Stormwater Capture

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Policy Barriers to Increase Stormwater Capture and Potential Solutions

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Presentation Overview

• LADWP Stormwater Capture Initiative

• City’s One Water LA 2040

• Water Trading Markets Opportunity and Challenges
Water Sources and Reliability Challenges
Comprehensive Strategy for Future Reliability

**TODAY**
FYE 2011-2015 Actual
Total: 550,133 AFY

- MWD 313,988 (57%)
- LA Aqueduct 160,461 (29%)
- Local GW 67,135 (12%)
- RW 8,549 (2%)

**FUTURE***
FYE 2040 Avg. Hydrology
Total: 675,700 AFY

- LA Aqueduct 286,200 (42%)
- MWD 74,930 (11%)
- Groundwater, GWR, SWC Recharge 159,070 (24%)
- Conservation, SWC Reuse 110,100 (16%)
- RW 45,400 (7%)

*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

One Water LA 2040

- 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)

- Payments for non-point source pollution reduction
- Point Source (e.g. wastewater treatment plants, municipal stormwater systems)
- Non-Point Source (e.g. roads, ag lands, rural lands)
- Credits to offset point source discharges
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.
• 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 (85th 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

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