



REQUEST FOR PROPOSALS

TO PROVIDE:

**PROFESSIONAL SERVICES TO THE
RAINBOW MUNICIPAL WATER DISTRICT**

**IMPORTED RETURN FLOW SUPPLY FROM THE BONSALL SUBBASIN OF THE
SAN LUIS REY VALLEY BASIN**

STUDIES TO ADVANCE BONSALL BASIN DESALTER IMPLEMENTATION

RESPONSE DUE BEFORE 3:00 P.M.

ON

August 30, 2017

**Rainbow Municipal Water District
Engineering Department
3707 Old Highway 395
Fallbrook, CA 92028
(760) 728-1178**

I. INTRODUCTION

Rainbow Municipal Water District (District) is seeking proposals from qualified and committed firms to provide professional services to advance the implementation of a groundwater desalter in the Bonsall Groundwater Basin.

This Request for Proposal describes the overall project, the required scope of services, proposal requirements, evaluation criteria, the selection process, project schedule, and submittal requirements.

II. BACKGROUND AND DESCRIPTION

The District covers approximately 80 square miles in North San Diego County. The District serves the unincorporated communities of Rainbow and Bonsall as well as portions of Pala, the City of Vista, and Fallbrook. The District provides water to approximately 7,800 meter accounts and currently receives all its water through San Diego County Water Authority (SDCWA) and the Metropolitan Water District of Southern California (MWD).

The District has completed several studies of the Bonsall Groundwater Basin with an objective of developing a reliable local water supply based on recovery of imported water return flows. In May 2017, a technical memorandum (TM) was completed that compared a baseline groundwater extraction and desalination project against three alternatives that supplemented the groundwater supply with indirect potable reuse (IPR). The TM concluded that the District should implement the baseline groundwater desalination project while preserving the IPR alternatives for possible implementation in the future. The TM and other relevant studies are listed in section VIII and are available with this request for proposals (RFP). The baseline project includes the following facilities:

- 18 groundwater production wells
- 30,000 feet of 14-inch raw water supply pipelines
- A 3.6 million gallon per day (mgd) brackish groundwater desalination water treatment plant
- A 1.5 million gallon (MG) product water storage tank
- 45,000 feet of 8- to 10-inch brine pipeline to the City of Oceanside's San Luis Rey Water Reclamation Facility and ocean outfall.
- Certain wastewater facilities included for comparison to IPR alternatives

The estimated costs, including 25 percent for legal, environmental, engineering, design, and construction services, and a 25 percent contingency, are as follows:

- Capital - \$68,772,000
- Annual Debt Service Plus Operations - \$7,080,000
- Production – 3,326 acre-feet per year (AFY)
- Cost of Water - \$1,403 per acre-foot (AF) (not including wastewater facilities)

The TM recommended several next steps to advance the implementation of the groundwater desalter. The District prepared this RFP to solicit proposals and select the most qualified firm with expertise in the groundwater modeling, water rights, water quality, borings and well construction, and pump testing of wells, desalination plant planning, siting, alternatives, and costs, and brine management. The scope of services focuses on the following:

1. Update, validate/calibrate the 2016 groundwater model. Use the model to verify production well yields in the Bonsall Basin.
2. Confirm Imported Return Flow water rights and regulatory structure.
3. Collect groundwater quality data.
4. Exploratory borings for production well sites.
5. Property acquisition, contracts/agreements.
6. Revise and refine desalter project alternatives and costs including brine disposal options.

III. PROJECT SCOPE OF SERVICES AND PROJECT SCHEDULE

The proposed scope of required services for this project includes at a minimum the following tasks. These tasks are intended to be a framework and the consultant is encouraged to recommend alternative approaches, changes, and additional tasks that will improve the process and results.

TASK 100 – PROJECT MANAGEMENT

The Consultant shall provide overall project management including contract administration, and budget and schedule tracking and controls, and coordination with District staff. The Consultant shall provide internal quality control and quality assurance procedures.

TASK 200 – DATA COLLECTION

The Consultant shall coordinate with the District and others to collect and review all previous studies, models, and reports. Evaluate the previous work and recommend to the District during the course of this scope of services that it be used or revised and updated.

TASK 300 – UPDATE AND VALIDATE GROUNDWATER MODEL AND VERIFY PRODUCTION WELL YIELDS

Obtain the 2016 groundwater model and update it including the net precipitation recharge element and imported water return flows in the boundary condition, and with any new data that is available. Discuss with the District an approach to further validate/calibrate the model then collect any data needed and complete the validation/calibration. Add the proposed production well field to the model and test the Bonsall Basin's ability to produce the maximum yield. Identify the preferred sites for test borings and wells to be installed in task 700.

The 2016 model is based on the MODFLOW 2005 software with the Groundwater Vistas graphical user interface. The groundwater study was originally completed using FEMFLOW3D software. The model was converted to MODFLOW 2005 but the net precipitation recharge and imported water return flow elements were not completed.

TASK 400 – WATER RIGHTS OPINION AND CONFIRMATION

Review the previous studies and reports and the opinions relative to the District's importer Return Flow water rights in the Bonsall Basin. Analyze water rights and provide an independent opinion relative to the District's right to produce the maximum yield. Describe the steps the District needs to follow to confirm its water right. Coordinate with the State of California. Estimate the cost to the District, and the time required to confirm its water rights.

Task 500 – COLLECT AND SUMMARIZE GROUNDWATER QUALITY DATA

Review previous studies and reports and summarize historical water quality in the Bonsall Basin. Identify existing wells in or near the Bonsall Basin that would provide valuable data. With District approval and assistance, contact the owners and arrange to sample the water from their wells. Purge the well as necessary and follow steps to obtain a representative sample using appropriate containers. Send samples to a laboratory for analysis following procedures to avoid contamination.

TASK 600 – DEVELOP DRAFT BRINE DISPOSAL AGREEMENT WITH OCEANSIDE

Provide technical support to District in developing a brine disposal agreement with the City of Oceanside. District will discuss the elements that need to be covered in a brine disposal agreement. Discuss Oceanside requirements for brine disposal and obtain a copy of the ocean outfall operation permit. Research and provide other brine disposal agreements to compare with the City of Oceanside.

TASK 700 – EVALUATE PRODUCTION WELL SITES, GEOLOGY, AND PRODUCTION

Review existing wells and identify those that would be relevant in evaluating the geology and production of the proposed well field. Identify and recommend sites to complete exploratory borings and pump testing to confirm the proposed well field and maximum yield. With District approval and assistance, contact well and property owners to obtain permission to complete pump tests on existing wells and complete new borings and pump tests. Draft a letter agreement describing the work to be done, schedule, responsibilities of the District and private party or public agency, cost sharing, if any, and sharing of results.

Contract with well drillers to complete the borings and pump tests. Obtain all permits required for borings and pump tests including but not limited to the County of San Diego and environmental agencies. Develop plans for the disposal of boring and pump test water and residuals. Wells should be finished considering future use for production and/or monitoring wells.

Revise and update the groundwater model with new geologic and pump testing data.

TASK 800 – PROPERTY ACQUISITION AND COSTS

Identify property requirements for all project facilities including those listed in section II. Public streets and rights of way can be used for pipelines. Prepare maps showing preferred and alternative sites and rights of way. Retain a California Certified General Appraiser familiar with public facilities and the project area to appraise local properties and estimate land acquisition and right of way costs. Recommend fee acquisition or easement for the facilities and recommend the elements of easement documents.

TASK 900 – DESALTER PROJECT ALTERNATIVES AND COSTS

Revise and refine the desalter project components and alternatives and confirm or revise project capital, debt service, and annual operating costs, and the resulting cost of water per acre-foot.

TASK 1000 – EVALUATION OF ENVIRONMENTAL ISSUES

Complete a preliminary environmental study of the project and the project area. Identify environmental issues and possible mitigation. Recommend the most appropriate environmental process under CEQA and if necessary, NEPA. Provide a preliminary schedule and cost for completing environmental work.

TASK 1100 – DRAFT AND FINAL SUMMARY REPORTS

Prepare a draft summary report and present findings to District staff. Present findings to the Engineering Committee and then the full Board of Directors. Develop recommended changes to the draft report and review and confirm them with District staff. Prepare final summary report.

PROJECT SCHEDULE

The District's desired schedule is discussed below. The proposal should address this schedule and any proposed changes or refinements to it. Provide a bar chart type graphic schedule showing the sequencing of tasks. Consultant can breakdown the main tasks into subtasks for the purpose of schedule planning.

Task 200 Data Collection, Task 400 Water Rights Opinion and Confirmation, Task 500 Collect and Summarize Groundwater Quality Data, Task 800 Property Acquisition and Costs, and Task 1000 Evaluation of Environmental Issues – December 31, 2017. The property and costs in Task 800 can be refined after Task 700 is completed.

Task 300 Update and Validate Groundwater Model and Verify Production Well Yields, Task 600 Develop Draft Brine Disposal Agreement with Oceanside, Task 700 Evaluate Production Well Sites Geology, and Production (except borings and pump tests), and Task 900 Desalter Project Alternatives and Costs – March 31, 2018.

Remaining Tasks, borings and pump tests, final model update and calibration/validation, refinement of project alternatives and costs, and Task 1000 Draft and Final Summary Reports – August 31, 2018

IV. PROPOSAL REQUIREMENTS

The proposal shall not exceed 20 pages excluding resumes, cover letter, dividers, and front and back covers. Responses to this RFP shall be in the following order and shall include:

1. Executive Summary (2 pages maximum)

Summarize the contents of your firm's proposal in a clear and concise manner.

2. Identification of Prime Consultant and Subconsultants (1 page maximum)

- i. Legal name and address of the company.
- ii. Legal form of company (partnership, corporation).
- iii. If company is wholly owned subsidiary of a "parent company," identify the "parent company."
- iv. Name, title, address and telephone number of person to contact concerning the proposal.
- v. Number of staff and the discipline/job title of each.

3. Approach and Scope of Services (7 pages maximum)

- i. Describe your approach to the project and any proposed enhancements, additions, or modifications to the RFP scope of services.
- ii. Describe a proposed schedule, showing all facets of work, that will meet the District's objectives and goals in a timely manner.

4. Project Manager and Team Qualifications (5 pages maximum, not including resumes)

- i. Describe proposed project organization, identification and responsibilities of key personnel and sub-consultants. Include two-page maximum length resumes.
- ii. Summarize the experience of the Project Manager and the experience that the proposed personnel have working on past projects as a team.
- iii. Describe the project management approach to the work effort, locations where work will be done, responsibilities for coordination with the District, and lines of communication necessary to maintain the project on schedule.
- iv. Describe the Firm's capacity to perform the work within the time limitations, considering the firm's current and planned workload and the firm's current and planned work force.

5. Experience and Past Performance, Including Cost and Schedule Control (5 pages max / 3 projects max)

- i. Include a summary of the past experience and performance of the Project Manager and team on **similar projects**. Include the following information:
 1. Owner, contact name and phone number
 2. Project description
 3. Project initial and final budget
 4. Initial project schedule and total time to completion
 5. Estimated and actual construction costs (if available)

6. Proposed Total Professional Fee and Fee Schedules Submitted Under Separate Sealed Cover

- i. Proposed fee shall not be the sole basis of award, but will be used to evaluate the Consultant's understanding of the Scope of Work.
- ii. Include the hourly rates of all staff that will charge directly to the project.
- iii. Include a budget for exploratory borings, well construction, and pump testing on existing or new wells as described in Task 700.

7. Exceptions to this RFP

The Consultant shall certify that it takes no exceptions to this RFP including, but not limited, to the Consultant Services Agreement (attached). The District will require a professional liability insurance verification for coverage of not less than \$1,000,000.00. If the Consultant does take exception(s) to any portion of the RFP, the specific portion of the RFP to which exception is taken shall be identified and explained.

V. EVALUATION CRITERIA

The evaluation criteria and the respective weights that will be given to each criterion are as follows:

1. Executive Summary	10%
2. Identification of Consultant	5%
3. Approach and Scope of Services	30%
4. Project Manager and Team Qualifications	30%
5. Firm's Experience and Past Performance	20%
6. Proposed Fee	5%

VI. SELECTION PROCESS

The District will form a proposal review and consultant selection panel to rank the firms who submit. The District may select based on the proposals or may hold oral interviews with selected firms. The District will enter into negotiations with the top ranked firm. At this time, the District contemplates the use of a Time and Materials Not to Exceed contract for the services requested. Negotiations will cover the scope of work, contract terms and conditions, and appropriateness of the proposed fee.

After negotiating a proposed agreement that is fair and reasonable the General Manager will present the contract to the District's Board of Directors for authorization to execute a contract with the selected firm.

VII. SELECTION SCHEDULE

The District anticipates that the process for selection of firm and awarding of the contract will be according to the following tentative schedule which assumes selection based on proposals:

Issue RFP	July 25, 2017
Proposal Due Date	August 30, 2017
RMWD Board of Directors Approval	September 26, 2017
Notice to Proceed	October 3, 2017
Engineering Committee	January 2018
Board of Directors Meeting	September 2018
Project Completion	September 2018

VIII. SPECIAL CONDITIONS / ATTACHMENTS

The following documents provide background for the project and are available through the following link:
https://www.dropbox.com/sh/fbs9yxng8e81bbs/AABozNjEKwQaRP1EBbbyr_DZa?dl=0.

1. Rainbow Municipal Water District, Indirect Potable Reuse (IPR) Preliminary Evaluation Technical Memorandum, RMC, May 5, 2017.
2. Rainbow Municipal Water District, Groundwater Supply Study, West Yost Associates, Jan 2016.
3. San Luis Rey Ground Water Model, MODFLOW 2005, West Yost Associates, 2016
4. An example professional services contract is attached. Consultant shall identify any exceptions regarding the contract.

IX. SUBMITTAL REQUIREMENTS

1. One (1) executed original marked "ORIGINAL" in red ink and three (3) copies of the Proposal shall be submitted. One single sealed Proposed Fee Estimate marked "FEE ESTIMATE" in red ink shall be submitted separate from the proposal. Emailed proposals will not be accepted. Submit one electronic copy of the proposal in PDF format. The Response shall be signed by an individual, partner, officer or officers authorized to execute legal documents on behalf of the Firm.
2. The Response Proposal must be received no later than **3:00 p.m.** local time, on or before **August 30, 2017** at the office of:

**RMWD Engineering Department
3707 Old Highway 395
Fallbrook, CA 92028**

Attn: RMWD Engineering Department (D. Rubio)

Failure to comply with the requirements of this RFP may result in disqualification or deduction in score. Questions regarding this RFP shall be submitted in writing to **drubio@rainbowmwd.com**.