



# One Water One Watershed Plan Update 2018

**Mike Antos, Ph.D.**  
**Watershed Manager**

SAWPA Commission Meeting  
January 17, 2017



Today I've borrowed pics from the Inland Empire Waterkeeper, a stakeholder in the watershed

Thank you!



**INLAND EMPIRE WATERKEEPER.**  
*Advocacy • Education • Research • Restoration • Enforcement*



# OWOW Business Line - Critical Success Factors

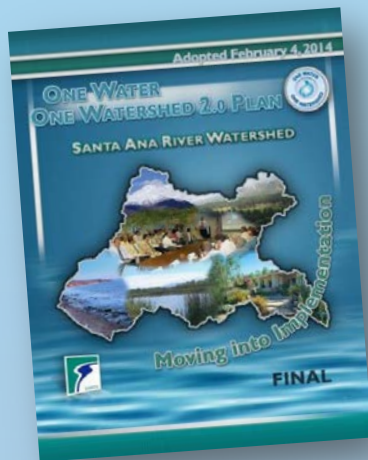
Active  
Participation  
of a diverse  
group of  
stakeholders

## 2.2 Stakeholder Involvement and Outreach



# OWOW Business Line - Critical Success Factors

Successful implementation of an integrated regional water resource plan



# SAWPA & OWOW are good governance

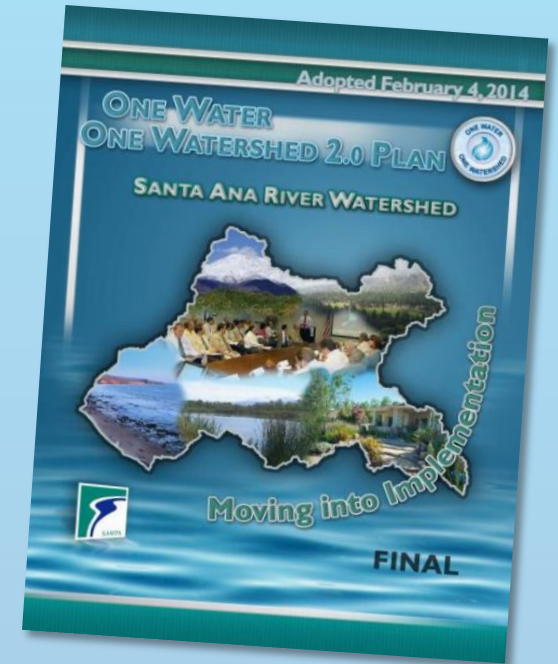


- Benefits from:
  - Watershed
  - Joint-powers-agency
  - Funding region
  - Regional Water Management Group (IRWM)



# OWOW Plan Update 2018

- OWOW 2.0 Plan (2014)
  - Compliant with 2012 IRWM Plan Standards
- NEW 2016 IRWM Plan Standards
  - Three large and several small policy changes
- **Compliance with 2016 Standards required to be eligible for Proposition 1 Implementation Funding**



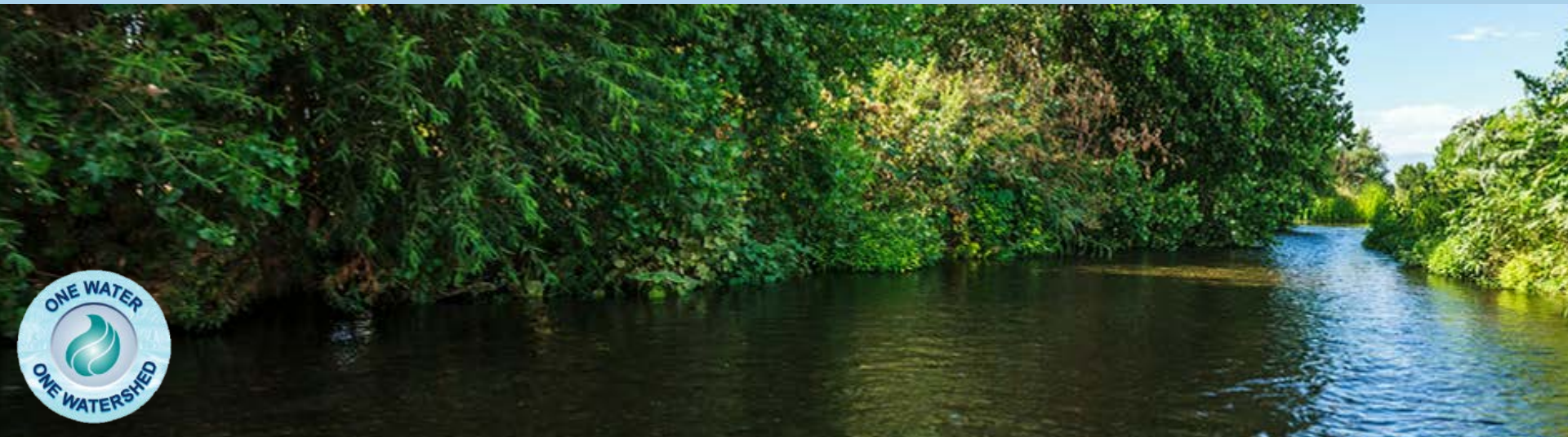
# OWOW Plan Update 2018 Process

- Facilitated by SAWPA Planning staff
- Driven by those who know and care
  - SAWPA, OWOW Steering Committee & Pillars, Stakeholders
- For constituents of the Santa Ana River watershed
- Includes:
  - State of the Watershed Conference
  - Disadvantaged Community Involvement Program



# Update an IRWM Plan

- Water Code §10543 & Government Code §6066
- Require a Public Hearing
  - Conducted to receive public comment
  - Noticed Press Enterprise / Daily News  
December 15 & 22, 2016





# The memo recommends:

1. The Commission conduct a public hearing regarding the preparation of an updated IRWMP.
2. The Commission direct staff to update the OWOW Plan.



# **APPROVAL OF BASIN MONITORING PROGRAM TASK FORCE CONSULTANT**

**Presented by Mark Norton P.E.,  
Water Resources & Planning Manager**

**SAWPA Commission  
January 17, 2017**

# Basin Monitoring Program Task Force

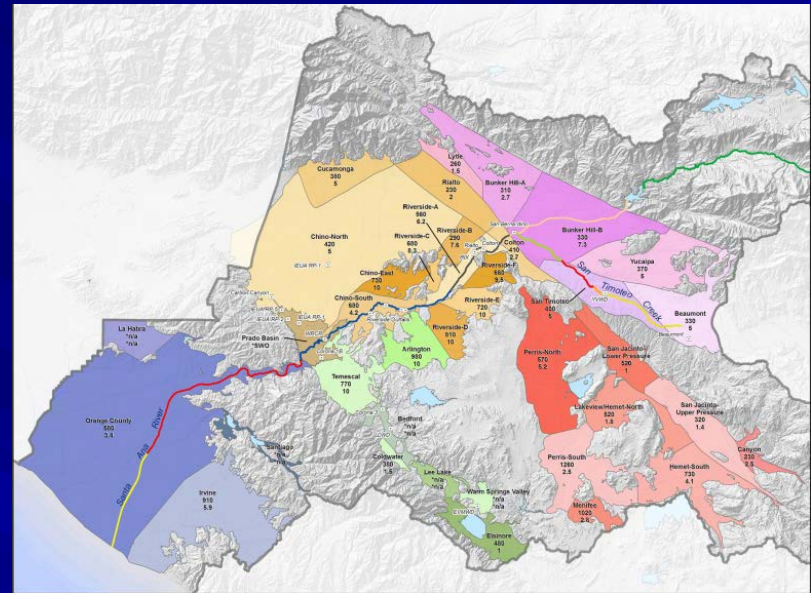
## SAWPA authorized agreement in 2004

### Benefits

- Regional task force support in reducing regulatory compliance for 20 agencies by \$10-\$99 million in avoided WWTP desalting
- Regional Board views Task Force as a clearinghouse for all TDS and nitrate related issues in watershed which resolve conflicts and allow for efficiencies

### Description

- Conducts analysis of TDS and nitrate in watershed groundwater every three years to identify trends
- Annual Santa Ana River (SAR) water quality report
- SAR Wasteload Allocation to confirm compliance of river discharges with ground water quality objectives



# Basin Monitoring Program Task Force

<b>Eastern Municipal Water District</b>	<b>Chino Basin Watermaster</b>
<b>Inland Empire Utilities Agency</b>	<b>Yucaipa Valley Water District</b>
<b>Orange County Water District</b>	<b>City of Beaumont</b>
<b>City of Riverside</b>	<b>City of Corona</b>
<b>Lee Lake Water District</b>	<b>City of Redlands</b>
<b>Elsinore Valley Municipal Water District</b>	<b>City of Rialto</b>
<b>Irvine Ranch Water District</b>	<b>Jurupa Community Services District</b>
<b>Colton/San Bernardino Regional Tertiary Treatment and Wastewater Reclamation</b>	<b>Western Riverside Co Regional Wastewater Authority</b>
<b>*San Bernardino Valley Municipal Water District</b>	<b>*City of Banning</b>
<b>* San Geronio Pass Water Agency</b>	<b>* Beaumont Cherry Valley Water District</b>

- Four new agencies added in 2015
- Santa Ana Regional Board also a non-funding task force agency

# Critical Success Factors

- SAWPA has a strong reputation as a watershed-wide, knowledgeable, neutral and trusted facilitator, leader, and administrator of contracted activities.
- Goals, scope, costs, resources, timelines, and the contract term are approved by the Commission before executing an agreement to participate in a roundtable group.
- Report and use results of roundtable's work, leverage information and involvement for the benefit of SAWPA, its members, and other stakeholders.

# Current work - Deliverables

- Conducting triennial ambient groundwater quality update in 2016-17 – due by July 2017
- Implementing Basin Plan Amendments for past SAR Wasteload Allocation – Mar. 2017
- Drought Policy development with So Cal Salinity Coalition – Feb. 2017
- Kicking off update to the next SAR Wasteload Allocation with new OC model reach



# Santa Ana River Wasteload Allocation Update – Consultant Proposal Review

- Consultant Team recommended based on responses to a competitive RFP
- Three proposals were received
  - **Geoscience** **\$265,100**
  - **Wildermuth Environmental** **\$556,150**
  - **Daniel Stephens** **\$731,656**
- Interviews conducted with all three firms using defined qualifications based criteria
- Interview team composed of three Task Force agencies across watershed, Reg Bd staff and SAWPA staff
- Unanimous recommendation to select Geoscience Inc.
- Geoscience proposal modified to \$249,800 after negotiations with Task Force and SAWPA staff



# Recommendation

That the Commission approve:

- Agreement for Services and Task Order GEOS374-01 with Geoscience for the amount not-to-exceed \$249,800 to prepare the Santa Ana River Waste Load Allocation Update



# SAWPA

A blue fountain pen with a silver nib is positioned diagonally across the center of the image. The pen is resting on a document that features a line graph with a blue line. The graph has a y-axis with values 0000, 0050, and 0000. The x-axis has labels for months: Feb., Apr., Jun., and Aug. A magnifying glass is visible on the right side of the image, focusing on the graph. The background is a light blue gradient.

**FYE 2018 and 2019 Budget  
Goals and Objectives**

# Agenda

- 1 Brine Line Goals and Objectives
- 2 OWOW Goals and Objectives
- 3 Roundtable Goals and Objectives
- 4 Agency Operations Goals and Objectives



# Brine Line Goals & Objectives - Operations

- Marketing – Update plan and implement program using new tools (brochure, video, streamlined/coordinated web sites)
- Develop capacity lease & loan options for Commission consideration
- Continue O&M Programs
  - Line cleaning and inspection
  - Solids control
  - Scale management
  - A/V valves – frequent maintenance, containment, alarm

A close-up photograph of a silver fountain pen with a blue nib, resting on a document. The document features a line graph with a red line and some text, including the word 'MAY' and 'UR'. A magnifying glass is visible in the upper right corner, focusing on the document. The background is a dark blue gradient.

# Brine Line Goals & Objectives - Operations

- Make adjustments for new dischargers and transfer of Chino Development Corporation flow to RP-5
- Continue to maintain/grow partnership with OCSD
  - Joint Operations Committee
- Update financial model and recommend rates
- Complete and implement new business plan
- Sanitary Sewer Management Plan – implement requirements
- Pretreatment – program revisions per audit findings, program efficiencies
- Safety - update/refine safety plan

A close-up photograph of a silver fountain pen nib resting on a document. The document features a line graph with a red line and some handwritten text in blue ink. The background is a soft, out-of-focus blue.

# Brine Line Goals & Objectives - Operations

- Increase in-house field staff capability/equipment reducing reliance on contractors, increasing efficiency, reducing costs
- Future planning for brine disposal from the watershed
  - Develop options for pipeline capacity ownership versus needs
  - Evaluate impacts of technology (improved RO efficiency, zero liquid discharge, indirect potable reuse)
  - Evaluate alternatives
- Develop and implement plan for remote flow monitoring system



# Brine Line Goals & Objectives - Capital Projects

- Reach V Capital Repairs
  - Complete construction
  - Successfully resolve litigation
- Continue capital repairs based on system wide pipe and access structure inspections
- Investigate and repair pipe invert corrosion, Reach IV-D
- Coordinate with Corps on new Alcoa Dike impacts
- Rock removal in SAR near abandoned SARI (Orange County)
  - OCSD project, SAWPA pays 76%



# OWOW Goals & Objectives

- Fund 373 OWOW Plan
- Fund 370-01 General Basin Planning
- Fund 370-02 USBR Partnership Studies
- Fund 397 Water Energy Grant (WECAN)
- Fund 398 Proposition 1 – Disadvantaged Communities Involvement Program
- Fund 130–145 Proposition 84 - Grant Administration
- Fund 504-301 Proposition 84 - Drought Round Capital Projects
  - PA22 Committee
- Fund 504-401 Proposition 84 - 2015 Round SARCCUP
  - PA23 Committee



# Fund 373 OWOW Plan

Project Manager: Mike Antos

Funding Source: Member Agency Contributions and Proposition 1 - IRWM Planning Grant

- Support OWOW process
  - Steering Committee meetings (6)
  - Pillar meetings (6)
- Complete the OWOW Plan Update 2018
- Administer successful Call for Projects in response to Proposition 1 - IRWM Grant release (FYE 2019)





# Fund 370-01 General Basin Planning

Project Manager: Mark Norton

Funding Source: Member Agency Contributions

- Conduct planning activities that focus on inter-agency coordination and cooperation, integration within the member agencies and external organizations
- Coordinate with Regional Board staff and attend Regional Board meetings (quarterly)
- Santa Ana River Trail Technical Advisory Committee
- SoCal Salinity Coalition (SCSC)
  - Attend/chair quarterly meetings
  - Manage salt balance evaluation under joint Reclamation, SCSC, MWDSC study
  - Conduct technical analysis of salinity trends through SCSC for So Cal Drought Policy development (FYE 2018)
  - Fold FYE 2018 work into Drought Policy development through Basin Monitoring Program TF and Santa Ana Regional Board (FYE 2019)



# Fund 370-02 USBR Partnership Studies

Project Manager: Mark Norton

Funding Source: Member Agency Contributions, USBR Grant funding

- Coordination and preparation of possible grant funding partnership and regional studies with the US Bureau of Reclamation programs such as WaterSmart and Basin Studies updates



# Fund 397 Water Energy Grant (WECAN)

Project Manager: Mike Antos

Funding Source: DWR Grant and West Valley Water District (USBR WaterSmart Grant)

- Contract Administration of DWR Water Energy Grant (WECAN)
- Implement the Water-Energy Community Action Network Program (WECAN)
  - Retrofit of residential turf in low income homes in the SAR watershed
  - Install water/energy saving devices for residential low income homes in the SAR watershed
- Contract through December 2017, with extension to 2018 due to additional funding from WVWD and Reclamation



# Fund 398 Proposition 1 – IRWM Disadvantaged Communities Involvement Program

Project Manager: Mike Antos

Funding Source: Proposition 1 Grant Funding

- Contract Administration of DWR Proposition 1 - Disadvantaged Community Involvement Program Grant
- Implement the Disadvantaged Communities Involvement Program
  - Initiate “Trust the Tap” campaign
  - Conduct Strengths & Needs Assessment
  - Conduct education and training programs across watershed
  - Provide technical assistance/funding support for selected projects



# Fund 130-145 Proposition 84 – Grant Administration

Project Manager: Nicole Weideman

Funding Source: Proposition 84 Grant Funding

- Continue grant administration for Proposition 84
  - Round 1
  - Round 2
  - Drought Round
  - 2015 Round

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# Fund 504-301 Proposition 84 - Drought Round Projects

Project Manager: Ian Achimore

Funding Source: Proposition 84 Grant Funding

- Administer PA 22 Committee and Advisory Workgroup
  - Monthly Meetings
- Implement Emergency Drought Grant Projects
  - Implement Water Use Efficiency Projects of SARCCUP
  - Implement Turf Removal and Retrofit
- Total grant funds:
  - \$12.86 million Proposition 84 - Drought Round
  - \$826,000 Proposition 84 - 2015 Round SARCCUP



# Fund 504-401 Proposition 84 - Final Round Projects

Project Manager: Ian Achimore

Funding Source: Proposition 84 Grant Funding

- Administer PA23 Committee and PA23 Committee Agencies
  - Bimonthly Meetings
- Implement SARCCUP
- Total grant funds of \$54.2 million



# Roundtable Goals & Objectives

- Fund 372 Imported Water Recharge
- Fund 374 Basin Monitoring Program TF
- Fund 381 SAR Fish Conservation TF
- Fund 384-01 MSAR TMDL TF
- Fund 386 RWQ Monitoring TF
- Fund 387 Arundo Management & Habitat Restoration
- Fund 392 Emerging Constituents TF
- Fund 396 Forest First



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# Fund 372 Imported Water Recharge

Project Manager: Mark Norton

Funding Source: Fund Balance, Other Agency and Member Agency Contributions

- Administer all defined responsibilities and activities under the Cooperative Recharge Agreement including all necessary groundwater salt and nitrate modeling and recharge reporting among the recharge parties and Regional Board
- Amend or create additional agreement to administer and fund imported water recharge activities for FYE 2019
- 2 to 3 meetings per year



# Fund 374 Basin Monitoring Program TF

Project Manager: Mark Norton

Funding Source: Other Agency and Member Agency Contributions

- Administer all defined responsibilities and activities under the Regional Board Basin Plan as defined in the Basin Monitoring Program Task Force agreement.
  - Monthly meetings
- Conduct updated Santa Ana River Wasteload Allocation Model Analysis
- Conduct Triennial Ambient Water Quality Update
- Prepare SAR Annual Water Quality Update
- Support Drought Policy technical development in conjunction with SCSC
- Finalize Drought Policy and Prepare Basin Plan Amendment



# Fund 381 Santa Ana River Fish Conservation TF

Project Manager: Ian Achimore

Funding Source: Other Agency and Member Agency Contributions, SEP Funds, Other Grant Funding

- Administer SAR Fish Conservation Task Force
  - Quarterly meetings
- Serve as clearinghouse and coordination body on Santa Ana sucker habitat restoration i.e. Upper SAR Habitat Mgmt Plan
- Design and plan habitat project using grant funds (FYE 2018)
- Gather habitat data based on Santa Ana Riverwalk monitoring
- Support permit compliance for OCWD
- Construct habitat projects (FYE 2019)



# Fund 384-01 Middle Santa Ana River TMDL TF

Project Manager: Rick Whetsel

Funding Source: Other Agency Contributions

- Administer MSAR TMDL Task Force
  - 6 meetings per year
- Conduct 2017- 18 Annual Watershed-wide TMDL compliance monitoring
- Conduct 2018-19 Annual Watershed-wide TMDL compliance monitoring
- Conduct source evaluation studies and implement projects to support TF
- Support Comprehensive Bacteria Reduction Plan (CBRP) implementation



# Fund 386 Regional Water Quality Monitoring TF

Project Manager: Rick Whetsel

Funding Source: Other Agency Contributions

- Administer Regional Water Quality Monitoring Task Force
  - 6 meetings per year
- Implement the 2017 SAR Bacteria Monitoring Program
  - Monitoring and surveillance requirements of the 2012 adopted Basin Plan Amendment
  - Conduct sampling to support implementation of MSAR Bacteria Indicator TMDL
- Implement the 2018 Santa Ana River Bacteria Monitoring Program
  - Monitoring and surveillance requirements of the 2012 adopted Basin Plan Amendment
  - Conduct sampling to support implementation of MSAR Bacteria Indicator TMDL



# Fund 387 Arundo Mgmt & Habitat Restoration

Project Manager: Ian Achimore

Funding Source: Mitigation Credit Sales (Proposition 13)

- Administer Arundo Mitigation Bank
- Assess arundo removal progress in watershed through coordination with ACOE and SARCCUP
- Plan and Implement Arundo Removal and Habitat Restoration Projects

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# Fund 392 Emerging Constituents TF

Project Manager: Mark Norton

Funding Source: Other Agency Contributions, IEUA and EMWD Contributions

- Administer all defined responsibilities and activities under the Emerging Constituent Program TF agreement including EC data collection, data management, and communication and outreach on the safety of tap water.
- Plan and conduct two meetings per year with public relations representatives
- Monitor State Board studies and possible further monitoring requirements for ecosystem impacts from ECs
- Administer “Your So Cal Tap Water” and other social media tools

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# Fund 396 Forest First

Project Manager: Ian Achimore

Funding Source: Other Agency Contributions

- Administer Forest First Workgroup
- Conduct analyses of benefits to downstream flood control districts of forest management projects
- Plan and implement forest projects such as fuels reduction, meadow and chaparral restoration, and sediment retention





# Fund 477 LESJWA JPA Administration

Project Manager: Mark Norton (JPA )  
Rick Whetsel (TMDL TF)

Funding Source: Reimbursement from LESJWA and minimal member agency contributions

- Administer the LESJWA JPA – serve as authority administrator for LESJWA including all defined responsibilities and activities under the LESJWA JPA and Business Plan
  - Bi-monthly meetings
- Administer the Lake Elsinore & Canyon Lake nutrient TMDL Task Force
  - Monthly meetings



# OWOW and Roundtable Goals & Objectives - Other

Add in-house planning staff (grant writer) capability resulting in the following:

- Increased revenue for OWOW and Roundtable programs
- Reduced costs to SAWPA
- Fulfillment of and support to OWOW and Roundtables Goals, Objectives and Critical Success Factors
- Important revenue for project implementation

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# Agency Operations Goals & Objectives

- Implement goals and objectives from the Strategic Plan
- Improve operation efficiency and effectiveness
- Continue lobbying efforts
- Provide administrative and technology support to Engineering and Planning projects
- Continue to implement OnBase throughout all departments
- Continue to integrate OnBase with Outlook and GIS
- Continue to maximize GIS data investments by providing GIS Web Apps and provide input to local and State initiatives
- Design GIS Web App for Landscape measurement data as part of PA 22 Committee work



# Agency Operations Goals & Objectives

- Increase use of virtual servers in SAWPA network to allow system flexibility and improve reliability
- GASB 45 Compliance – Actuarial Valuation (FYE 2019)
- GASB 68 Compliance – CalPERS Unfunded Liability Disclosure
- Submit Budget and CAFR for GFOA Award Program
- Increase investment earnings through use of asset management firm
- Annual review and update of Retention and Destruction of Agency Records Policy and accompanying procedures as necessary


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# Agency Operations Goals & Objectives


- Continue agency-wide transparency commitment and open governance policies applicable to Special District Leadership Foundation (SDLF) transparency certification
- Continue risk transfer protocol review in accordance with Joint Powers Insurance Authority (JPIA) standards
- Review and update policies and procedures in adherence with recently enacted legislation, as applicable
- Review and update policies and procedures relating to Conflict of Interest law and FPPC filings, as applicable





**Questions?**



# Proposition 84 Projects Status Update



January 17, 2017 Commission Meeting

Nicole D. Weideman, PE

## Proposition 84 Project Status



Round	No. of Proponents	Projects Complete	Grant Amount	Total Cost
Round 1	13	7	\$12M	\$260M
Round 2	18	0	\$14.5M	\$150M
Drought Round	9	0	\$12M	\$23M
2015 Round	7	0	\$61M	\$237M



## Project Construction Status Round 1

	Project	Construction Started	Construction Progress
A	GWRS Flow Equalization	Yes	100%
B	Sludge Dewatering, Odor Control / Primary Sludge Thickening	Yes	93%
E	Santa Ana Watershed Vireo Monitoring	Yes <sup>1</sup>	100%
F	Mill Creek Wetlands	Yes	100%
G	Cactus Basin	Yes	69%
H	Inland Empire Brine Line Rehabilitation and Enhancement	Yes	100%
I	Arlington Desalter Interconnection Project	Yes	100%
J	Perris II Desalination Facility	Yes	100%
K	Perchlorate Wellhead Treatment System Pipelines	Yes	100%
L	Chino Creek Wellfield Development	Yes	80%
M	Impaired Groundwater Recovery	Yes	100%
N	Alamitos Barrier Improvement Project	Yes	40%
O	Arlington Basin Water Quality Improvement Project	No	0%

<sup>1</sup> Project does not include construction, but rather implementation of a plan.

## Project Construction Status Round 2

	Project	Construction Started	Construction Progress
1	Grant Agreement Administration	N/A	N/A
2	Perris Desalination Program – Brackish Water Well 94	Yes	40%
3	Quail Valley Subarea 9 – Phase I Sewer System Project	No	0%
4	Forest First: Increase Stormwater Capture and Decrease Sediment Loading	Yes	50%
5	Wineville Regional Recycled Water Pipeline & Groundwater Recharge System Upgrades	Yes	75%
6	Plunge Creek Water Recharge and Habitat Improvement	No	0%
7	Prado Basin Sediment Management Demonstration Project	No	0%
8	San Sevaine Ground Water Recharge Basin	No	0%
9	Corona/Home Gardens Multi-Jurisdictional Water Transmission Line Project	No	0%
10	Enhanced Stormwater Capture and Recharge along the Santa Ana River	No	0%



## Project Construction Status Round 2

	Project	Construction Started	Construction Progress
11	Regional Residential Landscape Retrofit Program	Yes <sup>1</sup>	95%
12	Canyon Lake Hybrid Treatment Process	Yes	95%
14	Customer Handbook to Using Water Efficiently in the Landscape	Yes <sup>1</sup>	60%
15	Lower Day Basin	No	0%
16	CII Performance Based WUE Program	Yes <sup>1</sup>	38%
17	Peters Canyon Channel Water Capture and Reuse Pipeline	Yes	100%
18	Soboba Band of Luiseno Indians Wastewater Project	Yes <sup>1</sup>	95%
19	Recycled Water Project Phase I (Jackson-Central Avenue Pipeline)	No	0%
20	Wilson III Basins Project and Wilson Basins/ Spreading Grounds	No	0%

<sup>1</sup> Project does not include construction, but rather implementation of a plan.

## Project Construction Status Drought Round

	Project	Construction Started	Construction Progress
3.1	Conservation Based Reporting Tools and Rate Structure	Yes <sup>1</sup>	37%
3.2	EMWD High Visibility Turf Removal & Retrofit SARW	Yes <sup>1</sup>	58%
3.2	IEUA High Visibility Turf Removal & Retrofit SARW	Yes <sup>1</sup>	100%
3.2	OCWD High Visibility Turf Removal & Retrofit SARW	Yes <sup>1</sup>	57%
3.2	SBVMWD High Visibility Turf Removal & Retrofit SARW	Yes <sup>1</sup>	35%
3.2	WMWD High Visibility Turf Removal & Retrofit SARW	Yes <sup>1</sup>	84%
3.2	EMWD High Visibility Turf Removal & Retrofit USMW	Yes <sup>1</sup>	58%
3.2	WMWD High Visibility Turf Removal & Retrofit USMW	Yes <sup>1</sup>	84%
3.2	RCWD High Visibility Turf Removal & Retrofit USMW	Yes <sup>1</sup>	95%

<sup>1</sup> Project does not include construction, but rather implementation of a plan.

## Project Construction Status 2015 Round

	Project	Construction Started	Construction Progress
1	Grant Agreement Administration	N/A	N/A
2	Newhope-Placentia Trunk Sewer Replacement Project	No	0%
3.1	IWPP - San Jacinto River, Stage 4, Phase 1	No	0%
3.2	IWPP- Baustista Optimization Pond	No	0%
3.3	IWPP - Beaumont MDP-Line 16	No	0%
4.1	SARCCUP Habitat Improvement - Arundo Donax	No	0%
4.1	SARCCUP Habitat Improvement - Santa Ana Sucker Fish	No	0%
4.2	SARCCUP WUE - Conservation-based Water Rates	No <sup>1</sup>	0%
4.2	SARCCUP WUE - Smartscape Implementation	No <sup>1</sup>	0%
4.3	SARCCUP Conjunctive Use - Chino Basin	No	0%
4.3	SARCCUP Conjunctive Use - Elsinore Basin	No	0%
4.3	SARCCUP Conjunctive Use - San Bernardino Basin	No	0%
4.3	SARCCUP Conjunctive Use - San Jacinto Basin	No	0%

<sup>1</sup> Project does not include construction, but rather implementation of a plan.

### Projected Watershed-Wide Benefits of All Four Rounds of OWOW Prop 84 IRWM Projects

- Reduces water demand by 18,000 AFY representing 36,000 households
- Recharges 180,000 AF of additional imported water
- Produces 18,000 AFY of desalted groundwater
- Removes 29,000 tons of salt from groundwater per year
- Creates 11,000 AFY of additional recycled water
- Captures 44,000 AFY of stormwater for beneficial use
- Restores 3,800 acres of environmental habitat
- Reduces nonpoint source pollution by 29,000 pounds per year
- Reduces flood risk damage by \$91 million
- Creates about 11,000 construction related jobs

# Round 1 Projects

## Proposition 84 Round 1 Project Status Update

Project Name	Agency	Grant Amount	Required Funding Match	Add'l Cost Share	Total Project Cost	% Grant Billed	% Project Complete
Grant Agreement Administration	SAWPA	\$ 660,004	\$ 0 0.00%	\$ 0	\$ 660,004	44%	44%
GWRS Flow Equalization	OCWD	\$ 1,000,000	\$ 1,180,760 7.67%	\$ 13,218,920 <sup>1</sup>	\$ 15,399,680	100%	100%
Sludge, Dewatering, Odor Control & Primary Sludge Thickening	OCSD	\$ 1,000,000	\$ 36,638,218 26.00%	\$ 103,278,005	\$ 140,916,223	100%	94%
Santa Ana Watershed Vireo Monitoring	SAWA	\$ 600,000	\$ 225,994 26.00%	\$ 43,213	\$ 869,207	100%	100%
Mill Creek Wetlands*	Ontario	\$ 1,000,000	\$ 1,615,000 8.85%	\$ 15,635,000	\$ 18,250,000 <sup>2</sup>	100%	100%
Cactus Basin	SBCFCD	\$ 1,000,000	\$ 4,427,155 29.96%	\$ 9,350,026	\$ 14,777,181	100%	65%
Inland Empire Brine Line Rehabilitation and Enhancement	SAWPA	\$ 1,000,000	\$ 698,153 10.07%	\$ 5,234,576 <sup>3</sup>	\$ 6,932,729	100%	100%

<sup>1</sup> \$ 13,218,920 in Other State Funds  
<sup>2</sup> \$ 15,420,000 in Other State Funds  
<sup>3</sup> \$ 5,234,576 in Other State Funds  
 \* Retention not paid yet

Green – Project on schedule or ahead of schedule  
 Yellow – Project delay experienced, not on schedule per the Agreement.  
 Orange/Red – Project delay experienced, unsure if project will complete on time, or not enough schedule information known at this time to determine.

## Proposition 84 Round 1 Project Status Update

Project Name	Agency	Grant Amount	Required Funding Match	Add'l Cost Share	Total Project Cost	% Grant Billed	% Project Complete
Arlington Desalter Interconnection Project	Corona	\$ 400,000	\$ 350,493 26.00%	\$ 597,556	\$ 1,348,049	100%	100%
Perris II Desalination Facility	EMWD	\$ 1,000,000	\$ 607,296 26.00%	\$ 728,456	\$ 2,335,752	100%	99%
Perchlorate Wellhead Treatment System Pipelines	WVWD	\$ 1,000,000	\$ 368,940 26.00%	\$ 50,060	\$ 1,419,000	100%	100%
Chino Creek Wellfield Development Project	WMWD	\$ 1,000,000	\$ 1,646,091 26.00%	\$ 3,685,027	\$ 6,331,118	100%	95%
Impaired Groundwater Recovery	IRWD	\$ 1,000,000	\$ 20,148,848 53.99%	\$ 16,173,122	\$ 37,321,970	100%	100%
Alamitos Barrier Improvement Project	OCWD	\$ 1,000,000	\$ 650,600 5.61%	\$ 9,956,000 <sup>4</sup>	\$ 11,606,600	100%	30%
Arlington Basin Water Quality Improv Project	WMWD	\$ 1,000,000	\$ 900,000 33.21%	\$ 809,670	\$ 2,709,670	1%	45%
<b>Total</b>		<b>\$ 12,660,004</b>	<b>\$ 69,457,548 26.62%</b>	<b>\$ 179,419,635</b>	<b>\$ 261,537,187</b>	<b>89.3%</b>	<b>81.4%</b>

<sup>4</sup> \$ 9,956,000 in Other State Funds

Green – Project on schedule or ahead of schedule  
 Yellow – Project delay experienced, not on schedule per the Agreement.  
 Orange/Red – Project delay experienced, unsure if project will complete on time, not enough schedule information known at this time to determine.

## Round 2 Projects

## Proposition 84 Round 2 Project Status Update

Project Name	Agency	Grant Amount	Required Funding Match	Add'l Cost Share	Total Project Cost	% Grant Billed	% Project Complete
Grant Agreement Administration	SAWPA	\$ 625,310	\$ 0 0.00%	\$ 0	\$ 625,310	33%	33%
Perris Desalination Program – Well 94	EMWD	\$ 1,000,000	\$ 0 0.00%	\$ 9,238,280	\$ 10,238,280	0%	13%
Quail Valley Subarea 9 Phase I Sewer System	EMWD	\$ 1,930,000	\$ 2,960,000 37.00%	\$ 3,110,000	\$ 8,000,000	19%	15%
Forest First	USFS	\$ 1,000,000	\$ 2,055,039 37.00%	\$ 2,499,121	\$ 5,554,160	0%	49%
Wineville Regional Recycled Water Pipeline and GW Recharge System Upgrades	IEUA	\$ 1,000,000	\$ 0 0.00%	\$ 29,500,000 <sup>1</sup>	\$ 30,500,000	100%	74%
Plunge Creek Water Recharge and Habitat Improvement	SBVMWD	\$ 500,000	\$ 184,731 26.00%	\$ 25,769	\$ 710,500	21%	35%

<sup>1</sup> \$29,500,000 in Other State Funds

Green – Project on schedule or ahead of schedule

Yellow – Project delay experienced, not on schedule per the Agreement.

Orange/Red – Project delay experienced, unsure if project will complete on time, or not enough schedule information known at this time to determine.

## Proposition 84 Round 2 Project Status Update

Project Name	Agency	Grant Amount	Required Funding Match	Add'l Cost Share	Total Project Cost	% Grant Billed	% Project Complete
Prado Basin Sediment Management Demonstration Project	OCWD	\$ 750,000	\$ 2,910,050 37.00%	\$ 4,204,950	\$ 7,865,000	0%	19%
San Sevaine GW Recharge Basin	IEUA	\$ 750,000	\$ 925,001 32.34%	\$ 1,184,999	\$ 2,860,000	43%	59%
Corona/Home Gardens Multi-Jurisdictional Water Transmission Line	Corona	\$ 1,300,000	\$ 2,327,494 37.00%	\$ 2,663,031	\$ 6,290,525	1%	40%
Enhanced Stormwater Capture & Recharge along SAR	SBVMWD	\$ 1,000,000	\$ 11,581,000 37.00%	\$ 18,719,000	\$ 31,300,000	0%	25%
Regional Residential Landscape Retrofit	IEUA	\$ 500,000	\$ 370,000 37.00%	\$ 130,000	\$ 1,000,000	66%	95%
Canyon Lake Hybrid Treatment Process	LESJWA	\$ 500,000	\$ 327,635 37.00%	\$ 57,865	\$ 885,500	62%	95%
Customer Handbook to Using Water Efficiently	WMWD	\$ 120,000	\$ 42,000 25.93%	\$ 0	\$ 162,000	0%	60%

Green – Project on schedule or ahead of schedule

Yellow – Project delay experienced, not on schedule per the Agreement.

Orange/Red – Project delay experienced, unsure if project will complete on time, or not enough schedule information known at this time to determine.

## Proposition 84 Round 2 Project Status Update

Project Name	Agency	Grant Amount	Required Funding Match	Add'l Cost Share	Total Project Cost	% Grant Billed	% Project Complete
Lower Day Basin	IEUA	\$ 750,000	\$ 917,599 37.00%	\$ 812,401	\$ 2,480,000	0%	48%
CII Performance Based WUE Program	MWDOC	\$ 500,000	\$ 898,179 37.00%	\$ 1,029,333	\$ 2,427,512	100%	38%
Peters Canyon Channel Water Capture and Reuse Pipeline	Irvine	\$ 1,000,000	\$ 3,211,086 37.00%	\$ 4,467,523	\$ 8,678,609	100%	87%
Soboba Band of Luiseno Indians Wastewater Project	Soboba	\$ 150,000	\$ 53,000 26.11%	\$ 0	\$ 203,000	0%	95%
Recycled Water Project Phase I	Riverside	\$ 1,000,000	\$ 8,030,000 37.00%	\$ 12,670,000	\$ 21,700,000	0%	10%
Wilson III Basins Project and Wilson Basins/ Spreading Grounds	Yucaipa	\$ 750,000	\$ 4,825,807 37.00%	\$ 7,466,914	\$ 13,042,721	0%	29%
<b>Total</b>		<b>\$ 15,125,310</b>	<b>\$ 40,151,571 26.67%</b>	<b>\$ 95,279,236</b>	<b>\$ 151,178,427</b>	<b>27%</b>	<b>50%</b>

Green – Project on schedule or ahead of schedule  
 Yellow – Project delay experienced, not on schedule per the Agreement.  
 Orange/Red – Project delay experienced, unsure if project will complete on time, or not enough schedule information known at this time to determine.

## Drought Round Projects

## Proposition 84 Drought Round Project Status Update

Project Name	Agency	Grant Amount	Required Funding Match	Add'l Cost Share	Total Project Cost	% Grant Billed	% Project Complete
Grant Agreement Administration	SAWPA	\$ 625,000	\$ 0 0.00%	\$ 0	\$ 625,000	47%	48%
Project Agreement 22 Committee Admin	SAWPA	\$ 300,000	\$ 0 0.00%	\$ 0	\$ 300,000	65%	65%
Conserv. Based Report Tools/Rate Structure	SAWPA	\$ 6,662,610	\$ 0 0.00%	\$ 0	\$ 6,662,610	35%	37%
High Visibility Turf Removal & Retrofit SARW	EMWD	\$ 906,800	\$ 1,212,770	\$ 600,830	\$ 2,720,400	2%	58%
	IEUA	\$ 807,564	\$ 1,080,050	\$ 535,077	\$ 2,422,691	100%	100%
	OCWD	\$ 880,894	\$ 1,178,123	\$ 583,666	\$ 2,642,683	0.27%	57%
	SBVMWD	\$ 828,499	\$ 1,108,049	\$ 548,949	\$ 2,485,497	0%	35%
	WMWD	\$ 851,243	\$ 1,138,467	\$ 564,019	\$ 2,553,729	47%	84%
High Visibility Turf Removal & Retrofit USMW	EMWD	\$ 420,000	\$ 561,715	\$ 278,285	\$ 1,260,000	2%	58%
	WMWD	\$ 52,500	\$ 70,214	\$ 34,786	\$ 157,500	47%	84%
	RCWD	\$ 525,000	\$ 702,145	\$ 447,855	\$ 1,675,000	99%	95%
<b>Total</b>		<b>\$ 12,860,110</b>	<b>\$ 7,051,533 31.23%</b>	<b>\$ 3,593,467</b>	<b>\$ 23,505,110</b>	<b>36%</b>	<b>67%</b>

Green – Project on schedule or ahead of schedule

Yellow – Project delay experienced, still on track to complete on time

Orange/Red – Project delay experienced, unsure if project will complete on time or not enough schedule info known at this time to determine.

## 2015 Round Projects

## Proposition 84 2015 Round Project Status Update

Project Name	Agency	Grant Amount	Required Funding Match	Add'l Cost Share	Total Project Cost	% Grant Billed	% Project Complete
Grant Agreement Administration	SAWPA	\$ 3,213,384	\$ 0 0.00%	\$ 0	\$ 3,213,384	0%	0%
Newhope – Placentia Trunk Sewer Replacement Project	OCSD	\$ 1,000,000	\$ 30,000,000 28.60%	\$ 73,890,000	\$ 104,890,000	0%	0%
Integrated Watershed Protection Program	RCFC& WCD	\$ 5,054,302	\$ 9,060,000 29.71%	\$ 16,379,698	\$ 30,494,000	0%	0%
SARCCUP	Member Agencies	\$ 55,000,000	\$ 30,500,000 30.12%	\$ 15,772,899	\$ 101,272,899	0%	0%
<b>Total</b>		<b>\$ 64,267,686</b>	<b>\$ 69,560,000 29.00%</b>	<b>\$ 106,042,597</b>	<b>\$ 239,870,283</b>	<b>0%</b>	<b>0%</b>

Green – Project on schedule or ahead of schedule

Yellow – Project delay experienced, still on track to complete on time

Orange/Red – Project delay experienced, unsure if project will complete on time, or not enough schedule information known at this time to determine.

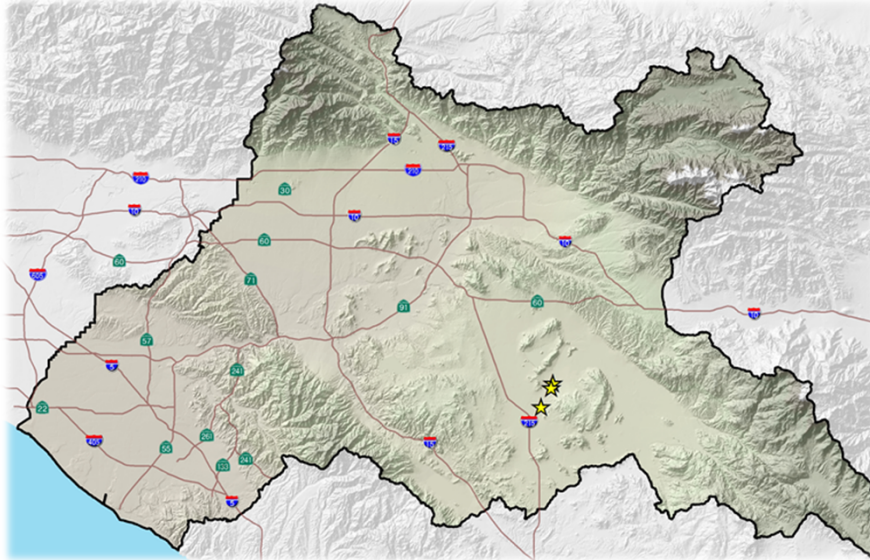
## A Closer Look

### Round 2

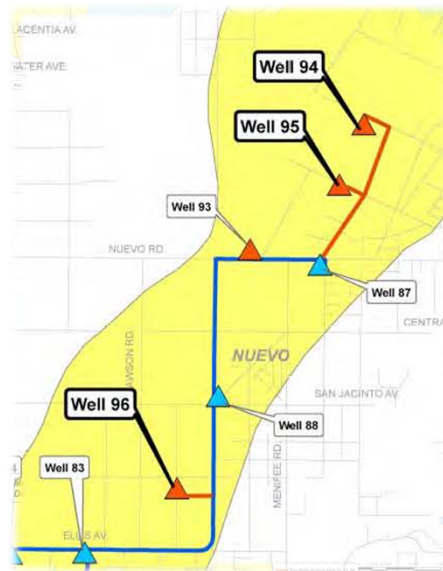
- Perris II Desalination Program – Brackish Water Well 94 (EMWD)
- Quail Valley Subarea 9 – Phase 1 Sewer System Project (EMWD)
- Plunge Creek Water Recharge & Habitat Improvement Project (SBVWCD)
- Enhanced Stormwater Capture and Recharge along Santa Ana River (SBVMWD)



### Perris II Desalination Program – Brackish Water Well 94 (EMWD)



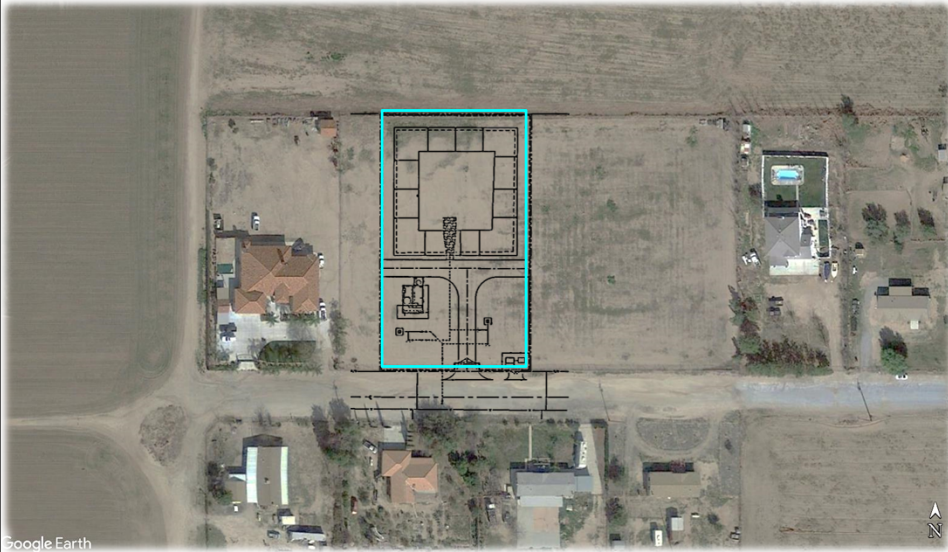
### Perris II Desalination Program – Brackish Water Well 94 (EMWD)



Perris II Desalination Program –  
Brackish Water Well 96 (EMWD)



Perris II Desalination Program –  
Brackish Water Well 96 (EMWD)



## Perris II Desalination Program – Brackish Water Well 95 (EMWD)



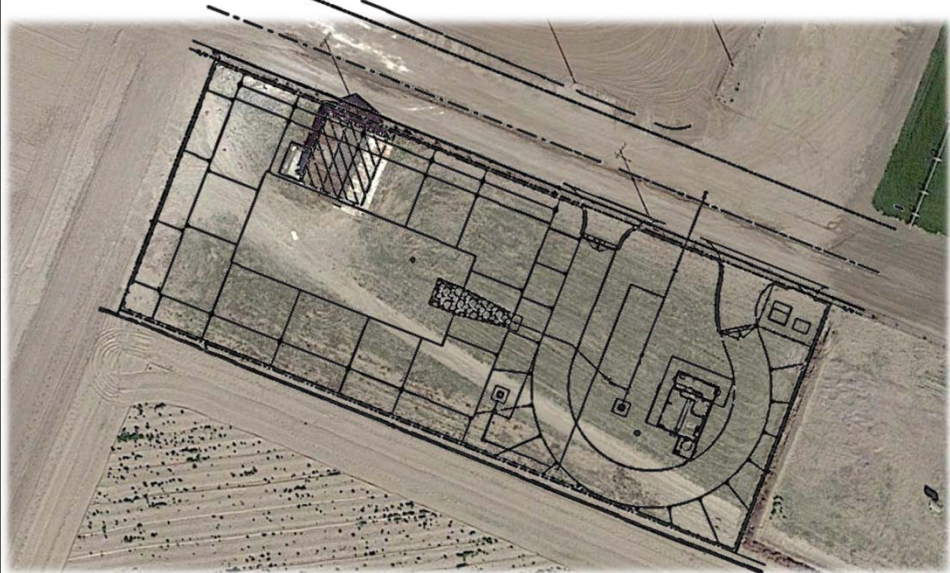
## Perris II Desalination Program – Brackish Water Well 95 (EMWD)



Perris II Desalination Program –  
Brackish Water Well 94 (EMWD)

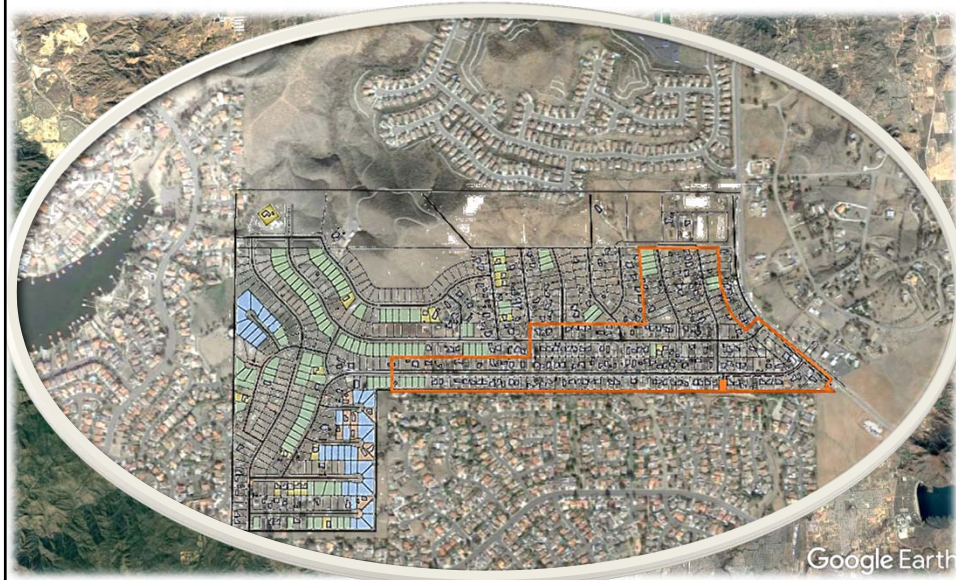


Perris II Desalination Program –  
Brackish Water Well 94 (EMWD)





## Quail Valley Subarea 9 – Phase 1 Sewer System Project (EMWD)



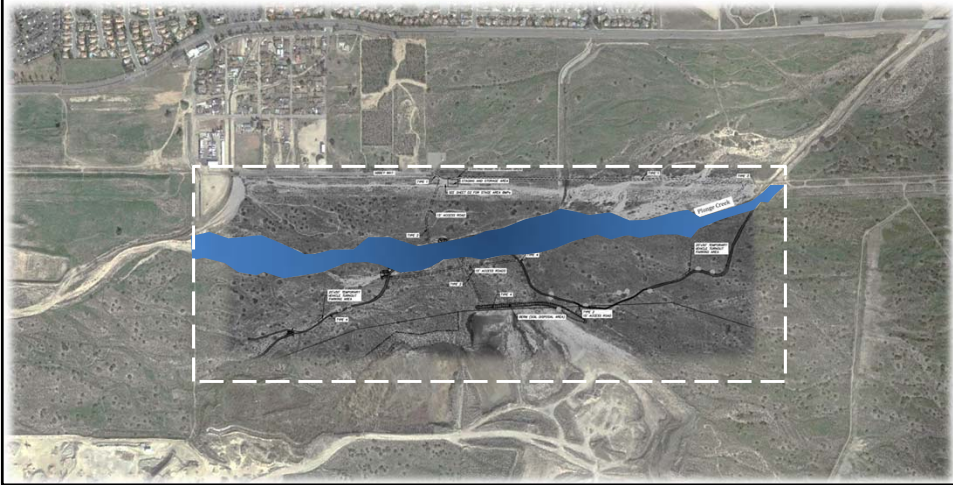
## Quail Valley Subarea 9 – Phase 1 Sewer System Project (EMWD)

- Description: Install sewer collection system to replace 149 failing septic systems.
- Overall Percent Complete : 15%
- Estimated Completion: March 2018
- Benefits: Divert  $\approx$ 44 AFY of septic effluent from entering shallow groundwater and/or migrating to Canyon Lake.



Plunge Creek Water Recharge & Habitat Improvement (SBVWCD)

**Historic (pre-Drought)**



Plunge Creek Water Recharge & Habitat Improvement (SBVWCD)

**Current (Drought)**





# Plunge Creek Water Recharge & Habitat Improvement (SBVWCD)

## Proposed



# Plunge Creek Water Recharge & Habitat Improvement (SBVWCD)

**Splitter Mounds**

**Pilot Channel**

**Soil Berm**

EXISTING ROAD TO REMAIN OPEN  
STAGING AND STORAGE AREA  
SEE SHEET 02 FOR STAGE AREA BIRMS  
15' ACCESS ROAD  
15' ACCESS ROAD  
15' ACCESS ROAD  
15' ACCESS ROAD  
15' ACCESS ROAD  
BIRM SOIL DISPOSAL AREA  
10' ACCESS ROAD  
Plunge Creek  
15' ACCESS ROAD  
15' ACCESS ROAD  
15' ACCESS ROAD  
15' ACCESS ROAD  
15' ACCESS ROAD

VARIES - 10' (W)

EXISTING GROUND

VARIES - 15' (W)

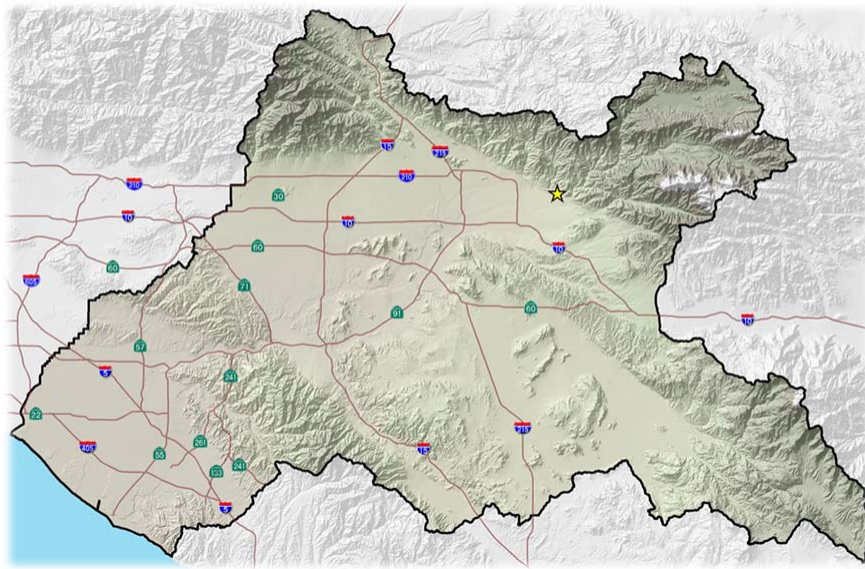
EXISTING GROUND (VARIES)

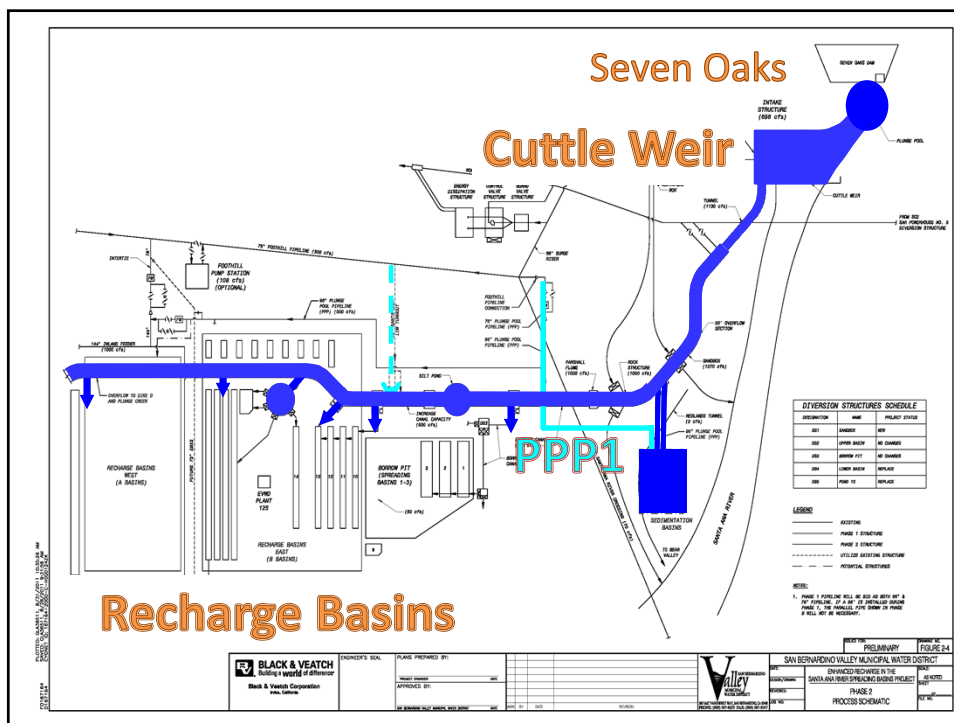
TYPE 1  
TYPE 2  
TYPE 3  
TYPE 4

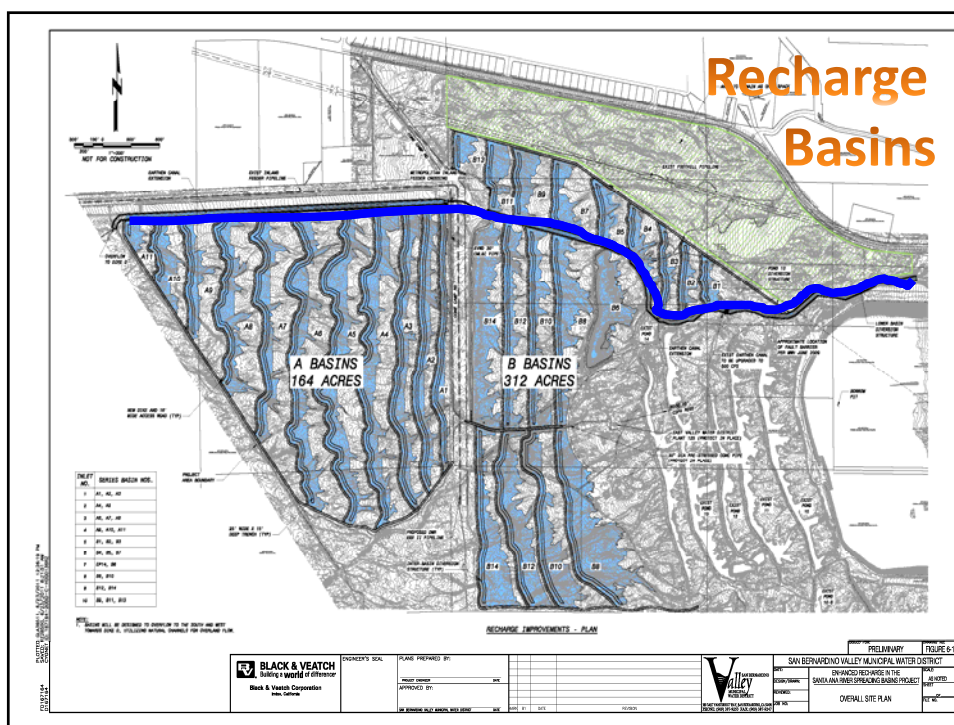
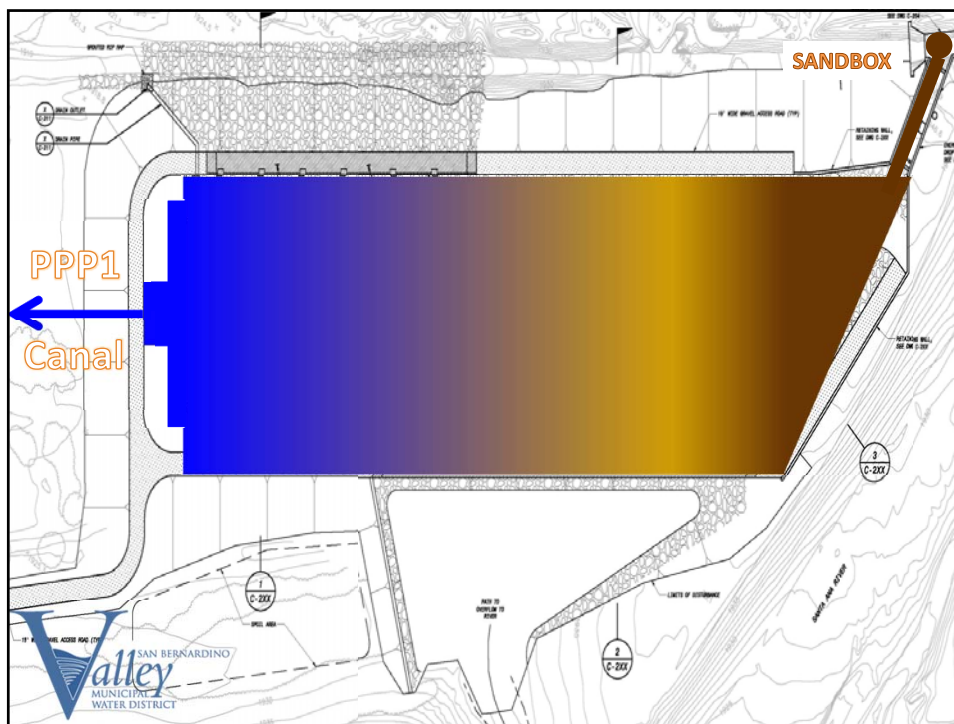
## Plunge Creek Water Recharge & Habitat Improvement (SBVWCD)

- Description: Initiate early implementation work under the Upper Santa Ana River Wash Area Planning Effort.
- Overall Percent Complete : 35%
- Estimated Completion: November 2018
- Benefits: Restore and enhance ≈10 acres of habitat for the San Bernardino Kangaroo Rat, increase permeability and surface area available for recharge in the creek.

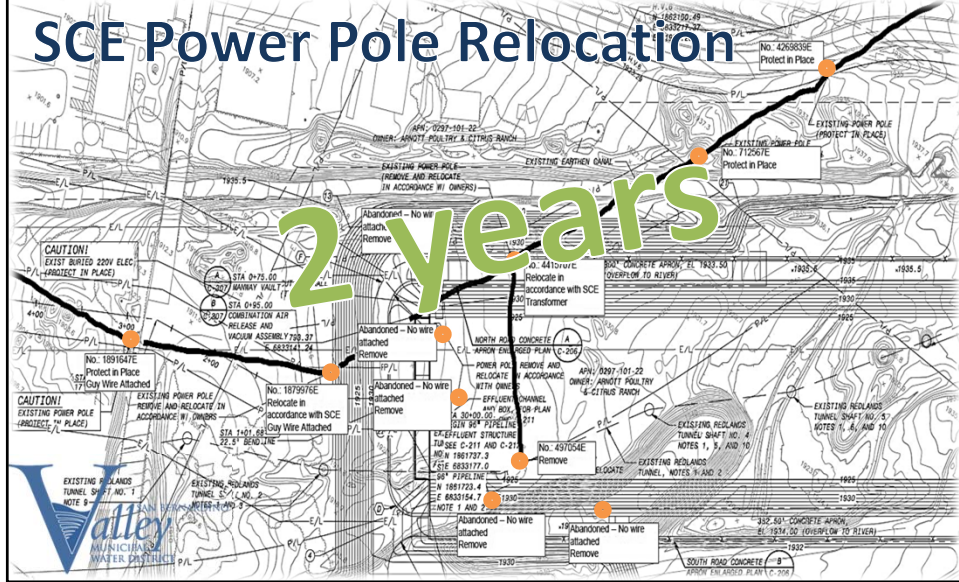
## Enhanced Stormwater Capture & Recharge along the SAR (SBVMWD)



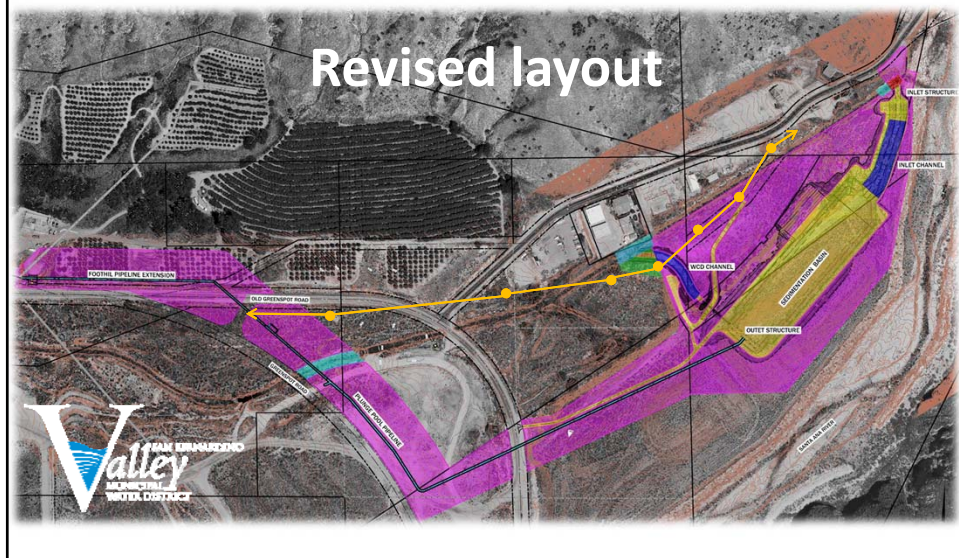




# Enhanced Stormwater Capture & Recharge along the SAR (SBVMWD) SCE Power Pole Relocation



# Enhanced Stormwater Capture & Recharge along the SAR (SBVMWD)



## Enhanced Stormwater Capture & Recharge along the SAR (SBVMWD)

- Description: Improvements to Cuttle Weir Intake Structure, construction of a new sedimentation basin, canal, pipeline and recharge basins.
- Overall Percent Complete : 25%
- Estimated Completion: December 2019
- Benefits: Increase stormwater capture and recharge; up to 80,000 AFY and 500 CFS instantaneous flow.

Thank You