ARROYO SECO FOUNDATION

Arroyo Seco Canyon Project

BIOLOGICAL IMPLICATIONS

Who we are

- Arroyo Seco Foundation works with:
 - Agencies
 - Stakeholders
 - Citizen
 - **▶** Educators
 - Lawyer
 - Volunteers

- ▶ To restore:
 - ► Native fish population
 - Other species of special concern
 - Native habitat restoration
 - Environmental education
 - Community engagement

Arroyo Seco Canyon Project (Area 2 & 3)

- Pasadena Water and Power (PWP) desires to divert water from Hahamongna Watershed Park and Arroyo Seco for city purposes
 - Area 2: Dam and Diversion Replacement
 - Area 3: Expansion of Spreading Basins (for percolation of ground water)
 - City can take 60-80% of this water for city use

What did the judge say?

➤ 2017 LA Court Judge Richard L. Fruin required Pasadena to conduct EIR of ASCP as current evaluation from city was inadequate

Did not consider impacts from sedimentation excavation project

Plans and analysis of impacts on arroyo seco diversion and mitigation plans were required



Arroyo Seco Canyon Project Areas 2 and 3 Draft Environmental Impact Report

Modification to Conditional Use Permit No. 6222 State Clearinghouse No. 2014101022

Prepared for:

City of Pasadena Department of Water and Power

150 South Los Robles Avenue, Suite 200 Pasadena California 91101

Prepared by:



38 North Marengo Avenue Pasadena, California 91101

JUNE 15, 2020

Why no public meetings?

- City has not reached out to public about project adequately
- No public meeting was announced to inform public what was in draft EIR

Why is the Arroyo Seco and Hahamongna Vital?

- Arroyo Seco (creek) is 45-mile river nestled in park and drains 295-sq.miles
- Named for the Tongva/Gabrielino/Keech (Kizh) word for "Flowing waters, fruitful valley"
- Historic and current home of endangered/threatened species
- Connecting link to LA River and Coast



What has been Lost?

- 1. Lampetra spp. (Pacific brook lamprey)
- 2. Entosphenus tridentata (Pacific lamprey)
- 3. Rainbow Trout/Steelhead
- 4. Gila orcutti (Arroyo Chub)
 - ASF has restored some below Devils
 Gate Dam and below Rose Bowl

Source: ASCP EIR 2020

Historic Fish Populations

- 4. Rhinichthys osculus (Ana speckled dace)
- 5. Catostomus santaanae (Santa ana sucker)
- 6. Gastero asculeatus williamsoni (Unarmored threespine stickleback

Above (except trout) were last recorded 50 years ago in Arroyo Seco

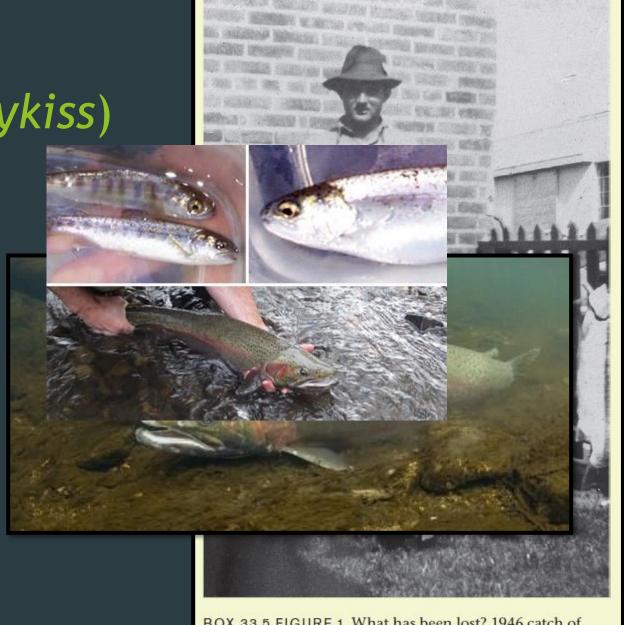
What has been Lost?
Steelhead (Oncorhynchus mykiss)

Water development such as diversions and Land Conversion reduced numbers

- -Dams landlock
- -Groundwater pump remove adequate depth
- -urban runoff

Hatchery stock do NOT breed with native fish

- Historical pop: ~tens of thousands
- Current >1000 individuals



BOX 33.5 FIGURE 1 What has been lost? 1946 catch of steelhead from the Ventura River at Foster Park. Angler: John B. Colla. Photo: Robert Phelan.

Source: Power et. al. (200X) Ecosystems of California

Table 1 List of all native salmonid fishes known to breed in California, ranked by level of extinction threat. Conservation status is for California only and approximates the IUCN classification system. For definitions of status scores and categories see Table 4

Species	Distribution	Status score	Conservation status	
Bull trout, Salvelinus confluentus	Pacific Northwest	0.0	Extirpated in CA	
Central coast coho salmon, Oncorhynchus kisutch ^b	Cali fornia ^d	1.1	Endangered ^a	
Pink salmon, O. gorbuscha	Pacific Coast d	1.3	Endangered	
Upper Klamath-Trinity spring Chinook salmon, O. tshawytschab	Cali fornia ^d	1.6	Endangered	
Southern Oregon Northern California coast coho salmon, O. kisutch ^b	California & Oregon ^d	1.6	Endangered ^a	
Chum salmon, O. keta	Pacific Coast ^d	1.6	Endangered	
Central Valley late fall Chinook salmon, O. tshawytschab	Cali fornia ^d	1.7	Endangered	
Klamath Mountains Province summer steelhead, O. mykiss ^c	Cali fornia ^d	1.7	Endangered	
Southern California steelhead, O. mykiss ^c	Cali fornia ^d	1.7	Endangered ^a	
Paiute cutthroat trout, O. c. seleneris	California	1.7	Endangered ^a	
Northern California coast summer steelhead, O. mykiss ^c	Cali fornia ^d	1.9	Endangered ^a	
McCloud River redband trout, O. m. stonei	California	1.9	Endangered	
Kem River rainbow trout, O. m. gilberti	California	1.9	Endangered	
Central Valley winter Chinook salmon, O. tshawytschab	Cali fornia ^d	2.0	Vulnerable ^a	
Central Valley spring Chinook salmon, O. tshawytschab	Cali fornia ^d	2.0	Vulnerable ^a	
Central Valley fall Chinook salmon, O. tshawytschab	Cali fornia ^d	2.0	Vulnerable	

Double Oregon Horarem Camornia Coast Cono Sannon, O. Mismo

Chum salmon, O. keta

Central Valley late fall Chinook salmon, O. tshawytschab

Klamath Mountains Province summer steelhead, O. mykiss^c

Southern California steelhead, O. mykiss^c

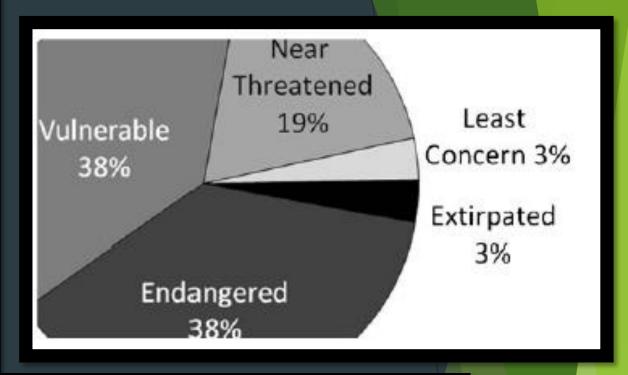
Paiute cutthroat trout, O. c. seleneris

Northern California coast summer steelhead, O. mykiss^c

McCloud River redband trout, O. m. stonei

wountain witteristi, rrosopium wittiamsoni	Pacific Northwest	3.9	Near Inteatened
Klamath Mountains Province winter steelhead, O. mykiss ^c	California & Oregon ^d	3.9	Near Threatened
Coastal rainbow trout, O. m. irideus	Pacific Coast	4.7	Least Concern

^a Taxon listed by federal and/or state Endangered Species Acts



Cu	1.0	Dirami gor va	٦
Pacific Coast ^d	1.6	Endangered	
California ^d	1.7	Endangered	
California ^d	1.7	Endangered	
Californiad	1.7	Endangered ^a	
California	1.7	Endangered ^a	
California ^d	1.9	Endangered ^a	
California	1.9	Endangered	

Source: Katz et. al. (2013). Environmental Biology of Fish

b Taxon is an evolutionary significant unit (ESII)

Possible Extinction of Trout

- ► 13 species (42%) of endemic salmonid in CA at risk for extinction in near future
- Some predicted to reach extinction in 50-100 years

Native Fish Restoration

 Once thriving area for Steelhead Trout (O. mykiss) who migrated:
 San Gabriel Mountains → Arroyo
 Seco → LA River → Ocean

- Dams, coastal estuary development, urban development, city water demands led to Endangered Status
- 2009 Station Fire, few have been spotted

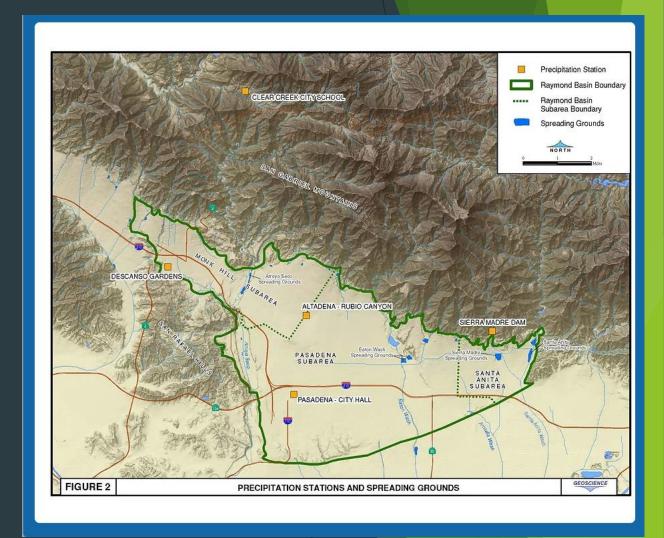


Source: KCET.org

Living Stream vs. Spreading Basins

Arroyo Seco is prime groundwater recharge area for Raymond Basin

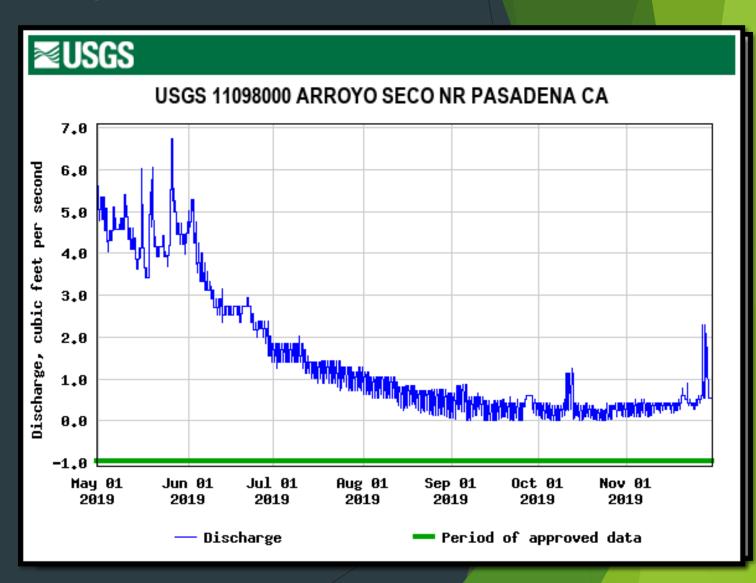
Continue to remove little available surface water



Living Stream vs. Spreading Basin

► PWP wants 25 cfs (cubic-feet/sec) when average is 7 cfs drier seasons avg. is 2 cfs

PWP has not indicated any plan volume or timing in DEIR



How often do the spreading basins have water?

- Built in the 1940s by previous water management to clean water
- ▶ Rarely are all filled.
- City plans to divert surface water and place in spreading pools
 - ▶ Can take 60-80% of diverted water for use
 - The rest is percolated

Environmental Flows

- Fish and Wildlife Code #5937
 requires dams and water facilities
 provide enough water for fish to
 survive during critical period.
- > #5901 requires fish to able to go up and downstream.
- ► The current Draft EIR does not provide mitigation for this and future climate change

Threatened Species of Arroyo Seco

Amphibians

Taricha torosa (California newt) species of special concern (SSC). Observed in 2013, was NOT observed in survey for EIR in 2019

Suitable Habitat in Area 2 according to EIR



"File:Taricha torosa, Napa County, CA.jpg" by Connor Long is licensed under CC BY-SA 3.0

Threatened Species of Arroyo Seco

- **Anaxyrus** (Bufo) calfornicus (arroyo toad) FE and SSC, considered extirpated, negative survey 2013 + 2019.
- ▶ 3 inch

Rana draytonii (California redlegged frog) FT and SSC. Species considered extirpated



Threatened Species of Arroyo Seco

Reptiles

1. Aspidosceilis tig (California whip



- 2. Thamnophis hammondii (Twostriped gartersnake) SSC, both
 - observed in 2013, assumed to be present now but not recorded in 2019



Threatened Species

- 3. Anniella stebbinsi
 (Southern CA legless lizard)
 SSC, recorded in 2018.
 Suitable habitat in Area 2 +
 3
- 7 inch.
- Can burrow down to 2 feet



Threatened Species: <u>Birds</u>

- 1. Accipiter cooperii (Coopers hawk)
- 2. Baelophus inornatus (Oak titmouse)
- 3. Spinus lawrencei (Lawrence goldfinch)



Environmentally Superior Alternative Let the River Flow!

- a minimum environmental flow for fish and aquatic species of 3 cfs in the Spring;
- No "engineered" stream material
- A living river and natural stream hydrology to allow the water to percolate into the groundwater basin rather than spreading basins.

Hope

- Ojai Land Conservancy acquired part of Ventura River and developed first CA Steelhead Preserve
 - ▶ Working to remove Matilija Dam

- ► Friends of the LA River (FOLAR)
- Citizen, Nature, Environmental Groups like us Arroyo Seco Foundation



Source: ovlc.org

What can we do?

Study project documents https://ww5.cityofpasadena.net/waterand-power/arroyosecoproject/

Learn about Arroyo Seco, Arroyo Seco Foundation website, Hahamongna Nursery, or receive updates fish@arroyoseco.org



What we can do

- Submit letter or feedback comments about the draft EIR:
 - Urge PWP adopt better alternatives
 - Keeping surface water for fish, wildlife + native plants.

<u>eventura@cityofpasadena.net</u> by 5:30 pm on July 31, 2020.