



Bay Delta Conservation Plan and Importance to So Calif.

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SBCCOG

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BDCP

BAY DELTA CONSERVATION PLAN

Sources of Water for Southern California



Sacramento-San Joaquin Delta:

California's Water
Epicenter



**DELTA
DISRUPTED**

A Vulnerable & Incomplete System

- Past generations invested in a network of dams, aqueducts and pumps to move water around the state
- 100-year-old man-made levee system is old and fragile
- Much of the land has subsided below sea level
- Future sea level rise and changing weather patterns will put greater pressure on the levees



**DELTA
DISRUPTED**

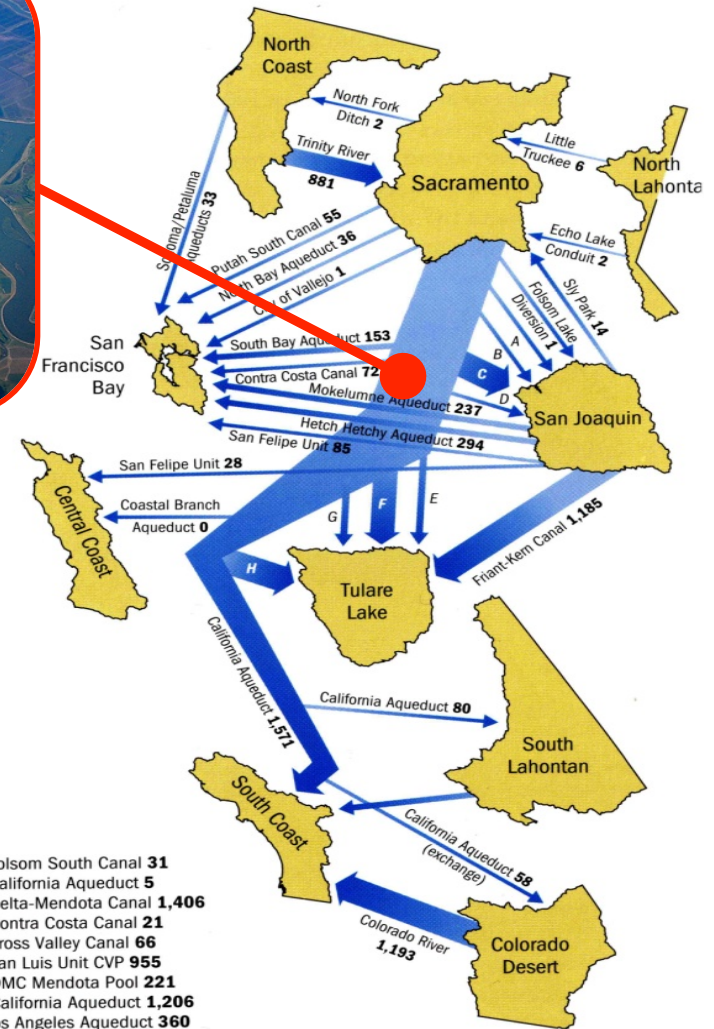
**How likely is a
major earthquake
(6.7 magnitude)
to hit Northern California?**



**DELTA
DISRUPTED**



Water Movement in California



A retrofit of the existing system that secures it from risk of flood, earthquake and sea level rise in the Delta is the most sensible approach



**DELTA
DISRUPTED**

Investing In The Seismic Retrofit

- Project is prudent, affordable & urgently needed
- Cost of the water conveyance project would be covered by public water agencies
 - ~\$14 billion
 - Project would be financed over many years
 - No state general fund dollars involved
- Broader funding sources, including potentially voter approved bonds, would pay for environmental improvements



An Investment Long Overdue



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Bridges &
Highways

Hospitals

Public
Schools

Prisons

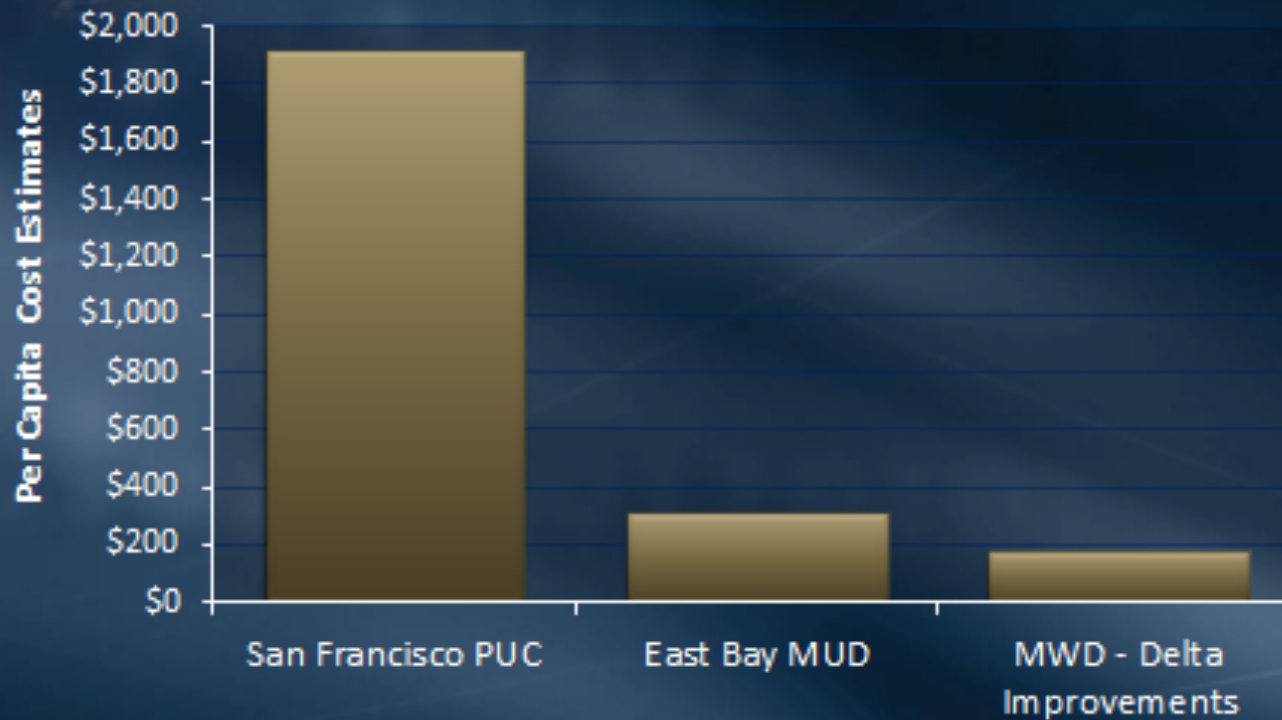
California's Water
Delivery System



**DELTA
DISRUPTED**



What is the Per-Capita Cost of Other Supply Improvement Projects?



* Per-Capita Cost = Total Capital Cost / Population Served

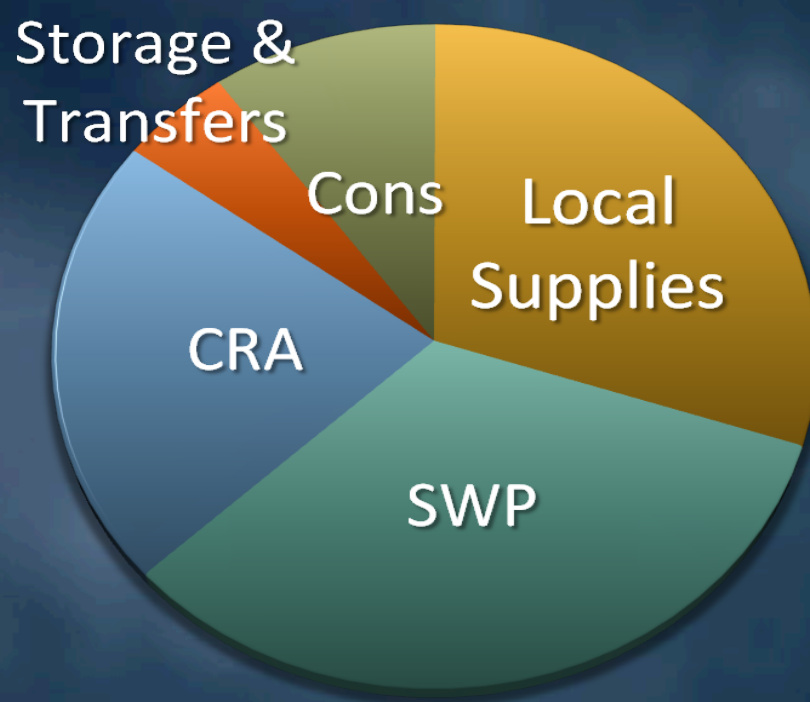


Regional Water Investments

- Water Conservation and Efficiency
- Recycled Water
- Groundwater clean up efforts
- Groundwater storage for droughts
- Stormwater capture

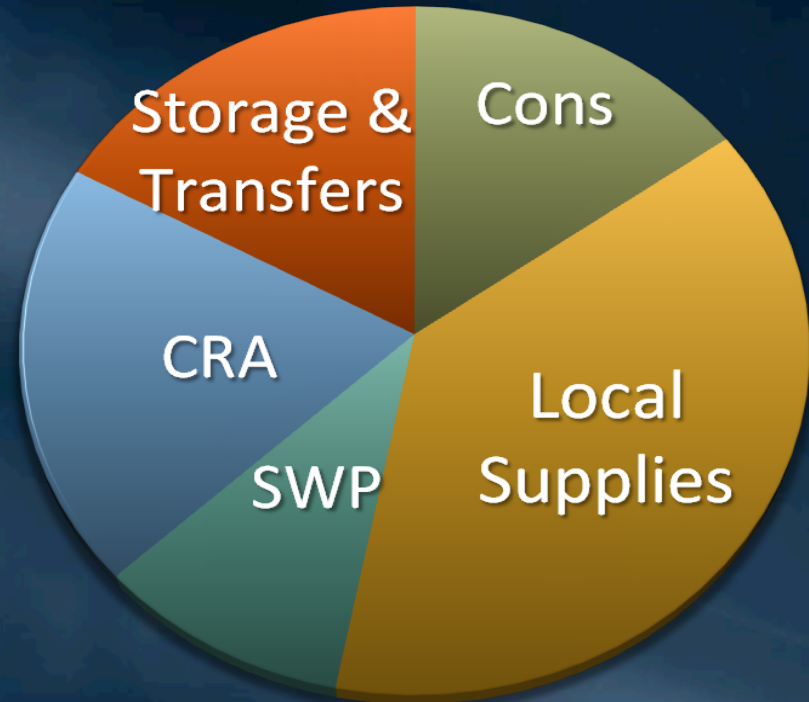


MWD's Balanced Approach Dry-Year Strategy



Early 1990's

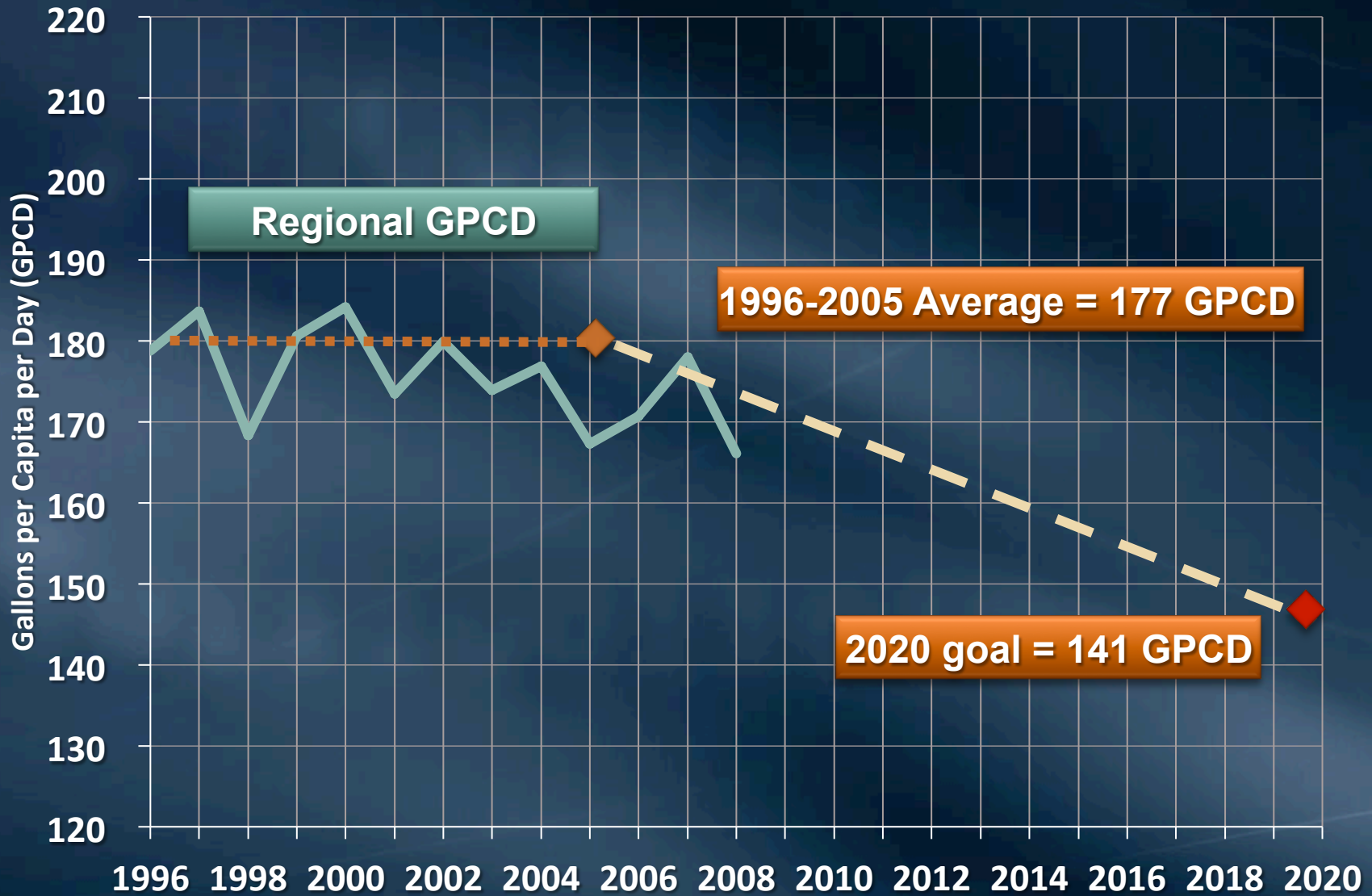
Heavy dependence on imported supplies



Current Strategy

Emphasis on conservation, local supplies, storage & transfers

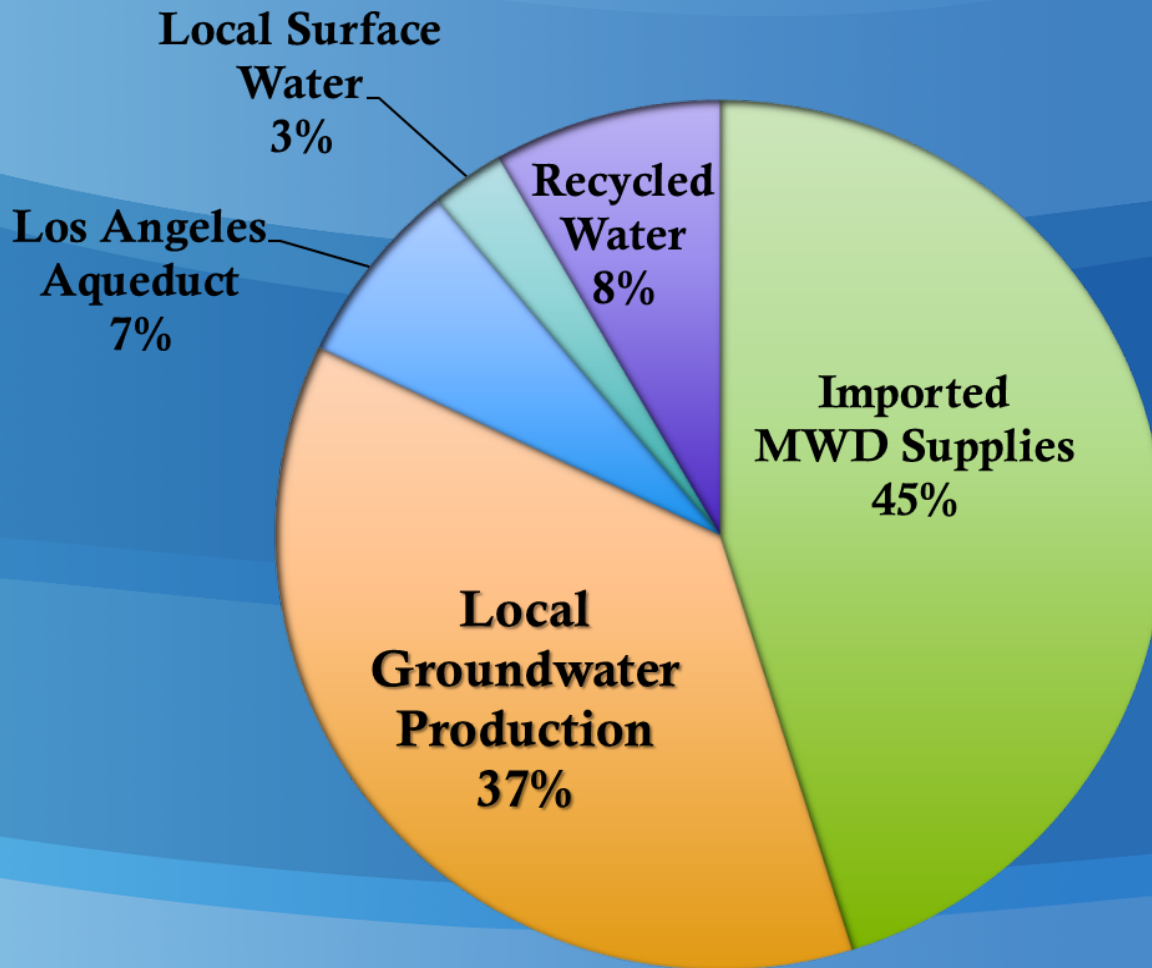
Regional Per Capita Water Use



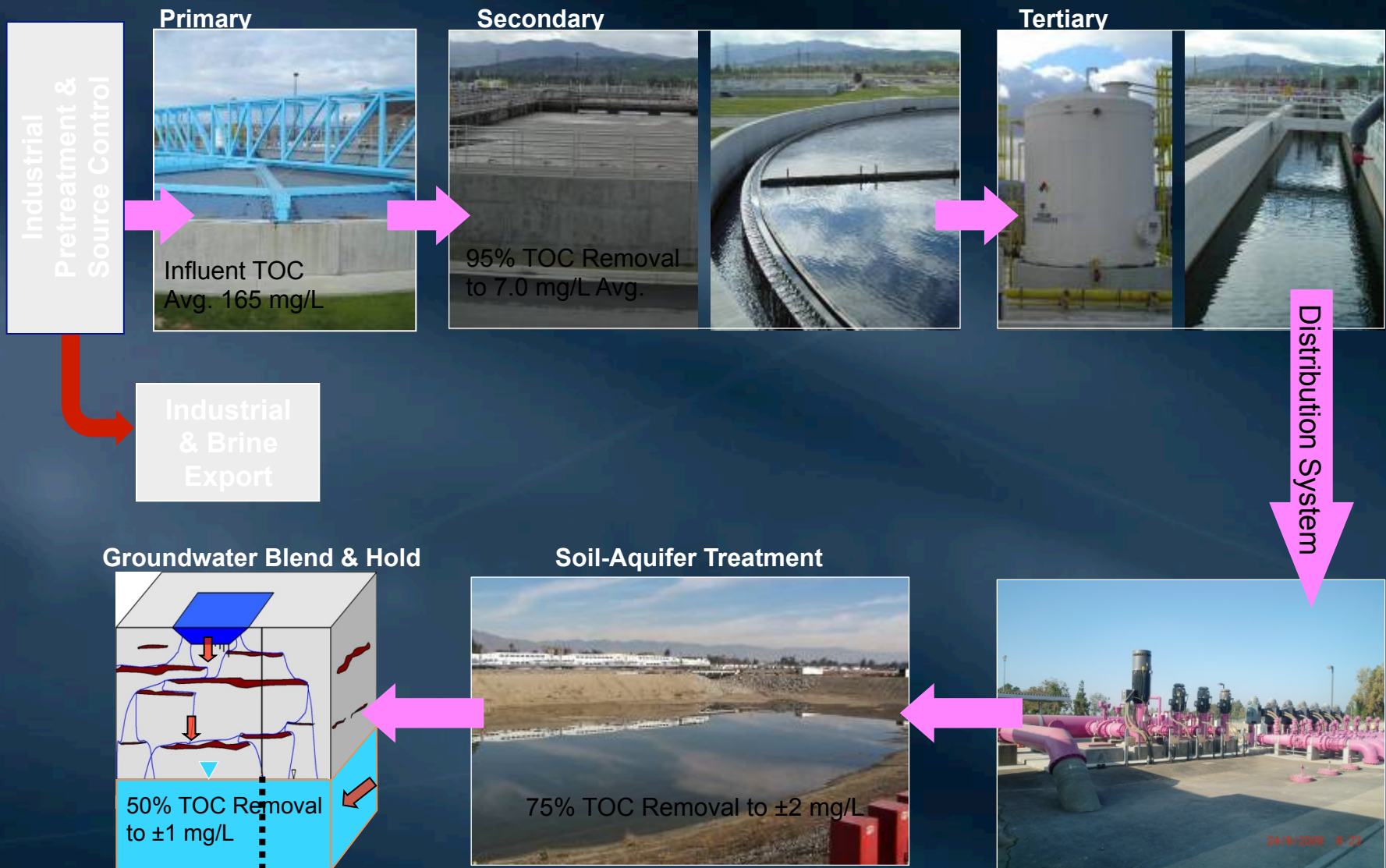


2010 Service Area Water Supplies

Total Retail Demand: 3.6 MAF



San Gabriel River Recycled Water Production Cycle



Using Water Over And Over Again: Recycling

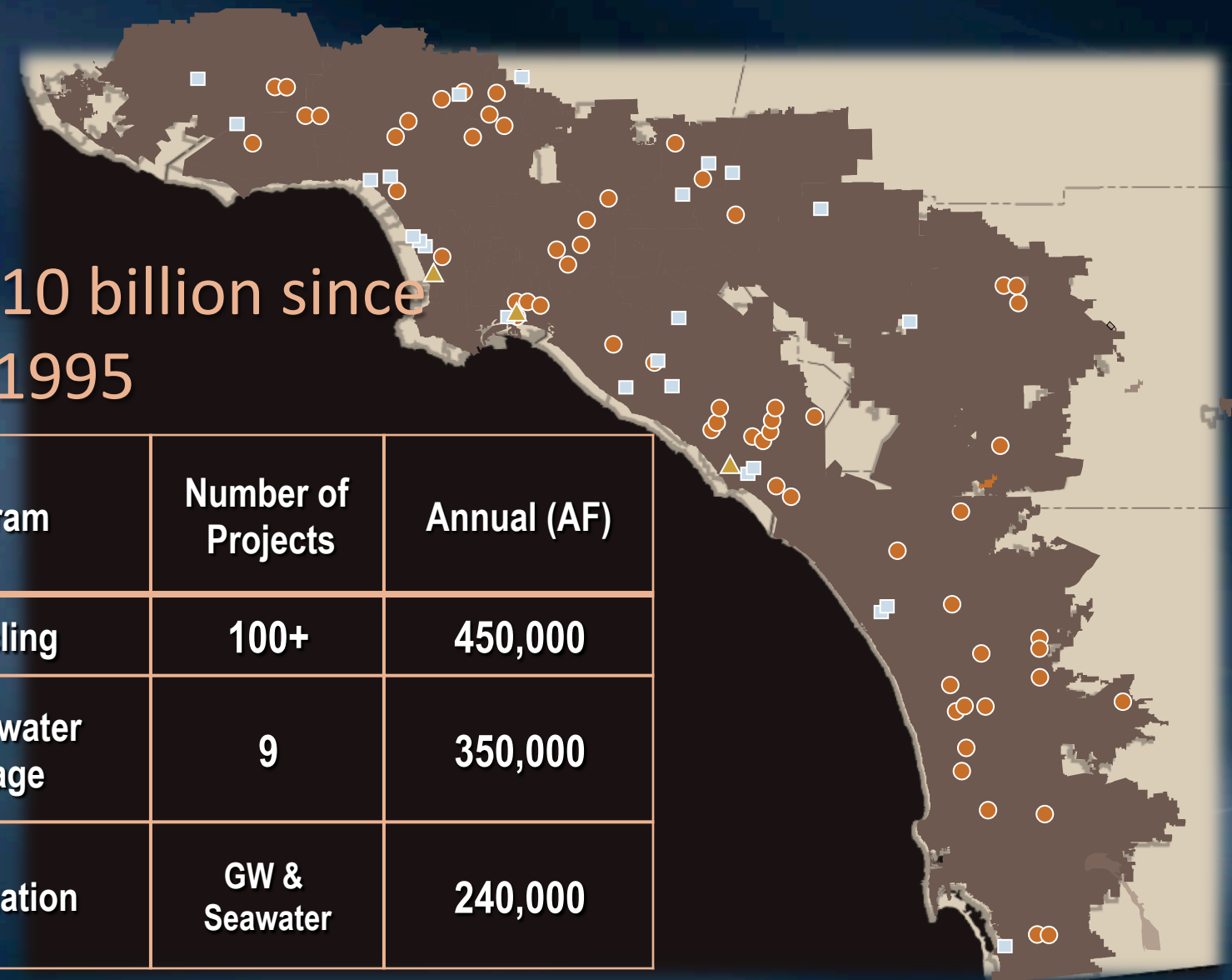


Investing in Efficiency



Investment in Local Water Projects

Invested \$10 billion since
1995



	Program	Number of Projects	Annual (AF)
●	Recycling	100+	450,000
■	Groundwater Storage	9	350,000
▲	Desalination	GW & Seawater	240,000

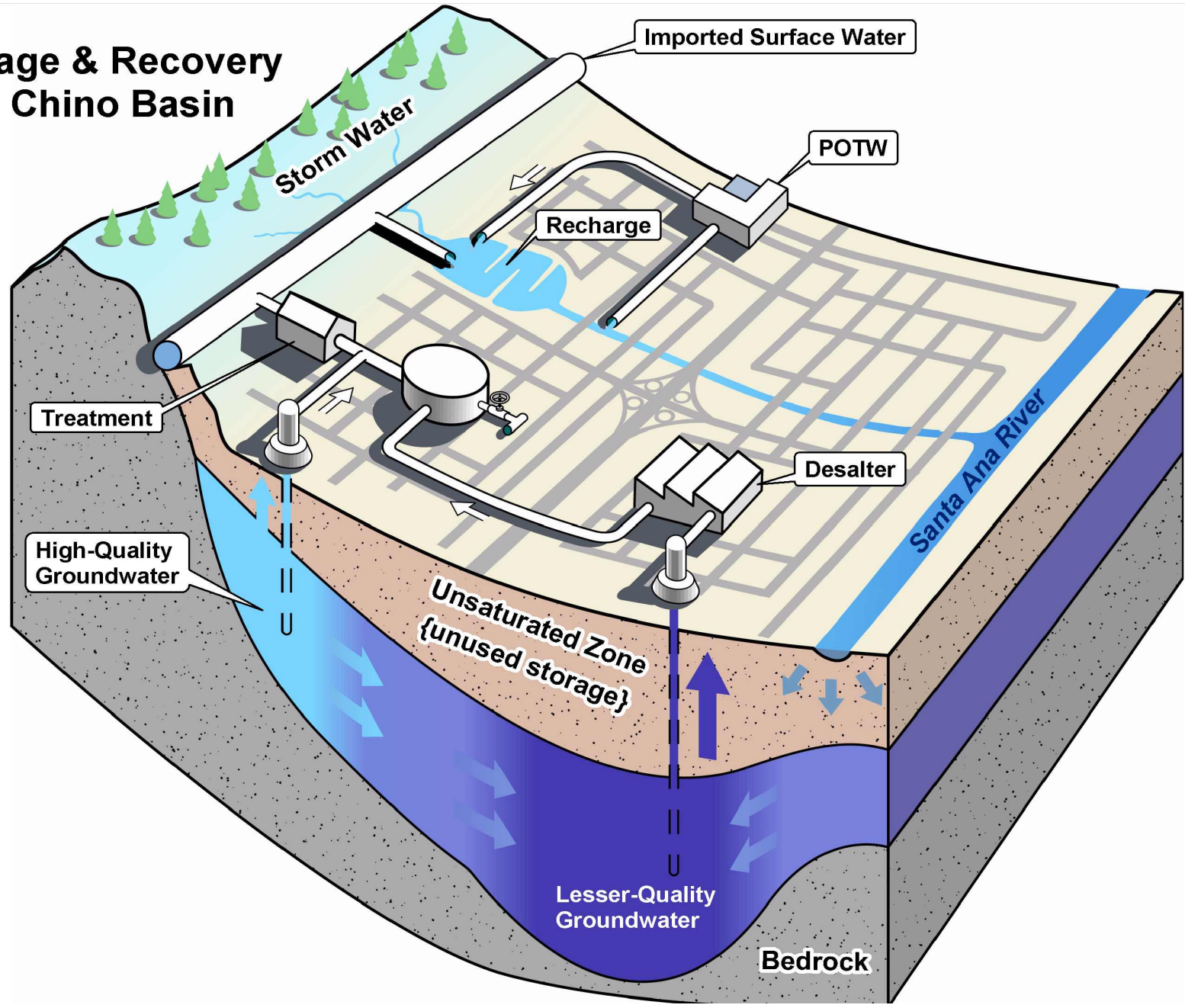
A map of Southern California showing various water basins color-coded to match the table. The basins are: Northwest MWD (dark green), San Fernando Valley (blue), LA County Coastal Plain (light green), San Gabriel Valley (orange), Orange County (red), Inland Empire (yellow), Eastside MWD (cyan), and San Diego County (purple). The map also shows the coastline, major water bodies, and topographic features.

~ 3 MAF of Available Storage Space

2011

Northwest MWD Service Area Basins	NA
San Fernando Valley Basins	510,000
LA County Coastal Plain Basins	484,300
San Gabriel Valley Basins	353,000
Orange County Basins	218,000
Inland Empire Basins	500,000
Eastside MWD Service Area Basins	600,000
San Diego County Basins	NA

Storage & Recovery in Chino Basin





Multi-Use Project Types



Flood Protection and Drainage



Site Specific LID -- Water Supply and Water Quality



Traditional Water Supply



Water Quality Streetscape



Habitat and Environment

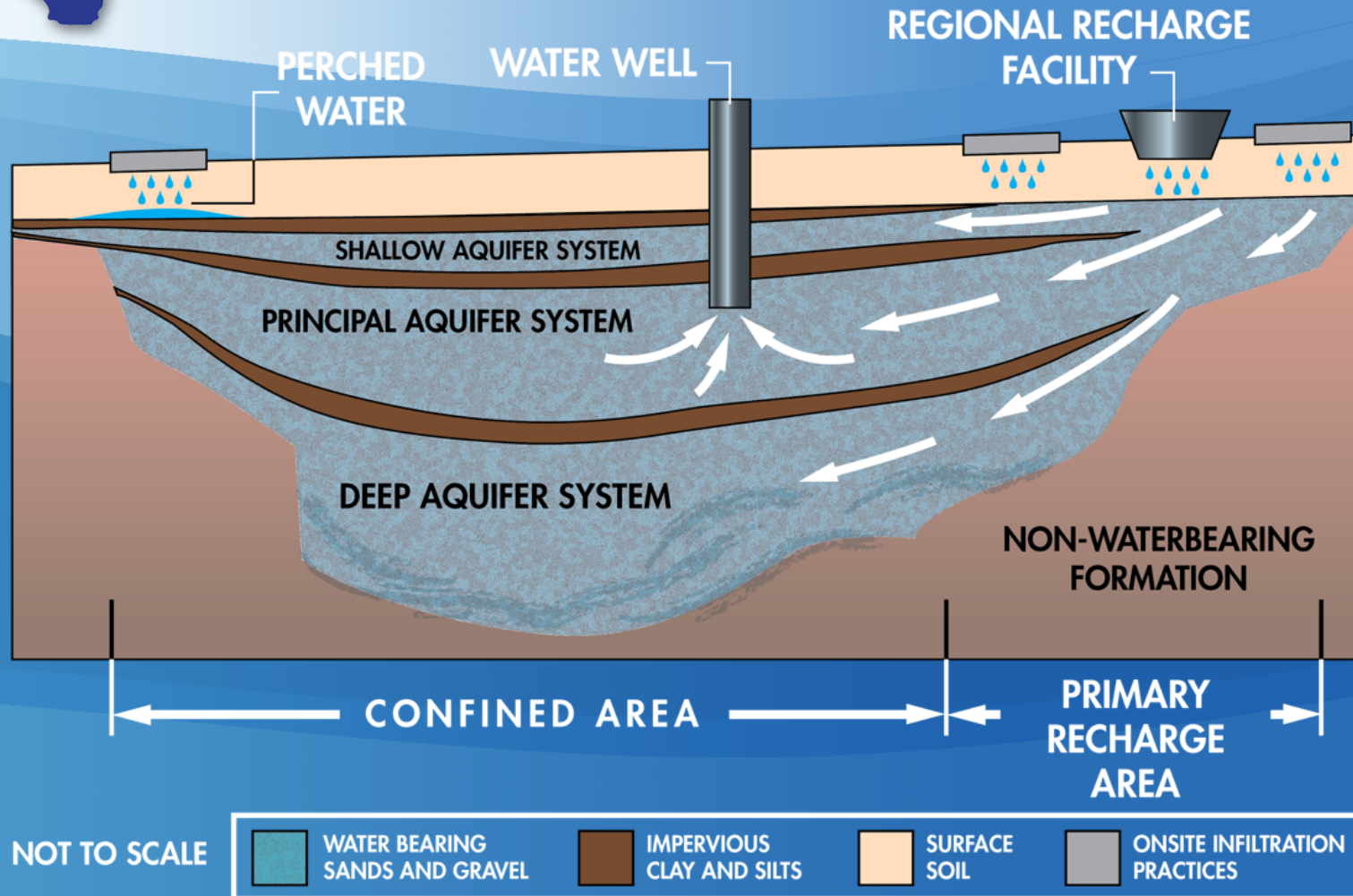


Recreation Trails and Education





Deep Percolation of Stormwater



Source: SCWC Stormwater White Paper



Stormwater: A Smart & Sensible Solution

- 450,000 acre-feet of stormwater is currently captured and recharged into So Cal groundwater basins per year (enough water for 3 million people/year)
- Billions of gallons are lost every year because we don't have enough stormwater capture systems
- Capturing stormwater is viable, cost-effective and environmentally preferable
- Capturing stormwater provides numerous benefits, including:
 - Creating more local water supplies
 - Reducing polluted run-off
 - Providing a cost-effective water supply option





Stormwater Capture Types



- Individual
- Neighborhood
- Large Scale





Small Scale Projects



Whitnall Highway Power Line Easement Project

- LADWP Project.
- Conceptual plan being developed.
- Project expected to increase groundwater recharge by more than 110 acre-feet per year.
- Goal is to capture and infiltrate stormwater beneath LADWP power lines using swales and ponds.
- Designs expected in 2013.



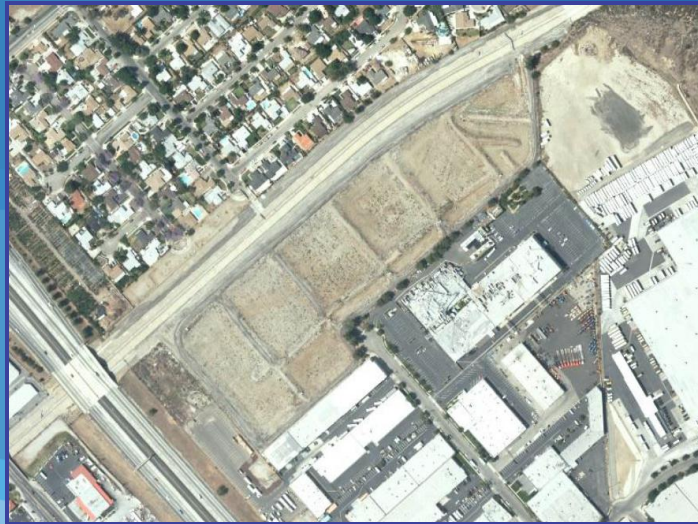
Courtesy of Los Angeles Department of Water and Power



Large Scale Projects

Pacoima Spreading Grounds Project

- LACFCD/LADWP Project.
- Estimated cost \$32 million.
- Increased recharge by 2,000 acre-feet annually.
- Designs expected in late 2012.



Lopez Spreading Grounds Project

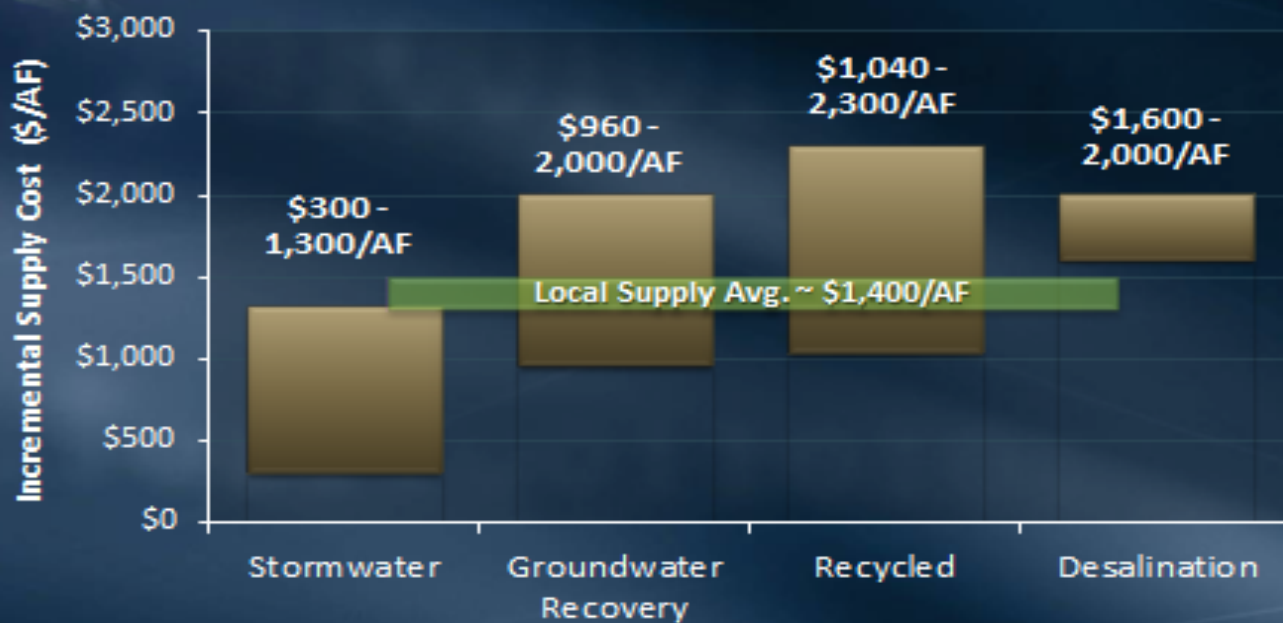
- LACFCD/LADWP Project.
- Increased recharge by 750 acre-feet annually.
- Designs expected in 2013.
- Estimated cost \$8 million.



Courtesy of Los Angeles Department of Water and Power



What is the Cost of Other Supplies?



• MWD estimates

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Thank You!

Richard Atwater
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