AGENDA
CARPINTERIA CITY RELATIONS COMMITTEE
(Meeting jointly with representatives of the City of Carpinteria and the Sanitary District)

at
CARPINTERIA SANITARY DISTRICT
5300 SIXTH STREET
CARPINTERIA, CA 93013

Thursday, May 22, 2014 at 3:00 P.M.

I. CALL TO ORDER

II. PUBLIC FORUM (Any person may address the Carpinteria City Relations Committee on any matter within its jurisdiction which is not on the agenda)

III. NEW BUSINESS

1. Drought Update
2. Recycled Water Facilities Planning – Memorandum of Understanding
3. City of Carpinteria Trench Cut Ordinance
4. Capital Project Update Report
   A. City of Carpinteria
   B. CVWD
   C. CSD

IV. Future Agenda Items

V. ADJOURNMENT

Charles B. Hamilton, Secretary

Note: The above Agenda was posted at Carpinteria Valley Water District’s Administrative Office in view of the public, no later than 3:00 p.m. May 19, 2013. The Americans with Disabilities Act provides that no qualified individual with a disability shall be excluded from participation in, or denied benefits of, the District’s programs, services, or activities because of any disability. If you need special assistance to participate in this meeting, please contact the District Office at (805) 684-2816. Notification at least twenty-four (24) hours prior to the meeting will enable the District to make appropriate arrangements.

Materials related to this Agenda submitted to the Directors after the distribution of the agenda packet are available for public inspection in the Carpinteria Valley Water District offices located at 1301 Santa Ynez Avenue, Carpinteria during normal business hours, from 8 am to 5 pm.
This Memorandum of Understanding, herein after referred to as “MOU,” is entered into in the City of Carpinteria, California on this ___ day of May, 2014.

TERM: The term of this MOU shall from May __, 2014 through May __, 2015.

AGREEMENT: Under terms of this MOU the Carpinteria Valley Water District (CVWD), Carpinteria Sanitary District (CSD) and City of Carpinteria (City), together referred to as “Agencies”, agree to work cooperatively to investigate and determine feasible alternatives and related costs for establishing a recycled water system to benefit the Carpinteria area currently served by CVWD.

GOALS: Agencies have a common interest in conserving water resources and protecting water quality of the Carpinteria Valley while controlling costs and improving reliability.

GRANT: Agencies will cooperate to acquire a State Water Resources Control Board facilities planning grant through the Water Recycling Funding Program (WRFP) as an initial step

FACILITIES PLANNING STUDY: Contingent on successful acquisition of a grant, Agencies will cooperate on the preparation of a recycled water facilities planning study. Agencies intend to engage a qualified engineering consultant to prepare the study.

FUNDING SOURCES AND LIMITATIONS
Agencies agree, subject to any appropriate authorization required, that the matching requirement of the Grant shall be split pursuant the following allocation on a percentage basis:

- CVWD 33.3%
- CSD 33.3%
- City of Carpinteria 33.3%

The WRFP facilities planning grant will cover 50 percent of eligible costs up to a maximum of $75,000. Matching funds contributions from Agencies shall not exceed $75,000 in aggregate.

(Discuss payment timing from SWRCB vs. invoicing from consultant – cash flow)
ROLES

- CVWD agrees to serve in a lead role with regard to the Grant administration, in the investigation of alternatives for a recycled water system, and to participate in joint Agencies committee meetings on the project.
- CSD agrees, in addition to providing a portion of the grant matching funds, to support the grant application effort and to participate in joint Agencies committee meetings on the project.
- City agrees, in addition to providing a portion of the grant matching funds, to support the grant application effort and to participate in joint Agencies committee meetings on the project.

TERMINATION
This MOU may be terminated upon mutual agreement of the Agencies, with or without cause. Written notice of such termination shall be distributed to each participating member and shall specify the effective date of such termination. Agencies agree to pay all costs incurred up to the point of termination per the allocation formula previously described.

ASSIGNMENT
No party may transfer or assign this MOU without the written consent of the other, which consent may be withheld at the absolute discretion of the party from whom consent is sought.

NONDISCRIMINATION
Agencies agree to be bound by the terms and conditions of nondiscrimination.

AMENDMENT
This MOU contains the entire agreement of the parties. No additional term or modification may be effected except as provided in writing, signed by the parties to this MOU.
April 2, 2014

Craig Murray, P.E.
General Manager
Carpinteria Sanitary District
5300 Sixth Street
Carpinteria, CA 93013

Subject: Proposal to Prepare a Recycled Water Alternatives Evaluation and Facilities Plan

Dear Mr. Murray:

RMC Water and Environment is pleased to provide you with a proposal to perform an evaluation for serving recycled water to potential users within Carpinteria Valley Water District’s (CVWD) service area. The primary focus of the evaluation will be to serve potential urban and agricultural non-potable demands and implement indirect potable reuse alternatives. Our proposal includes preparing the following:

- A grant application to the State Water Resources Control Board (SWRCB) to assist with funding the study up to $75,000.
- A facilities planning report including a construction financing and implementation plan for Carpinteria WWTP improvements and recycled water infrastructure.
- A draft initial study to be used to initiate environmental clearance of the recommended facilities.

Our proposed services, estimated fee and a preliminary schedule are provided in Attachment A of this letter. At the end of our scope of work, we present two ways in which Carpinteria Sanitary District (CSD) may wish to proceed with the scope of work and with pursuing a grant from the SWRCB.

Performing this evaluation and preparing this report is an important step for CSD to maximize local water resources to meet the growing water needs and economic opportunities of the community and region. The facilities planning report and draft initial study will be important tools CSD will be able to use as it seeks outside funding and partnerships to fund projects that will meet these needs. Timing is particularly important. CSD may be able to apply for Proposition 84, Round 3 funds later this year or next year. In addition, Santa Barbara County entities are moving forward quickly with implementing a regional recycled water system. Thus, the sooner CSD can develop its recycled water plans, the more effective it can be in partnering with Santa Barbara County entities.

RMC is uniquely qualified in a number of ways to assist the District with this new recycled water facilities planning study.
• RMC recently completed the South Coast Recycled Water Development Plan under the 2013 Santa Barbara County IRWM Plan. As such, RMC has a unique understanding of both the opportunities and constraints on local recycled water.

• RMC has completed over 50 recycled water projects throughout the State, including over a dozen facilities planning studies funded in part by the SWRCB.

• Lastly, RMC has secured over $170 million in State and Federal water resource and recycled water grants for clients throughout California during the past 5 years. Our strategy for success commonly leverages facilities plans, such as the one proposed here, to present a compelling case to granting agencies.

We thank you for this opportunity to serve the CSD and look forward to your review of our proposal. Please contact me at (310) 566-6479 if you have any questions.

Very truly yours,

[Signature]

Brian Dietrick, P.E.
Principal-in-Charge
Project Description

The City of Carpinteria (Carpinteria) is located 80 miles north of Los Angeles in the south coast sub-region of Santa Barbara County. Carpinteria has a population of approximately 15,141. The Carpinteria Sanitary District (CSD) owns and operates the 2.5 mgd Carpinteria Wastewater Treatment Plant (CWWTP) and collection system that serves this region and the Carpinteria Valley Water District (CVWD) provides potable water through 4,161 connections.

Developing recycled water use opportunities could have significant benefits to CSD, CVWD, and the broader Carpinteria Valley area by further enhancing water supply reliability, creating additional beneficial uses of wastewater, and improving ocean water quality. However, implementing these new opportunities will require a feasibility analysis of alternatives, facilities planning, environmental requirements assessment and discussion with external parties as well as the CSD staff and Board.

The CSD and CVWD are two of the twelve Recycled Water Plan Workgroup Members responsible for guiding the preparation of the South Coast Recycled Water Development Plan (RW Development Plan) as part of the 2013 Santa Barbara Integrated Regional Water Management (IRWM) Plan. The RW Development Plan’s purpose is to identify technical, institutional, political, and social opportunities to advance the use of recycled water and address related constraints for implementation. The Workgroup Members’ planning goals are to increase regional water supply, improve the quality of the water being discharged into the ocean, and increase the region’s self-sufficiency by reducing dependency on imported water.

In the RW Development Plan, CSD and CVWD identified potential opportunities to use recycled water in the CVWD service area. These opportunities include providing recycled water for the following beneficial uses:

- Non-potable recycled water for urban irrigation and industrial/commercial customers within the Carpinteria area.
- Non-potable recycled water for agricultural irrigation in the CVWD service area surrounding Carpinteria.
- Indirect potable use of recycled water for groundwater recharge and/or a saltwater intrusion barrier (optional project).

With regard to projected supplies of recycled water meeting Title 22 standards, CSD’s CWWTP is currently permitted to produce up to 2.5 mgd of secondary-treated wastewater. On average, CSD discharges 1.4 mgd of secondary effluent into the Pacific
Ocean via a dedicated outfall pipe. In order to deliver recycled water to new potential uses, it is anticipated that CSD will need to implement one or more of the following depending on user type:

- Tertiary treatment upgrades at the CWWTP such that a portion of the flows treated through the CWWTP will meet Title 22 standards for reuse. This smaller scale project would allow for greater flexibility and continued use of chemical disinfection.
- Tertiary treatment at the CWWTP such that all of the flows treated through the CWWTP will meet Title 22 standards for reuse. This larger scale project could require implementation of technologies offering reduced footprint due to site constraints.
- Advanced treatment beyond Title 22 (MF/RO) to meet water quality requirements for agricultural irrigation demands and/or groundwater recharge.
- Onsite clearwell for diurnal storage
- Distribution system
- Injection wells

This scope of work outlines a planning study intended to address issues related to alternatives evaluation, facilities planning, environmental requirements, and coordination.

**Scope of Work**

The overall objectives of this scope of work are as follows:

- Secure a planning grant from the State Water Resources Control Board (SWRCB) to assist with funding of this scope of work;
- Further develop understanding of the potential recycled water market and the associated social, technical, institutional, political, and economic challenges presented;
- Identify a preferred alternative that includes various volumes and water quality constraints of recycled water to meet the demands of this additional market;
- Identify a preferred demand or set of demands that corresponds to the various volumes of recycled water produced;
- Recommend a preferred alternative for pipe alignment and operational strategy for delivering these supplies;
- Identify technical and environmental issues to be resolved during subsequent design and preparation of California Environmental Quality Act (CEQA) documentation, and
• Identify proposed funding strategies and provide CSD with the necessary information to enter into meaningful discussions with the appropriate parties to implement the recommended project.

The scope of work for this study is broken down into six major tasks and one optional task:

1. SWRCB Recycled Water Facilities Planning Grant Application
2. Recycled Water Market Assessment
3. Alternatives Analysis and Recommended Facilities Plan (including cost estimates)
4. Construction Financing Plan (including fee analyses)
5. Facilities Planning Report
6. Project Communications and Quality Control
7. Optional Task - Preliminary Environmental Documentation (Initial Study)

Each task is outlined below.

**Task 1. SWRCB Recycled Water Facilities Planning Grant Application**

The objective of this task will be to prepare and submit a grant application to the SWRCB to secure a planning grant (50/50 match) for up to $75,000 to help fund the evaluation and preparation of a facilities plan as outlined in the remainder of this scope of work. Activities under this task include preparing a work plan to be submitted as part of the grant application, coordination with SWRCB staff regarding work plan, and follow up discussions with the SWRCB staff during the processing of the application.

*Task 1 Deliverable:*
- Planning grant application including a work plan

**Task 2. Recycled Water Market Assessment**

The objective of this task is to conduct a recycled water market assessment that will provide the basis to develop recycled water project alternatives. This assessment will also include identifying concerns and assurances for each potential user.

Potential uses and users in the study area will be identified. The most significant demands are expected to be for agricultural irrigation and for groundwater recharge. Other demands for non-potable supplies will also be identified and may include landscape irrigation, local schools, new commercial, industrial and residential developments, parks and environmental enhancements. The assessment will also include developing estimated annual and peak demands, and identifying any water quality issues,
timing of use, reliability needs, and general retrofit/on-site issues for each identified potential user.

The methodology to identify potential uses/users and develop estimated demand will be driven by available data. Assumed sources of information will include:

- Agricultural land use and well extraction data.
- Historical groundwater well elevation and water quality data related to potential seawater intrusion and groundwater recharge opportunity.
- Information on other current and proposed development in the study area provided by CSD
- Information from other related regional water planning activities.

Potential water quality issues and retrofit/on-site issues will be based on a review of CWWTP effluent water quality data, groundwater sample water quality data, recycled water literature, and input from major potential users. Market assurances needed to secure the market and meet the SWRCB requirements for future grant funding (most of the irrigation users are covered by CSD’s use ordinance) will be identified.

Up to four meetings will be held directly with representatives knowledgeable about major potential users to provide information on recycled water and the project and get input from the potential users on specific issues associated with the use of recycled water at their site (e.g., on-site retrofits, delivery pressure, sensitive landscaping). An assessment will be performed of potential users’ response and willingness to use recycled water and evaluate the incentives that would be necessary to “secure” the recycled water market. These incentives may include on-site retrofit grants, reduced price, quality improvements, service reliability, and service pressure. The potential benefits of a recycled water ordinance (or revisions to any current proposed ordinance) will also be considered.

Task 2 Assumptions:
- A total of four meetings with major potential customers (or group thereof)
- The necessary information from assumed information sources above will be available

Task 2 Deliverables:
- Meeting agenda, materials and minutes
- Potential users GIS database
- Table summarizing market assessment data (potential users and related data, including recommended market assurance type)

Task 3. Alternatives Analysis and Recommended Facilities Plan
The objective of this task is to develop and evaluate recycled water distribution system alternatives to serve the demands identified in Task 2 and develop a “project plan” for the recommended facilities.
Task 3.1: Alternatives Development and Analysis

Up to three alternatives will be developed and evaluated as well as a no project alternative for meeting the market needs identified in Task 2. A conceptual level engineering evaluation of the project alternatives will be performed to ultimately select preferred facilities. The alternatives are expected to include any or all of the following elements:

- Implement tertiary treatment at the CWWTP to meet Title 22 standards.
- Implement advanced treatment at CWWTP beyond Title 22 standards for agricultural customers, and/or groundwater injection.
- Construct clearwell storage at CWWTP.
- Construct recycled water distribution system.
- Construct injection wells for groundwater recharge and/or seawater intrusion barrier.

Information will be reviewed from other related regional planning activity including the South Coast Recycled Water Development Plan (RMC 2013), Wastewater Collection System Master Plan (CSD, April 2005), Water Reliabilities Strategies 2030 (CVWD, February 2006), Santa Barbara Water Supply Planning Study (Carollo, 2009), Goleta Reclaimed Water Project Study (CDM, 1999), Cost of Tertiary Wastewater Treatment for Southern Santa Barbara County (GWSD, 2004), Water Reclamation Research (HTO, 2000), California Ocean Wastewater Discharge Report and Inventory (HTP, 2010), and Montecito Water Reclamation Study (CH2M HILL, 1991).

A conceptual level engineering evaluation of the project alternatives will be performed to ultimately select preferred facilities. Each alternative will be analyzed for its ability to meet a set of evaluation criteria that are expected to include:

- Ability to meet projected demands (volume, timing and water quality)
- Volume of recycled water put to beneficial use
- Conceptual level capital costs, O&M costs, unit cost, cost effectiveness and projected cash flow needs
- Maximum economical volume based on specific alternative assumptions (e.g. pipe capacity, tertiary water availability, pumping capacity, etc.)
- Ability to arrange necessary institutional agreements
- Permitting and environmental constraints

Alternative components will include treatment, pumping, storage and conveyance facilities. A preferred alternative will be selected and carried forward in Task 3.2.
Task 3.2: Recommended Facilities Plan
The recommended facilities will be developed to a facility plan level as described below.

Facilities: Preliminary design criteria will be determined for the recommended treatment facilities, pipelines, pump(s), and reservoir(s). Refined pipeline routes will be determined. Any potential design hurdles and/or potential implementation issues (easements requirements, construction permit acquirement period, constructability) that will need to be addressed and resolved to avoid delay in future design and construction will be identified.

Cost Estimate and Benefits Summary: Planning level cost estimates for design, construction, operation and maintenance of the recommended facilities will be developed. Cost estimates will be based on the review of historical cost estimates on similar jobs and similar areas and on information from recent local bids. The benefits associated with the recommended facilities (including potable water savings) will be identified.

Implementation Schedule: An implementation schedule that includes environmental documentation, Title 22 report development, market assurances, permitting, design and construction will be developed.

Task 3 Assumptions:
- CSD will guide RMC in the selection of “logical” pipeline alignments given the identified recycled water market through their knowledge of the CSD’s site constraints (alternatively, CSD will provide RMC with maps showing major utilities corridors, major traffic corridors, and other information to be determined).

Task 3 Deliverables:
- Planning and design assumptions
- Summary of alternatives and alternative evaluation results
- Preliminary design criteria for recommended facilities
- A schematic, map and layout for each alternative and for the recommended facilities
- Conceptual level cost estimates for alternatives and planning level cost estimate for the recommended facilities
- Implementation schedule for the recommended facilities

Task 4. Construction Financing Plan
The objective of this task is to prepare a construction financing and revenue plan for the facilities recommended under Task 3.2. CSD’s projected recycled water pricing policy will be documented. Future revenue sources and funding opportunities will be identified and evaluated. These include sale to industrial customers, sale for other non-potable users, and avoided costs associated with reducing imported water supplies. Other potential outside funding sources will be considered. Sources may include:
• State grant funding (DWR, SWRCB), including Proposition 84 Implementation Funding
• State Revolving Fund Loan
• Federal grant funding (USBR, USEPA)
• Potential State Water Bond Funding (November 2014 ballot)

A cash flow analysis and sensitivity analysis to failure of users to connect to the system and/or failure to receive outside funding will be performed. A construction financing plan and a revenue program for the facilities recommended in Task 3.2 will be prepared.

Task 4 Deliverables:
• Table summarizing projected facilities costs and revenues (monthly projections for the design/construction period; annual projections after start of operation)

Task 5. Facilities Planning Report
This objective of this task is to prepare a Facilities Planning Report that meets the SWRCB guidelines. Per the Water Recycling Facilities Planning (WRFP) Guidelines, “the facilities planning grant must result in a final facilities planning report. The final report must include an analysis of all of the essential components of potential project alternatives.”

Task 5.1: Administrative Draft Facilities Planning Report Preparation
An Administrative Draft Facilities Planning Report (Admin Draft, or 70% level complete) will be prepared, based on the findings of the Market Assessment and subsequent Facilities Planning Study. The Draft will summarize the findings of Tasks 2 through 4. It will include detailed descriptions of customer onsite and offsite facilities, new storage and conveyance facilities, an operations plan, a market assurance strategy, a revised cost estimate, and economic and financial analyses for the optimal near-term project. The report will include an implementation schedule that will provide the basis for seeking local, state, and federal funding assistance. Copies of supporting engineering and other calculations will be provided in either an appendix or a separate document.

Task 5.2: Draft and Final Facilities Planning Report Preparation
RMC will incorporate CSD comments on the Admin Draft into the Draft Facilities Planning Report (95% level complete) that will be submitted to the SWRCB for review. Comments from the SWRCB on the draft report will be addressed and a Final Facilities Planning Report will be prepared. Copies of supporting engineering and other calculations will be provided in either an appendix or a separate document.

Task 5 Assumptions:
• The report will be prepared using RMC standard report format
• Two-week review period by CSD for the Administrative Draft Report
• Four-week review period by the SWRCB for the draft Report is assumed.
Task 5 Deliverables:
- Administrative Draft Facilities Planning Report (10 color hard copies and 1 electronic copy)
- Draft Facilities Planning Report (10 color hard copies and 1 electronic copy; includes 3 copies for the SWRCB)
- Final Facilities Planning Report (10 color hard copies and 1 electronic copy; includes 3 copies for the SWRCB)

Task 6. Project Communications and Quality Control
The objective of this task is to ensure adequate coordination and communication between the consultant team and CSD for the duration of the project and provide the necessary quality control on the study deliverables. The objective of this task is also to ensure timely coordination with the SWRCB, obtain feedback, guidance and approval over the course of the study.

Task 6.1: Coordination and Communication
General project management activities (including tracking budget/schedule, preparing monthly invoice and progress report) will be performed. RMC will communicate regularly with the CSD (typically monthly phone call to report on project status and discuss information/coordination needs).

Task 6.2: Meetings with SWRCB
An initial kickoff meeting between RMC, CSD and SWRCB staff will be held to satisfy SWRCB requirements. The purpose of the meeting will be to confirm overall study goals and objectives, establish lines of communication, confirm critical assumptions (e.g. study area) that might affect the directions of the study, and start gathering the information necessary for the completion of the study. A “mid-course” meeting between RMC, CSD and SWRCB staff will be held to present the proposed structure and content of the Draft Facilities Planning Report to SWRCB and obtain feedback and guidance prior to submission of the report to SWRCB. It is assumed that the meetings will be held in Rosamond.

Task 6.3: Quality Assurance and Quality Control
Quality assurance and quality control will be performed for all deliverables identified in Tasks 1 through 5.

Task 6 Deliverables:
- Meeting agenda, material, and minutes
- Monthly invoice and progress report
Optional Task 01. Initial Study

The work to be performed under this task is presented as optional for the convenience of CSD. The objective of this task is to determine the required level of environmental review for the facilities recommended under Task 3.2 so that CSD can move forward with the design and construction of the facilities.

A preliminary review of the environmental issues will be conducted in accordance with the California Environmental Quality Act (CEQA) to determine if there are any impacts that could be significant and unavoidable, or significant and require more than standard mitigation measures. This review will be documented by the preparation of an Initial Study and will have developed sufficient information to allow determination of the type of environmental documentation required for project implementation (Negative Declaration/Mitigated Negative Declaration (ND/MND) or Environmental Impact Report (EIR)).

The scope of this task is similar to preparation of a ND/MND in that it reviews each resource topic identified in CEQA Guidelines’ Appendix G, but would be completed prior to the required public notice and review steps and would not include detailed site surveys, modeling, or development of mitigation measures. The Initial Study will be based on available existing information and no field surveys or technical studies will be completed because the scope of these efforts is dependent on whether a ND/MND or EIR is needed. Also, the Initial Study would be for internal use at CSD and would only be distributed publicly at CSD’s discretion once the formal CEQA compliance process is initiated.

Note that the advantage of this approach is that sufficient definition of potential environmental issues and impacts will be developed utilizing portions of the SWRCB planning grant funding.

Optional Task 01.1: Site Visit and Kick off Meeting
RMC will attend a kick-off meeting at CSD’s offices and conduct a site visit of the proposed project site. RMC will meet with CSD staff to discuss the project and collect all applicable documents and information for use in completing the Initial Study. RMC will take photographs of the site(s) as appropriate.

Optional Task 01.2: Prepare Project Description
Based on information developed under Task 3, RMC will prepare a Draft Project Description for review by CSD. The project description will include a location map, site plan, and description of project activities including construction and operation. The project description will be as detailed as possible, describing the project’s geographic location, the area directly affected by the project (its “footprint”), the methods and means used to construct the project, and project operations.
Optional Task 01.3: Administrative Draft Initial Study
RMC will review existing CEQA environmental documents from the study area and prepare an Initial Study in accordance with CEQA Guidelines Appendix G to determine the required level of environmental review. The Initial Study will identify the potential environmental impacts of the preferred project, including supplemental comments which clearly and concisely describe those impacts. The supplemental comments will identify the need for mitigation measures to reduce potential environmental impacts to less-than-significant levels. The Initial Study will be organized by CEQA resource category and will address each project component, as needed. An electronic copy of the Administrative Draft Initial Study will be provided to CSD for review.

Optional Task 01.4: Final Draft Initial Study
RMC will revise the Administrative Draft Initial Study in response to the CSD’s comments and prepare the Final Draft Initial Study. RMC will make a recommendation as to what level of environmental review should be conducted for the preferred project (ND/MND or EIR). An electronic copy of the Final Draft Initial Study will be provided to CSD.

Optional Task 01 Assumptions
- Site visit to be conducted by two staff personnel (RMC CEQA task leader and associate).
- No air quality modeling, biological field surveys, cultural resources literature review, or permitting applications would be conducted as part of this scope.
- The Initial Study report is intended to determine the need for an ND/MND or EIR, which will not be completed as part of this study.

Optional Task 01 Deliverables:
- Meeting minutes from environmental documentation kick-off meeting and site visit
- Electronic copy of Project Description, Administrative Draft Initial Study, and Final Draft Initial Study
- Administrative Draft Initial Study (2 color copies and CDs)
- Final Draft Initial Study (5 color copies and CDs)
Schedule

The table below summarizes the proposed schedule for executing this scope of work. RMC’s experience is that portions of the schedule may be able to be expedited but will depend upon the duration of review and approval by CSD and the SWRCB.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSD Board Approval</td>
<td>April 15, 2014</td>
</tr>
<tr>
<td>Submit grant application to SWRCB</td>
<td>May 15, 2014</td>
</tr>
<tr>
<td>Notice-to-Proceed from SWRCB</td>
<td>August 15, 2014</td>
</tr>
<tr>
<td>Administrative Draft Facilities Plan</td>
<td>November 15, 2014</td>
</tr>
<tr>
<td>Review meeting with SWRCB</td>
<td>January 15, 2015</td>
</tr>
<tr>
<td>Final Facilities Planning Report</td>
<td>March 15, 2015</td>
</tr>
<tr>
<td>Draft Initial Study</td>
<td>June 15, 2015</td>
</tr>
</tbody>
</table>

Budget

The table on the following page outlines the proposed fee estimate to execute this scope of work. Items to consider include:

- All scope items can be funded by the SWRCB planning grant at a 50% match up to $75,000 with the exception of Task 1. If successful in securing the planning grant, the expected net cost to CSD will be approximately $104,000.

- CSD may wish to hold off on environmental clearance activities proposed under Optional Task 01 either at this time or during the course of the facilities plan development. If so, the expected net cost to CSD will be approximately $60,000 if CSD is able secure a SWRCB planning grant.
# Fee Estimate

## Carpinteria Sanitary District

### Recycled Water Alternatives Evaluation and Facilities Plan

<table>
<thead>
<tr>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District</strong> Brian, P.E.</td>
</tr>
<tr>
<td><strong>Principal-in-Charge</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 1: SWRCB Recycled Water Planning Grant Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Dietrick, Brian, P.E. 10 Erickson, Kraig, P.E. 20 Caldwell, Kathy 4 Propeski, Rosalyn, AICP 38 Prickett, Rosalyn, AICP 226 Mohr, Crystal 184 Maskin, Cathy 104 Total Hours $236 ODCs $205 Total ODCs (3) $226 Total Fee $184</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 2: Recycled Water Market Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Dietrick, Brian, P.E. 20 Erickson, Kraig, P.E. 20 Caldwell, Kathy 4 Propeski, Rosalyn, AICP 50 Prickett, Rosalyn, AICP 16,972 Mohr, Crystal 440 Total Hours $7,070 0 0 7,070</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 3: Alternatives Analysis and Recommended Facilities Project Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Alternatives Development and Analysis 8 30 110 8 156 $29,110 0 0 29,110</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 4: Construction Financing Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Dietrick, Brian, P.E. 80 Erickson, Kraig, P.E. 32 Caldwell, Kathy 4 Propeski, Rosalyn, AICP 46 Prickett, Rosalyn, AICP 29,110 Mohr, Crystal 12,000 Total Hours $8,416 0 0 8,416</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 5: Facilities Planning Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Administrative Draft Facilities Planning Report Preparation 2 20 8 60 8 98 $19,228 500 550 $19,778</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 6: Project Communications and Quality Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Coordination and Communication 2 16 8 8 34 $6,056 0 0 6,056</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task 7: Administrative Support Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 Administrative Support Services 4 8 12 2 30 $5,948 550 600 $6,198</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optional Task 01: Initial Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 Initial Study and Kick off Meeting 0 4 12 12 2 50 $5,948 550 600 $6,198</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL (WITH OPTIONAL TASK 01)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 172 14 370 52 208 63 935 $176,296 $2,750 3,025 $179,321</td>
</tr>
</tbody>
</table>

1. The individual hourly rates include salary, overhead and profit.
2. Other direct costs (ODCs) such as reproduction, delivery, mileage (rates will be those allowed by current IRS guidelines), and travel expenses, will be billed at actual cost plus 10%.
3. RMC reserves the right to adjust its hourly rate structure and ODC markup at the beginning of the calendar year for all ongoing contracts.
RMC Water and Environment is a California-based environmental engineering company focused exclusively on water. We work with public agencies and local communities to develop innovative solutions for managing one of the earth’s most vital resources.

Every day RMC brings sound technical expertise and big-picture thinking to a broad range of local and regional water-related projects. We operate as one company from offices located throughout California so we can be as responsive as possible while bringing real-world understanding of local water, wastewater and stormwater issues.

**Expertise**

Water Resources
Water Recycling
Wastewater Infrastructure
Wastewater Treatment
Water Infrastructure and Treatment
Flood and Stormwater Protection

To learn more, visit [rmcwater.com](http://rmcwater.com)
Engineering consultants need to have the right technical expertise for planning and designing water resources projects. But, adding a big picture perspective can help achieve even more.

Will regional partnerships help get my projects implemented?
How can I diversify my water supplies?
How do I gain the public’s support?

You can count on RMC Water and Environment to have the sound technical expertise and the big picture thinking needed to make the most of your water resources project or program.

RMC is a recognized leader in water resources, integrated water supply, and watershed planning in California, and we have provided strategic water supply planning since our founding in 1998. RMC has been heavily involved in the Integrated Regional Water Management Program, working with 22 regions across the state and providing IRWM services to more than 85% of California’s population. And, we have an unparalleled success rate in securing IRWM program funding—more than $246 million—through Propositions 50, 84, and 1E.

RMC also prepares urban water management plans, basin management plans, and groundwater management plans; and we provide engineering support for water resource projects—from the feasibility evaluation stage through project implementation.
Strategic Water Resources Plan Tackles Water Supply Uncertainty
For the Palmdale Water District in northeastern Los Angeles County, RMC developed a clear strategy for creating over 30,000 AFY of new water supply. Through analysis and modeling of water supply and demand management alternatives, we created a coherent plan for accessing additional imported water sources, capitalizing on multiple groundwater banking opportunities, increasing groundwater pumping capacity, implementing water recycling, and expanding a progressive conservation program.

Regional Planning Secures Funding and Builds Public Support
Working with the Mokelumne/Amador/Calaveras (MAC) IRWM Region since 2005, RMC has facilitated a collaborative planning process reflecting the region’s diversity and goals for ensuring a reliable water supply, reducing flood-related impacts, and preserving water quality and the environment. We secured funding for this Sierra Nevada foothills region through five separate IRWM-related funding programs and helped successfully build public support for vital projects.

Integrated Modeling Clarifies the Inter-Relationship of Surface Water and Groundwater
RMC led the modeling analysis for the Sacramento Groundwater Authority to simulate the effects of regional groundwater substitution and transfer programs on major surface water bodies in the area. Using the SacIGSM model, the analysis modeled the effects of the proposed banking on Delta inflows during the Delta shortage periods, of interest for biological and fisheries impacts.

Collaboration Supports Basin-Wide Goals
RMC provided preliminary facilities engineering and prepared the environmental impact report for the Pasadena Groundwater Storage Program, a joint program among multiple agencies aimed at ensuring the sustainability of the groundwater basin as a long-term reliable water source. We evaluated alternatives and prepared conceptual design for the groundwater nitrate treatment facility, three aquifer storage and recovery wells, and a new connection between two different water systems.

Flexible and Cost-Effective Plan Addresses Demand and Long-Term Reliability
Contra Costa Water District is faced with the challenge of providing high quality, reliable water supplies for a service area population projected to increase 28% over the next 25 years. RMC created a detailed decision model to help prioritize water supply alternatives that best meet the District’s needs. We then developed a long-term plan that included evaluating supply reliability, alternatives, and conservation measures; recommending a water supply portfolio; and developing a cost-effective implementation plan.
Engineering consultants need to have the right technical expertise for planning and designing water recycling projects. But, adding a big picture perspective can help achieve even more.

Is there a local or expanding market for recycled water?

What emerging treatment options are available?

How will changing regulations impact options?

*You can count on RMC Water and Environment to have the sound technical expertise and the big picture thinking needed to make the most of your water recycling project or program.*

RMC Water and Environment was established on a foundation of recycled water expertise. We have gained a reputation for providing clients with the most advanced technical expertise in recycled water coupled with unparalleled commitment to innovation and comprehensive solutions. RMC has worked with cities and agencies throughout California on water resource issues with water recycling as a core focus. And, we are leading the industry in the development of potable reuse—including groundwater replenishment and surface water augmentation—to alleviate strains on our water supplies.
Comprehensive Planning to Reduce Imported Water Needs
RMC is leading the largest recycled water planning effort in the country to expand Los Angeles’ recycled water supplies through projects and partnerships with local agencies. We managed a series of comprehensive master plans that analyzed non-potable and indirect potable reuse options, phased expansion of reuse systems, partnerships with other agencies, major potential reuse customers, and existing system reliability.

Advanced Water Purification Technology to Provide Safe and Reliable Water
RMC is managing program elements and public outreach services for San Diego’s Water Purification Demonstration Project. The proposed project for surface water augmentation using advanced treated recycled water is the first planned project of its type in California. The demonstration project is intended to provide the technical, water quality, environmental, public outreach, regulatory, and funding requirements necessary to implement a full-scale project.

New Regulations for Salt and Nutrient Management
Santa Rosa brought in RMC to help identify and manage salt and nutrient inputs, streamline permitting of recycled water projects, and establish basin objectives and best practices for maintaining water quality. RMC is assisting Santa Rosa in navigating the new regulatory process associated with the State Water Resource Control Board’s Recycled Water Policy and achieve early, trendsetting approval related to salt and nutrient management.

Regional Solution for Addressing Delta Water Supply Shortages
RMC is helping Del Puerto Water District and the Cities of Modesto and Turlock determine the feasibility of delivering up to 33,500 acre-feet per year of tertiary-treated recycled water to Central Valley lands for agricultural irrigation. The project is a regional solution to address south of the Delta water supply shortages and reliability concerns and enhance the viability of local farmland.

New Life for Abandoned Structures and Pipelines
RMC designed and provided engineering services during construction for a recycled water treatment facility in Novato incorporating existing process structures and pipelines that were no longer in use. The $6-million recycling facility provides tertiary treated water for local landscape irrigation, saving Novato an estimated 150 million gallons of water annually, enough to supply about 1,400 single-family homes a year.
Kathy F. Caldwell
Senior Water Resources Planner

Experience
25 years

Education
M.A., Urban Planning and Environmental Policy Analysis, University of California, Los Angeles, 1997
B.A., Political Science, University of California, Berkeley, 1973

Summary
Kathy specializes in public policy with extensive experience in water resource planning and policy, public outreach, and stakeholder facilitation. She has managed several integrated regional water management projects in California. Kathy also has a significant background in acquiring and administering grant and loan funding. Over the last 15 years, Kathy has prepared grant and loan applications for many water agencies throughout the state of California.

Relevant Experience

Santa Barbara County Integrated Regional Water Management Planning
Project Manager. Kathy has worked with Santa Barbara County for six years managing various Integrated Regional Water Management (IRWM) planning projects. She is currently Project Manager for the IRWM Plan Update that will be completed in 2013. She managed the writing of the original IRWM Plan in 2007. The IRWM Plan serves as a foundation for water resource development and securing California grant funding for the region. IRWM planning is an outgrowth of efforts to develop plans, projects, and programs at regional levels that incorporate an integrated approach to water and other resources management. Development of IRWM plans involves integration of multiple water resource strategies and coordination of a wide stakeholder group from throughout the County of Santa Barbara.

Grant Writing, Various Agencies
Project Manager. Kathy has successfully written multiple grant and loan applications for clients throughout California. Those clients include Santa Barbara County Water Agency and Flood Control District, Los Angeles Department of Water and Power, Metropolitan Water District of Southern California, West Basin Municipal Water District, Mojave Water Agency, City of Santa Maria, Long Beach Water Department, Eastern Municipal Water District, Rancho California Water District, Coachella Valley Water District, Three Valleys Municipal Water District, Monte Vista Water District, Crescenta Valley Water District, Oceanside, Otay Water District, and Semitropic Water Storage District. The size of grants awarded ranges from $25 million to $100,000. She has written applications for state and federal agencies including the USEPA, US Bureau of Reclamation, California Department of Water Resources, State Water Resources Control Board, California Department of Public Health, California Resources Agency, the CALFED Bay-Delta Program, and California Energy Commission.

Santa Barbara County Integrated Regional Water Management (IRWM) Propositions 50 and 84 Grant Applications
Project Manager. Kathy successfully submitted three recent grant applications that have secured $28,578,000 to the Santa Barbara County IRWM Region. The Proposition 50 Implementation Grant application resulted in a $25 million grant from the SWRCB, the Proposition 84 Planning Grant application resulted in a $577,000 grant from DWR, and the Proposition 84 Round 1 Implementation Grant brought more than $3 million in grant funds from DWR to the region. Additional responsibilities as Project Manager included advocacy with State regulatory agencies, development of regional governance options, multi-objective decision-making for project selection, and consensus building with the 29 participating regional agencies.
Southern California Regional Integrated Drinking Water Quality Plan

*Project Manager.* Kathy was project manager for the Southern California Regional Integrated Drinking Water Quality Plan (Plan) completed in 2005. In this role, she conducted grant administration with the funding agency, California Bay-Delta Authority. The Plan developed an analytical framework from which to evaluate water quality tools or actions and strategies that can be used to improve regional drinking water quality over the next 15 years. Agencies participating in development of the Plan included the Metropolitan Water District of Southern California, Los Angeles Department of Water and Power, San Diego County Water Authority, Long Beach Water Department, Inland Empire Utilities Agency, Cucamonga Valley Water District, and Mojave Water Agency with assistance from the Mono Lake Committee.

Southern California Water Dialogue

*Coordinator.* Kathy has served as coordinator of the Southern California Water Dialogue since 2001. Water Dialogue participants from eight counties meet on a monthly basis to address the management of southern California’s water supply to meet future needs and focus on reliability, water quality, conservation, recycling, storage, conveyance, and watershed management. Meetings are well attended by members of the water agency, environmental, watershed, elected officials and staff, and public interest communities. Kathy monitors water resource, water use efficiency, and watershed legislation and updates stakeholders on upcoming grant opportunities. She developed and manages the Water Dialogue website (www.socalwaterdialogue.org) that provides meeting, issues, funding and other related information to stakeholders.

Integrated Regional Water Management Plan Project Selection Process, County of Santa Barbara

*Project Manager.* Kathy was the project manager for the Santa Barbara County IRWM Plan Project Selection Process in 2010 and 2012. The Project Selection Process updated the 2007 IRWM Plan project list using multi-criteria decision-making to select new regional priority projects for State funding. The process included team building, public stakeholder outreach and workshops, provision of project information forms to collect project data, facilitation of agreement on regional issues and objectives, audit of project information, and utilization of a multi-criteria decision-making tool to objectively score and rank projects.

CALFED Bay-Delta Water Federal Funding Coalition

*Project Manager.* Kathy co-managed the CALFED Bay-Delta Federal Funding Coalition in the late 1990's. Coalition members were stakeholders from the urban, agricultural, and environmental communities. The Coalition worked to foster federal policy and funding in support of the CALFED Bay-Delta Program (CALFED). Kathy created promotional information packages to garner support from legislators for the CALFED Program.

Coachella Valley Integrated Regional Water Management Program, Coachella Valley Regional Water Management Group

*Project Manager for Disadvantaged Community Outreach Program.* Kathy is managing the Coachella Valley Integrated Regional Water Management (IRWM) Disadvantaged Community (DAC) Outreach Program which is funded by the Department of Water Resources (DWR). The DAC Program will develop and implement methods to improve DAC participation in IRWM planning and assist DWR in developing a model DAC Program for other similar areas in California. The DAC Program methods include expanded outreach efforts, the development and use of spatial data to characterize smaller DAC areas and flood control needs within DAC areas, a needs assessment for DACs in the region, identification of existing or proposed projects intended to benefit DACs, development of in-depth engineering and project management plans for priority DAC projects, and work items to ensure that information and outcomes from the DAC Program are included within the Coachella Valley IRWM Plan Update. The Program is supported by the Coachella Valley Water District, Coachella Water Authority, Desert Water Agency, Indio Water Authority, and Mission Springs Water District.
Summary

Brian is civil engineer specializing in facilities planning and design for water resources, wastewater, and recycled water projects. He has experience in technical planning for collection systems, distribution systems, groundwater recharge facilities, integrated regional water management plans, urban water management plans, and environmental impact and regulatory compliance reports. Brian's design experience includes large-diameter trunk sewer relief and replacement projects, sewer force mains, and sewer rehabilitation. He is also experienced in funding, cost estimating, industrial waste discharge, and public outreach. In addition to his engineering planning and design experience, Brian has served as a faculty lecturer at Loyola Marymount University for graduate level solid waste management classes.

Relevant Experience

Groundwater Reliability Improvement Program, Alternatives Analysis, Water Replenishment District of Southern California

Project Manager. RMC is leading a joint effort between the Water Replenishment District of Southern California, Los Angeles County Sanitation Districts, and the Upper San Gabriel Valley Municipal Water District. From 2010 to 2011, Brian served as project manager for consultant team of seven, including two sub-consultant partners. Prepared technical memoranda on existing planning documents and regulations, supply and facility options, and various project alternatives to offset the use of imported replenishment water in the Main San Gabriel and Central Basins. Project alternatives include combinations of imported water, storm water, groundwater, and recycled water improvements. The project included writing a successful application for a Water Recycling Planning Grant from the SWRCB and participation in all stakeholder outreach efforts.

Antelope Valley Integrated Regional Water Management Plan, AV Regional Water Management Group

Project Manager. Managed the IRWMP Plan Update and the Round 2 Implementation Grant Applications. RMC is working with the Antelope Valley Region to update its IRWM Plan, prepare an integrated flood management plan, provide support for development of a Salt and Nutrient Management Plan, and to support further Disadvantaged Community outreach in the Antelope Valley Region. The region is seeking to address groundwater adjudication lawsuits, the development of groundwater banking options, and the expansion of recycled water systems to offset further need for imported water from the Bay-Delta.

Recycled Water Seasonal Storage Project Feasibility Study, Las Virgenes MWD

Project Manager. RMC is preparing a Feasibility Study that analyzes a recycled water seasonal storage project, including expansions of the existing conveyance system and customer base outside the Las Virgenes service area. The project also includes a conceptual groundwater recharge project intended to maximize reuse from the District's water reclamation plant. Brian served as project manager for the study, which included writing a successful application for a Water Recycling Planning Grant from the SWRCB.
Proposition 1E Grant Application, City of Palmdale
Project Manager. RMC prepared the grant application for the Upper Amargosa Creek Flood Control, Recharge, and Habitat Restoration Project proposed by the City of Palmdale. Brian served as project manager for the grant, which demonstrated a positive benefit-cost ratio to Department of Water Resources based on an in-depth analysis of water supply and avoided flood damage benefits. The project was awarded $6.5 million, the full amount of requested grant funding.

Groundwater Recharge with Recycled Water Pilot Project – USBR Challenge Grant Program application, City of Lancaster
Project Manager. Prepared application for Challenge Grant Program: Recovery Act of 2009 Water Marketing and Efficiency Grants, including background data, technical project description, description of performance measures, description of potential environmental impacts, required permits and approvals, funding plan, commitment letters, and project budget proposal.

Groundwater Recharge with Recycled Water Pilot Project – Clean Water State Revolving Fund Program Application, City of Lancaster
Contributing Grant Writer. Assisted project manager to prepare application for Clean Water State Revolving Fund Program and Water Recycling Funding Program.

Palmdale 2025 Facilities Plan and Environmental Impact Report, LACSD
Technical Advisor/Reviewer. Provided technical review for chapters of the Palmdale 2025 Plan and drafted Executive Summary. The Palmdale 2025 Plan recommends upgrade to full tertiary treatment and a combination of agricultural reuse and municipal/industrial reuse for effluent management. Portions of this recommendation are currently being implemented in the southern Antelope Valley.

Lancaster Water Reclamation Plant Quarterly Reports, LACSD
Project Manager. Created reports to address orders from the Lahontan Regional Water Quality Control Board. Coordinated input from the facilities planning, design, operations, monitoring, and financial planning groups at LACSD. The report contained information regarding progress on construction, monitoring, and recycled water reuse development.

Lancaster Water Reclamation Plant Farm Management Plan, LACSD
Technical Advisor/Reviewer. Provided technical review for the Farm Management Plan which recommends agricultural reuse with disinfected tertiary recycled water, center pivot irrigation systems, and a contract or lease farming business model. This recommendation is currently being implemented at the Lancaster Water Reclamation Plant effluent management site in the central Antelope Valley.

2010 Urban Water Management Plan Update, Palmdale Water District
Project Manager. RMC updated the District’s Urban Water Management Plan (UWMP) to meet 2010 requirements and those of Senate Bill 7-x7. Brian served as project manager for the 2010 Update, which includes supply and demand analyses, as well as calculations for baseline water use and 2020 water use targets.

2010 Urban Water Management Plan Update, City of Upland
Project Manager. RMC updated the City’s Urban Water Management Plan (UWMP) to meet 2010 requirements and those of Senate Bill 7-x7. Brian served as project manager for the first part of the 2010 Update, which includes supply and demand analyses, as well as calculations for baseline water use and 2020 water use targets.
Kraig J. Erickson, P.E.
Civil/Environmental Engineer, Construction Manager

**Summary**

Kraig participates in all aspects of project implementation, from planning through design and construction services. He has provided design and construction management services for pipeline, pump station, treatment and reservoir projects for recycled water, potable water, storm drainage, and wastewater systems. His areas of specialty include recycled water conversions for irrigation and industrial customers, pipeline design, construction cost estimating, condition assessment inspections, and construction management for infrastructure projects. Kraig has also provided engineering and construction management for public works construction, public buildings, and public parks. He is experienced with condition assessment and rehabilitation projects for pipelines, reservoirs, pump stations and wastewater treatment facilities, as a well a certified inspector for cured-in-place pipeline relining. Kraig has engineering experience with GIS, Auto-CAD, and hydraulic modeling software. He has been performing studies and providing engineering design services for various municipalities, government agencies, and private-sector clients throughout California since 2002.

**Relevant Experience**

**Drinking Water SRF Grant Writing Support, Los Angeles Department of Water and Power (LA DWP) Project Engineer.** LADWP is pursuing funding for multiple projects under the American Recovery and Reinvestment Act in junction California Department of Public Health funding. RMC was tasked with preparing two engineering reports and a green business case for LA DWP. Kraig prepared engineering reports for the City Trunk Line South-Unit 2 Project and the River Supply Conduit Lower Reach-Unit 3 Project. Kraig also developed a green business case for the Santa Ynez Water Quality Improvement Project. LA DWP is requesting a total of $101-million in stimulus funding among these three projects.

**Grant Funding, Water Replenishment District of Southern California Project Engineer.** WRD was investigating the feasibility of state and federal grant funding for groundwater and recycled water projects. Kraig assisted with the preparation of a presentation for WRD summarizing the plausible Proposition 50 funding chapters and local groundwater assistance program opportunities, as well as federal funding through U.S. EPA Region 9.

**Greater Los Angeles County Region Integrated Regional Water Management Plan, Leadership Committee for LA County IRWMP Project Engineer.** The purpose of this IRWMP was to define a clear vision and direction for the sustainable management of water resources in the Greater LA County Region for the next twenty years, present the basic information regarding possible solutions and the costs and benefits of those solutions, and to inspire the Region and potential funding partners outside this Region that these solutions make sense, are good for the community, and are...
Kraig J. Erickson, P.E.

RMC assisted in preparation of the IRWMP. Kraig worked on the water supply section of the IRWMP analyzing recycled water supply in the region. In addition Kraig assisted in the integration of projects based on project benefits and impacts. Kraig also prepared graphics for the IRWMP in GIS.

**State Revolving Fund (SRF) Recycled Water Project, City of Lancaster**

*Project Engineer.* RMC provided funding support to the City of Lancaster for three recycled water projects: City Park Recycled Water Retrofits, Avenue H-8 and 5th Street East Recycled Water Corridor, and Carter Park Recycled Water Project. Kraig worked directly with the City developing materials and attachment for the application packet.

**Wastewater Collection and Recycled Water Distribution System, City of Malibu**

*Project Engineer.* RMC is designing a wastewater collection system, 0.2-MGD wastewater treatment plant, and recycled water dispersal system for percolation as well as for reuse. During the planning process, Kraig served as the lead engineer for the recycled water dispersal/reuse system and provided preliminary design information and plans along with construction cost estimates. Currently in the design phase, Kraig is leading the pipeline design for both the collection and dispersal system. A key component of the system is the utilization of a dual trench for the HDPE wastewater collection system with the PVC recycled water distribution system. The recycled water system will carry tertiary treated effluent to both deep-groundwater injection wells as well as to irrigation customers in the City.

**Recycled Water Plan Check, Yucaipa Valley Water District**

*Project Manager.* The District is responsible for water treatment, water production, water delivery, wastewater collection, wastewater treatment and recycled water delivery in the Yucaipa Valley. As part of continued efforts with the District, RMC's responsibilities include providing plan check services for the use of recycled water for compliance with District and State Department of Public Health requirements. Kraig is managing the project coordinating with the District, customers, and developers for new uses of recycled water.

**Recycled Water Regulatory Assistance, City of Camarillo – Water Division / Sanitary District**

*Project Manager.* RMC is providing engineering support to the City of Camarillo for recycled water regulatory assistance. Tasks include assistance with Site Supervisor Training, regulatory compliance with recycled water at Conejo Cemetery, and regulatory compliance with recycled water at a new agricultural site. Kraig is preparing site conversions drawings for California Department of Public Health review, assisting in cross-connection testing, and attending meeting with the City and customers.

**LA Harbor Industrial Customer Conversions, City of Los Angeles Department of Water and Power**

*Project Manager.* RMC is providing LADWP with engineering support for the conversion of three large refineries and one air separation facility to recycled water use in cooling and boiler-feed operations in the LA Harbor. A key component of these industrial customers converting to recycled water use is analysis of treatment processes to be used in existing RO units and for the cooling towers. Kraig is leading the team providing the most beneficial conversion approach for each customer. Tasks include installation of flow recorders on all potable water meters, developing conversion cost estimates/alignments, assessing water balance, and determining impact of these new customers to the recycled water system.

**Recycled Water Customer Development, West Basin Municipal Water District**

*Project Manager.* RMC is providing WBMWD with as-needed engineering support for recycled water customer development. Kraig is serving as project manager to review/develop onsite drawings and supplemental engineering reports, perform site inspections with Los Angeles County Department of Public Health, and coordinate with contractors for submittals. Currently, Kraig is working as an extension of WBMWD staff to manage 19 customer conversions which parks, schools, medians, power-plants, dual-plumbed buildings, car washes, baseball fields, and a race track. In addition, Kraig is providing support to customers and recycled water site supervisor training. RMC is also providing assistance for expansion of WBMWD’s system to the LA Harbor.
Crystal Mohr
Water Resources Planner

Summary
Crystal is a project planner with experience working on Federal and State-level grant and loan applications; completing permitting documents; writing environmental impact reports, and completing initial studies and mitigated negative declarations in compliance with California Environmental Quality Act (CEQA) regulations; conducting research and biological field surveys; monitoring sensitive species populations; and using GIS and database tools. In addition, Crystal has experience working in the public sector to complete a verified greenhouse gas analysis.

Relevant Experience

2014 Coachella Valley Integrated Regional Water Management Plan, Coachella Valley Regional Water Management Group
Project Planner. Crystal provides general support to the Coachella Valley Regional Water Management Group for development of a comprehensive update to the 2010 IRWM Plan. Crystal helps to manage outreach for the IRWM Program, including directed outreach to economically disadvantaged and tribal communities, as well as general outreach to the public and the Planning Partners. Crystal also helps to manage progress reporting and contracting as this project is funded through a grant from the State of California (DWR).

State Revolving Fund Loan Support, Marina Coast Water District
Project Planner. Crystal assisted the Marina Coast Water District (MCWD) with applying for a State Revolving Fund (SRF) loan through the State Water Resources Control Board for their Regional Desalination Project. Completed portions of the project report and associated attachments, and coordinated with other consultants to complete the environmental documentation and credit review analysis.

U.S. Bureau of Reclamation WaterSMART Grant Application, City of Oceanside
Project Planner. Crystal assisted in preparing a WaterSMART Grant Application for an Advanced Water Treatment Pilot and Demonstration Project for the City of Oceanside. Her work included drafting and editing all sections of the grant application.

Proposition 1E Stormwater Flood Management Grant Proposal, City of Escondido
Project Planner. Crystal assisted in preparing a Proposition 1E Stormwater Flood Management grant application for the City of Escondido. Her work included completing technical evaluations of the proposed flood inundation zone, working on economic cost benefit analyses, completing analysis with the Flood Rapid Assessment Model (FRAM), and editing and drafting multiple sections of the grant application. Crystal was also responsible for providing GIS support, and creating maps and figures for the grant application.
Crystal assisted in preparing a Proposition 1E Stormwater Flood Management grant application for the City of San Marcos. Her work included completing technical evaluations of the proposed floodplain, working on economic cost benefit analyses, completing analysis with FRAM, and editing and drafting multiple sections of the grant application. Crystal was also responsible for providing GIS support, and creating maps and figures for the grant application.

Coachella Valley Integrated Regional Water Management Implementation Grant Proposal Round 2, Coachella Valley Regional Water Management Group
Project Planner. Crystal assisted in preparing the Proposition 84 IRWM Implementation grant application, managing stakeholder and technical input from agencies and local project sponsors, facilitating the project review and selection process, and drafting the grant application. Crystal was also responsible for coordinating with the economic analysis team to complete the cost-benefit analyses for all projects included in the grant application.

Coachella Valley Integrated Regional Water Management Implementation Grant Proposal Round 1, Coachella Valley Regional Water Management Group
Project Planner. Crystal assisted in preparing the Proposition 84 IRWM Implementation grant application, managing stakeholder and technical input from agencies and local project sponsors, and drafting multiple sections of the grant application. Crystal was also responsible for providing meeting support for ongoing Regional Water Management Group meetings.

San Diego Integrated Regional Water Management Program, San Diego Regional Water Management Group
Project Planner. Crystal provides general support to the San Diego Integrated Regional Water Management (IRWM) Program. Support includes preparation of materials and facilitation for stakeholder workgroup meetings, public outreach meetings, directed DAC and tribal meetings, Regional Advisory Committee, and Regional Water Management Group (RWMG) meetings. In addition, Crystal helped author the 2013 IRWM Plan that was recently released for public review. Crystal also helps to manage progress reporting and contracting as this project is funded through a grant from the State of California (DWR).

Upper Santa Margarita Watershed IRWMP Grant Application
Project Engineer. Assisting in the development of a Round 2 planning grant application for the region that also involved developing the scope, budget and schedule for the Rancho California Water District Salt and Nutrient Management Plan.
Rosalyn Prickett, AICP
Water Resources Planner

<table>
<thead>
<tr>
<th>Experience</th>
<th>Education</th>
<th>Certification</th>
<th>Affiliations</th>
</tr>
</thead>
</table>
| 14 years   | MLA, Environmental Planning, University of California Berkeley  
MCP, City and Regional Planning, University of California Berkeley  
BS, City and Regional Planning, California Polytechnic State University | American Institute of Certified Planners (AICP) | WateReuse Association  
Association of Environmental Professionals (AEP)  
American Planning Association (APA) |

Summary
Rosalyn Prickett specializes in water resources planning, environmental assessment, regulatory permitting, and funding support. She has a demonstrated ability to manage complex, schedule-driven projects. She effectively manages integrated water resources planning and associated stakeholder outreach efforts, including the development of State and federal funding applications. Her specialty in environmental documentation and regulatory permitting for water, wastewater, and recycled water infrastructure projects provides RMC’s clients with the full range of planning and implementation services.

Rosalyn has a working knowledge of the provisions and requirements of the Clean Water Act, Porter-Cologne Water Quality Control Act, California Environmental Quality Act, National Environmental Policy Act, and federal and State Endangered Species Acts.

Relevant Experience

**North San Diego Regional Recycled Water Project Feasibility Study and EIR, Olivenhain Municipal Water District**  
*Project Manager.* Preparing a Feasibility Study and EIR, in cooperation with the U.S. Bureau of Reclamation and U.S. Army Corps of Engineers, for the North San Diego Regional Recycled Water Project. This regional project includes recycled water production, storage, and distribution facilities necessary to optimize use of recycled water throughout the service areas of 10 water purveyors in northern San Diego County, along with U.S. Marine Base Camp Pendleton. Environmental analysis will provide all CEQA and NEPA documentation necessary for the federal agencies to make their findings prior to granting federal (Title XVI and WRDA) funding.

**Upper Santa Margarita Watershed Integrated Regional Water Management (IRWM) Program, Rancho California Water District**  
*Project Manager/Grant Writer.* Rosalyn led the Upper Santa Margarita Watershed region in developing a successful Planning Grant (Round 2) application to prepare a comprehensive update of their IRWM Plan. Developed project-related materials (work plan, budget, schedule, economic analysis) for the Santa Margarita Nutrient Management Project, an inter-regional project supported by both the Upper Santa Margarita and San Diego IRWM regions, in the Proposition 84-Round 1 funding cycle.

**San Diego Integrated Regional Water Management (IRWM) Program, San Diego County Water Authority, City of San Diego, County of San Diego**  
*Project Manager.* Supporting the San Diego region in developing an integrated, consensus-based approach to ensuring the long-term viability of San Diego’s water supply, water quality, and natural resources. Facilitates meetings of the 32-member multi-disciplinary Regional Advisory Committee to identify water resources issues and prioritize projects that contribute to attainment of the Region’s objectives. Develops web database tools and prepares deliverables to
position the Region for near-term funding opportunities (applications for the Region Acceptance Process and Proposition 84 planning and implementation grants). Implementing a public involvement program to engage disadvantaged and environmental justice communities.

**Coachella Valley Integrated Regional Water Management (IRWM) Program, Coachella Water Authority, Coachella Valley Water District, Desert Water Agency, Indio Water Authority, and Mission Springs Water District**

*Project Manager.* Supporting the Coachella Valley region in expanding its IRWM program, including developing a consensus-based region description, issues identification, goals setting, establishment of regional priorities, project identification and prioritization, and coordination with regulatory agencies. Prepared grant applications in compliance with the Department of Water Resources’ IRWM program, including Proposition 84 planning and implementation. Implementing a public outreach and involvement program to engage local stakeholders, including disadvantaged communities and tribes, in integrated planning. Providing design and engineering support to disadvantaged communities for implementation projects that meet critical water resources needs.

**Integrated Regional Water Management (IRWM) Funding Support, Multiple Regions**

*Project Manager.* Prepares funding applications for Proposition 84 planning and implementation under the California Department of Water Resources’ IRWM Grant Program. Facilitates stakeholder outreach and training on the nuances of IRWM funding. Supports development of funding application materials for non-governmental and disadvantaged community organizations. Develops web database tools and conducts technical analysis to assess the viability of the Region’s projects for IRWM funding. Prepares extensive technical justification and economic analyses of the Region’s projects to support funding applications.

**Proposition 1E Stormwater and Flood Management Funding Support, City of Escondido**

*Project Manager.* Prepared application under Proposition 1E Stormwater and Flood Management Grant Program for the Lake Wohlford Dam Replacement Project. Prepared extensive technical justification and economic analyses of the projects to support funding application.

**Proposition 1E Stormwater and Flood Management Funding Support, City of San Marcos**

*Project Manager.* Prepared application under Proposition 1E Stormwater and Flood Management Grant Program for the San Marcos Creek Floodway Improvement Project. Prepared extensive technical justification and economic analyses of the projects to support funding application.

**WaterSMART Funding Support, City of Oceanside**


**Clean Water State Revolving Fund Support, Carlsbad Municipal Water District**

Miluska Propersi, P.E.
Water Resources Engineer

Summary
Miluska Propersi has experience working on planning and design projects involving water resources, recycled water and collection systems. She has experience in regional/local master planning, hydraulic modeling, economic and engineering analysis of recycled water, water supply, and wastewater conveyance systems. Her experience includes developing hydraulic models, performing hydraulic analyses, preparing master plan reports/feasibility studies and implementing capital improvement programs for water, recycled water and wastewater cities/agencies. Additional experience includes developing salt nutrient management plans, water supply assessments, and water conservation outreach for industrial/commercial businesses. She also has experience in pipeline design and construction cost estimating. Her hydraulic modeling software experience includes H2OMap Water, InfoWater, InfoWorks CS, InfoSWMM and Arc GIS.

Relevant Experience

**Proposition 1E Grant Application, Santa Barbara County**
*Project Engineer.* RMC prepared the grant application for the Lower Mission Creek proposed by the County of Santa Barbara. Miluska developed sections of the grant application.

**Greater Los Angeles County Integrated Regional Water Management (GLAC IRWM) Program and Funding Support for Prop 84 - Round 2 Implementation Grants, Los Angeles County Public Work**
*Project Engineer.* RMC prepared 15 projects for the Proposition 84, Round 2 Implementation Funding from the GLAC IRWM. Miluska coordinated with the client, prepared draft attachments for five of the requested funding projects. The project was awarded the full amount of requested grant funding.

**Title XVI Local Groundwater Assistance, Upper San Gabriel Valley Municipal Water District**
*Project Engineer.* Miluska assisted the development of the Upper District Indirect Reuse Groundwater Replenishment Project Grant Application Proposal for the Title XVI Water Reclamation and Reuse Program. The proposal is for partial funding of a Feasibility Study for the Upper District Indirect Reuse Groundwater Replenishment Project that will seek to implement solutions to reverse diminishing groundwater supplies. Miluska gathered available data, prepared grant language and exhibits and developed multiple sections of the application.

**Pilot Project USBR Grant, City of Lancaster**
*Project Engineer.* Miluska assisted and prepared the Bureau of Reclamation Challenge Grant Application for a pilot groundwater recharge project using recycled water for the City of Lancaster. She gathered available data, prepared grant language and exhibits and developed multiple sections of the application.
SRF Assistance Application Support, City of Lancaster

*Project Engineer.* Miluska assisted and prepared three Financial Assistance Applications for three recycled water expansion projects for the Clean Water State Revolving Fund Program and the Water Recycling Funding Program. She assisted in the grant development, determined qualifying projects and in the development of exhibits for the grant application.

North San Diego County Regional Recycled Water Project Feasibility Study and Environmental Impact Report, Olivenhain Municipal Water District

*Project Engineer.* RMC is preparing a Feasibility Study and Environmental Impact Report, in cooperation with the U.S. Bureau of Reclamation and U.S. Army Corps of Engineers, for the North San Diego County Regional Recycled Water Project. This regional project includes recycled water production, storage, and distribution facilities necessary to optimize use of recycled water throughout the service areas of 10 water purveyors in northern San Diego County, along with U.S. Marine Base Camp Pendleton. The environmental analysis will provide all CEQA and NEPA documentation necessary for the federal agencies to make their findings prior to granting federal (Title XVI and WRDA) funding. Miluska is updating the regional recycled water system and analyzing the hydraulics and preparing cost estimates.

East County Industrial Recycled Water Feasibility Plan, Delta Diablo Sanitation District

*Project Engineer.* The East County Industrial Recycled Water Feasibility Plan includes grant funding application and developing recycled water facilities plan that focuses on maximizing existing and future industrial reuse opportunities. Miluska modeled multiple alternatives of supply/demand using H2OMap Water. She performed pump station calculations, alternative flow analysis and developed cost estimates for each alternative. She also developed GIS figures for report and client meetings.

West Basin Recirc and Save, West Basin Municipal Water District

*Project Engineer.* RMC is helping West Basin Municipal Water District (WBMWD) with their water conservation program, Recirc and Save Funding opportunity by contacting existing WBMWD customers and conducting field and equipment site visits to identify water conservation projects. Miluska has conducted industrial facility water use reduction audits and provided summary report including estimated water reduction, savings from water and sewer flow reduction, impact on wastewater strength, life cycled costs analysis and recommendation for incentive program.