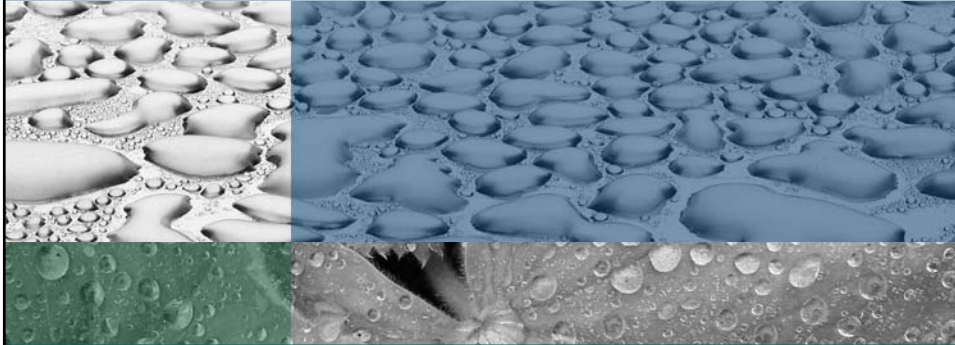


*Joint IRWM Plan Update  
Workshop #1 &  
San Diego IRWM Program  
RAC Meeting #70*



October 4, 2017

*Agenda*

- Welcome and Introductions
- San Diego RWQCB Update
- San Diego IRWM Update
- San Diego IRWM Plan Update
- Grant Administration
- Public Comments
- Summary and Next Steps

## *Agenda*

- Welcome and Introductions
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## **San Diego Regional Water Quality Control Board Update**

Tony Felix, San Diego Regional Water Quality Control  
Board



## ***Agenda***

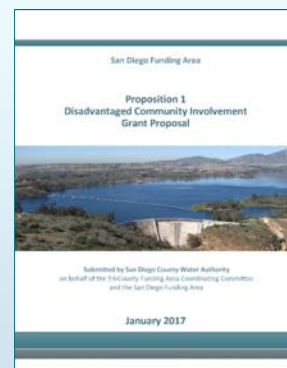
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## *Statewide IRWM Update – Roundtable of Regions (RoR)*

- Prop 1 IRWM Implementation Grants
  - Prop 1-Round 1 (*tentative!*):
    - Draft PSP in Spring 2018;
    - Final PSP Summer 2018;
    - Consultations in Fall 2018;
    - Applications due Winter 2018
  - Prop 1-Round 2: Anticipated in 2020
- Concern about Lack of IRWM Funding in Proposed Bills and Initiatives
  - Senate Bill 5: California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 (\$4B) passed on September 15

## *DAC Needs Assessment Schedule*

- RAC Kickoff: December 2017
- Definitions and Mapping: November 2017 – March 2017
- DAC Outreach and Presentations: March – September 2018
- Draft Regional DAC Needs Assessment: October – December 2018



## ***DAC Needs Assessment RFQ***

- Looking for Non-Profit and Academic partners to support consulting team
  - Experience working with DACs/EDAs/URCs/EJs, specifically those not involved previously in IRWM
  - Assist with identifying DAC organizations and updating DAC Outreach contact list
  - Support outreach to targeted DACs/EDAs/URCs/EJs
- RFQ will be released later this month!
  - Responses will be due in November

## ***DAC Outreach List***

- |                                      |   |
|--------------------------------------|---|
| • San Diego Coastkeeper              | • Mid City CAN                                    |
| • San Diego EarthWorks               | • San Diego Canyonlands                           |
| • Environmental Health Coalition     | • Surfrider Foundation – San Diego County Chapter |
| • Elementary Science Institute       | • Sierra Club San Diego Chapter                   |
| • Jacobs Center                      | • Urban Corps San Diego County                    |
| • Groundwork San Diego-Chollas Creek | • UC San Diego                                    |
| • Wildcoast                          | • Rural Community Assistance Corporation          |
| • Climate Science Alliance           | • California Rural Water Association              |
| • Alter Terra                        | • County Department of Environmental Health       |
| • Indian Health Service              | • <b>Who else?</b>                                |

# San Diego Basin Study: Update

Leslie Cleveland, Bureau of Reclamation  
Allison Danner, Bureau of Reclamation  
Sarah Brower, City of San Diego  
Goldy Herbon, San Diego County Water Authority



## San Diego Basin Study Tasks & Status

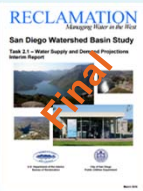
Water Supply and Water Demand Projections (Task 2.1)

Downscaled Climate Change and Hydrologic Modeling (Task 2.2)

Existing Structural Response and Operations Guidelines Analysis (Task 2.3)

Structural and Operations Concepts (Task 2.4)

Trade-Off Analysis and Recommendations (Task 2.5)



Task 2.4

In progress

Task 2.5

In progress

Summary Report (Task 2.6)



## *Aug. 2<sup>nd</sup> RAC Meeting Re-Cap*

### Summary:

1. Overview of Basin study
  - Task 2.5 Trade off Analysis Goal and Approach
2. Feedback received on Evaluation Objectives

## *Task 2.5 Next Steps*

### Summary:

1. Finalized Evaluation Objectives
2. Develop weighted scores/rank for objectives
  - Survey coming soon!
3. Complete Trade-Off Analysis

## Evaluation Objectives

- Provide Reliability & Robustness
- Optimize Local Supplies/Independence
- Cost Effectiveness
- Regional Integration and Coordination
- Provide for Scalability of Implementation
- Project Complexity
- Protect Quality of Life/Recreation
- Environmental Justice
- Regional Economic Impact
- Climate Resilience
- Protect Habitats, Wildlife & Ecosystem Services
- Water Quality and Watersheds
- Address Climate Change through GHG Reduction

**Please send  
relevant  
resources with  
survey results!**

## Feedback Requested via Survey

**LA Basin Study | Task 6 – Trade-Off Analysis & Recommendations**  
Weighting the Categories

1. Stormwater Conservation

Lowest Importance	1	2	3	4	5	6	7	8	9	Highest Importance
	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Capital Cost

1	2	3	4	5	6	7	8	9	10
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Operations & Maintenance Cost

1	2	3	4	5	6	7	8	9	10
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Habitat

1	2	3	4	5	6	7	8	9	10
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Recreation

1	2	3	4	5	6	7	8	9	10
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Example Survey Format*



## Next Steps

- Tradeoff Analysis Survey – Fall 2017
- Technical Team working on Tasks 2.4 and 2.5
  - Evaluation Objective weighted scores and preliminary results will be shared at Dec and Feb RAC meetings

## Questions?

Leslie Cleveland ([lcleveland@usbr.gov](mailto:lcleveland@usbr.gov)), Project Manager  
Allison Danner ([adanner@usbr.gov](mailto:adanner@usbr.gov)), Technical Team  
Sarah Brower ([sbrower@sanidiego.gov](mailto:sbrower@sanidiego.gov)), Project Manager  
Andrew Funk ([afunk@sanidiego.gov](mailto:afunk@sanidiego.gov)), Project Manager  
Goldy Herbon ([gherbon@sdewa.org](mailto:gherbon@sdewa.org)), Technical Team

# Stormwater Capture & Use Feasibility Study Update

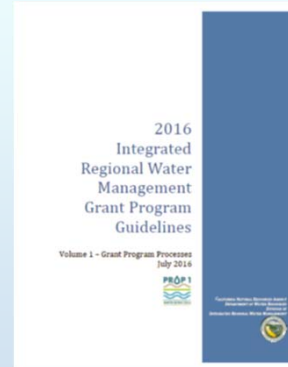
Stephanie Gaines, County of San Diego

## *Agenda*

- Welcome and Introductions
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## Current Status: IRWM Planning Grant

- Change in anticipated schedule:
  - Updates for 2016 IRWM Guidelines – September 2018
    - Schedule dependent on compliance date for implementation grant
  - Updates for SWCFS and DAC Needs Assessment – July 2019
- Next steps:
  - IRWM Plan Update Kickoff today!



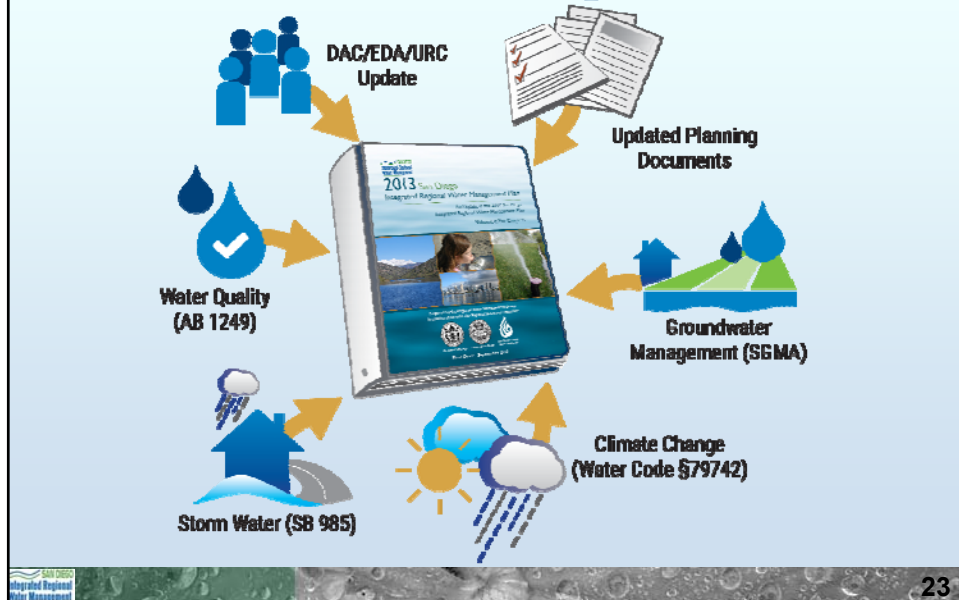
21

## RAC Input (tentative)



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## 2016 IRWM Guideline Updates



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## Technical Development Areas

Reviewed 2013 IRWM Plan Objectives, 2016 IRWM Summit, and IRWM Strategic Plan

Reviewed benefits of funded projects

Reviewed status of Implementation Actions from 2013 IRWM Plan

### Identified Technical Development Areas:

- Four areas of IRWM Plan to be expanded
- Other, equally important, areas are not included as they were sufficiently addressed in 2013 IRWM Plan

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## *Step 1: Review SD IRWM Material*

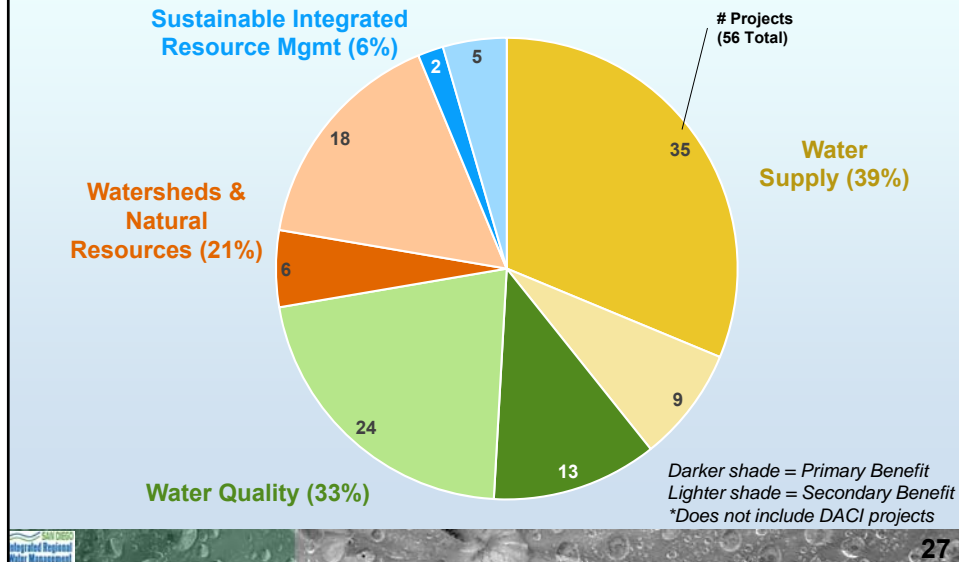
- 2013 IRWM Plan Objectives
  - 11 objectives including integration, diverse mix of water resources, and restore habitat
- 2016 IRWM Summit
  - 6 focus areas including water reuse, changing public views/value of storm water, and investing in surface water/reservoir augmentation
- IRWM Strategic Plan
  - 8 benefits of IRWM including reduced costs, avoided conflict, and enhanced trust

## *Step 1: Review SD IRWM Material – 2016 IRWM Summit*

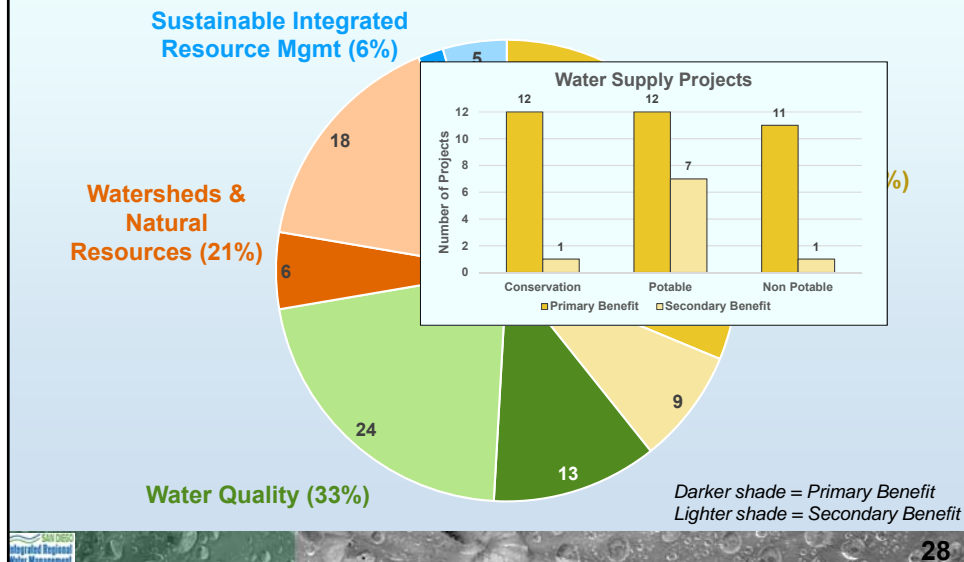
1. Use and reuse water locally – large imported water systems are not sustainable
2. Reduce consumption
3. Change how the public views and values water – particularly stormwater
4. Better integration in water resources plans – stormwater not always integrated well
5. Invest in surface water/reservoir augmentation
6. Invest in source water augmentation (potable reuse)



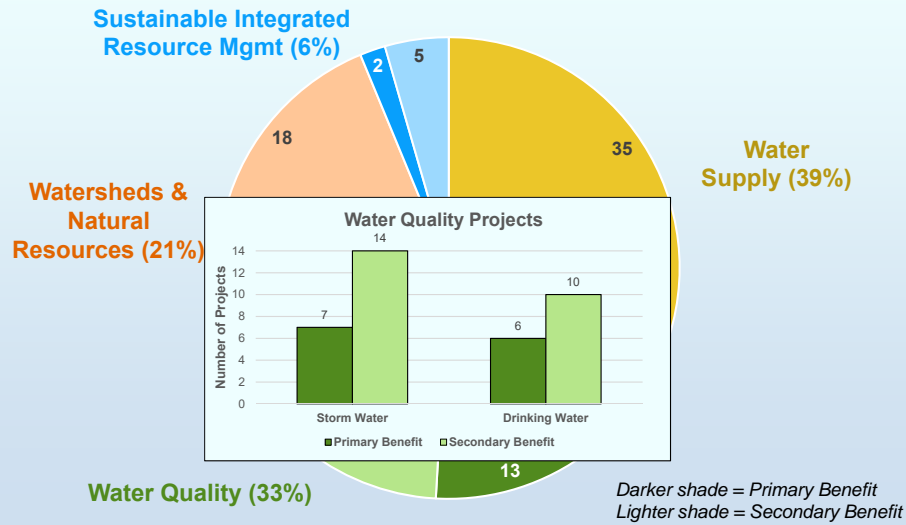
## Step 2: Review Funded Project Benefits - IRWM Goals



## Step 2: Review Funded Project Benefits - IRWM Goals

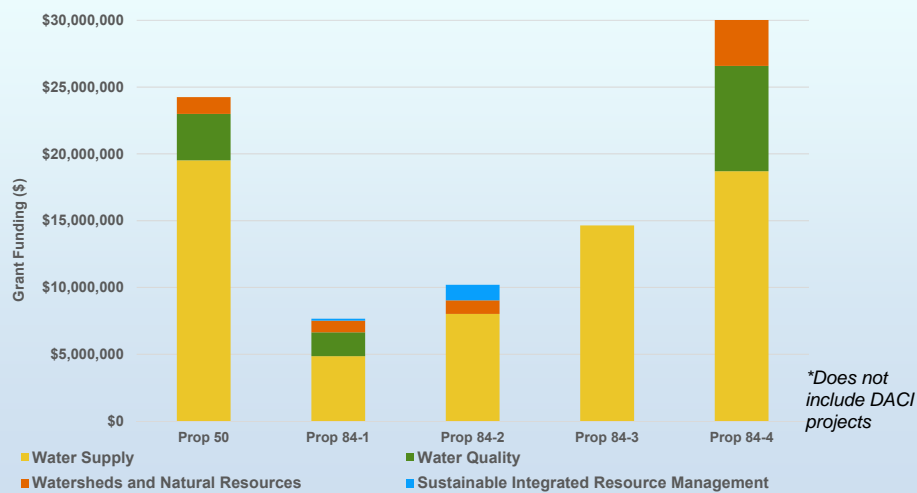


## Step 2: Review Funded Project Benefits - IRWM Goals



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## Step 2: Review Funded Project Benefits - Grant Award vs. Primary Goal\*



30

## Step 3: Review Status of Implementation Actions

- 2013 IRWM Plan had implementation actions from Regulatory, Land Use, Integrated Flood Management, and Climate Change studies
- 40 Implementation Actions:
  - 27 completed or underway
  - 5 partially completed through other efforts
  - 2 attempted but abandoned
  - 6 not yet begun

Table 11-1: Implementation Commitments from Planning Study Recommendations

Planning Study	Objective	#	Recommendation Action from Planning Study	Responsible Party	Party Commitment
Regulatory Workshop Report	Improve communication between IRWM Program and the San Diego Regional Water Quality Control Board (Regional Board)	R-1	Assign IRWM liaison to Regional Board	City Public Utilities	City will assign Senior Staff to be IRWM liaison to Regional Board
		R-2	Provide periodic IRWM progress reports to Regional Board	City Public Utilities	City's commitment will involve assigning existing staff to: 1) attend monthly meetings of the Water Board, 2) review agendas and proposed Board Actions ahead of each meeting, 3) report out at RAC meetings on Water Board actions, and 4) once or twice per year make a presentation to the Water Board about the status of the San Diego IRWM Program
	Ensure consistency between IRWM Plan and Regional Board Practical Vision	R-3	Monitor development of Regional Board Practical Vision	RWMG	Same as Recommendation Action
		R-4	Incorporate priority themes from Regional Board Practical Vision into IRWM Plan	RWMG	Same as Recommendation Action
		R-5	Coordinate with Regional Board for consistency in IRWM Plan and Practical Vision	RWMG	Same as Recommendation Action

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## Step 3: Review Status of Implementation Actions

- Actions Attempted but Abandoned:
  - 2 Land Use actions – greywater ordinance and engagement with professional associations
  - Abandoned due to lack of interest from other parties
- Actions Not Yet Begun:
  - 2 Regulatory actions – reclassify 303(d) listings
  - 1 Land Use action – source water protection guidelines
  - 2 Integrated Flood Management actions – communication with floodplain managers and review of recurring flood damage losses

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## *Area 1: Sustainable Water Development*

- Increase availability and reliability of local water supply
- Reduce, reuse, and recycled water
- Consider water quality improvements vs. cost-benefit analysis and financial capacity assessment
- Reduce consumption of first-use/imported water
  - Focus on consumer use and improving distribution system losses (main breaks and leaks)
- Implement potable reuse
- Increase surface/source water augmentation
- Consider brackish and seawater desalination
  - Can help to meet energy/environmental demands
- Investigate the cost-benefit balance of groundwater conjunctive use



## *Area 2: Value Stormwater As a Resource*

- Consider potential habitat and environmental benefits of storm water projects
  - Beneficial use improvements
  - Resource for habitat improvement, not solely water supply
- Integrate storm water into source water replenishment
  - Augment supply for potable reuse
- Consider green infrastructure that assists with urban forestry
  - Mitigation for climate change
- Increase public knowledge about importance of storm water as resource and watershed/water quality protection
- Emphasize the need for economic feasibility of storm water projects

*Will be partially addressed by guideline updates (SWRP and SWCFS)*



### ***Area 3: Invest in DAC-EDA-URC-EJ Water Systems***

- Invest in water/energy efficiency in DAC-EDA-URC-EJ communities
- Invest/assist in necessary DAC/EDA/URC water systems improvements
  - Must address financial, technical, managerial needs

*Will be partially addressed by guideline updates (DAC Needs Assessment)*



### ***Area 4: Optimize Regional Infrastructure***

- Utilize existing infrastructure to improve water quality and supply
- Focus on asset management to support use of existing infrastructure
  - Implement reservoir reoperation to improve efficiency and storage capacity
  - Connect reservoirs to existing systems (interties)
- Align projects with regulatory requirements - achieve two goals in one project
- Transition grey infrastructure to green infrastructure
- Expand emphasis on habitat values

## *2016 IRWM Guideline Updates*

- Climate Change – Water Code §79742
  - Expand discussion of risks to water supply/infrastructure to include sea level rise adaptation in coastal areas
- Storm Water – SB 985
  - Include SWRP and SWCFS elements into IRWM Plan; focus on SW management and dry weather water quality improvement
- Groundwater Management – SGMA
  - Include Region's approach to groundwater management per recent legislation and political environment

## *2016 IRWM Guideline Updates*

- Water Quality – AB 1249
  - Adequately address nitrate and perchlorate contamination in surface water and groundwater within the Region
- DAC, EDA, URC Updates
  - Develop definitions for EDAs and URCs in the Region, and evaluate location and needs of these groups
- Planning Documents Updates
  - Incorporate updated planning documents (e.g. UWMPs)

## *Technical Development Areas*




- Purpose of Discussion:
  - To identify which areas to highlight in the IRWM Plan Update
  - To assess what kind of data is available for those highlights



## *Technical Development Areas*

- Before We Start:
  - Are there topics/areas missing from the list?
- Dot Exercise:
  - Distribute dots across technical development area posters to identify priorities and data availability for IRWM Plan Update
  - All areas will be addressed, but some will be addressed in greater detail

## Technical Development Areas

-  = Priority to Include – I can provide case study, examples, literature, data
-  = Important – I may or may not provide data source
-  = Not Priority – Already addressed

## Review of Results

- Which technical development areas should be prioritized?
- Any other insights?



## *Data Needs and Project Highlights*



Who are key contacts?  
Which case studies shall we highlight?



Who are key contacts?  
What data are available?

## *Agenda*

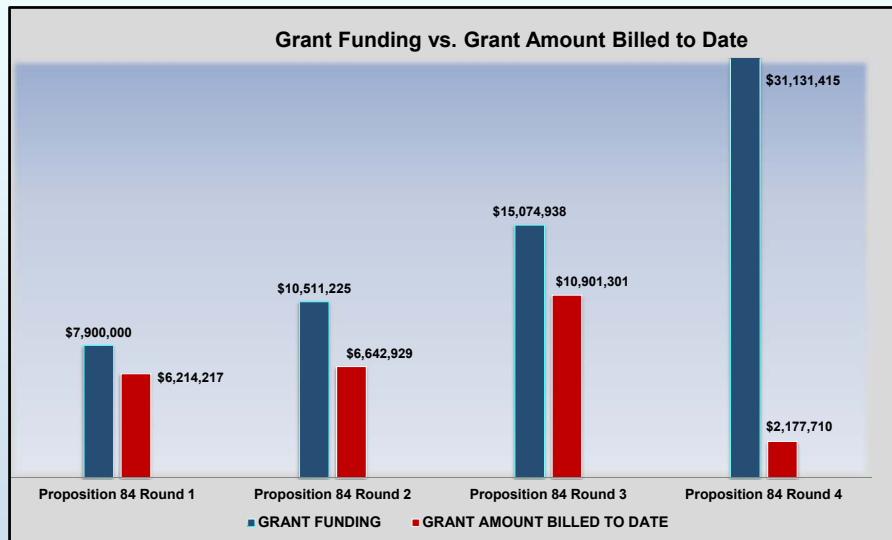
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## IRWM Grant Program

### Grant Funding Summary

Funding Source	Date Awarded	Grant Award (\$)	# of Projects Funded	# Projects Completed/at least 80% Complete	Grant Billed to DWR (\$)
Proposition 50	2008	\$25.0M	18	18	\$24.9M
Proposition 84, Plan Update	2011	\$1.0M	1	1	\$1.0M
Proposition 84, Round 1	2011	\$7.9M	11	7	\$6.2M
Proposition 84, Round 2	2014	\$10.5M	7	2	\$6.6M
Proposition 84, Round 3	2014	\$15.1M	7	3	\$10.9M
Proposition 84, Round 4	2016	\$31.1M	13	0	\$2.2M
Proposition 1, Plan Update	2017	\$250K	1	0	\$0
Proposition 1, DACI	2017	\$5.5K	9	0	\$0
<b>Total</b>		<b>\$96.4M</b>	<b>67</b>	<b>31</b>	<b>\$51.8M</b>

## Proposition 84 Grants



## *DWR Project Evaluation Site Visit*

Biofiltration Wetland Creation/Safari Park Drought Response and Outreach



## *DWR Project Evaluation Site Visit*





## ***DWR Project Evaluation Site Visit***

### **Hodges Reservoir Projects (all rounds) Site Visit**



## ***Proposition 84 Implementation, Round 1***

### **Significant Milestones:**

- Sustainable Landscapes Program – Dedication Ceremony
- 4 New Completed Projects
  - Nutrient Management in Santa Margarita River Watershed
  - Chollas Creek Integration – Phase I
  - Bannock Avenue Neighborhood Streetscape
  - San Diego Regional Water Quality Assessment

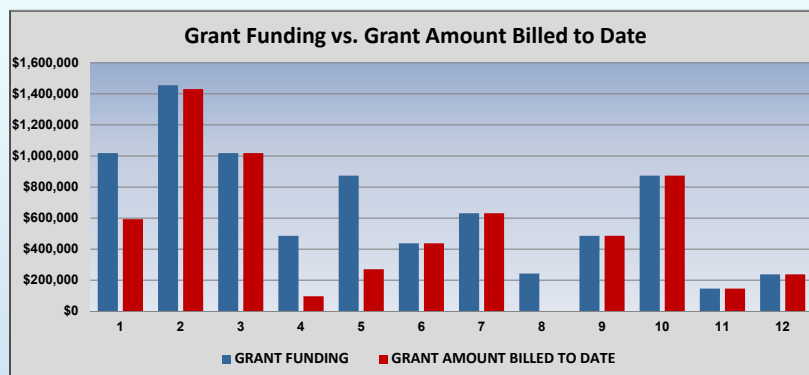
### **Upcoming:**

- Implement 4 projects through October 2018
  - Sustainable Landscapes Program
  - North County Regional Recycled Water project Rural Disadvantaged Community Partnership Project
  - Rural Disadvantaged Community Partnership Project
  - Lake Hodges Reservoir Water Quality and Quagga Mitigation Measure
  - Pilot Concrete Channel Infiltration

## Proposition 84 Implementation, Round 1



## Proposition 84 Implementation, Round 1



Total Costs Billed \$6.2M

## *Proposition 84 Implementation, Round 2*

### Significant milestones:

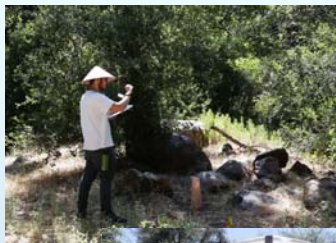
- Turf Replacement and Agricultural Irrigation Efficiency Program
  - 11 Turf conversion rebates for a 16,872 sf conversion
- Sustaining Healthy Tributaries to the Upper San Diego River
  - Hoop house (nursery) construction, invasive species mapping and plant propagation
- Failsafe Potable Reuse at the Advanced Water Purification Demonstration (AWPD) Facility
  - Quantitative Microbial Risk Analysis (QMRA) was published in June 2017

### Upcoming:

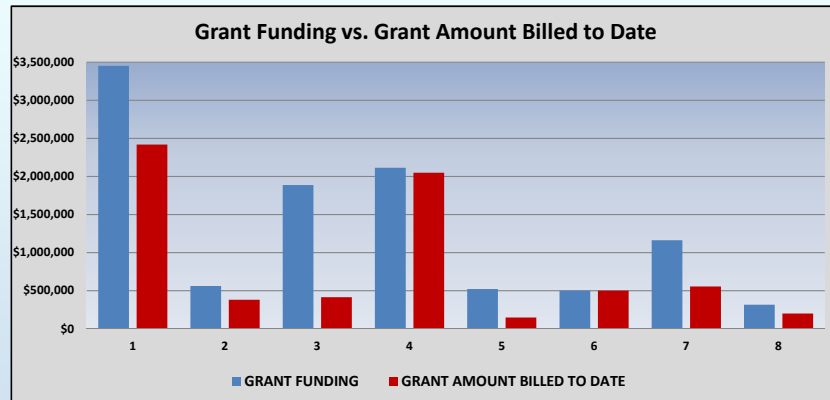
- Failsafe Potable Reuse at AWPD
  - Final report, publication of findings and project completion
- Sustaining Healthy Tributaries to Upper San Diego River
  - irrigation system, water and weed seedlings and monitoring of invasive plant

## *Proposition 84 Implementation, Round 2*

### Project 5 – Sustaining Healthy Tributaries to Upper San Diego River



## Proposition 84 Implementation, Round 2



Total Costs Billed \$6.6M

## Proposition 84 Implementation, Round 3

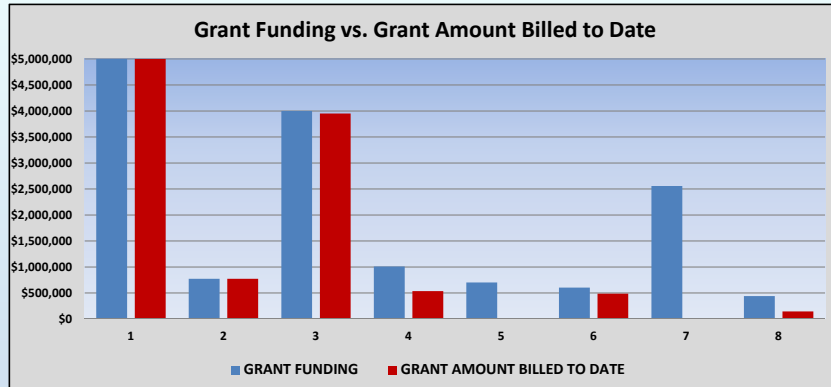
### Significant Milestones:

- Construction Completion
  - Reynolds Groundwater Desal Facility Expansion - June 15 Ribbon Cutting Ceremony
  - Carlsbad Recycled Water Plant and Dist. System
- Rincon Customer-Driven Demand Management Program
  - Known as the "leader in leak detection"
  - Classify leak notification as emergency notification

### Upcoming:

- Carlsbad Recycled Water Plant/Distribution System
  - Complete testing and outreach

## Proposition 84 Implementation, Round 3



Total Costs Billed \$10.9M

## Proposition 84 Implementation, Round 4

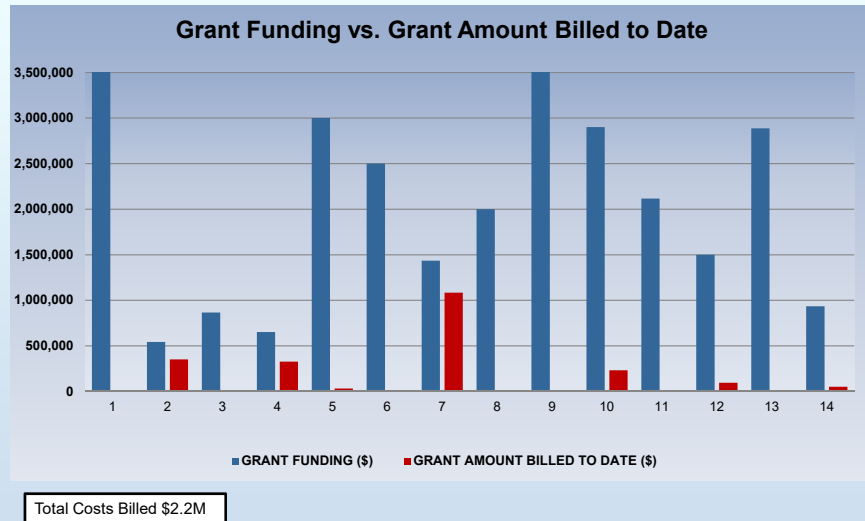
### Significant Milestones:

- Regional Drought Resiliency Program
  - 44 applicants approved for Sustainable Landscape Program conversion
- San Diego River Healthy Headwaters Restoration
  - Collected 2,700 pounds of trash and hazardous materials
- Safari Park Drought Response and Outreach
  - Award for museum education and 425,226 guests received water conservation messaging

### Upcoming:

- Continue environmental compliance and permitting work
- Approval of rescoped projects by DWR (Amendment 2)

## Proposition 84 Implementation, Round 4



## Proposition 84 Implementation, Round 4

### Project 1, Regional Drought Resiliency Program





## *Proposition 84 Implementation, Round 4*

### **Project 2, Conservation Home Makeover, Chollas Creek Watershed**



## *Proposition 84 Implementation, Round 2*

### **Project 10 – Safari Park Drought Response and Outreach**



## *Proposition 1 Plan Update*

- Significant Milestones:
  - Secured funding with DWR – Agreement approval
  - July 17, 2019- Program completion date
- Upcoming:
  - Execute Local Project Proponent (sub) agreement
  - First reporting and invoicing- November 2017

## *Proposition 1 Disadvantaged Community Involvement (DACI)*

- Significant Milestones:
  - August 1, 2017- Received award (\$5.5M)
  - August 31, 2017- Submitted Grant Agreement Conditional Requirements
  - June 2019\*- Program completion date
- Upcoming\*:
  - November/December 2017- Approved grant agreement
  - December/January 2017- Approve LPS Agreements
  - January/2017- Submit advance payment request
  - March 2017 - First reporting deadline

\*All dates are estimates and subject to change



## *Agenda*

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## *Public Comments*

## Agenda

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## Current Funding Opportunities

Project Types	Deadline	Website
<b>DWR Sustainable Groundwater Planning (SGWP) Grant Program</b>		
<u>Category 1:</u> Groundwater sustainability for Severe DACs	Phase 1: August - October	<a href="http://www.water.ca.gov/irwm/grants/sgwp/index.cfm">http://www.water.ca.gov/irwm/grants/sgwp/index.cfm</a>
<u>Category 2:</u> GSP planning and development	Phase 2: December – January	
<b>Prop 1 California Coastal Conservancy Grants</b>		
Projects consistent with the Conservancy's Strategic Plan and address one or more of the Conservancy's four priorities.	October 31, 2017	<a href="http://scc.ca.gov/grants/proposition-1-grants/">http://scc.ca.gov/grants/proposition-1-grants/</a>
<b>Title XVI Water Recycling and Reclamation Program</b>		
Planning, design, and construction of water recycling and reuse projects	Title XVI: December 2017 (anticipated)	<a href="https://www.usbr.gov/watersmart/title/">https://www.usbr.gov/watersmart/title/</a>
<b>Hazard Mitigation Assistance for Flood Mitigation Project</b>		
Projects and planning that reduces or eliminates long-term risk of flood damage to structures insured under the Nat'l Flood Insurance Program	NOI approved sub-applications – November 1, 2017	<a href="https://www.fema.gov/flood-mitigation-assistance-grant-program">https://www.fema.gov/flood-mitigation-assistance-grant-program</a>

## *2017 Meeting Schedule*

- Next RAC Meeting: December 6, 2017

**- Regular Meetings Held First Wednesday  
of Every Other Month -**

## *Joint IRWM Plan Update Workshop #1 & San Diego IRWM Program RAC Meeting #70*



October 4, 2017