



**SAN BERNARDINO
VALLEY** | A REGIONAL WATER
AGENCY SINCE 1954

**BOARD OF DIRECTORS WORKSHOP - RESOURCES/ENGINEERING
2:00 pm Tuesday, October 10, 2023**

In Person:

380 East Vanderbilt Way
San Bernardino, CA 92408

Online via Zoom:

<https://sbvmwd.zoom.us/j/82492309440>

Meeting ID: 824 9230 9440

PASSCODE: 3802020

By Telephone:

Dial-in Info: (877) 853 5247 US Toll-free

Meeting ID: 824 9230 9440

PASSCODE: 3802020

If you are unable to participate online or by telephone, you may also submit your comments and questions in writing for the District's consideration by sending them to comments@sbvmwd.com with the subject line "Public Comment Item #" (insert the agenda item number relevant to your comment) or "Public Comment Non-Agenda Item". Submit your written comments by **6:00 p.m. on Monday, October 9, 2023**. All public comments will be provided to the Board President and may be read into the record or compiled as part of the record.

IMPORTANT PRIVACY NOTE: Online participants **MUST** log in with a Zoom account. The Zoom app is a free download. Please keep in mind: (1) This is a public meeting; as such, the virtual meeting information is published on the World Wide Web and available to everyone. (2) Should you participate remotely via telephone, your telephone number will be your "identifier" during the meeting and available to all meeting participants; there is no way to protect your privacy if you elect to call in to the meeting.



SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
380 E. Vanderbilt Way, San Bernardino, CA 92408

BOARD OF DIRECTORS' WORKSHOP - RESOURCES/ENGINEERING
2:00 PM Tuesday, October 10, 2023

CALL TO ORDER

1) **INTRODUCTIONS**

2) **PUBLIC COMMENT**

Members of the public may address the Board regarding any item within the subject matter jurisdiction of the Board; however, no action may be taken on off-agenda items except as authorized by law. Each speaker is limited to a maximum of three (3) minutes.

3) **PRESENTATION**

3.1 Presentation on Santa Ana River Freshwater Health Index (20 min) - Page 2
[Staff Memo - Presentation on Santa Ana River Freshwater Health Index](#)

4) **DISCUSSION AND POSSIBLE ACTION ITEMS**

4.1 Proposed Governance Approach for the Proposed Sites Reservoir Project (20 min) - Page 4
[Staff Memo - Sites Governance Approach](#)

4.2 Status Update on the Bunker Hill Basin Regional Recycled Water Coalition (30 min) - Page 6
[Staff Memo - Status Update on the Bunker Hill Basin Regional Recycled Water Coalition Amendment No. 1 to the Cost Share Agreement for Bunker Hill-B Management Zone Feasibility Study](#)
[Amendment No. 1 to the Memorandum of Understanding for The Mitigation of Salt Loading in The Bunker Hill-B Management Zone](#)

5) **FUTURE BUSINESS**

6) **ADJOURNMENT**

DATE: October 10, 2023
TO: Board of Directors' - Resources/Engineering
FROM: Kai Palenscar, Environmental Compliance and Permitting Program Manager
SUBJECT: Presentation: Santa Ana River Freshwater Health Index

Staff Recommendation

Receive and File.

Background Summary

The Freshwater Health Index (FHI) is a comprehensive tool for assessing the overall health of a watershed. It provides a quantitative way to compare watershed health over time and/or between watersheds. The FHI is comprised of three components: Ecosystem Vitality, Ecosystem Services, and Governance and Stakeholders. The University of California, Riverside (UCR) is currently compiling data from many sources within the watershed that will be used to create a FHI for the Santa Ana River. This tool has been used in several large river systems around the globe.

In July 2023, UCR and San Bernardino Valley staff cooperatively prepared an application for a University of California grant that would have funded a UCR graduate student (Gary Qin) to complete the FHI for the Santa Ana River Watershed and would have funded a portion of San Bernardino Valley staff time to acquire data and support this scientific research. Unfortunately, this application was not successful, however, we continue to seek grant opportunities to continue the effort. A presentation will be given during the workshop by the UCR research team developing the FHI study on the current status and next steps.

District Strategic Plan Application

This effort demonstrates our values of being collaborative, innovative, and trustworthy through continued pursuit of regional scale, partnership-based research efforts as a basis for decisions of the agency. It also supports our strategies of being science based and developing integrated solutions that optimize value for our watershed. Although this work is not a component of the Upper Santa Ana River Habitat Conservation Plan (HCP), an assessment of the health of the

freshwater ecosystems of the Santa Ana River Watershed will establish a baseline and will be useful in tracking the progress of regional, including those of the HCP, conservation, and water-related projects. It also provides valuable information to the many communities living and working adjacent to the Santa Ana River and can identify areas needing increased or continued investment such as flood control, water quality, stormwater management, ecological function, community access and recreational opportunities, public safety, and many others. Tracking the overall health and function of the watershed will provide metrics for San Bernardino Valley to use to show progress on achieving multiple Goals and Objectives set forth in the Strategic Plan.

Fiscal Impact

There is no fiscal impact.

DATE: October 10, 2023

TO: Board of Directors' Workshop – Resources/Engineering

FROM: Bob Tincher, Chief of State Water Initiatives/Deputy General Manager

SUBJECT: Proposed Governance Approach for the Sites Reservoir Project

Staff Recommendation

Provide any feedback on the proposed governance approach for the Sites Reservoir Project.

Summary

The proposed governance approach for the Sites Reservoir Project is essentially based upon the same approach currently being utilized by the State Water Project. The table below compares some of the general elements of the proposed approach for the Sites Reservoir Project with the existing structure for the State Water Project:

Element	State Water Project	Proposed Sites Reservoir
Own	DWR	Sites JPA (local agencies)
Operate/Maintain	DWR	Sites Reservoir Committee (investors)
Cost	Paid by investors	Paid by investors
Benefits	Proportioned by investment	Proportioned by investment
Legal Agreement	Contract	Contract
Future Contract Changes	Considered by Investor Boards	Considered by Investor Boards

At this workshop, staff will provide an overview of the proposed governance approach for the Sites Reservoir Project and receive any feedback from the Board.

Background

As a result of a series of endangered species protection decisions in the Sacramento - San Joaquin Delta, the average water supply from the State Water Project has been reduced by about 20% (20,000 af per year reduction for San Bernardino Valley) since 2007 with possible future reductions likely due to ongoing fish population concerns. To help overcome these reductions, San Bernardino Valley and many other State Water Contractors are investing in

two projects that will help restore the lost supply and mitigate the risk of any further reductions: the Delta Conveyance Project (DC) and the Sites Reservoir Project (Sites). Sites has been anticipated for more than 30 years. It was originally envisioned as part of, what was then referred to, as Stage II of the State Water Project which was administered by DWR until 2010 when the Sites Reservoir [Joint Powers] Authority took over. Sites is proposed as a 1.5 million acre-foot off-stream reservoir that would be filled from several diversions off the Sacramento River. Up to 50% of the annual yield is being reserved for public benefit purposes like fish habitat that would be funded with Proposition 1 grants and other State and Federal funding. The remaining annual yield is being purchased for water supply by various water agencies throughout the State of California.

The Sites project conducted the most extensive water availability analysis in California history with a wide range of possible scenarios that demonstrated there is enough water in the Sacramento River to fill Sites Reservoir after fulfilling all the other existing water rights and environmental needs. In every scenario, Sites could fill to its capacity of 1.5 million acre-feet (there is actually more than 1.5 million acre-feet available). Although the exact amount of water will vary each year, the results show that an annual average of about 658,000 acre-feet of water would be available for Sites. If Sites was in place in 2023, it would have captured about 700,000 acre-feet of water.

San Bernardino Valley is the second largest water agency investor in Sites at about 10% of the total project which will provide 133,408 acre-feet of storage and an estimated, average water supply benefit of about 14,000 acre-feet per year.

District Strategic Plan Application

Supplemental water from the State Water Project helps San Bernardino Valley achieve its mission to work collaboratively to provide a reliable and sustainable water supply to support the changing needs of our region's people and environment. The Sites Reservoir Project also helps San Bernardino Valley achieve its Goal 2.1 Recover lost supply reliability from the State Water Project.

Fiscal Impact

None

DATE: October 10, 2023
TO: Board of Directors' Workshop – Resources/Engineering
FROM: Leo Ferrando, Assistant Chief Engineer
SUBJECT: Status Update on the Bunker Hill Basin Regional Recycled Water Coalition

Staff Recommendation

At the request of the Board, Staff is providing the Board of Directors (BOD) with an update on the status of the Bunker Hill Basin Regional Recycled Water Coalition (Coalition). Additionally, Staff is also seeking the BOD's direction on the next steps, including directing staff to place the amendments to the Memorandum of Understanding (MOU) and Cost Share Agreement for the Coalition to the next Board of Directors' meeting for consideration.

Summary

On February 21, 2023, the BOD approved a MOU with East Valley Water District (EVWD), the City of San Bernardino Municipal Water Department (SBMWD), and the City of Redlands regarding the formation of the Coalition. During the meeting, the BOD also approved a Cost Share Agreement (Agreement) and a Professional Services Contract with Rincon Consultants, Inc. related to the Mitigation of Salt Loading in the Bunker Hill-B Basin Management Zone. Under the MOU, among other things, the Parties agreed to work together in developing a Feasibility Study. The costs of these efforts will be shared equally at 25% each among the agencies.

As the administering agency on behalf of the Coalition, San Bernardino Valley (Valley) prepared a request for proposals (RFP) for the Study, issued the RFP, and received three (3) proposals. Upon completion of in-depth review, discussion, and interview process, it was determined that WSC, Inc. is the best qualified team for the Feasibility Study. The total proposal fee is \$304,731 with an anticipated schedule of approximately 18 months. The updated cost has been incorporated into Amendment No.1 for the Cost Share Agreement for the Bunker Hill-B Management Zone Feasibility Study.

Together with the scope and fee for the Feasibility Study, the Parties have been preparing amendments to the Agreement and MOU that include clarifications regarding the next steps in the

development of regional salt mitigation in the Bunker Hill Basin where Valley will continue to serve as a facilitator, i.e., convener, and as the Administering Agency pursuant to Agreement, thus Valley will not directly bring new capital, operational, nor maintenance investments to fund a potential future regional desalter. However, Valley will support efforts by the Parties to obtain and administer outside funding for a potential desalter, such as State or Federal grants and/or potential contributions from other basin stakeholders. Moreover, Valley will redirect Local Resource Investment Program (LRIP) payments at the request of LRIP parties. Each Party is ultimately responsible for mitigating salinity impacts from their respective recycled water projects.

On the other hand, in anticipation of recycled water recharge in the Weaver Basins soon, EVWD and Valley staff have convened to develop a Joint Use Agreement for the future operations and maintenance of the Regional Recycled Water System, including the Regional Recycled Pipeline and the Weaver Basins that are currently under construction. Staff will bring the agreement to the BOD at a future meeting for consideration following the full development of the terms.

Background

An MOU and a cost-share Agreement were approved by the BOD on the February 21, 2023 meeting with EVWD, SBMWD, and the City of Redlands for Valley to facilitate the permitting process with the Regional Board and to meet its recycled water policy. The MOU establishes the framework for mitigating total dissolved solids (TDS, salt) loading in the Bunker Hill-B management zone. Under the MOU, among other things, the Parties also agreed to work together in developing a feasibility study with an estimated cost of between \$250,000 and \$350,000, which will be shared equally among the four (4) agencies.

As agreed to, in the MOU, the Parties collaborated through the “Steering Committee” (Committee), comprised of the General Managers of each of the four Parties or their designees, to oversee and direct the selection of a consultant and preparation of the Feasibility Study. Valley, as the administering agency on behalf of the Coalition and, in concurrence with the rest of the Committee, issued the RFP on April 25, 2023. Following the issuance of the RFP, three proposals were received. Below is a summary of the three (3) firms that submitted proposals:

<u>Entity</u>	<u>Project Schedule</u>	<u>Cost Estimate</u>	<u>Ranking</u>
WSC, Inc.	18 Months	\$304,731	1st
Firm B	15 Months	\$448,618	2nd
Firm C	15 Months	\$296,694	3rd

An in-depth staff review, discussion, and interview process took place by Committee members, and it was determined that WSC, Inc. was the best team for the Feasibility Study. The total proposal not-to-exceed amount is \$304,731, which is being proposed to be equally shared among the four agencies, or approximately \$76,200 each. The timeline for completion of the Study is 18 months with the expected completion by April 2025. The main tasks identified in this proposal are divided into five tasks, as depicted below:

<u>Tasks</u>	<u>Description</u>	<u>Included Scope of Work</u>
1	Project Management and Meetings	Meetings, workshops, routine coordination, updates, and progress report preparations.
2	Kickoff and Data Collection	Kickoff meeting, data collection, and related document review.
3	Alternative Salt Mitigation Strategies	Identify conceptual alternative salt mitigation strategies, refine and estimate benefit/cost analysis for alternatives.
4	Draft Feasibility Study	Compile identification and analysis of alternative salinity management strategies into a Draft Feasibility Study.
5	Final Feasibility Study	Review and incorporate Coalition comments from the Draft.

In addition to WSC's qualifications and significant experience leading regional water resources planning projects in the Santa Ana River Watershed, WSC assembled a team that includes engineering support from Trussell Technologies. This specialty sub-consultant brings expertise in membrane treatment, brine disposal, and potable reuse projects.

The Feasibility Study will analyze a range of potential salinity management alternatives, and the ultimate solution could include multiple actions that form an optimized strategy to achieve the desired outcome. For example, a possible approach could consist of the future construction of a regional desalter located at SBMWD's Tertiary Treatment System or EVWD's Sterling Natural Resource Center to reduce TDS and salts using reverse osmosis (RO) or other technology in the discharges. The location and option of a potential desalter will depend on the cost/benefit analysis performed as part of this Study. The Parties have agreed that, per the MOU, the assignment of responsibility for salt mitigation will be based on the mass loading of salts to the basin by the Parties' recycled water contributions and overall benefit to the basin.

On the other hand, in anticipation of EVWD's conveyance and recharge of recycled water through the Regional Recycled Water System, EVWD and Valley staff have initiated discussions and developed fundamental principles for a Joint Use Agreement regarding the future operations and

maintenance of the System, including the Regional Recycled Water Pipeline and the Weaver Basins. The principles include each Party's responsibilities regarding cleaning of the basins, repairs on the facilities, and water quality reporting requirements. Staff will continue to work with the partners to develop the principles and agreement. Following the full development of the Joint Use Agreement and its terms, staff will bring this agreement to the Recycled Water Ad-Hoc Committee and then to the full Board for consideration soon. These facilities are expected to be completed and ready for operation around December 2023.

District Strategic Plan Application

The effort is consistent with the Mission Statement to work collaboratively to provide a reliable and sustainable water supply to support the changing needs of our region's people and environment, specifically through driving science-based decision-making, proactive risk management, and effective communication and engagement.

Fiscal Impact

The estimated cost for the Feasibility Study of \$304,731 was anticipated and included in the FY 2023-24 General Fund Budget under Line Item No. 6360 – Consultants, of which San Bernardino Valley's share is 25%, or approximately 76,200.

Attachments

1. Amendment No. 1 to the Cost Share Agreement for Bunker Hill-B Management Zone Feasibility Study
2. Amendment No. 1 to the Memorandum of Understanding for The Mitigation of Salt Loading in The Bunker Hill-B Management Zone

COST SHARE AGREEMENT FOR BUNKER HILL-B MANAGEMENT ZONE FEASIBILITY STUDY

This Cost Sharing Agreement for the preparation of a Feasibility Study related to the Mitigation of Total Dissolved Solids (TDS, Salt) Loading in the Bunker Hill-B Management Zone is entered into and effective on the 9th day of March 2023 among the following listed Signatories: San Bernardino Valley Municipal Water District (“Valley District”), East Valley Water District (“EVWD”), City of San Bernardino Municipal Water Department (“San Bernardino”), and City of Redlands (“Redlands”), collectively referred to as the “Parties”.

Recitals

WHEREAS, the State Water Resources Control Board’s Recycled Water Policy encourages public agencies to recycle municipal wastewater, including in the development of groundwater recharge projects, to enhance the State’s existing water supply; and

WHEREAS, the Parties, together with a number of other water agencies, are working together to develop a collaborative regional plan – the Upper Santa Ana River Watershed Salt & Nutrient Management Plan – that increases the use of recycled water for groundwater replenishment and other purposes, while also managing groundwater quality to provide the maximum benefits to the State; and

WHEREAS, the Parties believe that through their cooperative work, they can treat and discharge recycled water in a manner that will maximize benefits to the Bunker Hill-B Groundwater Management Zone, the Parties, and their ratepayers; and

WHEREAS, using recycled water to replenish the Bunker Hill-B Groundwater Management Zone provides a drought tolerant water supply that improves water supply reliability for the Parties and the region and also provides a drought buffer for those agencies in the event of a prolonged drought; and

WHEREAS, the Parties will collaborate on a Feasibility Study (conceptual design and engineering, benefits analysis, economic modeling for cost share) for a regional desalter, to be completed by September 2024; and

WHEREAS, the Parties believe that there is potential to pursue and apply for available and qualifying grants, such as the WaterSMART FY2023 Water Recycling and Desalination Planning Grant Program.

WHEREAS, the Feasibility Study is expected to serve as supporting documentation for future funding pursuits; and

WHEREAS, the Parties wish to establish and agree to a framework for sharing costs associated with the preparation of the Feasibility Study and related facilitation services.

Agreements

NOW, THEREFORE, the Parties agree as follows:

1. Term. This Agreement shall be effective on the date of the last signature to this agreement, and shall remain in effect until December 31, 2024, unless terminated earlier as provided herein. Termination or expiration of this Agreement will not excuse any Party from payment of costs incurred under this Agreement prior to the termination or expiration date.
2. Feasibility Study Steering Committee. The Parties will collaborate via committee made up of the General Managers of each of the four Parties, or their designees (“Steering Committee”), the purpose of which to be shall oversee and direct the selection of a consultant and preparation of the Feasibility Study. To support the work of the committee, the Parties intend to engage a consultant to provide facilitation services. The costs of the Feasibility Study preparation and of the associated facilitation services will be shared equally among the parties. All decisions shall be made on a unanimous basis.
3. Agreement to Share Costs. Each Party will be responsible for 25% of the invoiced costs associated with the development of the Feasibility Study, the associated facilitation services, and grant assistance services. Upon selection of final consultants for this work product, this Agreement will be amended to include as an exhibit the final scope of work and estimated budget for each of those consultant services.
4. Administering Agency: An Administering Agency will be appointed by the members of the Steering Committee by unanimous agreement of each Party’s designated representative. The Administering Agency will be responsible for day-to-day oversight of the consultant, invoicing of costs, and providing progress reports to the Steering Committee. Valley District will be the initial Administering Agency.
5. Contracting for Feasibility Study. The Administrating Agency shall, in cooperation with the Steering Committee, prepare a Request for Proposals, identify appropriate consultant(s), and enter into a contract for the preparation of the Feasibility Study.
6. Contracting for Grant Assistance. The Parties agree to pursue qualifying grants to assist with potential funding for planning, design, and future construction of the regional desalter project. The Parties agree to apply any potentially awarded grants towards the costs of the regional desalter project.
7. Invoicing and Payment of Costs. The Administering Agency will submit invoices to each of the Parties for work based on the cost-share percentages specified in Section 3 of this Agreement. Invoices will be provided to the Parties quarterly, and are payable within 30 days of receipt.
8. Amendment. This Agreement may be amended from time to time. No alteration, amendment, or variation of this Agreement shall be valid unless made in writing and signed by all Parties.

9. Notice. All notices, requests, demands, or other communications required or permitted under this Agreement shall be addressed as follows:

SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

Heather Dyer, General Manager
380 East Vanderbilt Way
San Bernardino, CA 92408
heatherd@sbumwd.com

EAST VALLEY WATER DISTRICT

Michael Moore, General Manager/CEO
31111 Greenspot Road
Highland, CA 92346
mmoore@eastvalley.org

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

Miguel Guerrero, General Manager
PO Box 710
San Bernardino, CA 92402
Miguel.Guerrero@sbumwd.org

CITY OF REDLANDS


John Harris, Director, Municipal Utilities & Engineering Department
35 Cajon St Suite 15A
Redlands, Ca 92374

10. Attorneys' Fees. In the event of a civil action to enforce any obligation under this Agreement, the prevailing party shall be entitled to an award of reasonable attorneys' fees and costs (including but not limited to reasonable expert witness fees and costs) incurred in connection with such litigation.
11. Entire Agreement. This instrument constitutes the entire agreement and understanding between the Parties with respect to the subject matters hereof, and supersedes and replaces any prior agreements and understandings, whether oral or written, by and between them with respect to such matters.
12. Arms Length Negotiation. The Parties acknowledge and agree that this Agreement is the product of mutual arms-length negotiations and accordingly, the rule of construction, which provides that the ambiguities in a document shall be construed against the drafter of that document, shall have no application to the interpretation and enforcement of this Agreement.


13. Titles & Captions. Titles and captions are for convenience of reference only and do not define, describe or limit the scope of the intent of the Agreement or any of its terms. Reference to section numbers are to sections in the Agreement unless expressly stated otherwise.
14. No Third Party Beneficiary. Nothing contained in this Agreement shall be deemed or construed by the Parties or by any third person to create the relationship of principal and agent, or partnership or joint venture, or any association between the Parties, and none of the provisions contained in this Agreement or any act of the Parties shall be deemed to create any relationship other than as specified herein, nor shall this Agreement be construed, except as expressly provided herein, to authorize either Party to act as the agent for the other
15. Counterparts. This Memorandum may be executed in any number of counterparts, each of which shall be deemed to be an original instrument, but all of which together shall constitute one and the same instrument.
16. Authority to Execute. Each person executing this Agreement represents and warrants that he or she is duly authorized and has legal authority to execute and deliver this Agreement for or on behalf of the parties to this Agreement. Each Party represents and warrants to the other(s) that the execution and delivery of the Agreement and the performance of such Party's obligations hereunder have been duly authorized.

IN WITNESS WHEREOF, the parties hereto have entered into this instrument as of the Effective Date set forth above.


SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

By: 
Name: Heather Dyer
Date: 3/9/2023

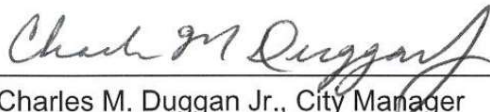
EAST VALLEY WATER DISTRICT

By: 
Name: Michael Moore, General Manager/CEO
Date: 3/8/2023

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

By: 
Name: Miguel J. Guerrero, P.E., General Manager
Date: February 28, 2023

CITY OF REDLANDS

By: 
Name: Charles M. Duggan Jr., City Manager
Date: 3/7/23

**COST SHARE AGREEMENT FOR BUNKER HILL-B MANAGEMENT ZONE
FEASIBILITY STUDY – AMENDMENT 01**

Amendment 01 for this Cost Sharing Agreement for the preparation of a Feasibility Study related to the Mitigation of Total Dissolved Solids (TDS, Salt) Loading in the Bunker Hill-B Management Zone is entered into and effective on the 14th day of September 2023 among the following listed Signatories: San Bernardino Valley Municipal Water District (“Valley District”), East Valley Water District (“EVWD”), City of San Bernardino Municipal Water Department (“San Bernardino”), and City of Redlands (“Redlands”), collectively referred to as the “Parties”.

WHEREAS, the Parties entered into Cost Sharing Agreement for the Bunker Hill-B Management Zone Feasibility Study, dated March 9, 2023 (“Agreement”), which provides for a 25% cost share of the invoiced costs associated with the development of the Feasibility Study; and

WHEREAS, Section 3 of the Agreement directs that upon selection of final consultants for this work product, this Agreement will be amended to include as an exhibit the final scope of work and estimated budget for each of those consultant services; and

WHEREAS, on June 21, 2023, the Parties selected WSC/Trussell as the final consultant team for development of the Feasibility Study. The Parties and WSC/Trussell agreed to a final cost of \$304,731 for consultant services.

WHEREAS, the Feasibility Study seeks to:

1. Complete a robust analysis of feasible salinity management strategies to inform confident decisions making,
2. Achieve strong consensus and alignment on the preferred strategy to enable effective implementation, and
3. Define a lasting solution with a clear path forward that can adapt to changing conditions, which may include a regional desalter.

NOW, THEREFORE, the Parties agree as follows:

1. The final scope of work and estimated budget for WSC/Trussell’s services attached hereto shall be incorporated into the Cost Sharing Agreement as Exhibit A.

IN WITNESS WHEREOF, the parties hereto have entered into this instrument as of the Effective Date set forth above.

SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

By: _____
Name:
Date:

EAST VALLEY WATER DISTRICT

By: _____
Name:
Date:

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

By: _____
Name:
Date:

CITY OF REDLANDS

By: _____
Name:
Date:

Exhibit A

Feasibility Study Final Scope and Cost Estimate

Scope of Work

The following Scope of Work is consistent with the scope of services included in the RFP and includes refinements and additional detail where needed.

Task 0 Project Management Meetings

0.1 PROJECT MANAGEMENT

- Manage project efforts including budget and schedule updates.
- Conduct internal project coordination and manage resources.
- Prepare monthly invoices and progress reports.
- Project duration is assumed to be 18 months, with the Final Feasibility Study complete within 16 months followed by two months of limited work during USBR review.

0.2 ROUTINE COORDINATION WITH COALITION

- Conduct one hour, monthly virtual meetings with the Coalition to provide updates on project progress, discuss project methodologies, review data needs, present interim results, and other coordination needs. The budget is based on 11 monthly meetings; additional Coalition meetings during the project will be used for workshops scoped in other tasks.
- Conduct 30 minute bi-weekly check-in meetings with the Project Manager to discuss project status and coordination needs. The budget is based on 32 check-in meetings.

0.3 ALTERNATIVES REFINEMENT WORKSHOP

Conduct a three-hour in-person Alternatives Refinement Workshop with the Coalition. The purpose of the workshop will be to:

- Review and discuss preliminary alternatives developed in Task 2.1.
- Discuss potential refinements to preliminary alternatives and identify new preliminary alternatives, as needed.
- Select up to five alternatives for further evaluation and review data needs and identify data sources that may be needed for further evaluation of alternatives.
- Develop a comprehensive list of evaluation criteria and associated numerical scoring rubric to be applied during the alternatives analysis in Task 2.2.

0.4 ALTERNATIVES SCREENING WORKSHOP

Conduct a three-hour in-person Alternatives Screening Workshop with the Coalition. The purpose of the workshop will be to:

- Review and discuss results of the Draft Alternatives Analysis developed in Task 2.2. Discuss potential refinements to the Draft Alternatives Analysis, as needed.
- Review preliminary results of alternatives evaluation scoring and discuss whether adjustments to scoring or weighting factors are needed to calibrate the evaluation.
- Discuss alternative weighting factors to be used for a sensitivity analysis, if desired.

0.5 ALTERNATIVES SELECTION WORKSHOP

Conduct a two-hour in-person Alternatives Selection Workshop with the Coalition. The purpose of the workshop will be to:

- Review and discuss the Updated Alternatives Analysis developed in Task 2.2, incorporating feedback from the Alternatives Screening Workshop.
- Review results of updated alternatives evaluation scoring and sensitivity analysis.
- Select a preferred alternative to be carried forward.
- For the selected alternative, discuss options for adaptive management and potential offramps to other strategies in response to actual future conditions, as appropriate.

0.6 DRAFT FEASIBILITY STUDY REVIEW WORKSHOP

Conduct a two-hour in-person Draft Feasibility Study Review Workshop with the Coalition. The purpose of the workshop will be to review the content of the Draft Feasibility Study and receive comments and feedback from the Coalition.

0.7 STAKEHOLDER MEETINGS

Prepare presentation materials and conduct up to six (6) meetings with regional stakeholders. Meetings are assumed to be one-hour virtual meetings. The purpose and agenda of the meetings will be defined in collaboration with the Coalition but could be conducted at key project milestones. It is assumed that the Facilitator will coordinate strategy and schedule meetings and the WSC Team will prepare and present slides with technical content.

0.8 QA/QC

Perform comprehensive quality control of all work items being prepared for delivery to the Coalition.

Task 1 Kickoff and Data Collection

1.1 KICKOFF MEETING

- Participate in a one-hour virtual kickoff meeting. Prepare short presentation on strategy for project delivery, data request, and other relevant items.
- Key outcomes of the meeting will be:
 - Shared goals and objectives for the project, including salt removal targets/ranges.
 - Preliminary list of conceptual salinity management alternatives to be explored.

1.2 DATA COLLECTION

- Review materials associated with the project, including Bunker Hill Basin Regional Recycled Water Coalition Memorandum of Understanding, Cost Share Agreement, Cumulative Antidegradation Analysis, SNRC Engineering Report and Report of Waste Discharge (ROWD), San Bernardino Water Reclamation Plant ROWD, Redlands Water Reclamation Plant ROWD, and other documents as provided.

Task 2 Alternative Salt Mitigation Strategies

1.2 ALTERNATIVES DEVELOPMENT

- Beginning with preliminary alternatives discussed at the Kickoff Meeting, identify conceptual alternative salt mitigation strategies for consideration by the Coalition, including, but not limited to, construction of a regional recycled water advanced water treatment (AWT) facility, disposal of brine, expansion of surface water recharge, creation of regional pretreatment program, and others.
- Develop preliminary planning-level concepts for each alternative, including potential location, sizing, infrastructure, treatment technology, brine disposal requirements, and phasing/timing. Articulate the specific objective and water supply and water quality benefits from the implementation of each alternative.
- Compile explanatory charts, maps and graphics to support the discussion and refinement of alternatives at the Alternatives Refinement Workshop.

Deliverables: Preliminary alternative materials will be provided to the Coalition for review two weeks prior to the Alternatives Refinement Workshop.

2.2 ALTERNATIVES ANALYSIS

- Refine alternatives as discussed in the Alternatives Refinement Workshop.
- Complete benefit/cost analysis for up to four (4) alternatives, including planning level cost estimates for capital costs, annual operation (including brine disposal fees), maintenance, replacement cost estimate, and life cycle costs.
- Applying the evaluation criteria developed in the Alternatives Refinement Workshop, evaluate and score the various alternatives to support selection of the preferred alternative moving forward.
- Update the Draft Alternatives Analysis to incorporate feedback from the Alternatives Screening Workshop.

Deliverables: Provide the Draft Alternatives Analysis to the Coalition for review two weeks prior to the Alternatives Screening Workshop.

Deliverables: Provide the Updated Alternatives Analysis to the Coalition for review two weeks prior to the Alternative Selection Workshop.

Task 3 Draft Feasibility Study

Due to potential grant funding for the project from the United States Bureau of Reclamation (USBR), the Feasibility Study will be prepared in compliance with the USBR Reclamation Manual, Directives and Standards (WTR 11-01). Compile identification and analysis of alternative salinity management strategies into a Draft Feasibility Study.

The Feasibility Study will include the following components:

- **Introduction.** Identification of project sponsors and description/definition of study area showing the regional recycled water systems.
- **Statement of Problems and Needs.** Describe key water resource management problems and needs for which the regional project will solve. Describe current and projected water supplies, including water rights, and potential sources of additional water other than the project.

Describe current and projected water demands, including imbalances. Describe water quality concerns for the current and projected recycled water supply and recharge activities.

▪ **Water Reuse Opportunities.**

- Identify the sources of water available for reclamation in the study area, including the three planned recycled water projects in the regional program. Describe or categorize all uses for recycled water and identify associated water quality and treatment requirements. Summarize the current water market available, including existing and potential users, expected use, peak use, on-site conversion costs and, if necessary, desire to use reclaimed water, any consultation with potential reclaimed water customers, and the market assessment procedures used for the three projects.
 - Assumption: the Regional Recycled Water Concept Study and the respective ROWDs will be used to provide this content and that no additional analysis of recycled water markets is needed.
- Discuss water quality considerations of what may prevent implementation of the proposed recycled water recharge, as well as water quality improvements (TDS and other constituents of concern) that may accrue from a regional salinity management program.
- Identify methods or community incentives for salinity management associated with water reclamation and methods to eliminate obstacles which will inhibit the recharge of reclaimed water.
- Identify all jurisdictional water and wastewater agencies in the service area and the role they might play in salinity management.
- Describe any current salinity management in the study area and the projected wastewater and disposal options.
- Summarize current water reclamation and demineralization technology in use in the study area and opportunities for the development of improved technologies.

▪ **Description of Alternatives.**

- Describe the range of salinity management alternatives considered in Task 2.1. State the specific objectives all alternatives are designed to address, including groundwater replenishment, reuse, and water quality improvement. Quantify the water supply and water quality benefits of the alternatives, including TDS and other constituents of concern as applicable.
 - Assumption: Groundwater replenishment alternatives and benefits will be based on the SNMP modeling scenario results and new model runs will not be performed for this project.
- Describe the proposed project including cost estimate, annual operation, maintenance, replacement cost estimate, and life cycle costs. Estimated costs to be presented in terms of dollars per million gallons (MG), and/or dollars per acre-foot of capacity, to facilitate comparison of alternatives. Describe any necessary waste-stream discharge treatment and disposal requirements. Describe one or more alternative technologies, including emerging technologies.

- **Economic Analysis.** Analyze the proposed project relative to other water supply alternatives that could be implemented by the Coalition in lieu of a salt mitigation project needed to support groundwater recharge with reclaimed water. Describe conditions that exist in the area and provide future projections with and without the project. Provide a cost comparison of salt

mitigation alternatives. Describe other salt mitigation alternatives with appraisal level cost estimates. Provide a description of the qualitative benefits of the project.

- **Selection of the Proposed Project.** Include justification of why the proposed project is the selected salinity management alternative. Analysis of whether the proposed project would address the reduction, postponement, or elimination of development of new or expanded water supplies; reduction or elimination of the use of existing diversions from natural watercourses or withdrawals from aquifers; reduction of demand on existing Federal water supply facilities; and reduction, postponement, or elimination of new or expanded wastewater facilities.
- **Environmental Consideration and Potential Effects.** Include sufficient information to assess the compliance with National Environmental Protection Act, Endangered Species Act, and Clean Water Act. Discuss how the project will affect water supply and quality. Discuss public involvement and potential effects the project will have on historical resources, including mitigation measures.
 - Assumption: Existing environmental documents for the recycled water projects and the Upper SAR HCP will be referenced to provide the information needed for this section. If supplementary environmental information is needed, WSC can obtain the support of an environmental subconsultant.
- **Legal and Institutional Requirements.** Identify any legal or institutional, state, and/or local requirements or barriers to implement the salinity management project. Analysis of any water rights issues potentially resulting from implementation of the project. Discuss the need for multi- jurisdictional or interagency agreements, any coordination undertaken, and any planned coordination activities. Discuss permitting procedures. Describe any unresolved issues associated with implementation and how and when such issues will be resolved. Identify current and projected wastewater discharge requirements. Describe rights to wastewater discharges.
 - Assumption: It is assumed that there will be no water rights issues resulting from the implementation of the project. Should potential water rights issues be identified, it is assumed that legal counsel for the Coalition members can provide legal support to inform this section of the Feasibility Study.
- **Financial Capability of Sponsor.** Demonstrate financial capability of the Coalition prior to construction. Proposed schedule and milestones for project implementation. Describe the willingness of the Coalition partners to each pay for its share of capital costs and the full operation, maintenance, and replacement costs. Describe the funding plan including analysis of the project’s construction, operation, maintenance, and replacement costs. Describe all Federal and non-Federal sources of funding and any restrictions on such sources.
 - Assumption: WSC will coordinate with the Coalition’s Facilitator to incorporate the results of their funding and financing evaluation.
- **Research Needs.** Describe any research needs and objectives to be accomplished for the salt mitigation project. Describe the basis for Reclamation participation. Identify parties who will administer and conduct research. Identify the research timeframe.

Deliverables: Provide the Draft Feasibility Study to the Coalition for review three weeks prior to the Draft Feasibility Study Review Workshop.

Task 4 Final Feasibility Study

4.1 FINAL FEASIBILITY STUDY

- Review and incorporate Coalition comments on the Draft Feasibility Study. Prepare and circulate a Final Feasibility Study for review and approval by USBR for funding under the Title XVI Water Reclamation and Reuse Program.
- Provide additional information and/or necessary additions should USBR staff deem the Feasibility Study inconsistent or incomplete during their review.
- Coordinate with USBR staff as needed to facilitate the submission and review of the Feasibility Study.
- It is assumed that any final edits from the Coalition or USBR comments will be discussed at one of the routine meetings in Task 0.2 and that a separate Final Feasibility Study Review Workshop will not be needed.

Deliverables: Provide the Final Feasibility Study to the Coalition for review prior to submitting it to USBR.

Deliverables: If comments are received from USBR, update the Feasibility Study and provide a Revised Final Feasibility Study to the Coalition and USBR.

Task No. Task Description	WSC											Trussell		ALL FIRMS				
	Principal in Charge	Project Manager	Deputy Project Manager	Regulatory/Basin Context	QA/QC	Regulatory Support	Engineering Support	Engineering Support	Feasibility Study Support	Project Admin	Graphics Support	WSC Labor Fee	Labor Hours	Labor Fee	Total Labor Hours	Total Labor Fee	Expenses	Total Fee
	Jeffery Szytel	Laine Carlson	Aaron Morland	Michael Cruikshank	Robert Morrow	Antonia Estevez-Olea	Patricia Parks	Heather Freed	Justin Sutton	Kay Merrill	Frederick Franklin							
<i>Billing rates, \$/hr</i>																		
	\$380	\$335	\$185	\$295	\$335	\$220	\$175	\$220	\$220	\$170	\$140							
0	Project Management and Meetings																	
0.1	6	12	40							20		\$ 17,100			78	\$ 17,100	\$ -	\$ 17,100
0.2		46	60	6								\$ 28,280	16	\$ 3,696	128	\$ 31,976	\$ -	\$ 31,976
0.3		10	20	10							4	\$ 10,560	12	\$ 3,607	56	\$ 14,167	\$ 1,200	\$ 15,367
0.4		10	20	10							4	\$ 10,560	12	\$ 3,607	56	\$ 14,167	\$ 1,200	\$ 15,367
0.5		10	20	10							4	\$ 10,560	8	\$ 2,452	52	\$ 13,012	\$ 1,200	\$ 14,212
0.6		8	12	4							4	\$ 6,640	8	\$ 2,452	36	\$ 9,092	\$ 1,200	\$ 10,292
0.7		12	12	12								\$ 9,780	8	\$ 2,310	44	\$ 12,090	\$ -	\$ 12,090
0.8					12							\$ 4,020			12	\$ 4,020	\$ -	\$ 4,020
	6	108	184	52	12	0	0	0	0	20	16	\$ 97,500	64	\$ 18,123	462	\$ 115,623	\$ 4,800	\$ 120,423
1	Kickoff and Data Collection																	
1.1		6	4	6							2	\$ 4,800	13	\$ 3,035	31	\$ 7,835	\$ -	\$ 7,835
1.2		6	6	6								\$ 4,890	3	\$ 809	21	\$ 5,699	\$ -	\$ 5,699
	0	12	10	12	0	0	0	0	0	0	2	\$ 9,690	16	\$ 3,843	52	\$ 13,533	\$ -	\$ 13,533
2	Alternative Salt Mitigation Strategies																	
2.1		22	32	20		24						\$ 24,470	64	\$ 15,152	162	\$ 39,622	\$ -	\$ 39,622
2.2		32	64	22		20		8				\$ 35,210	70	\$ 15,414	216	\$ 50,624	\$ -	\$ 50,624
	0	54	96	42	0	44	0	8	0	0	0	\$ 59,680	134	\$ 30,566	378	\$ 90,246	\$ -	\$ 90,246
3	Draft Feasibility Study																	
3.1		16	60	8		12	40		12		16	\$ 33,340	120	\$ 27,216	284	\$ 60,556	\$ -	\$ 60,556
	0	16	60	8	0	12	40	0	12	0	16	\$ 33,340	120	\$ 27,216	284	\$ 60,556	\$ -	\$ 60,556
4	Final Feasibility Study																	
4.1		8	24	6		6	8		4		8	\$ 13,610	29	\$ 6,363	93	\$ 19,973	\$ -	\$ 19,973
	0	8	24	6	0	6	8	0	4	0	8	\$ 13,610	29	\$ 6,363	93	\$ 19,973	\$ -	\$ 19,973
COLUMN TOTALS	6	198	374	120	12	62	48	8	16	20	42	\$ 213,820	363	\$ 86,111	1269	\$ 299,931	\$ 4,800	\$ 304,731

**MEMORANDUM OF UNDERSTANDING FOR THE
MITIGATION OF SALT LOADING IN THE BUNKER HILL-B MANAGEMENT ZONE
BY AND BETWEEN
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT, EAST VALLEY WATER DISTRICT,
CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT, AND CITY OF REDLANDS**

This Memorandum of Understanding (MOU) for the Mitigation of Total Dissolved Solids (TDS, Salt) Loading in the Bunker Hill-B Management Zone is entered into and effective on the 25th day of January 2023 among the following listed Signatories: San Bernardino Valley Municipal Water District ("Valley District"), East Valley Water District ("EVWD"), City of San Bernardino Municipal Water Department ("San Bernardino"), and City of Redlands ("Redlands"), collectively referred to as the "Parties".

Recitals

- A. In 2009, the State Water Resources Control Board adopted a Recycled Water Policy that encourages public agencies to recycle municipal wastewater as it becomes an increasingly valuable source of water for the State. The Recycled Water Policy was amended in 2018 to encourage development of groundwater recharge projects using recycled water.
- B. The Recycled Water Policy requires evaluation and management of salt and nutrient loading to groundwater as a result of basin-wide recycled water use for irrigation and/or recharge. Groundwater recharge project proponents are required to participate in applicable salt and nutrient management planning efforts.
- C. The Recycled Water Policy also requires Antidegradation Analysis (State Water Resources Control Board Resolution 68-16) for all groundwater recharge projects to determine if assimilative capacity is available for projected salt and nutrient loading. Individual projects are permitted to consume up to 10% of available assimilative capacity in a basin, while multiple projects may consume up to 20% of available assimilative capacity.
- D. Valley District is constructing the Regional Recycled Water Facilities which includes a recycled water conveyance system and a groundwater recharge facility known as the Weaver Basins. The conveyance system will allow recycled water to be conveyed from EVWD and San Bernardino facilities to the Weaver Basins.
- E. EVWD is constructing Sterling Natural Resource Center, a new water reclamation facility that will recycle wastewater from EVWD's service area and recharge it via Weaver Basins into Bunker Hill-B Groundwater Management Zone.
- F. San Bernardino is developing the Tertiary Treatment System, which will produce recycled water from the San Bernardino Water Reclamation Plant (WRP) with the intent of beneficially using in and around WRP for general plant use and irrigation. Valley District's recycled conveyance system will convey recycled water from the WRP and will also convey recycled water produced by EVWD via a future pipe connection to Valley District's conveyance system for recharge via Weaver Basins into Bunker Hill-B Groundwater Management Zone.

- G. Redlands has existing Waste Discharge Requirements for treatment and discharge of recycled water from its service area into Bunker Hill-B Groundwater Management Zone. Phase 2 expansion of its Redlands Wastewater Treatment Facility will increase recycled water discharges via Redlands Basins.
- H. The Parties believe that through their cooperative work, they can treat and discharge recycled water in a manner that will maximize benefits to the Bunker Hill-B Groundwater Management Zone, the Parties, and their ratepayers.
- I. Using recycled water to replenish the Bunker Hill-B Groundwater Management Zone provides a drought tolerant water supply that improves water supply reliability for the Parties and the region and also provides a drought buffer for those agencies in the event of a prolonged drought.
- J. The Parties, together with a number of other water agencies, are working together to develop a collaborative regional plan – the Upper Santa Ana River Watershed Salt & Nutrient Management Plan – that supports increasing the use of recycled water for groundwater replenishment and other purposes, while also managing groundwater quality to provide the maximum benefits to the people of the State.
- K. The Upper Santa Ana River Watershed Salt & Nutrient Management Plan is a multi-year effort and will not be complete before the Parties – namely EVWD’s Sterling Natural Resources Center, and potentially San Bernardino’s Tertiary Treatment System and Redlands’ Phase 2 expansion of its Redlands Wastewater Treatment Facility – require executed Waste Discharge Requirements for the recycled water discharge projects listed above. This MOU is intended to establish and implement salt mitigation commitments for the Parties, to be reflected in the Upper Santa Ana River Watershed Salt & Nutrient Management Plan. Salt mitigation commitments may include regional groundwater quality monitoring, brine line discharge for high-TDS industries, optimized chemical use at wastewater treatment/reclamation facilities, a regional recycled water desalter, and enhanced upstream recharge of low-TDS water.
- L. The Parties wish to establish and agree to a framework for their working collaboratively toward mitigation of salt loading that will occur due to all the Parties’ recycled water recharge operations within the Bunker Hill-B Groundwater Management Zone, prior to the implementation of the Upper Santa Ana River Watershed Salt & Nutrient Management Plan.

Agreements

1. The Parties agree that they will work together in good faith to develop and implement a regional approach to salt mitigation in Bunker Hill-B Groundwater Management Zone, prior to the implementation of the Upper Santa Ana River Watershed Salt & Nutrient Management Plan. This may include a regional recycled water desalter and associated brine line, enhanced upstream recharge of low-TDS water, or other regional project constructed via partnership between all Parties that contribute salt loading to the basin.
2. The Parties agree that assignment of responsibility for salt mitigation shall be based on mass loading of salts to the basin by the Parties’ recycled water contributions and overall benefit to the basin and its stakeholders, as calculated through a mutually agreeable Antidegradation Analysis or similar effort.

3. The Parties will continue to participate in the development of the Upper Santa Ana River Watershed Salt & Nutrient Management Plan to manage salt and nutrient loading in the broader San Bernardino Basin Area and will support mitigation strategies for Bunker Hill-B Groundwater Management Zone in accordance with the responsibility structure set forth in paragraph 2.
4. The Parties will conduct collaborative reporting and assessment to document the assimilative capacity that is consumed by the Parties' recycled water recharges. Annually, each Party shall provide total discharge volumes and TDS concentrations to a mutually agreeable third party who shall calculate mass loading by each Party and calculate use of available assimilative capacity, both individually and cumulatively.
5. The Parties will collaborate on a Feasibility Study (conceptual design and engineering, alternative salt mitigation strategies, benefits analysis, economic modeling for cost share) for a regional recycled water desalter, to be completed by December 2024. The regional recycled water desalter will be defined in this Feasibility Study to serve as supporting documentation for funding pursuits.
6. The Parties agree to develop and execute a Funding Agreement for cost share of the Feasibility Study in Item 5 by March 2023.
7. Wastewater that goes through advanced water treatment processes (reverse osmosis) and is recharged to the Bunker Hill basin has additional regional benefits by contributing to removal of multiple water quality constituents that may be of concern to the Parties. The Parties shall also consider these regional benefits in the design of the regional recycled water desalter or other salt mitigation strategy.
8. The Parties will collaborate on development of a Salt Mitigation Implementation Plan for Bunker Hill-B Groundwater Management Zone, to be completed and submitted to Santa Ana Regional Water Quality Control Board by June 2025, which defines the selected mitigation strategy, operations, roles and responsibilities, cost share, and schedule.
9. The Parties will use 285 mg/L ambient TDS concentration as an "action limit" – once 10% of available assimilative capacity (5 mg/L increase over 280 mg/L ambient condition¹) is used in Bunker Hill-B Groundwater Management Zone, based on the collaborative reporting and assessment completed annually, the Parties shall begin implementation (final design and construction) of the regional desalter. Based on current modeling results, with implementation of a regional desalter, the action limit is expected to be reached in year 2027.
10. The Parties will ensure that the salt mitigation measures are constructed and operational by the time 20% of available assimilative capacity (10 mg/L increase over 280 mg/L ambient condition²) is consumed. Based on current modeling results, prior to construction and start-up of the regional desalter, total allowable assimilative capacity is expected to be reached in 2031. Construction of

¹ Santa Ana Watershed Project Authority's 2020 *Recomputation of Ambient Water Quality in Santa Ana River Watershed for the Period 1999-2018*

² Ibid.

the regional recycled water desalter or other salt mitigation strategy will be completed by the end of 2031, with operation beginning in January 2032. With implementation of a regional recycled water desalter, cumulative TDS loading from the four regional partners will not exceed total allowable assimilative capacity within the model timeframe (60 years).

11. Should the Upper Santa Ana River Watershed Salt & Nutrient Management Plan analysis and findings be accepted by regulatory agencies in the future, and with consensus of the Regional Water Quality Control Board, the Parties may amend this MOU to revise the "mitigation strategies" in Paragraph 1 and/or "action limits" identified in Paragraphs 9 and 10 in order to be consistent with the Plan.
12. The Parties will collaborate via committee made up of the General Managers of each of the four Parties, or their designees. All decisions shall be made on a unanimous basis.
13. The Parties hereby authorize their respective General Managers or designees to develop administrative and operating rules and procedures that may be needed to implement the terms of this MOU.
14. All notices, requests, demands, or other communications required or permitted under this MOU shall be addressed as follows:

SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
Heather Dyer, General Manager
380 East Vanderbilt Way
San Bernardino, CA 92408
heatherd@sbnmwd.com


EAST VALLEY WATER DISTRICT
Michael Moore, General Manager/CEO
31111 Greenspot Road
Highland, CA 92346
mmoore@eastvalley.org

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
Miguel Guerrero, General Manager
PO Box 710
San Bernardino, CA 92402
Miguel.Guerrero@sbnmwd.org

CITY OF REDLANDS
John Harris, Director, Municipal Utilities & Engineering Department
35 Cajon St Suite 15A
Redlands, Ca 92374

In witness whereof, the Parties have caused this MOU to become effective by their respective endorsements below:

SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

By: 
Name: Heather Dyer
Date: 3/9/2023

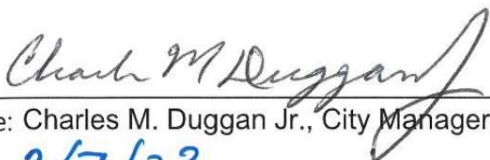
EAST VALLEY WATER DISTRICT

By: 
Name: Michael Moore, General Manager/CEO
Date: 3/8/2023

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

By: 
Name: Miguel J. Guerrero, P.E., General Manager
Date: February 28, 2023

CITY OF REDLANDS

By: 
Name: Charles M. Duggan Jr., City Manager
Date: 3/7/23

**MEMORANDUM OF UNDERSTANDING FOR THE
MITIGATION OF SALT LOADING IN THE BUNKER HILL-B MANAGEMENT ZONE
AMENDMENT 01**

Amendment 01 for this Memorandum of Understanding (MOU) for the Mitigation of Salt Loading in the Bunker Hill-B Management Zone is entered into and effective on the 4th day of October 2023 among the following list of Signatories: San Bernardino Valley Municipal Water District ("Valley District"), East Valley Water District ("EVWD"), City of San Bernardino Municipal Water Department ("San Bernardino"), and City of Redlands ("Redlands"), collectively referred to as the "Parties".

WHEREAS, the Parties entered into the MOU, dated January 25, 2023, in which the Parties agreed that they would work together in good faith to develop and implement a regional approach to salt mitigation in Bunker Hill-B Groundwater Management Zone; and

WHEREAS, Agreement 2 of the MOU states that the Parties agree that assignment of responsibility for salt mitigation shall be based on mass loading of salts to the basin by the Parties' recycled water contributions and overall benefit to the basin and its stakeholders, as calculated through a mutually agreeable Antidegradation Analysis or similar effort; and

WHEREAS, Agreement 5 of the MOU states that the Parties will collaborate on a Feasibility Study for a regional recycled water desalter and other salt mitigation strategies to be completed by December 2024 and Agreement 6 of the MOU states that the Parties will develop and execute a Funding Agreement for cost share of the Feasibility Study; and

WHEREAS, the Parties entered into Cost Sharing Agreement for the Bunker Hill-B Management Zone Feasibility Study, dated March 9, 2023, which provides for a 25% cost share of the invoiced costs associated with the development of the Feasibility Study; and

WHEREAS, since execution of the MOU, the Parties have developed Partnership Principles to outline the decision-making process among the Parties, articulate guiding principles for group conduct, describe how consultants will be managed, and explain how new partners can be added as the Parties embark on beneficial projects and processes to serve the Bunker Hill-B Management Zone.

NOW, THEREFORE, the Parties agree as follows:

1. The Partnership Principles agreed upon by the Parties attached hereto shall be incorporated into the MOU as Exhibit A.
2. Valley District will continue to serve as a facilitator and the Administering Agency pursuant to the Cost Sharing Agreement. Valley District will not directly bring new capital, operational, nor maintenance investments to fund a potential future regional desalter. However, Valley District will support and facilitate efforts by the Parties to obtain and administer outside funding such as state or federal grants, and/or potential contributions from other basin stakeholders. Valley District will redirect Local Resource Investment Program (LRIP) payments at the request of LRIP parties. Each Party is ultimately responsible for mitigating salinity impacts from their respective recycled water projects.

IN WITNESS WHEREOF, the parties hereto have entered into this instrument as of the Effective Date set forth above.

SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

By: _____
Name:
Date:

EAST VALLEY WATER DISTRICT

By: _____
Name:
Date:

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

By: _____
Name:
Date:

CITY OF REDLANDS

By: _____
Name:
Date:

Exhibit A

Partnership Principles

Partnership Principles

Bunker Hill Basin Regional Recycled Water Coalition

July 14, 2023

1.0 Purpose

The purpose of this Partnership Agreement for the Bunker Hill Basin Regional Recycled Water Coalition (Coalition) is to outline the decision-making process among the agencies, articulate guiding principles for Coalition conduct, describe how consultants will be managed, and explain how new partners can be added as the partner agencies embark on beneficial projects and processes to serve the Bunker Hill-B Groundwater Management Zone (GMZ).

The Guiding Principles derive from and include by reference the Memorandum of Understanding for the Mitigation of Salt Loading in the Bunker Hill-B Management Zone by and Between San Bernardino Valley Municipal Water District, East Valley Water District, City of San Bernardino Municipal Water Department, and the City of Redlands (Coalition MOU).

This Partnership Agreement is valid through submittal of the Salt Mitigation Implementation Plan to Santa Ana Regional Water Quality Control Board, anticipated to occur in June 2025. Following submittal of the Salt Mitigation Implementation Plan, the Coalition shall revisit the Partnership Agreement and either amend the existing agreement or create a new agreement to best capture the next phases of the Coalition's efforts and corresponding commitments.

2.0 Coalition Partners

The Coalition is made up of the following four agencies:

- San Bernardino Valley Municipal Water District (San Bernardino Valley)
- East Valley Water District (EVWD)
- City of San Bernardino Municipal Water Department (SBMWD)
- City of Redlands (Redlands)

The core parties that make up the Coalition are described below.

Coalition Boards/Councils

The respective legislative bodies of the four agencies have designated representatives as Steering Committee members.

Coalition Steering Committee

The Steering Committee is responsible for determining appropriate salinity management strategies for the Bunker Hill-B GMZ. The following describes the current recycled water recharge operations of each Steering Committee agency.

- San Bernardino Valley is constructing the Regional Recycled Water Facilities which includes a recycled water conveyance system and a groundwater recharge facility known as the Weaver Basins. The conveyance system will allow recycled water to be conveyed from EVWD and SBMWD facilities to the Weaver Basins.

- EVWD is constructing Sterling Natural Resource Center, a new water reclamation facility that will recycle wastewater from EVWD’s service area, convey it through San Bernardino Valley’s recycled water conveyance infrastructure, and recharge it via Weaver Basins into Bunker Hill-B GMZ.
- SBMWD is developing the Tertiary Treatment System, which will produce recycled water from the San Bernardino Water Reclamation Plant (WRP) for beneficial use in and around the WRP (plant use and irrigation). Recycled water will also be conveyed through San Bernardino Valley’s recycled conveyance system for recharge via Weaver Basins into Bunker Hill-B GMZ.
- Redlands has existing Waste Discharge Requirements for treatment and discharge of recycled water from its service area into Bunker Hill-B GMZ. Phase 2 expansion of its Redlands Wastewater Treatment Facility will increase recycled water production for distribution to recycled water end users and/or discharge to the Redlands Basins.

The Coalition believes that through their cooperative work, they can treat and discharge recycled water in a manner that will maximize benefits to the Bunker Hill-B GMZ, their agencies, and their ratepayers.

A map of the three recycled water projects located in the Bunker Hill basin is included as Figure 1.

Coalition Administrator

San Bernardino Valley has been determined as the Administrating Agency for the Coalition by the members of the Steering Committee. San Bernardino Valley will coordinate among the four agencies in development of a Bunker Hill Basin Regional Recycled Water Feasibility Study (Feasibility Study).

3.0 Responsibilities

The primary responsibilities of each party of the Coalition are identified below.

Coalition Boards/Councils

Each respective legislative body for the four Coalition agencies will be responsible for:

- Receiving updates on the Feasibility Study and directing its Steering Committee members as it deems appropriate.
- Approving an updated Memorandum of Understanding (or similar arrangement) outlining the Coalition’s next steps following completion of the Feasibility Study.

Coalition Steering Committee

The Steering Committee shall be responsible for:

- Participating in execution of this Partnership Agreement and development and implementation of an Outreach Strategy for Coalition activities.
- Selecting an engineering firm to prepare the Feasibility Study.

- Collaborating on the Feasibility Study for a regional approach to salinity management in Bunker Hill-B GMZ, to be completed by December 2024.
- Reviewing and providing comments on the Feasibility Study.
- Considering and approving any potential scope enhancements to the Feasibility Study, and sharing the additional costs equally at 25 percent, if any.
- Collaborating on development of a Salt Mitigation Implementation Plan for Bunker Hill-B GMZ to be completed and submitted to Santa Ana Regional Water Quality Control Board by June 2025.

Coalition Administrator

San Bernardino Valley will be responsible for:

- Serving as point-of-contact for coordinating with Coalition consultants, including managing any necessary Request for Proposals and procurement processes, as well as entering into an agreement with each of the Coalition consultants.
- Day-to-day oversight of the Coalition consultants (grant writer, facilitator, engineer, and others as needed).
- Tracking and invoicing of costs associated with consultant work, along with billing of equal share (25 percent each) to Coalition parties.
- Coordinating with consultants on monthly progress reports to the Steering Committee.
- Ensuring Title XVI planning grant obligations are met and reimbursements received (if awarded).

4.0 Decision Making

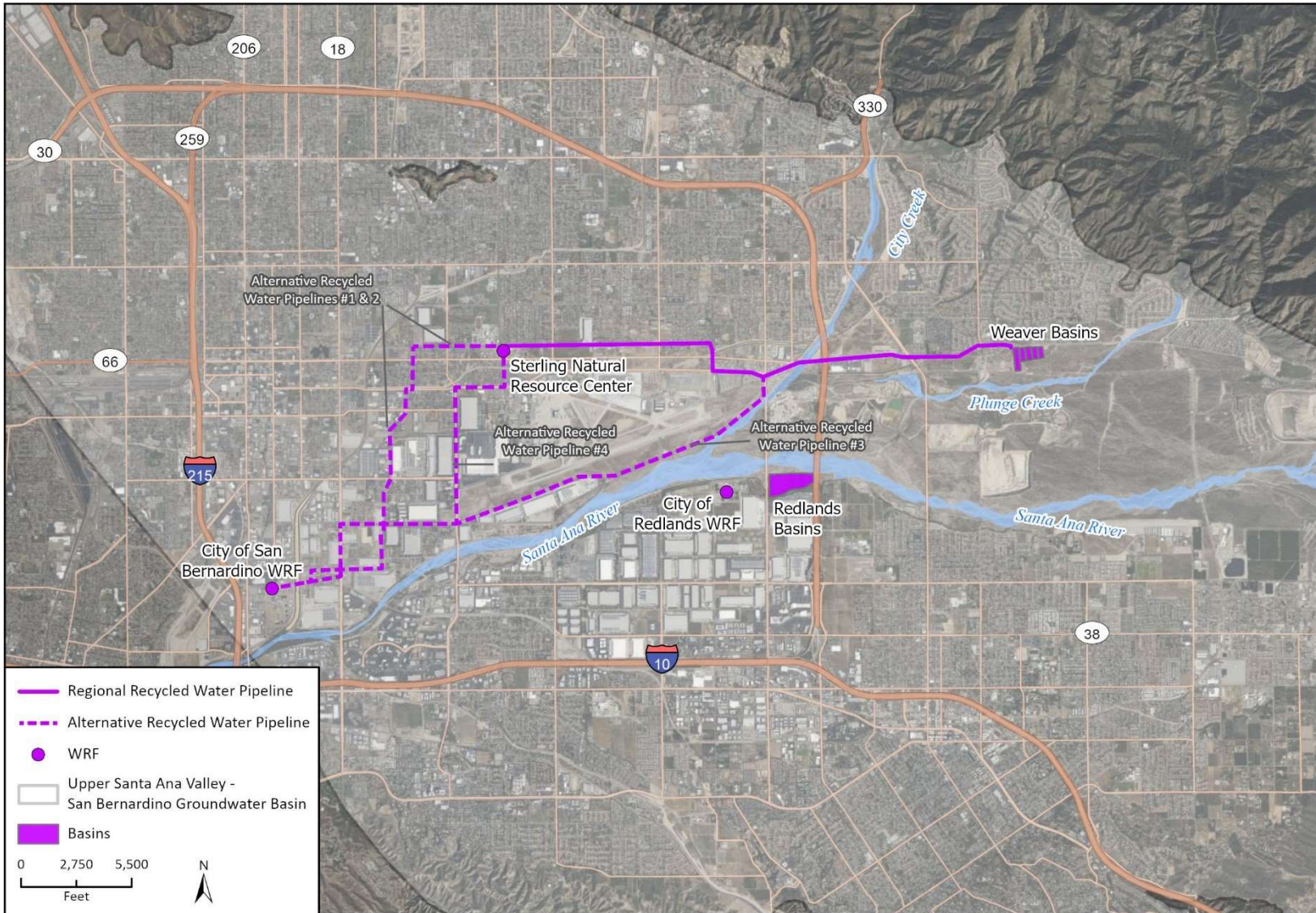
The Steering Committee will seek to make decisions through consensus. Consensus is a form of decision-making that concludes only when all participants reach agreement. This does not mean that all participants must provide an unqualified “yes” on a decision; however, all parties must agree to support and implement it.

To facilitate decision-making discussions when consensus is not immediately met, the following levels of consensus can be referenced to communicate how comfortable Steering Committee members are with moving forward with a decision.

1. I can say an unqualified "yes"!
2. I can accept the decision.
3. I can live with the decision.
4. I do not fully agree with the decision, however, I will not block it and will support it.
5. I do not agree with the decision and feel the need to stand in the way of this decision being accepted.

If any members communicate that they are a level four or five on the consensus scale, the Steering Committee shall take the time to hear and consider additional ideas and reasoning.

Figure 1: Map of Regional Recycled Water Projects



Imagery provided by Microsoft Bing and its licensors © 2023.
 Additional sources provided by CA DWR, 2019; USGS, 2022.

23-14083 EPS
 Fig 1 Project Location

In support of consensus-based decision-making, the Coalition parties agree to come to discussions with an open mind, view differences of opinions as helpful rather than harmful, and avoid changing their mind only to reach an agreement and avoid conflict.

In the event a decision cannot be made through consensus and a majority vote is required, each agency will receive one vote, all of which will be weighted equally, and the decision with the most votes will move forward.

5.0 Membership

Should an existing Coalition partner choose to exit the Coalition prior to completion of the Salt Mitigation Implementation Plan in June 2025, all monetary contributions from the date of execution of the Coalition MOU shall be forfeited. The Coalition MOU and Cost Share Agreement shall be amended to reflect the new Coalition membership.

Should a new water or recycled water agency in the Bunker Hill Basin desire to join the Coalition during this timeframe, that new partner shall pay an equal share of all monetary contributions from the date of execution of the Coalition MOU. This share shall be held by the Coalition Administrator for use in Coalition-directed activities or redistribution among the existing partners as a reimbursement for early phase work. The Coalition MOU and Cost Share Agreement shall be amended to reflect the new Coalition membership.

6.0 Success Factors and Barriers to Success

In April 2023, the Coalition partners identified how to define success for the Coalition's efforts and anticipated challenges the group will face. The following categories were used to define both the success factors and barriers:

- Governance/Decisions Making
- Stakeholder/Outreach
- Technical
- Regulatory
- Schedule
- Funding

The activity responses were discussed at the Steering Committee meeting on April 20, 2023, and have been used to develop the Guiding Principles discussed below.

7.0 Guiding Principles

Members agree to the following guiding principles to inform and guide Steering Committee deliberations, foster constructive discussions, promote a clear and shared set of expectations, and encourage collaboration.

Dedicated Participation and Respectful Engagement

Commitment to Collaborate. All members agree to work together in a constructive manner to meet key milestones. Understand that all agencies are equal and agree to support partner projects. Strive to reach consensus on positions of shared interest and proactively identify barriers for discussion and, where possible, resolution at the earliest opportunity. Once decisions are made will support successful implementation.

Equitable Cost Share. All members agree to work collaboratively to develop a fair and equitable cost sharing agreement. No one is to benefit at the expense of others, and all parties agree to negotiate in good faith. Per the Coalition MOU, all members agree that future cost responsibilities for salt mitigation shall be based on the mass loading of salts to the basin by the members' recycled water contributions and overall benefit to the basin and its stakeholders, as calculated through a mutually agreeable Antidegradation Analysis or similar effort.

Commitment of Time. Strive to attend meetings consistently; we need everyone at the table throughout. Contribute your thoughts and share our time so everyone can participate.

Respect Others and the Process. Seek opportunities to share your perspective and understand the perspectives of others. Listen intently to what others are saying. Be honest and fair, and as candid as possible. If you hear something you do not understand, ask questions to clarify. If you hear something you do not agree with, help people understand your concerns.

Support an Effective Process

Rely on Credible Information. To foster effective dialogues, members agree to mutually support a transparent and inclusive process where parties commit to providing and relying on credible data and clear criteria to inform decision-making and to draw on the advice of the Feasibility Study consultant.

Equitable Allocation of Assimilative Capacity. All members agree to work collaboratively to develop a fair and equitable allocation of assimilative capacity. All members agree to strive for consistency in their approach to permitting with the Regional Water Quality Control Board and have shared permitting expectations to ensure consistency in permit conditions and requirements across partner agencies.

Support the Schedule. Provide timely responses and input to communication and deliverables and be transparent and timely in the delivery of pertinent information. Commit to meeting key milestones and provide adequate time for members and stakeholders when requesting information.

State-of-the-Art Analysis. Commitment to a science-based process for identifying and evaluating technical alternatives and salinity management strategies. Be proactive and creative about potential solutions and benefits to regional stakeholders.

Invest in Stakeholder Engagement

Transparency. Commitment to address groundwater salinity at regional level, sharing information freely among partners and stakeholders.

Strive for Consistent Communication. All members agree to support the development and communication of united messaging to stakeholder groups (including regulatory agencies) and collaborate on the direction of the messaging specific to the stakeholder.