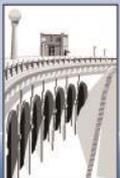




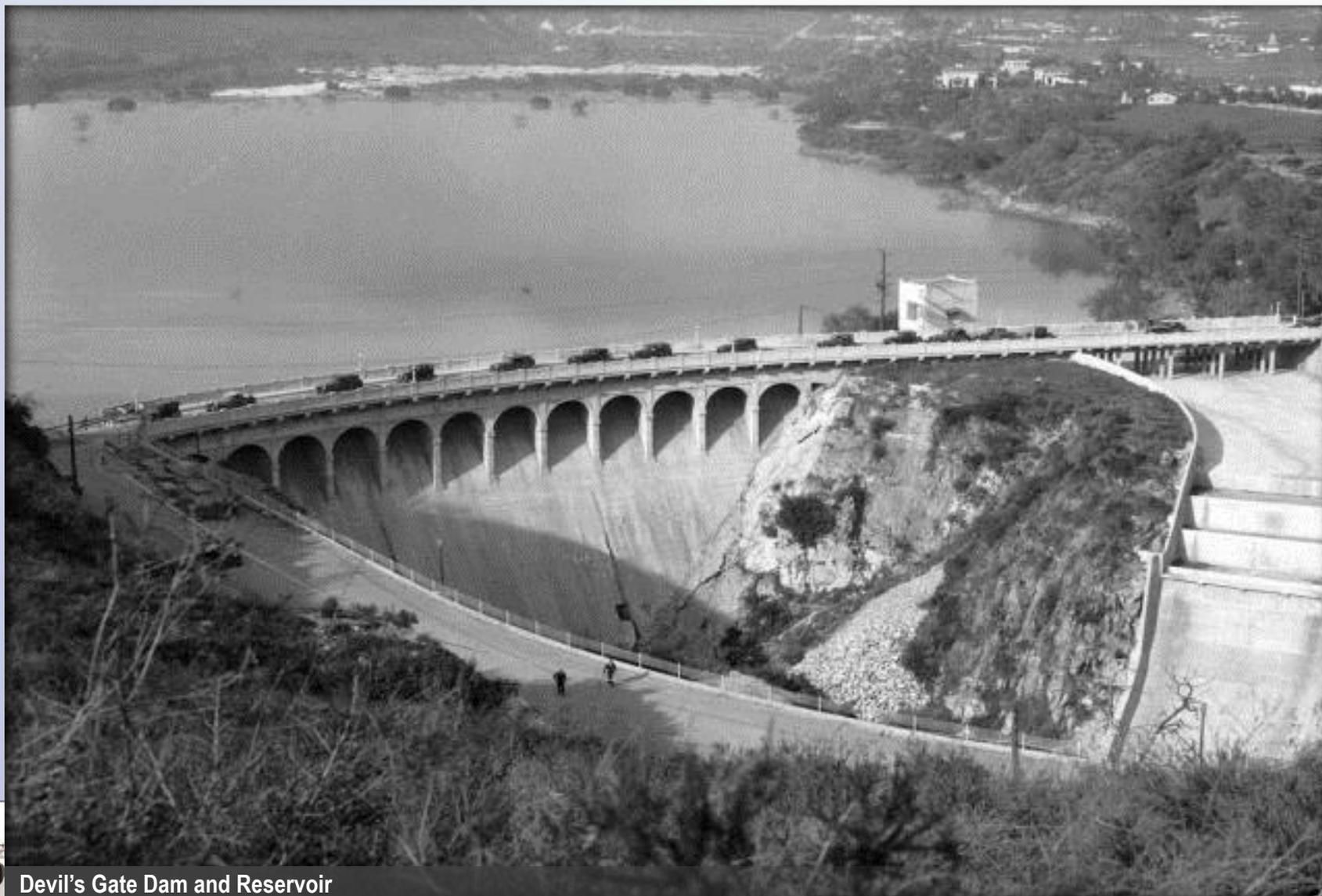
Devil's Gate Reservoir Sediment Removal and Management Project – Draft EIR

Presentation to Pasadena City Council
December 9, 2013



Presentation By: Keith Lilley, P.E.

Devil's Gate Dam & Reservoir

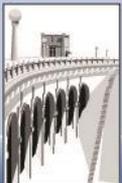


Devil's Gate Dam and Reservoir

Devil's Gate Reservoir Sediment Removal and Management Project



1935 Aerial View

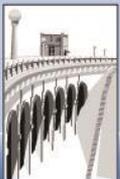




A Regional Disaster: 2009 Station Fire

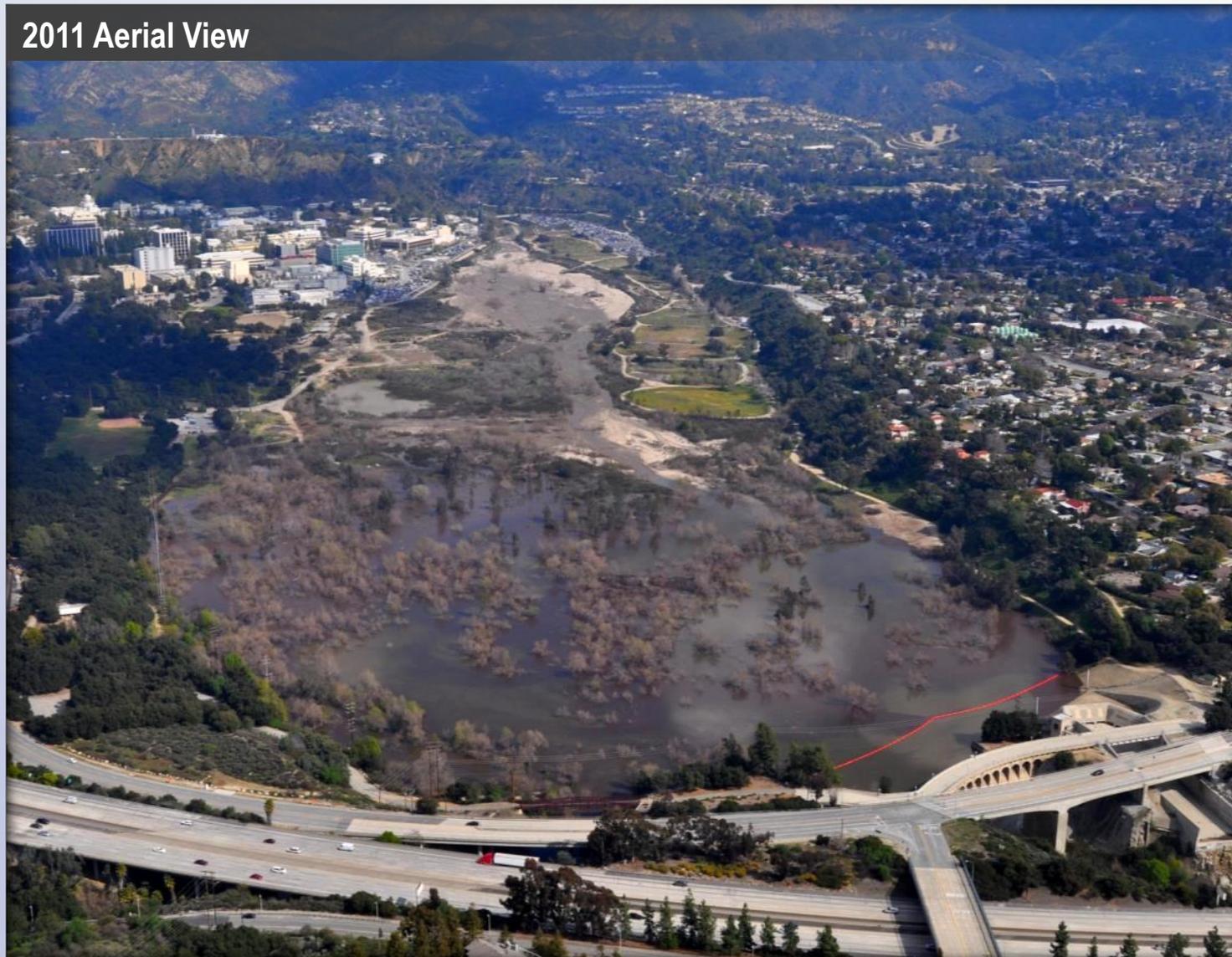
Largest fire in Los Angeles County Recorded History

- Burned over 160,000 acres in the San Gabriel Mountains
- Burned approximately 68% of the Devil's Gate watershed





2011 Aerial View

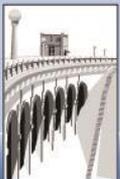




Design Debris Event (DDE)

Potential Sediment Inflow from Design Storm
(once in 50-years event) falling on Burned
Watershed after 4 years of recovery

- 5- to 10- year storm on fresh burn can produce DDE
- Devil's Gate Reservoir DDE = 2,000,000 CY

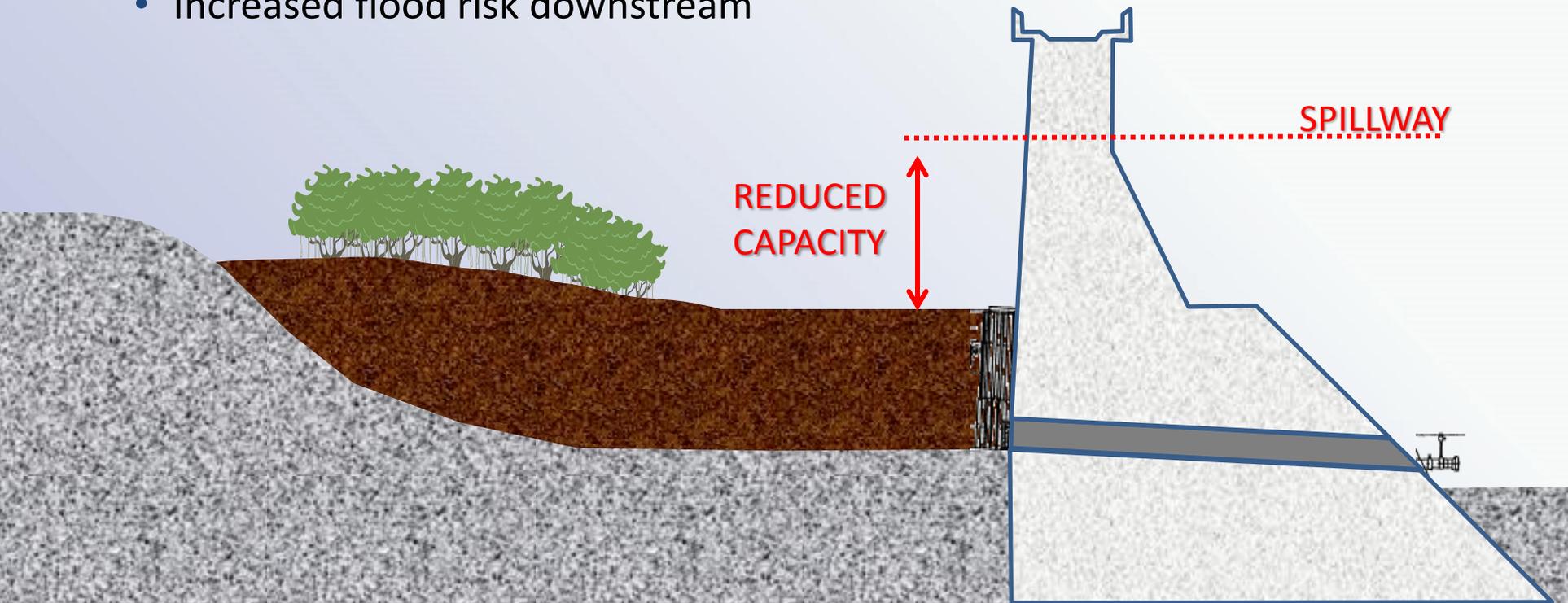


Station Fire burning behind JPL



Sediment Concerns

- Reduction in reservoir capacity
- Potential to block outlet works
- Increased flood risk downstream

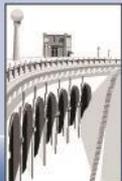


Devil's Gate at Spillway

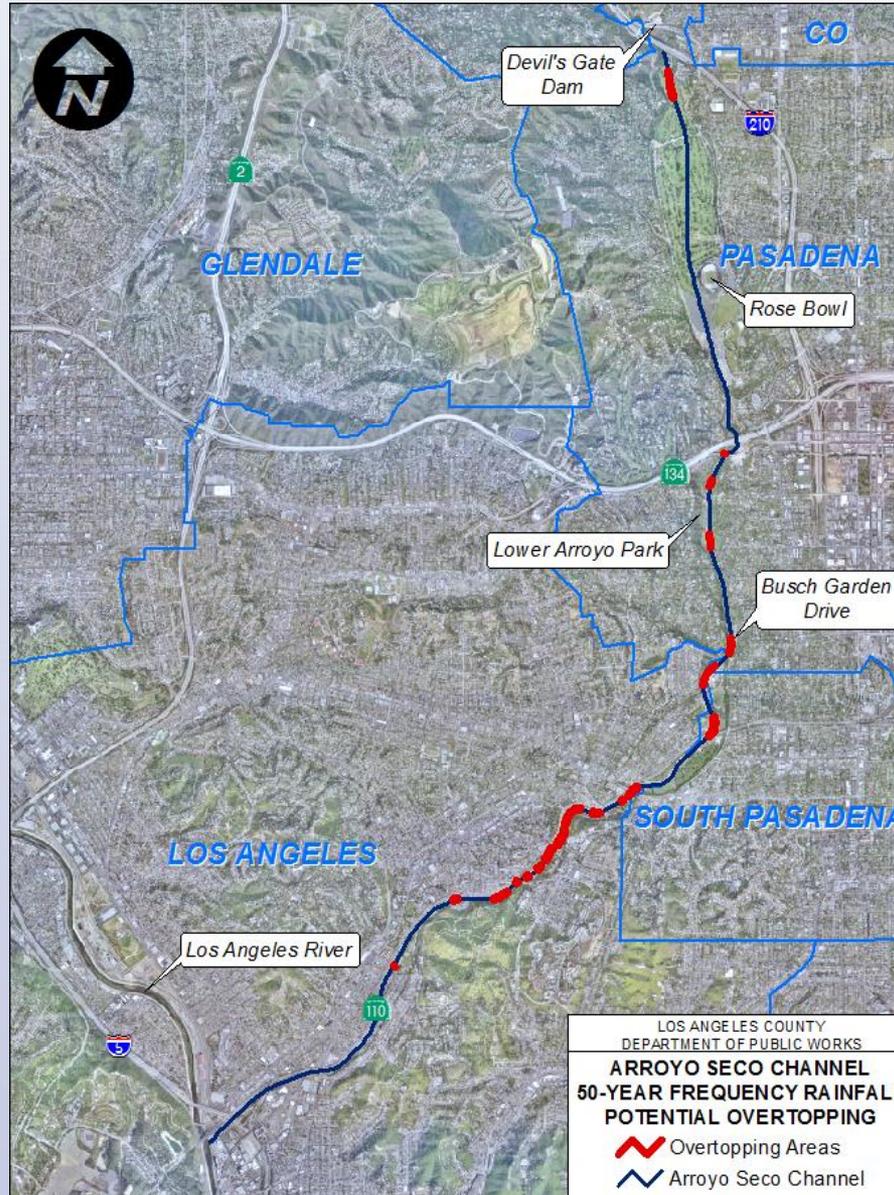


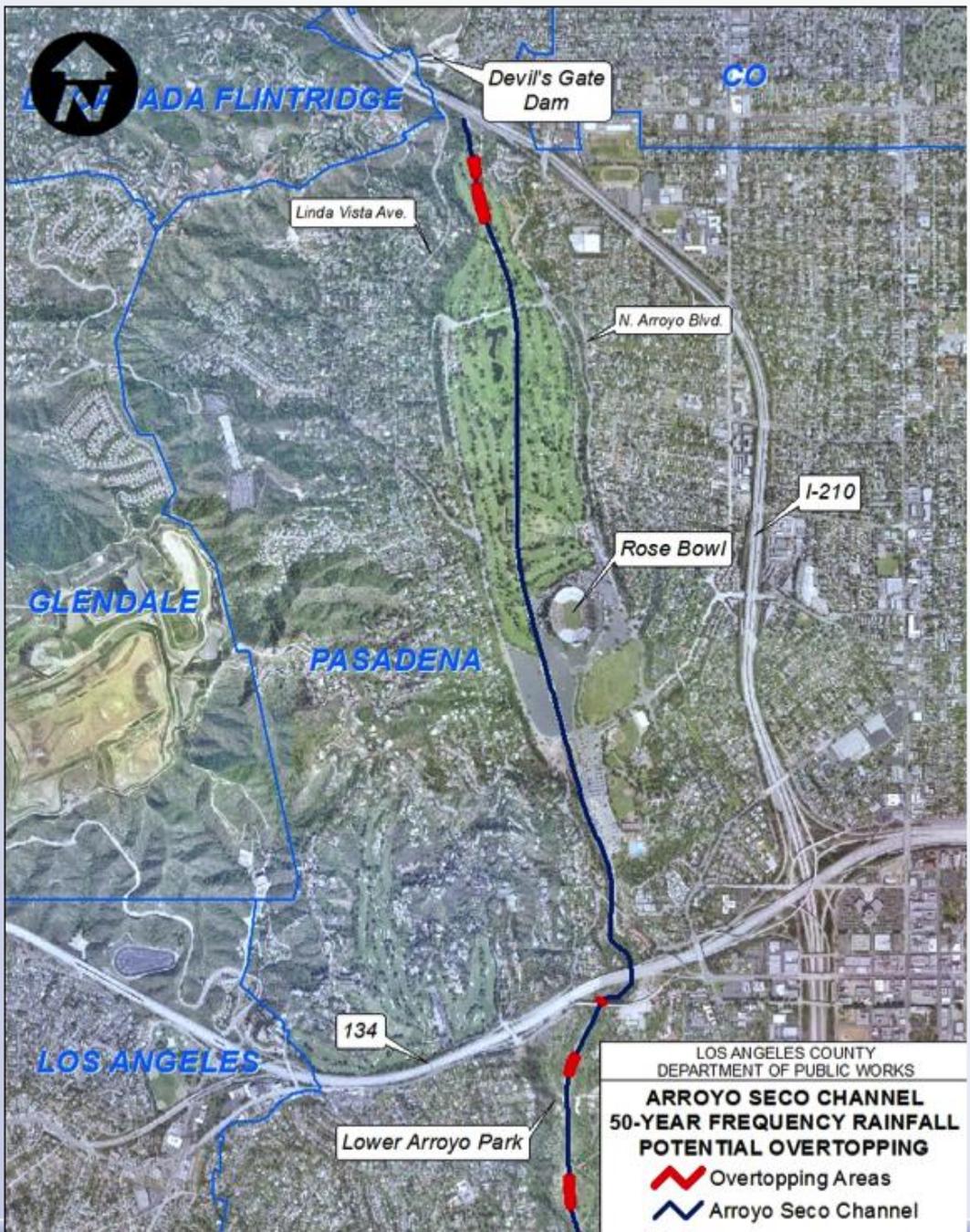
Devil's Gate 2005

Source: Arroyo Seco Foundation



Downstream Communities





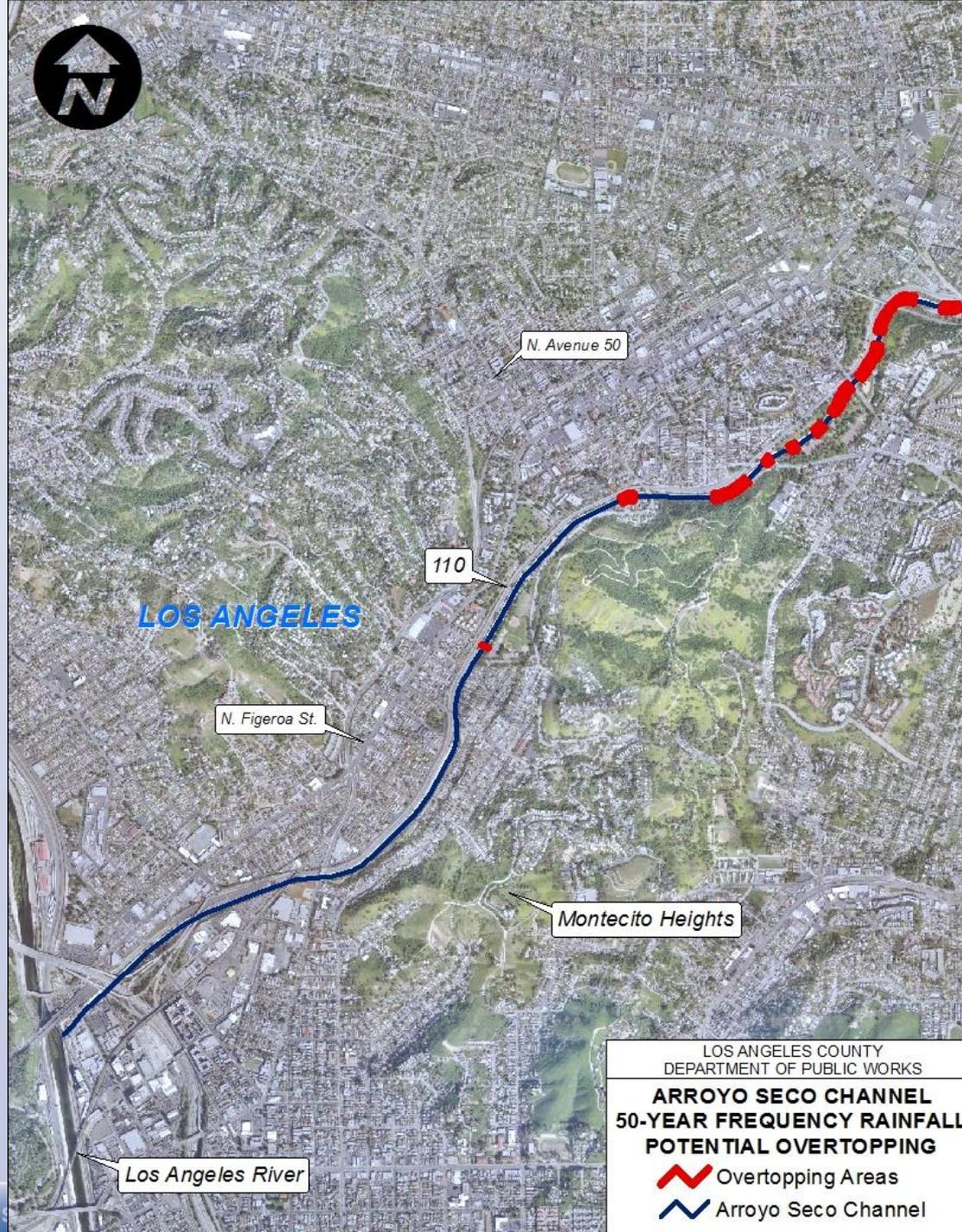


LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS

**ARROYO SECO CHANNEL
50-YEAR FREQUENCY RAINFALL
POTENTIAL OVERTOPPING**

 Overtopping Areas

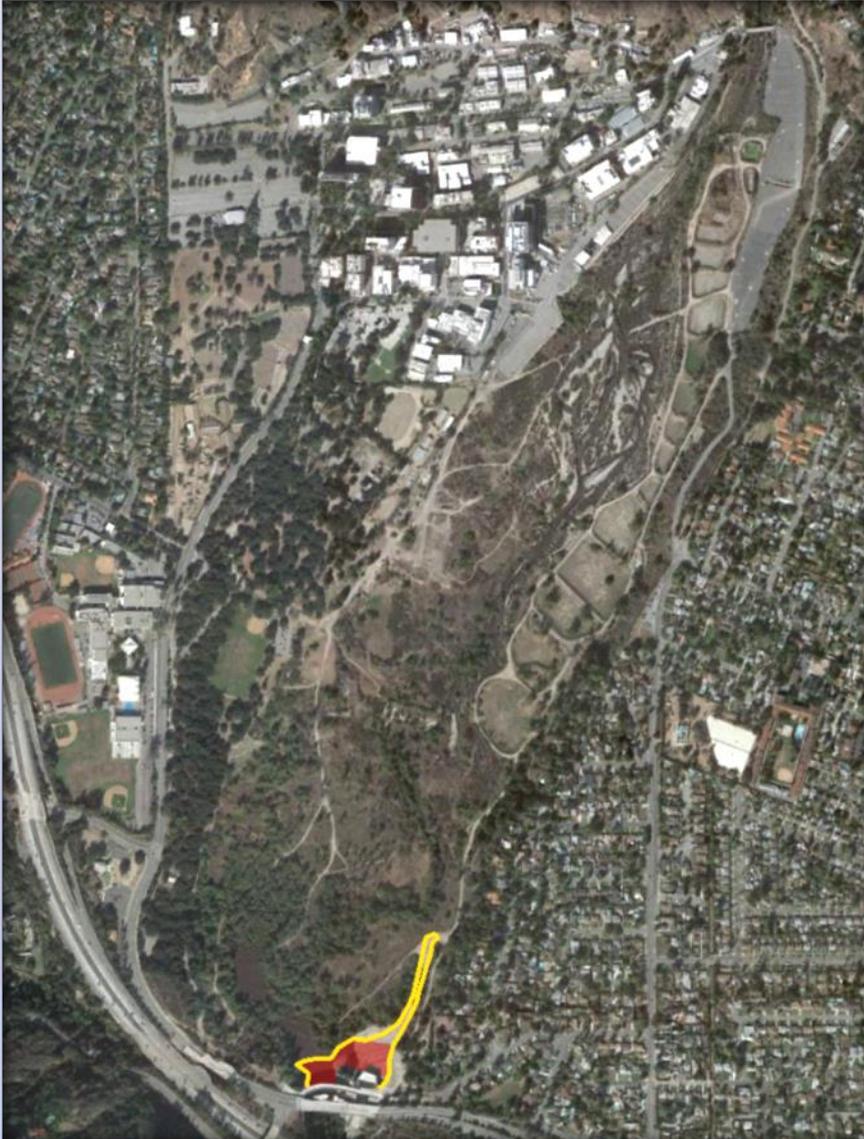
 Arroyo Seco Channel



Interim Measures Project (IMP)



IMP Impact Boundary

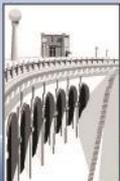
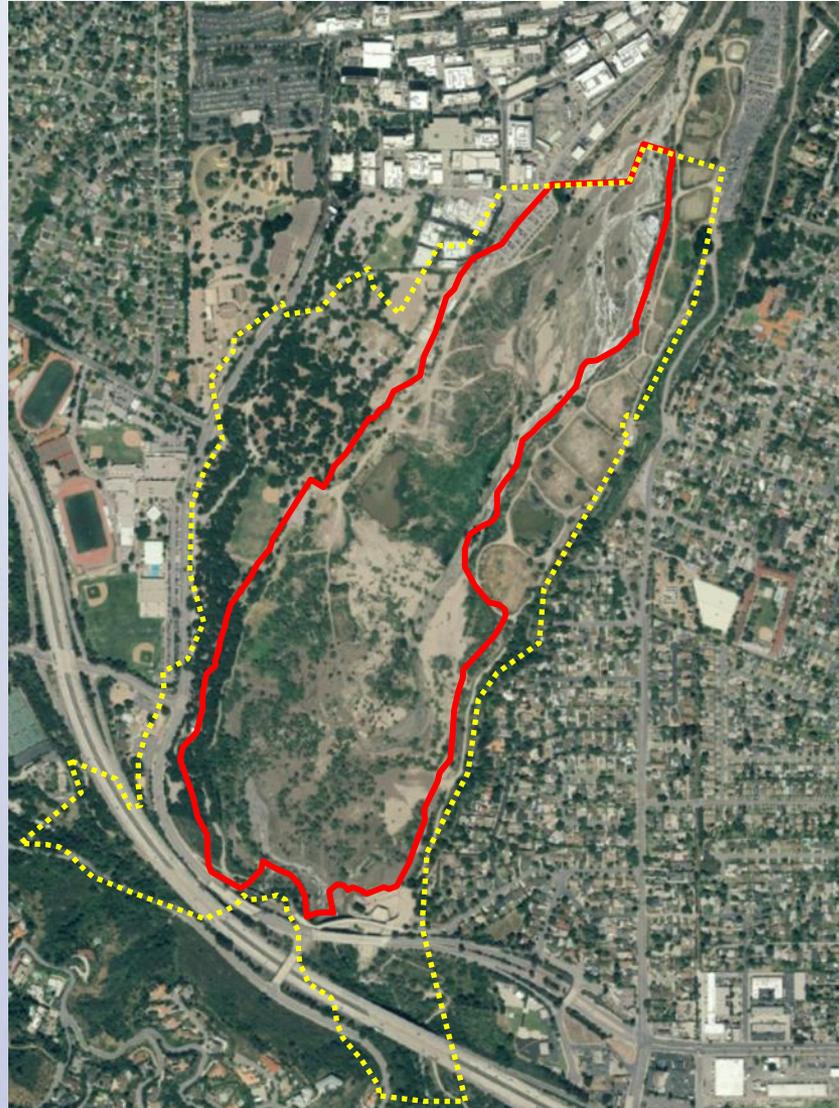


IMP Construction



Improvements to the Sluice Gate Trash Rack

Devil's Gate Reservoir Sediment Removal & Management Project



Proposed Project



Sediment Removal Quantity - 2,950,000 cy

Sediment Removal Area - 120.42 ac

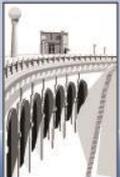
Future Maintenance Area - 120.42 ac



Potential Project Alternatives

Based on community input received during project scoping, several alternatives were developed which have less environmental impact.

- Alternative reservoir configurations with different areas of sediment removal and different areas where vegetation will reestablish.
- Sluicing alternative.
- Alternative traffic routes.



Project Alternatives



Alternative 3



HWP Master Plan Overlay



Alternative 5 - Sluicing



- Chang Consultants
 - Howard H. Chang, Ph.D., P.E.
 - San Diego State University
 - FLUVIAL-12, national standard for sediment modeling

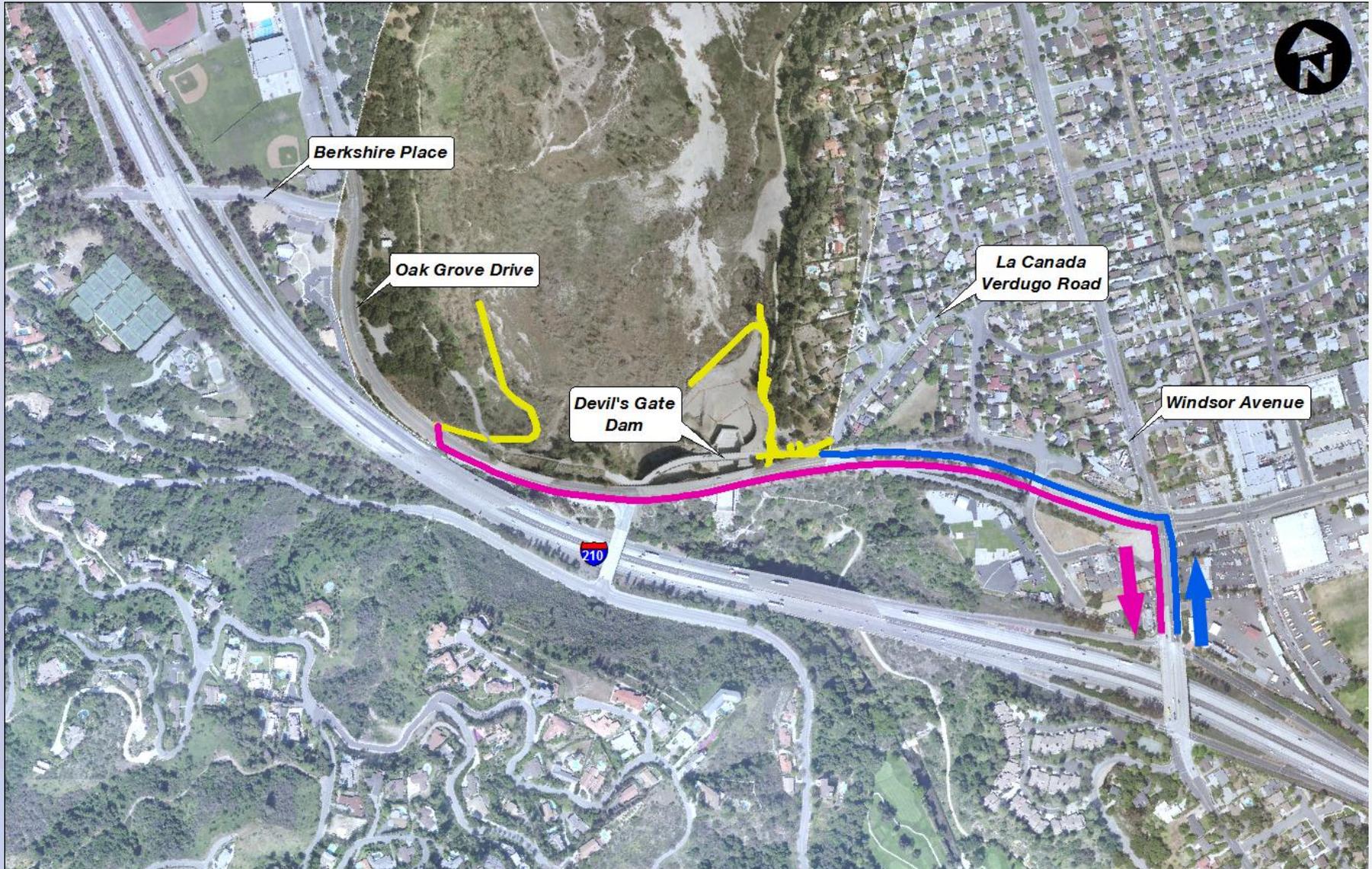
Existing Haul Routes



Proposed Haul Routes



Alternative Haul Routes





Draft Environmental Impact Report Issues Analyzed

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology & Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology & Water Quality
- Land Use & Planning
- Mineral Resources
- Noise & Vibration
- Recreation & Public Services
- Transportation & Traffic
- Utilities & Service Systems

Green = Less than Significant

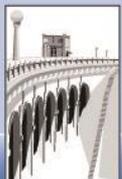
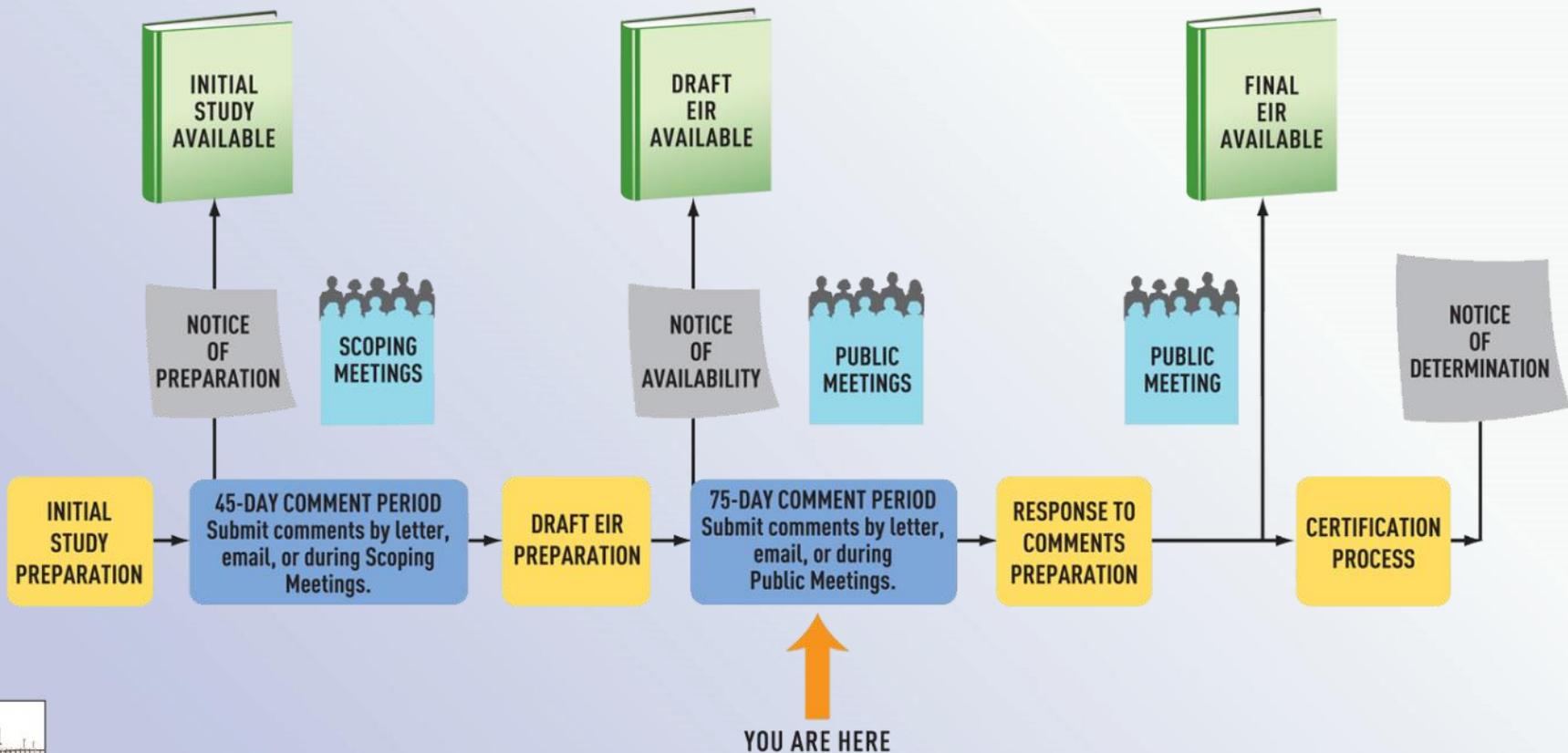
Blue = Less than Significant with Mitigation

Orange = Significant and Unavoidable





Environmental Impact Report Process





Submit Written Comments

PUBLIC MEETINGS

Wednesday, November 6, 2013, 6:00 - 8:00 p.m.

Rose Bowl Stadium, Visitor's Locker Room,

Thursday, November 14, 2013, 6:30 - 8:30 p.m.

Jackson Elementary School Auditorium

Saturday, November 16 2013, 2:00 - 4:00 p.m.

Community Center of La Cañada Flintridge

Comment Period

Wednesday, October 23, 2013 to

Monday, January 6, 2014

EMAIL

reservoircleanouts@dpw.lacounty.gov

Include "Devil's Gate Reservoir Sediment Removal and Management Project" in the subject title.

WRITTEN

Los Angeles County Department of Public Works

Attn: Water Resources Division - Reservoir Cleanouts

P.O. Box 1460, Alhambra, CA 91802-9974

