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SLIDES: What Ever Happened to the Soft Landing?: Coping With and Without Surplus Waters

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What Ever Happened to the Soft Landing? Coping With and Without Surplus Waters

26th Summer Conference
Natural Resources Law Center
University of Colorado School of Law
Metropolitan Water District of Southern California

- 6 counties; 5,200 square miles
- 18 million people
- Regional economy: $822 billion
- Projected growth: ~240,000 people/year
- MWD provides nearly 60% of southern California’s supply
Where Southern California Gets its Water

Local Supplies

Groundwater & Recycling

Los Angeles Aqueduct

Colorado River Aqueduct

Transfers & Storage

Local Supplies

Conservation

California Aqueduct
The Soft Landing

- 2000-2004 Colorado River Basin drought eliminated the availability of surplus water in 2005
- Metropolitan chose to not divert available surplus water from October 2003 through 2004
- Metropolitan substituted other water supplies
Sources of Water Supply in MWD’s Service Area

Million Acre-Feet

- State Water Project
- Colorado River Aqueduct
- LA Aqueduct
- Local Supplies

Years: 1971-2003
Integrated Resources Plan

A diverse resource strategy reduces risk

- Colorado River
- State Water Project
- Storage & Transfers
- Recycling
- Groundwater Recovery
- Conservation
- Local Supplies
- Conjunctive Use
- Desalting
- Supply Options
Diverse Water Supply Portfolio

- Hydrologically Dependent
  - Local Surface & Ground Water
  - Colorado River Aqueduct
  - Los Angeles Aqueduct
  - California Aqueduct
  - In & Out of Service Area Storage
  - Conjunctive Use Programs
  - Operational Flexibility

- Hydrologically Independent
  - Conservation
  - Recycling
  - Contaminated Water Recovery
  - Transfers
  - Desalination
  - Land Management/Supply Programs/Ag-Urban Partnerships
  - Water Quality
Palo Verde Program

- Develops flexible and reliable water supply
- Stabilizes farm economy in the Valley
- Funds community improvement programs
- Provides up to 111,000 AF/yr
Canal Lining Projects

- **Concrete lining**
- **Conserves seepage**
  - SDCWA 77,000
  - SLR Parties 16,000
  - Total 93,000 AF/yr

- **2004 construction start**
QSA Related Agreements

- 24 related agreements signed on October 10, 2003
  - Specifies exchange of IID/SDCWA transfer water (200,000 AF/yr)
  - Allocates water conserved by All American & Coachella canal lining projects
  - Requires IID to conserve water for CVWD and/or MWD for payments (100,000 AF/yr)
Other MWD Supplies

- **Special surplus water**
  - Restored access

- **Shortage sharing/payback to Arizona**
  - None, if MWD does not use special surplus

- **Additional IID conserved water**
  - Up to 1.6 MAF to MWD
  - Dependent on Salton Sea restoration
Ultimate Yield of QSA Transfer Programs Benefiting Metropolitan’s Service Area

- **110,000 AF/yr** – MWD/IID conservation
- **200,000 AF/yr** – IID/SDCWA Transfer
- **94,000 AF/yr** – Canal lining to SDCWA & Settlement Parties
- **1.6 Million AF** – Salton Sea mitigation / restoration
Water Supply Reliability

Current Performance:
- Stored water at the end of 2004 was 2.3 maf
- Potential water in storage at the end of 2005 is 2.7 maf

Potential Water in Storage (End of 2005)
- Kern Delta Prop. 13 Programs (start-up)
- San Bernardino Valley
- North Kern & Mojave Demo

Water in Storage (End of 2004)
- Semitropic, Castaic & Perris
- No. Las Posas
- Desert / Coachella
- Lake Mathews & Lake Skinner

Current Performance:
- Stored water at the end of 2004 was 2.3 maf
- Potential water in storage at the end of 2005 is 2.7 maf

Water in Storage
- End of 2004
- Potential Water in Storage (End of 2005)
- Million Acre-Feet
- Year
- '90
- '95
- '00
- '05
- Greater than 10x Increase
Dry-Year Supply Portfolio

- **San Joaquin Valley Transfers**
  - Kern Delta
  - Semitropic
- **Hayfield**
- **Coachella**
- **Imperial**
- **Palo Verde**
- **Central Arizona**
- **Arvin-Edison**
- **San Bernardino**

**Sacramento Valley Transfers & DWR Drought Bank**

**MWD Service Area**
- 7 existing GW programs
- 6 new GW programs
- 22 GW Recovery programs
- 53 Recycling projects
- Surface Reservoirs
- 5 desalination projects (proposed)

**Surface Reservoirs**
- Lake Mathews
- Skinner Res.
- Lake Perris
- San Luis Reservoir
- Skinner Res.
- Taylor Res.
- Lake Mathews
- Lake Merritt
- Lake Korson
- San Bernardino Reservoir
- Diamond Valley Lake
- San Marcos Reservoir
- Imperial

**Multi-year banking / transfer programs**
- Lake Mathews
- Skinner Res.
- Lake Perris
- San Luis Reservoir

**Single-year options**
- Castaic Lake
- Lake Mathews
- Skinner Res.
- Lake Perris
- San Luis Reservoir
- Lake Mathews
- Skinner Res.
- Lake Perris
- San Luis Reservoir