Co <sup>2</sup> RD 2063 <sup>3</sup> Patterson <sup>4</sup> TRT <sup>5</sup>			ΓRT <sup>5</sup>	ESA/PWA		Other Sta	keholders <sup>6</sup>									
		CI Daniana		Various			١.													ital Project
	President	SJ Regional Director	Controller Total Labor		Tot	al Labor		sistant anager	Consultant	Deput	y Director					Subtotal		RD 2092 <sup>7</sup>	101	Cost
Task 1. Project Management			\$ 22,230		\$	22,125		\$ -	\$ -		\$ -	\$	56,483		\$ -	\$100,838	\$	13,800	\$	114,638
1.1 Direct Project Management	54	36	72 \$ 22,230	177	\$	22,125		\$ -	\$ -		\$ -	\$	-		\$ -					
1.2 Work Plan and Schedule			\$ -		\$	-		\$ -	\$ -		\$ -	\$	12,500		\$ -					
1.3 Administration and Fees			\$ -		\$	-		\$ -	\$ -		\$ -	\$	43,983		\$ -		\$	13,800		
Task 2. Coordination and Communication			\$ 37,840		\$	29,000		\$4,750	\$ -		\$9,791	\$	134,500		\$ 25,840	\$215,881	\$	-	\$	215,881
2.1 Coordination Plan		12	\$ 1,680	24	\$	3,000		\$ -	\$ -		\$ -		\$12,500		\$ -					
2.2 Planning Meetings		24	\$ 3,360	33	\$	4,125		\$ -	\$ -		\$ -		\$23,000	8	\$ 760					
2.3 Workshops	40	50	\$ 13,600	135	\$	16,875	50	\$4,750	\$ -	63	\$7,835		\$45,000	264	\$ 25,080					
2.4 Briefings	40	50	\$ 13,600	20	\$	2,500		\$ -	\$ -	16	\$1,956		\$29,000		\$ -					
2.5 Website and Materials		4	\$ 560		\$	-		\$ -	\$ -		\$ -		\$17,000		\$ -					
2.6 Coordination Meetings		36	\$ 5,040	20	\$	2,500		\$ -	\$ -		\$ -		\$8,000							
Task 3. Update Regional Atlas			\$ 1,680		\$	1,500		\$1,140	\$ -		\$ -	\$	40,000		\$ 2,280	\$ 44,320	\$	-	\$	44,320
3.1 Update Regional Atlas			\$ -		\$	-		\$ -	\$ -		\$ -	\$	40,000		\$ -					
3.2 QA/QC		12	\$ 1,680	12	\$	1,500	12	\$1,140	\$ -		\$ -	\$	-	24	\$ 2,280					
Task 4. Draft RFMP			\$ 36,440		\$	33,750		\$1,900	\$6,500		\$ -	\$	416,000		\$ 41,040	\$494,590	\$	-	\$	494,590
4.1 Regional Setting		20	\$ 2,800	21	\$	2,625		\$ -	\$ -		\$ -		\$50,500	36	\$ 3,420					
4.2 Assessment of Flood Hazards		10	\$ 1,400	21	\$	2,625		\$ -	\$ -		\$ -		\$40,000	36	\$ 3,420					
4.3 Emergency Response Planning		12	\$ 1,680	36	\$	4,500		\$ -	\$ -		\$ -		\$42,500	36	\$ 3,420					
4.4 Proposed Regional Improvements	12	32	\$ 6,460	66	\$	8,250	20	\$1,900	1 \$6,500		\$ -		\$89,000	120	\$ 11,400					
4.5 Regional Priorities		12	\$ 1,680	18	\$	2,250		\$ -	\$ -		\$ -		\$32,500	48	\$ 4,560					
4.6 Enhanced O&M		20	\$ 2,800	18	\$	2,250		\$ -	\$ -		\$ -		\$33,000	36	\$ 3,420					
4.7 Finance Plan	36	20	\$ 8,740	18	\$	2,250		\$ -	\$ -		\$ -		\$63,000	36	\$ 3,420					
4.8 Land Use and Env Enhancements	12	20	\$ 4,780	48	\$	6,000		\$ -	\$ -		\$ -		\$37,000	36	\$ 3,420					
4.9 Exec Summary and Plan Completion	20	20	\$ 6,100	24	\$	3,000		\$ -	\$ -		\$ -		\$28,500	48	\$ 4,560					
In-Kind															\$ 69,160	\$ 69,160			\$	69,160
Project Total	214	390	72 \$ 98,190	691	\$	86,375	82	\$7,790	1 \$6,500	78	\$9,791	\$	646,983	728	\$ 69,160	\$924,789	\$	13,800	\$	938,589
DWR Request			\$ 98,190		\$	86,375		\$7,790	\$6,500		\$9,791	\$	646,983			\$855,629	\$	13,800	\$	869,429

Blue = units (hours)

#### notes

- 1. River Partners will act as a project manager and financial agent for RD 2092. Rates are fully encumbered.
- 2. Stanislaus County rates are averaged for County employees.
- 3. Reclamation District 2063 = rates are fully encumbered
- 4. Patterson Consultant = lump sum to provide City flooding information from prior work to the regional planning process in a format usable by consultant team
- 5. Tuolumne River Trust = rates are fully encumbered
- 6. In-kind = uncompensated participation from committed stakeholders, hours are estimated based upon partner commitment letters and hourly participation estimates. Hours are valued at \$95.
- 7. 1.8% of total project cost requested to cover direct costs including printing and postage, legal review of project documents, project-related risk management, and book-keeping