

# IRON CANYON FISH PASSAGE PROJECT:

## Case Study of Successful Non-Profit/Local Government/Tribal Government Collaboration

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PROJECT MANAGER



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MECHOOPDA TRIBAL COUNCIL MEMBER  
CULTURAL STEWARD PROGRAM MANAGER



# LAND ACKNOWLEDGMENT

Since time immemorial the Mechoopda people have resided within the greater Ótakim Séwi (Big Chico Creek) Watershed, Eskenim Séwi (Butte Creek) Watershed, as well as both sides of the Séwote:m (Sacramento River in Butte and Glenn counties)

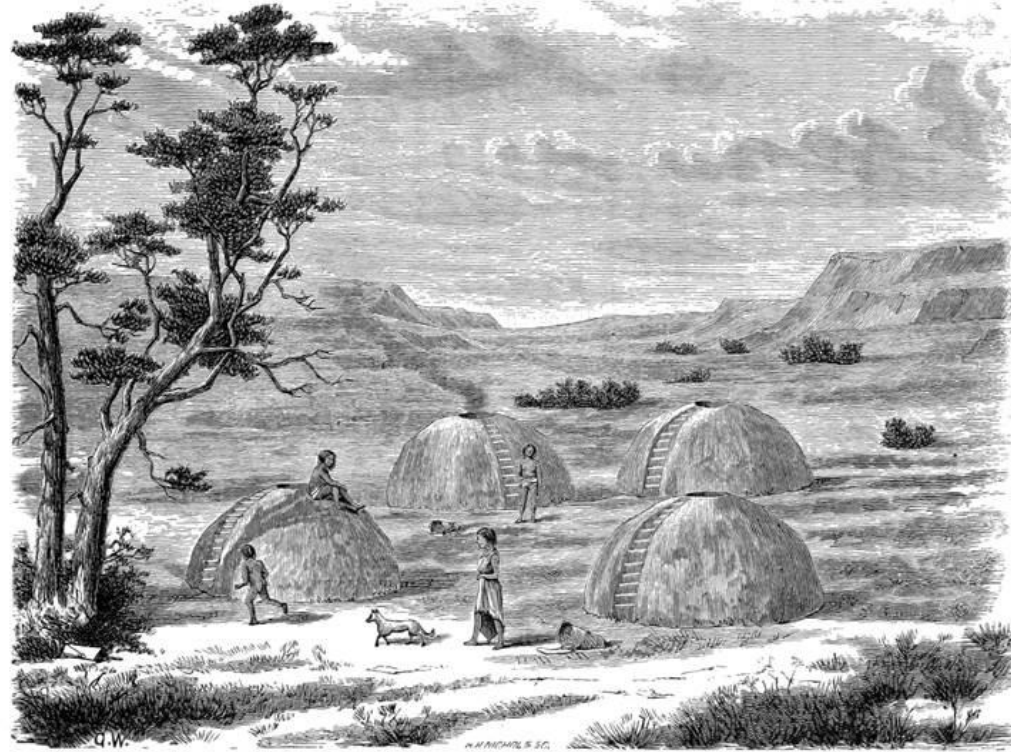
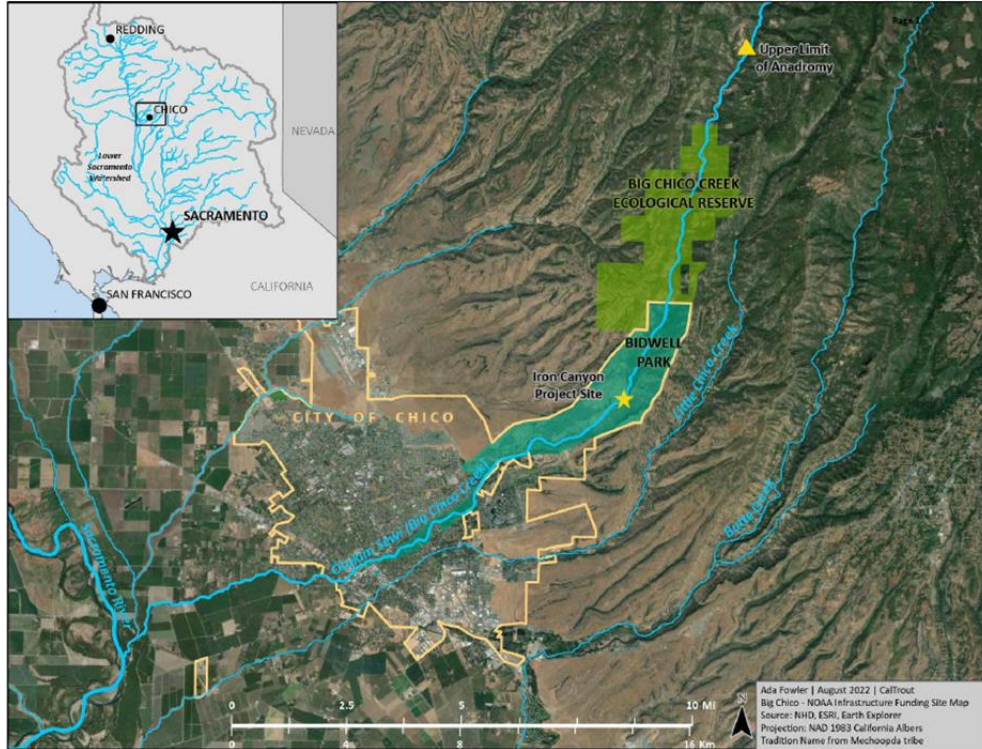


Photo courtesy of Mechoopda Indian Tribe

# ÓTAKIM SÉWI (Big Chico Creek) WATERSHED



# AQUATIC SPECIES OF ÓTAKIM SÉWI



Photo courtesy of Chico State Digital Collections

- Critical habitat for spring-run Chinook salmon and steelhead
- Other native fish include pacific and brook lamprey, hardhead, Sacramento sucker, riffle sculpin, and Sacramento pikeminnow
- Three freshwater mussel species
- Western pond turtle
- Foothill yellow-legged frog





# BIDWELL PARK

3,670 acres of  
public land with  
multi-use trails

"Crown jewel of  
Chico"



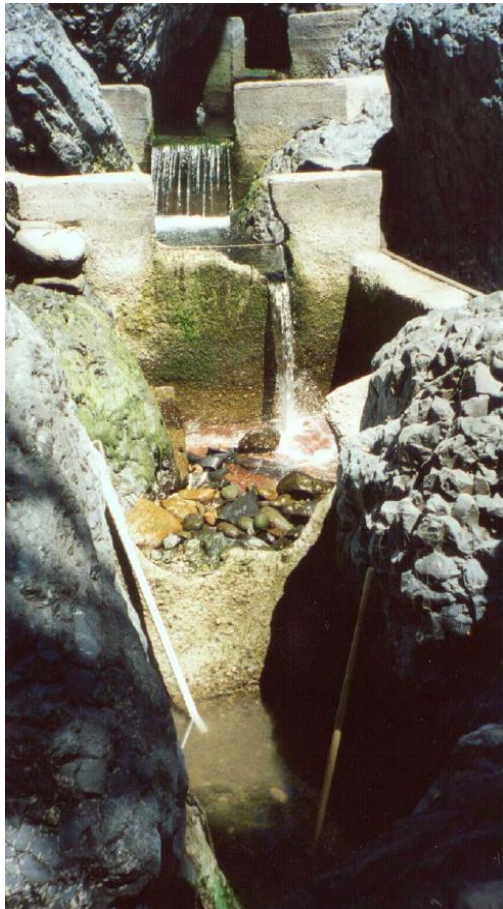
# BIG CHICO CREEK ECOLOGICAL RESERVE

7,835 acres of  
protected reserve  
land

“Where Education  
Meets the Land”



Photo courtesy of Explore Butte County



## IRON CANYON FISH PASSAGE PROJECT



Alleviate barrier – remove dilapidated fish ladder, reconfigure rock fall to form step-pools, opening 8.5 miles of habitat



Provide community outreach and integrate project into K-12 education programs reaching thousands of kids each year



Reintroduce extirpated non-game native fish into watershed



# PROJECT FUNDERS

- NOAA Restoration Center - Community-based Restoration Program
- USFWS - National Fish Passage Program





# IRON CANYON WORKING GROUP



## Partners

- Mechoopda Indian Tribe of Chico Rancheria
- Chico State's Big Chico Creek Ecological Reserve
- City of Chico
- NOAA Restoration Center
- U.S. Fish and Wildlife Service
- Ca. Dept. of Fish and Wildlife
- Yurok Tribe Fisheries Department
- Syblon Reid
- Gallaway Enterprises
- Western Fishes
- FISHBIO
- Dr. Paul Maslin, Chico State
- Gayland Taylor, retired Game Warden
- Maxim Crane Works
- NV5 Geologist
- R.E.Y. Engineer

# TRIBAL PARTNERSHIP

Project components Mechoopda Tribe is engaged in:

- Community outreach
- K-12 education
- Cultural resource monitoring
- Revegetation using traditional practices





# COMMUNITY OUTREACH

This last year, tribal members were trained to table various events to discuss project with the public.





# EDUCATION

Education to K-12  
students through  
the WaterShed Ed  
Collective

Integrating fish and  
fire and place-  
based knowledge



Photos courtesy of Chico State



# CULTURAL RESOURCE MONITORING

- Instream work as well as the construction of access road and contractor use area includes the use of heavy equipment which has the potential to disturb non-living cultural resources
- Tribe is working in tandem with California Trout & partners to include the use of Tribal Cultural Monitors during earth moving activities





# REVEGETATION OF PROJECT SITE

- Project site is characterized by basalt with very thin soil, non-native grasses, & Wàji
- Project site dominated by Wàji (native edible geophytes)
- Wàji are an important living cultural resource for Mechoopda
- Mechoopda Land Steward crew will transplant Wàji from project site to tribal





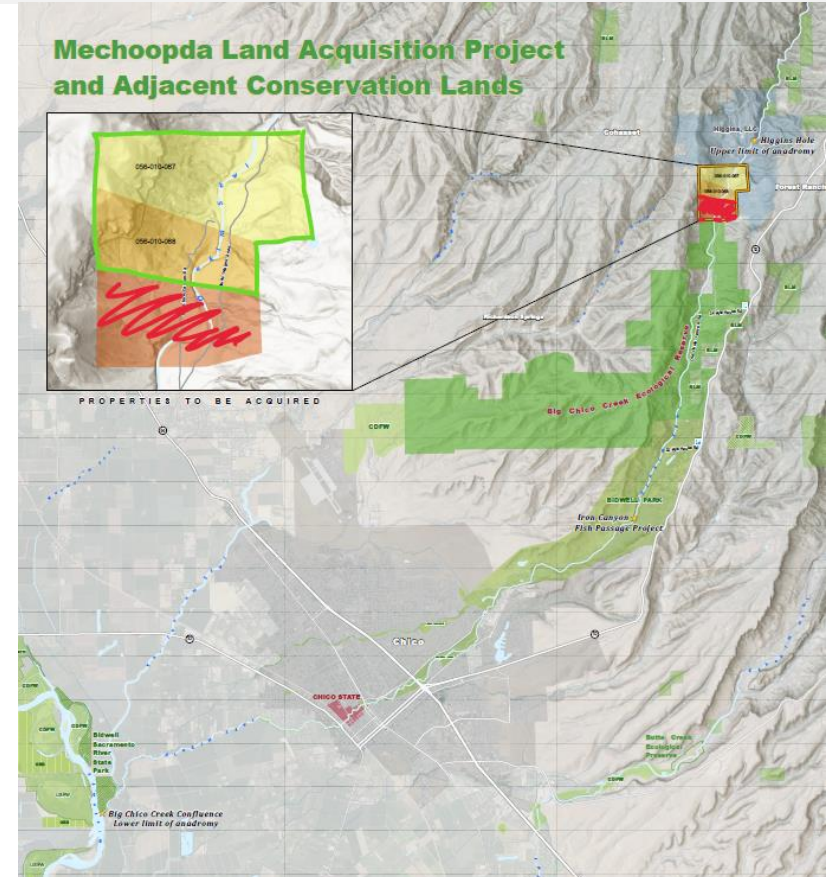
# REVEGETATION OF PROJECT SITE

- Mechoopda Land Steward crew will transplant Wàji from project site to tribal conservation lands to be replanted at a later date
  - Mechoopda conservation lands abundant in "wild" Wàji, same species as found at project site, may be utilized to revegetate project



# IRON CANYON PROJECT: A CATALYST

- Alternative analysis on two partial barriers downstream of Iron Canyon, additional watershed monitoring, and capacity building for tribe - funded by CDFW
- "String of Pearls" – Wilson's Landing and Indian Fisheries side channel restoration on Sacramento River – awarded by NOAA
- Tribal land acquisition in upper Big Chico Creek near limit of anadromy – awarded by CNRA





# IRON CANYON PROJECT: A CATALYST

- Mechoopda Tribe owes 93 acres of prime salmon habitat on Butte Creek
  - Spawning and rearing habitat
  - 100+ years of gold dredging
  - Intention of tribe to restore habitat





An aerial photograph of a river flowing over a rocky bed. The water is a vibrant turquoise color, contrasting with the dark, jagged rocks. A small waterfall is visible in the center-right, where the water cascades over a series of rocks. The surrounding area is densely forested with green trees, and some bare, light-colored branches are visible in the upper left and lower right corners. A semi-transparent grey banner is overlaid on the left side of the image, containing the text 'Q & A' in a large, black, serif font.

Q & A



## WHAT POST-IMPLEMENTATION MAY LOOK LIKE



Before and after images  
from Eagle Canyon project  
(Battle Creek)



## WHAT POST-IMPLEMENTATION MAY LOOK LIKE





## OTHER FISH SPECIES

Rotenone treatment in 1980's extirpated these non-game native fish species from the upper watershed. We will be working with CDFW to relocate fish from locations in Lindo Channel and Mud Creek that get disconnected over summer. The Iron Canyon project will allow these species to move about the watershed more freely.

