

MINUTES OF THE ADJOURNED MEETING OF THE  
BOARD OF DIRECTORS OF  
VISTA IRRIGATION DISTRICT

September 22, 2021

An Adjourned Meeting of the Board of Directors of Vista Irrigation District was held on Wednesday, September 22, 2021, at the offices of the District, 1391 Engineer Street, Vista, California.

**1. CALL TO ORDER**

President Sanchez called the meeting to order at 9:01 a.m.

**2. ROLL CALL**

Directors present: Miller, Vásquez, Dorey, Sanchez, and MacKenzie (via teleconference).

Directors absent: None.

Staff present: Brett Hodgkiss, General Manager; Lisa Soto, Secretary of the Board; Don Smith, Director of Water Resources; Randy Whitmann, Director of Engineering; Frank Wolinski, Director of Operations and Field Services; Marlene Kelleher, Director of Administration; Shallako Goodrick, Finance Supervisor; Greg Keppler, Engineering Project Manager; and Ramae Ogilvie, Administrative Assistant. Interim General Counsel Jennifer Farrell was also present.

Other attendees: Travis Van Ligten of Rutan & Tucker was also present via teleconference.

**3. PLEDGE OF ALLEGIANCE**

Director Dorey led the pledge of allegiance.

**4. APPROVAL OF AGENDA**

21-09-105	<i>Upon motion by Director Vásquez, seconded by Director Miller and unanimously carried (5 ayes: Miller, Vásquez, Dorey, MacKenzie, and Sanchez), the Board of Directors approved the agenda as presented.</i>
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**5. ORAL COMMUNICATIONS**

No public comments were presented on items not appearing on the agenda.

**6. CONSENT CALENDAR**

21-09-106	<i>Upon motion by Director Miller, seconded by Director Dorey and unanimously carried (5 ayes: Miller, Vásquez, Dorey, MacKenzie, and Sanchez), the Board of Directors approved the Consent Calendar, including Resolution No. 21-37 approving disbursements.</i>
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A. Waterline project approval

See staff report attached hereto. Staff recommended and the Board approved the waterline project for a Taco Bell restaurant consisting of approximately 1.15 gross acres owned by St. John, LLC, a California Limited Liability Company, located at 910 E. Vista Way, Vista (LN 2020-027; APN 176-013-10; DIV 1).

B. Minutes of Board of Directors meeting on September 8, 2021

The minutes of September 8, 2021 were approved as presented.

C. Resolution ratifying check disbursements

**RESOLUTION NO. 21-37**

**BE IT RESOLVED, that the Board of Directors of Vista Irrigation District does hereby approve checks numbered 67652 through 67729 drawn on Union Bank totaling \$279,748.87.**

**FURTHER RESOLVED that the Board of Directors does hereby authorize the execution of the checks by the appropriate officers of the District.**

**PASSED AND ADOPTED unanimously by a roll call vote of the Board of Directors of Vista Irrigation District this 22nd day of September 2021.**

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**7. TIERED WATER RATE STRUCTURE REVISIONS AND RATE ADJUSTMENT POLICY**

See staff report attached hereto.

General Manager Brett Hodgkiss stated that the Fiscal Policy Committee (Committee) discussed potential rate structure adjustments in depth on September 14, 2021 with the goal of funding the continuation of the District’s aggressive capital infrastructure replacement program over the next five years. He said that the Board will be reviewing potential rate structures aimed at funding the District’s capital projects identified in the Water Master Plan, Water Supply Planning Study and Four Reservoirs Seismic and Structural Analysis as well as its obligations set forth in the San Luis Rey Indian Water Rights settlement, namely the San Pasqual Undergrounding Project.

Director of Administration Marlene Kelleher provided background regarding the District’s current rate structure. She said that staff conducted an in-depth analysis of the operating and capital improvement costs through Fiscal Year (FY) 2027 to determine if the District’s current rate structure and water rates could equitably recover the costs of providing water service to customers. Ms. Kelleher stated that based on the results of this analysis, staff is proposing adjustments to the service charge and tiered water rates and the elimination of Tier 3 from the water rate structure.

Ms. Kelleher said that the District proposes to adopt rates related to three components: 1) a pass-through of 100% of any adjustments to the Water Authority’s fees and charges. The first year pass-through would be 16 cents per unit (one unit = 748 gallons) and would be applied to Tier 1 and Tier 2 water rates. The 16-cent increase is net the four-cent per unit rebate from the Water Authority; 2) a proposed increase of \$1.42 per month (\$2.84 bi-monthly for a ¾” meter) to the service charge to adjust for annual inflation; and, 3) a proposed water rate increase of 16 cents per unit for Tier 1 water rates and nine additional cents per unit for Tier 2 water rates to ensure the District recovers, but does not exceed, the cost of providing water service to its customers.

Using a PowerPoint presentation (attached hereto as Exhibit A), Ms. Kelleher reviewed the methodology used in the water rate study. She stated that without any adjustments to water rates, five-year projections show that the District will need to use over \$16 million of its Capital Improvement Reserves (CIR) to cover projects costs, leaving a balance of just \$4 million in the CIR at the close of FY 2027.

Ms. Kelleher stated that the detailed cost of service analysis determined that a minimum balance of approximately \$13.2 million is needed in the CIR fund to cover the replacement of District capital assets. She noted that this estimate does not include the cost to replace or reengineer the Vista Flume. Ms. Kelleher reviewed the allocation of costs to revenue from the District service charge, the Tier 1 and Tier 2 Rates, and other revenue sources. She said that staff is proposing to eliminate the District's current Tier 3, which was developed in 2009 during the drought to recover any penalties the District may incur associated with not meeting its mandatory water-use reduction target. Ms. Kelleher stated that penalties have been discontinued, and Tier 3 water use is currently charged at the Tier 2 rate.

The Board discussed whether to keep Tier 3, just in case penalties are reinstated for the current drought. Mr. Hodgkiss responded that even when Tier 3 was implemented during mandatory reductions the District never received a penalty for not meeting its conservation goals. He stated that the District has an aggressive conservation program, which can be ramped up if needed to accomplish mandatory water use reduction targets.

Ms. Kelleher explained that average monthly water use has declined significantly since 2009 when the tier allotments were implemented; therefore, staff is proposing to decrease the Tier 1 allotment to match the decline in water use. She stated that the current Tier 1 allotment of 10 units for a ¾" meter would decrease to six units; anything over six units would be billed at Tier 2 water rates. Ms. Kelleher stated that the potential Tier 1 water rate is set at \$4.76 per unit, an increase of 32 cents per unit. The Tier 1 rate is set to ensure recovery of the District's operating costs less the costs related to expanding the District's local water supply, conservation and increasing storage capacity. The potential Tier 2 water rate is set at \$5.23 per unit, an increase of 25 cents. The Tier 2 water rate is set using the Tier 1 rate as its base and adds costs related to improving and expanding the District's local water supply system, including the cost to establish and begin funding a debt reserve coverage fund necessary to obtain future financing to replace or reengineer the Vista Flume, increase reservoir storage capacity and wellfield production, and the cost of conservation.

The Board discussed the potential rate increases and tier limits. There was some sentiment expressed by the Board that the six-unit Tier 1 allotment might be too restrictive. Mr. Hodgkiss commented that a typical customer's bimonthly water use is currently 24 units, down from 2009 when it was 40 units. He stated that the methodology that has been applied to arrive at the six-unit allotment is in keeping with what was done in 2009, adding that it is presented as an option, and other methodologies can be developed and applied if the Board so desires.

Ms. Kelleher reviewed a sample of an average customer's bill, applying the potential two-tier rate structure to show the difference in cost over a two-month period. The difference was an increase of \$14.00 over the two-month billing period (or \$7 per month). In the two-tier scenario, sufficient revenue would be generated to keep the CIR fund at the required threshold of approximately \$13.5 million by FY 2027. She then reviewed a potential flat rate scenario and compared it to the proposed two-tier rate. Applying the flat rate to the same sample typical customer's bill resulted in an increase in cost of \$15.80 over the two-month billing period (90 cents more per month than in the proposed two-tiered rate) and the amount of revenue over the same five-year period was approximately \$500,000 less.

Mr. Hodgkiss said that as part of the Vista Flume alignment study a financial analysis of the various alternatives would be prepared. The results of said analysis would be helpful in figuring out how to fund the project and determining whether adjustments the District's rate structure would be necessary to pay for the project.

Director Vásquez said that the proposed increase is onerous, and he was prepared to oppose it; however, after discussing it thoroughly with staff and the Board, he understands why this increase is necessary and is the fiscally responsible thing to do. He said he is still not sure about the six-unit Tier 1 allotment, and he questioned whether it would be a realistic allotment for the typical customer.

The Board expressed concern about the increased financial burden on District ratepayers but all members were in agreement that providing funding for the District’s capital improvement plan through FY 2027 is the fiscally responsible thing to do. Mr. Hodgkiss said that staff is working with Jennifer Farrell and Travis Van Ligten of Rutan & Tucker (Rutan) to ensure compliance with the requirements of Proposition 218. He said that once Rutan’s feedback is received staff would place this matter on an upcoming agenda for further discussion. President Sanchez requested that staff bear in mind that Director Miller will be absent for the next two Board meetings, and he requested that the item be scheduled for public hearing when Director Miller will be present.

President Sanchez thanked staff for its hard work on this item. Mr. Hodgkiss thanked the Fiscal Policy Committee for its thorough review and feedback on matter, and he thanked Ms. Kelleher, Finance Supervisor Shallako Goodrick and other staff involved for their hard work as well.

## **8. EDGEHILL (E) RESERVOIR REPLACEMENT AND PUMP STATION**

See staff report attached hereto.

Engineering Project Manager Greg Keppler provided an overview of the Edgehill (E) Reservoir Replacement and Pump Station Project (Project). He stated that in 2018 the District entered into a professional services agreement with Dudek to conduct planning, design, and environmental assessments for the Project to replace the existing reservoir with a nearly three million gallon capacity reservoir and a 3,000 gallon per minute pump station. He stated that as part of the environmental review process for the Mitigated Negative Declaration that was approved by the Board in 2020, the District conducted all of required notifications including notifying local Native American Tribes that may have an interest in the project (as required by Assembly Bill [AB] 52) and the surrounding local residences.

Mr. Keppler said the Project was delayed for nearly a year due to the impacts of the COVID-19 pandemic. He stated that the design for the Project is complete, and the District is ready to advertise and solicit bids for construction. Mr. Keppler stated that the District issued a Request for Proposal for construction management and inspection services to seven firms and received four proposals. Staff is seeking authorization for the General Manager to enter into an Agreement for Professional Services with Valley Construction Management (VCM) for construction management and inspection services, as this firm was deemed by staff to be the most responsive and provided the most comprehensive proposal. Mr. Keppler reviewed the Scope of Work for VCM, which will include providing a full time inspector.

Mr. Keppler stated that staff is also requesting authorization for the General Manager to amend the Agreement for Professional Services with Dudek for construction related design/environmental support services. He reviewed the Scope of Work for the Dudek amendment, which will include providing final “as-builts” for the Project, training all the parties on the site regarding environmental compliance, and technical review of submittals and shop drawings.

Director MacKenzie requested a timeline of when the construction management firm (VCM) will be hired and when the bidding process will be conducted. Mr. Keppler responded that with the Board’s approval of the agenda item, the General Manager will be authorized to enter into an agreement with VCM. He stated that staff would like to begin advertising for construction in October and anticipate having bids submitted in November 2021; a recommendation for award of construction could be presented to the Board

in December 2021. He estimated that the Notice to Proceed would likely be issued by the end of January 2022. It is estimated that the Project will take up to 24 months to complete (by the end of calendar year 2024). The Board questioned whether there is enough time in the proposed timeline to receive responsive bids; Mr. Keppler responded that he spoke with approximately six contractors that are likely to bid the project, and all indicated the time allotted for bidding was adequate.

Mr. Keppler provided clarifications regarding the costs, stating that the costs associated with staff's recommendations include \$1,006,886 for construction management and inspection services (VCM) and \$403,826 for design/environmental support services (Dudek).

Mr. Keppler provided clarification regarding the special inspection services to be provided by VCM, stating continuous inspection is something the District has chosen to require based on consultation with Dudek. He said that the inspector will be present onsite from start to finish each day, and the Construction Manager will serve in more of an administrative capacity and will be onsite at key times. Mr. Keppler commented that this type of "cast-in-place" tank is one of the most difficult to construct, and it requires a tremendous amount of supervision and inspection to ensure it will not leak. He added that in the interest of risk management, staff is considering having the General Contractor perform all of the concrete work without the use of a subcontractor. Director MacKenzie requested that the full-time inspector be identified in the contract document and that this position be held and performed by one individual, not by a rotation of various individuals.

Mr. Keppler clarified that Dudek will provide services related to cultural, biological, and noise concerns on or near the project site. Director MacKenzie suggested that staff check with legal counsel to be sure whether a local tribal representative is required to be onsite during grading activities. Mr. Keppler responded that as part of AB 52, local Native American tribes were notified of the project during the environmental review process, and this notification served as the tribes' formal opportunity to provide someone to be onsite during construction; the tribes declined to make that request during the review process. He added that if something were uncovered during the project, Dudek would notify tribal representatives as part of the required mitigation measures.

It was noted and questioned whether the fact that Dudek prepared the design and specification for the Project and will also be conducting the constructability review is problematic. Mr. Keppler responded that VCM will also conduct an independent review of the plans and specifications, and Dudek will be notified if anything comes into question based on VCM's review. If anything were to be identified by VCM, it could be captured and competitively bid through a bid addendum.

21-09-107 *Upon motion by Director Dorey, seconded by Director Miller and unanimously carried (5 ayes: Miller, Vásquez, Dorey, MacKenzie, and Sanchez), the Board of Directors approved the Edgehill (E) Reservoir Replacement and Pump Station project; authorized staff to advertise and solicit bids for the construction of the project; authorized the General Manager to enter into an Agreement for Professional Services with Valley Construction Management for construction management and inspection services in an amount not-to-exceed \$1,006,886; and authorized the General Manager to amend the Agreement for Professional Services with Dudek for construction related design/environmental support services for a total amount not-to-exceed \$1,288,936 (D-2346, DIV NO. 3).*

At the conclusion of the above discussion, Director MacKenzie left the meeting. The following agenda item was taken out of sequence out of consideration for Interim General Counsel Jennifer Farrell's schedule.

**14. COMMENTS BY GENERAL COUNSEL**

None were presented.

**9. BUENA CREEK (HB) RESERVOIR REHABILITATION PROJECT**

See staff report attached hereto.

Director of Engineering Randy Whitmann stated that when last discussed the Board authorized District General Counsel to negotiate the cost of Richard Brady & Associates' final change order; an agreement has since been reached in the amount of \$35,000 (and a settlement agreement has been signed). He noted that with the change order, the Buena Creek (HB) Reservoir Rehabilitation Project was completed for approximately \$6,000 over budget, and the project was ready to be closed out. Director Vásquez commented that for a project of this size and complexity, this overage is minor. The Board commended Mr. Whitmann and Mr. Kepler for a job well done.

21-09-108	<i>Upon motion by Director Miller, seconded by Director Vasquez and unanimously carried (4 ayes: Miller, Vásquez, Dorey, and Sanchez; 1 absent: MacKenzie), the Board of Directors accepted the Buena Creek (HB) Reservoir Rehabilitation Project and directed staff to file a Notice of Acceptance with the County Recorder's Office (D-2342, DIV NO 5).</i>
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**10. MATTERS PERTAINING TO THE ACTIVITIES OF THE SAN DIEGO COUNTY WATER AUTHORITY**

See staff report attached hereto.

Director Miller reported that there had not been a meeting of the San Diego County Water Authority (Water Authority) since his last report. He stated that the next meeting would be the following day, and the main item for discussion will be the Water Authority's long-range financial plan. He stated that the City of San Diego has requested a third-party review of the Capital Improvement Plan cost and prioritization and that this topic will also be discussed at the meeting.

Director Miller commented that Glenn Farrel, Water Authority Director of Government Relations is retiring and will be sorely missed. He stated that at the next day's Water Authority Board meeting the replacements for Michael Hogan and Jerry Butkiewicz as Water Authority Delegates to the Metropolitan Water District (MWD) will be announced.

Mr. Hodgkiss reported that he received an email from Water Authority General Manager Sandy Kerl regarding a decision made on MWD's appeal of the 2010-12 rate cases; the decision was favorable for the Water Authority.

Ms. Farrell left the meeting at this time.

**11. MEETINGS AND EVENTS**

See staff report attached hereto.

Director Dorey reported on his attendance at the Annual Meeting of the Groundwater Resources Association held in conjunction with Fourth Annual Western Groundwater Congress. He stated that this year's event included individual presentations and panel discussions on matters such as water resources

development, groundwater management, contaminant assessment and remediation. Director Dorey reported on multiple sessions he attended on concerning polyfluoroalkyl (PFAS) substances in groundwater.

Director Vásquez reported on his attendance at the recent Association of California Water Agencies (ACWA) Water Quality Committee meeting where discussion centered on methods for treating PFAS in drinking water. There were also discussions regarding a recent study of microplastics in drinking water and about the Sustainable Groundwater Management Act. Director Vásquez stated there was a presentation by Mary Lynn Coffee of Nossaman LLP regarding the proposed California Endangered Species Act listing of steelhead, and the impending closing of the comment period for agencies with affected watersheds.

Director Miller requested authorization to attend the Colorado River Water Users Association Annual Conference (CRUWA) and added that he would make a final determination as to whether his schedule will allow him to attend as the date gets closer.

President Sanchez reported on his attendance at the ACWA Business Development Committee meeting where the Agency Certificate of Excellence (ACE) program was reviewed. He stated that the ACE program is planned to launch in 2023, and the return on investment for this program is still being evaluated. President Sanchez stated that also discussed during the meeting were programs including the Premier Vendor Program and the Preferred Provider Program and ways to promote associate partners to increase involvement; an update on registrations for the upcoming ACWA Fall Conference was provided.

21-09-109      *Upon motion by Director Dorey, seconded by Director Vásquez and unanimously carried (4 ayes: Miller, Vásquez, Dorey, and Sanchez; 1 absent: MacKenzie), the Board of Directors authorized Director Miller to attend the Colorado River Water Users Association Annual Conference.*

**12. ITEMS FOR FUTURE AGENDAS AND/OR PRESS RELEASES**

See staff report attached hereto.

No additions or changes were made to the items for future agendas and/or press releases.

**13. COMMENTS BY DIRECTORS**

President Sanchez reported that he will not be at the November 17, 2021 Board meeting. Director Miller stated that he may have a scheduling conflict for the upcoming Warner Ranch inspection tour on September 29, 2021; he added that he would know and advise staff the following day.

**15. COMMENTS BY GENERAL MANAGER**

Mr. Hodgkiss informed the Board about a damage claim issued to a customer for a broken curbstop, and the letter that was hand delivered for each board member from the customer requesting relief from the claim amount. Director of Operations and Field Services Frank Wolinski provided clarification on the details of the matter. Mr. Hodgkiss stated that unless otherwise directed by the Board, staff would continue to proceed with the claims process. President Sanchez directed that if necessary, to place the item on an upcoming agenda for action by the Board.

Mr. Hodgkiss reminded the Board that flu shots would be offered for District employees, Directors and family members at the District headquarters on September 28, 2021 between 3:00 p.m. and 4:30 p.m. He also reminded the Board of the Warner Ranch inspection tour on September 29, 2021 at 8:00 a.m.

Mr. Hodgkiss provided a brief update on the San Pasqual Undergrounding Project bid opening, stating that seven of the nine bids were received under the Engineer's Estimate with the low bid being nearly \$8.5 million below said estimate. He noted that even the two higher bids were still very close to the Engineer's Estimate. He stated that this item will be presented to the Board at its October 6, 2021 meeting.

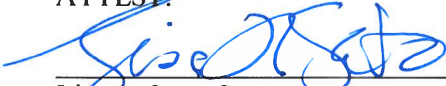
Director of Water Resources Don Smith updated the Board regarding a water quality issue at Lake Henshaw Resorts. As part of the routine water quality monitoring performed by the concessionaire, there was an indication of a bacteriologic issue found in the sample. He stated that, in coordination with the County of San Diego, a boil water alert was issued to affected parties including three District staff members who live in the area. Mr. Smith stated that, with assistance from Water Distribution Supervisor Dean Farris, daily sampling has been ongoing since corrective steps were taken, and all tests had come back clear until yesterday (September 21, 2021) when a bacteriological sample failed. Mr. Smith said that the District will continue to work with the concessionaire on the matter. The Board was in agreement with the District's level of assistance to the concessionaires. Mr. Hodgkiss added that District staff who live in the affected area and the concessionaire have expressed gratitude for the District's assistance.

**16. ADJOURNMENT**

There being no further business to come before the Board, at 11:45 a.m., President Sanchez adjourned the meeting to September 29, 2021 at 8:00 a.m.

  
Patrick Sanchez, President

ATTEST:

  
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Lisa R. Soto, Secretary  
Board of Directors  
VISTA IRRIGATION DISTRICT





## STAFF REPORT

Agenda Item: 6.A

Board Meeting Date:	September 22, 2021
Prepared By:	Robert Scholl
Reviewed By:	Randy Whitmann
Approved By:	Brett Hodgkiss

SUBJECT: WATERLINE PROJECT APPROVAL

RECOMMENDATION: Approve this waterline project for a Taco Bell restaurant consisting of approximately 1.15 gross acres owned by St. John, LLC, a California Limited Liability Company, located at 910 E. Vista Way, Vista (LN 2020-027; APN 176-013-10; DIV 1).

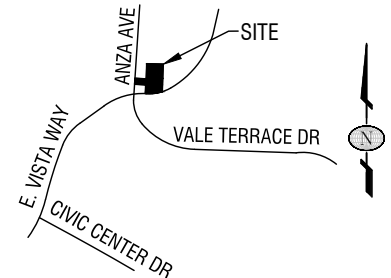
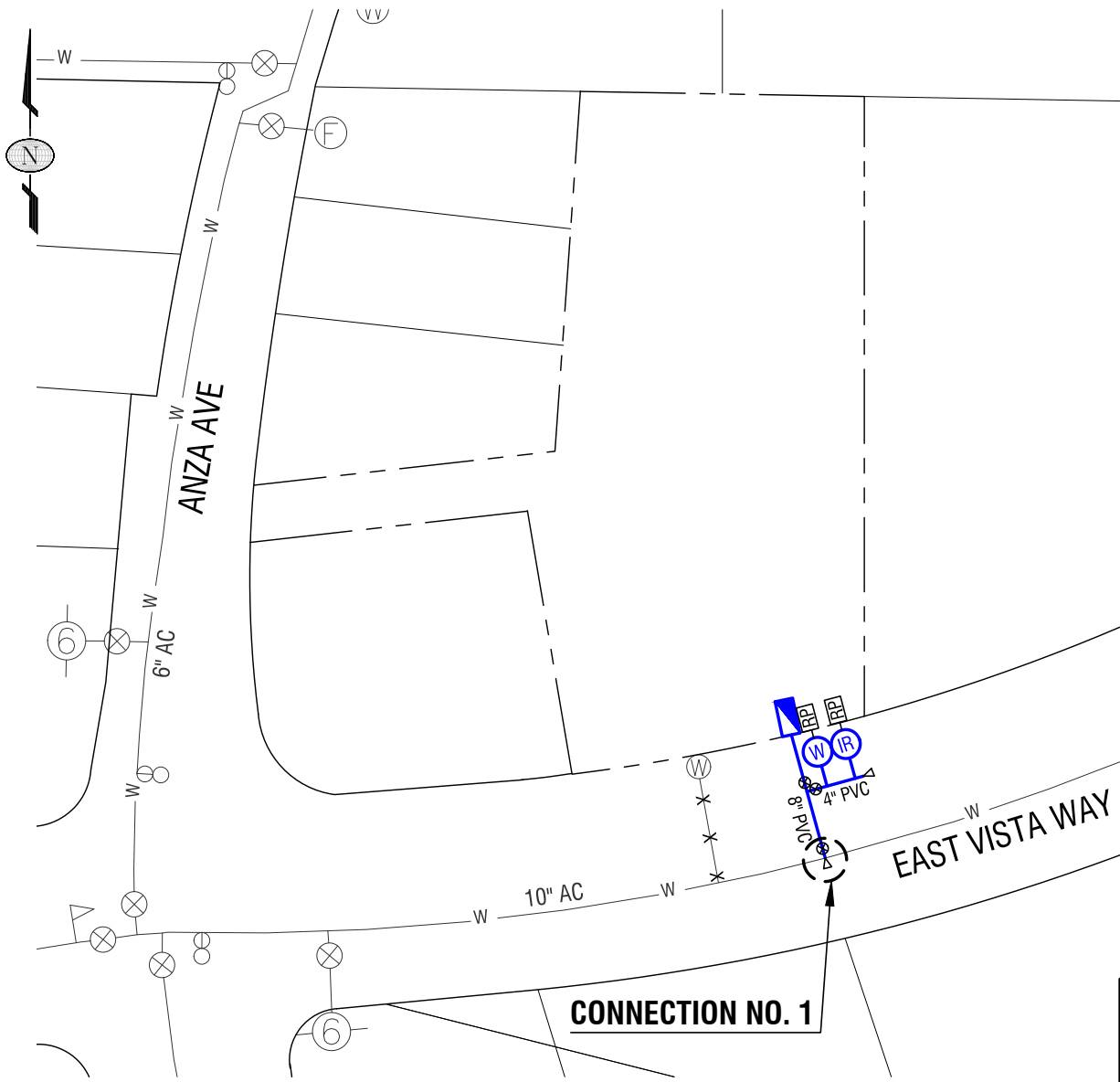
PRIOR BOARD ACTION: None.

FISCAL IMPACT: None.

SUMMARY: On August 27, 2021, the District signed the improvement plans for this waterline project; approval of this project will allow the General Manager to execute a construction contract with the developer.

DETAILED REPORT: Under District inspection, the developer's contractor will install approximately 54 feet of 8-inch waterline, seven feet of 4-inch waterline, one 8-inch gate valve, one 4-inch gate valve, one 1-inch domestic service, one 1-inch irrigation service, one 6-inch fire service, sever an existing 1-inch service lateral and make connections as approved on the plans. The new water facilities will be located within the public right of way. The owner will submit applications and pay the necessary fees to the District for water meters. Approval of this waterline project will allow the owner to proceed with the development of their project.

ATTACHMENT: Map



### VICINITY MAP

NTS

### LEGEND

#### EXISTING

- W — WATER MAIN
- ∞ BLOW OFF
- ▽ AIR VENT
- ⊗ VALVE
- (6) — FIRE HYDRANT
- x - x - (W) SEVER EXIST. SERVICE LATERAL

#### PROPOSED PUBLIC

- PVC (DR14) WATER
- ⊗ VALVE
- (W) WATER LATERAL

#### PROPOSED PRIVATE

- ▢ PRIVATE RPDA
- RP PRIVATE RP

<b>VISTA IRRIGATION DISTRICT</b>		
<b>TACO BELL</b>		
<b>910 EAST VISTA WAY</b>		
APN 176-013-10	T.B.	
SCALE: NONE	L.N. 2020-027	
APPD. BY	DATE	W.O.
DRAWN BY JS	DATE 09/02/21	
SHEET 1 of 1	MAP G11/G12	
REVISED: 9/2/21 Jose Sanchez		
Z:\Engineering\JOBS\LN-Jobs\LN2020\LN 2020-027 910 E. Vista Way\LN2020-027 Taco Bell Map.dwg		

OWNER:  
 ST. JOHN, LLC  
 627 N. ESCONDIDO BLVD  
 ESCONDIDO, CA 92025  
 972-391-5375  
 CONTACT: TOMMIE MIKELS

ENGINEER:  
 THATCHER ENGINEERING & ASSOCIATES, INC.  
 700 E. REDLANDS BLVD., SUITE U-206.  
 REDLANDS, CA 92373  
 909-907-9116



# Cash Disbursement Report

Payment Dates 8/26/2021 - 9/8/2021

Payment Number	Payment Date	Vendor	Description	Amount
67652	09/01/2021	Amazon Capital Services	Headlight Assemblies - Truck 9	111.36
	09/01/2021		Fish Tape Puller	173.11
67653	09/01/2021	AT&T	3680/CALNET 07/13/21-08/12/21-Phones	418.43
	09/01/2021		0230/CALNET 07/13/21-08/12/21-Teleconference	25.37
67654	09/01/2021	Auto Specialist Warehouse	Rear Brake Parts - Truck 41	306.62
67655	09/01/2021	Dixieline	New Kitchen Cabinets for Weir House - Henshaw	9,489.59
67656	09/01/2021	CDW Government Inc	Next Business Day Support Items	3,688.83
	09/01/2021		Phone System Software and Licensing Support	2,963.00
	09/01/2021		Core Switch Support and Maintenance	2,063.58
	09/01/2021		24x7 Support Items	1,695.41
67657	09/01/2021	City Of Escondido	Escondido Canal Operating Cost FY20-21 Balance	15,815.94
67658	09/01/2021	CliftonLarsonAllen, LLP	Audit Transfer Fee	750.00
67659	09/01/2021	Coast Equipment Rentals	Concrete	265.21
67660	09/01/2021	Core & Main	Reducer 8x6 DI PO (1)	127.47
	09/01/2021		18" x 8" P.O. x Flg Tee (1)	1,682.21
	09/01/2021		Flange 14" SOW (1)	232.75
	09/01/2021		18" x 6" Flg. Tee (2)	2,262.58
67661	09/01/2021	Direct Energy	Electric 08/2021 - Henshaw Buildings & Grounds	234.14
	09/01/2021		Electric 08/2021 - Henshaw Well Field	10,499.36
	09/01/2021		Electric 08/2021 - T & D / Cathodic Protection	30.07
	09/01/2021		Electric 08/2021 - Reservoirs	40.22
	09/01/2021		Electric 08/2021 - Pump Stations	6,939.67
	09/01/2021		Electric 08/2021 - Treatment Plants	35.62
67662	09/01/2021	DIRECTV	Direct TV Service	102.99
67663	09/01/2021	Ferguson Waterworks	Fire Hydrant Spool 6x6 DI (2)	177.53
	09/01/2021		Fire Hydrant Spool 6x24 DI (3)	470.89
	09/01/2021		Pipe Lube 5 gal (2)	121.24
	09/01/2021		Clamp 1x6 Repair Full Circle SS Romac (2)	137.98
	09/01/2021		Clamp 4x12 Repair Full Circle SS Romac (1)	235.53
	09/01/2021		Angle Ball Valve 2" FNPT X MNPT (CurbStop)(2)	641.53
	09/01/2021		Service Saddle 4x1 PVC (3)	299.42
	09/01/2021		Coupling 6" Macro (1)	306.25
	09/01/2021		Nut Bolt Gasket Kit 6"-8" (6" gskt) 3/4 x3 1/4 (21)	247.78

Payment Number	Payment Date	Vendor	Description	Amount
	09/01/2021		Ell 2" Brass Street 90 Degree (5)	128.82
	09/01/2021		Gate Valve 8" POxFL R/W (2)	1,969.05
	09/01/2021		Flange 10" SOW (1)	77.13
	09/01/2021		Coupling 8" Macro (1)	346.80
	09/01/2021		Tracer Lids 4" Cast Iron (4)	72.14
	09/01/2021		Nut Bolt Gasket Kit 4" (4" gasket) (2)	12.99
	09/01/2021		Fire Hydrant LB400 Check Valve (4)	7,361.00
	09/01/2021		Nut Bolt Gasket Kit 10"- 12" (10" gasket) (4)	103.92
	09/01/2021		Service Saddle 8x1 PVC (18)	2,619.76
	09/01/2021		Service Saddle 4x2 PVC (3)	361.25
	09/01/2021		Tee 8" DI Flange (1)	416.46
	09/01/2021		Angle Ball Mtr Valve 1" Flare Swl Mtr Nut Lockwing(30)	3,425.14
	09/01/2021		Zinc Anode bag 30lb (29)	4,179.91
	09/01/2021		Corp Stop 1" MIP X Flare (30)	1,812.11
	09/01/2021		Ell 6"x16" POxFL Bury DI (4)	1,439.73
	09/01/2021		Service Saddle 12x1 PVC (5)	1,002.29
	09/01/2021		Tee 8x6 DI POxFL (3)	837.47
	09/01/2021		Service Saddle 8x2 PVC (4)	633.87
	09/01/2021		Angle Ball Meter Valve 2" FLG X FIP DD Lockwing (2)	556.43
	09/01/2021		Wire 10 Copper (4000)	1,385.60
	09/01/2021		Service Saddle 12x2 PVC (2)	460.50
	09/01/2021		Gate Valve 4" POxFL R/W (1)	472.93
	09/01/2021		Adapter 12" DI FLxPO (1)	370.99
	09/01/2021		Adapter 8" DI POxFL (2)	373.72
	09/01/2021		Tubing 2" Copper Soft 20' (60)	1,464.62
	09/01/2021		Adapter 2" Copper x MIP (20)	392.51
	09/01/2021		Air Vent Enclosure VCAS-1830 Granite Mix (1)	427.59
	09/01/2021		Tubing 1" Copper Soft 60' (720)	5,962.41
	09/01/2021		Tee 8x4 DI Flange (1)	387.36
	09/01/2021		Pipe 8" PVC DR-14 C900 (1140)	23,965.25
	09/01/2021		2" Schedule 80 Threaded Caps (5)	42.49
	09/01/2021		8" x 4" Flg x PO Reducer (DI) (1)	198.67
	09/01/2021		12" x 6" Flg Tee (DI) (1)	725.62
	09/01/2021		Regulator Gasket Seals (2)	219.96
67664	09/01/2021	Glennie's Office Products Inc	Office Supplies	16.62
67665	09/01/2021	Grand Stands, Inc	Ergonomics Supplies	2,563.72
67666	09/01/2021	Hach Company	Lab Supplies	3,850.64
	09/01/2021		Chlorine Analyzer (1)	2,659.71

Payment Number	Payment Date	Vendor	Description	Amount
67667	09/01/2021	JCG Technologies, Inc	Liberty Board Room Recording Software	450.00
67668	09/01/2021	Joe's Paving	Patch Paving	5,907.25
67669	09/01/2021	Lawson Products	Stainless Hose Clamps	39.70
67670	09/01/2021	Mutual of Omaha	LTD/STD/Life Insurance 09/2021	6,819.18
67671	09/01/2021	NAPA Auto Parts	Air Filter - B22	55.56
67672	09/01/2021	North County Auto Parts	Silicone	22.49
	09/01/2021		Brake Parts - Truck 6	193.36
67673	09/01/2021	North County Industrial Park	Association Fee 09/2021	879.30
67674	09/01/2021	Pacific Pipeline Supply	Coupling .75" Repair CxC Copper (4)	86.60
	09/01/2021		Clamp 1x3 Repair Full Circle Orangeburg Romac (10)	378.01
	09/01/2021		6" PO End Cap (1)	105.72
67675	09/01/2021	Portillo Concrete, Inc	Refund Meter Deposit	590.58
67676	09/01/2021	Premier Chevrolet	Windshield Washer Reservoir	62.39
67677	09/01/2021	Quadient Leasing USA, Inc.	Postage Meter Lease 09/12/21 - 09/11/22	1,828.20
67678	09/01/2021	Ramona Disposal Service	Trash Service 08/2021	167.50
67679	09/01/2021	Red Wing Shoe Store	Footwear Program	241.77
67680	09/01/2021	Richard Brady & Associates, Inc	HB Reservoir Rehab 05/2021 - Final Progress Pymt	28,360.00
67681	09/01/2021	Sealright Paving Inc.	Patch Paving	2,523.61
	09/01/2021		Patch Paving	2,671.05
67682	09/01/2021	SignArt	No Trespassing Signs (6)	174.56
67683	09/01/2021	Southern Counties Lubricants, LLC	Fuel 08/01/21 - 08/15/21	7,345.16
67684	09/01/2021	Bend Genetics, LLC	HABs Lab Analysis	790.00
67685	09/01/2021	Midas Service Experts	Tires (2) - Truck 59	345.11
	09/01/2021		Alignment - Truck 18	69.99
67686	09/01/2021	TS Industrial Supply	Striping Paint Blue #750 (12)	67.55
	09/01/2021		Wire Brush 7 3/4" SS with Plastic Handle (15)	39.94
	09/01/2021		Welding Strikers (10)	57.05
	09/01/2021		Marking Paint White #255 (12)	46.37
	09/01/2021		Sea 2" Pipe Wrap Tape (18)	139.90
	09/01/2021		Smart Fit Earplug #SMF 30 (1)	84.92
	09/01/2021		Marking Paint Blue #254 (24)	92.75
	09/01/2021		Striping Paint White #710 (24)	135.10
	09/01/2021		Sea Duct Tape #398 (4)	47.59
	09/01/2021		Striping Paint Asphalt Black (24)	135.10
	09/01/2021		Sling Lifting 2"x8' Heavy Duty (1)	29.57
	09/01/2021		Broom 24" Push (4)	193.26
	09/01/2021		Gloves Thickster Nitrile XL 100 per box (10)	281.45
	09/01/2021		Wire Wheel 4" (10)	188.14

Payment Number	Payment Date	Vendor	Description	Amount
	09/01/2021		Sling Lifting 2"x6' Heavy Duty (1)	24.25
	09/01/2021		Wire Wheel 5" (5)	114.42
	09/01/2021		Towel Wypall X80 (5)	185.11
	09/01/2021		Shovel Square Point (5)	147.49
	09/01/2021		Abrasive Mesh Roll 180G (4)	73.61
	09/01/2021		Cutter 1/8" to 1 5/8" Ridgid #RC-1625 PVC (1)	72.53
	09/01/2021		Hammer 3lb Steel Sledge (1)	18.56
	09/01/2021		Level 2' (2)	61.92
	09/01/2021		Pruner 26" (1)	60.87
	09/01/2021		Level 9" Torpedo (3)	43.48
	09/01/2021		Impact Sockets (2), Adapter (1)	99.92
67687	09/01/2021	UniFirst Corporation	Uniform Service	331.41
67688	09/01/2021	Verizon Wireless	Air Cards 07/13/21-08/12/21	152.04
67689	09/01/2021	Vinje & Middleton Engineering Inc	Geotechnical Observation/Density Testing - Oak Dr	283.75
67690	09/01/2021	Watts Regulator Company	DPD Reagents	579.36
67691	09/01/2021	Xerox Corporation	Xerox Service & Supplies	237.09
67692-67693	09/08/2021	Refund Checks 67692 - 67693	Customer Refunds	4,895.10
67694	09/08/2021	Escondido Metal Supply	Raw Materials - Truck #85 Bed	39.45
67695	09/08/2021	Line-X of Escondido	Line-X Bed - Truck 85	2,922.92
67696	09/08/2021	Allied Electronics Inc	SCADA Fan Filters	502.81
	09/08/2021		LED Indicators	492.39
67697	09/08/2021	Amazon Capital Services	Office Supplies - Flow Templates (2)	35.27
	09/08/2021		Wrist Cushions (4)	(62.24)
	09/08/2021		Deep Impact Socket Set	40.93
	09/08/2021		Wireless Display Adapter	48.16
67698	09/08/2021	Boot Barn Inc	Footwear Program	142.61
67699	09/08/2021	CDW Government Inc	AutoDesk Civil3D per User (2)	1,258.28
	09/08/2021		AutoDesk Inventor per User (1)	2,181.41
	09/08/2021		AutoDesk Map3D Users (12)	4,182.72
67700	09/08/2021	Citi Cards	Key Fobs	153.48
	09/08/2021		Kitchen & Restroom Supplies	778.48
	09/08/2021		Microsoft Basic Office 365 Licenses	18.00
	09/08/2021		Microsoft Basic Office 365 Licenses	25.00
	09/08/2021		GFI FaxMaker Online Service	12.75
	09/08/2021		LCW Cal/Osha Covid-19 Prevention Plan Template	249.00
	09/08/2021		Employment Advertising - Maintenance Worker	200.00
	09/08/2021		Dumbbell Set - ACWA JPIA Wellness Grant	324.74
	09/08/2021		Refreshments for Training	87.06

Payment Number	Payment Date	Vendor	Description	Amount
	09/08/2021		CSDA Conference - R Vasquez	398.00
	09/08/2021		CSDA Conference - R Vasquez	(600.00)
	09/08/2021		CSDA Conference - R Vasquez	675.00
	09/08/2021		Urban Water Conference - J MacKenzie	290.00
	09/08/2021		So Cal Water Coalition Lunch/Mtg - P Dorey	75.00
67701	09/08/2021	City of Vista	Permit Fees 04/2021 - 06/2021	10,149.65
67702	09/08/2021	Coastal Chlorination & Backflow	Chlorination of Main - Vista Grande/Green Hills Way	428.00
67703	09/08/2021	Core & Main	Fire Hydrant Spool (1)	169.25
67704	09/08/2021	County of San Diego	Permit Fees 07/2021	5,144.50
67705	09/08/2021	Craneworks Southwest Inc	High Pressure Hose	41.37
67706	09/08/2021	Diamond Environmental Services	Portable Restroom Service	119.03
	09/08/2021		Portable Restroom Service	84.39
67707	09/08/2021	Diesel Pollution Solutions Inc	Cleaned & Baked DPF - Truck 11	259.00
67708	09/08/2021	EDCO Waste & Recycling Services Inc	Trash & Recycle 08/2021	250.96
67709	09/08/2021	FedEx	Express Shipping	22.16
67710	09/08/2021	Fountain Car Wash	Wash Tokens (600)	540.00
67711	09/08/2021	Glennie's Office Products Inc	Office Supplies	54.24
	09/08/2021		Office Supplies	69.19
67712	09/08/2021	Government Finance Officers Association	Membership Renewal 10/2021 - 09/2022	160.00
67713	09/08/2021	Grainger	UPS & Run Time Meters	289.34
67714	09/08/2021	Hach Company	Sc200 Controller Door Assembly	133.16
67715	09/08/2021	Joe's Paving	Patch Paving	5,998.00
	09/08/2021		Patch Paving	8,674.75
67716	09/08/2021	Ken Grody Ford Carlsbad	Coolant Surge Tank - Truck 30	118.01
67717	09/08/2021	McMaster-Carr Supply Company	Pulley	43.42
67718	09/08/2021	Moodys	Dump Fees	600.00
67719	09/08/2021	NAPA Auto Parts	Air Filters (6)	90.54
	09/08/2021		Oil Filters (3)	15.07
67720	09/08/2021	North County Auto Parts	Windshield Washer Pump - Truck 6	18.65
	09/08/2021		Chemicals, Filter - Garage	145.15
	09/08/2021		Oil Filter - Truck 71	3.82
67721	09/08/2021	Pacific Pipeline Supply	Electric Hand Pumps (4)	970.73
	09/08/2021		Angle Stops (3)	576.23
67722	09/08/2021	Rincon del Diablo MWD	MD Reservoir Water Service 08/2021	64.01
67723	09/08/2021	Rutan & Tucker LLP	Legal 07/2021	3,471.50
	09/08/2021		Legal 07/2021	776.00
67724	09/08/2021	San Diego Gas & Electric	Electric 08/2021 - Henshaw Buildings & Grounds	541.74
	09/08/2021		Electric 08/2021 - Henshaw Well Field	16,056.84

Payment Number	Payment Date	Vendor	Description	Amount
67725	09/08/2021	Sunrise Materials Inc	Concrete Edger, Trowels	106.09
	09/08/2021		Gravel	85.52
67726	09/08/2021	The UPS Store 0971	Shipping 07/2021	1,028.65
	09/08/2021		Shipping 08/2021	976.77
67727	09/08/2021	Bend Genetics, LLC	HABs Lab Analysis	925.00
67728	09/08/2021	TS Industrial Supply	3" Ball Valve - Truck 1	214.85
	09/08/2021		Wrench T-Handle 5'-9' SW-510 (1)	149.28
	09/08/2021		Rake 14" Garden (1)	18.67
	09/08/2021		Air Hose	37.70
	09/08/2021		Fire Hose, Couplings	349.21
67729	09/08/2021	UniFirst Corporation	Uniform Service	391.66
<b>Grand Total:</b>				<b>279,748.87</b>





## STAFF REPORT

Agenda Item: 7

**Board Meeting Date:** September 22, 2021  
**Prepared By:** Shallako Goodrick  
**Reviewed By:** Marlene Kelleher  
**Approved By:** Brett Hodgkiss

**SUBJECT:** TIERED WATER RATE STRUCTURE REVISIONS AND RATE ADJUSTMENT POLICY

**RECOMMENDATION:** Review and provide input on proposed revisions to the tiered water rate structure and water rates.

**PRIOR ACTION:**

- 07/15/2009 Conducted a public hearing and adopted Resolution Number 09-40 which renewed the pass through of the San Diego County Water Authority (Water Authority) costs and annual inflationary adjustments (Rate Adjustment Policy) for a five-year period.
- 10/09/2013 Conducted a public hearing and adopted Resolution Number 13-38 renewing the District's Rate Adjustment Policy for a period of five years.
- 10/18/2017 Conducted a public hearing and adopted Resolution Number 17-38 renewing the District's Rate Adjustment Policy for a period of five years.

**FISCAL IMPACT:** The tiered rate structure includes pass-through of Water Authority fees and charges imposed on the District for water purchases and an increase to cover the District's capital needs and other obligations. Additionally, an increase to the service charge is being proposed to implement the annual water rate adjustment that the Board decided to forgo in 2020. Adoption of the proposed water rate changes should ensure that the District's revenues and reserves sufficiently fund current and future operations and capital costs.

**SUMMARY:** In 2009, the Board approved water rate adjustments and rate structure modifications, including the implementation of a tiered water rate structure. In 2013 and 2017, the Board approved the renewal of the pass through of Water Authority costs and annual inflationary adjustments to the service charge (Rate Adjustment Policy).

Staff has conducted a detailed cost of service analysis, in compliance with Proposition 218, to ensure that the District's rates equitably recover the costs associated with providing water service to each customer. The analysis examined operating and capital improvement costs and projected these costs over a five-year period ending in Fiscal Year 2027. The projections are based on estimated costs necessary to continue to operate and maintain the water system for District ratepayers and utilizes industry standard cost indexes and historical averages.

**DETAILED REPORT:** The District proposes to adopt rates related to the following three components:

The first component is the pass-through of Water Authority fees and charges imposed on the District for water purchases. The Water Authority is the District's wholesale water supplier. The District proposes to pass through 100% of any increase or decrease in the Water Authority's fees and charges imposed on the District for water purchases through December 31, 2026. The pass-through of Water Authority fees and charges for the first year of the five-year period is 16 cents per unit (one unit = 748 gallons) which will be applied to Tier 1 and Tier 2 water rates. This amount is comprised of a 20-cent per unit increase, less a four cent per unit related to a rate case rebate received from the Water Authority.

The next component is comprised of an increase to the service charge that the Board decided to forgo implementing in 2020 due to the impacts of the COVID-19 pandemic. If the proposed rates were to be adopted, the pass-through of an annual inflationary adjustment (based on the Consumer Price Index) to the service charge would not be necessary in 2022. The amount of the annual inflationary adjustment included in this rate adjustment, based on a 3/4 inch meter is \$1.42 per month (\$2.84 bi-monthly).

The final component is to ensure that the District has sufficient revenues to cover the costs of providing water service. It is anticipated that the water rate and service charge revenues over the upcoming five years will recover, but not exceed, the cost of providing water service, which includes water purchases from the District's wholesale supplier, the Water Authority, system operation and maintenance, facility and equipment maintenance, system rehabilitation, regulatory compliance, metering, billing, conservation and account management. This one-time increase during the five-year period represents a 16-cent increase to Tier 1 rates and a nine-cent increase to Tier 2 rates.

As a governmental district, and unlike a public utility, the District does not make a profit or have shareholders, and all revenues go back into the water system. Revenues derived from the proposed rate adjustments will not exceed the cost to provide water service to customers, and the revenues will not be utilized for any purpose other than financing the District's operating and capital needs.

The District also proposes making changes to its tiered water rate structure (also known as "monthly water allotments [units]"). The District originally adopted a tiered water rate structure comprised of three water usage tiers. Staff proposes eliminating tier 3, and adopting a two tiered water rate structure as outlined below.

The District developed its current tiered rate structure based on meter size and hydraulic capacity that can be applied to all customer classes; the tier thresholds for each meter size are different but the cost per unit in each tier remains the same. Average monthly water use for the most common meter size (3/4") was utilized to set the baseline tier threshold for 3/4" meters; this baseline was then applied to other meter sizes taking into account each meter's hydraulic capacity to develop baseline tier thresholds for all other meter sizes. As the meter size increases so does the capacity factor and the amount of water that can be used before moving to the next tier. Staff recommends continuing to utilize this same method in its proposed Tiered Rate Structure.

A Tier 1 threshold was set at 50% of the average monthly water use, as to not penalize low water users that had implemented conservation measures and is considered the average customers usage; any water use above the Tier 1 threshold shall be considered Tier 2 water usage.

The Tier 1 rate is set at a rate to recover the District's operating costs minus costs related to expanding the District's local water supply, the cost of conservation and increasing storage capacity. The Tier 2 rate uses the Tier 1 rate as its base, and adds on the recovery of the following costs. The cost of improving and expanding the District's local water supply system, including the replacement of or reengineering of the District's aging Vista Flume; the cost of increasing reservoir storage capacity; the cost of increasing wellfield production; and the cost of conservation.

The proposed Tier 1 rate is set at the commodity price of \$4.76 per unit, which is 32 cents higher than the current rate of \$4.44 and includes the Water Authority pass-through increase (16 cents – District and 16 cents - Water Authority). The proposed Tier 2 rate is comprised of the proposed Tier 1 commodity price plus the incremental amount to recover costs related to replacing/reengineering the Vista Flume, increased reservoir storage capacity, increased wellfield production and conservation to arrive at \$5.23 per unit for Tier 2. The proposed Tier 2 rate is 25 cents higher than the current rate of \$4.98 per unit and includes the Water Authority pass-through increase (nine cents – District and 16 cents - Water Authority).

The current Tier 1 allotments are based on average monthly water use (for a 3/4" meter) in 2009; said average monthly water use has decreased by approximately 40%. Applying the same methodology used in 2009, staff has analyzed average monthly water use and calculated proposed new Tier 1 allotments (see table below); any usage above said allotments would be billed at Tier 2 rates.

Size	Current Tier 1 Limits	New Tier 1 Limits	Difference
5/8	7	4	3
3/4	10	6	4
1	25	15	10
1 1/2	50	30	20
2	80	48	32
3	160	96	64
4	250	150	100
6	500	300	200
8	800	480	320
10	1150	690	460

In addition to the changes to current rates outlined above, staff recommends the pass-through of any Water Authority cost increases/decreases and the annual water rate adjustment be reaffirmed for five years.

#### **Pass-Through of San Diego County Water Authority Fees and Charges**

The Water Authority is the District's wholesale water supplier. The District proposes to pass through 100% of any increase or decrease in the Water Authority's fees and charges imposed on the District for purchased water through December 31, 2026

#### **Inflationary Adjustments to Rates and Charges**

Inflationary adjustments shall be calculated as an increase or decrease equal to the amount of the increase or decrease in the U.S. Department of Labor's Consumer Price Index – All Urban Consumers – San Diego, California for the previous calendar year ended. These adjustments shall be effective July 1 each year, commencing July 1, 2023 through July 1, 2026. This adjustment is only applied to District costs other than those charged the District by the County Water Authority.

#### **Public Hearing**

To comply with the procedural requirements of Proposition 218, staff has prepared a Notice of Public Hearing to consider the adoption of proposed water rate changes. The Notice of Public Hearing informs the public of the District's proposal to adjust the tier structure, allotments and rates as well as the District's service charge for each meter size. The Notice will also advise the public of the District's intent to reaffirm its pass-through of Water Authority fees and charges for wholesale water and related services and its annual inflationary adjustment for a period of five years.

#### **ATTACHMENTS:**

- 2021 Water Rate Study
- Summary of Rate Model Assumptions
- Cash Flow Projections under Current and Proposed Rates
- Projected Capital Improvement Plan Expenditures for Fiscal Years 2022 through 2027
- Reserve Policies Descriptions
- Draft of Notice of Public Hearing on Water Rates (direct mailing to customers)



# Water Rate Study 2021



This Water Rate Study (Study), prepared by Vista Irrigation District (District) staff, resulted in the recommended water rate structure.

## Objectives

*Presented Rates are Legal and Defensible* – Staff developed the recommended rate structure with no arbitrary attributes or components. Staff was sensitive to the outcomes of recent rate litigation and common law guidance provided by their decisions.

*Rates Presented Satisfy the District's Mission Statement and Values* – The District's Mission Statement, to provide a reliable supply of high quality water that meets the needs of its present and future customers in an economically and environmentally responsible manner, is achieved through satisfying adopted values, including "reliable facilities, efficient operations and fiscal strength and stability". The revenue requirement covered by the recommended rates includes all operation and maintenance costs as well as a provision for infrastructure replacement and upgrades.

*Provide a thorough and understandable administrative record* – This Study along with the Rate Model; a spreadsheet documenting methodologies, calculations, and processes; a consumption use analysis; and all presentations to the Board provide a thorough and understandable administrative record.

*Nothing arbitrary (tier levels, cost acceleration from tier to tier, etc.)* – Tier levels are tied to historical usage behavior patterns. Costs to provide water within each tier are well documented and based on the costs of water supply and maintenance costs at various levels.

*Establish a revenue requirement that exhausts all efforts to cut costs and maintains or increases the current level of service and workforce engagement* – This objective is achieved through the participative budget process employed by District staff. Since the introduction of Tiers in 2009, the District has continued its analysis of costs and have continued to reduce expenditures when possible; the District has eliminated 14 positions through streamlining of processes and improvements in technology. The District will continue to reduce costs when possible but the current staffing level is required to operate and ensure business continuity for the District.

## Vista Irrigation District Water Rate History

**2009 Water Rate Public Hearing-** In 2009, the District conducted a thorough analysis with the intent to implement tiered water rates due in part to the drought and implementation of mandatory water use reductions. It was decided to implement a three-tier water rate structure. The methodology used to establish the Tier 1 limit was 50% of the average usage for a 3/4 meter; this average was used with hydraulic capacity of the meter size to establish Tier 1 limits for all meter sizes. Tiers based on meter size permitted allotments to be established based on the hydraulic capacity that a customer had paid for when originally purchasing their meter. This methodology did not require complex technical billing changes, calculating a separate budget for each individual customer or setting up a process to allow for variances to established budgets based on each household's unique situation. The District determined that implementing a system based on hydraulic capacity as opposed to unique "water budgets" would result in lower costs to the District due to not needing to hire additional staff or implement new software to accommodate the establishment of individual customer water budgets. The theory behind this approach was that larger meters had already paid for more capacity at installation so they were entitled to a tier allotment based on the hydraulic capacity of the meter size, which was appropriate for the parcel and its development.

Tier 3 was established at volumes that would incur a penalty from the San Diego County Water Authority (Water Authority) for not conserving during the drought. Tier 2 represented the volume between Tier 1 and Tier 3. Tier 3 water use has been billed at Tier 2 rates, except during a period (6 to 9 months) when mandatory water use reductions were implemented in 2009 and 2010.

Participants in the agricultural water rate program (Water Authority’s Special Agricultural Water Rate program) pay a water rate that reflects a reduced level of service and supply reliability. Program participants are the first to be cutback in the event of drought or other water shortages. Additionally, current program participants will be required to reduce their water use at a greater level (by a minimum of 5%) than municipal and industrial water users.

The 2009 study is the basis of the tiered water rate structure, including allotments in place today.

At the same time it approved of the 2009 rates, the Board approved a Rate Adjustment Policy. The Policy permitted the automatic pass-through of all Water Authority fees and charges for wholesale water and water related services to District customers; and the adjustment of District water rates to reflect inflationary costs (based on the Consumer Price Index – All Urban Consumers – San Diego) on July 1 of each year. The Policy allowed the above-described adjustments to take place for a period of five years.

**2013 and 2017 Water Rate Public Hearings-** In 2013 and again in 2017, an analysis of water rates was completed to determine if an increase (beyond what was allowed for by the adopted Rate Adjustment Policy) was necessary. It was determined that the District did not need to increase its water rates and continuation of the existing Rate Adjustment Policy would cover the cost of wholesale water purchases as well as operation and maintenance and infrastructure replacement costs. At the conclusion of the public hearings held in 2013 and 2017, the Board approved the continuation of the Rate Adjustment Policy (Water Authority pass-through and inflationary adjustment) for a period of five years.

## Relevant Guidance and Law Review

The California Constitution provides the highest level of authoritative support for California water rate setting. The next highest authority is case law that interprets the Constitution and sets precedent for future challenges and defenses. Industry guidance, while not authoritative, is most prevalent in the M1 Manual published by the American Water Works Association.



### Statutory Law – California Constitution

The California Constitution has recognized the importance of conserving water since 1925 when Article X,



Section 2 was adopted – “The general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use of water be prevented.”

In 1977, California Water Code Section 375 provided that agencies may adopt and enforce a water conservation program. Later amended in 1993, Water Code Section 375 stated that a water conservation ordinance or resolution may encourage conservation through rate structure design.

Proposition 218 (1996) added Articles XIII C and D to the California Constitution, which established procedural and substantive requirements for property related fees. Procedural requirements, Article XIII D Section 6(a), refer to holding a public hearing, the noticing thereof, and majority protests. Section (b) requires that fees not exceed the cost to provide the service, not be used for any other purpose, and not exceed the proportional cost of providing the service attributable to the parcel on which it is imposed.

Water Code sections 370-374 (2008) established volumetric allotments of water, a basic charge, a conservation charge, and proportionality and cost-revenue nexus requirements through tiers and allocations. Conservation and water resource management costs are to be determined and supported.

Proposition 26 (2010) clarified the meaning of “tax” requiring voter approval and identified five specific exceptions, one of which is “A charge imposed for a specific government service or product ... which does not exceed the reasonable costs ... of the service or product ...”

### Common Law

Common law is derived from judicial precedent rather than statutes. The following cases have set some of the more significant precedents and are often cited in challenges and other cases.

In *Brydon v. East Bay Municipal Utility District (1994)*, appellants alleged that tiered rates imposed by the District violated the California Constitution and were “arbitrary, capricious and not rationally related to any legitimate legislative or administrative objective.” The opinion rendered by Judge Hodge of the Superior Court of Contra Costa County stated, “In our view, the inclining block rate structure is one small and modest component of a well-conceived and eminently reasonable drought management program [and] ... does not violate the California Constitution. ... The inclining block rate structure bears none of the indicia of taxation which California Constitution, article XIII A purported to address. ... The rates were levied against water consumers in accordance with patterns of usage... The incremental rate was not compulsory to the extent that any consumer had the option of reducing his or her consumption.”

In *City of Palmdale v. Palmdale Water District (2011)*, the City of Palmdale (City) successfully challenged (on appeal) that the Palmdale Water District’s rate structure discriminated unfairly against the customer class of irrigation accounts. In the discussion of the decision, the City asserts that the Palmdale Water District (PWD) “failed to prove its revenues under the new rate structure will not exceed the costs of providing water service in contravention of Article XIII D, section 6(b)(1), ... [and] makes no showing whatsoever that PWD’s cost of delivering service to those irrigation users is proportionately higher than PWD’s costs of delivering service to residential and commercial users.”

As decided in the case of *Griffith v. Pajaro Valley Water Management Agency (2013)*, property related fees do not have to be established on a “parcel-by-parcel” basis as allocating costs of service “is not a determination that lends itself to precise calculation.”

In *Morgan v. IID (2014)*, the trial court determined that establishing customer classes is consistent with the proportionality requirement of Article XIII D, Section 6(b). The appellate court stated that Section 6 does not require data used in cost of service studies to be perfect.

In *Capistrano Taxpayers Association v. City of San Juan Capistrano (2015)*, the decision states that "Neither the voters nor the Constitution say anything we can find that would prohibit tiered pricing." While the conclusion reiterates Proposition 218's provision that fees "not exceed the proportional cost of service attributable to the parcel," the conclusion also states that this doesn't mean that rates need to be calculated for *specific* parcels. The decision concludes that computations to show costs associated with high usage levels "would seem to satisfy Proposition 218." The City simply failed to show its computations. The conclusion is also explicit that passing on costs attributable to high use "to those consumers whose extra use of water forces water agencies to incur higher costs to supply that extra water" is not precluded by the California Constitution. The City simply failed to demonstrate the nexus.

## Industry Guidance

Principles of Water Rates, Fees and Charges, Manual of Water Supply Practices, M1, published by the American Water Works Association, is commonly known as the M1 Manual, and is frequently used as guidance by rate consultants. The M1 Manual is not specific to California rate setting, but most of the larger consulting firms performing cost of service studies in California rely heavily on the M1 Manual and are contributing authors and editors to the publication.

## **Data Collection and Analysis**

### Demand Projection

Staff analyzed recent usage behavior trends since the implementation of tiered water rates in 2009. Table 1 below shows the impact of water conservation as sales (in acre-feet) have decreased by 26% using a five-year rolling average; this decrease has occurred while the number of connections has increased by 2.5% (as illustrated in Table 2). The decrease in water consumption is largely related to the implementation of water use efficiency practices and water conservation measures, such as the installation of water-efficient devices and the replacement of lawn with low water use plants. The reduction in water use from these activities is anticipated to yield consistent consumption patterns in future years; appreciable growth in water sales is not anticipated during the five-year period covered by this Study. The District's service area is not built out so growth and new service connections are expected; however, growth is expected to be in-fill development and take place at a rate similar to what is shown in Table 2. This Study is based on Fiscal Year 2022 budget, which uses a three-year average to determine water sales.



Fiscal Year	Water Sales af	5 Year Average	Percent Change 5 Year Avg 2009 to 2021
2021	17,322	16,093	-26%
2020	15,224	15,503	
2019	15,484	15,882	
2018	16,937	16,610	
2017	15,496	17,004	
2016	14,375	17,353	
2015	17,117	17,996	
2014	19,128	18,227	
2013	18,904	18,575	
2012	17,241	19,266	
2011	17,590	20,352	
2010	18,273	21,245	
2009	20,866	21,893	
2008	22,362		
2007	22,667		
2006	22,057		
2005	21,513		

Fiscal Year	Service Connection	Percent change 2010 to 2021
2021	29,007	2.5%
2020	28,879	
2019	28,780	
2018	28,688	
2017	28,622	
2016	28,443	
2015	28,625	
2014	28,580	
2013	28,415	
2012	28,409	
2011	28,313	
2010	28,305	

### Defining Customer Classifications - Tiers by Meters

*The ideal solution to developing rates for water utility customers is to assign cost responsibility to each individual customer served and to develop rates that reflect that cost. Unfortunately, it is neither economically practical nor often possible to determine the cost responsibility and applicable rates for each individual customer served. However, the cost of providing service can reasonably be determined for groups or classes of customers that have similar water-use characteristics ...*

American Water Works Association, Principles of Water Rates, Fees, and Charges – M1 Manual

The District’s current rate structure establishes customer classifications by meter size. A water rate structure tiered by meter size simulates the same allotments as a budget-based system without having to implement resource-intensive methods, procedures and technologies. Customers with larger meters pay higher service charges and pay for greater capacity in the system.

Per the industry standard, as published in the M1 Manual, “In some cases, it may be better to determine customer classes based on meter size. A utility can also implement an increasing block structure by meter size if it can demonstrate a consistent relationship or homogeneous usage pattern by meter size.” This analysis focuses on average usage and recommends the use of meter size for establishing tier limits.

## **Financial Requirement Analysis**

### Budget Projection

The rate model created is based on the Budget for Fiscal Year Ending June 30, 2022 approved by the Board on June 6, 2021. The Budget is created each year based on historical averages for water sales, water purchases and local water production. Other revenue sources and expenses are based on historical averages or current data if known at the time. The water purchased costs remain constant for all years since the District passes-

through those costs directly to customers; an increased expense is not recognized for purchased water but additional revenue charged to cover the cost is also not recognized. The Budget is projected forward for five-years using an average historical inflationary adjustment for most items and actual, data if known. The budget projection excludes depreciation since it is not a cash flow item and instead incorporates the District’s Capital Projects anticipated through Fiscal Year 2027. Expected capital expenditures for Fiscal Years 2022 through 2027 total approximately \$78.7 million. The largest capital projects involve the rehabilitation or replacement of several of the reservoirs, the San Pasqual Undergrounding Project and the Mainline Replacement Program (see Attachment A, Capital Projects).

Budget projections through Fiscal Year 2027, as previously outlined, are used to determine the shortfall in revenue and cashflow compared to required reserves; Attachment B, Budget Projection through Fiscal Year 2027, shows a decrease in cash at the end of Fiscal Year 2027 of \$16.3 million.

**Reserves**

The District maintains the following Reserve Accounts: Emergency and Contingency Reserve, Working Capital Reserve, Water Purchase Stabilization Reserve, and Capital Improvement Reserve.

- The Emergency and Contingency Reserve balance is \$10 million as of June 30, 2021 and is calculated as 10% of the District’s Net Fixed Assets plus all Capital in Progress accounts. The Emergency and Contingency Reserve is for unanticipated expenses resulting from unforeseen emergencies.
- The Working Capital Reserve balance is \$10 million as of June 30, 2021 and is calculated as 20% of Water Revenues. The Working Capital Reserve is for operating revenue and expense variances and timing in collections and payments.
- The Water Purchase Stabilization Reserve is contributed to when the District has excess local water over the 60-year average. The Water Purchase Stabilization Reserve is currently zero due to a lack of surplus local water in recent years with any balance from prior years being used in its entirety.
- The Capital Improvement Reserve represents remaining funds available. The purpose of the Capital Improvement Reserve is to fund for the District’s Capital Improvement program.

The cash balance as of Fiscal Year June 30, 2021 is approximately \$46.5 million. The Surplus Supplemental Water and the Water Rebate are not District funds to spend on operations or capital. As shown in Table 3, the District’s Capital Reserve as of June 30, 2021 is estimated at \$20.3 million.

**Table 3**

<b>Cash Balance Actual 06/30/2021</b>	<b>Amount</b>
Emergency and Contingency Reserve	\$ 10,000,000
Working Capital Reserve	10,000,000
Surplus Supplemental Water	4,595,222
Water Rebate	1,571,006
Capital Improvement Reserve	20,346,496
<b>Total Cash Balance</b>	<b>46,512,724</b>

Based on budget projections through Fiscal Year 2027, the Capital Improvement Reserve at June 30, 2027 will be \$4,083,678 (if no changes are made to the existing water rate structure and tiered allotments); see Table 4.

**Table 4**

Capital Improvement Reserve 06/30/21	\$ 20,346,496
Budget Projection to Fiscal Year 2027	(16,262,819)
Remaining Capital Improvement Reserve	4,083,678

**Capital Improvement Reserve-** The water industry has many long-lived assets; for example, reservoirs have an estimated life of 80 years. While the lives are very long, the initial construction and replacement costs of these assets are high. Large projects cannot be funded from a single year of customer revenue collection; instead, revenue is collected in smaller amounts over time and held in reserves until the project is ready to be built. Without sufficient reserves, the District would have to finance large projects and charge the customer after the fact at a much higher rate due to the cost of financing, including interest. It is in the best interest of the customers to have capital reserves to help keep costs low, when feasible.

The Capital Improvement Reserve does not have a Board established minimum balance. To arrive at a minimum balance to maintain in this account at the end of the five-year rate setting period, a one year value of the District’s system depreciation, adjusted for inflation, was calculated using the “Engineering News Record” which maintains a Construction Cost Index. This index is used to adjust the District’s historical Fixed Assets value to current costs. Any material assets not in the District’s asset database (existed prior to the maintenance of fixed asset records) were included in the District’s Capital Projects list and those values were used. Using the District’s current estimated asset lives, the annual cost of the District’s system and assets was calculated at approximately \$13.2 million (see Attachment C, Capital Assets Current Value). Collecting revenue using the current water rate structure will result in the Capital Reserve being depleted to a level that will not sustain Pay-go (cash) funding of planned capital projects. As shown in Table 5, the shortfall by Fiscal Year end 2027 will be approximately \$9.1 million.

**Table 5**

Remaining Capital Improvement Reserve	\$ 4,083,678
Required Capital Reserve	13,230,783
Short Fall by Fiscal Year End 2027	(9,147,105)

## Water Rate Recommendations

As discussed, budget projections through Fiscal Year 2027 (based are revenues generated by current rates and charges) will result in the Capital Improvement Reserve being insufficient to meet annual capital spending needs. In order to minimize water rate increases, staff recommends utilizing a portion of the current Capital Improvement Reserve Balance (\$20.3 million) to fund capital projects; staff recommends ending Fiscal Year 2027 with a minimum Capital Improvement Reserve balance of \$13.2 million. While there are several additional pressures not included in the projection (e.g., scarcity of local water that could result in the purchase of higher cost wholesale water, Flume Replacement Project costs, etc.), staff recommends that water rates should be kept as low as possible.

The District’s rate structure is comprised of three separate charges; Emergency Water Storage Fee, Service Charge, Water Usage Charge.

**Emergency Water Storage Fee**

The Emergency Water Storage Fee (also known as the Infrastructure Access Charge) is a direct cost to the District from the Water Authority and that is passed through to District customers. It is recommended that the District continue to pass-through any changes this fee from the Water Authority.

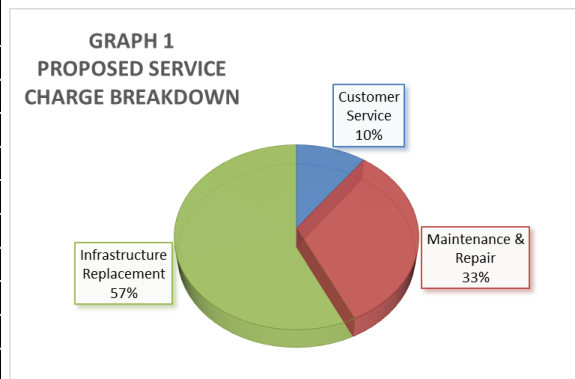
**Service Charge**

The Service Charge recovers the District’s customer service, repairs and maintenance and the majority of the infrastructure replacement, which exists regardless of the amount of water pumped and delivered. These costs continue without regard to the amount of water that a customer uses and are sometimes called “readiness-to-serve” charges. The largest component of the service charge recovers the cost of replacing the District’s aging water system infrastructure. The Service Charge also covers the costs for customer service, meter reading and the maintenance and repair of District systems.

The Board previously approved changes to the Service Charge, once a year on July 1, to cover inflation on the District’s costs excluding purchased water. In July 1, 2020, the Board elected to forgo the increase the inflationary adjustment due to the impacts of the COVID-19 pandemic. It is recommended that the District increase the Service Charge to recover the revenue that was not collected when the adjustment was not implemented. Additionally, it is recommended that the Board approve the pass-through of an inflationary adjustment on July 1 each year for the next five years; since the proposed adjustment to the Service Charge will generate sufficient revenue through Fiscal Year 2023, the first pass-through inflationary adjustment would be implemented on July 1, 2023. Table 6 shows current and proposed Service Charges; Graph 1 shows expense categories paid for by revenue generated from the proposed Service Charge.

**Table 6**

<b>Service Charges</b>				
<b>Meter Size</b>	<b>Currently Monthly Charge</b>	<b>Proposed Monthly Charge</b>		
5/8	\$ 31.75	\$ 32.82		
3/4 & 3/4 1	41.88	43.30		
1	61.89	63.98		
1.5	112.34	116.14		
2	172.66	178.50		
3	333.57	344.85		
4	514.49	531.89		
6	1,218.45	1,259.65		
8	1,620.90	1,675.71		
10	2,425.46	2,507.47		



**Water Usage Charges**

Water Usage Charges recover per acre-foot charges from Water Authority, costs related to the District’s local water supply located at Lake Henshaw, costs of treating raw water as well as a portion of transmission and distribution and other costs associated with flow and the engineering of flow. The Tier 2 marginal rate above the Tier 1 rate recovers the cost of conservation, storage expansion, wellfield improvements and some costs

associated with the start of the Vista Flume Replacement project.

**Water Rate Structure-** The District’s current water rate structure is made up of a three tiered structure based on meter size and hydraulic capacity that can be applied to all customer classes regardless of how the water is being used. In 2009, the Tier 1 allotment was set at 50% of average monthly water use for the most common meter size in the District (3/4-inch) and hydraulic capacity, based on meter size, was used to calculate tier limits for smaller and larger meters. The 50% usage was used to split the usage between the two main tiers with Tier 3 add to encourage mandated drought requirements imposed by the State of California. Staff recommends the continued use of this model but proposes to eliminate Tier 3, since the Tier 3 was charged at the same rate as Tier 2 once the drought ended shortly after the adoption of rates in 2009.

Staff recalculated the average monthly water use for a 3/4-inch meter using Fiscal Year 2019 billing data. The 3/4-inch meter size represents 59% of all meters in use. Fiscal Year 2019 was selected because water sales that year are similar to the projected sales for Fiscal Year 2022. Additionally, Fiscal Year 2019 was prior to the COVID-19 pandemic, which caused unusual activity as many businesses were closed, and most customers were at home.

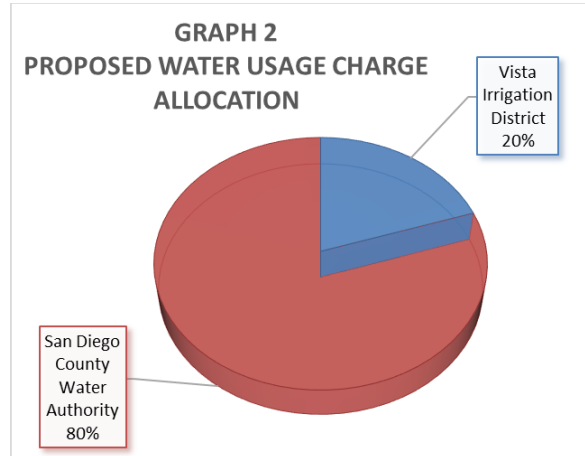
The analysis showed the average monthly use for a 3/4-inch was 12 units, which is down from 20 units calculated during the adoption of the 2009 water rates. Based on the updated data, staff recommends adjusting the Tier 1 allotment for a 3/4-inch meter to six units (12 units x 50%) and using the hydraulic capacity of other meter sizes to determine their Tier 1 allotments. Table 7 shows the proposed Tier 1 allotments for all meter sizes. Table 8 shows the distribution of water sales (in acre-feet) between Tier 1 and Tier 2 based on the current and proposed tiered rate structures.

**Table 7**

Meter Size	Current Tier 1 Allotment	Proposed Tier 1 Allotment	Difference
5/8	7	4	3
3/4	10	6	4
1	25	15	10
1 1/2	50	30	20
2	80	48	32
3	160	96	64
4	250	150	100
6	500	300	200
8	800	480	320
10	1150	690	460

**Table 8**

	Current	Proposed
Water Sales Billed	Acre Feet	Acre Feet
Tier 1	8,354	5,012
Tier 2	7,446	10,788
Total	15,800	15,800



As illustrated in Graph 2, approximately 20 percent of the revenue generated by water usage charges is utilized by Vista Irrigation District to cover operating and maintenance expenses; the remaining 80 percent is used to pay the Water Authority for water purchases.

The Water Authority is responsible for supplying water to 24 member agencies within San Diego County. Not simply a water provider, the Water Authority is also responsible for the construction and maintenance of regional storage, delivery and treatment infrastructure necessary to ensure the reliable delivery of water to local water agencies like Vista Irrigation District.

**Tier 1 Water-** The Tier 1 rate is equal to the cost of water purchased as well as producing local water plus costs of transmission and distribution, water treatment, tanks and reservoirs, engineering and other costs associated with flow not allocated to the Service Charge as maintenance and repairs. The Tier 1 rate was calculated by removing the Tier 2 Marginal cost (detailed in Table 9) from budget projections through Fiscal Year 2027 and adding in the proposed Service Charge adjustment. The Tier 1 rate was calculated to be \$4.76 per unit including the Water Authority pass-through and rebate. Staff recommends the Tier 1 rate be changed from \$4.44 to \$4.60. (NOTE: This increase only covers the District’s shortfall and does not include the Water Authority’s new pass-through increase or the rebate as seen in Table 10.)

**Tier 2 Water-** The Tier 2 rate equals the Tier 1 rate plus Marginal Tier 2 rate. The portion that is Tier 1 covers the same costs outlined above. The Marginal Tier 2 rate is used to cover costs associated with above average usage and conservation; those costs include expanding of reservoir storage, improvement of the wellfield to increase local water production and preparations associated with the replacement of the aging Vista Flume. The Marginal Tier 2 rate was calculated by taking the items specific to the Marginal Tier 2 rate and dividing by the amount of expected Tier 2 billings. Staff recommends the Tier 2 rate be changed from \$4.98 to \$5.07. (NOTE: This increase only covers the District’s shortfall and does not include the Water Authority’s new pass-through increase or the rebate as seen in Table 10.) Table 9 shows the breakdown of the Marginal Tier 2 rate.

**Table 9**

<b>Description</b>	<b>Annual Cost</b>
Wells	\$ 621,449
Flume	1,064,160
Pechstein II New	300,000
Tier 2 Marginal Capital	1,985,609
Conservation	235,854
<b>Total Marginal Tier 2</b>	<b>\$ 2,221,463</b>
Expected Units Sold Tier 2	4,699,253
<b>Marginal Rate Tier 2</b>	<b>\$ 0.47</b>
Tier 1 Rate	4.60
<b>Total Proposed Tier 2 Rate</b>	<b>\$ 5.07</b>

#### Detailed Marginal Tier 2 Capital

*Expanding of Reservoirs-* The District’s largest reservoir, Pechstein Reservoir, is in need of a new roof and other improvements; however, Pechstein Reservoir is critical to the District’s system operations and cannot be taken out of service without alternative storage to meet peak system demands; construction of the Pechstein II Reservoir is needed before the Pechstein Reservoir can be taken offline. Above average demand is associated with the need for additional storage.

*Improvement of Wellfield-* Local water from Lake Henshaw provides lower cost water supply and serves as a diversification of sources. Current wells are limited in their ability to pump water beyond a certain level. By rehabilitating existing wells and constructing new ones, local water production could be increased.

*Vista Flume-* The District maintains capacity rights from two sources, raw water treated at the Escondido-Vista Water Treatment Plant (EVWTP) located at Lake Dixon and multiple treated water connections along the Water Authority’s aqueducts. To reduce costs, the District typically maximizes the locally treated water supply at EVWTP and relies on the 11-mile Vista Flume to convey it to the District’s service area.

The Vista Flume was constructed between 1925 and 1927 and is built through rugged hillside country and snakes through rolling hills and valleys, through avocado groves and passed residences for 11 miles. In 1947, after 20 years in service, a repair and maintenance program began and seven miles of open bench sections were covered with a reinforced concrete arched cover. The Flume received another upgrade in the late 1990s when the District installed a high-density polyethylene (HDPE) sheet lining system. In 2010, an HDPE pipeline was inserted within a half-mile section. Now after all these years, the Flume is approaching its useful life.

In March 2020, the District prepared a Water Supply Planning Study (WSPS) with the help of Gillingham Water Planning and Engineering, Inc. to evaluate whether the Flume should be replaced or retired and what other water supply alternatives exist. The WSPS weighed a number of factors when comparing the two options including costs, reliability, water quality, environmental protection, existing water supply obligations and assets. During a planned 10-day shutdown along the Second Aqueduct, the District is dependent on the Vista Flume.

The current cost to replace the Vista Flume is estimated at \$120 to \$130 million. District reserves are not sufficient to pay for such a large and costly project; therefore, the District will need to build sufficient reserves to cover the debt service ratio before financing could be obtained and construction could begin. If the District decided not to replace the Vista Flume, the District would need to construct new storage reservoirs that would also be costly projects. If demand was below average, the District would potentially not need as much additional storage.

Large capital improvement projects are complex and can take years to complete. The District has begun planning efforts to replace the Vista Flume, including the preparation of an alignment study and financial planning.

### Budget Projections through Fiscal Year 2027 after Proposed District Rate Increases

If the Board approves staff's recommendations, at the end of Fiscal Year 2027 Capital Reserves are estimated to be \$13.5 million. Attachment D, Budget Projections through Fiscal Year 2027 after Proposed Rate Increases, shows the updated budget projections with the proposed Service Charge increase, the adjustment of Tier 1 allotments and the changes to the Tier 1 and Tier 2 water rates. The increased portion that represents the Water Authority and the Rebate credit is not included in Attachment D (in revenue or expense) since those amounts are passed-through to District customers.

It is recommended that the District continue the practice of automatically passing through all Water Authority fees and charges for wholesale water and water related services to District customers.

### Water Rate Increases all Sources

**San Diego County Water Authority Increase Pass-through-** The Water Authority has provided information related to their January 1, 2022 increases to purchased water that the District will include on billings to customers on and after March 1, 2022 (should the Rate Adjustment Policy be continued as recommended). Most customer bills cover two months in arrears, so water usage in January and February 2022 would be billed in March 2022. This year the Water Authority pass-through increase is 20 cents per unit of water. The pass-through increases in revenue and expense are not in the projections in this document because they cancel each other out.

**Rebate-** The Water Authority received a \$44.4 million rebate from the Metropolitan Water District of Southern California (Metropolitan). On February 25, 2021, the Water Authority's Board of Directors announced a plan to distribute the rebate to its 24 member agencies. The District's pro-rata share of the rebate was \$1,570,006; funds were received in April 2021.

The rebate was the result of decade-long rate case litigation between the Water Authority and the Metropolitan; The Water Authority won on several critical issues in the cases covering 2011 to 2014 and was deemed the prevailing party; as such, The Water Authority was owed legal fees and charges in addition to the damages and interest payments. The payment by Metropolitan was a damages award for Water Stewardship Charges that had been unlawfully assessed by Metropolitan on the Water Authority's independent water supplies transported through Metropolitan facilities from 2011 through 2014.



Vista Irrigation District  
Water Rate Study 2021

The District has elected to use the rebate to offset the Water Authority rate increases over the next five years beginning January 1, 2022, lessening the impact of future Water Authority pass-through rate increases. The rebate amount starting January 1, 2022 is four cents, lowering the Water Authority’s projected increase from 20 cents/unit of water consumed to 16 cents/unit.

**Final Increases All Sources-** Table 10 shows the total proposed increase to commodity rates by source; Table 11 (identical to Table 6) shows the proposed increase to the Service Charge by meter size.

The “AG Domestic” rate is a flat rate paid by customers that have a residence on a property that participates the Water Authority’s Special Agricultural Water Rate program; this is not a discounted rate. Customers participating in the Water Authority’s Special Agricultural Water Rate program (shown as “SAWR AG” in the table) pay a water rate (on water used for agricultural purposes) that reflects a reduced level of service and supply reliability; program participants are the first to be cutback in the event of drought or other water shortages.

**Table 10**

	<b>Current Rates Per Unit</b>	<b>Vista Irrigation District Increase</b>	<b>New Rate Calculated</b>	<b>San Diego County Water Authority Pass-through</b>	<b>Rebate credit applied to Pass-through Increase</b>	<b>Total Proposed Rate Per Unit</b>
Tier 1	\$4.44	\$0.16	\$4.60	\$0.20	-\$0.04	\$4.76
Tier 2	4.98	0.09	5.07	0.20	-0.04	5.23
AG Domestic	4.76	0.15	4.91	0.20	-0.04	5.07
SAWR AG Rate	3.91					4.14
Emergency Storage Fee*	4.24					4.24
*Charge per equivalent meter. Part of Pass-through charges.						

**Table 11**

<b>Service Charges</b>	<b>Currently Monthly Charge</b>	<b>Proposed Monthly Charge</b>
<b>Meter Size</b>		
5/8	\$ 31.75	\$ 32.82
3/4 & 3/4 1	41.88	43.30
1	61.89	63.98
1.5	112.34	116.14
2	172.66	178.50
3	333.57	344.85
4	514.49	531.89
6	1,218.45	1,259.65
8	1,620.90	1,675.71
10	2,425.46	2,507.47

# Attachment A

## Vista Irrigation District

### CAPITAL PROJECTS

Fiscal Years 2022 to 2050

Escalator ENR 3.38% starting FY 2023

Infrastructure	Allocated by	Current Cost	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
E. Reservoir Replacement/Upsize/Pump Station	Tier 1 Rate	11,500,000	3,000,000	2,842,878	4,007,582	2,209,565	-	-
Main Replacement Program	Tier 1 Rate	50,000,000	2,500,000	2,584,435	2,671,721	2,761,956	2,855,238	2,951,670
Vista Flume Rehabilitation	Tier 1 Rate	120,000,000	750,000	723,642	-	-	-	-
Paseo Santa Fe Project	Tier 1 Rate	428,611	225,000	-	-	-	-	-
Well Field Repair/Replacement (65%), Siphon reha	Tier 2 Rate	6,956,076	200,000	516,887	-	-	-	-
Deodar Reservoir	Tier 1 Rate	1,350,000	135,000	51,689	336,637	939,065	-	-
Calle Maria Pipeline Extension	Tier 1 Rate	200,000	100,000	103,377	-	-	-	-
Pechstein II Reservoir	Tier 2 Rate	9,000,000	-	465,198	480,910	1,789,747	3,700,388	3,825,365
A Reservoir	Tier 1 Rate	5,000,000	-	258,443	267,172	994,304	2,055,771	2,125,203
Pechstein Rehabilitation Roof	Tier 1 Rate	14,100,000	-	-	-	-	799,467	826,468
Pechstein Reservoir Secondary Feed	Tier 1 Rate	5,100,000	-	-	-	-	-	-
CO SD, S. Santa Fe Ave - Widening Project	Tier 1 Rate	4,110,549	-	-	-	-	-	-
San Marcos, S. Santa Fe Wide - Smilax to Bostick	Tier 1 Rate	256,909	-	-	-	-	-	-
Robelini/Buena Creek Pipeline	Tier 1 Rate	3,773,638	-	-	-	-	-	-
Valve Rehab on Dam Outlet	Tier 1 Rate	220,942	-	-	-	-	-	-
Santa Fe - Civic to Postal	Tier 1 Rate	940,000	-	-	-	-	-	-
HB Pipeline	Tier 1 Rate	872,314	-	-	-	-	-	-
H Line Aband. - Pechstein to E Reservoir	Tier 1 Rate	719,346	-	-	-	-	-	-
900 Zone Feed Regulator and Pipe	Tier 1 Rate	600,000	-	-	-	-	-	-
Habitat Conservation Plan	Tier 1 Rate	544,648	-	-	-	-	-	-
637 Zone Feed Vault and Regulator	Tier 1 Rate	300,000	-	-	-	-	-	-
C Reservoir Demo and PRV Feed Upgrade	Tier 1 Rate	800,000	-	-	-	-	-	-
E-1 Reservoir Demo-565 Zone PRV	Tier 1 Rate	1,800,000	-	-	-	-	-	-
<b>Total Infrastructure</b>		<b>238,573,033</b>	<b>6,910,000</b>	<b>7,546,550</b>	<b>7,764,022</b>	<b>8,694,637</b>	<b>9,410,864</b>	<b>9,728,705</b>
Non Infrastructure	Tier 1 Rate	16,076,085	519,000	549,306	567,858	587,037	606,864	627,360
San Pasqual Undergrounding (50%)	Tier 2 Rate	25,051,715	8,000,000	17,162,420	-	-	-	-
<b>Total</b>		<b>279,700,833</b>	<b>15,429,000</b>	<b>25,258,275</b>	<b>8,331,880</b>	<b>9,281,674</b>	<b>10,017,727</b>	<b>10,356,065</b>

# Attachment B

## Budget Projection to Fiscal Year 2027

Budget FY22		
Local Water	3,115	18.5%
Purchased Water	13,685	81.5%
<b>Total Budgeted Water Supply</b>	<b>16,800</b>	

Water Sales Billed (Avg FY17-FY20 rounded)	Current State			
	Acre Feet	Units	Rate 03/1/21	Amount
Tier 1	53%	8,354	3,639,002	\$4.44 \$ 16,157,171
Tier 2/3	47%	7,446	3,243,478	\$4.98 16,152,518
<b>Total</b>		<b>15,800</b>	<b>6,882,480</b>	<b>32,309,689</b>

Service Charge (Connections Actual FY21)	Current State		
	Count	Monthly Charge	Annual
5/8	6,832	\$ 31.75	\$ 2,602,992
3/4 & 3/4 1	17,000	41.88	8,543,520
1	2,880	61.89	2,138,918
1.5	1,318	112.34	1,776,769
2	883	172.66	1,829,505
3	55	333.57	220,156
4	23	514.49	141,999
6	13	1,218.45	190,078
8	2	1,620.90	38,902
10	1	2,425.46	29,106
	<b>29,007</b>		<b>17,511,946</b>

Financial		Budget	Projected	Projected	Projected	Projected	Projected	Total
		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	
Revenue Water Sales/Emergency Storage Fee	66%	\$ 34,121,000	\$ 34,121,000	\$ 34,121,000	\$ 34,121,000	\$ 34,121,000	\$ 34,121,000	
Revenue Service Fee	34%	17,500,000	17,957,533	18,491,583	19,107,992	19,744,948	20,403,137	
Revenue All Others		3,241,900	3,473,430	3,548,193	3,635,110	3,724,309	3,815,850	
<b>Revenue Total</b>		<b>54,862,900</b>	<b>55,551,962</b>	<b>56,160,776</b>	<b>56,864,101</b>	<b>57,590,257</b>	<b>58,339,987</b>	
Expenses less Depreciation		44,682,700	45,186,674	45,783,333	46,466,237	47,098,503	47,740,734	
<b>Net</b>		<b>10,180,200</b>	<b>10,365,288</b>	<b>10,377,443</b>	<b>10,397,865</b>	<b>10,491,754</b>	<b>10,599,253</b>	
Captial Projects		15,429,000	25,258,275	8,331,880	9,281,674	10,017,727	10,356,065	
<b>Amount Left over (Negative decr reserves)</b>		<b>(5,248,800)</b>	<b>(14,892,987)</b>	<b>2,045,563</b>	<b>1,116,191</b>	<b>474,027</b>	<b>243,188</b>	<b>(16,262,819)</b>

# Attachment C

## Capital Assets Current Value

### Annual ENR cost Tier 1 Rate

Type	Annual Cost
Bldg	970,972
Canals	380,262
Const	356,268
Copiers	7,026
Dam	1,067,362
Filt Plant	819,423
IT	118,860
Land	
Misc	116,708
Pipe	3,886,379
Pipe Contr	1,905,077
Pump Sta	109,779
Reg Sta	100,534
Res	671,692
SCADA	57,526
Trt Plant	60,974
Trucks	565,722
Valves	13,088
Vehicles	37,522
Total	11,245,174

### Annual ENR cost Tier 2 Rate

Type	Annual Cost
Wells	621,449
Flume	1,064,160
Pechstein II New	300,000
<b>Tier 2 additional</b>	1,985,609
Total All	<b>13,230,783</b>

# Attachment D

## Budget Projection through Fiscal Year 2027 after Proposed Rate Increases

All Sources except Service Charge	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Total
Water Rates Sales Tier 1/2 (Tier 1 Rate Only)	\$ 31,974,859	\$ 31,649,719	\$ 31,649,719	\$ 31,649,719	\$ 31,649,719	\$ 31,649,719	
Emergency Storage Pass-through	1,821,000	1,821,000	1,821,000	1,821,000	1,821,000	1,821,000	
Revenue All Others	3,241,900	3,473,430	3,548,193	3,635,110	3,724,309	3,815,850	
All Expenses excl Depr and CS RM	36,814,349	37,200,242	37,590,773	38,062,228	38,477,588	38,897,316	
<b>Total</b>	<b>223,411</b>	<b>(256,094)</b>	<b>(571,861)</b>	<b>(956,400)</b>	<b>(1,282,561)</b>	<b>(1,610,747)</b>	
<b>Service Charge</b>							
Service Revenue	17,796,062	18,092,124	18,612,568	19,213,271	19,833,999	20,475,418	
Customer Service	1,871,702	1,835,010	1,882,372	1,930,955	1,980,793	2,031,917	
Repairs and Maintenance	5,760,795	5,909,480	6,062,003	6,218,462	6,378,959	6,543,599	
Capital	<b>10,163,565</b>	<b>10,347,633</b>	<b>10,668,193</b>	<b>11,063,854</b>	<b>11,474,247</b>	<b>11,899,902</b>	
Total	-	-	-	-	-	-	
<b>Marginal Tier 2</b>							
Marginal Tier 2 Revenue	1,110,731	2,221,463	2,221,463	2,221,463	2,221,463	2,221,463	
Cost of Conservation	235,854	241,941	248,186	254,591	261,162	267,903	
MarginalTier 2 for Capital	874,878	1,979,522	1,973,277	1,966,872	1,960,301	1,953,560	
<b>Capital Sources</b>							
Capital Sources Top Section	223,411	(256,094)	(571,861)	(956,400)	(1,282,561)	(1,610,747)	
Capital Sources Service Charge	10,163,565	10,347,633	10,668,193	11,063,854	11,474,247	11,899,902	
Capital Sources Marginal Tier 2	874,878	1,979,522	1,973,277	1,966,872	1,960,301	1,953,560	
<b>Available for Capital</b>	<b>11,261,853</b>	<b>12,071,062</b>	<b>12,069,609</b>	<b>12,074,326</b>	<b>12,151,987</b>	<b>12,242,715</b>	
Capital Project	(15,429,000)	(25,258,275)	(8,331,880)	(9,281,674)	(10,017,727)	(10,356,065)	
<b>Amount Left over (Negative depr reserves)</b>	<b>(4,167,147)</b>	<b>(13,187,214)</b>	<b>3,737,729</b>	<b>2,792,652</b>	<b>2,134,259</b>	<b>1,886,650</b>	<b>(6,803,070)</b>
<b>Cash Balance Actual 06/30/2021</b>							
		Amount					
Emergency and Contingency Reserve		\$ 10,000,000					
Working Capital Reserve		10,000,000					
Surplus Water Pass-through		4,595,222					
Water Rebate		1,571,006					
Capital Improvement Reserve		20,346,496					
Total Cash Balance		<b>46,512,724</b>					
Capital Improvement Reserve 06/30/21		\$ 20,346,496					
Proposed Budget Projection to Fiscal Year 2027		(6,803,070)					
Remaining Capital Improvement Reserve		13,543,427					
Remaining Capital Improvement Reserve		\$ 13,543,427					
Required Capital Reserve		13,230,783					
Overage by Fiscal Year End 2027		<b>312,643</b>					

## SUMMARY OF RATE MODEL ASSUMPTIONS

The proposed rates and charges were developed with the long term financial health of the District in mind. As such, the District prepared a comprehensive rate analysis that forecasts the financial results of the District over the next five fiscal years. Assumptions are an important component of long term financial forecasting and to develop reasonable assumptions the District utilized historical results and costs indexes, where applicable.

The District will closely monitor the actual financial results and compare them to the rate analysis projections to ensure that the assumptions are reasonable. The major assumptions utilized in the rate analysis are:

Revenues and operating expenses are derived from the District's Fiscal Year 2022 Budget. Beyond fiscal year 2022, revenues and operating expenses are assumed to increase approximately 3% annually.

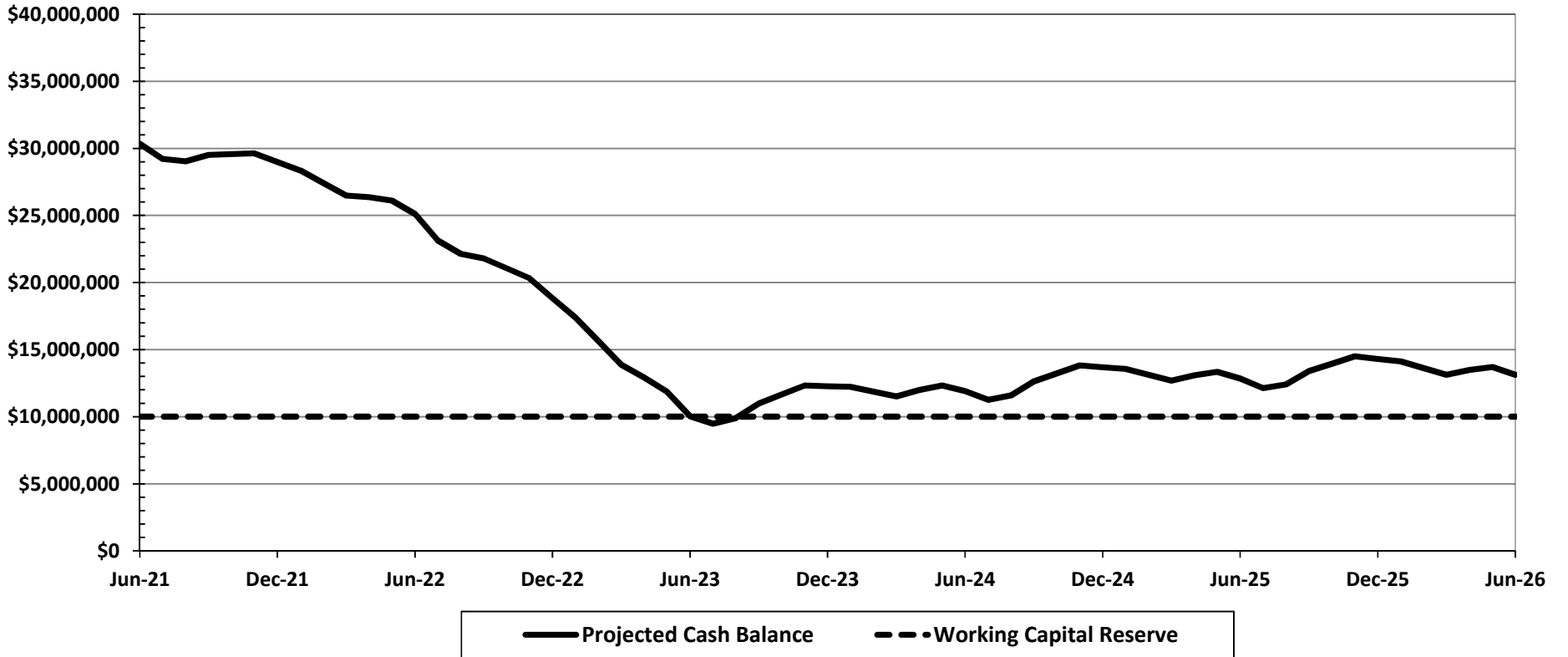
Capital Improvement Plan expenditures are based on the District's Capital Improvement Plan, which includes major capital projects such as Mainline Replacement Program, Vista Flume Replacement, San Pasqual Undergrounding Project, Wellfield Replacement and various reservoir projects.

Future infrastructure capital improvement expenditures are escalated from current costs by the average of the Engineering News Record's Construction Cost Index of 3.338%. Non infrastructure capital improvement expenditures are escalated by 3%.

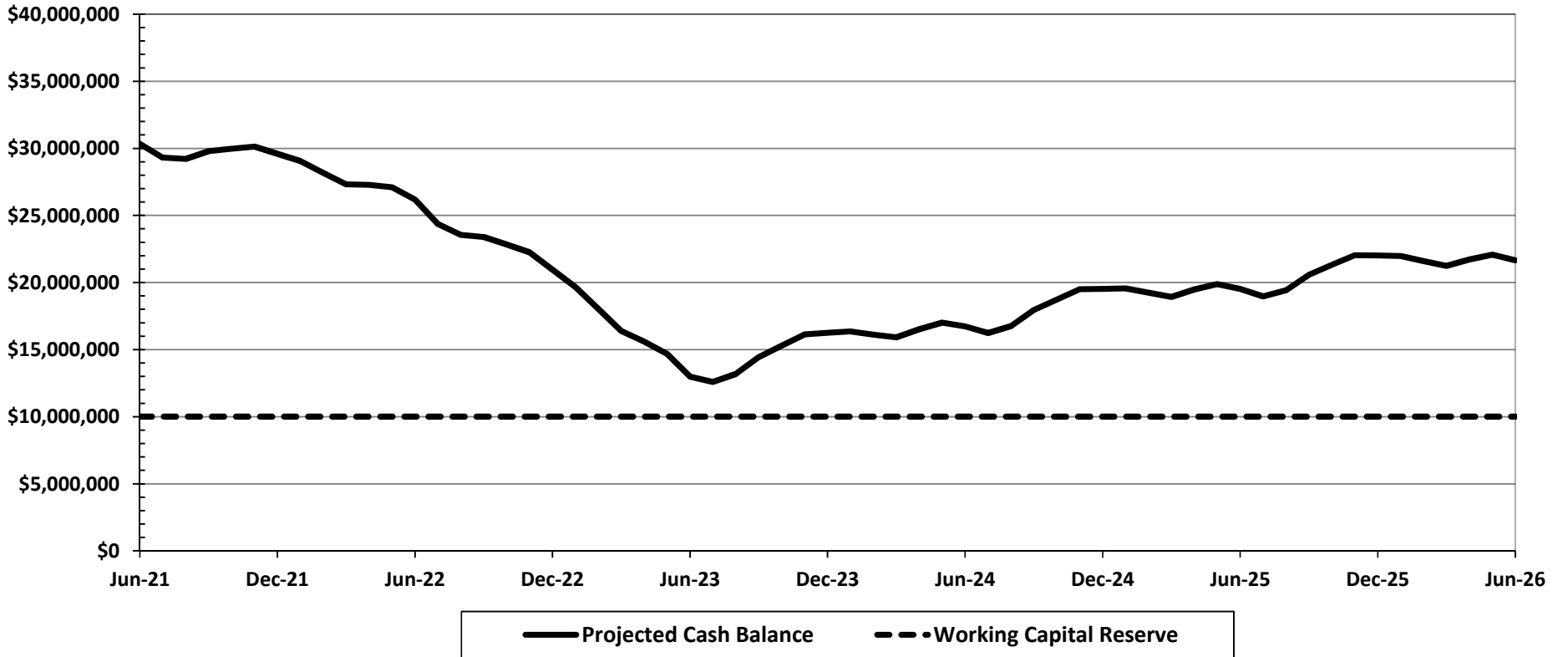
Water sales are assumed to be 15,800 acre feet annually which represents a 26% decrease from the District's last rate study in 2009.

The Reserve Policy goal for the Emergency and Contingency Reserve is met each year. Approximately \$7,000,000 of the Reserve for the Capital Improvement Reserve will be utilized to fund shortfalls in order to minimize rate increases.

**Vista Irrigation District  
CASH FLOW PROJECTION  
through June 2026**



**Vista Irrigation District  
CASH FLOW PROJECTION  
through June 2026  
Based on Proposed Rate Increases**





Vista Irrigation District

**CAPITAL PROJECTS**

**Fiscal Years 2022 to 2027**

Escalator ENR 3.38% starting FY 2023

<b>Infrastructure</b>	<b>Allocated by</b>	<b>Current Cost</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>
E. Reservoir Replacement/Upsize/Pump Station	Tier 1 Rate	11,500,000	3,000,000	2,842,878	4,007,582	2,209,565	-	-
Main Replacement Program	Tier 1 Rate	50,000,000	2,500,000	2,584,435	2,671,721	2,761,956	2,855,238	2,951,670
Vista Flume Rehabilitation	Tier 1 Rate	120,000,000	750,000	723,642	-	-	-	-
Paseo Santa Fe Project	Tier 1 Rate	428,611	225,000	-	-	-	-	-
Well Field Repair/Replacement (65%), Siphon rehal	Tier 2 Rate	6,956,076	200,000	516,887	-	-	-	-
Deodar Reservoir	Tier 1 Rate	1,350,000	135,000	51,689	336,637	939,065	-	-
Calle Maria Pipeline Extension	Tier 1 Rate	200,000	100,000	103,377	-	-	-	-
Pechstein II Reservoir	Tier 2 Rate	9,000,000	-	465,198	480,910	1,789,747	3,700,388	3,825,365
A Reservoir	Tier 1 Rate	5,000,000	-	258,443	267,172	994,304	2,055,771	2,125,203
Pechstein Rehabilitation Roof	Tier 1 Rate	14,100,000	-	-	-	-	799,467	826,468
Pechstein Reservoir Secondary Feed	Tier 1 Rate	5,100,000	-	-	-	-	-	-
CO SD, S. Santa Fe Ave - Widening Project	Tier 1 Rate	4,110,549	-	-	-	-	-	-
San Marcos, S. Santa Fe Wide - Smilax to Bostick	Tier 1 Rate	256,909	-	-	-	-	-	-
Robelini/Buena Creek Pipeline	Tier 1 Rate	3,773,638	-	-	-	-	-	-
Valve Rehab on Dam Outlet	Tier 1 Rate	220,942	-	-	-	-	-	-
Santa Fe - Civic to Postal	Tier 1 Rate	940,000	-	-	-	-	-	-
HB Pipeline	Tier 1 Rate	872,314	-	-	-	-	-	-
H Line Aband. - Pechstein to E Reservoir	Tier 1 Rate	719,346	-	-	-	-	-	-
900 Zone Feed Regulator and Pipe	Tier 1 Rate	600,000	-	-	-	-	-	-
Habitat Conservation Plan	Tier 1 Rate	544,648	-	-	-	-	-	-
637 Zone Feed Vault and Regulator	Tier 1 Rate	300,000	-	-	-	-	-	-
C Reservoir Demo and PRV Feed Upgrade	Tier 1 Rate	800,000	-	-	-	-	-	-
E-1 Reservoir Demo-565 Zone PRV	Tier 1 Rate	1,800,000	-	-	-	-	-	-
<b>Total Infrastructure</b>		<b>238,573,033</b>	<b>6,910,000</b>	<b>7,546,550</b>	<b>7,764,022</b>	<b>8,694,637</b>	<b>9,410,864</b>	<b>9,728,705</b>
Non Infrastructure	Tier 1 Rate	16,076,085	519,000	549,306	567,858	587,037	606,864	627,360
San Pasqual Undergrounding (50%)	Tier 2 Rate	25,051,715	8,000,000	17,162,420	-	-	-	-
<b>Total</b>		<b>279,700,833</b>	<b>15,429,000</b>	<b>25,258,275</b>	<b>8,331,880</b>	<b>9,281,674</b>	<b>10,017,727</b>	<b>10,356,065</b>

## **Vista Irrigation District RESERVE POLICY**

The District has established certain reserves to meet its internal requirements, its external legal requirements, and to provide savings to pay for replacement and/or repair of District facilities and properties due to natural disasters and emergencies. The dollar amount of each reserve account is based upon a particular formula which is reviewed and adjusted annually. The efficient and discrete use and management of these reserves, when combined with appropriate security measures, assure the District and its customers that the current levels of service, reliability and quality will continue into the future.

### *Working Capital Reserve*

The purpose of the Working Capital Reserve is to protect the District's ability to have enough funds to meet its most basic and common financial obligation against operating revenue and expense variances, such as reduced water sales, tax and investment revenues, and/or increased operating expenses, such as extraordinary measures necessary as the result of unforeseen climatic, operational and economic conditions. This reserve represents 20% of the District's annual water sales.

### *Emergency and Contingency Reserve*

The purpose of the Emergency and Contingency Reserve is to have savings to pay for unanticipated expenses resulting from emergencies including, but not limited to, earthquakes, floods, winds, fires, and damages to or destruction of District facilities and properties. This reserve represents 10% of the District's capital assets, net of accumulated depreciation.

### *Water Purchase Stabilization Reserve*

The purpose of the Water Purchase Stabilization Reserve is to accumulate the necessary funds during wet years to help offset the financial burden sustained during dry years. In years that local water production is in excess of the historical average production, the Water Purchase Stabilization Reserve is funded by transferring the value of the excessive local water. In years that local water production is less than the historical average, a transfer of funds equal to the current cost of imported raw water multiplied by the shortfall of local water production is made to avoid an increase in water rates.

## **NOTICE OF PUBLIC HEARING ON PROPOSED WATER RATES**

**PLEASE TAKE NOTICE that the Governing Board of the Vista Irrigation District will conduct a Public Hearing on November 17, 2021 at 9:00 a.m., in the Board Room at its Administrative Office at 1391 Engineer Street, Vista, CA 92081, to consider the adoption of proposed water rate changes.**

This legal notice contains information regarding adjustments to water rates charged for providing water service to all parcels of land within the boundaries of the Vista Irrigation District (District). The District proposes to adjust the tiered water rate structure, increase water rates to generate sufficient revenue to cover the costs of providing water service, and extend and modify annual cost of living adjustments and wholesale purchased water pass-through costs to cover the District's future cost of providing water service.

### **Background**

The water rates being considered would be reflected on invoices sent on or after March 1, 2022. The District bills for water service in arrears, water bills received on or after March 1, 2022 will reflect the adjusted rates for the customer's billing period (which may be monthly or bi-monthly) prior to that date. The proposed water rate changes are being considered for the purpose of recovering costs incurred by the water system, which include water purchases from the San Diego County Water Authority, system operation and maintenance, facility and equipment maintenance, system rehabilitation, regulatory compliance, metering, billing, conservation and account management.

The reason for the proposed rate adjustments is to generate approximately \$2,163,000 in additional revenue in Fiscal Year 2023 for the District. This amount recovers revenue that was not collected when the annual water rate adjustment was not passed through on July 1, 2020 due to impacts of the COVID-19 pandemic. The proposed rate adjustments also provide funding for necessary repairs and improvements to the District's aging infrastructure, ensuring the District is able to continue provide a reliable supply of high quality water to its current and future customers.

## **PROPOSED CHANGES TO RATES AND SERVICE CHARGES**

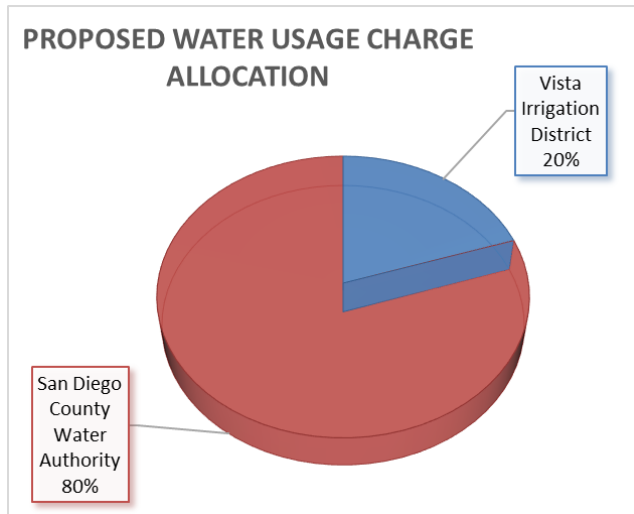
### **Tiered Rate Structure**

The water allotment for each tier will be based on meter size, so that as the size of a meter increases so does the water allotment. The Tier 1 limit had been set in 2009 based on 50% of the average ¾" meter usage. The average usage of ¾" meter has been recalculated based on current water consumption, and all tiers adjusted accordingly. Special Agricultural Water Rate (SAWR) program water use will continue to be billed at a flat rate.

**Water Usage Charges**

	Current Rate Per Unit	Vista Irrigation District Increase	San Diego County Water Authority Pass-through	Rebate credit applied to Pass-through Increase	Proposed Total Per Unit*
Tier 1	\$4.44	\$0.16	\$0.20	-\$0.04	\$4.76
Tier 2	4.98	0.09	0.20	-0.04	5.23
<b>Agricultural Programs Only</b>					
Domestic usage	4.76	0.15	0.20	-0.04	5.07
SAWR usage	3.91	0.07	0.20	-0.04	4.14
* 1 Unit = 748 Gallons					

<u>Monthly Water Allotments by Tier</u>			
	Current	Proposed	
Meter Size	Tier 1 Allotment	Tier 1 Allotment	Tier 2
5/8"	0-7	0-4	5+
3/4"	0-10	0-6	7+
1"	0-25	0-15	16+
1 1/2"	0-50	0-30	31+
2"	0-80	0-48	49+
3"	0-160	0-96	97+
4"	0-250	0-150	151+
6"	0-500	0-300	301+
8"	0-800	0-480	481+
10"	0-1150	0-690	691+



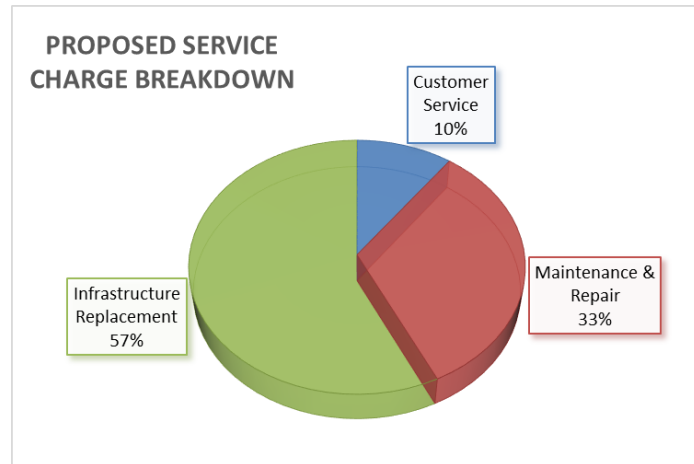
Approximately 20 percent of the revenue generated by water usage charges is utilized by Vista Irrigation District to cover operating and maintenance expenses; the remaining 80 percent is used to pay San Diego County Water Authority (Water Authority) for water purchases.

The Water Authority is responsible for supplying water to 24 member agencies within San Diego County. Not simply a water provider, the Water Authority is also responsible for the construction and maintenance of regional storage, delivery and treatment infrastructure necessary to ensure the reliable delivery of water to local water agencies like Vista Irrigation District.

**Service Charge**

The District proposes to adjust the monthly service charge per the schedule below.

Meter Size	Current	Proposed
5/8"	\$31.75	\$32.82
3/4"	41.88	43.3
1"	61.89	63.98
1-1/2"	112.34	116.14
2"	172.66	178.5
3"	333.57	344.85
4"	514.49	531.89
6"	1,218.45	1,259.65
8"	1,620.90	1,675.71
10"	2,425.46	2,507.47



The Service Charge recovers the District’s customer service, repairs and maintenance and the majority of the infrastructure replacement, which exists regardless of the amount of water pumped and delivered. These costs continue without regard to the amount of water that a customer uses and are sometimes called “readiness-to-serve” charges. The largest component of the service charge recovers the cost of replacing the District’s aging water system infrastructure.

**Inflationary Adjustments to Rates and Charges**

Such adjustments shall be calculated as an increase or decrease equal to the amount of the increase or decrease in the U.S. Department of Labor’s Consumer Price Index – All Urban Consumers – San Diego, California for the previous calendar year ended. These adjustments shall be effective July 1 each year, commencing July 1, 2023 through July 1, 2026; the July 1, 2022 has been included in proposed the increase to the monthly service charge shown on page 2 of this notice. This inflationary adjustment is only applied to District costs other than those charged the District by the San Diego County Water Authority.

**Pass-Through of San Diego County Water Authority Fees and Charges:**

The San Diego County Water Authority is the District’s wholesale water supplier. The District proposes to pass through 100% of any increase or decrease in the San Diego County Water Authority’s fees and charges imposed on the District for imported water purchases, through December 31, 2026.

If you need assistance determining the proposed changes in water rates or the billing cycle applicable to your property, please contact the District’s Customer Service Department at (760) 597-3120, 8:00 a.m. to 5:00 p.m., Monday through Friday.

**The District will accept written comments or protests prior to the public hearing.** A valid protest must contain a description of the property (address and/or Assessor Parcel Number) that is sufficient to identify the property, and identify the owner(s) of the property or properties for which the protest is entered. The protest must be signed by the property owner. If the person(s) signing was/were not shown on the last equalized assessment roll of San Diego County as owner(s) of the property, written evidence must be submitted stating that the person(s) signing is/are the owner(s) of the property. If a majority of the affected property owners file written protests, the proposed rate changes and the current rate structure will be reconsidered. If you have any questions regarding this notice, please call the District's Customer Service Department at (760) 597-3120 during regular office hours, Monday through Friday. Protests can be mailed or personally delivered to Vista Irrigation District at 1391 Engineer Street, Vista, CA 92081. Please do not send protests by e-mail.

Exhibit A

# **VID Water Rate Study**

**September 22, 2021**

# Presentation Outline

- Water Rate Study Methodology
- Capital Improvement Reserve Fund
- Allocation of Costs to Revenue
- Potential Tiered Water Rate Structure Revisions
- Potential Rate Increases



# Water Rate Study Methodology

## Five-Year Projection – Current Water Rates

	Budget	Projected	Projected	Projected	Projected	Projected	Total
Financial	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	
Revenue Water Sales/Emergency Storage Fee	\$ 34,121,000	\$ 34,121,000	\$ 34,121,000	\$ 34,121,000	\$ 34,121,000	\$ 34,121,000	
Revenue Service Fee	17,500,000	17,957,533	18,491,583	19,107,992	19,744,948	20,403,137	
Revenue All Others	3,241,900	3,473,430	3,548,193	3,635,110	3,724,309	3,815,850	
Revenue Total	54,862,900	55,551,962	56,160,776	56,864,101	57,590,257	58,339,987	
Expenses less Depreciation	44,682,700	45,186,674	45,783,333	46,466,237	47,098,503	47,740,734	
<b>Net</b>	<b>10,180,200</b>	<b>10,365,288</b>	<b>10,377,443</b>	<b>10,397,865</b>	<b>10,491,754</b>	<b>10,599,253</b>	
Capital Projects	15,429,000	25,258,275	8,331,880	9,281,674	10,017,727	10,356,065	
<b>Contribution to or (Use of) Capital Improvement Reserves</b>	<b>(5,248,800)</b>	<b>(14,892,987)</b>	<b>2,045,563</b>	<b>1,116,191</b>	<b>474,027</b>	<b>243,188</b>	<b>(16,262,819)</b>

## Projected Reserve Balance as of 06/30/27

Cash Balance Actual 06/30/2021	Amount
Emergency and Contingency Reserve	\$ 10,000,000
Working Capital Reserve	10,000,000
Surplus Supplemental Water	4,595,222
Water Rebate	1,571,006
Capital Improvement Reserve	20,346,496
<b>Total Cash Balance</b>	<b>46,512,724</b>
Capital Improvement Reserve 06/30/2021	\$ 20,346,496
Contribution to or (Use of) Capital Improvement Reserves through Fiscal Year 2027	(16,262,819)
<b>Projected Capital Improvement Reserve Balance as of 06/30/2027</b>	<b>4,083,678</b>

- Projection is based on FY 2022 Budget.
- Uses average CPI to project forward.
- Purchased water expense and water rates held constant since Water Authority increases/decreases are passed through to customers.

# Capital Improvement Reserve Fund

- Currently no required Capital Improvement Reserve Funding level.
- To calculate an annual minimum Capital Improvement Reserve Fund, current asset values were adjusted by ENR to 2021 year values and divided by each assets life to determine each assets an annual value.
- Analysis shows a minimum of \$13.2 million should be maintained in the Capital Improvement Reserve Fund.

Annual ENR cost Tier 1 Rate	
Type	Annual Cost
Bldg	970,972
Canals	380,262
Const	356,268
Copiers	7,026
Dam	1,067,362
Filt Plant	819,423
IT	118,860
Land	
Misc	116,708
Pipe	3,886,379
Pipe Contr	1,905,077
Pump Sta	109,779
Reg Sta	100,534
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<b>Total</b>	<b>11,245,174</b>

Annual ENR cost Tier 2 Rate	
Type	Annual Cost
Wells	621,449
Flume	1,064,160
Pechstein II New	300,000
<b>Tier 2 additional</b>	<b>1,985,609</b>
<b>Total All</b>	<b>13,230,783</b>

# Allocation of Costs to Revenue

Service Charge- Recovers customer service(10%), maintenance and repairs (33%) and the majority of the infrastructure and asset replacement (57%).

Tier 1 Rate- Cost of water (local and purchased) plus costs of transmission and distribution, water treatment, tanks and reservoirs, engineering and other costs associated with flow not allocated to the Service Charge and overhead costs.

Tier 2 Rate (Tier 1 Rate plus Marginal Tier 2 Rate)- Marginal Tier 2 Rate is to cover costs associated with above average usage and conservation, such as expanding of reservoir storage, improving the wellfields and preparation associated with the rebuilding of the Flume.

Other Revenue (Such as penalties, capacity fees, leases, interest income, property taxes)- Used to cover overhead departments expenses and other directly related costs.

# Potential Tiered Water Rate Structure Revisions

- Eliminate Tier 3 which is currently being charged at the Tier 2 water rate.
- Tiers updated using 2009 methodology-
  - $\frac{3}{4}$  meter 50% average usage is Tier 1 limit; used FY 2019 actual water consumption.
  - Hydraulic capacity of other meter sizes used to determine their respective Tier 1 allotments.

Size	Current Tier 1 Limits	Proposed Tier 1 Limits	Difference
5/8	7	4	3
3/4	10	6	4
1	25	15	10
1 1/2	50	30	20
2	80	48	32
3	160	96	64
4	250	150	100
6	500	300	200
8	800	480	320
10	1150	690	460

Water Sales Billed	Current State	Proposed New Tier 1 Limits
	Acre Feet	Acre Feet
Tier 1	8,354	5,012
Tier 2	7,446	10,788
Total	15,800	15,800

# Potential Rate Increases

- Allow the automatic pass-through of all San Diego County Water Authority fees and charges for wholesale water and water related services.
- Allow an inflationary adjustment to District water rates annually on July 1; forgo the increase on 07/01/22.
- Effective on bills mailed after 03/01/22, increase the Tier 1 water rate to \$4.76 and Tier 2 water rate to \$5.23; eliminate the Tier 3 water rate.
- Increase Service Charge to recover revenue not collected as the result of forgoing the inflationary adjustment due to be implemented on July 1, 2020.

Service Charges				
Meter Size	Currently Monthly Charge		Proposed Monthly Charge	
5/8	\$	31.75	\$	32.82
3/4 & 3/4 1		41.88		43.30
1		61.89		63.98
1.5		112.34		116.14
2		172.66		178.50
3		333.57		344.85
4		514.49		531.89
6		1,218.45		1,259.65
8		1,620.90		1,675.71
10		2,425.46		2,507.47

# Potential Rate Increases (continued)

Average 2 month Bill Example				2 Month Bill								
3/4" METER - CURRENT CHARGE												
Tier	Usage	Rate	Charge	Tier	Usage	Rate	VID Increase	Rate pass-through	Rebate	Final Rate	Charge	
1	20	\$4.44	\$ 88.80	1	12	\$4.44	\$0.16	\$0.20	-\$0.04	\$4.76	\$ 57.12	
2	4	\$4.98	19.92	2	12	\$4.98	\$0.09	\$0.20	-\$0.04	\$5.23	62.76	
	24		\$ 108.72	Total	24						\$ 119.88	
Service Charge			83.76	Service Charge			86.60					
IAC			8.48	IAC			8.48					
Total <u>Bi-Monthly</u> Cost			\$ 200.96	Total <u>Bi-Monthly</u> Cost			\$ 214.96					
										<u>Bi-Monthly</u> Dollar Change		\$ 14.00
										Percentage Change		6.97%

Breakdown of Average Bill by Source	Amount	Percent
Service Charge	\$ 2.84	1.4%
Water Authority Pass-through 01/01/2022	4.80	2.4%
Rebate 01/01/2022	(0.96)	-0.5%
VID Rate Increase Needed	7.32	3.6%
	\$ 14.00	

New Rates	
Capital Improvement Reserve 06/30/2021	\$ 20,346,496
Contribution to or (Use of) Reserves through Fiscal Year 2027	(6,803,070)
Projected Capital Improvement Reserve Balance as of 06/30/2027	\$ 13,543,427

# Potential Flat Rate, Reserve to \$13.1m

Average 2 month Bill Example								2 Month Bill				
3/4" METER - CURRENT CHARGE												
Tier	Usage	Rate	Charge	Tier	Usage	Rate	VID Increase	Rate pass-through	Rebate	Final Rate	Charge	
1	20	\$4.44	\$ 88.80	1	24	\$4.44	\$0.47	\$0.20	-\$0.04	\$5.07	\$ 121.68	
2	4	\$4.98	19.92								-	
	<u>24</u>		<u>\$ 108.72</u>	<b>Total</b>	<u>24</u>						<u>\$ 121.68</u>	
<b>Service Charge</b>			<b>83.76</b>	<b>Service Charge</b>							<b>86.60</b>	
<b>IAC</b>			<b>8.48</b>	<b>IAC</b>							<b>8.48</b>	
<b>Total Bi-Monthly Cost</b>			<u><u>\$ 200.96</u></u>	<b>Total Bi-Monthly Cost</b>							<u><u>\$ 216.76</u></u>	
										<b>Bi-Monthly Dollar Change</b>		<u>\$ 15.80</u>
										<b>Percentage Change</b>		<u>7.86%</u>

Breakdown of Average Bill by Source	Amount	Percent
Service Charge	\$ 2.84	1.4%
Water Authority Pass-through 01/01/2022	4.80	2.4%
Rebate 01/01/2022	(0.96)	-0.5%
VID Rate Increase Needed	9.12	4.5%
	<u>\$ 15.80</u>	

New Rates	
Capital Improvement Reserve 06/30/2021	\$ 20,346,496
Contribution to or (Use of) Reserves through Fiscal Year 2027	(7,283,932)
Projected Capital Improvement Reserve Balance as of 06/30/2027	<u>\$ 13,062,564</u>





## STAFF REPORT

Agenda Item: 8

**Board Meeting Date:** September 22, 2021  
**Prepared By:** Greg Keppler  
**Reviewed By:** Randy Whitmann  
**Approved By:** Brett Hodgkiss

**SUBJECT:** EDGEHILL (E) RESERVOIR REPLACEMENT AND PUMP STATION

**RECOMMENDATION:** Approve the Edgehill (E) Reservoir Replacement and Pump Station project; authorize staff to advertise and solicit bids for the construction of the project; authorize the General Manager to enter into an Agreement for Professional Services with Valley Construction Management for construction management and inspection services in an amount not-to-exceed \$1,006,886; and authorize the General Manager to amend the Agreement for Professional Services with Dudek for construction related design/environmental support services for a total amount not-to-exceed \$1,288,936 (D-2346, DIV NO. 3).

**PRIOR BOARD ACTION:** On October 24, 2018, the Board authorized the General Manager to enter into an Agreement for Professional Services with Dudek for the Edgehill (E) Reservoir Replacement and Pump Station project in an amount not-to-exceed \$885,110. On August 5, 2020, the Board adopted a Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for the project and directed staff to file a Notice of Determination with the County Clerk.

**FISCAL IMPACT:** The District has budgeted a total of \$4,400,000 for the project to date (approximately \$950,000 for the completed planning, design and environmental services and \$3,450,000 for estimated construction and associated professional services costs during Fiscal Year 2022. The engineer's total estimated construction cost for the project is \$12,350,000; the balance of project construction and professional services costs will be budgeted in Fiscal Years 2023 and 2024.

**SUMMARY:** Edgehill (E) Reservoir, located near the end of Edgehill Road, is a 1.5 million gallon, reinforced, gunite reservoir constructed in 1929. This project will replace the existing reservoir with a new hexagonal, cast-in-place concrete reservoir with a storage volume of 2.92 mg. As recommended in the Master Plan, the project also includes a new 3,000 gallon per minute pump station at the site to serve as a redundant feed from the Edgehill (E) Reservoir into the District's higher pressure zones.

The bid package for the Edgehill (E) Reservoir Replacement and Pump Station project has been completed and the project is ready to be advertised for construction. Following Board approval, the project will be advertised and bid per the District's purchasing policy. Once bids are received, a recommendation for construction award will be placed on the Board agenda for final approval.

**DETAILED REPORT:** Given the complexity of this project, staff recommends hiring the construction management team prior to awarding the construction contract to afford the opportunities for the consultant to become familiar with the contract documents and participate in responding to any questions and/or requests for information from bidders. It also benefits the District by having an independent construction management firm review the contract documents and provide risk reduction recommendations prior to bidding.

Staff issued a Request for Proposal to seven firms for construction management and inspection services for the Edgehill (E) Reservoir Replacement and Pump Station project and received responsive proposals from Infrastructure Engineering Corporation, MKN & Associates, NV5, and Valley Construction Management (Black & Veatch, Jacobs, and Tetra Tech declined to submit). The District's selection committee ranked each firm based on the consultant's understanding of the project, relevant experience, project approach, scope of work and project team. The committee selected Valley Construction Management as the most qualified and



responsive team. District staff has negotiated a scope of work and time and materials not-to-exceed fee of \$1,006,886 for the project based on the estimated staffing levels required during the time for completion schedule in the construction contract (625 days after Notice to Proceed). Contractor liquidated damages will include the estimated costs to the District for needing to extend construction management and inspection services if there are unauthorized delays. The scope of work includes the following key tasks:

- Pre-construction phase services – bid support, submittal log and procedures manual development, pre-construction meeting, contractor construction schedule and bid schedule of values approval.
- Contract management and administration – progress meetings report preparation; progress payment, change order, requests for information, shop drawing, and submittal review and processing; schedule tracking, critical path and claims avoidance analysis.
- Field services – full-time inspection, documentation, coordination, and notifications for construction, storm water, permit, site safety, District operations, and noise mitigation and community impact avoidance compliance; materials testing, special inspections, photo and video documentation, and equipment start-up.

Dudek provided the planning, design and environmental services for the Edgehill (E) Reservoir Replacement and Pump Station project, and the agreement's 3-year term ends on October 24, 2021. An amendment to the Agreement for Professional Services with Dudek is requested to extend the term through construction and include design/environmental support services (e.g., environmental compliance training and monitoring; technical review of requests for information, submittals, shop drawings, etc.) for an additional time and materials not-to-exceed fee of \$403,826 (from \$885,110 to \$1,288,936).

Following Board approval, construction advertising will begin in October with bids due in November. It is anticipated staff will return to the Board with recommendations for construction award in December with construction commencing in January 2022.

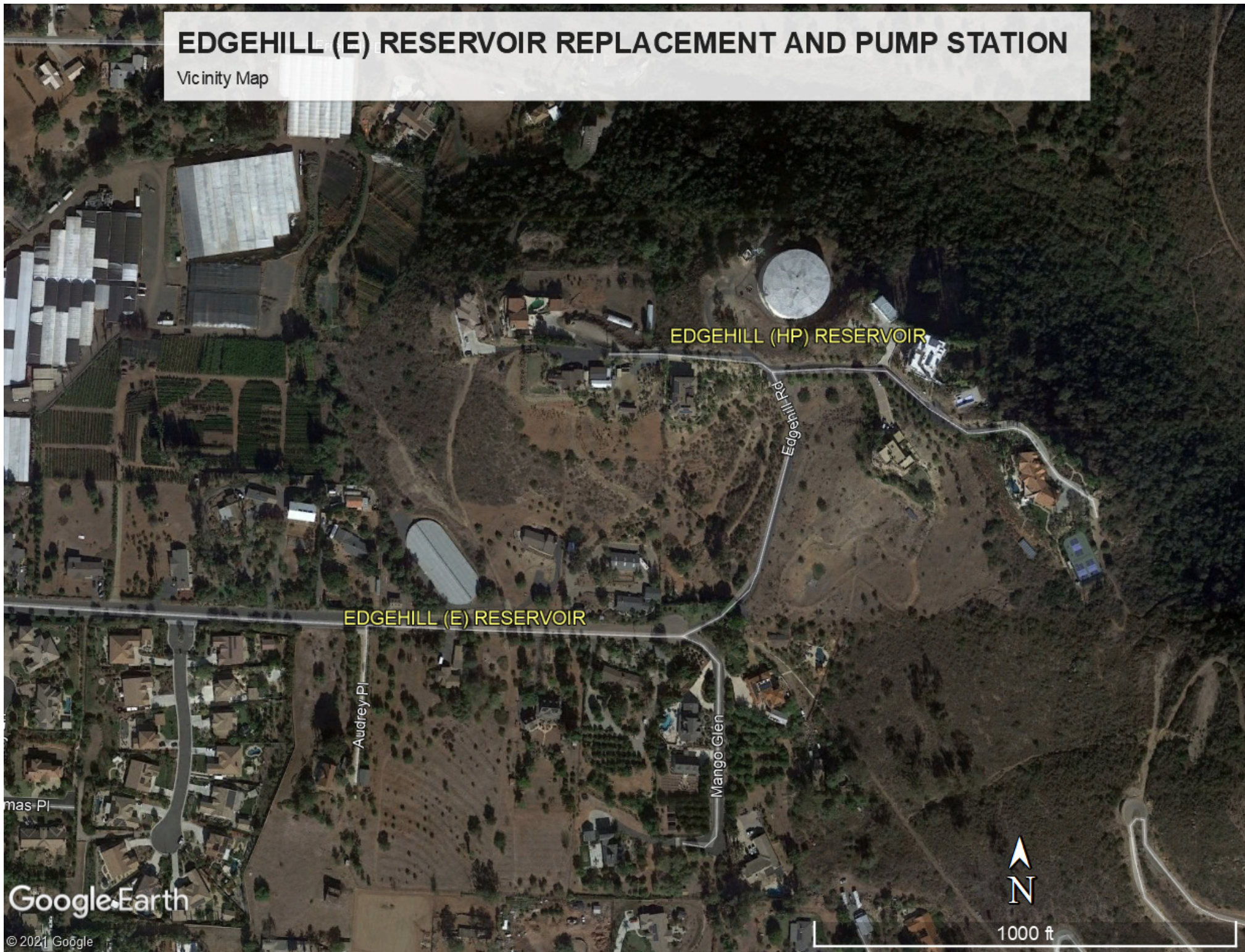
ATTACHMENTS:

- Vicinity Map
- Scope of Work: Valley Construction Management
- Scope of Work: Dudek



# EDGEHILL (E) RESERVOIR REPLACEMENT AND PUMP STATION

Vicinity Map



Google Earth

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## **SCOPE OF WORK**

### **Contract Administration and Communication**

Valley CM will prepare a Project procedures manual outlining the standards and flow of Project documents. It will include all necessary forms, filing system indexes and flowcharts to fully explain the Project administration procedures including which items of work require specialty inspection. The procedure manual shall be subject to District approval, and shall include providing and setting up a web based document control system for the Project. Following approval, Valley CM shall distribute the manual to all Project participants.

Valley CM has extensive experience managing CM effort and supervision of inspection staff. Valley CM will provide weekly schedule updates to District staff as well as conversations and emails to alert District staff of any changes in schedule or potential change orders. Valley CM will present a monthly progress report to the District to provide a summary of the project for use by the District in presenting the project to other departments or the Board. The report will outline in text, with supporting photo documentation, the progress of the project including financial status of the construction and CM contract, schedule status change order status and copies of all project logs (Requests for Information [RFIs], submittals, change orders, correspondence, etc.).

Valley CM staff will personally meet with all the immediate neighbors prior to the start of the project to personally explain the schedule and what to expect with noise that will most affect them. Valley CM will also provide our cell phone numbers to the residents, so they have a direct line to call with any questions/complaints during the project. We have found that when residents have a direct line for complaints, we can resolve them quickly without escalation to District staff or management. We have found most residents are accepting of the inconvenience of construction when they understand the facts behind the project and have access to personnel on the project to quickly contact for any issues that may arise.

Valley CM will meet with District operations staff prior to the preconstruction meeting to discuss their involvement and expectations for the project shutdowns. This information will be presented to the Contractor during the preconstruction meeting and at the shutdown meeting prior to the actual shutdown. Shutdowns will be required to be shown on the Contractor's critical path method (CPM) schedule and on the look ahead schedule that will be provided at progress meetings. This will allow operations staff time to plan shutdowns, perform mock shutdowns to determine leak-by and notify customers. Valley CM's policy is to require all parts and pieces for the shutdown (down to the washers for the bolts) to be inspected onsite PRIOR to the District notifying customers of the shutdowns. This prevents supplier material delivery delays from forcing the District to cancel shutdowns and reschedule them, which is extremely time consuming and disruptive to the District's customers.

Valley CM will meet with District operations staff prior to the preconstruction meeting to go over the project requirements and staff expectations so the Contractor can be provided clear direction regarding staff involvement.

### **Permit Compliance/Site Safety**

Valley CM will review all of the Project permits prior to the start of construction and be familiar with all of the requirements. Permit issues can range from safety, sound levels, working hours, or working restrictions due to animal habitat or nesting. Valley CM will be familiar with each permit and meet regularly with the Contractor to ensure compliance. The Contractor is responsible for overall site safety. Should apparent unsafe conditions be observed, they will be immediately brought to the Contractor's attention. Should the Contractor fail to expeditiously remedy the situation, Valley CM shall notify the District immediately so a stop work order can be issued.



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The new reservoir has larger footprint that will require significant excavation and rock removal. The noise generated by these activities will likely be the largest noise impact for the neighbors on this project. The use of jack jammers, breakers and possible blasting, will severely impact the neighbors. Valley CM will ensure that proper notification is made to the neighbors prior to starting this work. We will ensure all proper procedures are followed to minimize the noise impact to the community. If blasting is required, Valley CM will ensure all requirements of the Mitigated Negative Declaration (MND) are followed.

Dust control will be required during the demolition of the existing reservoir to mitigate impacts to the surrounding neighbors. Valley CM will ensure proper dust control is performed.

The City of Vista will require the Contractor to obtain a haul route permit for the demolition debris removal. Valley CM will ensure the Contractor follows the approved haul route.

Valley CM will ensure any artifact found during construction is handled in accordance with the MND.

#### RFIs

Valley CM will manage Contractor RFIs during construction. The status of RFIs will be accounted for in the RFI log. Valley CM believes that RFIs should be processed at the lowest level possible. RFIs will be reviewing and a response drafted for District review. If required, Valley CM will forward to the Designer for further review. Valley CM will respond to RFIs typically in less than working 2 days.

#### Shop Drawings & Submittal Reviews

Valley CM will work in conjunction with District staff to identify and organize the list of submittals required to be provided for review throughout the Project. Valley CM will log in, track, process, distribute to the District and engineer of record, submittals, plans, profiles and shop drawings. Valley CM will review each submittal for completeness and compliance with all contract requirements, and incorporate all District and engineer of record review comments. Submittals such as pipe material, fittings, etc. can be reviewed and approved by Valley CM with any deviations sent to the Designer for approval if the District requires. All submittals will be tracked on the submittal log and be converted to PDF format and stored in the projects document control system.

#### Project Planning Meeting

Valley CM will hold a Project Planning Meeting with the Contractor prior to the pre-construction meeting. At this meeting, the CM and Contractor (including the foreman and estimator) review every page of the plans and specifications to flush out problems, discrepancies. We will discuss the Contractor's proposed plan to complete the project to foresee any problems and discuss in detail the inspection requirements, shutdown requirements and other owner requirements for the project. The Contractor will be asked to bring their bid estimate to the meeting. This meeting also has the beneficial effect of becoming a meaningful partnering session without anybody realizing it. This is the first time all relevant parties are face to face to begin developing a collaborative working relationship. The Contractor will see exactly how the CM team interprets any issues they bring up. By responding in a fair and reasonable manner, the Contractor will respond likewise and start the project with the correct tone and build collaboration.

#### Construction Progress Meetings

Valley CM will coordinate with the District, Contractor and appropriate agencies and chair all meetings. Valley CM has standard agendas for the preconstruction meeting and progress meeting that will be modified for this contract. Valley CM will hold bi-weekly progress meetings with the Contractor and their appropriate subcontractors to review construction progress. We will keep minutes of the meetings, assigning action items, responsibilities, and documenting project trends. Minutes will be distributed within 2 days of the progress



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meeting. Meetings will include reviewing the Contractor's three-week look ahead schedule (including shutdown and tie-in work), submittals and RFI/design clarification status, potential change orders and change orders, delays and potential claims, construction problem resolution and public outreach issues. Minutes will include a copy of the latest submittal, RFI and change order logs.

#### Schedule Review

Valley CM's team will review the Contractor's baseline CPM schedule to ensure that the sequencing and durations reflect a true representation of the construction. We will check the logic network and the activity input durations and precedents for reasonableness of the sequence and duration of the activities. Specified construction sequencing, shutdown and scheduling constraints, interfacing with adjacent contracts, as well as all submittals, procurement, construction, shutdowns and tie-ins and closeout activities that are included for work will be confirmed. Valley CM will also perform detailed reviews of the Contractor's monthly schedule update to ensure that actual work progress based upon their records is properly incorporated, including the impacts of any change order work. Valley CM will also maintain its own "As-Built" schedule for verifying the Contractor's schedule. Valley CM will require the Contractor to prepare a recovery schedule when any critical path falls significantly behind schedule and will monitor its effectiveness in restoring the schedule. Valley CM will also review the weekly 3-week look-ahead schedule against the current approved schedule to determine if the project is slipping behind schedule. It is easier to correct smaller delays discovered on a weekly basis than a larger delay on a monthly basis. Contractors prefer to make smaller adjustments to the schedule on a weekly basis to rectify delays.

#### Progress Payment Application

Valley CM will review the Contractor's Schedule of Values to ensure it represents an appropriate detailed cost breakdown for each lump sum item as required by the contract. Valley CM will review the monthly Progress Payment Request to ensure it represent the actual work completed that month and provide a recommendation to the District for payment. Valley CM will maintain red-line markups of the contract drawings showing all change order items and RFIs/design clarifications, as well as other information regarding underground utilities and information useful to the District for future maintenance and construction. Valley CM will review the Contractor's set of marked up drawings to verify completeness prior to processing the monthly pay estimate.

#### Risk Management

Change order management begins at the project planning meeting to flush out any problems and address them quickly and typically at a lesser cost than if encountered during construction. The Contractor is also instructed of the proper procedure that must be followed for claiming a change condition during construction. During construction, Valley CM's inspectors are trained to follow the proper procedures for documenting changed conditions. Quick response to a change condition is essential. Valley CM typically prepares an independent estimates and schedule impact analyses for larger proposed changes to be used as a baseline for negotiations. We maintain a fair and objective approach to negotiations and assure that appropriate changes are authorized in a timely manner.

#### Change Orders and Claims

Valley CM will manage the change order process to help obtain a fair and reasonable price for legitimate extra work items. Valley CM will request and log change order (extra work) quotations as requested by the District or Contractor and will coordinate the preparation of any revised specifications and/or sketches needed to define the scope of the extra work. In each case, until a potential extra work item is confirmed and executed as a change order (or is dropped), it will be assigned a potential change order (PCO) number to facilitate tracking and filing. In this manner, several PCOs can subsequently be incorporated into a single contract change order. Change order work performed on a time-and-materials basis will be verified daily. Valley CM will enter the change order work activities into the CPM schedule to verify requested time



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extensions impacts accompanying the change order. A detailed change order cost estimate with which to compare and negotiate the Contractor's cost quotation will be prepared for larger change orders. Valley CM will then recommend acceptance or rejection of the terms of the change order to the District. If the change order is accepted, Valley CM will prepare the document for signature. If there is disputed extra work, Valley CM will work with the District and Contractor until the item has been satisfactorily resolved. If it is not resolved, Valley CM will track the item as a potential claim. Change order status will be included in the monthly status report.

Valley CM will take the lead in the resolution of any contract claims for this project during the construction contract period. We will keep current logs of Notice of Potential Claims and will prepare documents and supporting evidence regarding claims. Information on each individual Notice of Potential Claim will be kept separately in the project files. Valley CM will provide complete documentation, a claims response strategy, and cost analysis for the District review. However, it is Valley CM's intent to resolve claims and disputed work quickly and fairly as our experience has proven this typically results in the lowest cost to the District.

Storm Water Pollution Prevention Plan (SWPPP) Compliance

The District's Project Manager, Greg Keppler, will act as the Legal Responsible Person (LRP). Valley CM will provide a qualified SWPPP Practitioner (QSP) to inspect the Contractor's storm water pollution prevention efforts and provide notification and documentation required by the latest version of the Construction General Permit without annulling the Contractor's responsibility to maintain a storm water pollution prevention compliant site and conform to all requirements and regulations. Valley CM will assist the District as requested with utilization of the California Water Board's Stormwater Multiple Application and Report Tracking System (SMARTS). Valley CM will act as an extension of staff to the District to make sure the Contractor has done everything they are responsible for, including but not limited to, filing a Notice of Intent (NOI), uploading the SWPPP into SMARTS, reporting to SMARTS as required based on project risk level, making sure the completed project has the required finished ground coverage, and filing the Notice of Completion (NOC).

Quality Assurance/Quality Control

An accurate description of the work is key to successful inspections. The inspector's daily report needs to tell a story to someone reading it years from now about how the project was built. Using Note Vault daily report software allows our inspector to provide incredibly detailed reports on multiple projects throughout the day due to the ease of use of the software. Additionally, the District has almost immediate access to the daily reports. If an inspector is sick and someone else must fill in, all they must do is look up the previous day's report to understand where the project is at and if there are any issues that need to be addressed that day. There is no confusion with the current job status because the inspector did not finish their daily report that day or week. Valley CM inspectors typically make at least one entry per hour with a minimum of 4-6 photos for each entry.

Valley CM senior staff review daily reports on a weekly basis to ensure they are complete, accurate and contain the correct type of photographs and information.

Project Closeout

Project closeout can often be an overlooked item on the project. Valley CM believe that a successful closeout starts at the beginning of the project by explaining to the Contractor what will be required and reminding them as the project progresses. Valley CM typically prepares an ongoing punch list to allow the Contractor to complete these items as the work progresses instead of waiting to the end. We also require O&M manuals early to allow enough time for review by Operations. Redlines are reviewed on a monthly basis as a prerequisite for processing the progress payment so the accuracy is maintained throughout the project and we are not trying to recreate it at the end.





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Valley CM's Construction Inspector shall distribute all RFIs, field memos, and change orders on the record set of construction drawings. Valley CM's Construction Inspector shall also note daily on the record set as-built dimensional or other changes which occur in the field. Valley CM's Construction Inspector shall use the drawing to document the Project during the progress payment review process. Upon completion of the Project, the Inspector will sign and date the as-built set to certify that they are complete and correct. Once the activity is complete, the drawings will be turned over to the District.

Administration and Record Keeping

Valley CM utilizes Smartsheet, a cloud-based project management software program. All project documents (submittals, RFIs, meeting minutes, progress payments, etc.) are transmitted, logged and shared electronically utilizing this cloud-based system. Each user (District, Contractor and Valley CM) has separate login credentials that allows easy tracking of all use and restricted access to specific areas as needed. A dependable and simple document control system is the key to managing claims. At the end of the project, a thumb drive with all the electronic copies will be turned over to the District.

Field Observation/Inspection

Valley CM will provide full-time inspection services to monitor the Contractor's work for contract compliance during construction. Valley CM's inspector will document the Contractor's daily work activities and compliance with all District and agency standard specifications for utility materials and installation procedures through preparation of daily construction reports and logs. Logs will include verbal, electronic and telephone conversations, material certification for compliance with the contract, compaction results, pipe testing results including welds and coated surfaces, anchorage, reinforced concrete inspection, concrete strength testing and coordination and verification of all 3rd part quality control testing.

Regulated California-only hazardous waste must be disposed of properly. Valley CM will ensure all applicable regulations are followed.

Valley CM's inspector, Jeff Moody, will perform inspection of the rebar as it is placed. When sections of rebar installation are completed, Jeff will coordinate with Leighton Consulting to provide International Code Council (ICC) final inspection of the reinforcing steel prior to concrete placement.

Valley CM typically takes additional test cylinders on critical concrete placements so concrete strength can be determined on shorter intervals. This allows us to determine when concrete meets strength quickly and allow for form removals, backfill, etc. sooner than the typical testing. Leighton Consulting will provide American Concrete Institute (ACI) certified inspectors to take concrete cylinders and observe the concrete placement and ensure proper vibration to avoid rock pockets.

Valley CM will pay strict attention to the installation of the water stop at all locations to ensure it is properly installed and not folded over or otherwise damaged during installation and concrete placement.

Valley CM will ensure all subgrade preparation is performed under the inspection of a Geotechnical Engineer to ensure all work met the specifications.

Valley CM will thoroughly check subgrade elevations throughout entire foundation subgrade to verify the slab is a minimum 12 inches deep at all locations.

The California Department of Drinking Water (DDW) will have final approval of the District permit prior to operation of the reservoir. Valley CM will coordinate with District staff and DDW to ensure all required inspections are scheduled and any issues resolved so the reservoir can be put into service as soon as possible.



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Deficient work will be identified, tracked, and corrected using advisory notices and non-conformance reporting systems. Any damage to private or public property will be tracked, resolved, and reported in a timely manner. Compliance with all agency encroachment and other permits will be monitored and reported. All materials will be verified and documented for compliance with plans, specifications and approved submittals.

Valley CM will perform a final project walkthrough with the District and Contractor to prepare the final punch list. Any items remaining from preliminary punch lists and logs of nonconforming work will be added. Items from the post-construction conditions survey will be added and both the Contractor and Valley CM will sign off on the completion of each punch list item.

Daily Inspection Reports.

Valley CM utilizes Note Vault software for preparation of our daily reports. Note Vault is a software app that allows Jeff to speak his notes regarding the description of the current activities. Photographs can be tagged to each specific note entry. The voice notes are then transcribed, and the daily report is automatically generated and emailed to Jeff for review on a daily basis. This application virtually eliminates the old, time consuming way of handwriting daily reports and allows for a more detailed and thorough daily report. The daily report automatically pulls the current, local weather three times during the day and also allows the easy input of labor and equipment used. The daily inspection reports can be emailed to the District and any other personnel on a daily basis.

Photographs and Videos

Digital photos and video records will be taken of work progress (and preconstruction conditions) to document the Contractor's work. All photos will be annotated with key words for future searching and stored in electronic files. All Valley CM personnel have experience with the tasks and duties listed in the RFP. We have specialized experience in completing the following tasks and duties. Drone photograph and videos will be taken of the project on a regular basis by Paul Mochel, who is a Federal Aviation Administration (FAA) licensed drone pilot. Drone photographs can provide a unique perspective of the construction project that is often helpful for reports to the Board of Directors.

A Time-lapse video and security camera shall be provided by Valley CM to observe and document the Project site for the District's sole use.





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**SCHEDULE OF WORK**

The following schedule is based on The Time for Completion shown in Special Provisions 1.2.D.4.A-C with 2 months included for preconstruction activities and 3 month included for post construction activities:

Reservoir: 480 calendar days after the NTP  
 Pump Station: 575 calendar days after the NTP  
 All Other Work: 625 calendar days after the NTP

**RESOURCE PLAN AND FEE ESTIMATE**

	Months																							
	PRE		CONSTRUCTION																			POST		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Constructability Review	█																							
Bid Assistance		█																						
Submittals			█	█	█																			
Mobilization				█																				
E Reservoir Construction																								
Remove from Service				█																				
Demolition				█																				
Temp Grading & Shoring					█																			
Excavation and Subgrade Preparation					█	█																		
Construct Rough Piping for Reservoir						█																		
Reservoir Construction							█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Yard Piping & Vault Construction									█	█	█													
Retaining Walls											█													
Disinfection																	█	█						
Testing																	█	█						
Water Proofing																	█	█						
Backfilling & Compaction																	█	█						
Place Reservoir In Service																								
E Pump Station																								
Packaged Pump Station Procurement													█	█	█	█	█							
Pump Station Building Construction													█	█	█	█	█							
New Electric Service Installation																	█	█						
Electrical & Mechanical Equipment																		█	█					
Pump Station Startup & Testing																			█	█				
Site Improvements																								
Site Drainage																					█	█		
New Site Pavement																					█	█		
Landscaping & Irrigation																					█	█		
Demobilization																							█	
CM Closeout																							█	█

Position	Name	Months																								Hours	Rate	Total		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
Construction Manager	Paul Mochel, PE, CCM	60	40	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	1,420	\$185	\$262,700		
CM/Inspection	Jeff Moody, PE, CCM	40	40	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	176	3,700	\$155	\$573,500
Electrical, I&C Inspection	RCS*																												\$56,133	
Material Testing	Leighton Consulting*																												\$94,553	
Remote Access Security Camers	Truelook																												\$20,000	
																												<b>TOTAL</b>	<b>\$1,006,886</b>	

All typical ODC costs are included in the hourly rate (auto, laptop, cell phone, etc.) and based on prevailing wage  
 \*5% markup included on all subconsultants

**VALLEY CONSTRUCTION MANAGEMENT FEE SCHEDULE**



**VID E Reservoir and Pump Station Project  
ESTIMATED STAFF HOURS FOR EACH TASK AND STAFF MEMBER**

Task	Task Description	Paul Mochel Construction Manager	Jeff Moody Resident Engineer	RCS Electrical Inspector	Leighton Material Testing	Other Direct Costs	TASK TOTAL COST
<b>1</b>	<b>Pre-Construction Phase Duties</b>						
1.1	Preconstruction Meeting	16	4				\$3,580.00
1.2	Submittal Review Log	4	4				\$1,360.00
1.3	Construction Schedule	4	4				\$1,360.00
1.4	Schedule of Values	4	4				\$1,360.00
1.5	Procedures Manual	4	4				\$1,360.00
1.6	Constructability Review	100	40				\$24,700.00
	<b>Task 1 Total Hours</b>	<b>132</b>	<b>60</b>				
	<b>Hourly Rate</b>	<b>\$185</b>	<b>\$155</b>				
	<b>Task 1 Total Cost</b>	<b>\$24,420</b>	<b>\$9,300</b>				<b>\$33,720</b>
<b>2</b>	<b>Construction Phase Duties</b>						
2.1	Contract Administration	570	0				\$105,450.00
2.2	Bi-Weekly Progress Meetings (50)	100	50				\$26,250.00
2.3	Monthly Progress Reports (24)	40	0				\$7,400.00
2.4	Change Orders	60	0				\$11,100.00
2.5	Progress Payments (24)	40	0				\$11,120.00
2.6	RFIs (75), Submittals (150)	200	24				\$37,000.00
2.7	Schedule Review	40	0				\$7,400.00
2.8	Project MND & MMRP	20	8				\$4,940.00
2.9	Full-Time Inspection	0	3334	\$56,133.00			\$572,903.00
2.10	Record Drawings	24	24				\$8,160.00
2.11	SWPPP Complianace	16	40				\$9,160.00
2.12	Permit Compliance/Site Safety	16	24				\$6,680.00
2.13	Materials Testing & Special Inspection	16	40		\$94,553.00		\$103,713.00
2.14	Claims Avoidance and Analysis	10	8				\$3,090.00
2.15	Photo & Video Documentaiton	8	32			\$20,000.00	\$26,440.00
2.16	Coordinate Construction Survey	8	16				\$3,960.00
2.17	Project Closeout	120	40				\$28,400.00
	<b>Task 2 Total Hours</b>	<b>1288</b>	<b>3640</b>				
	<b>Hourly Rate</b>	<b>\$185</b>	<b>\$155</b>				
	<b>Task 2 Total Cost</b>	<b>\$238,280</b>	<b>\$564,200</b>				<b>\$973,166</b>
	<b>PROJECT TOTAL HOURS</b>	<b>1420</b>	<b>3700</b>				
	<b>Hourly Rate</b>	<b>\$185</b>	<b>\$155</b>				
	<b>PROJECT TOTAL COST</b>	<b>\$262,700</b>	<b>\$573,500</b>	<b>\$56,133</b>	<b>\$94,553</b>	<b>\$20,000</b>	<b>\$1,006,886</b>

# DUDEK

27372 CALLE ARROYO  
SAN JUAN CAPISTRANO, CALIFORNIA 92675  
T 949.450.2525 F 949.450.2626

August 27, 2021

Mr. Greg Keppler, P.E., QSD  
Engineering Project Manager  
Vista Irrigation District  
1391 Engineer Street  
Vista, CA 92081

**Subject: Proposal for Engineering Services During Construction for the E Reservoir Replacement and Pump Station Project**

Dear Mr. Keppler:

We are pleased to provide this scope and fee proposal for engineering services during construction for the E Reservoir Replacement and Pump Station project (project).

## Background

The final design bid package documents were recently completed for the E Reservoir Replacement and Pump Station project by the Dudek team for Vista Irrigation District (VID or District). The project is planned to be advertised for bid in the near future with construction following soon thereafter.

## Team

As discussed, and with the District, the Dudek team will maintain the same organizational structure for this phase of the project with Neil Harper continuing to serve as project manager and Amanda Combs serving as the lead project engineer. Dudek will continue retain the services of the following subconsultants:

- **Beyaz & Patel, Inc.** – Structural Engineering (overseen by Subhash Patel, PE, SE).
- **Gerry Green, Inc** – Electrical Engineering (overseen by Gerry Green, PE).
- **MBN Group** – Architecture (overseen by Minh Nguyen, AIA).
- **ATC** – HVAC Engineering (overseen by Tony Ngo, PE).
- **Dudek** – Landscaping (overseen by Ed Armstrong, AIA) and Environmental Compliance Services (MMRP) (overseen by Keith Carwana)

## Scope of Work

In accordance with the VID's request, Dudek proposes to provide the following services:

**Task 1 – As-Needed Consultation:** The proposed construction duration for the project is approximately (20) months. Dudek has allocated (8) hours per month (160 total hours) of as-needed consultation from our in-house team members and (4) sub-consultants.

**Task 2 – Provide Responses to Requests for Information (RFIs):** Dudek has provided budget for the design team to provide responses for up to (100) requests for information (RFIs). At the District’s discretion, the Dudek team will provide responses to RFIs in letter form or e-mail form. It is assumed that the District’s third party construction management firm will maintain an RFI log or utilize a website to document the RFI’s such as Virtual Project Manager (VPM).

**Task 3 – Review Shop Drawings and Submittals:** We have provided budget for the design team to provide review and process up to (120) shop drawings and submittals and up to (50) resubmittals. It is assumed that VID’s third party construction management firm will maintain a Shop Drawing/Submittal log or utilize a website to document the shop drawings and submittals such as Virtual Project Manager (VPM).

**Task 4 – Site Visits:** We are providing budget for up to (8) site visits (not including visits for environmental compliance (MMRP)).

**Task 5 – Construction Progress Meetings:** We are providing budget for attendance of up to (40) bi-weekly construction progress meetings. It is assumed that up to (4) meetings will be attended in person by Dudek and the remaining (36) meetings will be handled via teleconference.

**Task 6 – Drawing Modifications/Clarifications:** We are allocating budget to be used for drawing modifications and clarifications at the request and direction of the District.

**Task 7 – Change Order Reviews:** We are allocating budget to be used for up to (10) change order reviews at the request and direction of VID.

**Task 8 – Project Management and Project Status Reporting:** Dudek is providing budget on this item based on a (20) month project duration.

**Task 9 – Prepare Record Drawings:** Based on other similar projects, Dudek has provided budget to prepare record drawings based on the provided redline drawings from the contractor. Our budget is based on providing (86) Mylar drawings and a CD of the drawings (AutoCAD and pdf forms).

**Task 10 – Environmental Compliance Services (MMRP):** This work covers the following mitigation measures (MM) as specified in the project’s specifications section 01060 (Permits and Other Regulatory Requirements), subsection 3.02 (Environmental Compliance - Mitigation, Monitoring and Reporting Procedures).

#### **Task 10.1 – Pre-Construction Nesting Birds Surveys and Reporting (MM-BIO-1)**

Dudek assumes vegetation clearing and initial ground-disturbing activities will occur during the avian breeding season (March 1 (January 1 for raptors) through September 15) in 2022 and 2023. A qualified Dudek biologist will conduct a pre-construction survey for active nests on-site pursuant to MM-BIO-1 in 2022 and 2023. The pre-construction surveys will be conducted a maximum of 72 hours prior to the onset of ground-disturbing activities and encompass the project impact area plus a 300-foot buffer surrounding the impact area, where there is legal access.

Upon completion of the survey, Dudek will prepare a survey and monitoring report documenting the pre-construction survey results.

For the purposes of this scope, Dudek assumes no nesting birds or raptors will be detected during the survey. Should nesting birds or raptors be detected during the survey, this scope of work would be subject to additional scope and fee. Other assumptions for this subtask are: up to two site visits by a single biologist (up to 16 hours) will be required for the pre-construction nesting bird surveys, up to two nesting bird survey reports will be prepared, and there will not be any nests present on-site; therefore, no additional coordination will be necessary, and the preparation and implementation of a nest monitoring program will not be required.

Note: This scope of work does not include services for compliance with MM-NOI-2. In the event blasting is required, Dudek assumes that the blasting contractor will prepare the blasting plan and implement the noise-related blasting requirements set forth in MM-NOI-2.

### **Task 10.2 – Worker Environmental Awareness Training Program (MM-CUL-1)**

In accordance with MM-CUL-1, Dudek will prepare a worker environmental awareness training program (WEAP) to provide management, supervisory, construction, and inspection staff with the information regarding the cultural sensitivity of the general area and of the types of artifacts that are commonly found during construction in the region. The WEAP will also discuss the requirements and process that needs to be implemented should a discovery be made on site and include relevant information to ensure compliance with Mitigation Measure CUL-2 in the event human remains are discovered on site.

Dudek will prepare the WEAP materials for the project, including an electronic MS PowerPoint-based slide deck with voiceover suitable for independent use or group trainings conducted at the field office, and brief handouts in case training sessions are required in the field. The biological monitor will conduct one environmental training session for construction managers prior to the commencement of work at the site. After the initial environmental training sessions, Dudek assumes most additional training sessions for new workers will be administered by the contractor via the pre-recorded video, and incorporated into the contractor workers' orientation process, without the need for Dudek participation.

Dudek will prepare up to 150 hardhat stickers to be distributed to personnel after completion of the WEAP training.

### **Task 10.3 – Cultural Resource Construction Monitoring (MM-CUL-1 and MM-CUL-2)**

Though no routine cultural resource monitoring is required during construction, in the event that resources (sites, features, or artifacts) are exposed during construction activities, all construction work occurring within 50 feet of the find shall immediately stop until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the significance of the find and determine whether or not additional study is warranted. If the discovery is clearly not significant (e.g., an isolate) the archaeologist may simply record the find and allow work to continue. If the discovery proves potentially significant under CEQA, additional work such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted. Should any discoveries be made that require formal documentation, evaluation, and/or data recovery, we will work with you to develop an appropriate scope of work and cost based on the mitigation measures for the project.

We are anticipating the field investigations for the project are estimated to require one archaeologist working one day (8 hours) working directly with construction crews to complete evaluation of one unanticipated discovery of an archaeological resource.



#### **Task 10.4 – Noise Compliance Site Inspections (MM-NOI-1)**

Dudek assumes the construction contractor will be responsible for implementing the nine construction noise reduction measures set forth in MM-NOI-1 during construction. To ensure compliance with MM-NOI-1, Dudek will provide up to two noise compliance site visits by a qualified Dudek acoustician. Dudek assumes one of these site visits will occur during the first week of construction to establish a baseline and verify the required construction noise reduction measures are being implemented. The subsequent visit will occur during a future date when heavy construction activities are expected to occur (this would be coordinated with Vista Irrigation District and the construction contractor). After each of the noise inspection visits, Dudek will prepare a brief memorandum to summarize the inspections and any areas identified for corrective action.

We have budgeted (2) site visits by one acoustician and total of 16 hours for this effort.

#### **Task 10.5 – Mitigation Measure Tracking**

To ensure compliance with each MM, Dudek will prepare a Microsoft Excel spreadsheet or similar document that will effectively track all MMs and associated deliverables. Dudek will update the spreadsheet on a routine basis and provide to the District and the construction contractor via ShareFile or a similar file sharing program. This task also includes Dudek participation in monthly conference calls with Vista Irrigation District and the construction contractor to discuss the status of each mitigation measure, action items, and potential issues/concerns.

**Task 11 – Development of Prescriptive and Performance Specifications for SCADA, Controllers, and VFDs:** As requested we are providing budget for the development of prescriptive and performance specifications for the SCADA, Controllers, VFDs, etc. We are anticipating that the contractor will design, build, furnish, install, and test these project components, and that VID staff will provide the programming.

This will involve augmentation of the project documents with several schematic drawings and panel layouts. In addition, we anticipate modifying several Division 1 specification sections (including the summary of work and measurement and payment sections) and multiple Division 16 and 17 specifications. Several Division 16 and 17 specification sections will need to be added too.

## Schedule

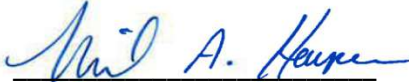
We are ready to commence work immediately once authorized by the City. We will provide these services on an as-needed and as-requested basis by the City.

## Closing

We look forward to continuing our work on this project with you and the District and to providing the services described herein. We propose a time and materials not-to-exceed budget of \$403,826.00 for the scope of work described herein. In addition, we reserve the right to update our hourly rates for 2023. Please do not hesitate to call or email me (949.439.6420 or [nharper@dudek.com](mailto:nharper@dudek.com)) with any questions you might have about our proposal.

Sincerely,

**DUDEK**



Neil A. Harper, PE  
Project Manager



Amanda D. Combs, PE  
Lead Engineer

*Attachments: Fee Estimate*

**Vista Irrigation District**  
**Engineering Services During Construction for the E Reservoir Replacement and Pump Station**  
**DUDEK FEE ESTIMATE**

	<i>Project Team Role: Team Member:  Billable Rate :</i>	Labor Hours and Rates							TOTAL HOURS	DUDEK LABOR COST	Subconsultant Fees				TOTAL HOURS	OTHER DIRECT COSTS	TOTAL FEE
		Project Manager Harper	Lead Engineer Combs	Senior Engineer I	Senior Designer	Senior Specialist III	Analyst V	Project Coordinator			Structural Engineering (Beyaz & Patel) Fee	Electrical Engineering (GG, Inc.) Fee	Architecture (MBN) Fee	HVAC (ATC) Fee			
		\$245	\$240	\$215	\$185	\$220	\$120	\$145									
1	As-Needed Consultation (160 hrs)	88	32						120	\$ 29,240	\$3,086	\$2,780	\$1,250	\$710	120		\$ 37,066
2	Respond to RFIs (Budget for 100)	76	56	60	8				200	\$ 46,440	\$20,460	\$3,872	\$2,254	\$325	200		\$ 73,351
3	Review Shop Drawings/Submittals (Budget for 120 + 50 Resubs)	80	60	236					376	\$ 84,740	\$10,120	\$10,120	\$3,660	\$880	376		\$ 109,520
4	Site Visits (Budget for 8)	24	12	12					48	\$ 11,340	\$2,320	\$1,920	\$1,125		48	\$ 240	\$ 16,945
5	Construction Progress Meetings (40 total)	48	12	8					68	\$ 16,360	\$2,115		\$940	\$350	68	\$ 120	\$ 19,885
6	Drawing Modifications/Clarifications	12	4	8	32				56	\$ 11,540	\$2,790	\$1,936	\$1,935	\$280	56		\$ 18,481
7	Change Order Reviews (Budget for 10)	16	8	10					34	\$ 7,990		\$675	\$650		34		\$ 9,315
8	Project Management and Project Status Reporting	48						18	66	\$ 14,370					66		\$ 14,370
9	Prepare Record Drawings	8		18	86				116	\$ 22,320	\$6,050	\$1,929	\$1,276	\$700	116	\$ 3,612	\$ 35,887
10	Environmental Compliance Services (MMRP)	6	4	4					18	\$ 3,870					18		\$ 3,870
	10.1 - Pre-Con Nesting Birds Surveys and Reporting (MM-BIO-1)					18	2		20	\$ 4,200					20	\$ 60	\$ 4,260
	10.2 - Worker Environmental Awareness Training Program (MM-CUL-1)					12	16	20	48	\$ 7,460					48		\$ 7,460
	10.3 - Cultural Resource Construct. Monitoring (MM-CUL-1 & MM-CUL-2)					4	6		10	\$ 1,600					10	\$ 30	\$ 1,630
	10.4 - Noise Compliance Site Inspections (MM-NOI-1)					16	8		24	\$ 4,480					24	\$ 60	\$ 4,540
	10.5 - Mitigation Measure Tracking					24	11		35	\$ 6,600					35		\$ 6,600
11	Development of Prescriptive/Performance Specs for SCADA, Cont./VFDs	16	20		2				42	\$ 9,670		\$30,976			42		\$ 40,646
<b>Total Hours and Fee</b>		<b>422</b>	<b>208</b>	<b>356</b>	<b>128</b>	<b>74</b>	<b>43</b>	<b>50</b>	<b>1281</b>	<b>\$ 282,220</b>	<b>\$ 46,941</b>	<b>\$ 54,208</b>	<b>\$ 13,090</b>	<b>\$ 3,245</b>	<b>1281</b>	<b>\$ 4,122</b>	<b>\$ 403,826</b>
<i>Percent of Hours (Base):</i>		<i>33%</i>	<i>16%</i>	<i>28%</i>	<i>10%</i>	<i>6%</i>	<i>3%</i>	<i>4%</i>	<i>100%</i>								



**Vista Irrigation District**  
**E Reservoir Replacement and Pump Station**  
**Engineer's Opinion of Probable Construction Cost Summary**  
**Final Design Submittal**

Item	Description	Unit	Unit Cost	Quantity	Cost
1	Mob., Demob. and General Conditioning (4% Max)	LS	\$ 429,000	1	\$ 429,000
2	Permit Acquisitions, Fees, and SWPPP	LS	\$ 120,000	1	\$ 120,000
3	Site Demo, Clearing, & Grubbing	LS	\$ 148,790	1	\$ 148,800
4	Existing Reservoir Demolition	LS	\$ 297,000	1	\$ 297,000
5	Temporary Shoring	SF	\$ 60	4,278	\$ 256,700
6	Tank Excavation and Subgrade Prep	LS	\$ 632,000	1	\$ 632,000
7	Cast-in-Place Concrete Tank	LS	\$ 5,179,000	1	\$ 5,179,000
8	Pump Station	LS	\$ 807,000	1	\$ 807,000
9	Valve Vault	LS	\$ 244,000	1	\$ 244,000
10	Onsite Piping	LS	\$ 503,000	1	\$ 503,000
11	Site Grading (Except for Tank) and Detention Basin	LS	\$ 1,053,000	1	\$ 1,053,000
12	Concrete Retaining Walls	LS	\$ 281,000	1	\$ 281,000
13	Site Concrete Work and Paving	LS	\$ 227,000	1	\$ 227,000
14	Landscaping and Irrigation	LS	\$ 103,000	1	\$ 103,000
15	Fencing and Gates	LS	\$ 148,000	1	\$ 148,000
16	Electrical and SCADA+Electrical Coord. Mtgs	LS	\$ 841,000	1	\$ 841,000

<b>Subtotal</b>	<b>\$ 11,270,000</b>
<b>Contingency (10%)</b>	<b>\$ 1,080,000</b>
<b>Total</b>	<b>\$ 12,350,000</b>



**STAFF REPORT**

**Board Meeting Date:** September 22, 2021  
**Prepared By:** Randy Whitmann  
**Approved By:** Brett Hodgkiss

SUBJECT: BUENA CREEK (HB) RESERVOIR REHABILITATION PROJECT

RECOMMENDATION: Accept the Buena Creek (HB) Reservoir Rehabilitation Project and direct staff to file a Notice of Acceptance with the County Recorder's Office (D-2342, DIV NO 5).

PRIOR BOARD ACTION: On June 19, 2019, the Board authorized the General Manager to enter into a design-build construction contract with Richard Brady & Associates for the Buena Creek (HB) Reservoir Rehabilitation Project in an amount not to exceed \$6,317,331. On August 7, 2019, the Board authorized increasing the total not to exceed amount to \$6,418,831 to include access road paving.

FISCAL IMPACT: The final contract amount with Richard Brady & Associates, Inc. (Brady) totaled \$6,425,506 (\$6,675 over the approved budget), including a final negotiated change order for \$35,000. A final payment of \$354,525 will be released to Brady 35 days after the Notice of Acceptance is recorded with the County of San Diego; the payment includes the \$35,000 change order amount plus \$319,525 for the standard 5% retention that was withheld during the project.

SUMMARY: Brady has completed all of the rehabilitation improvements for the Buena Creek (HB) Reservoir; the project is ready for acceptance by the Board, allowing Notice of Acceptance to be recorded by the County of San Diego and final payment to be released thereafter.

DETAILED REPORT: The Buena Creek (HB) Reservoir is a 4.5 million gallon (mg), pre-stressed concrete tank constructed in 1964 and located along Buena Creek Road, just west of Blue Bird Canyon Road and Pechstein Reservoir. Rehabilitation improvements included demolition and removal of existing concrete roof, hypalon liner, and yard piping; concrete footing and wall cap modifications; installation of wall/footing seismic cables, post tension strands, and exterior shotcrete covering; interior and exterior concrete spalling and crack repairs; installation of new aluminum dome roof, concrete floor, interior stairs, interior urethane coating, separate 18-inch steel inlet/outlet yard piping and flow control vault, site grading and drainage improvements, exterior painting, security fencing, and paving around the site and access road.

The final construction cost was \$6,425,506; various change orders totaling \$82,389 were necessary during construction and included the following items:

- Additional efforts required for asbestos padding removal along the existing concrete wall/roof joint.
- Installation of epoxy injection along perimeter of existing/new concrete foundation cold joint.
- Installation of additional site paving at the request of the District.
- Final negotiated change order to Brady for additional design and construction management efforts.

ATTACHMENT: Final Cost Summary

## BUENA CREEK (HB) RESERVOIR REHABILITATION FINAL COSTS

Description of Work	Budgeted Cost	Actual Bid Cost	Over or Under Budgeted Amount
<b>Initial Site Work - M-Rae</b>			
<i>Demolish Existing Fence, Steel Roof, Gate, Grub Site, Initial Site Work for Crane and Equipment Access</i>	\$59,693	\$39,918	-\$19,775
<b>Exterior Stairs - Suez</b>			
<i>Disassemble, Transport, Protect, Store, and Reinstall Exterior Stairs</i>	\$52,718	\$50,488	-\$2,230
<b>Roof Demolition - DN Tanks</b>			
<i>Roof Demolition, Remediate Existing Asbestos</i>	\$809,400	\$1,026,840	\$217,440
<b>Tank Improvements - DN Tanks</b>			
<i>Footing Modifications, Seismic Cables, Wall Shotcrete, Tank Exterior Crack Repair, Pressure Wash Tank Interior, Interior Floor and Wall Crack Repairs, Seal Existing Floor Joints, Demolish Existing Inlet/Outlet, Modify Drain, Construct New Inlet, Outlet, Washdown, Demolish Exist Inlet/Outlet, Modify Drain, Construct Inlet, Outlet, Washdown, Construct New Concrete Floor, Construct New Concrete Cap Beam, CIM Wall-Slab Joint, Construct New Staff Gage, New Overflow, Post Construction Leak Test, Install Corrosion Protection System</i>	\$1,814,961	\$1,527,638	-\$287,323
<b>Interior Reservoir Stairs - DN Tanks</b>			
<i>Design, Furnish, Install, New Interior Access Stairs</i>	\$170,400	\$172,800	\$2,400
<b>Interior Coatings - DN Tanks</b>			
<i>Prepare Surface, Apply Coatings to Interior Wall</i>	\$210,870	\$323,630	\$112,760
<b>Aluminum Dome Roof - CST</b>			
<i>Design, Furnish, Install, New Aluminum Roof and Appurtenances</i>	\$785,570	\$668,127	-\$117,443
<b>Yard Piping Improvements - M-Rae</b>			
<i>Demolish Exist Yard Piping, Fittings, Valves, and Appurtenances, Construct New Yard Piping, Construct New Valve Vault, Remove and Replace Drain Valve, Construct Yard Piping Corrosion Protection System</i>	\$651,569	\$605,897	-\$45,672
<b>Electrical Improvements - M-Rae</b>			
<i>Construct New Conduit, Junctions and Pull Boxes</i>	\$37,275	\$88,296	\$51,021
<b>Stormwater Drainage and Final Site Work - M-Rae</b>			
<i>Demolish Existing Asphalt, Rough Grade Site, Install Subsurface Waterproofing, Modify Underdrains, Construct New Storm Drain Inlet and Piping, Connect to Exist Manhole, Finish Grade, Construct Concrete V-gutter, Pave Site with Asphalt Concrete</i>	\$192,812	\$349,133	\$156,321
<b>Additional AC Pavement - Joe's Paving</b>			
<i>Access Road Asphalt Paving</i>	\$101,500	\$80,037	-\$21,463
<b>Security Fence - TWC</b>			
<i>Construct New Chain Link Security Fence</i>	\$72,953	\$54,552	-\$18,401
<b>Exterior Reservoir Coating - DN Tanks</b>			
<i>Pressure Wash, Apply Coatings to Reservoir Exterior</i>	\$58,575	\$59,281	\$706
<b>General Conditions</b>			
<i>Provide Trailer, Porta Potty, Reproduction, Temporary Facilities, Insurance, Bonds, Special Inspection and Testing, Potholing, Surveying, Video, Install and Maintain Stormwater Best Management Practices</i>	\$343,692	\$287,026	-\$56,666
<b>Sub-Total (Construction)</b>	<b>\$5,361,988</b>	<b>\$5,333,664</b>	<b>-\$28,325</b>
<b>Contractor and Construction Management - Brady</b>	<b>\$1,056,843</b>	<b>\$1,091,843</b>	<b>\$35,000</b>
<b>TOTAL (CONTRACT)</b>	<b>\$6,418,831</b>	<b>\$6,425,506</b>	<b>\$6,675</b>



**Agenda Item: 10**

**STAFF REPORT**

**Board Meeting Date: September 22, 2021**  
**Prepared By: Brett Hodgkiss**

SUBJECT: MATTERS PERTAINING TO THE ACTIVITIES OF THE SAN DIEGO COUNTY WATER AUTHORITY

SUMMARY: Informational report by staff and directors concerning the San Diego County Water Authority. No action will be required.



## **STAFF REPORT**

**Agenda Item: 11.A**

**Board Meeting Date: September 22, 2021**  
**Prepared By: Lisa Soto**  
**Approved By: Brett Hodgkiss**

SUBJECT: REPORTS ON MEETINGS AND EVENTS ATTENDED BY DIRECTORS

SUMMARY: Directors will present brief reports on meetings and events attended since the last Board meeting.



**STAFF REPORT**

**Agenda Item: 11.B**

**Board Meeting Date:** September 22, 2021  
**Prepared By:** Lisa Soto  
**Approved By:** Brett Hodgkiss

**SUBJECT:** SCHEDULE OF UPCOMING MEETINGS AND EVENTS

**SUMMARY:** The following is a listing of upcoming meetings and events. Requests to attend any of the following events should be made during this agenda item.

	<b>SCHEDULE OF UPCOMING MEETINGS AND EVENTS</b>	<b>ATTENDEES</b>
<b>1 *</b>	<b>Vista Chamber of Commerce Business Mixer</b> <i>Oct. 13, 2021; 5:00 p.m.–6:00 p.m.; Cosmic Solar Vista</i> <i>Registration deadline: None</i>	
<b>2</b>	<b>Orange County Water Summit</b> <i>Oct. 15, 2021; Grand Californian Hotel, Anaheim</i> <i>Registration deadline: 10/15/21</i>	
<b>3</b>	<b>Council of Water Utilities Meeting</b> <i>Oct. 19, 2021, 8:00 a.m.–9:30 a.m.</i> <i>Registration deadline: TBD</i>	Vásquez
<b>4</b>	<b>Sexual Harassment Prevention Training AB 1661</b> <i>Nov. 2, 2021 –9:00 a.m. – 11:00 a.m., VID Board Room</i> <i>Registration deadline: None</i>	Miller (R) Vásquez (R) Dorey (R) Sanchez (R) MacKenzie (R)
<b>5 *</b>	<b>CSDA Quarterly Meeting</b> <i>Nov. 18, 2021, 6:00 p.m.; The Butcher Shop Steakhouse, Kearny Mesa</i> <i>Registration deadline: TBD</i>	MacKenzie
<b>6</b>	<b>ACWA Fall Conference</b> <i>Nov. 30-Dec. 3, 2021–Pasadena</i> <i>Registration deadline: 11/19/21</i>	Miller (T) Vásquez Dorey Sanchez MacKenzie
<b>7 *</b>	<b>Vista Chamber of Commerce Business Mixer</b> <i>Dec. 8, 2021; 5:00 p.m.–6:00 p.m.; Location TBD</i> <i>Registration deadline: None</i>	
<b>8</b>	<b>Colorado River Water Users Association Conference (CRWUA)</b> <i>Dec. 14-16, 2021; Caesar’s Palace Las Vegas</i> <i>Registration deadline: 11/30/21</i>	Sanchez MacKenzie

\* Non-per diem meeting except when serving as an officer of the organization

The following abbreviations indicate arrangements that have been made by staff:

**R**=Registration; **H**=Hotel; **A**=Airline; **S**=Shuttle; **C**=Car; **T**=Tentative

◊=Attendee to self-register for virtual meeting.



**Agenda Item: 12**

**STAFF REPORT**

**Board Meeting Date: September 22, 2021**  
**Prepared By: Lisa Soto**

SUBJECT: ITEMS FOR FUTURE AGENDAS AND/OR PRESS RELEASES

SUMMARY: This item is placed on the agenda to enable the Board to identify and schedule future items for discussion at upcoming Board meetings and/or identify press release opportunities.

*Staff-generated list of tentative items for future agendas:*

- District fees and charges other than water rates (October – following Fiscal Policy Committee review)
- San Pasqual Undergrounding Project bids (October)
- General Counsel interviews and selection (November/December)



## **STAFF REPORT**

**Agenda Item: 13**

**Board Meeting Date: September 22, 2021**  
**Prepared By: Lisa Soto**

SUBJECT: COMMENTS BY DIRECTORS

SUMMARY: This item is placed on the agenda to enable individual Board members to convey information to the Board and the public not requiring discussion or action.





## **STAFF REPORT**

**Agenda Item: 14**

**Board Meeting Date: September 22, 2021**  
**Prepared By: Brett Hodgkiss**

SUBJECT: COMMENTS BY GENERAL COUNSEL

SUMMARY: Informational report by the General Counsel on items not requiring discussion or action.



## **STAFF REPORT**

**Agenda Item: 15**

**Board Meeting Date: September 22, 2021**  
**Prepared By: Brett Hodgkiss**

SUBJECT: COMMENTS BY GENERAL MANAGER

SUMMARY: Informational report by the General Manager on items not requiring discussion or action.

NOTICE OF ADJOURNED MEETING  
OF THE BOARD OF DIRECTORS OF THE  
VISTA IRRIGATION DISTRICT

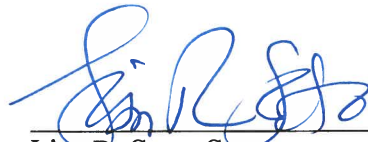
AN ADJOURNED MEETING OF THE BOARD OF DIRECTORS OF VISTA IRRIGATION DISTRICT, HELD ON SEPTEMBER 22, 2021 WAS ADJOURNED UNTIL 8:00 AM, WEDNESDAY, SEPTEMBER 29, 2021 AT THE OFFICE OF THE VISTA IRRIGATION DISTRICT, 1391 ENGINEER STREET, VISTA, CALIFORNIA.

\* \* \* \* \*

AFFIDAVIT OF POSTING ORDER OF ADJOURNMENT OF MEETING

STATE OF CALIFORNIA )  
COUNTY OF SAN DIEGO )

I, Lisa R. Soto, hereby certify that I am the duly appointed, qualified Secretary of the Board of Directors of Vista Irrigation District; that the foregoing is duly noted in the Minutes of said Regular Meeting of the Board of Directors of Vista Irrigation District; that said Regular Board Meeting was ordered adjourned to the time and place above specified; and that I posted a copy of this order of adjournment near the public entrance to the Board Room at the offices of the District.



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Lisa R. Soto, Secretary  
Board of Directors  
Vista Irrigation District

POSTED: September 22, 2021