



## The meeting teleconference will begin shortly

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# Call to Order

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Board of Directors Workshop - Engineering  
Tuesday, December 14, 2021

*Chairperson – Director Harrison*  
*Vice-Chair – Director Hayes*

# Introductions

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*Following the introduction of Directors and District staff, participants may use this time to state their name and agency/affiliation in order to be included in the formal record of attendees.*

# Public Comment

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Any person may address the Board on matters within its jurisdiction.

- *Please use the chat feature on the Zoom toolbar or digitally raise your hand to let the moderator know you would like to make a comment.*



# Summary of Previous Meeting (Pg. 3)

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Board of Directors Workshop – Engineering – November 9,  
2021



# Presentation Item 4.1

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**John Mura** – Chief Executive Officer/General Manager – East Valley Water District

Update on the Sterling Natural Resource Center



East Valley Water District  
*Sterling Natural Resource Center Update*

December 14, 2021



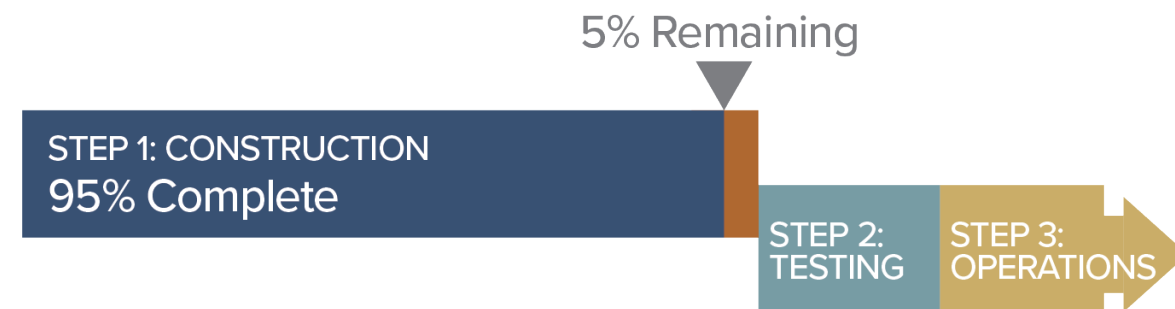
## COMING TOGETHER AS A REGION FOR A COMMON GOAL

- 2016 Valley District Regional Recycled Water Study
  - *Highlighted the importance of new supplies and the sense of urgency*
  - *SNRC was highest ranking project in the study based on initial flows*
- Region needs to develop a drought-proof water supply, recognizing it is not the least expensive today.
  - *Reinforced by 0% allocation for 2022*
- 2x2x2 Committee working to address this effort collaboratively since 2015
  - *Valley District*
  - *East Valley Water District*
  - *San Bernardino Water Department*

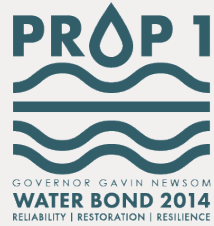


## STERLING NATURAL RESOURCE CENTER

- Facility will initially treat 6 million gallons of water per day and recharge the local groundwater basin
- Team Sterling construction
  - *Treatment Plant: 97%*
  - *Administrative Center: 98%*
  - *Pipeline/Recharge:*
    - Pipeline Installation from Sterling to Palm: 99%
    - Pipeline Installation from Palm to Weaver Basins: 0%
  - *Facility testing will be required before beginning operations*
  - *Operations anticipated to begin in 2022*



## SNRC FUNDED IN PART BY:



Funding for this Sterling Natural Resource Center project has been provided in full or in part by the Proposition 1 – the Water Quality, Supply, and Infrastructure Improvement Act of 2021 and the Clean Water State Revolving Fund through an agreement with the State Water Resources Control Board. California’s Clean Water State Revolving Fund is capitalized through a variety of funding sources, including grants from the United States Environmental Protection Agency and state bond proceeds.

The Urban Greening Program is part of California Climate Investments, a statewide program that puts billions of cap-and-trade dollars to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment – particularly the disadvantaged communities. The cap-and-trade program also creates a financial incentive for industries to invest in clean technologies and develop innovative ways to reduce pollution. California Climate Investment projects include affordable housing, renewable energy, public transportation, zero emission vehicles, environmental restoration, more sustainable agriculture, recycling and much more. At least 35 percent of these investments are made in disadvantaged and low-income communities. For more information, visit California Climate Investments.

## PROGRESS UPDATE

- Operations
  - *Initial testing in progress*
  - *Installation of large covers*
  - *Preparing for connection of network system*
- Administration
  - *Interior curb and gutter in place*
  - *Preparing for concrete, exterior fence line, and landscaping*
- Recharge Water
  - *Installing pipeline*
  - *Preparing for construction of Weaver Basins*









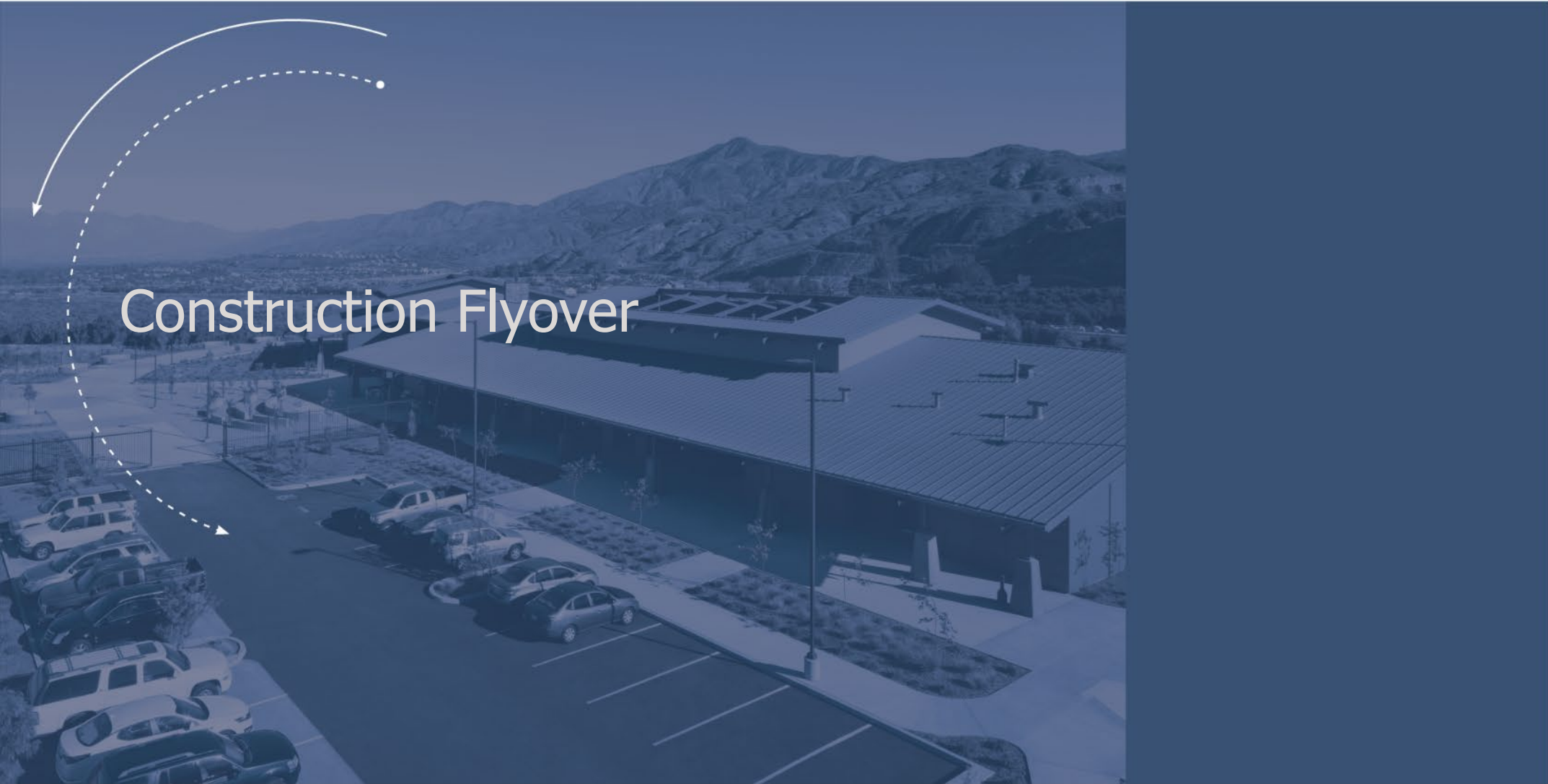
# ADMINISTRATION BUILDING



EAST VALLEY WATER DISTRICT







# Construction Flyover

SNRC

# CONSTRUCTION UPDATE

FALL 2022





## JOINT PROJECTS TO MAXIMIZE ECONOMIES OF SCALE

- Best partnerships take advantage of each other's strengths
  - *Collectively, we have been able to do things that we couldn't do by ourselves*
- Maximize regional resources
- Working together to reach solutions and provide multiple benefits

## DYNAMIC PARTNERSHIP

Design  
Pipeline to  
Redlands  
Basin

Design  
Pipeline to  
City Creek

Design of  
Pipeline and  
Weaver  
Basins

Construction  
Costs of  
Pipeline and  
Weaver  
Basins

## LOOKING FORWARD TO 2022

- January
  - *Tentative: Valley District/ East Valley consideration of Reimbursement Agreement*
- February
  - *Groundbreaking for the Weaver Basins (Pending Updated Reimbursement Agreement)*
- March
  - *Construction of treatment plant and administrative center 100% completed*
- May 14
  - *SNRC Grand Opening Event*
- July
  - *Completion of the Weaver Basins/Conveyance Pipeline*
  - *Testing and commissioning*
  - *Groundwater recharge begins*



EAST VALLEY  
WATER DISTRICT

# Discussion

# Discussion Item 5.1 (Pg. 12)

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**Wen B. Huang, PE, MS** – Deputy General Manager/Chief Engineer

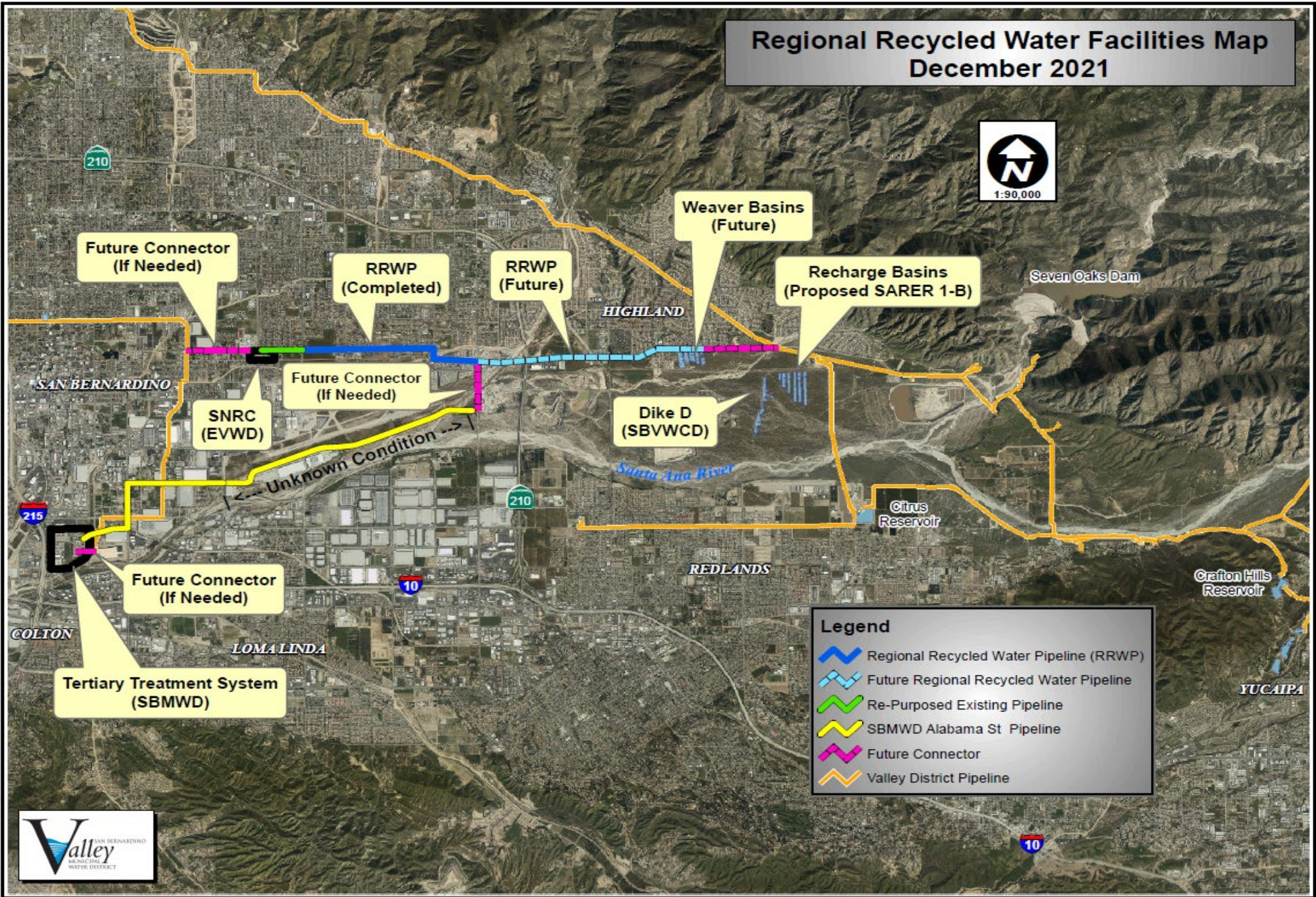
Consider Third Amendment to the Reimbursement Agreement with East Valley Water District for Construction of the Regional Recycled Water Facilities

## **Staff Recommendation**

Forward the Third Amendment to the Reimbursement Agreement with EVWD for construction of the Regional Recycled Water Facilities to the next regular Board of Directors meeting for consideration.



# Regional Recycled Water Facilities Map December 2021



**Legend**

- Regional Recycled Water Pipeline (RRWP)
- Future Regional Recycled Water Pipeline
- Re-Purposed Existing Pipeline
- SBMWD Alabama St Pipeline
- Future Connector
- Valley District Pipeline





# Summary of Reimbursement Agreements

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## **Original Reimbursement Agreement**

- Executed in January 2019, \$453,125
- Design of the RRWP from SNRC to Redlands Basins and to City Creek

## **Amendment No. 1**

- Executed in November 2019, \$16,428,342
- Construction of RRWP from SNRC to Redlands Basins
- Design Modification for City Creek location from Levee to Street ROW

## **Amendment No. 2**

- Executed in April 2021; \$1,359,708
- Design of the RRWP to Weaver Basins, Design of Weaver Basins, and Assessment for Alabama St. Pipeline

## **All work performed by EVWD's Contractor**

- Potential Cost Savings on Mobilization/Demobilization Costs and Economy of Scale
- Continuity and Efficiency



# Constr. Cost - RRWP and Weaver Basins

SUMMARY OF COSTS				Direct Costs
New Discharge Basin, Weaver Site			\$	15,782,788
Extend Pipeline to New Weaver Basin			\$	13,172,239
<b>Subtotal Direct Costs</b>			<b>\$</b>	<b>28,955,027</b>
	Bond	1%	\$	330,869
	Markup	10%	\$	3,040,989
	Insurances	LSUM	\$	1,123,995
	Owner Control Contingency	10%	\$	3,345,088
	Subtotal Indirect Costs & Contingency		\$	7,840,941
	Geotechnical Costs during Construction		\$	474,730
<b>Total Project Cost</b>			<b>\$</b>	<b>37,638,658</b>

*Similar to the approach taken by the Board previously, an amendment to the Reimbursement with EVWD is recommended for the construction of the Weaver Basins and RRWP.*





# Cost Summary for Phase I RRWS

Agreement	Scope	Budget
Original Reimbursement	Design of RRWP to Redlands Basins and City Creek	\$453,125
Amendment No. 1	Construction of RRWP to Redlands Basins and Design Refinement	\$16,428,342
Amendment No. 2	Design of Weaver Basins, RRWP to Weaver, and Condition Assessment	\$1,359,708
<b>Amendment No. 3</b>	<b>Construction of Weaver Basins and RRWP to Weaver (considered today)</b>	<b>\$37,650,000</b>
	Valley District's Site Acquisition for Weaver Basins (32 ac/59 ac)	\$3,800,000
<i>Potential Future Amendment(s) or Expenses</i>	<i>Design and Construction of RRWP from TTS</i>	<i>TBD</i>
	Overall Budget to-date:	\$59,691,175

Based on 10 MGD a day recharge for 50 years (expected service life) with the budget to-date and land acquisition at \$60M, the average facility cost of recharge of the recycled water per ac-ft is approx. \$110/AF.

# Director Comments and Discussion

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**Paul Kielhold**  
President



**June Hayes**  
Vice President



**T. Milford  
Harrison**  
Treasurer



**Gil J. Botello**  
Director



**Susan Longville**  
Director

## Staff Recommendation

Forward the Third Amendment to the Reimbursement Agreement with EVWD for construction of the Regional Recycled Water Facilities to the next regular Board of Directors meeting for consideration.

# Discussion Item 5.2 (Pg. 26)

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**Heather Dyer, MS, MBA** – Chief Executive Officer/General Manager

Consider Creating a Joint Powers Authority in Cooperation with the Yucaipa Valley Water District

**Staff Recommendation**

Consider creating the Yucaipa Valley Water District Financing Authority (Financing Authority) in cooperation with the Yucaipa Valley Water District and if desired, direct staff to engage House Counsel to review the JPA agreement and place a resolution on a future Board of Directors meeting for consideration.

# Director Comments and Discussion

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President



**June Hayes**  
Vice President



**T. Milford  
Harrison**  
Treasurer



**Gil J. Botello**  
Director



**Susan Longville**  
Director

## Staff Recommendation

Consider creating the Yucaipa Valley Water District Financing Authority (Financing Authority) in cooperation with the Yucaipa Valley Water District and if desired, direct staff to engage House Counsel to review the JPA agreement and place a resolution on a future Board of Directors meeting for consideration.



# Discussion Item 5.3 (Pg. 46)

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**Wen B. Huang, PE, MS** – Deputy General Manager/Chief Engineer

**Michael R. Esquer** – Senior Project Manager

**Aaron Jones, EIT** – Associate Engineer

## Consider Tunneling Feasibility Study for Foothill Pipeline Crossing at City Creek Project

### **Staff Recommendation**

Staff is recommending the Board of Directors direct staff to place an item on a future Board of Directors agenda for consideration that would authorize the CEO/General Manager to execute an agreement with AECOM in the amount of \$435,000 for this scope of work.





Highland Ave

Highland Ave

Tesla Supercharger

Round Table Clubhouse

Bear Springs

330

Foothill Pipeline - City Creek Crossing

Canyon Oaks Park

Summertrail Pl

Boulder Ave



# Background

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- ❑ SBVMWD constructed the 78-inch Foothill Pipeline in 1970s
- ❑ A portion of the existing pipeline that crosses under City Creek was exposed during major storm events, which increased the potential for pipe failure.
- ❑ The US Army Corps of Engineers is planning modifications to City Creek to reduce the channel velocity and scouring depth. However, the timing of such improvements are unknown
- ❑ Thus, Staff is recommending to replace the pipeline beneath City Creek via tunneling, and install a new carrier pipe within a casing at a deeper location to protect it from potential damage and failure.
- ❑ The new pipe will be approximately 700-foot long and 70 to 100 feet deep.
- ❑ Geomorphologic and streambed erosion studies indicate that scouring depths of 15 to 25 feet could occur during major storm events at Foothill Pipeline City Creek Crossing.
- ❑ The new pipeline will need to be below the expected storm scour and under MWDs existing 144-inch diameter Inland Feeder.



# The purpose of the feasibility study is to perform the following:

- ❑ Identify horizontal and vertical alignment alternatives for new pipeline and tunnel
- ❑ Assess the feasibility and risk of applicable tunneling methods
- ❑ Carrier pipe design and installation
- ❑ Tie-in scheme to existing Foothill Pipeline
- ❑ Perform geotechnical evaluation to identify constraints as it relates to tunnel construction
- ❑ Identify groundwater depth and mitigation measures
- ❑ Identify permits and develop a permit acquisition strategy
- ❑ Develop preliminary construction cost estimates and project schedule through construction
- ❑ Present recommendations for applicable installation methods and preferred alignment, profile, and method in a preliminary design report.



# Proposals

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Firm	Cost
AECOM	\$435,000
Firm 2	\$464,000
Firm 3	\$553,868
Firm 4	\$883,135
Firm 5	\$1,283,617

# Director Comments and Discussion

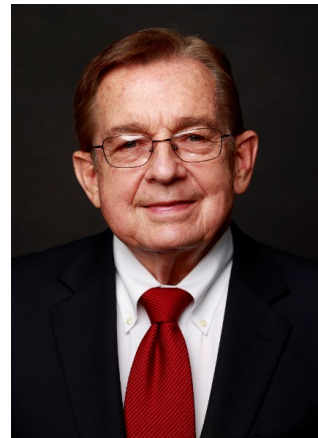
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President



**June Hayes**  
Vice President



**T. Milford  
Harrison**  
Treasurer



**Gil J. Botello**  
Director



**Susan Longville**  
Director

## Staff Recommendation

Staff is recommending the Board of Directors direct staff to place an item on a future Board of Directors agenda for consideration that would authorize the CEO/General Manager to execute an agreement with AECOM in the amount of \$435,000 for this scope of work.

# Discussion Item 5.4 (Pg. 177)

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**Joanna Gibson, MS** – Executive Director Upper SAR Habitat Conservation Program

Consider ICF contract amendment and budget augmentation for Upper SAR Habitat Conservation Plan

## **Staff Recommendation**

Staff recommends the Board direct staff to place this budget augmentation and amendment to the ICF contract on the next regular Board of Director's meeting agenda for consideration.

# ICF: Contract Amendment and Budget Augmentation

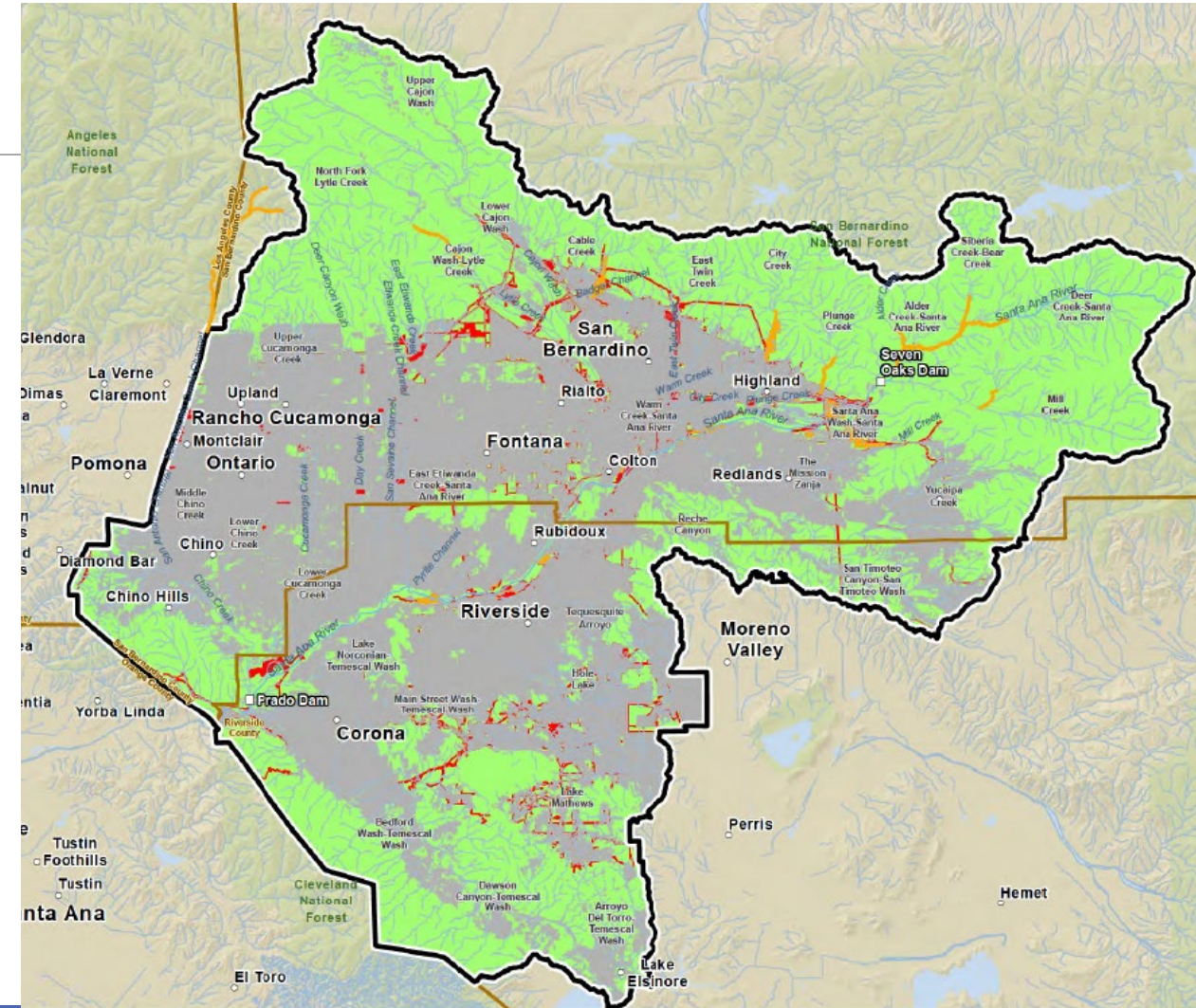
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- **14<sup>th</sup> Amendment to ICF Upper SAR HCP Contract**
  - Complete DEIR response to comments, finalize FEIR
  - Address changes to and finalize HCP
  - Carry changes forward into NEPA document
  
- **Budget Augmentation**
  - \$199,973



# Upper SAR HCP

- 11 water agencies
- >100 Projects over 50 years:
  - Water Reuse
  - Groundwater Recharge
  - Wells and Water Conveyance Infrastructure
  - Solar Energy Development
  - Existing Facility Routine Operations and Maintenance
  - Habitat Improvement, Management, and Monitoring
- 12 listed species



# Habitat Conservation Plans

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- **Balance between impacts and conservation**
  - **Primary objective: conserve species and ecosystems while streamlining permitting for development projects**
- **Section 10 of ESA – Habitat Conservation Plans (HCP)**
  - Planning documents
  - Required as part of an application for an incidental take permit
  - Assess impacts on protected species
  - Measures to minimize and mitigate for impacts
  - Analysis of alternatives not chosen
  - How the HCP will be funded
  - Measures to monitor and manage species and habitats
- **Regional HCPs**
  - Anticipate, prevent, resolve controversies and conflict of project-by-project permitting
  - Address issues on large scale, over long-term.

# Upper SAR HCP

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- Take assessments / impact analyses
  - Geographic Information System (GIS) – species distribution modeling
  - Hydrologists/Fluvial Geomorphologists
  - Biologists
- Conservation Strategy
  - Conservation Planners
  - Finance – funding assurances
  - Habitat Restoration
  - Biologists
- HCP Implementation
- CEQA and NEPA (Cultural, GHG, Hydrology, Transportation, etc.)
- Permitting: USFWS, CDFW, USACE, RWQCB
- **VERY SPECIFIC EXPERIENCE/SKILLSET**



CONTRACT AMENDMENT	DATE	AMOUNT	PURPOSE	HCP PHASE	GRANT FUNDING RECEIVED
	9/27/2013	\$ 179,000	Feasibility Study for Regional Habitat Conservation Plan	Planning	
1	4/30/2014	\$ 1,975,247	Develop Regional Habitat Conservation Plan	Planning	\$ 635,345
2	1/28/2015	\$ -28,000	Correction of Contract Error		
3	8/18/2015	\$ 30,625	<b>Add City of Rialto</b>	<b>Planning</b>	
4	5/17/2016	\$ 1,336,270	Add Tributaries Restoration Design & Planning	Mitigation	\$4,029,395
5	7/19/2016	\$ 110,898	<b>Add OCWD and Metropolitan</b>	<b>Planning</b>	
6	2/21/2017	\$ 207,892	<b>Budget Augmentation for Additional Hydrology Modeling and Impacts Analyses for Covered Activities</b>	<b>Planning</b>	
7	6/20/2017	\$ 96,447	Add Hidden Valley Wetlands Restoration Design & Planning	Mitigation	
8	1/16/2018	\$ 429,801	Add CEQA and Permitting for Tributaries Restoration	Mitigation	
9	2/20/2018	\$ 0	No Cost Contract Extension		
10	6/19/2018	\$ 593,697	<b>Add Corps and CDFW Programmatic Permits, Lake Evans Conceptual Design &amp; Planning</b>	Planning/Mitigation	
11	9/18/2018	\$ 246,054	<b>Budget Augmentation for Expanded HCP Scope and CEQA Analysis</b>	<b>Planning</b>	
12	4/2/2019	\$ 3,273,430	Add Tributaries Restoration Advanced Designs and Construction Management	Mitigation	
13	10/6/2020	\$ 926,362	Add Lake Evans Restoration Advanced Design, CEQA, and Permitting	Mitigation	\$2,000,000
14	10/14/2021	\$ 199,973	<b>Budget Augmentation for Final HCP, Final EIR, and NEPA document (Proposed)</b>	<b>Planning</b>	

**NOTES:**

\*Budget Augmentations Needed for HCP Planning Work from 2014 to Present = \$653,919 (2015\*, 2016\*, 2017, 2018, 2021)

\*Total HCP Planning Costs = \$3,356,342 including initial Feasibility Study (\$2,720,997 after application of \$635,345 grant)

\*Total Contract 2013 to present = \$9,577,694



# ICF Upper SAR HCP Contract Amendment & Budget Augmentation

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1. Project/Program Management
2. Additional Funding Analysis Support
3. Ongoing Public Outreach Support
4. Prepare Final HCP
5. Prepare Final EIR
6. Additional NEPA Support
7. Updates to the CAMMP Portal website: [uppersarhcp.com](http://uppersarhcp.com)
8. Contingency - Additional Hydrology/Analysis, as needed and approved by Valley District



# ICF Upper SAR HCP Contract Amendment & Budget Augmentation

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## Fiscal Impact:

- \$199,973
- Valley District (40%): \$ 79,989
- HCP Partners (60%): \$119,984
  
- Approved FY 2021/2022 budget:
  - Environmental/HCP  
Implementation, Line Item 6780

## ICF Planning:

- \$2,720,997 (after Section 6 grant: \$635,345)
- Valley District (40%): \$1,088,399
- HCP Partners (60%): \$1,632,598

## ICF Implementation Totals:

- \$6,221,352
- Grants: \$6,029,395 (Prop 84, Prop 1)

# HCP Benefits

Increase regional water supply reliability

Local cost savings: \$945M

Permanently conserve  $\geq 1,350$  acres

Manage conservation lands, & translocations in perpetuity. Provide dedicated stream flow.

Capture & Recharge of ~80,000 AFY

Creation of ~85 jobs annually

Protect 22 native animals and plants

Protect 12 endangered /threatened species

# Director Comments and Discussion

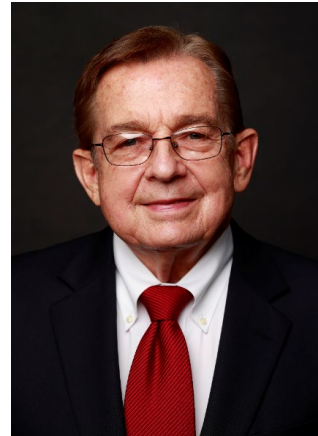
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**Paul Kielhold**  
President



**June Hayes**  
Vice President



**T. Milford  
Harrison**  
Treasurer



**Gil J. Botello**  
Director



**Susan Longville**  
Director

## Staff Recommendation

Staff recommends the Board direct staff to place this budget augmentation and amendment to the ICF contract on the next regular Board of Director's meeting agenda for consideration.

# Discussion Item 5.5 (Pg. 193)

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**Heather Dyer, MS, MBA** – Chief Executive Officer/General Manager

Consider Recruitment of Principal Engineer and Addition of Lead Water Systems Operator Position

## **Staff Recommendation**

- 1) Consider directing staff to begin recruitment for the previously approved Principal Engineer position.
- 2) Consider request to add another Lead Water Systems Operator position to the organizational chart and salary schedule and if so desired, direct staff to place an updated organizational chart and salary schedule on a future Board meeting for consideration.



# Director Comments and Discussion

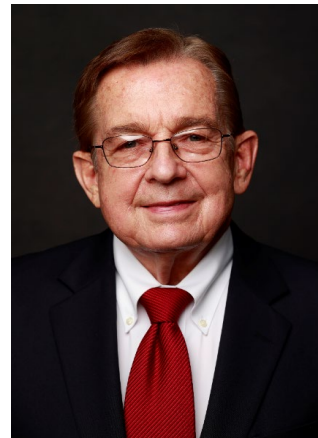
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President



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Harrison**  
Treasurer



**Gil J. Botello**  
Director



**Susan Longville**  
Director

## Staff Recommendation

- 1) Consider directing staff to begin recruitment for the previously approved Principal Engineer position.
- 2) Consider request to add another Lead Water Systems Operator position to the organizational chart and salary schedule and if so desired, direct staff to place an updated organizational chart and salary schedule on a future Board meeting for consideration.

# Discussion Item 5.6 (Pg. 197)

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**Melissa Zoba, MBA, MPA** – Chief Information Officer  
**Dan Borell, GISP** – Manager of Geospatial Services

Consider Entering Into an Agreement for Professional Consulting Services for the Redistricting of Division Boundaries

## **Staff Recommendation**

Staff recommends that the Board forward the consulting services agreement with Redistricting Insights in the amount of \$30,000 to the next regular meeting of the Board of Directors for consideration.

# Background

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- **October 12<sup>th</sup> Engineering Workshop** – Board directed staff to seek professional consulting services for the redistricting of division boundaries
- **November 5<sup>th</sup>** - RFP for redistricting services was released.
- **November 30<sup>th</sup>** - Two proposals were received

# Proposals

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	Redistricting Insights	Consultant 2
Project Proposal Fee	<b>\$30,000</b>	<b>\$40,000</b>

## Proposal Review/Consultant Interview

- Experience
- Approach
- Timeline
- Project Team
- Optional Services – *Multi-lingual translation, paid advertising, online mapping tools, website development*

# Redistricting Insights

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- **Approach**
  - Overview of process to Board – Redistricting 101
  - Create dataset used for mapping
  - Community engagement
  - Develop draft maps
  - Finalize maps and assist with submittal to Registrar of Voters
- **Timeline** – Submittals due April 17, 2022
- **Project Team** – Legal counsel, demographer, data scientist, and communications professionals
- **Current Redistricting Clients** – County of San Bernardino, Beaumont-Cherry Valley W/D



# Director Comments and Discussion

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**Paul Kielhold**  
President



**June Hayes**  
Vice President



**T. Milford  
Harrison**  
Treasurer



**Gil J. Botello**  
Director



**Susan Longville**  
Director

## Staff Recommendation

Staff recommends that the Board forward the consulting services agreement with Redistricting Insights in the amount of \$30,000 to the next regular meeting of the Board of Directors for Consideration.

# Future Business

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# Adjournment

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