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EXHIBIT A - SCOPE OF WORK

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

MASTER WATER PLAN FOR SAN LUIS OBISPO COUNTY

CONSULTING ENGINEERING SERVICES

February 18, 2009

Introduction

The following scope of work is provided for Consulting Engineering Services in support of a San Luis Obispo County Flood Control and Water Conservation District (District) Master Water Plan (MWP). This scope of work pertains to the preparation of a MWP for San Luis Obispo County (County). The primary objectives of this scope of work include the following:

- Optimize existing water resources management in the County
- Conduct stakeholder review workshops/meetings
- Conduct water demand analysis of urban, rural, agricultural, and environmental users
- Develop water resources management strategies
- Prioritize recommendations
- Prepare MWP

Project Description

The District completed the 1998 Master Water Plan, which at the time was considered Phase I of a three phase project. The 1998 MWP was an inventory of existing information, reasonable conclusions and missing data. The goal of the 1998 plan was to clarify the County's water situation by collecting existing sources of data and assessing their validity. The goal was also to identify water management strategies and issues to provide the tools and options to project and protect the County's water use into the future.

The tasks for which the Carollo team (Consultant) will be in the lead or support role on the District's project team, include activities associated with preparation of the MWP as follows:

Task A - Refine Scope, Goals and Objectives

Task B - Describe Water Resources Management in the County

Task C - Water Resources Analysis

Task D - Document Relationship of MWP to other Related Documents

Task E - Administrative Draft, Public Draft, Board of Supervisors Draft and Final Reports

Task F - Stakeholder Review/Meetings

Task G - Provide Framework for Maintaining and Updating the MWP

Task H - CEQA Compliance

SCHEDULE

A Gantt chart schedule is included in the proposal. The schedule illustrates the total anticipated project duration, individual task durations, relationship between tasks, task dependencies, and Water Resources Advisory Committee (WRAC)/stakeholder meetings. Key milestones are the WRAC/stakeholder workshops and completion of various MWP deliverables.

General Scope Assumptions

The Consulting Services and associated level of effort are based on the following general assumptions. Task specific assumptions are included separately under each scope task description.

1. This scope of work for the preparation of a MWP and will run from February 2009 through January 2011.

2. The proposed scope reflects Consultant's projection of the type and level of services required to complete this effort; however, Consultant also recognizes that this project may evolve as the project's scope, goals, and objectives are refined and modified services and/or additional services may be required during completion of this effort. The specific timing and phasing of tasks and sub-tasks will be periodically reviewed with the District to meet the needs of the project. Additional services and/or additional fees will require pre-approval by the Board.

3. The final MWP projects and recommendation will become the basis for proceeding with the CEQA compliance work.

4. Refer to the schedule for estimated review times by District and County staff, and public/stakeholder review. Revisions to the review time may impact the schedule.

5. Primary Consultant will coordinate work with subconsultants on this project. Subconsultants are listed in this proposal and were described in more detail in the Statement of Qualifications (SOQ). Consultant's team will work directly with District's Project Manager. Coordination of work with other County departments will be conducted by the District's Project Manager.

6. Existing reports will be made available to Consultant, including but not limited to plans from previous designs, previous reports, mapping for the County, and any other relevant information. District and County staff will be responsible for collecting information in County's possession.

7. District will instruct Consultant on preferred format for preparing written documents. All written documents will be prepared in memorandum or chapter report format.

8. District responsible for obtaining reports and data from County departments and agencies. Consultant will assist District in obtaining reports and data for projects on which the Consultant team worked.

9. The County's Planning Department GIS staff will be the lead in using the County's Geographical Information Systems (GIS) to provide land use information under the guidance of the Consultant.

10. District's Project Manager is responsible for obtaining and coordinating the WRAC review comments.

SCOPE OF WORK

The following scope of services includes the tasks presented in the project description.

Task A - Refine Scope, Goals and Objectives

Objective

The objective of this task is to review the scope, goals and objectives of the MWP and to work with District staff to refine and document these items in an introduction section of the MWP. The preliminary Scope, Goals and Objectives were outlined in Attachment C of the request for qualifications (RFQ).

Task Description

Consultant will lead this task. Consultant will refine the scope, goals and objectives. The goals and objectives will likely evolve and experience several iterations as Consultant and District staff meet with WRAC members and other stakeholders to understand water resource issues. Obtaining stakeholder and WRAC input/participation is critical to the success of this project. Consultant will use established relationships with WRAC members and existing positions as district engineers to assist in this task.

Assumptions

1. The Consultant will lead the effort for Task A. The District has already prepared a draft of the scope, goals and objectives that will serve as a template for the project.
2. Consultant will attend three meetings with WRAC and other stakeholders to present scope, goals and objectives.

Key Team Members

- Carollo Engineers
- Wallace Group

Deliverables

- Scope, goals and objectives and revisions to text

Task B - Describe Water Resources Management in the County

Objective

The objective of this task is for the Consultant to prepare the description of water resources management in the County for District staff review.

Task Description

Consultant will lead this task and the preparation of the description. Consultant will rely on their active participation in various local water management groups to develop a comprehensive summary of current and planned water management efforts by the various water purveyors throughout the County. Consultant has prepared water planning documents for many of the key agencies in the County, which will facilitate collection of data and research. In addition, Consultant's detailed involvement in the Nipomo Mesa Management Area (NMMA), Northern Cities Management Area, and Los Osos Purveyor Groups will be a benefit to this task, as will our ongoing relationships with Templeton and Cambria community services districts, the City of Paso Robles, and the Atascadero Mutual Water Company. Consultant will also describe the broad inventory of groundwater supplies and management.

Consultant will contact the various water agencies in the County, collect information regarding water resource management infrastructure, policies, agreements, and procedures implemented or recommended to be implemented by the various agencies, for management of surface and groundwater resources and municipal inter-agency infrastructure and agreements.

Assumptions

1. The Consultant will develop and prepare the description of water resources management in the County for District review.
2. Consultant will collect background information.

Key Team Members

- Wallace Group
- Fugro
- Cleath and Associates

Deliverables

- Review of water resources management prepare by District staff
- Research and information for projects on which Consultant worked

Task C - Water Resources Analysis

Objective

The objective of this task is to conduct the water resources analysis, which involves the completion of several subtasks including assessing existing water supplies, conducting the water demand analysis, developing strategies to optimize existing water supplies, and recommending alternatives to address projected shortfalls.

Task C.1 Develop Objectives of Water Resource Analysis Section

Consultant will lead this task. Consultant will prepare and describe the objectives of the water resource analysis portion of the MWP. In addition to the objectives listed in the request for qualifications (RFQ) Attachment C, Consultant will guide vision planning, goals development, stakeholder outreach, and identifying opportunities and issues. Consultant's existing work throughout the County allows our team to provide a community and purveyor group perspective on objectives development.

Key Team Members

- Carollo Engineers
- Wallace Group

Task C.2 Description of Available Data

Consultant will take the lead in describing available data. Consultant will identify available data not in the District's possession and will lead research of information. Since our team has worked for 90 percent of the water entities in the County, we possess or have direct access to most of the data needed for the MWP. Consultant will reference the County's Data Enhancement Plan. Descriptions of available information will be consolidated into one database, which can be updated easily as new reports are published. The database will be organized by Sub-Region and be consistent with the District's approach to assessing the County's water resources.

The data descriptions will include those items outlined in Section II.2 of the draft Outline, including:

a. Groundwater. Summarize and document available sources of data on groundwater basins and subbasins. It is noted that data has been compiled for the Santa Maria Valley litigation by the agencies within the basin. The Cuyama and Santa Maria groundwater basins are within both San Luis Obispo and Santa Barbara Counties, and the Paso Robles groundwater basin/Salinas Valley alluvial basin extends into Monterey County. Thus, some pertinent data may be held by adjacent County agencies.
b. Stream Flow. Inventory and describe stream flow data. Compile information on stream gage locations and periods of record from the County, the Department of Water Resources (DWR), and the U.S. Geological Survey (USGS). Import the information to a GIS project and delineate the watershed areas for each stream gage location. This would facilitate an understanding of the spatial and temporal extent of the existing gage network with respect to the watersheds within the County.
c. Precipitation. Review CIMIS weather stations, and collect and describe information available from various agencies including airports, cities, special districts in the County.
d. Reservoirs. Inventory and describe the reservoirs existing in the County, and available data/information regarding storage capacity/safe yield, spillway height, allocations and use agreements, and other data.
e. Water Quality. Collect State DWR water quality data from available private and municipal wells related to water quality. Summarize available well water quality data sources and describe the water quality data in terms of type of data available, the organizational source of the data, the dates of data available, whether the information is confidential or public. Summarize available consumer confidence reports, master plans, and other water quality data available from municipalities and special districts.
f. Unimpaired Runoff. Inventory and review information on unimpaired runoff throughout the County. Identify those stream gages (and data) from Task C.2b that reflect unimpaired runoff conditions over all or part of the period of record. This would include determining (or specifying the assumptions underlying) what constitutes impaired and unimpaired flow and may, in some cases, involve further consultation with the entities responsible for maintaining the stream gage records (e.g., if the stream gage is no longer active). It would be particularly important to identify any major diversions upstream of the stream gage locations.
g. Land Use. Inventory and review land use data from the County of SLO, including GIS database information, and respective General Plans and Amendments from various incorporated cities.
h. Population. Inventory and review population data from the County, and individual projections from cities and special districts. Reference and review the latest (2000) census data in GIS database.
i. Water System Production and Consumption. Collect and describe the potable water production and consumption for each water purveyor in the County, including demand offsets from recycled water use.
j. Agriculture. Inventory and review agricultural data from the County of SLO, including GIS database information and annual crop reports.

Some areas that might lack sufficient information and require special attention include:

1. Data to support a riparian/environmental demand estimate.
2. Existing stream gage data and inventories.
3. Existing coastal monitoring wells tracking seawater intrusion.

4. Agricultural groundwater pumping data.

Key Team Members

- Entire Consultant Team

Task C.3 Water Supply Inventory and Assessment

Consultant will lead this task. This section will identify and evaluate water supply sources as an option to support demand in terms of quantity, quality, availability, and usability for existing and future conditions. Consultant will assist in the compilation of water supply data, particularly for those agencies and entities where Consultant's experience facilitates rapid information gathering. Consultant will collect information from existing water master plans, including description of water supply sources and their corresponding water qualities, summarize agency contracts for the various water supplies (such as State Water, Lopez Water, Whale Rock Reservoir Water, Santa Margarita Lake Water, Nacimiento Water, etc.). Consultant will assemble available information on groundwater supplies, including inter-agency agreements.

The availability and quality of suitable recycled water will be a key element in this task. Consultant's local experience with the application of recycled water on six area golf courses will benefit the District by providing an understanding of agronomic demand, acceptable blending ratios, recycled water irrigation management practices to reduce impacts from dissolved salts, and turf tolerance for dissolved salts. Consultant's past recycled water feasibility studies for South San Luis Obispo County Sanitation District (SSLOCSD), San Simeon Community Services District, SSLOCSD/City of Arroyo Grande/City of Grover Beach and other water supply/management reports for many other agencies, will be assimilated and incorporated into the overall water supply inventory and assessment section of the MWP. Other recent water recycling studies and projects include the 2007 City of Pismo Beach study, and the City of San Luis Obispo's water recycling program, and the City's discharge of recycled water to the San Luis Obispo Creek for maintenance of environmental habitat. Consultant has extensive experience with industrial recycled water in the local wine industry that will be included in the inventory.

Consultant recently completed a seawater desalination feasibility study for the Cities of Arroyo Grande, Grover Beach, and Oceano Community Services District, and findings from this study will be included in this review of future potential water supplies. Consultant will summarize the status of Cambria Community Service District's efforts and partnership with the Army Corps of Engineers to pursue seawater desalination. The City of Morro Bay's seawater/brackish groundwater desalination plant will also be summarized as part of this task.

Consultant is working with agencies and private clients on groundwater development and management in the coastal valleys and basins, where sea water intrusion has been documented and nitrate issues are common (for example in Nipomo Mesa, Los Osos and Morro Bay) and the rural areas of the County where agricultural irrigation wells and private domestic wells are the primary sources of water serving properties. Consultant has assisted in the development of sea water source wells at the City of Morro Bay and near the cities of Pismo Beach and Avila Beach. Consultant has developed previously unknown ground water sources within older sedimentary and volcanic units throughout the County for municipal, agricultural and rural residential uses.

The primary water supply source throughout most of the County is groundwater. Consultant has worked in every groundwater basin in the County and has, in many cases, prepared the definitive studies that define and quantify the groundwater supply capabilities of these basins. With this experience and access to information, Consultant will quantify known and estimated basin yields, status of the basin with respect to yield versus current demand, and constraints to the availability of the water. These constraints may include physical limitations, regulatory constraints, and water quality limitations.

Consultant will assess the potential sources of water available in the County for water supply use. The sources will be evaluated for sustained yield, current demands, and factors affecting the use of the water including access to the sources and the quality of the water. Some of the existing sources that will be reviewed include surface water sources, ground water, sea water desalination, recycled water, and imported water from outside the County. Production from each source will be estimated from municipal/ districts, agriculture, rural residential, commercial and industrial. Regulatory issues connected with each source of supply will be identified. Environmental uses for sources will be described and evaluated.

Consultant will manage the water supply data for each sub-region using GIS and create an inventory of available supply. Consultant will use GIS and linked spreadsheets from the water demand analysis (Task C.4) to run a mass balance on supply and demand for a sub-region to determine if there is a deficit or surplus in supply.

Key Team Members

- Wallace Group
- Fugro
- Cleath and Associates

Task C.4 Water Demand Analysis

Consultant will lead this task. The demand projections developed for the 1998 MWP are available as Excel files, and Consultant is prepared to link them with the County's GIS data. For each demand sector, Consultant will utilize the County's GIS to populate look-up tables with land use, parcel and population data. The product will be a dynamic tool that allows the District to adjust the variables as a way to revise the projections as new data become available, or to test the sensitivity of the projections to changes in any or all of the variables. In the event the GIS data are too coarse grained (e.g. land use is defined as Agriculture, but not distinguished by crop type), Consultant will provide "placeholder" tables, from additional sources, like annual crop reports. As the GIS data are refined, the placeholder can be replaced with the GIS data.

Consultant possesses the institutional knowledge of the 1998 MWP and the spreadsheets used in the 1998 water demand analysis. Consultant will work with the County GIS staff to link the existing spreadsheets to the existing County GIS database as the new starting point and Consultant will update urban, rural, agricultural, and environmental water use and demand. Consultant will compile the existing use data and calculate the future water demands for each sub-region and areas in the County, by sector.

Urban and Rural Water Demand

Consultant will quantify and qualify urban and rural water demands, which will include residential, commercial, industrial, parks, institutions, and golf courses. The rural areas are defined as the areas within the County that are not incorporated, the purveyors that serve the incorporated areas, and unincorporated communities. Most of the rural demand is from residential development. Consultant will utilize existing data and future water demand projections from water master plans and urban water management plans prepared by water purveyors and incorporated cities and unincorporated communities, as well as the San Luis Obispo County Integrated Regional Water Management Plan 2007. For urban areas where there are no or limited water demand information, Consultant will calculate future urban water demands by applying a water duty to a future population estimate. The rural water demands will be developed by multiplying the number of rural dwelling units by a water duty factor. Some of the population and demand information is available in the County Resource Management System's Annual Resources Summary Report 2007. Urban/Rural water demands will also be further categorized as to their future potential to be served by recycled water (if not currently being done so). Consultant will utilize available GIS layers and water demand spreadsheets to delineate and calculate urban water demands for each Water Planning Area. The GIS layers that will be used include, but are not limited to, County Land Use Element (June 2008), population, and parcel data.

Agricultural Water Demand

Consultant will quantify and qualify agriculture water demands for present and future. Consultant will ensure support for agriculture water demand approach by reviewing methods and results with regional, sub-regional, and area agricultural stakeholders through the WRAC and will solicit letters of concurrence. Consultant will calculate a gross irrigation water requirement for each crop group identified in the County Crops GIS data (August 2008) and each Water Planning Area. The gross irrigation water requirement calculation incorporates crop evapotranspiration, effective rainfall, leaching requirements, irrigation efficiency, and frost protection. Consultant has developed a series of spreadsheets that link these parameters. The agricultural demand for each crop will be calculated by multiplying the gross irrigation water requirement by the crop acreage. Consultant will work with GIS staff from the County and Department of Agriculture to develop a GIS model that links the gross irrigation water requirement spreadsheets to a selected area within the County. Agricultural water demands will also be quantified by their potential to be irrigated with tertiary recycled water from nearby municipal plants. Direct crop irrigation is being implemented very successfully in Monterey County, and this potential exists for San Luis Obispo County also.

Environmental Water Demand

Consultant will attempt to quantify and qualify present and future environmental water demands for areas where data are available. Consultant will ensure support for environmental water demand analysis by reviewing methods and results with regional, sub-regional, and area environmental stakeholders and collect letters of concurrence. The major challenge in determining environmental water demand is the lack of unimpaired runoff data. Consultant will utilize United States Geologic Survey (USGS) and County existing stream gage data, identify locations where data are critical, and develop a plan for obtaining the

critical stream flow data. Unimpaired runoff estimates will be calculated by developing regional, multiple regression relationships that will predict runoff as a function of two or more factors (e.g. drainage area, precipitation, topography, or land cover) or one that would predict runoff at an ungaged, or partially gaged, location as a function of runoff at a gaged location.

Once the estimated unimpaired runoff has been established, numerous methodologies for calculating environmental water demand may be applied. These methodologies range from desktop exercises such as the February median flow (FMF) methodology (California Department of Fish and Game [CDFG] and National Marine Fisheries Service [NMFS], 2002), the "Montana Method" (Tennant, 1976), or the median annual discharge methodology (Hatfield and Bruce, 2000), to more data intensive methodologies such as the critical riffle approach (Thompson, 1972) and the Physical Habitat Simulation (PHABSIM) model (Bovee, 1982). All of these methodologies have advantages and disadvantages, and the selection of an appropriate methodology for this project will need to be based on target species, stakeholder consensus, time constraints, and budget constraints.

Key Team Members

- ESA
- Crawford, Multari & Clark Associates
- Wallace Group
- Fugro
- Cleath and Associates

Task C.5 Identify Analysis Criteria

Consultant will lead this task. Consultant will identify the criteria for asserting a water resource shortfall and for evaluating potential water resource management solutions/projects/programs/policies. Consultant is currently working with various regional purveyor groups to develop trigger mechanisms to identify severe and potentially severe water shortages. Consultant will work with District staff to extend these efforts County-wide utilizing such typical mechanisms as:

1. Sentinel wells near the coast for the monitoring of water level and quality conditions that may indicate possible or actual seawater intrusion.
2. Key inland wells that indicate, in aggregate, general groundwater basin health.
3. Climatic conditions and available surface water supplies.

Key Team Members

- Carollo Engineers
- Wallace Group

Task C.6 Sub-Regional Analysis, Conclusions and Recommendations

Consultant will lead this task. This section will include the water budgets broken down by sub-region and area, identification of shortfalls and priorities, and recommendations on solutions, policies, projects, future cooperative efforts, and their relationship to water resources management in the area.

The issues that Consultant must address in this analysis and should be resolved by the recommendations are those related to the coexistence of agriculture, domestic and environmental water supply and demand, water quality issues related to specific sources and water uses, and competition for the limited water resources of the County. The conclusions and recommendations that evolve from this process will determine the optimum strategy for managing water resources and addressing these issues.

Consultant will take an active role in the analysis of the North Coast and South Coast South sub-regions. Consultant's current leadership roles in these regions as chair of the Los Osos Purveyor Group and the NMMA, and active participant in the Northern Cities Management Area, provide a context for the formulation of successful strategies.

With respect to recycled water, Consultant's local experience will be essential to the formulation of feasible strategies, which to date have been limited to golf course and limited urban use. Key points relating to recycled water policies and strategies are as follows:

1. Cost of distribution is a substantive barrier to project implementation. The development of adequate markets, or the subsidization of distribution facilities, will be important.
2. Salt management is a key policy issue that if implemented correctly, may substantially increase the viability of recycled water for both turf irrigation, direct crop irrigation and even indirect potable reuse. One key example is in the community of Nipomo, where the use of self-regenerating water softeners limits the agronomic usefulness of available secondary and tertiary water.
3. The agricultural community, particularly for vineyard use, is beginning to pursue or at least accept recycled water as a beneficial and long-term water supply.
4. Golf courses remain the primary recipient of recycled water – a strategy that may be significantly expanded. However, on-going challenges with respect to water quality limit the quantity of water that can be applied, which requires scarce groundwater resources for blending.
5. Groundwater recharge and banking programs are currently under consideration that may provide future opportunities to store and recover excess State Water, and recycled water. It will be important to focus the Consultant's efforts on treatment facilities that have existing ocean discharges for brine disposal such as the cities of Morro Bay, Pismo Beach, and the South San Luis Obispo County Sanitation District.
6. Water recycling opportunities should be strongly encouraged for "grass roots" municipal wastewater projects such as the Los Osos Wastewater Treatment Plant, in the context of the existing purveyor group. Also, for municipalities now planning to upgrade to tertiary recycled water, for example, the Morro Bay/Cayucos joint WWTP, emphasis should be placed on such facilities to recycle plant water to the extent possible in lieu of discharging this resource to the ocean.

The increasing number of autonomous mutual water companies provides a potential barrier to the development of accurate data and successful strategies. Consultant currently manages a number of local water companies, and our team looks forward to assisting the District in understanding the legal framework, management, and financial resources, and shared interests relating to these small but important purveyors.

Assumptions

1. Consultant will rely on available data and reports only, and will revise and update available data based on engineering judgment to reflect anticipated conservation measures.
2. As part of a separate project, the County procured the services of URS to develop and consolidate available data into one database. The data collection includes but is not limited to streamflow, water levels, and water demands from purveyors. Consultant team assumes that the database developed by URS will be made available for the MWP project.
3. County Planning Department will provide all available GIS land use information, population data, and other planning data.
4. County and/or District will provide planning documents and engineering reports not in possession of Consultant that describe water resources, facilities, demands, land use, population projects, and other information that would be useful in the preparation of the MWP.
5. County Agricultural Commissioner's office available GIS data on crop type and water usage.

Key Team Members

- Carollo Engineers
- Wallace Group
- Fugro
- Cleath and Associates
- Crawford, Multari & Clark Associates

Deliverables

Written summaries of the following:

- Objectives of Water Resource Analysis
- Description of Available Data
- Water Supply Inventory and Assessment
- Water Demand Analysis
- Analysis Criteria Summary
- Sub-Regional Analysis, Conclusions and Recommendations

Task D - Document Relationship of MWP to other Related Documents

Objective

The objective of this task is to describe the relationship between the MWP and the documents/program/policies identified in Attachment C of the RFQ (Part III of MWP outline), including:

1. California Water Plan (2005 adopted, 2009 draft).
2. County Integrated Regional Water Management Plan (2007).
3. Conservation and Open Space Element of the County General Plan (2006).
4. Land Use Element of the County General Plan (revised 2006), utilize latest land use maps (e.g. June 2008 GIS map).
5. County Resource Management System's Annual Resources Summary Report 2007.
6. Agricultural Policies (2007).
7. Sub-regional/Area Water Resources Planning Documents.

Task Description

District will lead this task, and Consultant will assist. Consultant will review District summary and provide input on the relationship between the MWP and various documents, programs, and policies including. In particular, the evaluation of water management strategies in the MWP must consider the standards and requirements established in the Integrated Regional Water Management Plan (IRWMP). The IRWMP presents a comprehensive water resource management approach focused on sustaining the region's water resources to meet current and future needs. The MWP will define the multiple benefits associated with each water management strategy and describe how those benefits help achieve the water resources management goals and objectives as defined in the IRWMP. Consultant will examine the MWP for consistency with the proposed IRWMP guideline modifications which are likely to include climate change analysis, a more enhanced integration of flood management into water supply project analysis, and a well defined assessment of the Disadvantage Community benefits offered by each water management strategy. By addressing these concepts in the MWP for easy incorporation into the IRWMP, these water management strategies are better positioned to compete for state funding through Proposition 84 IRWMP funding while minimizing additional grant development costs.

Assumptions

1. District staff will take the lead in developing and drafting the relationship between the MWP and the related documents.

Key Team Members Team Members

- Carollo Engineers
- ESA
- Crawford, Multari & Clark Associates
- Gutierrez Consultants

Deliverables

- Review and input on Document Relationship write up.

Task E - Prepare Master Water Plan

Objective

The objective of this task is to compile all of the sections of the MWP into one document.

Task Description

Consultant will lead this task. Consultant will prepare four separate deliverables of the Master Water Plan, including:

1. Administrative Draft for District staff and County Planning Department review (5 hard copies)
2. Public Draft for WRAC and stakeholder presentations and review (10 hard copies and pdf electronic file).
3. Board of Supervisors Draft for Board review and approval process (10 hard copies and pdf electronic file).
4. Final Report for County adoption (10 hard copies and pdf electronic file).

Consultant shall compile all of the sections into a draft report for administrative review. The draft report will include an executive summary and appropriate appendices. Consultant will process and incorporate comments into a Public Draft Report for stakeholder (WRAC) presentations and review. Consultant shall process and incorporate comments from the Public Draft Report into a Board of Supervisors Draft for the Board approval process. Consultant shall process and incorporate comments from the Board into a Final MWP Report for County adoption.

Assumptions

1. Assumed 20 days for District and County staff to review Administrative Draft MWP.
2. Assumed 45 days for WRAC, public and stakeholder review of Public Draft MWP.
3. Assumed 20 days for Board of Supervisors review of Board of Supervisors Draft MWP.

These assumptions on review time are reflected in the schedule and can be adjusted if necessary.

Key Team Members

- Entire Consultant Team

Deliverables

- See task description

Task F - Stakeholder Review/Meetings

Objectives

The objective of this task is to involve stakeholders and WRAC in MWP preparation process and to gain their support of the plan.

Task Description

District will lead the coordination with the WRAC and other stakeholders, and Consultant will provide technical presentations. Consultant will provide monthly written updates to the WRAC on the progress of the MWP. Consultant will conduct bi-weekly conference calls and monthly meetings with District Project Manager to discuss project progress, issues, schedule and deliverables. Consultant will lead discussions on technical topics in a workshop setting for:

1. Alternative sources of water (e.g. desalination and re-use/grey water systems) as a water resource.
2. Summary of existing water resources and existing data (baseline conditions).
3. Development of goals and objectives.
4. Review methodology for calculating/addressing Agricultural and Environmental water demands.
5. Water demand analysis summary and supply requirements.
6. Sub regional analysis and options development.
7. Alternatives development.
8. Recommended projects.

Consultant will obtain and address District and County staff, public, Board of Supervisors, committee, commissions, and WRAC comments and recommendations.

Assumptions

1. Consultant will provide monthly written updates to the WRAC and attend four workshops to discuss technical topics. In addition to the workshops, Consultant will attend up to 10 meetings at the direction of the District.
2. Consultant will conduct a presentation of the Public Draft to the WRAC and at three sub-regional meetings.
3. Consultant will conduct one presentation to the Board of Supervisors.
4. District will lead coordination with the WRAC and other stakeholders (e.g. meetings, review of deliverables, etc.). District will coordinate collection of comments on deliverables.

Key Team Members

- Entire Consultant Team

Deliverables Members

- Agenda, meeting material, and minutes for four workshops
- Power point presentations
- Responses to comments

Task G - Provide Framework for Maintaining and Updating the MWP

Objectives

The objective of this task is to develop a framework for maintaining and updating the MWP.

Task Description

Consultant will lead this task. Consultant will develop a framework for maintaining and updating the MWP that includes a data collection protocol, recommended schedule, a summary of scope of work required to update the MWP, and an estimated budget to update the MWP. The framework will be included as an appendix to the MWP. The framework for updating the MWP could be linked to the County's GIS land use data and the different urban water management plans (UWMP) and water master plans developed for County cities. Maintaining the linkage to County land use data ensures that modifications in urban boundaries, development of urban areas, and changes in agricultural land are accurately reflected in the MWP. Updating the MWP following the completion of UWMPs would ensure that the District is relying on the most current water demand calculations for cities.

Assumptions

1. None.

Key Team Members

- Carollo

Deliverables

- Provide Framework for Maintaining and Updating the MWP Appendix

Task H - CEQA Compliance

Objectives

The objective of this task is to assist District staff with CEQA requirements.

Task Description

District will lead this task, and Consultant will provide assistance. Consultant will assist District with CEQA compliance by providing input on CEQA requirements for the project. Consultant will review CEQA documents developed and drafted by District staff.

Assumptions

1. District responsible for preparing CEQA document.

Key Team Members

- ESA
- Crawford, Multari & Clark Associates

Deliverables

- Review of CEQA document and input on requirements for the project.

Task I - Project Management

Objectives

The objective of this task is to assist manage the project team, monitor project progress, and conduct quality assurance/quality control of deliverables.

Task Description

Consultant will lead this task. Consultant will conduct monthly team meetings/conference calls with District to discuss project progress, issues, and to provide direction on completing tasks. Consultant will prepare meeting minutes and maintain a decision log of issues and resolutions. Consultant will prepare monthly progress reports and schedule updates to accompany invoices. Consultant will conduct QA/QC review all deliverables prior to submission to District staff.

Assumptions

1. To control costs, only team members involved in tasks that are in progress or are part of the meeting discussion will attend meeting/conference call.

Key Team Members

- Entire Consultant Team

Deliverables

- Monthly progress reports.

Optional Services Tasks

Task OS1 - Remote Data Collection Systems

Consultant can develop modern data logging and remote telemetry data collection systems. These continuous monitoring programs can be applied to stream gages to collect critical data for environmental demand estimates or groundwater monitoring for assessing water supply.

Task OS2 - Funding Analysis

Consultant will identify funding sources to assist financially with the implementation of the recommended projects.

Task OS3 - WRAC Workshops

The scope assumes four workshops with WRAC. Additional workshops can be added at the District's direction.

Task OS4 - Monthly WRAC Meetings

Task F above assumes that Consultant will attend four WRAC workshops and provide monthly written progress reports to the WRAC. This optional service task would provide for Consultant to attend 10 monthly meetings or workshops with WRAC and other stakeholders.

Task OS5 - Increased Involvement on District Lead Activities

For the tasks that the District will serve as the lead and develop the deliverables (e.g. Description of water resources management, description of available data), Consultant is available to play a greater role in the research, analysis, and preparation of the deliverables. The estimated fee for this task is unknown and dependent on the level of involvement requested. The estimated fee included in this proposal is a placeholder and will be negotiated at the time the services are requested.

San Luis Obispo County Flood Control and Water Conservation District
Master Water Plan for San Luis Obispo County

Task Description	Hours by Classification						Fee										
	Senior Professional - Carella	Project Professional - Gutierrez	Professional - Grecl	Technicians - Dunn	Support Staff	Total	Labor Fee	PECE	Other	Wallace Group	ESA	Fugro	Cleath & Associates	Crawford, Multari & Clark Associates	Gutierrez Consultants	Subs + 10%	Subs & Other Fees	Total Fee
TASK A: Refine Scope, Goals and Objectives (Consultant Lead Task)																		
Task A Refine Scope, goals and Objectives	22	22	0	0	8	52	$ 10,844	$ 468	$ 800	$ 3,000	$ -	$ -	$ -	$ -	$ -	$ 3,300	$ 4,568	$ 15,412
Task A - Sub Total	22	22	0	0	8	52	$ 10,844	$ 468	$ 800	$ 3,000	$ -	$ -	$ -	$ -	$ -	$ 3,300	$ 4,568	$ 15,412
TASK B: Describe Water Resources Management in County (Consultant Lead Task)																		
Task B Describe Water Resources Management in County	4	6	0	0	0	10	$ 2,259	$ 90	$ -	$ 13,000		$ 7,000	$ 7,000	$ -	$ -	$ 29,700	$ 29,790	$ 32,049
Task B - Sub Total	4	6	0	0	0	10	$ 2,259	$ 90	$ -	$ 13,000	$ -	$ 7,000	$ 7,000	$ -	$ -	$ 29,700	$ 29,790	$ 32,049
TASK C: Water Resource Analysis																		
Task C.1 Develop Objectives of Water Resource Analysis Section (Consultant Lead Task)	20	20	0	0	6	46	$ 9,736	$ 414	$ 200	$ 3,000	$ -	$ -	$ -	$ -	$ -	$ 3,300	$ 3,914	$ 13,650
Task C.2 Description of Available Data (Consultant Lead Task)	8	30	16	6	8	68	$ 12,736	$ 612	$ 600	$ 18,000	$ 17,300	$ 7,000	$ 7,000	$ -	$ -	$ 54,230	$ 59,442	$ 88,178
Task C.3 Water Supply Inventory and Assessment (Consultant Lead Task)	4	8	0	8	8	28	$ 4,644	$ 252	$ -	$ 10,500	$ 4,000	$ 13,500	$ 13,500	$ -	$ -	$ 45,850	$ 45,902	$ 50,546
Task C.4 Water Demand Analysis (Consultant Lead Task)	6	8	0	0	8	22	$ 3,534	$ 198	$ 200	$ 3,000	$ 24,700	$ 2,000	$ 2,000	$ 2,000	$ -	$ 37,070	$ 37,468	$ 41,402
Task C.5 Identify Analysis Criteria (Consultant Lead Task)	6	8	0	0	4	18	$ 3,550	$ 162	$ 200	$ 5,000	$ 2,000	$ 1,500	$ 1,500	$ -	$ -	$ 11,000	$ 11,362	$ 14,912
Task C.6 Sub-Regional Analysis, Conclusions, and Recommendations (Consultant Lead Task)	8	16	40	8	8	80	$ 14,312	$ 720	$ 200	$ 9,000	$ 2,000	$ 3,000	$ 3,000	$ 2,000	$ -	$ 29,800	$ 31,820	$ 36,132
Task C - Sub Total	52	90	56	22	42	262	$ 48,512	$ 2,358	$ 1,400	$ 48,500	$ 50,000	$ 27,000	$ 27,000	$ 4,000	$ -	$ 172,150	$ 175,908	$ 224,820
TASK D: Relationship of MWP to Related Documents (District Lead Task)																		
Task D Document Relationship of MWP to Related Documents	4	4	0	0	0	8	$ 1,832	$ 72	$ -	$ 3,000	$ 3,000	$ -	$ -	$ -	$ 3,500	$ 10,450	$ 10,522	$ 12,354
Task D - Sub Total	4	4	0	0	0	8	$ 1,832	$ 72	$ -	$ 3,000	$ 3,000	$ -	$ -	$ -	$ 3,500	$ 10,450	$ 10,522	$ 12,354
TASK E: Prepare Master Water Plan Reports (Consultant Lead Task)																		
Task E.1 Administrative Draft	4	16	32	8	8	68	$ 11,916	$ 612	$ 1,000	$ 3,000	$ 3,000	$ 2,000	$ 2,000	$ 1,000	$ 500	$ 12,650	$ 14,262	$ 25,178
Task E.2 Public Draft	4	16	24	8	8	60	$ 10,516	$ 540	$ 1,500	$ 3,000	$ 3,000	$ 1,000	$ 1,000	$ 1,000	$ 500	$ 10,460	$ 12,490	$ 23,006
Task E.3 Board of Supervisors Draft	4	8	16	8	8	44	$ 7,444	$ 396	$ 1,500	$ 2,000	$ 2,500	$ 1,000	$ 1,000	$ -	$ -	$ 7,150	$ 8,046	$ 15,490
Task E.4 Final Report	4	8	8	4	8	32	$ 5,440	$ 288	$ 1,500	$ 2,000	$ 2,000	$ -	$ -	$ -	$ -	$ 4,400	$ 6,188	$ 11,628
Task E - Sub Total	16	48	80	28	32	204	$ 35,316	$ 1,836	$ 5,500	$ 10,000	$ 10,500	$ 4,000	$ 4,000	$ 2,000	$ 1,000	$ 34,660	$ 41,986	$ 77,302
TASK F: Stakeholder Review/Meetings (District Lead Task)																		
Task F.1 Progress Reports/Updates and four workshops	40	30	0	0	0	70	$ 16,230	$ 630	$ 4,000	$ 8,000	$ 3,000	$ -	$ -	$ -	$ -	$ 12,100	$ 16,730	$ 32,960
Task F.2 Monthly WRAC Meetings (Up to 10 Meetings)	80	80	0	0	0	160	$ 35,640	$ 1,440	$ 4,000	$ 8,000	$ -	$ -	$ -	$ -	$ -	$ 8,800	$ 14,240	$ 50,880
Task F.3 Present Public Draft (WRAC and 3 Sub-Regions)	24	32	0	4	8	68	$ 13,844	$ 594	$ 500	$ 2,000	$ 2,000	$ -	$ -	$ -	$ -	$ 4,400	$ 5,494	$ 19,338
Task F.4 Present Board of Supervisors Draft	8	12	0	0	0	18	$ 4,002	$ 162	$ 500	$ 2,000	$ 1,500	$ -	$ -	$ -	$ -	$ 3,850	$ 4,512	$ 8,514
Task F.5 Obtain and Address Comments/Recommendations	2	8	8	8	8	34	$ 5,546	$ 306	$ -	$ 1,000	$ 1,500	$ 1,000	$ 1,000	$ -	$ -	$ 4,950	$ 5,256	$ 10,802
Task F - Sub Total	152	162	8	12	16	348	$ 76,262	$ 3,132	$ 9,000	$ 21,000	$ 8,000	$ 1,000	$ 1,000	$ -	$ -	$ 34,100	$ 46,232	$ 122,494
TASK G: Framework for Maintaining and Updating MWP (Consultant Lead Task)																		
Task G Provide Framework for Maintaining and Updating MWP	2	8	0	0	0	10	$ 2,170	$ 90	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 90	$ 2,260
Task G - Sub Total	2	8	0	0	0	10	$ 2,170	$ 90	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 90	$ 2,260
TASK H: CEQA Compliance (District Lead Task)																		
Task H CEQA Compliance	2	4	0	0	0	6	$ 1,334	$ 54	$ -	$ -	$ 8,000	$ -	$ -	$ 2,000	$ -	$ 11,000	$ 11,054	$ 12,388
Task H - Sub Total	2	4	0	0	0	6	$ 1,334	$ 54	$ -	$ -	$ 8,000	$ -	$ -	$ 2,000	$ -	$ 11,000	$ 11,054	$ 12,388
TASK I: Project Management (Consultant Lead Task)																		
Task I.1 Team Meetings/Conference Calls	24	24	0	0	0	48	$ 10,992	$ 432	$ 500	$ 2,000	$ 2,000	$ 1,000	$ 1,000	$ 1,000	$ 500	$ 8,250	$ 9,182	$ 20,174
Task I.2 Monthly Progress Reports and Schedule Updates	8	24	0	0	0	32	$ 7,008	$ 288	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 288	$ 7,296
Task I.3 QA/QC of Deliverables	16	24	0	0	0	40	$ 9,000	$ 360	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 360	$ 9,360
Task I - Sub Total	48	72	0	0	0	120	$ 27,000	$ 1,080	$ 500	$ 2,000	$ 2,000	$ 1,000	$ 1,000	$ 1,000	$ 500	$ 8,250	$ 9,830	$ 36,830
TOTAL COSTS																		
Total	302	416	144	62	96	1,020	$ 205,920	$ 9,180	$ 17,200	$ 100,500	$ 81,500	$ 40,000	$ 40,000	$ 9,000	$ 5,000	$ 303,600	$ 329,980	$ 535,900

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Exhibit B

From Proposal Dated Dec. 2008

Subconsultants

TEAM MEMBERS

All of the team members have been partners with Carollo on other projects at one time, and we have all worked with each other on numerous water resources projects. More detailed information on team personnel qualifications is provided in the Appendix (see resumes). Summaries of each subconsultant firm and personnel proposed for this project were included in our Statement of Qualifications - Firm Qualifications Section.

Also included in the SOQ were summaries of recently completed projects and references that are directly related to the Master Water Plan. The projects in the SOQ demonstrate this team's specific planning, design, and project expertise related to integrated, land use-based water resources planning; experience assessing water management strategies; and expertise implementing regional water infrastructure projects, programs, and agreements. More importantly, the project summaries in our SOQ highlight projects completed in San Luis Obispo County.

Carollo Engineers

• Project Management	KEY STAFF
• Project Direction	Lou Carella
• Water Resources Management	Jose Gutierrez
• Stakeholder Coordination	Tommy Greci

Subconsultants

Wallace Group

• Agency Coordination	KEY STAFF
• Demand Analysis	John Wallace
• Regional Projects	Rob Miller
• Stakeholder Coordination	Steven Tanaka

ESA

• 1998 Master Water Plan Coordination	KEY STAFF
• Demand Analysis	Eric Zigas
• Environmental Coordination	Annika Fain
	Bill Boynton

Fugro

• Groundwater Resources	KEY STAFF
• Stakeholder Coordination	Paul Sorensen
• Demand Analysis	David Gardner
	Timothy Nicely

Cleath and Associates

• Groundwater Resources	KEY STAFF
• Stakeholder Coordination	Tim Cleath
• Demand Analysis	Spencer Harris
	David Williams

Crawford Multari & Clark Associates

• Land Use Planning	KEY STAFF
• Environmental Policy Coordination	Chris Clark
• Demand Analysis	

Gutierrez Consultants

• IRWMP Coordination	KEY STAFF
• Funding Coordination	Lidia Gutierrez

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