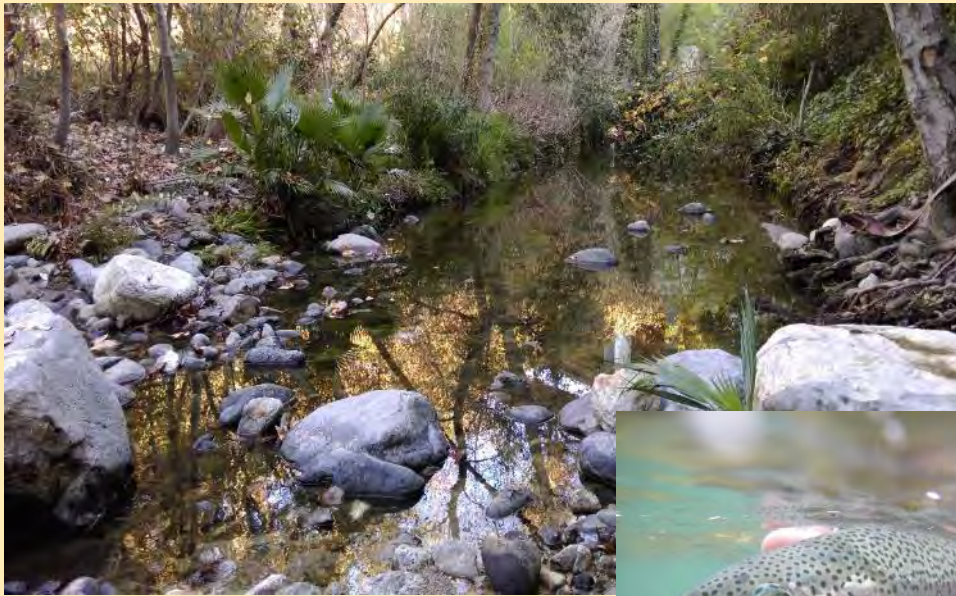


## Session: Restoring Riparian Landscapes in Urbanized Watersheds of Southern California





# Restoration Actions in the Los Angeles River and Upper Tributaries Through the Looking-Glass

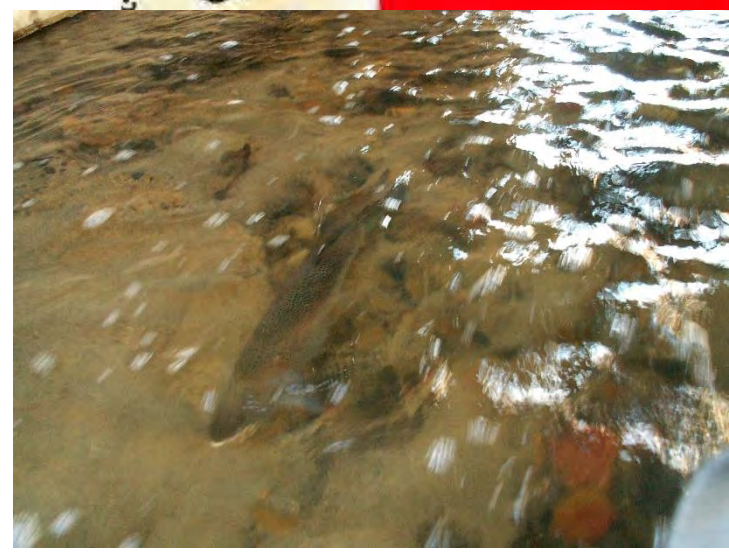
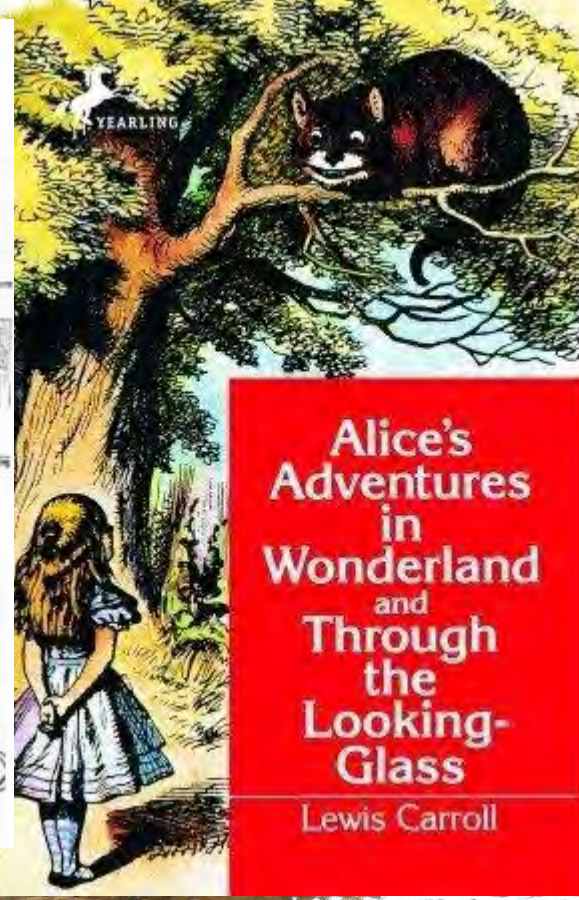


Wendy Katagi  
Senior Manager Watershed &  
Ecosystem Restoration Services  
October 19, 2017



STILLWATER SCIENCES  
Los Angeles  
Riparian Summit  
UC Davis







**Eric  
Garcetti**  
#lamayor



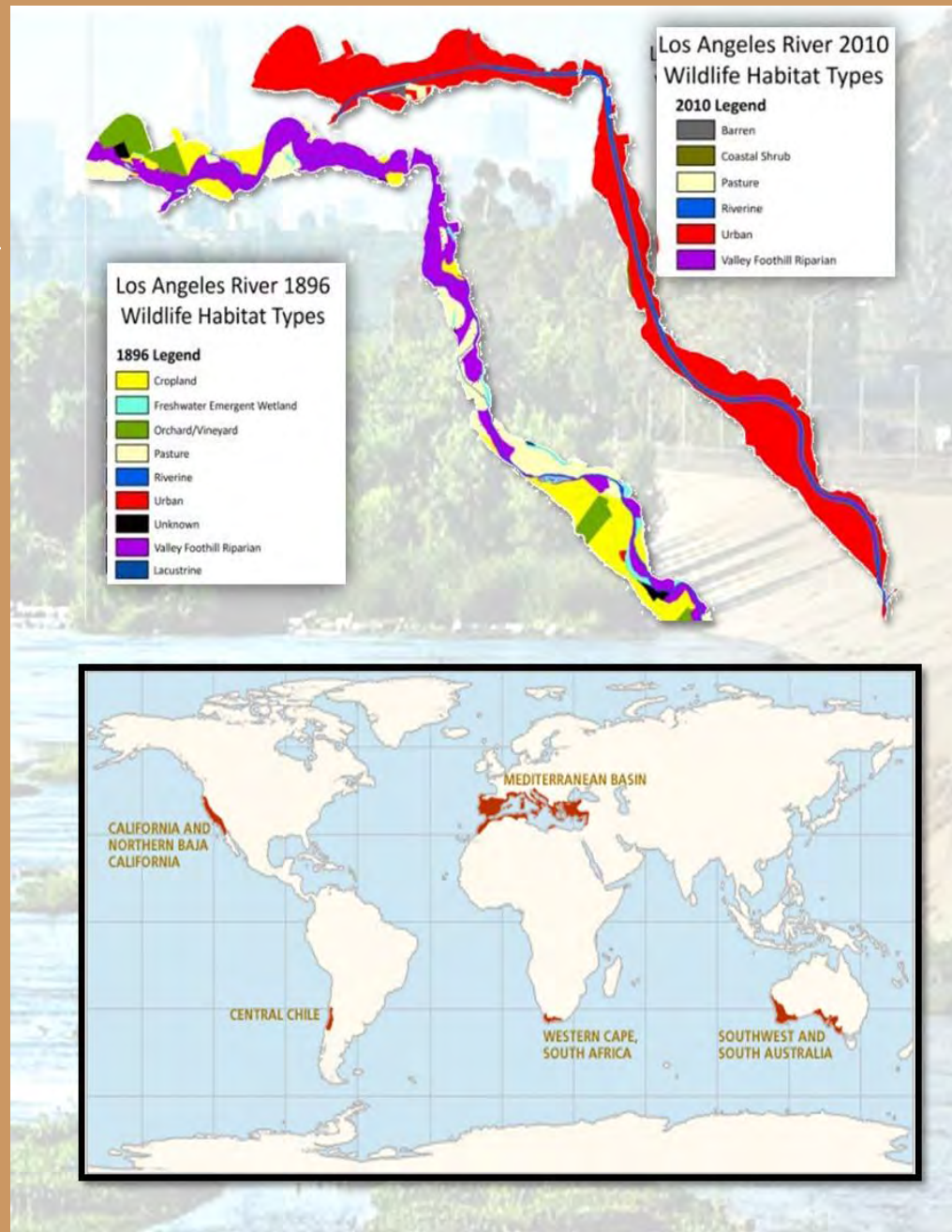
**LOS ANGELES RIVER REVITALIZATION**

# River Action DEVELOPMENT

Move at  
All Scales  
Simultaneously

2

percent of the globe's  
surface that is covered by  
Mediterranean-type  
ecosystems



1.4

billion dollars = authorized  
project of the 11-mile  
USACE LA River Ecosystem  
Restoration Project

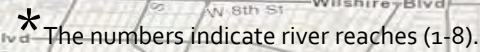


Pigg



**US Army Corps  
of Engineers.**  
Los Angeles District







Act  
Decisively

20+

Years the site has been  
wanted for a public park

42

Acres

~60

million dollar purchase price

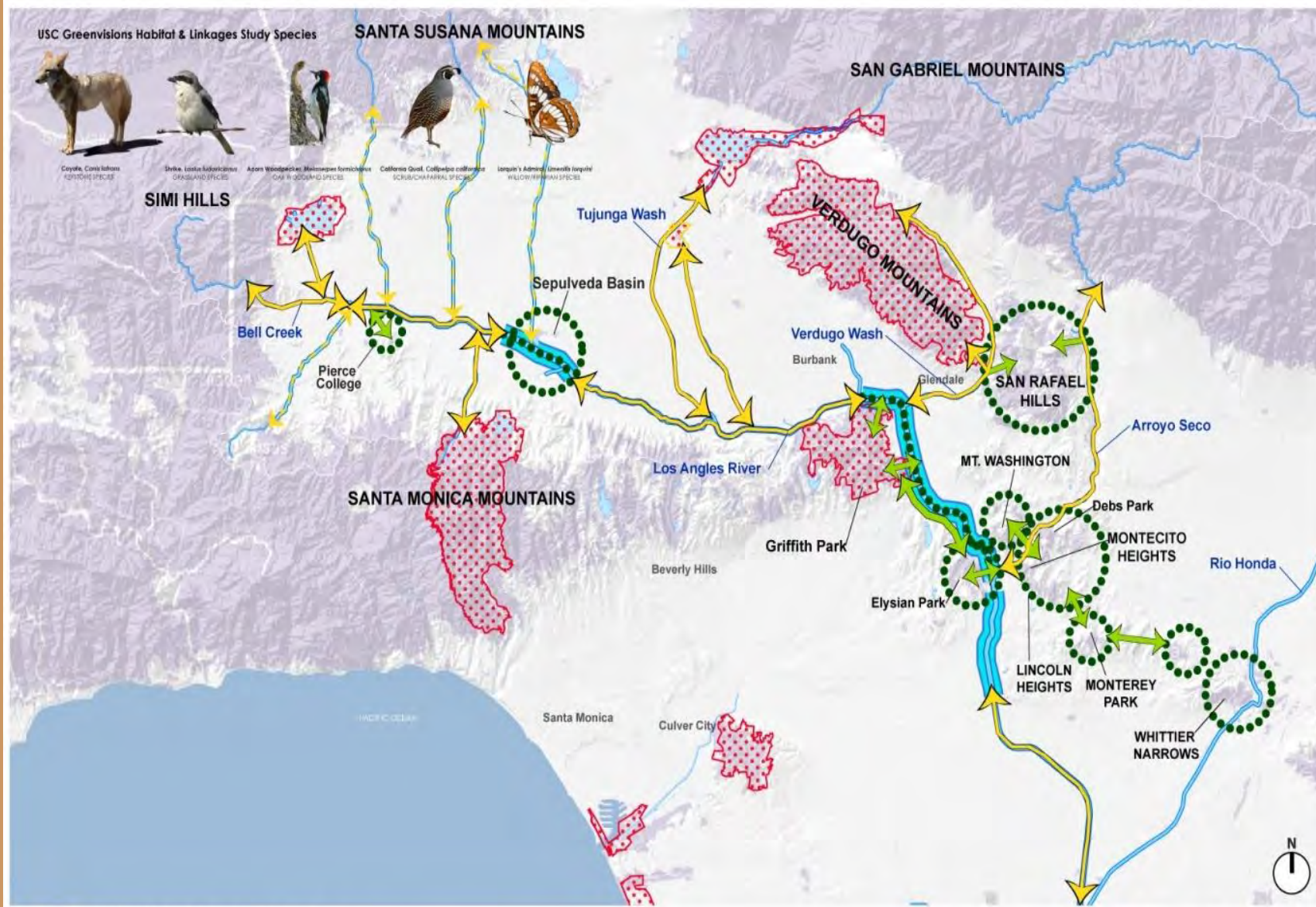
3.3.17

date the City celebrated the  
close of escrow on G2





# Connect Habitat



## HABITAT CONNECTIVITY GOALS

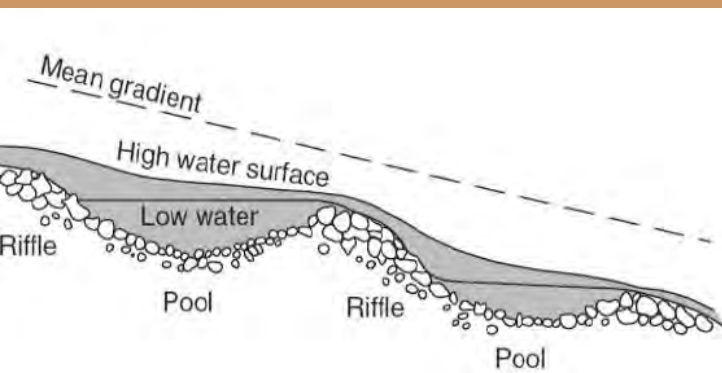
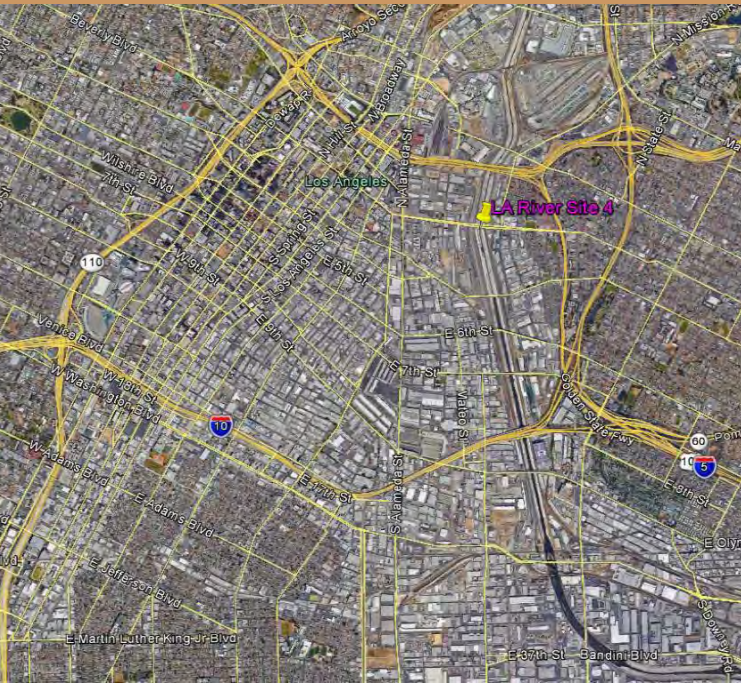
Los Angeles River Revitalization Master Plan / Plan de Revitalización del Río de Los Angeles  
07.13.06

0 0.5 1 2 3 4 5 Miles  
(0.25 Miles = ~3 City Blocks or ~20 Minute Walk)  
(0.25 Miles = ~3 manzanas de ciudad o ~ una caminata de 20 minutos)





# LA River Restoration Bureau of Reclamation



Future: The channel bottom with a restored riparian corridor with native plants.



# Ed. P Reyes Riverway





# North Atwater Park and Creek Restoration





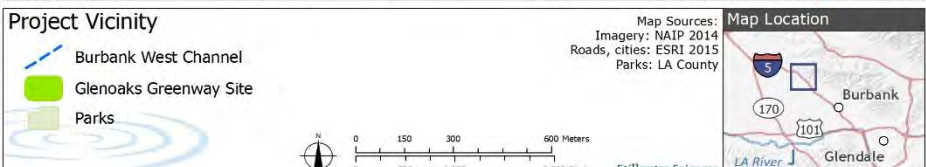
# Urban Orchard/Bandini Channel LA River City of South Gate – Trust for Public Lands





# Glenoaks Greenway

## Burbank Channel, Verdugo SEA





# Arroyo Seco Tributary to LA River

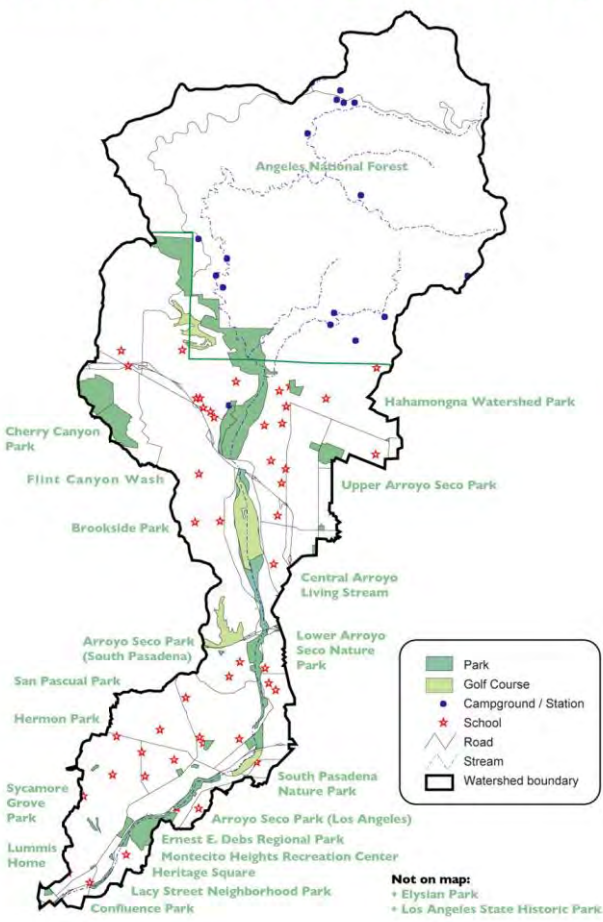


## Study Reaches



Color	Reach No.	Name	Jurisdictions
Pink	1	Hahamongna Basin	City of Pasadena
Red	2	Flint Canyon Wash	City of La Cañada Flintridge
Green	3	I-210 Near Oak Grove	City of Pasadena
Orange	4a	Brookside - North	City of Pasadena
Yellow	4b	Brookside - South	City of Pasadena
Blue	5a	Lower Arroyo Park - N	City of Pasadena
Light Blue	5b	Lower Arroyo Park - S	City of Pasadena
Yellow	6	South Pasadena	City of South Pasadena
Pink	7a	Arroyo Seco - North	City of Los Angeles
Light Pink	7b	Arroyo Seco - South	City of Los Angeles
Light Blue	8	Sycamore Grove Park	City of Los Angeles

## ARROYO RIVER PARKS





# Arroyo Seco

## Current Stream Habitat Conditions

### **SOUTH RESTORATION AREA – FALL 2016**

- South Restoration Area has generally good aquatic habitat conditions
- Native and non-native riparian vegetation
- Relatively cool summer water temperatures (2016 monitoring by RCDSMM)

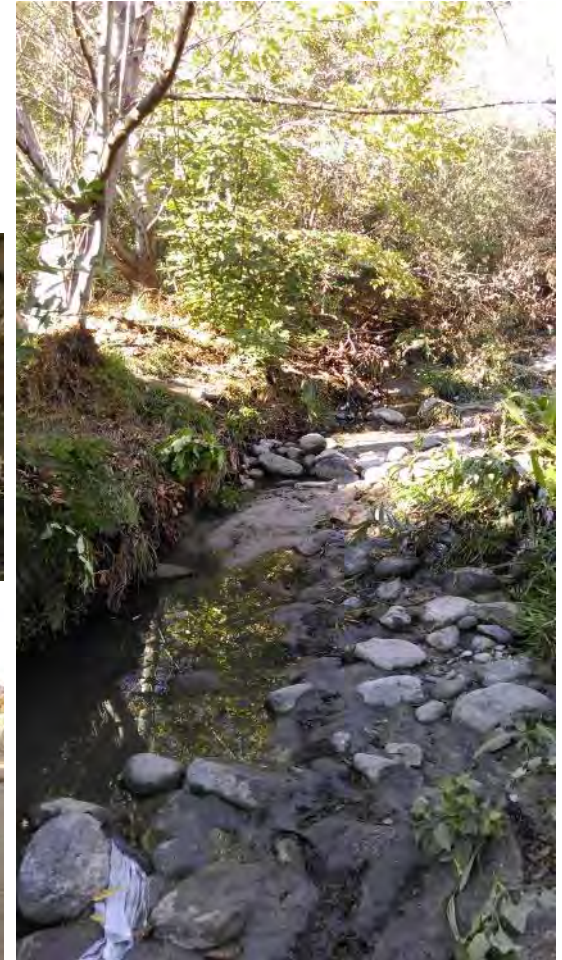




# Current Stream Habitat Conditions

## **SOUTH RESTORATION AREA – FALL 2016**

- Some evidence of fine sediment deposition
- Multiple barriers to fish movement





# Current Stream Habitat Conditions

## NORTH RESTORATION AREA – FALL 2016

- Intact riparian vegetation
- Lack of surface flow
- Substantial fine sediment deposition





# Current Stream Habitat Conditions

## NORTH RESTORATION AREA – FALL 2016

- Habitat simplification
- Barriers to fish movement





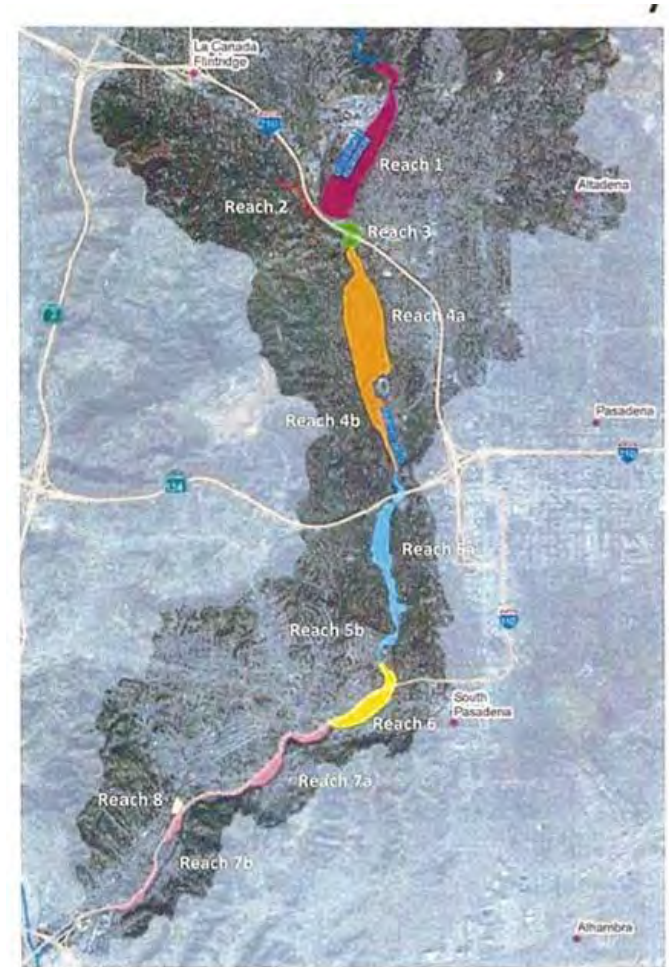
# Arroyo Seco Recommendations

## LIKELY LIMITING FACTORS

- Channelized concrete streambed
- Fish barriers and impediments
- Fine sediment
- Instream flow

## RECOMMENDED ACTIONS

- Restore channelized concrete reaches
- Remove or modify fish barriers
- Watershed-wide sediment management plan
- Fish surveys
- Targeted reintroductions of native fish



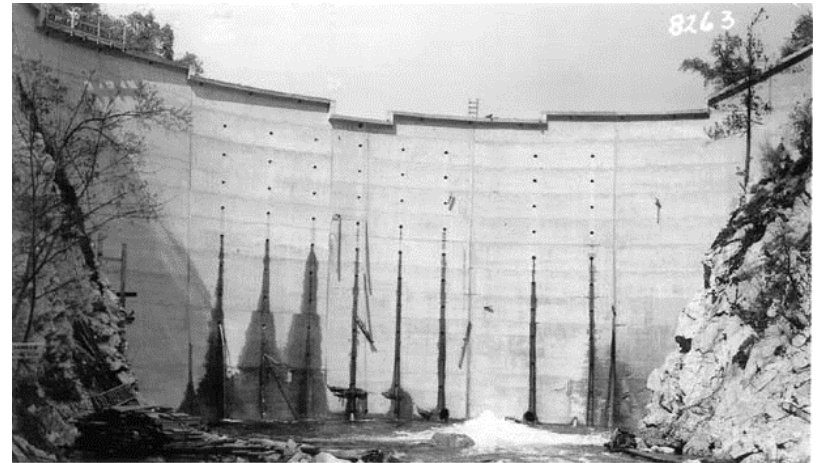
USACE proposed restoration reaches



# Looking Upstream...

## HAHAMONGNA AND THE UPPER WATERSHED

- Station Fire impacts
- Sediment removal/management
- Brown Mountain Dam





# Looking Upstream...

## HAHAMONGNA AND THE UPPER WATERSHED

- Current conditions – suitable for native fish?
- Stream habitat surveys
- Fish population surveys
- Identify priority areas for restoration & reintroduction





# Special Thanks

- Office of Mayor Eric Garcetti
- Michael Affeldt, LARiverWorks Director
- Carol Armstrong, LA Mayor's Office
- Ed Demesa and Dan Sulzer, USACE, LA District
- Tim Brick, Arroyo Seco Foundation
- Nathan Holste, Bureau of Reclamation
- Council for Watershed Health