



San Diego County
Water Authority
And Its 24
Member Agencies

Proposition 84 Round 3 Project 4 Completion Report

February 1, 2023
San Diego IRWM RAC Meeting

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Proposition 84 IRWM 2014 Drought Grant Solicitation

Back to 2014...

- In April 2014, SDIRWM began accepting applications for Prop 84 Round 3 Drought Relief grant funding
- What was considered “Drought Relief” in 2014?
Projects that provide drought relief/preparedness and increase water supply reliability:
 - Water conservation
 - Landscape/agricultural irrigation efficiency
 - Conjunctive use
 - Water reuse/recycling
 - Long-term reductions in water use
 - Efficient groundwater basin management
 - System inerties

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Project 4 Regional Demand Management Program Expansion

Budget Adjustments

Budget Category	Original Grant Amount	Amended Grant Amount	Original Cost Share (Funding Match)	Amended Cost Share (Funding Match)	Original Total Budget	FINAL Amended Total Budget
A - Direct Project Administration	\$19,362	\$19,362	\$6,453	\$6,453	\$51,630	\$25,815
D - Construction / Implementation	\$989,550	\$1,279,523	\$330,618	\$432,500	\$1,320,168	\$1,712,023
Totals	\$1,008,912	\$1,298,885	\$337,071	\$438,953	\$1,345,983	\$1,737,838

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Project 4 Regional Demand Management Program Expansion

Final suite of implementation activities



Kearny Mesa Juvenile Detention Facility
Plumbing Retrofits



Turf Replacement Rebates



WaterSmart Landscape Classes

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Kearny Mesa Juvenile Detention Facility Plumbing Retrofits

Water efficiency hardware upgrades



**Final Grant Expenditures:
\$160,000**

Financial incentives for the direct installation of water efficiency hardware upgrades in partnership with the County of San Diego

- toilets equipped with electronic flush valves
- valve converters
- showerheads

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Kearny Mesa Juvenile Detention Facility Plumbing Retrofits

Water supply benefits

Retrofit Device Type	Actual No. of Units Installed	AFY Savings	AFY	AFL (10 yrs)
Urinal flush valves	144	0.12	17.3	172.5
Valve converters	88	0.003	0.3	2.6
Faucet flow reducers	12	0.0054	0.1	0.6
Low-flow showerheads*	49	0.2283	11.2	111.9
High efficiency toilets**	4	0.0322	0.1	1.3
TOTAL	297		29	289

* With timers

** Installed in common areas

Greenhouse gas reduction: 262.2 MT CO₂e over 10-year device life
Equivalent to taking 66 cars off the road

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Turf Replacement Rebates

Residential and commercial landscapes



Financial incentives for residential and commercial customers to replace turf landscapes with sustainable landscapes:

- healthy, living soils
- climate-appropriate plants
- high-efficiency irrigation
- rainwater as a resource

**Final Grant Expenditures:
\$1.4 million**

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Turf Replacement Rebates

Residential and commercial landscapes

Sustainable Landscapes Incentive Program @ \$1.75/sf 2015-2018 \$380,000	MWD Turf Rebate Program @ \$1/sf 2018-2021 \$1,037,649
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Total # Rebates	SF Replaced	Average SF/Project	Total Grant- Funded Rebates	AFY Water Saved
533	1,018,041	1,910	\$1,417,649	137.1



18
football
fields



250+
California
homes


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Prop 84 Round 1 Sustainable Landscapes Program Partnerships




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The City of









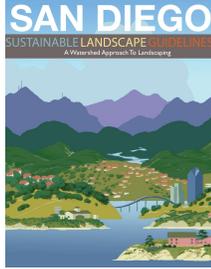


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Sustainable Landscapes Program

Originated with Prop 84 Round 1 Grant



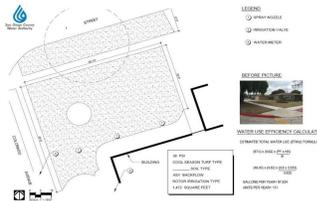
Development of Landscape Guidelines

Professional/Residential Education & Training



Sustainable Landscapes Program

Originated with Prop 84 Round 1 Grant



Technical Assistance

Marketing & Outreach



Sustainable Landscapes Program

Originated with Prop 84 Round 1 Grant



**Turf Conversion
Financial
Incentives**



**Landscaping
Materials**

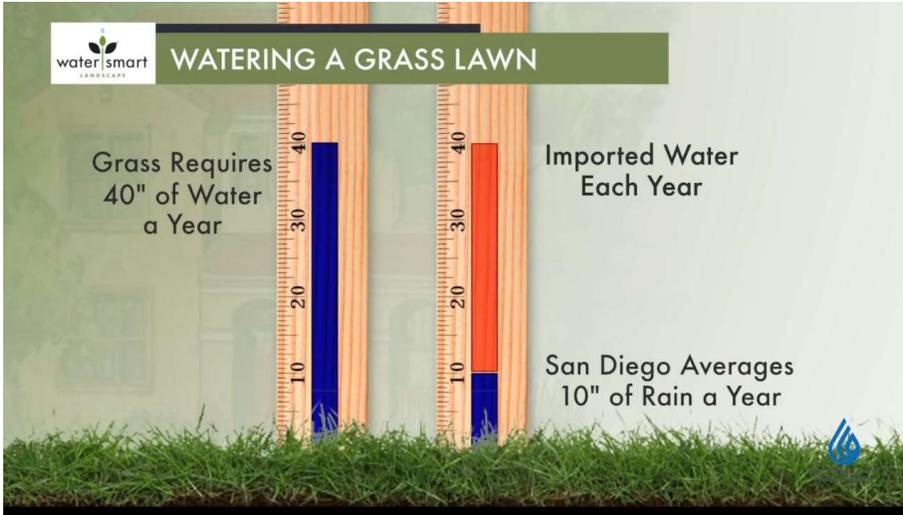


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Sustainable Landscapes are WaterSmart



water smart LANDSCAPE WATERING A GRASS LAWN

Grass Requires 40" of Water a Year

Imported Water Each Year

San Diego Averages 10" of Rain a Year

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Turf Replacement Rebates

Benefits

Component	Water Supply Benefit	GHG Avoidance Benefit (MT CO2e Avoided)
Turf Replacement Rebates	137 AFY	124 MT/yr
Total over 30 yr life of project	4,113 AFL	3,717 MT CO2e

Equivalent to taking 1,500 cars off the road

Challenges/Lessons Learned

- New frontier
- Inefficient irrigation
- Savings not easily tapped
- Tough for water agencies
- Expensive for homeowners

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WaterSmart Landscape Makeover Program

In-depth, regionally-specific landscape education for homeowners



Develop the skills and confidence to complete a turf conversion project

- four-class series
- three-hour workshops
- homeowner's guide

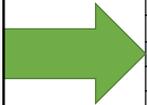
**Final Grant Expenditures:
\$134,550**

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WaterSmart Landscape Makeover Program

Deliverables

Class Date	Class Location	Number of Attendees
3-Hour Workshops (in-person)		
10/20/15	San Diego Gas & Electric Energy Innovation Center	90
10/26/15	City of Escondido	37
11/9/15	Vallecitos Water District	25
11/14/15	City of Oceanside	35
12/3/15	San Diego Gas & Electric Energy Innovation Center	81
12/19/15	City of San Diego	30
1/30/16	City of San Diego	24
4-Class Series (in-person)		
6/13/16	City of Poway	22
8/17/16	San Diego Gas & Electric Energy Innovation Center	26
9/15/16	Mira Costa College, Oceanside	22
10/5/16	San Diego Gas & Electric Energy Innovation Center	24
10/11/17	San Diego Gas & Electric Energy Innovation Center	26
179,000 sf		24 AFY



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Your Path to a WaterSmart Landscape



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WaterSmart Landscape Makeover Program



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Project 4 Regional Demand Management Program Expansion

Final suite of implementation activities

Benefits (over project lifetime unless otherwise indicated)		Target	Actual
1	Avoid Imported Water Supply Purchases (AF)	1,524	2,344.7
2	Reduce Demand for Net Diversions from the Bay-Delta (AF)	1,016	1,563
3	Local Supply Development to Decrease Vulnerabilities (AF)	1,386	2,132
4	Reduce Net Production of Greenhouse Gases (MT CO ₂)	1,378	2,120
5	Avoid Social Costs of Greenhouse Gases	\$37,414	\$57,562
6	Contribute to 20x2020 Goals (AF)	78	78
7	Reduce Water Costs to Customers, Including DACs	\$1,924,154	\$1,924,154
8	Reduce Pollution of Green Waste (lbs/yr)	11,307	15,338

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Thank you!

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