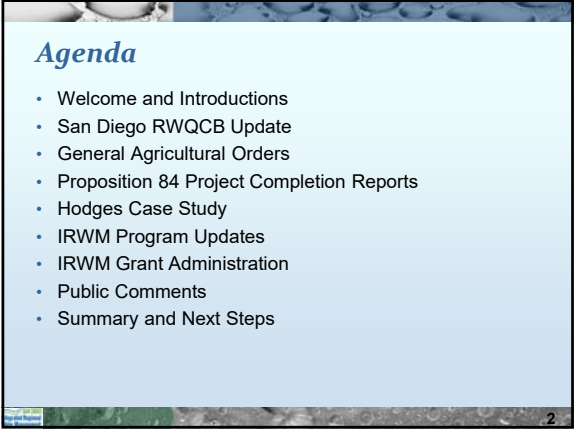




**SAN DIEGO**  
Integrated Regional  
Water Management

*San Diego IRWM Program  
RAC Meeting #68*

June 7, 2017



**Agenda**

- Welcome and Introductions
- San Diego RWQCB Update
- General Agricultural Orders
- Proposition 84 Project Completion Reports
- Hodges Case Study
- IRWM Program Updates
- IRWM Grant Administration
- Public Comments
- Summary and Next Steps



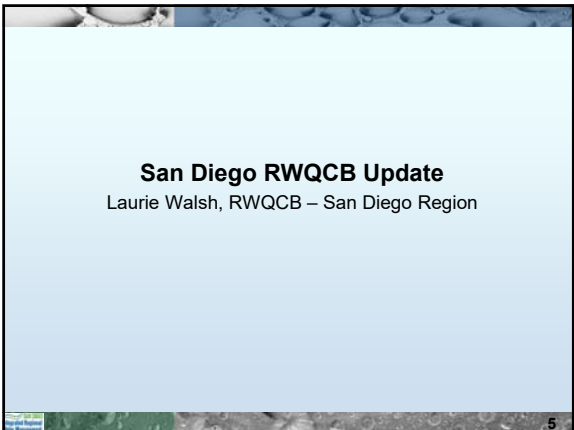
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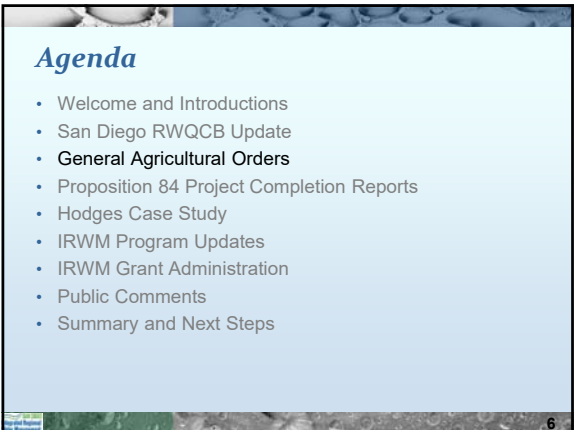


**Agenda**

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**San Diego RWQCB Update**  
Laurie Walsh, RWQCB – San Diego Region



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## General Agricultural Orders

Eric Anderson, San Diego County Farm Bureau  
Barry Pulver, Regional Water Quality Control Board

## Agenda

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## Project Completion Report

**Project 84-6: Implementing Nutrient Management in the Santa Margarita River Watershed**



## Project Completion Report

**Project 84-3: Fallbrook Plan Nurseries Recycled Water Distribution System Expansion**

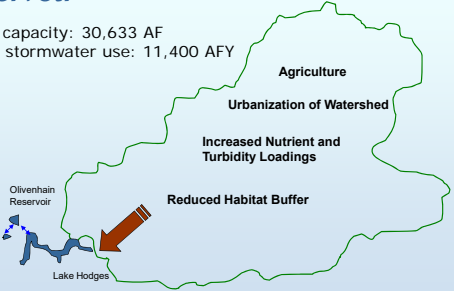


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## San Dieguito Watershed, Hodges Reservoir

Storage capacity: 30,633 AF  
Average stormwater use: 11,400 AFY



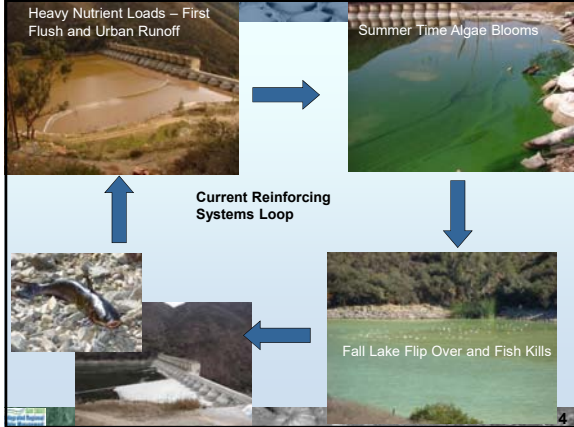
### What are the Issues?

Water Quality Challenges

- High Manganese/Sulfur Concentrations
- High Organic Carbon Concentrations
- Low DO • Algae (taste/odor)
- Fish Kills • Methyl Mercury
- Urban Runoff, Ag Runoff and Sewage Spills



13



14

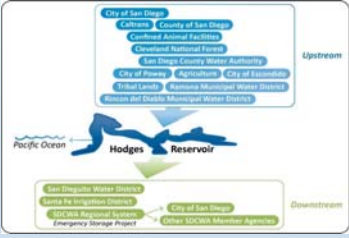
### Why do we care?



15

### Hodges Case Study

- Using Hodges Catchment as a case study, identifies:
  - Challenges to holistic watershed management
  - Opportunities to address specific challenges
- Provides insight into how an IRWM approach can address challenges while remaining in compliance with regulations



16

### Hodges Case Study Process

- Compendium
  - 12 Stakeholder Agencies Identified
  - 2 Stakeholder Workshops
  - 2 Workgroup Meetings
  - 11 Jurisdictional & Regulatory Interviews
  - 27 Documents Identified

*The Compendium is one part of a two-part study to determine ways in which an integrated (IRWM) approach could be used to improve outcomes and lead to more sustainable management of watersheds in the region, using Hodges Catchment as the case study.*

17

### Barriers to Watershed Management

Regulatory and Legal	Regulations, compliance and other legal challenges
Jurisdictional	Limits in agency jurisdictions or authority
Coordination	Coordinating Stakeholders' management efforts
Temporal Processes	Timing of projects, funds and natural systems
Knowledge of the Watershed	Disconnect among players in the scientific understanding of the watershed
Physical	Physical and geographical characteristics of the watershed
Priorities	Different and/or competing priorities within an agency or watershed
Financial	Financial constraints

18

### Most Significant Challenges

- Basin Plan Priorities
- Specific Requirements beyond control of entity
- TMDLs do not align with stakeholder issues
- Watershed group limitations
- Financial constraints

19

### Opportunities for Integration

- Solutions align with Practical Vision
- Leverage existing watershed groups
- Regulatory flexibility
- Multiple benefit solutions
- Science and data
- Grant funding

20

### IRWM Based Solutions

21

22

### IRWM Based Solutions

#### Reservoir Solutions

Hodges Hypolimnetic Oxygenation System

#### Hodges Natural Treatment System

23

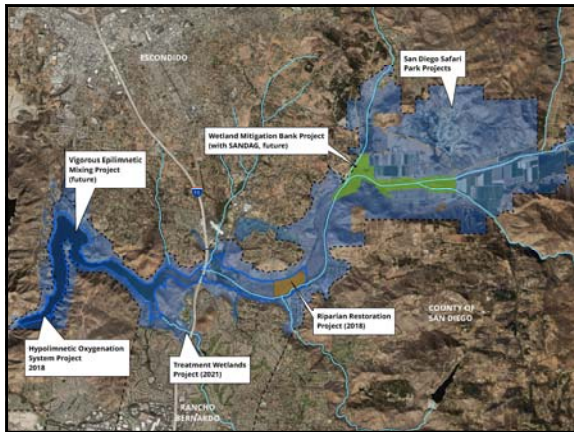
### IRWM Based Solutions

#### Watershed Solutions

Biofiltration Wetland Creation and Education Program

Safari Park Drought Response and Outreach Project

24



### Other Efforts

- San Dieguito Source ID Study – Partnership with City of San Diego Stormwater
- San Dieguito Watershed Wet Weather Sampling
- Hodges Reservoir Water Quality Modeling
- Hodges Reservoir Mercury Pilot

## Questions?

Toby Roy, [troy@sdcwa.org](mailto:troy@sdcwa.org)  
 Jeff Pasek, [jpasek@sandiego.gov](mailto:jpasek@sandiego.gov)

### Hodges Case Study Availability

- Online: <http://sdirwmp.org>  
 → IRWM Planning → Planning Documents

### Agenda

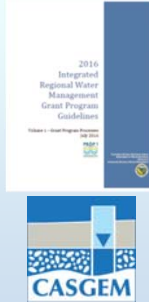
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### Current Status: DAC Planning Grant

- Draft Proposal submitted: January 27, 2017
- Post-proposal meeting with DWR: February 22, 2017
- Revised Proposal submitted: May 11, 2017
- Next steps:
  - Grant award anticipated: June 2017
  - Grant contract anticipated: July 2017
  - LPS contracts anticipated: August 2017

## Current Status: IRWM Planning Grant

- Update of San Diego IRWM Plan:
  - Updates per 2016 IRWM Guidelines, including new regulations
  - Development of a Stormwater Capture Feasibility Study (SWCFS)
  - Define Economically Distressed Areas (EDAs) and Underrepresented Communities (URCs)
- Next steps:
  - Grant contract anticipated: June 2017
  - Plan Update kick-off: October 2017



31

## Regional Stormwater Capture & Use Feasibility Study

Stephanie Gaines, County of San Diego  
Watershed Protection Program

32

## Scope of Work Tasks

- Data Collection & Existing Conditions Analysis
- Technical Feasibility Analysis of Stormwater Capture & Use
- Implementation Approach for Capture & Use
- Cost Analysis of Stormwater Capture Alternatives
- Feasibility Report



33

## Project Funding

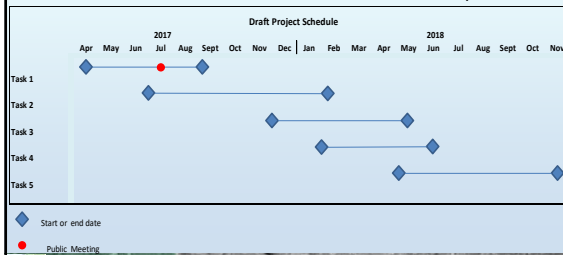
- Awarded San Diego IRWM Prop1 Planning Grant
  - \$149,941
- Awarded contract to ESA
  - Team includes: Brown & Caldwell, Burns & McDonnell, Katz & Associates
  - \$339,997
- Funding delta
  - \$190,056
  - Partners: Water agencies, Copermitees, NGO's



34

## Draft Project Schedule

- 18 month project
  - Coordinate & include results in IRWM Plan Update

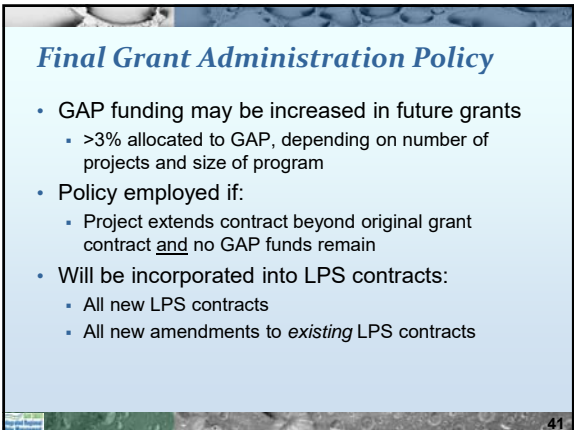
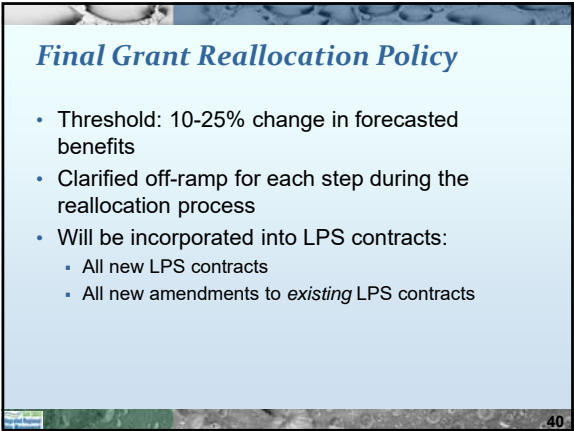
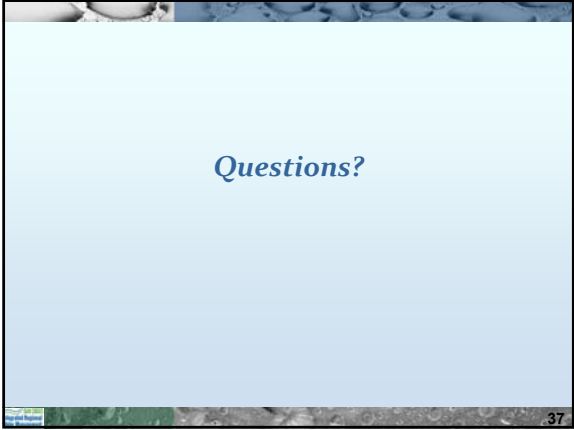


35

## Project Start & Next Steps

- Team Kick-off May 5, 2017
  - Project Overview
  - Schedule
- Developing Outreach Plan
  - Technical Advisory Committee
  - Goal: Workshop – July 2017

36

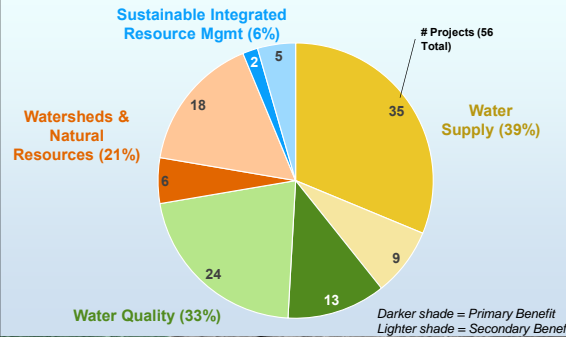


## IRWM Successes

- G3 evaluated types of projects funded since 2007
  - Number of projects by IRWM Plan Goal addressed (based on primary and secondary benefits)
  - Grant dollars awarded by IRWM Plan Goal addressed (based on primary and secondary benefits)
- Project types influenced by requirements of individual funding cycles
- Projects generally provide many benefits, not all captured by analysis

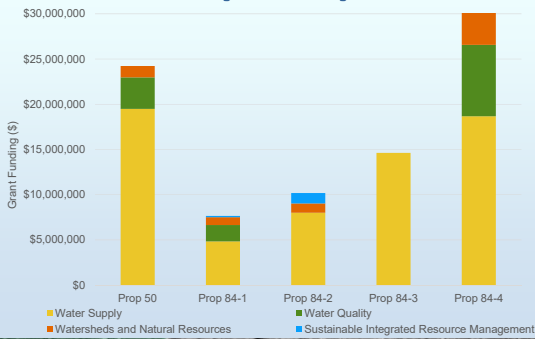
43

## IRWM Goals Addressed by Projects



44

## Grant Award by Primary IRWM Goal



45

## IRWM Plan Update Visioning

- G3 discussed and evaluated:
  - Gaps in current IRWM Plan
  - Areas of interest to the Region
  - How to address required Plan updates
  - Technical areas that could be made more robust in the revised Plan

*Will be presented to RAC for input at future RAC meeting*



46

## Statewide IRWM Update

- DWR Water Summit
  - “Stakeholder Perspectives”
    - Formerly known as Strategic Plan
  - Includes stakeholder recommendations that were part of draft Strategic Plan
  - Unclear what happens next – if anything
  - RWMGs and ACWA to ask DWR about future of “Stakeholder Perspectives”
  - Stay tuned ...

47

## Statewide IRWM Update

- Prop 1 grant program
  - DWR briefed Roundtable of Regions about possible changes to how program is operated
  - DWR presented potential solutions to perceived problems with process
  - For example, DWR definitely wants to continue receiving one grant application per funding area
  - They emphasized that this briefing was just “start of conversation” – they seemed open to compromise
    - We gave them plenty of feedback

48



## Statewide IRWM Update

- Prop 1 grant program schedule
  - Target date for DAC Grant contract execution is October 2017
  - Current schedule shows draft PSP for Prop 1- Round 1 in late 2017; applications due in Spring 2018
  - Round 2 in 2020
  - DWR plans to solicit DAC and general implementation projects jointly; majority of DAC funds available in Round 2

49

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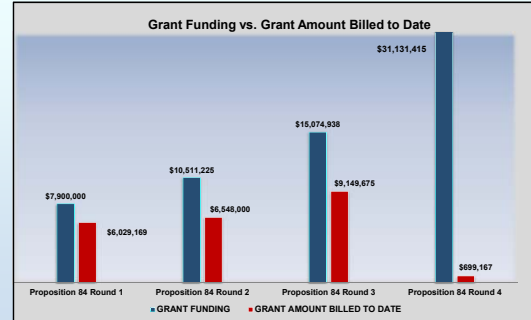
50

## 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	\$6.0M
Proposition 84, Round 2	2014	\$10.5M	7	2	\$6.5M
Proposition 84, Round 3	2014	\$15.1M	7	2	\$9.1M
Proposition 84, Round 4	2016	\$31.1M	13	0	0.7M
Proposition 1, Plan Update	2017	\$.250M	1	0	\$0
<b>**Total</b>		<b>\$90.85M</b>	<b>58</b>	<b>30</b>	<b>\$48.2M</b>

51

## Proposition 84 Grants



52

## Proposition 84 Implementation, Round 1 Significant Milestones:

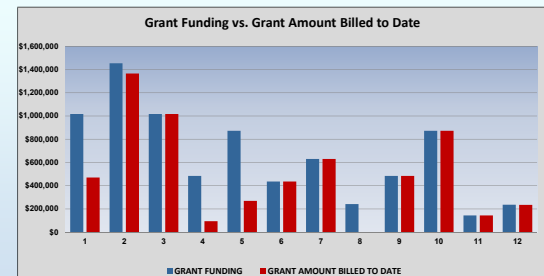
- Sustainable Landscapes Program
  - 12,476 square feet turf conversion
- North San Diego County Regional Recycled Water
  - 3,000 linear feet recycled water line installation
- San Diego Regional Water Quality Assessment & Implementing Nutrient Management Plan in Santa Margarita River
  - Implementation complete
- Grant program extended through October 2018

### Upcoming:

- Continue project implementation

53

## Proposition 84 Implementation, Round 1



54

### Proposition 84 Implementation, Round 2

Significant milestones:

- North San Diego Regional Recycled Water Program
  - OMWD Recycled Water Project Completion
- Rural DAC Partnership, Phase II
  - Rancho Estate Mutual Water Systems Consolidation project selection
- Failsafe Potable Reuse at AWT
  - Final testing and final report development

Upcoming:

- North San Diego Regional Recycled Water Program
  - SFID –construction completion
- Sustaining Healthy Tributaries – Education Plan completion, Hydromodification feasibility study and nursery construction

55

### Proposition 84 Implementation, Round 2

North San Diego Regional Recycled Water Project, Phase II  
Olivenhain Municipal Water District's Conversion of Distribution Facilities to Recycled Water Project

56

### Proposition 84 Implementation, Round 2

Sustaining Healthy Tributaries to the Upper San Diego River

57

### Proposition 84 Implementation, Round 2

Grant Funding vs. Grant Amount Billed to Date

Period	Grant Funding	Grant Amount Billed to Date
1	\$3,500,000	\$2,500,000
2	\$1,000,000	\$500,000
3	\$2,000,000	\$500,000
4	\$2,500,000	\$2,000,000
5	\$1,000,000	\$200,000
6	\$1,000,000	\$500,000
7	\$1,500,000	\$1,000,000
8	\$500,000	\$200,000

Total Costs Billed \$6.5M

58

### Proposition 84 Implementation, Round 3

Significant Milestones:

- Reynolds Groundwater Desalination Facility
  - Completed pipeline, electrical and pump installation
- Carlsbad Recycled Water Plant/Distribution System
  - Completed facilities construction
- Rincon Customer-Driven Demand Management
  - Detected 1,007 leaks

Upcoming

- Reynolds Groundwater Desalination Facility
  - Ribbon-cutting ceremony on June 15
- Carlsbad Recycled Water Plant/Distribution System
  - Testing and outreach

59

### Proposition 84 Implementation, Round 3

Grant Funding vs. Grant Amount Billed to Date

Period	Grant Funding	Grant Amount Billed to Date
1	\$5,000,000	\$4,000,000
2	\$1,000,000	\$500,000
3	\$4,000,000	\$3,500,000
4	\$1,000,000	\$500,000
5	\$1,000,000	\$200,000
6	\$1,000,000	\$200,000
7	\$2,500,000	\$1,000,000
8	\$500,000	\$200,000

Total Costs Billed \$9.1M

60

## Proposition 84 Implementation, Round 4

### Significant Milestones:

- Received advance payments, and 1<sup>st</sup> LPS progress reports; and approved LPS Grant Agreements

### First Report:

- Conservation Home Makeover
  - Converted demonstration home to drought-tolerant, installed rain barrel and completed Education Plan
- Via de la Valle/Highway 101 Recycled Water Pipeline
  - 6,240 Linear Feet of recycled water pipeline installed
- UCSD Water Conservation/Protection Project
  - CUP cooling tower completed and modular wetland treatment system installed

61

## Proposition 84 Implementation, Round 4

### Significant Milestones:

- Safari Park Drought Response and Outreach
  - Completed: Waste Water Treatment Plant Basis of Design Report, Water Master & Nutrient Management Plans
- San Diego River Healthy Headwaters Restoration
  - El Capitan Catchment Invasive Weed Strategic Plan

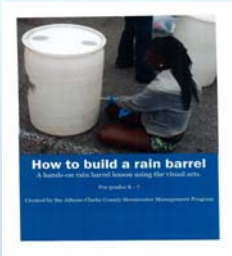
### Upcoming:

- Continue environmental compliance and permitting work
- Approval of outstanding LPS grant agreements
- Approval of amendment requests by DWR

62

## Proposition 84 Implementation, Round 4

### Conservation Home Makeover – Education Plan



63

## Proposition 84 Implementation, Round 4

### Ms. Smarty-Plants Grows Water-Wise Schools



64

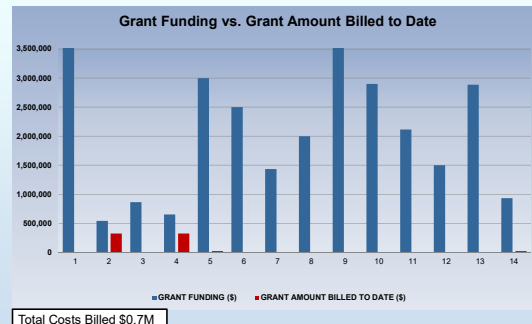
## Proposition 84 Implementation, Round 4

### UCSD Water Conservation/Protection Project



65

## Proposition 84 Implementation, Round 4



66

## Proposition 1 Plan Update

### Significant Milestones:

- Received draft grant agreement and routed for final edits
- Program anticipated end date - October 2019

### Upcoming:

- Execute grant agreements
- First reporting and invoicing deadline

67

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68

# RECLAMATION

*Managing Water in the West*

## San Diego Basin Study Public Meeting

July 24, 2017 – North County Location TBD  
July 25, 2017 – Mission Valley Library



U.S. Department of the Interior  
Bureau of Reclamation

69

## Public Comments

70

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71

## 2017 Meeting Schedule

- Next RAC Meeting: August 2, 2017
- 2017 Meeting Schedule:
  - October 4
  - December 6

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

72

**SAN DIEGO**  
Integrated Regional  
Water Management

**San Diego IRWM Program**  
**RAC Meeting #68**

June 7, 2017

- Up to 55% Runoff
  - Where are the opportunities?

**San Diego County Soil Types**

Soil Type

- A
- B
- C
- D

**SW Reservoirs & GW basins**

Dominant Hydrologic Processes  
Regional San Diego County Watershed

**Watersheds & WWT / WRFs**

Watershed

WWT / WRF

**Study Benefits**

New pathways to implement stormwater management

- Legislation (SB985)
- Capture & Beneficial Use
  - Recycling
  - Infiltration
  - Storage
  - Direct Use
- Identify new water supply opportunities
  - Supply diversification
  - Benefits stormwater & urban water management goals