

CSULA - Water Savings Performance Program & MWD of So. Calif. Funding



Create Tomorrow Together
2008 CSU FACILITIES MANAGEMENT CONFERENCE

CSULA Water Wise Campus

Session Objectives

- **Historical Irrigation Water Usage at CSULA**
- **Large Savings Potential**
- **MWD of Southern California Funding**
- **Water2Save Water Management Service**



History – Irrigation Timers

CALSENSE ET1 Controllers

**Installed Throughout
Campus for 5 Years**



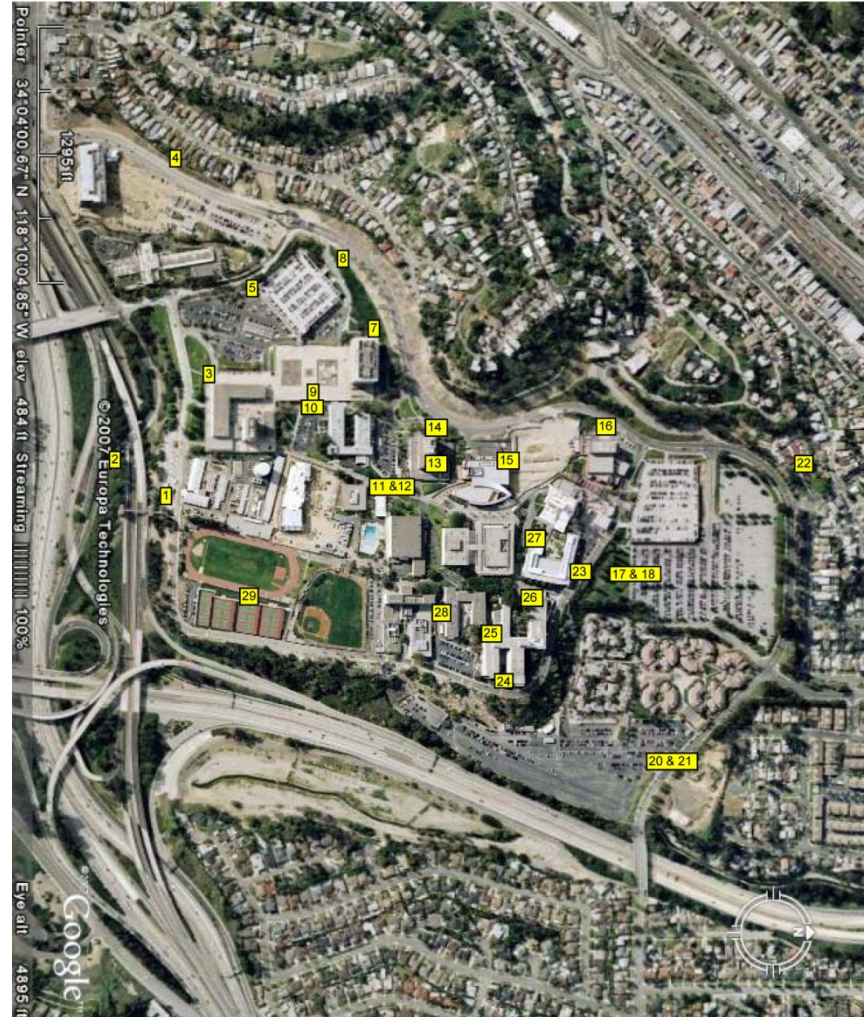
Limitations of Existing Smart Timers

- **Studies show that 70% of “smart technology” do not save and ones that do save only achieve 5% of Water2Save savings**
- **Static programming for a dynamic environment**
- **No performance guarantee by third-party**
- **Cannot “look ahead” or apply forecasted weather using ET data due to patented methodology**

Location of Irrigation Timers

CSULA Campus Map

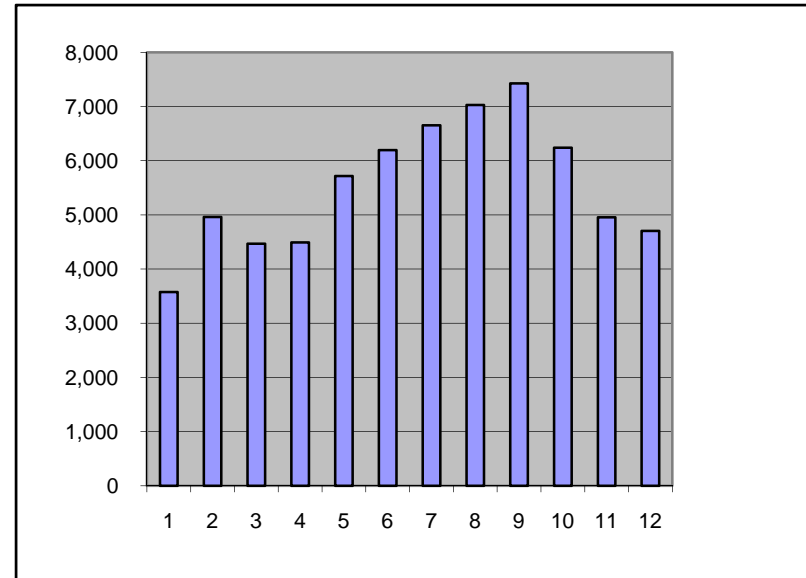
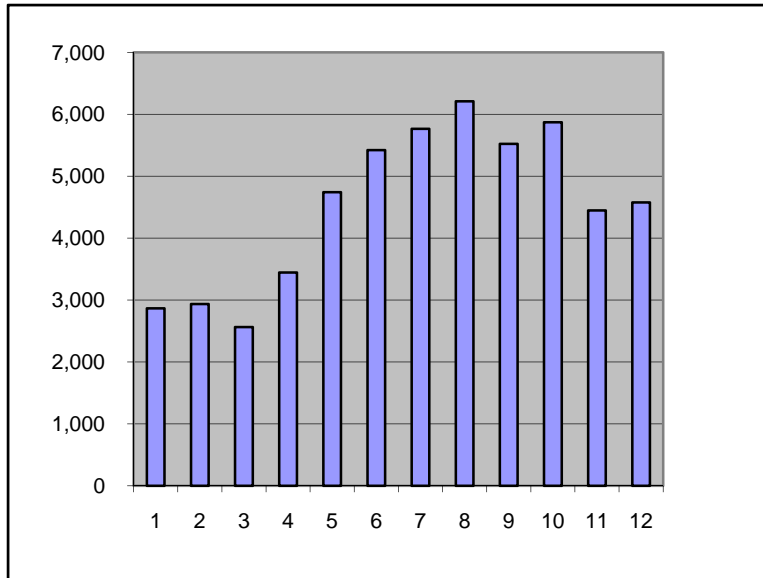
24 Controllers



Appraisal of Savings Potential at CSULA

- 5 Years Consumption History
- Mapping of Landscape Size
- Verify Meters and Existing Clocks
- Inspect Irrigation System Condition
- Compare Climate Requirements
- Compute Savings Opportunity

Historical Total Irrigation Water Usage at CUSLA



Year	2002	2003	2004	2005
Meter 1 (HCF)	61,894	69,518	60,397	68,249
Meter 2 (HCF)	67,885	65,018	66,993	62,696

The Solution.....

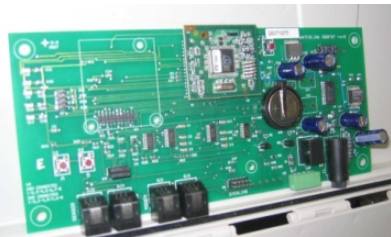
Irrigation Water Management Service

- Time Tested for over 10 Years
- Real-World Savings Performance
- Patented** “Look-Ahead” ET™
- Full Accountability
- Performance Guarantee
- On-Going Savings Reporting and Tracking

***** Adjusts Irrigation Runtimes for Tomorrow’s Watering Needs
Using Forecasted Weather and Actual Weather Measurements
Resulting in 15% More Savings Over Using Yesterday’s Weather***

New Installation Sterling Controllers with Water2Save Service

2-Way Fully Integrated AT&T Wireless Data Communications



Central Control Card



Cellular Modem





Water Metrics

Usage 100 M Gallons/Yr

Save 22 M Gallons/Yr

Bill \$190,000 per Yr

Save \$60,000 per Yr

Plus

MWD Incentive - \$64,000

Efficient Irrigation Program

The Efficient Irrigation Program provides incentives to upgrade existing commercial, industrial, institutional, one-acre single family, multi-family and homeowner's association landscapes with more efficient irrigation equipment. Financial assistance is provided for documented water savings derived from implemented projects that meet program requirements. Sites irrigated with recycled water are considered on a case-by-case basis.

Minimum Requirements

- Commercial, industrial, institutional, multi-family and homeowner association landscapes require no minimum size (single family landscapes must be at least one acre or more)
- Projects that have purchased equipment or started construction prior to application are ineligible.
- Projects must be implemented within Metropolitan's service area.
- Water savings and usage shall be metered.
- Irrigation improvements must remain operational for a minimum of five years.
- Operation, maintenance and landscape plant costs are excluded from consideration.
- Access to project site must be granted to Metropolitan to conduct pre- and post-installation inspections.

Financial Incentives

Metropolitan program funding is based on the lesser of:

- \$3.00 per 1,000 gallons of water saved for one year; or
- 100% of eligible project costs including installation and first-year water management service fees.

Incentive Payment

If project meets program requirements, a financial assistance agreement would be executed. Payment would be made in two steps:

- (1) First payment (up to one-half of total funding amount) upon site inspection and verification that equipment is installed and operational, and
- (2) Final payment after one-year monitoring period.

Example:

Total Project Cost:	\$64,372
Estimated annual water savings (gallons)	21,987,000
Incentive payment options (lesser of):	
a) \$3.00/1,000 gallons of water saved	\$65,961
b) 100% of Total Project Cost	\$64,372
Metropolitan's Incentive Payment	\$64,372

Application Submittal

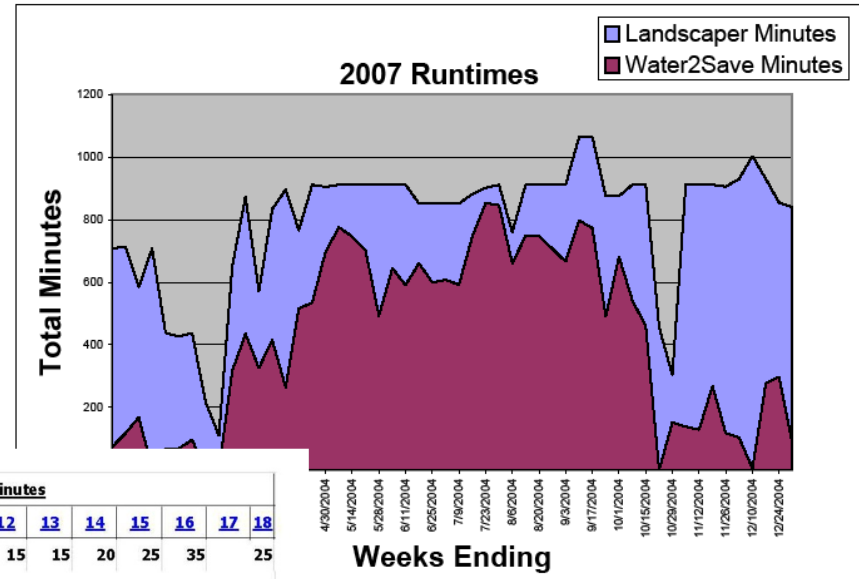
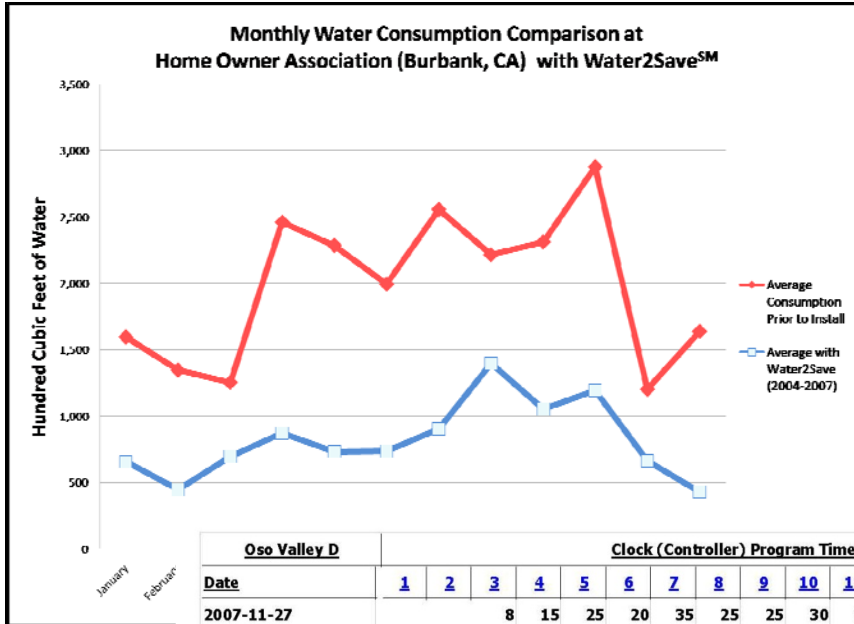
Complete and sign the application. Attach a copy of your most recent water bill and mail to:

The Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

ATTN: Deneice Cotton, US 9-302
Regional Supply Unit

You may also send the application by fax:

Fax: (213) 217-6949



Oso Valley D		Clock (Controller) Program Time in Minutes																	
Date		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2007-11-27				8	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/26Mon		15	25	17															
11/25Sun				8	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/24Sat		15	25	25	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/23Fri		15	25	25	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/22Thu		15	25	25	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/21Wed		15	25	25	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/20Tue		15	25	25	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/19Mon		15	25	17															
11/18Sun				8	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/17Sat		15	25	25	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/16Fri		15	25	25	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/15Thu		15	25	25	15	25	20	35	25	25	30	15	15	15	20	25	35	25	
11/14Wed		15	25	25	15	25	20	35	25	25	30	15	15	15	20	25	35	25	

Continuous 220 Million Gallons Saved Per Year Actual Meters – Real Savings

Real World: 50+ Properties

- *26 Apartment Communities*
- *20 Home Owner Associations*
- *7 Commercial Properties*
- *220 Million Gals Water Saved Per Year*

Summary

- **Reduction of Outdoor Water Bills – Water-Wise**
- **Remote Wireless Management Service – Adjusts Irrigation to Look-Ahead Weather**
- **Properties with Aesthetic Landscaping**
- **Immediate Net Dollar Savings – No ROI-Cap Cost**
- **Large Incentive from MWD of So. Calif.**
- **Net Savings Increases Value of Property**
- **Water Utility “Cash” Incentives**



www.water2save.com

2008 CSU Facilities Management Conference