



Regional Advisory Committee (RAC) Meeting  
February 3, 2016

Proposition 50 IRWM LPS Project #2

# Irrigation Hardware Giveaway and Grass Replacement Rebate Program

City of San Diego Public Utilities Department  
Water Conservation Program

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## Background

- In 2002, California voters approved Proposition 50, the Water Security, Clean Drinking Water, Coastal, and Beach Protection Act
- In 2010, the City of San Diego was approved for grant funding to implement Project #2:

## Irrigation Hardware Giveaway and Grass Replacement Rebate Program



## Program Philosophy

The grant funded program offered incentives to qualified City of San Diego Commercial and Residential customers to make upgrades to landscape and irrigation systems – which included Grass Replacement, Micro Irrigation and Smart Controller rebates. The program also offered landscape and irrigation efficiency reviews by certified (CLSP) and trained field staff as part of the on-site evaluation. Field review and customer interaction focused on:

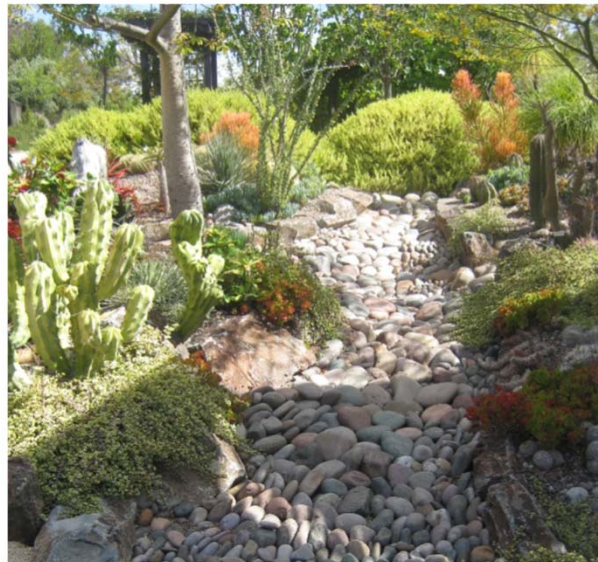
- Balancing ease of process and practicality
- Education and Support
- Identifying Water Savings Opportunities
- Changes in irrigation
  - Micro Irrigation
  - High efficiency rotating nozzles
  - Adjustment to controller run times
- Postcards – Reminder after 6 months





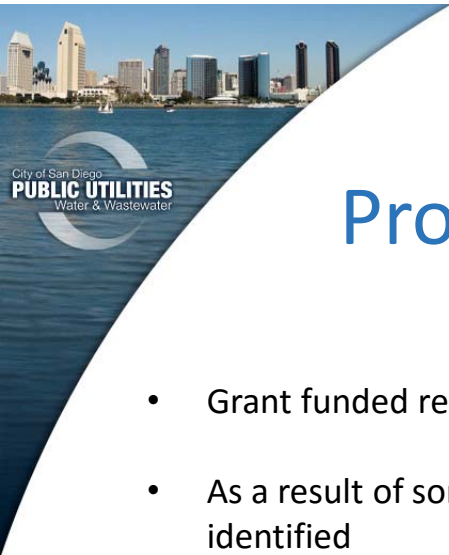
## Project Highlights

- Focused on individualized customer training and education
- Plant List submittal requirement that provided customers with a tool to design their landscape and ensure required plant coverage was achieved using moderate to low water using plants



### End result:

- Customers became active water conservationists and modified water use behavior
- Customers often could speak to inquisitive neighbors about types of water-wise plants they selected



## Project Goals

- Grant funded rebate program was initially projected to conserve at least 91 acre feet per year (AFY) of water
- As a result of some modifications to the rebate program, approximately 117 AFY in water savings was identified
- A selected group of 50 participating sites to serve as a study group to demonstrate the link between use of landscape conservation hardware and observable levels of urban runoff reduction
- The Smart Controller and Micro Irrigation Rebate Program will promote further utilization of residential and commercial weather-based irrigation controllers
- Aim to reduce the extensive amount of overwatering that occurs in commercial, residential and institution urban landscapes with the added benefit of reducing pollutant-laden dry weather urban runoff flows into the municipal storm drain system





## Rebate Program – Smart Controllers, Micro Irrigation and Grass Replacement

- Structured to complement City of San Diego's existing Commercial Landscape Survey Program (CLSP) and Residential Survey Program
- Customers with sites that qualify to participate would receive a customized survey and analysis of property's irrigation system and efficiency
- The rebates served to incentivize customers to convert high water use landscapes to low water use landscapes with efficient irrigation, resulting in reduced water consumption

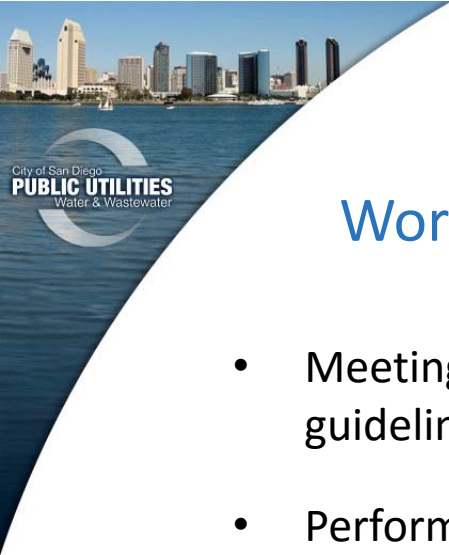






## Grass Replacement Rebate Program – Before and After Comparisons...



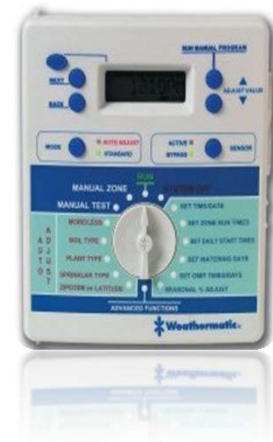
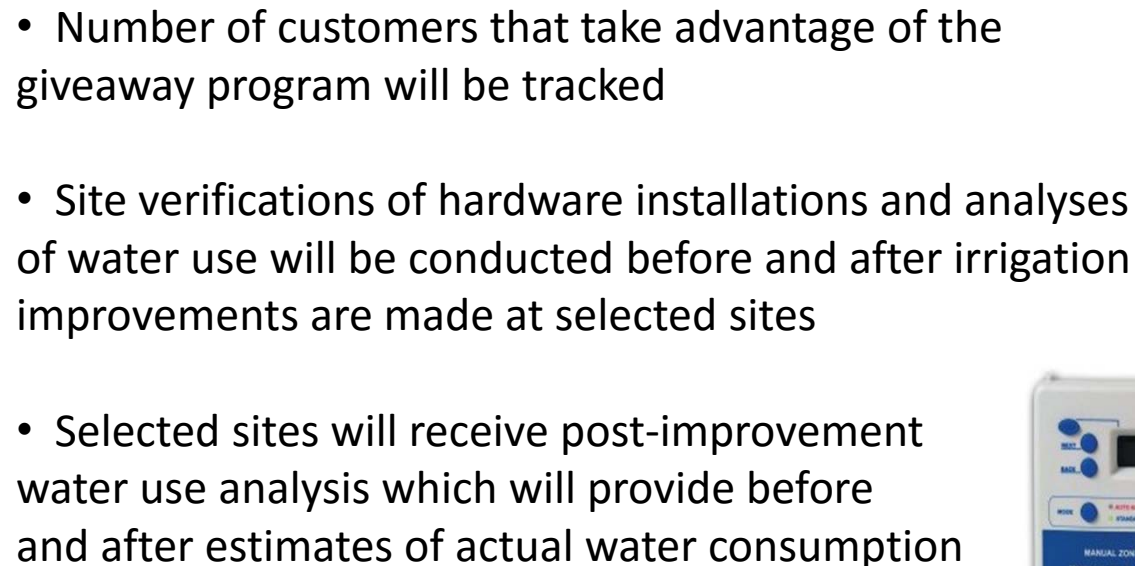


## Work Plan – Project Management, Planning & Design

- Meetings and coordination efforts to develop and design the program and guidelines
- Performed various research related to topics
- Efforts focused on the Grass Replacement Rebate Program
- Program guidelines, criteria and rebate process were developed
  - *Materials included customer instructions, guidelines and application; brochures; flyers*
  - *Yard signs, flyers, posters, logos were created*
  - *On-going process improvement conducted throughout the life of the project*









# Work Plan - Implementation

## Grass Replacement Rebate

Customer rebate application submittal

Application review by staff

Pre and Post Site Visits

Receipt review and verification

Customer receives rebate check

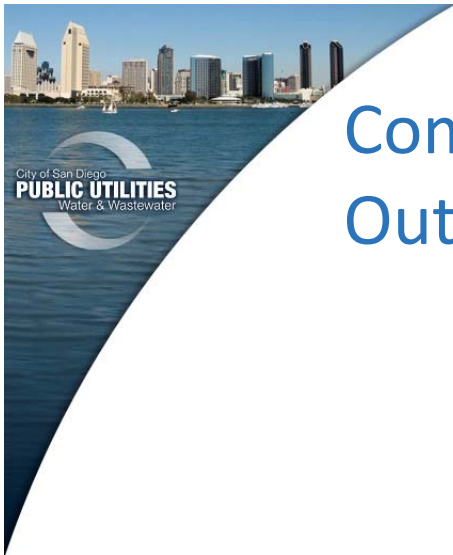




## Residential Outdoor Water Conservation Rebates



<b>Smart Controller</b>	Up to \$400	2,000 square feet
	or \$200	Less than 2,000 square feet
<b>Micro-Irrigation</b>	\$0.20 per square foot	Per square foot
		Maximum 2,400 square feet
<b>Grass Replacement</b>	\$1.25 and \$1.50 per square foot	Per square foot; maximum 2,400 square feet



# Commercial & Multi-Family Outdoor Water Conservation Rebates



<b>Smart Controller</b>	Up to \$1,700	\$25 per station
<b>Micro-Irrigation</b>	\$0.20 per square foot	Ceilings varied throughout life of program.
<b>Grass Replacement</b>	\$1.50 per square foot	Ceilings varied throughout life of program.



# Outreach/Public Awareness







# Quick Stats

	Residential			Commercial			Total \$
Rebate	Total Number of Rebates Issued	Total Square Footage Rebated	Total Rebate Dollars	Total Number of Rebates Issued	Total Square Footage Rebated	Total Rebate Dollars	
Smart Controller	298	-	\$83,243	22	-	\$19,902	\$103,145
Micro Irrigation	195	174,525	\$34,905	39	190,450	\$38,090	\$72,995
Grass Replacement	297	387,490	\$276,359	70	373,438	\$412,110	\$688,469



Total Project Cost - \$1.5 million



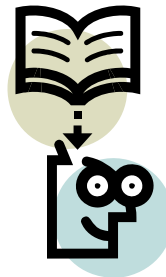
# Water Savings

City of San Diego Prop 50 Water Savings Case Study of 50 Participants				City of San Diego General Population Savings			
Gallons Saved Per Year Per Square Feet of Grass Removed 2012-2014		Gallons Saved Post Prop 50 as a Percent Reduction 2012-2014		Gallons Saved Post Prop 50 in GPCD as a Percent Reduction 2012-2014			
Avg Gal Saved/SF Turf Removed	82.85	Savings As a Percent	40.8%	Savings As a Percent	19.1%		
<b>50 Participants Compared to General Population as Percent Saved</b>		<b>Water Savings after General Population Savings are Factored into The Prop 50 Participants Savings</b>					
50 Participants Savings	40.8%						
All San Diego Customer Savings	19.1%						
Participant Savings Factor (40.8%-19.1%)/40.8%	0.53	Water Savings in Gal/SF Turf Removed (.53% * 82.85)				<b>44</b>	



## Other Data

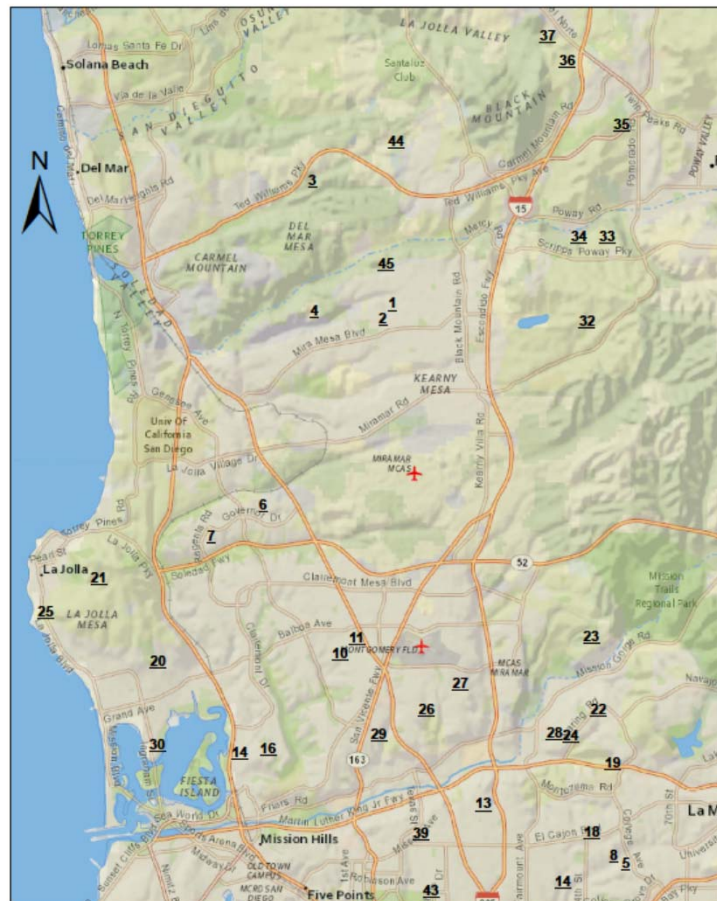
- Water Conservation Variables Relative Index
- Water Conservation Variables Analysis
- Before and After Photos with Savings Results
- Case Study Water Usage by Participant
- Case Study Water Usage Graphs
- Cost of Savings Analysis for 50 Case Study Participants
- Economic Indicators
- Map Display of Case Study Participants





# Map of Case Study Participants

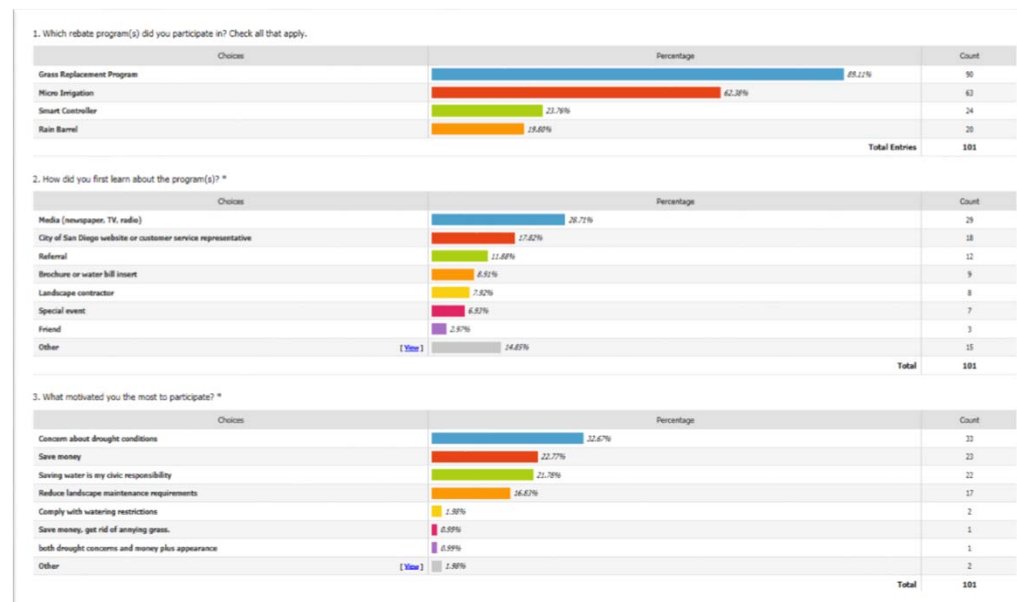
Exhibit H  
Proposition 50 Case Study Participant Location Map





# Customer Survey

- Recently sent out a survey to rebate participants for feedback
- Total of 16 questions related to rebate program participation, water usage, satisfaction of program and customer feedback







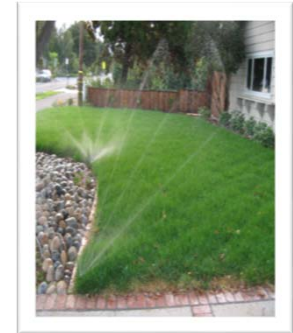
# Customer Survey - Results

- Received 101 responses
- Majority heard about the rebate programs through the media and the website
- Participants were motivated to participate in the program because of the drought, saving money and felt that saving water is their civic responsibility
- Participants felt the programs were extremely helpful in achieving water savings and have actually seen a decrease in water use on their water bill
- Comments:
  - *“The expert who helped us plan the replacement plantings was a terrific help!”*
  - *“Extend the rebate program. We are constantly approached by our neighbors and they are eager to participate too!”*
  - *“Our visit was very helpful in choosing the water wise plants we put in our front yard. Beautifully landscaped and it's nice to see the size of the plants.”*



# Lessons Learned

- Customer training should be individualized based on customer's project and is determined during the pre-site inspection
- Assist customer in identifying invasive weeds during pre-site and offer recommendations to eradicate
- During post-site inspection, be very thorough on watering schedule and scheduling after root establishment and change of seasons
- Provide tools to the customer to assist with plant selection and completing the design plant list
- Provide tools to the customer to assist in proper irrigation selection
- Emphasize the importance of doing thorough job killing grass; provide resources, training, information and advice on specific grass type; it is often the hardest part of the project





# Landscape Projects



*Pre-Site*



*Post-Site*



# Landscape Projects



Commercial rebate participant from 2012:  
6 unit complex  
1831 square feet converted  
Gallons per day prior to conversion - 514  
Post conversion - 352  
Savings - 162 gpd







# Landscape Projects



*Pre-Site*



*Post-Site*





# Landscape Projects



*Pre-Site*



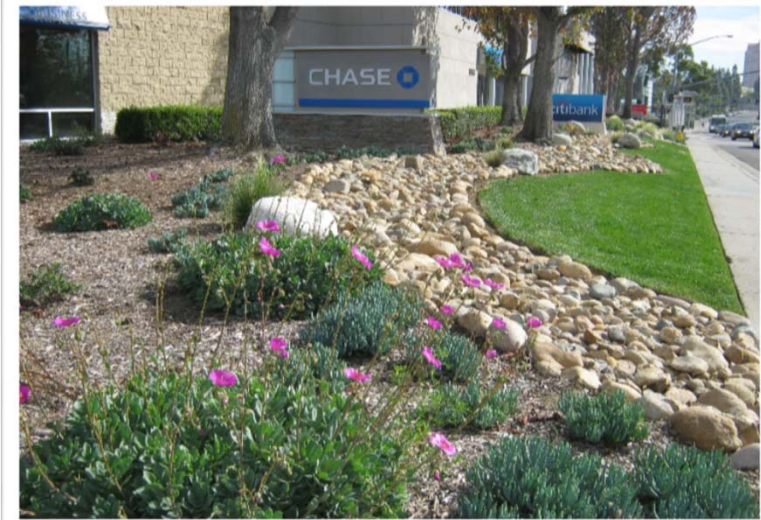
*Post-Site*



# Landscape Projects



*Pre-Site*



*Post-Site*



# Questions?

