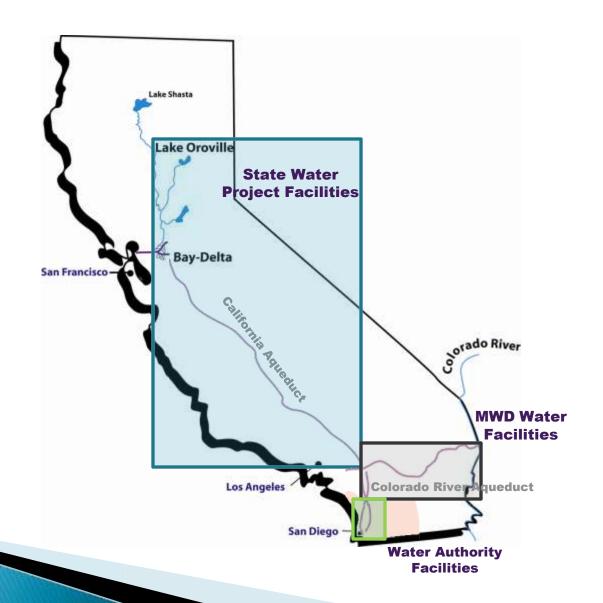


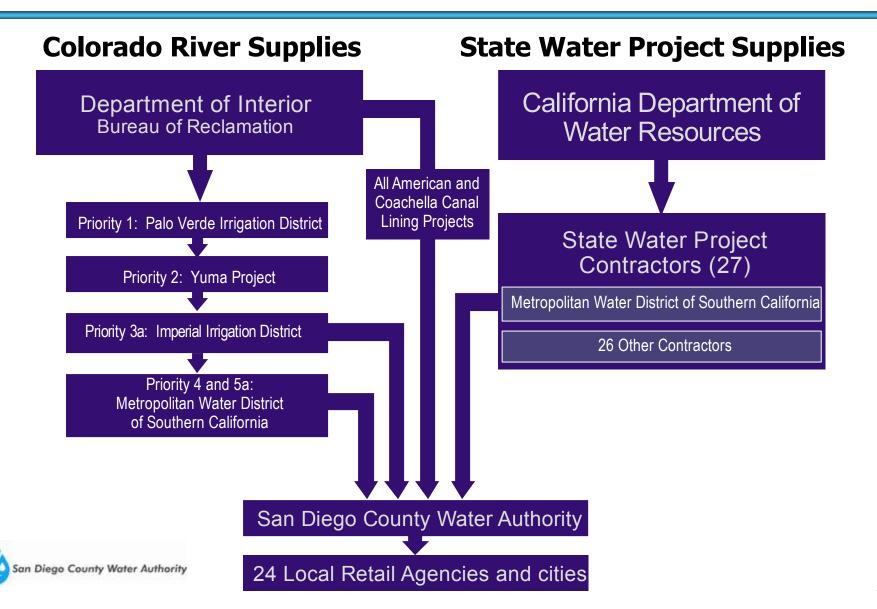
San Diego Coastkeeper Legislative Forum September 30, 2010



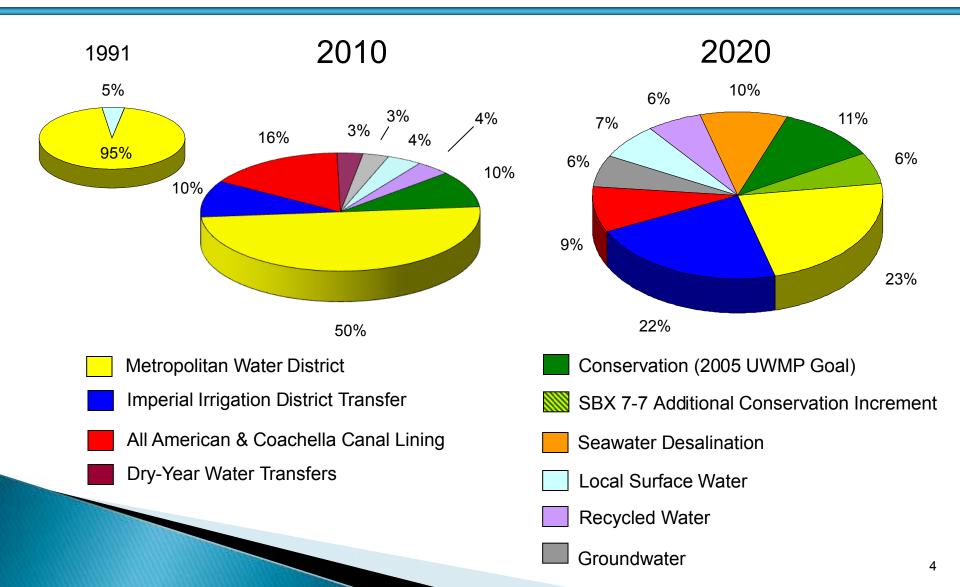
## **California Water Facilities**



## **Imported Water Sources**



### **Regional Water Supply Diversification**



## **Quantification Settlement Agreement**

- Colorado River QSA Supplies
  - Imperial Irrigation District transfer
    - 200,000 acre-feet\*/year for 45 to 75 years
  - Canal-lining projects
    - 80,000 acre-feet\*\*/year for 110 years
- Key to supply diversification strategy
  - Provides 165,000 acre-feet in 2010; helps mitigate current shortage
- By 2021, will provide 30% of region's supply



Lining the Coachella Canal

\*At full implementation in 2021

\*\* Acre-foot = 325,900 gallons



## **Local Supplies**

### Conservation

- Comprehensive water conservation programs, incentives and school programs since 1990s
- 65,000 AFY today, growing to 94,000+ by 2020
- Cumulative savings: more than 600,000 AF
- Shifting emphasis from indoor to outdoor conservation

### Recycled Water

- 28,000 AFY today, growing to 52,000 AFY by 2020
- 17 agencies in San Diego produce recycled water
- Primarily used for landscaping irrigation
- 2 IPR projects in planning stages

### Groundwater

- 13,000 AFY today, growing to 53,000 AFY by 2020
- San Diego does not have significant underground storage basins
- Brackish groundwater must be desalinated
- Six local agencies have groundwater projects







## Local Supplies (cont.)

### Seawater Desalination

- Carlsbad Desalination Project
  - Produce up to 56,000 AFY
  - Approved term sheet that will lead to water purchase agreement to buy output of plant
- Camp Pendleton Project
  - 56,000 to 168,000 AFY
  - Feasibility studies under way
- Bi-national Desalination Project
  - In conjunction with agencies in Nevada, Arizona and Mexico
  - Studying site in Baja California



Encina Power Station, Carlsbad

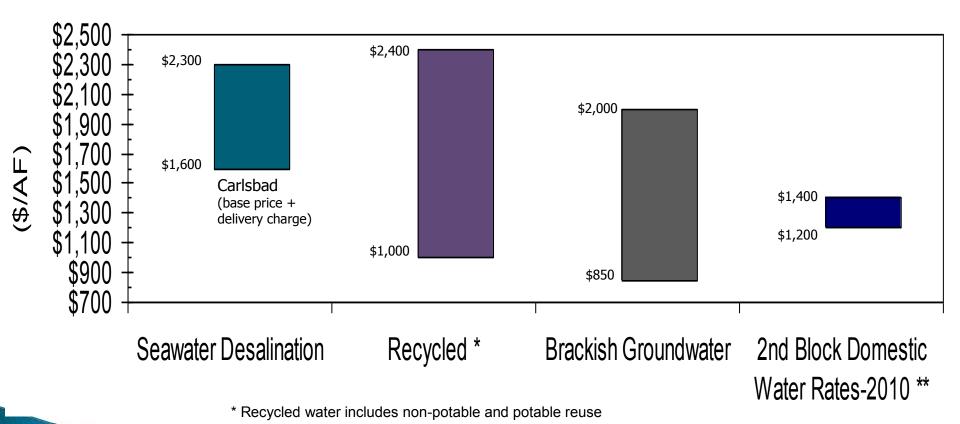
# The Cost of Local Supplies in San Diego County

- All new water will be more expensive than historic imported water costs
- Cost is an important factor in evaluating a local supply reliability, quantity produced, avoided costs, other benefits are also important
- Ultimate cost of a local supply to rate payer is project specific
- When establishing a range of cost-effectiveness, understanding unit cost of supply allows a common basis for a valid comparison
- Unit cost provides a realistic assessment of the range of cost effective options
- Most of the "low hanging fruit" of local supply has been developed
- Future marginal cost of the next increment of local supply will be more expensive



## Unit Cost Ranges for Existing and Proposed Supplies in San Diego County

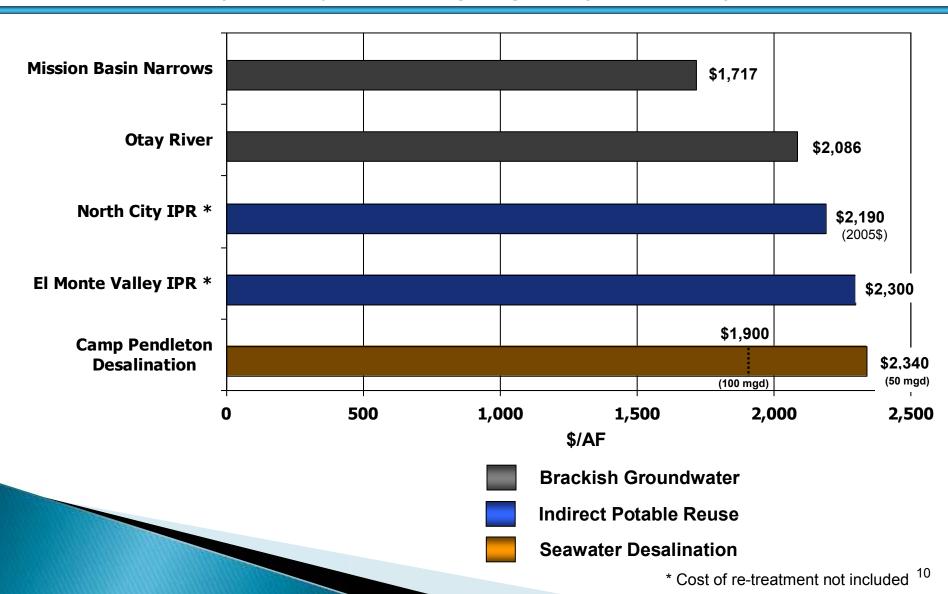
(Before Incentives and Deductions for Avoided Costs)



<sup>\*\*</sup> Water rates represent a range of rates (2<sup>nd</sup> tier of inclining block rates) paid by 78% of Water Authority Service area population

# Marginal Cost of the Next Increment of Local Supply

(Actual Proposed San Diego Region Project Unit Costs)



## Local Supply Development for San Diego County

- Supply development takes into account more than just cost
  - Amount of water produced
  - Regulatory requirements
  - Ability to implement or overcome institutional issues
- A reliable water supply for the region depends on a balanced, multi-source approach to supply

## **Region Succeeding in Saving Water**

### September 2009-August 2010 Urban Water Use\*

600,000

**Acre-feet** 

550,000

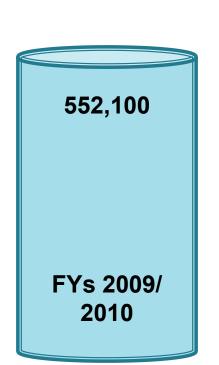
500,000

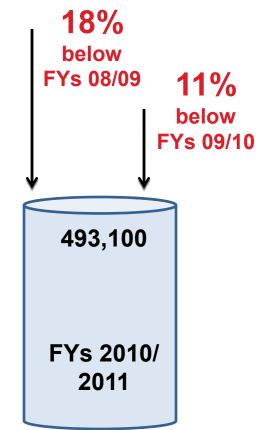
450,000

400,000



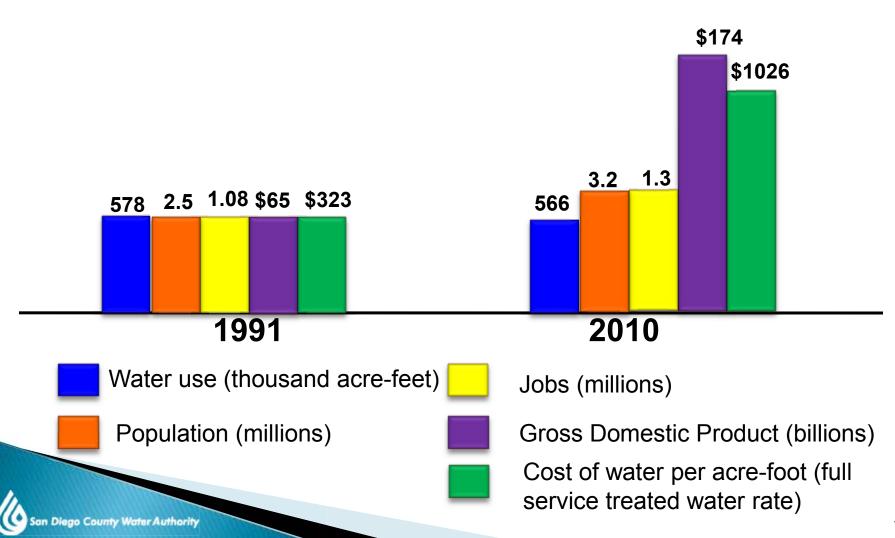
2009







## San Diego County: 1991 vs. 2010



## **Continuing Challenges**

- Achieving Bay-Delta fixes that restore reliability
- Rising water rates
- Sustaining new water use ethic
- Resolving MWD and QSA legal disputes
- Water bond passage?



Bay-Delta waterways

# Questions