



**THIS MEETING WILL BE CONDUCTED WITH IN PERSON ATTENDANCE PERMITTED. THE CDC STILL RECOMMENDS MASKING FOR ALL INDIVIDUALS BUT IS NOT MANDATORY. PARTICIPATION WILL ALSO BE AVAILABLE VIA VIDEO CONFERENCE OR TELECONFERENCE.**

**TO PARTICIPATE IN THE MEETING VIA VIDEO OR TELECONFERENCE, GO TO <https://rainbowmwd.zoom.us/j/82980075354> OR CALL 1-669-900-6833 or 1-346-248-7799 or 1- 253-215-8782 or 1-301-715-8592 or 1-312-626-6799 or 1-929-205-6099 (WEBINAR/MEETING ID: 829 8007 5354).**

MEMBERS OF THE PUBLIC WISHING TO SUBMIT WRITTEN COMMENT TO THE COMMITTEE UNDER PUBLIC COMMENT OR ON A SPECIFIC AGENDA ITEM MAY SUBMIT COMMENTS TO OUR BOARD SECRETARY BY EMAIL AT [DWASHBURN@RAINBOWMWD.COM](mailto:DWASHBURN@RAINBOWMWD.COM) OR BY MAIL TO 3707 OLD HIGHWAY 395, FALLBROOK, CA 92028. ALL WRITTEN COMMENTS RECEIVED **AT LEAST ONE HOUR IN ADVANCE OF THE MEETING** WILL BE READ TO THE COMMITTEE DURING THE APPROPRIATE PORTION OF THE MEETING. THESE PUBLIC COMMENT PROCEDURES SUPERSEDE THE DISTRICT'S STANDARD PUBLIC COMMENT POLICIES AND PROCEDURES TO THE CONTRARY.

**ENGINEERING AND OPERATIONS COMMITTEE MEETING**

**RAINBOW MUNICIPAL WATER DISTRICT  
Wednesday, July 6, 2022  
Engineering and Operations Committee Meeting - Time: 3:30 p.m.**

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| <b>District Office</b> | <b>3707 Old Highway 395</b> | <b>Fallbrook, CA 92028</b> |
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Notice is hereby given that the Engineering and Operations Committee will be holding a regular meeting beginning at 3:30 p.m. on Wednesday, July 6, 2022.

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**AGENDA**

- 1. CALL TO ORDER**
- 2. PLEDGE OF ALLEGIANCE**
- 3. ROLL CALL: Flint Nelson (Chair) \_\_\_\_\_ Steve McKesson \_\_\_\_\_ (Vice Chair)**  
**Members:** Helene Brazier \_\_\_\_\_ Robert Marnett \_\_\_\_\_ Mig Gasca \_\_\_\_\_  
Julie Johnson \_\_\_\_\_  
**Alternates:** Tracy Largent \_\_\_\_\_

**4. INSTRUCTIONS TO ALLOW PUBLIC COMMENT ON AGENDA ITEMS FROM THOSE ATTENDING THIS MEETING VIA TELECONFERENCE OR VIDEO CONFERENCE**

**CHAIR TO READ ALOUD** - "If at any point, anyone would like to ask a question or make a comment and have joined this meeting with their computer, they can click on the "Raise Hand" button located at the bottom of the screen. We will be alerted that they would like to speak. When called upon, please unmute the microphone and ask the question or make comments in no more than three minutes.

Those who have joined by dialing a number on their telephone, will need to press \*6 to unmute themselves and then \*9 to alert us that they would like to speak.

A slight pause will also be offered at the conclusion of each agenda item discussion to allow public members an opportunity to make comments or ask questions."

5. SEATING OF ALTERNATES
6. ADDITIONS/DELETIONS/AMENDMENTS TO THE AGENDA (Government Code §54954.2)
7. PUBLIC COMMENT RELATING TO ITEMS NOT ON THE AGENDA (Limit 3 Minutes)
- \*8. APPROVAL OF MINUTES
  - A. May 4, 2022
9. GENERAL MANAGER COMMENTS
10. ENGINEERING AND CIP PROGRAM MANAGER COMMENTS
11. OPERATIONS MANAGER COMMENTS
12. COMMITTEE MEMBER COMMENTS
13. BOARD ACTION UPDATES
14. CONSIDER AWARD OF CONSTRUCTION CONTRACT IN THE AMOUNT OF \$839,850 WITH ORTIZ CORPORATION FOR THE RAINBOW WATER QUALITY IMPROVEMENT PROJECT - WATER MAIN AND SERVICE RELOCATION PROJECT IN DIVISION 5 (ENGINEERING)
- \*15. DISCUSSION AND POSSIBLE ACTION TO AWARD A PROFESSIONAL SERVICES AGREEMENT FOR THE SAN LUIS REY IMPORTED RETURN FLOW RECOVERY PROJECT (DISTRICT WIDE) (ENGINEERING)
16. CIP PROJECT UPDATE PRESENTATION (ENGINEERING)
- \*17. AS-NEEDED SERVICES EXPENDITURES SUMMARY
18. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT SCHEDULED ENGINEERING AND OPERATIONS COMMITTEE MEETING
19. ADJOURNMENT

**ATTEST TO POSTING:**

*Pam Moss*

\_\_\_\_\_  
Pam Moss  
Secretary of the Board

7-1-22 @ 7:45 a.m.

\_\_\_\_\_  
Date and Time of Posting  
Outside Display Cases

**MINUTES OF THE ENGINEERING AND OPERATIONS COMMITTEE MEETING  
OF THE RAINBOW MUNICIPAL WATER DISTRICT  
MAY 4, 2022**

1. **CALL TO ORDER** – The Engineering and Operations Committee Meeting of the Rainbow Municipal Water District on May 4, 2022 was called to order by Chairperson Nelson at 3:30 p.m. in the Board Room of the District, 3707 Old Highway 395, Fallbrook, CA 92028. *(All meetings are being held with in-person attendance following County and State COVID guidelines as well as virtually.)* Chairperson Nelson, presiding.

2. **PLEDGE OF ALLEGIANCE**

3. **ROLL CALL:**

**Present:** Member Marnett, Member McKesson, Member Nelson, Member Brazier *(arrived at 4:30 p.m. via teleconference)*.

**Also Present:** General Manager Kennedy, Operations Manager Gutierrez, Engineering and CIP Program Manager Williams, Engineering Technician Rubio, Information Systems Specialist Espino.

**Absent:** Member Gasca, Member Johnson, Alternate Largent.

**Also Present Via Teleconference or Video Conference:**

IT Manager Khattab, Associate Engineer Powers, Project Manager Parra, Grant Specialist Kim, Construction and Meters Supervisor Lagunas.

One member of the public was present in person, via teleconference or video conference.

4. **INSTRUCTIONS TO ALLOW PUBLIC COMMENT ON AGENDA ITEMS FROM THOSE ATTENDING THIS MEETING VIA TELECONFERENCE OR VIDEO CONFERENCE**

Mr. Nelson read aloud the instructions for those attending the meeting via teleconference or video conference.

5. **SEATING OF ALTERNATES**

There were no alternates seated.

6. **ADDITIONS/DELETIONS/AMENDMENTS TO THE AGENDA (Government Code §54954.2)**

There were no amendments to the agenda.

7. **PUBLIC COMMENT RELATING TO ITEMS NOT ON THE AGENDA (Limit 3 Minutes)**

There were no comments.

**\*8. APPROVAL OF MINUTES**

**A. April 6, 2022**

***Motion:***

***To adopt the minutes.***

***Action: Approve, Moved by Member McKesson, Seconded by Member Marnett.***

***Vote: Motion carried by unanimous roll call vote (summary: Ayes = 3).***

***Ayes: Member Nelson, Member McKesson, Member Marnett.***

***Absent: Member Brazier, Member Gasca, Member Johnson.***

**9. GENERAL MANAGER COMMENTS**

Mr. Kennedy noted Mr. Gasca and Ms. Largent were attending the 2022 ACWA Spring Conference at which Mr. Gasca will participate on an Innovations Award panel for the Heli-Hydrant project for which RMWD was one of the four finalists.

Mr. Kennedy mentioned ACWA/JPIA through which RMWD receives its health insurance through. He noted they used to provide the District with property and liability insurance until approximately 2006-2007 at which time RMWD was removed due to being too high of a risk. He stated over the last few years, RMWD has been working with ACWA/JPIA to be allowed to rejoin. He reported after visiting RMWD facilities and collecting documentation, the ACWA/JPIA Board met on May 10<sup>th</sup> to approve RMWD’s ability to apply to rejoin and provided a quote for property and liability insurance that is approximately \$250,000 less per year than RMWD’s current provider. He noted staff was actively evaluating other pricing through the use of a broker to try to get the best pricing possible; however, this reflected the commitment of the staff and Board to ensure there is consistency and professionalism being displayed throughout.

Mr. Kennedy reported the recent Town Hall meeting was very well attended.

Mr. Nelson asked if ACWA/JPIA was prepared to allow RMWD rejoin midstream. Mr. Kennedy stated the current insurance provider will end after June 30<sup>th</sup>. Mr. Nelson inquired as to whether RMWD would receive a refund from the current carrier when the change takes place. Mr. Kennedy said no since RMWD would be fulfilling the remainder of the term. Discussion ensued.

Mr. Nelson stated he was in attendance and agreed with Mr. Kennedy’s assessment. He said he was impressed with the questions asked of LAFCO and Chairperson Desmond; however, he found the two LAFCO representatives responding gave signals that were not entirely favorable. Discussion followed.

**10. ENGINEERING AND CIP PROGRAM MANAGER COMMENTS**

Mr. Williams reported staff was still in the process of obtaining four of the necessary easements for Lift Station 1. Mr. Kennedy added there were challenges filed related to the bid process as well as a lawsuit filed by TC Construction which was rejected by the RMWD Board. He explained because TC Construction filed a lawsuit without filing a claim first, it was unknown whether additional action may be taken or how the project may be impacted.

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Mr. Williams reported RMWD received two proposals for the San Luis Rey Return Flow Recovery Project with interviews held with both consulting firms. He stated staff will be continuing to evaluate these firms and expect to bring a recommendation to the Board in June for consideration. He also noted the \$300K from CalOES grant funding has been expended on emergency generators as well as the Heli-Hydrant project. Discussion followed.

Mr. Williams pointed out the Sumac Communications Solar project did not receive any proposers; therefore, Legal Counsel has recommended staff expand the parameters of the proposal process. He stated in the event there are no proposers received after the second round, the District may have to declare an emergency due to the critical nature of the tower where it would then be able to award to a contractor that may be interested.

Mr. Nelson inquired as to the scope of work. Mr. Williams stated it was to install the solar system with battery backups for approximately \$75,000. Mr. Nelson asked why RMWD would not directly approach a company known to be capable to doing the work as a sole source as opposed to a second round of RFP's. Mr. Kennedy stated the amount was over his signing authority; therefore, it needed to go before the Board. Mr. Williams added it was also more than the California Bidding Code limit as well. Mr. Nelson recommended directly contacting a company of RMWD's choosing to ask what they would charge to do this project. Mr. Williams explained this could be done; however, it would have to be backwards because once RMWD engages with a consultant, that consultant is precluded from bidding on the project which is similar to what occurred with the Rainbow Cathodic Protection project. Discussion ensued.

## **11. OPERATIONS MANAGER COMMENTS**

Mr. Gutierrez talked about the information he gathered from speaking with several companies that peaked Director Gasca's interest when he attended the recent AWWA Conference. Discussion ensued.

## **12. COMMITTEE MEMBER COMMENTS**

Mr. Nelson stated he lives off Live Oak Park Road where there is a \$5.78 million project to build a bridge and relocate a waterline. He recalled RMWD contracted with Hazard Construction to hang and run its pipes at this location for \$508,000. He inquired as to why it is costing so much for a small project. Mr. Gutierrez stated that each utility company had to pay to move their own facilities out of the way at their own cost. Mr. Williams added staff really wanted to perform this work in-house, but it was more involved due to the hangers, specialty equipment, coordinating with the contractor on a County project, etc.

## **13. BOARD ACTION UPDATES**

Mr. Williams reported the Board approved the Notice of Completion for the Water Services Project (WSUP), the Notice of Completion for the Rainbow Heights Pump Station, a contract change order for Cass Arrieta, an amendment to the Acquisition Agreement, awarding a construction contract with Hazard Construction for the Live Oak Park bridge project, adopted an ordinance updating RMWD's engineering fees, an amendment to the Rice Canyon Participation Agreement, as well as approved Qualtek filing their applications with the County.

Mr. Marnett inquired as to how many meters were remaining for the WSUP project. Mr. Gutierrez stated there were 53 remaining.

Mr. Kennedy announced there will be small safety luncheon on May 10<sup>th</sup> with those working on the Lift Station 1 project to celebrate no incidents.

**14. QUALTEK WIRELESS UPDATE (OPERATIONS)**

Mr. Gutierrez said he and Mr. Marnett met with Qualtek staff to discuss questions raised regarding the installation of cell towers. He said they are still waiting on responses to some of those inquiries.

Mr. Marnett provided handouts to the committee members. He reviewed the information contained in each handout including a list of questions asked of Qualtek, some of which are still unanswered. Mr. Kennedy directed Mr. Gutierrez to monitor the progress of this as it goes through the County approval process.

Mr. Marnett expressed concern regarding the biological effects of radiation. Discussion followed.

***Member Brazier joined the meeting at 4:30 p.m.***

Mr. Marnett mentioned during a meeting he had with his neighbors, they expressed they did not want the tower installed near their homes and if it were to be installed, they wanted to see detailed radiation patterns, any road damage during construction to be 100% reimbursed, as well as tag Dish with the yearly road maintenance fee. Mr. Kennedy stated staff would need to research how this can be done under Civil Code 845.

Mr. Marnett pointed out there was a big caveat regarding rebuilding the road that has been put off for years. He noted a bid has been received for a cost of \$200,00 for which RMWD's and his share would be \$21,000.

Mr. Marnett reviewed the radiation data provided in the handout explaining how the numbers provided were calculated.

Mr. McKesson stated for the purpose of business at hand today, he would like to know the executive summary, recommendation, and next steps. Mr. Marnett stated to actually do testing and find out the real numbers as well as receive additional information from Qualtek at which point it would be determined if it is safe or not. He added if it ends up being close to safe, then it will be recommended to proceed and mitigate the steps.

Mr. Kennedy noted it was important to keep RMWD staff and neighbors safe. Discussion ensued.

Mr. Kennedy pointed out the direction of the Board was to allow Qualtek to proceed with their process. He said during the six-month approval process, staff will amass all the data for the Board to consider so they can make an informed decision.

Mr. Nelson stated he was very uncomfortable with this discussion. He said based on what has transpired, it would be his recommendation that this process be stopped immediately because, in his opinion, the District has injected itself into setting design and requirements for this site making RMWD liable should anything occur in the future such as a homeowner lawsuit, attempt to get an injunction, or someone becomes ill. He noted traditionally in a situation with cell towers, the entire liability for all of this is placed on the cell tower. He expressed concern all of this could be subject to discovery at some point.

Mr. Kennedy stated this was a committee made up of ratepayers at which members can speak on topics and how staff has not made any recommendations. Mr. Nelson clarified he has the utmost respect for Mr. Marnett; however, there was a part of him that is concerned about this from the District's perspective that it may have exceeded its level of involvement and possibly brought upon itself liability that it would not have otherwise. Mr. Kennedy understood Mr. Nelson's concern

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but noted this committee has no legal authority to take any action. Mr. Nelson stated his concern is that neighbors have been provided with a great deal of data and information about all of this stuff. Mr. Kennedy explained discussion among neighbors occur all the time. Mr. Nelson agreed, but reiterated he was still uncomfortable. Mr. Kennedy assured the committee members before anything is presented to the Board staff is obligated to perform due diligence.

Mr. Kennedy pointed out discussions that happen at this committee meeting are not binding. Discussion ensued.

Mr. Marnett clarified the information presented was available on the internet. He said he will proceed with putting equipment together, take some measurements, etc. and update the information provided today. Mr. Kennedy stressed this was Mr. Marnett working as an individual to bring committee information he compiles to share; however, it was not the stance or position of this committee to determine whether Mr. Marnett was correct or not in his findings.

Mr. Marnett concluded with stating the cell tower was absolutely not safe for RMWD employees and it must be turned off whenever an employee is in the near vicinity. Mr. Gutierrez agreed this would be something to ensure is included in the contract.

Mr. Nelson thanked Mr. Marnett for his level of work and commitment he has put into this matter.

**\*15. AS-NEEDED SERVICES EXPENDITURES SUMMARY**

Mr. Nelson noted there was only one change.

Mr. McKesson recommended the report only show the current and prior year detail only.

**16. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT SCHEDULED ENGINEERING AND OPERATIONS COMMITTEE MEETING**

It was noted the San Luis Rey Groundwater Study should be on the next agenda.

Mr. Nelson announced he would not be attending the June 1, 2022 Engineering and Operations Committee meeting. He solicited the committee members as to whether they would have any difficulty with moving this meeting to June 8, 2022. Mr. Marnett, Mr. McKesson, and Ms. Brazier did not have any objection to rescheduling the June meeting. It was noted Ms. Washburn would follow up with those absent to get their input and report back to the committee.

**17. ADJOURNMENT**

***The meeting was adjourned by Chairperson Nelson.***

The meeting adjourned at 5:03 p.m.

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**Flint Nelson, Committee Chairperson**

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**Dawn M. Washburn, Board Secretary**





### BOARD OF DIRECTORS

July 26, 2022

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### SUBJECT

CONSIDER AWARD OF CONSTRUCTION CONTRACT IN THE AMOUNT OF \$839,850 WITH ORTIZ CORPORATION FOR THE RAINBOW WATER QUALITY IMPROVEMENT PROJECT - WATER MAIN AND SERVICE RELOCATION PROJECT IN DIVISION 5

### BACKGROUND

District staff has been working with the County of San Diego Department of Public Works (referred to herein as County) since 2019 to design the County-initiated and owned water quality project known as the Rainbow Water Quality Improvement Project, which is located in the community of Rainbow along Fifth St., Huffstatler St. and Rainbow Valley Boulevard. Staff would like the Board and the public to know that this project does not involve the water quality in Rainbow Municipal Water District's distribution system, but rather surface water runoff from roads and is a stormwater project to control pollutants that may enter Rainbow Creek and its tributaries. The County's project proposes to install 3,400 linear feet of green infrastructure in the form of subsurface wetland channels to remove nutrients found in road runoff and private property discharge. Additional improvements include new storm drain connections, driveway connections, and new sidewalk, curb and gutter. These improvements are driven by the Regional Water Quality Control Board's (RWQCB) water quality requirements to immediately address nitrogen and phosphorous total maximum daily loads (TMDL's) impacting Rainbow Creek.

The County's subsurface wetland channels will be installed in the roadway shoulders and will be approximately 4-5 feet deep filled with treatment material and vegetation. The County's improvements will result in utility conflicts with SDG&E, AT&T, and District facilities. Approximately four (4) water main and 21 lateral conflicts have been identified based on the County's Final Design and multiple site visits.

In June 2021, the County received Board of Supervisor's approval to advertise and award a construction contract for their job. To date, the County has not advertised the construction of their Project, however the County's construction must begin no later than Fall 2022 to avoid fines from the RWQCB for not fulfilling commitments associated with the Municipal Separate Sewer and Stormwater (MS4) Permit. All utility conflicts with SDG&E gas distribution have been designed and relocated and gas transmission has started construction. The SDG&E electric team is finalizing their design to relocate utility poles and overhead electrical lines and AT&T will relocate their facilities after the electric relocation is complete. District facilities will be relocated prior to the County's start of construction using a pre-qualified general contractor.

### DESCRIPTION

The District's Rainbow Water Quality Improvement Project - Water Main and Service Relocation 600077 is occurring in response to the County's Rainbow Water Quality Improvement Project. The County in close coordination with the District has identified the need to relocate approximately 21 service laterals, 350 feet of 8-inch water main, 650 feet of 12-inch main and three (3) sections of 8-inch water main to remove existing utility conflicts with the County's proposed water quality improvements.

To date, District staff have finalized the Project plans and specifications and are working to relocate District facilities by Fall 2022. A solicitation for construction of the District's project was advertised in early June to District pre-qualified general contractors only. Two bids were received for the project:

- 1.) SCW Contracting in the amount of \$1,281,900.000
- 2.) Ortiz Corporation in the amount of \$839,850

Ortiz Corporation was determined to be the lowest and responsive bidder. District construction crews are unable to provide assistance on this work due to prior commitments on other District jobs.

The Board approved \$760,000 (80%) of the total project budget of \$950,000 for FY 21/22. At the February 22, 2022, Board Meeting, a mid-year budget reduction in the amount of \$610,00 was made to the FY21/22 Project budget under the assumption that all District construction activities would occur in FY 22/23, leaving a remaining balance of \$150,000 for FY 21/22. .

Given the current status of the Project, a budget adjustment is not necessary for FY 21/22, as a construction contract will be awarded at the beginning of FY 22/23, which the Board approved a budget of \$920,000 at the June Board meeting.

### **POLICY/STRATEGIC PLAN KEY FOCUS AREA**

Strategic Focus Area One: Water Resources. Modifications to the existing water mains are essential to ensuring safe and reliable conveyance of water to District ratepayers.

### **ENVIRONMENTAL**

On June 9, 2021, the County Board of Supervisors adopted the Mitigated Negative Declaration (MND) for the Rainbow Water Quality Improvement Project, dated May 4, 2021, State Clearinghouse # 2021030346, which was found to be in compliance with the California Environmental Quality Act (CEQA) and the State and County CEQA guidelines. The County's CEQA document also included the District's utility improvements associated with the water quality improvements. The location of the documents and other materials constituting the record of the proceedings upon which the Board decision is based in this matter is the San Diego County Department of Public Works, 5500 Overland Avenue #310, San Diego, CA 92123 and also available at this link:

<https://bosagenda.sandiegocounty.gov/cob/cosd/cob/doc?id=0901127e80d28645>

There are no substantial changes in the project or in the circumstances under which it is undertaken which involve significant new environmental impacts which were not considered in the previously adopted MND, dated May 4, 2021. There is no substantial increase in the severity of previously identified significant effects and no new information of substantial importance has become available since the MND was adopted; therefore, no additional environmental review of findings are necessary for the Rainbow Water Quality Improvement Project - Water Main and Service Relocation

### **BOARD OPTIONS/FISCAL IMPACTS**

Adequate funds are available and are included in the FY23 Budget for project number 600077.

Option 1:

(1) Acting as a responsible agency for the Rainbow Water Quality Improvement Project, consider the MND prepared and dated May 4, 2021 and certified by the County of San Diego as lead agency for the project on June 9, 2021 (State Clearinghouse # 20171201061); certify that the Board has independently reviewed and considered the information contained in the MND and reached its own conclusions regarding the environmental effects of the County's approvals related to the project as shown in the MND; adopt the mitigation and monitoring program of the County as applicable to

RMWD's activities as a responsible agency, finding that the mitigation monitoring program is adequately designed to ensure compliance with the mitigation measures during project implementation; and determine that the significant adverse impacts of the project have been reduced to below a level of significance, as outlined in the MWD, which findings and statement are adopted and incorporated herein by reference as applicable.

(2) Authorize the filing of a Notice of Determination with the San Diego County Clerk in accordance with Section 21152 of the California Public Resources Code.

(3) Approve the Construction Agreement with Ortiz Corporation in the amount of \$839,850.

(4) Authorize the General Manager to execute the construction contract.

Option 2:

(1) Provide other direction to staff.

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### **STAFF RECOMMENDATION**

Staff recommends Option 1.

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Chad Williams  
Engineering and CIP Group Manager

07/26/22

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### BOARD OF DIRECTORS

July 26, 2022

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### SUBJECT

DISCUSSION AND POSSIBLE ACTION TO AWARD A PROFESSIONAL SERVICES AGREEMENT FOR THE SAN LUIS REY IMPORTED RETURN FLOW RECOVERY PROJECT (DISTRICT WIDE)

### BACKGROUND

Currently, the District purchases 100 percent of its potable water supply (imported water) from San Diego County Water Authority (SDCWA). The vast majority of this supply is treated in Riverside County at the Skinner Water Treatment Plant owned by the Metropolitan Water District of Southern California (Metropolitan), and a small portion is treated at SDCWA's Twin Oaks Valley Water Treatment Plant in San Marcos.

A strategic goal of the District is to diversify the water supply with locally-controlled reliable sources. Towards this end, the District continues to investigate opportunities for groundwater development and other local water projects. Some of these investigations have identified opportunities with potential merit, however to date, no developments have been put into fruition.

In 2016, the District consulted with West Yost to determine possible return flow opportunities for the District. West Yost estimated that between years 2016 to 2046, water users within the San Luis Rey Valley Groundwater Basin (SLRVGB) will be recharging the basin at a rate of 7,200 to 7,600 acre-feet per year (AFY). The 2016 estimate was based on the water use of the District, Fallbrook Public Utilities District (FPUD), and Valley Center Municipal Water District (VCMWD) customers within the watershed contributing to the SLRVGB. West Yost concluded that median annual pumping rates of 5,700 AFY could be supported without significant impacts to the hydrologic conditions that would exist in the absence of imported water. West Yost prepared preliminary project planning for a conceptual groundwater extraction and treatment project sized at 4,000 AFY (3.6 million gallons per day).

In May 2017, a technical memorandum was completed that compared a baseline groundwater extraction and desalination project against three (3) alternatives that supplemented the groundwater supply with indirect potable reuse (IPR). The memo concluded that the District should implement the baseline groundwater desalination project while preserving the IPR alternatives for possible implementation in the future. The District contracted Dudek to update the 2016 West Yost groundwater model, use the model to verify production well yields in the Bonsall Basin, confirm imported return flow water rights and regulatory structure, collect groundwater quality data, perform exploratory borings for production well sites and facilitate property acquisition and private property contracts and agreements. Dudek spent approximately \$70,000 developing a Feasibility Study, which was later paused due to unfavorable findings. Dudek's report indicated treatment of the imported water return flow for potable use would require a substantial capital investment to construct extraction wells, a brackish water desalter, and a brine disposal line or brine treatment plant with zero liquid discharge. The estimated 1,300 AFY supply from imported water return flows was determined not to be substantial enough to warrant moving forward with a project because a smaller scale project would result in a higher unit cost of water.

After ongoing coordination with local stakeholders including the San Luis Rey Indian Water Authority (SLRIWA), the District has decided to resume its investigation for a potential Return Flow Recovery Project in close coordination with local tribes. Using the findings from previous studies, opportunities in the Eastern portion of the Bonsall Basin may exist due to lower total dissolved solids (TDS) and options to avoid cost prohibitive demineralization procedures. The water produced from an Imported Water Recovery Project may be competitive with, or even less expensive than SDCWA-provided imported water which is expected to approach \$2,500/acre-foot in the next five years.

## **DESCRIPTION**

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On February 11, 2022, the District advertised a Request for Proposals (RFP) for Hydrogeologic and Engineering Services to re-visit the possibility of identifying and implementing an Imported Return Flow Project. The RFP was advertised in the Daily Journal and posted on the District's website. Proposals were due on March 25, 2022 at 3:00pm. The District received a total of two (2) proposals from:

- (1) Geosyntec
- (2) Hoch Consulting

District staff and Engineering and Operations (E&O) Committee members reviewed the proposals and scored each one based on (1) Approach to Work (25%), (2) Project Manager and Team Qualifications (35%) and Project Experience (40%). Hoch Consulting scored the highest of both Consultants and their original proposal fee was \$1,316,959.

The District invited both Consultants to an interview on May 4, 2022 to discuss why each Consultant felt they were the best fit for the project and provide added value to each proposal by showcasing team qualifications, expertise and experience. The interview panel included both District staff, a technical Consultant and an E&O Committee member. Interview panelists concurred after both interviews that Hoch Consulting was the best choice for this project based on the team's understanding of the scope of work, team's local expertise in the San Luis Rey watershed, work on similar types of projects, and willingness to negotiate fees.

After the Evaluation Committee selected the preferred consulting team, District staff entered negotiations with Hoch and successfully negotiated a 12% decrease to the proposed fee estimate. This process also incorporated measures (e.g. "stop-points" or "off-ramps") into the scope of services for the District to assess findings and make a determination in close coordination with the Board of Directors as to whether to proceed to the next task. This process will ensure that should early results be unfavorable additional funds would not be expended.

The original scope of work was broken into two phases with a stopping point incorporated between Phase I – Feasibility Study and Phase II – Plans, Specification and Estimate. After further discussion with the Evaluation Committee, the District proposed a restructured scope to incorporate two (2) additional stopping points into the scope of services after Task 1 – Feasibility Study, Task 2 – Stakeholder & Tribal Coordination, and Task 3 – Plans, Specifications and Estimate before proceeding to the last Task 4 – Construction Inspection & Reporting. This would allow the District greater flexibility and control of the project during each Task and allow the District to put the project on hold or cancel the project if technical findings do not support a viable return flow recovery project or support from local stakeholders' changes.

While the Hoch team had concerns about the District recommended scope restructure and full fee reduction, Hoch Consulting restructured their proposal following Task A: Preliminary Evaluation and Project Planning, Task B: Project Coordination & Stakeholder Outreach, Task C: Plans, Specifications, and Estimate Development, which included construction monitoring, inspection and reporting. Hoch Consulting removed monitoring of well work and telemetry from the scope in order to reduce the fee and indicated they were agreeable to incorporating "stop points" between each Task.

Staff's recommendation was presented at the July 6, 2022 E&O Committee where the committee unanimously voted to support the recommendation to award a Professional Services Agreement to Hoch Consulting. Their total proposed cost estimate with a 12% negotiated reduction was \$1,158,183.

Staff is asking the Board to consider entering into a Professional Services Agreement with Hoch Consulting on a time and material basis for a not to exceed amount of \$600,000 to only complete Task A: Preliminary Evaluation and Project Planning at this time. District Board of Directors will be consulted on the findings of the feasibility study for the project and will be presented with recommendations on how to proceed before starting the next task. Tasks B: Project Coordination & Stakeholder Outreach and Task C: Plans, Specifications, and Estimate Development will only occur upon the Board approval and will include the remaining contract balance of \$558,183, bringing the total contract amount to \$1,158,183. A copy of the proposed Professional Services Agreement has been added for reference (Exhibit A).

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### **POLICY/STRATEGIC PLAN KEY FOCUS AREA**

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Strategic Focus Area One: Water Resources. The proposed studies would refine the feasibility of creating a local supply of potable water through investigating various return flow recovery project options. This would broaden the District's supply beyond strictly imported water.

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### **ENVIRONMENTAL**

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In accordance with CEQA guidelines Section 15378, the action before the Board does not constitute a "project" as defined by CEQA for entering into a Professional Services Agreement for a feasibility study. Environmental review and CEQA documentation will be prepared as required under CEQA for Phase II upon the Board's approval.

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### **BOARD OPTIONS/FISCAL IMPACTS**

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Adequate funds are available and were budgeted in the FY 22-23 Water Capital Project Budget for project number 600003.

Option 1:

- (1) Determine that the action defined herein does not constitute a "project" as specified by CEQA
- (2) Approve the Professional Services Agreement with Hoch Consulting for a not to exceed amount of \$600,000.
- (3) Authorize the General Manager to execute the Professional Services Agreement.

Option 2:

- (1) Provide other direction to staff.

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### **STAFF RECOMMENDATION**

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Staff recommends Option 1.

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Chad Williams  
Engineering and CIP Group Manager

July 26, 2022







RAINBOW MUNICIPAL WATER DISTRICT
3707 OLD HIGHWAY 395
FALLBROOK CA, 92028
(760) 728-1178

PROFESSIONAL SERVICES AGREEMENT

PROJECT: TITLE
Project No. 600003, Contract No. 22-XX

THIS AGREEMENT ("Agreement") is made and entered into this \_\_\_ day of Month, 2022 by and between the RAINBOW MUNICIPAL WATER DISTRICT, a municipal water district, hereinafter designated as "DISTRICT", and HOCH CONSULTING, a California corporation, hereinafter designated as "CONSULTANT"

RECITALS

- A. DISTRICT desires to obtain Professional Consulting Services from an independent contractor for the above-named Project.
B. CONSULTANT has submitted a proposal to provide professional services for DISTRICT in accordance with the terms set forth in this Agreement.
C. DISTRICT desires to contract with CONSULTANT as an independent contractor and CONSULTANT desires to provide services to DISTRICT as an independent contractor.
D. CONSULTANT has demonstrated its competence and professional qualifications necessary for the satisfactory performance of the services designated herein by virtue of its experience, training, education, and expertise.

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

- 1. PROFESSIONAL SERVICES PROVIDED BY CONSULTANT.
1.1 The professional services to be performed by CONSULTANT shall consist of the following: Engineering services to \_\_\_\_. The scope of services is more particularly defined in Exhibit "A", attached and made a part hereof. Any additional engineering services will be requested in writing as set forth in Section 19.
1.2 In performing the services set forth in Exhibit "A", CONSULTANT shall work closely with DISTRICT'S General Manager or Authorized Representative and staff in performing services in accordance with this Agreement in order to receive clarification as to the result

that DISTRICT expects to be accomplished by CONSULTANT. The General Manager or Authorized Representative, shall be DISTRICT'S authorized representative in the interpretation and enforcement of all services performed in connection with this Agreement.

1.3 CONSULTANT represents that its employees have the qualifications and skills necessary to perform the services under this Agreement in a competent, professional manner, without the advice or direction of DISTRICT. This means CONSULTANT is able to fulfill the requirements of this Agreement. Failure to perform all services required under this Agreement constitutes a material breach of the Agreement.

**2. TERM AND TIMING REQUIREMENTS.**

2.1 This Agreement will become effective on the date stated above, and will continue in effect until the earlier of the completion of services provided for in this Agreement or until terminated as provided under Section 14 of this Agreement.

2.2 CONSULTANT'S performance of services under this Agreement shall be in accordance with the schedule outlined below unless otherwise modified in writing as set forth in Section 19. Failure by CONSULTANT to strictly adhere to these timing requirements may result in termination of this Agreement by DISTRICT.

| Task              | Due Date         |
|-------------------|------------------|
| Notice to Proceed | Month, Day, Year |
| Progress Report   | Month, Day, Year |
| Final Submittal   | Month, Day, Year |

2.3 CONSULTANT shall submit all requests for extensions of time for performance in writing to the General Manager or Authorized Representative no later than two (2) business days after the commencement of the cause of any unforeseeable delay beyond CONSULTANT'S control and in all cases prior the date on which performance is due if possible. The General Manager or Authorized Representative shall review all such requests and may grant reasonable time extensions for unforeseeable delays which are beyond CONSULTANT'S control.

2.4 For all time periods not specifically set forth herein, CONSULTANT shall respond in the most expedient and appropriate manner under the circumstances, by telephone, fax, hand delivery, e-mail or mail.

**3. STUDY CRITERIA AND STANDARDS.**

3.1 All services shall be performed in accordance with applicable DISTRICT, county, state and federal Codes and criteria. In the performance of its professional services,

CONSULTANT shall use the degree of care and skill ordinarily exercised by CONSULTANTS performing the same or similar work under similar conditions.

**4. INDEPENDENT CONTRACTOR.**

4.1 CONSULTANT'S relationship to DISTRICT shall be that of an independent contractor in performing all services hereunder. DISTRICT will not exercise any control or direction over the methods by which CONSULTANT shall perform its services and functions. DISTRICT'S sole interest and responsibility is to ensure that the services covered in this Agreement are performed in a competent, satisfactory and legal manner. The parties agree that no services, act, commission or omission of CONSULTANT or its employee(s) pursuant to this Agreement shall be construed to make CONSULTANT or its employee(s) the agent, employee or servant of DISTRICT. CONSULTANT and its employee(s) are not entitled to receive from DISTRICT vacation pay, sick leave, retirement benefits, Social Security, workers' compensation, disability benefits, unemployment benefits or any other employee benefit of any kind.

4.2 CONSULTANT shall be solely responsible for paying all federal and state employment and income taxes, for carrying workers' compensation insurance and for otherwise complying with all other employment requirements with respect to CONSULTANT or its employee(s). CONSULTANT agrees to indemnify, defend and hold DISTRICT harmless from any and all liability, damages or losses (including attorney's fees, costs, penalties and fines) DISTRICT suffers as a result of CONSULTANT'S failure comply with the foregoing.

4.3 CONSULTANT shall be solely responsible for the performance of any of its employees, agents, or subcontractors under this Agreement. CONSULTANT represents and warrants that CONSULTANT customarily engages in the independently established trade and business of the same nature as the work to be performed under this Agreement.

4.4 CONSULTANT shall have no authority, express or implied, to act on behalf of as an agent, or to bind DISTRICT to any obligation whatsoever, unless specifically authorized in writing by the General Manager or Authorized Representative. If CONSULTANT'S services relate to an existing or future DISTRICT construction contract, CONSULTANT shall not communicate directly with, nor in any way direct the actions of, any bidder for that construction contract without the prior written authorization by the General Manager or Authorized Representative.

**5. WORKERS' COMPENSATION INSURANCE.**

5.1 By CONSULTANT'S signature hereunder, CONSULTANT certifies that CONSULTANT is aware of the provisions of Section 3700 of the California Labor Code requiring every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and CONSULTANT will comply with such provisions before commencing the performance of the services of this Agreement.

**6. INDEMNIFICATION, HOLD HARMLESS AND DEFENSE.**

6.1 All officers, agents, employees and subcontractors, and their agents, who are employed by CONSULTANT to perform services under this Agreement, shall be deemed officers,

agents and employees of CONSULTANT. To the extent and in any manner permitted by law, CONSULTANT shall defend, indemnify, and hold DISTRICT, its directors, officers, employees, authorized volunteers and agents, and each of them free and harmless from any claims, demands, liability from loss, damage, or injury to property or persons, including wrongful death, that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of CONSULTANT, including CONSULTANT'S officers, employees and agents, in connection with the services required by this Agreement, including without limitation, the payment of reasonable attorneys' fees and costs. In no event shall the cost to defend charged to the CONSULTANT exceed the CONSULTANT'S proportionate percentage of fault, as determined by a court of law. The foregoing indemnity, hold harmless and defense obligation of CONSULTANT shall apply except to the extent the loss, damage or injury is caused by the sole negligence or willful misconduct of an indemnified party.

- 6.2 To the extent and in any matter permitted by law, CONSULTANT shall defend, indemnify and hold DISTRICT, its directors, officers, employees, authorized volunteers and agents, and each of them free and harmless from and against any and all actions, proceedings, damages, costs, expenses, penalties or liabilities, in law or equity, of every kind or nature whatsoever, arising out of, related to or incident to a breach of any governmental law or regulations, compliance with which is the responsibility of CONSULTANT, except any violation of law due to the DISTRICT'S negligence or willful misconduct.
- 6.3 CONSULTANT shall defend, at CONSULTANT'S own cost, expense and risk, any and all such aforesaid claims, suits, actions or other legal proceedings of every kind that may be brought or instituted against DISTRICT or DISTRICT'S directors, officers, employees, authorized volunteers and agents, and each of them. DISTRICT shall be consulted regarding and approve of the selection of defense counsel.
- 6.4 CONSULTANT shall pay and satisfy any judgment, award or decree that may be rendered against DISTRICT or its directors, officers, employees, authorized volunteers and agents, and each of them, in any and all such aforesaid claims, suits, action or other legal proceeding. CONSULTANT shall not agree without DISTRICT'S prior written consent, to any settlement which would require DISTRICT to pay any money or perform some affirmative act, including in the case of intellectual property infringement any payment of money or performance of some affirmative act to continue using CONSULTANT Products.
- 6.5 CONSULTANT'S indemnification, hold harmless and defense obligation shall survive the termination or expiration of this Agreement.

7. **LAWS, REGULATIONS AND PERMITS.**

- 7.1 CONSULTANT shall give all notices required by law and comply with all laws, ordinances, rules and regulations pertaining to the conduct of the services required by this Agreement. CONSULTANT shall be liable for, and bear all costs resulting from, any violations of the law in connection with services furnished by CONSULTANT, except any violation of the law due to the DISTRICT'S negligence or willful misconduct.
- 7.2 CONSULTANT shall comply with all of the following requirements with respect to any services as a Building/Construction Inspector, Field Soils and Material Tester, or Land Surveyor, as those trades are defined by the California Department of Industrial Relations ("DIR").

- a) CONSULTANT agrees to comply with and require its subcontractors to comply with the requirements of California Labor Code sections 1720 *et seq.* and 1770 *et seq.*, and California Code of Regulations, title 8, section 16000 *et seq.* (collectively, "Prevailing Wage Laws") and any additional applicable California Labor Code provisions related to such work including, without limitation, payroll recordkeeping requirements. CONSULTANT and its subcontractors shall pay not less than the prevailing rate of per diem wages as determined by the Director of the DIR for all services described in this Section 7.2 of the Agreement and as required by law. The general prevailing wage determinations can be found on the DIR website at: [www://dir.ca.gov/dslr](http://www.dir.ca.gov/dslr). Copies of the prevailing rate of per diem wages may be accessed at the DISTRICT'S administrative office and shall be made available upon request. CONSULTANT shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the services described in this Section 7.2 of the Agreement available to interested parties upon request, and shall post and maintain copies at CONSULTANT'S principal place of business and at all sites where services are performed. Penalties for violation of Prevailing Wage Laws may be assessed in accordance with such laws. For example, CONSULTANT shall forfeit, as a penalty to the DISTRICT, Two Hundred Dollars (\$200) for each calendar day, or portion thereof, for each workman paid less than stipulated prevailing rates for services performed under this Agreement by CONSULTANT, or any subcontractor under CONSULTANT, in violation of Prevailing Wage Laws.
- b) CONSULTANT and each of its subcontractors shall keep accurate payroll records showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by CONSULTANT or subcontractor in connection with the services performed pursuant to this Agreement. Each payroll shall be certified, available for inspection, and copies thereof furnished as prescribed in California Labor Code sections 1771.4(a)(3)(A) and 1776, including any required redactions. CONSULTANT shall keep the DISTRICT informed as to the location of the records and shall be responsible for the compliance with these requirements by all subcontractors. CONSULTANT shall inform the DISTRICT of the location of the payroll records, including the street address, city and county and shall, within five (5) working days, provide a notice of a change of location and address. Penalties for noncompliance include a forfeiture of One Hundred Dollars (\$100) per calendar day, or portion thereof, for each worker until strict compliance is effectuated, which may be deducted from any moneys due to CONSULTANT.
- c) Eight (8) hours of work shall constitute a legal day's work. CONSULTANT and any subcontractors shall forfeit, as a penalty to the DISTRICT, Twenty-Five Dollars (\$25) for each worker employed in the execution of services pursuant to this Agreement by CONSULTANT or any subcontractor under him for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one (1) calendar day and forty (40) hours in any calendar week in violation of the provisions of the California Labor Code, in particular, sections 1810 to 1815, thereof, inclusive, except services performed by employees of CONSULTANT and its subcontractors in excess of eight (8) hours per day at not less than the rates published by the California Department of Industrial Relations.

- d) CONSULTANT'S attention is directed to the provisions of California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning employment of apprentices by CONSULTANT or any of its subcontractors. If applicable to the services performed under the Agreement, CONSULTANT shall comply with such apprenticeship requirements and submit apprentice information to the DISTRICT. Information relative to apprenticeship standards, wage schedules and other requirements may be obtained from the DIR or the Division of Apprenticeship Standards. Knowing violations of section 1777.5 will result in forfeiture not to exceed One Hundred Dollars (\$100) or Three Hundred Dollars (\$300), depending on the circumstances, for each calendar day of non-compliance pursuant to section 1777.7.
- e) CONSULTANT shall require any subcontractors performing services described in this Section 7.2 of the Agreement to comply with all the above.
- f) CONSULTANT must be, and must require, all subcontractors performing services described in this Section 7.2 to be, registered with and have paid the annual fee to the DIR prior to execution of this Agreement pursuant to Labor Code Section 1725.5. No contractor or subcontractor may be listed on a bid proposal for a public works project, or perform services described in this Section 7.2, unless registered with the DIR pursuant to Labor Code Section 1725.5. No contractor or subcontractor may be awarded a contract for public work on a public works project, or perform services described in this Section 7.2, unless registered with the DIR pursuant to Labor Code Section 1725.5. The performance of services described in this Section 7.2 is subject to compliance monitoring and enforcement by the DIR

## 8. **SAFETY.**

In carrying out CONSULTANT'S services, CONSULTANT shall at all times, exercise all necessary precautions for the safety of employees appropriate to the nature of the services and the conditions under which the services are to be performed, and be in compliance with all federal, state and local statutory and regulatory requirements including State of California, Division of Industrial Safety (Cal/OSHA) regulations, and the U.S. Department of Transportation Omnibus Transportation Employee Testing Act (as applicable). Safety precautions as applicable shall include instructions in accident prevention for all employees such as safe walkways, scaffolds, fall protection, ladders, bridges, gang planks, confined space procedures, trenching & shoring, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries.

## 9. **INSURANCE.**

### 9.1 **INSURANCE COVERAGE AND LIMITS.**

CONSULTANT shall provide and maintain at all times during the performance of this Agreement, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the services hereunder by CONSULTANT, its agents, representatives, employees or subcontractors. Claims made policies shall not satisfy these insurance requirements unless CONSULTANT notifies DISTRICT and obtains DISTRICT'S prior written consent to the use of such claims made policies.

**Coverage** – CONSULTANT shall maintain coverage at least as broad as the following:

- a) Coverage for Professional Liability appropriate to CONSULTANT'S profession covering CONSULTANT'S wrongful acts, negligent actions, errors or omissions. The retroactive date (if any) is to be no later than the effective date of this Agreement.
- b) Insurance Services Office Commercial General Liability Coverage (Occurrence Form CG 0001).
- c) Insurance Services Office Automobile Liability Coverage (Form CA 0001), covering Symbol 1 (any auto).
- d) Workers' Compensation insurance as required by the State of California and Employers Liability insurance.

**Limits** - CONSULTANT shall maintain limits no less than the following:

- a) Professional Errors and Omissions Liability - One million dollars (\$1,000,000) per claim and two million dollars (\$2,000,000) annual aggregate.

Professional Errors and Omissions Liability is required if CONSULTANT provides or engages in any type of professional services including, but not limited to engineers, architects and construction management.

- b) General Liability - One million dollars (\$1,000,000) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit or products-completed operations aggregate limit is used, either the general aggregate limit shall apply separately to the project/location (with the ISO CG 2503, or ISO CG 2504, or insurer's equivalent endorsement provided to DISTRICT) or the general aggregate limit and products-completed operations aggregate limit shall be twice the required occurrence limit.
- c) Automobile Liability - One million dollars (\$1,000,000) for bodily injury and property damage each accident limit.
- d) Workers' Compensation insurance with statutory limits as required by California law and Employer's Liability insurance with a limit of no less than One Million Dollars (\$1,000,000) per accident for bodily injury or disease.

**9.2 REQUIRED PROVISIONS.** The insurance policies are to contain, or be endorsed to contain the following provisions:

- a) DISTRICT, its directors, officers, or employees are to be covered as insureds on the CGL and auto policies with respect to liability arising out of automobiles owned, leased, hired, or borrowed by on or behalf of CONSULTANT; and with respect to liability arising out of services or operations performed by or on behalf of CONSULTANT including materials, parts, or equipment furnished in connection with such services

or operations. General liability coverage can be provided in the form of an endorsement to CONSULTANT'S insurance (at least as broad as ISO Form CG 20 10, 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used). The coverage shall contain no special limitations on the scope of protection afforded to DISTRICT, its directors, officers, employees, or authorized volunteers. The Project Name shall also be included.

- b) For any claims related to the services provided hereunder, CONSULTANT'S insurance shall be primary insurance as respects DISTRICT, its directors, officers, employees, and authorized volunteers. Any insurance, self-insurance, or other coverage maintained by DISTRICT, its directors, officers, or employees shall not contribute to it.
- c) Each insurance policy specified above are to state or be endorsed to state that coverage shall not be canceled except after thirty (30) days prior written notice (ten (10) days for non-payment of premium) by U.S. mail has been provided to DISTRICT.
- d) In the event any change is made in the insurance carrier, scope of coverage or retroactive date of professional liability coverage required under this Agreement (if applicable), CONSULTANT shall notify DISTRICT prior to any changes.

**9.3 PROFESSIONAL WARRANTY.** CONSULTANT represents and warrants that: (a) the Professional Services will be performed in a professional and workmanlike manner with a degree of care, skill and competence that is consistent with generally accepted industry standards reasonably expected of similar types of engagements, and (b) the Deliverables will substantially conform to the description and specifications set forth in Exhibit "A" for the specified period after delivery or if none stated, a period of XX days after the date of delivery ("Warranty Period"). To the extent any Professional Services or Deliverables do not substantially conform to the foregoing warranties, CONSULTANT shall promptly re-perform the Professional Services and/or resubmit the Deliverables. If after receiving notice of non-conformity CONSULTANT determines that the Professional Services cannot be performed or the Deliverables cannot reasonably be delivered pursuant to the specifications, within the Warranty Period, DISTRICT may elect to remedy or receive such Professional Services or Deliverable through another contractor and CONSULTANT shall reimburse DISTRICT within 30 days of request by DISTRICT. This warranty will apply only if: (a) no modification, alteration or addition has been made to the Deliverable(s) other than with CONSULTANT'S written consent; and (b) receives written notification of the breach during the applicable Warranty Period.

CONSULTANT warrants that any drawings and specifications, reports or other documents submitted by Contractor to Agency shall be complete and unambiguous and in compliance with all applicable codes, ordinances, statutes, regulations, and laws.

**9.4 WAIVER OF SUBROGATION.** CONSULTANT hereby agrees to waive rights of subrogation which any insurer of CONSULTANT may acquire from CONSULTANT by



virtue of the payment of any loss. CONSULTANT agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of DISTRICT for all services performed by CONSULTANT, its employees, agents and subcontractors.

**9.5 DEDUCTIBLES AND SELF-INSURED RETENTIONS.** Any deductible or self-insured retention must be declared to and approved by DISTRICT. At the option of DISTRICT, the insurer shall either reduce or eliminate such deductibles or self-insured retention.

**9.6 ACCEPTABILITY OF INSURERS.** Insurance is to be placed with insurers having a current A.M. Best rating of no less than A:VII or equivalent or as otherwise acceptable to DISTRICT.

**9.7 EVIDENCES OF INSURANCE.** Prior to execution of this Agreement, CONSULTANT shall furnish DISTRICT with original certificates and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this Agreement. All certificates and endorsements are to be received and approved by DISTRICT before services commence. However, failure to obtain the required documents prior the services beginning shall not waive CONSULTANT'S obligation to provide them.

CONSULTANT shall, upon demand of DISTRICT at any time, deliver to DISTRICT complete, certified copies or all required insurance policies, including endorsements, required by this Agreement.

**9.8 SUBCONTRACTORS.** In the event that CONSULTANT employs subcontractors as part of the services covered by this Agreement, it shall be the CONSULTANT'S responsibility to require and verify that each subcontractor meets the minimum insurance requirements specified in this Agreement.

**10. NO CONFLICT OF INTEREST.**

If CONSULTANT is providing services related to a DISTRICT project, CONSULTANT shall not be financially interested in any other contract necessary for the undertaking of the project. For the limited purposes of interpreting this section, CONSULTANT shall be deemed a "district officer or employee", and this section shall be interpreted in accordance with California Government Code Section 1090. In the event that CONSULTANT becomes financially interested in any other contract necessary for the undertaking of the project, this Agreement shall be null and void and DISTRICT shall be relieved of any responsibility whatsoever to provide compensation under the terms and conditions of any such contract for those services performed by CONSULTANT.

**11. OWNERSHIP OF DOCUMENTS.**

All documents, drawings, reports, and specifications, including details, computations, code, scripts, workflows, and other documents, prepared or provided by CONSULTANT under this Agreement shall be the property of DISTRICT. DISTRICT agrees to hold CONSULTANT free and harmless from any claim arising from any use, other than the purpose intended, of the documents and all preliminary sketches, schematics, preliminary plans, architectural perspective renderings, working drawings, including details, computations, and other documents, prepared or provided by CONSULTANT. CONSULTANT may retain a copy of

all material produced under this Agreement for the purpose of documenting their participation in this Project.

**12. CONFIDENTIAL INFORMATION.**

Any written, printed, graphic, or electronically or magnetically recorded information furnished by DISTRICT for CONSULTANT'S use are the sole property of DISTRICT. CONSULTANT and its employee(s) shall keep this information in the strictest confidence and will not disclose it by any means to any person except with DISTRICT'S prior written approval, and only to the extent necessary to perform the services under this Agreement. This prohibition also applies to CONSULTANT'S employees, agents, and subcontractors. On termination or expiration of this Agreement, CONSULTANT shall promptly return any such confidential information in its possession to DISTRICT.

**13. COMPENSATION.**

**13.1** For services performed by CONSULTANT in accordance with this Agreement, DISTRICT shall pay CONSULTANT in accordance with the schedule of billing rates set forth in Exhibit "A", attached hereto and incorporated herein by reference. This is a Time-and-Materials contract. Overtime work must be authorized by the DISTRICT. No hourly rate changes shall be made during the term of this Agreement. **CONSULTANT'S compensation for all services performed in accordance with this Agreement shall not exceed the total contract price of \$\_\_\_\_\_.** No services shall be performed by CONSULTANT in excess of the total contract price without prior written approval of the General Manager or Authorized Representative. CONSULTANT shall obtain approval from the General Manager or Authorized Representative prior to performing any services that result in incidental expenses to the DISTRICT.

**13.2** CONSULTANT shall maintain accounting records including the following information:

- a) Names and titles of employees or agents, types of services performed, and times and dates of all services performed in connection with Agreement that is billed on an hourly basis.
- b) All incidental expenses including reproductions, computer printing, postage, mileage billed at current Internal Revenue Service ("IRS") Rate, and subsistence.

**13.3** CONSULTANT'S accounting records shall be made available to DISTRICT Accounting Manager, for verification of billings, within a reasonable time of the Accounting Manager's request for inspection.

**13.4** CONSULTANT shall submit monthly invoices to DISTRICT. DISTRICT will make partial payments to CONSULTANT not to exceed the total contract price within thirty (30) days of receipt of invoice, subject to the approval of the General Manager or Authorized Representative. ***Each application for partial payment shall be accompanied with a Progress Report summarizing the status of the services performed.***

**13.5** DISTRICT reserves the right to withhold payments for services to cover potential or nonconforming services. Additionally, the DISTRICT may elect not to make a particular payment if any of the following exists:

- a) CONSULTANT with or without knowledge, made any misrepresentation of substantial and material nature with respect to any information furnished to DISTRICT.
- b) CONSULTANT took an action without receiving DISTRICT'S prior approval as required under this Agreement.
- c) CONSULTANT is in default of a term or condition of this Agreement.

**13.6** CONSULTANT shall ensure that any report generated under this Agreement shall comply with Government Code Section 7550.

**14. TERMINATION OF AGREEMENT.**

**14.1 TERMINATION FOR CAUSE.** If DISTRICT ("demanding party") has a good faith belief that CONSULTANT is not complying with the terms of this Agreement or is deemed non-responsive or non-responsible, DISTRICT will give written notice of the default (with reasonable specificity) to CONSULTANT and demand the default to be cured within ten (10) calendar days of the notice. Responsive is defined as conforming with material requirements and responsible is defined as possessing the attributes of trustworthiness, quality, fitness, capacity, and experience to satisfactorily perform the contract.

If CONSULTANT fails to cure the default within ten (10) calendar days of the notice, or if more than ten (10) calendar days are reasonably required to cure the default, and CONSULTANT fails to give adequate assurance and due performance within ten (10) calendar days of the notice, DISTRICT may terminate this Agreement upon written notice to CONSULTANT. In the event of a material breach of any representation or term of this Agreement by CONSULTANT that is not curable or results in a threat to health or safety, DISTRICT may immediately terminate this Agreement by providing written notice and without a cure period.

Upon termination, DISTRICT will pay CONSULTANT for any services completed up to and including the date of termination of this Agreement, in accordance with the compensation Section 13. DISTRICT will be required to compensate CONSULTANT only for services performed in accordance with the Agreement up to and including the date of termination. DISTRICT shall not pay for lost profits or overhead/extended overhead fees and at its sole discretion may deduct fees for any non-conforming or non-complying work.

**14.2 TERMINATION FOR CONVENIENCE.** DISTRICT will have the express right to terminate this Agreement at any time without cause by giving seven (7) calendar days advanced written notice to CONSULTANT. This Agreement shall be automatically terminated without further action of any party upon expiration of the seven (7) day period.

Promptly upon receipt of any termination notice from the DISTRICT, CONSULTANT shall cease all further work and services, except as otherwise expressly directed by the DISTRICT in the written termination notice. In the event the DISTRICT exercises its termination right, CONSULTANT shall be paid only for work and services performed and approved by the DISTRICT to the date this Agreement terminates. The DISTRICT will have the express right to withhold any payment otherwise due CONSULTANT to correct

any labor or materials determined to be defective by the DISTRICT at the time of termination.

All plans, maps, drawings, reports, designs, or other writings of any type or nature prepared by CONSULTANT as a result of this Agreement shall become and remain the sole property of the DISTRICT. All such writings shall be provided to the DISTRICT not later than seven (7) consecutive days after termination of this Contract for any reason. All labor, supplies, work and materials provided by CONSULTANT in conjunction with this Agreement will become and remain the sole property of the DISTRICT.

**15. ASSIGNMENT AND DELEGATION.**

**15.1** This Agreement and any portion thereof shall not be assigned or transferred, nor shall any of CONSULTANT'S duties be delegated or subcontracted, without the express written consent of DISTRICT. Any attempt to assign or delegate this Agreement without the express written consent of DISTRICT shall be void and of no force or effect. Consent by DISTRICT to one assignment shall not be deemed to be consent to any subsequent assignment.

**15.2** This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

**16. AUDIT DISCLOSURE.**

Pursuant to Government Code section 8546.7, if the Agreement is over ten thousand dollars (\$10,000), it is subject to examination and audit of the State Auditor, at the request of DISTRICT or as part of any audit of DISTRICT, for a period of three (3) years after final payment under the Agreement. CONSULTANT shall cooperate with any such examination or audit at no cost to DISTRICT.

**17. ENTIRE AGREEMENT.**

This Agreement, and the attached Exhibit "A", comprise the entire integrated understanding between DISTRICT and CONSULTANT concerning the services to be performed pursuant to this Agreement and supersedes all prior negotiations, representations, or agreements whether express or implied, oral or written. The express terms hereof control and supersede any course of performance and/or usage of the trade inconsistent with any of the terms herein. In the event of any conflict between the provisions of the Agreement and the Exhibit(s), the terms of the Agreement shall prevail.

**18. INTERPRETATION OF THE AGREEMENT.**

**18.1** The interpretation, validity, and enforcement (including, without limitation, provisions concerning limitations of actions) of the Agreement shall be governed by and construed under the laws of the State of California, notwithstanding any conflict-of-laws doctrines of such state or other jurisdiction to the contrary and without the aid of any canon, custom or rule requiring construction against the draftsman. The Agreement does not limit any other rights or remedies available to DISTRICT.

**18.2** CONSULTANT shall be responsible for complying with all applicable local, state, and federal laws whether or not said laws are expressly stated or referred to herein.

**18.3** Should any provision herein be found or deemed to be invalid, the Agreement shall be construed as not containing such provision, and all other provisions which are otherwise lawful shall remain in full force and effect, and to this end the provisions of this Agreement are severable.

**18.4** Each and every provision of law and clause required by law to be inserted in this Agreement shall be deemed to be inserted herein, and the Agreement shall be read and enforced as though they were included herein. If through mistake of otherwise any such provision is not inserted, or is not correctly inserted, then upon application of either party, the Agreement shall forthwith be physically amended to make such insertion.

**19. AGREEMENT MODIFICATION.**

This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by the parties hereto.

**20. DISPUTE RESOLUTION.**

Upon the written demand of either party, any dispute, claim, or controversy arising out of or relating to this Agreement or the breach, termination, enforcement, interpretation, or validity thereof, shall be first submitted to mediation, the cost of which shall be borne equally by the parties, if not resolved pursuant to the Government Claims Act, Government Code section 900 *et seq.* if applicable, and prior to the commencement of any legal action or other proceeding. Any mediation shall take place in the State of California, County of San Diego, and shall be concluded within sixty (60) days of the written demand, unless such time is extended by mutual written consent of the parties. Nothing herein waives or excuses compliance with the California Government Claims Act.

In the event mediation has not been successfully concluded within the time allowed, any dispute, claim or controversy arising out of or relating to this Agreement or the breach, termination, enforcement, interpretation, or validity thereof, including the determination of the scope or applicability of this agreement to arbitrate, shall be determined by arbitration in the State of California, County of San Diego, before one arbitrator. The arbitration shall be administered by JAMS pursuant to its Comprehensive Arbitration Rules and Procedures if the amount in controversy is equal or greater than Two Hundred Fifty Thousand Dollars (\$250,000), or pursuant to its Streamlined Arbitration Rules and Procedures if the amount in controversy is less than Two Hundred Fifty Thousand Dollars (\$250,000). The use of arbitration shall allow full discovery by all parties associated with the dispute or claim. Judgment on the award may be entered in any court having jurisdiction. This clause shall not preclude the parties from seeking provisional remedies in aid of arbitration from a court of competent jurisdiction. The arbitrator may, in the award, allocate all or a part of the costs of the arbitration, including the fees of the arbitrator and the reasonable attorneys' fees of the prevailing party. If either party petitions to confirm, correct or vacate the award as provided by Chapter 4, of Title 9 of the California Code of Civil Procedure (commencing with Section 1285), the prevailing party shall be entitled as part of his or its costs to reasonable attorneys' fees to be fixed by the Court.

**21. JURISDICTION, FORUM AND VENUE.**

Except as otherwise required by Section 20 of this Agreement concerning dispute resolution, the proper jurisdiction, forum and venue for any claims, causes of action or other

proceedings concerning this Agreement shall be in the state and federal courts located in the State of California, northern district of the County of San Diego. DISTRICT and CONSULTANT agree not to bring any action or proceeding arising out of or relating to this Agreement in any other jurisdiction, forum or venue. DISTRICT and CONSULTANT hereby submit to personal jurisdiction in the State of California for the enforcement of this Agreement and hereby waive any and all personal rights under the law of any state to object to jurisdiction within the State of California for the purposes of any legal action or proceeding to enforce this Agreement whether on grounds of inconvenient forum or otherwise.

**22. MAILING ADDRESSES.**

Notices given pursuant to this Agreement shall be deemed communicated as of the earlier of the day of receipt or the fifth (5<sup>th</sup>) calendar day after deposit in the United States mail, postage prepaid, and addressed to the following:

**DISTRICT:**                   **Rainbow Municipal Water District  
General Manager  
3707 Old Hwy 395  
Fallbrook, CA 92028  
Phone: (760) 728-1178**

**CONSULTANT:**               **Hoch Consulting  
804 Pier View Way, Suite 100  
Oceanside, CA 92054**

Notices delivered personally will be deemed communicated as of actual receipt.

**23. SIGNATURES.**

Each party represents that the individual executing this Agreement on its behalf has the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of such party.

**24. COUNTERPARTS.**

This Agreement may be executed in counterparts, each of which shall constitute an original, but all of which together shall constitute one and the same agreement, and the signature of any party to any counterpart shall be deemed to be a signature to, and may be appended to, any other counterpart.

**25. ATTORNEY'S FEES.**

In the event of a dispute arising under terms of this Agreement, it is agreed that the prevailing party may be awarded reasonable attorneys' fees and actual costs.

**IN WITNESS WHEREOF** the parties hereto for themselves, their heirs, executors, administrators, successors, and assigns do hereby agree to the full performance of the covenants herein contained and have caused this Agreement to be executed.

DRAFT

**CONSULTANT** \_\_\_\_\_

**RAINBOW MUNICIPAL WATER DISTRICT** \_\_\_\_\_

By \_\_\_\_\_  
**CONSULTANT**

By \_\_\_\_\_  
**TOM KENNEDY, GENERAL MANAGER**

\_\_\_\_\_  
PRINT NAME

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Attest: **Executive Secretary**

\_\_\_\_\_  
**Federal Employer ID #**

\_\_\_\_\_  
**Approved as to Form:  
Alfred Smith, General Counsel**

**NOTARY ACKNOWLEDGEMENT OF CONSULTANT MUST ACCOMPANY THIS DOCUMENT**

**DRAFT**



# EXHIBIT “A”

## SCOPE OF SERVICES Hydrogeologic and Engineering Services

The Consultant shall provide professional hydrogeologic and engineering services to investigate a viable return flow recovery project as described below:

### TASK A – PRELIMINARY EVALUATION & PROJECT PLANNING

#### 2.A.1: Feasibility Study

The Consultant will review studies, reports, data, and other information regarding the SLRVGB, the District, and the proposed Project. We propose to use historical and existing information to develop a Feasibility Study; however, we will also identify any potential critical knowledge gaps and make recommendations for additional investigations if warranted. At a minimum, the feasibility study will cover the following information:

1. Project Goals, Alternative Concepts, Evaluation Criteria, and Key Issues - Establish project goals, alternative concepts, key issues, and alternative evaluation criteria. Identify any changes to the approach outlined in this scope of work.
2. Regulations – Provide regulatory background to establish the need for the Project.
  - a. Evaluate options to discharge water from a long-term pump test. Consider on-site beneficial uses by private parties to avoid the need for a discharge permit. Evaluate permitting requirements and the potential to use the District’s existing State permit.
  - b. Certainty of Supply - Evaluate a range of legal, administrative, and institutional structures for their ability to provide high levels of certainty and sustainability to a potential supply of groundwater from the San Luis Rey Valley Basin for use by the District. Review options including but not limited to SGMA, CEQA/NEPA, agreements, permits, and other approaches. Recommend a preferred approach.

*\*It is assumed that water quality analysis with relation to regulations that were performed as part of the previous feasibility study are applicable and will not need to be reviewed again.*

3. Existing Conditions –
  - a. Water Quality – The Consultant will review water quality in the Bonsall and Pala Basins and identify existing wells in or near the Bonsall Basin that would provide valuable water level or quality data. From the existing data, the Consultant will develop a monitoring plan to gather additional data needed for the alternatives analysis that will identify new constituents recommended for monitoring (e.g. PFAS) due to regulatory changes or treatment considerations.
  - b. Return Flow Estimates – The Consultant will develop a range of return flows that will be used to evaluate the economics of a potential imported water recovery project. The range will expand on the West Yost report and recent history of water use in the Districts, within the

SLR Valley watershed and estimated return flows from residential and commercial irrigation and flow from septic systems, which were not meaningful in the previous study. Additionally, the Consultant will provide the following tasks in support of the return flow and hydrogeologic efforts:

- i. *Update, Refine, and Recalibrate Groundwater Model.* The Consultant's proposed scope of work for this subtask was based on a review of the model description included in the West Yost 2016 Groundwater Supply Study Report as well as a review of MODFLOW model files provided by Rainbow Municipal Water District associated with the District's 2017 RFP. This subtask includes the following tasks.
- ii. *Complete and Rerun the 2016 MODFLOW 2005 Model.* The Groundwater Supply Study was originally completed using the FEMFLOW3D computer code. The model was subsequently converted to MODFLOW 2005 using the Groundwater Vistas. However, transfer of the imported water return flow was not completed. The Consultant will obtain both the FEMFLOW3D model files and MODFLOW 2005 model files and rerun the MODFLOW 2005 model with the imported water return flow to verify the water balance and model- simulated streamflow reported in the 2016 Groundwater Supply Study Report.
- iii. *Update Groundwater Model.* The 2016 West Yost model was calibrated for the period from 1947 through 1977. The Consultant will update the model by extending the model calibration period from 1977 through present. It will be necessary to update an in-house database with the latest geohydrologic and well related information. Geohydrologic data necessary for updating the groundwater model include:
  1. Groundwater pumping well locations and associated information, including construction details, lithologic logs, and any relevant pumping test data,
  2. Imported water use,
  3. Groundwater pumping,
  4. Streamflow,
  5. Groundwater elevations,
  6. Precipitation records, and
  7. Land use coverages.

iv. *Refine Groundwater Model*  
Refine Model Temporal Discretization

The existing West Yost model simulates the time period from 1947 through 1977 with a variable temporal discretization (i.e., stress period) of one to eight years. That means the model cannot simulate average streamflow and groundwater levels at smaller time intervals. Effects on streamflow, groundwater levels, and evapotranspiration from wet and dry hydrologic cycles or seasonal fluctuations were not able to be evaluated. Therefore, the Consultant will refine the temporal discretization with a monthly stress period.

### Refine Model Vertical Discretization

The existing West Yost model is 2-dimensional, composed of a single layer which limits the ability of the model to simulate vertical gradients or represent units with differing hydraulic properties. The Consultant will refine the numerical model to 3 layers based on the lithologic logs from wells in the basin to better simulate the physical system with refined vertical discretization. The top model layer will represent younger alluvium and alluvial fan deposits, the bottom layer will represent older alluvium, and the middle layer will allow the model to simulate confining strata, where present. This configuration allows for more accurate representation of groundwater pumping and streamflow interaction and is consistent with the representation of the alluvial groundwater systems in the Upper San Luis Rey Groundwater Model (Geoscience, 2021) and the Mission Basin Model Update and Evaluation of Indirect Potable Reuse for the Pure Water Oceanside Project (Geoscience, 2018).

### Improve Deep Percolation from Precipitation Estimates

Deep percolation from precipitation (or precipitation recharge) of 2,000 acre-ft/yr was assumed by the existing West Yost model. This volume was based on estimates using the chloride mass balance method and an empirical equation relating the average annual deep percolation to annual precipitation, then adjusted during model calibration. This recharge, which is approximately 1% of the precipitation, is considered to be a very low deep percolation from precipitation. Typically, precipitation recharge ranges from 3% to 8% of precipitation. The Consultant will improve this estimate of recharge using the relationship of deep percolation and precipitation established through the construction and calibration of the surface water model for the Upper San Luis Rey Watershed (Geoscience, 2021). This watershed model was developed using the HSPF computer code. HSPF is a successor to the Fortran version of the Stanford Watershed Model. The codes became widely available after 1974 through work for and with support of the EPA and USGS. It is a comprehensive and physically based watershed model that can simulate all water cycle components and water quality with a time step of less than a day. The simulated components include rain, vegetation interception, evaporation of rain, evapotranspiration from plants, infiltration of applied water into the upper soil zone, infiltration to groundwater, interflow of water through the upper soil layer to a stream channel, stream channel losses to groundwater, and stream channel gains from groundwater.

### Refine Underflow Inflow from Upgradient Areas

Underflow from upgradient areas is simulated in the existing model within a limited area surrounding the San Luis Rey River (with a width of approximately 800 ft). Upgradient inflow is also assumed to be constant through time, with a magnitude of 486

afy. Utilizing this approach, the existing model underestimates upgradient inflow spatially by excluding underflow traveling in the broader alluvial system surrounding the stream (an additional width of approximately 6,400 ft). The approach also fails to account for temporal variability in underflow inflow during wet and dry hydrologic cycles. The Consultant will refine the approach for calculate underflow from upgradient areas utilizing the Upper San Luis Rey Groundwater Model (USLRGM; Geoscience, 2021). Upgradient inflow will be updated with fluxes from the USLRGM on a monthly timestep, incorporating inflow from the alluvial groundwater basin and temporal variability in inflows. Based on a preliminary assessment of the underflows from the USLRGM in this area, the existing model significantly under-represents underflow inflow from upgradient.

#### Refine Return Flow Estimates

The existing West Yost model does not include return flow from residential and commercial irrigation or septic systems. In addition, the Consultant will reevaluate the return flow estimates from agricultural use. Results from the refined estimates of return flow from imported water will be included in the groundwater model.

- v. *Recalibrate Groundwater Model.* Once the Consultant updates and refines the groundwater model, the Consultant will recalibrate it. The existing model was only calibrated to average annual stream flow measured at a USGS gaging station (#11041000 San Luis Rey near Bonsall) from 1947 to 1977. No quantitative statistics of model calibration for groundwater levels were presented. Our model re-calibration will be performed using the “history matching” technique. In this method, historical groundwater levels and streamflow data will be compared with model generated groundwater levels and streamflow. Results of the model calibration will be explained in terms of calibration statistics, plots of observed versus model-generated water levels and transient hydrographs of observed versus model-generated heads for specific wells. The calibration statistics will be used to determine the accuracy of the updated model and the uncertainty of predictive results. The flow model recalibration will be conducted based on the guidelines documented in “Standard Guide for Comparing Ground-Water Flow Model Simulations to Site-Specific Information (ASTM, 1993), “Standard Guide for Calibrating a Ground-Water Flow Model Application” (ASTM, 1996) and “Guidelines for Evaluating Ground-Water Flow Models” (USGS, 2004).
4. Environmental – The Consultant will determine all necessary permits, including environmental permits needed to implement an Imported Water Recovery Project. Identify environmental opportunities and constraints and necessary analysis needed to ensure compliance with California Environmental Quality

Act (CEQA) and/or National Environmental Policy Act (NEPA).

5. Project Alternatives – The Consultant will determine recovery wells, sources of power, raw water pipelines, a treatment plant, product water pipelines, associated facilities, land requirements, a construction cost and annual operation and maintenance cost estimate. Consider land ownerships and the location of District facilities. Prepare project maps and preliminary project layouts and site plans. Evaluate access, land ownerships, temporary or permanent easements, and necessary agreements.

The scope of services includes use of the GIS Suitability Analysis tool to evaluate the geohydrology of the project area for the purpose of identifying areas or zones favorable for a recovery wellfield. Hydrogeologic data and aquifer characteristics collected through previous tasks, including the model update, refinement, and recalibration, will be used to guide potential site selection. Additional information that may need to be collected to assess the suitability of potential locations include, but are not necessarily limited to:

- Well performance characteristics,
- Groundwater quality information (depth-specific, if available),
- Point sources of groundwater contamination,
- Non-point sources of groundwater contamination,
- Location of existing infrastructure, and
- Location of available property for construction.

The final product of this evaluation will be a site suitability analysis tool (SSAT) capable of evaluating optimal locations for exploratory borings, a new test and/or monitoring well for aquifer pump tests to help confirm hydrogeologic aquifer parameters (i.e., yield), and recovery wells. The tool produces an interactive GIS layer that can be opened in ESRI products or Google Earth. With minor adjustments, the District could utilize the tool to determine suitable sites for additional wells or recharge basins in the future. At a minimum this tool will help prioritize site suitability based on the following factors:

- Data availability
- Parcel size
- Land use
- Hydraulic conductivity
- Return flow capture
- Distances from water lines
- Constructability

All site selection criteria will be shown in relation to existing land use, production wells, utilities, and transmission pipelines. Each recommended site will be ranked according to favorability utilizing a decision matrix. Several criteria will be assessed, including but not limited to:

- **Geohydrologic:** production potential, anticipated water quality, and water level interference
- **Environmental:** proximity to point-source sites of groundwater

- contamination and surface water bodies
- **Logistical:** available access and area for drilling, appropriate setbacks from electrical and sanitary facilities, and disturbance to nearby businesses and/or residents
- **Engineering:** proximity to existing water transmission system and adequacy of that system
- **Cost:** project cost, including property acquisition, etc.
- **Water Quality:** limited to the water quality parameters that drive decisions.

Each of the criteria will be weighted and evaluated in a quantitative manner according to importance. The criteria and corresponding weighting values will be prepared based on Geoscience recommendations in consideration of the District's goals. This tool will also incorporate any potential fatal flaws identified by the Consultant and District.

The Consultant will present results of the SSAT in a virtual workshop with the District. This workshop will serve to demonstrate the tool, show how it can be utilized by the District, and provide a way for the District to ask questions and convey comments on the preliminary results of the tool. After the workshop, any comments will be incorporated into the tool and the SSAT will be finalized. The Consultant will evaluate the available information and recommend **two (2)** favorable locations for recovery wells. These sites will then be used to develop predictive model scenarios to evaluate potential recovery pumping impacts under the following subtask.

Based on the water quality at the recovery well sites, our team will evaluate the need for pre-treatment, demineralization, filtration, disinfection, and other treatment processes to produce a potable water supply meeting State and Federal requirements (including for iron and manganese removal) and will provide analysis of dynamic future conditions for consideration.

If the project requires demineralization, the Consultant will evaluate brine recovery and discharge options and costs. At least one (1) project alternative will include brine recovery and discharge options.

6. **Cost Estimates and Feasibility Analysis** – The Consultant will review the projects covered in the West Yost Report and discuss them with the District for possible adjustments. The Consultant will update the construction cost estimates and develop capital and annual operation and maintenance costs. Based on SDCWA water rate projections from the District, the Consultant will use our lifecycle cost estimate to update the project technical feasibility analysis and calculate the all-in project unit cost of water per acre-foot.

### **2.A.2: Feasibility Study Presentation**

The Consultant will prepare a presentation covering all information listed in Task 2.A.1– Feasibility Study. The Consultant will present the analysis and findings of the Feasibility Study to the District, including project concepts and approach. The Consultant will document items needing further clarification and address all

feedback provided by the District. If no fatal flaws are identified, and with District direction, the Consultant will be given Notice to Proceed (NTP) with Task B.

## **TASK B – PROJECT COORDINATION & STAKEHOLDER OUTREACH**

### **2.B.1 Tribal Coordination**

The Consultant will support the District in coordination with the SLRIWA and Pala Band. The Consultant will provide experienced outreach staff to support in the facilitation of up to six (6) meetings, including preparation of exhibits, attendance, and meeting notes.

### **2.B.2 Inventory of Existing Groundwater Pumpers and Permit Holders**

After reviewing and compiling existing inventories of groundwater pumpers and permit holders, the Consultant will conduct research and update the inventory including the volume pumped, if available. The Consultant will contact the pumpers on behalf of the District for various purposes including to arrange taking samples from their wells. In contacting pumpers, the Consultant will review the potential use of the well for monitoring and pump testing. The scope includes efforts to purge the well as necessary, follow steps to obtain a representative sample using appropriate containers, and sending samples to a laboratory for analysis following procedures to avoid contamination. The scope of services assumes 10 samples.

Review existing wells and identify those that would be relevant in evaluating the geology and production of a proposed return flow recovery 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, new borings, and a long-term pump test.

The Consultant will 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 and support the District's General Counsel in developing formal agreements and conducting negotiations.

## **TASK C – PS&E DEVELOPMENT**

### **2.C.1 Monitoring Network Instrumentation**

The Consultant will develop monitoring protocols and a monitoring network focused on monitoring the long-term pump test and proposed Imported Water Recovery Project (Project). The Consultant will use current monitoring systems, data collected from previous tasks, and GIS Site Suitability Analysis Tool to help identify wells for the network. The purpose of the network is to determine impacts from the long-term pump test and a possible Imported Water Recovery Project, but also to set a baseline for the evaluation of projects and impacts.

The Consultant will provide recommendations for addressing potential data gaps by expanding the network as appropriate, developing an ongoing monitoring program for tracking water level and water quality throughout the long-term pump

test and/or Project operations. After the monitoring network has been established, the Consultant will design the instrumentation for water level and quality monitoring and install the equipment. The scope of services assumes eight (8) monitoring wells.

This instrumentation will provide real-time graphical data presentation of water level and water quality in each well, which could help minimize data loss and field costs by allowing long-term pump test monitoring to easily be conducted from any computer or smart phone. This system also allows the user to program threshold alarms. For example, if the pump fails during the long-term pump test and water level rises to a certain threshold, user will be alerted and be able to minimize downtime and data gaps. This service uses either cellular or satellite telemetry to upload data to a cloud-based website that can be accessed any time with a specific login. These devices would either be purchased or rented by the District and are not included in our scope.

### **2.C.2 Plans, Specifications and Estimate (PS&E)**

The Consultant will prepare plans, specifications, and construction cost estimates for bidding the construction of one (1) pump test wells. The Consultant will coordinate with the Division of Drinking Water so that the well design would be acceptable to them as a production well in the future. It is anticipated that the District will provide front-end contract documents for our team to edit, that the District will conduct the bid process and will pay for the well construction outside of this consultant contract, and that all environmental review, reporting and permitting will be performed by an As-Needed Environmental Consultant contracted by the District. The Consultant will prepare surveying data, plat map, and legal description to support the District's acquisition of well sites in easement or fee acquisition. The contract documents will specify that the contractor will obtain all permits required for borings and pump tests including but not limited to the County of San Diego and environmental agencies and that the contractor shall manage and dispose of all residuals in accordance with local, State and Federal regulations, and agreements with property owners. Wells will be designed considering future use for production and/or monitoring wells.

Furthermore, the Consultant will prepare a document with detailed technical plans and specifications for the construction of the and test well to be included with contractual front-end documents. Additionally, a detailed cost estimate and bid schedule will be prepared to be included with the bid package, with specific line items showing units and unit quantities for the work. Items included in the technical specifications will include (but are not necessarily limited to) the following:

- Well locations, depths, dimensions, and materials,
- Expected geohydrologic conditions,
- Permits and regulatory requirements (contractor responsibility),
- Compliance with discharge requirements, as necessary,
- Job conditions (e.g., noise suppression, drilling waste, runoff management, power, lighting, water, security, sanitation, parking, traffic control, and work damage),
- Mobilization, demobilization, clearing, grubbing, and site cleanup,
- Recommended drilling methods and potential drilling problems,



- Equipment, materials, and records to be furnished by the contractor,
- Records to be kept by the contractor,
- Well drilling and construction procedures, including:
  - Drilling, installation, and cementing of the conductor casing,
  - Borehole drilling,
  - Geophysical borehole logging (i.e. short- and long-normal resistivity logs, guard or lateral logs, spontaneous-potential log, gamma ray, and sonic),
  - Alignment, plumbness, borehole integrity, and drilling speed,
  - Isolated aquifer zone testing (test well only),
  - Well casing and screen installation,
  - Filter pack material selection and approved placement method, and
  - Annular cement seal installation.
- Well development procedures, including:
  - Initial airlift development between packers,
  - Development by wireline swabbing and bailing (if necessary),
  - Development by pumping,
  - Aquifer pumping and recovery tests, and spinner (flowmeter) survey, and
  - Collection of groundwater samples.
- Downhole video camera and gyroscopic alignment surveys,
- Well disinfection, and
- Wellhead completion.
- Electrical infrastructure
- Civil site plan and yard piping.

### Deliverables

The Consultant will submit an electronic copy (i.e., PDF) of the 100% DRAFT version of the technical plans and specifications to the District for review and comment. One round of comments to the draft will be incorporated and our team will submit an electronic copy in native and PDF formats.

The Consultant will also prepare a planning-level estimate of drilling contractor costs (i.e., Engineer's Estimate) for the proposed drilling, construction, development, and testing of the new production well.

The scope of services assumes that no treatment will be required for the pump test discharge. Should water quality dictate treatment will be required for the pump test, our team can prepare a scope and budget for designing that treatment.

### **2.C.3 Bid Phase Support**

The Consultant will be available to provide support to the District during bidding, including answering questions during the bid process, attending the pre-bid meeting, preparing project addenda, and reviewing the bids and recommending a lowest responsive and responsible bidder to the District.

### **2.C.4 Construction Inspection, Testing and Reporting**

The Consultant will provide complete construction management during well construction and confirm that the construction meets the requirements of the plans and specifications. The Consultant will coordinate with the contracted driller

and provide construction administration and full-time inspection of the mobilization, drilling activities, well construction, pump development and tests, etc. Construction management activities will include review of contractor submittals, review of contractor invoices to ensure accuracy and completeness, review of and response to contractor Requests for Information (RFIs) and change order requests for legitimacy, preparation of a “punch list”, and filing of essential paperwork, correspondence, field notes, etc. Daily email and/or phone updates will be provided along with submittal of relevant photographs and daily field logs.

*\*It is assumed that we will be able to find an existing suitable well for use as a monitoring well during the testing period- design, construction management, and well development for a monitoring well is excluded.*

The scope of services assumes a twelve-month test, the Consultant will implement specific inspection, development, and testing scope:

**Task 2.C.4.a Assistance with Application for Domestic Water Supply Permit Amendment (as needed)** The Consultant will assist the District with the State of California Domestic Water Supply Permit Amendment application process by preparing the Preliminary Well Data Sheet for the new well. The Consultant will submit an electronic copy of the completed data sheet to the District.

**Task 2.C.4.b Preliminary and Final Drinking Water Source Assessment Program (DWSAP) Documents (as needed)** The Consultant will prepare preliminary DWSAP documents to identify potential sources of contamination that could be detrimental to the water quality of the new well. Preparation of the permit documents requires identification of all potential contamination areas (PCAs) within two-, five- and ten-year protection zones for the new well using actual aquifer and well pumping information gathered from existing wells in the area. The protection zones will be delineated using the United States Environmental Protection Agency’s Wellhead Protection Area (WHPA) model and will be shown in relation to PCAs and overlain on a USGS topographical map. A figure showing protection zones and PCAs for the proposed new well will be attached to the DWSAP documents.

The Consultant will submit an electronic copy of all final DWSAP documents for the new well and will forward the documents to the California Division of Drinking Water (DDW) as required.

**Task 2.C.4.c NPDES Permit Compliance** It is assumed that the work shall be performed under the District’s existing National Pollutant Discharge Elimination System (NPDES) permit and that the contractor will be held responsible for NPDES compliance during construction. However, the Consultant will provide on-site supervision to ensure that contractor activities are meeting NPDES and Best Management Practices (BMP) requirements. This will include coordination with the contractor regarding monitoring requirements, inspection during monitoring and sampling of discharges during construction, tabulation of field monitored data, and reporting to the selected water quality analytical laboratory.

**Task 2.C.4.d Pre-Construction Meeting and Pre-Mobilization Coordination with Contractor** The Consultant will attend one (1) pre-

construction meeting with the selected drilling contractor and District personnel to review key issues within the contract documents and technical specifications. In addition, questions will be addressed regarding hydrogeologic and logistical matters. Items to be discussed at the meeting will include (but not be limited to) required submittals and inspections, permitting, discharge issues, work schedule, invoicing, and communication protocols. Additionally, at the time of the pre-construction meeting, the prospective contractor will have the opportunity to visit each well site to satisfy themselves regarding conditions that may affect equipment set up. The Consultant will also coordinate contractor activities prior to mobilization. This will include verifying that the contractor has provided all submittals required by the technical specifications and that equipment delivered to the site meets the requirements of the specifications.

**Task 2.C.4.e Onsite Supervision during Conductor Borehole Drilling and Casing Installation (test well only)** Full-time on-site field supervision will be provided during drilling and logging of the conductor borehole and during installation of the conductor casing (test well only) and sanitary cement seals to ensure that all materials are furnished and installed in accordance with the technical specifications and regulatory requirements.

**Task 2.C.4.f Pilot Borehole Drilling and Geophysical Logging** Field inspection will be provided on a full-time basis during pilot borehole drilling. Formation samples will be collected at 10 ft intervals (or more frequently depending on the stratigraphy encountered). Samples will be identified as to material type and production potential by visually logging them in the field using the Unified Soil Classification System (USCS). Upon completion of the pilot borehole drilling, the Consultant will provide full-time onsite inspection of the geophysical borehole logging (i.e., short- and long-normal resistivity, guard or lateral, spontaneous-potential, gamma-ray, and sonic logs; dual-induction logs may need to be performed within monitoring borehole as an alternative). For cost estimating purposes, it is assumed that the pilot borehole will be approximately 100 ft in depth for each the monitoring well and the test well.

**Task 2.C.4.g Evaluation of Geophysical Borehole Logs and Selection of Interval for Isolated Aquifer Zone Testing (test well only)** Permeable and non-permeable formation material will be identified from the geophysical borehole logs and from the samples collected during drilling. Based on this information, as well as information collected during the drilling process, recommendations will be made for the selection of a zone (i.e., depth intervals) for isolated aquifer zone testing (test well only). The purpose of isolated aquifer zone testing is to determine both yield and water quality from the potential completion interval(s) before determining the final well design.

**Task 2.C.4.h Supervision of Isolated Aquifer Zone Testing and Water Quality Sampling (assumes one zone; test well only).** Once depth intervals for aquifer zone have been identified for selective zone testing, construction of the zone by the contractor will begin. The Consultant will provide part-time supervision during construction and testing of each zone. Zone testing will be performed at discharge rates exceeding 200 gallons per minute (gpm) to ensure that representative sampling of the aquifer is taking

place and that the aquifer is being sufficiently stressed to provide the best available field data. Whenever possible, turbidity measurements taken from the discharge water should be less than 10 nephelometric turbidity units (NTUs) for at least two hours before collecting water quality samples from any given zone.

After the zone has been appropriately developed, water samples will be collected by the Consultant and delivered to a certified laboratory for water quality testing for selected analysis established in the Feasibility Study.

Field measurements will also be collected during the zone test to determine field parameters such as pH, temperature, and electrical conductivity. Additionally, the discharge rate, and static and pumping water levels, will be measured frequently during pumping of each zone such that each zone's productivity can be determined (including pressure head and specific capacity). One sample will be collected from the zone.

The zone selection and recommended water quality analytical suite will be presented to the District for final approval prior to implementation in the field. It is recommended that the groundwater quality samples collected from the zone testing be analyzed on a 24-hour turn-around time (i.e. rush), as the results of these analyses are integral for determining the screen interval(s) for the final well design.

**Task 2.C.4.i Mechanical Grain Size Analysis (test well only).** Using the visual and geophysical logs collected from the pilot borehole, up to four (4) formation samples will be selected for mechanical grain size (i.e., sieve) analysis to assess permeability, sand migration potential, and uniformity coefficients. These analyses will be used as a basis for preparing the custom filter pack and well screen design for the well (test well only).

**Task 2.C.4.j Design of Casing, Screen, and Filter Pack.** Although the anticipated lengths and dimensions of the well casing and screen (and the materials used to manufacture them) will be identified during the preliminary design phase, these details will ultimately be determined based on the results of the borehole lithology, geophysical logs, zone testing, the desired production rate, or monitoring interval.

Use of a properly designed and installed filter pack will control sand production from the wells when pumping. Selection of filter pack material will be determined from mechanical grading analysis and will be designed based on industry standards regarding pack-to-aquifer ratios. The size of the screen openings will be designed to allow a minimal but acceptable amount of filter pack material to move through the screen. This controlled movement of filter pack material will permit the proper development of the filter pack and near-well zone.

Based on results from the mechanical grain size analyses, the Consultant will design the filter pack with a pack to aquifer ratio of between 4 and 20, as well as using Terzaghi's criteria for the movement of fines through the filter pack, and for the permeability of the aquifer and filter pack. Based on geophysical

logs, mechanical grain size analysis, and isolated aquifer zone testing, targeted aquifers will be identified. The final well design will include recommended depth intervals and diameters for the well casing and screens, recommended borehole diameter(s), and the proper screen opening size to complement the filter pack designs. Recommended depths for the well appurtenances and deep annular seals will also be provided as necessary.

**Task 2.C.4.k Borehole Enlargement (Reaming).** During reaming (enlargement) of the pilot borehole to the final design diameter and depth, part-time field supervision will be provided by our team to ensure that the work is performed correctly, and that drilling fluid properties are maintained within the parameters defined by the technical specifications.

**Task 2.C.4.l Installation of Casing, Screen, Filter Pack, and Annular Seal.** Following preparation of the final well design and meeting with the District, full-time inspection will be provided during installation of the casing, screen, filter pack, and annular seal to ensure that all materials are furnished and placed in accordance with the recommended design and technical specifications. Prior to installation, the Consultant will inspect the filter pack material and the well casing and screen for compliance with the specified well design.

**Task 2.C.4.m Initial Well Development by Airlifting and Swabbing.** Initial well development by airlifting and swabbing is an extremely important component of the well completion and development process. The Consultant will provide full-time supervision during the airlift development process and will closely monitor discharge water turbidity and sand content to track the development progress of the well. The Consultant will also provide full-time supervision of the injection of chemical dispersant.

**Task 2.C.4.n Final Well Development.** The Consultant will monitor final development by pumping and surging on a part-time basis. Tests for sand content and specific capacity will be performed frequently to measure the advancement of the development process and to ensure that the well is fully developed before beginning the aquifer pumping tests.

For the monitoring well, the Consultant will monitor final development by pumping and surging on a full-time basis to measure the advancement of the development process and to ensure that each completion is fully developed before the collection of ground water quality samples. Development will continue until water pumped from the well has a turbidity of less than 5 nephelometric turbidity units (NTUs) and field water quality parameters have stabilized. It is anticipated that the monitoring well will require approximately 8 hours of final development by pumping to produce clear water that is free of suspended sediment and considered representative of groundwater.

The Consultant will collect groundwater samples immediately following development of each monitoring well completion. These samples will be collected in laboratory-prepared containers and submitted under chain-of-custody protocol, to a State of California certified laboratory for analysis. Since these ground water quality analyses will provide baseline water quality

signatures for the aquifer(s), it is anticipated that at a minimum, a full Title 22 water quality suite will be required. For cost estimating purposes, it is assumed that cost of analysis will be borne by the selected contractor; therefore, analysis fees are not included in this proposal. The Consultant will coordinate with the selected laboratory, acquire bottles, and deliver the samples.

**Task 2.C.4.o Supervision during Step and Constant Rate Pumping Tests (test well only).** Once the well development process is considered complete, aquifer pumping tests will be performed to determine well and aquifer characteristics. Transducer will be installed in nearby monitoring wells to help perform a drawdown analysis for the aquifer testing.

- Step Drawdown Pumping Test (8 hours): time drawdown measurements will be made to determine specific capacity and well efficiency relationships which are necessary to calculate the optimal production rate and pump setting. Typically, three to four rates are selected for pumping – beginning with the lowest rate and progressing to the highest.
- Constant Rate Pumping and Recovery Test (24 hours): time drawdown and recovery measurements will be made to estimate aquifer parameters. If possible, nearby wells will also be monitored to obtain interference groundwater levels during the test.

Toward the end of the constant rate test, our team will collect groundwater quality samples and deliver them to a certified laboratory for analysis of water quality constituents required by the State of California's Title 22 Rule. For cost estimating purposes, it is assumed that cost of analysis will be borne by the selected contractor; therefore, analysis fees are not included in this proposal. The Consultant will also provide full-time supervision of flowmeter (spinner) survey, typically conducted during the latter portion of the constant rate testing and following water sample collection. The groundwater sample will be collected by the Consultant and delivered to the laboratory for water quality analysis.

**Task 2.C.4.p Supervision of Alignment and Video Survey, and Well Disinfection (test well only).** Following removal of the test pumping equipment and bailing of the bottom of the well, our team will provide full-time supervision of final downhole video survey to document the post-construction condition of the well. The Consultant will also provide supervision of plumbness and alignment surveys, the purpose of which is to measure well verticality and alignment.

**Task 2.C.4.q Final Well Head Completion**

The Consultant will provide part-time supervision of the final wellhead completion to ensure that the well casing and appurtenances are finished as described by the technical specifications and/or well design. The post- construction condition of the well site will also be inspected to ensure that all equipment, materials, and trash have

been removed and that the site has been restored as closely as possible to its original condition.

#### **Task 2.C.4.r Well Completion Summary Report**

At the conclusion of well construction activities, the Consultant will prepare a letter report that summarizes the details of drilling, construction, development, and testing. The report will, at a minimum, include the following:

- Chronology of activities,
- Lithologic logs based on the drill cuttings,
- Geophysical logs,
- An as-built diagram of each well,
- Baseline groundwater quality data,
- California DWR well completion report, and
- Other pertinent data and analytical results.

The Consultant will submit one (1) letter report for both the test and monitoring wells in 100% FINAL format.

#### Deliverables

- Well completion summary report.

#### **Task 2.C.4.s Recommended Pump Setting and Design Discharge Rate**

Data from the pumping tests will be analyzed and recommended operational parameters will be provided to the District in letter format--including design pumping rate, short- and long term drawdown characteristics, well efficiency, and recommended pump setting. The Consultant will attend a virtual meeting with District personnel to discuss the pump design recommendations.

#### **Task 2.C.4.t Long-Term Pump Testing**

The Consultant recommends operating the test well for a period of one (1) year. During the testing period, the groundwater monitoring network will be used to collect data to assess:

- Impacts to water levels and water quality in nearby wells,
- Changes in water levels (piezometric levels) in the aquifer, and
- Changes in groundwater storage in the aquifer.

The monitoring network will include one (1) test well, and up to eight (8) selected existing monitoring wells. No new monitoring wells are proposed. The proposed monitoring network will be provided in the Long-Term Pumping Test Plan (LTPTP), which will include a map showing the monitoring wells, proposed instrumentation and monitoring frequency, Sampling and Analysis Plan (SAP) for continual tracking of water quality changes, and proposed analyses and reporting of data. Collection of long-term water level and water quality data in each monitoring well will use level transducers and conductivity sensors. The level transducers will consist of In-situ Aquatroll 200 devices or equivalent. An In-situ Barotroll will be installed in one of monitoring wells (TBD), which will be used to normalize for atmospheric barometric variation. The Consultant will evaluate seasonal and other temporal variations in source water quality by measuring water level and water quality data. The baseline

groundwater quality will have been sampled after the short-term (24 hour) pumping test. A groundwater sample will also be collected from the eight (8) monitoring wells for baseline water quality. Additional samples will be collected on a quarterly basis for a 12-month period. The quarterly sampling will include the test well and the eight (8) selected monitoring wells. Including the baseline samples, a total of 45 samples will be collected during the long-term testing phase. The water quality samples will be analyzed for the water quality parameters described above. The estimate of costs assumes that the samples will be collected by the Consultant and delivered for laboratory analysis. All laboratory work can be completed on a normal turn around basis. The Consultant will also conduct the quarterly download of water level data.

#### Deliverables

Meetings: Four (4) quarterly monitoring reports, including water level, water quality, and pumping data for the previous quarter. Four (4) quarterly progress meetings.

### **2.C.5 Imported Water Recovery Project - Pump Test and Impact Analysis Report**

The Consultant will prepare an Imported Water Recovery Project – Pump Test and Impact Analysis Report to analyze the results of the pump tests and long-term monitoring including impacts to water levels throughout the monitoring area including existing wells, recommendations for mitigating impacts, if any, and summarize the raw water quality for the purpose of planning treatment processes. At a minimum the report will include:

- A description of the pump installation process,
- A description of activities during well long-term pump test,
- Water levels in both test pump and monitoring wells,
- Water quality of test well and monitoring wells,
- Pump test results,
- Potential aquifer parameters, and
- Any other pertinent data, recommendations, and conclusions.

The draft report will summarize all activities in the phase of work, data collected, results, and recommendation. A final report will be prepared utilizing feedback from the District and project stakeholders.

Data from the pump test and impact analysis report will be used to update the feasibility study. Based on the water quality at the recovery well sites, our team will make recommendations for pre-treatment, demineralization, filtration, disinfection, and other treatment processes to produce a potable water supply meeting State and Federal requirements while considering how quality could change in the future. If the project requires demineralization, we will evaluate brine recovery and discharge options and costs. The Consultant's scope of work includes a review of the need for iron and manganese removal. The report will detail the optimal permanent recovery solution, including recovery wells, sources of power, raw water pipelines, a treatment plant, product water pipelines, associated facilities, land requirements, a construction cost and annual operation and maintenance cost estimate.



**FEE SCHEDULE:**

This is a Time and Material Agreement **not to exceed \$600,000** for Task A – Preliminary Evaluation & Project Planning. District Board of Directors review and approval is required before proceeding to the next task. The Consultant fee schedule is attached.



**AS-NEEDED CONTRACT EXPENDITURES REPORT  
MAY-JUNE 2022**

| CONTRACT INFO  | FUND SOURCE | ASSIGN. NO. | STATUS | DATED      | DESCRIPTION  | CONTRACT AMOUNT | AUTHORIZED ASSIGNMENT |
|--|-------------|-------------|--------|------------|--|-----------------|-----------------------|
| <b>Title: As-Needed Land Surveying Services, PSA 18-16   Firm: Johnson-Frank &amp; Assoc.   Expires: 8/29/22   CO-01 \$0 NCE BoD 6/22/21.</b>                |             |             |        |            |  |                 |                       |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |  | \$ 50,000.00    |                       |
|  | CIP         | 2021-04     | Closed | 5/3/2021   | Prepare Plat Map - Thoroughbred Lift Station   |                 | \$ 22,403.50          |
|  | CIP         | 2022-05     | Open   | 5/10/2022  | Legal Descriptions/Plat Maps/Easements - Thoroughbred Lift Station   |                 | \$ 6,600.00           |
|  |             |             |        |            | Unspecified  |                 | \$ 5,702.10           |
|  |             |             |        |            |  | <b>TOTALS:</b>  | \$ 50,000.00          |
| <b>Title: As-Needed Land Surveying Services, PSA 18-14   Firm: KDM Meridian, Inc.   Expires: 8/29/22   CO-01 \$50K BoD 5/26/20, CO-02 \$50K BoD 6/22/21.</b> |             |             |        |            |  |                 |                       |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |  | \$ 150,000.00   |                       |
|  | CIP         | 2021-14     | Closed | 1/29/2021  | Survey & staking of easements - Rancho Amigos. (Additional \$815 was approved by staff.)                             |                 | \$ 7,530.00           |
|  | CIP         | 2021-15     | Closed | 5/27/2021  | Survey & staking of easement - Turner Pump Station. (Staff evaluating if more work may be needed.)                   |                 | \$ 5,665.00           |
|  | NON-CIP     | 2021-16     | Closed | 7/22/2021  | Prepare documentation to file a quit claim for Rainbow easement at Fire Station 4.                                   |                 | \$ 1,500.00           |
|  | NON-CIP     | 2021-17     | Closed | 7/29/2021  | Bonsall Park prepare documentation for new easement and quit claim documentation for existing easement.              |                 | \$ 7,240.00           |
|  |             |             |        |            | Unspecified  |                 | \$ 60,887.00          |
|  |             |             |        |            |  | <b>TOTALS:</b>  | \$ 150,000.00         |
| <b>Title: As-Needed Land Surveying Services, PSA #18-15   Firm: Right-of-Way Eng.   Expires: 8/29/22   CO-01 \$50K BoD 5/26/20, CO-02 \$50K BoD 6/22/21.</b> |             |             |        |            |  |                 |                       |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |  | \$ 150,000.00   |                       |
|  | CIP         | 2021-10     | Closed | 1/11/2021  | Topographic Survey - Rainbow Heights Road  |                 | \$ 8,820.00           |
|  | CIP         | 2021-11     | Closed | 1/19/2021  | Easement Survey - Skycrest Drive.  |                 | \$ 7,710.00           |
|  | CIP         | 2021-12     | Closed | 2/4/2021   | Easement Survey, Legal Desc./Plat Map - Camino Del Cielo. (Additional \$518 was approved by staff.)                  |                 | \$ 5,490.00           |
|  | CIP         | 2021-13     | Closed | 2/23/2021  | Easement Survey/County ROW Marking, Topo Map - Camino Del Cielo.   | \$ 103,700.70   | \$ 2,320.00           |
|  | CIP         | 2021-14     | Closed | 2/23/2021  | Easement Survey - Skycrest Drive.  |                 | \$ 4,720.00           |
|  | CIP         | 2022-15     | Closed | 1/25/2022  | Old Mission Road (LS-1) - Legal Description & Plat Map   |                 | \$ 2,940.00           |
|  | CIP         | 2022-16     | Closed | 2/1/2022   | River Village-Daniels Market (LS-1) - Staking Easements Centerlines/Limits (Additional \$840 was approved by staff.) |                 | \$ 1,470.00           |
|  | CIP         | 2022-17     | Open   | 4/5/2022   | Hutton/Turner - Locate Existing Easements & Stake Limits.  |                 | \$ 6,940.00           |
|  | CIP         | 2022-18     | Open   | 4/28/2022  | Hutton Site - Legal Description, Easements, Plats.   |                 | \$ 6,790.00           |
|  |             |             |        |            | Unspecified  |                 | \$ 32,569.30          |
|  |             |             |        |            |  | <b>TOTALS:</b>  | \$ 150,000.00         |
| <b>Title: As-Needed Civil Engineering Services, PSA #19-16   Firm: Dudek   Expires: 6/25/22   CO-01 (\$100K) BoD 6/22/21.</b>                                |             |             |        |            |  |                 |                       |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |  | \$ 50,000.00    |                       |
|  |             |             |        |            | Unspecified  |                 | \$ 38,212.50          |
|  |             |             |        |            |  | <b>TOTALS:</b>  | \$ 50,000.00          |
| <b>Title: As-Needed Civil Engineering Services, PSA #19-17   Firm: Omnis Consulting, Inc.   Expires: 7/1/22   CO-01 \$150K BoD 6/23/20.</b>                  |             |             |        |            |  |                 |                       |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |  | \$ 300,000.00   |                       |
|  | NON-CIP     | 2019-01     | Closed | 7/16/2019  | PS&E Pavement Repair - Dentre De Lomas.  |                 | \$ 8,890.00           |
|  | CIP         | 2019-02     | Closed | 8/1/2019   | Olive Hill Estates Transmission Water Main.  |                 | \$ 73,700.00          |
|  | CIP         | 2019-03     | Closed | 10/14/2019 | Vista Valley Retaining Wall Design.  |                 | \$ 23,495.00          |
|  | CIP         | 2019-04     | Closed | 12/3/2019  | Sarah Ann to Gird Road Force Main Replacement.   |                 | \$ 22,790.00          |
|  | CIP         | 2020-05     | Closed | 3/24/2020  | Gird Road Water Main Upsize.   |                 | \$ 21,120.00          |
|  | CIP         | 2020-06     | Closed | 8/5/2020   | Caltrans Encroachment Permit Renewal.  |                 | \$ 6,410.00           |
|  | NON-CIP     | 2020-07     | Open   | 10/14/2020 | Standard Drawing - CAD Updates.  |                 | \$ 4,400.00           |
|  | NON-CIP     | 2020-08     | Closed | 10/29/2020 | PEIR Pipe Alignment Analysis.  |                 | \$ 19,920.00          |
|  | CIP         | 2021-09     | Closed | 4/19/2021  | Sarah Ann Waterline Replacement.   |                 | \$ 6,800.00           |
|  | CIP         | 2021-10     | Closed | 4/19/2021  | Rainbow Water Quality Improvement Relocation Design. Amended for additional design services.                         |                 | \$ 13,900.00          |
|  | CIP         | 2021-11     | Open   | 6/9/2021   | Wilt Road Water Pipeline Design.   |                 | \$ 45,905.00          |
|  | CIP         | 2021-10A    | Closed | 10/26/2021 | Rainbow Water Quality Improvement Relocation Design. Amended for additional design services.                         |                 | \$ 6,290.00           |
|  | CIP         | 2021-12     | Closed | 12/15/2021 | Additional Services for Wilt Road Water Pipeline Design.   |                 | \$ 23,090.00          |
|  | NON-CIP     | 2021-13     | Closed | 2/3/2022   | Rice Canyon Road - Prepare Street Improvement Plans  |                 | \$ 8,630.00           |
|  | CIP         | 2022-14     | Open   | 6/21/2022  | Gird Road Water Main Upsize. Amended for additional design services.   |                 | \$ 5,865.00           |
|  |             |             |        |            | Unspecified  |                 | \$ 8,795.00           |
|  |             |             |        |            |  | <b>TOTALS:</b>  | \$ 300,000.00         |
| <b>Title: As-Needed Civil Engineering Services, PSA #19-18   Firm: HydroScience Eng., Inc.   Expires: 6/25/22   CO-01 \$40K BoD 6/22/21.</b>                 |             |             |        |            |  |                 |                       |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |  | \$ 110,000.00   |                       |
|  | CIP         | 2019-01     | Closed | 12/18/2019 | Live Oak Park Road Bridge Crossing.  |                 | \$ 42,020.00          |
|  | CIP         | 2022-02     | Open   | 2/2/2022   | Additional Services for Live Oak Park Road Bridge Crossing. Bid Support/Engineering Services during Construction.    |                 | \$ 24,290.00          |
|  |             |             |        |            | Unspecified  |                 | \$ 43,690.00          |
|  |             |             |        |            |  | <b>TOTALS:</b>  | \$ 110,000.00         |

**AS-NEEDED CONTRACT EXPENDITURES REPORT  
JUNE 2022**

| CONTRACT INFO  | FUND SOURCE | ASSIGN. NO. | STATUS | DATED      | DESCRIPTION   | CONTRACT AMOUNT | AUTHORIZED ASSIGNMENT |               |
|--|-------------|-------------|--------|------------|---|-----------------|-----------------------|---------------|
| <b>Title: As-Needed Real Estate Appraisal Services, PSA #19-19   Firm: Anderson &amp; Brabant, Inc.   Expires: 6/25/22   CO-01 \$20K BoD 6/22/21.</b>              |             |             |        |            |   |                 |                       |               |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |   | \$ 40,000.00    |                       |               |
|  | CIP         | 2021-03     | Closed | 4/28/2021  | Hutton Pump Station Site Appraisal. (Staff authorized additional work.)             |                 | \$ 7,500.00           |               |
|  | CIP         | 2021-04     | Closed | 8/11/2021  | Thoroughbred Lift Station Appraisal. (Four Reports)                                 |                 | \$ 17,500.00          |               |
|  | CIP         | 2022-05     | Closed | 2/1/2022   | S. Mission Road (LS-1) - Fair Market Appraisal                                      |                 | \$ 3,500.00           |               |
|  |             |             |        |            | Unspecified   |                 | \$ 500.00             |               |
|  |             |             |        |            |   | <b>TOTALS:</b>  | \$ 40,000.00          | \$ 40,000.00  |
| <b>Title: As-Needed Real Estate Appraisal Services, PSA #19-20   Firm: ARENS Group, Inc.   Expires: 6/11/22   CO-01 \$20 BoD 6/22/21.</b>                          |             |             |        |            |   |                 |                       |               |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |   | \$ 40,000.00    |                       |               |
|  |             |             |        |            | Unspecified   |                 | \$ 28,200.00          |               |
|  |             |             |        |            |   | <b>TOTALS:</b>  | \$ 40,000.00          |               |
| <b>Title: As-Needed Geotechnical Services, PSA #19-39   Firm: Leighton Consulting, Inc.   Expires: 11/13/22.</b>   |             |             |        |            |   |                 |                       |               |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |   | \$ 100,000.00   |                       |               |
|  | CIP         | 2021-02     | Closed | 4/15/2021  | Turner Pump Station geotechnical exploration.                                       |                 | \$ 14,300.00          |               |
|  | CIP         | 2021-03     | Open   | 5/15/2021  | Hutton Pump Station geotechnical exploration.                                       |                 | \$ 8,450.00           |               |
|  |             |             |        |            | Unspecified   |                 | \$ 68,620.00          |               |
|  |             |             |        |            |   | <b>TOTALS:</b>  | \$ 100,000.00         | \$ 100,000.00 |
| <b>Title: As-Needed Geotechnical Services, PSA #19-40   Firm Ninyo &amp; Moore G.E.S   Expires: 11/1/22.</b>   |             |             |        |            |   |                 |                       |               |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |   | \$ 100,000.00   |                       |               |
|  | NON-CIP     | 2021-03     | Closed | 5/6/2021   | Dentro De Lomas - Geotech observation & material testing. Proj. #1                  |                 | \$ 6,097.00           |               |
|  | CIP         | 2022-04     | Open   | 2/9/2022   | Rice Canyon Road Improvements geotech observation & material testing.               |                 | \$ 3,422.00           |               |
|  |             |             |        |            | Unspecified   |                 | \$ 73,728.00          |               |
|  |             |             |        |            |   | <b>TOTALS:</b>  | \$ 100,000.00         | \$ 100,000.00 |
| <b>Title: As-Needed Geotechnical Services, PSA #19-41   Firm: ATLAS (SCST, LLC)   Expires 11/20/22.</b>  |             |             |        |            |   |                 |                       |               |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |   | \$ 100,000.00   |                       |               |
|  |             |             |        |            | Unspecified   |                 | \$ 63,381.00          |               |
|  |             |             |        |            |   | <b>TOTALS:</b>  | \$ 100,000.00         | \$ 100,000.00 |
| <b>Title: As-Needed Construction Management &amp; Insp. Services, PSA #20-01   Firm: Harris &amp; Associates   Expires: 1/28/23   CO-01 \$20K BoD 6/22/21.</b>     |             |             |        |            |   |                 |                       |               |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |   | \$ 170,000.00   |                       |               |
|  | CIP         | 2022-05     | Open   | 1/6/2022   | Continued District Wide Inspection Services.  |                 | \$ 20,000.00          |               |
|  |             |             |        |            | Unspecified   |                 | \$ 12,730.00          |               |
|  |             |             |        |            |   | <b>TOTALS:</b>  | \$ 170,000.00         | \$ 170,000.00 |
| <b>Title: As-Needed Construction Management &amp; Insp. Services, PSA #20-02   Firm: ReillyConstruction Mnmt.   Expires: 1/28/23   CO-01 (\$100K) BoD 6/22/21.</b> |             |             |        |            |   |                 |                       |               |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |   | \$ 50,000.00    |                       |               |
|  |             |             |        |            | Unspecified   |                 | \$ 50,000.00          |               |
|  |             |             |        |            |   | <b>TOTALS:</b>  | \$ 50,000.00          | \$ 50,000.00  |
| <b>Title: As-Needed Environmental Services, PSA #20-03   Firm: Helix Environmental   Expires: 2/25/23   CO-01 \$110 BoD 6/22/21, CO-02 \$115K BoD 12/7/21.</b>     |             |             |        |            |   |                 |                       |               |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |            |   | \$ 325,000.00   |                       |               |
|  | CIP         | 2021-07     | Closed | 3/25/2021  | Rainbow Heights Pipe Installation - Bird Survey.                                    |                 | \$ 5,000.00           |               |
|  | CIP         | 2021-08     | Open   | 5/21/2021  | RMWD HQ - Biological Survey & Buffer Mapping.                                       |                 | \$ 11,684.00          |               |
|  | CIP         | 2021-09     | Open   | 11/16/2021 | CIP General Environmental Support Services  |                 | \$ 25,000.00          |               |
|  | CIP         | 2021-10     | Open   | 11/30/2021 | Hutton & Turner Pump Stations - Cultural, Biological, Noise Reports. CEQA - IS/MND. |                 | \$ 46,603.00          |               |
|  | CIP         | 2021-11     | Open   | 12/8/2021  | Rice Canyon Pipeline - Cultural & Tribe Monitoring                                  |                 | \$ 111,400.00         |               |
|  | CIP         | 2022-12     | Open   | 1/10/2022  | LS-1 Environmental Compliance   |                 | \$ 48,798.00          |               |
|  |             |             |        |            | Unspecified   |                 | \$ (6,801.00)         |               |
|  |             |             |        |            |   | <b>TOTALS:</b>  | \$ 325,000.00         | \$ 325,000.00 |

**AS-NEEDED CONTRACT EXPENDITURES REPORT  
JUNE 2022**

| CONTRACT INFO  | FUND SOURCE | ASSIGN. NO. | STATUS | DATED    | DESCRIPTION  | CONTRACT AMOUNT | AUTHORIZED ASSIGNMENT |
|--|-------------|-------------|--------|----------|--|-----------------|-----------------------|
| <b>Title: As-Needed Environmental Services, PSA #20-04   Firm: Rincon Consultants   Expires: 2/25/23   CO-01 \$(15K) BoD 6/22/21.</b>        |             |             |        |          |  |                 |                       |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |          |  | \$ 85,000.00    |                       |
|  | NON-CIP     | 22-02       | Open   | 3/3/2022 | Nesting Bird Survey at Gopher, Morro and Canonta tanks, prior to tree/vegetation clearing. |                 | \$ 4,185.25           |
|  |             |             |        |          | Unspecified  |                 | \$ 77,574.75          |
|  |             |             |        |          |  | <b>TOTALS:</b>  | <b>\$ 85,000.00</b>   |
| <b>Title: As-Needed Environmental Services, PSA #20-05   Firm: Michael Baker International   Expires: 3/24/23   CO-01 (15K) BoD 6/22/21.</b> |             |             |        |          |  |                 |                       |
| <b>CONTRACT AMOUNT:</b>  |             |             |        |          |  | \$ 85,000.00    |                       |
|  |             |             |        |          |  |                 |                       |
|  |             |             |        |          | Unspecified  |                 | \$ 85,000.00          |
|  |             |             |        |          |  | <b>TOTALS:</b>  | <b>\$ 85,000.00</b>   |

