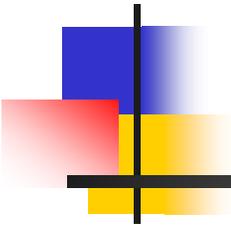


Climate Change Adaptation, Mitigation, and AB 32 at the San Diego County Water Authority



September 4, 2008

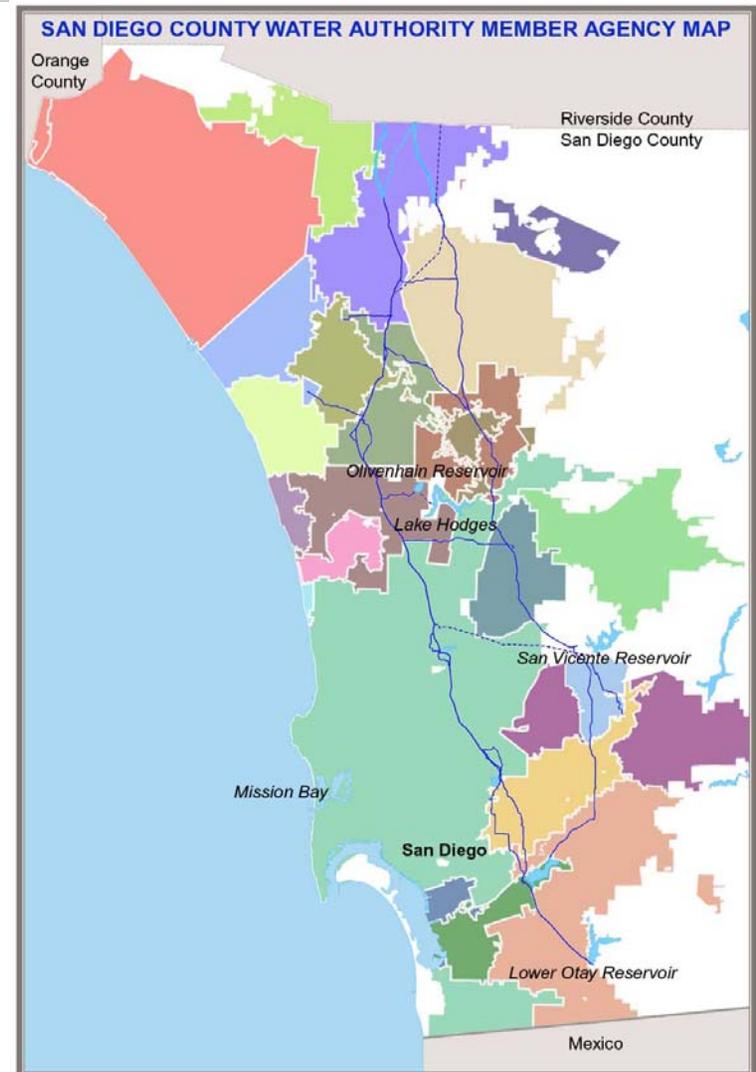


Agenda

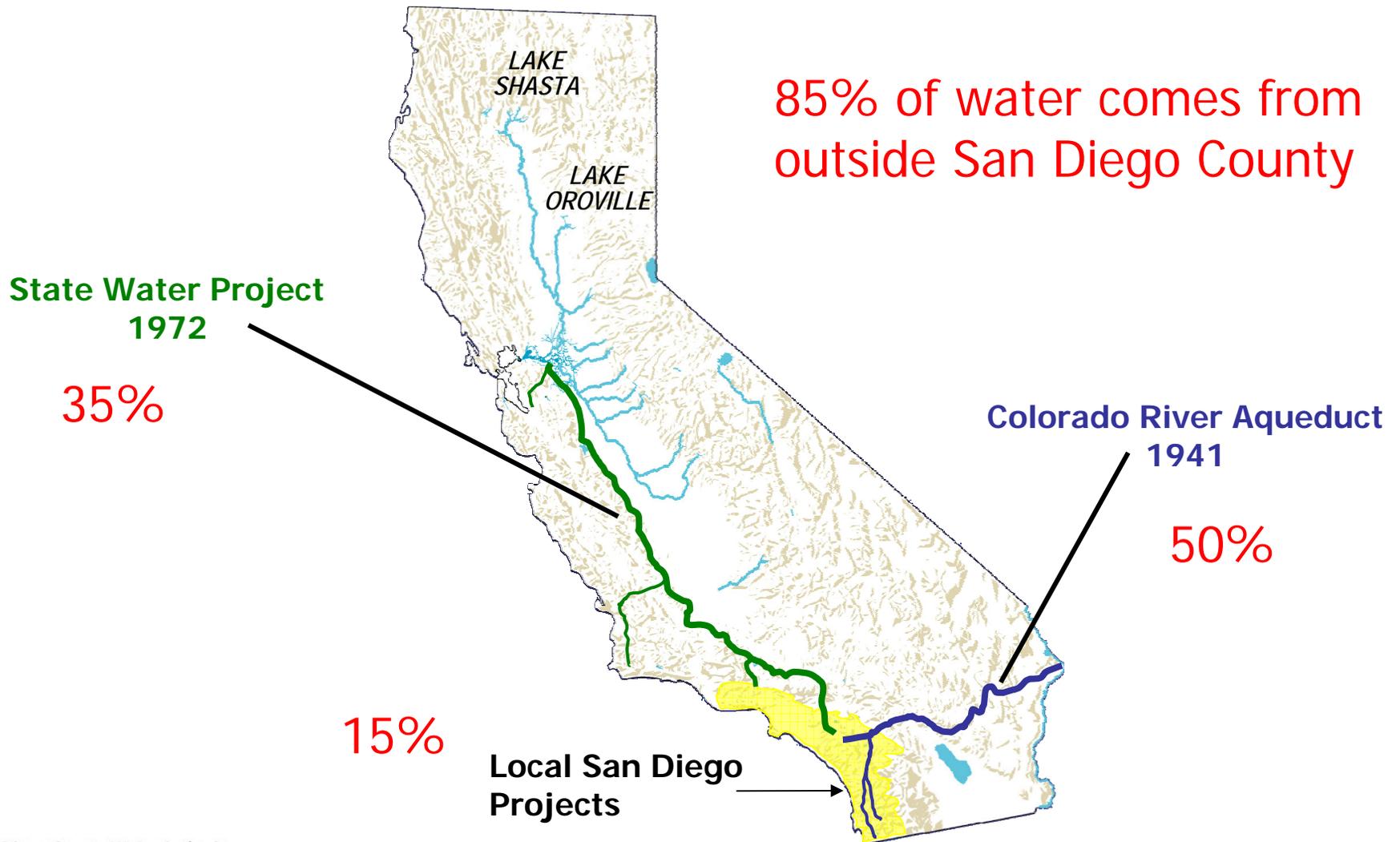
- Water Authority overview
 - Water Supply Sources
- Climate Change Adaptation Activities
 - Water Supply Diversification
 - Water Utility Climate Alliance (WUCA)
 - AWWARF Projects
- Mitigation Activities
 - Climate Change & Sustainability Program
 - AB32 Scoping Plan – Water Measures
 - Local Government Protocol
 - 20 Gallon Challenge

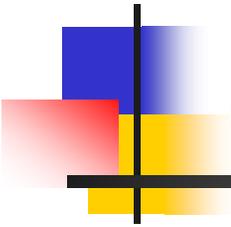
What is the Water Authority?

- Wholesale water agency created by State Legislature in 1944
 - 24 member agencies
 - 35-member board of directors
 - Serves 3 million people and supports region's \$163 billion economy
- Service area
 - 920,000 acres
 - 97% of county's population



Major Water Conveyance Facilities





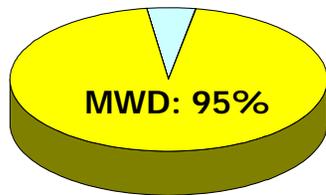
Climate Change Adaptation Activities

What are we doing?

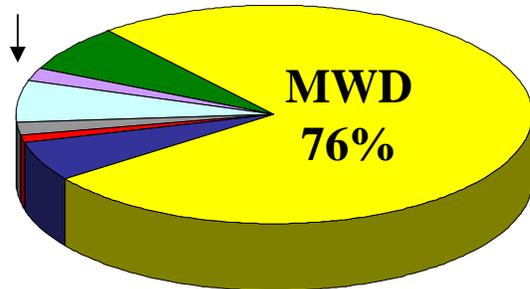
Diversifying San Diego County's Water Supply Portfolio

1991

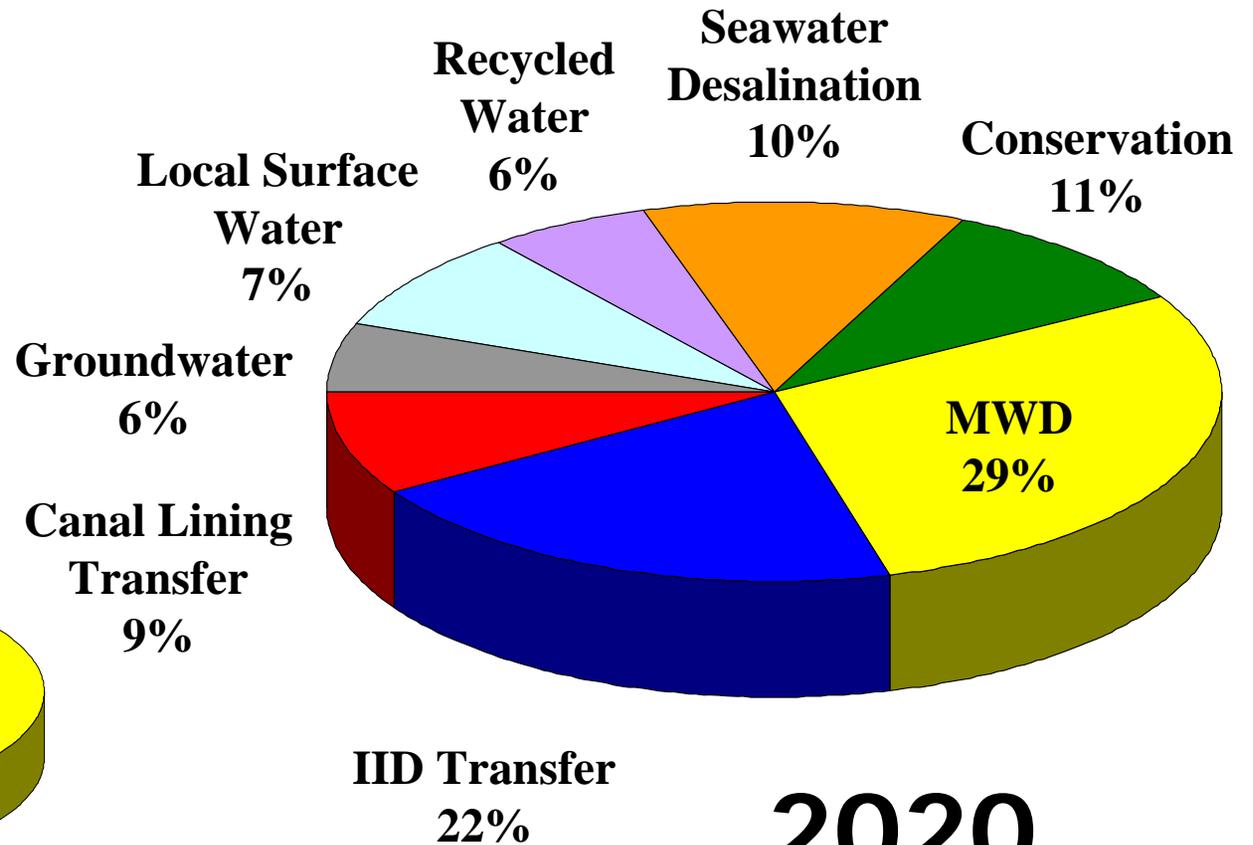
Local Supplies: 5%



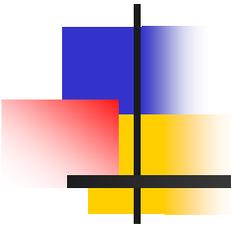
Local Supplies
24%



2007

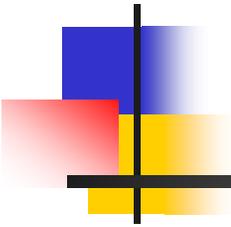


2020



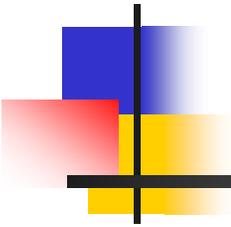
Collaboration with water utilities & professional organizations

- Water Utility Climate Alliance (WUCA)
 - Coalition formed in February 2008
 - Eight large water providers, serving 36 million people
 - Seattle Utilities
 - Portland Water
 - San Francisco PUD
 - MWD
 - Denver Water
 - Southern Nevada Water Authority
 - City of New York Dept. of Environmental Services
 - San Diego County Water Authority



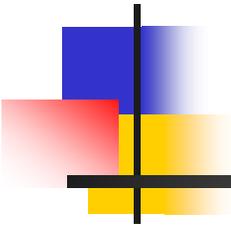
Collaboration continued

- WUCA Objectives:
 - Provide leadership on climate change issues affecting drinking water utilities by
 - Improving and expanding climate research
 - Promoting and collaborating in the development of adaptation strategies and tools
 - Identifying and minimizing greenhouse gas emissions that result from the operations of each member.



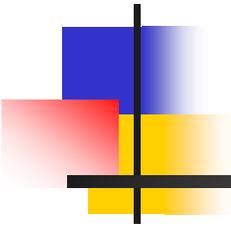
Collaboration continued

- Provided comment or input on:
 - US Climate Change Science Program Research Plan
 - National Water Program Strategy , Office of Water, USEPA
- American Water Works Research Foundation
 - Identification of research needs
 - Study of effects on water supply planning and design standards



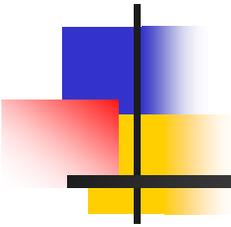
Mitigation Activities

- Climate Change and Sustainability Program, 2012 Business Plan:
 - Key Issues
 - Enhanced Data for water supply planning and decision support
 - Climate Change as an area of legislative focus
 - Sustainable and costs effective business practices



Sustainability Program

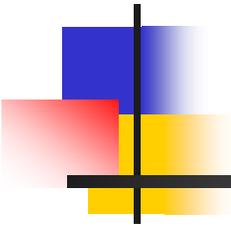
- Goals
 - Reduce GHG emission from fleet
 - Reduce impacts from energy consumption
 - Reduce impacts from water generation
 - Develop photovoltaic projects at Authority facilities
 - Pursue energy efficiency opportunities
 - Participate with local agencies and organizations to promote intergovernmental coordination and share information



AB32 Scoping Plan

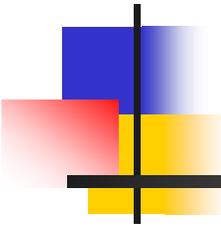
Water Sector Measures

- Reduce GHG by 4.8MMT
 - Water Use Efficiency
 - Recycling
 - Water System Energy efficiency
 - Reuse urban runoff
 - Increase renewable energy production
 - Includes public goods charge Collect \$100 to \$500 million modeled after electricity program



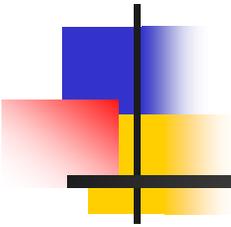
Scoping Plan Response

- California Urban Water Agencies (CUWA)
 - Eleven agencies including Water Authority
 - Remove public goods charge from consideration – coordinate with existing activities underway – 20% per capita reduction
 - Increase water sector implementation of renewable energy projects by removing barriers



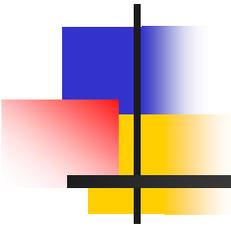
Scoping Plan Response continued

- Request for Clarification
 - End User related emissions
 - Potential overlap of water sector and local government measures
 - Overlap green building and water sector efficiency measures
 - Applicability of cap and trade to water sector
 - Water sector emissions and reductions currently combined with electricity – how will they be separated



Local Government Protocol

- Provide a standardized approach to voluntary reporting
- Special districts encouraged to use
- Water Authority is using to identify sources and quantify emissions

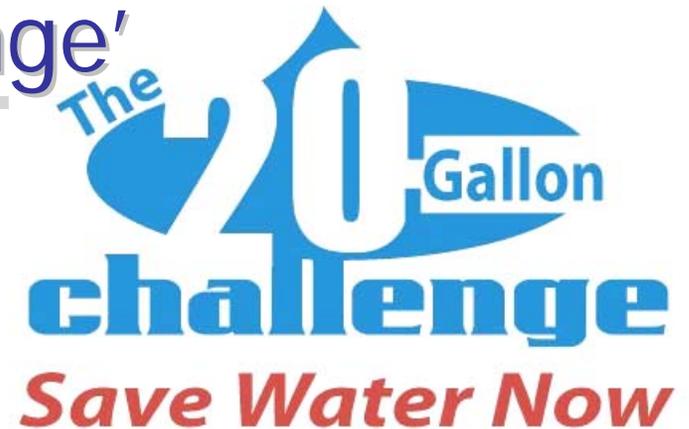


Water Authority GHG Inventory

- Preliminary inventory 2006
- Business Plan goal for 2010
 - Identify sources of data
 - Quantify Scope 1 – Direct Emissions
 - Quantify Scope 2 – Indirect Emissions
 - Preliminary review of Scope 3 requirements

The '20-Gallon Challenge'

- Challenges each individual to save 20 gallons of water per day
- Emphasizes specific tips and amounts saved at www.20gallonchallenge.com
- Supported by member agencies, businesses, community partners
- 2008 target: 56,000 acre-feet





Lake Oroville – February 2008
719.86 Feet Elevation – 1,412,524 Acre Feet