

CRPD Water Reduction Plan 2018-2019





Where do we use water at CRPD?

❖ **Swimming Pools**

❖ **Ponds**

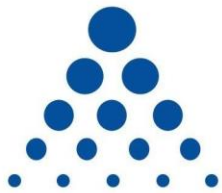
❖ **Waterfall Features**

❖ **Drinking Fountains**

❖ **Public Facilities & Restrooms**

❖ **Irrigation**

Service Providers of Water to the District



Golden State
Water Company

A Subsidiary of American States Water Company



CALIFORNIA
AMERICAN WATER

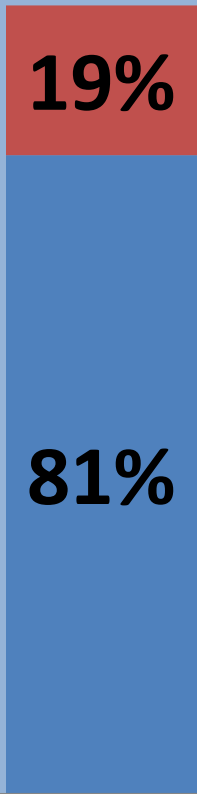


C O U N T Y
Department of Water Resources

Well Water

Water Service Providers

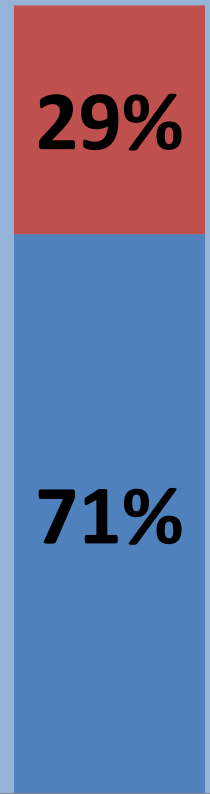
■ Actual Water ■ Fees & Surcharges



California
American



Golden State



Sacramento
County

Over the next 3 years, the water utility rates will go up 15% to 18%.

- **The District will need to budget an additional \$83,000 to \$100,000 to keep up with the same level of water usage for 2017 - 2018.**

Some funding areas have sufficient irrigation monies.

What should we do to conserve water or reduce cost increases?

It Starts With a Strategic Water Usage Plan



Involves Rethinking Water Usage Through

- ❖ Landscape Design**
- ❖ Irrigation System Efficiency**
- ❖ Community Education & Outreach**
- ❖ Landscape Maintenance Tactics**



Landscape Design

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO)

California State Law requires new construction projects to comply with MWELO

- Many design detail requirements
- New construction irrigation plans to include a water budget

Project Name: Heron Landing Community Park
 Project #: 12613
 Date: 07.22.15
 Initials: krd

Maximum Applied Water Allowance

$MAWA = (Eto) (0.62) [(0.45 \times LA) + (0.55 \times SLA)]$

Eto	Conversion	ET Factor	LA	ET Factor	SLA
57.1	0.62	0.45	591,872	0.55	484,735

MAWA = 18,867,377 gal/yr

Estimated Total Water Use (using potable water calculation method)

$ETWU = (Eto) (0.62) ((PF \times HA) / IE)$

Eto 57.1 in/yr
 Conversion 0.62 gal/(in x sf)

Hydz	Description	PF	HA	IE	EWU (gal)
Z1	Turf Rotor High	0.80	367,434	0.80	13,007,898
Z2	Turf MSMT High	0.80	117,301	0.85	3,908,414
Z3	Shrub Bubbler L-M Mix	0.40	66,688	0.80	1,180,444
* Z4	Tree Deep Water Bubbler L-M	0.40	1,720	0.90	27,068
Z5	Native Turf MSMT L-M	0.30	40,449	0.85	505,403
		0.00	0	0.80	0
TOTALS:			HA (sf): 591,872		ETWU: 18,629,228

* HA for this Hydrozone included within other hydrozones, and thus, not included in the total HA.

ETWU < MAWA? Yes

Water savings (in gallons / year) as compared to MAWA: 238,149

Maximum Applied Water Allowance

Special Landscape Area = Active Play Areas

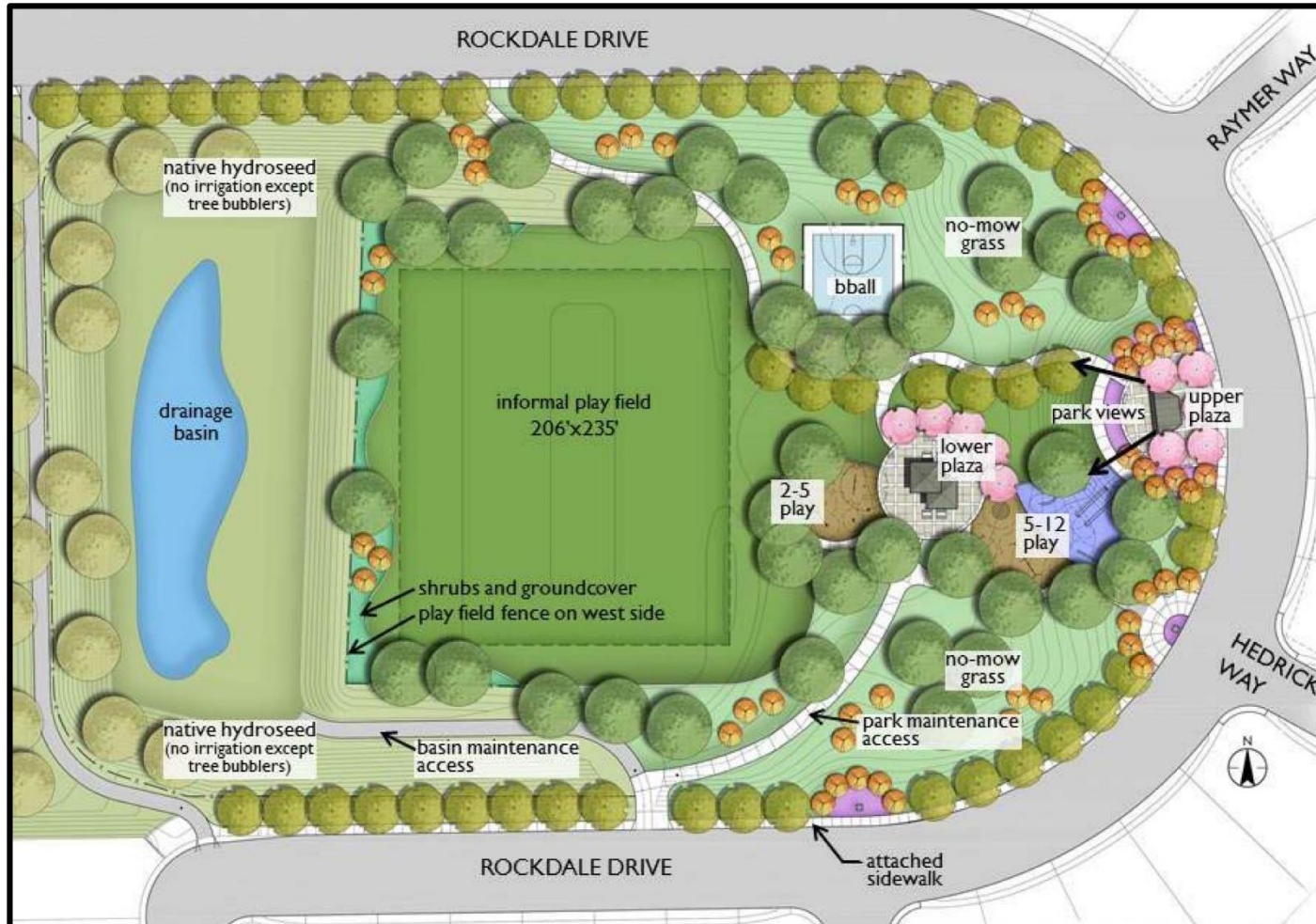
Plant types

Estimated Total Water Usage

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO)

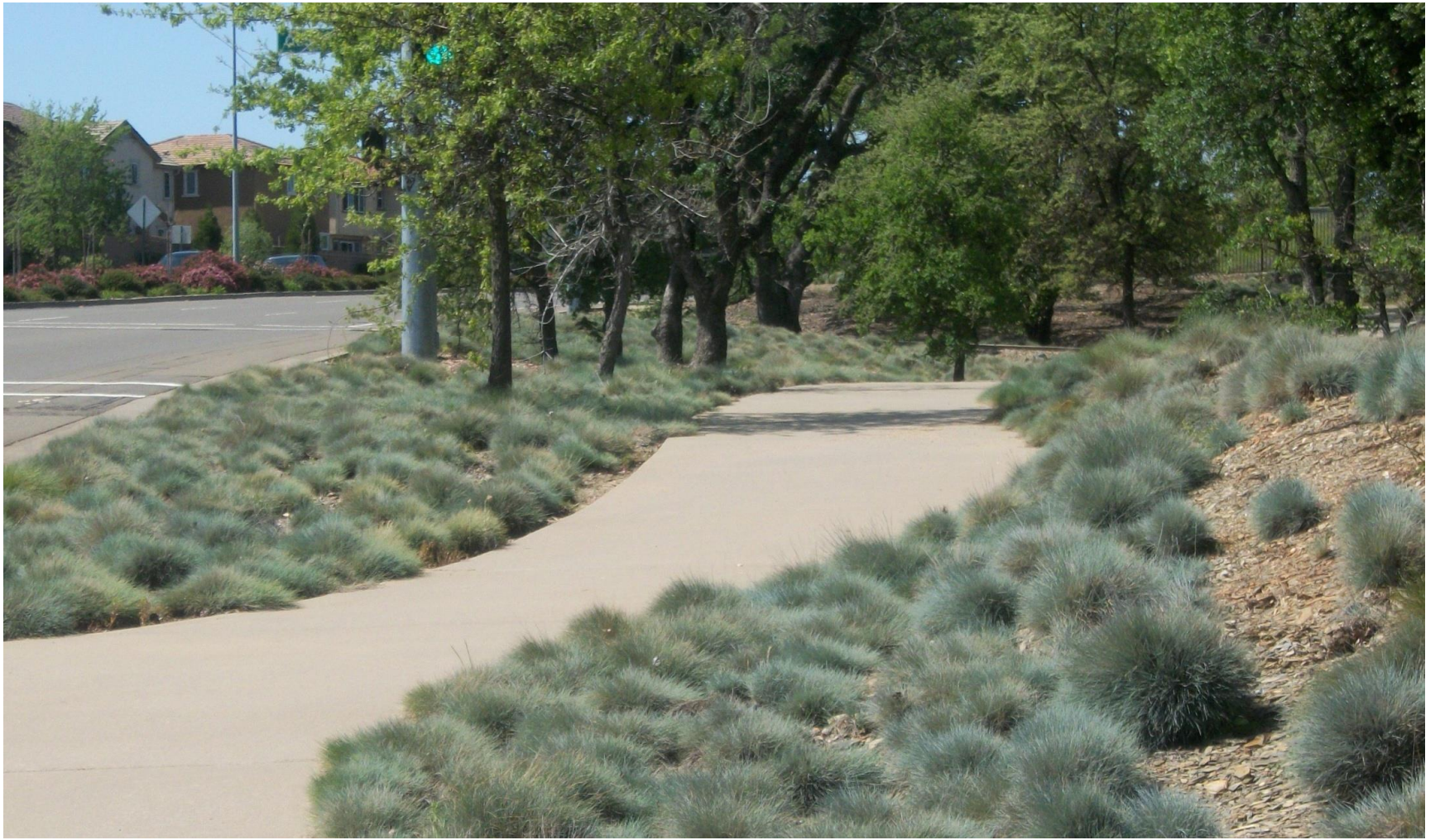
- The Department of Water Resources estimates MWELO cuts watering of commercial landscapes by 35%. Active areas in parks allow 20% more water.

HILLSIDE PARK MASTER PLAN





Hillside Park





**Mulching with
Leaves and
Wood Chips**



Dedicated Ball Field Irrigation Station



Irrigation System Upgrades



Staff Training

ESP-40SAT WITH CYCLE+SOAK™

WATERING
SUSPENDED
BY SENSOR

SENSOR

OFF ACTIVE

WED 9:42

ON OFF PGM MAN START ADV.



MANUAL WATERING OFF AUTO STATION WATERING TIME WATERING START TIMES MV PUMP START

TEST PROGRAM WATER BUDGET EVEN DAYS ODD DAYS CYCLICAL CUSTOM SUN SAT FRI THU WED

PROGRAM OVERLAP TIME CALENDAR EVENT DAY OFF RAIN DELAY MON TUE

STAND ALONE PUMP / MV STATUS EVEN DAY CYCLE

MAXICOM STATION STATUS ODD DAY CYCLE

LINKED TO MAXICOM CYCLICAL DAY CYCLE CUSTOM DAY CYCLE

ESP-COMMERCIAL



Irrigation
Controller



Series 4200
SkyRouter

Installing Wireless Communication to the Irrigation Controllers

Communicating with the Tablet and Android-style cell phone



Master Valve

Flow Meters





Using Wireless Communication



**Backflow Valve
Inspection &
Repair**



Community Outreach

Park Services

Park Services oversees the safety and accessibility of CRPD's parks, amenities, equipment and systems. The department ensures that everything from landscaping to picnic areas, irrigation systems to playground equipment is at its best for our community. Contact the [Park Services Department](#) to report a question or concern in our parks.

OR

Contact

CRPD

916-842-3300

customerservice@crpd.com



Landscape Maintenance Practices

Use of Plant Growth Regulators

Use of Charged Carbon Products

Soil Aeration

Use of Leaf & Grass Mulching Blades

Balanced Slow-Release Fertilizer



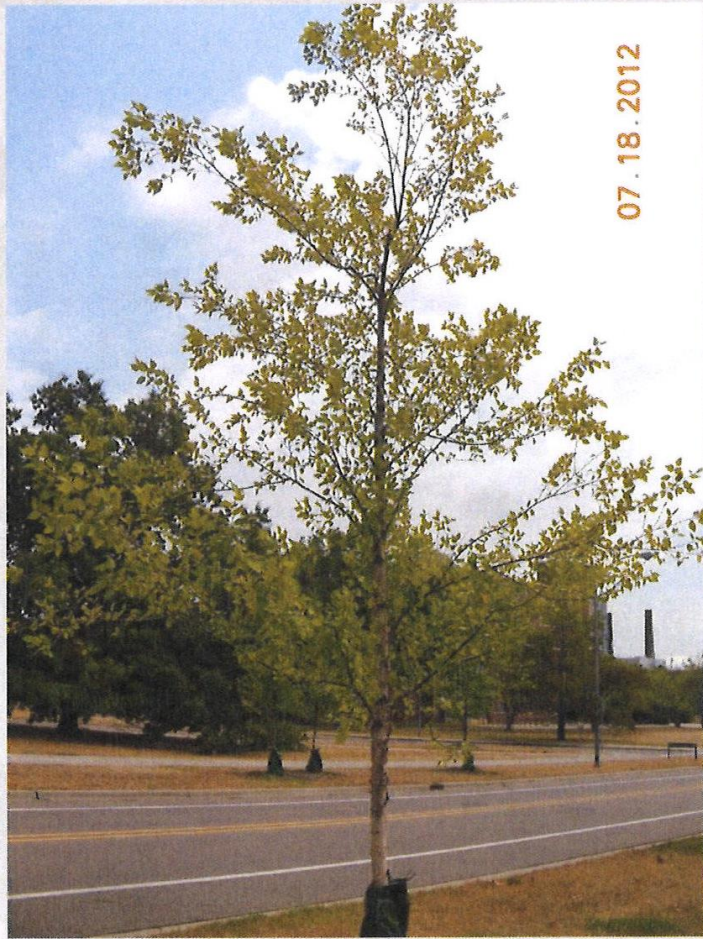
Untreated



PGR



Untreated (East Side)



PGR (West Side)



**Sunridge Park
- Soil Aeration**



**Sunridge Park
– 3 years later**



Using Mulching Blades



Applying Slow Release Fertilizer

We will continue to evaluate and re-evaluate our strategy to be wise stewards of our water resources.

