



**SPECIAL NOTICE REGARDING
CORONAVIRUS DISEASE 2019 (COVID-19)
AND PARTICIPATION IN PUBLIC MEETINGS**

On March 4, 2020, Governor Newsom declared a State of Emergency resulting from the threat of COVID-19. Governor Newsom issued Executive Order N-25-20 (3-12-20) and Executive Order N-29-20 (3-17-20) which temporarily suspends portions of the Brown Act relative to conducting public meetings. Subsequent thereto, Governor Newsom issued Executive Order N-33-20 (3-19-20) ordering all individuals to stay at home or at their place of residence. Accordingly, it has been determined that all Board Meetings and Workshops of the San Bernardino Valley Municipal Water District will be held pursuant to the Brown Act and will be conducted via teleconference. There will be no public access to the meeting venue.

**REGULAR MEETING OF THE BOARD OF DIRECTORS
TUESDAY, SEPTEMBER 1, 2020 – 2:00 P.M.**

PUBLIC PARTICIPATION

Public participation is welcomed and encouraged. You may participate in the September 1, 2020, meeting of the San Bernardino Valley Municipal Water District online and by telephone as follows:

**Dial-in Info: 877 853 5247 US Toll-free
Meeting ID: 684 456 030**

<https://us02web.zoom.us/j/684456030>

If you are unable to participate online or by telephone, you may also submit your comments and questions in writing for the District's consideration by sending them to comments@sbumwd.com with the subject line "Public Comment Item #" (insert the agenda item number relevant to your comment) or "Public Comment Non-Agenda Item". Submit your written comments by 6:00 p.m. on Monday, August 31, 2020. All public comments will be provided to the President and may be read into the record or compiled as part of the record.

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



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

REGULAR MEETING OF THE BOARD OF DIRECTORS

AGENDA

2:00 PM Tuesday, September 1, 2020

CALL TO ORDER/PLEDGE OF ALLEGIANCE/ROLL CALL

1. **PUBLIC COMMENT** - *Any person may address the Board on matters within its jurisdiction.*
2. **APPROVAL OF MINUTES**
 - 2.1. August 18, 2020, Meeting (Page 4)
[SBVMWD Minutes 081820](#)
3. **DISCUSSION AND POSSIBLE ACTION ITEMS**
 - 3.1. Consider Agreement with the Inland Empire Resource Conservation District for Water Education Programming Fiscal Year 2020-2021 (Page 8)
[Staff Memo - Consider Agreement with the IERCDC for Water Education Programming Proposed Contract for Performance of Water Conservation Public Outreach Programs](#)
 - 3.2. Consider Funding Support for the San Bernardino Municipal Water Department Water Use Efficiency Pilot Project (Page 17)
[Staff Memo - Consider Funding Support for SBMWD Pilot Project Program Proposal for SBMWD Pilot Project](#)
 - 3.3. Appointment of an Alternate Member to the Santa Ana Watershed Project Authority Project Agreement 24 Committee (Page 38)
[Staff Memo - Appointment of an Alternate to SAWPA PA-24 Committee](#)
 - 3.4. Update on Administration Building Office Remodeling Project (Page 39)
[Staff Memo - Update on Administration Building Office Remodeling Project Floor Plan of 2nd Floor Offices](#)
4. **REPORTS (DISCUSSION AND POSSIBLE ACTION)**

- 4.1. SAWPA Meeting Report
- 4.2. Director's Primary Representative and Activity Report
- 4.3. Board of Directors' Workshop - Resources, August 6, 2020 (Page 43)
[Summary Notes BOD Workshop - Resources 080620](#)
- 4.4. Board of Directors' Workshop - Engineering, August 11, 2020 (Page 47)
[Summary Notes BOD Workshop - Engineering 081120](#)
- 4.5. Board of Directors' Workshop - Policy, August 13, 2020 (Page 52)
[Summary Notes BOD Workshop - Policy 081320](#)

5. **ANNOUNCEMENTS**

- 5.1. List of Announcements (Page 55)
[List of Announcements 090120](#)

6. **CLOSED SESSION**

- 6.1. CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: Portions of City of Redlands/unincorporated San Bernardino County (APNs 0168-351-09, 0168-351-10, 0168-351-11)
Agency negotiator: Heather Dyer, Wen Huang, Mike Esquer
Negotiating parties: Md7, LLC, on behalf of Verizon Wireless
Under negotiation: Price and terms of payment
- 6.2. CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION
Pursuant to Government Code Section 54956.9(a),(d)(1) – Endangered Habitats League v. U.S. Army Corps of Engineers - Case No. 2:16-CV-09178 (U.S. District Court, Central District of California)
- 6.3. CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: Southern California Edison East End Hydroelectric Generation Plants
Agency negotiator: Heather Dyer, Wen Huang
Negotiating parties: Southern California Edison Company
Under negotiation: Price and terms of payment

7. **ADJOURNMENT**

PLEASE NOTE:

Materials related to an item on this Agenda submitted to the Board after distribution of the agenda packet are available for public inspection in the District's office located at 380 E. Vanderbilt Way, San Bernardino, during normal business hours. Also, such documents are available on the District's website at www.sbvmd.com subject to staff's ability to post the documents before the meeting. The District recognizes its obligation to provide equal access to those individuals with disabilities. Please contact Melissa Zoba at (909) 387-9228 two working days prior to the meeting with any special requests for reasonable accommodation.

**MINUTES
OF
THE
REGULAR BOARD MEETING
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT**

August 18, 2020

Directors Present: T. Milford Harrison, Paul Kielhold, Gil Navarro, Susan Longville, and June Hayes

Directors Absent: None

Staff Present: Wen Huang, Cindy Saks, Bob Tincher, Melissa Zoba, Kristeen Farlow, Chris Jones, Kai Palenscar, Anel Perez and Brendan Brandt

Registered Guests:

Ronald Coats, East Valley Water District

Melody McDonald, San Bernardino Valley Water Conservation District

Mandy Parks, Inland Empire Resource Conservation District

Josh Swift, Fontana Water Company

David Raley, San Bernardino Valley Water Conservation District

The regular meeting of the Board of Directors was called to order by President Harrison at 2:02 p.m. A quorum was noted present by roll-call.

President Harrison stated that before they consider public comments, the record will reflect that pursuant to the provisions of Executive Order N-29-20 issued by Governor Newsom on March 17, 2020, this meeting will be conducted by teleconference only. Please note that all actions taken by the Board at the meeting will be conducted by a roll-call vote.

Agenda Item 1. Public Comment

President Harrison stated that any member of the public wishing to make any comments to the Board may do so. Audience attendance will be recorded in the minutes based on registration information generated in the teleconference or by stating their name during this time. There were no email comments or Zoom requests to speak.

Agenda Item 2. Approval of Minutes of the August 4, 2020, Board meeting and August 5, 2020, Special Board Meeting.

Director Navarro moved to approve the minutes of the August 4, 2020 and August 5, 2020 Board meetings. Director Hayes seconded. The motion was unanimously adopted by a roll-call vote.

Agenda Item 3. Discussion and Possible Action Items.

3.1) Consider a Cooperative Agreement with Huerta Del Valle and a Consulting Agreement with WSC to Conduct Water Supply Studies for the Louis Robidoux Parkland and Jensen Alvarado Historic Ranch. Chris Jones stated this item was presented at the Board of Director' s Engineering Workshop on August 11, 2020. The restoration of Sunnyslope Creek will offer improved habitat along with storm water management benefits and water quality improvements that will be used as conservation measures in the Upper SAR Habitat Conservation Plan (HCP). Staff is requesting the Board authorize the CEO/General Manager to execute a consulting agreement with Water Systems Consulting, Inc (WSC) to conduct water supply studies for the Louis Robidoux Parkland (Parkland) and Jensen Alvarado Historic Ranch (Historic Ranch) in the amount of \$115,350. Staff is also requesting the Board authorize the CEO/General Manager to execute a cooperative agreement with Huerta Del Valle to co-fund the consulting agreement with WSC in the amount of \$50,000. The results of the studies will ultimately help develop water budgets for each site and determine the most efficient and cost-effective manner in which to provide a reliable source of water to support sustainable agriculture at both sites and restoration of a pond at the Parkland and seasonal augmentation of flows into Sunnyslope Creek. This reimbursement by Huerta Del Valle leaves a balance of \$65,350. Since this effort is related to restoration that forms a component of the HCP Conservation Strategy, 60% will be reimbursed to Valley District by HCP partners based on each partner agency's HCP impacts. This item was included in the 2020/2021 General Fund Budget in a line item in 6780 Environmental/HCP Implementation.

Director Kielhold moved to authorize the CEO/General Manager to execute a consulting agreement with Water Systems Consulting, Inc (WSC) in the amount of \$115,350 and to authorize the CEO/General Manager to execute a cooperative agreement with Huerta Del Valle to co-fund the consulting agreement with WSC. Director Longville seconded. The motion was unanimously approved by a roll-call vote.

3.2) Consider a Consulting Agreement and Cooperative Agreement to Obtain and Process Aerial Imagery and LiDAR in the San Bernardino National Forest. Chris Jones stated this item was presented at the Board of Directors' Engineering Workshop on August 11, 2020. Staff is requesting the Board authorize the CEO/General Manager to execute a consulting agreement with DMI for \$179,208.41 to obtain and process the aerial imagery and LiDAR in the San Bernardino National Forest. Staff is also requesting the Board authorize the CEO/General Manager to execute a cooperative agreement with the Inland Empire Resources Conservation District ("IERCD") to co-fund the project in the

amount of \$96,000.00. The Forest Service has been an important member of the overall scientific advisory committee during the development of the HCP. This item was included in line item 6360, Consultants, of the 2020/2021 General Fund budget. After reimbursement by the HCP Partners of \$60%, the final cost to Valley District is \$33,283.36.

Director Hayes moved to authorize the CEO/General Manager to execute a consulting agreement with DMI for \$179,208.41 to obtain and process the aerial imagery and LiDAR in the San Bernardino National Forest and authorize the CEO/General Manager to execute a cooperative agreement with the IERCD to co-fund the project. Director Kielhold seconded. The motion was unanimously approved by a roll-call vote.

3.3) Consider Two Science Advisor Proposals for the Development of the Comprehensive Adaptive Management and Monitoring Plan for the Upper Santa Ana River HCP. Kai Palenscar stated a Comprehensive Adaptive Management and Monitoring Program (CAMMP) will provide the basis for the HCP to manage, monitor, and track environmental values. Two proposals were received from firms who can serve as science advisors to the CAMMP, Balleau Groundwater (\$29,600.00), Inc. and Blue Octal Solutions (\$64,955.71). Both firms have previously worked on the HCP, helping with the modeling and impact prediction methodology. The 2019 Section 6 Habitat Conservation Planning Grant will reimburse 50% of the total cost of these science advisors and the HCP Partners will reimburse 60% of the remaining balance. Staff is requesting the Board authorize the CEO/General Manager to execute agreements with Balleau Groundwater and Blue Octal for the proposed technical assistance, in the amounts of not to exceed \$29,600.00 and \$64,955.71, respectively. This item was included in the approved fiscal year 2020-2021 budget and is part of the total project cost for CAMMP. The Section 6 USFWS grant will reimburse \$47,277.86 to the District and the HCP partners will reimburse approximately 60% or \$28,366.71.

Director Kielhold moved to authorize the CEO/General Manager to execute agreements with Balleau Groundwater and Blue Octal for the technical assistance for the Comprehensive Adaptive Management and Monitoring Program of the Upper Santa Ana River HCP, in the amounts of not to exceed \$29,600.00 and \$64,955.71. Director Hayes seconded. The motion was unanimously approved by a roll-call vote.

Agenda Item 4. Reports (Discussion and Possible Action Items).

4.1) District's Primary Representatives and Activity Report.

Director Kielhold had nothing to report.

Director Hayes reported that she attended the San Bernardino County Water Conference on August 14, 2020.

Director Navarro had nothing to report.

Director Longville reported that she attended Southern California Water Coalition's Stormwater webinar on August 6, 2020 and attended the San Bernardino County Water Conference on August 14, 2020.

President Harrison reported that he attended the San Bernardino Water Conservation District Board meeting on August 12, 2020. The San Bernardino County Water Conference on August 14, 2020. He also attended the CSDA Legislative committee and the Government Relations section of Habitat Conservation Plan committee meeting. On August 17, 2020 he attended a San Bernardino Special District Association Board meeting.

4.2) Operations Report. No oral report was given as a written report was included in the Board packet.

4.3) Treasurer's Report. Director Longville moved the following expenses for the month of July 2020. The State Water Contract Fund \$7,308,797.85, Devil Canyon/Castaic Fund \$405,843.00, and General Fund \$1,755,294.03. Director Kielhold seconded. The motion was unanimously adopted by a roll-call vote

4.4) Directors' Fees and Expenses for July 2020. No oral report was given as a written report was included in the Board packet.

Agenda Item 5. Announcements.

5.1) List of Announcements. No changes were noted to the list of announcements.

President Harrison requested a motion for adjournment.

Director Kielhold moved to adjourn the meeting. Director Navarro seconded. The motion was adopted by a roll-call vote.

Agenda Item 6. Adjournment.

The meeting was adjourned at 2:45 p.m.

<p>APPROVAL CERTIFICATION I hereby certify to approval of the foregoing Minutes of San Bernardino Valley Municipal Water District.</p> <p>_____</p> <p>Secretary</p> <p>Date _____</p>	<p>Respectfully submitted,</p> <p>Anel Perez Technical Assistant</p>
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DATE: September 1, 2020

TO: Board of Directors

FROM: Kristeen Farlow, External Affairs Manager

SUBJECT: Consider Agreement with the Inland Empire Resource Conservation District for Water Education Programming Fiscal Year 2020-2021

This item was presented to the Board of Directors' Workshop – Resources – on August 6, 2020, at which time it was recommended to be forwarded to the full Board for consideration. The Board of Directors is asked to consider authorizing the CEO/General Manager to execute an agreement with the Inland Empire Resource Conservation District (IERCD) for the Water Education Program for fiscal year 2020-2021.

Background

Requirements from the adopted AB 1668/SB 606 - *Making Water Conservation a California Way of Life* - allow for the State Water Resources Control Board to issue informational orders to wholesale water suppliers to provide water conservation assistance to retail water agencies. Assistance could include water education, rebate assistance, and other technical assistance. The District provides water use efficiency educational programming throughout the service area as part of the water education and technical assistance.

Since 2007, Valley District has contracted with the IERCD to manage and perform student education programs, adult programs, and educational workshops. In fiscal year 2019-2020, the IERCD completed 97 (out of 120) classroom presentations to student's grades Kindergarten through twelfth; six Landscape Workshops (three in person and three online); and one teacher workshop (out of two planned). Due to the COVID-19 pandemic, the program was forced to evolve in March 2020. While IERCD was unable to complete the in-classroom presentations,

they did provide additional resources on their website and the Valley District website that include at-home activities for kids and families, and in-the-classroom activities for teachers, as well as the online landscape workshops noted. The total cost for the 2019-2020 program was \$25,900, with an estimated reach of 3,000 children and adults.

In anticipation of continuing to offer online programs in fiscal year 2020-2021 due to the COVID-19 pandemic, IERCD has proposed a blended education program, that includes:

- All in-person conservation education programs – both student and adult – have shifted to a suite of online materials, for distance learning, along with options for live or recorded presentations.
- Live presentations using virtual meeting platform available to all teachers throughout the Valley District service area upon request, with a total goal of presenting 100 classroom presentations. Companion materials will be provided to teachers ahead of time so they may share them with their students.
- Downloadable content on the Valley District and IERCD websites, including narrated slide presentations and virtual lessons and activities for students and teachers.
- Online Landscape Workshops, similar to those offered in Spring 2020. Staff proposes four to six of these workshops in the new year.
- Virtual Project WET Teacher Workshops to be scheduled, targeting 4th- 6th grade teachers throughout the Valley District service area.

Since there remain so many unknown factors for the 2020-2021 school year and how social distancing will impact operations of this program, Staff will work closely with the IERCD to ensure we continue to meet our goals of educating students and the public about water use efficiency in the most efficient and effective manner possible. The 2020-2021 contract is proposed in the form of a “not to exceed” contract in the amount of \$30,000. As specified in their proposal, IERCD has defined a menu of potential tasks and will charge as the tasks are performed.

Fiscal Impact

The cost for the 2020-2021 Performance of Water Conservation Public Outreach Programs is not to exceed \$30,000 and funds are included in the approved Water Conservation & Education budget account number 6640.

Staff Recommendation

Authorize the General Manager to execute an agreement with IERCD for the Performance of Water Conservation Public Outreach Program for a cost not to exceed \$30,000.

Attachment

Proposed Contract for Performance of Water Conservation Public Outreach Programs

CONTRACT FOR PERFORMANCE OF WATER CONSERVATION PUBLIC
OUTREACH PROGRAMS

2020-21 Academic Year

Proposal To:
San Bernardino Valley Municipal Water District
Contact: Kristeen Farlow, Manager of Water Use Efficiency/
External Affairs
380 East Vanderbilt Way
San Bernardino, CA 92408

Proposal From:
Inland Empire Resource Conservation District
Contact: Mandy Parkes, District Manager
25864-K Business Center Drive
Redlands, CA 92374



2020-21 PROPOSAL DESIGN, DEVELOPMENT, AND IMPLEMENTATION NOTES

The onset of COVID-19 in March of 2020 has resulted in significant impact to education, including closure of all school campuses and implementation of distance learning for students to finish out the 19-20 academic year. The radical change in public and private school protocols for student presence and learning has obviously very dramatically impacted the Inland Empire Resource Conservation District's (IERCD/District) brand of in-person conservation education we've facilitated for over 20 years. As of this mid-June 2020 contract development, limited direction has come down from the state regarding protocols for the 2020-21 academic year; however, only one local school district has indicated concrete plans for use of this guidance in the next school year. As a result, the IERCD and other providers of classroom education content are uncertain of the manner in which we will be able to deliver conservation education to area students.

While there are many current unknowns, the IERCD is hoping to partner with the San Bernardino Valley Municipal Water District (Valley District) on development and delivery of conservation content for Valley District residents as we have for the last decade. In light of uncertainty in final protocols for area school districts, we have (1) summarized major areas of change to align with anticipated 20-21 campus operations and (2) added suggested steps to assist in mutual ability to reach residents with conservation messaging while enabling effective alteration of approach as necessary:

Classroom Program Re-Design: all formerly in-person conservation education programs have been redesigned to allow for ongoing content delivery within a range of anticipated restrictions in Valley District area schools. The former focus on completion of in-class K-12 and late high school/early college programs has shifted to a suite of distance learning materials and options for live and recorded classroom presentations, both of which are projected to continue elevation of resident awareness of the need for and methods of water conservation.

Outreach and Content Assessment: as with program changes, methods for advertising available programming and for assessing content retention are being updated to be facilitated virtually in 2020-21 with an eye to reaching as many residents as possible with the Valley District's water conservation messaging.

Regular Assessment of Proposal Components: the IERCD is anticipating an ongoing need to evaluate and possibly revise approaches to water conservation education in Valley District area schools, in partnership with Valley District. Protocols for classroom instruction are currently unknown and will likely shift even after established, requiring the District and Valley District to remain responsive to altering focus on what works best for resident education. To that end, IERCD is proposing (1) monthly staff-level check-ins on components of this proposal and necessary changes, and (2) an updated agreement structure detailing a "not to exceed" amount to be further directed by Valley District staff based on general programming categories rather than highly specific deliverables in previous contracts. Valley District direction will be memorialized in task orders to be executed as often as monthly to capture desired direction of IERCD efforts on behalf of the contract.

As with all previous contracts, the IERCD is incredibly grateful for the Valley District's support and partnership in completion of resident education on the critical importance of water conservation.

2020-21 PROGRAMMING OPTION 1: K-12 VIRTUAL WATER CONSERVATION CONTENT

This contract section describes content meant to substitute for the 100 in-person K-12 classroom programs facilitated by IERCD and funded by the Valley District in previous academic year, designed for 2020-21 to consist of (1) packaged content posted to online portal and accessible by residents and (2) options for pre-recorded and live (Zoom) classroom presentations. Each component will include content comprehension and satisfaction assessment via quiz with responses sent to IERCD for analysis/use in adapting content. The suite of content slated to replace in-person K-12 classroom programs is further described in the following section:

Marketing to Area Educators and Residents: IERCD staffers will advertise Valley District programs through a variety of strategies designed to elevate resident awareness of Valley District -sponsored water conservation content and programming, including:

- Social Media: IERCD staff will create posts for District Facebook and Instagram pages, ensuring no less than 2 posts/month address Valley District sponsored virtual content availability, access, and use.
- Website: Valley District-sponsored programming and content will be featured on IERCD's website. District Communications staff will work with interested partners to add links to content on companion websites to increase awareness of availability.
- Virtual Flyers: co-logo'd flyers advertising available content and programming will be created by District staff using professional design software, then distributed to partners in Valley District school districts, including to administrators, teachers, and community groups, within requirements established for advertising.

Options for Delivery of Program Content:

- Live virtual presentations using Zoom or similar virtual meeting platform, available upon request by teachers and featuring similar components to existing IERCD water conservation presentations on behalf of the Valley District. Materials used in program activities are projected to be dropped off to the requesting teacher's campus prior to the presentation.
- Downloadable Content from the Valley District's section in IERCD's Conservation Classroom Platform:
 - Narrated Google Slides Presentation: scheduled to be developed and available for download/use to interested educators and residents, these will consist of transitioning the existing IERCD water conservation classroom Prezi into a series of grade-group Google slide presentation narrated by District educators in English and Spanish.
 - Virtual lesson with activity, shorter in length than the full Google Slides presentation, but featuring one or more elements of presentation and connecting those to activities requiring simple materials that can be done at home. These will be available in individual grade groups, in both English and Spanish

K-12 Virtual Water Conservation Content Pricing Menu:

Task	Description	Approximate Cost
Live Virtual Classroom Presentation	One live zoom presentation, including all coordination with requesting teacher; tutorial on teleconference platform; plus, content refinement based on virtual setting	\$900/Live Presentation
Narrated Google Slide Presentation	One narrated Google Slide presentation for specific grade group in English and Spanish, based on existing Prezi with revised activities and content/ satisfaction checks	\$450/Narrated Google Slide Presentation for single grade group
Virtual grade-group specific activity or lesson video	Developing one video lesson with activity per grade group, aligned with NGSS Standards and available in English and Spanish; includes all design, filming, editing, and access support	\$900/Virtual Lesson
SBVMWD-IERCD Coordination and Reporting	Monthly reporting and coordination meetings	\$1,200/year

2020-21 PROGRAMMING OPTION 2: VIRTUAL RESIDENT WORKSHOPS

This component of the 2020-21 proposal represents new content for the IERCD- Valley District water conservation partnership, but is based on successful facilitation of similar virtual workshops on behalf of other water provider partners. If optioned for the 20-21 contract, Virtual Resident Workshops will include advertising; facilitation of a virtual workshop using Zoom or similar platform and featuring a speaker addressing attendees on a rotating series of water conservation-focused topics and including audience Q/A, a virtual raffle, and development and distribution of materials; and post-workshop assessment of participant satisfaction and content comprehension. Components of this proposed programming element include:

Marketing to Residents:

IERCD staffers will advertise Valley District programs through a variety of strategies designed to elevate resident awareness of Valley District -sponsored water conservation content and programming, including:

- Social Media: IERCD staff will create posts for District Facebook and Instagram pages, ensuring no less than one post/week is created and posted in the four weeks leading up to the workshop
- Website: workshop details and RSVP portal will be included on IERCD's website.
- Virtual Flyers: co-logo' d flyers advertising the workshop will be created by IERCD and distributed to (1) email list of attendees of other virtual workshops, (2) email list of District partners, (3) posted on websites of partners, and (4) shared with stakeholder groups such as water providers that are part of the Basin Technical Advisory Committee

Program Facilitation: workshops will be scheduled in coordination with Valley District priorities and will include the following components:

- Webinar materials including presenter PPT, companion resources, worksheets as needed to complete workshop activities
- Clear RSVP process and location, plus instructions for attendees on platform use, virtual workshop structure, accessing follow-up materials
- Webinar with speaker; Q/A, activity for attendees, recommendations for follow-up resources and actions
- Post-webinar assessment on satisfaction and content

Virtual Workshop Pricing Menu:

Task	Description	Cost
Program design and implementation – One Virtual Workshop	Develop presentation; coordinate prep and facilitation with attendees and contributors; follow-up materials distribution and adaptive design of next workshop driven by feedback	\$1,000/Workshop

2020-21 PROGRAMMING OPTION 3: VIRTUAL PROJECT WET TEACHER WORKSHOPS

Virtual Project Wet Workshops will be marketed primarily to members of the education community working with 4th – 6th grade students within SBVMWD service area boundaries. The workshop will last three to six hours, and consist of the following elements (Project WET Facilitator workshop must be six hours; Project WET regular workshop must be 3-4 hours):

- Pre-Event Coordination including:
 - Securing the venue
 - Managing RSVP's
 - Marketing and outreach for workshops
 - Reviewing Project Wet Lessons and developing accompanying training materials to be virtually distributed to all attendees, to include at least; agenda, updated 4th – 6th grade environmental science classroom standards relative to the critical uses and need for conservation of water; example lessons plans; pre/post-program activities to introduce content and reinforce it following lesson; additional resources for information, trainings, and student field trips
- Day-of Facilitation including:
 - Track origin of workshop participants and store contact information for follow-up messaging
 - Training facilitation from personnel within the environmental education/conservation community, addressing attendees on water conservation education foundation, correlation to standards, and available resources for content extension
 - Q/A with presenter(s)
 - Invitation to follow up with IERCD for additional post-workshop educational support
- Post-Presentation Follow-Up:
 - Survey on effectiveness/utility of presentation
 - Electronic versions of all workshop materials and presenter PowerPoints
 - Additional resources in support of water conservation awareness/education and upcoming educational and training opportunities for students, teachers, and parents

Virtual Project Wet Teacher Workshop Pricing Menu:

Task	Description	Cost
Program design and implementation – One Virtual Workshop	Planning, Designing, Facilitating Educator Workshop, Workshop advertising, Development of supplemental resources	\$1,000/Workshop

CONTRACT DETAILS

Not to Exceed Total: \$30,000

Cancellation: This contract may be cancelled at any time, via the submission of a letter from the terminating agency. Any unpaid program costs will be invoiced and paid within thirty (30) days of cancellation.

APPROVAL

San Bernardino Valley Municipal Water District
 380 East Vanderbilt Way
 San Bernardino, CA 92408

Inland Empire RCD
 25864-K Business Center Drive
 Redlands, California 92374

 Heather Dyer
 CEO/General Manager

 Mandy Parkes
 District Manager

ATTACHMENT: TASK ORDER FORM



DATE: September 1, 2020

TO: Board of Directors

FROM: Kristeen Farlow, External Affairs Manager

SUBJECT: Consider Funding Support for the San Bernardino Municipal Water Department Water Use Efficiency Pilot Project

This item was discussed at the Resources Workshop on August 6, 2020, at which time the Directors recommended it be forwarded to a Board Meeting for consideration. Staff is requesting that the Board of Directors consider funding 50% of the total cost for San Bernardino Municipal Water Department to implement a new water use efficiency pilot project that will address inefficient landscaping at residential and small to medium-sized commercial sites. The total cost to Valley District is \$90,959. There is sufficient budget available to cover the cost of this pilot project.

Background

As a wholesale water agency, Valley District is not directly responsible for the required demand reduction of SBX7-7 but is required to help the retail water agencies achieve their demand reductions (Water Code §10608.36). Requirements from AB 1668 and SB 606 allow for the State Water Resources Control Board to issue informational orders to wholesale water suppliers to provide water conservation assistance to retail water agencies. This assistance could include water education, rebates, or technical assistance.

Earlier this year, Staff was approached by the San Bernardino Municipal Water Department (Water Department) regarding a pilot project they are developing. This pilot project will address inefficient landscape water use at residential and small and medium-sized commercial sites, identifying landscaped areas that could be improved upon through alternative irrigation solutions, conducting a site assessment to gather irrigation data, installing a Weather-Based

Irrigation Controller, and providing minor repairs to the irrigation system as-needed. This pilot project will help the Water Department reduce overall water use, thus contributing to their water-use efficiency goals.

The Water Department is proposing to include 150 residential and small to medium-sized commercial sites in this project. The estimated cost per site is \$1,034 - \$1,141 for a total estimated project cost of \$181,918. Depending on whether the customer is an efficient or inefficient water user and how large their lot is, the average water savings is projected to be between 46.95 and 80.5 HCF (35,000 – 60,000 gallons) annually per customer.

The Water Department is asking Valley District to consider increasing its current 25% financial participation level toward retail water agency conservation programs to 50% for this Pilot Project, for a total amount not to exceed \$90,959. The total estimated water savings (for all 150 customers) is between 16 and 28 acre feet per year (AFY), depending on lot size and customer water-use efficiency at the start of the program. Valley Soil, the proposed contractor on this project, is providing an in-kind partnership of \$5,360 for this project.

For many years, Valley Soil has provided services for our large-scale customers to convert their systems to more efficient infrastructure. They provide excellent service and continued support to the property owner in order to ensure effective use of the new more efficient equipment. For the largescale program, the District typically funds 50% of project costs with the applicant and/or retail agency funding the other 50%. This proposed Water Department pilot project is similar to our existing largescale program in how it will be implemented, however, rather than the typical single property owner that Valley Soil will be working with (e.g. a school or school district) there will be many independent property owners converting their individual properties to more efficient infrastructure through participation in the Water Department-led project.

The Water Department will market this project to customers in two different ways. The majority of participants will be target-marketed by the Water Department with a focus on high-water users as well as ensuring participation across the city's seven wards. A small number of program spots will be made available to customers who request participation in the program.

This program aligns closely with Valley District's commitment to provide incentives to the retail water providers throughout our service area to promote and encourage water-use efficiency. By targeting high-water users, the Water Department will help reduce overall water use throughout their service area even more directly. Because this is a pilot project, it allows the Water Department and Valley District to gauge the interest in this type of program and track and assess the actual water savings that occurs over time. If the pilot project successfully

demonstrates a public interest and measurable water savings occurs as a result of the direct install and retrofit program, the Water Department plans to continue this service as part of their water conservation program. Based on recommendations received by the Board during the workshop, Valley District staff will use this pilot program in order to measure various success criteria and develop a strategy to effectively expand this concept throughout our service area in partnership with the retail agencies.

Fiscal Impact

The fiscal impact of funding 50% of this pilot project is approximately \$90,959. There are funds available in the approved FY 20-21 water conservation program budget to support this project.

Staff Recommendation

Approve providing 50% financial support for the San Bernardino Municipal Water Department Water Use Efficiency Pilot Project.

Attachment

Program Proposal, from Valley Soil, for SBMWD Pilot Program



Proposal for:

San Bernardino Municipal Water District's Pilot Program: Smart Audits and Direct Installs of WiFi Based Smart Irrigation Controllers, High Efficiency Nozzles, Conservation Upgrades, Irrigation Repairs and Wireless Flow Sensors

Submitted to:

**San Bernardino Municipal Water District
Devin Arciniega, Water Conservation & Public Affairs Coordinator
397 Chandler Place
San Bernardino, California 92408**

Submitted by:

**Valley Soil, Inc.
P. O. Box 890595
Temecula, CA 92589
951-767-2215, office
866-729-1784, fax
C.S.L.B. #997432, C.L.I.A #67058
D.I.R. Registration Number: 1000024420
Contact: Eric Anderson, President
Email: eric@valleysoil.com**



Cover Letter

To: Devin Arciniega, San Bernardino Municipal Water District, Water Conservation & Public Affairs Coordinator

We wish to thank the San Bernardino Municipal Water District (SBMWD) for this opportunity to assist in the design and implementation of a SBMWD sponsored Direct Install WiFi based WBIC, High Efficiency Nozzle and Irrigation Repair Pilot Program (Program) to assist in the SBMWD conservation goals.

Valley Soil is a water conservation company with over 35 years in the irrigation conservation field. It is our full time effort to provide Cities, Agencies, Municipalities, and private entities with specific services that promote saving each customer as much water as possible. Valley Soil, Inc has been in business since 2003. Our Book of Work exceeds: from FY 2009 to 2019 - over 52,000 irrigation controller evaluations, 21,800 weather based irrigation controller installations, 390,000 high efficiency nozzles installed, 1,000 Low Flush toilets installed, 1,200 efficient faucet aerators and shower heads installed, miles of drip line retrofits and hundreds of wired and wireless flow sensors. Public works billings are over \$9,250,000.00 and saving customers an estimated 2,900,000,000 gallons of water per year.

We accomplish this through: Customer education - trade shows, gardener workshops, association meetings, manufacturer training, and other methods. Personalized field services of itemized surveys, issue identification, resolution, and costs; flow management and whole site management. Valley Soil provides long term service beyond contract terms for the District and their Customers. Manufacturing issues are at no cost within the product warranty period. Customer inquiry response is same day or 24 hours at most. Valley Soil has been paperless since 2009. Our automated forms can be modified in anyway and can provide WCOLS based budgeting, repair costs, automated invoicing, valve by valve run times for base references and data is collated on a 1 page Summary report. We have an exemplary installation and customer data base. Our controller manufacturer provides pinpoint real time analytical data that provides the most cutting edge accumulative information.

Valley Soil has: consulted with the Irrigation Association and, in April 2019, Eric was 1 of 5 nationwide consultants hosted by the IA at their Fairfax, VA headquarters to assist them in a classification consolidation program. We have consulted with the NRCS, DWP, Cities and Agencies; interviewed and highlighted by Popular Mechanics, KTIE radio, KCAA radio, Green Magazine, Newport Beach TV, and other media. We have Beta tested new products and draft white paper results. Some items assisted on were Toro Precision Nozzles, Rainbird High Efficiency Variable Arc Nozzles and manufacturer's new controllers.

A handwritten signature in black ink, appearing to read "Eric Anderson", is written over a light blue horizontal line.

Eric Anderson, President, Valley Soil, Inc.

C.L.I.A. #67058, C.S.L.B. #997432, D.I.R. Registration #1000024420, MWEL0 #0365

Pilot Program

The Pilot Program shall or may consist of these services:

- A Smart audit of the site to gather information including irrigation issues, base valve run times, by valve – plant types, spray head count and type, acreage, water days, cycle counts, estimated precipitation and distribution rates and more.
- Areas that could save water by upgrading to drip irrigation.
- Areas that could save an automatic estimated amount of 15% by converting conventional spray nozzles to high efficiency nozzles.
- Converting the standard irrigation controller to a WiFi operated weather based irrigation controller.
- Providing irrigation repairs that have instant water savings. Data is automatically provided by our repair form.
- A single page customer summary with pictures of their home.
- Pictures of any irrigations deficiencies.

Administration Portion:

- Week 1; Obtain SBMWD contacts, arrange SBMWD meeting dates, provide insurances and documents, obtain project customers information and water use history, obtain product literature and submit all deliverables; meet with the IT department, and gather further requirements.
- Week 2; Finalize customer data, finalize SBMWD contract processes, obtain SBMWD purchase order, finish customer data entries and forms; finish formatting SBMWD data base and worksheets; finish Project strategies; begin agency/ customer portal.
- Week 3; Contact selected customers and arrange initial meeting dates and times, obtain from SBMWD handouts or final instructions.
- Week 3-4; Implement the Project and make the first site visits – if approved.
- Week 4-5; Finish Portal (week 3 is the actual target); launch portal if ready/ approved, begin installations and documentation.
- Week 5 & each month; Submit invoices, Program reports, data in approved format and summary, back enter any evaluations/ installations previously done from our data base; monitor website and portal, adjusting as needed.

Valley Soil has dedicated customer coordinators able to manage customer calendars, answer questions and liaise with field technicians once the SBMWD has pre-screened eligibility.

Valley Soil's Customer Coordinators have a participation success rate of over 81%.

Valley Soil has email, text message and phone call blast technology available for a targeted customer list.

The Work Plan and Scope of Services for this SBMWD Project shall be initially accomplished by our Administration Staff: Project Manager, General Manager and Program Administrator who will be overseeing a staff of project specific Customer Coordinators specifically trained on the SBMWD Project and can best organize then match the customer contact requests or phone conversations to the customer's questions and schedules, thus tracked in our data base.

Valley Soil's field staff is equipped with 4G network pads and synchronized to our office. This system reduces paper, speeds response time and helps the environment.

For this Project:

Field Staff shall consist of those who:

- Are water conservation experts, trained specifically for the SBMWD program,
- Have a genuine concern for the issues of the general public:
 - Water restrictions,
 - System issues water management/ use issues,
 - Their relationship with their landscape maintenance contractors or gardeners,
 - Customers who may have a difficult time with the English language,
 - Customers who may not initially comprehend the Program or products
 - Customers who may have other life related issues.

If we are not able to fully satisfy a Customer in the field or by phone, our procedure is to communicate that we shall provide a resolution within 48 hours or less. The Agency is notified immediately if it is apparent that the resolution requires the Agency's input. There is no cost for this, or any follow up for resolving issues.

The SBMWD has all rights in taking the Customer resolution lead at any time.

The results shall be distributed to both the SBMWD and the Customer with appropriate action taken within 48 hours or less.

Administration:

- It is understood that the project requires ease of customer and Agency portal interface, detailed use analysis, field data collection, exemplary SBMWD reporting for maximizing and tracking water savings potentials using Wi-Fi based irrigation controllers.
- It is understood that the first year shall target approximately 150 customers per year.
- It is understood that SBMWD retains the right to modify the agreement, Scope or Methods.
- **Valley Soil shall:**
- Meet the SBMWD's business standards and documentation requirements to allow us to perform the work.
 - Submit all insurances, protections, submittals and deliverables from Valley Soil and others.
- Meet with SBMWD Project Representatives to obtain customer information:
 - Discuss Project goals, products to be used, methodologies, educational video requirements, the demonstration workshops and record keeping.
 - Acknowledge that the Projects success and educational value hinges upon:
 - That SBMWD customers witness the easy sign up and scheduling process and may pass it on to others.
 - That they are excited to make modifications.
 - What the product and Program warranties are.
 - That Valley Soil shall process the nozzle rebates to minimize Customer and Agency costs.
 - Ease of installation, set up and training.
 - How to self-identify and correct future issues.
 - The ease of controller management.
 - The benefits received through lower water and energy use.
 - That landscape quality is not impacted.
 - The money saved.
 - Other SBMWD rebates available to them.
 - And, that their buy in to the technology makes for a successful Program.
 - Modify internal and online data base records and grant SBMWD full access.
 - Develop a customer participation agreement customer aprticipation agreement outlining the Programs goals, SBMWD limited liabilities, right-to-access, hold harmless, pre and post

inspection process, customer liabilities, financial liability if a post audit is denied, independent contractor clauses, contacts and other items, Valley Soil can provide sample customer participation agreements for review.

- Obtain customer names, account numbers, addresses, phone numbers, 3 year historical usage, lot size or other specifics and email addresses.
- Verify customer acreage, water use and had no previous rebates per the Program details.
- Arrange for monthly invoicing, and project installation data to be in a format that is compatible with all funding agencies, minimizes agency overhead and is turnkey for wholesale agency submittal.
- A SBMWD Program/ Safety Handbook shall be developed for use by all Valley Soil entities and includes:
 - Staff and Field Personnel noting the Project requirements; Field goals, procedures and directions; approved products, contact numbers and information; vehicle and personal safety procedures, emergency locations and reporting forms.
- It is understood that marketing, customer interest contacts and applications for the Program shall be coordinated thru the SBMWD however and if desired, we have capabilities to:
- Develop targeted marketing materials and preliminary customer packages highlighting:
 - The SBMWD's/ funding agents' logo and statement.
 - Projects reduction goals and methods of implementation.
 - The Projects costs to the customer.
 - Why the customer has been selected to participate and customer benefits.
 - Explain where the funding sources originate.
 - Describe any water restrictions.
 - Include the SBMWD's and Valley Soil's contact information.
 - Explain that the customer must be present during the evaluation and WBIC installation.
- Prioritize and contact selected customers by direct mail, direct calling, through an online portal and via email blasts to schedule audit appointments.
- Calling shall be done by our trained Customer Coordinators (CC) which are experienced in obtaining Program interest and buy-in for these programs.
 - Our Customer Coordinators have an 82% participation rate.
 - Initial customer calls shall begin by the CC's after any mailings have been sent out and at least three contact attempts are given.
- Arrange meeting dates and times, enter the meetings into a cloud based calendar to be shared with all agencies with respect to their participating customers.
- Enter or apply for any rebates inside or outside this Project.
- Supply all customer product installation data needed for rebate or funding agency submittal to the SBMWD in an approved format to minimize SBMWD overhead and turnkey participant agency submittals.
- Track any rebates, if applied for, inside or outside the Project.
- Submit invoices and deliverables in a timely manner.
- Keep Valley Soil's schedule flexible for SBMWD inquiries and meetings.

Data Base and Customer Portal:

- Valley Soil has worked with the manufacturers on past projects to assist their data base portal development. This information shall be made fully available to the District for real time referencing. As of now this back end data portal is provided free of charge and can be used by the District and then Valley Soil to quickly track customer % adjustments based on surrounding

customer % adjustments to verify proper programming and manage any high water use questions. Based on this, customers can be re-contacted and additional services or assistance can be given.

Data Entry:

- Enter collected customer contact data into the Trach Via database to develop tracking / reporting forms and statistics for SBMWD, office and field reporting synchronization.

Field Audit Forms are self-populating and up to 8 controllers per workbook. They collect:

- Customer information, contacts and email address; Auditor name, date and time; account number; acreage; controller location; hardwired; PSI, Leaks, manufacturers brand, station count, programming, run times, run off times, sprinklers counts for HE Nozzles and Rebates; irrigation type, plant type, precipitation rates and distribution uniformity rates; valve issues, could a valve be converted to drip and what type; soil type; and, any notes.
 - This information populates into:
 - An Install Form for the installer to note programming and changes along with a specific installation notation field.
 - A Repair Form which shows Customer repair costs.
 - An Auto Report that includes: repair issues, audit notes and conservation upgrades.
 - A Final Report which summarizes each recommendation from the Audit Form repair section; provides general notes, shows the Audit Notes, has space for final notes, allows for picture of the home, transfers the address and account number over along with acreage and controller information to be sent to the Customer and available to SBMWD through the shared database.
 - Optional MWELo monthly water based scheduling report.
 - The information is web based and populates into the Agency data base that also tracks water management services, repairs, upgrades and customer billings for all work; service call backs, phone contacts, site pictures and or other information that could benefit the SBMWD and incorporates into the controller manufacturer systems.
 - The SBMWD and Agency's shall be granted any information desired.
 - Monthly invoicing includes audit and installation data put into an excel format as needed by the SBMWD or MWD for turnkey submission.
 - Valley Soil shall strive to keep the District's project administration, customer contact, record keeping; agency reporting and issue resolution as minimal as possible.
 - Valley Soil understands that we are acting as a point consultant for the SBMWD to its Customers and shall act in the SBMWD's best interest.
 - No items or SBMWD policies shall be discussed, other than what is necessary for this Project, at any time.
 - If Customer has questions that are not within the Project's purview, the Customer shall be politely directed to contact SBMWD Customer Service or the SBMWD Project Administrator.
 - The contact shall become a part of the Customer database for SBMWD tracking purposes and no information shall be shared outside the SBMWD.
 - Reports: assist with grant fund management, submit and maintain customer reports and present reports or findings to the SBMWD as per Agreement. irrigation inconsistencies, device savings potential and the site maintenance potential, may be a part.
- Field Services:** All sites shall be left free of any construction or installation debris.
- Arrive in a professional manner and in professional attire with Company names on shirts and vehicles.
 - Present photo identification, business cards, credentials, call back numbers, toll free number. Have in hand all manufacturers operating manuals and warranty information.

- Present: customer participation agreements, SBMWD project summary, program benefits, written SBMWD and Company contact information. Valley Soil shall present the high efficiency product options and other available SBMWD conservation programs and California Friendly plant material suppliers.
 - Agreements, Program Summary and contact information are sent by e-mail or fax prior to the meeting time and may be collected before going onsite.
- If the Pre-Project package information was not able to be delivered via e-mail or fax: the information is presented, reviewed, discussed, and signed at time of the audit. It is then electronically entered into the data base.
- Present any SBMWD “goody bags” and other interior/ exterior information.
- Audit sites to determine and document:
 - Area size, the general condition of the landscaping, static system pressure.
 - Valve conditions, general landscape condition, valve by valve run off times, microzone or irrigation locations and mismatches; valve by valve plant types, controller original settings and location; what brand of sprinkler heads are being used, can the sprinkler stems be adapted to HE Nozzles, system issues: heads to low, correction or damaged items, brass to plastic body changes; count the number of pop ups and shrub heads per each valve to determine the nozzle counts; determine soil types/ infiltration rates, determine valve distribution uniformity (D.U.) and precipitation rates (P.R.).
 - Contact the SBMWD if low head drainage is noted and suggest upgrades using pressure compensating stems with check valves to hold back 5 feet of head pressure.
 - Program, eligibility issues or irrigation “holds” for correction prior to Program inclusion— manual systems, shrubs/ turf on the same valve, severe irrigation repairs needed, what these issues may cost to repair, existing WBIC’s or high efficiency nozzles in use or previously rebated shall be logged in the data base.
 - Discuss the reasons for practicing water conservation – note - any tiered rate or billing structure questions shall be courteously directed back to the SBMWD.
 - Present and discuss the SBMWD approved Wi-Fi based WBIC’s and high efficiency nozzles including what Wi-Fi security concerns the customer may have, what products may aid in additional water or energy conservation such as inline or point drip irrigation systems, standardizing large rotor nozzles, soil moisture sensors, flow sensors, master valves,
 - WiFi Security - Emphasize that the controllers selected have the most stringent security features in the market and that there has not been any back door hacks reported.
 - Explain how the WiFi system works, how only certain numbers are given for the installer to log the new system in and that there is no “back door” that can be used to infiltrate/ obtain a customer’s web or computer information.
 - System high head pressures: explain how a pressure compensating riser operates with high head pressures providing consistent head pressures and uniform systems across the valve. Explain that 7% (IA) more water can be saved by regulating misting, fogging and over spray from each 10 lbs in pressure drop, down to the head pressures recommended by the manufacturer as optimal.
 - Enter the local GPS coordinates, zip code or group numbers into the WBIC to active the weather adjustment services
 - Continue discussing other water or energy saving devices such as: variable frequency drive pump motors for pools and landscaped areas, 1.28 or 0.8 gpf toilets, faucet aerators, low flow shower nozzles, efficient washers and dishwashers, LED Lighting, Assistance Programs and others.

- Discuss potential energy savings obtained by the reduction in water delivery charges or improved methods. If requested: formulate an estimated return on investment for the products outside the Project.
- We understand that the SBMWD shall be contacted if a customer's site conditions prevent an audit.
- Contact the SBMWD Representative if Program deal breakers are discovered and what resolutions were presented to the customer; respond to customers within 24 hours of SBMWD directions and decisions.
- **Installations:**
- Schedule an installation date; complete an online or will call product order in the customer's name, for tracking and rebate purposes. Enter this information into the database.
- Deliver and install the Wi-Fi based WBIC's, high efficiency nozzles, driplines and repair items; install per SBMWD, Irrigation Association, Industry and Manufacturer specifications.
- Leave with the customer all product documentation, old controllers and nozzles for verification or opt out procedures.
- Note: no subscription based data subscription based cloud controllers shall be used.
- Program and connect the Wi-Fi signal for the WBIC's per product manufacturer's instructions, SBMWD restrictions and site specific audit data with no times exceeding run off potential.
- Connect controller to a local weather station that is site representative and show the customer how to change locations..
- Adjust the WBIC's online or in the manufacturers mobile application for the new high efficiency nozzle precipitation rates and distribution uniformities, plant material microzones, etc;
- Document the controller serial number and Wi-Fi settings for future reference and SBMWD tracking.
- Enter the appropriate controller data based on the evaluation of each valves specifics and run off times. Run off times are the baseline, if longer run times are needed, activate the cycle/ start features, document the new settings.
- Re-test all valves to verify the programming matches up with the evaluation data.
- As part of the final training before leaving the site - have the Customer operate every aspect of the new controller: verify that the customers home and mobile devices have the manufacturers web applications with the customers passwords, verify Wi-Fi connections, have the customer login to the system with either the home computer and mobile phone.
- Have the Customer interface and enact controller adjustments, show how their mobile device can be used for manually turning valves on and off or how it can be used in yard lighting, or fountain features; the interface if a flow sensor is or will be installed to demonstrate how the flow sensor features work and how they can help save additional water by alerting them to high flow or other events.
- Explain the ramifications of over adjusting run times to cover or flood irrigate weak spots that have less than adequate coverage rather than repairing the issue; low/ leaning heads, shrubs blocking spray patterns, broken heads/ pipes, leaking seals or over spraying an area/ nozzle adjustment.
- Explain what could happen if the Wi-Fi or system went down: that the system holds the last schedule if the connection is lost, then how, if not reconnected when the system is restored, to reconnect the controller, leave a note with the manufacturers technical support line, Valley Soil's contact information and SBMWD's phone number for their easy reach and reference, store connections; enter into their devices the Apps needed to connect and set them up; provide any additional training with the customer.

- Train the Customer in how to spot irrigation deficiencies before they become serious and generally teach them what the resolutions are and how timely contact with their service provider will keep their landscape from long term damage, explain that the customer owns the system and that all adjustments remain their responsibility. Valley Soil shall provide phone or email support and be available for call back service calls and follow up inspection after the installation, up to two. If we are in the area, we may be able to get there the same day.
- Obtain a digital signature receipt, explain that the customer owns the products and not the District.
- Our report shall include photos of existing irrigation issues.
- Our toll free number has been established and active for 15 years and will remain so.
- The site shall, again, be left debris free and removed products recycled or as per contract.

Landscape Tune Up: SBMWD sponsored \$300.00 Budget:

- Valley Soil’s Audit form notes and tracks the issues for each valve and transfers these issues to our repair form which has pre-determined values for each item.
- These items are also transferred and shown on our Report Summary page reducing administration costs and fast tracks the repairs.
- Repairs include all identified issues along with repair costs.
- If the total repairs are over the budget the customer has the option to self-fund the remaining overage.
- If a customer decides not to self-fund the overages, the repairs shall be prioritized by severity and to the budget.
- If the high priority repairs are more than the budget and the customer does not wish to pay their portion, the customer may be placed on a “repair hold”.
- If a “repair hold” is in place, the customer may not receive any WBIC’s, high efficiency nozzles or drip conversions until the repairs have been made, by the customer, and Valley Soil has been notified.
- Valley Soil shall promptly notify the District if a “repair hold” occurs, this information shall be entered into the data base.
- Once the repair completion has been verified the customer may continue with the Program.

Pricing:

- Survey and mini-audit required for programming and issue identification \$152.50
- WiFi based WBIC up to 16 stations including labor and set up. \$396.50
- Repair budget. \$300.00
- Wireless whole house flow sensor including labor and set up. \$292.32
- Valley Soil shall provide a credit incentive for the first 50 customers of (\$107.20)
 - If the manufacturer still has this available.
- The irrigation WBIC controllers shall be Hydro Rain professional models and outdoor rated.
- The wireless whole house flow sensor shall be Flume.
- Flume not only provides real time leak notifications for the whole water system but incorporates with the Hydro Rain controller to “learn” each valve’s flow rate and sends notifications on high flow alerts and will shut down the high flow valve.

Presented by:



Eric Anderson, President, Valley Soil, Inc.

C.L.I.A. #67058, C.S.L.B. #997432, D.I.R. Registration #1000024420, MWEL0 #0365

Please feel free to contact us at any time: 951-767-2215 or savewater@valleysoil.com



Customer Name: 0
Landscape at: 0 0
Evaluation Date: 1/0/1900
 The irrigation and landscape observed on the property is moderately efficient. There is a higher potential for water savings and improved efficiency that may also result in dollars saved.

Landscaped Area: 0
Account # 0

Existing Irrigation Equipment

Irrigation Controllers: 0	Controller 1 Run Times	0
	Controller 2 Run Times	0
	Controller 3* Run Times	0
Nozzles: 0	<u>Total Controller Weekly Run Times</u>	<u>0</u>

GENERAL

Install Weather Based Irrigation Controllers and High Efficiency Nozzles

WBIC work to provide appropriate watering based on the needs of the landscape and local weather. Installing WBICs will save an estimate of 25-45% of annual water use. HE Nozzles could save an additional 15% to 30%.

Recommendations

Repair and Adjustment Summary:

Repair or adjust: <input type="text" value="0"/> Leaning Heads	<input type="text" value="0"/> Fogging Nozzles	<input type="text" value="0"/> Overspray
<input type="text" value="0"/> Broken Valve	<input type="text" value="0"/> Broken Heads	<input type="text" value="0"/> Shrubs Block Head Spray
<input type="text" value="0"/> Low Heads	<input type="text" value="0"/> Broken Pipes	<input type="text" value="0"/> Leaking Seals
	<input type="text" value="0"/> Poor Coverage; balance nozzles	<input type="text" value="0"/> Wire Work

These repairs, retrofits and adjustments could save 10-20% more water per valve and maintain healthy plants.

Irrigation Tune-Up and Repairs

Mandatory Repairs need to be completed at or before Installations

Mandatory: by Valley Soil or Others

Conservation

Notes

It is recommended to install

Audit Notes

0

When it comes to innovative ways to Save Water, we Never Run Dry



2020

Audit Chart 1

Contact Name: _____ Phone: _____ Acct# _____

Com Address _____ City _____ Zip _____ Email _____ **Total Run Times** 0

T. Nzzl. Count 0 Agency _____ Date _____ Auditor _____ Hrd Wire? _____

Station Needed _____ Area Sq. Ft. _____ Head Type RBD _____ TORO _____ MIXED _____ Cycles _____ P2 Days _____ Weekly Run Times: C1 0

Controller Location:

Mfg _____ PGM 1 -water days _____ Starts _____ Cycles _____ P2 Days _____ Strt _____ Cy _____ TTL

Station Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	TTL
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Program 1 or 2																																					
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Weekly Run Times	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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Sprays: exact count																																				
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Shrub Adapters																																				0
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Broken/ Inoperable Valve																																				0
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Leaning Heads																																				0
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Broken Heads																																				0
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Broken Rotors																																				0
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Broken Pipes																																				0
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Leaky Seals																																				0
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Champion Brass Heads																																				0
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Poor Coverage																																				0
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Shrubs Block Heads																																				0
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High PSI: Anti-Siphon																																				0
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Broken Drip																																				0
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Drip: Inline																																				0
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Drip: Punch																																				0
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Emitter Count																																				0
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Wire Tracing HOURS																																				0
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Spray Heads																																				0
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MP Rotators																																				0
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Inline Drip																																				
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Bubbler/ Point Drip																																				
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Cool Season Grass																																				
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Warm Season Grass																																				
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Flowers																																				
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Trees																																				
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Shrubs: Med. Water																																				
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Shrubs: Low Water																																				
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Native Plants																																				
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Sun																																				
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Shade																																				
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Distribution Uniformity																																				
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Precipitation Rate?																																				
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Repair Hours																																				0
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Rewire Valves																																				0
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Soil Type	Sandy		Sandy Loam		Loam		Clay Loam		Clay		NOTE: 2ND CONTROLLER, 3 VALVES OR LESS, 1 MUST BE TURF																0	A1 nozzles
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Audit Notes:

Serial #																																			
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Repair Total	\$0.00	Customer Share	(\$300.00)	TOTAL PROJECT COST	\$0.00	Controller Cost	\$0.00	Nozzle Cost	\$0.00
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Repairs

Name: 0 Date 1/0/00

Address 0 Auditor 0

Agency 0

Phone: 0 Email 0

Thank you for your participation in this _____ Program.

Bonus: up to \$300.00 for irrigation repairs to help you Save More Water.

Repairs can be done by Valley Soil or others and must be verified at or during install time.

Credit cards are accepted - call Terry or Lesa at 951-767-2215 for arrangements.

A 50 % down payment may be required.

Incentive Extras may not be combined in another form of credit or applied to Project Overages .

	COUNT		FIELD COST	MATERIALS	TOTAL
Misc :					\$0.00
Broken/ Inoperable Valve	0				\$0.00
Low Heads	0				\$0.00
Leaning Heads	0				\$0.00
Broken Heads	0				\$0.00
Broken Rotors	0				\$0.00
Broken Pipes	0				\$0.00
Leaky Seals	0				\$0.00
Champion Brass Heads	0				\$0.00
Poor Coverage	0				\$0.00
High PSI: Anti-Siphon	0				\$0.00
Broken Drip	0				\$0.00
Under 30 nozzles	0				\$0.00
MP Rotators	0				\$0.00
Rotors/ Hunter PGJ	0				\$0.00
Rewire Valves	0		\$50		\$0.00
Wire Tracing HOURS	0				\$0.00
SAM Check Valve heads	4" 0	6" 0	12" 0		\$0.00
Misc :					\$0.00
				Sub Total	\$0.00

CONSERVATION UPGRADES: optional water savings upgrades

Controller Number:	1	2	3	TOTAL
Dripline: Inline/ Netafim	0	0	0	\$0.00
Dripline: Punch Emitters	0	0	0	\$0.00
1800 RETRO Drip Kit				\$0.00
Agrifim & Shrub Caps				\$0.00
New Drip Valve Kit				\$0.00
Shrub Adapters	0	0	0	\$0.00
STD Valve to Drip Valve, Reg + Filter				\$0.00
				\$0.00
EXTRAS?				\$0.00
				\$0.00

Customer Requests Water Management Services

Repair and Upgrade Total \$0.00

CONSERVATION UPGRADE SHARE \$300.00

CUSTOMER SHARE - BALANCE DUE -\$300.00



Customer	0				
Address	0				
Name	0				
Water Bill Address	0				
City	0	State	CA	Zip	0
Phone	0	Email	0		

Misc	
Date:	5/11/2020
Agency Water Acct #	0
Rev. Water Acct #	

Qty	Description	Unit Price	TOTAL
	<u>RESIDENTIAL - zero count out if commercial</u>		
0	Hydro-Rain 04082 16 stations	\$ 149.00	\$ -
0	Hydro-Rain 04080 8 stations	\$ 139.00	\$ -
	Hunter Hydrowise		\$ -
	Hunter Hydrowise		\$ -
	Residential Controller Subtotal		\$ -
0	Toro 0-10-HP RESIDENTIAL/ COMMERCIAL Nozzle TOTAL	\$ 4.45	\$ -
	Commercial Controller Count <input type="checkbox"/> FALSE		
	Station Count<11 Station Count>12 Potential Rebate		
	Hydro-Rain 04082	\$ 149.00	\$ -
	Hydro-Rain 04080	\$ 139.00	\$ -
	Hunter Hydrowise	\$ 0.00	\$ -
	Hunter Hydrowise	\$ 0.00	\$ -
	Hunter Hydrowise	\$ 0.00	\$ -
	Hunter Hydrowise	\$ 0.00	\$ -
	Hunter Hydrowise	\$ 0.00	\$ -
	Hunter Hydrowise	\$ 0.00	\$ -
	COMMERCIAL CONTROLLER SUB TOTAL		\$ -
	Total		

"When it comes to innovative ways to Save Water, we Never Run Dry"

Devin Arciniega
Water Conservation/ Public Affairs Coordinator
San Bernardino Municipal Water District
397 Chandler Place
San Bernardino, CA 92408
Devin.Arciniega@sbmwd.org

Subject: Water Conservation Pilot Program for Residential and Commercial Customers,
Data Analysis, Review and Notes: Letter of Explanation.

Hi Devin, the following are explanations of the analysis and comments from the data presented. The list is numerical and correlates to the spreadsheet's column heading numbers. Example "1. Average Conservation Product Savings" is listed below as "1".

1. Average Customer: The Evapotranspiration (Eto) was gathered from the UCR California Irrigation Management Information System website (CIMIS) for the San Bernardino area and is approximately 55.6 inches of Eto per year. The Eto is shown as a % for each month. The estimated minimum savings potential is expressed in HCF for installed weather based irrigation controllers, high efficiency nozzles but does not include whole house Flow Meters that connect directly to the irrigation controller and irrigation repairs is shown. Both Flow Meters and Irrigation Repairs will produce more savings. For the Average Customer, the **savings** are approximately **37.5 HCF** annually.
2. Average High Water User Savings: Based on the provided data, Eto and conservation products, excluding repairs, the Higher Water User may save approximately **56.4 HCF** annually.
3. Sample "A" calculations was completed with a rough Google Earth view of the square footages of pool, turf and shrubs. The estimate shows what a 70% turf, 45% shrub and 50% pool water loss budget would look like. Home Use was factored at the old rates of 16 HCF for indoor use for a family of 4. New Home Use is 55 gallons per day and around 2.23 HCF per person per day or approximately 8.8 HCF per month for 4 people, an allocation difference of 7.2 HCF. The addition of conservation products could approximately save this customer **30 HCF** annually.
4. Average 1" meter: with installed water conservation products these accounts should save approximately **64.4 HCF** annually.

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5. High Water 1" meter: with installed water conservation products these accounts should save approximately **96.6 HCF** annually.
6. Sample "B". Very Low Water Use: the customer only has trees and shrubs with a crop coefficient (Kc) of 0.40 and a covered canopy of about 50%+. The area was taken from a rough Google Earth view so total tree and shrub count could not be determined. From the given data and the calculations, the Owner has done a good job of saving water but maybe deficit irrigating. My observation is that the Owner is banking on some additional precipitation or hand watering or running washing machine grey water to make up the lack of applied water. Properly programmed conservation products may actually increase water use to the level of plant needs, as history shows. The site review will determine if conservation products or repairs may or may not be advised. In any case, the site review helps the Owner by highlighting any/ all savings potential: irrigation, upgrades, other products, repairs and indoor use discussions. At this time, the **savings estimates are 0 HCF** annually.
7. Sample "C" High Water Use: Using daily manual tight water management of the Owners controller adjustments might yield a savings of 64.2 HCF annually without installing conservation products. This is fairly unrealistic, but we have seen it done by some conservation enthusiasts. Installation of conservation products and accounting for nothing else could approximately **save 91.7 HCF** annually.
8. Area Based Budgeting for Sample "C": Site parameters from a rough Google Earth view shows this Owner to be over their estimated water budget by approximately 351.4 HCF annually. The actual water use by parameter based irrigation installation and scheduling, high efficiency nozzle installation and possible repairs and pool cover could produce an overall site of 407.6 HCF per year. **The savings might be 347.1 HCF** annually or approximately 42%.

Please contact me with any questions or clarifications,

Best Regards,

Eric Anderson

*President, Valley Soil, Inc.
CSLB #997432, CLIA #67058, MWEL0 #000365
eric@valleysoil.com
951-775-6495, cell*

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SBMWD Estimates and Calculations for the given data: Valley Soil, Inc.

	1. Average Conservation Product Savings			2. Average High Water User Savings			3. Sample "A" Calculations, Customer at Budget			4. Average 1"	5. High Water 1"
	Average Residential Account (5/8" or 3/4" meter) in HCF	HCF Savings with installed products	Eto Avg	50% more water use (conservation charges in affect above 32 HCF)	Additional Savings	Eto by Mo	Sample water use average lot size 5/8" meter	Area Based Water Budget: area size - Turf apx 1195, Shrubs apx 1680 & Pool at 675	Site review shows some deficit irrigation and owner count / ages are not determined.	Average Residential Account (1" meter) in HCF	50% more water use (conservation charges in affect above 32 HCF for residential)
Month											
January	13.79	5.5%	2.07	20.685	3.10	3.059	13	Pool: 31.25		20.76	31.14
February	13.51	5.4%	2.03	20.265	3.04	2.997	17	15.63	covered pool	19.69	29.535
March	14.29	5.7%	2.14	21.435	3.22	3.17	18	278.38	balance	24.33	36.50
April	18.4	7.3%	2.76	27.6	4.14	4.082	18	35.99	turf	32.08	48.12
May	22.5	9.0%	3.38	33.75	5.06	4.992	18	19.46	shrubs	41.26	61.89
June	26.24	10.5%	3.94	39.36	5.90	5.821	30	192	home	44.29	66.44
July	28.75	11.5%	4.31	43.125	6.47	6.378	50	263.07	Budget	51.68	77.52
August	27.86	11.1%	4.18	41.79	6.27	6.181	32	294	Actual	50.74	76.11
September	28.86	11.5%	4.33	43.29	6.49	6.403	30	30.9	savings	49.65	74.48
October	22.85	9.1%	3.43	34.275	5.14	5.069	24			40.74	61.11
November	19.17	7.6%	2.88	28.755	4.31	4.253	28			31.81	47.72
December	14.4	5.7%	2.16	21.6	3.24	3.195	16			22.1	33.15
	250.62		37.593	375.93	56.39	55.60	294			429.13	643.70
	Average Owner Savings			High Use Average Savings			29.4	Savings with Conservation Products		64.4	96.6
										Respective Savings	
	Notes: 50% Pool savings with cover, calculated in. Whole household use calculated at 16 Units per month. The "area" for Area Based Budgets are estimated and may not be "actual".										

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SBMWD Estimates and Calculations for the given data: Valley Soil, Inc.

6. Sample "B" Very Low Water Use		7. Sample "C" High Water Use Savings				8. Area Based Budget		9.AG: Citrus		
<u>Alternative Landscaping</u> <u>large lot</u> <u>3621</u> <u>Valencia Ave</u>		<u>High water use 1" large lot</u> Use Avg Eto Savings ET Avg				Area Estimate: S.F.		Citrus Grove Calculations for San Bernardino/ Highland in gallons per day: based on Eto Difference of 49.4" (Temecula) to <u>55.6" (UCR)</u> . Monthly #'s are UCR		
5	17700	30	3.6%	5.5%	0.65	Turf	7200	233.52	2.7	83.7
4	% covered	58	7.0%	5.4%	2.13	Shrubs			3.9	109.2
4	50%	36	4.3%	5.7%	1.05				8.3	257.3
23	net est area	81	9.7%	7.3%	4.95	Pool	1890	39.41	11.8	354
3	8850	70	8.4%	9.0%	5.28	Home	720	19.02	14.6	452.6
12	ETO factor	103	12.4%	10.5%	9.78				18.9	567
12	40%	100	12.0%	11.5%	10.47				21.7	672.7
6	Feet/ SF	117	14.1%	11.1%	12.00		192	192	27.5	852.5
18	1.85	90	10.8%	11.5%	9.36				21.5	645
21	Budget	57	6.9%	9.1%	4.20				12.5	387.5
44	<u>164.02</u>	65	7.8%	7.7%	3.97				5.4	162
<u>3</u>	Under Budget	<u>24</u>	2.9%	5.8%	0.38				3.7	114.7
155	9	831			64.22			483.9	Ann. Gal.	4658.2
		Units saved just using ET Residential Eto Factor		0.7		HCF Over Budget	347.1		Ann. Units	6.23
		Potential Savings with Conservation Products		91.7		Water Budget	411.4		UCR Ann. HCF/ Tree	0.0623
						Budget: Home & Parameter Based Irrigation Scheduling			Wine Grapes @ 980 HCF/Acre/ Yr. Citrus @1670 HCF/ A/ Yr	

Valley Soil: When it comes to innovative ways to Save Water, We Never Run Dry



DATE: September 1, 2020

TO: Board of Directors

FROM: Heather Dyer, CEO/General Manager

SUBJECT: Appointment of Alternate Member to the Santa Ana Watershed Project Authority Project Agreement 24 Committee

The District is a member agency of the Santa Ana Watershed Project Authority (SAWPA), along with the Inland Empire Utilities Agency, Western Municipal Water District, Orange County Water District, and Eastern Municipal Water District. Within the purview of SAWPA there are a number of projects, known as Project Agreements (PA). Those Project Agreements have Committees assigned to oversee them made up of Directors from each member agency. One of these is Project Agreement 24 (PA-24), which oversees the Inland Empire Brine Line. The Brine Line is a regional, cost-effective, and sustainable means to dispose of non-reclaimable wastes for utilities and industry within the Santa Ana River Watershed. The Brine Line accepts and transports water with high levels of salts from industrial and other users in order to effectively manage the discharge and prevent degradation of water quality within the Watershed.

President Harrison currently sits on the PA-24 Committee. The committee typically meets once per month. President Harrison has recommended the District appoint another Board member to serve as an alternate for the PA-24 Committee.

Fiscal Impact

There is no fiscal impact related to appointing an alternate member to PA-24.

Recommended Action

The Board President appoint an alternate to the SAWPA PA-24 committee.



DATE: September 1, 2020

TO: Board of Directors

FROM: Wen Huang, Chief Engineer/ Deputy General Manager
Mike Esquer, Senior Project Manager
Brent Adair, Project Manager

SUBJECT: Update on Administration Building Office Remodeling Project

The purpose of this memorandum is to provide an update on the Administration Building Office Remodeling Project (Project). At the Board of Directors' meeting on June 16, 2020, as part of the Board of Directors' consideration of the FY20/21 General Fund Budget, a budget line item of \$100,000 for the Administration Building Office Remodeling Project was approved. The remodeling is necessary to create new office spaces to accommodate three (3) new positions that the Board has authorized in response to the anticipated additional workload. Following the Board approval, staff has been working on the Project and will provide a presentation with construction photos during the meeting. Additionally, Staff recommends that the Board ratify the up-to-date expenditures for construction of the Project in the amount of \$39,673 and approve a budgetary authority to the CEO/General Manager in the amount of \$33,500 for office furniture, door staining and coating and glass installation to complete the Project.

Background:

At the May 28, 2020 Board of Directors' Wages, Benefits, & Insurance Workshop, the Board was presented with a new organizational chart with three (3) new positions in response to the anticipated additional workload. In order to create new office spaces to accommodate the new positions, at the June 8, 2020 Budget Workshop, among other things, the Board considered a budget line item of \$100,000 for the FY20/21 General Fund Budget. The new positions and General Fund Budget were subsequently approved at the Board of Directors' meeting on June 16, 2020.

Following the Board approval, staff has been working on the remodeling project. Several options were evaluated initially. After careful consideration of constructability and maintaining the connectivity among the offices and shared office equipment, the most preferred alternative selected reduces the footprint of the library space, which accommodates the three new offices. The design configuration was completely prepared by in-house staff in order to save costs. Following the completion of the design, staff solicited proposals from Gerold Construction, Inc. for general tenant improvement work in the amount of \$24,857, from Hydro Industrial Electric Corp. for electrical work in the amount of \$6,500, and from Wick's Heating and A/C, Inc. for HVAC improvements in the amount of \$3,283. After investigation of various alternatives, staff also pre-purchased four raw doors and frames for the project in the amount of \$5,033 from Foundation Building Materials. Purchasing the unfinished doors ourselves, directly from a supplier, saved the project approximately \$15,000. Engineering staff, Mike Esquer and Brent Adair, have been serving as our General Contractor in order to closely monitor and coordinate multiple contractors working on the project, which also resulted in substantial savings on markups typically charged by a General Contractor. While staff has been working remotely during the COVID-19 pandemic, the upstairs construction work has been substantially completed. Staff recommends that the Board ratify the expenditures to date for the remodeling work which totals \$39,673.

Two major items remain on the project: 1) color match staining, lacquer coating and glass installation for the doors and frames at an estimated cost of \$3,500; and 2) procurement of the furniture in the three new offices for an estimated cost of \$30,000. Staff recommends that the Board of Directors authorize a budgetary authority in the amount of \$33,500 for the CEO/General Manager to complete door finishing and installation and the furniture procurement. In sum, the project cost is estimated to total approximately \$73,173, substantially below the authorized budget for this line item.

Fiscal Impacts:

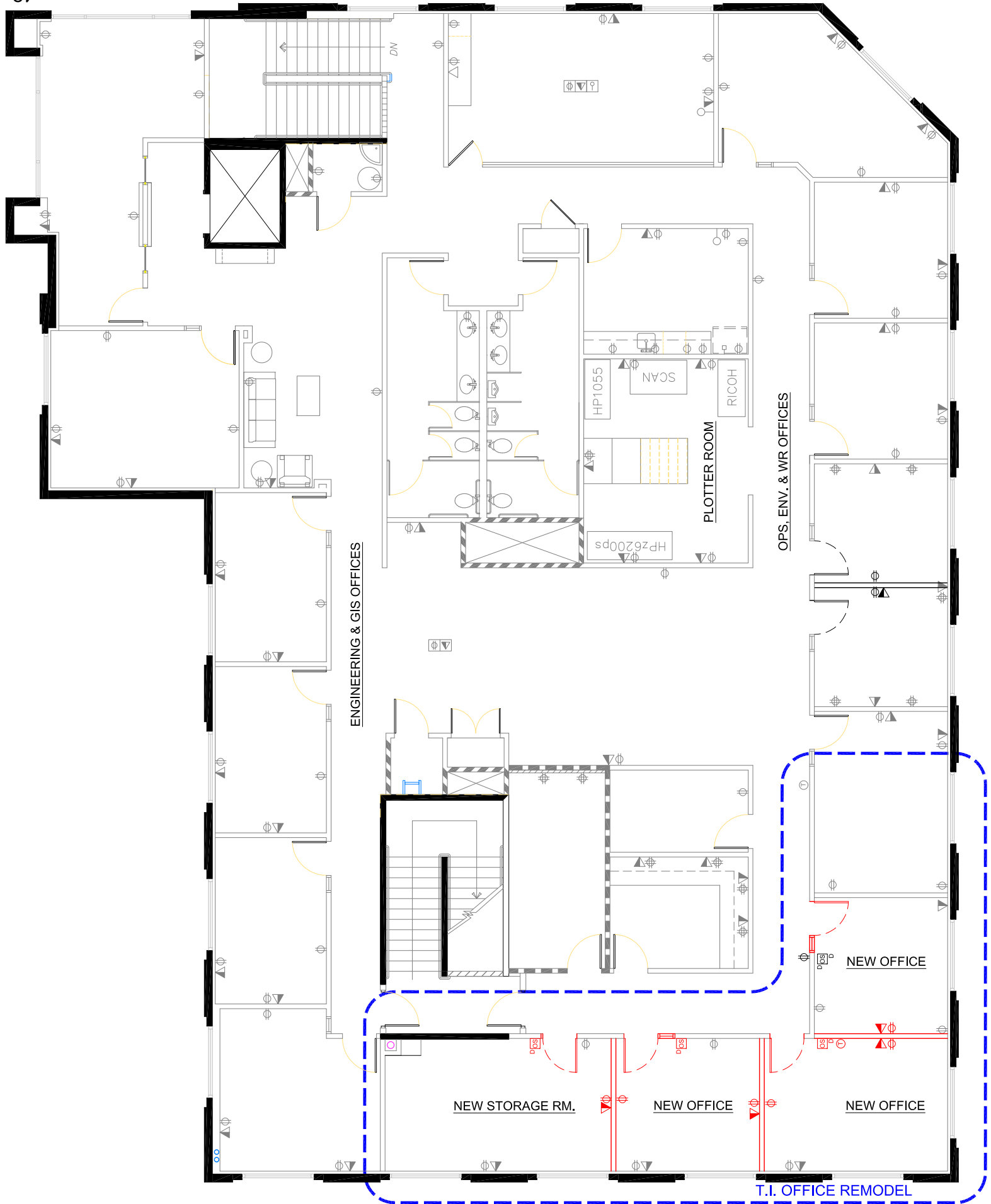
The total estimated cost for completing the Office Remodeling Project is \$73,173. This expense was expected and included in the approved FY20/21 General Fund Budget, Line Item 6280 Field Improvements, Administration Building New Office Space in the amount of \$100,000.

Staff Recommendations:

Staff recommends that the Board ratify the expenditures for a total of \$39,673 for the remodeling work and authorize a budgetary authority in the amount of \$33,500 for the CEO/General Manager to complete the procurement and the project for a total amount of \$73,173.

Attachment:

Updated floorplan of new 2nd floor offices.



FLOOR PLAN OF 2ND FLOOR OFFICES

T.I. OFFICE REMODEL



DATE: September 1, 2020

TO: Board of Directors

FROM: Staff

SUBJECT: Summary of August 6, 2020, Board of Directors Workshop – Resources

The Resources Workshop convened on August 6, 2020, via Zoom teleconference. Director Hayes chaired the meeting; Directors Kielhold, Longville and Navarro participated in the Workshop. Heather Dyer, Cindy Saks, Bob Tincher, Melissa Zoba, Kristeen Farlow, and Matt Howard, of staff, participated in the workshop. Guests in attendance were Devin Arciniega, Jorge Heredia, Melody McDonald, and Miguel Guerrero.

3. Summary of Previous Meeting

The meeting notes from the July 2, 2020, Board of Directors Workshop – Resources were reviewed. There were no additions or changes to the meeting minutes.

4.1 Results of Study to Estimate the Usable Groundwater Storage of the Arlington, Rialto-Colton, Riverside and San Bernardino Groundwater Basins

In partnership with the Western Municipal Water District, Valley District hired Geoscience Support Services to estimate the usable groundwater storage in the Arlington, Rialto-Colton, Riverside and San Bernardino Basins. A summary of the results are as follows:

Basin	Usable Storage	Current Storage		% Groundwater Accessible by Wells		Storage (years)	
		(acre-ft)	(acre-ft)	%	(Existing)	(New)	Min
San Bernardino (SBB)	5,690,000	4,716,000	83%	43%	57%	57	Infinite
Rialto-Colton (RCB)	1,749,000	1,530,000	87%	55%	45%	113	Infinite
Riverside (RB)	810,000	722,000	89%	57%	43%	65	Infinite
Arlington (AB)	95,000	56,000	59%	100%	0%	7	26

Action Item: Staff will present the results of this study to the Basin Technical Advisory Committee and work with the BTAC on possible next steps which could include establishing management zones for each basin among other things.

4.2 Discuss San Bernardino Municipal Water Department Water Use Efficiency Pilot Project

Staff provided the Board of Directors with an overview of a project proposed by the San Bernardino Municipal Water Department for a Weather-Based Irrigation Controller Pilot Project. The goals of the project are to address inefficient water use on landscapes, identify areas for alternative irrigation solutions, reduce overall water use and contribute to achieving water-use efficiency goals. This project will target 150 customers that are residential and small to medium-size commercial. The Water Department is requesting Valley District consider contributing to this project financially at a 50% level. Because it is a pilot project, the participation numbers will be kept to 150 and the results of the pilot project will be evaluated after the project is complete. Valley District’s cost share for this program would be approximately \$90,959.

Director Navarro expressed interest in supporting other retailer water use efficiency programs at the 50% level; Director Hayes recommended this program (or something

similar) be recommended to all retail water providers. The Board expressed support for this type of project partnership with one of our retail water providers.

Action Item: This item will be forwarded to a future Board Meeting for consideration.

4.3 Consider Proposal for Performance of Water Conservation Public Outreach Programs

Staff presented the Directors with a proposal from the Inland Empire Resources Conservation District (IERCD) for the performance of water conservation public outreach programs for fiscal year 2020-2021. In anticipation of continued distance learning, IERCD put together a proposal that focuses on remote learning elements, including pre-recorded and live presentations, materials for teachers, students and families to use at home, and online (live) landscape workshops.

Director Longville requested the IERCD assist us in promoting the water use efficiency rebate programs; Director Navarro requested the workshop marketing material ahead of time so it can be shared by the Directors; and Director Hayes requested the IERCD provide educational materials for junior high and high school students on careers in water. The Directors recommended this item be forwarded to a Board Meeting for approval consideration.

Action Item(s): This item will be forwarded to a future Board Meeting for consideration.

5. Directors' Requests for Consideration

The first request was from Director Longville regarding irrigation for the Community Garden at the Garcia Center for the Arts that is leased by the San Bernardino Valley Concert Association. Mr. Jorge Heredia provided an overview of the project request for irrigation on the site, similar to the way Huerta del Valle is set-up, in order to offer a community garden aspect to the current garden. Partners are interested and enthusiastic about a community garden at the Garcia Center.

Ms. Dyer discussed a goal of working together with the City to develop educational curriculum at the garden related to the heat island effect and educational signage.

Director Kielhold inquired about how many demonstration gardens the District is currently participating in and what the economic impact of these gardens is. Director Hayes is not

supportive of this effort as she does not see value to the entire Valley District region and the Garcia Center does not pay ad valorem. Her recommendation is for the Garcia Center to use the 25% reimbursement program and/or the Weather-Based Irrigation Controller Program. She also stated that if this opportunity is made available throughout the entire service area (to other gardens) then she would be supportive of it.

Director Longville clarified that she is not looking for “approval” of this item now but approval from the Board to assess whether this opportunity is feasible as a partnership opportunity for these types of community gardens and programs.

Director Hayes requested the District look at how we can work together with other gardens and similar projects throughout the service area.

Action Item(s): Staff will work with the City to determine how the two entities can work together to prepare a proposal and cost estimate for moving forward. Staff will also bring back an overview of all gardens being sponsored and the costs.

The second request considered was from Director Longville regarding the design, printing, and mailing a reusable grocery bag to all residents in the Valley District service area. The Directors discussed the pros and cons of this idea, including the challenges of obtaining addresses of all ratepayers, whether ratepayers would want money spent this way, and if we could work with retailers to distribute bags at community events.

Action Item(s): Staff will investigate the costs of ordering and mailing a reusable bag to every property taxpayer within our service area and investigate other ways that we might be able to effectively distribute the item within our service area. This item will be brought back to a future workshop.

6. Adjournment

Staff Recommendation

Receive and file.



DATE: September 1, 2020
TO: Board of Directors
FROM: Staff
SUBJECT: Summary of August 11, 2020 Board of Directors' Workshop - Engineering

The Board of Directors held a Workshop on August 11, 2020. Director Kielhold chaired the meeting via video-conference and Directors Navarro, Longville, and Hayes participated in the Workshop supported by Heather Dyer, Wen Huang, Cindy Saks, Bob Tincher, Melissa Zoba, Kai Palenscar, Brent Adair, and Chris Jones of staff. The following agenda items were discussed:

3.1 Summary of Previous Meeting on July 14, 2020. The summary notes of the July 14, 2020, meeting were accepted.

4.1 Presentation: Presentation by Dr. Daniel Swain: Extreme Atmospheric Rivers as Influenced by California's Warming Climate. Dr. Daniel Swain gave a presentation on his newly published research titled, "Extreme Atmospheric Rivers as Influenced by California's Warming Climate." Dr. Swain is a Climate Scientist with the Institute of the Environment & Sustainability at the University of California Los Angeles. He is also a Research Fellow at the Capacity Center for Weather and Climate Extremes at the National Center for Atmospheric Research and a California Climate Fellow at the Nature Conservancy. Dr. Swain presented on newly published research on the topic of widely varying hydrologic cycles of predicted for California due to changing climate and touched briefly on the potential implications for water managers, fire suppression, and flood control in coming decades.

Action Items: Receive and File

4.2 Presentation by William Ota (PhD Student, UC Riverside): Current and Future

Research Associated with the Santa Ana River. William Ota, a Ph.D. doctoral student at the University of California, Riverside within the lab of Associate Professor Kurt Anderson, gave a presentation on present and future research he is working on related to the Santa Ana sucker ecology. The Anderson Lab conducts research related to Quantitative Population, Community, and Applied Ecology, where in the last several years several researchers have begun assessing the Santa Ana River. The Santa Ana River is a human managed system containing threatened and endangered species that interact with other native and invasive species. The Upper Santa Ana River Habitat Conservation Plan (HCP) has benefitted from the work conducted by the Anderson Lab in the River related to ecological interactions between wastewater discharge and species abundance, distribution, and diversity. Mr. Ota's research will inform ongoing monitoring and management decisions for the HCP.

Action Items: Receive and File

5.1 Discuss Water Use Efficiency End of Year Report.

Staff provided a summary of the water use efficiency program for fiscal year 2019-2020. Funds for the program are included in the *Water Conservation and Education Program* budget account number 6640. A total of \$750,000 was budgeted for the program in 2019-2020 and \$658,452 was spent.

Action Items: Receive and file

5.2 Completion Report - Citrus Reservoir and Pump Station Floating Cover System

Project. Staff provided a final update on the Citrus Reservoir and Pump Station Project (Project), which was completed in June 2019. The reservoir has been in continuous service since June 2017. On November 6, 2018, the Board of Directors authorized procurement of the Rhombo Hexoshield floating cover system to comply with mitigation requirements for the Citrus Reservoir provided in the Wildlife Hazard Management Plan (WHMP) prepared and adopted by the California Department of Water Resources (DWR) as part of the East Branch Extension (EBX) Phase 2 Project. Since then, over 3.7 million balls out of a total of 7.5 million balls have been deployed in the reservoir. Based on the recent biological

monitoring events, the floating cover, even at less than half completed, has been very effective deterring migratory birds from using the reservoir.

In November 2019, there was evidence that some of the rhomboidal shaped balls have developed holes, sunk and subsequently been pulled into the reservoir pumps. The Citrus Pump Station was then shut down for investigations. Through the collaboration with DWR staff, corrective measures have since been identified and implemented. Due to a relatively-low State Water Project allocation so far for this year, deliveries to our customers on the east end of the District's service area and to San Geronio Pass Water Agency (SGPWA) have been successfully met through the Greenspot Pump Station without being impacted by the shutdown of the Citrus Pump Station.

On December 17, 2019, the Board approved a budget of \$280,000 related to the Project. Following the Board approval of the budget in December 2019, Valley District staff, in cooperation with DWR staff, completed the dewatering of the reservoir using the Citrus Pump Station and rental dewatering pumps in March 2020. DWR staff completed the deployment of a floating debris boom and net system designed to keep the rhomboidal balls from entering the Citrus Pump Station intake gallery. District staff also worked with DWR staff to complete the design of pump screens at each pump intake column to protect against any future intake of debris or balls that may plug up the pumps. DWR staff completed installation of the pump screens in May 2020 and began filling the reservoir after pump columns were inspected and maintenance performed. No significant issues were found during the inspection. The Citrus Pump Station was returned to normal operation in June 2020 and has been in continuous operation since.

The total cost for the Project by the District is approximately \$150,000, which will be shared with SGPWA (22.6%).

Action Item(s): Receive and File.

5.3 Consider a Cooperative Agreement with Huerta Del Valle and a Consulting Agreement with WSC to Conduct Water Supply Studies at the Louis Robidoux Parkland and Jensen Alvarado Historic Ranch.

Staff provided a presentation asking the Board to consider a consulting agreement with WSC to conduct water supply studies at both the Louis Robidoux Parkland (Parkland) and Jensen Alvarado Historic Ranch (Historic Ranch). These studies are intended to evaluate water demand for pond restoration at the Parkland and seasonal augmentation of flows into Sunnyslope Creek along with farming by Huerta Del Valle at the Parkland and Historic Ranch. Once water demand is determined, WSC will evaluate the existing condition of existing infrastructure like the Jurupa Ditch and potential well capacity in the area. Water quality will also be evaluated for farming and habitat restoration purposes. The studies will result in a report that provides recommendations for reliable and cost-effective options to provide adequate water supply for the determined demand.

The total cost for these studies and reporting is \$115,350. Staff also asked the Board to consider a cooperative agreement with Huerta Del Valle that would result in Huerta Del Valle providing \$50,000 towards these studies. The results of the studies provide benefit to the HCP Conservation Strategy so the HCP Partners will reimburse Valley District 60% of the remaining cost. The final cost to Valley District for these studies is approximately \$26,140.

Action Item(s): Forward this item to the full Board for consideration.

5.4 Consider a Consulting and Cooperative Agreement to Obtain and Process Aerial Imagery and LiDAR in the San Bernardino National Forest.

Staff provided a presentation asking the Board to consider two agreements. The first is a consulting agreement with Digital Mapping Inc (DMI) to obtain and process aerial imagery and LiDAR in the San Bernardino National Forest. This data will ultimately support many different types of analysis related to the Upper Santa Ana River Habitat Conservation Plan and others being scoped with staff from the San Bernardino National Forest to restore and protect the headwaters of streams that provide great value to the Valley District mission, its customers, and the public.

The second agreement is a cooperative agreement with the Inland Empire Resource Conservation District (IERCD) that will solidify our two agencies commitment to co-fund this effort. IERCD would reimburse Valley District \$96,000 of the \$179,208.41 total cost.

After reimbursement by the HCP Partners the final cost to Valley District is expected to total \$33,283.36.

Action Item(s): Forward this item to the full Board for consideration.

6. Future Business:

None discussed.

Staff Recommendation

Receive and File



DATE: September 1, 2020
TO: Board of Directors
FROM: Staff
SUBJECT: Summary of August 13, 2020 Board of Directors Workshop – Policy

The Policy Workshop convened on August 13, 2020, via Zoom teleconference. Director Longville chaired the meeting; President Harrison and Directors Hayes, Kielhold, and Navarro participated in the Workshop. Heather Dyer, Cindy Saks and Melissa Zoba of staff, participated in the workshop. Chris Austin from Maven’s Notebook and Richard Babbe from PFM Asset Management participated as well.

3. Summary of Previous Meeting

The meeting notes from the July 9, 2020, Board of Directors Workshop – Policy were reviewed with no additions or changes to the meeting minutes.

4.1 Presentation by Ms. Chris Austin, Author of Maven's Notebook

Chris Austin, the author and founder of Maven’s Notebook, made a presentation about the Maven’s Notebook, Groundwater Exchange, and California Water Library websites, and the abundance of resources and information that can be found on these sites. Ms. Austin thanked the board for the continued financial support of Maven’s Notebook and encouraged board members to subscribe to Maven’s Notebook to receive current water news daily.

Action Item(s): None

5.1 Quarterly Investment Portfolio Update from PFM Asset Management and Review of the District's Investment Policy

Cindy Saks introduced the District's financial advisor Richard Babbe from PFM Asset Management who reviewed the quarterly investment portfolio activity. Mr. Babbe reported on current interest rates, earnings and trends, current diversity of the District's portfolio, and trades made during the quarter.

The committee also reviewed and discussed the District's investment policy as required by the California Government Code. Cindy Saks reviewed some minor changes to update the policy to reflect current employee job titles for board consideration. The board accepted the minor changes that enhance the Policy's clarity and consistency.

Action Item(s): None.

5.2 Discuss State and Federal Legislative Update

Staff provided the Directors with an update on the State and Federal Legislative processes. Staff apprised the Directors of several bills that are still pending in both the Assembly and the Senate. These include AB 2560, AB 2800, SB 414, SB 625, and SB 1386. Director Longville requested the Gualco Group track Senate 1389 (Allen) regarding Public Investment Authority.

Action Item(s): None.

5.3 Discuss Opportunity to Sponsor the Public Policy Institute of California

Staff reported on a variety of opportunities and levels of sponsorships available to support the Public Policy Institute of California. The board inquired as to the value received from the sponsorship. After discussion staff was directed to bring additional information to a future workshop with a staff recommendation on the level of sponsorship and information on project support research opportunities for both Public Policy Institute and other agencies.

Action Item(s): Staff will provide additional information on recommendations on sponsorships with Public Policy Institute and other agencies in an upcoming workshop.

5.4 Discuss Board Strategic Planning Retreat

Staff briefly reviewed the background of the District's strategic plan process and presented venue options for the board strategic plan retreat planned for October 21 and 22, 2020. After reviewing all venues surveyed and included in the workshop packet, the UCLA Arrowhead Conference Center was selected by the board due to being an all-inclusive venue with hotel rooms, meeting rooms and food service included at the same location. Director Longville requested that all staff and directors be tested for COVID-19 and receive a negative test confirmation prior to being able to attend the retreat.

Action Item(s): Staff will make reservations at the UCLA Arrowhead Conference Center and arrangements for staff and directors to obtain COVID-19 testing and results prior to the retreat.

6. Future Business – None noted

7. Adjournment

Staff Recommendation

Receive and file.



DATE: September 1, 2020

TO: Board of Directors

SUBJECT: List of Announcements

- A. September 3, 2020 – Board of Directors’ Workshop - Resources, 2:00p.m. by teleconference
- B. September 8, 2020 – Board of Directors’ Workshop – Engineering, 2:00p.m. by teleconference
- C. September 10, 2020 – Board of Directors’ Workshop – Policy, 2:00p.m. by teleconference
- D. September 15, 2020 – SAWPA Commission Meeting, 9:30 a.m. by teleconference
- E. September 15, 2020 – Regular Board Meeting, 2:00p.m. by teleconference