

Los Angeles County Flood Control District, United States Army Corps of Engineers, and other Study partners

Invite you to attend the

ARROYO SECO ECOSYSTEM RESTORATION FEASIBILITY STUDY WORKSHOP

The Study proposes to identify opportunities for ecosystem restoration along 10 miles of the Arroyo Seco. The purpose of the meeting is to share the draft preliminary ecosystem restoration plans with the public and solicit feedback towards selecting the tentative National Ecosystem Restoration Plan.

Tuesday, November 15, 2016 at 6:30 pm — 8:30 pm
Pasadena Corporate Yards
Conference Room (2nd Floor)
233 W. Mountain St., Pasadena, CA 91103



How to Be an Effective Advocate for Ecosystem Restoration

Basic information and principles



HOME > MISSIONS > ENVIRONMENTAL

Environmental Program

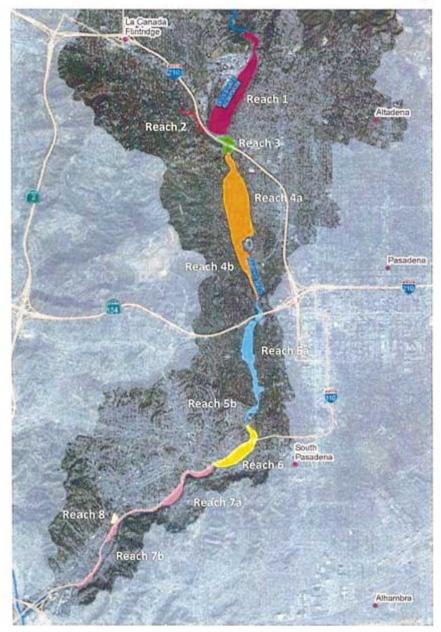


As the nation's environmental engineer, the U.S. Army Corps of Engineers manages one of the largest federal environmental missions: restoring degraded ecosystems; constructing sustainable facilities; regulating waterways; managing natural resources; and, cleaning up contaminated sites from past military activities.

The Corps' Arroyo Seco study began in 2001 and has been ongoing since then. The program has provided a thorough, scientific evaluation of issues and opportunities in the Arroyo Seco Watershed.

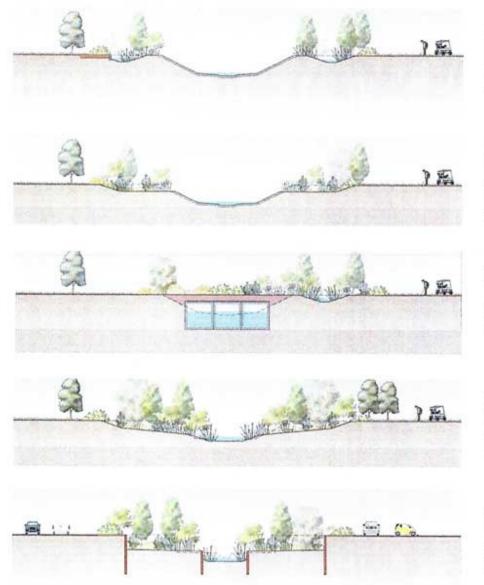
Now the Corps is preparing their Tentatively Selected Plan for ecosystem restoration in the Arroyo Seco. They have compiled a list of alternatives that are aimed at restoring ecosystem function and restoration of a more natural Arroyo Seco.

Study Reaches



Color	Reach No.	Name	Jurisdictions				
	1	Hahamongna Basin	City of Pasadena				
	2	Flint Canyon Wash	City of La Cañada Flintridge				
	3	I-210 Near Oak Grove	City of Pasadena				
13 8	4a	Brookside - North	City of Pasadena				
	4b	Brookside - South	City of Pasadena				
	5a '	Lower Arroyo Park - N	City of Pasadena				
	5b *	Lower Arroyo Park - S	City of Pasadena				
	6	South Pasadena	City of South Pasadena				
	7a	Arroyo Seco - North	City of Los Angeles				
	7b	Arroyo Seco - South	City of Los Angeles				
	8	Sycamore Grove Park	City of Los Angeles				

Focused Arrays



Low-Flow Channel

Maximize creating low-flow channel and day-lighting storm drains in study area; Grade control/bank control, habitat-creating measures. Armored back wall.

Notched Side Walls

Maximize creating low-flow channel in study area while modifying side channel walls; Grade control/bank control, habitat-creating measures. Structurally reinforced walls and armored landside slopes.

RCB Culverts with Low-Flow Channel

Maximize creating low-flow channel in study area; main channel in RCB culvert; Grade control/bank control, habitat-creating measures.

Floodplain Benching

Maximize removal of concrete to naturalize the streambed in study area; Grade control/bank control, habitat-creating measures.

Sheetpile Bank Protection with Floodplain Benching

Maximize removal of concrete to naturalize the streambed in study area while reinforcing banks with sheetpiles; Grade control/bank control, habitat-creating measures.

Key Definitions

- Flood Plain Benching full stream restoration; flood channel removal
- Low-Flow Stream a natural stream near the flood channel
- RCB with Low-Flow Stream main flow in a buried concrete box culvert with low-flow stream above it
- Habitat Units a measurement of the ecological value that a restoration project produces

Principles

Goal

Recreation/Ecosystem Restoration

National Ecosystem Restoration Program

Natural Channel Bottom

Flood Plain Buy-back

These are some principles for your consideration and advocacy recommended by the Arroyo Seco Foundation.

 The Corps' goal of ecosystem restoration should be the guiding principle for the Arroyo Seco restoration program. Recreation/Ecosystem Restoration

 Recreational uses and parking should be accommodated where possible, but not to the detriment of stream and habitat restoration. National Ecosystem Restoration Program

 Projects that would qualify for the National Ecosystem
 Restoration Program should receive the highest priority. Natural Channel Bottom

• In areas where the flood channel would remain, the program should establish a natural or soft bottom that contains appropriate habitat.

Flood Plain Buy-back

 LA County should consider a flood-plain buyback program to remove homes that are threatened by future floods.
 This would facilitate a more complete stream restoration approach through Reach 5b (the lower Lower Arroyo in Pasadena) and other reaches.



Comparison of Alternatives

	Reach 1	Reach 2	Reach 3	Reach 4a	Reach 4b	Reach 5a	Reach 5b	Reach 6	Reach 7a	Reach 7b	Reach 8			
	Hahamong na	Flint	I-210	Brookside N	Brookside S	Lower A	Lower B	SoPas	ASN	ASS	Sycamo re	HU	\$	\$/HU
Alternative 8		i	i	F	L			L	L			2,444	\$207 m	\$84,6972
Alternative 9		i	i	F	L			L	L		L	2,498	\$214 m	\$85,668
Alternative 10		i	i	F	L			F	L		L	3,714	\$412 m	\$110,931
Alternative 12		i	i	F	L	F		F	L		L	4,259	\$509 m	\$119,511
Alternative 12a		i	i	F	L	F		L	L		L	3,034	\$311 m	\$102,504
Alternative 15		i	i	F (w/pools)	L	F	L	F	L	L	L	4,491	\$527 m	\$117,345
Alternative 15a		i	i	F (w/pools)	L	F	L	L	L	L	L	3,267	\$329 <i>,</i>	\$100,704
Alternative 15b		i	i	F	L	F	L	L	L	L	L	3,067	\$329 m	\$107,270
Alternative 17		i	i	F (w/pools)	L	F	L	F (w/pools)	RCB	L	L	4,656	\$813 m	\$174,613
	i= invasive removal													
	F = flood plain benching													
	L = low-flow stream													
	RCB = reinforced concrete box													



For more information, please contact:

Arroyo Seco Foundation www.arroyoseco.org/corpsstudy.htm (323) 405-7326