

Water Savings Initiatives

COUNTY OF RIVERSIDE STEVEN HORN, SENIOR MANAGMENT ANALYST JUNE 26, 2015

Water Conservation Focus Areas

- County-wide Facilities Management
- Ordinance 859 Water Efficient Landscaping



Additional Research and Implementation

Leadership in Energy & Environmental Design

• Riverside County LEED Certification Policy H-29

On February 10, 2009, the Riverside County Board of Supervisors adopted Policy H-29, requiring all new large County buildings to achieve LEED certification. We typically achieve Water Credits for:

- WEc1 Reduce potable water consumption for irrigation by 50%
- WEc3 Building water use reduction 30%
- SSc6.1 Storm Water Quantity control
- SSc6.2 Storm Water Quality control

Our newer buildings already save in excess of 30% in water use.



Indio Law Building LEED PLATINUM CERTIFICATION

- Sustainable Landscaping; Drought Tolerant Native Plants
- Sub Metering
- Energy Star Rated Appliances
- Plumbed for future recycled water supply for landscaping irrigation
- Low flow fixtures throughout





Palm Desert Sheriff Station

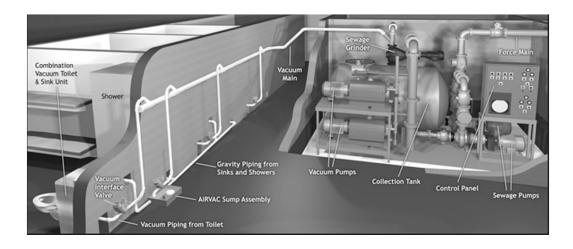
- Sustainable Landscaping, Drought Tolerant Native Plants
- Drip Irrigation Systems
- Weather Station to Control Landscape Irrigation
- Low Flow Toilets , Urinals, and Faucets
- Stormwater retention



East County Detention Center EXPECTED LEED SILVER CERTIFICATION UPON COMPLETION

• East County Detention Center

- Vacuum plumbing system uses 50% less water than even low flow fixed fixtures
- Potential savings of 380,000 gpd, or 141, 500,000 gallons per year





EDA Facilities Management VOLUNTARY WATER CONSERVATION MEASURES

- Drip irrigation and plant palette retrofit
- Irrigation-time reduced by 45 percent
- Use of technologically advanced irrigation components, including weather stations
- Use of mulch and decomposed granite to reduce evaporation
- Participation in municipal and district water conservation programs
- Applying for grant opportunities for retrofit



Ordinance 859, Water Efficient Landscaping *Timeline of Updates*



Adoption of Ordinance 859 Established water efficient standards for commercial, industrial & multifamily.

Set water budget of 80% Ordinance 859.1

Amended to include Single Family Residential tract homes Ordinance 859.2

Reduce water budget from 80% to 70%

Emphasis on recycled water

Soil Management

Smart Controllers

Ordinance 859, Water Efficient Landscaping Proposed Major Changes

Reduce Annual Water Allowance

- <u>Current</u>: Water Budget allows 70% of a given area's Evapotranspiration Rate (ETo)
- **Proposed:** Reduce ETo allowance from 70% to 50% Water savings on a typical lot: 30,000-40,000 gallons per year per 1,000 sq. ft. turf grass

Ordinance 859, Water Efficient Landscaping Proposed Major Changes, Cont.

Limit Non-Functional Turf

- <u>Current</u>: Natural turf is commonly used in builder installed residential front yards
- <u>Proposed</u>: Prohibit use of natural turf in builder installed front yards
 - Natural turf still allowed in subdivision functional use areas parks, sports fields, etc.

Ordinance 859, Water Efficient Landscaping Proposed Major Changes, Cont.

Add Requirements for Recycled Water

- <u>CURRENT</u>: Landscape using recycled water is allowed 100% of water budget
- <u>PROPOSED</u>: Reduce allowance from 100% to 70% or as approved by local water district
 - Further close coordination required with water districts based on individual recycled water supply availability

Ordinance 859, Water Efficient Landscaping Proposed Major Changes, Cont.

No natural turf allowed for new commercial and industrial projects (except for functional turf use areas)

No natural turf allowed in medians <u>and parkways</u> on public roads

• The County stopped allowing turf in medians in 2009.

Other Areas of Study and Implementation

- County Facility Retrofit
 - Retrofit landscaping and fixtures when and where possible for older facilities
- Gray Water System Use
 - Potential use for outdoor irrigation
- Sub-surface Turf Irrigation
 - Pilot program at Spring Mountain Ranch in Highgrove
- Planning Setbacks
 - Consider extending front-yard usable space (porches, patios, etc.) through revised setbacks
- Promote Innovation
 - Work proactively with industry stakeholders to study long-term water conservation options



Questions?

Thank you!