



# Stormwater Capture

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Policy Barriers to Increase Stormwater Capture and Potential Solutions

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# Presentation Overview

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- **LADWP Stormwater Capture Initiative**
- **City's One Water LA 2040**
- **Water Trading Markets Opportunity and Challenges**

# Water Sources and Reliability Challenges



Los Angeles Aqueduct



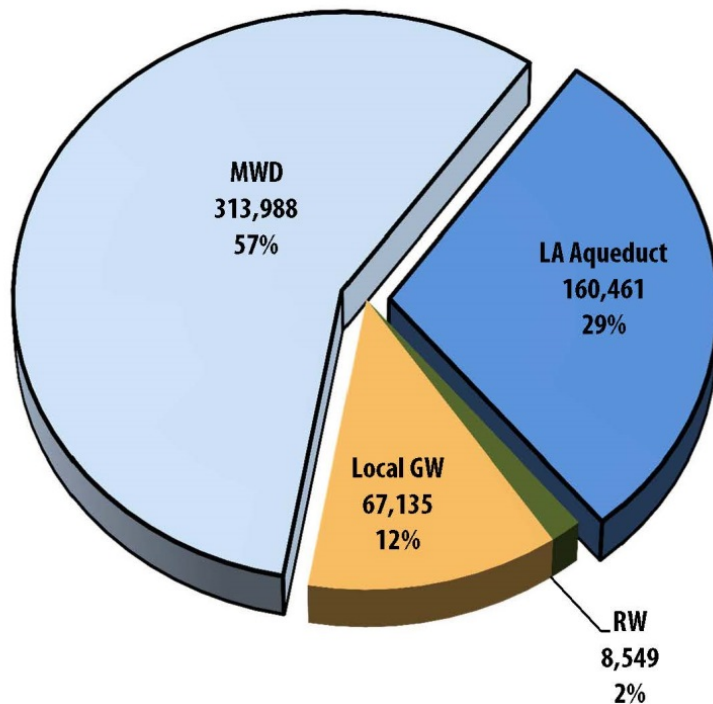
Colorado River Aqueduct

# Comprehensive Strategy for Future Reliability



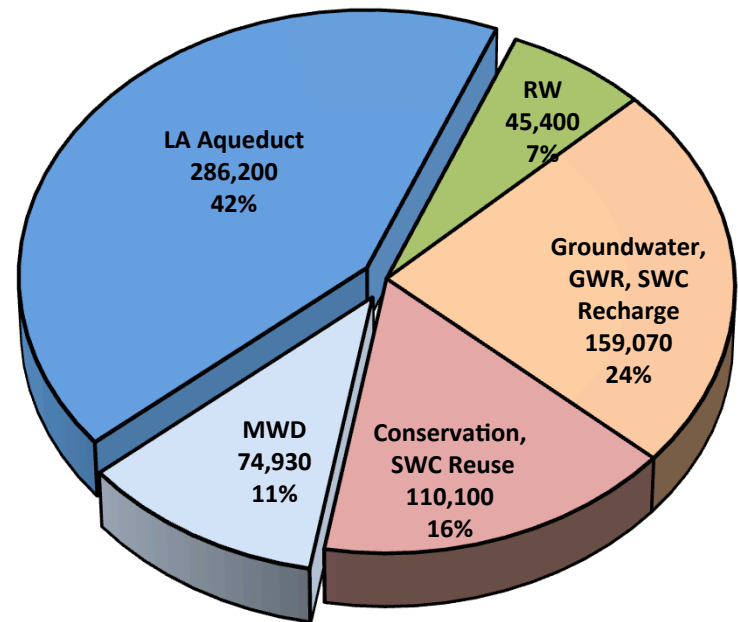
## TODAY

FYE 2011-2015 Actual  
Total: 550,133 AFY



## FUTURE\*

FYE 2040 Avg. Hydrology  
Total: 675,700 AFY



\*Projections from draft 2015 Urban Water Management Plan

# LA Mayor's Executive Directive #5 and Sustainable City pLAn

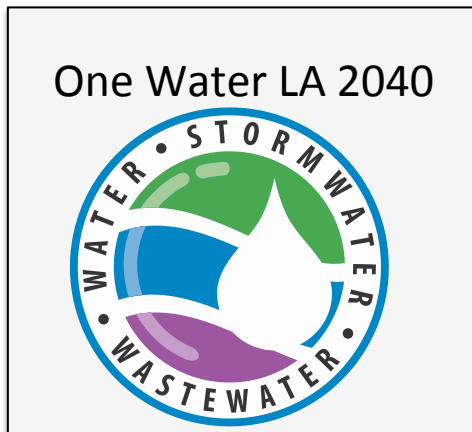


- **Mayor's Executive Directive Order #5**
  - Reduce GPCD 20% by 2017
  - Integrated Water Strategy
- **LA's Sustainable City pLAn**
  - Reduce GPCD to 25% (2035)
  - 50% Reduction of imported purchased by 2025
  - 50% of water locally sourced by 2035





# One Water Los Angeles: A continuation of Water IRP



- City's first comprehensive plan, interconnecting water, wastewater and stormwater
- Developed with unprecedented stakeholder collaboration
- Led to successful Prop O funding for multi-benefit water quality projects
- Support for wastewater rate increases and project implementation
- Support for expanding water reuse & conservation

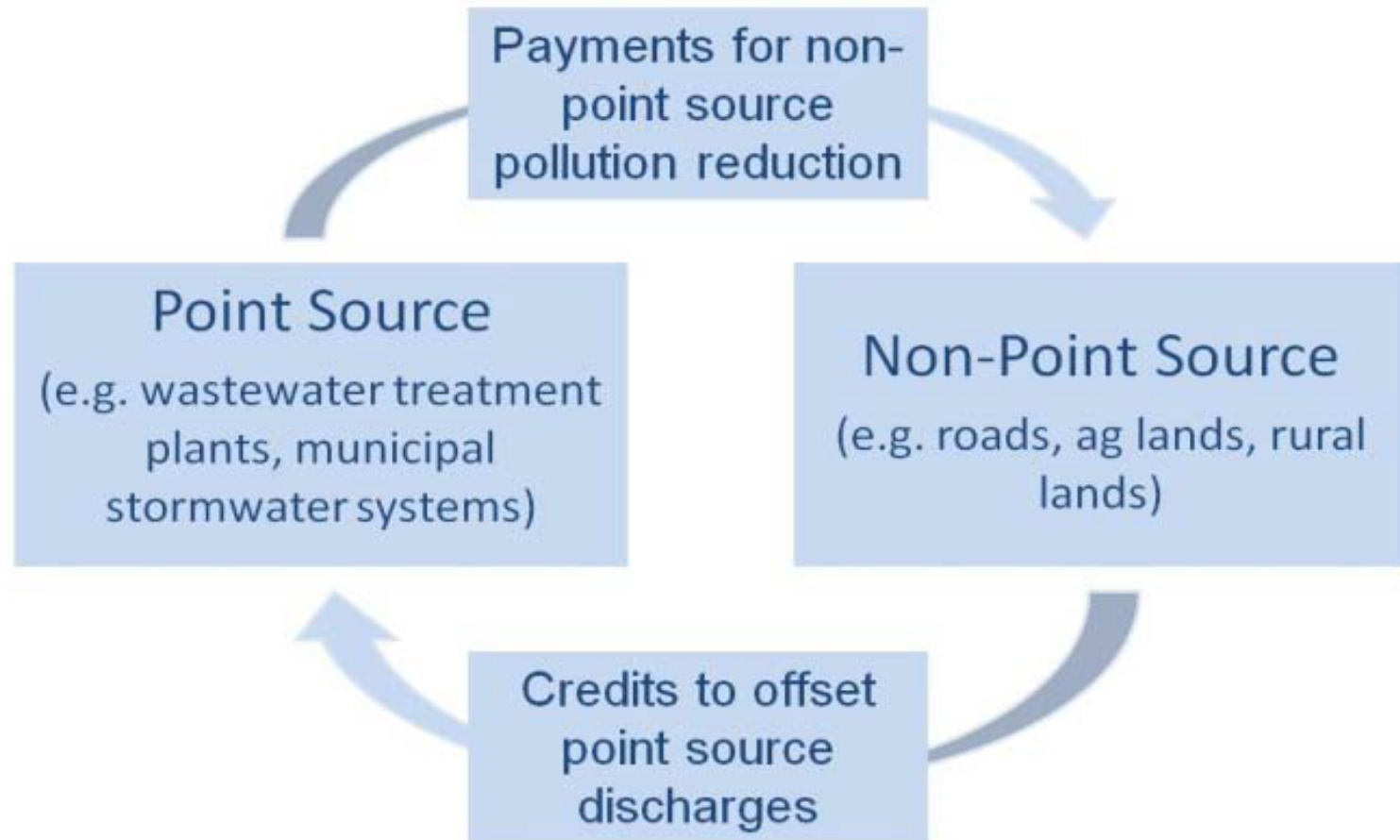
- Expanded planning horizon, from 2020 to 2040
- Incorporation of broader environment, energy and community goals
- Reflection of successes of Prop O, Recycled Water Planning, & Low Impact Development Ordinance
- Resiliency from climate change impacts

# Water Trading Market



- **Water Quality Trading is an innovative market-based approach to achieving water quality goals and/or compliance.**
- **Trading allows for a cost effective option allowing municipalities and other discharges to meet compliance that would otherwise cost billions.**
- **Water trading markets can bring together various stakeholders such as environmental groups, regulators, and dischargers who are interested in healthy watersheds and increases overall public awareness.**

# Water Trading Market (Old Paradigm)





# Water Trading Market - Progress



- EPA has historically promoted the use of watershed based trading involving both point and non point sources.
- Only some states have adopted this program due to lack of administrative and policy structure or the necessary resources such as manpower.
- Trading might be beneficial to municipalities that need to comply with MS 4 permits due to minimal financial and staff resources.
- Regulatory tradeoffs and stormwater as a resource.
- Several factors may require policy makers to consider stormwater capture as a factor when establishing water trading markets.

# Water Trading Market – and Storm Water Permits – Industrial Permit



- Industrial Permit – Point Source (broadly defined legal interpretation post 1980s) compliance with Numeric Action Levels (NALs). Requires Action Plan with BMP evaluation if exceed NAL.
- Design storm standards for treatment control BMPs based on volume of annual runoff (85<sup>th</sup> percentile), also encourage infiltration / stormwater capture BMPs.
- Develop an online credit registry.
- Verify pollutant reduction for credit.
- At a minimum, trading credits could result in better outcome and at a lower cost than could have been achieved by traditional regulatory approach.

# Water Trading Market – New Opportunities and Challenges

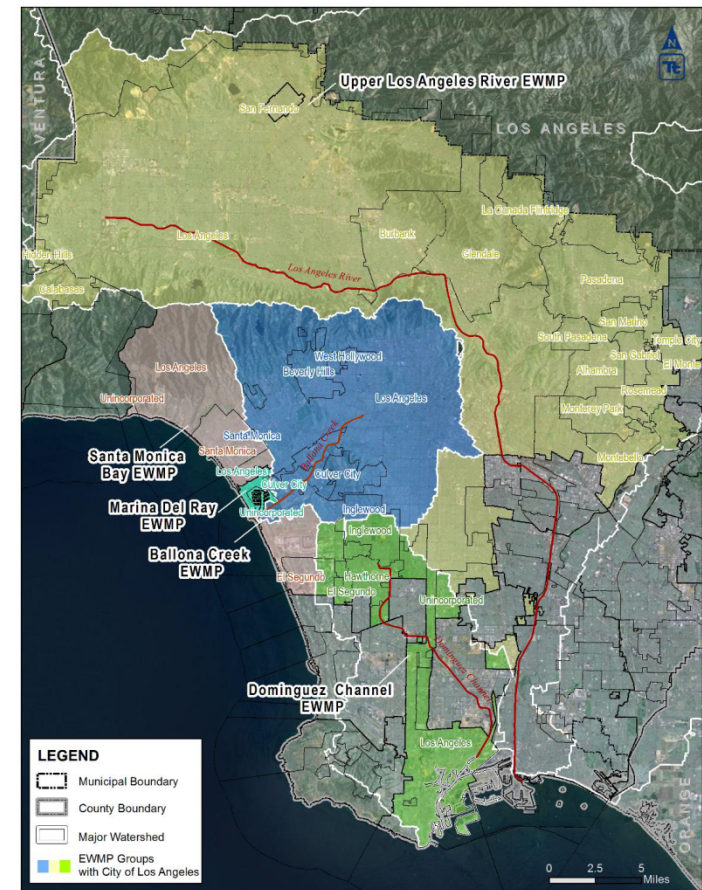


- Level of verification required.
- Sources must be on similar timeframe.
- Impacts on communities near paying point source facilities.
- Only works for specific types of pollutants.
- Requires monetizing benefits of SW capture / infiltration, i.e. externalities must be internalized.

# LADWP Stormwater Management Objectives



- Stormwater capture projects protect and improve groundwater and surface water quality.
- Stormwater capture projects support efforts to meet TMDLs on a Region-wide basis while achieving Water Supply benefits.
- Watershed Management efforts to meet TMDLs can be successful through Watershed Management Program (WMP), or Enhanced WMP (EWMP) Plans as allowed under the Los Angeles County MS 4 permit.
- **TAKE AWAY: STORMWATER IS AN ASSET, NOT A LIABILITY.**



# For more information



[www.ladwp.com/stormwater](http://www.ladwp.com/stormwater)

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