

Celebrating The Central Arroyo Stream Restoration Program

*Improving the health of a stream and ensuring
the future and sustainability of Pasadena*



ARROYO SECO FOUNDATION

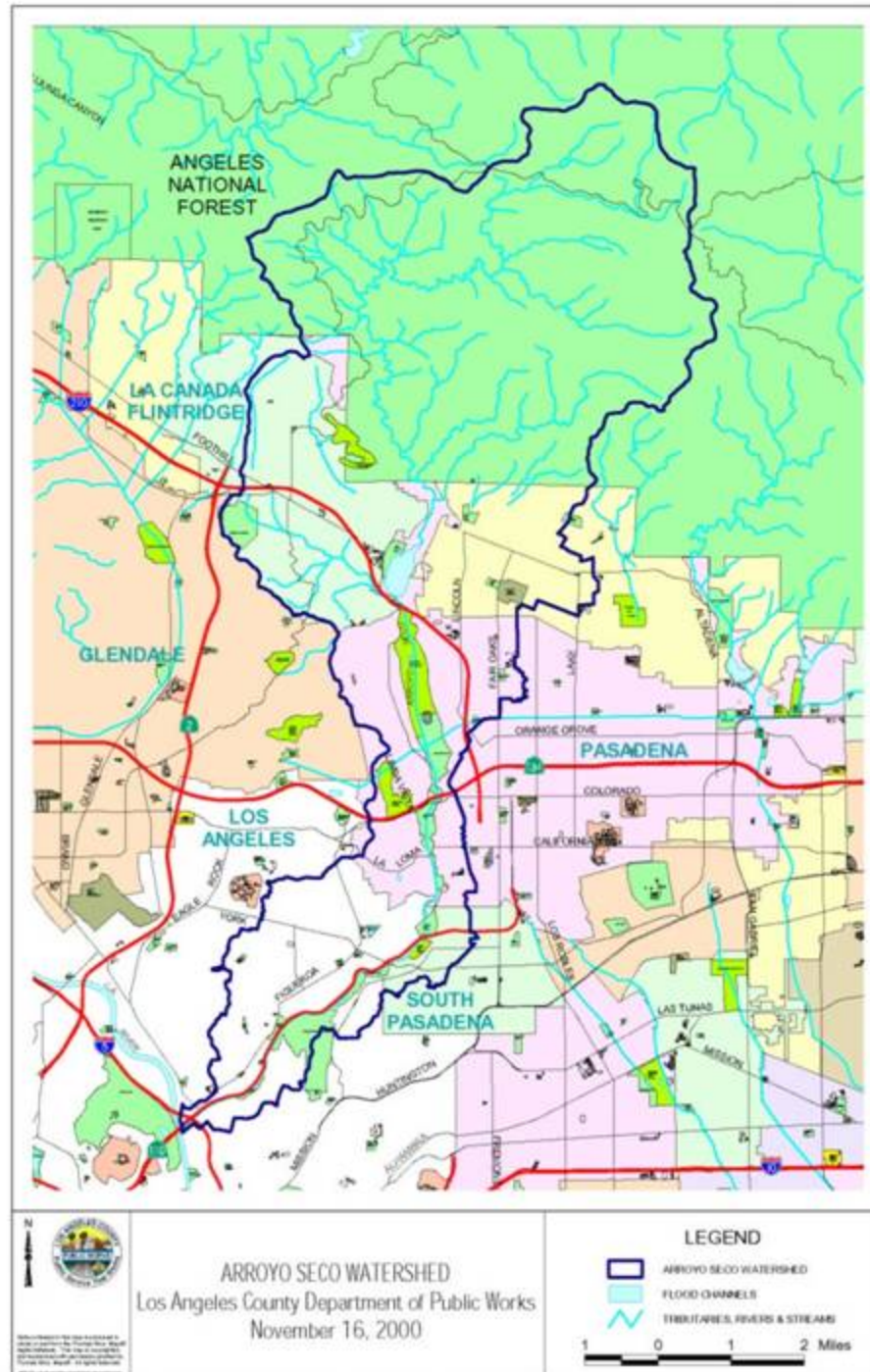


State Water
Resources
Control Board

CDM

The Arroyo Seco

- Major tributary of the Los Angeles River
- Linking downtown LA to the San Gabriel Mountains
- Home of JPL and the Rose Bowl
- Corps Feasibility Study



The Historic Arroyo Seco



Two different views of the Colorado Street Bridge

The Most Celebrated Canyon in Southern California

“This arroyo would make one of the greatest parks in the world”

- Theodore Roosevelt, 1911



Current Status of the Arroyo Seco

- Though long celebrated as one of the most beautiful streams in Southern California, the Arroyo Seco has not escaped wide-spread damage caused by human impact



Damage Caused by Urbanization / Channelization

- * destruction of habitat and wildlife
- * reduced infiltration
- * impaired water quality



LOCATOR MAP



The Central Arroyo



Project Accomplishments

- Improved water quality
- Enhanced trail network
- Implemented runoff BMPs
- Restored aquatic habitat
- Reintroduced the native Arroyo Chub
- Provided a model of stream restoration for urban Southern California



Improved Aquatic Habitat

☀ Created backwater pools and structures to provide resting, foraging, and spawning areas for fish.

☀ Stabilized stream banks

☀ Improvements were constructed with natural materials (native trees and arroyo stone).

☀ Under direction of CDFG, reintroduced 300 arroyo chub to the central Arroyo Seco.



Backwater pool and woody debris



Weir



Wing Deflector

Improved Vegetation

- Removed over 60 non-native trees.
- Replanted over 200 native trees and shrubs.



Non-native vegetation removed from west side of the Arroyo



Volunteer planting event

Trail and Bank Stabilization

- Stabilized over 1000 feet of bank and trail.
- Installed signage at the trail head to the south area and in Parking Lot I.



Trail Stabilization



Alignment Improvement

LOCATOR MAP

THE ARROYO SECO STREAM
A TRIBUTARY OF THE LOS ANGELES RIVER

THE ARROYO CHUB
(*Gila orcutti*)

THE CENTRAL ARROYO SECO STREAM has been recognized as a pilot project to re-establish habitat for native fish populations with special concern for the arroyo chub, a native fish, a California Species of Special Concern designated by the State Department of Fish and Game. Bankers, fallen trees and logs, and sustainable design have been used to create pools needed for protection and nesting areas and increase plant life needed for food and egg-laying. The added design elements work in combination to stir and direct water flow and create oxygen-rich waters, which in turn support more plant and animal life.

Construction of these stream improvements along with several water quality related improvements to trails, banks, riparian areas, adjacent Parking Lot I and sidewalk open drains with trash capture inserts will serve as a model for stream restoration in the community of Pasadena, the Los Angeles River watershed and the state of California.

WATER QUALITY & RIPARIAN WOODLAND

Riparian habitats provide an important transition zone between water and land plant and animal habitats. But plants and animals aren't the only ones that benefit from healthy riparian areas! People can enjoy their recreation potential and beauty, as well as the enhanced water quality, flood control, and enhanced water supply that they provide.

Use Fish Woodland

Stream Riparian Woodland

Wetland & Riparian Woodland

CDM

Improved Parking Lot I

- Installed 10 stormwater cleansing basins constructed of planted areas and porous parking spaces to remove 50 pounds of oil & grease annually
- Existing sycamore and oak trees were incorporated into the planter island design, enhanced by additional native plants.



City of Pasadena Contributions

The City of Pasadena's in-kind contributions include:

- Installation of 500 catch basin inserts through out the city.
- Parking Lot I sealing and striping.



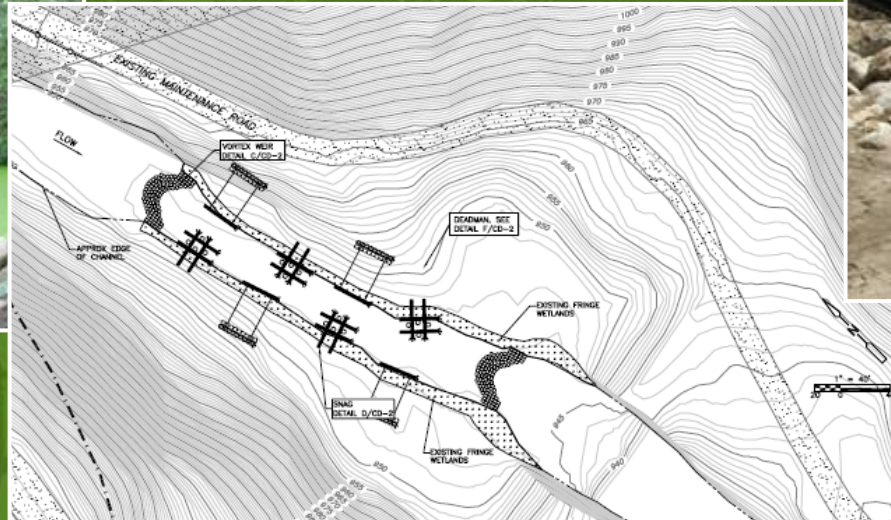
Environmental Stewardship

- Reintroduction of 300 arroyo chub
- volunteers removed trash, removed non-native plants, planted over 30 native trees
- Extensive public outreach, education and participation



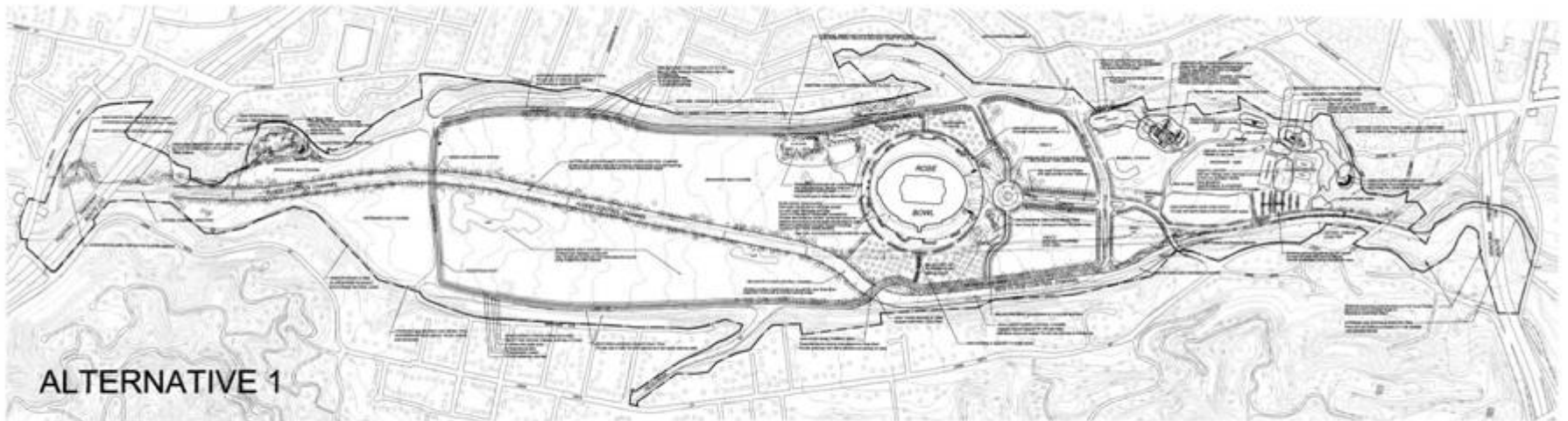
Design Build Approach

- Sponsored by a nonprofit (**ASF**)
- With and for a city (**Pasadena**)
- Funded by the state (**CA**)
- Designed and built by private corporation (**CDM**)



20 month
window

Opens New Doors



CENTRAL ARROYO SECO MASTER PLAN

Deardorff, Wilkins, Sandgren & Smith Ltd.
1307 Parkhill Boulevard, STE. A, La Grange, CA 94503

The Central Arroyo Stream Restoration Project:

- fulfills a key part of the restoration master plan, and
- establishes a context for greater funding and project opportunities in the Arroyo and LA River watershed



For more information: www.arroyoseco.org

- **Tim Brick**, Managing Director, ASF, tim@arroyoseco.org (626) 584-9902
- **Wendy Katagi**, Senior Project Manager, CDM, Katagiwr@cdm.com (213) 457-2132
- **Rosa Laveaga**, City of Pasadena. Rlaveaga@cityofpasadena.net (626) 744-4321