## Water/Energy Relationship at SDG&E





San Diego County Water Authority



#### SDG&E Business Overview

- 4,100 square miles in San Diego and southern Orange counties
- Serving 3.5 million electric and gas consumers
- 1.4 million electric and 850,000 natural gas meters
- 5,000 employees







## SDG&E's History w/San Diego County Water Authority

- SDG&E has a twenty plus year relationship with SDCWA
- Through our decades-long Partnership some of our achievements include:
  - Distributed over half a million low-flow showerheads
  - Assisted small businesses w/water equip installations, at low or no-cost
  - Made high-efficiency washers affordable for customers through our joint rebate program
- Established a formal Institutional Partnership with SDCWA in 2006 which established co-rebates for residential & commercial high efficiency washing machines





#### More History - Pilots

- SDG&E filed an application with the CPUC on 1/16/07
- Pilots began July 2008 and ran through December 2009
- Each IOU partnered with local water agencies to fund and manage the Water Pilots
- All IOUs developed different pilots residential, commercial, low income - to measure the indirect energy savings and water savings in different ways
- SDG&E developed three water/energy pilots
  - Managed Landscape
  - Water/Energy Audits
  - Recycled Water





#### SDG&E EE Programs 2013-2014

#### In 2013-2014 SDG&E:

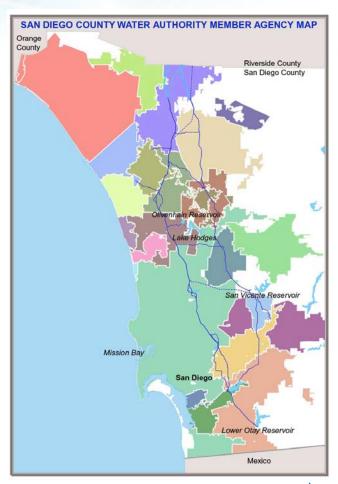
- Promote energy and water savings equipment by offering rebates, incentives on custom projects and agricultural pump testing
- Leverage SDG&E's financing offerings where applicable
- Implemente a leak loss detection and pressure management service in partnership with SDCWA.
- Explore incorporating water efficiency into our IDSM audit process
- Initiate planning efforts with our LGPs to develop comprehensive water efficiency programs for the 2015 and beyond.
- Work with local agencies to implement water energy savings measures at SDG&E's facilities





#### What is the Water Authority?

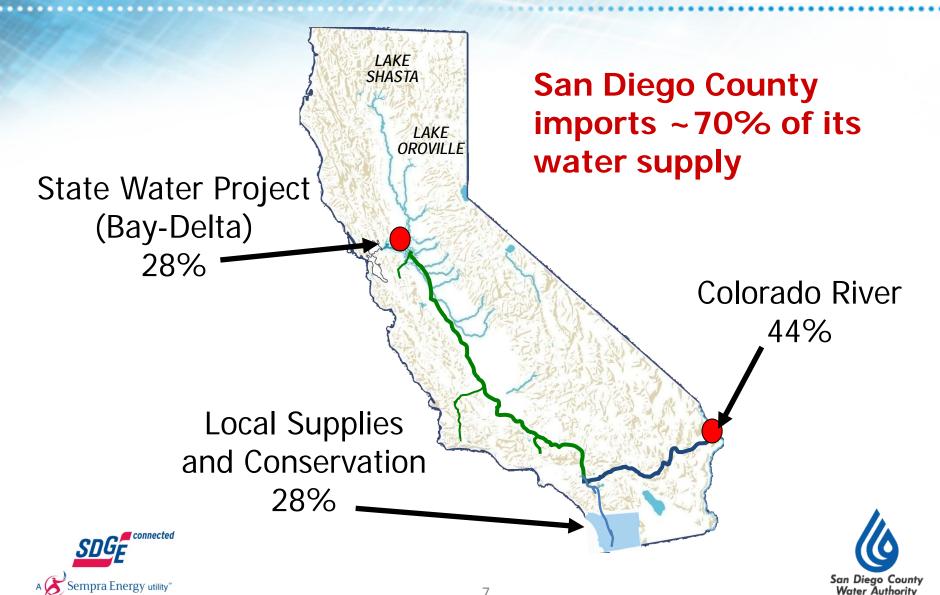
- Wholesale water agency created by State Legislature in 1944
  - 24 member agencies
  - 36-member board of directors
  - Serves 3.1 million people and region's \$188 billion economy
- Mission is to provide safe and reliable water supply to member agencies
- Service area
  - 950,000 acres
  - 97% of county's population



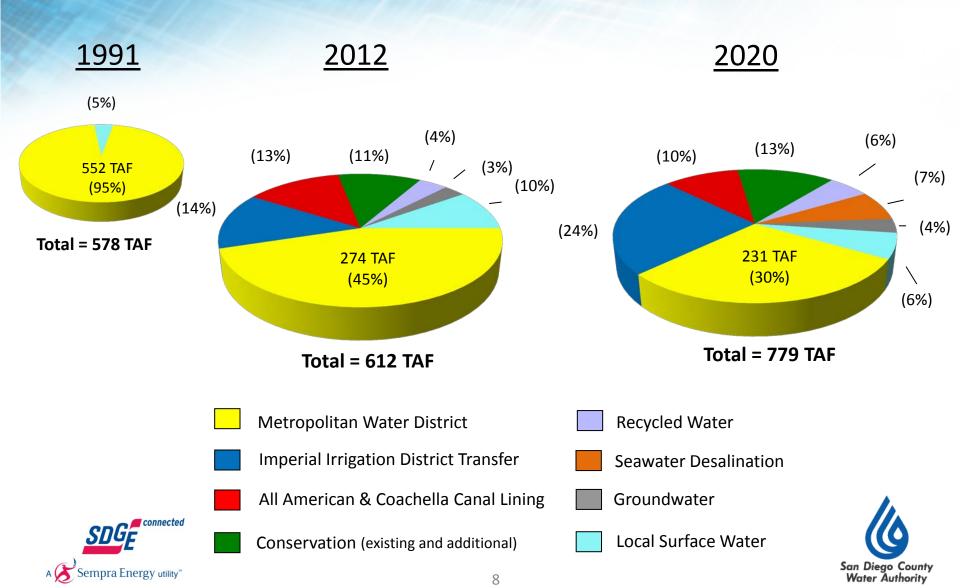




## Sources of San Diego County's Water Supply



# Increasing San Diego County's Water Supply Reliability through Supply Diversification



## Partnership Benefits and History

Water efficiency programs reduce energy use

 Embedded energy saved through less transporting and heating of water

 Implemented numerous programs through partnership





#### Showerhead Distributions

- Implemented in early 1990s
- Distributed more than 500,000 low-flow showerheads
- Distributed through community events, home water use surveys, etc.



#### Pre-Rinse Spray Valve Installations

- Implemented in mid-2000s
- Installed in more than 300 restaurants
- Water Authority facilitated a financial incentive
- SDG&E performed the installations





- High-Efficiency Clothes Washer Rebates (HEWs)
  - Installed more than 100,000 residential HEWs since 1994
  - Installed more than 9,100 commercial HEWs



- Energy Efficiency Assessments for Water Agencies
  - Implemented in 2010
  - Offered energy efficiency assessments to Water Authority and member agencies
  - Assessments performed on 103 water agency facilities







#### Home Energy and Water Savings Kits Distribution

- SDG&E provides free energy and water savings kits
- Includes showerhead and aerators
- Water Authority and member agencies distribute



#### Marketing

- Cross-market water and energy efficiency programs
- Includes messaging on websites and distribution of program marketing materials





- Water-Energy Pilot Program
  - Implemented in 2008
  - Evaluated embedded energy use in three programs
    - Comprehensive water/energy audits
    - Managed landscape program
    - Retrofits of sites from potable water to recycled water



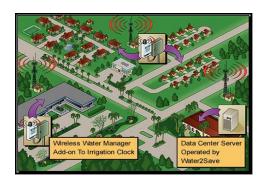








- WaterSmart Landscape Efficiency Program
  - Targets reduction in water use at sites with multiple acres of irrigated landscape
  - Achieves water savings through
    - Pre-implementation audit of site's irrigation system
    - Services provided by a water management service company







#### Leak Loss Detection Program

- Provides top-down water audits of retail water agency distribution systems
- No cost to water agencies
- Performed by a third-party contactor
- Identifies opportunities to implement pressure management measures







- Detention Facility Retrofits Program
  - Saves water and embedded energy through the installation of water-efficient devices
  - Modeled after previous pilot program with savings of 300+ acre-feet per year
  - County of San Diego will provide financial and in-kind services







- Other activities include
  - Continue to cross-promote SDG&E's programs
  - Distribution of energy and water savings kits
  - Host events/workshops at SDG&E's Energy Innovation Center





## Questions?





#### Contact



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