



# City of Los Angeles' Local Water Supplies and the LA River

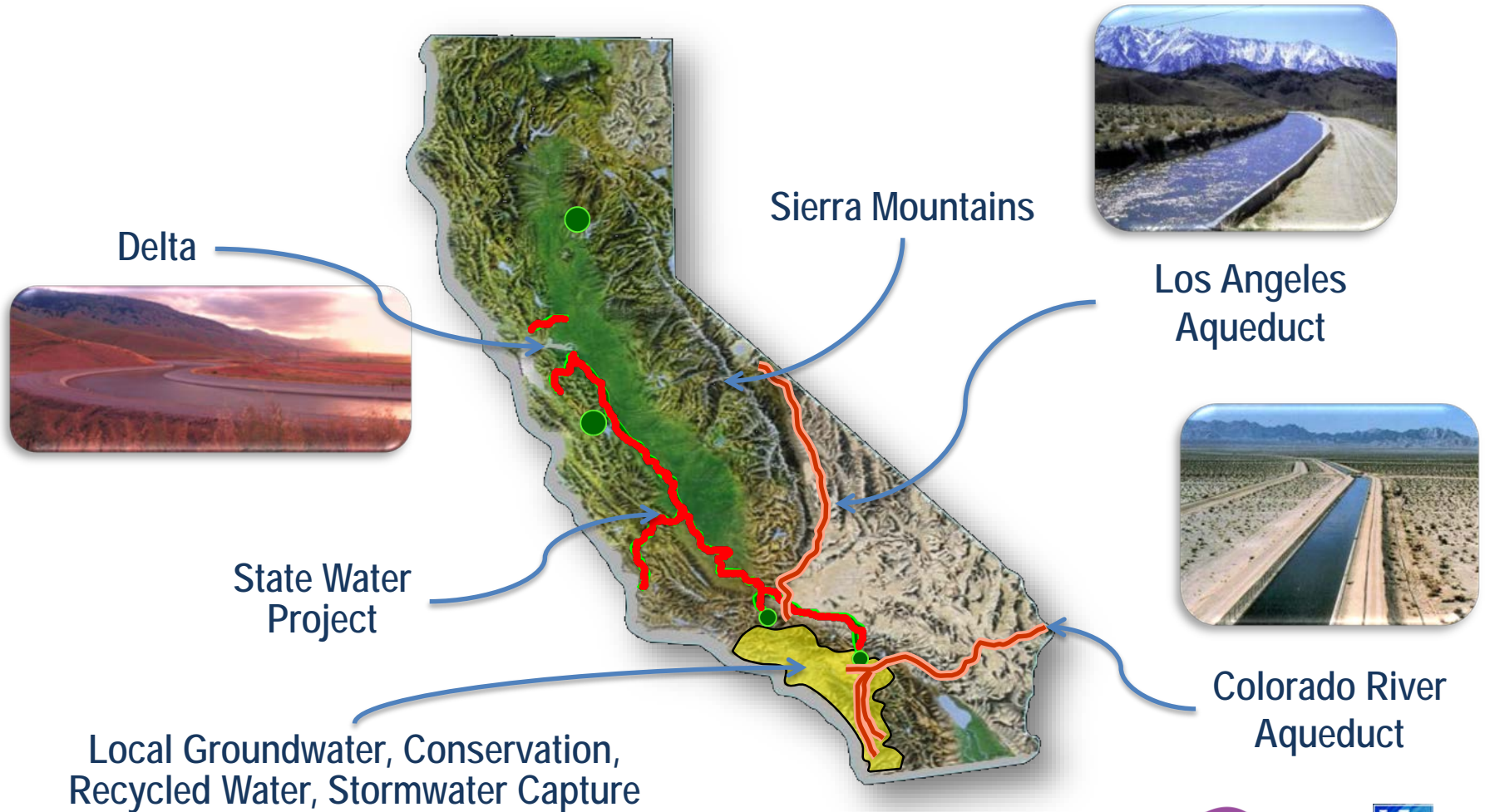
November 8, 2017

State Water Resources Control Board

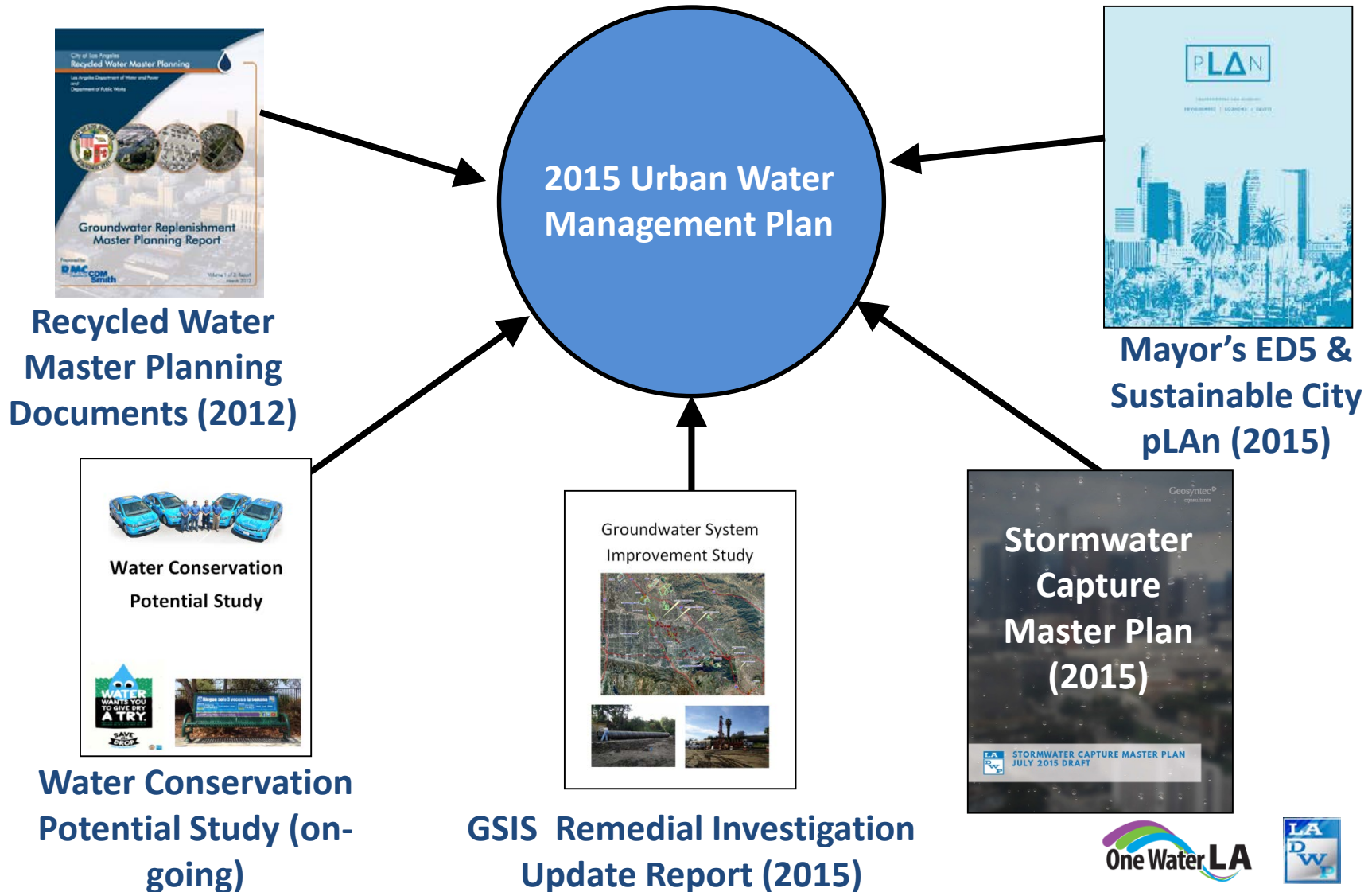
Los Angeles, CA

Putting Customers First 

# Water Sources and Reliability Challenges

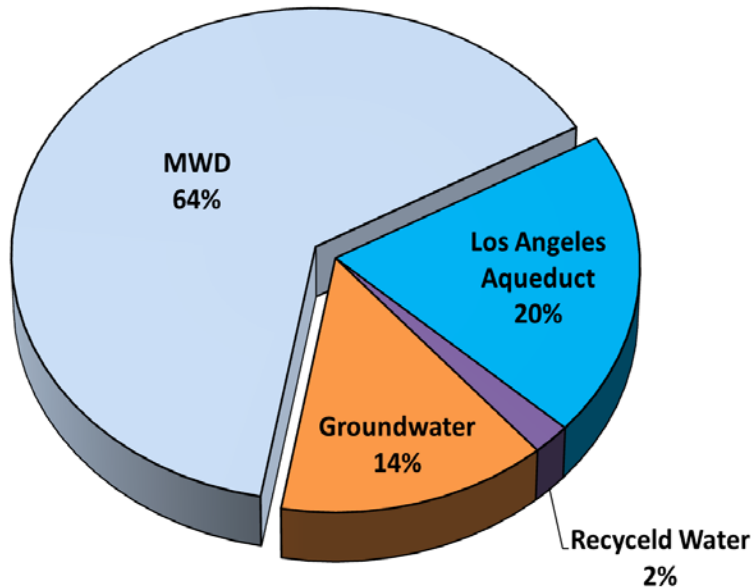


# Water Supply Planning Efforts

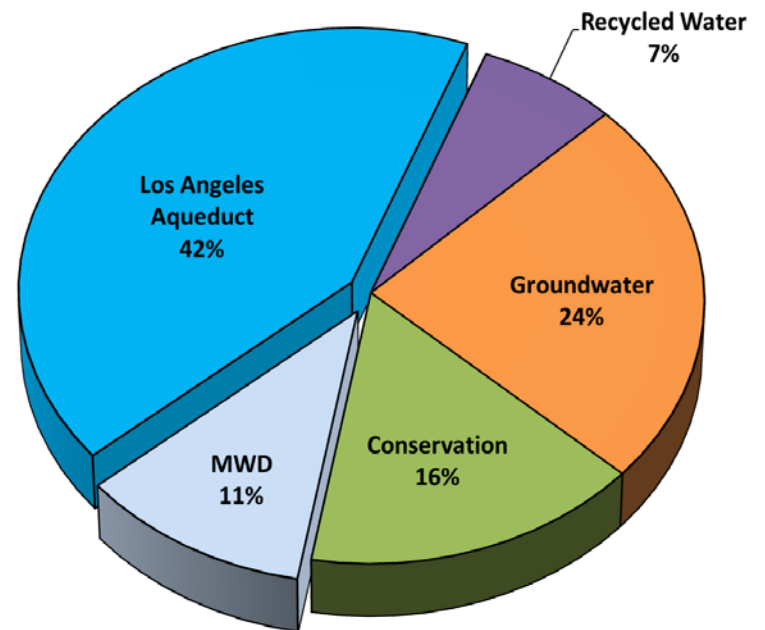


# Sustainable City pLAn & 2015 UWMP Goals

Fiscal Year 2012 - 16 Average  
Total Production: 540,400 AFY



Fiscal Year 2039 - 40 Average  
Total Production: 675,700 AFY



\*Does not include 118,034 AF of historical conservation

# Centralized vs. Distributed Capture

**Dam Improvements**



**Centralized**



**Spreading Basins**

**Dry Wells**



**Cisterns**



**Distributed**



**Green Streets**



**Sub-regional**

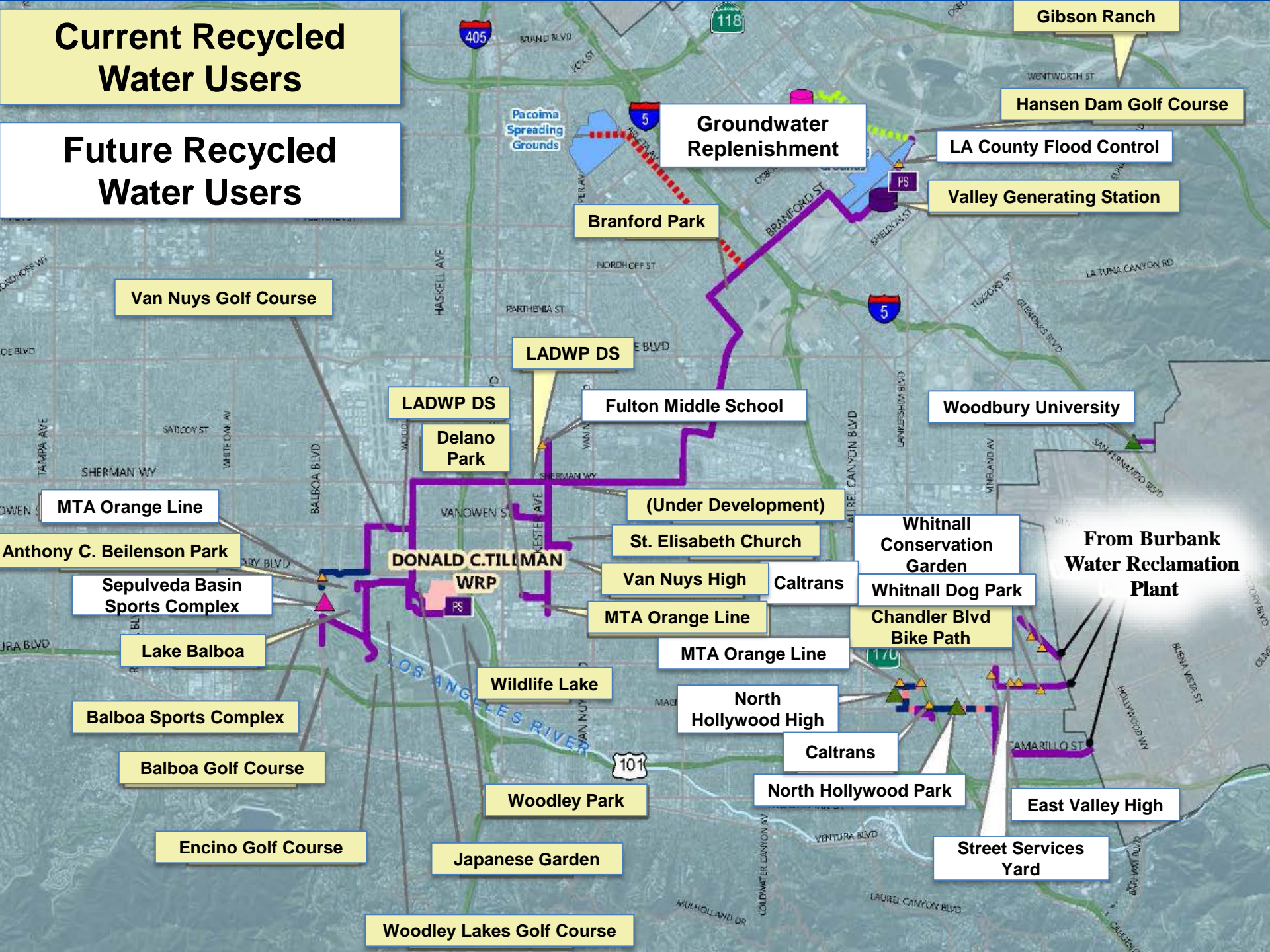
# Water Recycling in Upper Los Angeles River Watershed

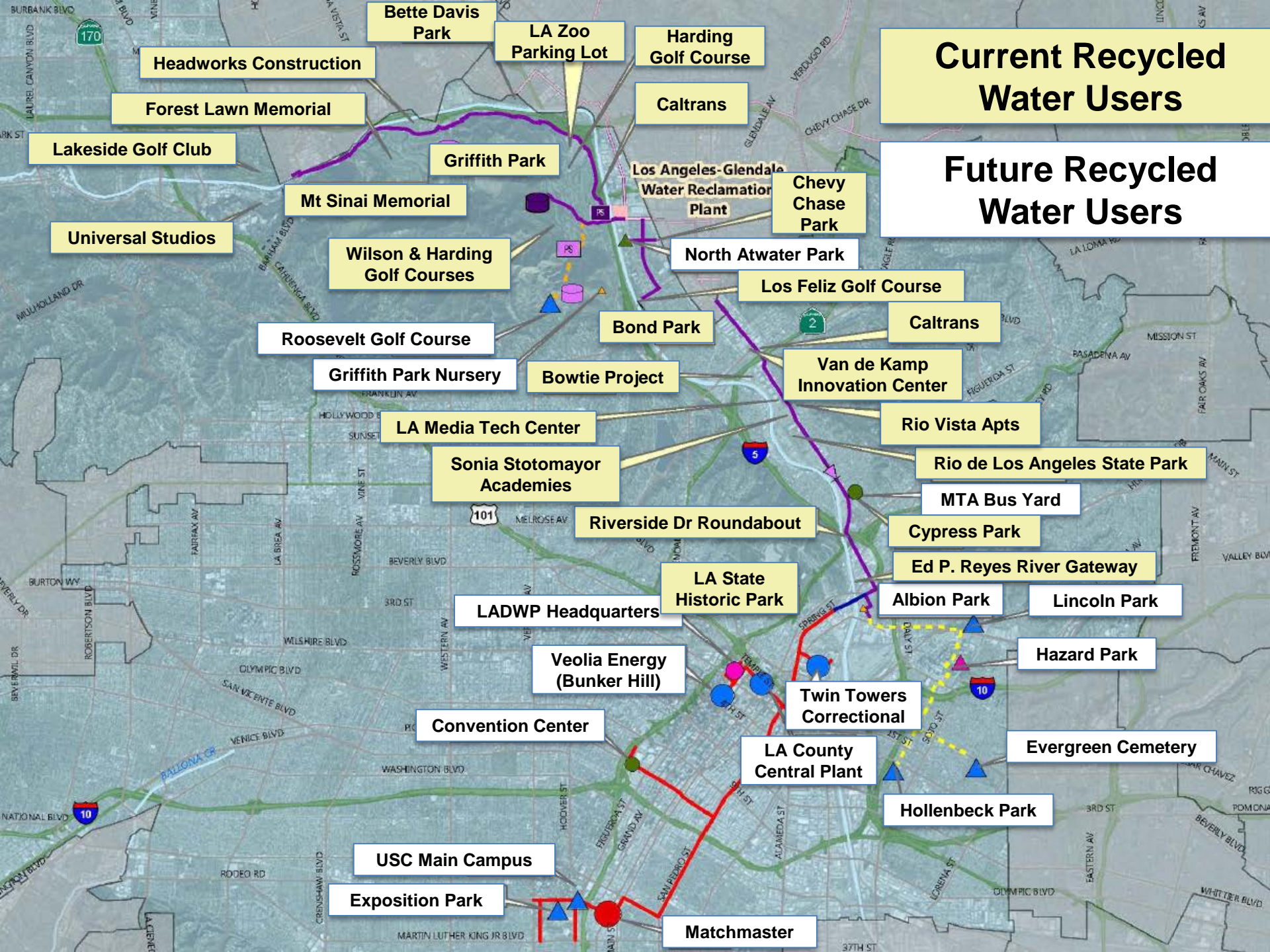
- Donald C. Tillman Water Reclamation Plant
  - Sepulveda Basin Sports Complex Water Recycling Project
  - Groundwater Replenishment Project
- Los Angeles / Glendale Reclamation Plant
  - Downtown Water Recycling Project
  - Eastside Water Recycling Project
- Burbank Water Reclamation Plant
  - North Hollywood Water Recycling Project



# Current Recycled Water Users

# Future Recycled Water Users





# Current Recycled Water Users

# Future Recycled Water Users

Headworks Construction

Forest Lawn Memorial

Lakeside Golf Club

Universal Studios

Mt Sinai Memorial

Wilson & Harding Golf Courses

Roosevelt Golf Course

Griffith Park Nursery

LA Media Tech Center

Sonia Stotomayor Academies

LADWP Headquarters

Veolia Energy (Bunker Hill)

Convention Center

USC Main Campus

Exposition Park

Bette Davis Park

LA Zoo Parking Lot

Harding Golf Course

Caltrans

Los Angeles-Glendale Water Reclamation Plant

North Atwater Park

Bond Park

Bowtie Project

Riverside Dr Roundabout

LA State Historic Park

LA County Central Plant

Matchmaster

Chevy Chase Park

Los Feliz Golf Course

Van de Kamp Innovation Center

Rio Vista Apts

Rio de Los Angeles State Park

MTA Bus Yard

Cypress Park

Ed P. Reyes River Gateway

Albion Park

Lincoln Park

Hazard Park

Evergreen Cemetery

Hollenbeck Park



# Current and Planned City of LA Projects that May Affect LA River Flows

No.	Projects	Estimated River Flow Impact (AFY)
1	US Army Corps of Engineers ARBOR Project	3,000 to 6,500
2	Sepulveda Sports Complex Water Recycling Project	56
3	Eastside Water Recycling Project	465
4	Increase number of LADWP recycled water customers	398
5	Expanded recycled water use through recirculation of Sepulveda Basin flow through lakes	up to 25,000 (22 MGD)
6	LAR Dry-Weather Bacteria Compliance Approach for Segment B	Will reduce dry weather flows to LAR to zero
7	Enhanced Watershed Management Plan for Upper LAR	
8	Projects to enhance recharge capacity in the San Fernando Groundwater Basin (SFB)	

# City of LA Project *Concepts* that May Affect LA River Flows

No.	Projects	Estimated River Flow Impact (AFY)
9	LAR Recharge into LA Forebay Concept	up to 25,000 (22 MGD)
10	LA/Glendale Water Reclamation Plant to Headworks Reservoir Concept	up to 6,000
11	Upper LAR to DCTWRP	4,500 to 5,600
12	DCTWRP to SFB Injection Wells	up to 15,000
13	DCTWRP to Los Angeles Aqueduct Filtration Plant	up to 15,000
14	DCTWRP to LADWP Distribution System	up to 15,000
15	Increase recycled water demand beyond 2015 UWMP	16,400 to 45,400

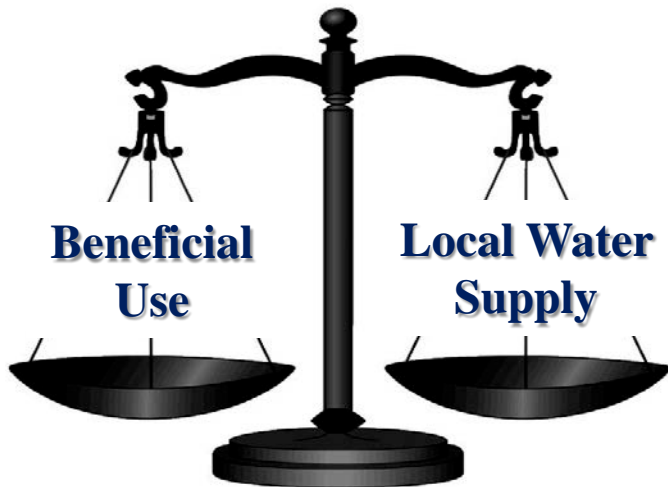
AFY = acre-feet/year

# Los Angeles River Low Flow Study



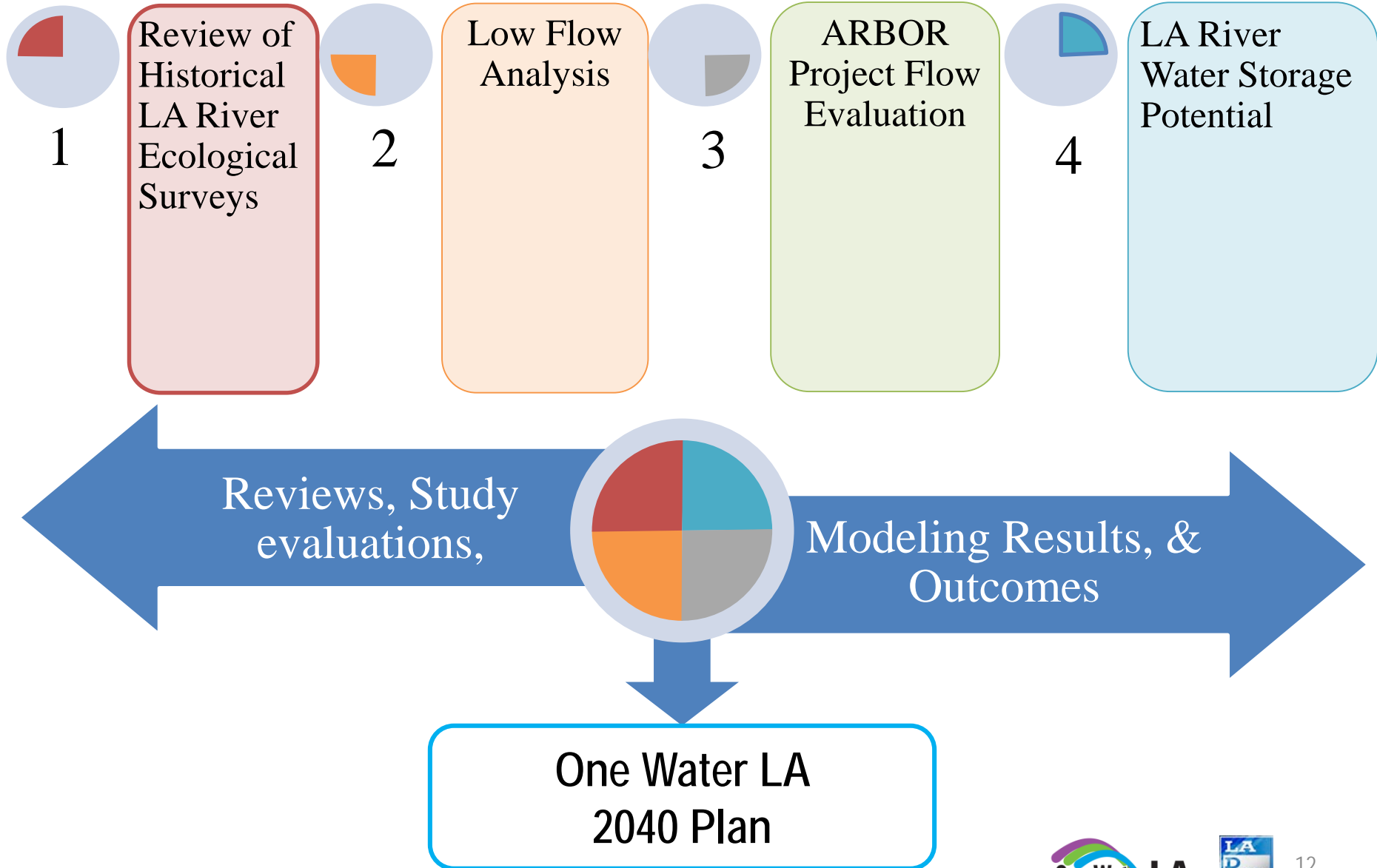
## Purpose

To identify considerations, assumptions, and areas of future study necessary to determine optimal flow conditions in the LA River.



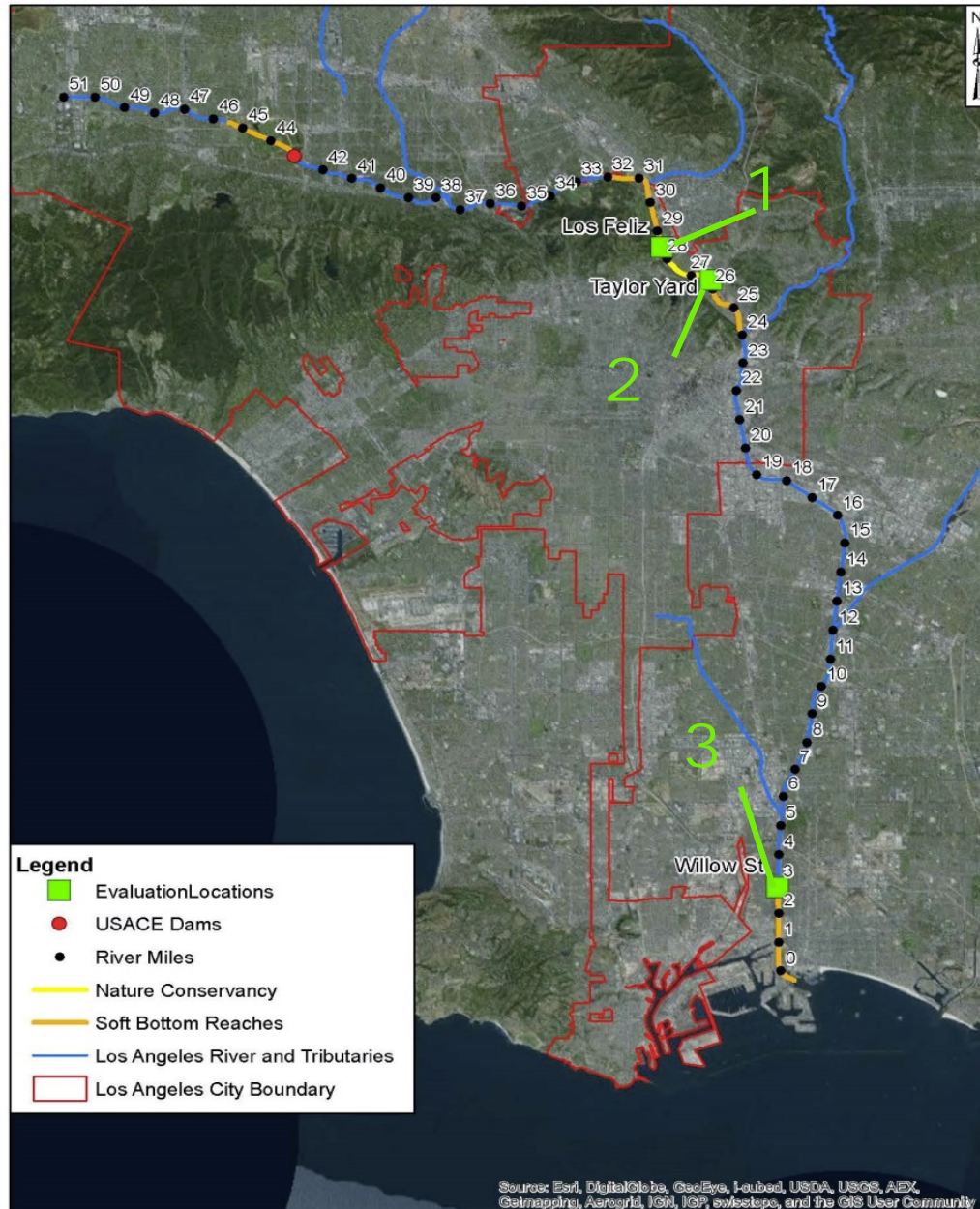
These conditions would **balance** the City's water supply needs with the River's water-dependent uses and regulatory requirements.

# Process For LA River Low Flow Study

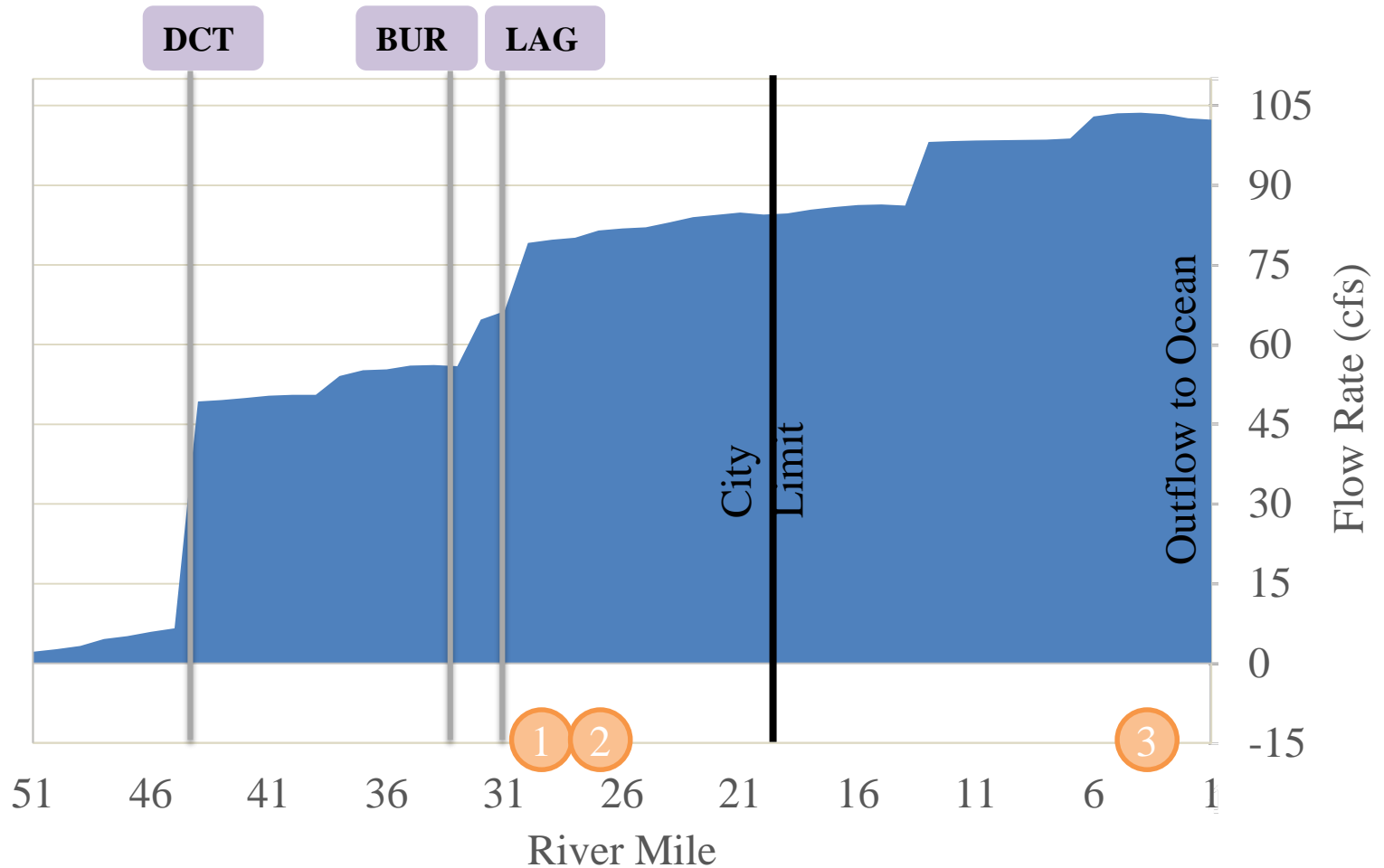


# Los Angeles River

- 51 miles – Headwaters to the Ocean
- Hydrologic mile-by-mile modeling
- Three sites modeled in more detail
  - Los Feliz
  - Taylor Yard
  - Willow Street



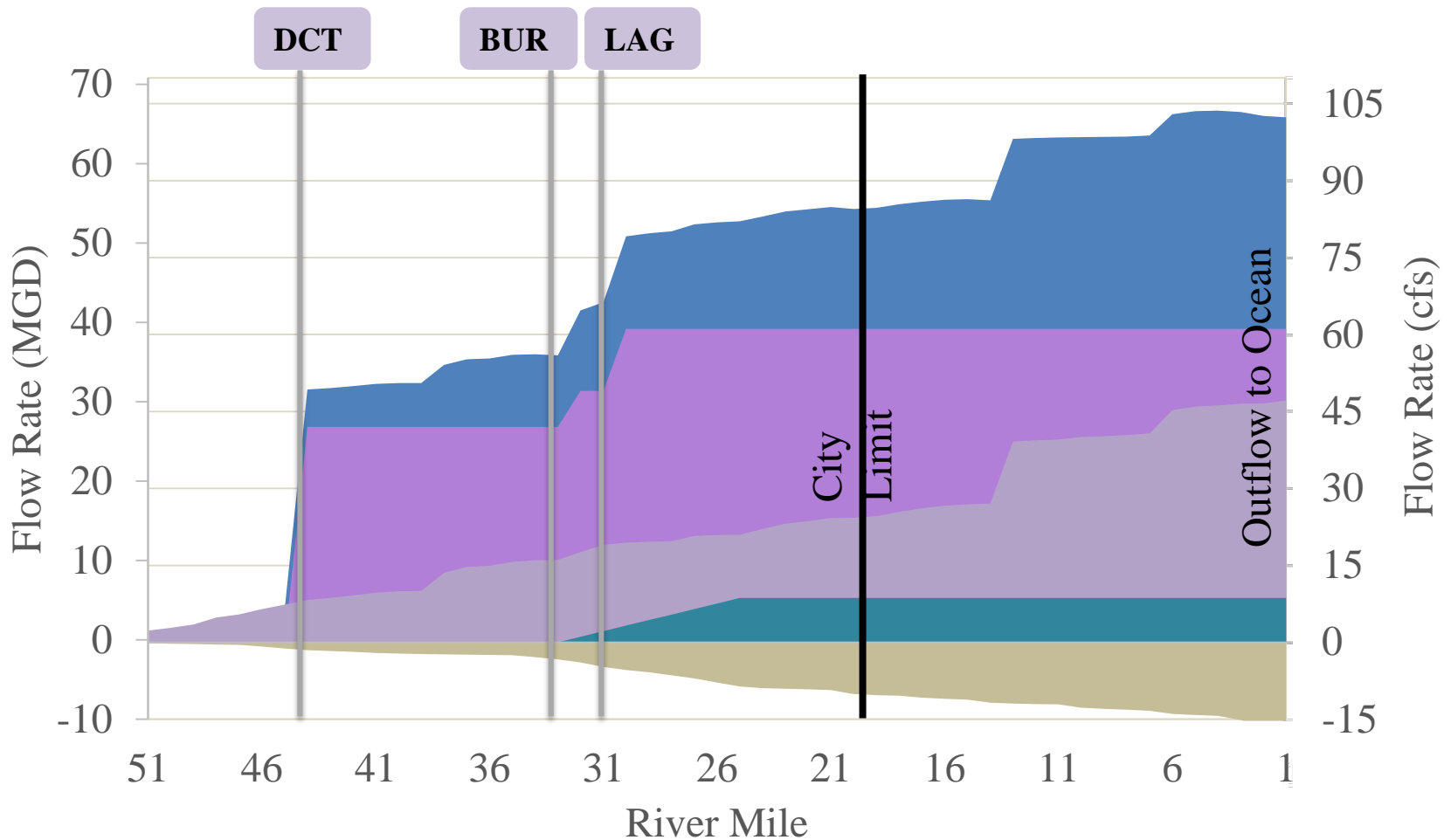
# LA River Dry Weather Flow Analysis



■ Total Flow

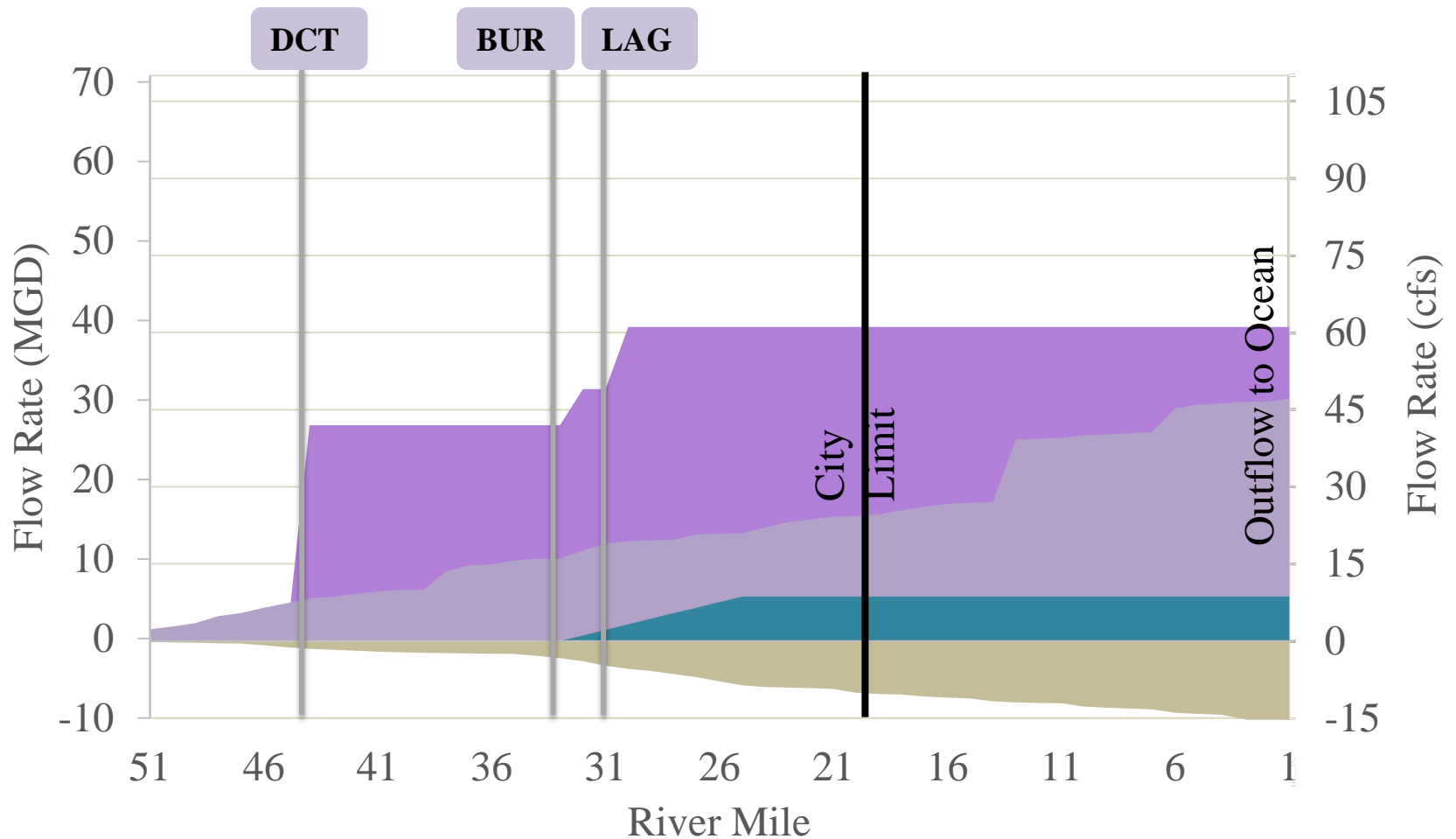
○ Study Sites

# LA River Dry Weather Flow Analysis



■ Total Flow ■ Losses to ET ■ WRP ■ Incidental Urban Runoff ■ Upwelling

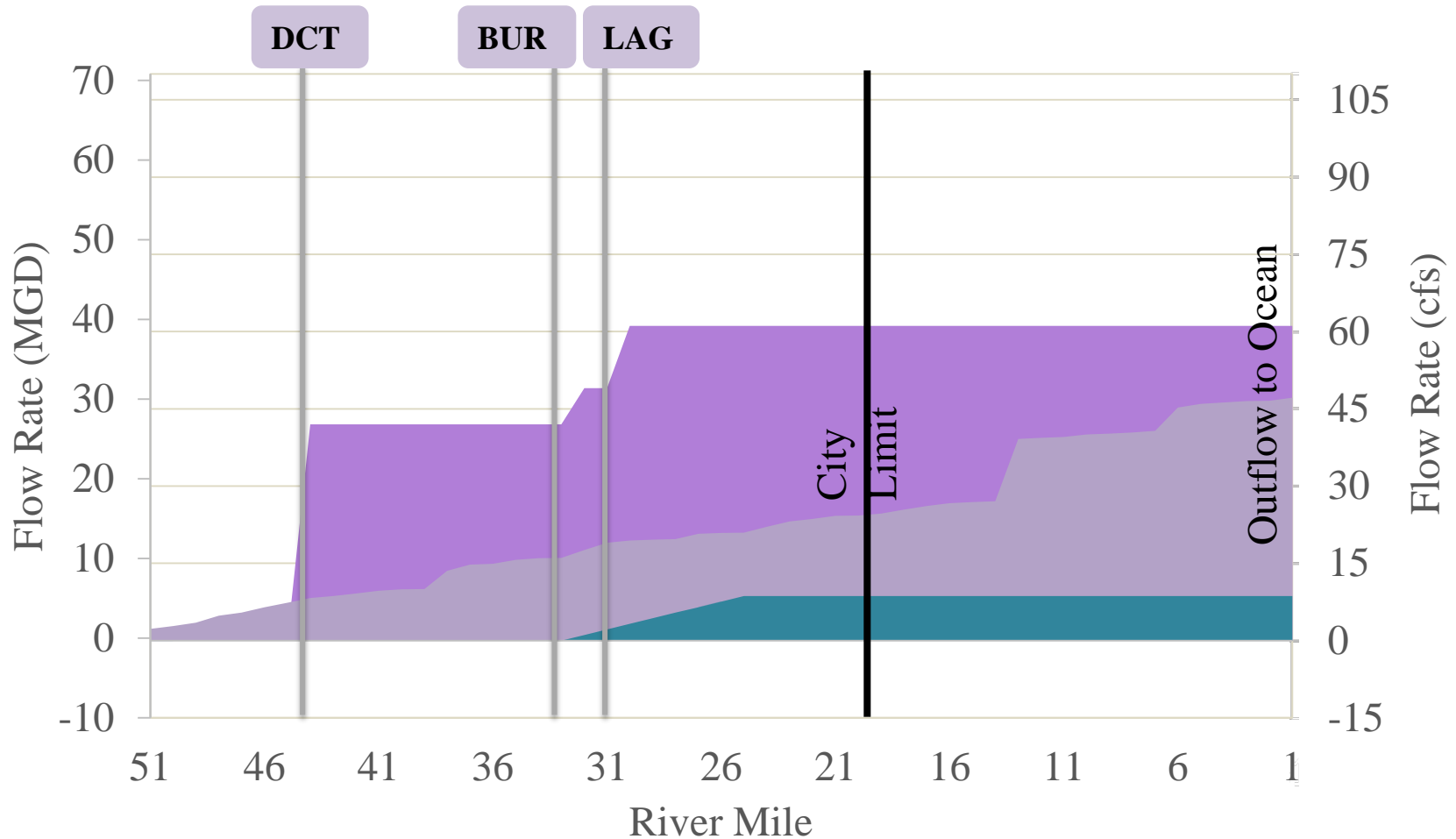
# LA River Dry Weather Flow Analysis



Total Flow ■ Losses to ET ■ WRP ■ Incidental Urban Runoff ■ Upwelling

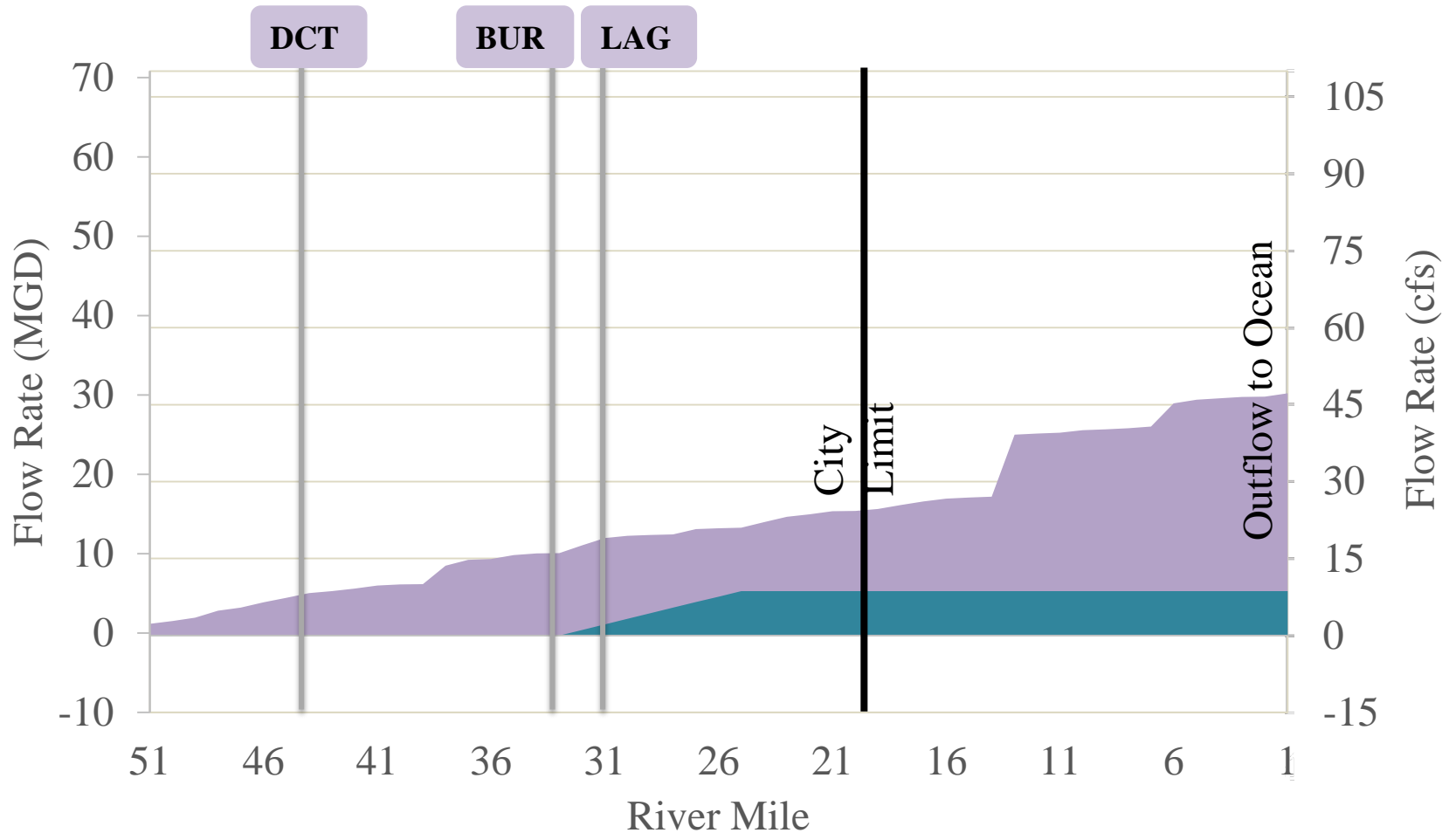


# LA River Dry Weather Flow Analysis



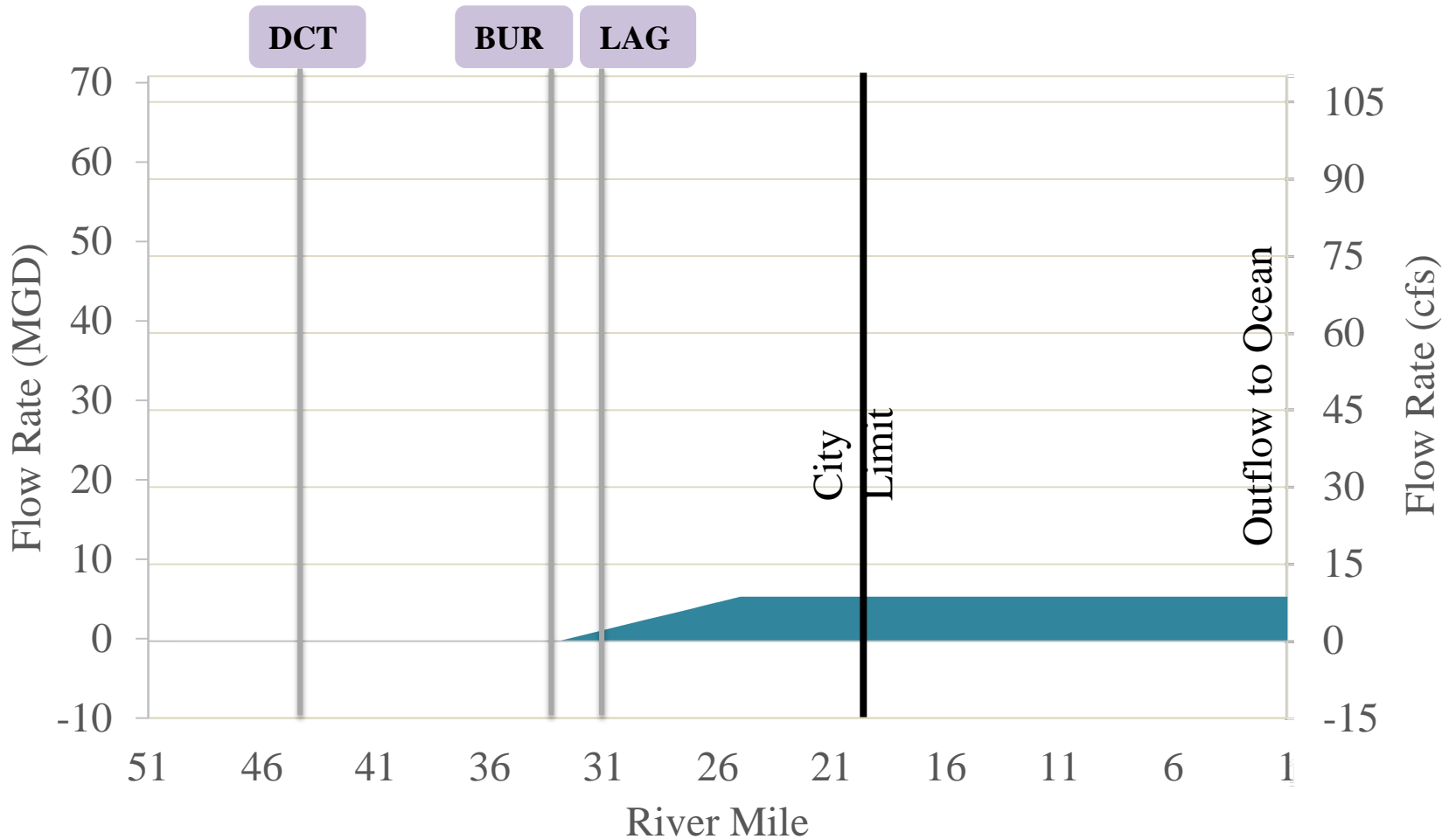
Total Flow    Losses to ET    WRP    Incidental Urban Runoff    Upwelling

# LA River Dry Weather Flow Analysis



Total Flow    Losses to ET    WRP    Incidental Urban Runoff    Upwelling

# LA River Dry Weather Flow Analysis



Total Flow    Losses to ET    WRPs    Incidental Urban Runoff    ■ Upwelling

# Next Steps

- Collaborative cumulative environmental impact analysis
- Planned and/or potential projects
- Participate in development of LA County's – LA River Master Plan Update
- Future City of Los Angeles 1211 Petition

# Thank You

## Questions?

Evelyn Cortez-Davis  
Assistant Director, Water Resources Division  
Los Angeles Department of Water and Power  
[Evelyn.cortez-davis@ladwp.com](mailto:Evelyn.cortez-davis@ladwp.com)

