## Testimony of Steve Macaulay

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### Qualifications

- Statement of Qualifications: Exhibit 10-2
- 34 years active involvement, wide range of California water resources issues
- State regulatory, water resources planning and development experience
- Extensive technical and policy experience

### Purpose of Testimony

- Water management in Santa Ana River watershed
- Statewide benefits of additional local supply and storage
- Advancing integrated regional water management -- State policy

### Elements of Testimony

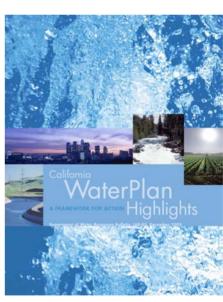
- Historic water management
- Major water resources challenges facing the region
- Project benefits in context of local and statewide water resources

## Historic Water Management

 2005 Calif Water Plan Update summarizes extensive progressive water management

activities

- Local/imported supplies
- Conservation
- Recycled water
- Brine lines, desalination
- Groundwater remediation
- Groundwater conjunctive use
- Watershed management



# Salinity is Key Driver for Water Management

Santa Ana Water Project Authority actions, activities



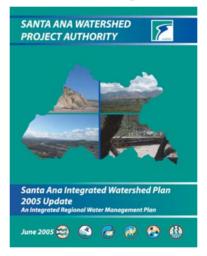


- Southern California Salinity Coalition
- MWD/USBR Salinity Management Study
- Orange County Groundwater Replenishment System

### Water Conservation

Extensive activities throughout Santa Ana

River watershed



- Western / MWD actions
- Muni actions



### Continued Pursuit of IRWM

- 1995 Muni Master Plan
- Extensive SAWPA plans, programs
- Integrated Regional GW Management Plan for Upper Santa Ana River almost complete
- Basinwide approach, multiple strategies
  - Santa Ana sucker
  - Key water quality components (N, TDS, perchlorate)
  - Watershed fires
  - Groundwater -- liquifaction, contamination, restore storage

## Major Water Resource Challenges in Region

- Imported water reliability, costs
- Local storage
- Increased recycled water use
- Increased conservation implementation
- Water quality

## ☐ Imported Water

- SWP reliability addressed in 2002, 2005 DWR special reports
- 75 percent average contract deliveries
- Below 50 percent in dry years
- Less in droughts
- As low as 4 percent in extreme critical year (repeat of 1977)
- High cost of pumping from northern Calif
- Delta vulnerable -- Governor's Executive Order S-17-06

### Local Storage

- Delta vulnerability heightens need for local storage
- Local actions taken in past decade to expand storage
  - MWD Diamond Valley Reservoir
  - CCWD Los Vaqueros Reservoir
  - SDCWA Olivenhain Reservoir
  - Extensive groundwater storage programs

## Increased Recycled Water Use

- Water recycling underway in basin
- Greater potential -- State Recycled Water Task Force
- Key issues continue to be water quality, public acceptance
- Long-term strategy

#### **Increased Conservation**

- One of 25 water management strategies in Calif Water Plan
- Not "either/or" choice
- Substantial continued future water savings potential
- Implementation challenges with all tools
- Project assumes 10 percent additional conservation savings -- consistent with regional planning
- State Landscape Task Force report -- additional outdoor savings possible, significant challenges to getting there

## Water Quality

- Salinity management critical
- Upper Santa Ana River lower in salinity than imported supplies
- Lower salinity water helps with groundwater basin remediation
- Santa Ana Regional Board actively working with basin water interests in managing nitrogen, salinity

### Why Project Makes Sense, Local and Statewide Water Resources

Foundational Actions

Ensure Sustainable Water Uses Vital Economy lealthy Environment High Standard

Protect

Water

Quality

Integrated

Regional Water

Water

Improve Statewide

Water Management

Systems

Support

**Environmental** 

- Value of diverse water portfolio: reduce risks, improve reliability, respond to future uncertainty including climate change
- Project is part of regional portfolio, regional partnership
- 2005 Water Plan Update strongly favors regional approaches
   diverse portfolios

### Why Project Makes Sense, Integrated Regional Water Management

- Intermittent Santa Ana River water improves quality, helps remediate GW
- Lower salinity expands opportunities for reuse
- Restored GW basins expand regional storage
- Increased conservation can reduce imports, saving \$\$\$ and aiding salinity management
- Conservation and salinity must be managed carefully
- Increases use of existing facilities (Seven Oaks Dam)