

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com

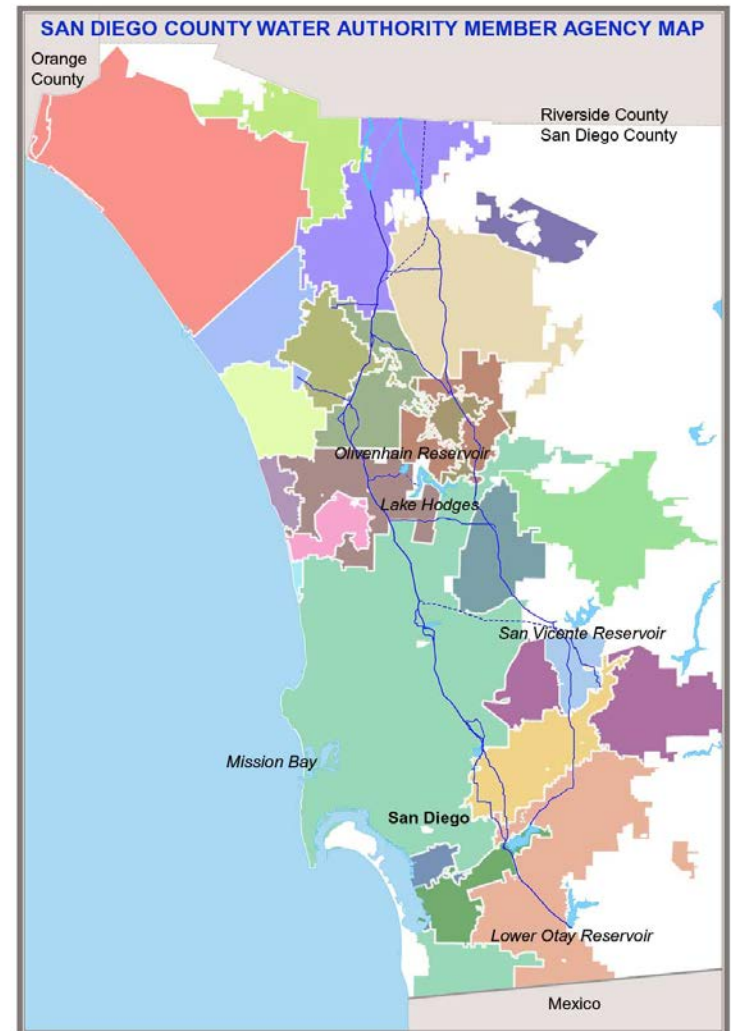


A Homeowner's Guide to a WaterSmart Landscape

**WaterSmart Innovations Conference
October 4, 2012**

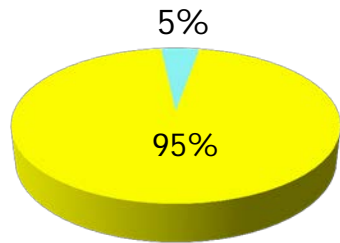
What is the Water Authority?

- Wholesale water agency created by State Legislature in 1944
 - 24 member agencies
 - 36-member board of directors
 - Serves 3.2 million people and region's \$186 billion economy
- Mission is to provide safe and reliable water supply to member agencies
- Service area
 - 950,000 acres
 - 97% of county's population



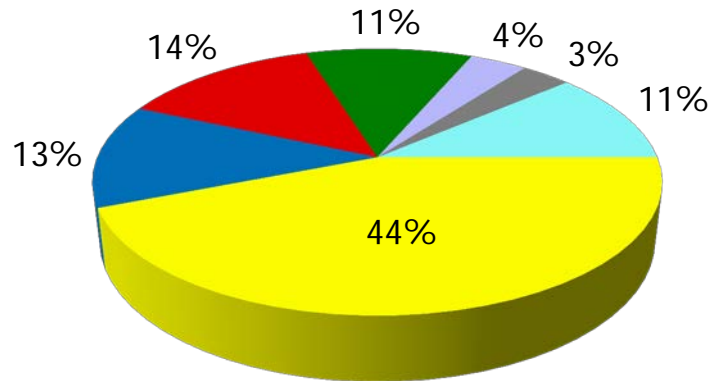
Increasing Supply Reliability through Supply Diversification

1991



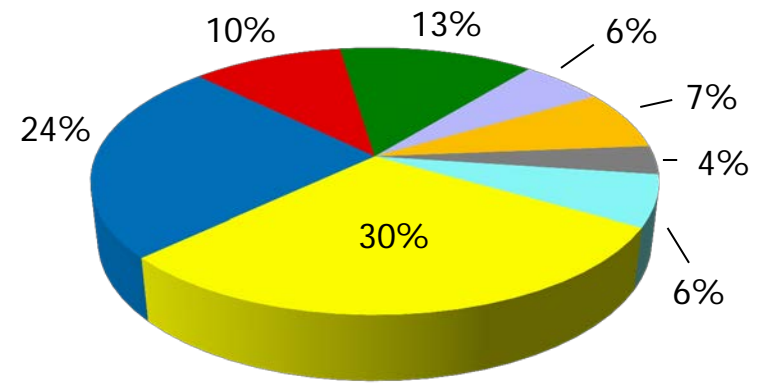
Total = 578 TAF

2011 (final)



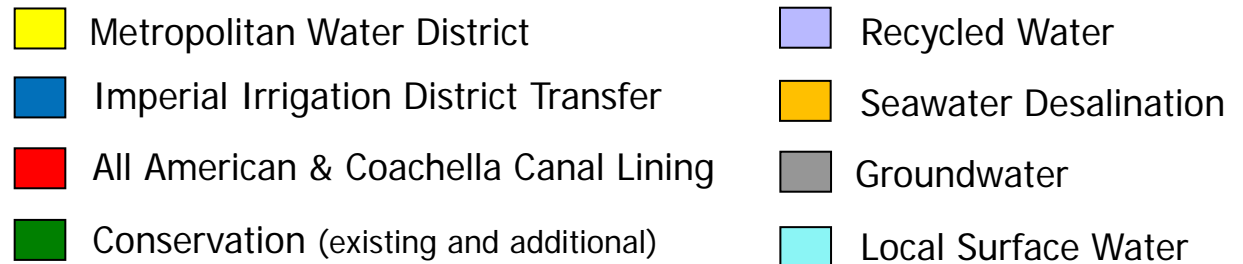
Total = 594 TAF

2020



Total = 779 TAF

TAF = thousand acre-feet



Guide Development

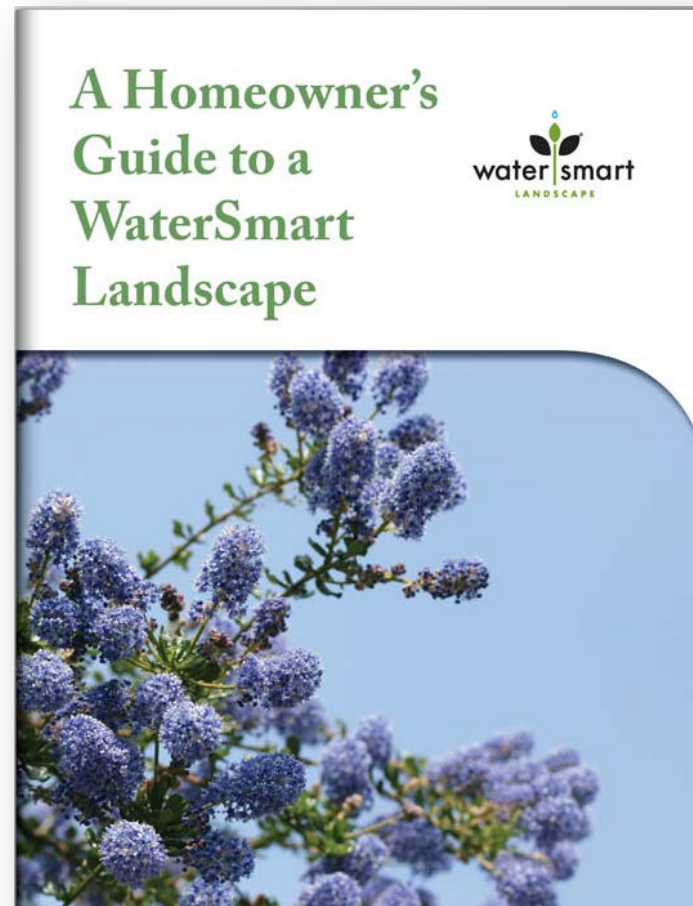


**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA**

RECLAMATION
Managing Water in the West

Online flipbook

- www.sdcwa.org/landscape-guide-flipbook



Program Goals

- Make resource user-friendly
- Improve outdoor water efficiency
- Help region meet long-term water management objectives
- Encourage market transformation and long-term behavioral change



Key Elements of a WaterSmart Landscape

- Water Efficient Design
- Efficient Irrigation
- Climate-Appropriate Plants
- Appropriate Maintenance and Irrigation Management



Steps to Achieving a WaterSmart Landscape

Achieving a WaterSmart landscape requires careful planning and implementation, but the many benefits you will derive – which include improving the beauty of your property, reducing maintenance, minimizing water pollution due to runoff, and conserving water – are well worth the effort.

1

IDENTIFY YOUR
LANDSCAPE
TARGET

2

CREATE A BASIC
PLOT PLAN

3

TEST AND
CONDITION YOUR
SOIL

4

DESIGN YOUR
WATERSMART
LANDSCAPE

5

IMPLEMENT YOUR
PLAN

6









CARE FOR YOUR
WATERSMART
LANDSCAPE

The following pages will guide you through the steps to creating a WaterSmart landscape.

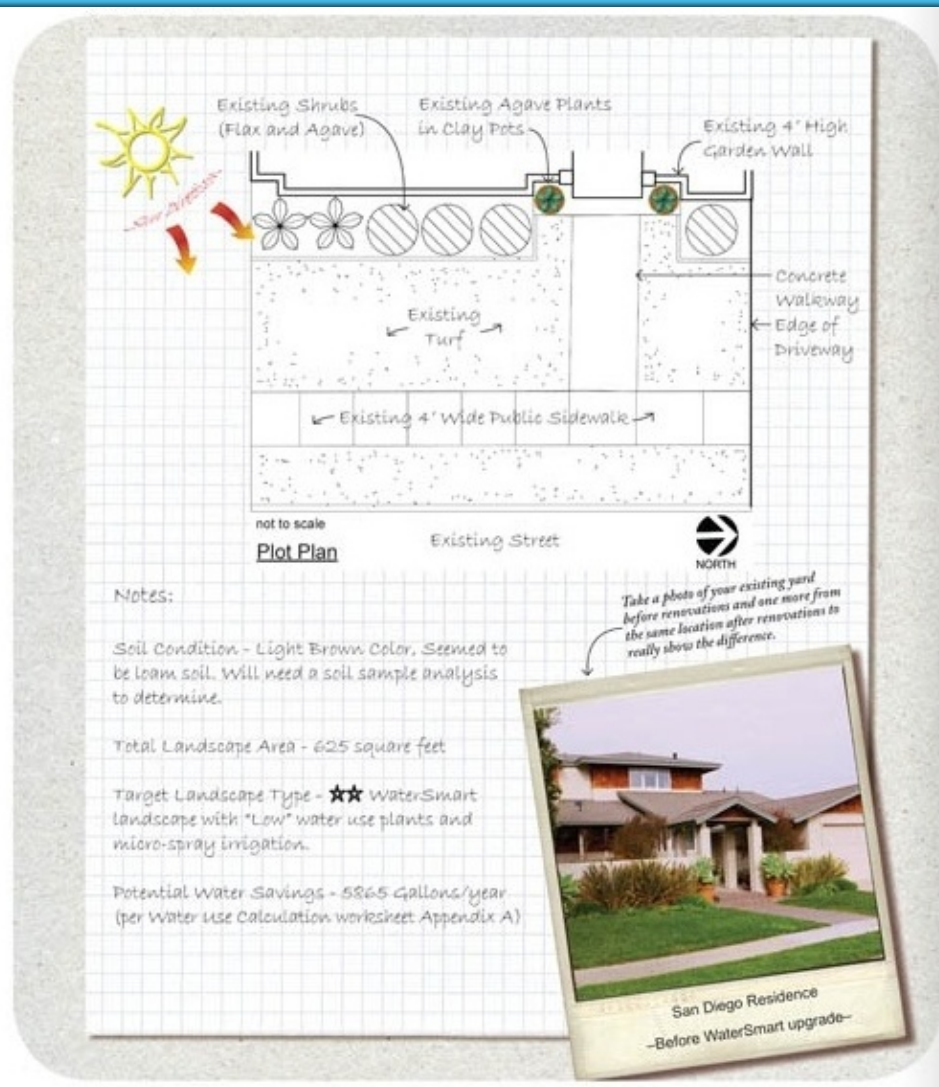
Note: If you're not ready to start the full landscape upgrade right now, you can start by upgrading just one portion of your yard at a time. Or if you're just looking for tips to maximize water savings in your existing landscape, skip to "Step 6 – Care for your WaterSmart Landscape" for recommendations on how to **save water in your landscape now!**

1. Identify Landscape Target

- Water savings is determined by:
 - Plants' water use characteristics
 - Irrigation system efficiency

Planting	Irrigation	Low efficiency irrigation	Moderate efficiency irrigation	High efficiency irrigation
		Conventional Spinklers Impact Rotors <i>IE = 0.55*</i>	Rotator Nozzles Gear Rotors <i>IE = 0.70*</i>	Drip Emitters Bubblers Micro Spray <i>IE = 0.80*</i>
"Low" to "moderate" water use plants 45% Low water use 45% Moderate water use 10% High water use <i>average PF = 0.40*</i>		not WaterSmart		
"Low" water use plants 90% Low water use 10% High water use <i>average PF = 0.26*</i>				
"Very low" water use plants 50% Very Low water use 50% Low water use <i>average PF = 0.15*</i>				

2. Create a Basic Plot Plan



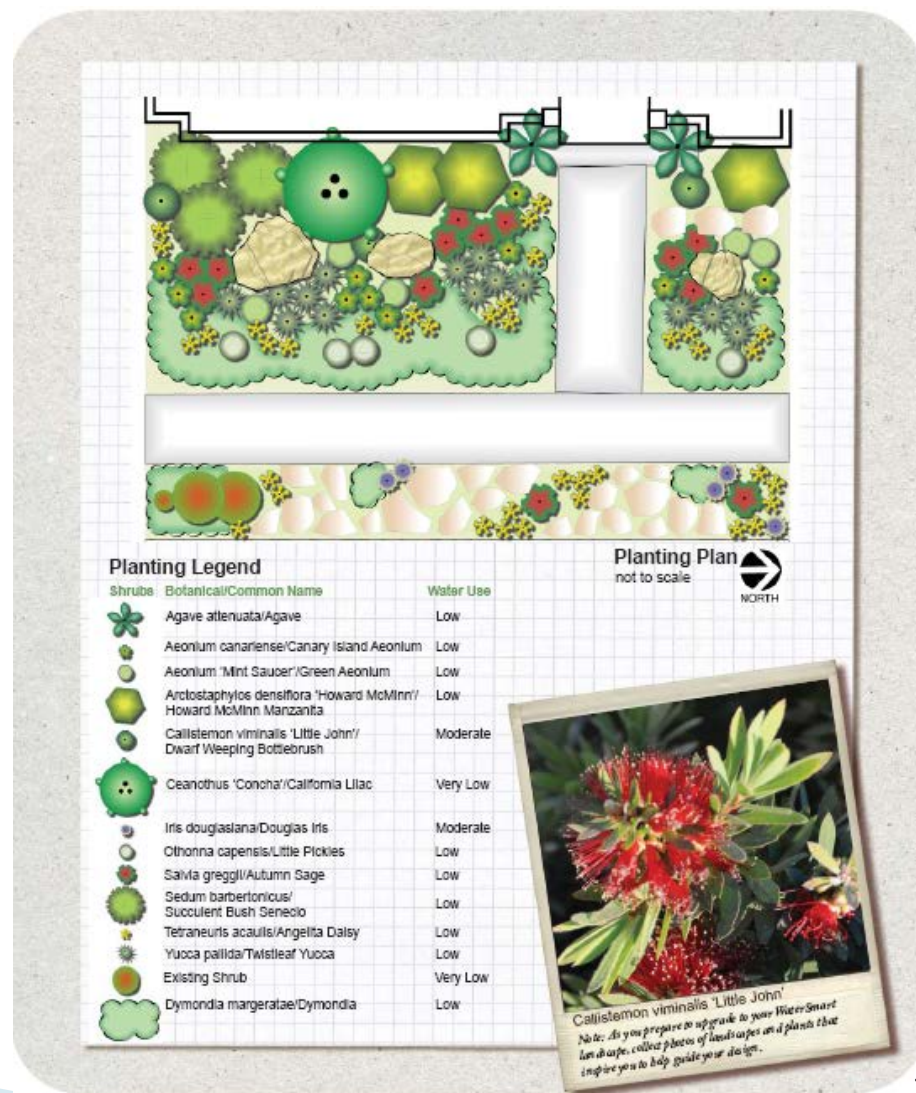
3. Test and Condition Soil

- Soil: Critical component of a healthy landscape.
- Test soil to help condition before planting.
- Soil texture class
 - Clay
 - Silty clay
 - Clay Loam
 - Loam
 - Sandy Loam
 - Loamy Sand
 - Sand



4. Design WaterSmart Landscape

- Layout
 - Identify different use areas
 - Consider alternatives to turf grass



4. Design WaterSmart Landscape

(cont'd)

- Irrigation design
 - Water pressure
 - Smart controller
 - Irrigation layout



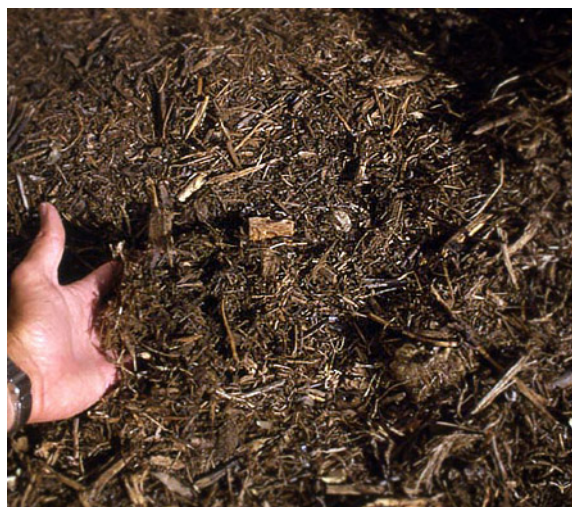
5. Implement Plan

- Demolition
- Grading
- Soil preparation
- Irrigation installation
- Planting installation



6. Care for WaterSmart Landscape

- Plan ahead
- Monitor and minimize watering
- Watering at appropriate times
- Check irrigation equipment
- Fertilize smart
- Weed smart
- Manage pests
- Mulch



Budget

Cost Estimate, 2010

Demolition/Soil Preparation	Quantity	Unit	Price	Total
Clear and Grub	630	Square Feet	\$0.50	\$315.00
Soil Test	1	Each	\$75.00	\$75.00
Soil Amendments/Fine Grading	3	Cubic Yard	\$140.00	\$420.00
Subtotal				\$810.00

Hardscape	Quantity	Unit	Price	Total
Install Boulder Accents	3	Each	\$400.00	\$1,200.00
Install Flagstone Paving on Concrete Base	70	Square Feet	\$30.00	\$2,100.00
Subtotal				\$3,300.00

Irrigation	Quantity	Unit	Price	Total
Micro-Spray Irrigation Upgrade	555	Square Feet	\$2.00	\$1,110.00
<i>(includes 50 micro-spray heads, 200 linear feet of PVC pipe, 50 swing joints with fittings, 20 pipe fittings, 3 above ground atmospheric vacuum breaker valves, and 1 isolation ball valve)</i>				
Smart Controller, Weather-based	1	Each	\$300.00	\$300.00
<i>(includes 18 gauge multi-strand wiring from controller to valves, waterproof wire nuts, and rain shutoff device)</i>				
Subtotal				\$1,410.00

Landscaping	Quantity	Unit	Price	Total
1 Gallon Shrubs	94	Each	\$12.00	\$1,128.00
5 Gallon Shrubs	9	Each	\$35.00	\$315.00
Flats of Groundcover	2	Each	\$30.00	\$60.00
Mulch	3.5	Cubic Yards	\$100.00	\$350.00
Subtotal				\$1,853.00
Total				\$7,373.00

**Note: Does not include cost of design and maintenance since example is for do-it-yourself homeowners*

Note: Prices include materials and labor.

Case Study

Before

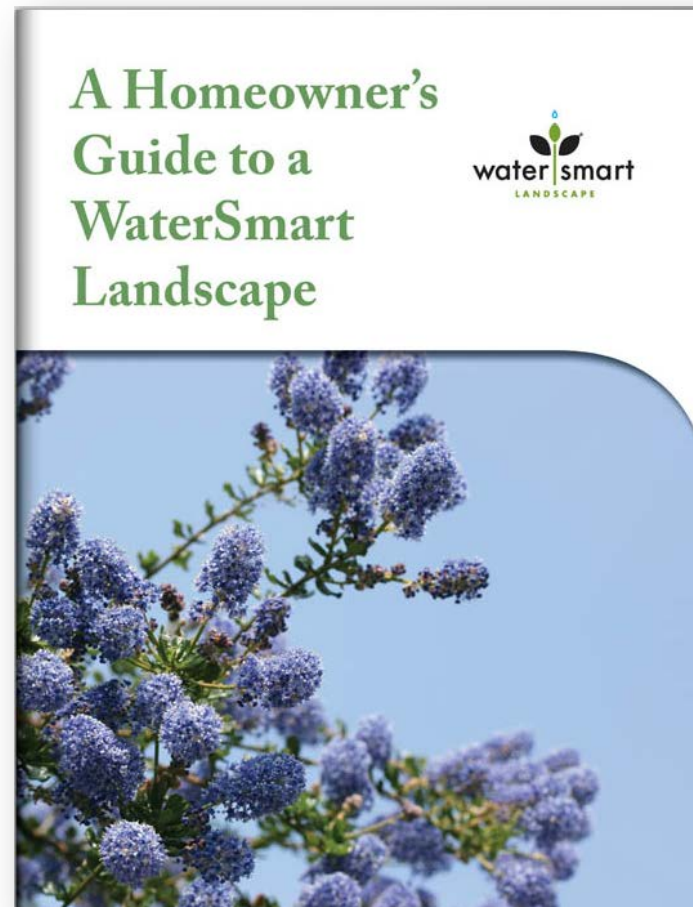


After



Online flipbook

- www.sdcwa.org/landscape-guide-flipbook



Stay in Touch with the Water Authority



sdcwa.org/mobile-news-app



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slideshare
Present Yourself



Conclusion

Thank you!

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