

This presentation premiered at WaterSmart Innovations

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Identifying Water Use Efficiency Opportunities for Large Landscapes with GIS

WaterSmart Innovations Conference
October 2-4, 2013
Las Vegas, Nevada



Metropolitan Water District of Southern California

- Regional water wholesaler to 6 counties, 19 million people over 5,200 sq mi
 - Growth: ~170,000 people/yr
 - \$1 trillion regional economy
 - ~50% of region's retail water supply

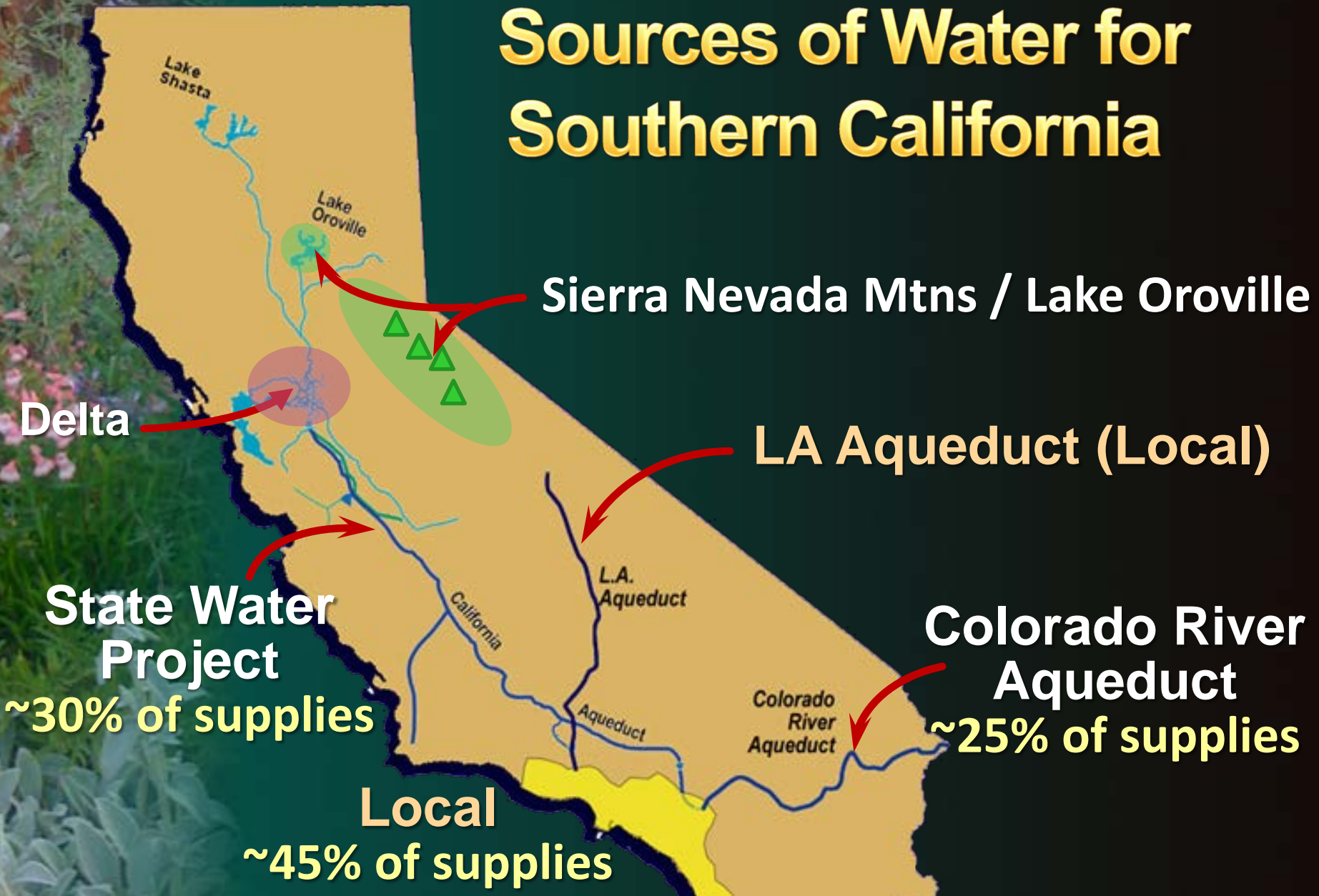


A map of the Metropolitan Water District of Southern California, showing its 26 member agencies. The map is color-coded by agency: Calloway MWD (brown), Las Virgenes MWD (pink), West Basin MWD (green), Central Basin MWD (blue), Orange County MWD (orange), San Gabriel Valley MWD (yellow), San Bernardino MWD (brown), San Diego County Water Authority (light blue), and others. Major cities like Los Angeles, Orange, and San Diego are labeled. The map is overlaid on a background of green foliage and pink flowers.

Metropolitan Water District Service Area

- 26 member agencies

Sources of Water for Southern California



Sierra Nevada Mtns / Lake Oroville

Delta

LA Aqueduct (Local)

**State Water Project
~30% of supplies**

**Colorado River Aqueduct
~25% of supplies**

**Local
~45% of supplies**

Average Rainfall = 15 inches per year

"20 x 2020"

2009 Water Conservation Act: SBX7 -7

- State mandate to reduce urban per capita water use 20% by 2020
- Achieve through conservation & recycled water use



Helping Large Landscapes Improve Water Use Efficiency

- Landscape surveys
- Rebates for irrigation equipment
- Water Savings Incentive Program for customized projects
- Recycled water hookups



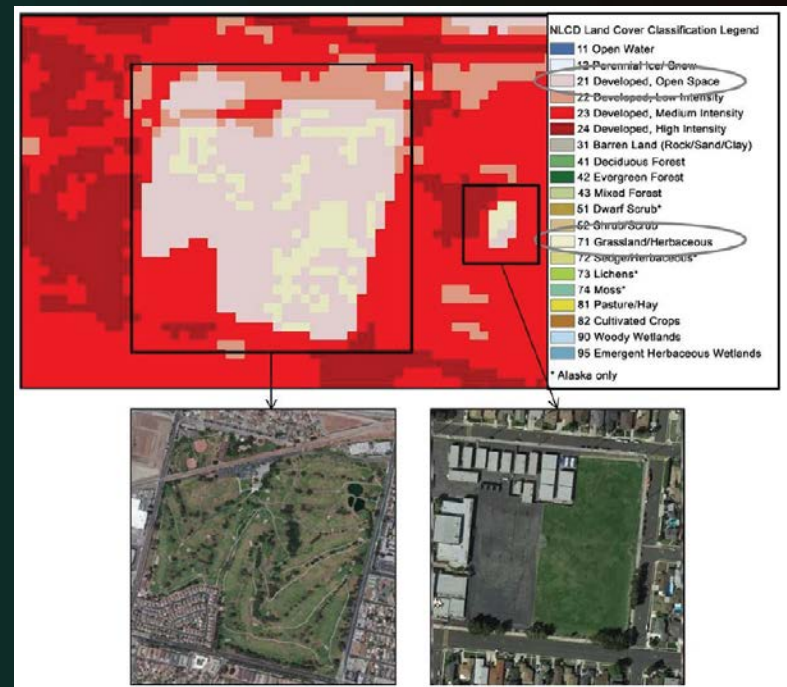
Irrigation Equipment Incentives

- “Smart” controllers & central systems
- High efficiency rotary sprinkler nozzles
- Large high efficiency nozzles
- Sprinkler flow regulators
- Soil moisture sensors
- Turf removal
- Active landscape management



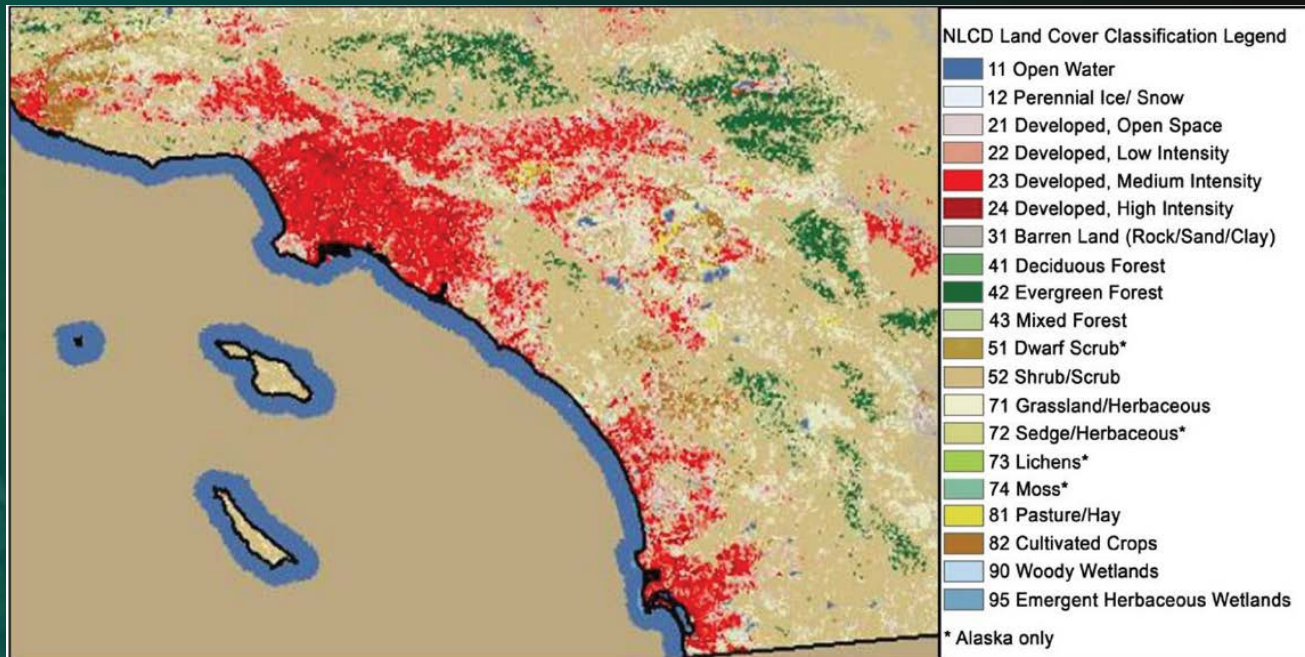
Goals

- Identify and catalog Large Landscape sites
- Overlay Metropolitan's past participation data (sites that have received incentives to retrofit water-conserving landscape equipment)
- Update Metropolitan's recycled water infrastructure data
- Obtain water treatment plant production data



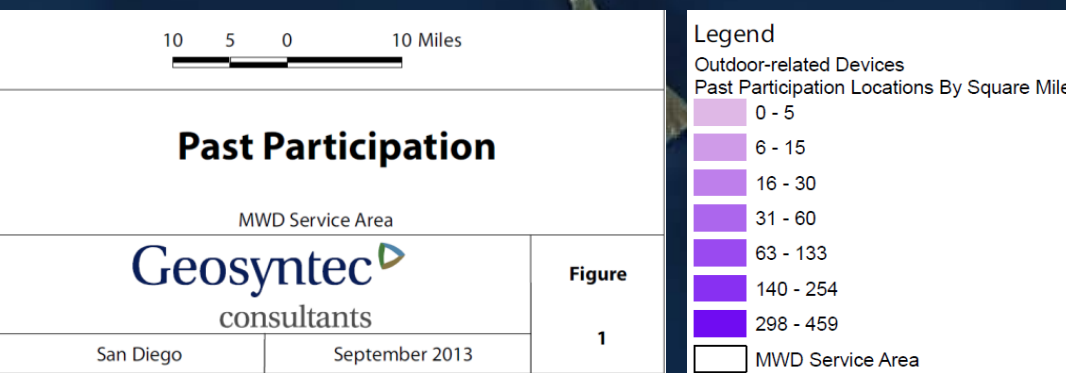
Large Landscapes

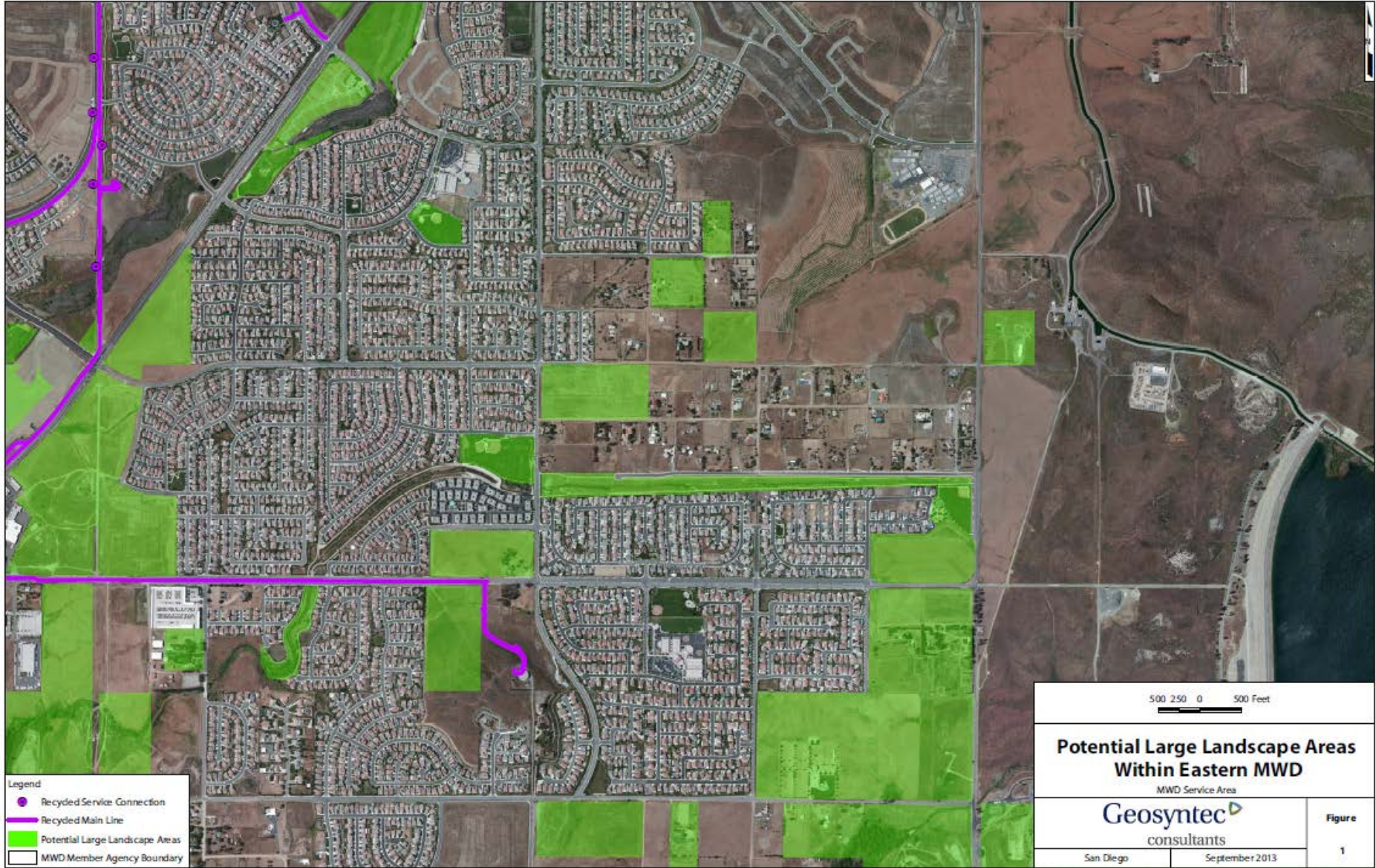
- ≥ 5 acres
- Actively irrigated
- Public or private
- Within Metropolitan's service area



Using The Results: Conservation

- Identify saturated areas & potential target areas
- Modify marketing and outreach strategies
- Collaborate with retail water purveyors, manufacturers, distributors, and resellers
- Consider adding / removing device or technology incentives





**Potential Large Landscape Areas
Within Eastern MWD**

MWD Service Area

Geosyntec
consultants

Figure

San Diego

September 2013

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RECLAMATION

Managing Water in the West

Gary Tilkian

(213) 217-6088

gtilkian@mwdh2o.com

