



Stakeholder Kickoff Workshop
May 21, 2014

Building on the Success of the Los Angeles
Water Integrated Resources Plan



Innovation • Integration • Inclusion

Welcome

Paul Brown, Facilitator, Paul Redvers Brown Inc.

Adel Hagekhalil, Assistant General Manager, LASAN

David Pettijohn, Director of Water Resources, LADWP



Agenda



- Introductions and Expectations
- Introduction to One Water LA
- Water IRP Updates
- One Water L.A. Project Overview & Schedule
- Networking Break
- Planning Baseline
- Next Steps



Introductions

***What would you like the City to achieve through
One Water LA?***



What you can expect from us:



- We commit to:
 - Listening attentively and with an open mind.
 - Ensuring transparency in sharing information.
 - Respecting your ideas and perspectives.
 - Keeping good records of discussion and input.
 - Providing information in a timely manner (whether at the workshop or as a follow-up).





What we expect from you:



- Contribute to make the group's time together productive.
- Respect the ideas and perspective of others. Give everyone a chance to speak. Don't interrupt.
- Listen attentively and with an open mind.
- Maintain focus on the topic currently under discussion. Avoid repeating issues that have already been raised or recorded.
- Consistent participation and engagement is critical. Commit to attend workshops, tours, and other sessions as often as possible.



And please, identify yourself and the organization you represent when asking questions or providing feedback.

Introduction to One Water LA

Doug Walters, Assistant Division Manager, LASAN

*Evelyn Cortez-Davis, Manager of Water Recycling
Policy & Water Rights, LADWP*



DRAFT Vision Statement



One Water LA is a collaborative approach to develop an integrated framework for managing the City's watersheds, water resources and water facilities in an environmentally, economically and socially beneficial manner.



One Water LA will lead to healthier watersheds, greater reliability of our water and wastewater systems, increased efficiency in operation of our facilities, enhanced livable communities, and resiliency against climate change.

WHAT IS IT?

WHAT WILL IT DO?





One Water LA Builds on Success of Water IRP, and Greatly Expands on it!



GENERAL
SERVICES
DEPARTMENT



One Water LA
Builds and Expands on Citywide
Coordination & Partnerships



Innovation • Integration • Inclusion





One Water LA Builds on Success of Water IRP, and Greatly Expands on it!



Maximizing recycled
water use



Rehabilitated Echo Park Lake



Elmer Ave
stormwater
infiltration swale



- Expanded water reuse
- Expanded water conservation
- Prop O Bond for multipurpose stormwater projects



City Objectives for One Water LA



- A. Increase water use efficiency, reuse of wastewater, and capture of stormwater to reduce future reliance on imported water and increase resiliency
- B. Develop multi-purpose/multi-beneficial stormwater projects for improving water quality and health of local watersheds
- C. Develop, monitor and maintain a sound wastewater system that safely conveys wastewater to water reclamation plants, while reducing sewer system overflows and odors



City Objectives for One Water LA (continued)



- D. Work to balance water supply development with Los Angeles River Revitalization for social, environmental, and economic benefits
- E. Support the beneficial role of trees and green spaces in public areas throughout the City
- F. Incorporate climate change mitigation and adaptation strategies in our actions



City Objectives for One Water LA (continued)



- G. Coordinate among all City departments to achieve: stronger integration of water-related codes and ordinances in the City's planning, zoning, engineering and building & safety requirements; and incorporation of water management into City's recreation & parks and street design and services
- H. Coordinate with regional water management planning activities, such as Los Angeles County Integrated Regional Water Management Plan, Sanitation Districts of Los Angeles County, and Metropolitan Water District of Southern California



City Objectives for One Water LA (continued)



- I. Address funding for capital and O&M costs for water management and facilities—with a focus on “green” infrastructure
- J. Ensure that stakeholders are representative of the LA community and have a voice in the direction of One Water LA
- K. Support education and learning center activities that further One Water LA goals

Open Discussion

Water IRP Updates

Doug Walters, Assistant Division Manager, LASAN

David Pettijohn, Director of Water Resources, LADWP



Water IRP Updates



- Background
- Wastewater
- Stormwater
- Recycled Water
- Water Conservation



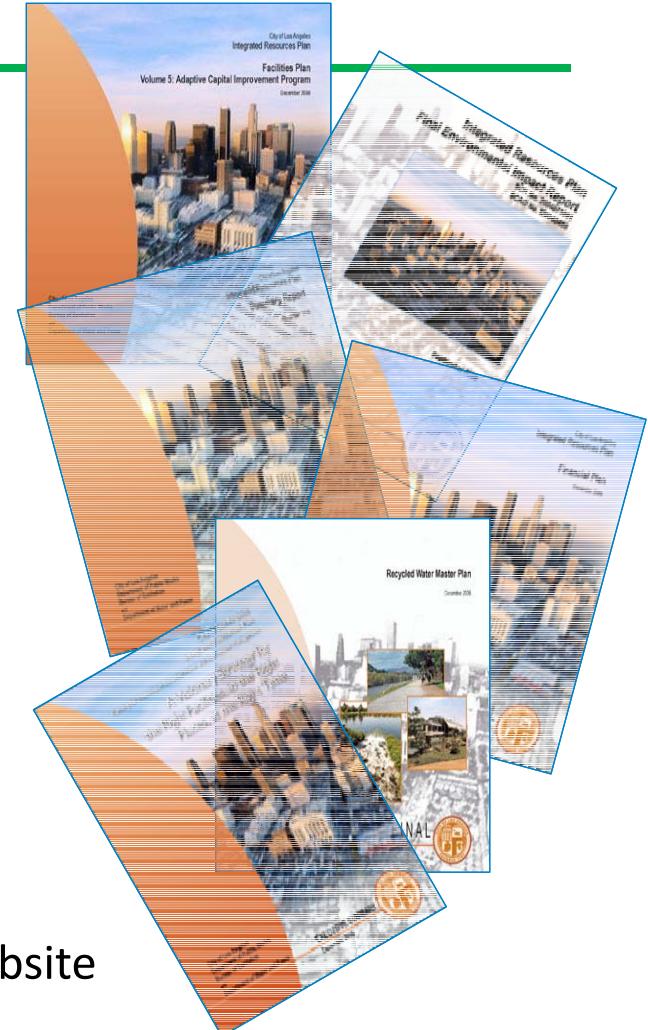
More information on the Water IRP can be found at:
www.lacitysan.org/irp



Water IRP Background



- Adopted by City Council in 2006
- Provided an **integrated facilities plan for water, wastewater, and runoff management** programs through 2020
- Innovative
 - Integrated watershed planning
 - City department collaboration
 - Stakeholder involvement
 - Over 200 meetings during development
 - Since 2006: Annual meetings, Newsletters, Website





Water IRP Recommendations



- **Go Projects (6):** For immediate implementation
 - 2 new interceptor sewers
 - Wastewater & recycled water storage at several plants
- **Go If Triggered Projects (6):** For future implementation once a trigger is met
 - Treatment plant upgrades, expansions, and improvements
 - Construction of a new interceptor sewer
- **Go Policy Directions (25):** Specific programmatic directions to staff on studies/steps required to implement preferred alternative
 - Focus on 3 areas: **Runoff Management, Recycled Water, and Water Conservation.**

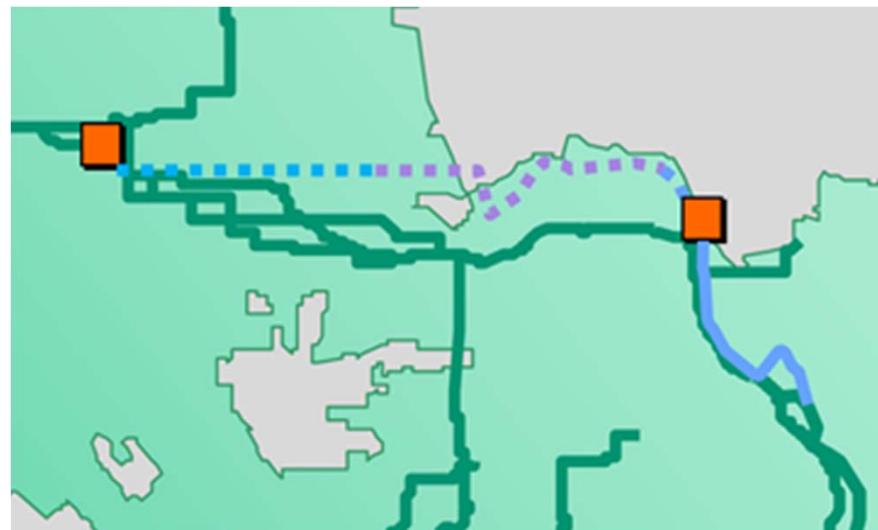


Water IRP Updates: Wastewater



- Go Projects

- Wastewater storage at DCTWRP Completed 2012
- Design of Northeast Interceptor Sewer Phase 2 Completed by late 2014
- Upgrade DCTWRP to advanced treatment (added)

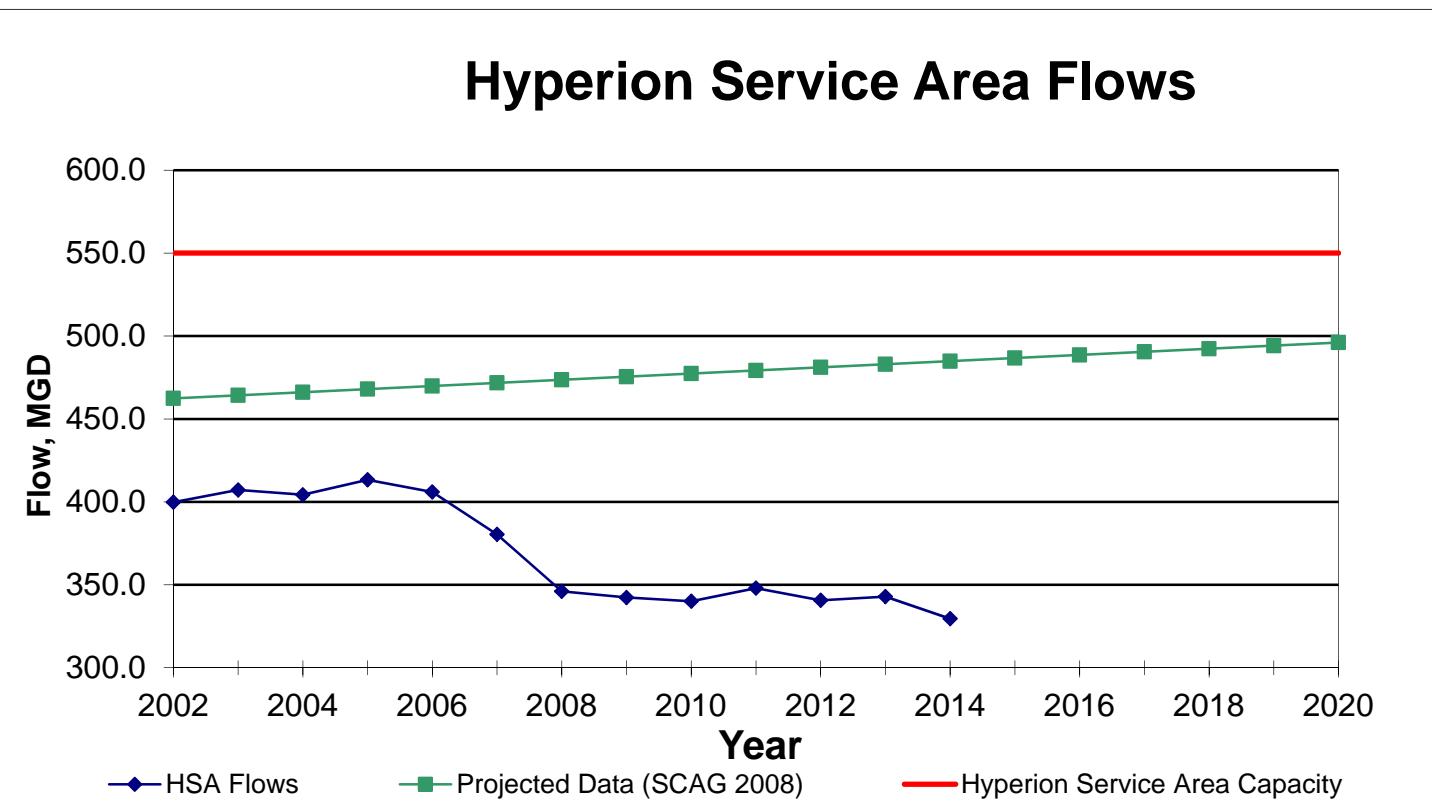




Water IRP Updates: Wastewater



- Go if Triggered Projects
 - Wastewater Flow





Water IRP Updates: Stormwater



- **Low Impact Development**

- Over 200 development/re-development projects reviewed and approved each month



- **Prop O (nearing final close-out)**

- Elmer Avenue Phase II: Elmer Paseo
 - Glenoaks/Sunland Stormwater Capture
 - Rosecrans Rec Center Stormwater Enhancements



- **Green Streets**

- Ed P. Reyes (Humboldt) River Greenway
 - Woodman Median Retrofit
 - Old Oak Road BMP





Water IRP Updates: Stormwater



Projects currently under construction include:

- Machado Lake Ecosystem Rehabilitation
- Manchester Neighborhood Greenway
- Santa Monica Bay Low Flow Diversion Upgrades Package 3, Phase I
- Temescal Canyon Park Stormwater BMPs Phase I
- Trash Total Maximum Daily Load Implementation Phase IV – Catch Basin Inserts and Opening Screen Covers
- Wilmington Drain Multiuse





Water IRP Updates: Stormwater



Stormwater and watershed management programs to contribute to more reliable and sustainable local water supplies





Water IRP Update: Stormwater



Stormwater Capture Potential

TODAY

- Active Recharge: 27,000 AFY
- Passive Recharge: 66,500 AFY*

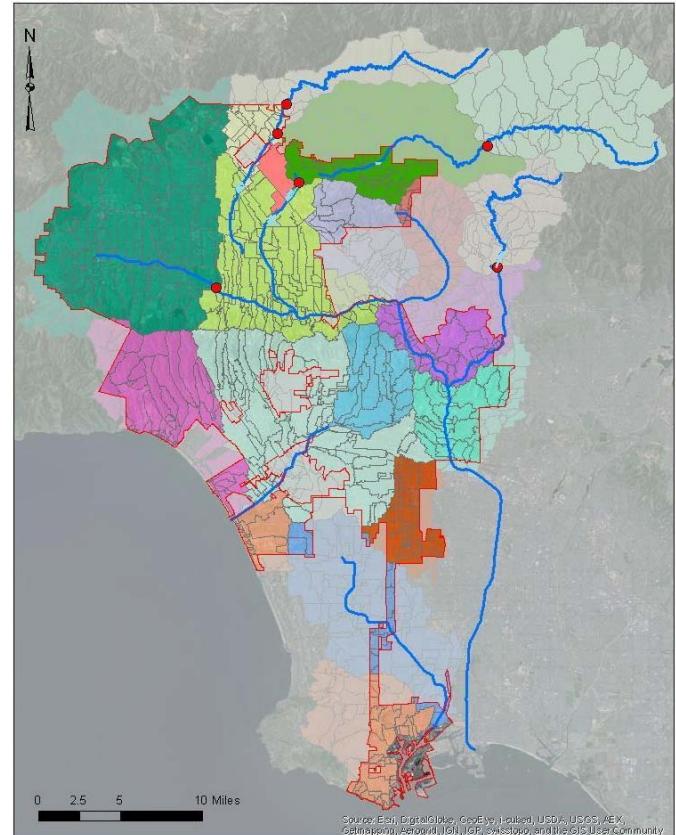


FUTURE POTENTIAL*

- 75,000 to 190,000 additional AFY
- Provides for 187,500 to 475,000 Single-Family Households Annually



*Based on Preliminary Modeling Results from Stormwater Capture Master Plan



LA Watershed Map



Water IRP Updates: Recycled Water



Groundwater Replenishment Project

Environmental Review Process

- Initial Study Public Review Period Completed
- CEQA Draft Environmental Impact Report (EIR) in Preparation

Next Opportunity for Public Review: Early 2015





Water IRP Updates: Recycled Water



Ongoing Purple Pipe Projects



Downtown Water Recycling Project

- 86,500 feet (or 16 miles)
- 2,350 acre-feet per year
- Estimated at \$45 Million (\$340 per acre-foot)



Data Sources: USGS, LADWP, EMS, NAIP



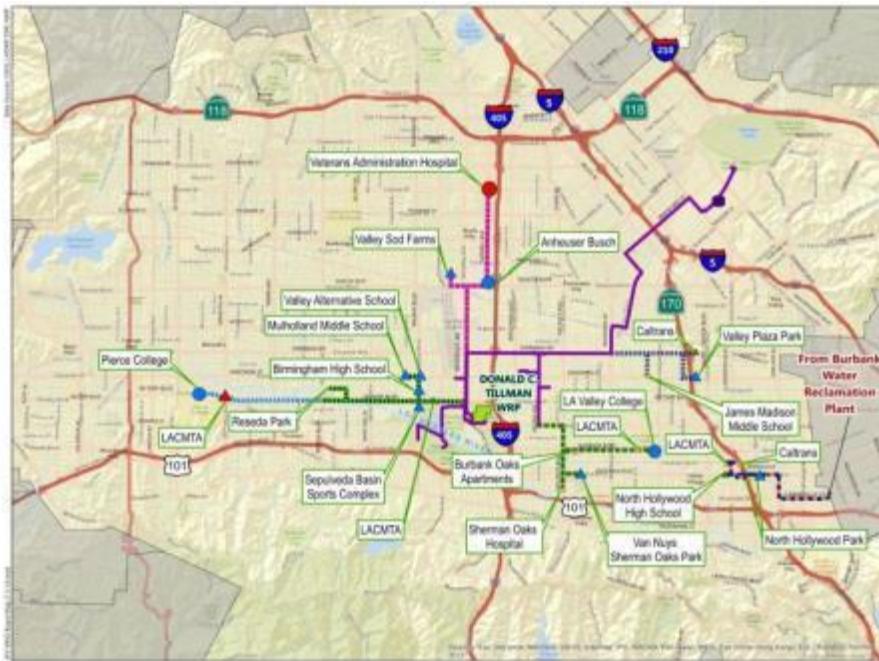


Water IRP Updates: Recycled Water



Ongoing Purple Pipe Projects

San Fernando Valley Water Recycling (Pipelines) Project



- 114,080 feet (or 22 miles) of pipeline
- 2,000 acre-feet per year
- Estimated at \$55 million (\$560 per acre-foot)





Water IRP Updates: Recycled Water



Recently Completed RW Connections

- Hercules Campus at Playa Vista East & West
- Zoo Parking Phase III
- Ed P. Reyes River Greenway
- Los Feliz Golf Course



Ongoing Projects

- Woodley Park Phase II
- N Atwater Park
- Bond Park
- Atlas Carpet



WateReuse California Honors LADWP Customer - Gibson Ranch



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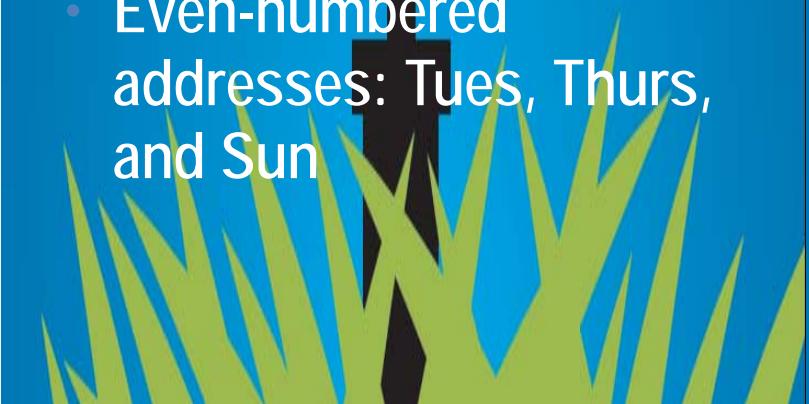


DROUGHT RESPONSE: LA's Water Conservation Ordinance



Watering Restrictions in Effect

- 3 days per week
- Before 9am or after 4pm
- Odd-numbered addresses: Mon, Wed, and Fri
- Even-numbered addresses: Tues, Thurs, and Sun



WATER CONSERVATION ORDINANCE

IN LOS ANGELES, YOU CANNOT:

- Use water to wash any hard surfaces such as sidewalks, walkways, driveways or parking areas, unless flushing is needed to protect health and safety;
- Use water to clean, fill or maintain decorative fountains unless the water is part of a recirculating system;
- Serve water to customers in eating establishments unless requested;
- Permit leaks from any pipe or fixture to go unrepairs;
- Allow for the washing of a vehicle without using a hose with a self-closing, shut-off device;
- Permit watering during periods of rain;
- Irrigate landscaping between the hours of 9 a.m. and 4 p.m.;
- Water outdoors for more than 15 minutes per watering station, 10 minutes for other irrigation systems;
- Allow runoff onto streets and gutters from excessive watering;
- Install single-pass cooling systems in new buildings;
- Install non-recirculating systems in new car wash and commercial laundry systems;
- Permit large landscape areas to water without rain sensors that shut off irrigation systems; and

YOU SHOULD:

- Inform hotels and motel guests of the option to reuse towels;
- Allow for exemptions for using gray water.

Los Angeles Department of Water & Power



DROUGHT RESPONSE: Focused Media Campaign



/LADWP



LADWP1



@LADWP



**KEEP SAVING
WATER, L.A.!**

Know your watering days.

STATEWIDE DROUGHT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
ODD Addresses							
EVEN Addresses							

Water conservation in Los Angeles is mandatory. Limit your outdoor watering to 3 days a week, 8 minutes per station, before 9 a.m. or after 4 p.m.

Los Angeles Department of Water & Power

CASH IN YOUR LAWN

Replace your turf and get a rebate of up to \$2 per square foot. Dig up info at www.ladwp.com

One Water LA Project Overview & Schedule

*Lenise Marrero, Environmental Engineering
Associate, LASAN*



One Water LA Project Phases



Phase 1 (Anticipated Completion December 2014)

- Develops initial planning baseline
- Establishes guiding principles for coordinated water management and facilities planning citywide



Phase 2 (within 2-3 years)



Refines baseline and projections with new information from on-going, more detailed studies



- Establishes refined guiding principles for coordinated water management and facilities planning citywide
- Develops updated facilities plans for stormwater and wastewater, and provides guidance for updates of other master plans citywide



Project Schedule for Phase 1



Effort	2014											
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Initiate City Coordination												
City Steering Committee Meetings		●		●		●		●		●		
Public Stakeholder Process				◆	■	■	◆	■	◆	■		
Develop Planning Baseline												
Develop Guiding Principles												

● Steering Committee Meeting

◆ Stakeholder Workshop

■ Stakeholder Comments Due

Questions

Networking Break

Initial Planning Baseline

Lenise Marrero, Environmental Engineering

Associate, LASAN



Why a New Planning Baseline?



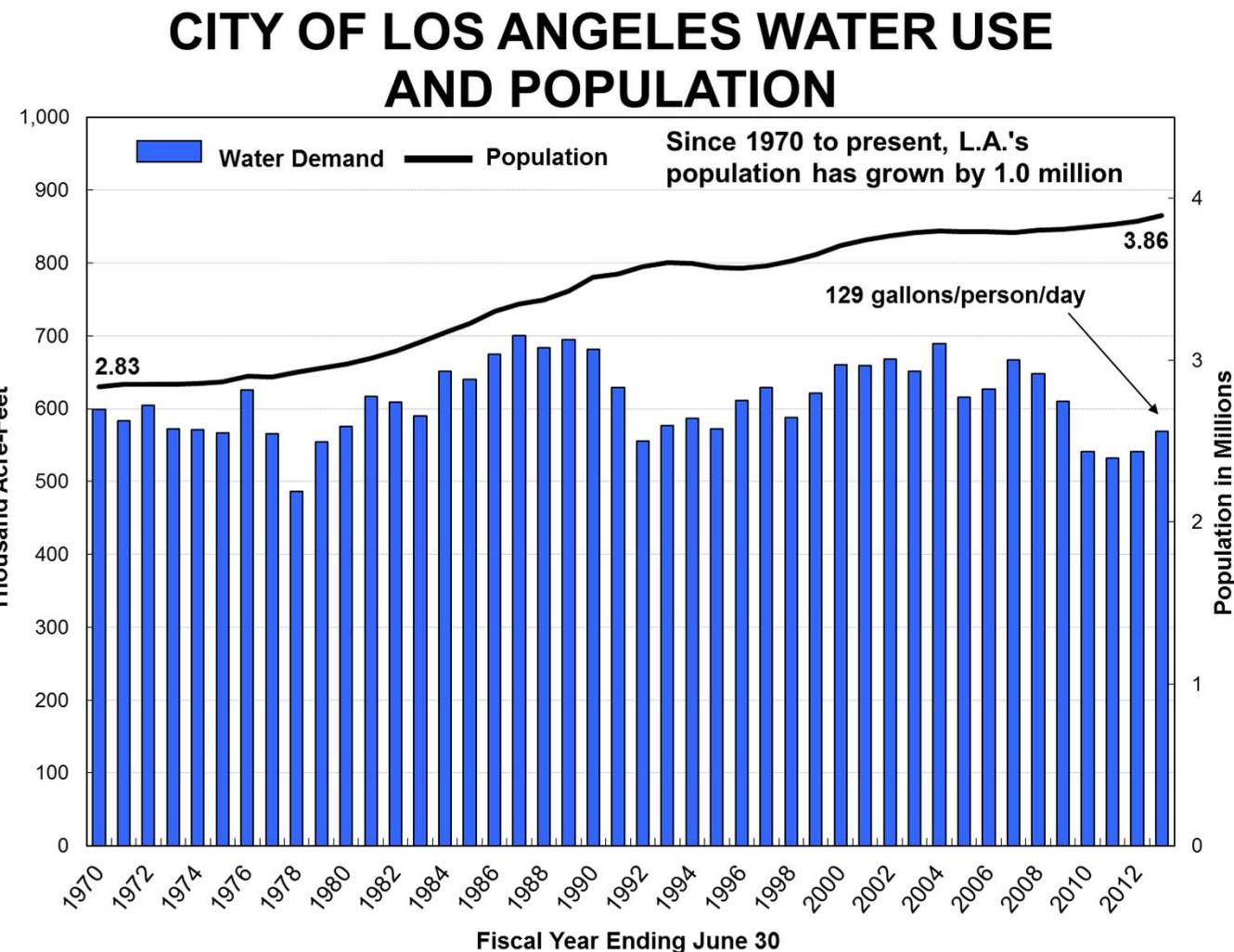
Changed planning parameters since the Water IRP:

- Lower population and demographic projections
- Lower water demands
- Lower wastewater flows
- Shift in reuse of wastewater from all non-potable to a mix of non-potable and indirect potable
- Success of Prop O to achieve multipurpose stormwater goals





Water Demands are Lower Despite Over One Million New Residents

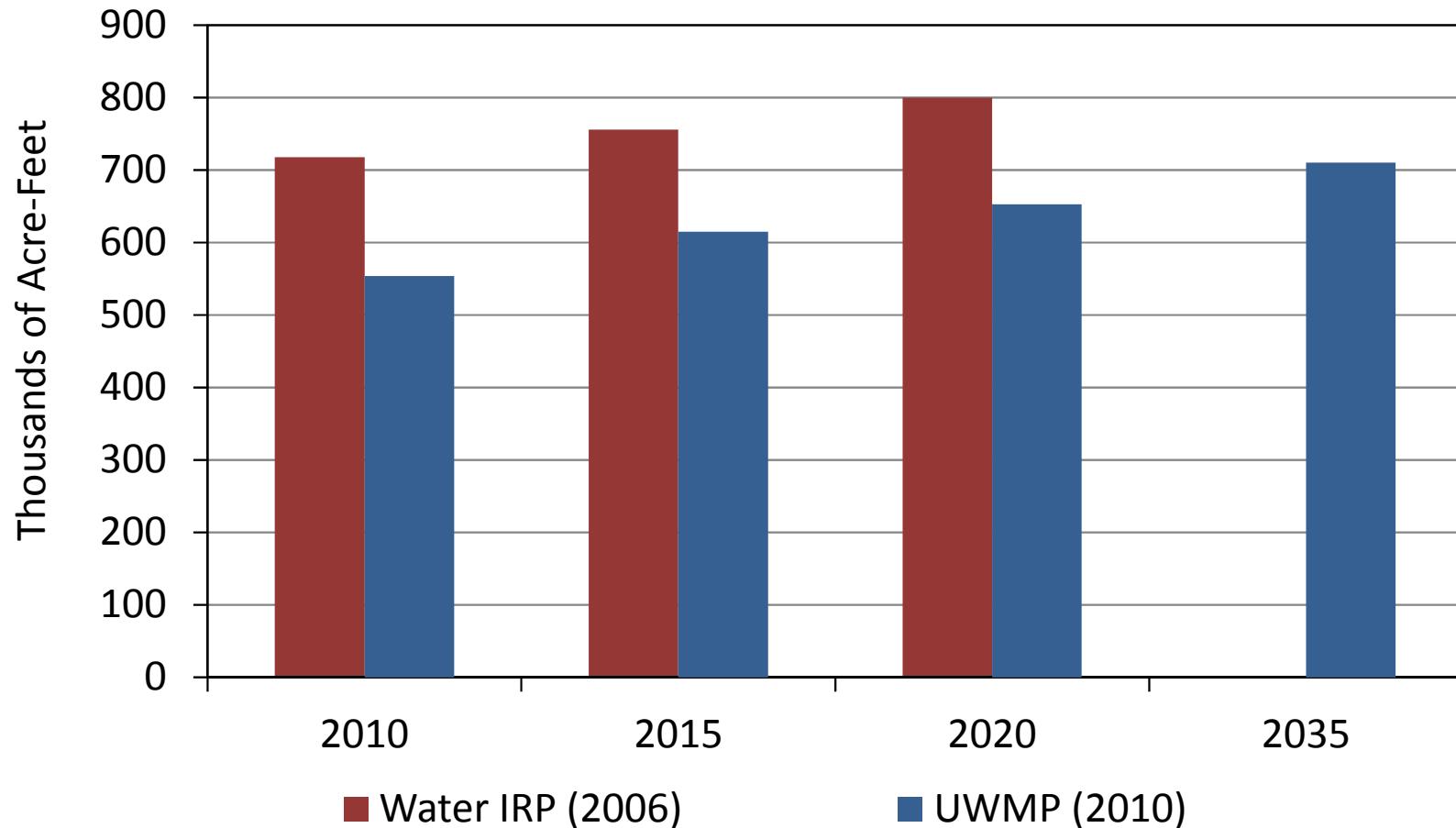


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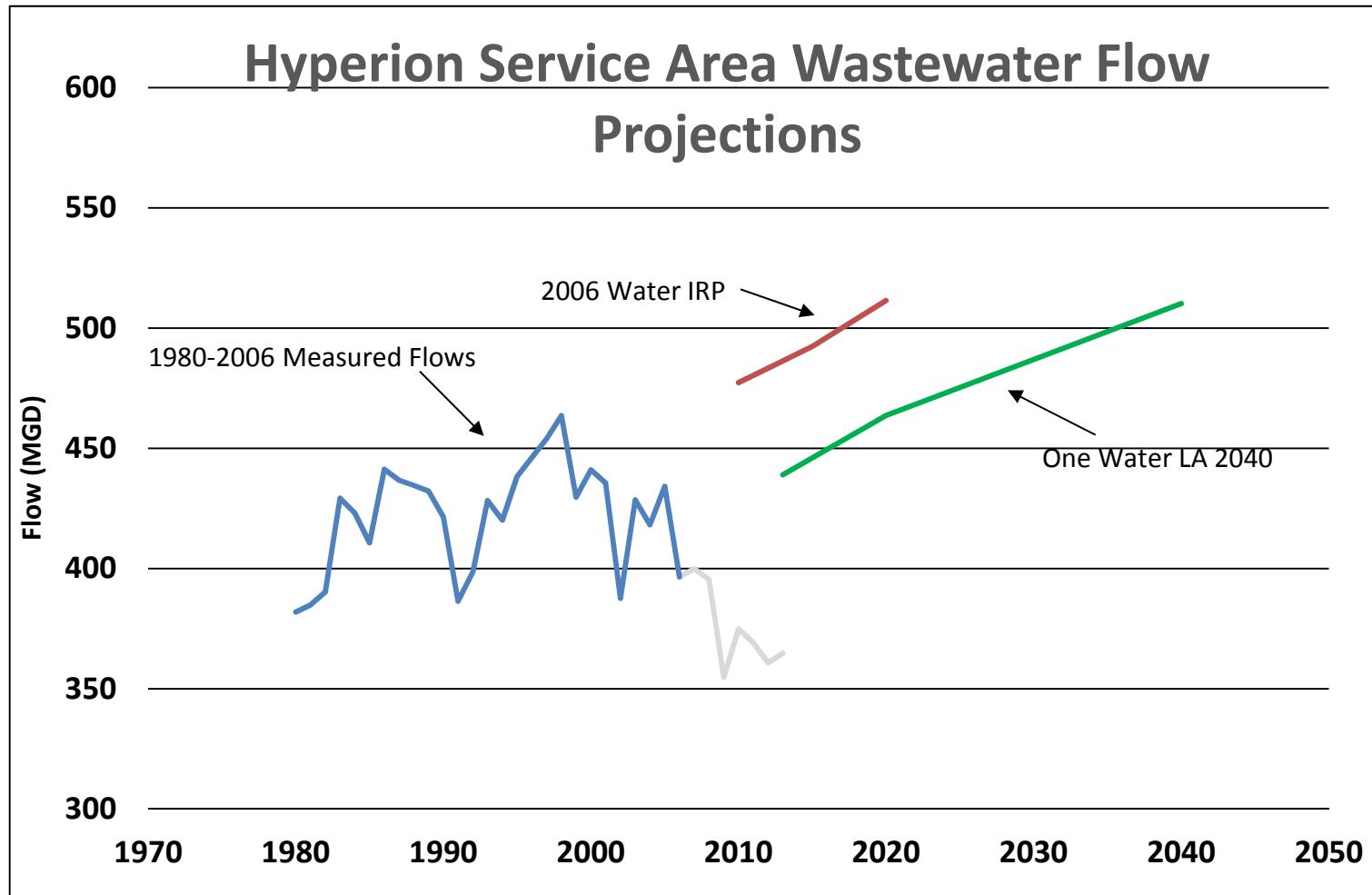


Projected Water Demands Lower than Water IRP



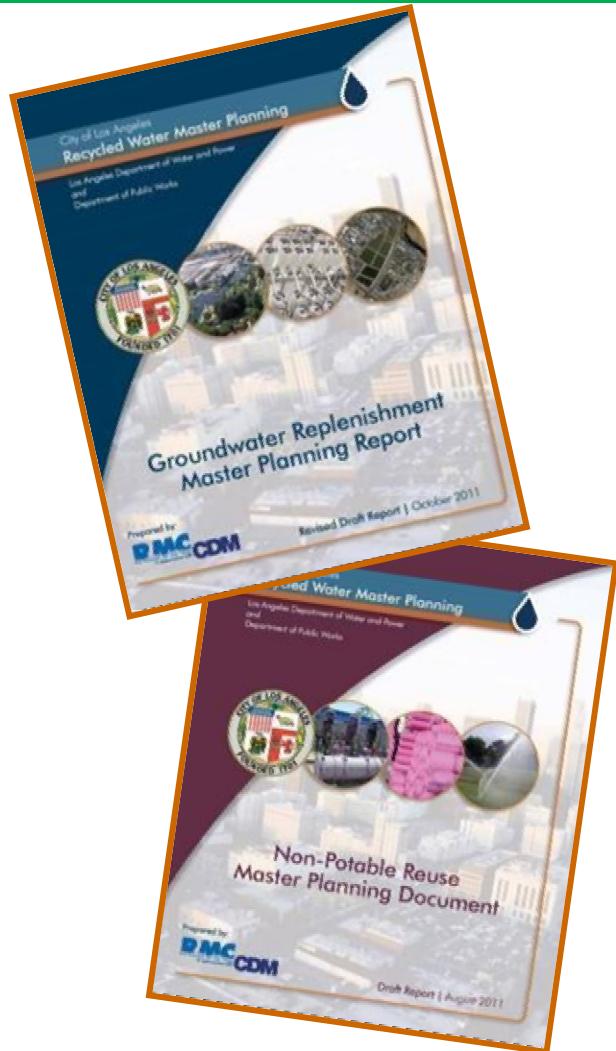


Wastewater Flows



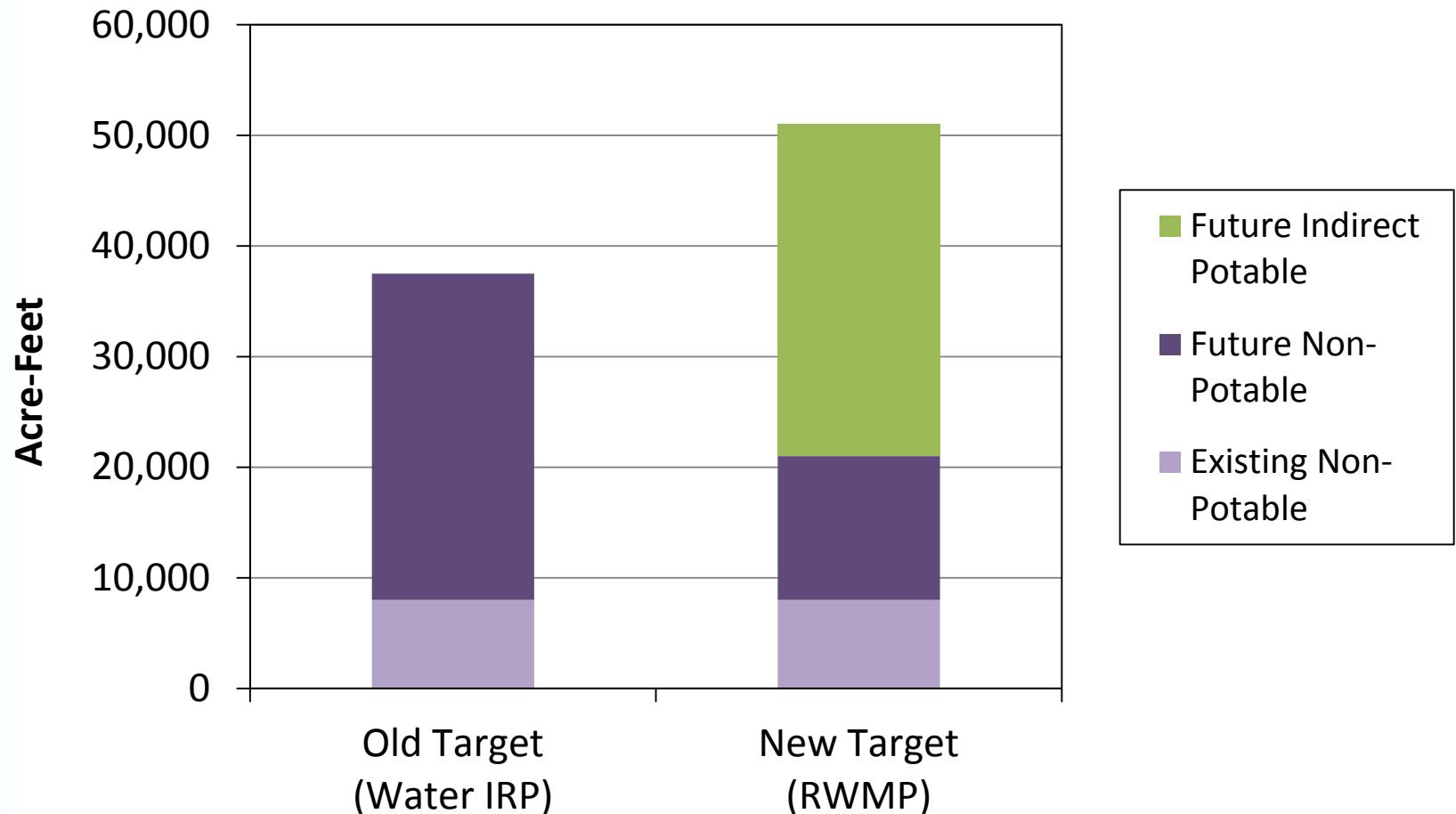


City's Recycled Water Master Planning & Public Outreach



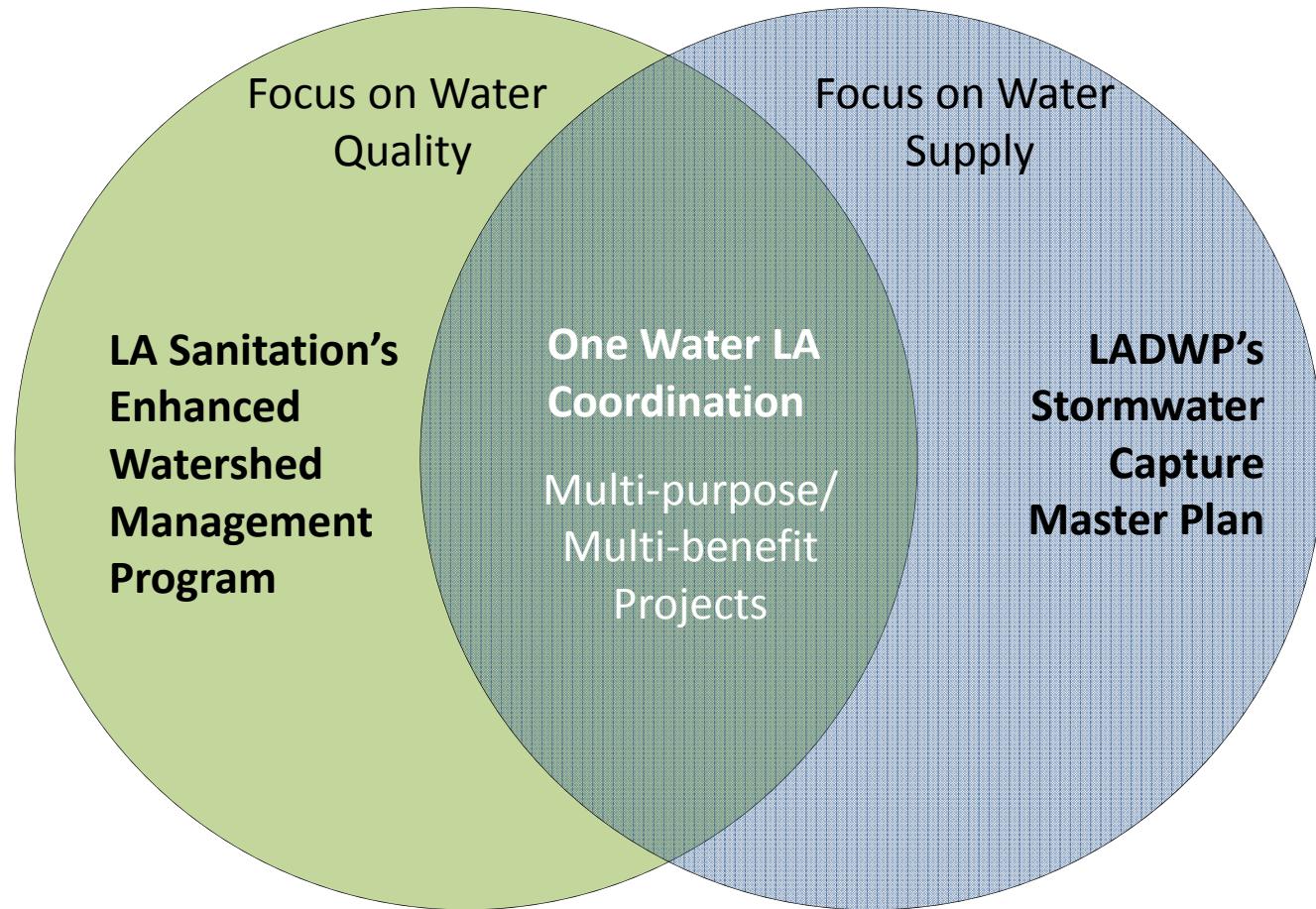


Near-Term Recycled Water Projections





One Water LA Coordination on Stormwater



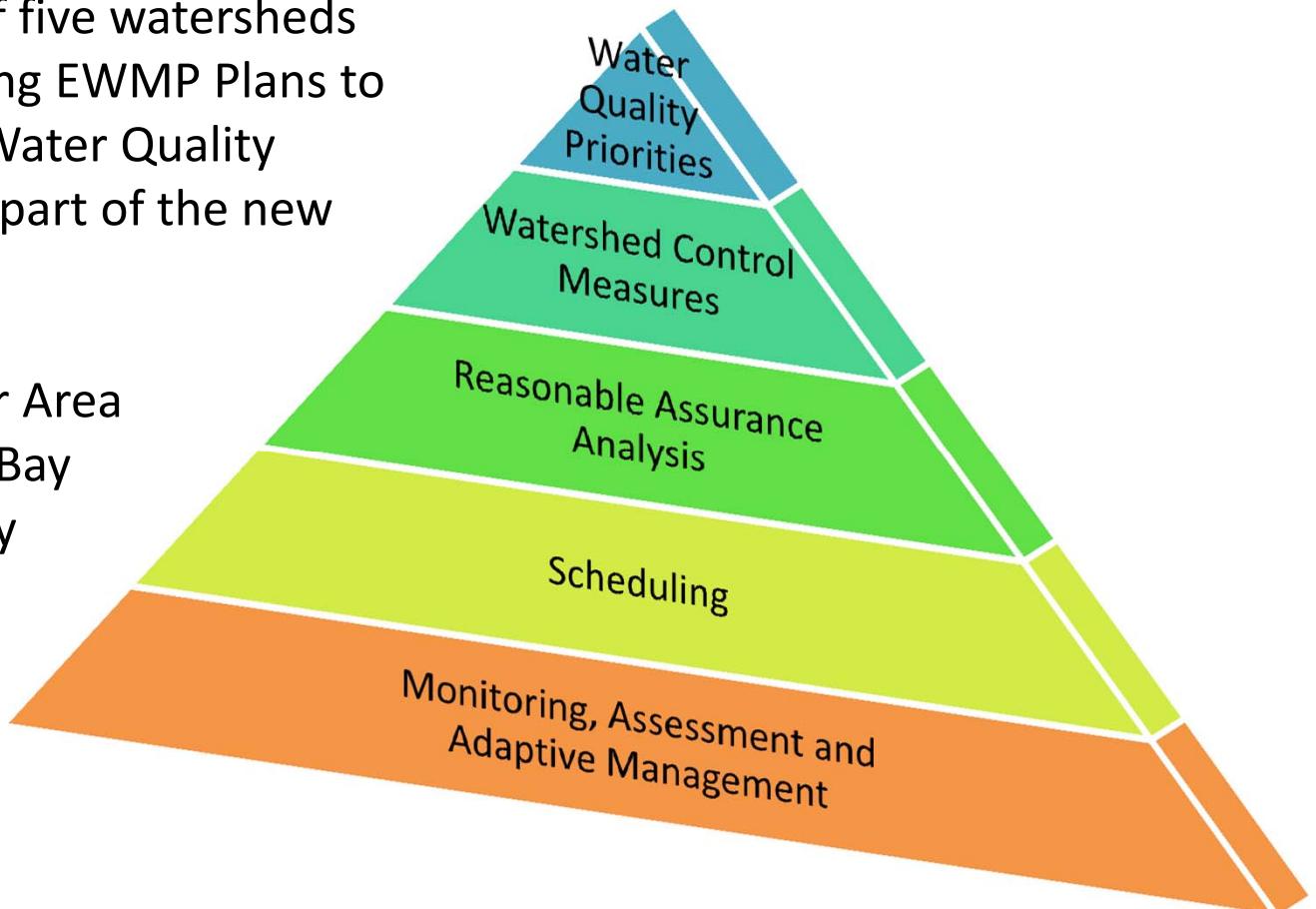


Enhanced Watershed Management Program



The City is part of five watersheds that are submitting EWMP Plans to the LA Regional Water Quality Control Board as part of the new MS4 Permit:

- Upper LA River Area
- Santa Monica Bay
- Marina Del Rey
- Ballona Creek
- Dominguez Channel





LADWP's Stormwater Capture Master Plan



GOALS

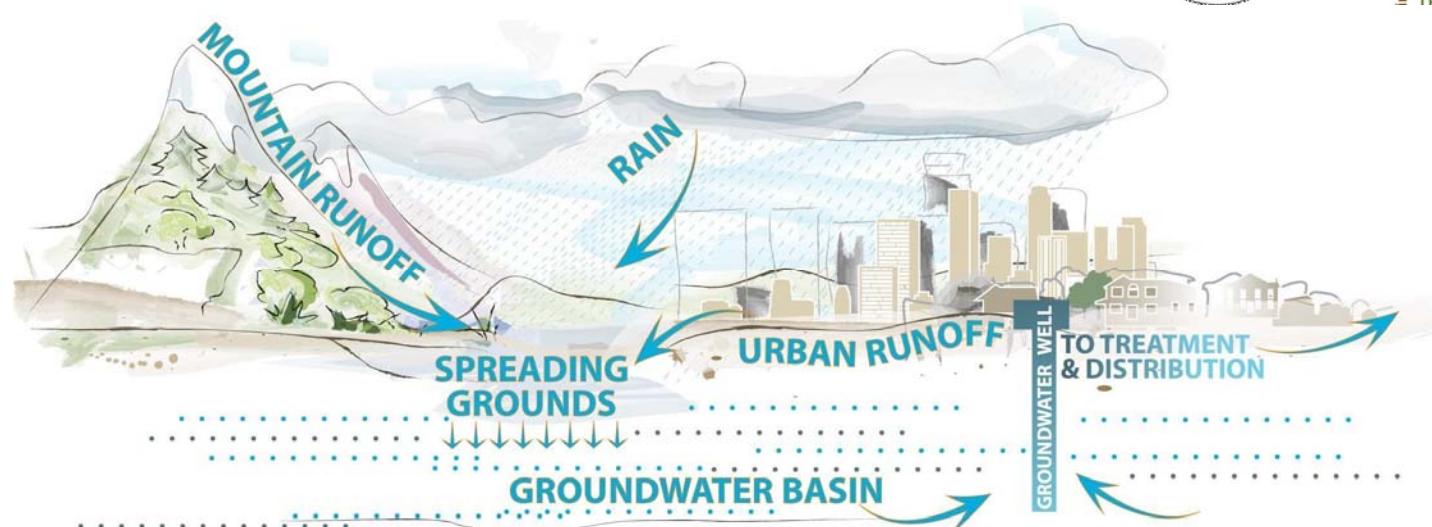
- Quantify stormwater capture potential
- Identify new projects/programs
- Prioritize based on water supply criteria
- Refine costs for proposed projects/programs
- Define timing and key milestones



PARTNERS



In partnership with





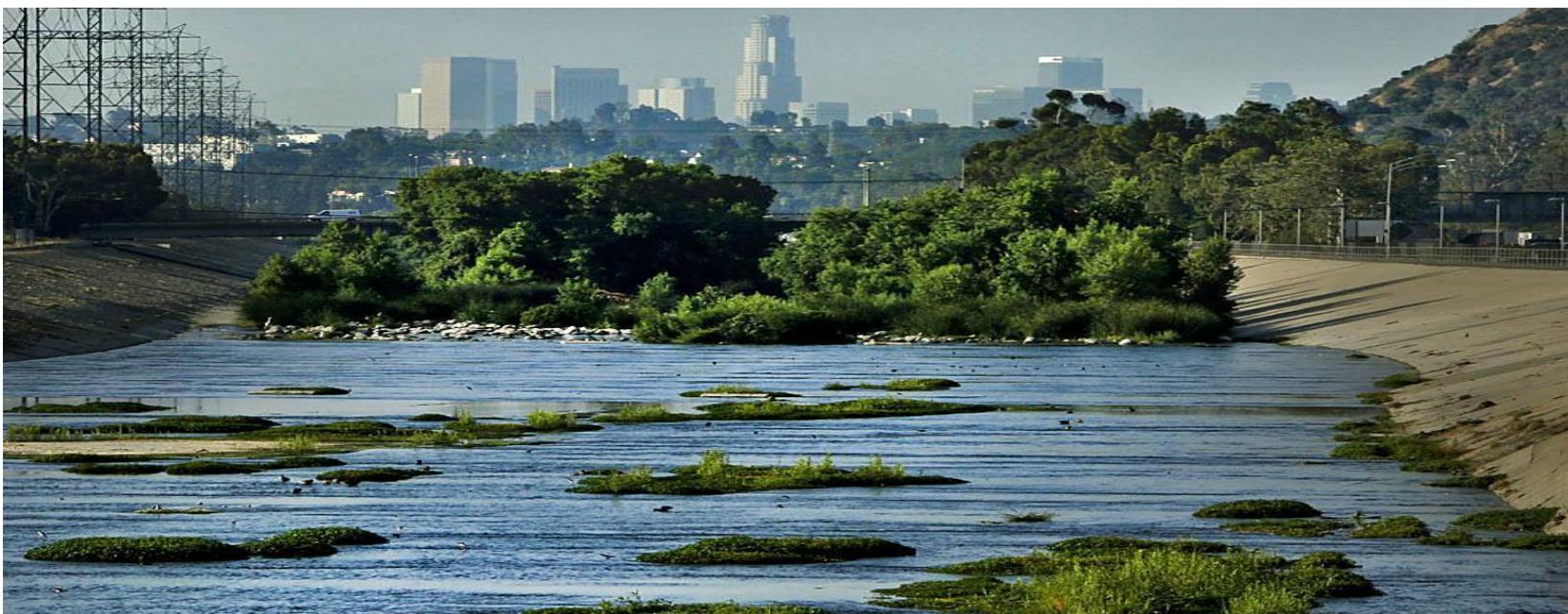
Balancing Water Supply Needs and LA River Restoration



- Water Supply
- Water Quality
- Flood Control



- Connecting Communities
- Habitat Restoration
- Recreation





Climate Change Overview



Global climate change models indicate:

- Greater temperatures
- Slightly reduced precipitation in some places, more extreme precipitation in other places



This results in:



- Greater peak (summer) water demands
- Imported water challenges due to earlier snow melt in our mountains
- Increased localized flooding



Climate Change Infrastructure Impacts to LASAN Facilities



- **Phase I: Example Infrastructure Response to Precipitation and Sea Level Rise**
 - Venice Pumping Plant (wastewater system)
 - San Pedro outfall (stormwater system)
 - Higher sewer and storm drainage flows predicted
 - Increase in the frequency of sanitary sewer overflows (spills) due to flooding
- **Phase II: Climate Vulnerability Assessment and Adaptation Plan (wastewater, stormwater and solid resources program areas)**





Current Activities That Will Impact Baseline



- 2015 Urban Water Management Plan
- Enhanced Watershed Management Program Plans
- Stormwater Capture Master Plan
- Water Conservation Potential Study



Questions

Next Steps

Doug Walters, Assistant Division Manager, LASAN



Next Steps



- Incorporate stakeholder comments from this workshop
- City departments will initiate discussions on specific areas of increased coordination and project partnerships
- Stakeholder input on draft guiding principles (tentatively scheduled for August 2014)
- City departments will develop refined, draft guiding principles
- Stakeholder feedback/suggestions on refined, draft guiding principles at Workshop #3 (tentatively scheduled for November 2014)

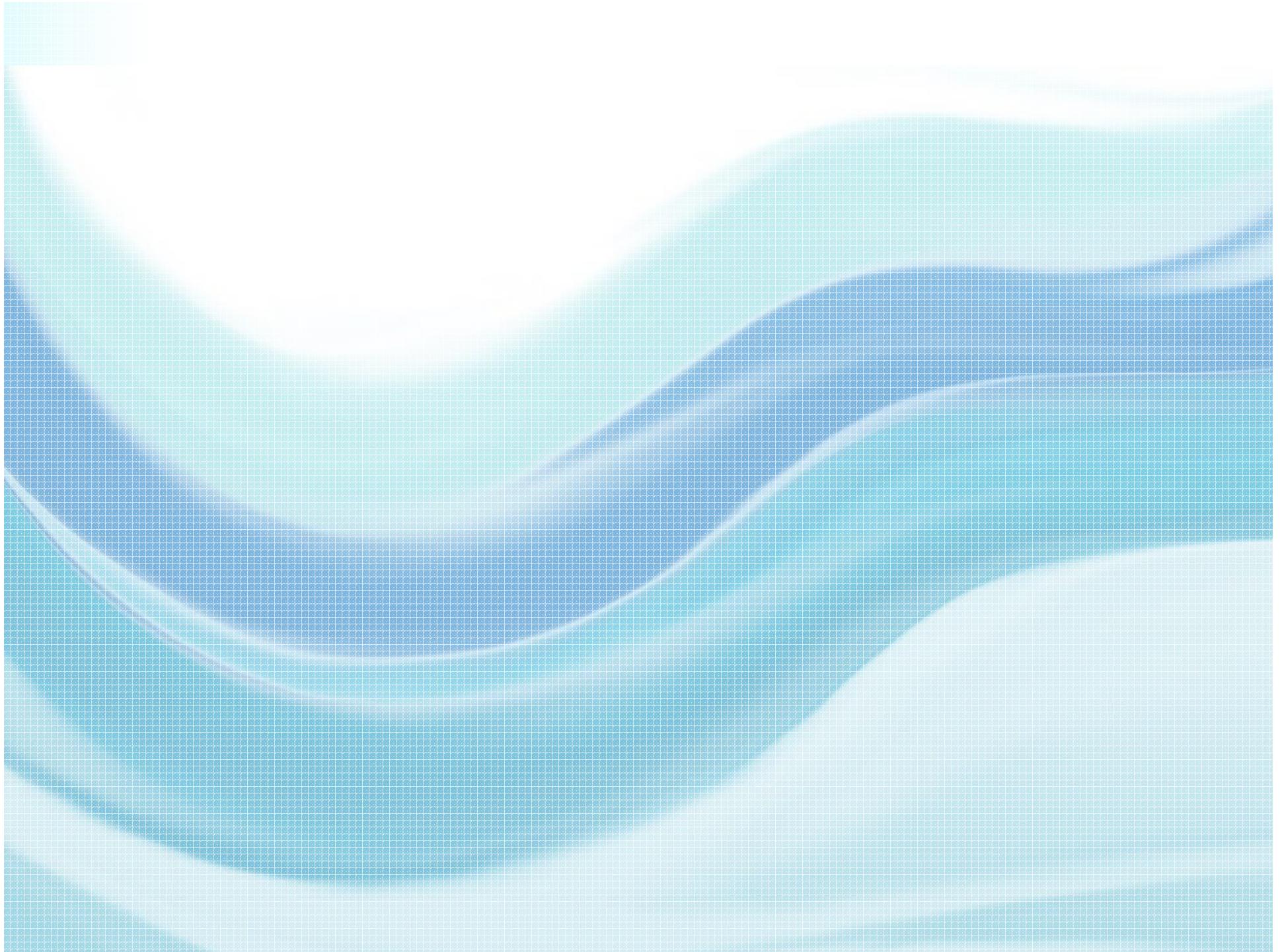


One Water LA Contact

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Stormwater Flows & Water IRP Goals



Acre-Feet per Year

2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
-

Wet Weather

Flows* IRP Goals for
Managed Flows

* Based on $\frac{1}{2}$ inch target storm

Dry Weather

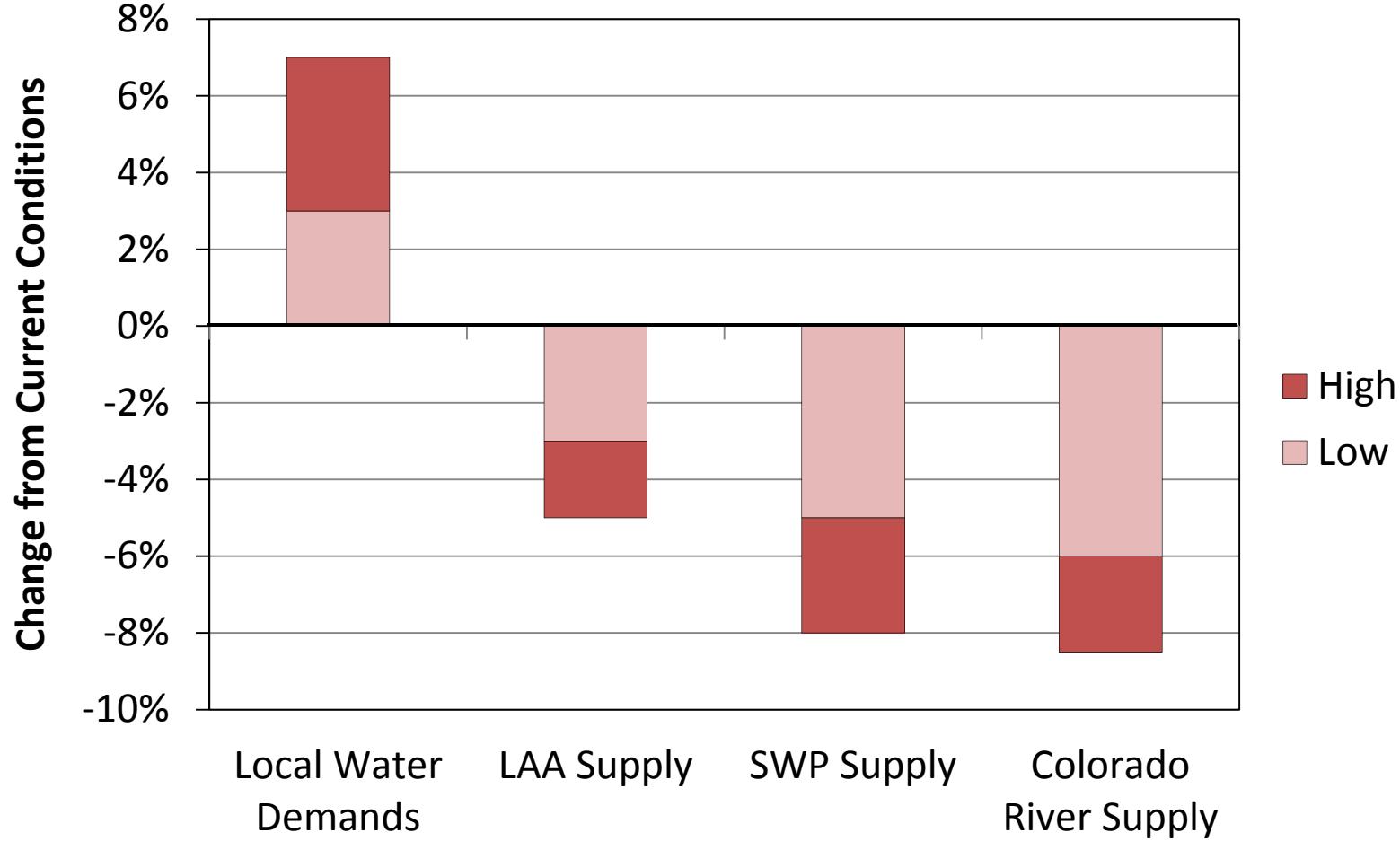
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-

Acre-Feet per Year

Flows IRP Goals for
Managed Flows



Climate Change Water Supply Impacts for Los Angeles – 2035 to 2050 time frame



Phase I: Study for LA Sanitation: Climate Risk Analysis for City-wide Infrastructure



• Infrastructure and operations flood protection impacts

Findings:

- Minor flow rate increases are predicted for the Venice Pumping Plant
- Increased inland flood events
- Peak flows from the City's stormwater outfall at San Pedro are predicted to increase more than nearly 12 percent and with slight backwater conditions
- Critical infrastructure and service at risk

