

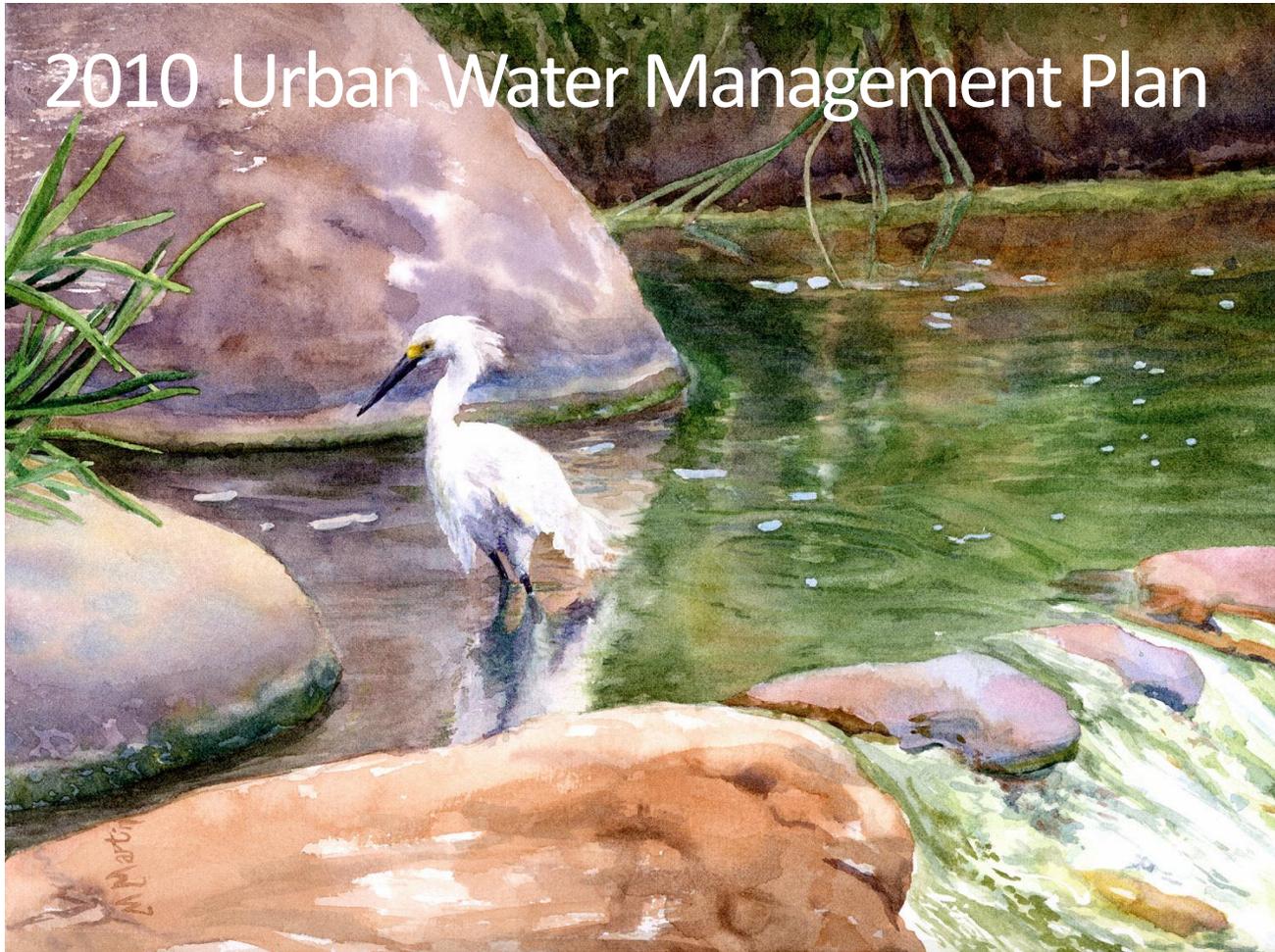


THE CITY OF SAN DIEGO  
PUBLIC UTILITIES  
DEPARTMENT



# Presentation to NR&C

April 20<sup>th</sup>, 2011





## UWMP Background

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- UWMP Act – required by law every 5 years
  - Water Code Sections 10610-10656
  - Established: AB 797 Klehs, 1983
  - 3,000 connections/3,000 ac-ft/yr
- Provide a 25 year estimate of water supplies and demands (to 2035)
- Drought planning
- Required for funding or drought assistance from state



## 2010 UWMP background cont..

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- Includes detailed information (actions, steps, schedule) on future supply development
- Coordination with other agencies





# Inter Agency Coordination

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- San Diego County Water Authority
- SANDAG
- Local water agencies
  - California American Water (Coronado and Imperial Beach)
  - Otay Water District
  - Olivenhain Municipal Water District
  - Santa Fe Irrigation District
  - San Dieguito Water District
  - City of Poway
- City and County notification
- Other



# City of San Diego - UWMP Objectives

- Satisfy Department of Water Resources (DWR) requirements
  - Provide a 25 year estimate of water demands and verifiable supplies (to 2035)
- Foundation for Integrated Regional Water Management Plan (IRWMP)
- Foundation and justification for water supply assessments (SB 610 and 221)





## New UWMP Requirements

- Due to recent changes in UWMP requirements, State law (SBX7-7) extended the deadline for the 2010 Plans to July 1, 2011.
- Legislation in 2009, SBX 7-7 (20% reduction is statewide urban water use by 2020), GPCD target
  - Interim 2015 target
  - 2020 target
- Lower income household water use (SB 1087)
- Water conservation reporting
- Grants/loans conditioned on Demand Management Measures (DMM) implementation
- 60-day City/County notification



# SANDAG 2050 Regional Growth Forecast – Series 12

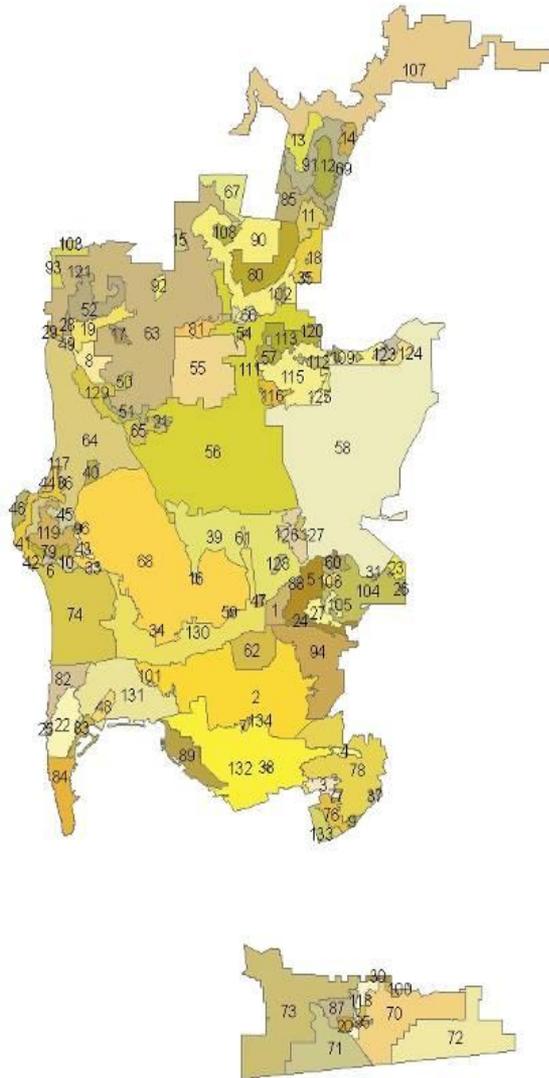


- Approved by SANDAG Board in February 2010
- New forecast includes:
  - Population, single- and multi-family housing units, employment counts, household income
  - Agency General/Specific plan updates approved since the last forecast
  - Updated economic outlook based on the current recession
  - Compliant with SB-375 requirement for sufficient housing to meet projected housing demand





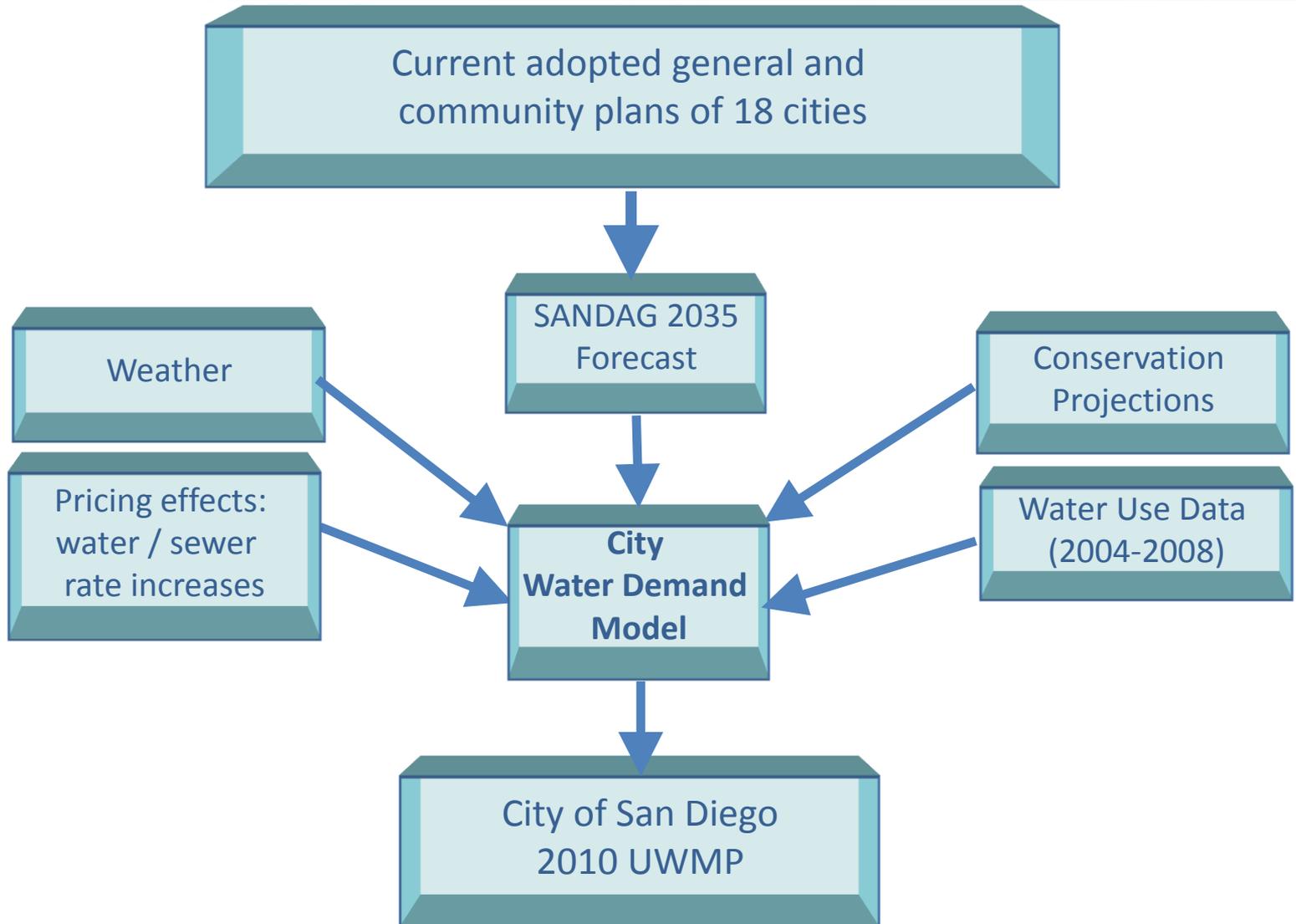
# Data Used for Water Demand Forecast



- SANDAG 2050 Update, Series 12
  - Employment
  - SF and MF occupied households
  - SF and MF housing density (computed from acreage)
  - Median household income
- Marginal price of water & sewer
- Weather data
  - historical observed
  - Climate change scenarios
- Historical Water use data
  - Customer billing information, premise code, and month
  - Wholesale water use
  - Percent NRW from annual report
- Conservation savings and future programs



# Water Demand From SANDAG Forecast





# Water Demands

	2015	2020	2025	2030	2035
<b>2005 UWMP demands</b> (SANDAG Series 10 forecast - acre-ft/ year)	246,378	256,460	266,438	275,925	
<b>Draft 2010 UWMP demands</b> (SANDAG Series 12 forecast - acre- ft/ year)	250,460	263,728	274,856	282,295	292,049
% change	1.7%	2.8%	3.2%	2.3%	

- Includes retail and wholesale potable demands and retail recycled water demands
- The 2010 demands are currently being analyzed and are not final.



## SBx7-7 (20x2020 conservation plan)

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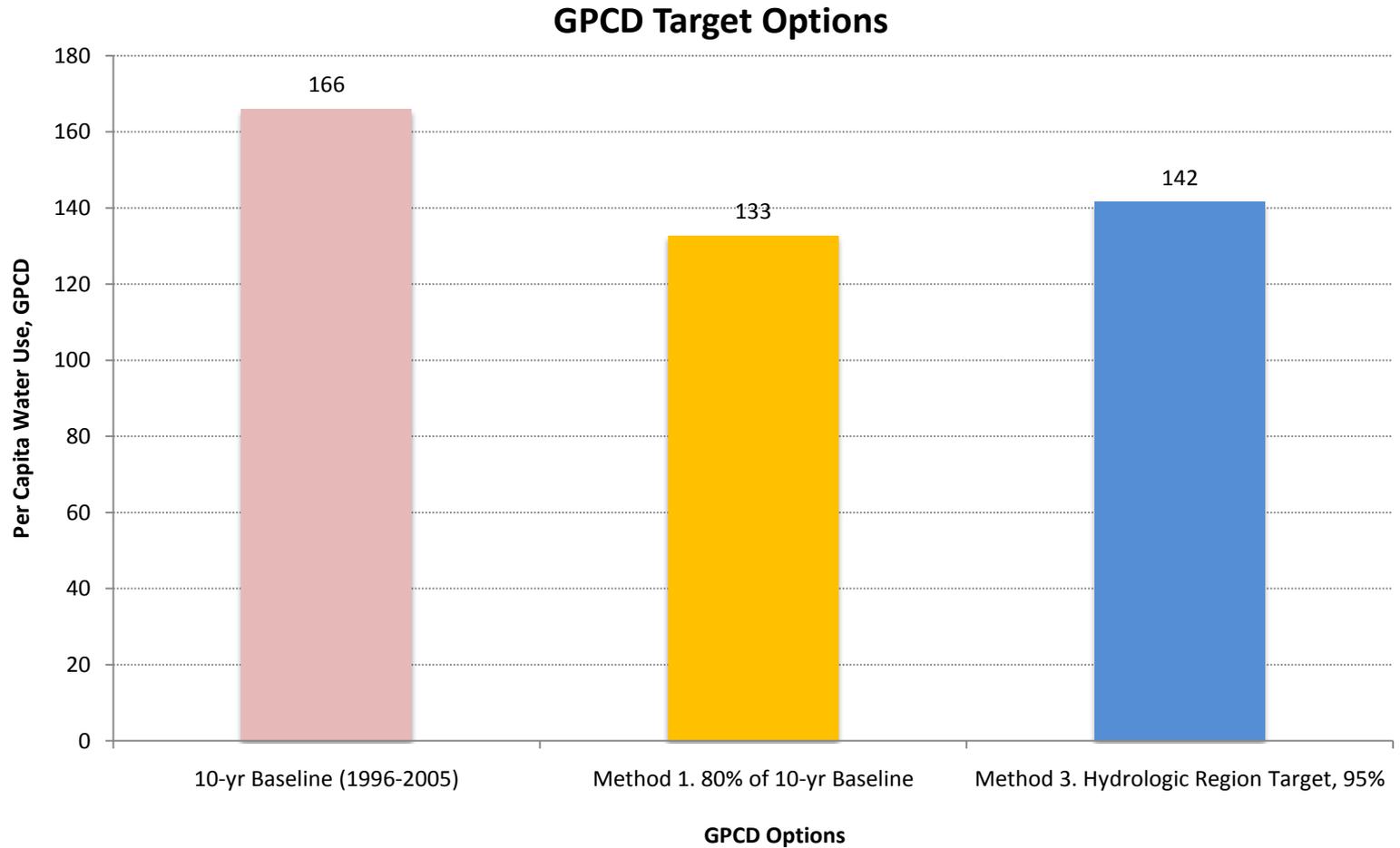
GPCD Target methods:

1. 80% of 10-yr baseline
2. indoor residential and outdoor budget
3. 95% of hydrological region target
4. provisional method based on indoor, CII, and outdoor targets





# GPCD Options





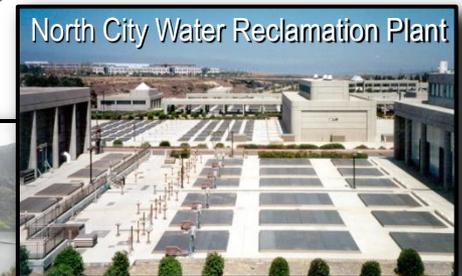
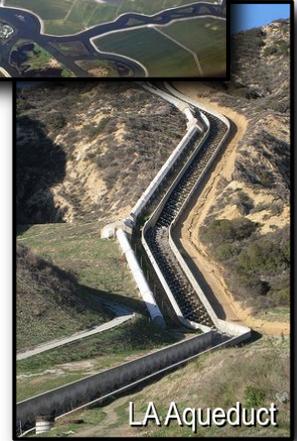
# Water Supplies

## Imported Water 85%

- Colorado River
- State Water Project

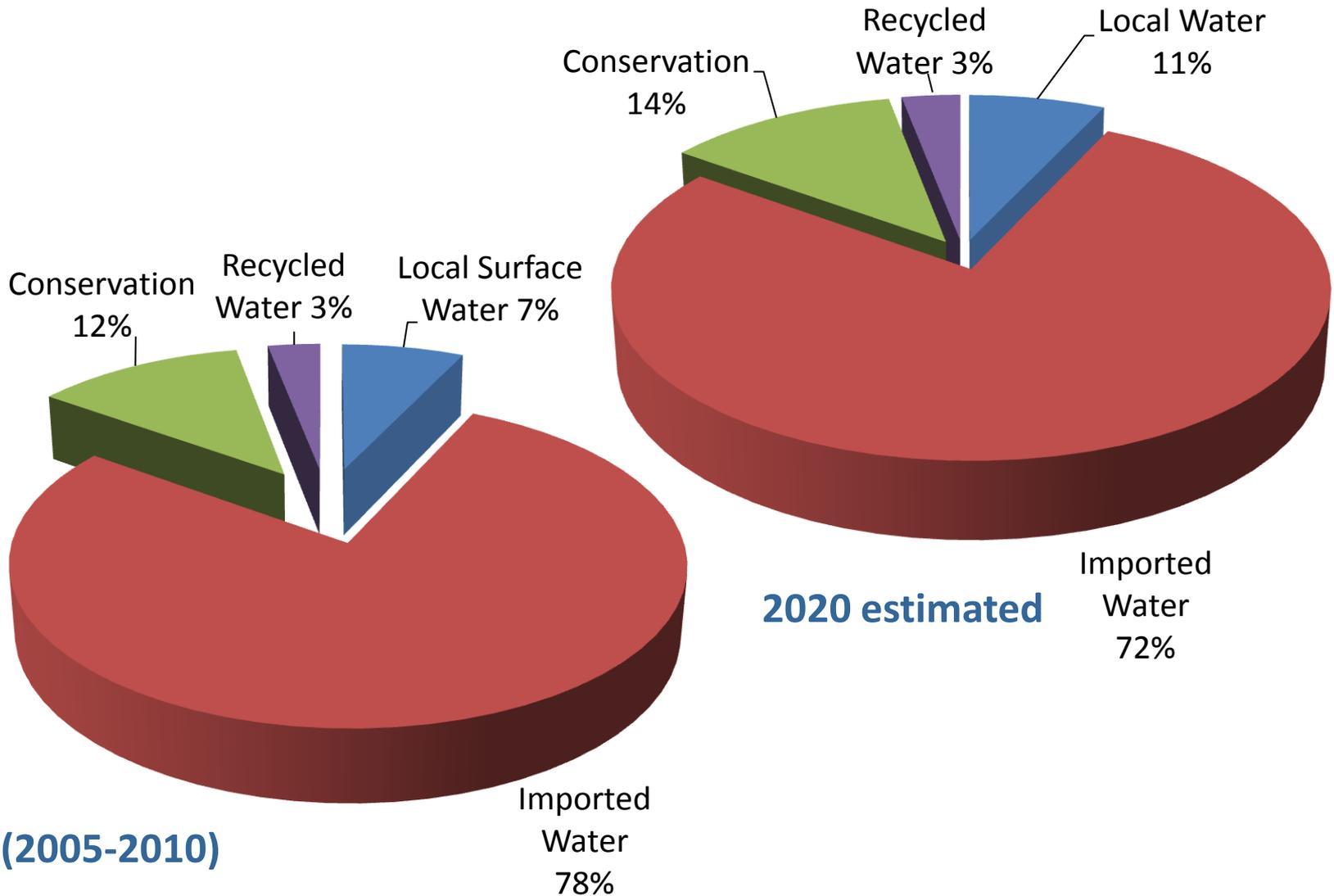
## Local Supplies – Verifiable

- Local Surface Water
- Recycled Water





# Water Supplies



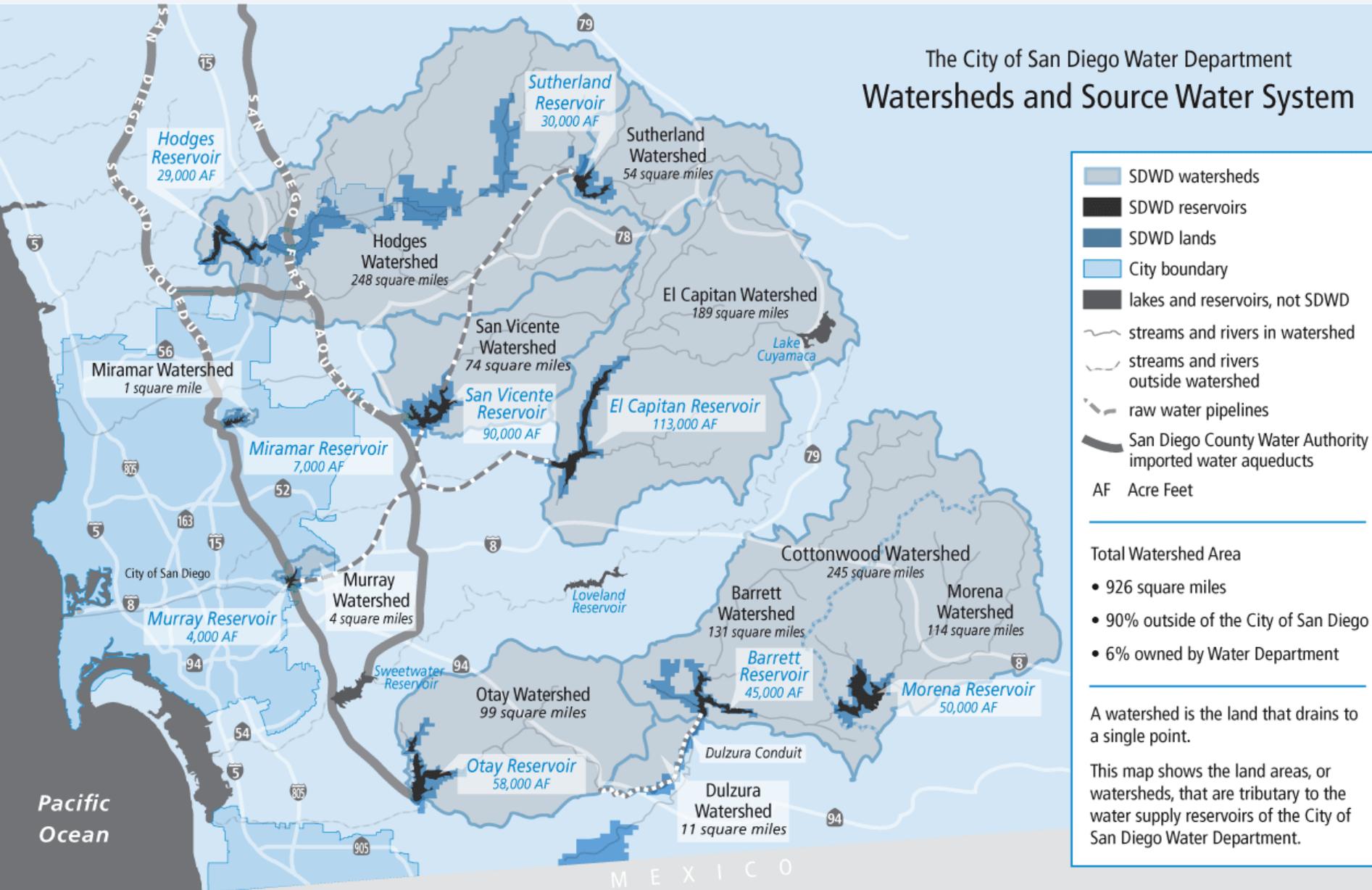
**Average (2005-2010)**

**2020 estimated**

# Local Runoff

Average Local Runoff: 29,000AF/yr

## The City of San Diego Water Department Watersheds and Source Water System



- SDWD watersheds
  - SDWD reservoirs
  - SDWD lands
  - City boundary
  - lakes and reservoirs, not SDWD
  - streams and rivers in watershed
  - streams and rivers outside watershed
  - raw water pipelines
  - San Diego County Water Authority imported water aqueducts
- AF Acre Feet

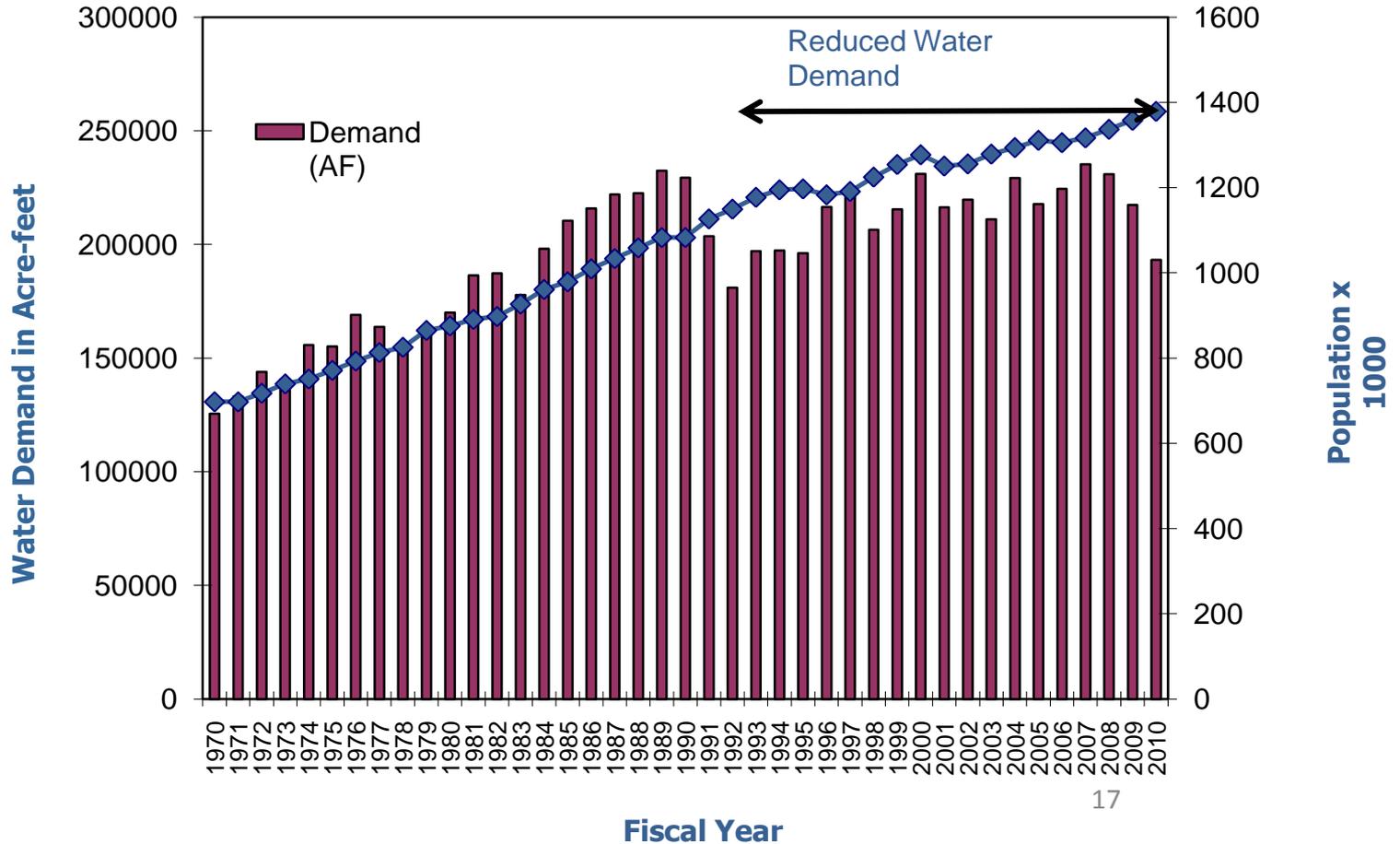
- Total Watershed Area**
- 926 square miles
  - 90% outside of the City of San Diego
  - 6% owned by Water Department

A watershed is the land that drains to a single point.

This map shows the land areas, or watersheds, that are tributary to the water supply reservoirs of the City of San Diego Water Department.



# San Diego is Conserving





# City Helps Residents Conserve Water

Incentives



Water Audits/Surveys



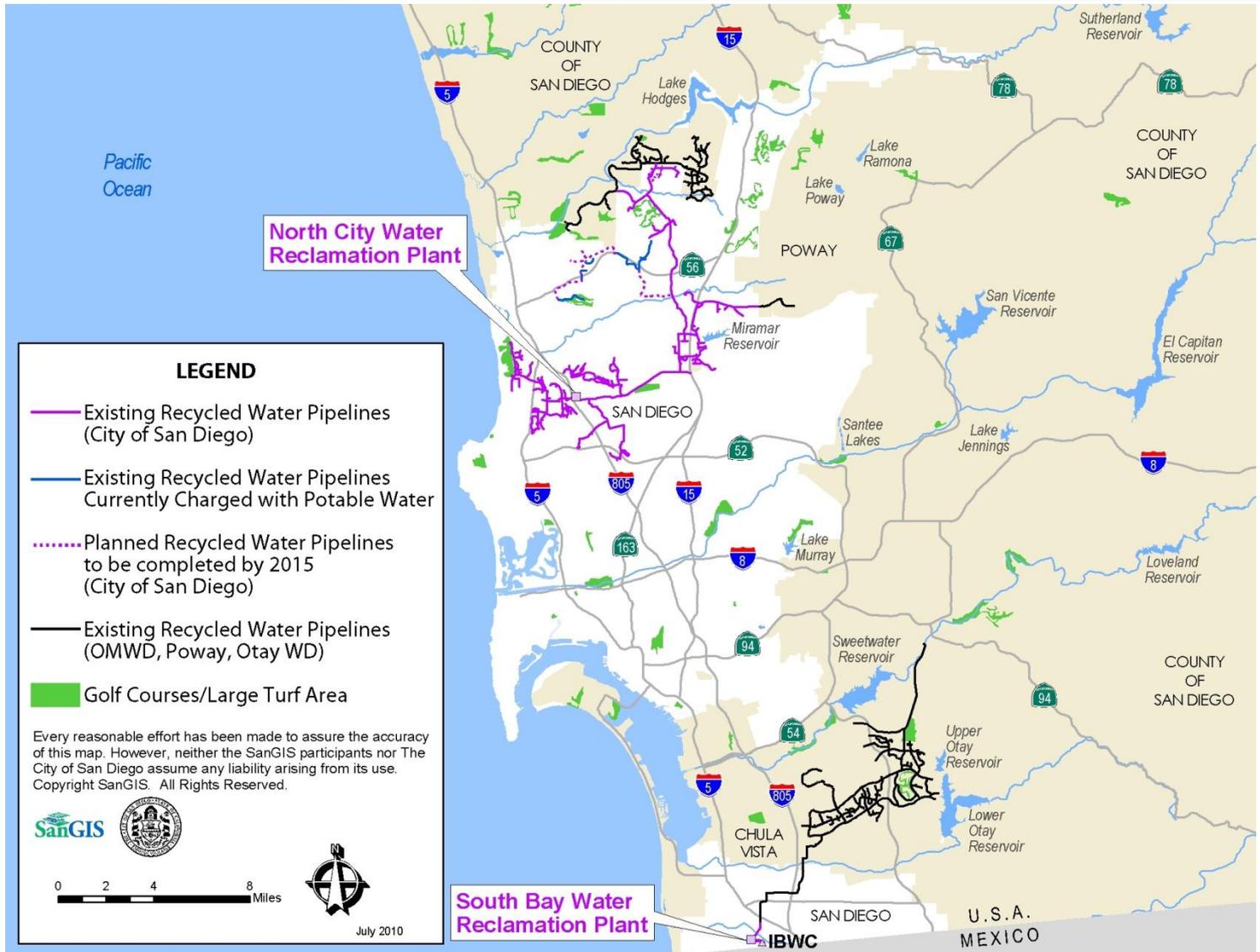
**NO TIME TO WASTE**  
**NO WATER TO WASTE**

Informing the Public





# City of San Diego Recycled Water System





# Groundwater





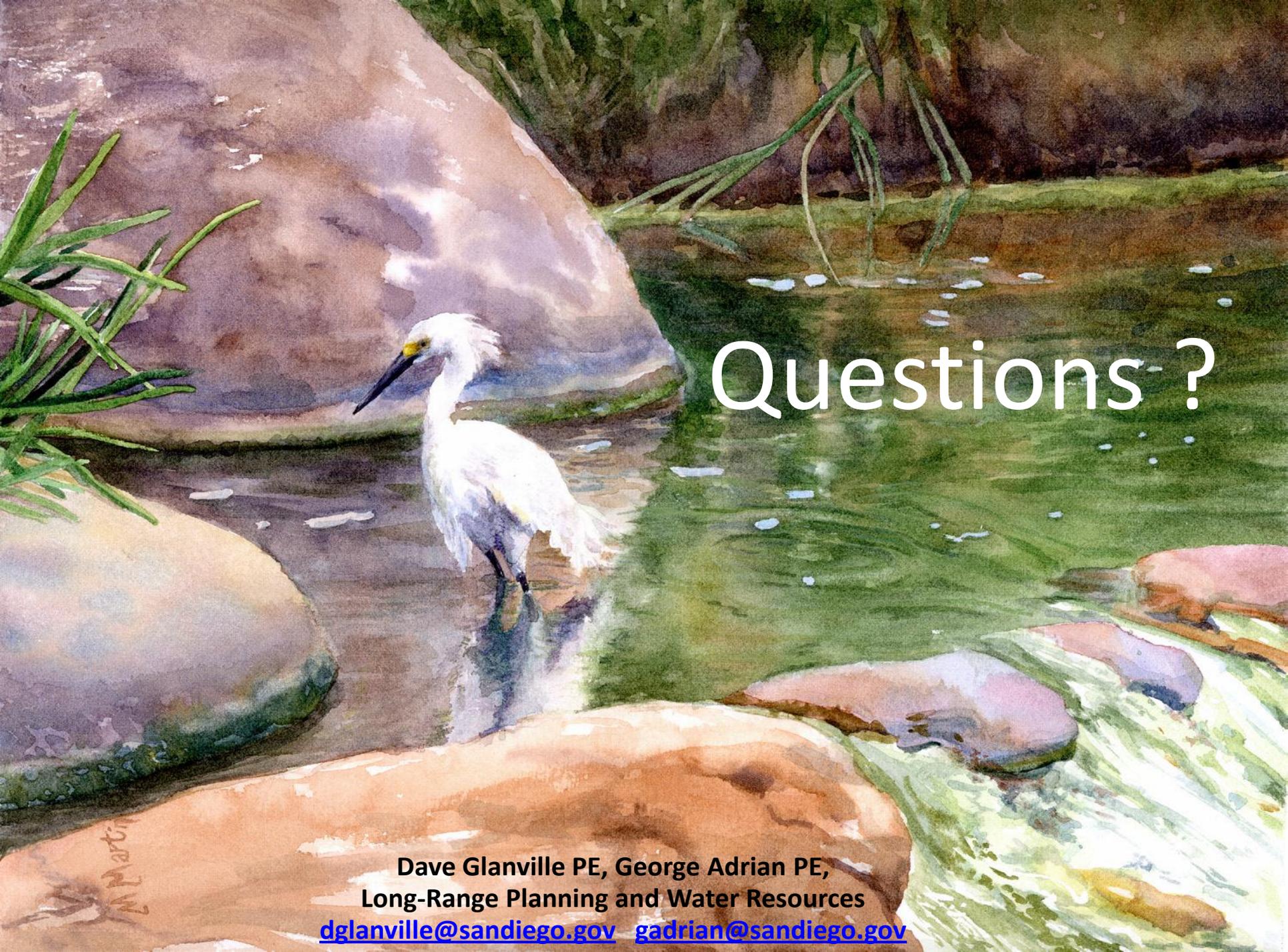
# Future Water Supply Actions

- Update to the 2002 Long-Range Water Resources Plan (LRWRP)
  - The LRWRP will evaluate water supply:
    - Costs (economic, environmental, social)
    - Reliability
    - Water Quality
    - Flexibility
    - Risk
  - Establish optimum water supply mix
  - Estimated Completion: January, 2012



# City of San Diego 2010 UWMP Schedule

Activity	Date
DWR releases 2010 UWMP Guidebook	March 4, 2011
Summary Presentation to IROC E &T	April 11, 2011
60 Day Public Hearing Notice to Cities and County	April 18, 2011
Summary Presentation to NR&C	April 20, 2011
2010 UWMP presentation to IROC	May 16, 2011
2010 UWMP presentation to NR&C	May 18, 2011
Presentation to City Council (Public Hearing) – Adoption of 2010 UWMP	June 20 or 21, 2011
Submit adopted 2010 UWMP to DWR	July 20, 2011

A watercolor illustration of a white egret standing in a shallow stream. The egret is the central focus, facing left. The water is a mix of green and brown tones, reflecting the surrounding environment. Large, smooth rocks are scattered throughout the scene, some in the foreground and some in the background. Green foliage, including long, thin leaves, is visible on the left and right sides. The overall style is soft and painterly.

# Questions ?

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