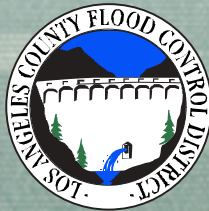
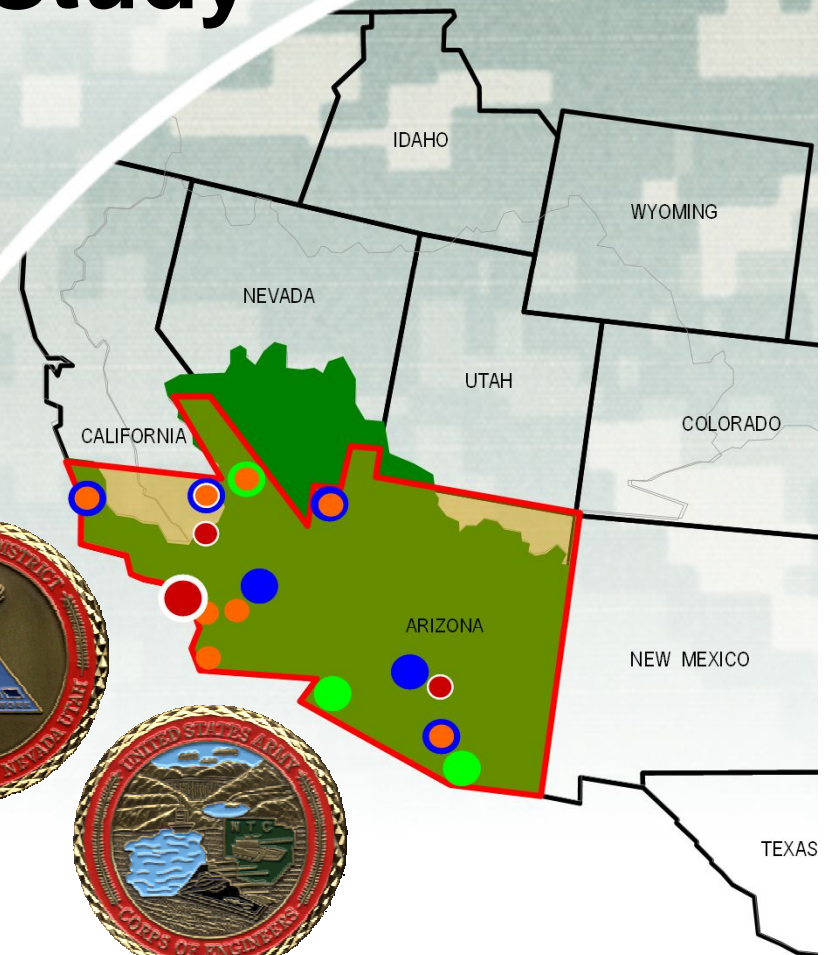


Arroyo Seco Ecosystem Restoration Integrated Feasibility Study



US Army Corps of Engineers
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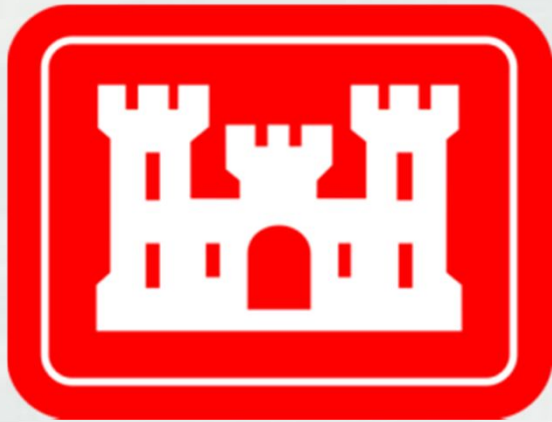
Meeting Objectives

- Study Overview
 - Background
 - Civil Works/SMART Planning Process
 - Schedule
 - Preliminary Study Objectives
 - Measures and Alternatives
- CEQA Overview

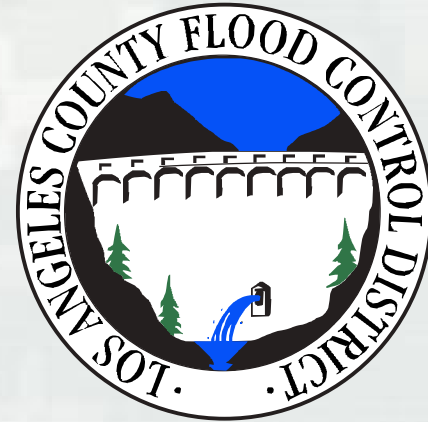


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Federal – Local Partnership



U.S. Army Corps of Engineers
Lead Agency



Los Angeles County
Flood Control District
Lead Local Sponsor



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Local Partnerships

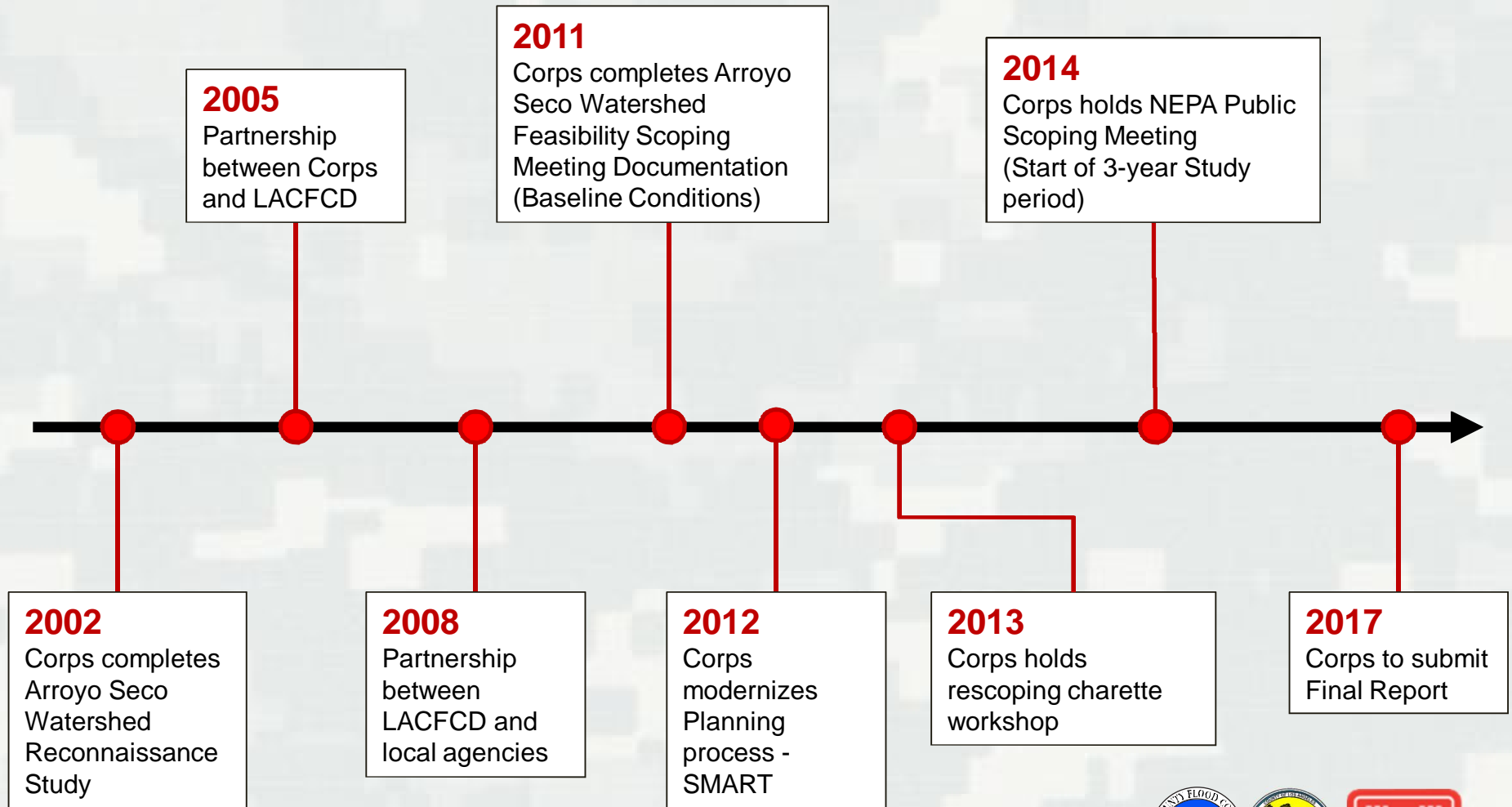


Council of Arroyo
Seco Agencies



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Study Timeline

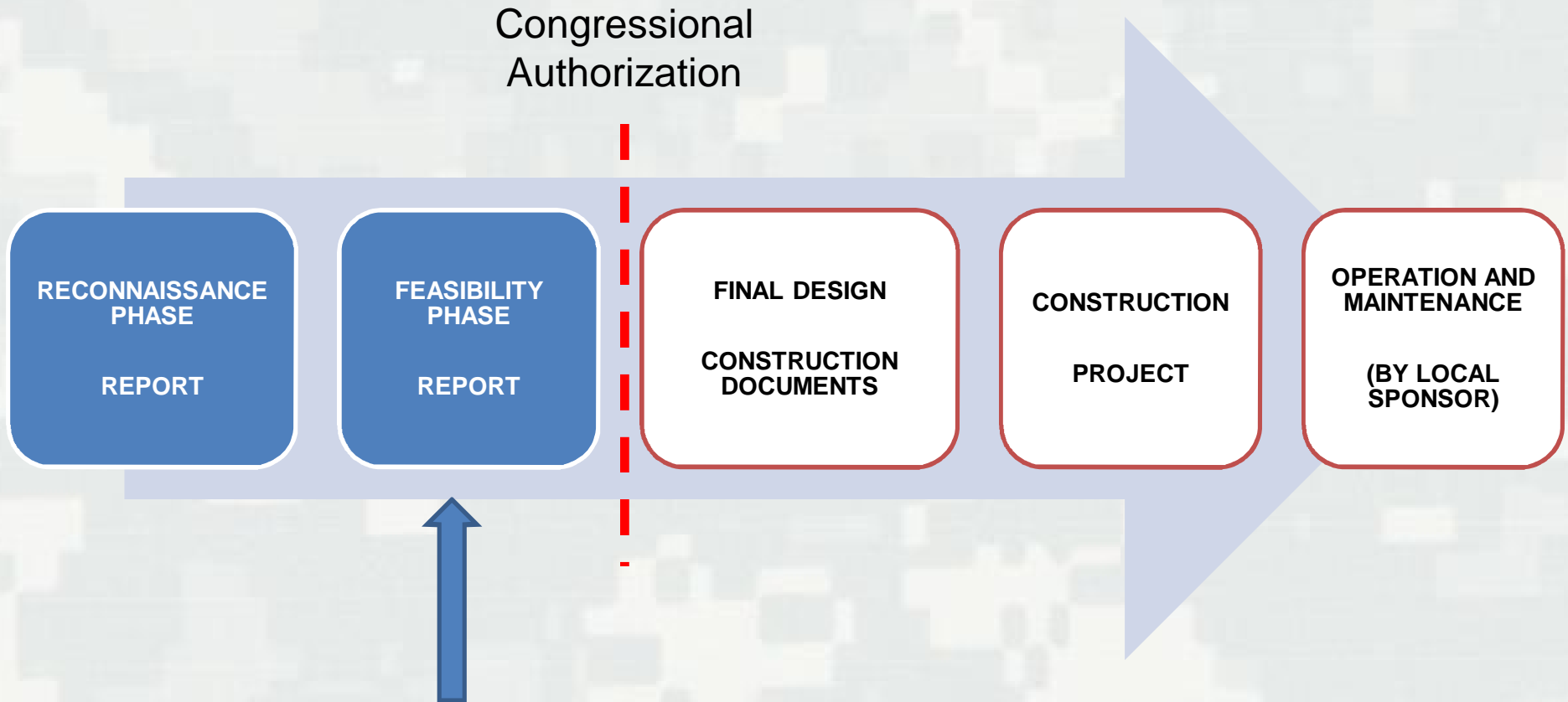


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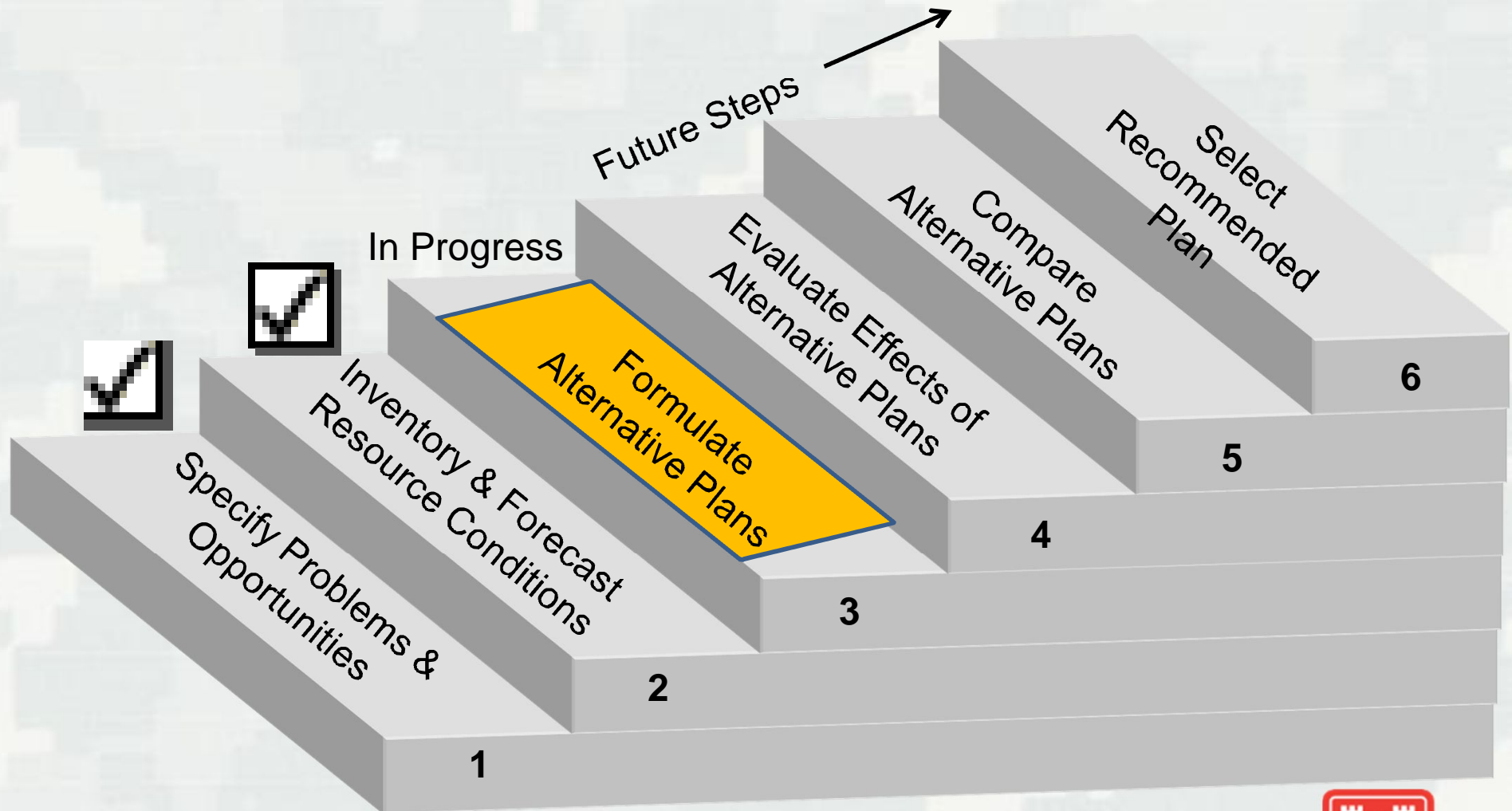
ARROYO SECO ECOSYSTEM RESTORATION FEASIBILITY STUDY

Civil Works Process



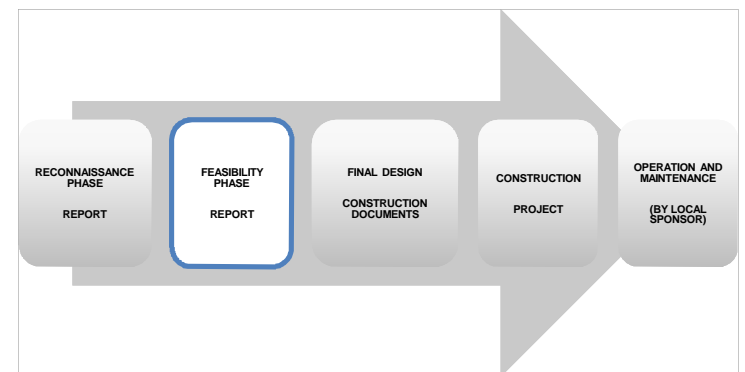
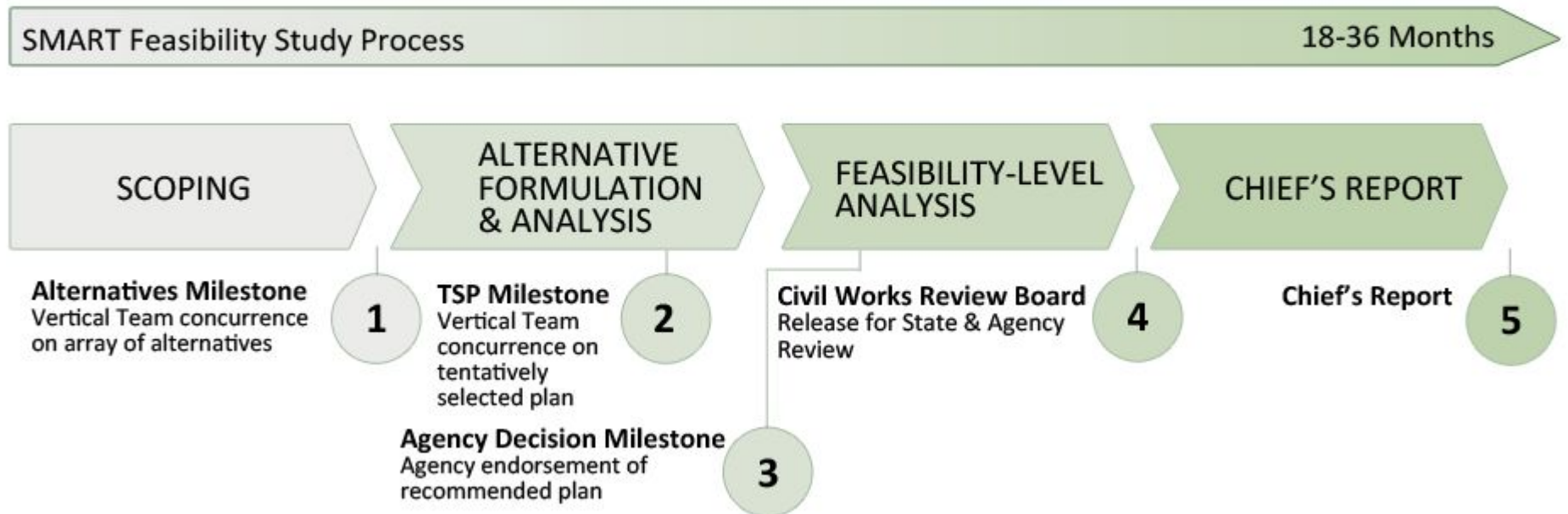
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Six Step Planning Process



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SMART Process



Study Schedule

Milestones	Date
Charette	November 2013
Review Plan approved	August 2014
Alternative Milestone	May 2015
Tentatively Selected Plan	March 2016
Agency Decision Milestone	September 2016
Submit Final Report	March 2017
CWRB	May 2017
Signed Chief's Report	June 2017
Termination Date	August 2017



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Integrated Feasibility Study Report

- Decision document
- Includes
 - Recommended action
 - Cost estimate for action
 - NEPA and CEQA document
- Leads to request for Congressional authorization for funding towards design and construction



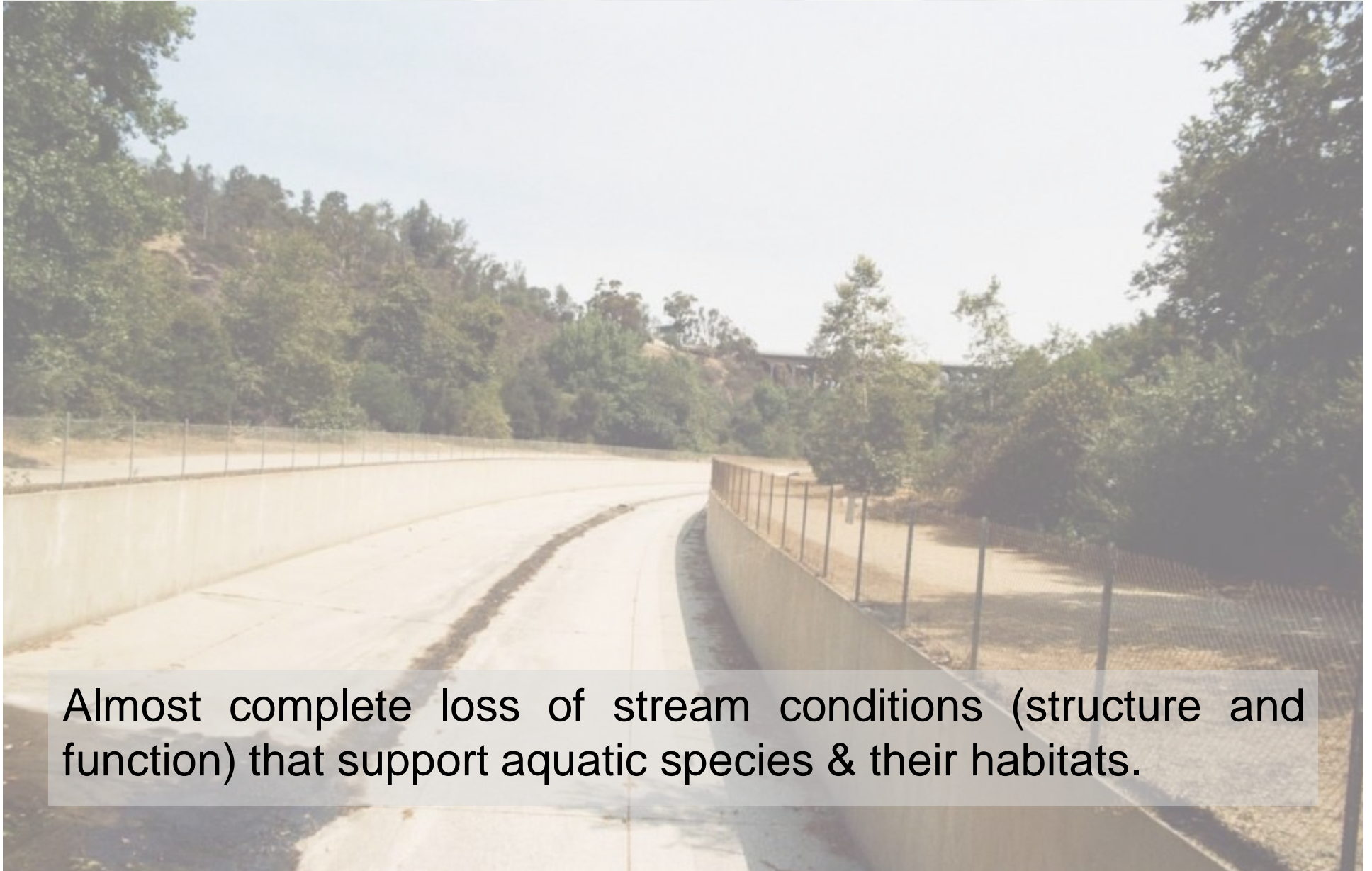
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Ecosystem Restoration Fundamentals



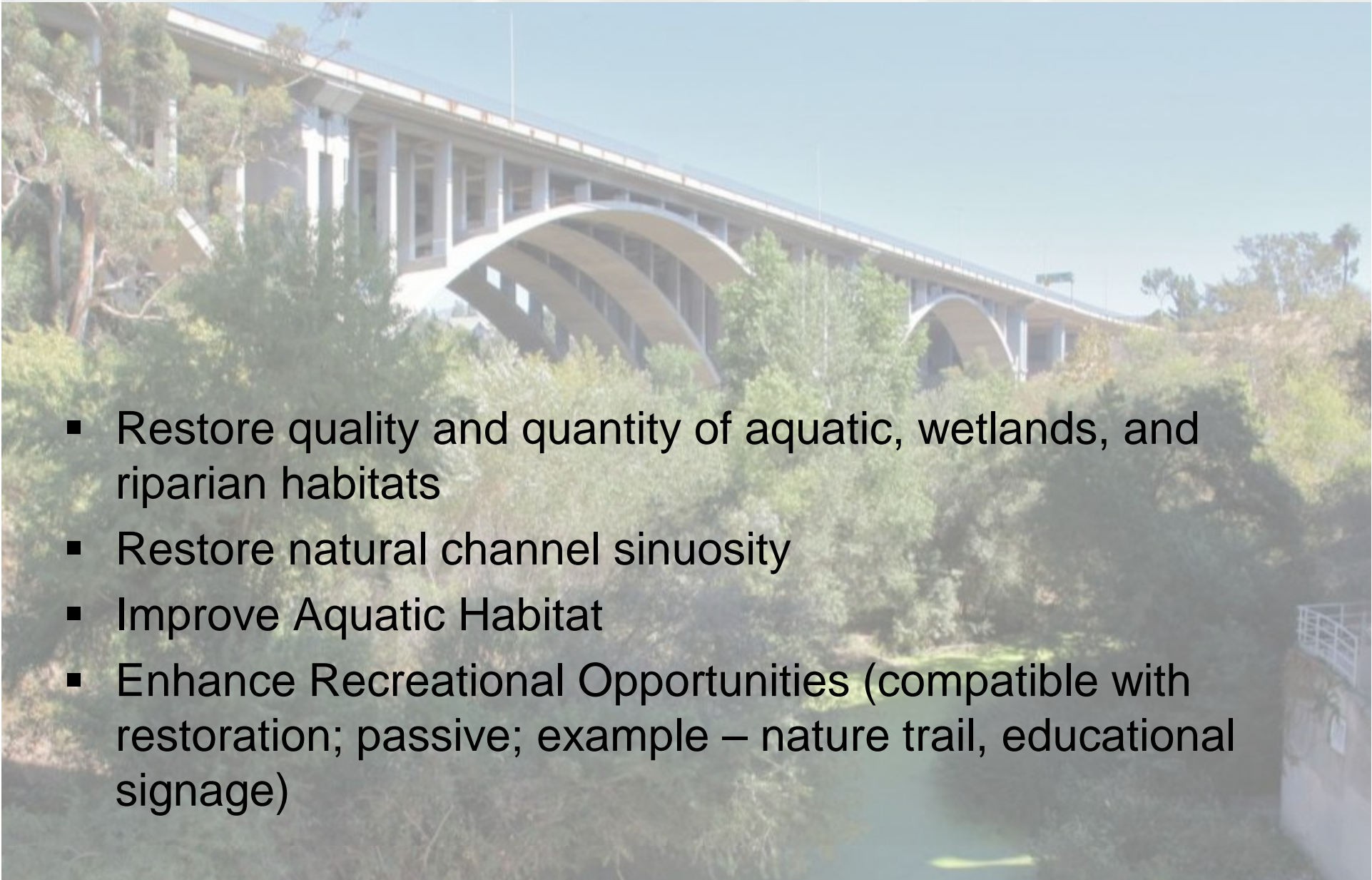
Those restoration opportunities that are associated with **wetlands, riparian** and other **floodplain and aquatic systems** are most appropriate for Corps involvement.

Identified Problem



Almost complete loss of stream conditions (structure and function) that support aquatic species & their habitats.

Planning Objective and Study Goals

- 
- Restore quality and quantity of aquatic, wetlands, and riparian habitats
 - Restore natural channel sinuosity
 - Improve Aquatic Habitat
 - Enhance Recreational Opportunities (compatible with restoration; passive; example – nature trail, educational signage)

Planning Constraints and Considerations

- Maintain flood risk management function/capability of existing Arroyo Seco system
- Maintain Devil's Gate Dam flood storage capacity
- Avoid Hazardous and Toxic Waste (HTW) site at Jet Propulsion Lab
- Minimize impacts to transportation infrastructure such as highways and bridges
- Minimize adverse impacts to nearby residences, especially historic and culturally significant districts and properties
- Minimize impacts to existing facilities and infrastructure such as Rose Bowl



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Habitat Evaluation

- CHAP evaluation – Combined Habitat Assessment Protocol
- Allows comparison of quality of existing habitat versus alternatives
- Assists in selection of the recommended plan



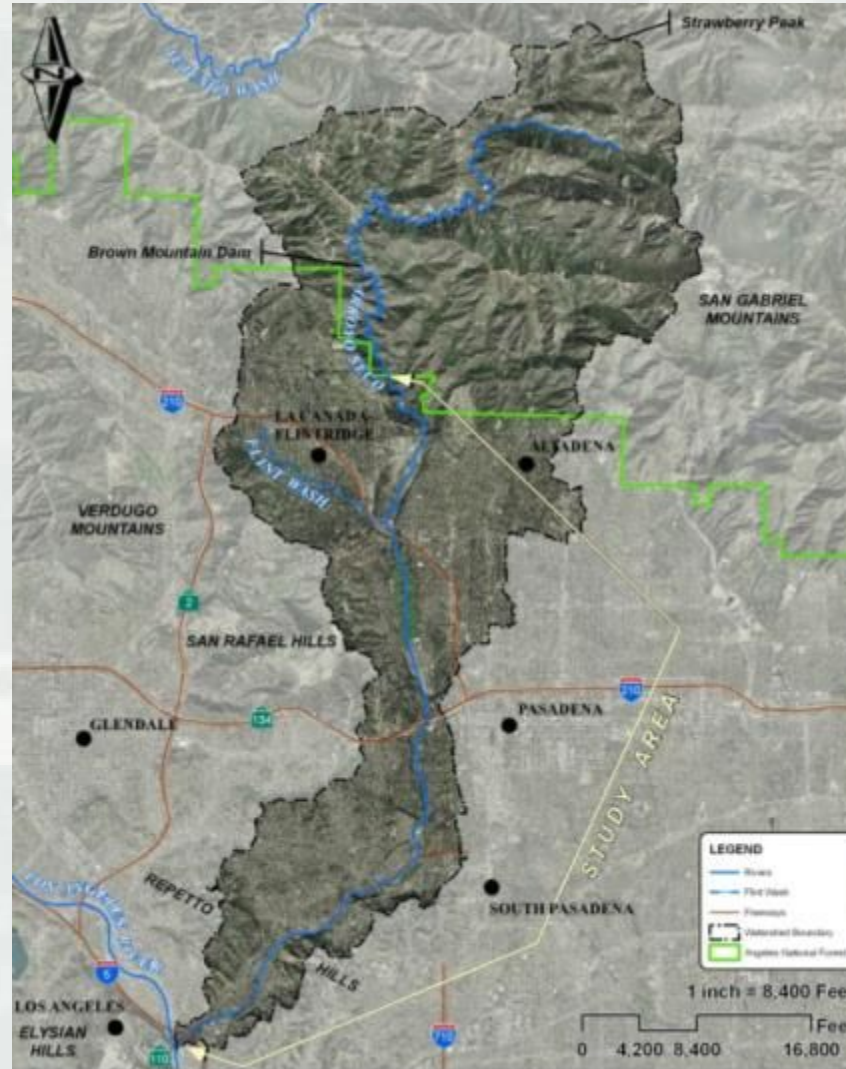
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Study Location



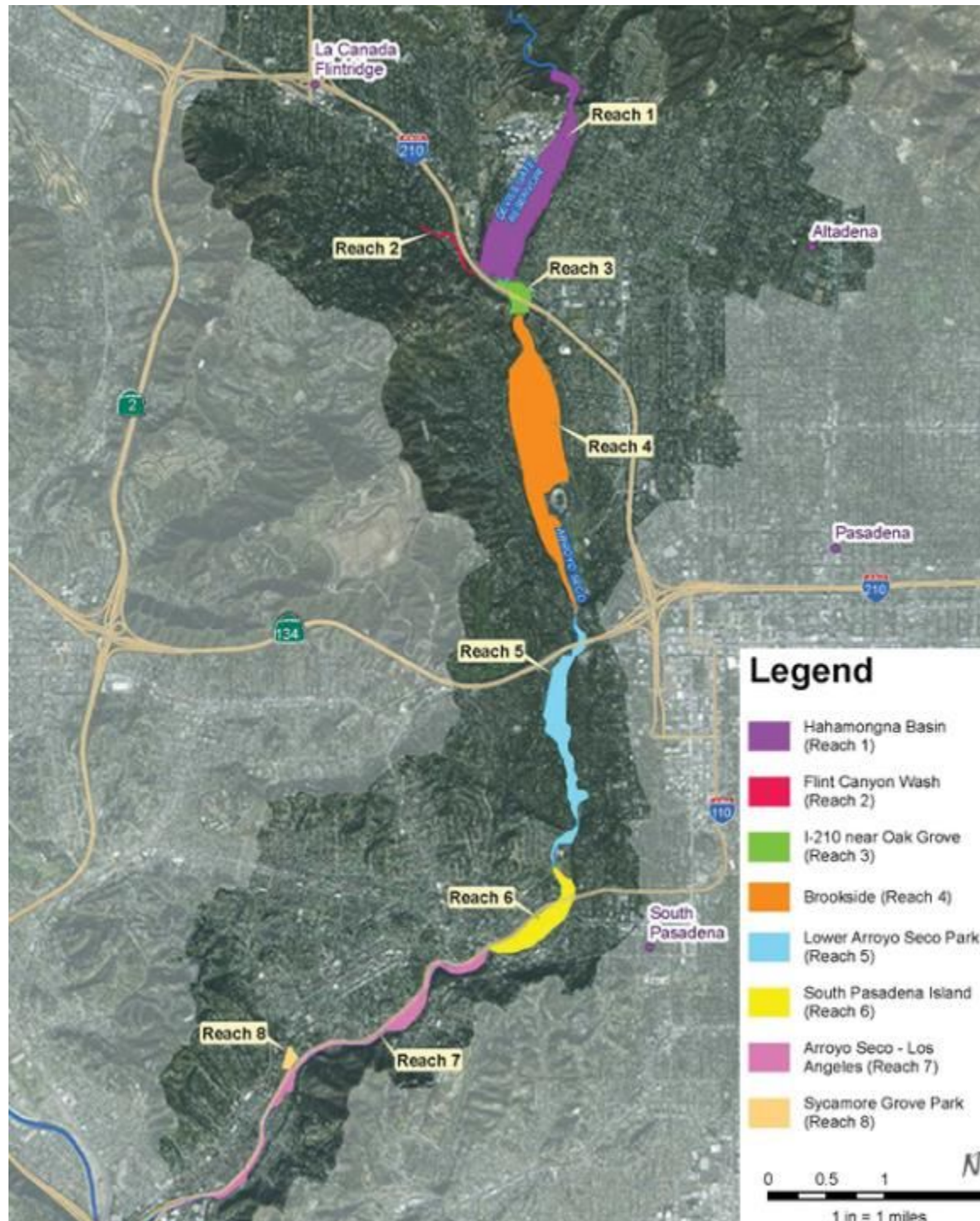
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Arroyo Seco Watershed

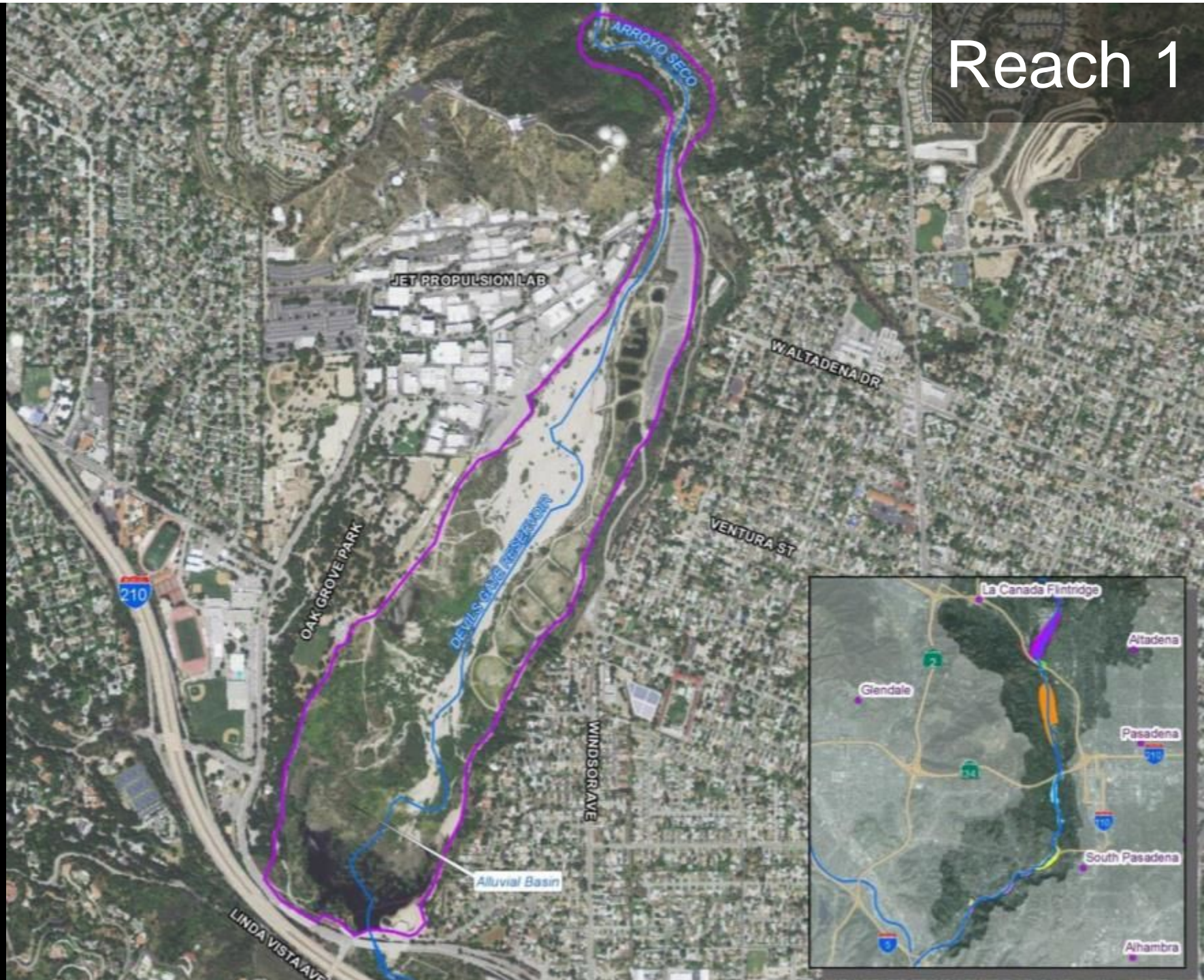


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Study Reaches



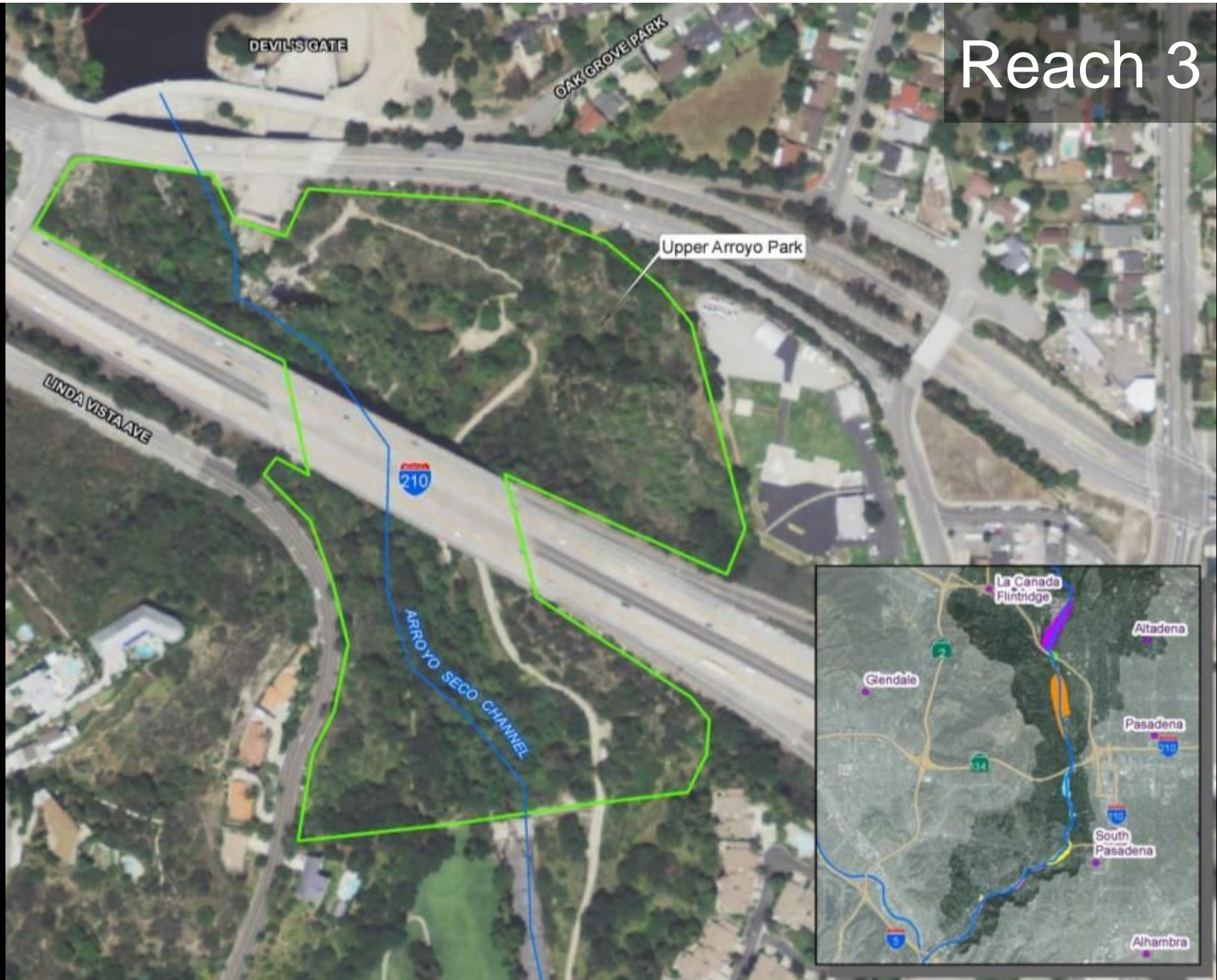
Reach 1



Reach 2



Reach 3



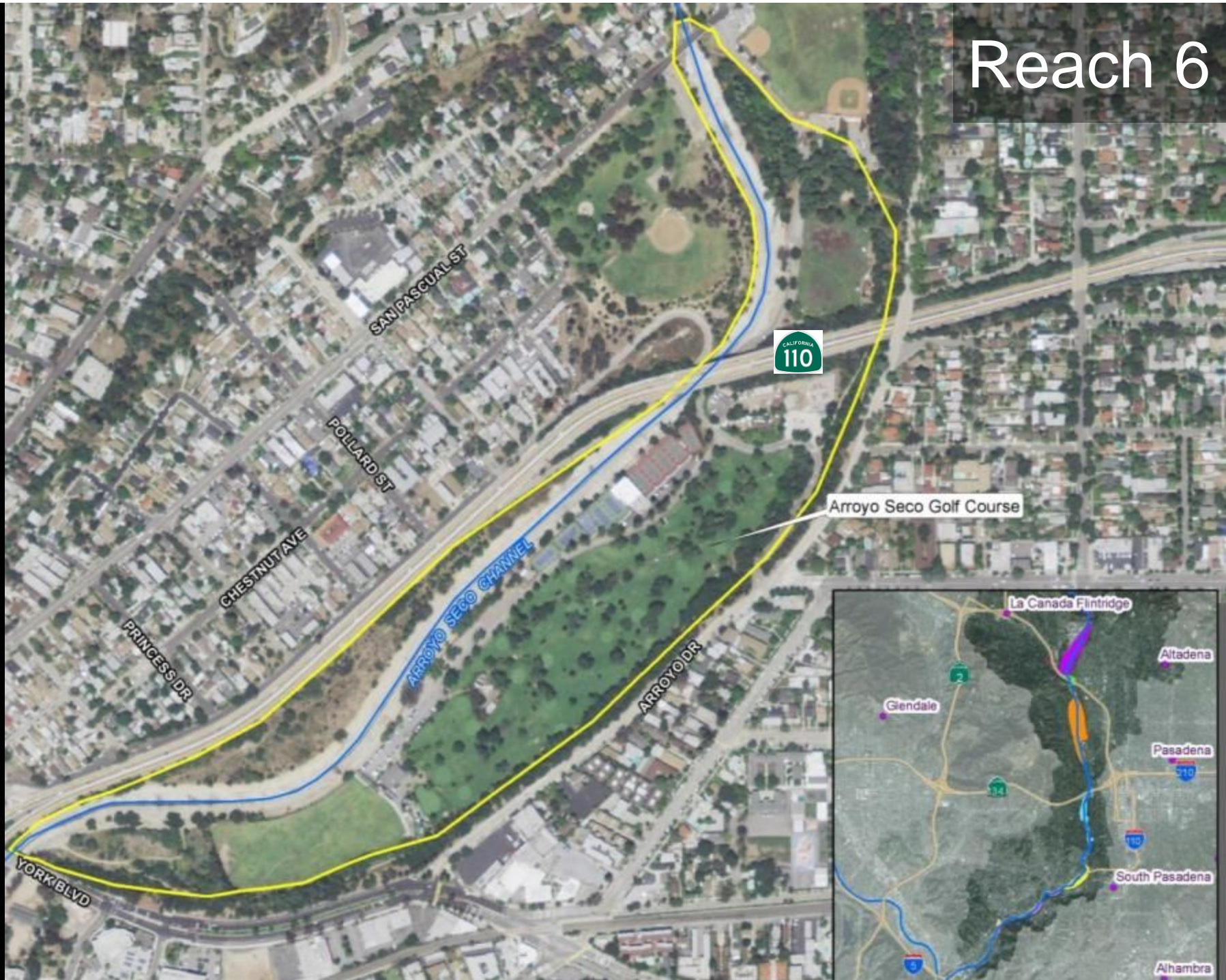
Reach 4



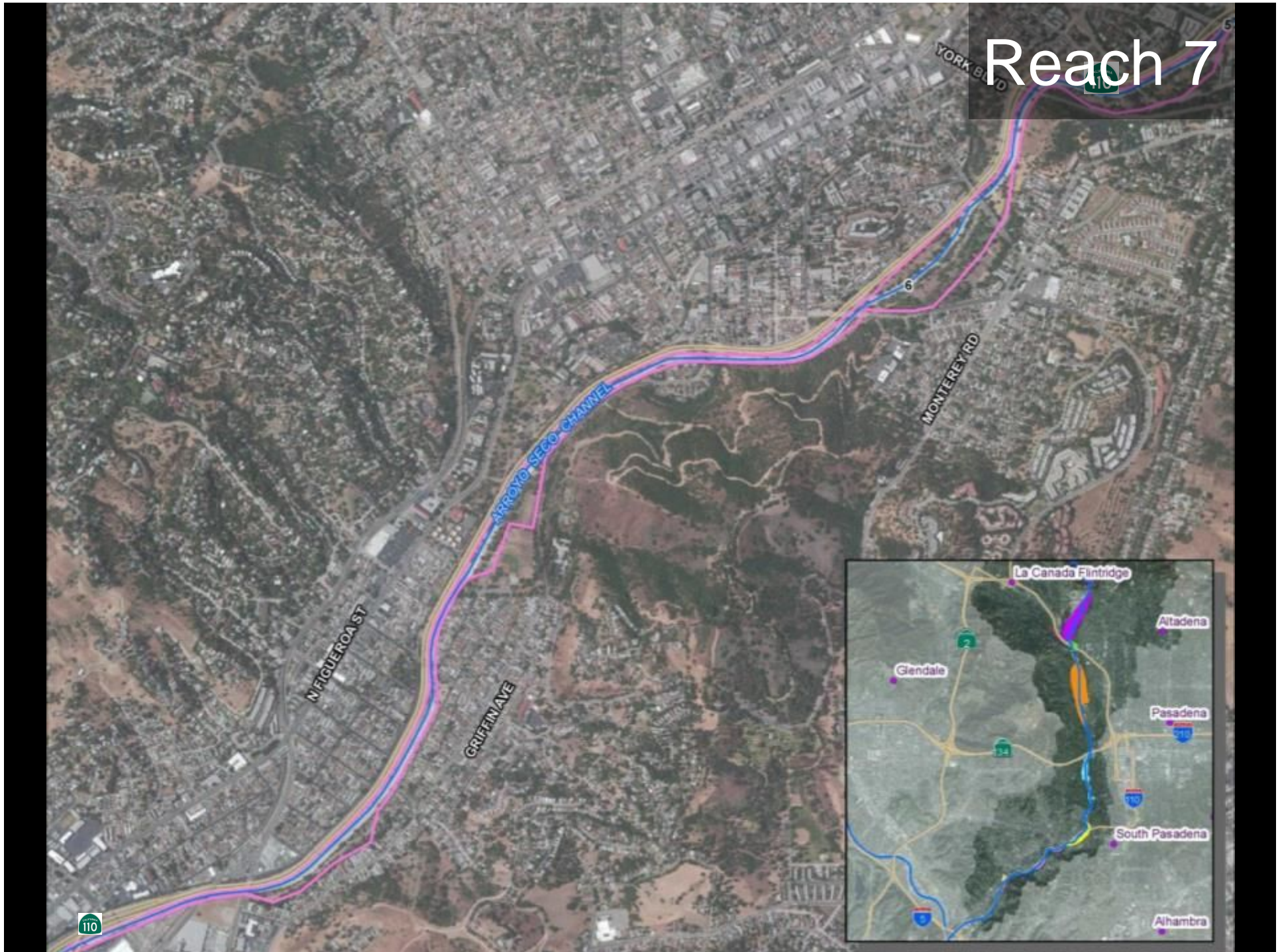
Reach 5



Reach 6



Reach 7

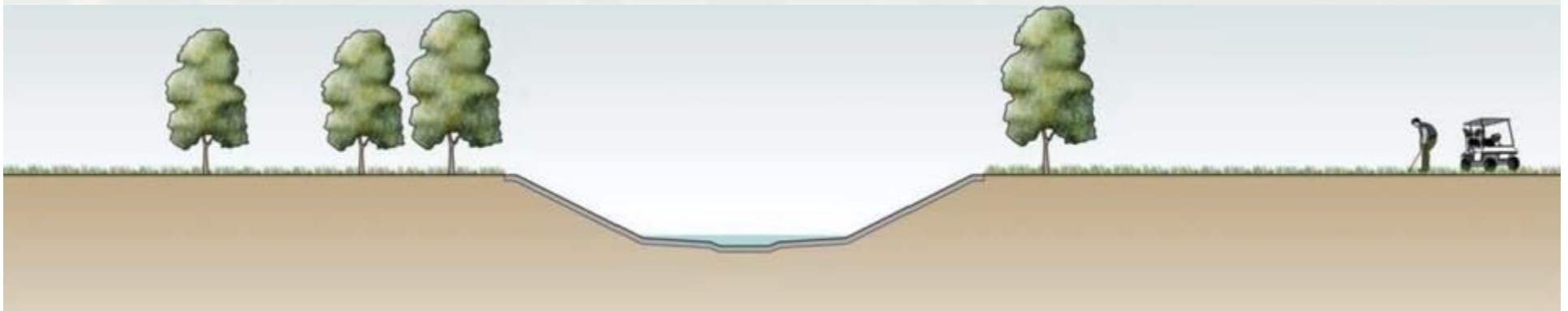


Reach 8



Focused Array of Alternatives (Under Evaluation)

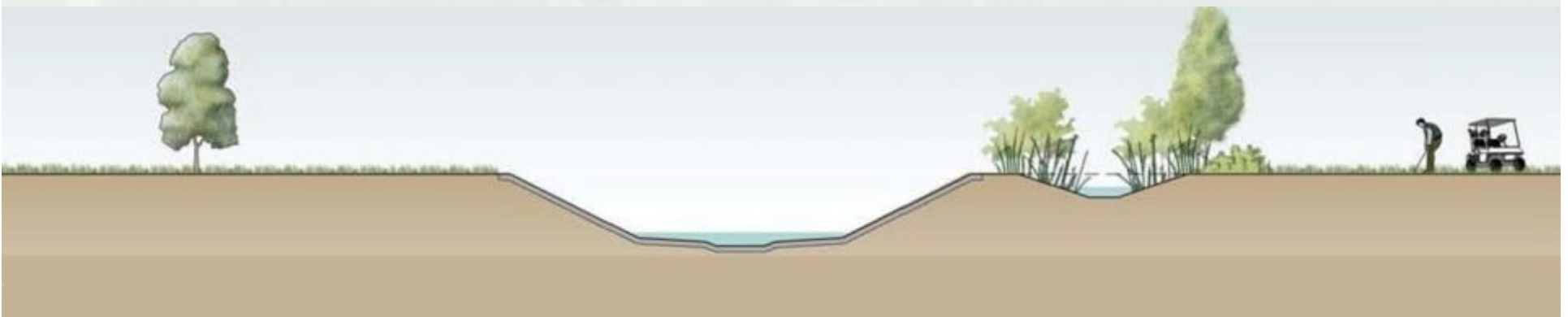
- *No Action:* Under this alternative, the Corps would take no action to restore any ecosystem functions or values within the Arroyo Seco study area.



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Focused Array of Alternatives (Under Evaluation)

- *Parallel Natural System: Low-Flow Channel*



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Focused Array of Alternatives (Under Evaluation)

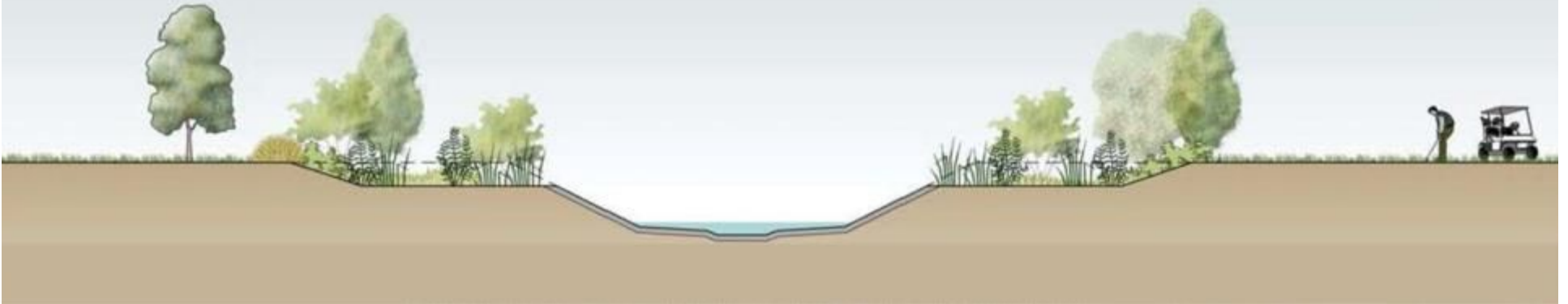
- *Parallel Natural System: RCB Culverts with low-flow channel*



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Focused Array of Alternatives (Under Evaluation)

- *Notched Side-Walls with low-flow channel*



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Focused Array of Alternatives (Under Evaluation)

- *Floodplain Benching*



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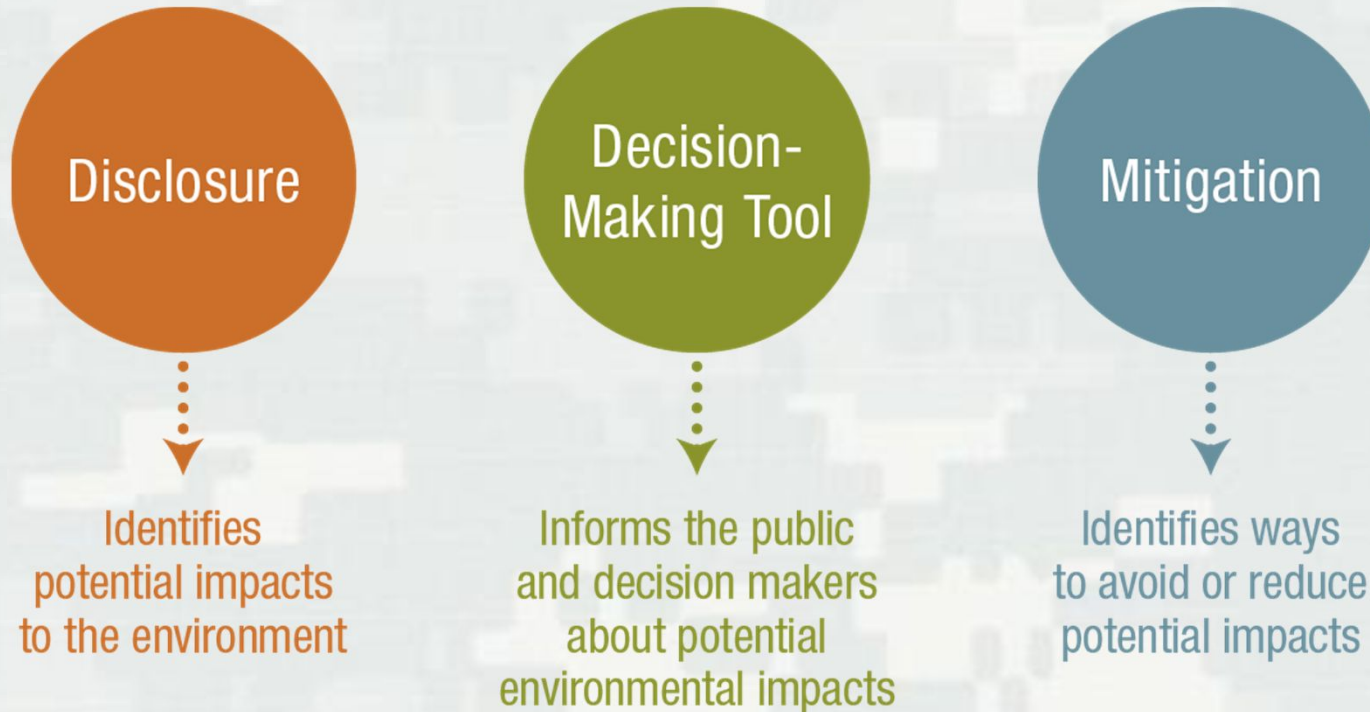
Focused Array of Alternatives (Under Evaluation)

- *Sheet-pile Bank Protection with Floodplain Benching*



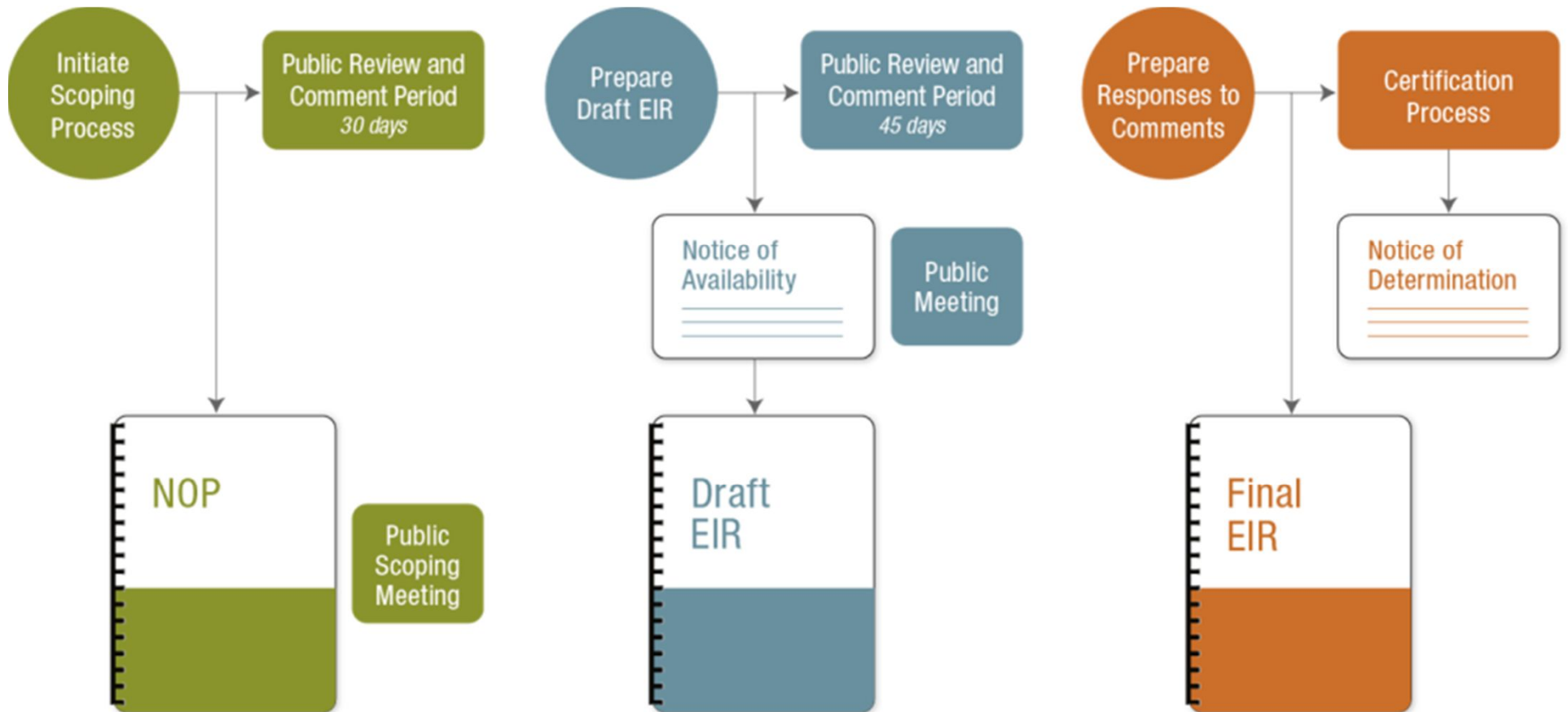
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California Environmental Quality Act (CEQA)



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CEQA Environmental Impact Report (EIR) Process



Public Participation

- Notice of Preparation (NOP) and scoping meeting
- Draft EIR
 - 45-day review and comment period
 - Public meeting



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Schedule

Milestones	Date
Charette	November 2013
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Schedule

Tentatively Selected Plan	March 2016
Draft Study/EIS/EIR Document <ul style="list-style-type: none">• 45 day Public Review Period• Public Meeting	June – July 2016
Agency Decision Milestone	September 2016



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Issues to be Analyzed

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology & Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Cumulative Impacts
- Hydrology & Water Quality
- Land Use & Planning
- Mineral Resources
- Noise
- Population & Housing
- Public Services
- Recreation
- Traffic & Transportation
- Utilities & Service Systems
- Mandatory Findings of Significance



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Public Participation NOP and Scoping Meeting

- NOP can be downloaded here: goo.gl/XEhAKp
- Fill out comment response forms
- Limit oral comments to three minutes



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Public Participation Written Comments

County of Los Angeles Department of Public Works
Watershed Management Division, 11th Floor
Attention: Mr. Patrick Goodfellow
900 South Fremont Avenue
Alhambra, CA 91803

or by email to: pgoodfellow@dpw.lacounty.gov

Submit comments by May 23, 2015



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Questions

For more information on the Study:

U.S. Army Corps of Engineers	Los Angeles County Flood Control District
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