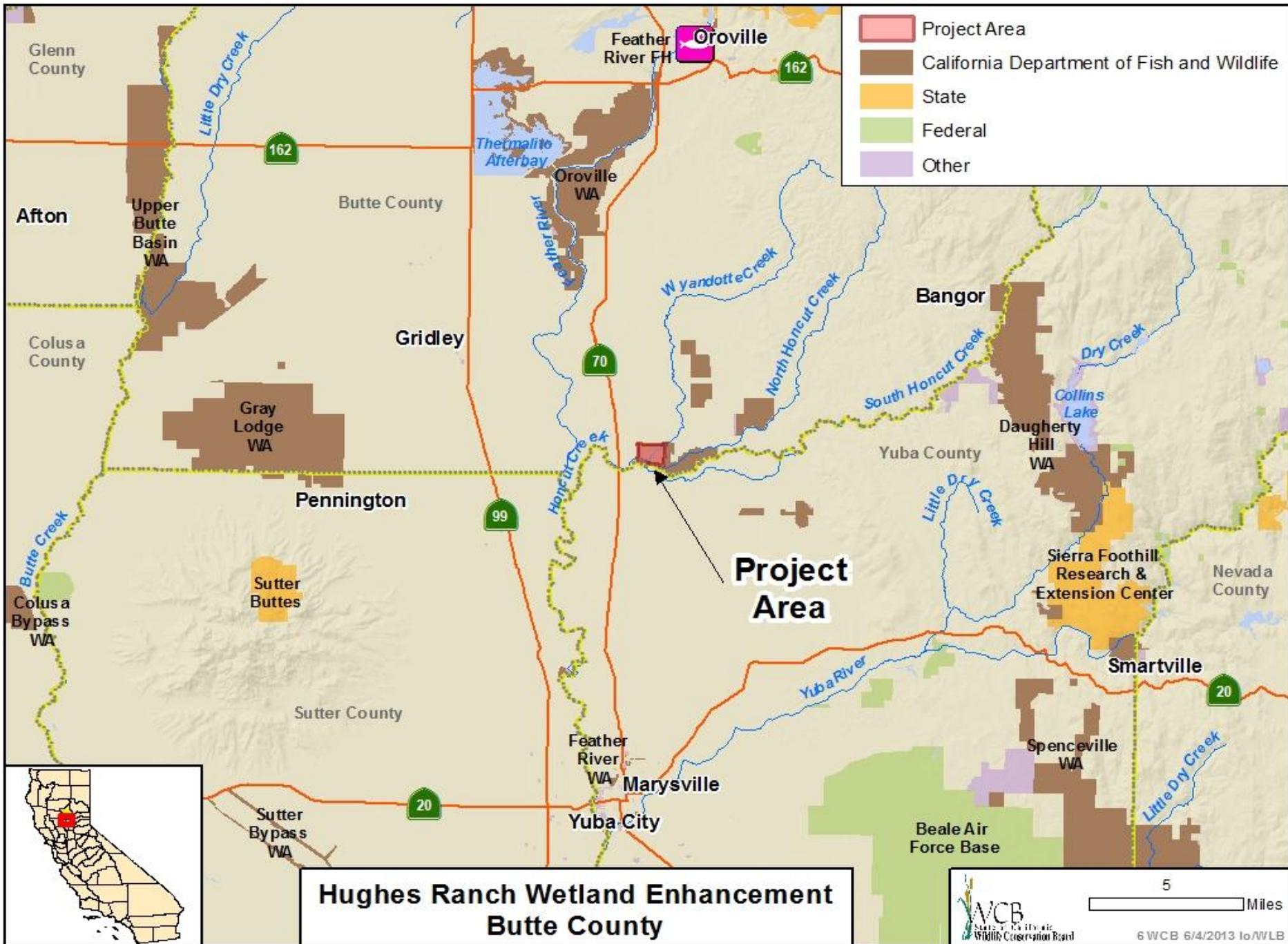




June 4, 2013
Wildlife Conservation Board
Meeting
2:00 PM, State Capitol, Room 2040
Sacramento, California 95814

Photo courtesy of David Galson



**Hughes Ranch Wetland Enhancement
Butte County**

#6. Hughes Ranch Wetland Enhancement



- Seasonal ponds that grow weeds (the brown residual plants above) instead of wetland plants will be re-leveled and contoured so that the ponds can be effectively flooded and irrigated to produce quality wetland habitat

#6. Hughes Ranch Wetland Enhancement

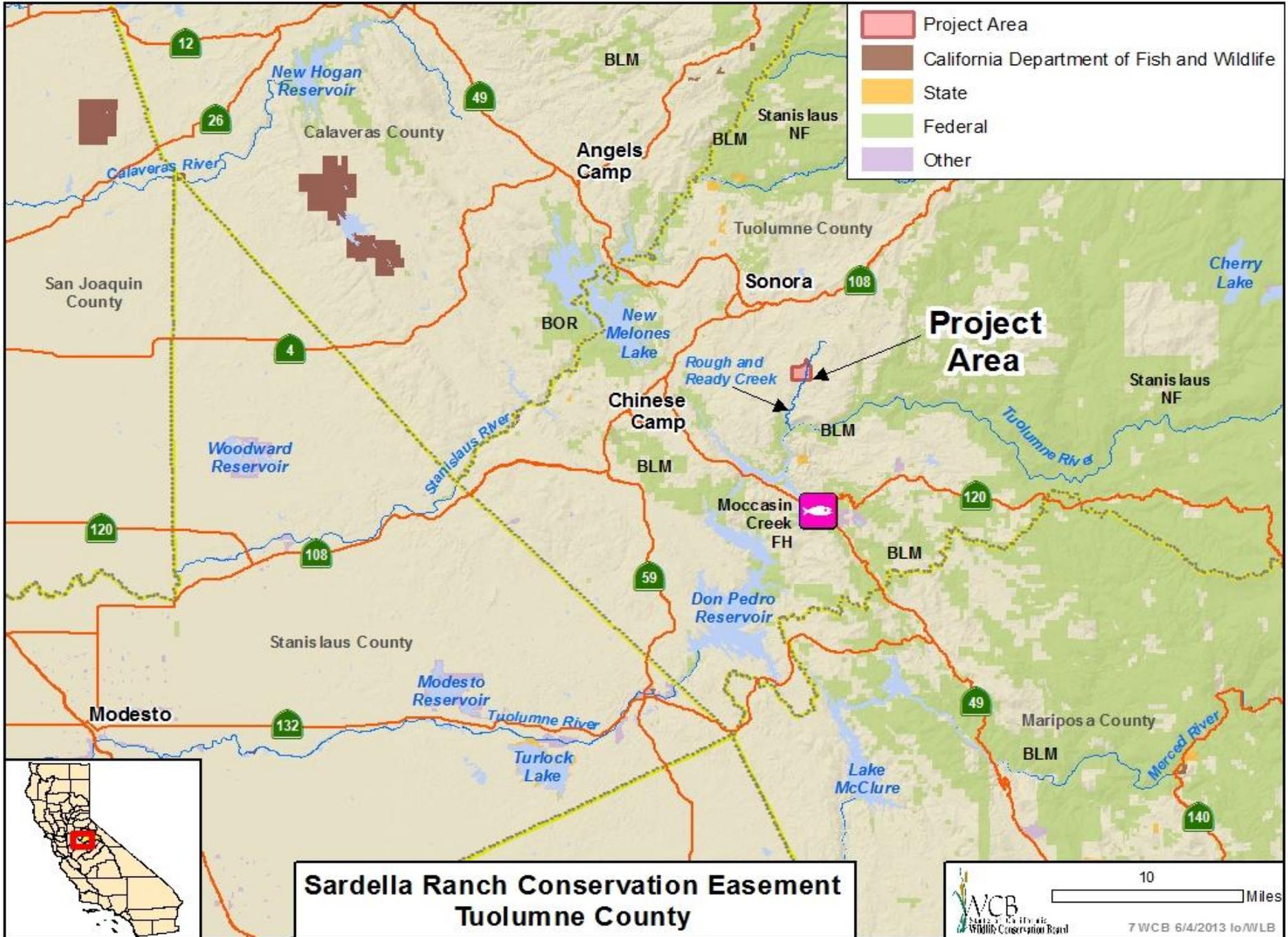


- Bare soils will be able to produce wetland vegetation after the project is complete

#6. Hughes Ranch Wetland Enhancement



- Areas that were unable to flood have reverted to upland plants. The project will restore these to native grasses.



- Project Area
- California Department of Fish and Wildlife
- State
- Federal
- Other

**Sardella Ranch Conservation Easement
Tuolumne County**

#7. Sardella Ranch Conservation Easement



- Looking southeast from the north east portion of the property towards Wards Ferry Road

#7. Sardella Ranch Conservation Easement



- Looking west from the east portion of the property

#7. Sardella Ranch Conservation Easement



- Looking northeast from the southern portion of the property

#7. Sardella Ranch Conservation Easement



- Looking north from the center of the property

#7. Sardella Ranch Conservation Easement



- Looking north east from the northern portion of the property

#7. Sardella Ranch Conservation Easement



- Rough and Ready Creek

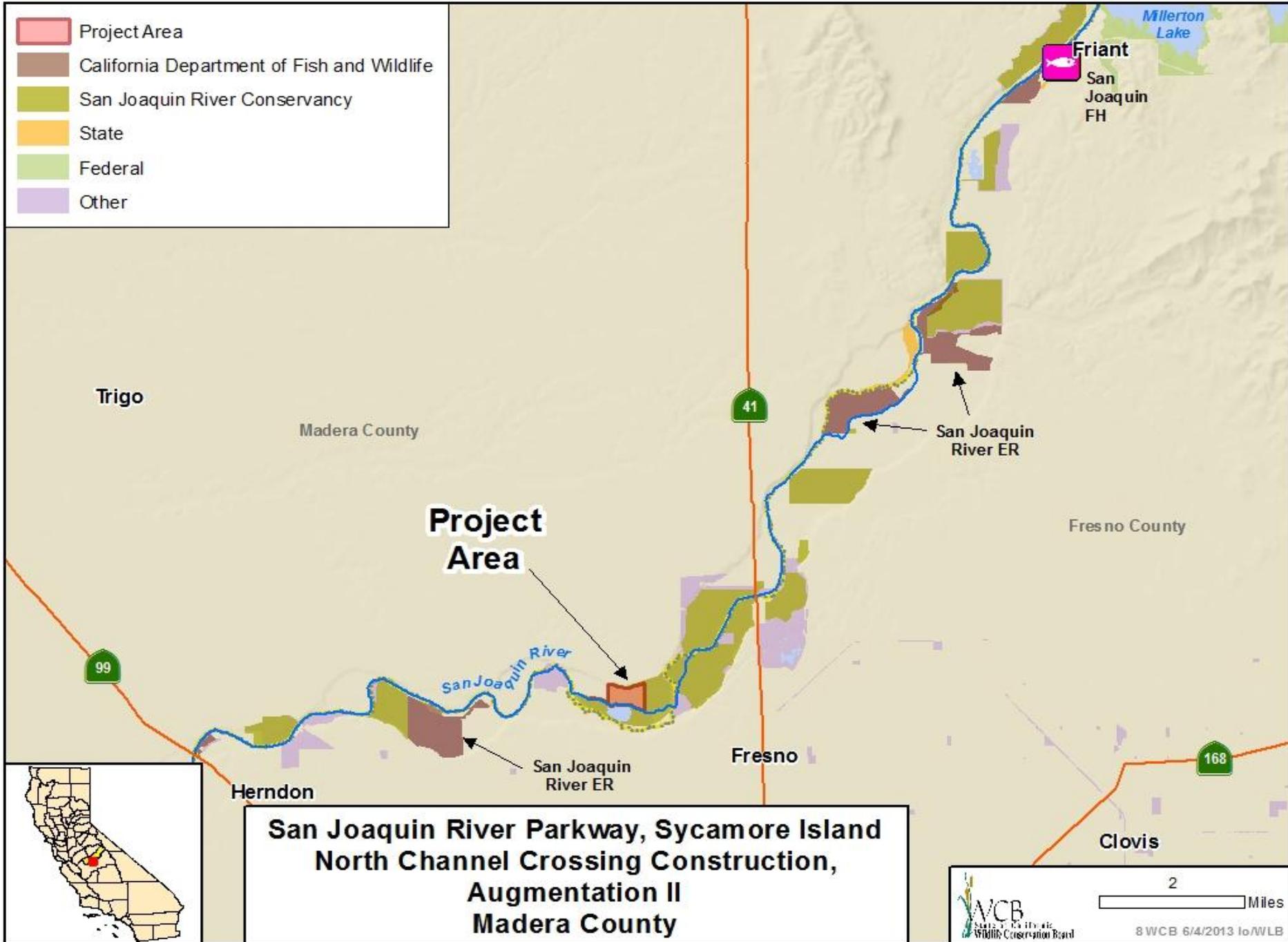
#7. Sardella Ranch Conservation Easement



Photo courtesy of Ron Pickup

- Bed Rock Mortar Site

- Project Area
- California Department of Fish and Wildlife
- San Joaquin River Conservancy
- State
- Federal
- Other



Project Area

**San Joaquin River Parkway, Sycamore Island
North Channel Crossing Construction,
Augmentation II
Madera County**


2 Miles
8 WCB 6/4/2013 lo/WLB

#8. San Joaquin River Parkway, Sycamore Island
North Channel Crossing Construction, Augmentation II



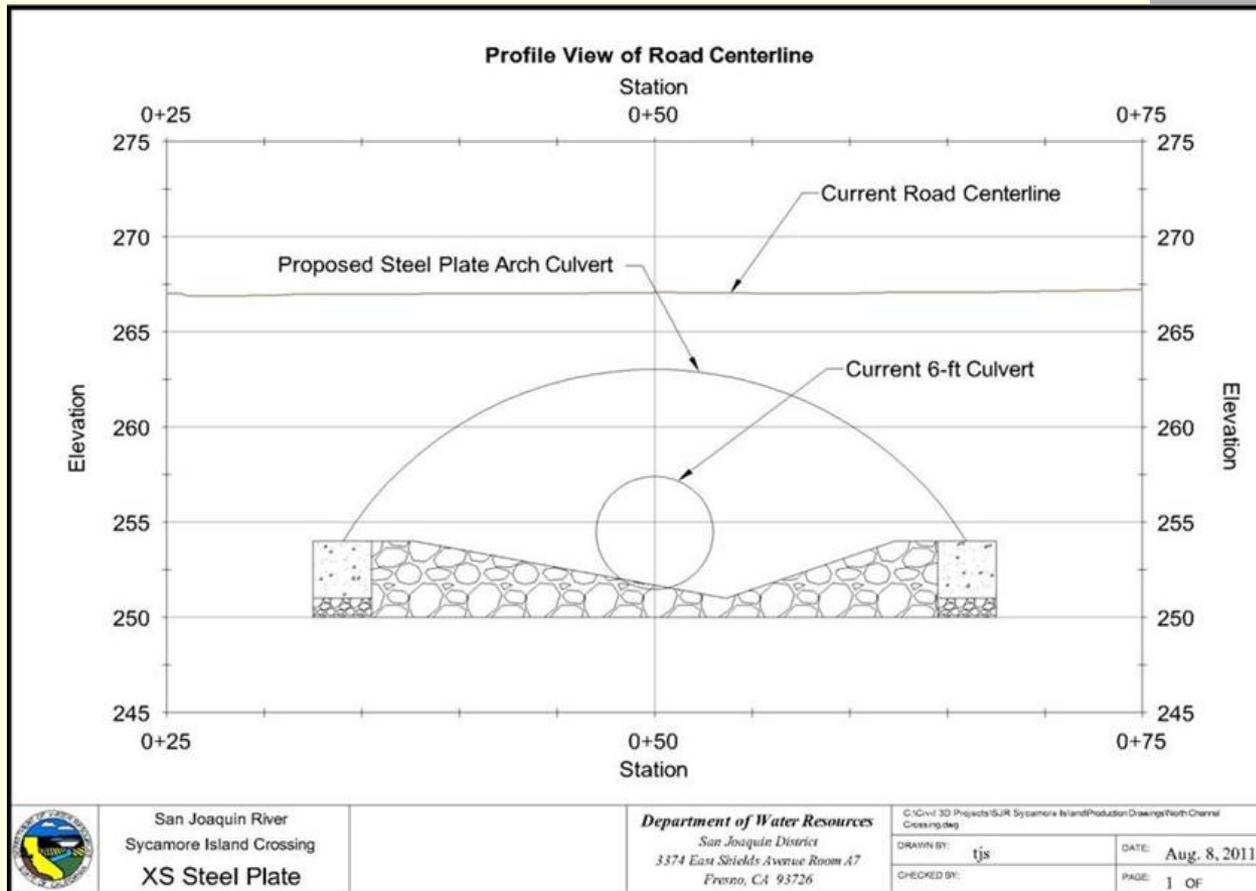
- Upstream end of culvert during 6000cfs release from Friant Dam, Jan 06, 2011

#8. San Joaquin River Parkway, Sycamore Island
North Channel Crossing Construction, Augmentation II



- Upstream end of culvert during after water receded, on February 25, 2011

#8. San Joaquin River Parkway, Sycamore Island North Channel Crossing Construction, Augmentation II



- Profile of the current culvert compared to proposed steel arch culvert

#8. San Joaquin River Parkway, Sycamore Island
North Channel Crossing Construction, Augmentation II

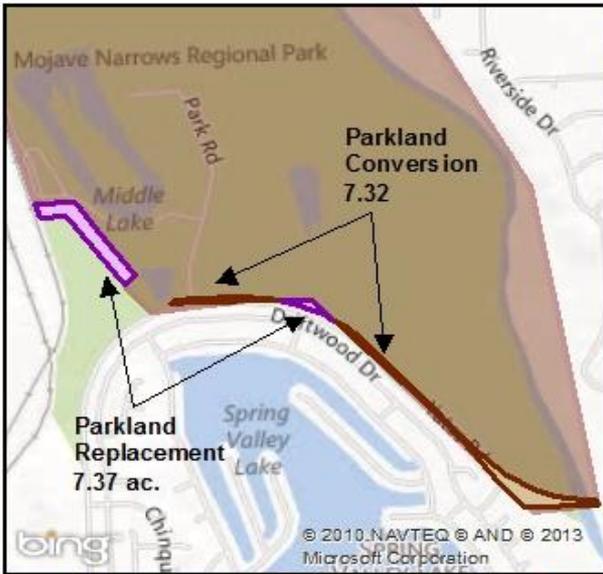


- Example of a steel arch culvert with cobble riprap

#8. San Joaquin River Parkway, Sycamore Island North Channel Crossing Construction, Augmentation II



- Project location



- Project Area
- California Department of Fish and Wildlife
- State
- Federal
- Other

**Yucca Loma Road, Yates Blvd, and Green Tree Blvd
Transportation Improvement Project
San Bernardino County**



#9. Yucca Loma Road, Yates Road and Green Tree Boulevard Transportation Project, Parkland Conversion



- Mojave Narrows Regional Park

#9. Yucca Loma Road, Yates Road and Green Tree Boulevard Transportation Project, Parkland Conversion



- Mojave Narrows Regional Park

#9. Yucca Loma Road, Yates Road and Green Tree Boulevard Transportation Project, Parkland Conversion



- Mojave Narrows

#9. Yucca Loma Road, Yates Road and Green Tree Boulevard Transportation Project, Parkland Conversion

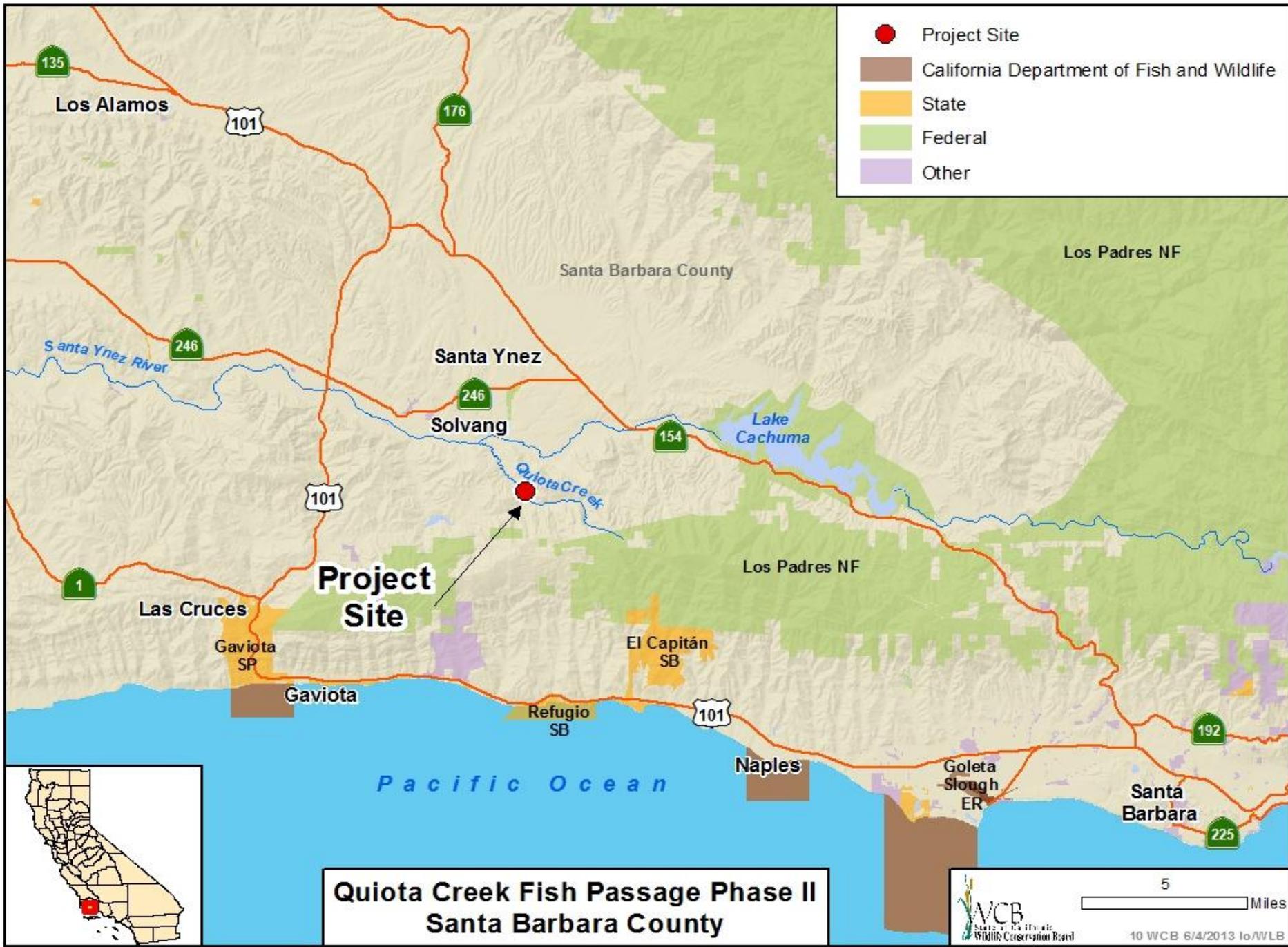


- Replacement Property (Fairway Equity LLC)

#9. Yucca Loma Road, Yates Road and Green Tree Boulevard Transportation Project, Parkland Conversion



- Replacement Property



- Project Site
- California Department of Fish and Wildlife
- State
- Federal
- Other

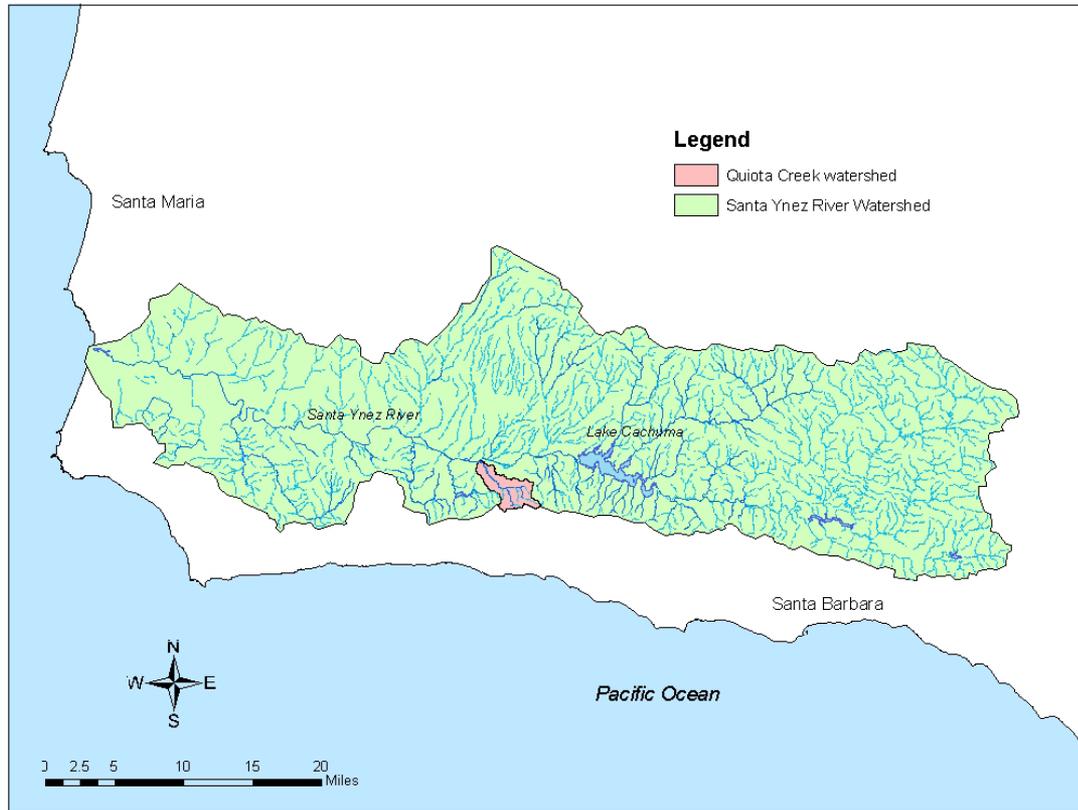
Project Site

**Quiota Creek Fish Passage Phase II
Santa Barbara County**

5 Miles

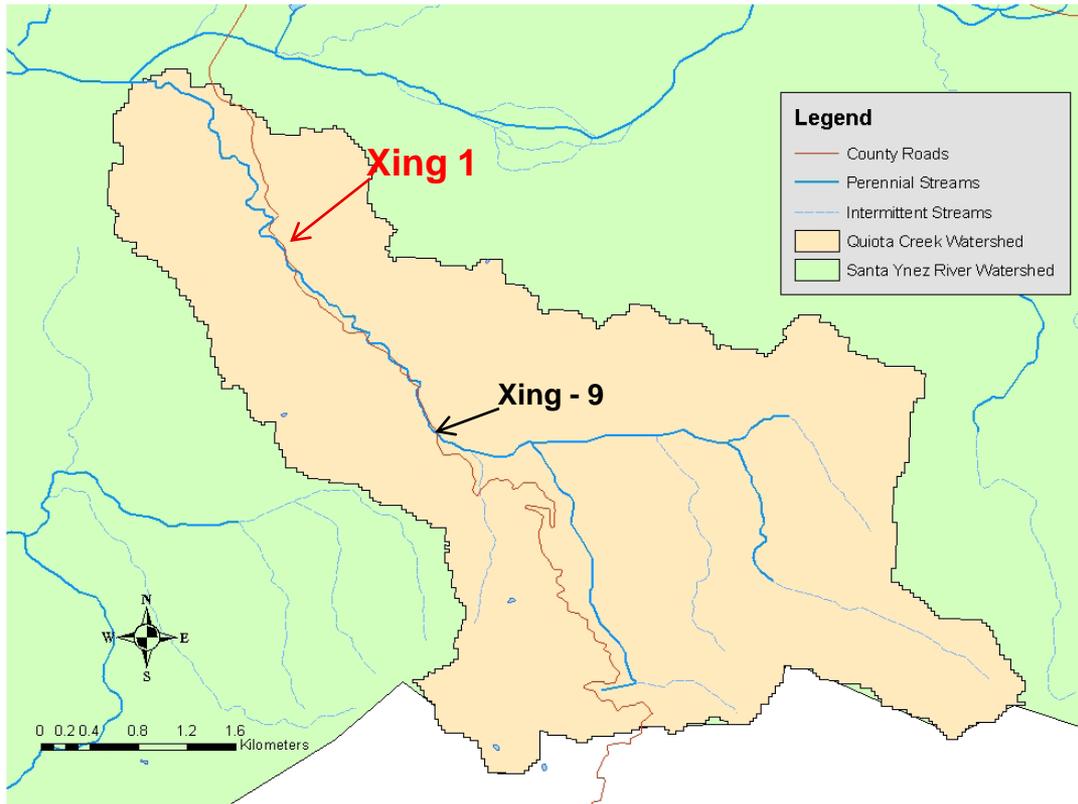
10 WCB 6/4/2013 to/WLB

#10. Quiota Creek Fish Passage, Phase II



- Quiota Creek Watershed within the Santa Ynez River Watershed

#10. Quiota Creek Fish Passage, Phase II



- The Quiota Creek Watershed

#10. Quiota Creek Fish Passage, Phase II

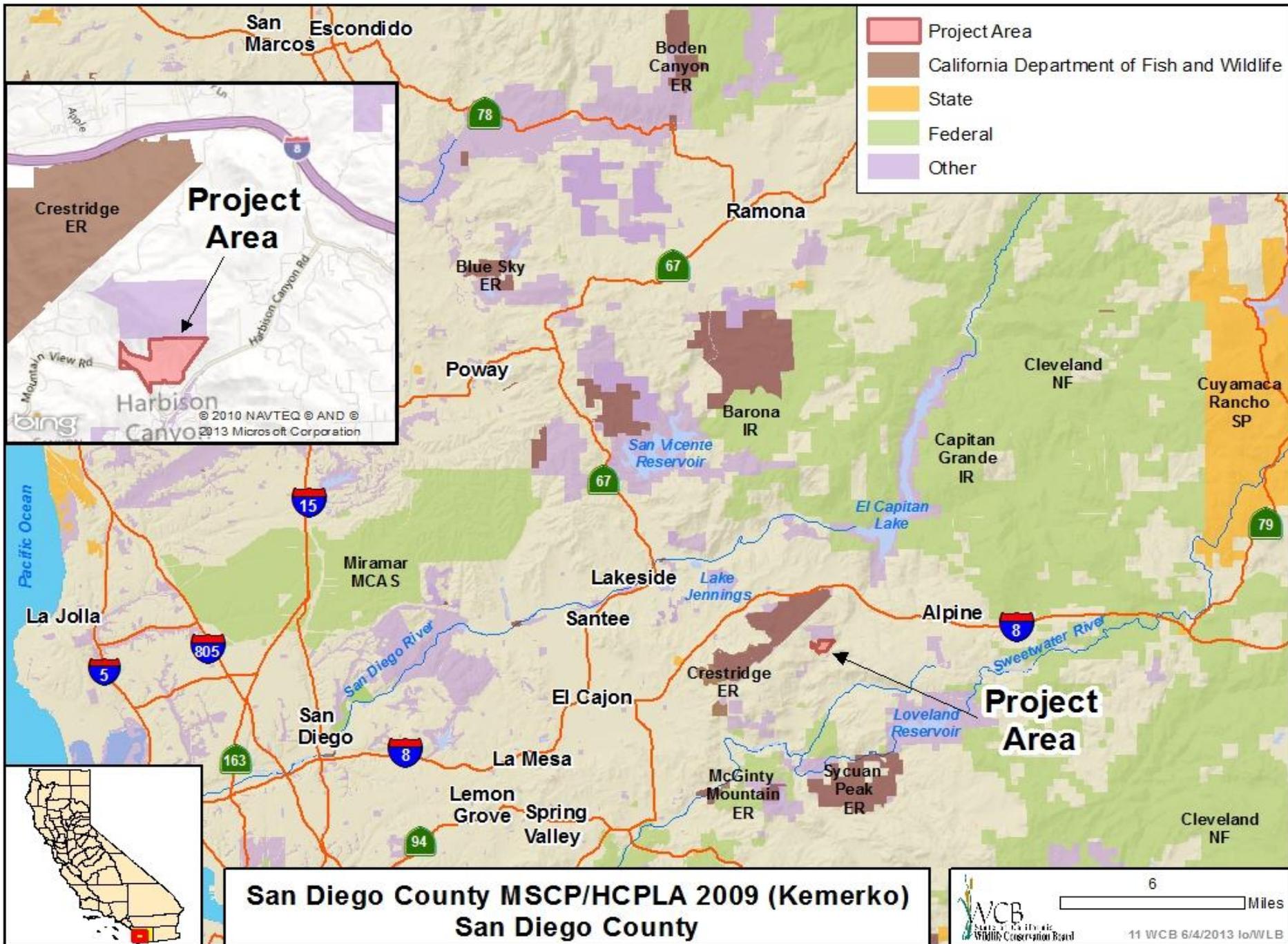


- Quiota Creek Crossing 1 looking up the road (left) and looking up the stream from below the crossing (right)

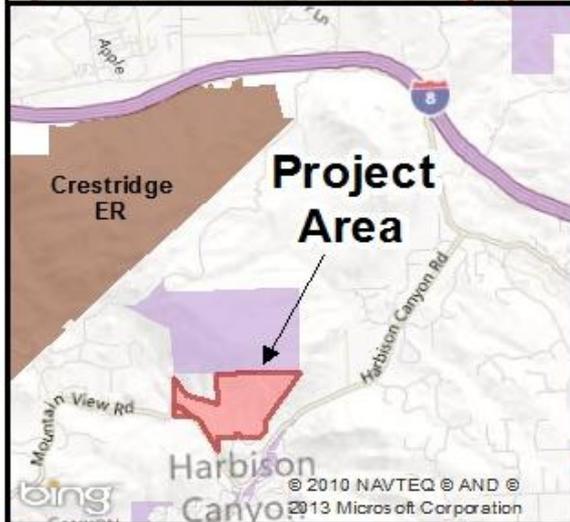
#10. Quiota Creek Fish Passage, Phase II



- Quiota Creek Crossing 7 Project
- WCB project May 2012



- Project Area
- California Department of Fish and Wildlife
- State
- Federal
- Other



San Diego County MSCP/HCPLA 2009 (Kemerko)
San Diego County

#11. San Diego County MSCP/HCPLA 2009 (Kemerko)



- Typical habitat found on property

#11. San Diego County MSCP/HCPLA 2009
(Kemerko)



- California gnatcatcher

#11. San Diego County MSCP/HCPLA 2009 (Kemerko)



- Typical habitat found on property

#12. Southern California Coastal Wetland Change Analysis



- U.S. Coast Survey Maps of California (1851-1889)

#12. Southern California Coastal Wetland Change Analysis

Topographic Maps (T-Sheets)

- The primary information source for early American shorelines
- Coastal surveys needed for navigation (shipwrecks were costly)
 - Formed in 1807 by Thomas Jefferson as The Survey of the Coast
 - Became the US Coast Survey in 1836
 - Became the US Coast and Geodetic Survey in 1878
 - Now part of NOAA as the National Geodetic Survey
- Responsible for “completing an accurate chart of every part of the coasts”
 - California coast mapped between 1850 and 1890
- Used science-based techniques imported from Europe
 - Accurate maps (lives depended on it)
 - Large scale (detailed)



#12. Southern California Coastal Wetland Change Analysis



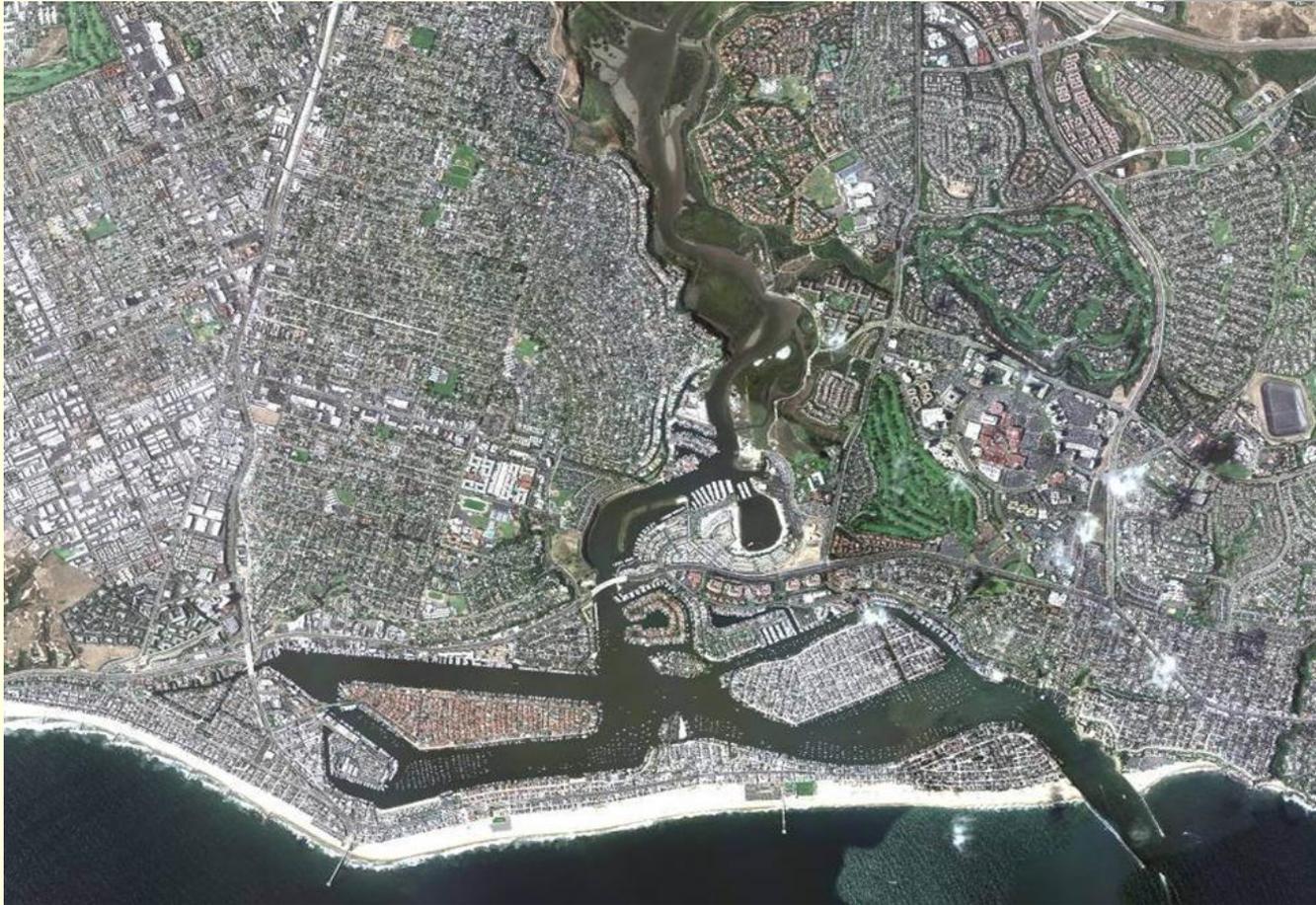
- Example of historic map (Newport Bay)

#12. Southern California Coastal Wetland Change Analysis



- Maps and landscapes analyzed for different habitat types

#12. Southern California Coastal Wetland Change Analysis

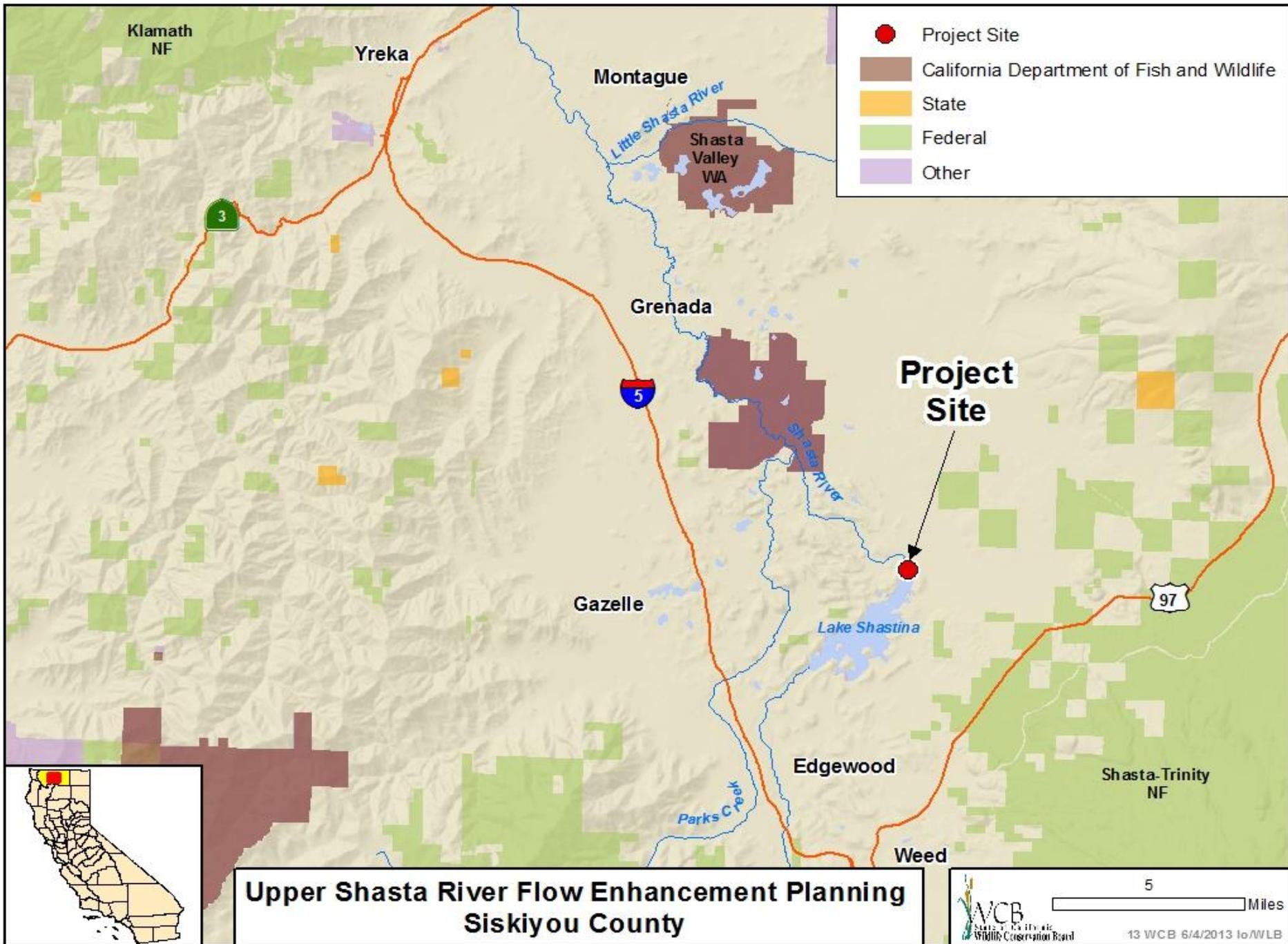


- Current configuration

#12. Southern California Coastal Wetland Change Analysis



- Historic habitats overlaid on current configuration



- Project Site
- California Department of Fish and Wildlife
- State
- Federal
- Other

**Upper Shasta River Flow Enhancement Planning
Siskiyou County**

5 Miles

WCB
 State of California
 Wildlife Conservation Board

13 WCB 6/4/2013 to/W/LB

#13. Upper Shasta River Flow Enhancement Planning

- Main Canal at base of Lake Shastina, with diversion to Shasta River.



#13. Upper Shasta River Flow Enhancement Planning



- It is estimated that 90% of the water lost to seepage could be saved through lining the main canal

#13. Upper Shasta River Flow Enhancement Planning



- Wetland seep at base of Lake Shastina dam could be improved for fisheries benefits

#13. Upper Shasta River Flow Enhancement Planning

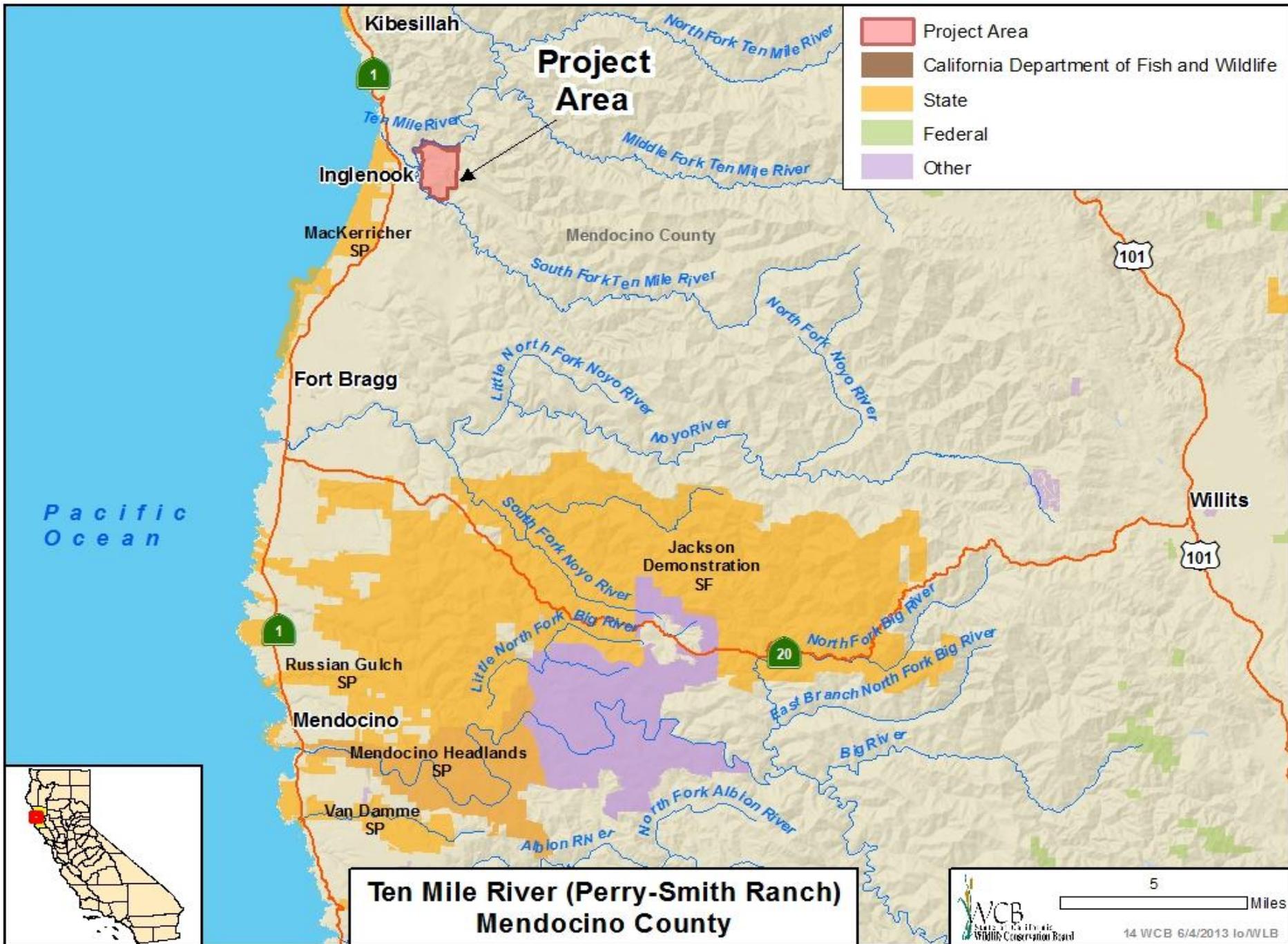


- Parks Creek Diversion has potential for improved diversion and state-of-the-art fish screens

#13. Upper Shasta River Flow Enhancement Planning

- Some improvements have been initiated in the system, such as this fish screen at the Little Shasta River





**Ten Mile River (Perry-Smith Ranch)
Mendocino County**


5 Miles
14 WCB 6/4/2013 lo/WLB

#14. Ten Mile River (Perry-Smith Ranch)



- Easterly view from Ten Mile River basin looking up to Ranch area

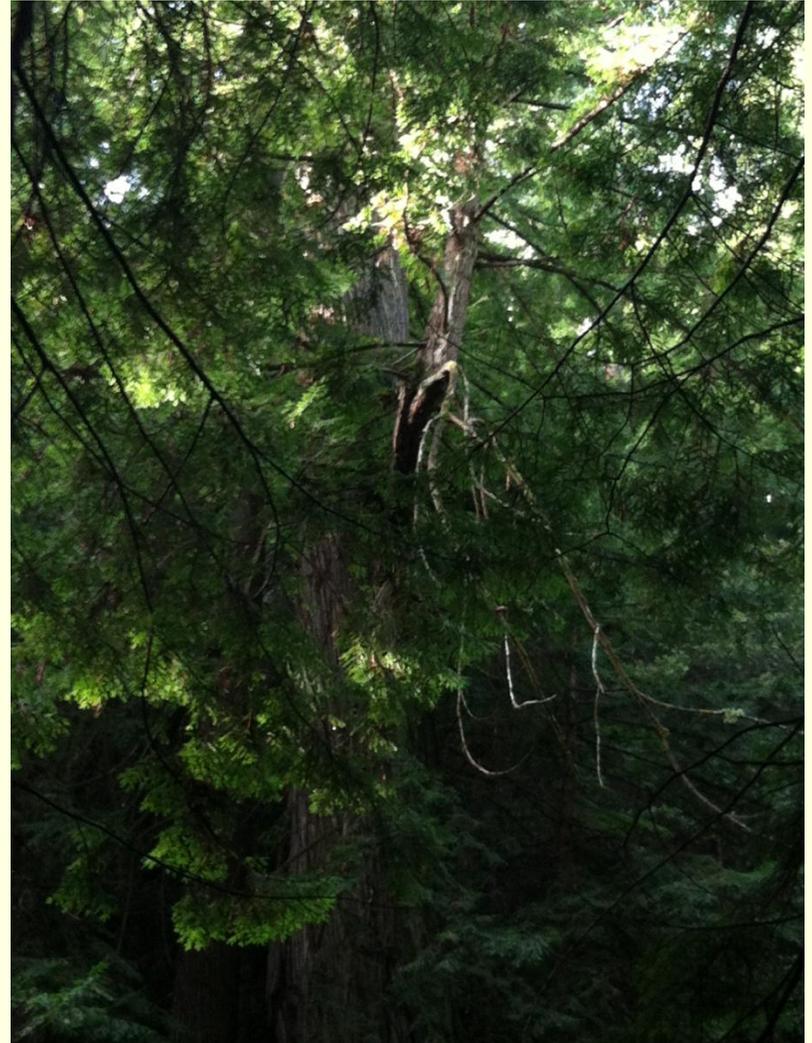
#14. Ten Mile River (Perry-Smith Ranch)



- Main stem of the Ten Mile River on Perry-Smith Ranch

#14. Ten Mile River (Perry-Smith Ranch)

- Spotted owl nesting site on the eastern border of the property



#14. Ten Mile River (Perry-Smith Ranch)



- Eagle resting on the South Fork of Ten Mile River

#14. Ten Mile River (Perry-Smith Ranch)



- Viewshed area from top of peak looking northwest to mouth of Ten Mile River

#14. Ten Mile River (Perry-Smith Ranch)



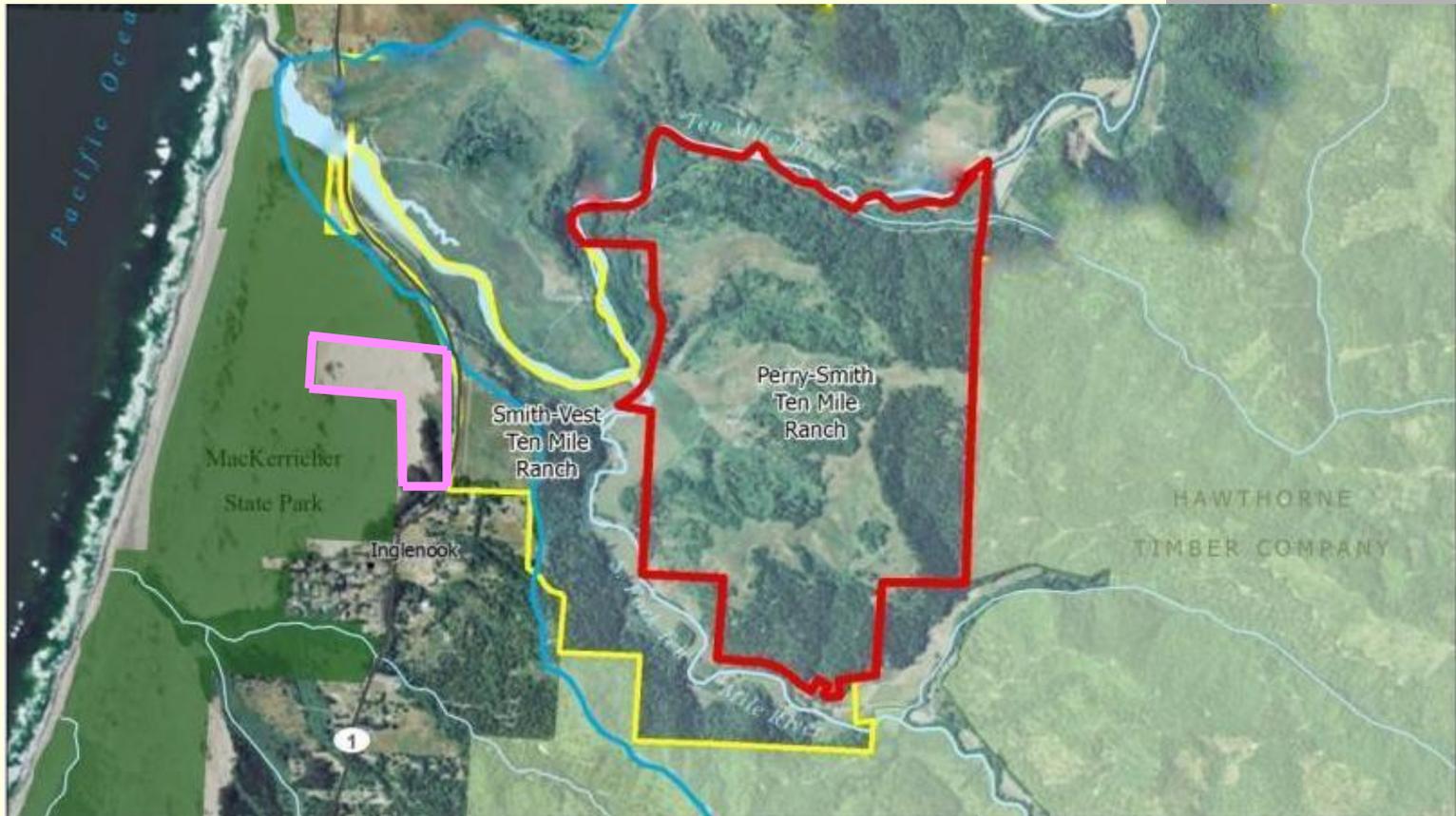
Ten Mile River Bridge

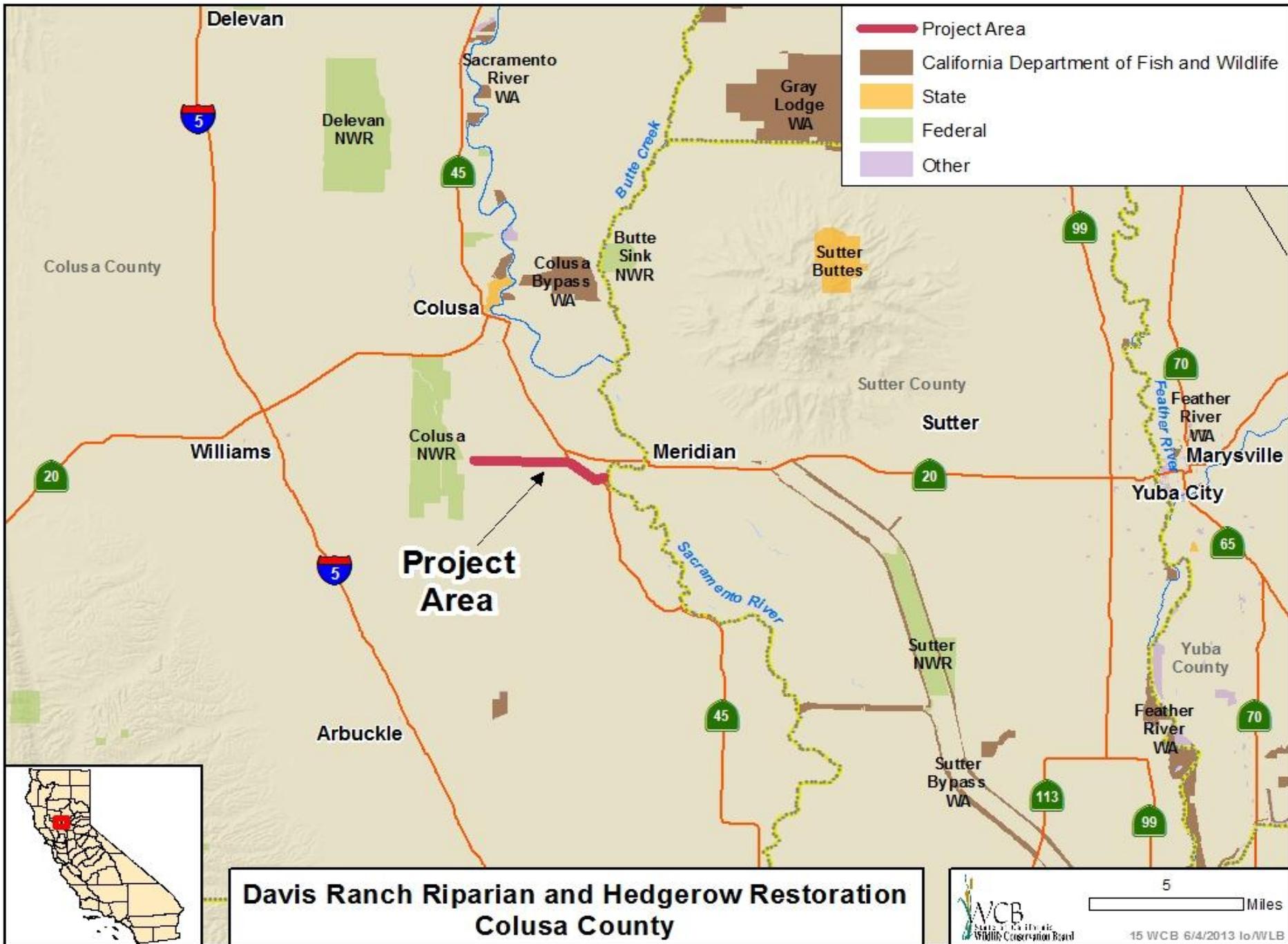
Date - about 1930

Print by Nancy Barth

- Gathering along the old Ten Mile River Bridge at the west end of the property

#14. Ten Mile River (Perry-Smith Ranch)





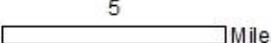
- Project Area
- California Department of Fish and Wildlife
- State
- Federal
- Other

**Davis Ranch Riparian and Hedgerow Restoration
Colusa County**



State of California
Wildlife Conservation Board

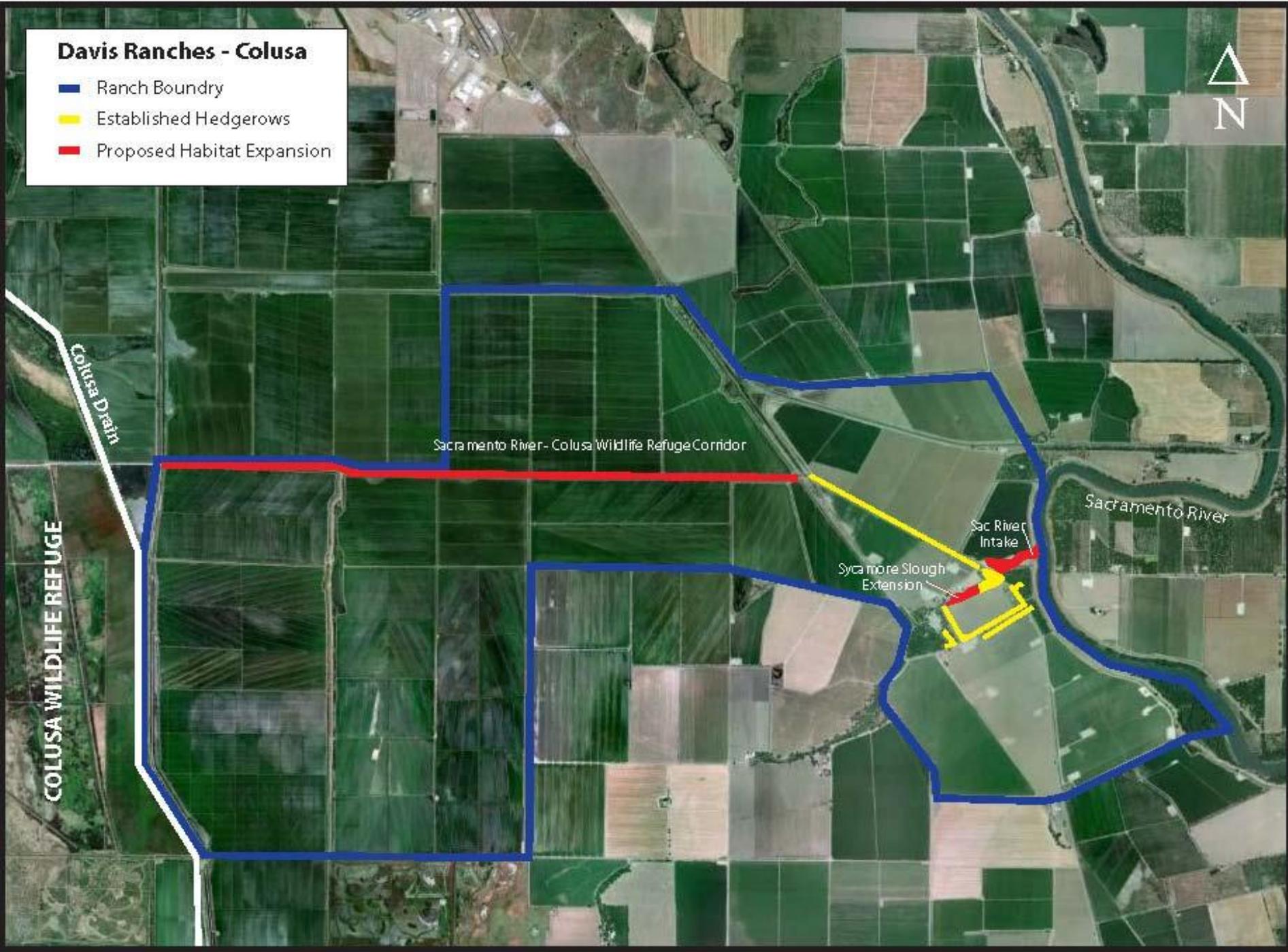
5 Miles



15 WCB 6/4/2013 10/WLB

Davis Ranches - Colusa

- Ranch Boundry
- Established Hedgerows
- Proposed Habitat Expansion



COLUSA WILDLIFE REFUGE

Colusa Drain

Sacramento River - Colusa Wildlife Refuge Corridor

Sacramento River

Sac River Intake

Sycamore Slough Extension

#15. Davis Ranch Riparian and Hedgerow Restoration



- Phase I: Sacramento River Intake site. Work to include bank sloping and restoring riparian habitat

#15. Davis Ranch Riparian and Hedgerow Restoration



- Phase I: Sacramento River Intake site.

#15. Davis Ranch Riparian and Hedgerow Restoration



- Phase III: River-refuge Corridor. Existing roads to be consolidated.

#15. Davis Ranch Riparian and Hedgerow Restoration



- Phase III, River-refuge Corridor site. Three miles of riparian habitat to be created, connecting the Davis Ranch riparian habitats to the Colusa National Wildlife Refuge

#15. Davis Ranch Riparian and Hedgerow Restoration

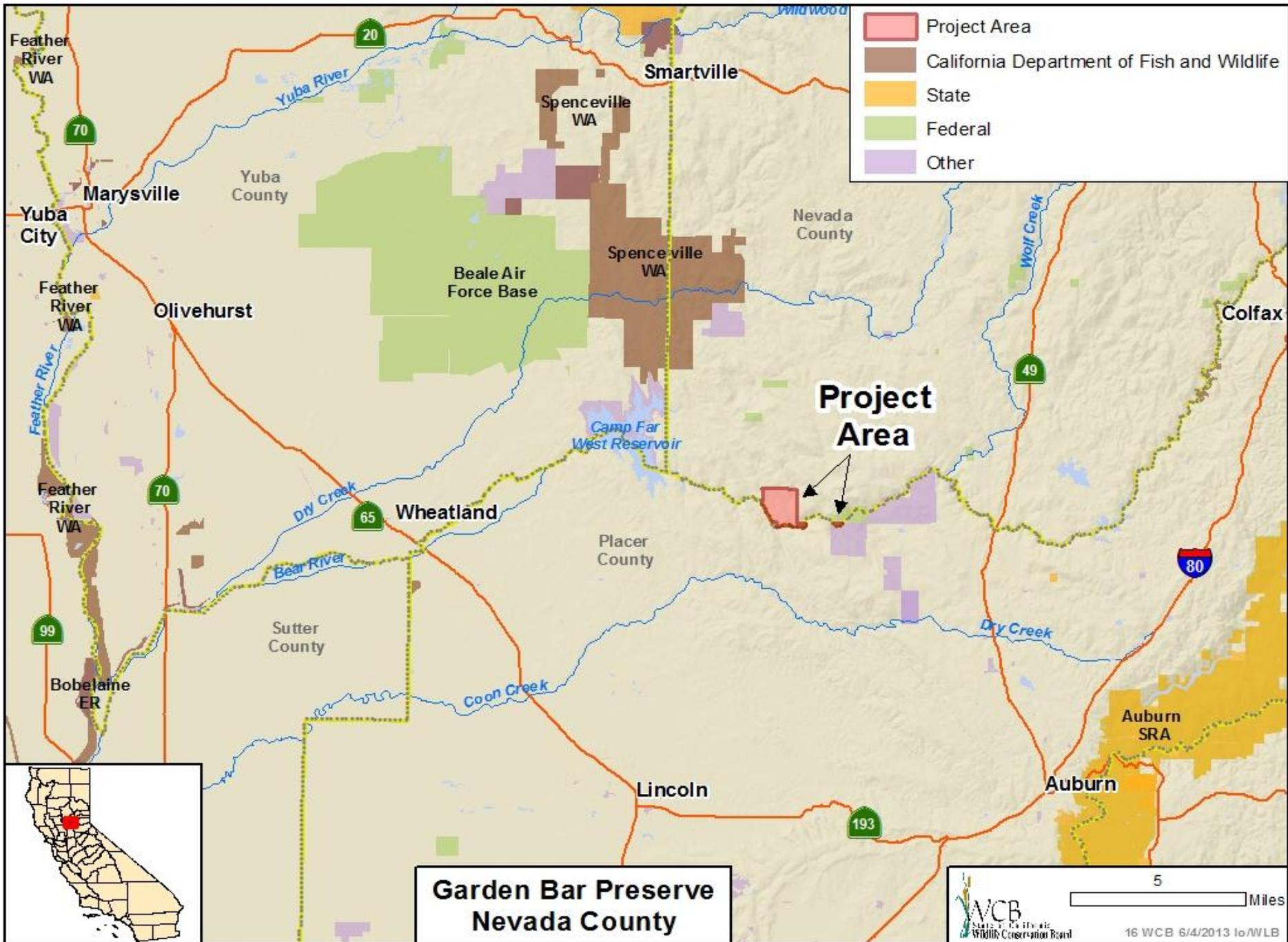


- Two-year old hedgerow from an earlier project at the Davis Ranch

#15. Davis Ranch Riparian and Hedgerow Restoration



- Two-year old hedgerow from an earlier project at the Davis Ranch



**Garden Bar Preserve
Nevada County**

#16. Garden Bar Preserve



- Bear River floodplain

#16. Garden Bar Preserve



- Looking southwest across the property

#16. Garden Bar Preserve



- Southwest view of the Bear River

#16. Garden Bar Preserve

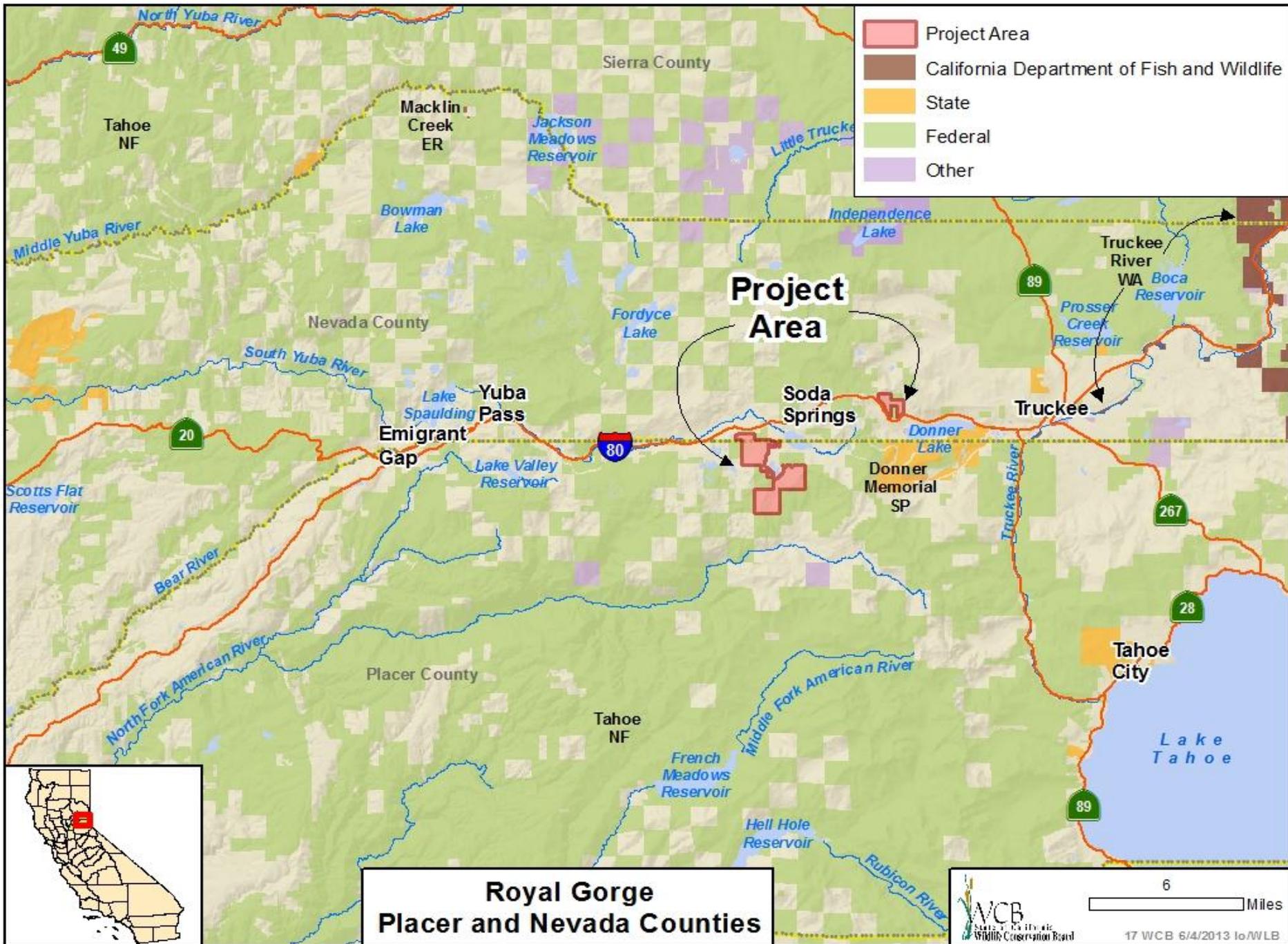


- Southwest view

#16. Garden Bar Preserve

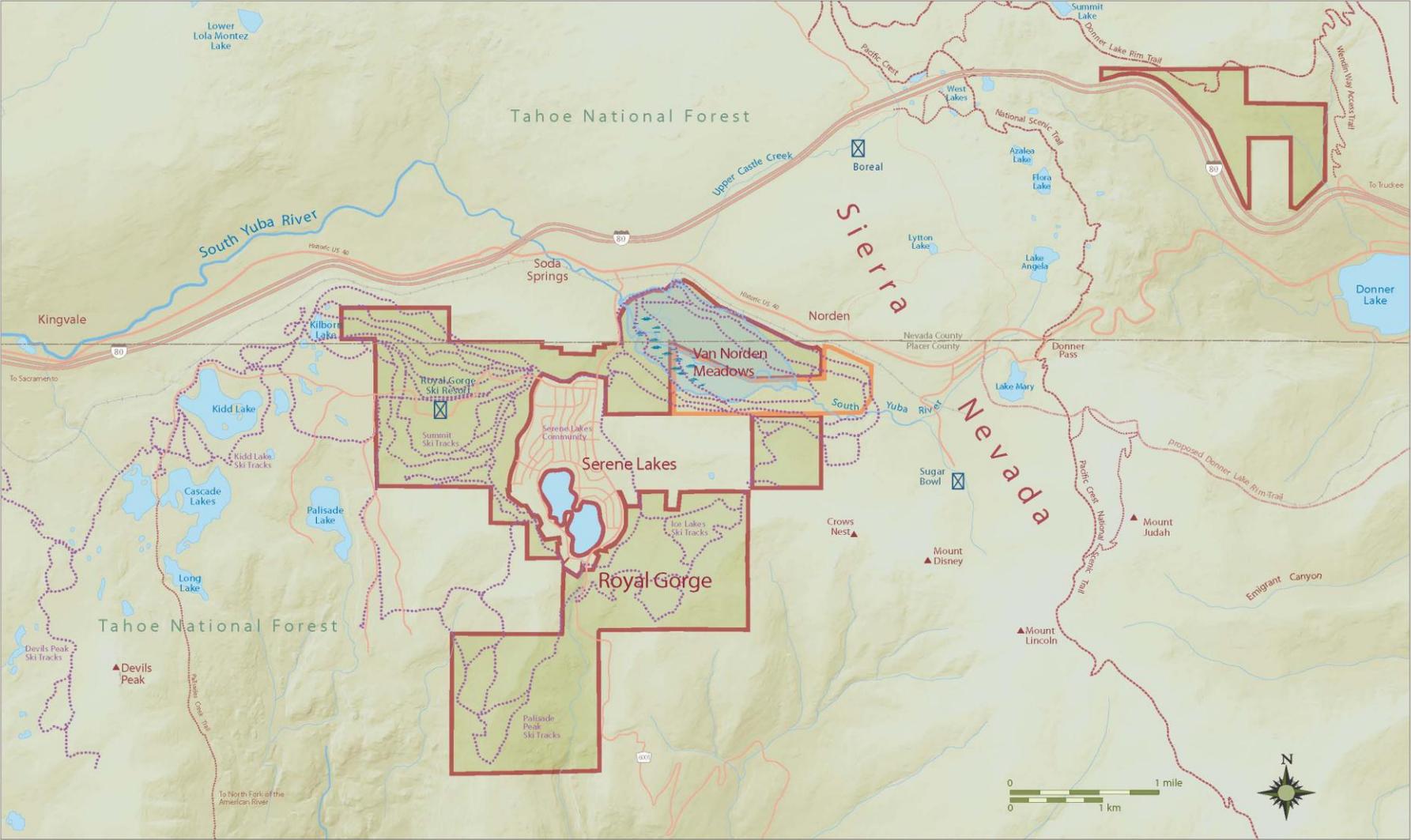


- Rock outcropping and oaks



**Royal Gorge
Placer and Nevada Counties**

Royal Gorge



- Proposed Acquisition
- Sugar Bowl/Van Norden Meadow Acquisition
- X Ski Areas

- Major trails
- Proposed trails
- Winter recreation trails*

Northern Sierra Partnership



#17. Royal Gorge



- Upper Gregory Creek Property

#17. Royal Gorge



- Upper Gregory Creek – mix of conifers and deciduous plants that grow in the loose volcanic soil

#17. Royal Gorge

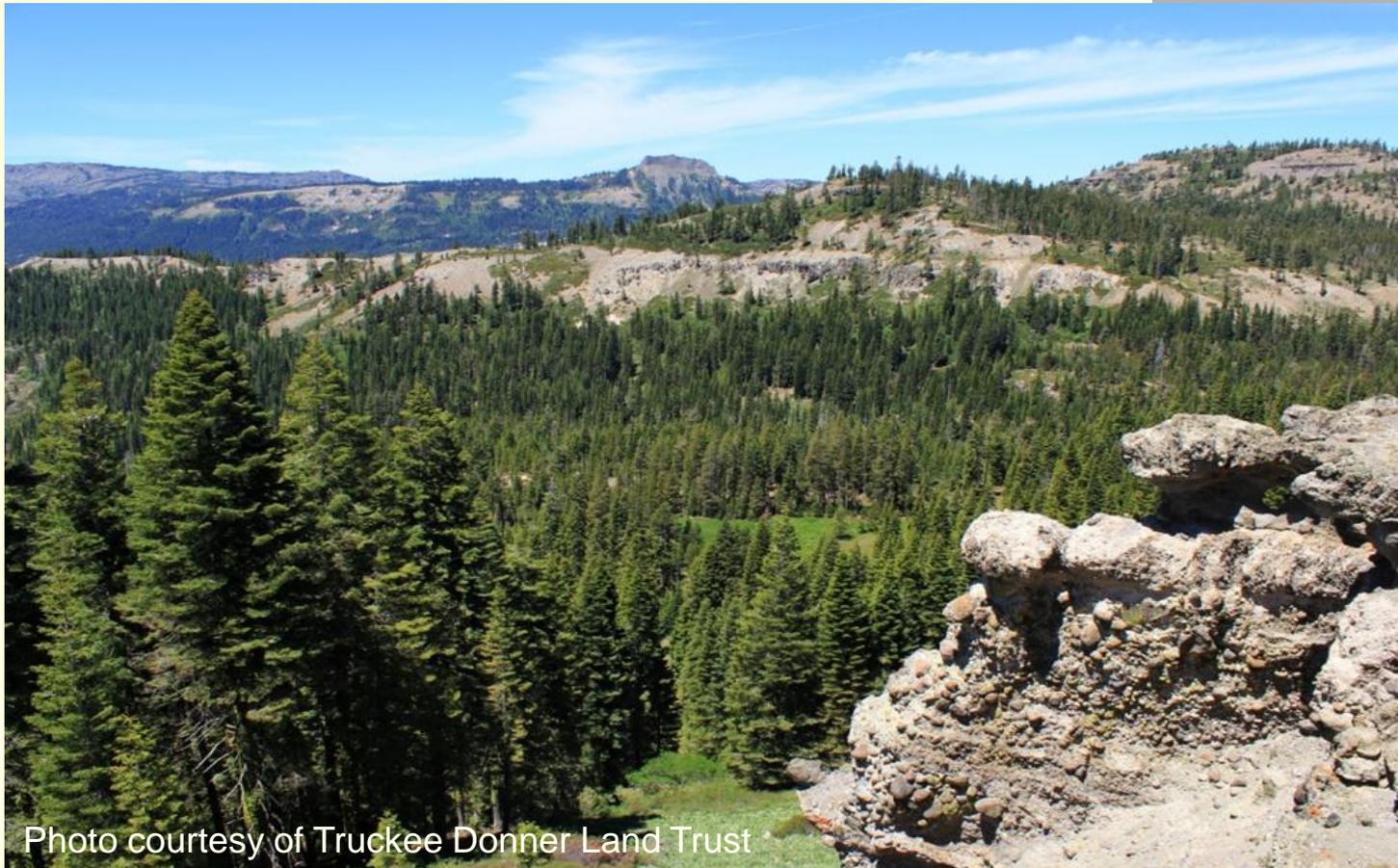


Photo courtesy of Truckee Donner Land Trust

- Royal Gorge Property

#17. Royal Gorge



Photo courtesy of Truckee Donner Land Trust

- Meadow from Palisade Peak

#17. Royal Gorge



Photo courtesy of Truckee Donner Land Trust

- Natural Arch on Mt. Rowton

#17. Royal Gorge



Photo courtesy of David Galson

- Royal Gorge

#17. Royal Gorge



Photo courtesy of David Galson

- Serena Creek

#17. Royal Gorge



Photo courtesy of David Galson

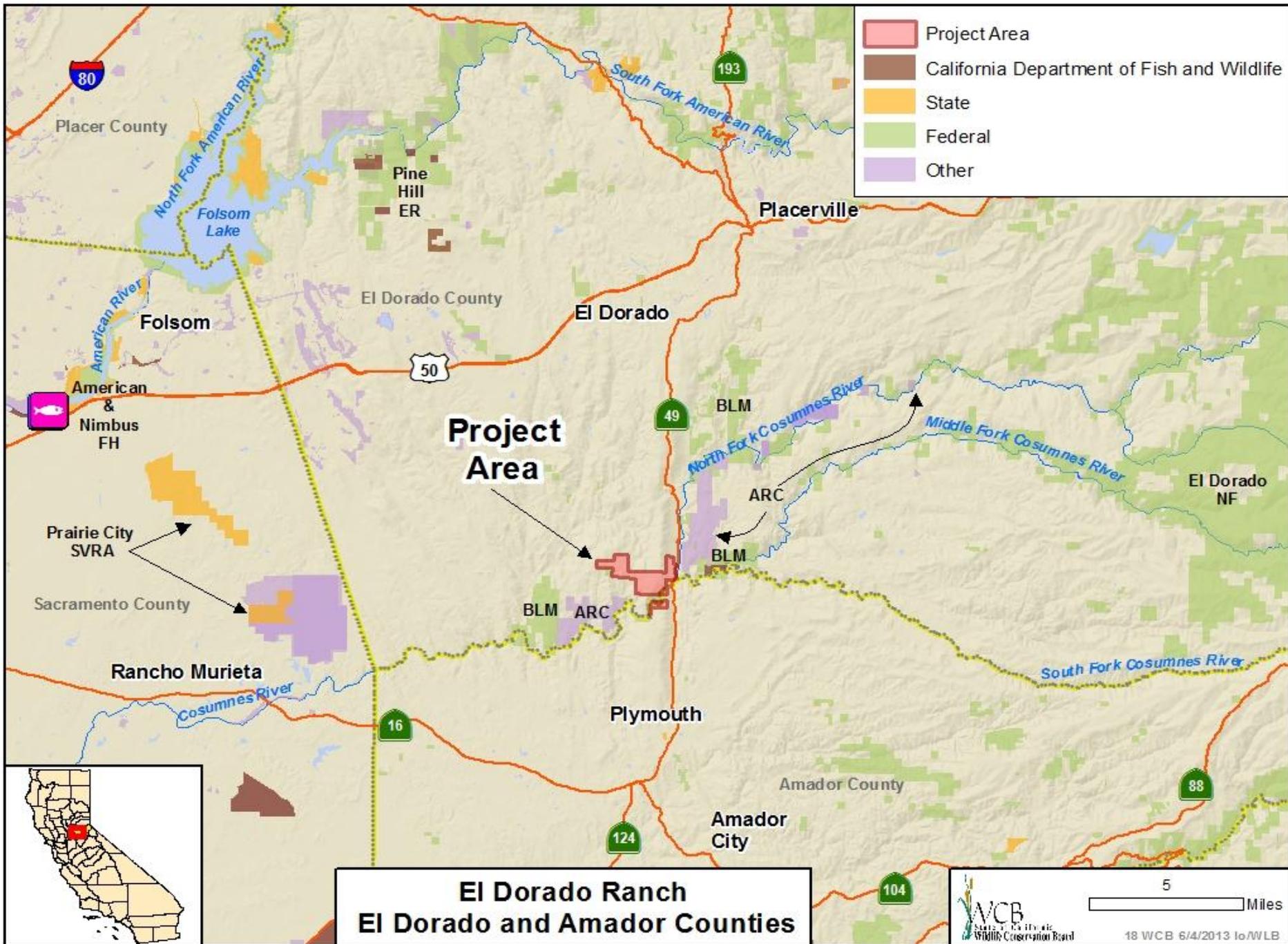
- Van Norden Meadow

#17. Royal Gorge



Photo courtesy of David Galson

- Serena Creek Falls



- Project Area
- California Department of Fish and Wildlife
- State
- Federal
- Other

Project Area

**El Dorado Ranch
El Dorado and Amador Counties**

5 Miles

18 WCB 6/4/2013 lo/WLB



#18. El Dorado Ranch



Courtesy of The American River Conservancy

Property contains river frontage along the Main Fork of the Cosumnes River

#18. El Dorado Ranch



Photo courtesy of Paul Cockrell and
The American River Conservancy

View of Blue oak woodlands above the Main Fork of the Cosumnes River

#18. El Dorado Ranch



The property is identified in the County of El Dorado's Oak Woodlands Management Plan as a priority conservation area. El Dorado Ranch contains the largest contiguous north-south corridor of blue oak woodlands in El Dorado County.

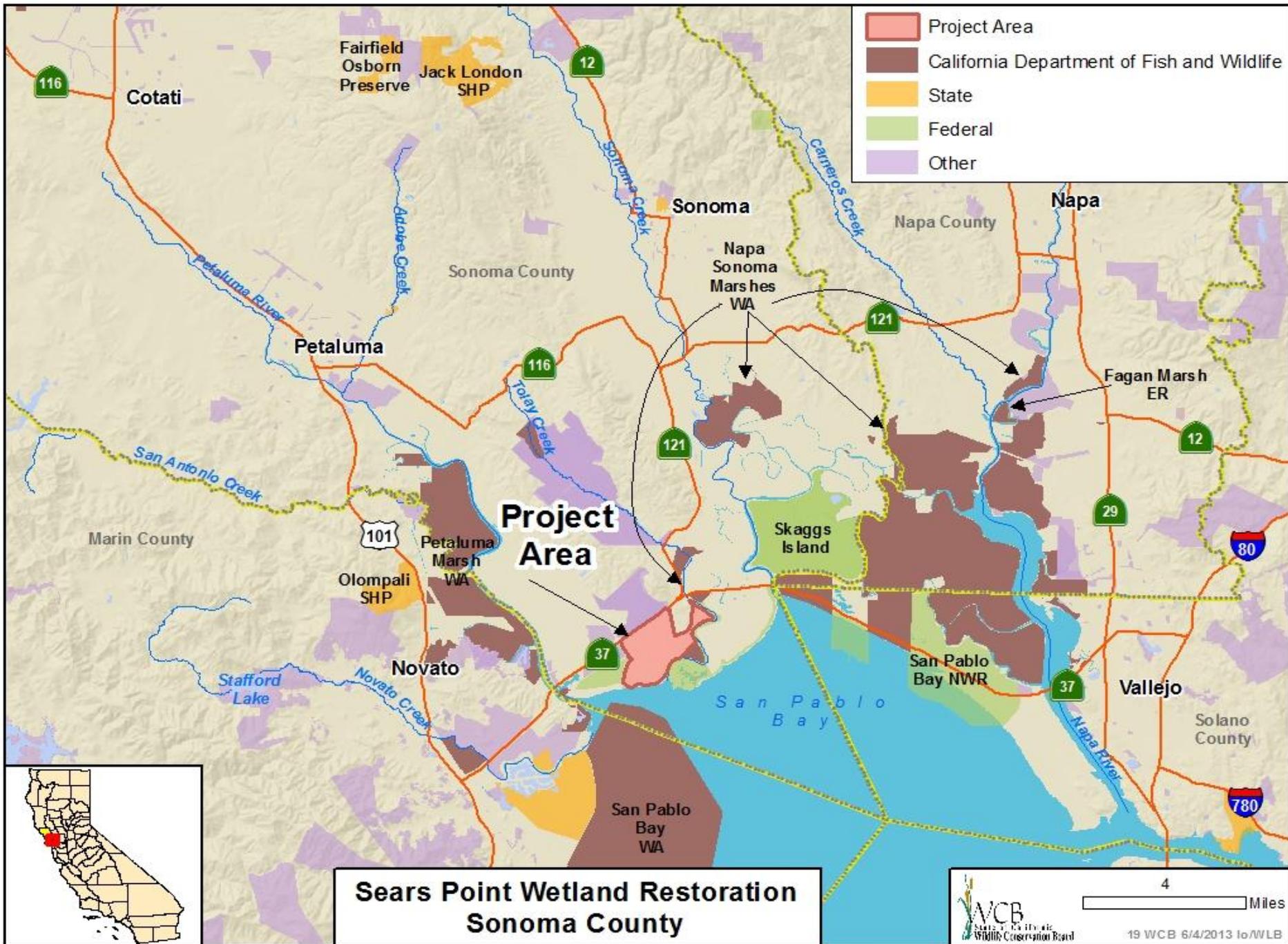
#18. El Dorado Ranch



Photo courtesy of Douglas Parks and
The American River Coastal Conservancy

© 2013 Douglas Parks Fine Photography

A scenic view overlooking the Cosumnes River that will be enjoyed by the public



- Project Area
- California Department of Fish and Wildlife
- State
- Federal
- Other

**Sears Point Wetland Restoration
Sonoma County**

#19. Sears Point Wetland Restoration



- The view west overlooking the 10-year-old Tubbs Island Levee Setback Restoration Project in the foreground, the diked baylands of Sears Point, and the recently restored Sonoma Baylands Restoration Project

#19. Sears Point Wetland Restoration



- The view south from the Sears Point uplands across Highway 37, the seasonal wetland restoration area, the railroad track, and into the future tidal marsh restoration area. Tubbs Island in the background gives way to San Pablo Bay

#19. Sears Point Wetland Restoration



- The view north over Sears Point. Note the prodigious suspended sediment supply within San Pablo Bay and Tolay Creek

#19. Sears Point Wetland Restoration



- The view east over the Petaluma River in the foreground with its existing tidal marsh, the recently restored Sonoma Baylands, the proposed restoration site, and Tolay Creek in the distance

#19. Sears Point Wetland Restoration

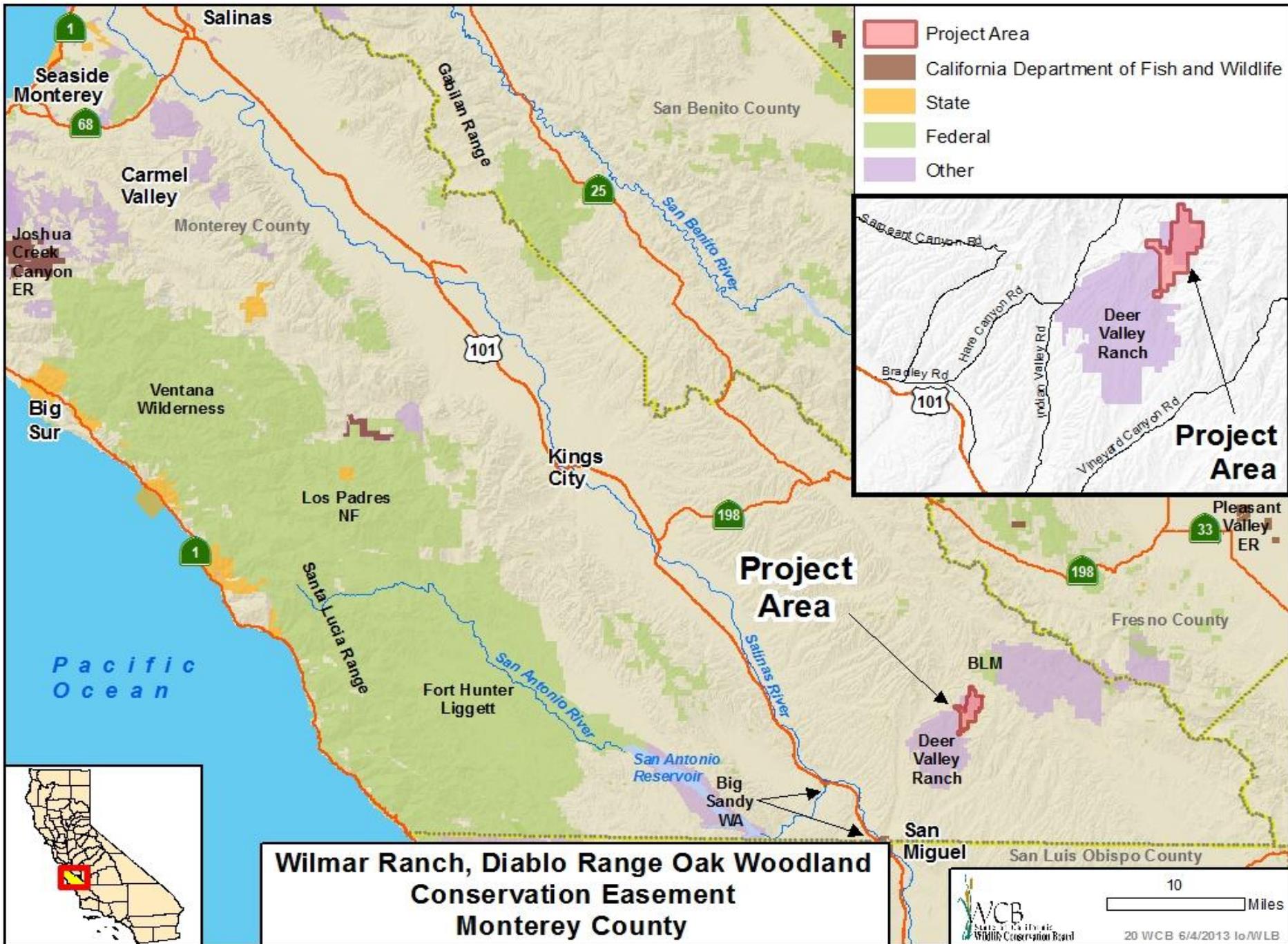


- Miles of new tidal channels will be constructed using historic maps to locate former channels and taking advantage of existing drainage ditches

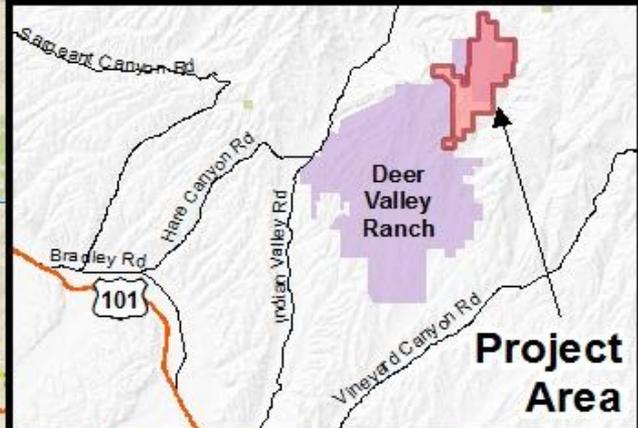
#19. Sears Point Wetland Restoration



- The recently restored Sonoma Baylands provides a good example of what the proposed project will become in a few years



- Project Area
- California Department of Fish and Wildlife
- State
- Federal
- Other



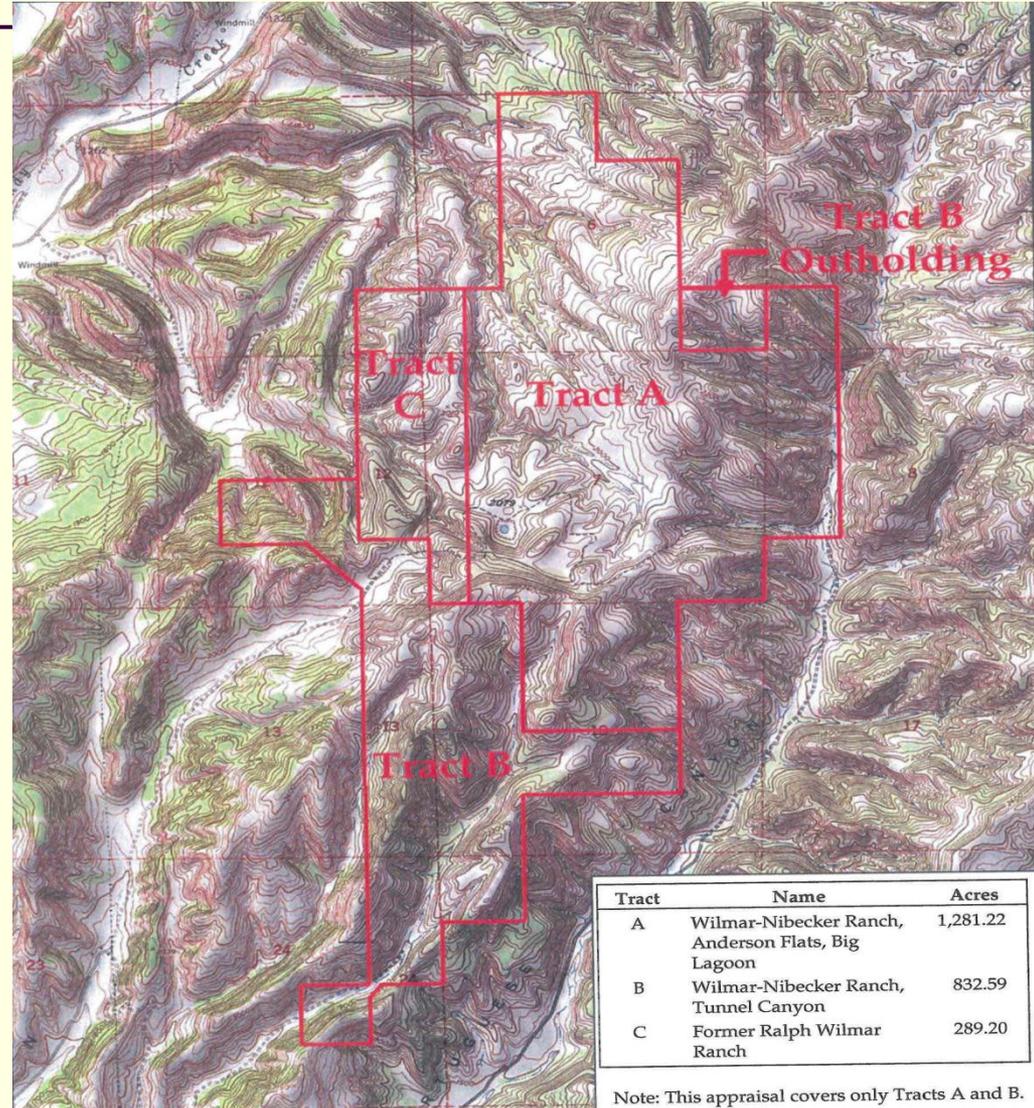
**Wilmar Ranch, Diablo Range Oak Woodland
Conservation Easement
Monterey County**



10
Miles

#20. Wilmar Ranch, Diablo Range Oak Woodland Conservation Easement

- The Easement Area is comprised of Tracts A and B



#20. Wilmar Ranch, Diablo Range Oak Woodland Conservation Easement



- The Wilmar Ranch is valued for its oak woodlands, oak savannahs and native plants and wildlife that include deer, bobcat, mountain lion, coyote, wild pig, wild turkey and raptors.

#20. Wilmar Ranch, Diablo Range Oak Woodland Conservation Easement



- The property includes both Live Oak and Coast Live Oak trees that will be conserved and protected by the easement.

#20. Wilmar Ranch, Diablo Range Oak Woodland Conservation Easement



- The conservation easement will compliment Monterey County's Oak Woodland Management plans to protect existing oak woodlands from development and maintain or improve conditions of existing oak woodlands.

#20. Wilmar Ranch, Diablo Range Oak Woodland Conservation Easement

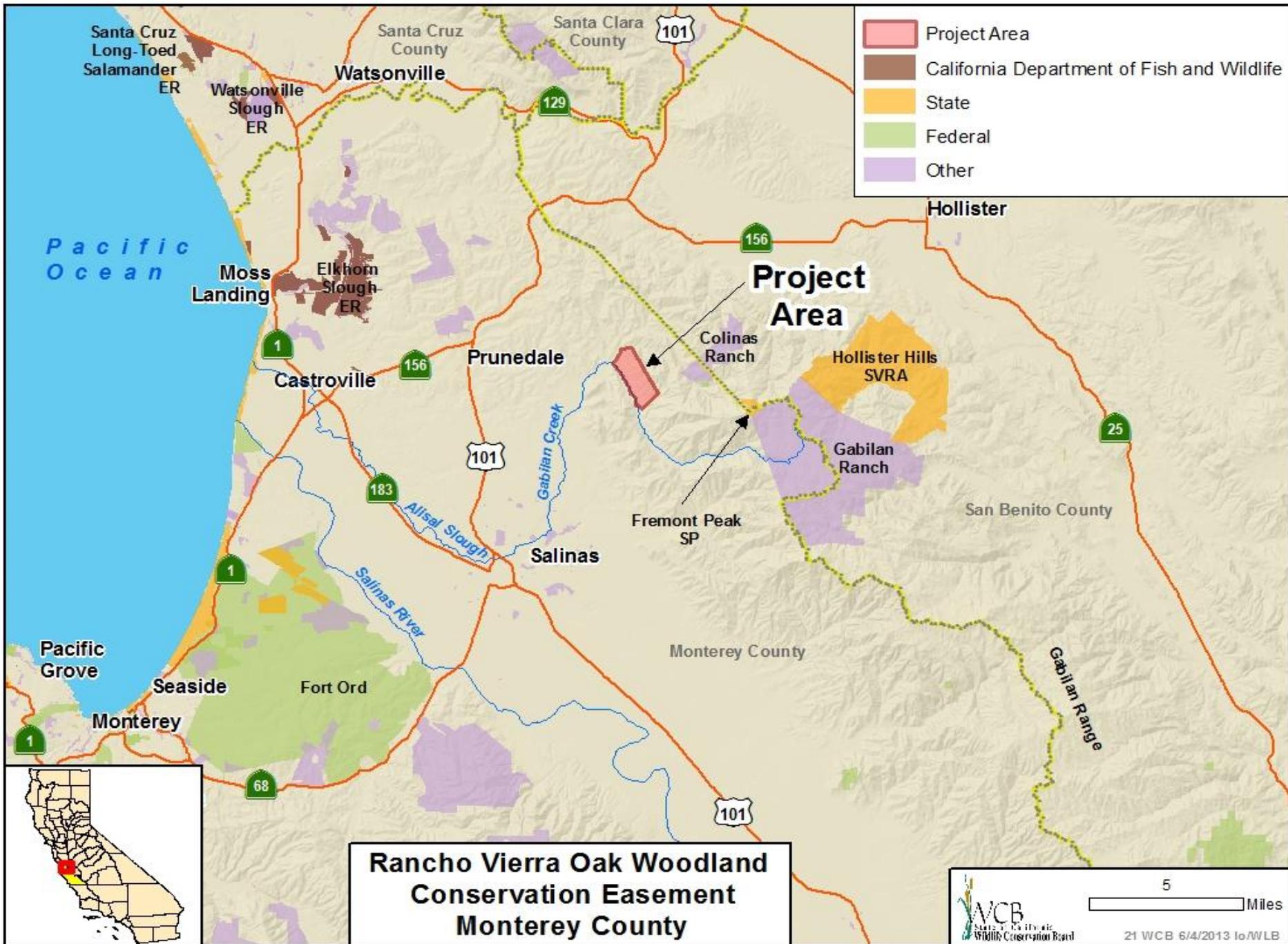


- View of Property

#20. Wilmar Ranch, Diablo Range Oak Woodland Conservation Easement



- Wildflowers and views from the Property



**Rancho Vierra Oak Woodland
Conservation Easement
Monterey County**

#21. Rancho Vierra Oak Woodland Conservation Easement



- Looking west from the north east portion of the property towards Old Stage Road.

#21. Rancho Vierra Oak Woodland Conservation Easement



Photo courtesy of Ron Pickup

- Blue Oak

#21. Rancho Vierra Oak Woodland Conservation Easement



Photo courtesy of Ron Pickup

- Gabilan Creek

#21. Rancho Vierra Oak Woodland Conservation Easement



- Looking southwest at Gabilan Creek.

#21. Rancho Vierra Oak Woodland Conservation Easement



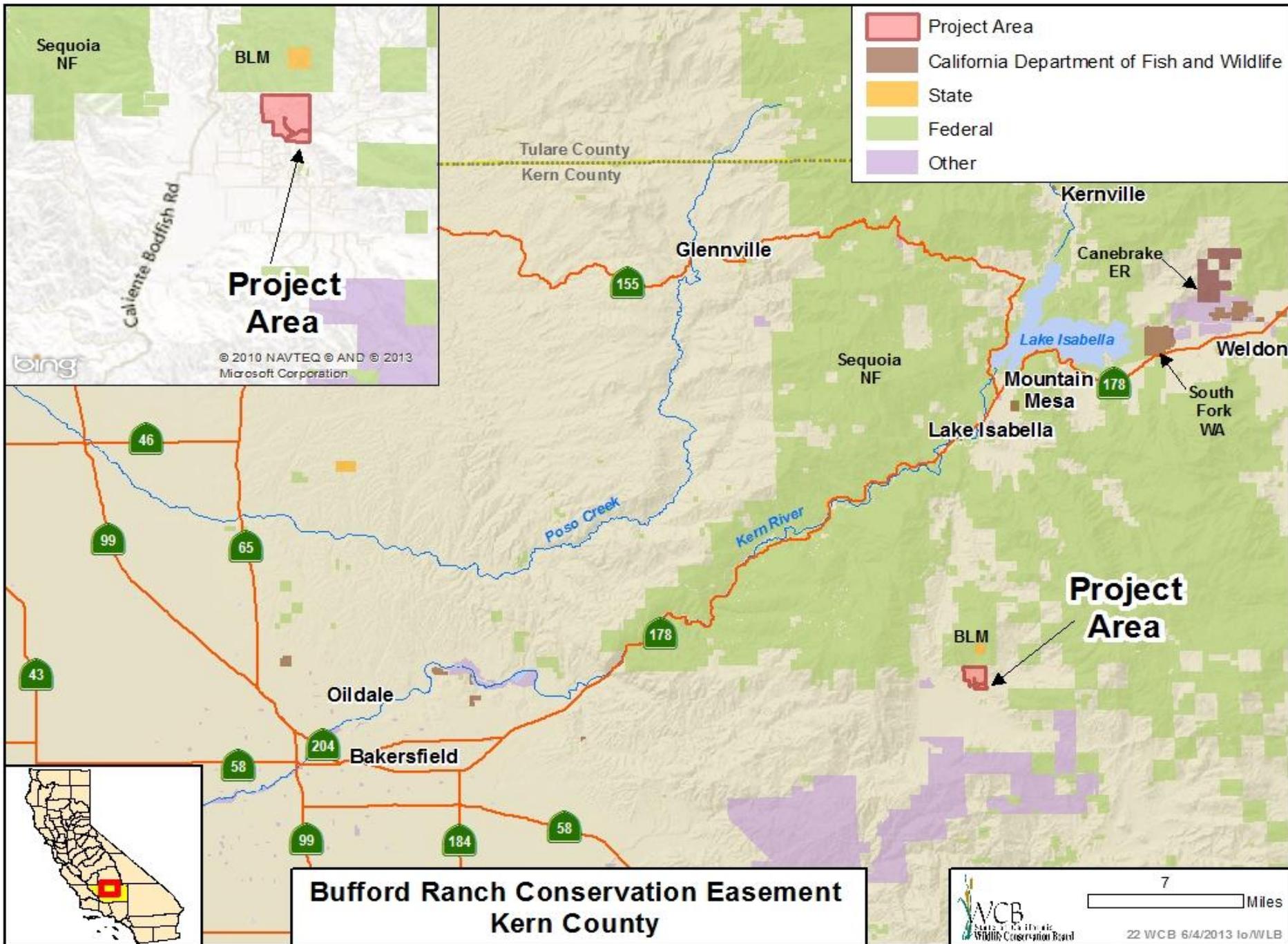
Photo courtesy of Ron Pickup

- Tule Elk

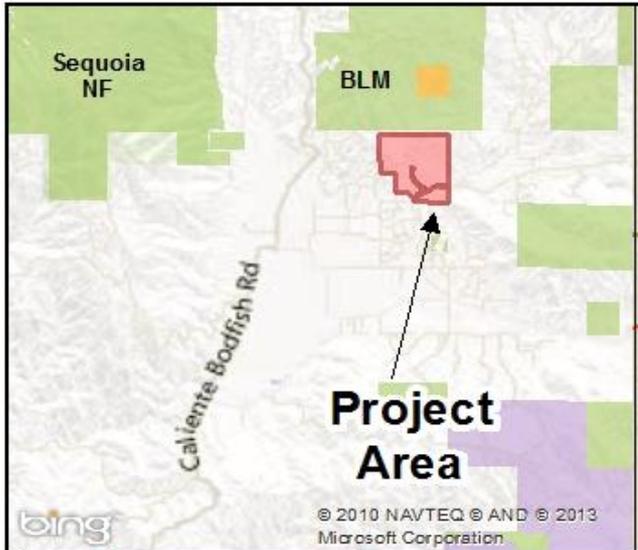
#21. Rancho Vierra Oak Woodland Conservation Easement



- Looking south from the center portion of the property towards Gabilan Creek.



- Project Area
- California Department of Fish and Wildlife
- State
- Federal
- Other

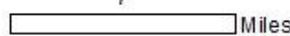


**Bufford Ranch Conservation Easement
Kern County**



Wildlife Conservation Board

7 Miles



22 WCB 6/4/2013 to/WLB

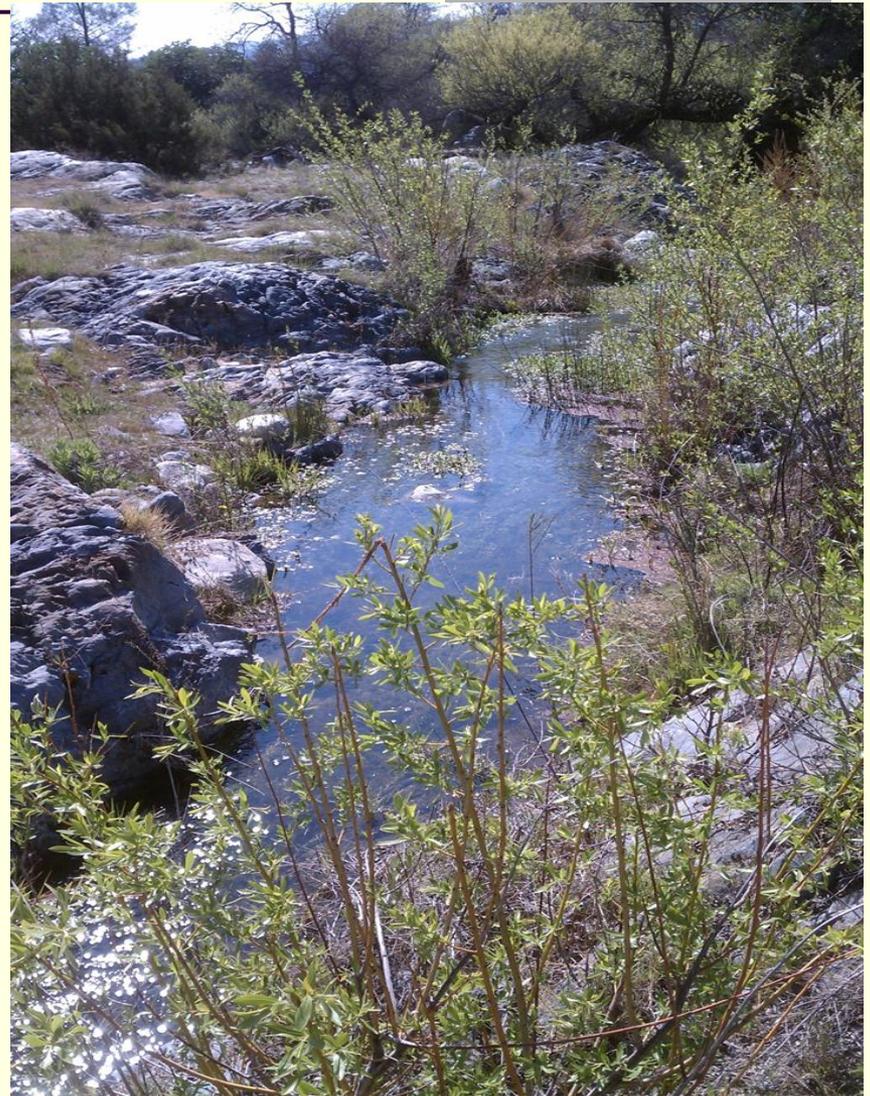
#22. Bufford Ranch Conservation Easement

- Open grazing land on property



#22. Bufford Ranch Conservation Easement

- Seasonal stream found on property



#22. Bufford Ranch Conservation Easement



- Native American grinding stones found on the property



- Project Area
- California Department of Fish and Wildlife
- State
- Federal
- Other

**Arrastre Canyon
Los Angeles County**

#23. Arrastre Canyon



- Looking up Arrastre Canyon with the Angeles National Forest in the background.

#23. Arrastre Canyon



■ Arrastre Creek

#23. Arrastre Canyon

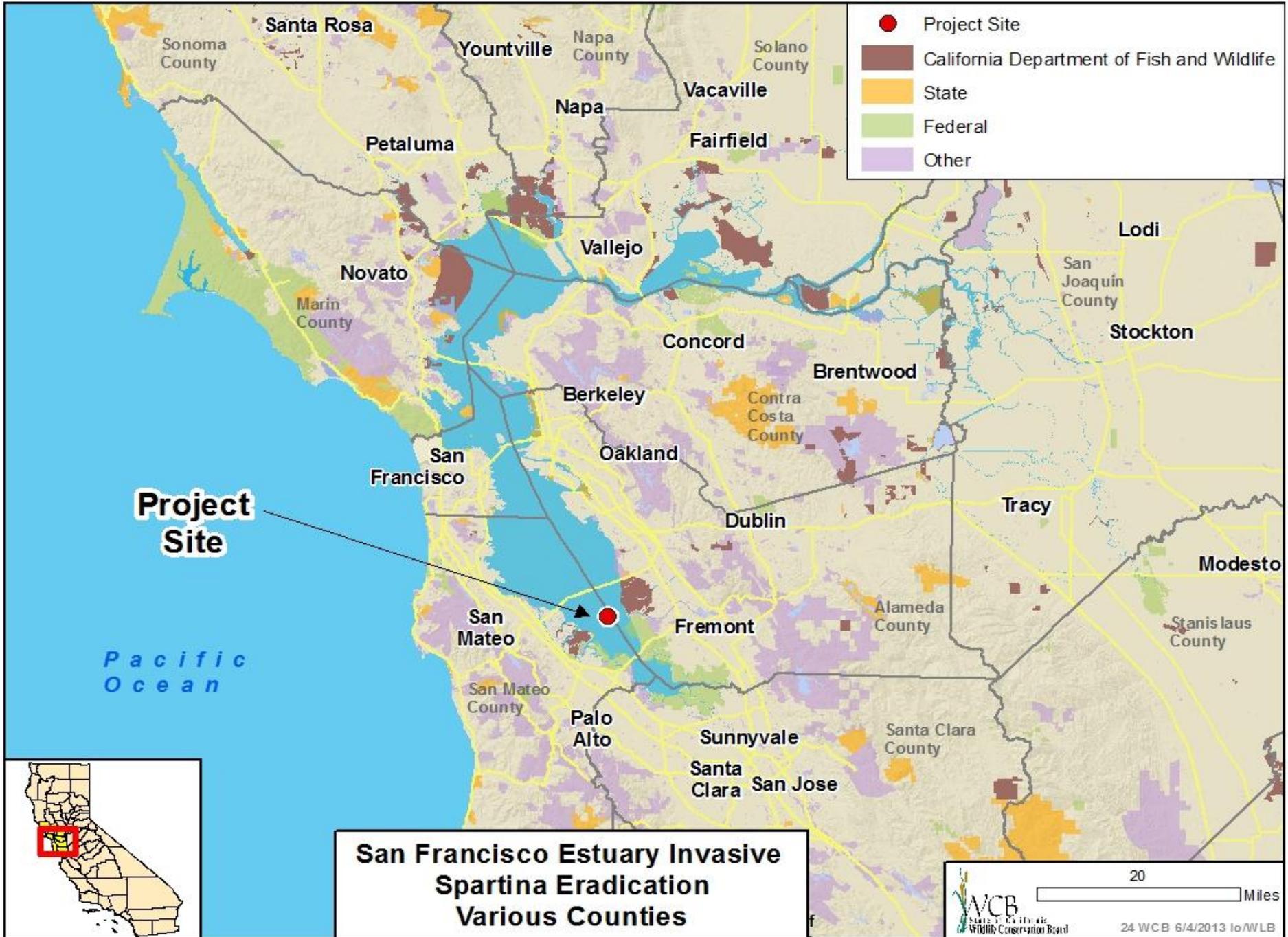
- Arrastre Creek -
Unarmored Three
Spined Stickleback
habitat



#23. Arrastre Canyon



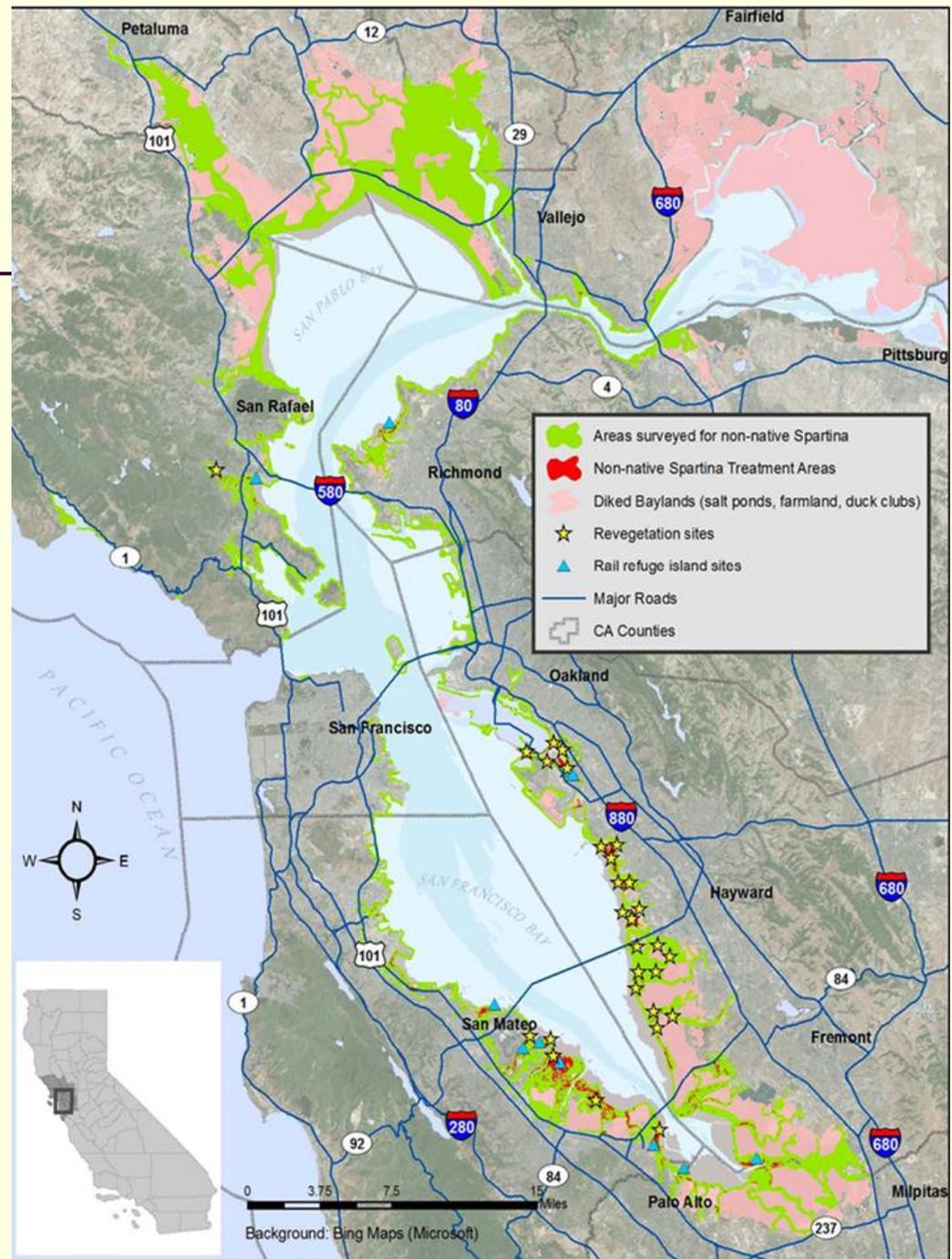
- View up towards Arrastre Canyon and the Angeles National Forest



**San Francisco Estuary Invasive
Spartina Eradication
Various Counties**

#24. San Francisco Estuary Invasive Spartina Eradication

Survey, treatment, and restoration sites in the project area.



#24. San Francisco Estuary Invasive Spartina Eradication



- Treating isolated plants along previously infested shorelines with low toxicity herbicide formulated for aquatic habitats. The blue color is a non-toxic dye added to the herbicide to help applicators see what has already been treated.

#24. San Francisco Estuary Invasive Spartina Eradication



- Sometimes the invasive hybrid plants are visible as brighter green spots in the marsh plain (indicated by red arrows), but in many marshes, the invasive is not nearly so discernible, consisting of only a few scattered individuals.

#24. San Francisco Estuary Invasive Spartina Eradication



- The stubble in the foreground is what is remaining of plants successfully killed the previous season. The established clone in the center of the photo illustrates how new green growth spreads from its center, sometimes at a rate of two meters or more per year.

#24. San Francisco Estuary Invasive Spartina Eradication



- Geotextile fabric secured over a plant can be effective for killing isolated clones in some situations

#24. San Francisco Estuary Invasive Spartina Eradication



- Native Marsh Gumplant is planted in dense clumps along small channels to provide nesting habitat and refuge for endangered California Clapper Rails

#24. San Francisco Estuary Invasive Spartina Eradication



- Transporting Native Spartina to restoration sites

#24. San Francisco Estuary Invasive Spartina Eradication



- Native Spartina planted within goose exclosure cages

#24. San Francisco Estuary Invasive Spartina Eradication



- Building earthen islands for high tide refuge areas

#24. San Francisco Estuary Invasive Spartina Eradication



- Once the earthen mound is constructed, the islands are densely planted with native marsh gumplant, saltgrass, and pickleweed – favorite cover for Clapper Rails and Harvest Mice

#24. San Francisco Estuary Invasive Spartina Eradication



- A completed island with newly-planted vegetation. Within a few months, this vegetation will provide the highest protective cover in the marsh

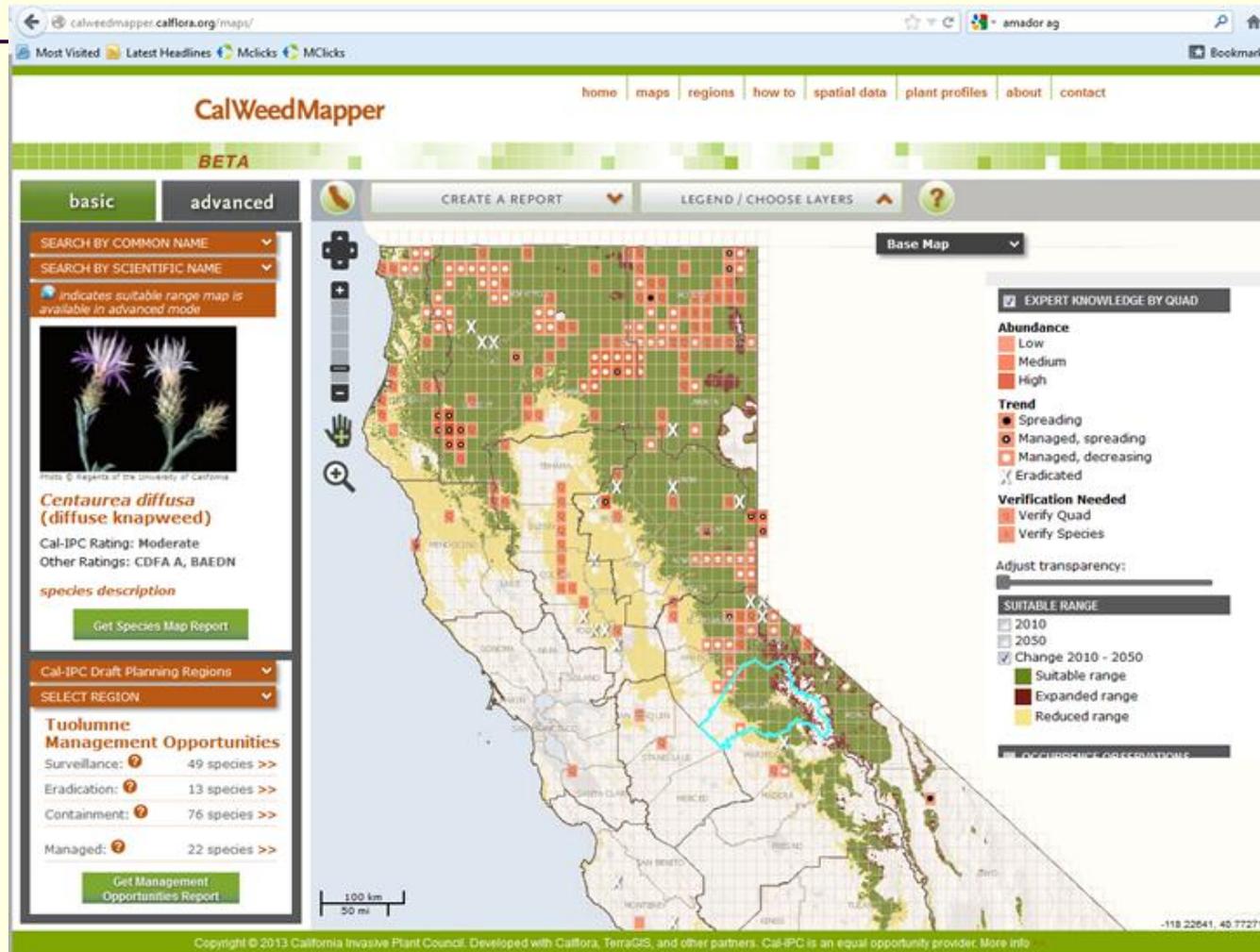
#25. Statewide Strategic Planning for Invasive Plants

Four Project Priorities:

- Support CDFW SWAP
- Identify Regional Priorities
- Develop Specific Projects
- Strengthen Decision Support Tools



#25. Statewide Strategic Planning for Invasive Plants



- Map of northern California provided by CalWeedMapper

#25. Statewide Strategic Planning for Invasive Plants



- Arundo displaces native plants and associated wildlife because of the massive stands it forms.

#25. Statewide Strategic Planning for Invasive Plants



- Spotted Knapweed crowds out native species and forage for livestock, and can invade undisturbed bunchgrass stands

#25. Statewide Strategic Planning for Invasive Plants



- Yellow starthistle inhabits open hills, grasslands, open woodlands, fields, roadsides, and rangelands, and it is considered one of the most serious rangeland weeds in the state