



CUSTOMERS FIRST

Silver Lake Reservoir Stormwater Capture Project

LADWP Neighborhood Council
MOU Oversight Committee

September 1, 2018



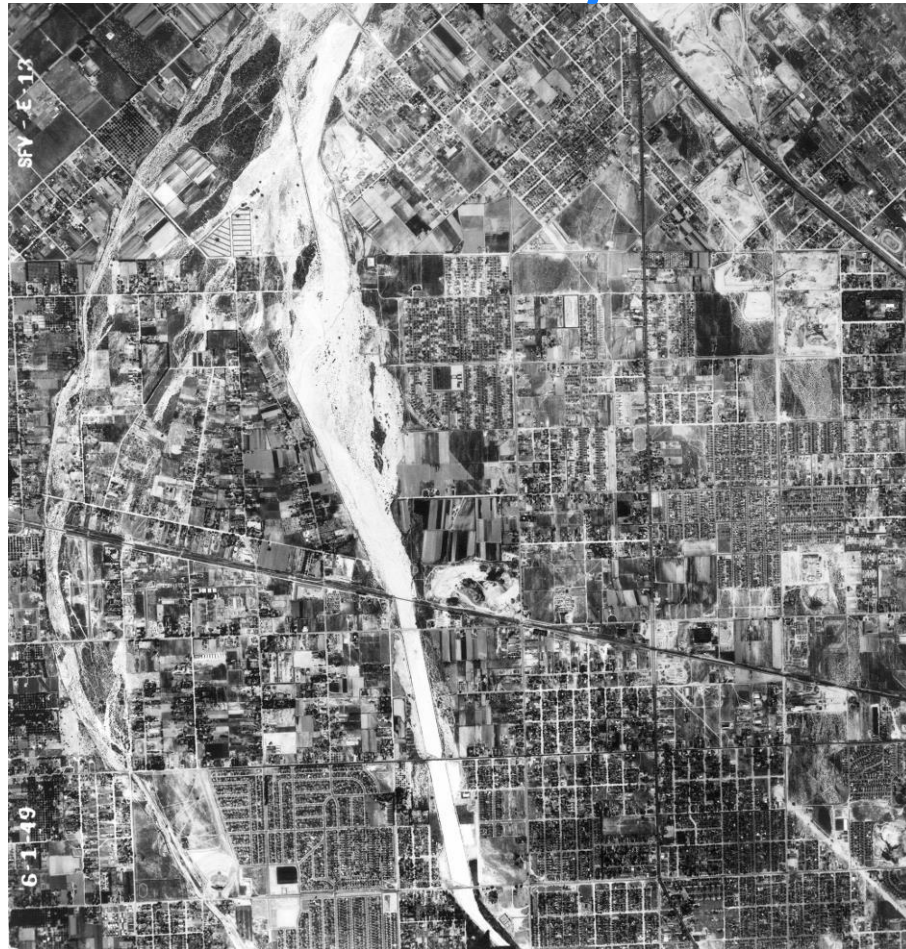
Agenda Today

- Overview of LADWP's Stormwater Capture Master Plan
- Silver Lake Reservoir Stormwater Capture Project
- SW Project Cost Benefit Methodology

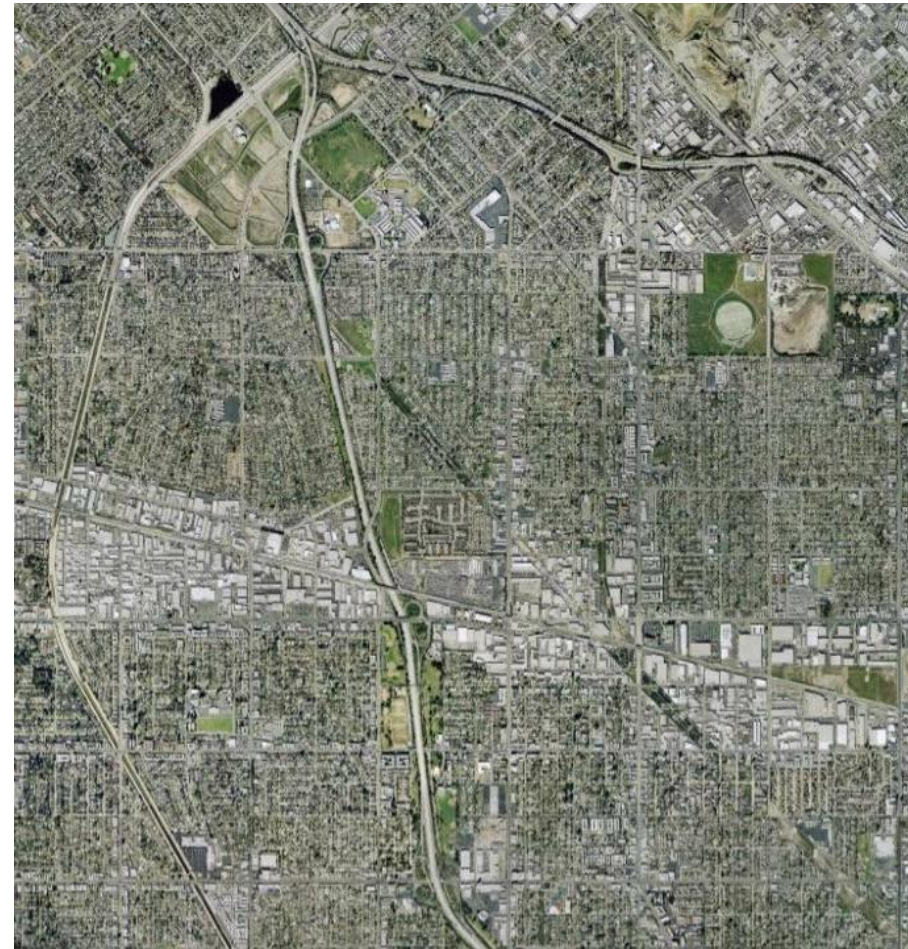


Stormwater Capture MASTER PLAN

Why we need to take action

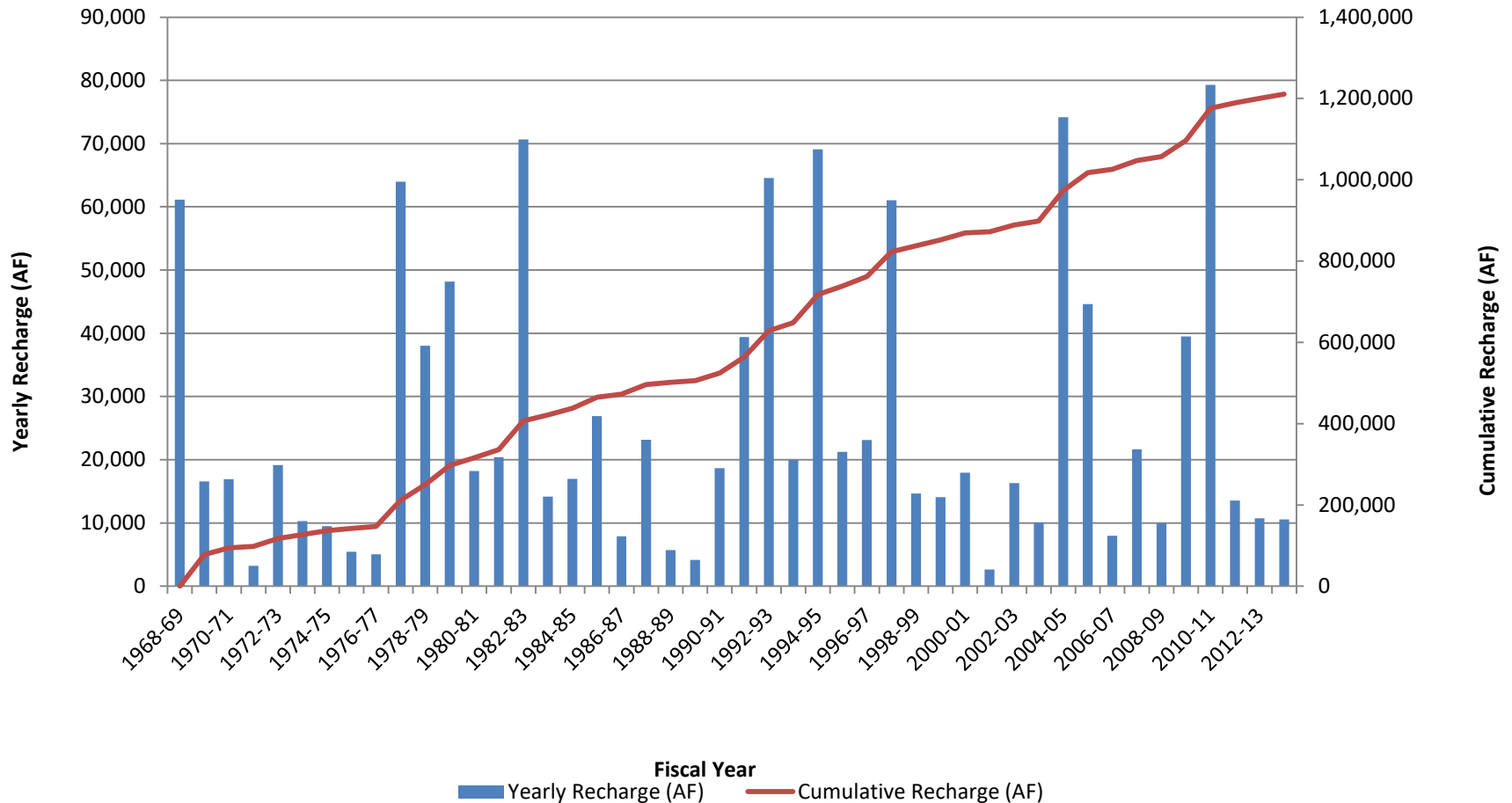


**Eastern San Fernando Valley
1949**



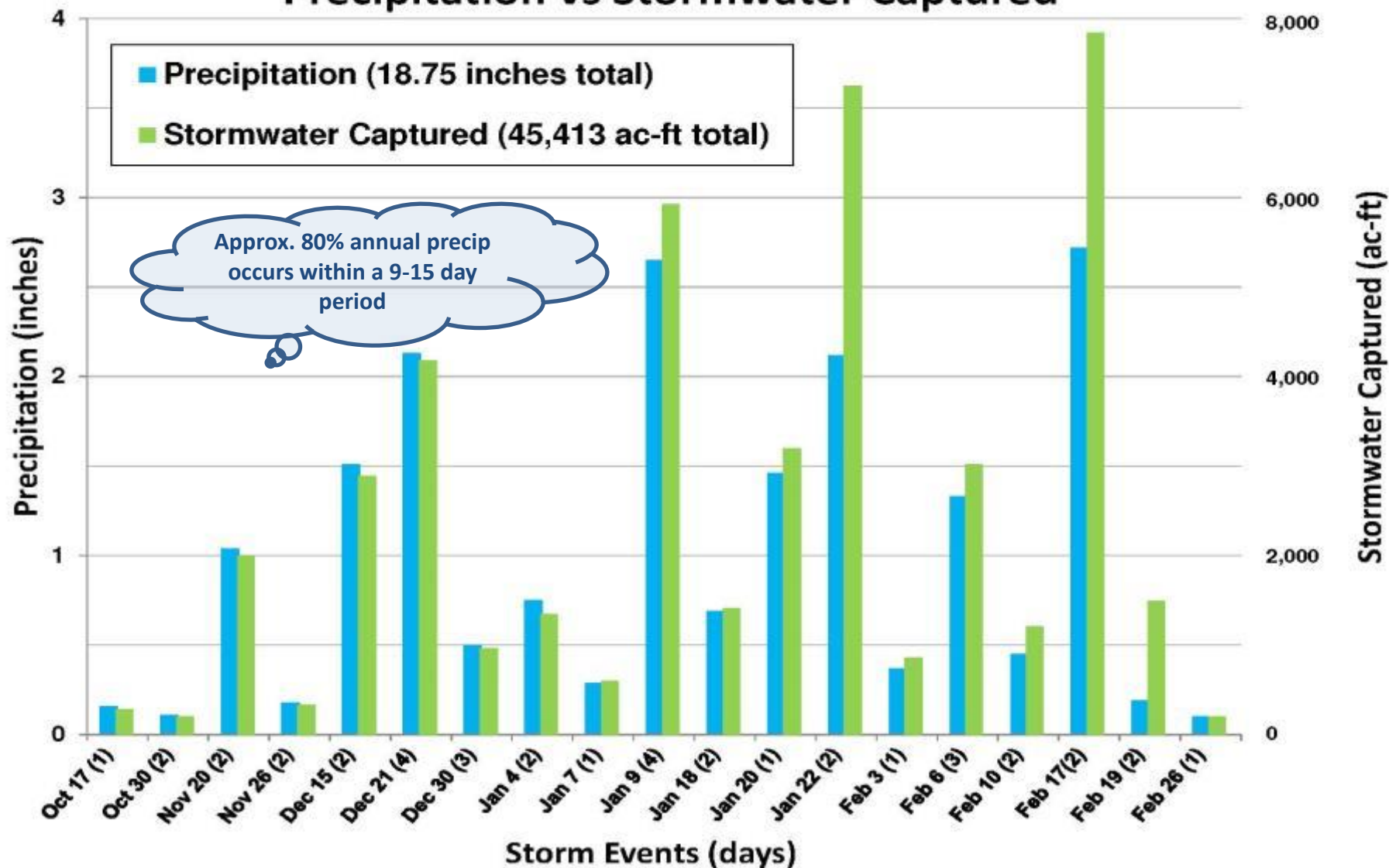
**Eastern San Fernando Valley
2008**

Cumulative Recharge at Five San Fernando Spreading Facilities



Water Year 16/17

Precipitation vs Stormwater Captured



Stormwater Capture Master Plan

- Published August 2015
- Evaluate stormwater as a water supply source
 - Feasibility
 - Valuation
 - Project identification
 - Implementation

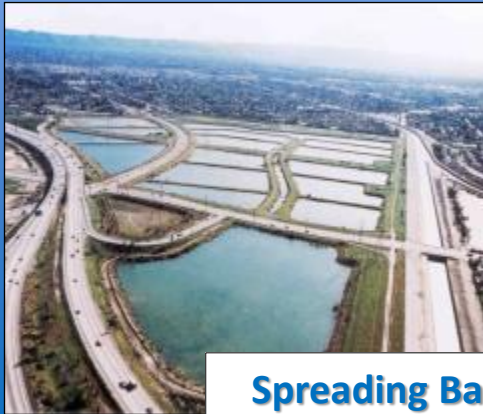


Centralized vs. Distributed Capture

Dam Improvements



Centralized



Spreading Basins

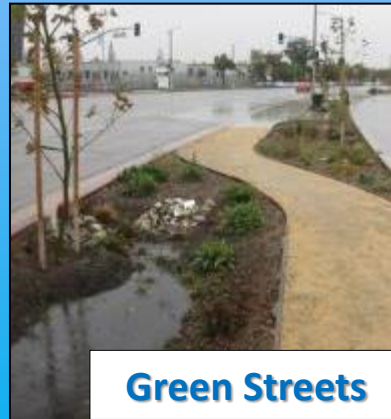
Dry Wells



Cisterns



Distributed

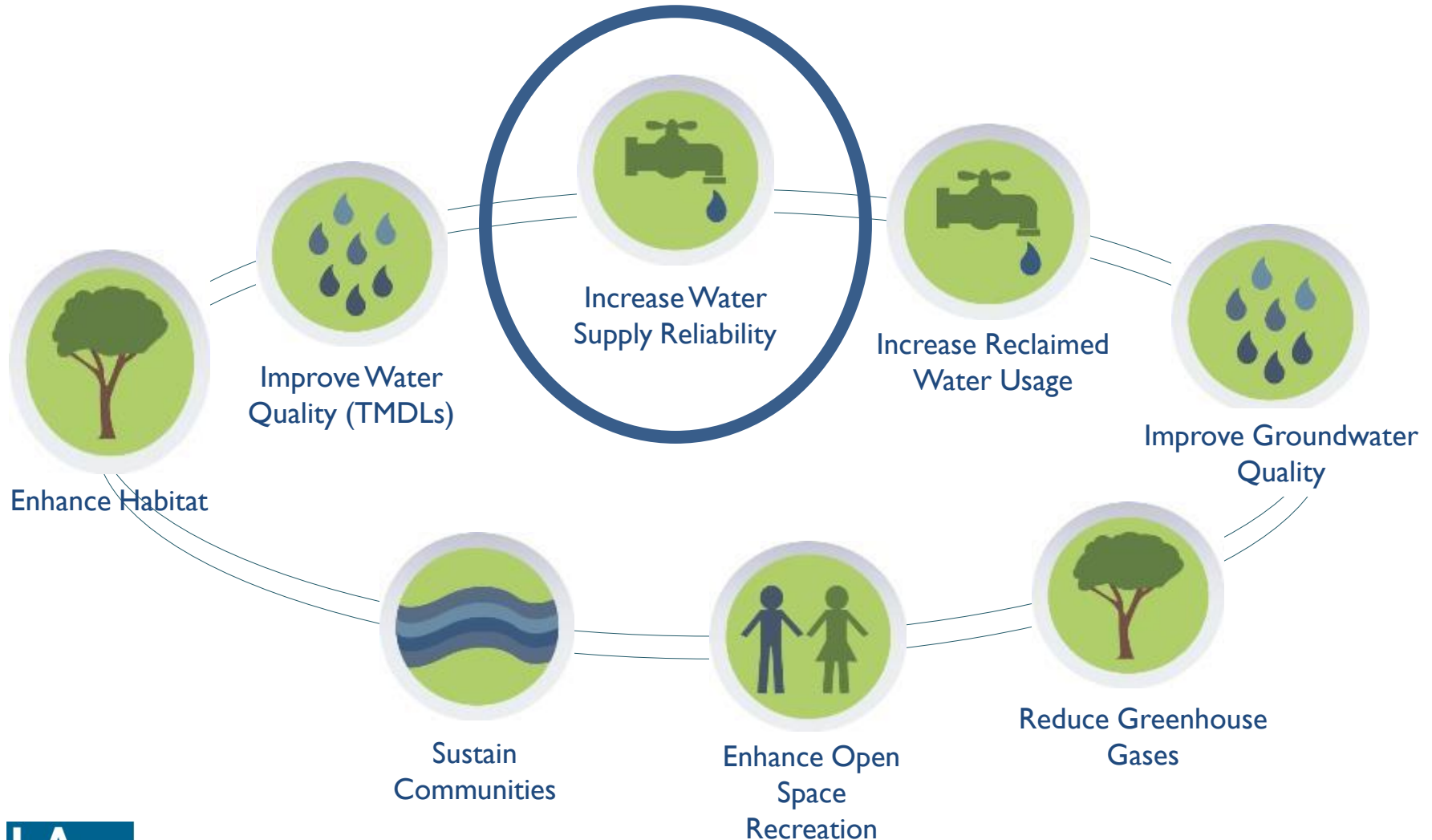


Green Streets

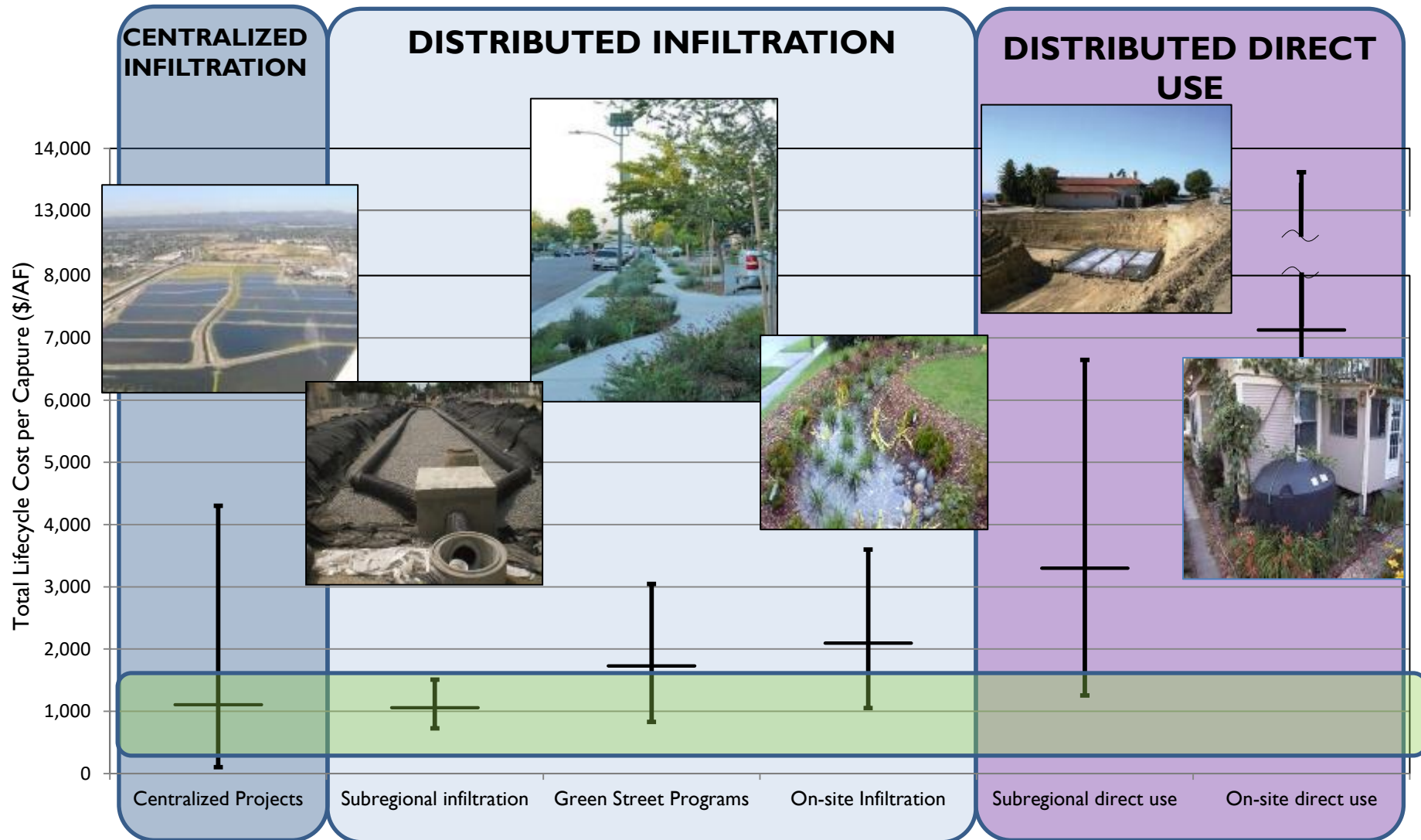


Sub-regional

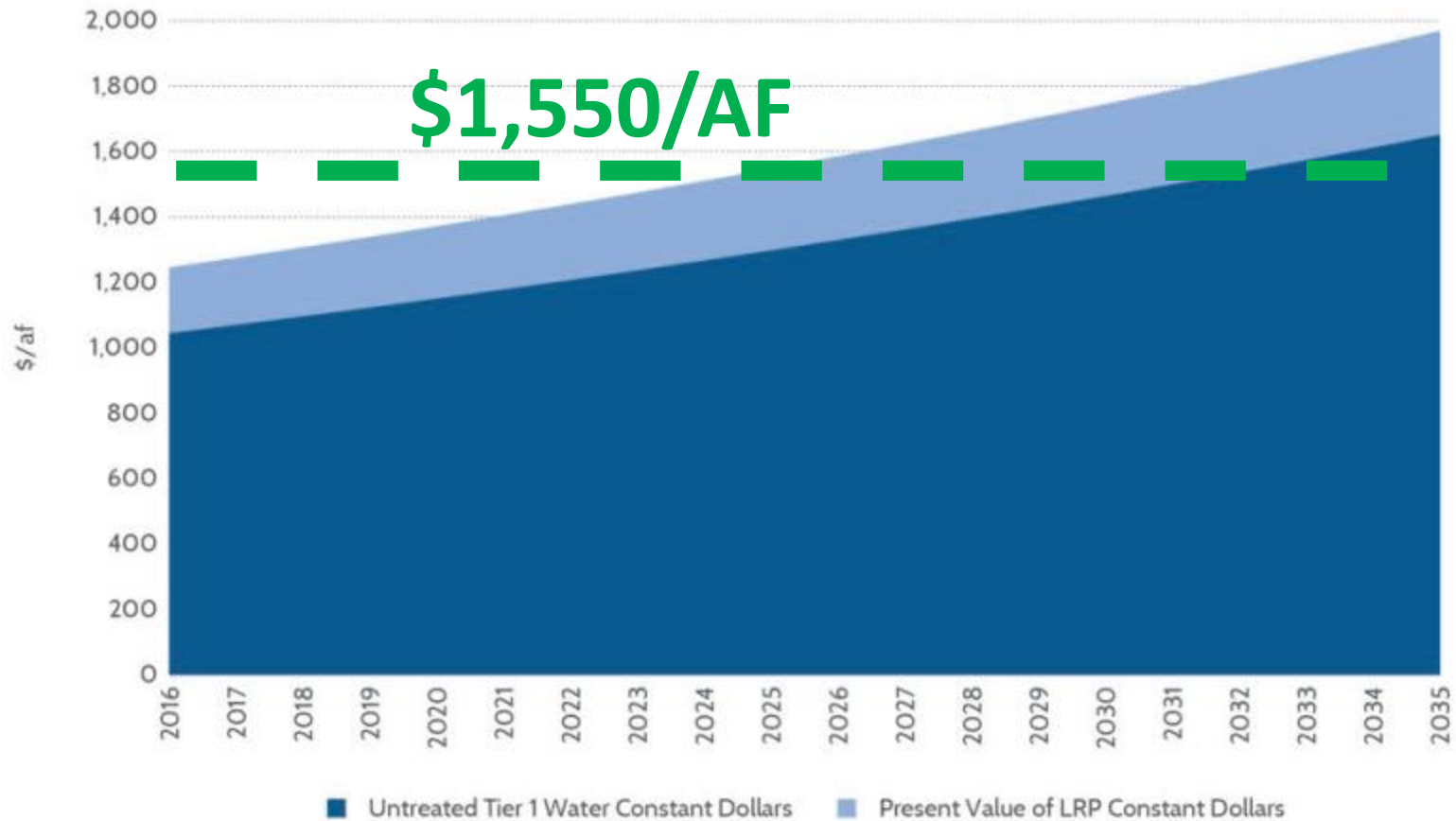
Ancillary Benefits of Stormwater Capture



Stormwater Capture in LA



Value of Direct Use Water to LADWP



Silver Lake Reservoir

New Supply Source:

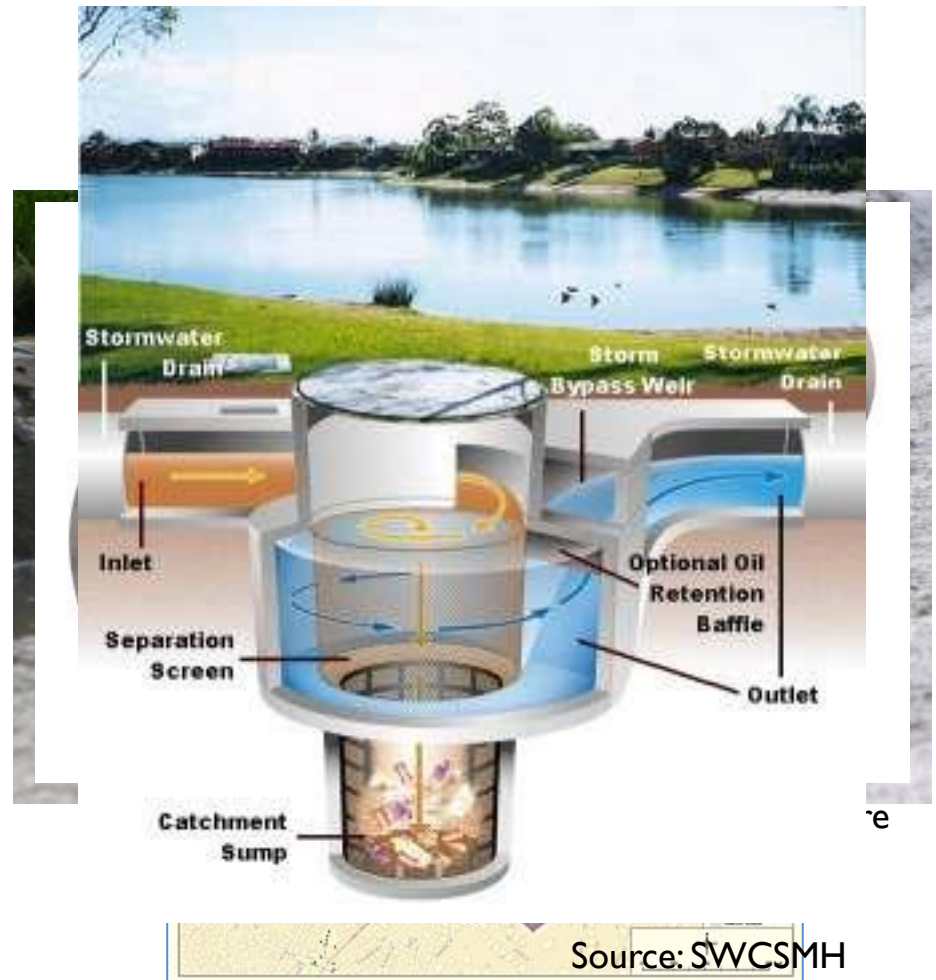
159 AFY stormwater capture to help meet reservoir replenishment demand



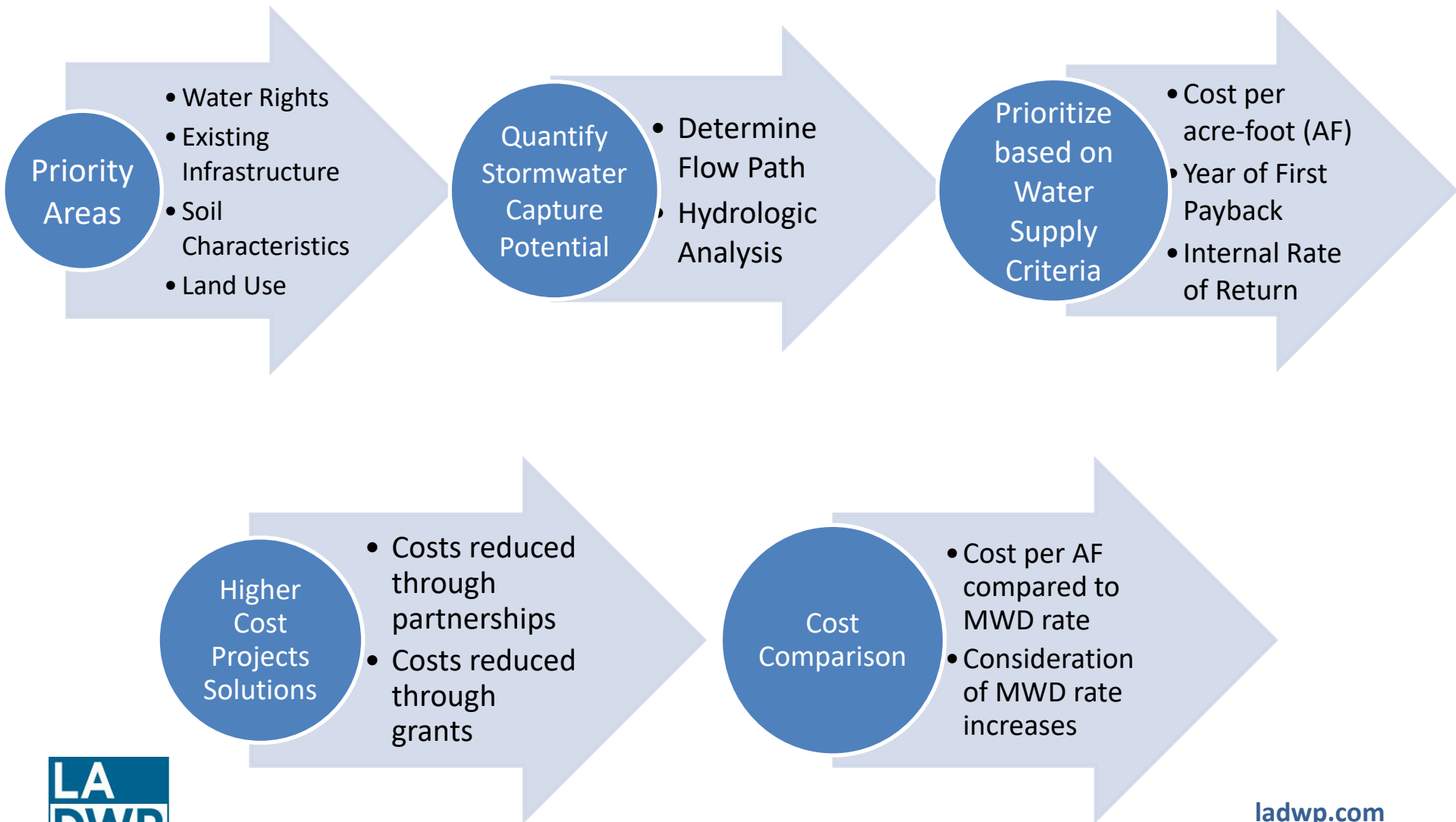
Historical Cultural Monument #422
(Adpt. March 1989)

Scope of Work

- Stormwater capture
- New infrastructure
 - Catch basins
 - Hydrodynamic separators
 - Pipes, outfalls
- Partners
 - LABOE (Lead)
 - LASAN (O&M)



Stormwater Project Evaluation Process



Silver Lake Stormwater Capture Project

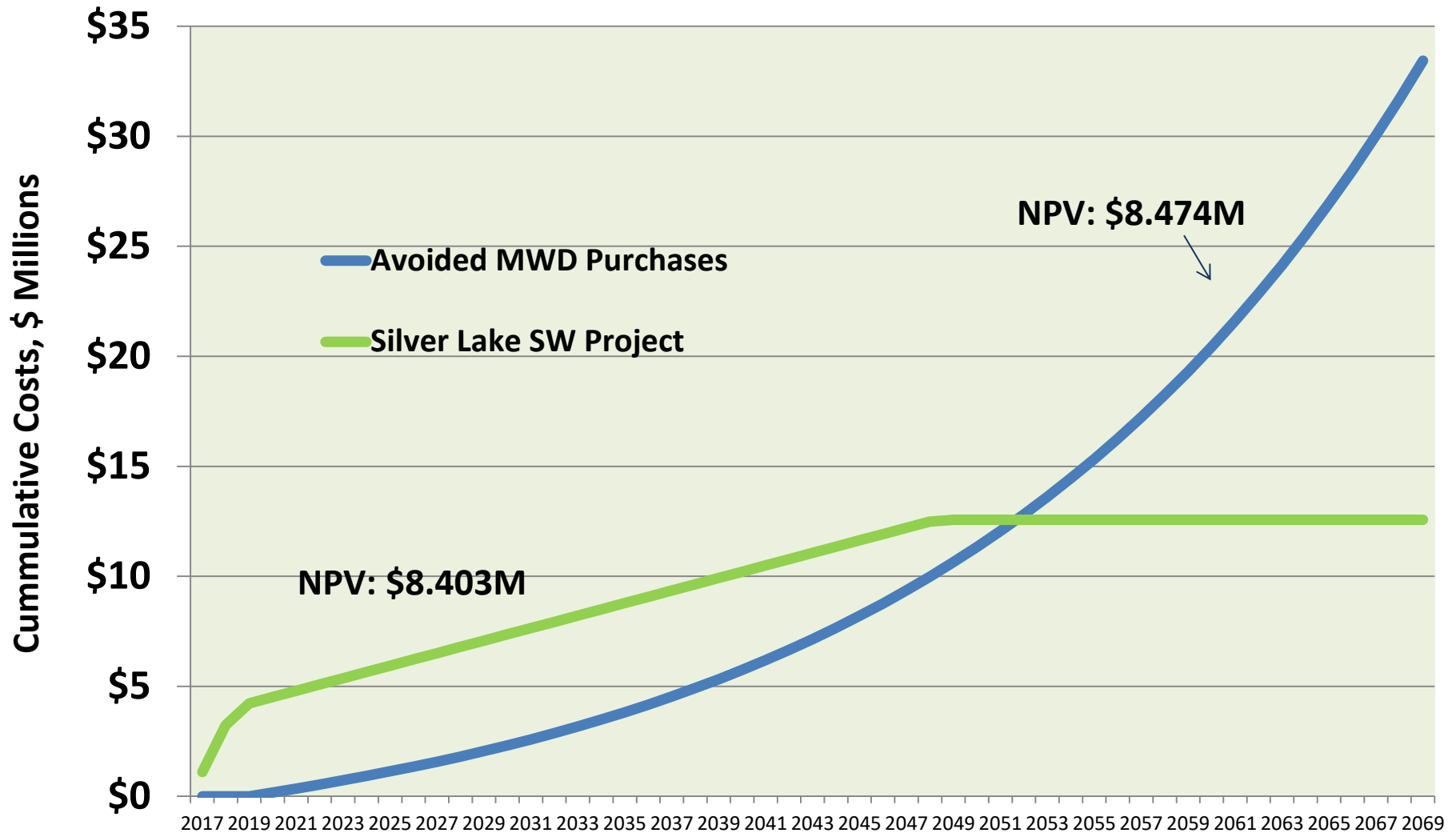
Cost-Benefit

- Present Value of Investment ~\$1,000/AF
- Project Useful Life (50 years)



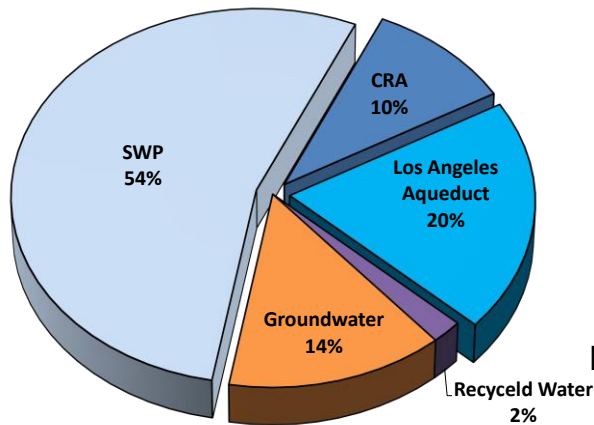
Name	Value
Capital Costs	\$8.13M
Capital Contingency	\$1.84M (inclusive)
Net Present Value	\$0.07M
Payback Year	2052
Internal Rate of Return	4.29%
MWD Tier I Water Rate	Treated
Long Term MWD Rate Increase	5.0%

Silver Lake Reservoir SW Capture Project CBA

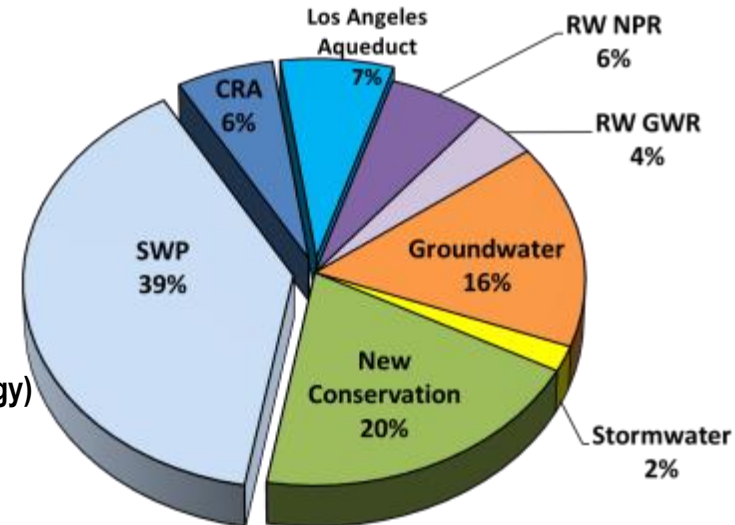


LA Water Supply Reliability

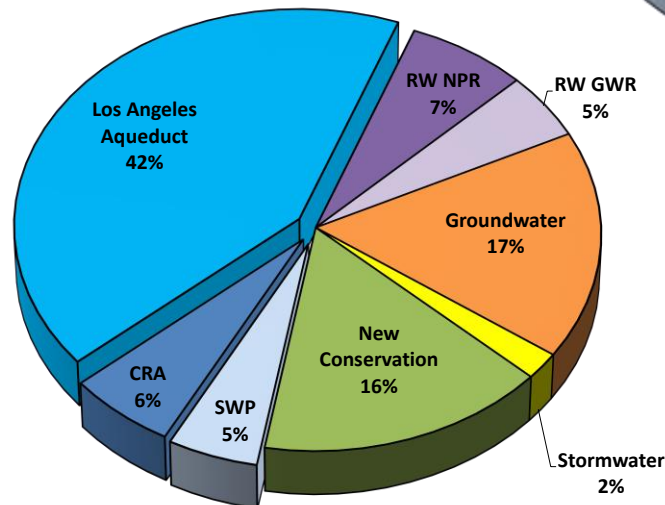
Fiscal Years 2012 - 16 Average
Total Production: 542,700 AFY



Fiscal Year 2039/40 (Single Dry Year)
Total Production: 709,500 AFY



Fiscal Year 2039/40 (Average Hydrology)
Total Production: 675,700 AFY





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