Every Drop Counts: Conserving water in San Diego County

CGSA
April 2015



A continuous concerted effort













Since 2009 San Diego County has **reduced** its annual water **consumption by** almost **142 million gallons**... enough water to supply 871 typical US households for a year.

Detention center savings

East Mesa: 126 million

Kearny Mesa Juvenile: 3 million

Vista: 21 million

South Bay: 3 million















Replaced Toilet Flush Valves, Shower Heads and Sink Aerators

Efficient Laundry Equipment

New Batch Washers at the East Mesa Detention and Las Colinas Detention and Reentry facilities are expected to save about 11 million gallons annually for both facilities combined.



Parks improvements

Converting natural turf baseball/multipurpose fields to synthetic turf





Installing high efficiency irrigation heads and smart irrigation controllers

Efforts **reduced irrigation use** by over 30% & also reduced **maintenance time**

Parks enhancements

Replaced standard water heaters with energy saving tankless heaters





Cooling Tower Treatment Tech

- ✓ Advanced Water Saving Technology
 - ✓ Expected Savings 2.3 million gallons at 2 sites (combined)
 - ✓ Softens Water
 - ✓ Increases cycles of concentration
 - ✓ Reduces blowdown, sewer discharge and chemicals







In the works



Water Reclamation System Feasibility Study:

Reduce the amount of non-potable water used by reclaiming and treating waste water produced at the site.



Policy, Procedure & Community Updates

- ➤ Updated Board of Supervisors Policy A-106 (Water Supply, Conservation and Reclamation)
- Adopted a Landscape Water Conservation Ordinance



- > Published a Water Efficient Landscape Design Manual
- ➤ Adopted a County Parks Water Conservation Plan

Costs: \$10 million over six years

\$ 4.3M: Synthetic turf replacement at 6 parks

\$ 2.2M: Efficient Laundry Equipment at 2 detention facilities

\$ 1.4 M: Smart Irrigation Controllers at 26 parks

\$ 1.2M: Efficient flush valves, sinks & showers at 4 facilities

\$ 68oK: Irrigation system conversion to recycled water at 1 park

\$ 100K: Water reclamation system feasibility study

\$ 66K: Cooling Tower Technology at 2 facilities

\$ 45K: Tankless Water Heaters at 6 parks



Savings and Results

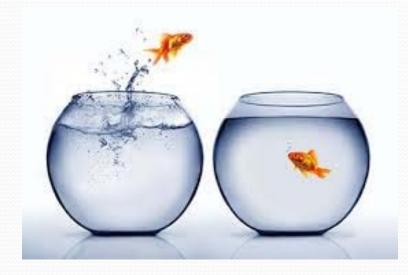
	CCF(100 cubic feet)	Gallons
FY 08-09	884,819	661,888,853
FY 13-14	695,026	519,914,199
Savings	189,793	141,974,654

Average Estimated Annual Cost Avoidance: \$1.9Million (avg since 2009)



Challenges

Behavior





Metrics

- Weather
- Population
- Square Feet
- Equipment Efficiency

