



**Wildlife Conservation Board Meeting  
February 25, 2021**



Puma Canyon, peak of Tidwell



## **Item 2. Discussion and Selection of new Board Chairman and Vice Chairman**



## Item 3. Public Forum



## Item 4. Funding Status

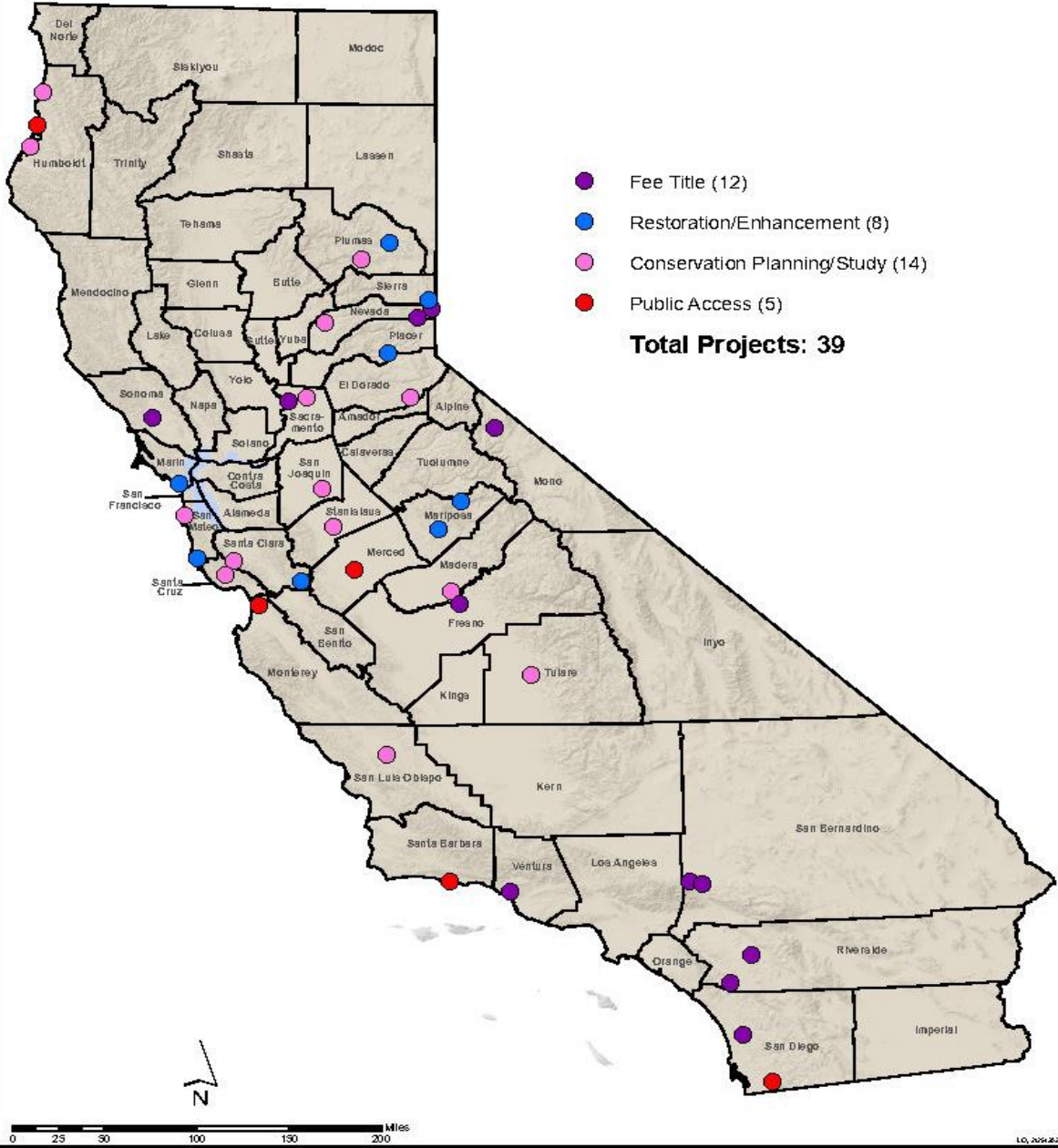


## Item 5. Executive Director's Report

Mariposa Creek Parkway Riparian Restoration

# 2021 Competitive Solicitations (tentative)

- **Proposition 68**
  - Lower American River Program- April (\$2 million)
  - Public Access - May (\$5 million)
  - Wildlife Corridors/Fish Passage - June (\$7 million)
  - Sierra Nevada and Cascade/Forest - August (\$12 million)
- **Proposition 1**
  - Stream Flow Enhancement -July (\$20 million)



# Wildlife Conservation Board Meeting February 25, 2021 Project Map



## Consent Items 7-31

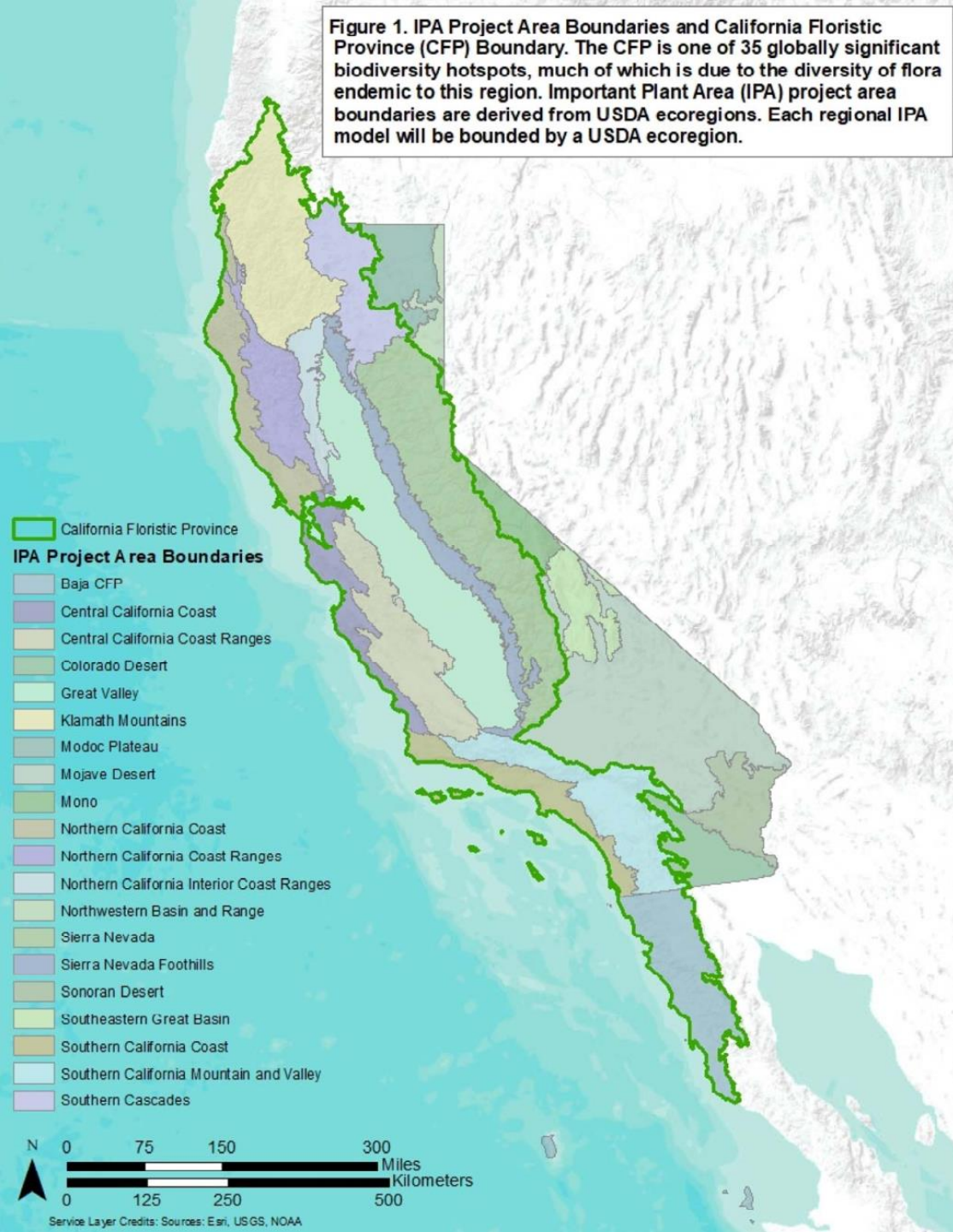
Golden Gate Monarch Butterfly Habitat  
Photo credit: Stephan Meyer





## Proposed Calendar Items 32-45

Figure 1. IPA Project Area Boundaries and California Floristic Province (CFP) Boundary. The CFP is one of 35 globally significant biodiversity hotspots, much of which is due to the diversity of flora endemic to this region. Important Plant Area (IPA) project area boundaries are derived from USDA ecoregions. Each regional IPA model will be bounded by a USDA ecoregion.



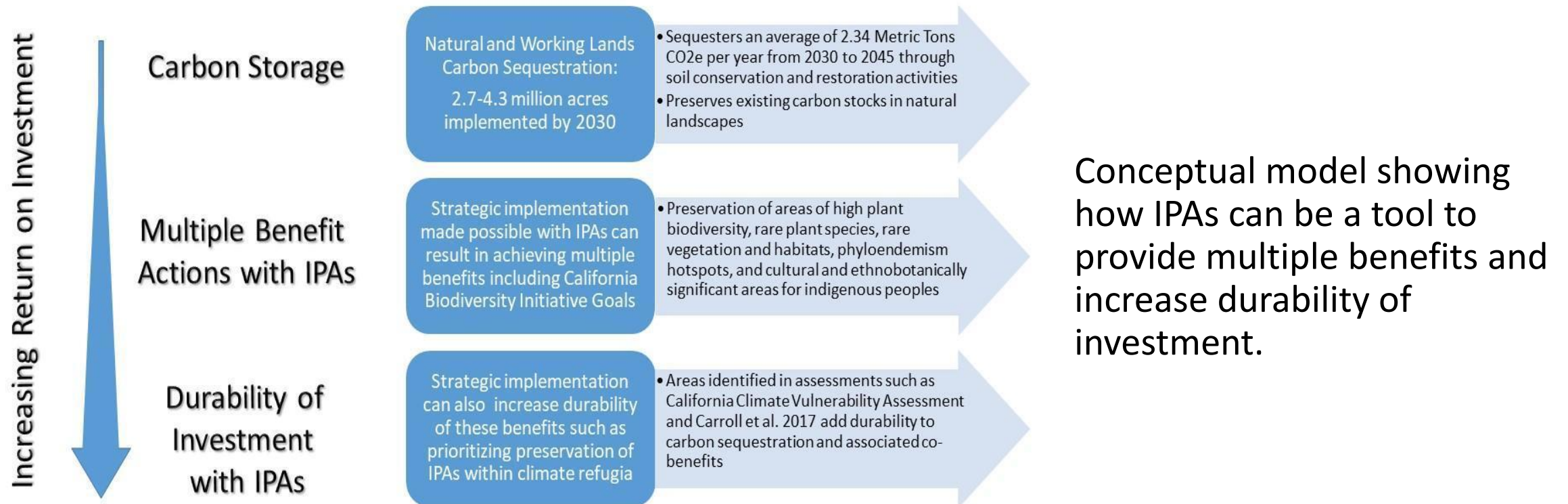
# 7. Mapping Important Plant Areas of California

Slide 1

Project boundary map

# 7. Mapping Important Plant Areas of California

Slide 2





# Programmatic Permitting for Aquatic Habitat Restoration, Augmentation Statewide





## 8. Programmatic Permitting for Aquatic Habitat Restoration, Augmentation

Slide 1

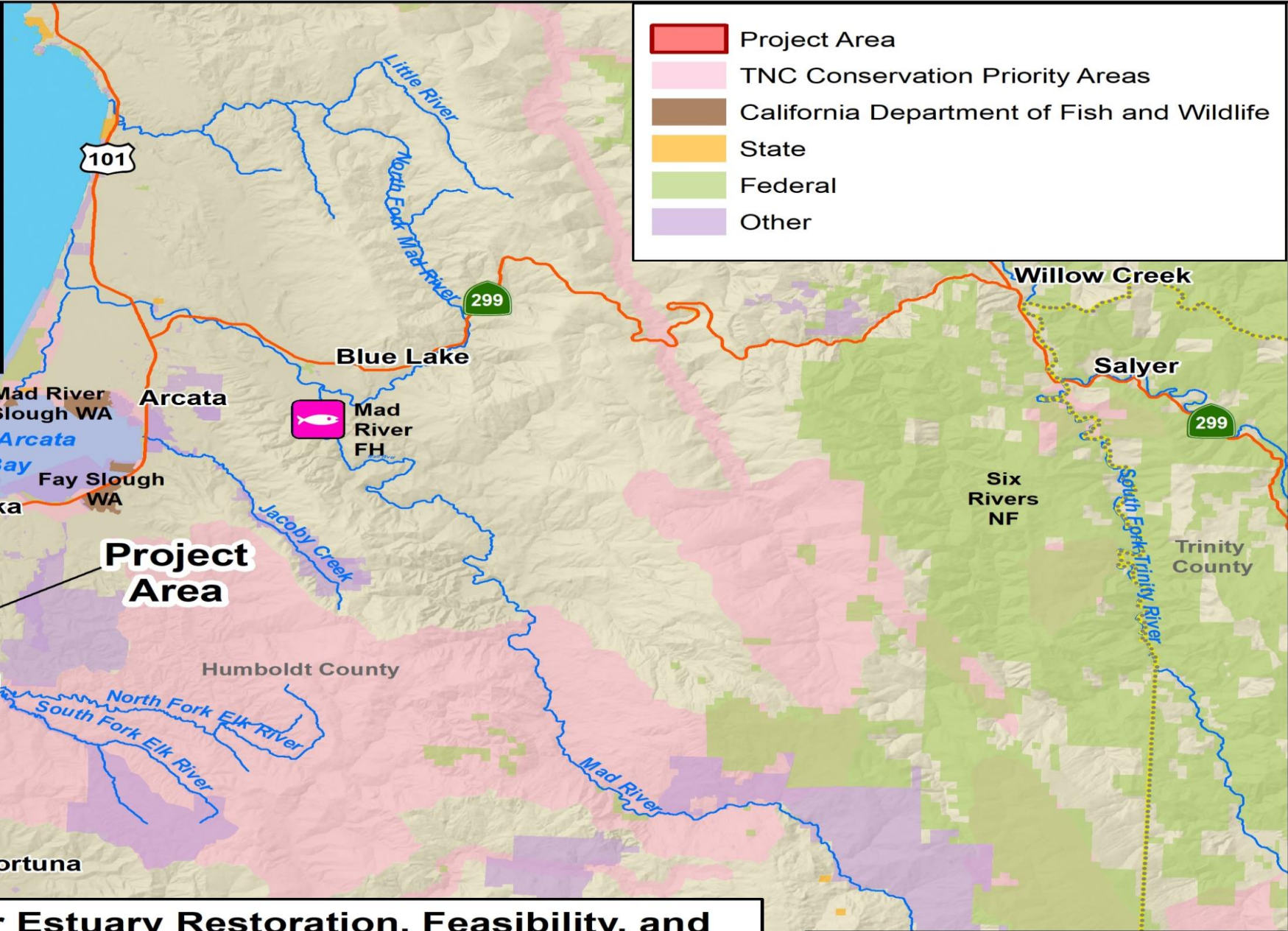
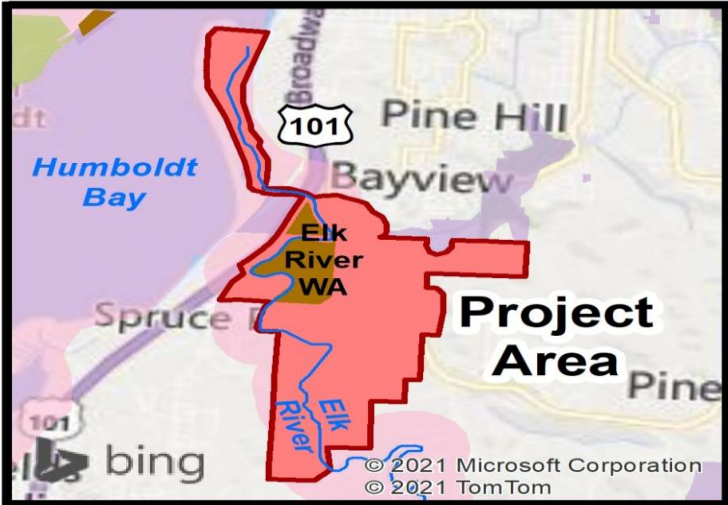
Example Site 1 before and after treatment. Stadia rods in pre-treatment photo indicate log placement within the site.



## 8. Programmatic Permitting for Aquatic Habitat Restoration, Augmentation

Slide 2

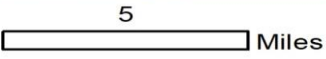
- Example Site 2 before and after treatment. Stadia rods in pre-treatment photo indicate log placement of two logs on left bank.



- Project Area
- TNC Conservation Priority Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other



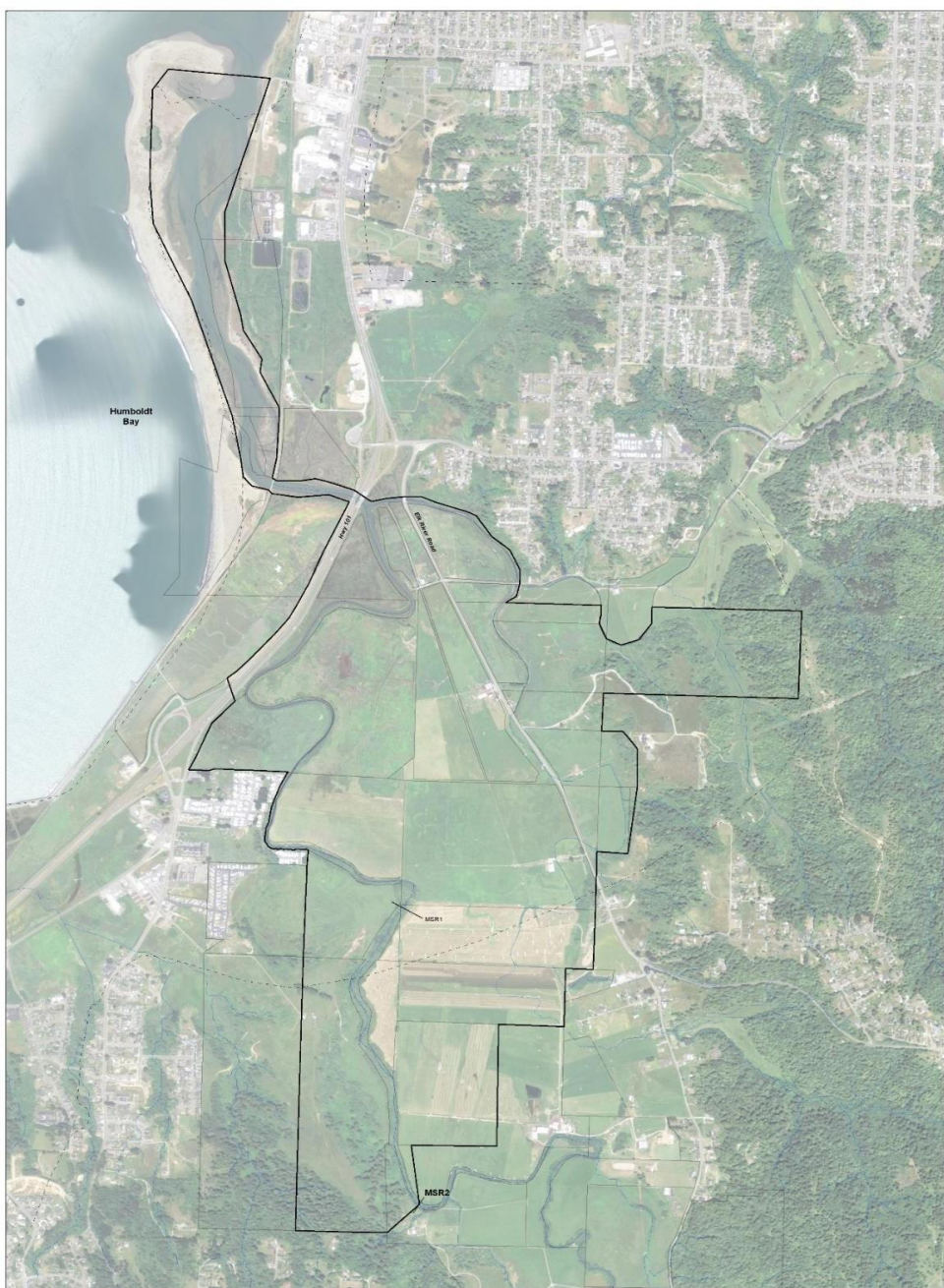
**Elk River Estuary Restoration, Feasibility, and Conceptual Design  
Humboldt County**



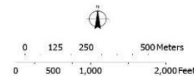
# 9. Elk River Estuary Restoration, Feasibility and Conceptual Design

Slide 1

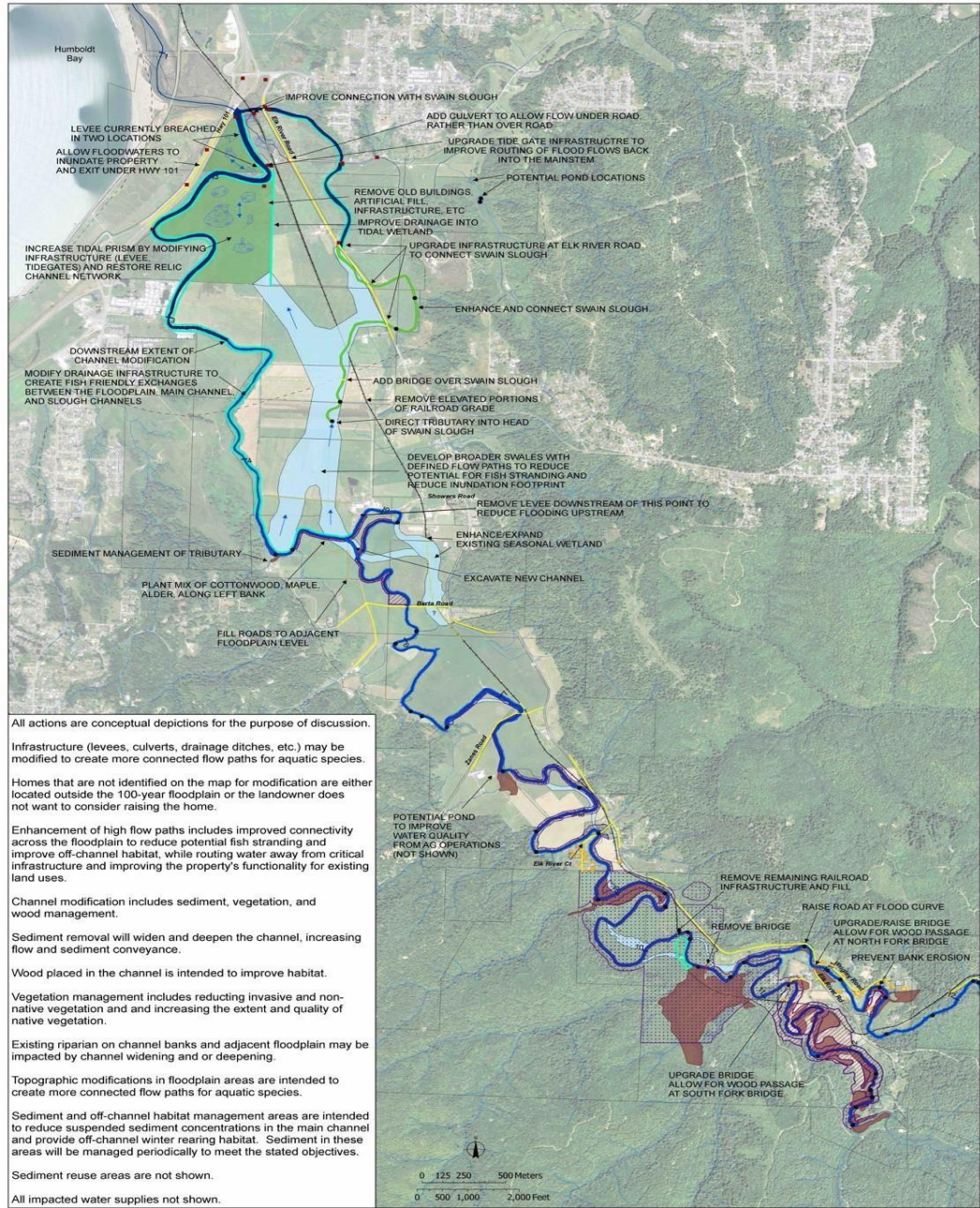
- Planning area for the Elk River Estuary Restoration Feasibility and Conceptual Design



— ELK RIVER CENTERLINE  
— STREAMS  
□ PLANNING AREA BOUNDARY  
--- COASTAL ZONE







All actions are conceptual depictions for the purpose of discussion. Infrastructure (levees, culverts, drainage ditches, etc.) may be modified to create more connected flow paths for aquatic species.

Homes that are not identified on the map for modification are either located outside the 100-year floodplain or the landowner does not want to consider raising the home.

Enhancement of high flow paths includes improved connectivity across the floodplain to reduce potential fish stranding and improve off-channel habitat, while routing water away from critical infrastructure and improving the property's functionality for existing land uses.

Channel modification includes sediment, vegetation, and wood management.

Sediment removal will widen and deepen the channel, increasing flow and sediment conveyance.

Wood placed in the channel is intended to improve habitat.

Vegetation management includes reducing invasive and non-native vegetation and increasing the extent and quality of native vegetation.

Existing riparian on channel banks and adjacent floodplain may be impacted by channel widening and or deepening.

Topographic modifications in floodplain areas are intended to create more connected flow paths for aquatic species.

Sediment and off-channel habitat management areas are intended to reduce suspended sediment concentrations in the main channel and provide off-channel winter rearing habitat. Sediment in these areas will be managed periodically to meet the stated objectives.

Sediment reuse areas are not shown.

All impacted water supplies not shown.

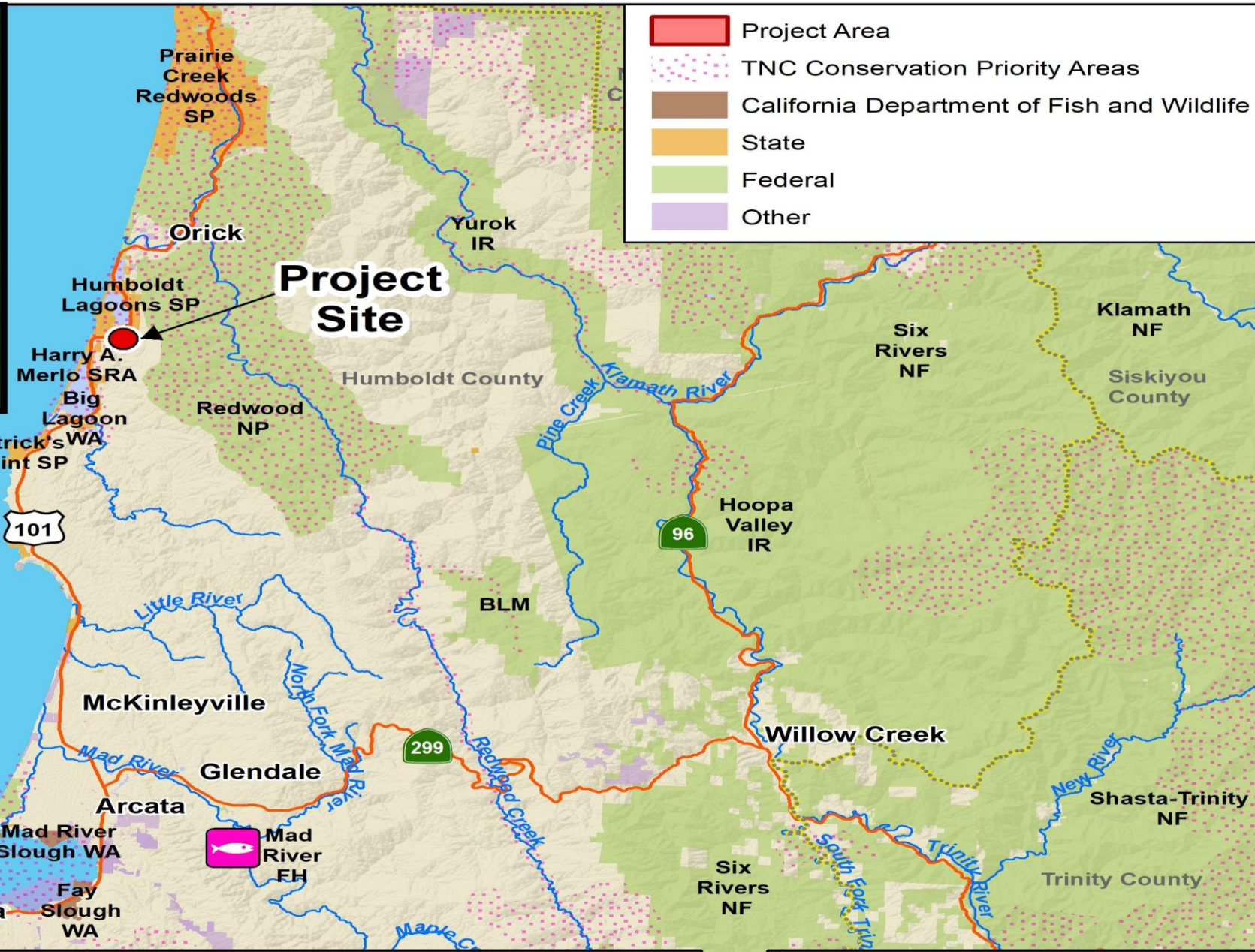
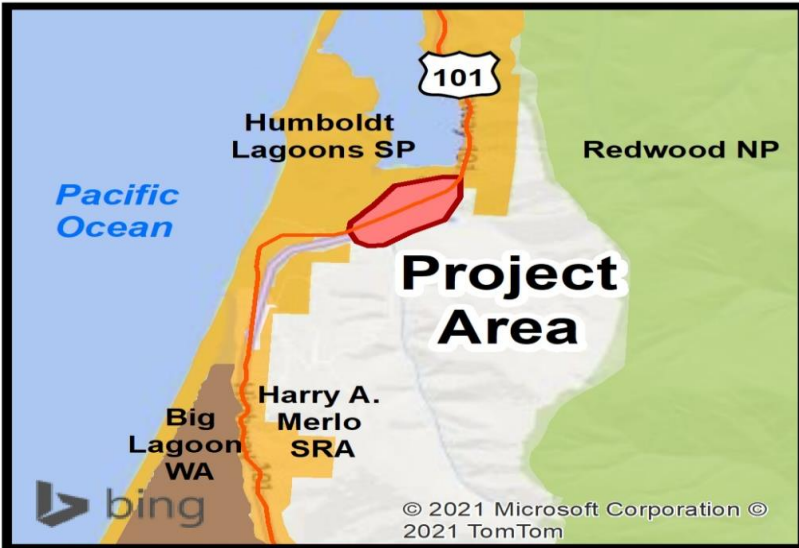
— ELK RIVER CENTERLINE	— INFRASTRUCTURE MODIFICATION	• TRIBUTARY JUNCTION ENHANCEMENT	■ WETLAND CREATION
— STREAMS	— CROSSING	■ HIGH FLOW PATH ENHANCEMENT	■ VEGETATION ENHANCEMENT
— RAILROAD	■ HOME	■ SLOUGH CHANNEL MODIFICATION	■ ENHANCE EXISTING VEGETATION
■ SELECTED PARCELS	— LEVEE	■ ESTUARY ENHANCEMENT	■ PLANTING
■ COASTAL ZONE	— RAILROAD	■ CHANNEL MODIFICATION	
■ EXISTING WATER CONTROL STRUCTURE	— ROAD	■ SEDIMENT AND HABITAT MANAGEMENT AREA	
	— FARM ROAD		

Map Sources: Roads, cities: ESRI 2016

# 9. Elk River Estuary Restoration, Feasibility and Conceptual Design

Slide 2


Elk River Watershed Stewardship Program “All Actions Map” representing the watershed-wide Preferred Recovery Strategy




- Project Area
- TNC Conservation Priority Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other



## Stone Lagoon Wildlife Connectivity Planning Humboldt County



10 Miles



10 WCB 2/25/2021



## 10. Stone Lagoon Wildlife Connectivity Planning

Slide 1

Elk Herd at Little Red Schoolhouse and Elk Country RV Resort and Campground



## 10. Stone Lagoon Wildlife Connectivity Planning

Slide 2

Traffic congestion caused by elk viewing on U.S. Highway 101 near mile marker 114

# 10. Stone Lagoon Wildlife Connectivity Planning

Slide 3

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Elk collision with truck near Little  
Red Schoolhouse, U.S. Hwy 101

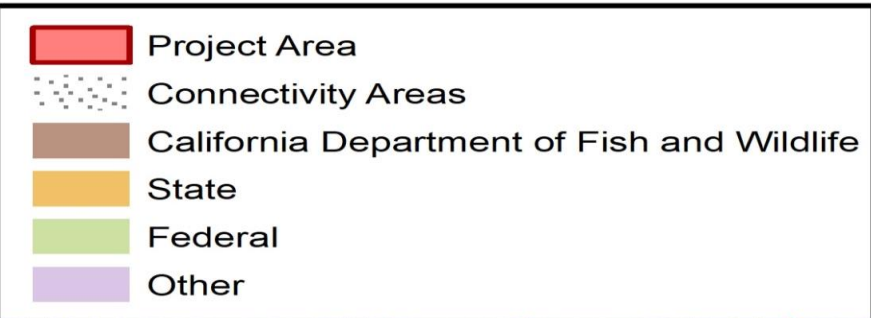
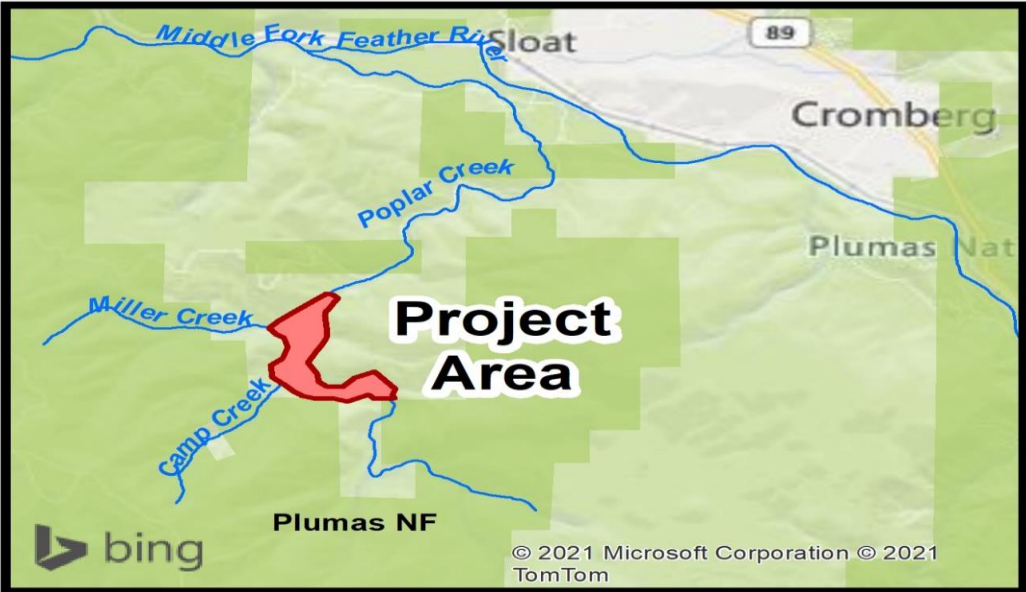


A photograph of a large, calm lagoon with a dense forest of tall evergreen trees in the background. In the foreground, several Roosevelt elk are wading through the shallow water. A small yellow boat with two people is visible in the middle ground. The scene is captured in a soft, natural light.

# 10. Stone Lagoon Wildlife Connectivity Planning

Slide 4

Roosevelt elk in Stone Lagoon, west of U.S. Hwy 101, approximately 0.5 mile north of study area





## 11. Poplar Valley Meadow Restoration Planning

Slide 1

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Erosion rills can be seen in areas where overland flow drops into the gully, causing numerous fingering headcuts that are converting productive wetland areas into upland dry meadow with bare ground.







# 11. Poplar Valley Meadow Restoration Planning

Slide 2

Head-cutting enabled the large gully to capture all flood flows; one of the remnant channels on the surface of the floodplain is visible here on the opposite bank.

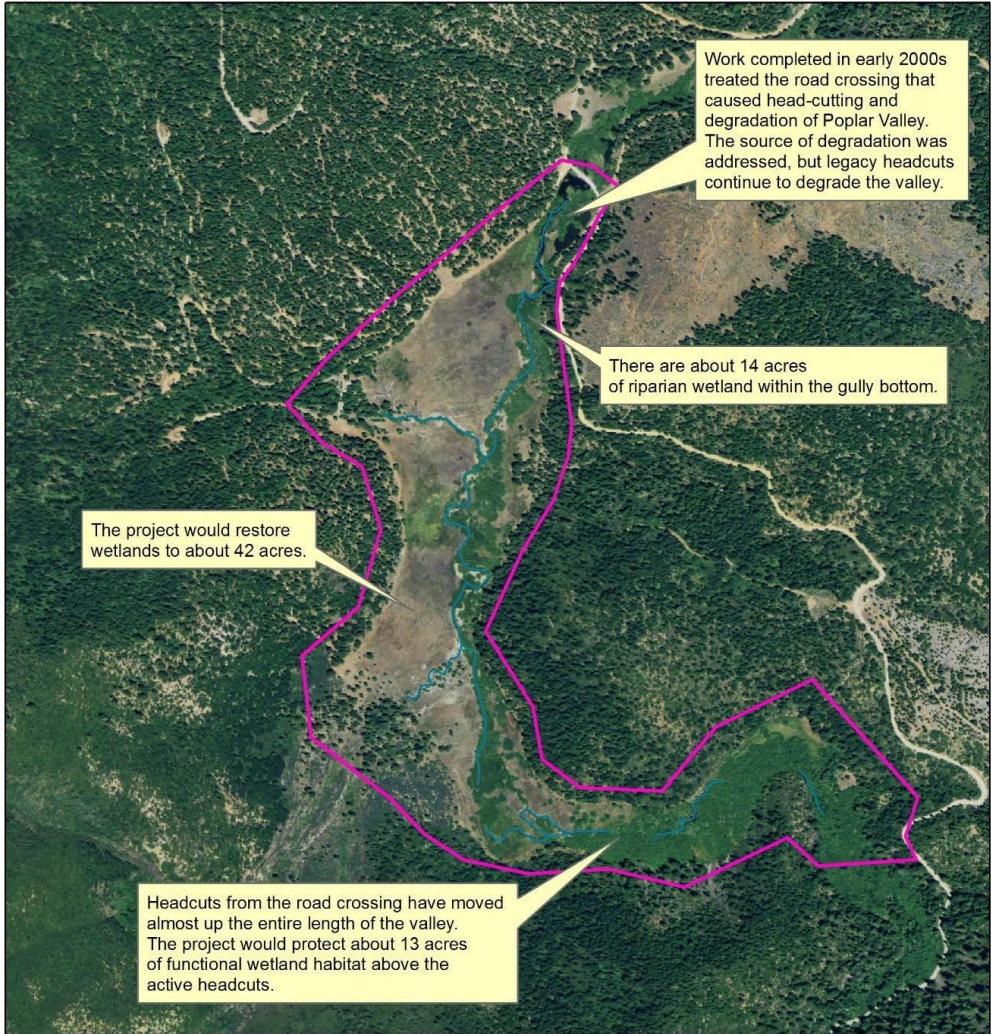
# Poplar Valley Restoration Planning Project Area



80-acre meadow within a 150-acre project area.  
Private Lands of Soper-Wheeler Company in Plumas County, CA  
T23 R11 Sections 28 and 21  
Blue Nose Mountain and Johnsville USGS quadrangles

1 inch = 800 feet 0 400 800 1,600 2,400 3,200 Feet

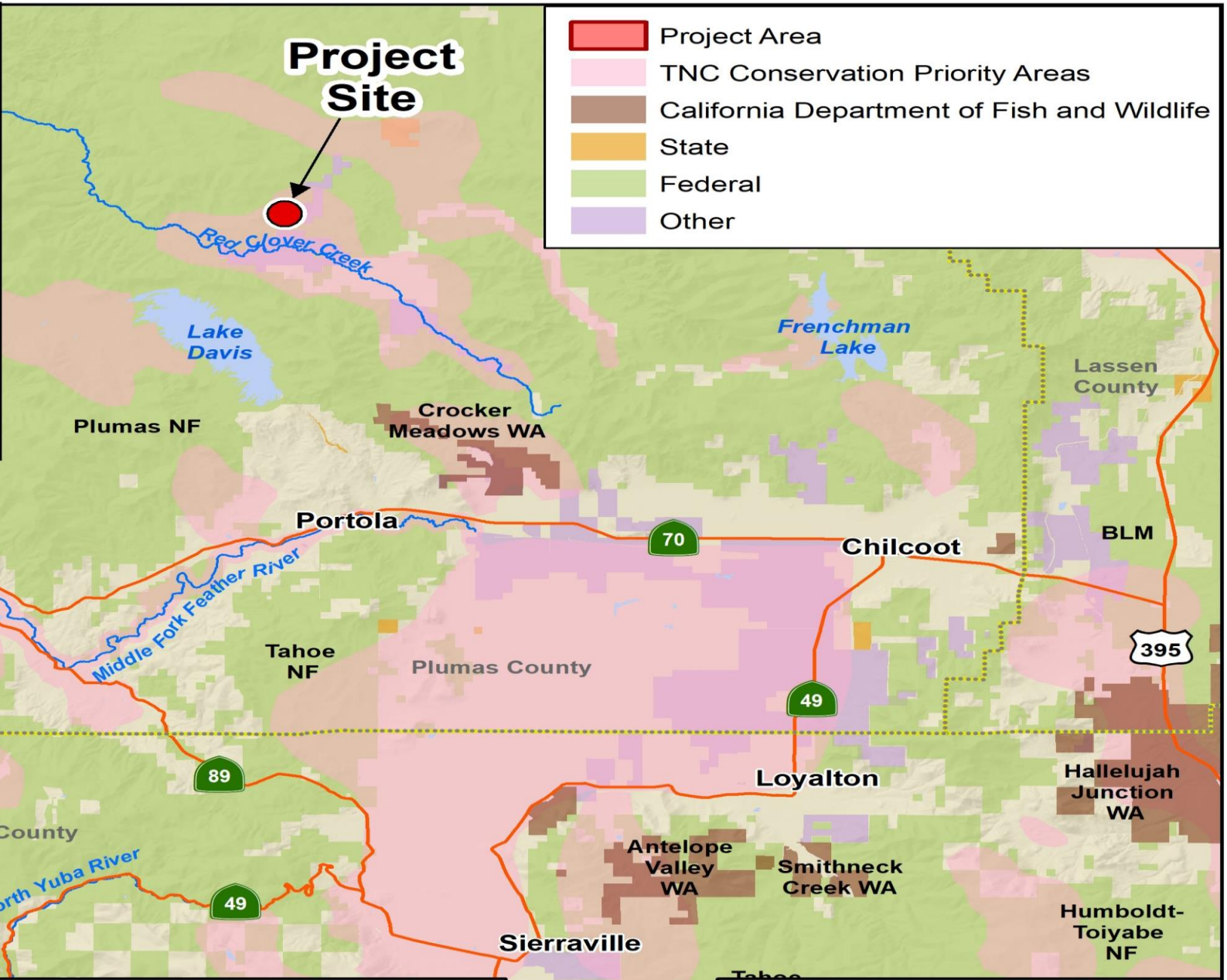
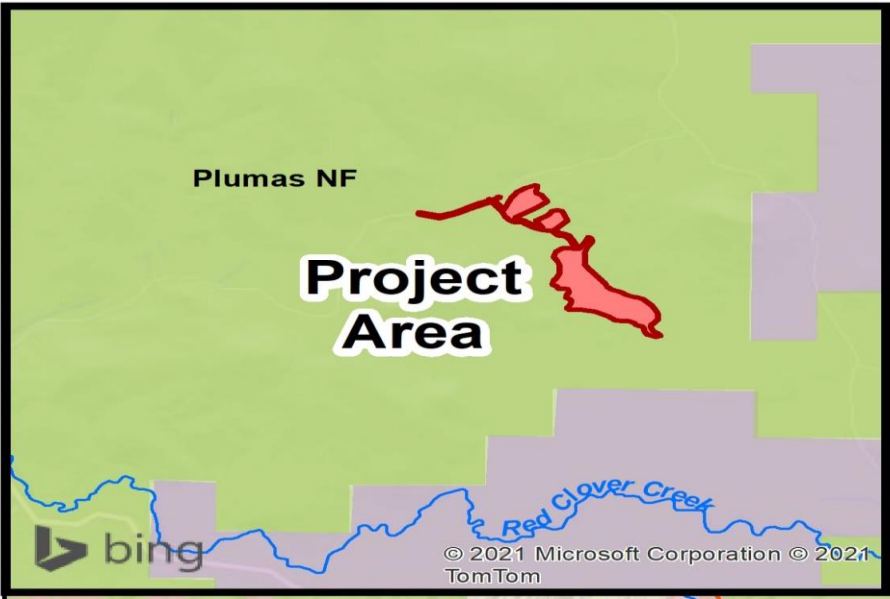
LHM 04/13/20



## 11. Poplar Valley Meadow Restoration Planning

Slide 3

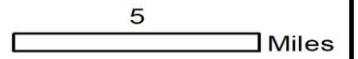
- The north fork of the middle fork of the American River flows through the property for approximately 2.6 miles.



- Project Area
- TNC Conservation Priority Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other



**Thompson Meadow Restoration  
Plumas County**



# 12. Thompson Meadow Restoration

An aerial photograph of a meadow area. The meadow is characterized by a network of dry, winding channels and patches of brown, dry vegetation. The surrounding landscape is a mix of green forest and brown, open land. The channels are filled with a dense growth of sagebrush, which is a common indicator of dry conditions in such environments. The overall scene depicts a meadow in a state of significant drought or aridity.

Slide 1

Pre-project aerial image of Thompson Meadow depicting dry meadow conditions and sagebrush all along the channel edge.

Photo credit: DWR



## 12. Thompson Meadow Restoration

Slide 2

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Thompson Creek is incised with depths reaching 10 feet.

Photo credit: DWR





# 12. Thompson Meadow Restoration

Slide 3

Large headcut near the downstream  
end of the meadow.

Photo credit: DWR

# 12. Thompson Meadow Restoration

Slide 4

- Groundwater monitoring well.
- Photo credit: DWR



# Building Climate Resiliency in Central Valley Wetlands (Phase 2) Multiple Counties





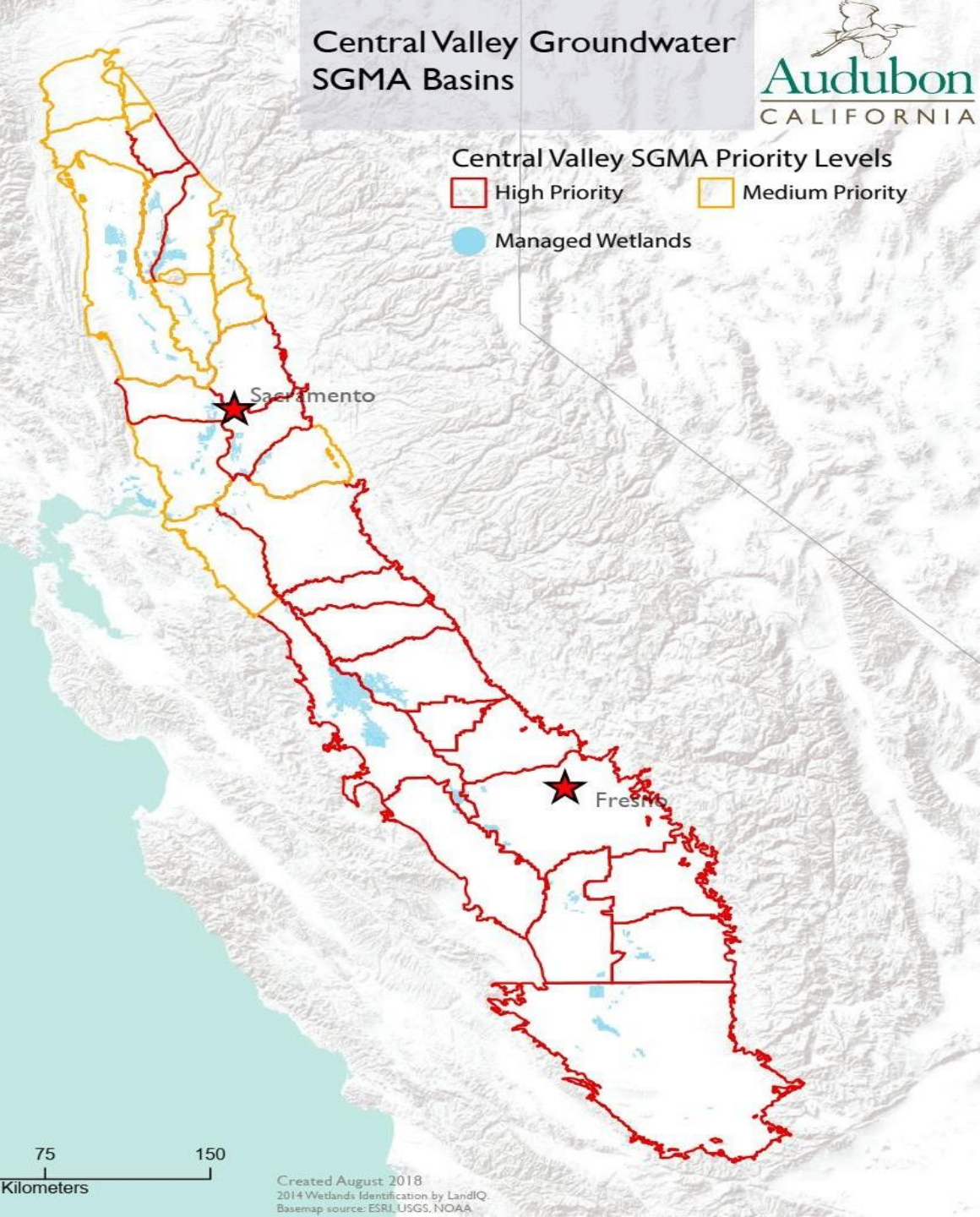
## Central Valley Groundwater SGMA Basins



### Central Valley SGMA Priority Levels

High Priority Medium Priority

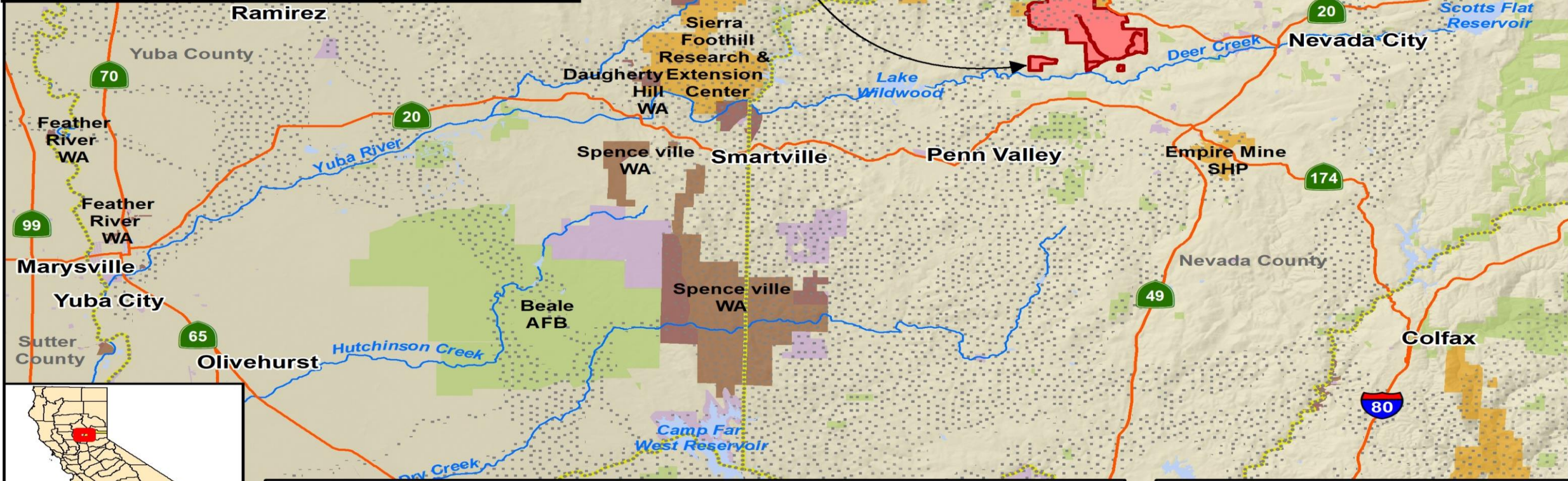
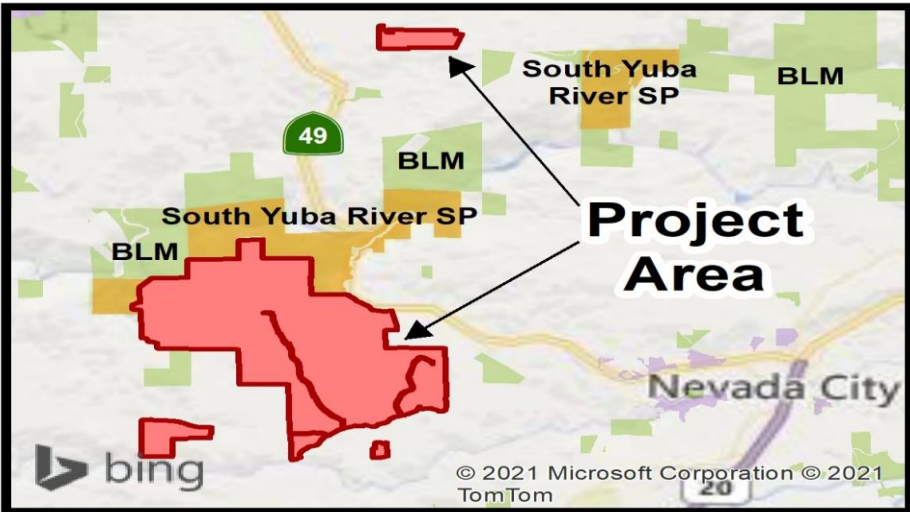
Managed Wetlands



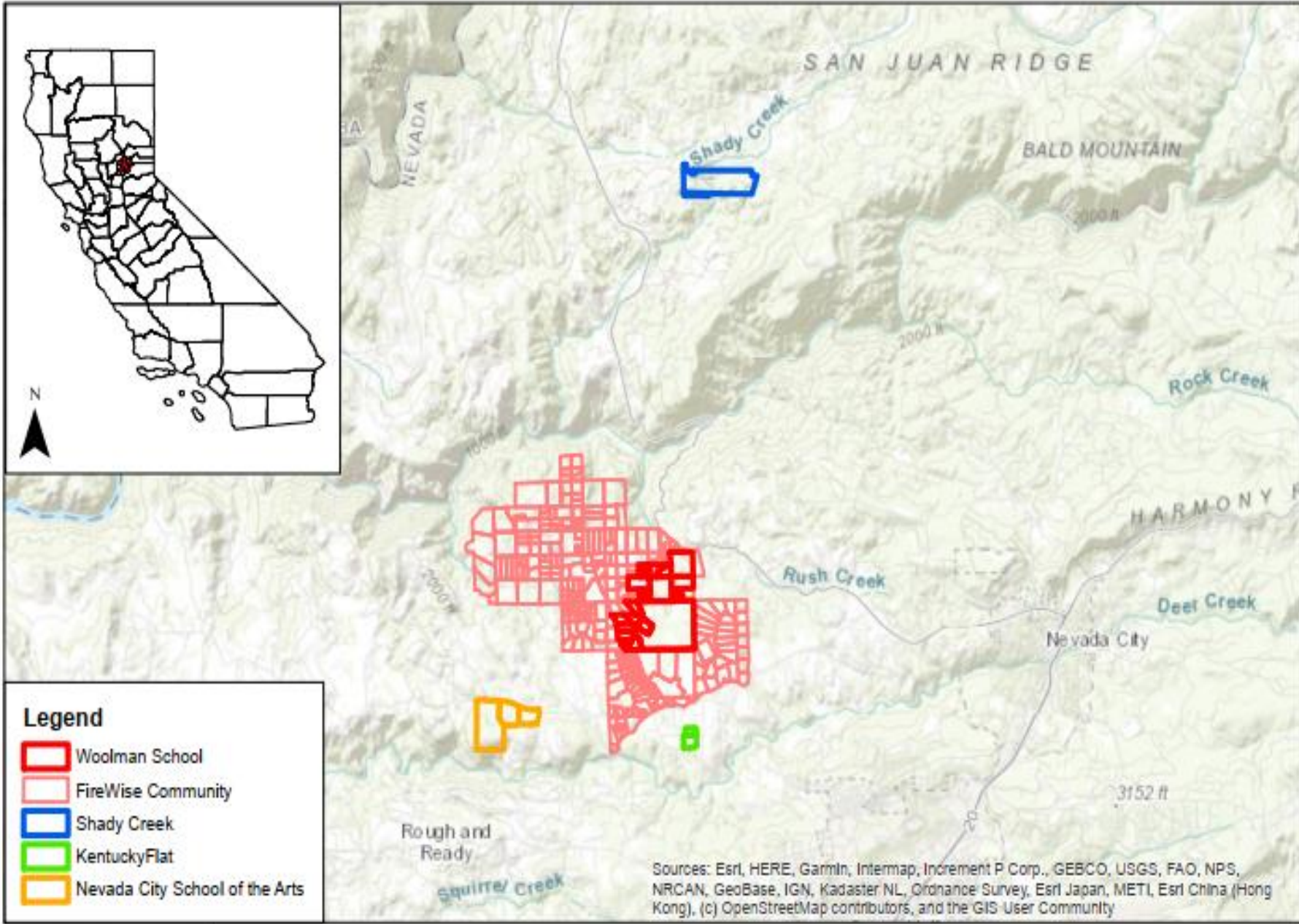
## 13. Building Climate Resiliency in Central Valley Wetlands, Phase 2

Slide 1

- Sustainable Groundwater Management Act (SGMA) groundwater basin map



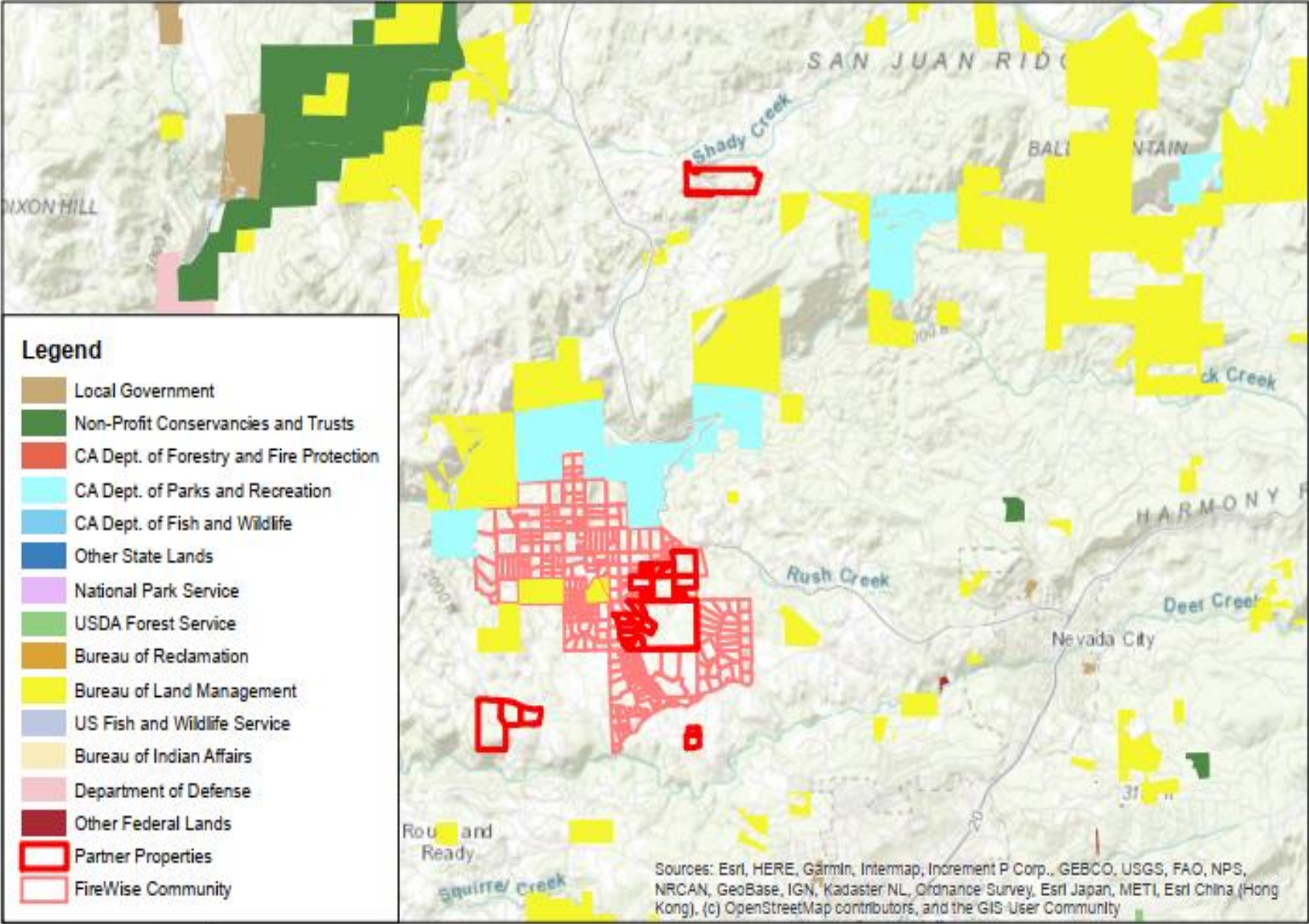
**Sierra Foothill Forest Climate Resilience Planning  
Nevada County**



# 14. Sierra Foothill Forest Climate Resilience Planning

Slide 1

Target properties and involved communities.



# 14. Sierra Foothill Forest Climate Resilience Planning

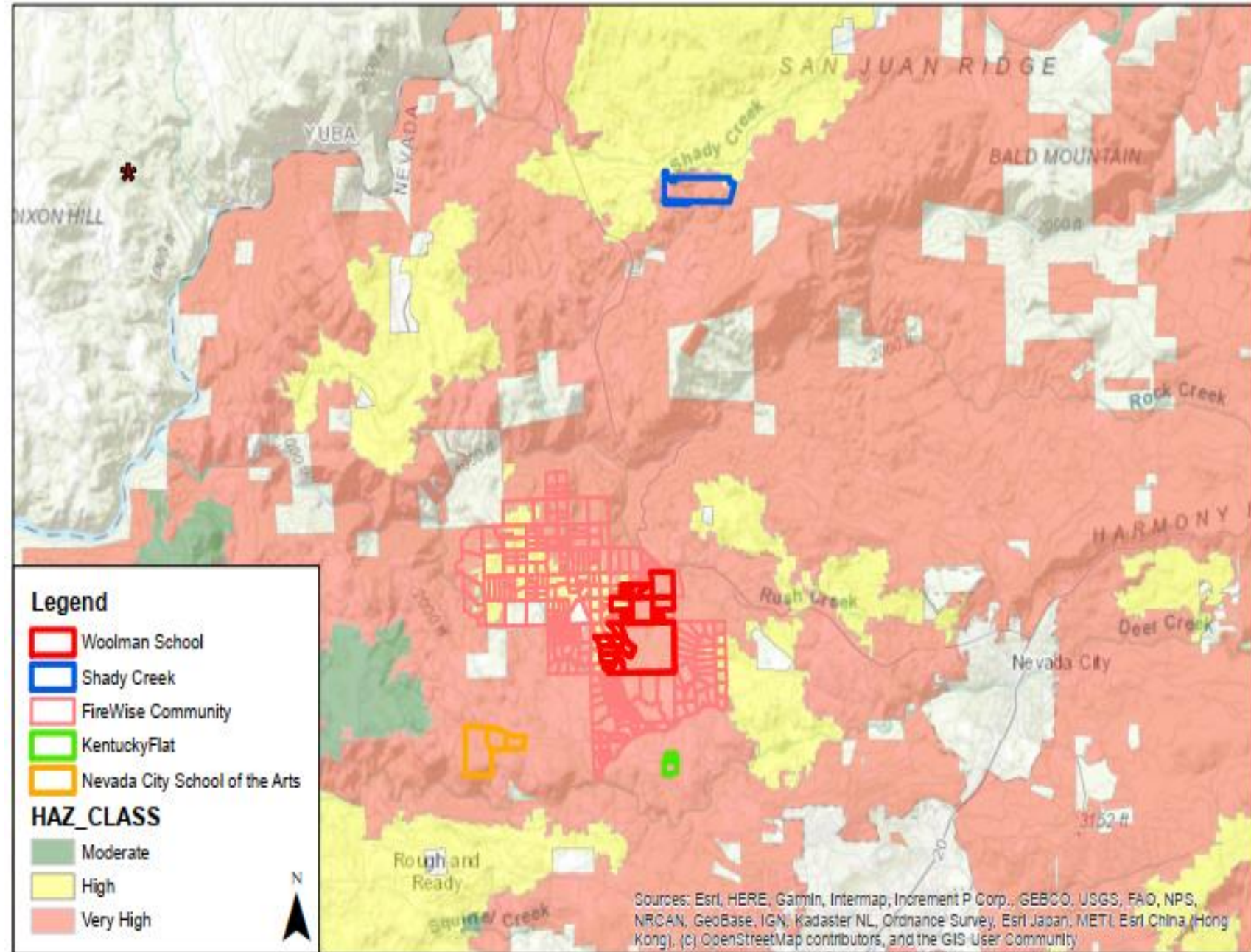
Slide 2

Public land ownership around project area.

# 14. Sierra Foothill Forest Climate Resilience Planning

Slide 3

Fire hazard severity zones.



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



**Truckee River Wildlife Area, Canyon Unit,  
Expansion 1  
Nevada County**

WCB  
State of California  
Wildlife Conservation Board

5 Miles

15 WCB 2/25/2021



**15. Truckee River  
Wildlife Area, Canyon  
Unit, Expansion 1**

Slide 1

View of meadow.

A landscape view of a mountain range. In the foreground, several tall, dark green pine trees are visible, some in silhouette. The middle ground shows a rocky, brownish-yellow hillside with scattered green pine trees. In the background, a range of mountains is visible under a clear blue sky. The overall scene is bright and clear.

## 15. Truckee River Wildlife Area, Canyon Unit, Expansion 1

Slide 2

View looking northwesterly  
across the property.



A scenic view of a mountain valley. In the foreground, there are several large, dark green pine trees with dense needles. The middle ground shows a valley with a mix of green pine trees and dry, yellowish-brown grass. In the background, there are rugged, rocky mountains under a clear, bright blue sky. The lighting suggests it's a sunny day.

# 15. Truckee River Wildlife Area, Canyon Unit, Expansion 1

Slide 3

View looking east



15. Truckee River  
Wildlife Area, Canyon  
Unit, Expansion 1

Slide 4

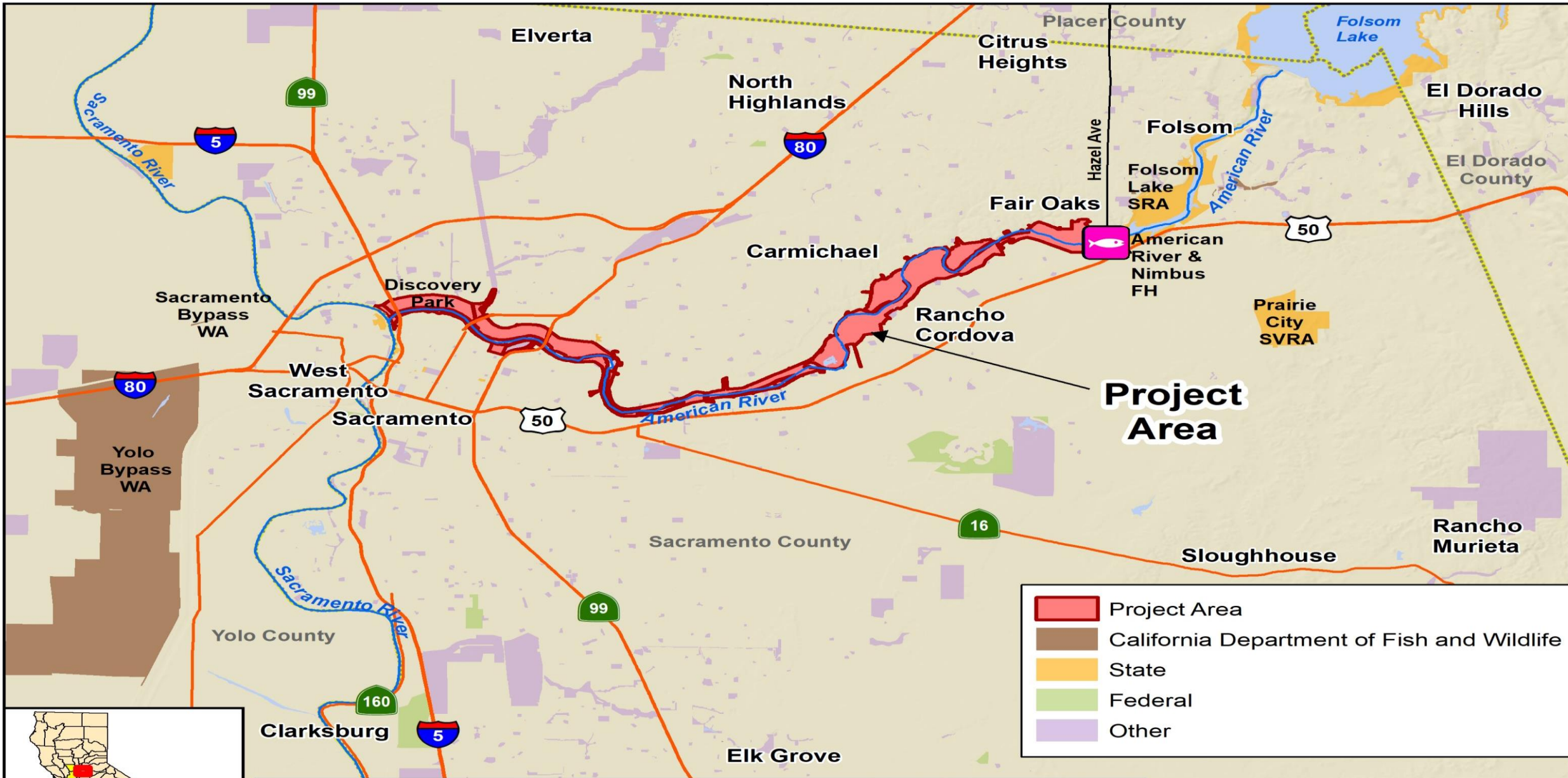
Access road




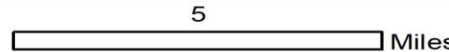
**15. Truckee River  
Wildlife Area, Canyon  
Unit, Expansion 1**

Slide 5

Meadow and forest area



**Lower American River  
Natural Resources Management Plan Augmentation  
Sacramento County**

16 WCB 2/25/2021

# 16. Lower American River Natural Resources Management Plan, Augmentation

Slide 1

- Preservation site to protect habitat mitigation.






## 16. Lower American River Natural Resources Management Plan, Augmentation

Slide 2

- Bushy Lake, Nature Study Area and conservation site for habitat restoration and enhancement.



## 16. Lower American River Natural Resources Management Plan, Augmentation

Slide 3

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- Restored Cordova Creek riparian corridor.



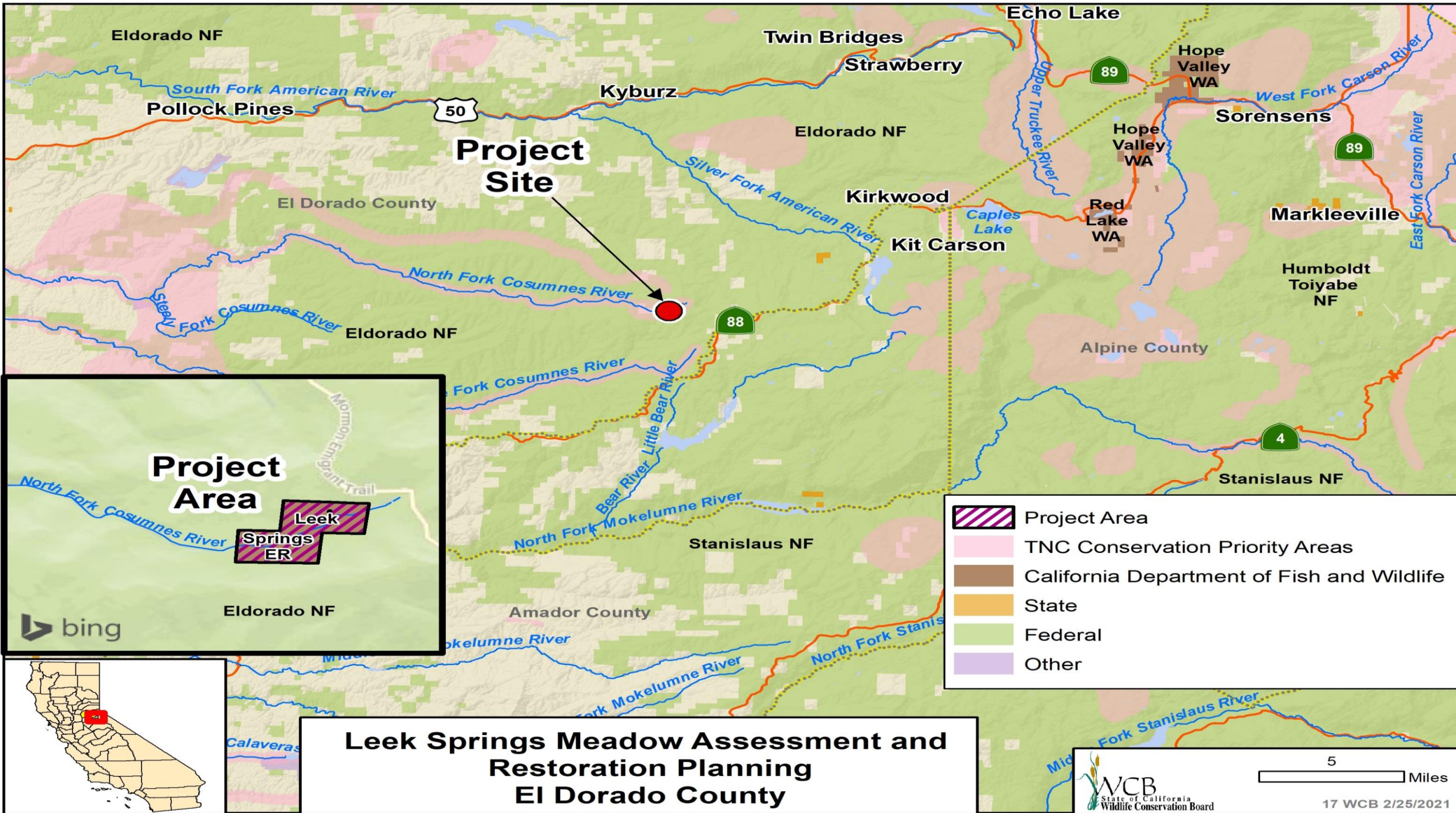
A photograph of a riverbank with dense green foliage and a log in the water. Three turtles are basking on the log. The water is green and reflects the surrounding trees. The scene is a natural, off-channel backwater.

## 16. Lower American River Natural Resources Management Plan, Augmentation

Slide 4

- Turtles basking on log in off-channel backwaters.





**Project Site**

**Project Area**

**Leek Springs Meadow Assessment and Restoration Planning  
El Dorado County**

-  Project Area
-  TNC Conservation Priority Areas
-  California Department of Fish and Wildlife
-  State
-  Federal
-  Other



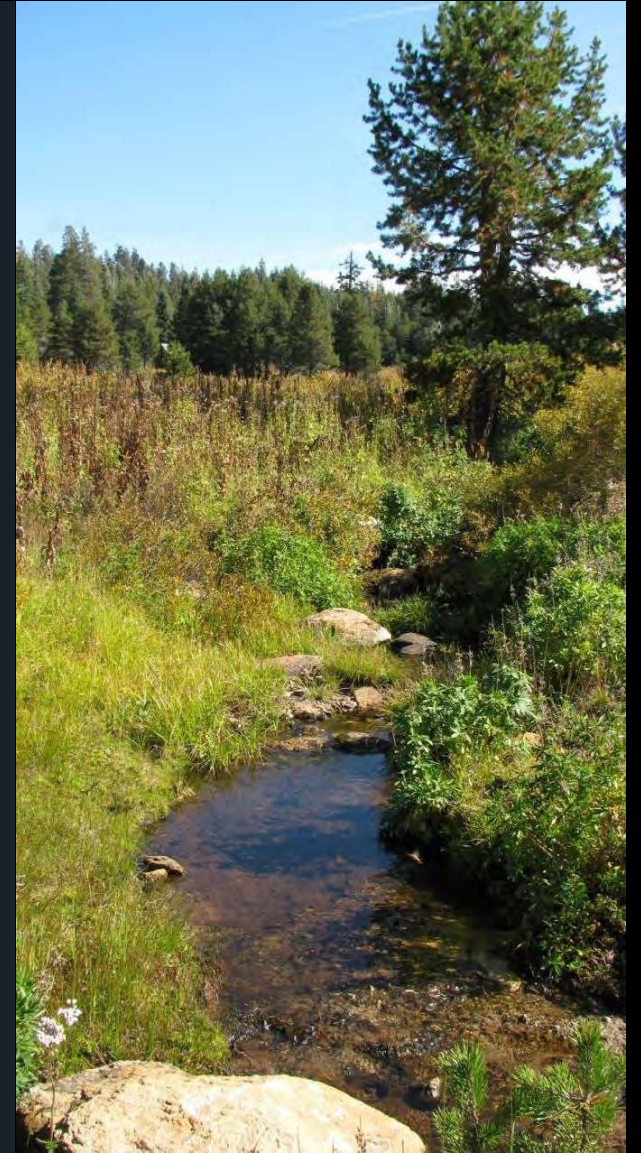
5 Miles



## 17. Leek Springs Meadow Assessment and Restoration Planning Slide 1

Right: Intact stream channel – North  
Fork Cosumnes River at Leek Springs  
Meadow

Left: Small cabin; remnant of past  
land-use



A landscape photograph showing a meadow in the foreground with various grasses and small trees. In the background, there is a dense forest of tall evergreen trees. A large, weathered tree stump is visible in the lower right foreground. The sky is bright with some light clouds.

# 17. Leek Springs Meadow Assessment and Restoration Planning

Slide 2

Leek Springs Meadow  
looking northwest



# 17. Leek Springs Meadow Assessment and Restoration Planning

Slide 3

NF Cosumnes – main channel.  
Portions of the bank exhibit  
moderate- severe headcut  
erosion.



## 17. Leek Springs Meadow Assessment and Restoration Planning

Slide 4

Stock pond remnant of past grazing activities. This and one other man-made pond in the meadow would be slated for removal as part of the restoration project.

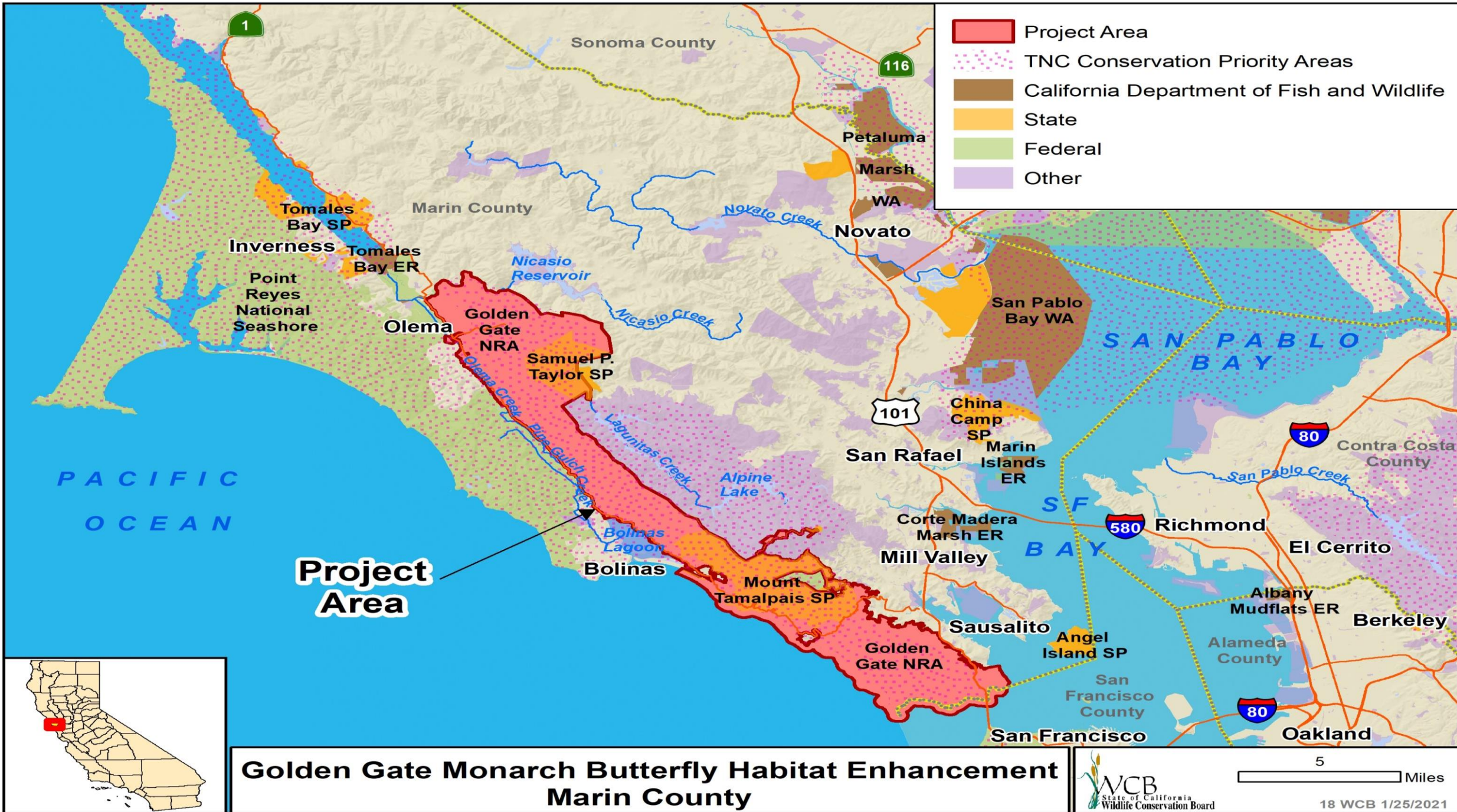
# 17. Leek Springs Meadow Assessment and Restoration Planning

Slide 5

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In some areas, the meadow floodplain is completely disconnected from the channel, altering meadow hydrology, changing vegetation structure and type and depleting groundwater levels.





# Golden Gate Monarch Butterfly Habitat Enhancement Marin County





# 18. Golden Gate Monarch Butterfly Habitat Enhancement

Slide 1

Existing conditions at  
East Fort Baker, October  
2020

Photo Credit: Janet Klein





# 18. Golden Gate Monarch Butterfly Habitat Enhancement

Slide 2

Aging eucalyptus with  
non-native invasive  
understory, East Fort  
Baker, October 2020

Photo Credit: Janet Klein



## 18. Golden Gate Monarch Butterfly Habitat Enhancement

Slide 3

Aging eucalyptus with  
non-native invasive  
understory. East Fort  
Baker October 2020.

Photo Credit: Janet  
Klein



# 18. Golden Gate Monarch Butterfly Habitat Enhancement

Slide 4

Marin monarchs

Photo Credit: Stephan Meyer

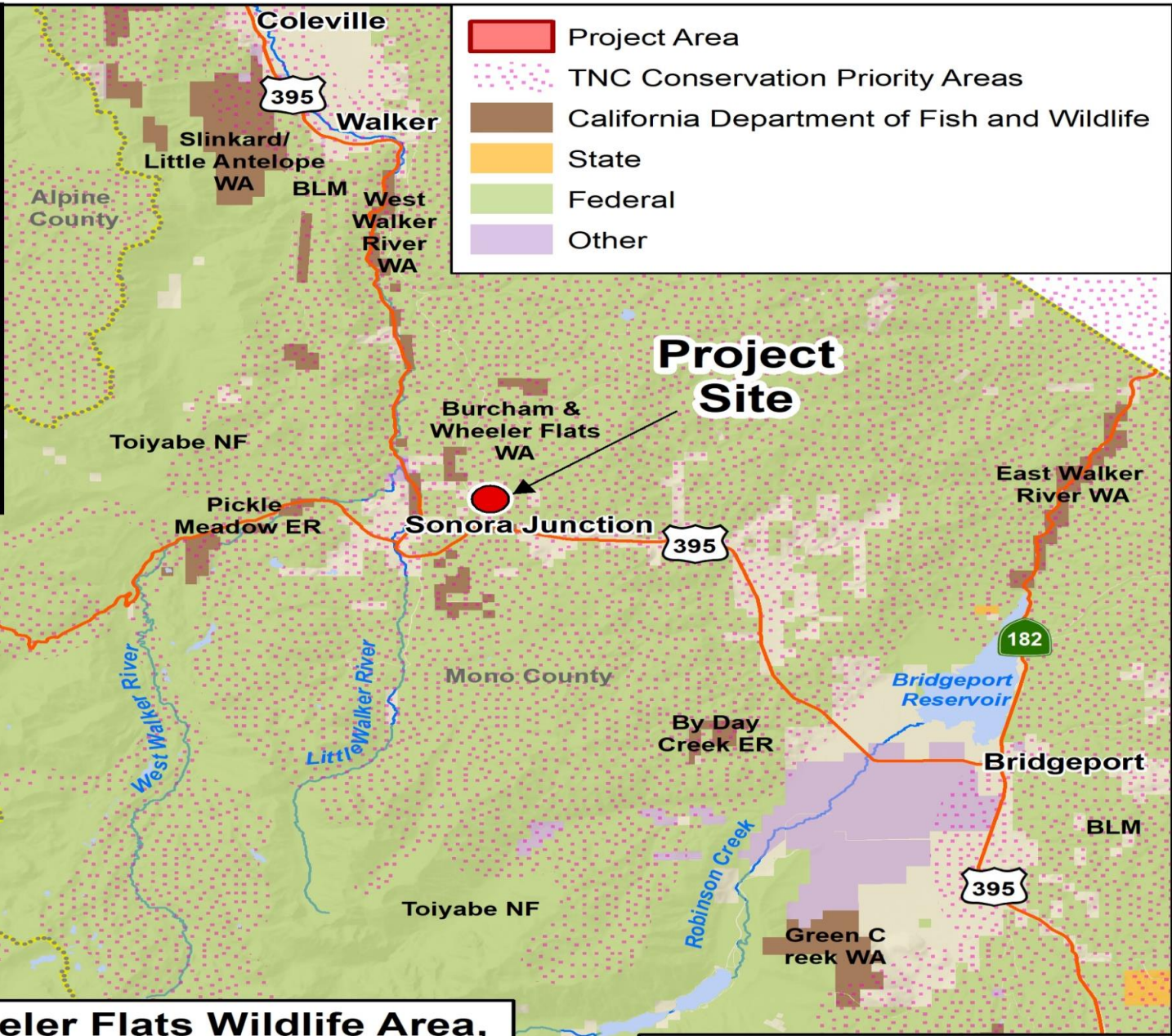
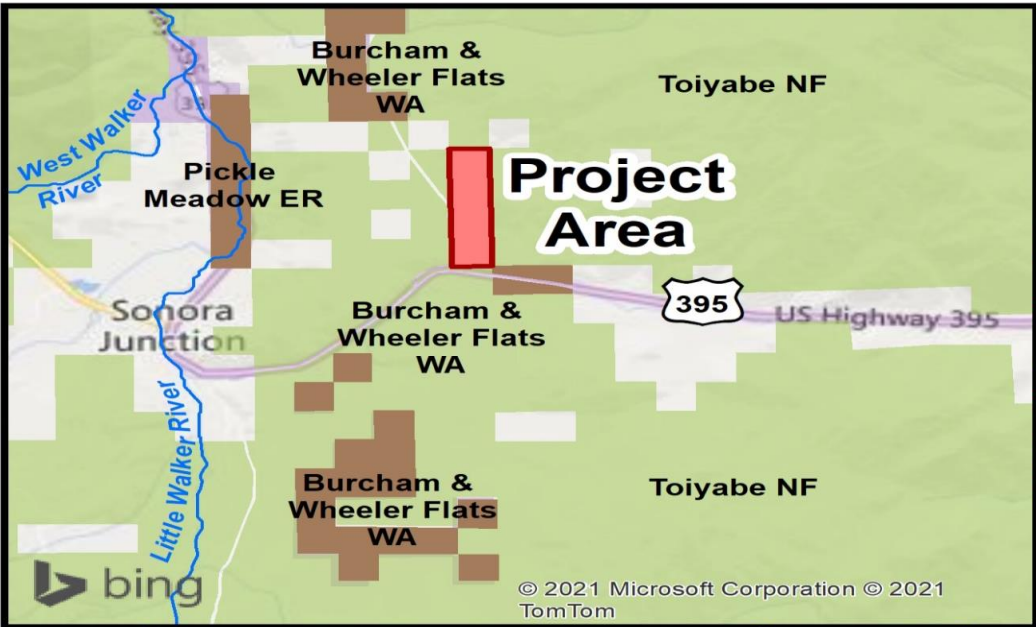


# 18. Golden Gate Monarch Butterfly Habitat Enhancement

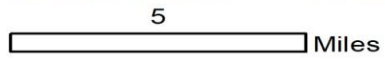
Slide 5

Marin monarchs.

Photo credit: Stephan Meyer



**Burcham and Wheeler Flats Wildlife Area,  
Expansion 2  
Mono County**





## 19. Burcham and Wheeler Flats Wildlife Area, Expansion 2

Slide 1

View looking northeast.

Photo by Cheryl Bretton

# 19. Burcham and Wheeler Flats Wildlife Area, Expansion 2

Slide 2

View looking west.

Photo by Cheryl Bretton





# 19. Burcham and Wheeler Flats Wildlife Area, Expansion 2

Slide 3

View looking southeast to US  
395.

Photo by Cheryl Bretton





## 19. Burcham and Wheeler Flats Wildlife Area, Expansion 2

Slide 4

View looking southwest to US  
395.

Photo by Cheryl Bretton

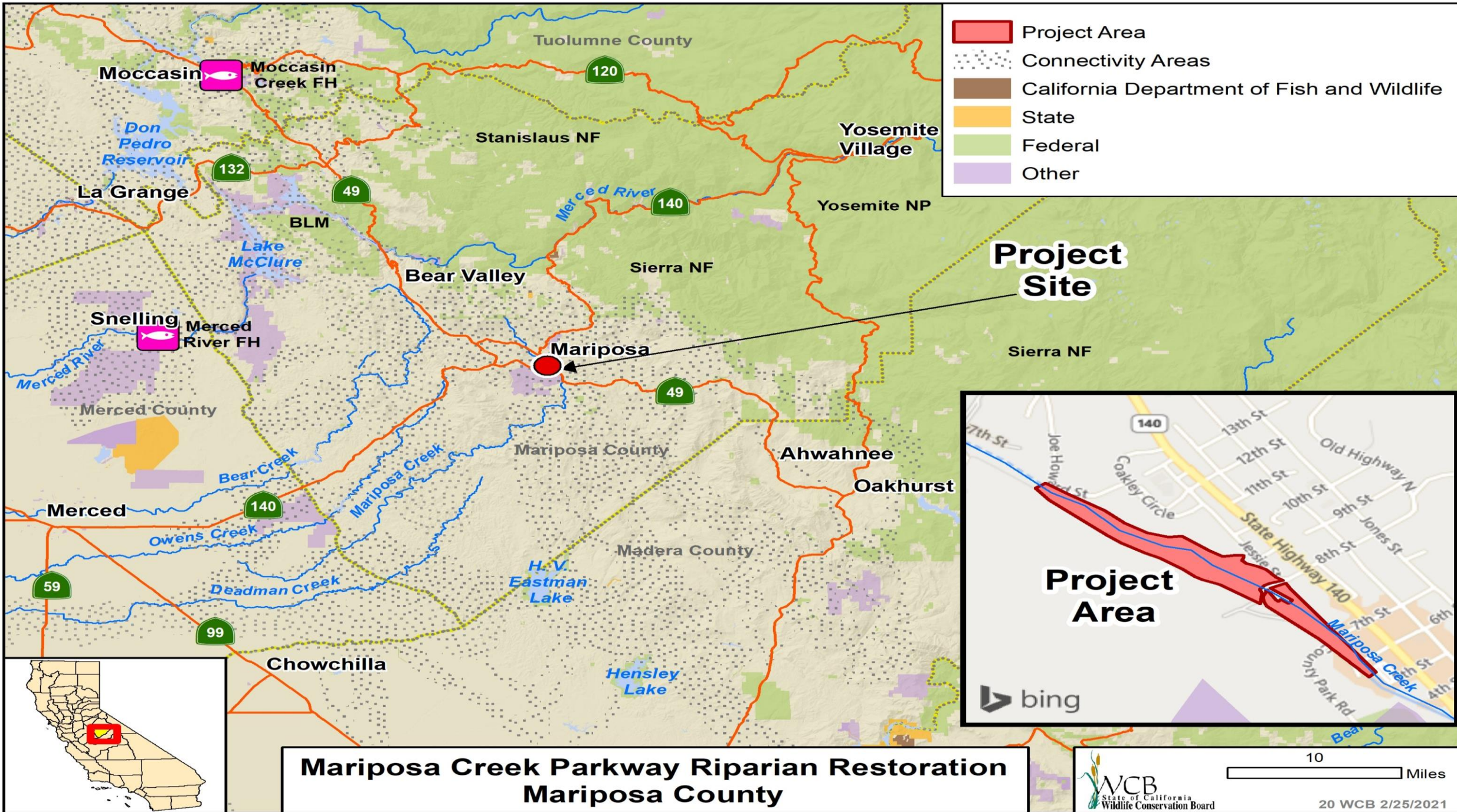


## 19. Burcham and Wheeler Flats Wildlife Area, Expansion 2

Slide 5

View of Hot Creek.

Photo by Cheryl Bretton



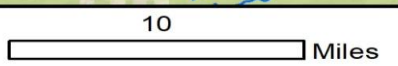
- Project Area
- Connectivity Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other

**Project Site**

**Project Area**



**Mariposa Creek Parkway Riparian Restoration  
Mariposa County**





# 20. Mariposa Creek Parkway Riparian Restoration

Slide 1

Degraded habitat along  
Mariposa Creek.



## 20. Mariposa Creek Parkway Riparian Restoration

Slide 2

- Existing high-quality habitat along Mariposa Creek – reference site for planting list.



## 20. Mariposa Creek Parkway Riparian Restoration

Slide 3

Himalayan blackberry patch  
along Mariposa Creek  
targeted for removal and  
replacement with native  
riparian plant species.



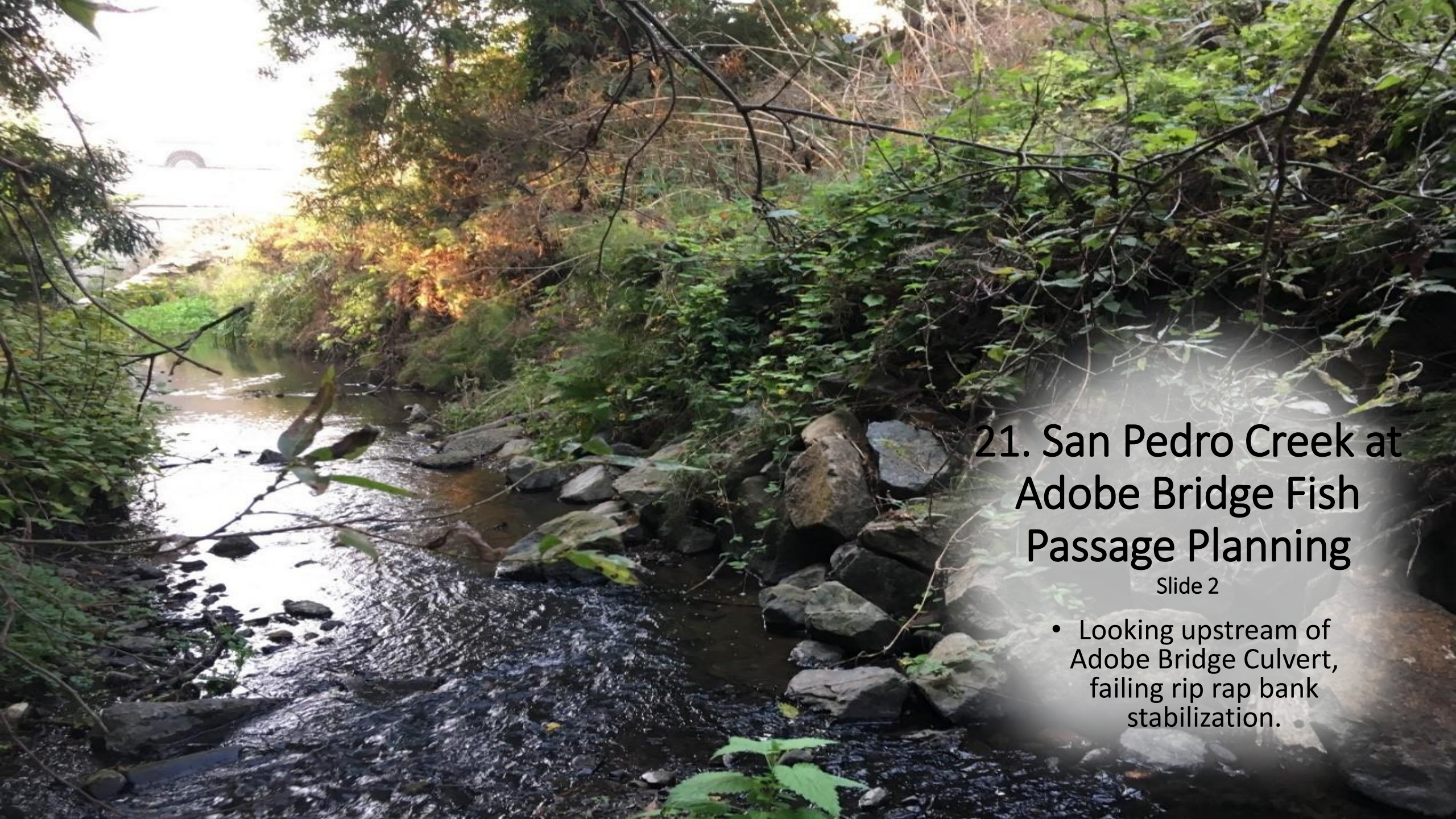


## 21. San Pedro Creek at Adobe Bridge Fish Passage Planning

Slide 1

- Adobe Bridge Culvert inlet and failing sac crete revetment





## 21. San Pedro Creek at Adobe Bridge Fish Passage Planning

Slide 2

- Looking upstream of Adobe Bridge Culvert, failing rip rap bank stabilization.



## 21. San Pedro Creek at Adobe Bridge Fish Passage Planning

Slide 3

Looking Downstream of Adobe Bridge  
Culvert. Sac crete lined channel banks.



# 21. San Pedro Creek at Adobe Bridge Fish Passage Planning

Slide 4

Adobe Bridge Culvert interior  
(looking downstream)



## 21. San Pedro Creek at Adobe Bridge Fish Passage Planning

Slide 5

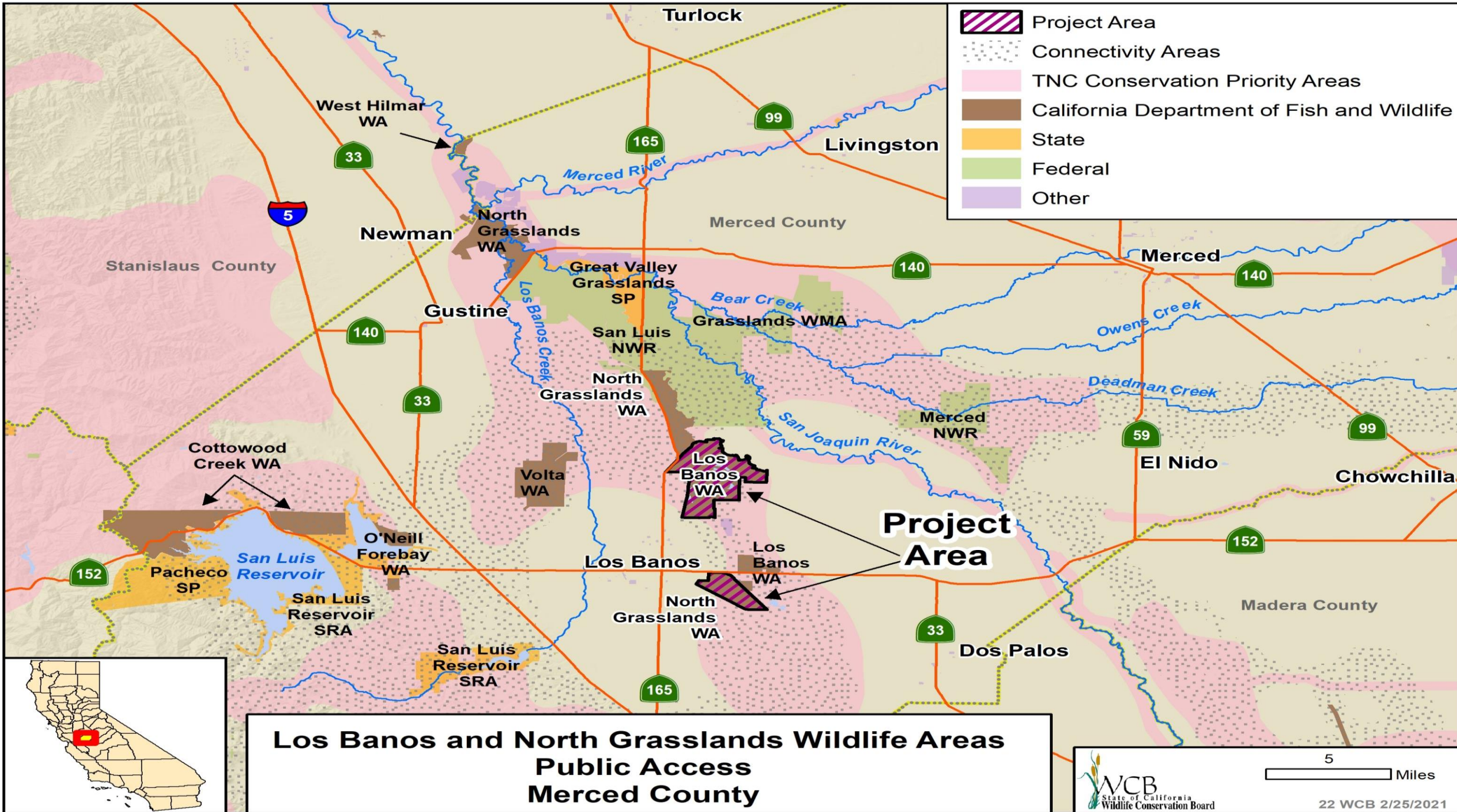
Upstream of Adobe Bridge Culvert,  
failing rock gabion.



## 21. San Pedro Creek at Adobe Bridge Fish Passage Planning

Slide 6

Adobe Bridge December 2014  
during rain event (looking  
downstream)





## 22. Los Banos and North Grasslands Wildlife Areas Public Access

Slide 1

Potential location for the Gadwall Unit signage.



# 22. Los Banos and North Grasslands Wildlife Areas Public Access

Slide 2

Los Banos Hunter Parking lot

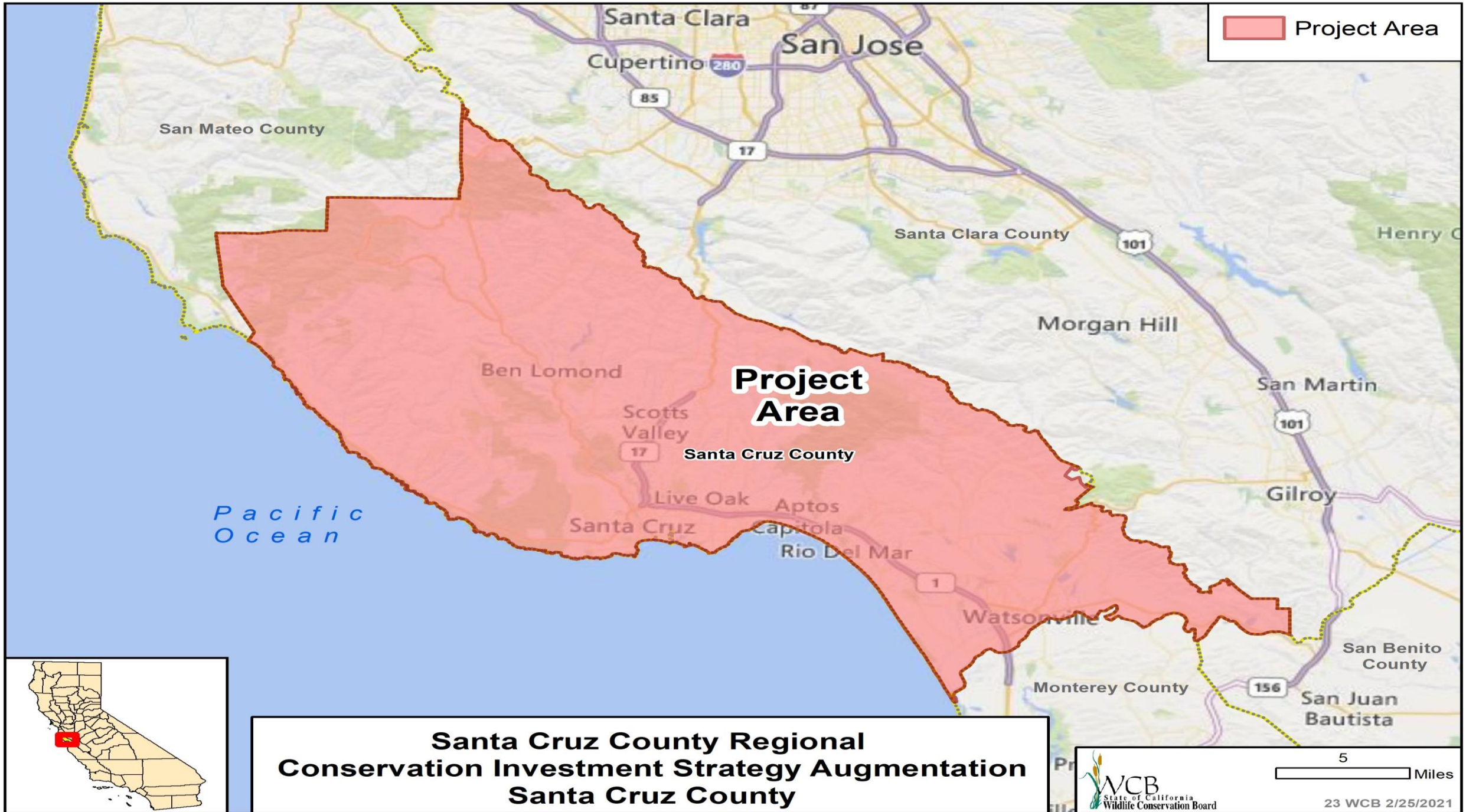




## 22. Los Banos and North Grasslands Wildlife Areas Public Access

Slide 3

- Students on the Van Atta Trail



Project Area

**Project Area**

*Pacific Ocean*



**Santa Cruz County Regional  
Conservation Investment Strategy Augmentation  
Santa Cruz County**

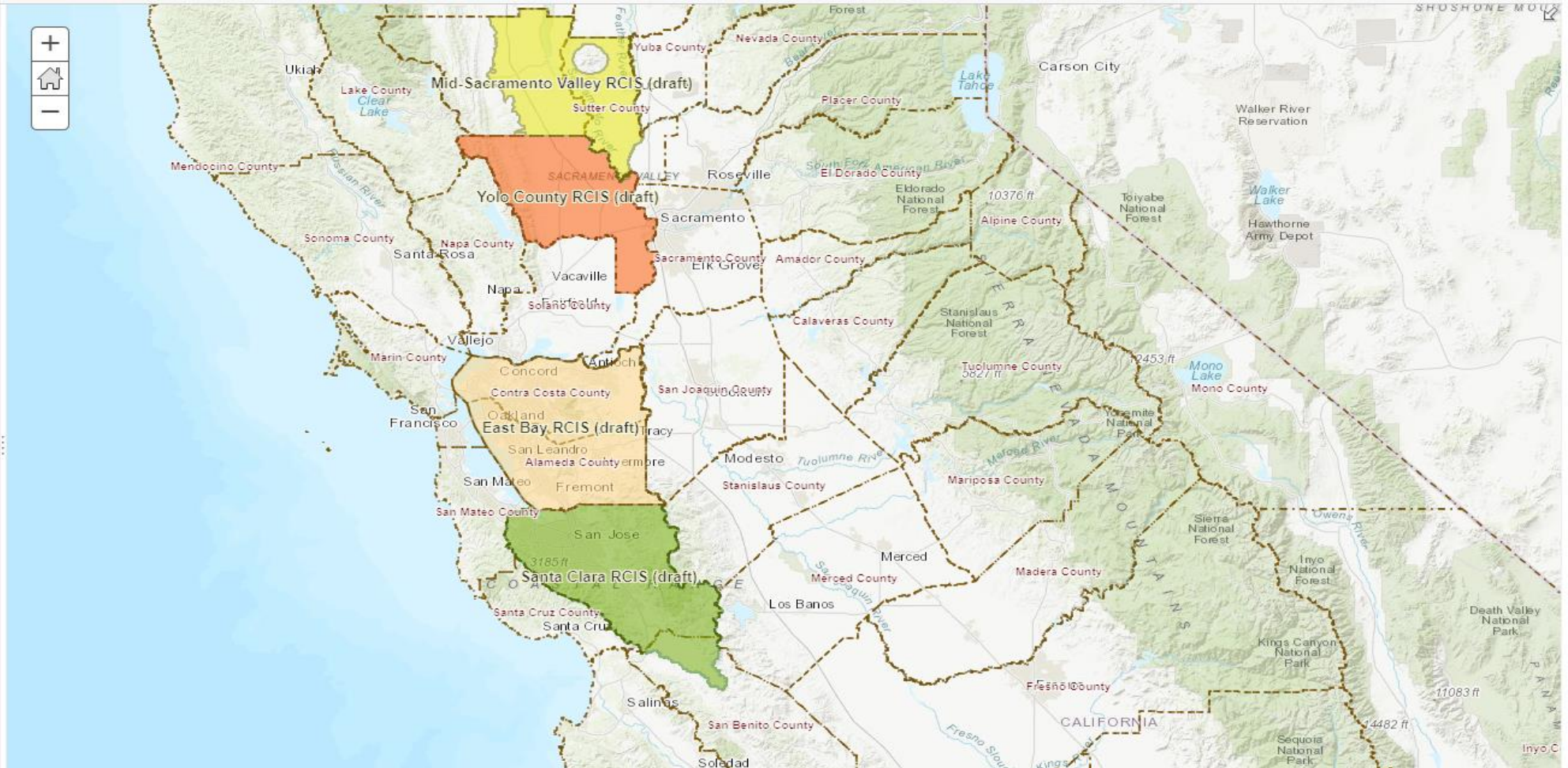


5 Miles

23 WCB 2/25/2021

Legend  
DRAFT Regional Conservation Investment Strategy  
Boundaries March 2019

- East Bay RCIS (draft)
- Mid-Sacramento Valley RCIS (draft)
- Santa Clara RCIS (draft)
- Yolo County RCIS (draft)



# 23. Santa Cruz County Regional Conservation Investment Strategy, Augmentation

Slide 1

## Current Draft Regional Conservation Investment Strategies



23. Santa Cruz County Regional  
Conservation Investment  
Strategy, Augmentation

Slide 2

Santa Cruz County supports a  
wealth of native biodiversity.

Moore Creek Preserve



## 23. Santa Cruz County Regional Conservation Investment Strategy, Augmentation

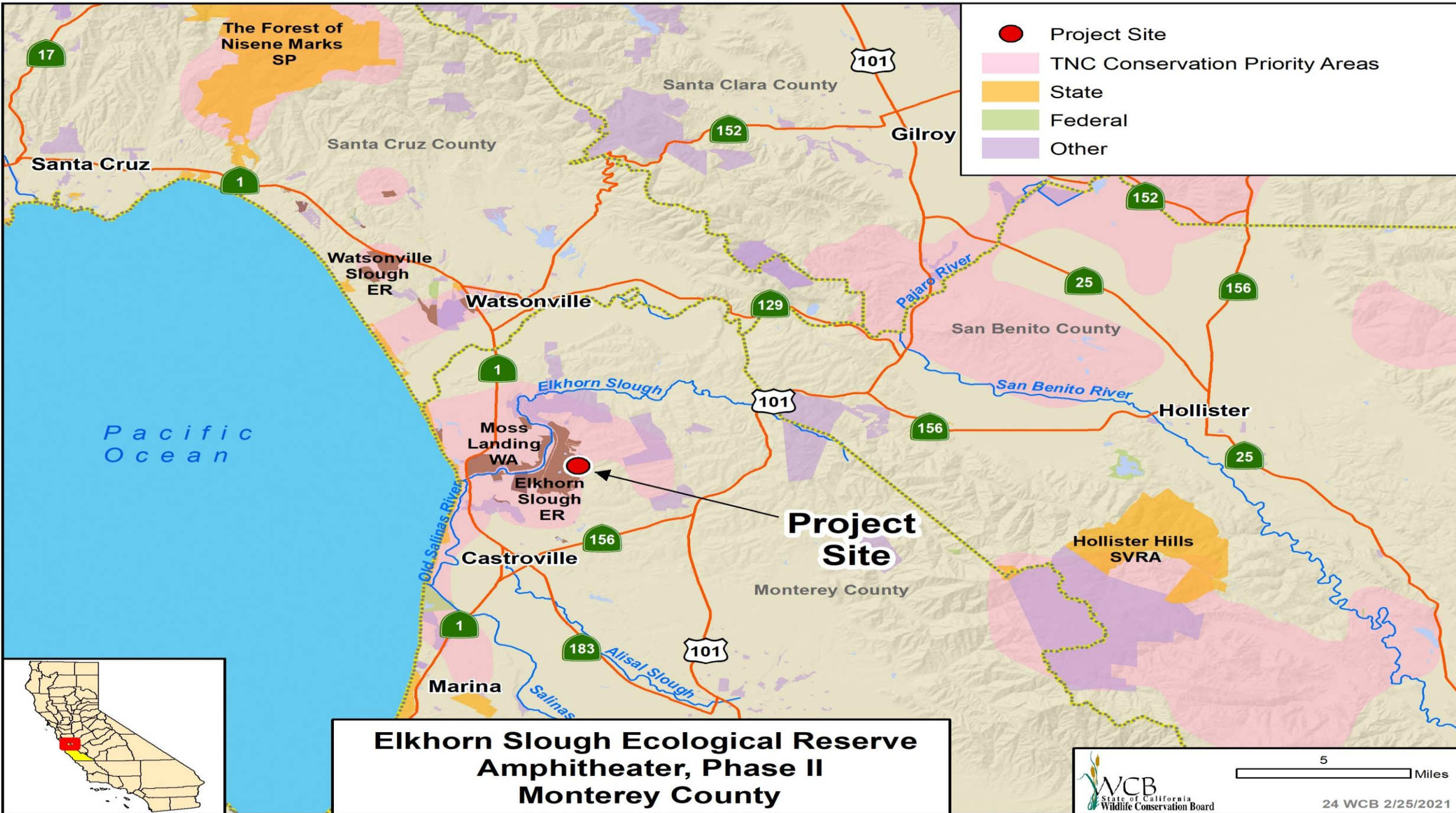
Slide 3

Coastal bluffs near Davenport  
on the left and Santa Cruz  
Mountains on the right



23. Santa Cruz County Regional  
Conservation Investment  
Strategy, Augmentation  
Slide 4





**Elkhorn Slough Ecological Reserve  
Amphitheater, Phase II  
Monterey County**





## 24. Elkhorn Slough Ecological Reserve Amphitheater, Phase II

Slide 1

Seating area after Phase I





**24. Elkhorn Slough  
Ecological Reserve  
Amphitheater, Phase II**

Slide 2

Stage area after Phase I

# 24. Elkhorn Slough Ecological Reserve Amphitheater, Phase II

Slide 3

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Teachers in the old amphitheater participating in an Elkhorn Slough Reserve teacher workshop on water quality, 2018.





# 24. Elkhorn Slough Ecological Reserve Amphitheater, Phase II

Slide 4

Students participating in  
the Elkhorn Slough  
Reserve's Estuary Explorers  
Club after school program  
in 2018.

# 24. Elkhorn Slough Ecological Reserve Amphitheater, Phase II

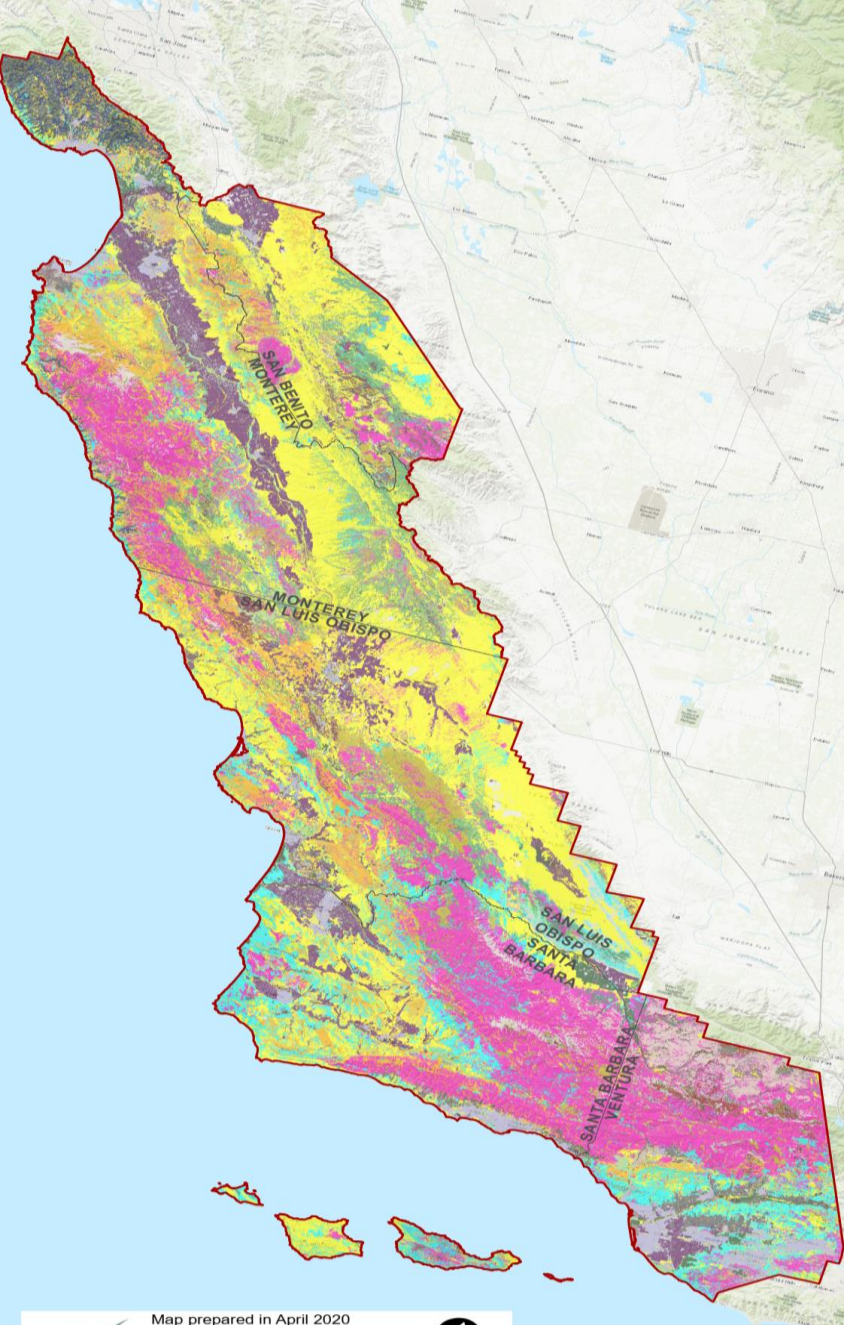
Slide 5



Elkhorn Slough Reserve Volunteers at the annual Volunteer appreciation held in the amphitheater. Old Amphitheater image, 2017.

# Protecting Central Coast Habitat for Listed Plant Species Multiple Counties





- LEGEND**
- ProjectArea
  - Counties
  - Clip\_FVeg15\_1
  - WHR Veg NAME**
  - Alkali Desert Scrub
  - Annual Grassland
  - Barren
  - Bitterbrush
  - Blue Oak Woodland
  - Blue Oak-Foothill Pine
  - Chamise-Redshank Chaparral
  - Closed-Cone Pine-Cypress
  - Coastal Oak Woodland
  - Coastal Scrub
  - Cropland
  - Deciduous Orchard
  - Desert Riparian
  - Desert Scrub
  - Desert Wash
  - Douglas Fir
  - Dryland Grain Crops
  - Eastside Pine
  - Estuarine
  - Eucalyptus
  - Evergreen Orchard
  - Fresh Emergent Wetland
  - Irrigated Grain Crops
  - Irrigated Hayfield
  - Irrigated Row and Field Crops
  - Jeffrey Pine
  - Juniper
  - Lacustrine
  - Marsh
  - Mixed Chaparral
  - Montane Chaparral
  - Montane Hardwood
  - Montane Hardwood-Conifer
  - Montane Riparian
  - Orchard - Vineyard
  - Pasture
  - Perennial Grassland
  - Pinyon-Juniper
  - Ponderosa Pine
  - Redwood
  - Rice
  - Riverine
  - Sagebrush
  - Saline Emergent Wetland
  - Sierran Mixed Conifer
  - Subalpine Conifer
  - Urban
  - Valley Foothill Riparian
  - Valley Oak Woodland
  - Vineyard
  - Water
  - Wet Meadow
  - White Fir

# 25. Protecting Central Coast Habitat for Listed Plant Species

Slide 1

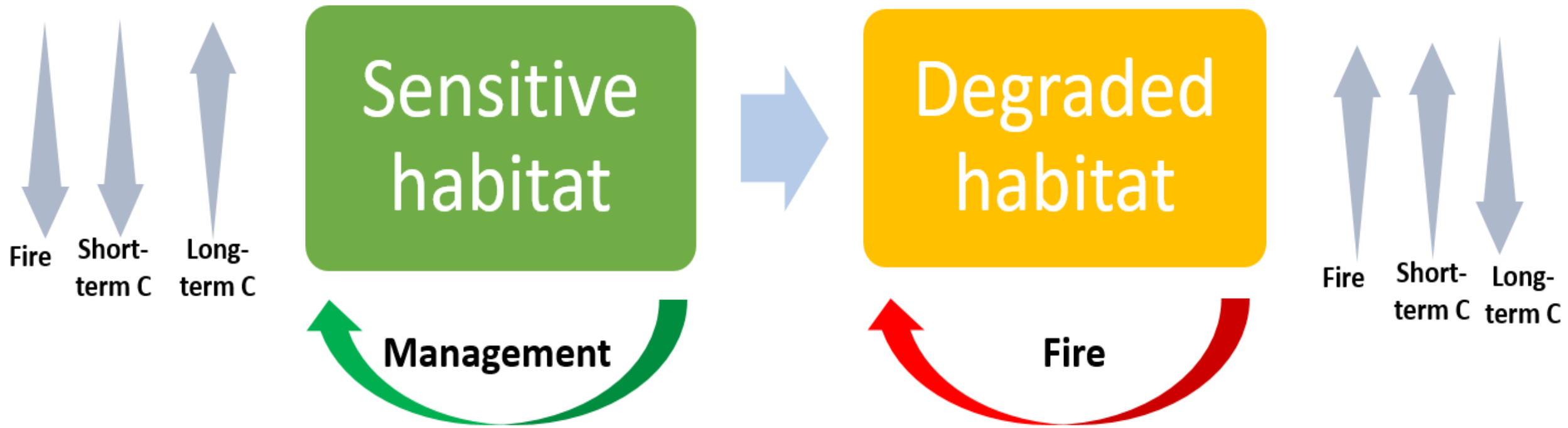
Vegetation types within the project study area.

# 25. Protecting Central Coast Habitat for Listed Plant Species

Slide 2

- Map of fifty Federally listed plant species within the project study area.



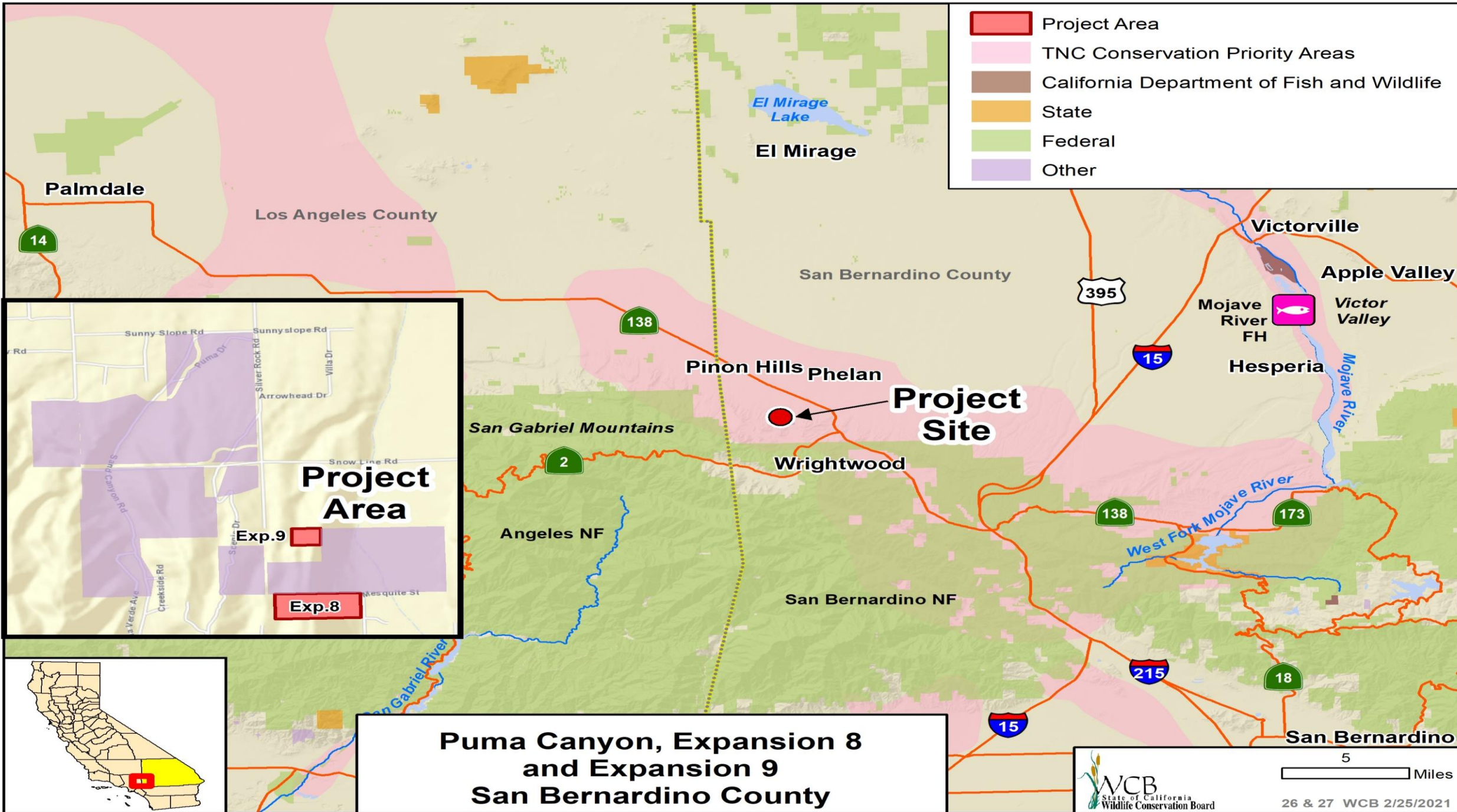


## 25. Protecting Central Coast Habitat for Listed Plant Species

Slide 3

Conceptual model displaying comparative long-term carbon losses through limiting conversion of sensitive habitats to degraded, invasive plant-dominated habitats.





**Puma Canyon, Expansion 8 and Expansion 9 San Bernardino County**

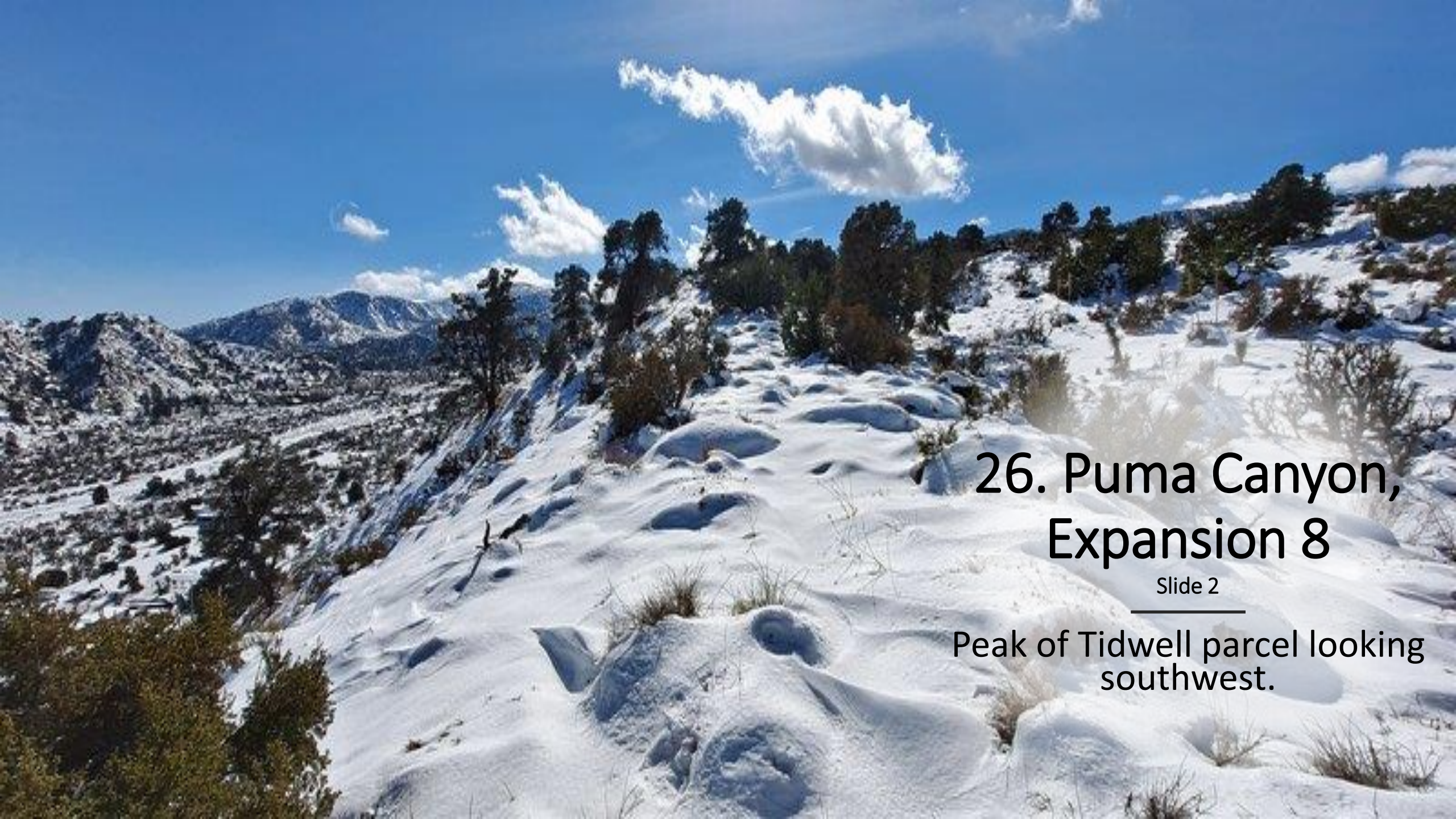


## 26. Puma Canyon, Expansion 8

Slide 1

---

Peak of Tidwell parcel  
looking north.



## 26. Puma Canyon, Expansion 8

Slide 2

---

Peak of Tidwell parcel looking  
southwest.

# 26. Puma Canyon, Expansion 8

Slide 3

Top: Valley views of  
Tidwell parcel

Bottom: Elevation view of  
Tidwell parcel





## 26. Puma Canyon, Expansion 8

Slide 4

Panorama of Tidwell parcel from ridge looking northwest.



## 26. Puma Canyon, Expansion 8

Slide 5

Snow covered Joshua Trees on Tidwell.




## 27. Puma Canyon, Expansion 9

Slide 1

---

Peak of Vogler parcel  
looking north.



## 27. Puma Canyon, Expansion 9

Slide 2

---

Habitat diversity on Vogler  
parcel.





## 27. Puma Canyon, Expansion 9

Slide 3

---

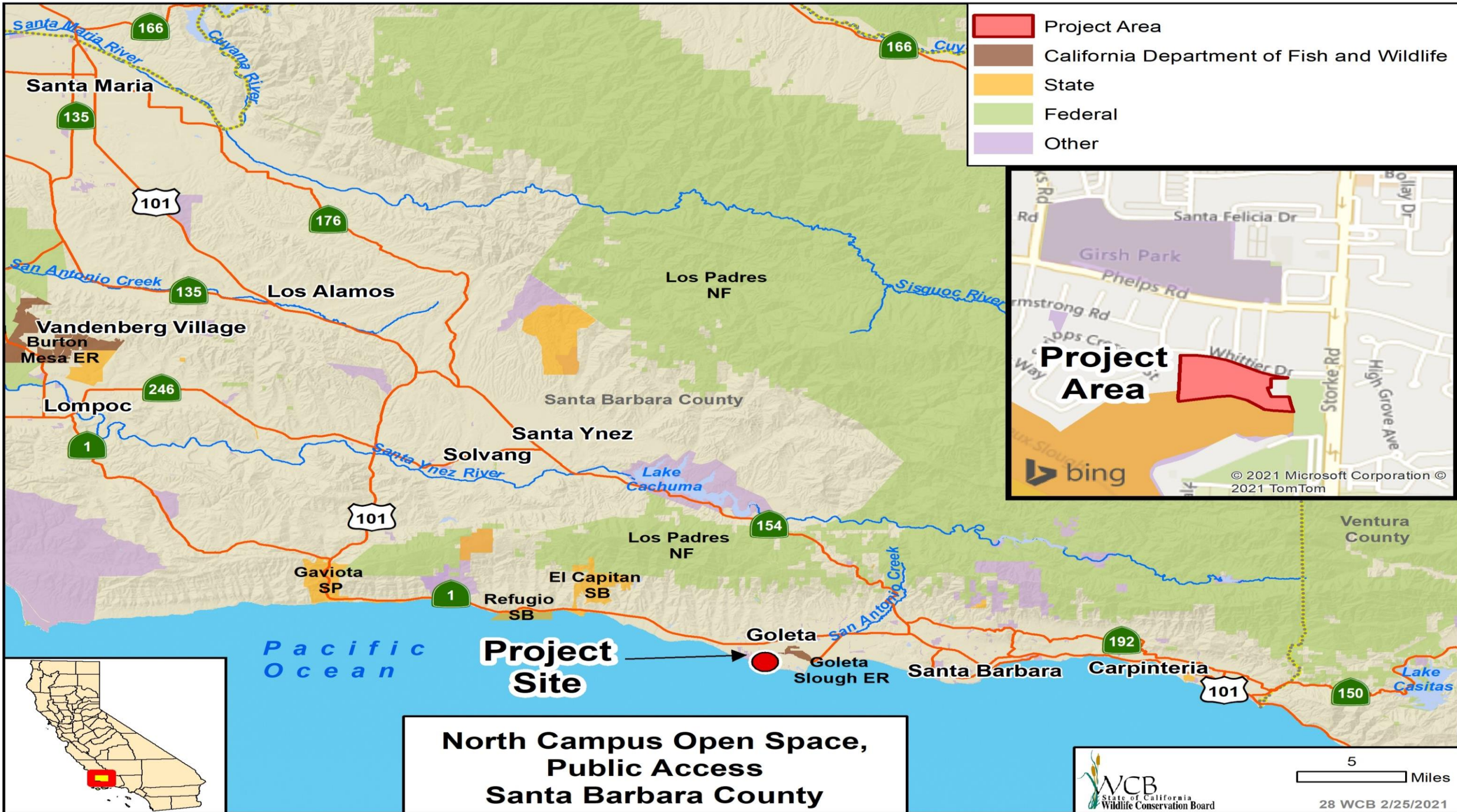
Vogler parcel looking  
southwest



## 27. Puma Canyon, Expansion 9

Slide 4

Snow covered Joshua Trees on Vogler



**North Campus Open Space,  
Public Access  
Santa Barbara County**



5 Miles


28 WCB 2/25/2021

# 28. North Campus Open Space, Public Access

Slide 1

North Campus Public Access  
Project location.



An aerial photograph of a campus open space. In the foreground, there is a dirt area with a blue canopy structure. A paved path winds through the area. To the left, there is a parking lot with several cars. In the background, there are several multi-story buildings and a large open field. The sky is overcast.

## 28. North Campus Open Space, Public Access

Slide 2

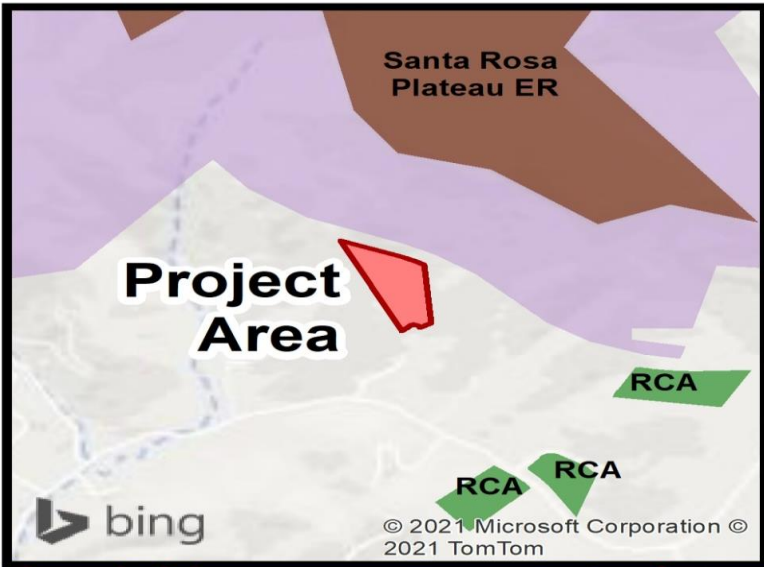
- Overview of the project area



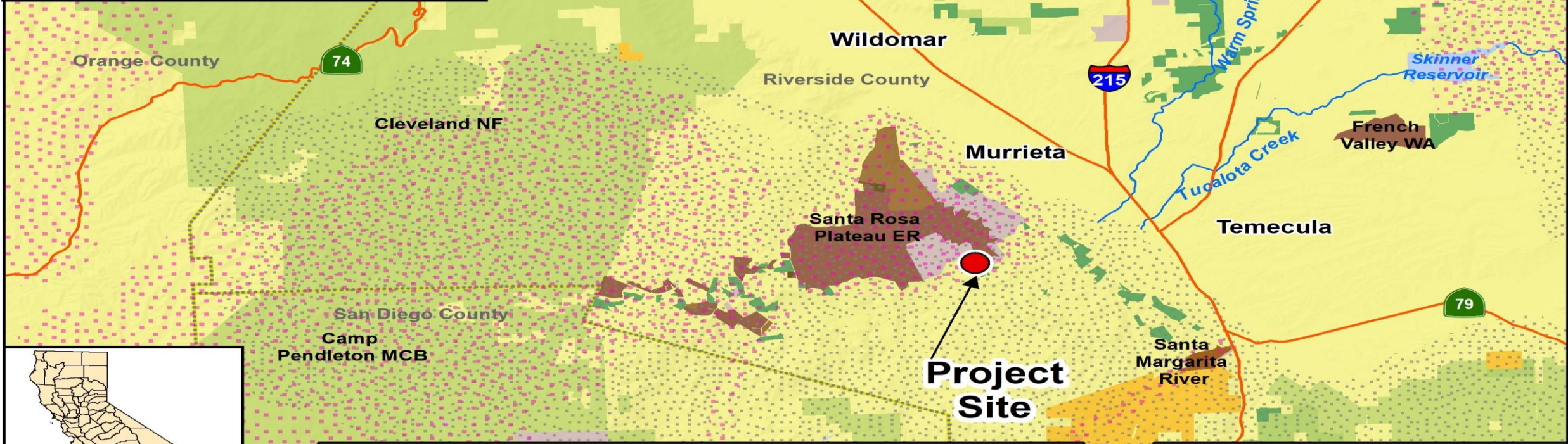
## 28. North Campus Open Space, Public Access

Slide 3

- The parking lot needs renovation



- Project Area
- HCP/NCCP
- Connectivity Areas
- TNC Conservation Priority Areas
- Regional Conservation Authority
- California Department of Fish and Wildlife
- State
- Federal
- Other




**Western Riverside MSHCP (2017) Startup  
Riverside County**

5 Miles

WCB  
State of California  
Wildlife Conservation Board

29 WCB 2/25/2021




29. Western  
Riverside MSHCP  
(2017) Startup

Slide 1

View looking north






**29. Western  
Riverside MSHCP  
(2017) Startup**

Slide 2

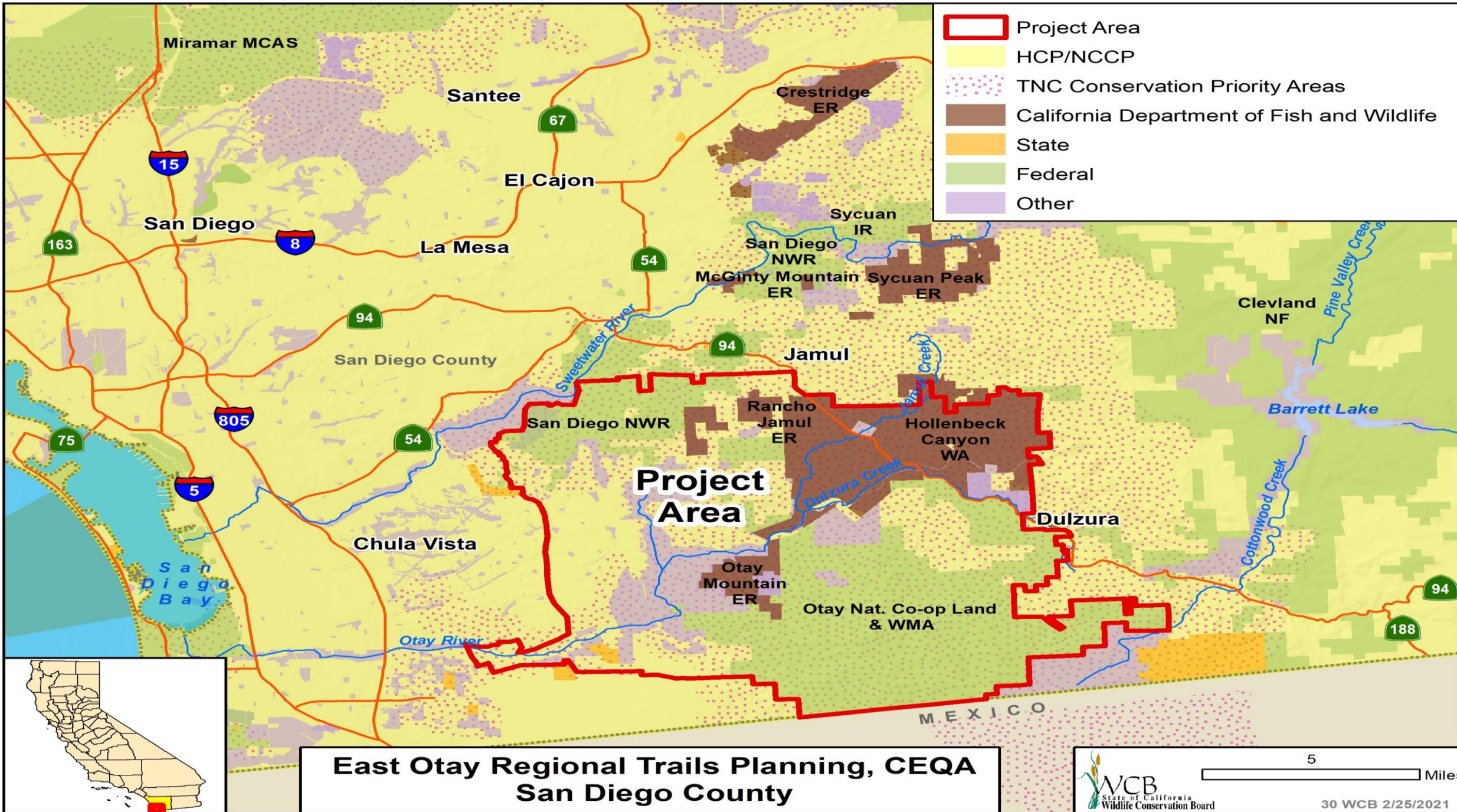
View looking east



**29. Western  
Riverside MSHCP  
(2017) Startup**

Slide 3

View looking west



- Project Area
- HCP/NCCP
- TNC Conservation Priority Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other

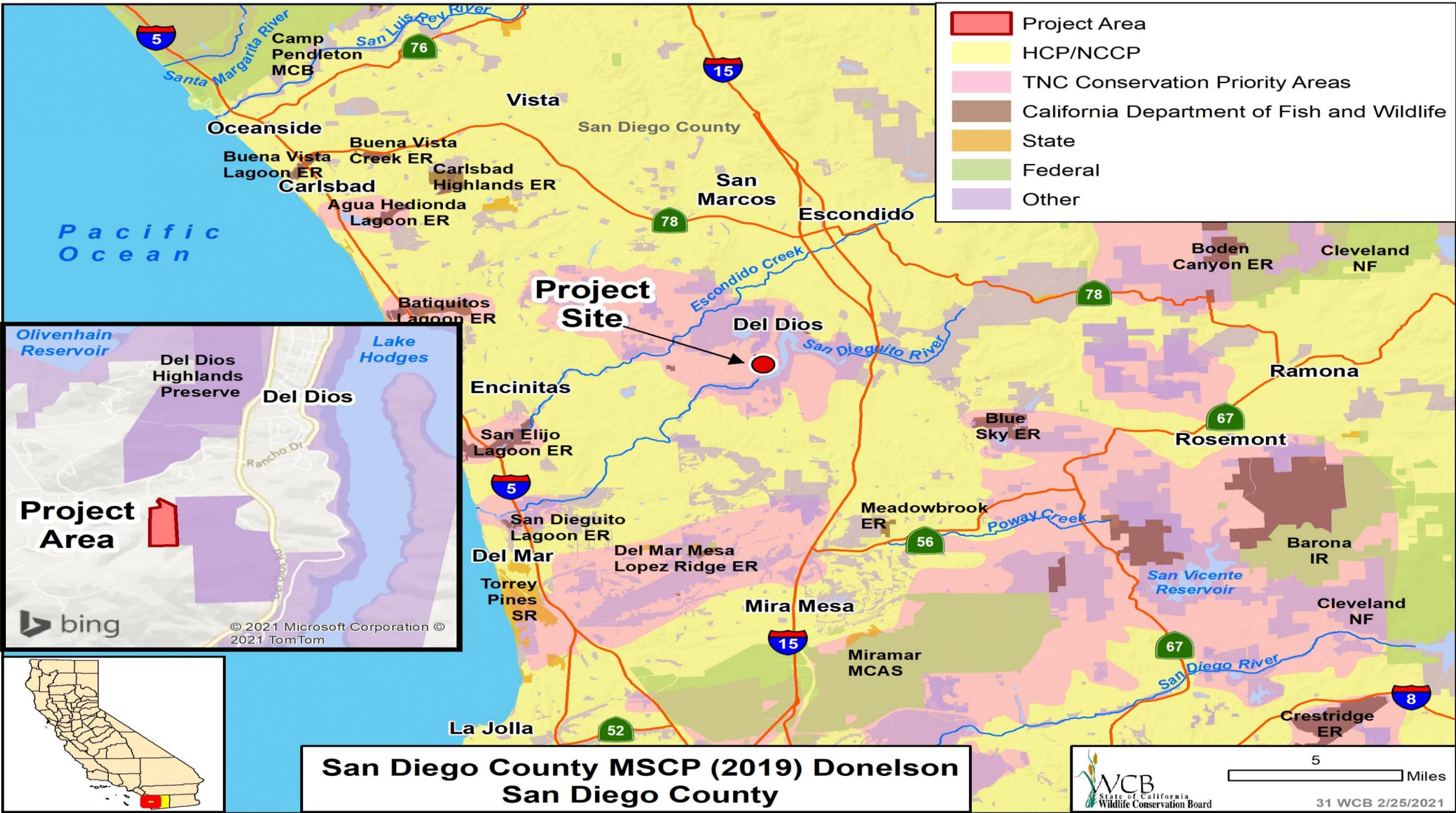
**East Otay Regional Trails Planning, CEQA  
San Diego County**



# 30. East Otay Regional Trails Planning, CEQA

Slide 1

Potential trail locations for the East Otay Regional Trails Planning, CEQA project.



- Project Area
- HCP/NCCP
- TNC Conservation Priority Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other



**San Diego County MSCP (2019) Donelson  
San Diego County**



31. San Diego County  
MSCP (2019)  
Donelson

Slide 1

Looking south

Photo: Trish Boaz




**31. San Diego County  
MSCP (2019) Donelson**

Slide 2

Looking South

Photo: Trish Boaz



**31. San Diego County  
MSCP (2019) Donelson**

Slide 3

Looking south

Photo: Trish Boaz





# 2020 Public Access Proposal Solicitation



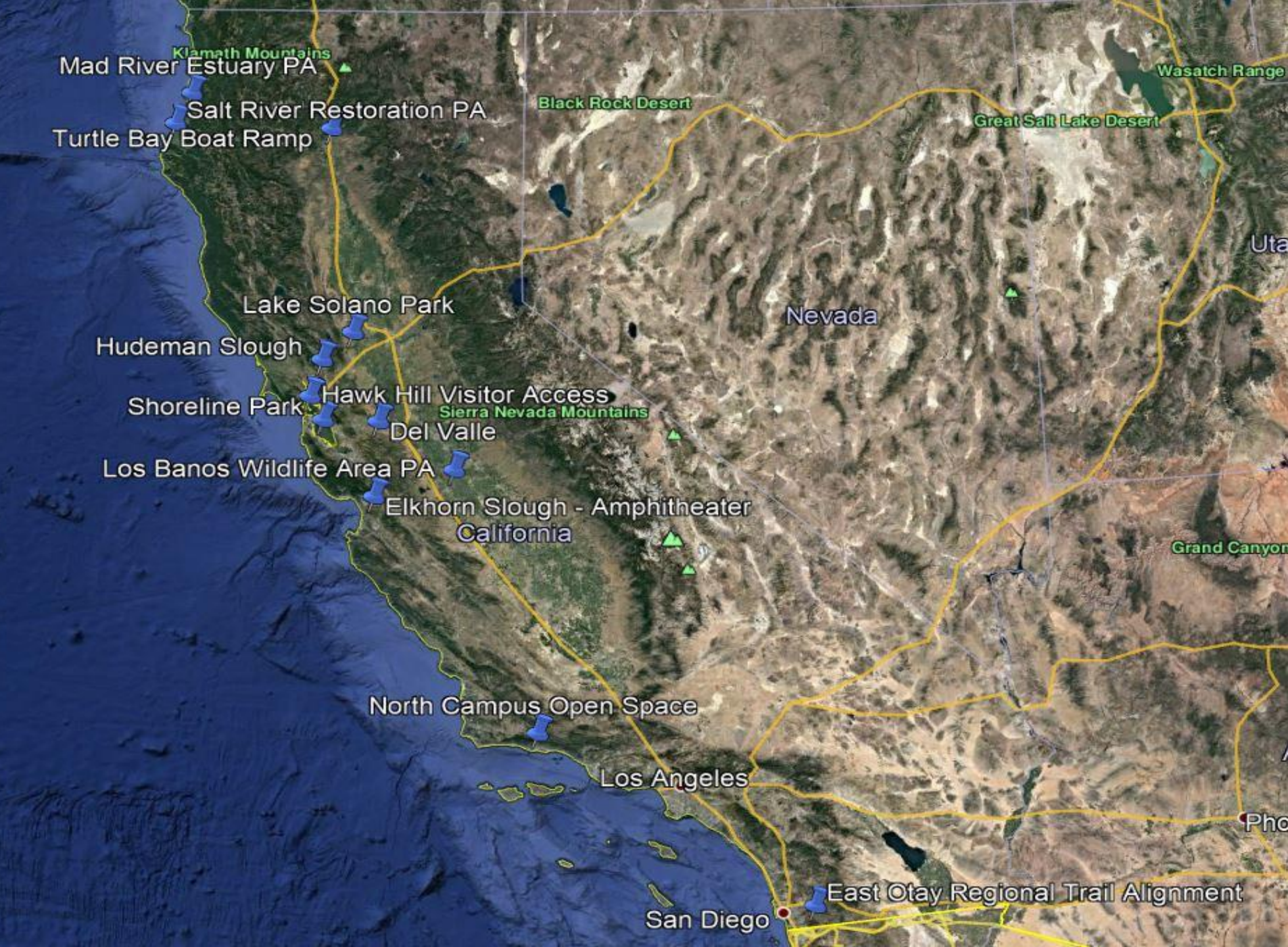
# 2020 Public Access Solicitation

Proposal Solicitation Notice (PSN) released: May 28<sup>th</sup>, 2020

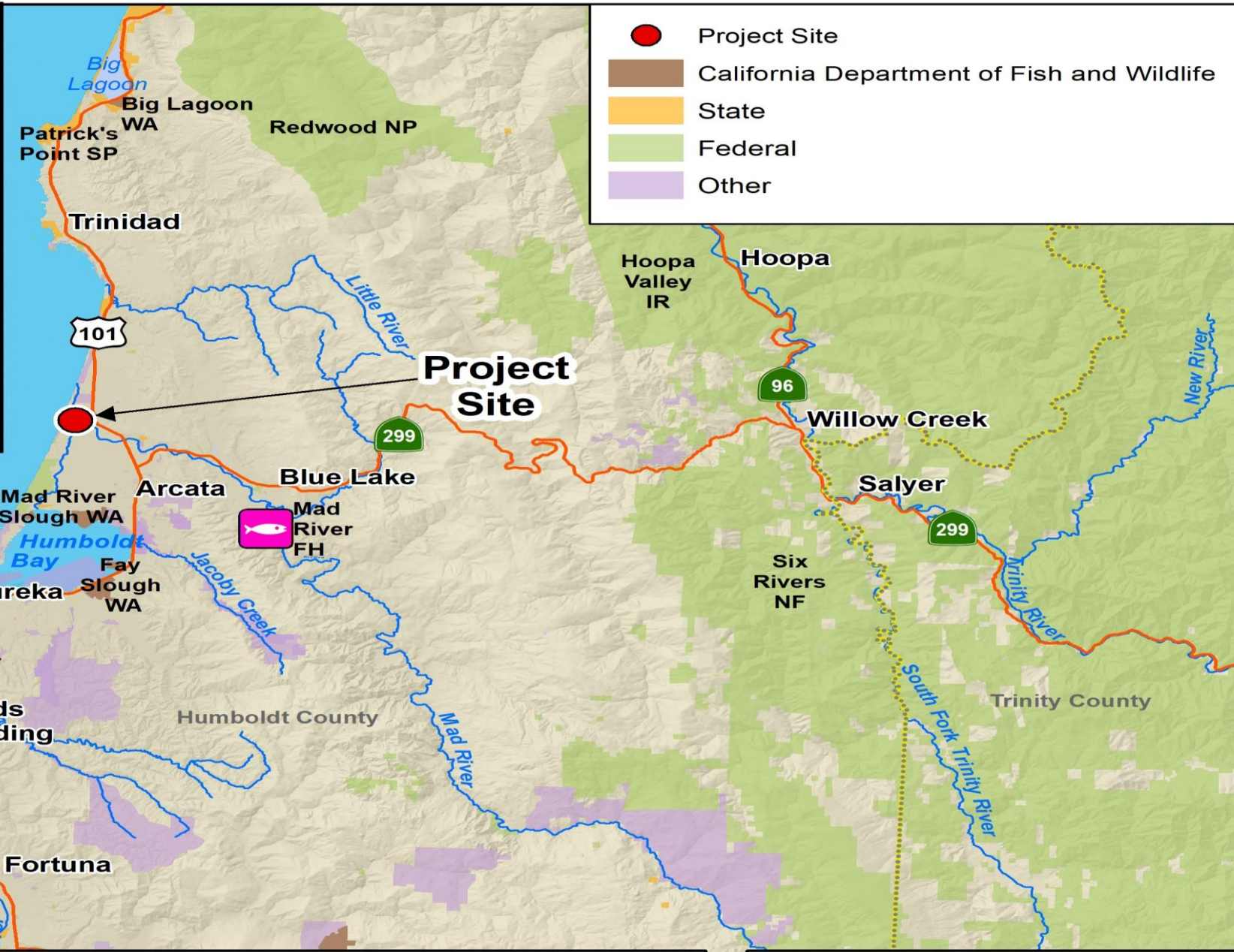
Priorities:

- Boating Access
- Fishing/hunting access
- Non-consumptive wildlife recreation

	Number of Applications	WCB Ask	Total Project Costs
<b>Concept Applications</b>	71	\$25,136,738	\$86,203,749
<b>Full Applications</b>	29	\$10,826,659	\$17,606,792
<b>Applications to the Board</b>	12	\$3,650,745	\$9,746,974



2020  
Public  
Access  
Projects



**Mad River Estuary Public Access Enhancement  
Humboldt County**



## 32. Mad River Estuary Public Access Enhancement

Slide 1

Existing informal trails are incomplete and do not provide universal access

## 32. Mad River Estuary Public Access Enhancement Slide 2

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Larger restoration  
project with two  
components:

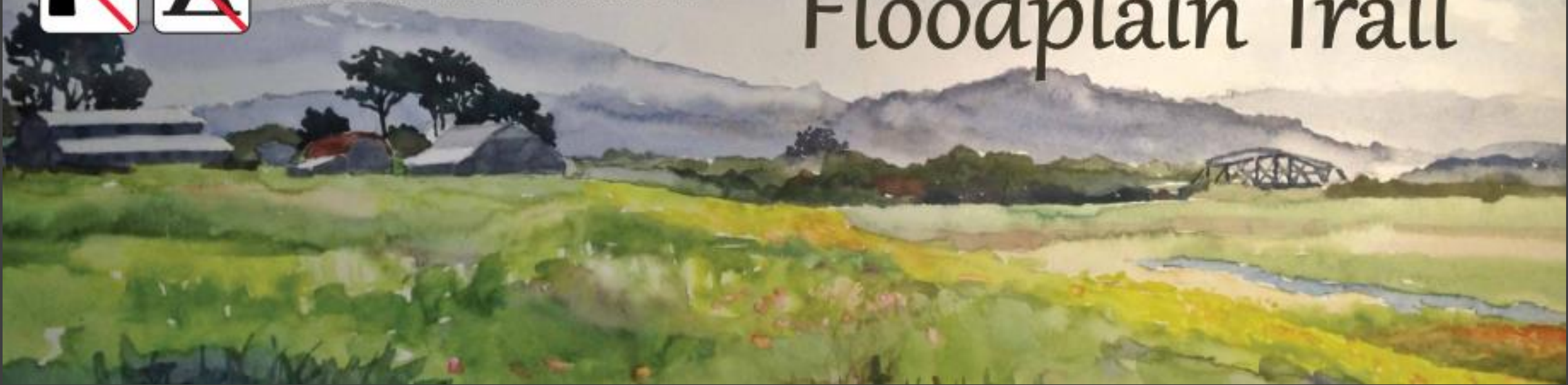
- Restoration of  
floodplain habitat
- Improvements for  
public access





DAY USE ONLY • Stay on trails to  
protect vegetation • Enter water at own risk  
Call MCSD for any suspicious trail activity: (707) 839-3251

# Mad River Floodplain Trail

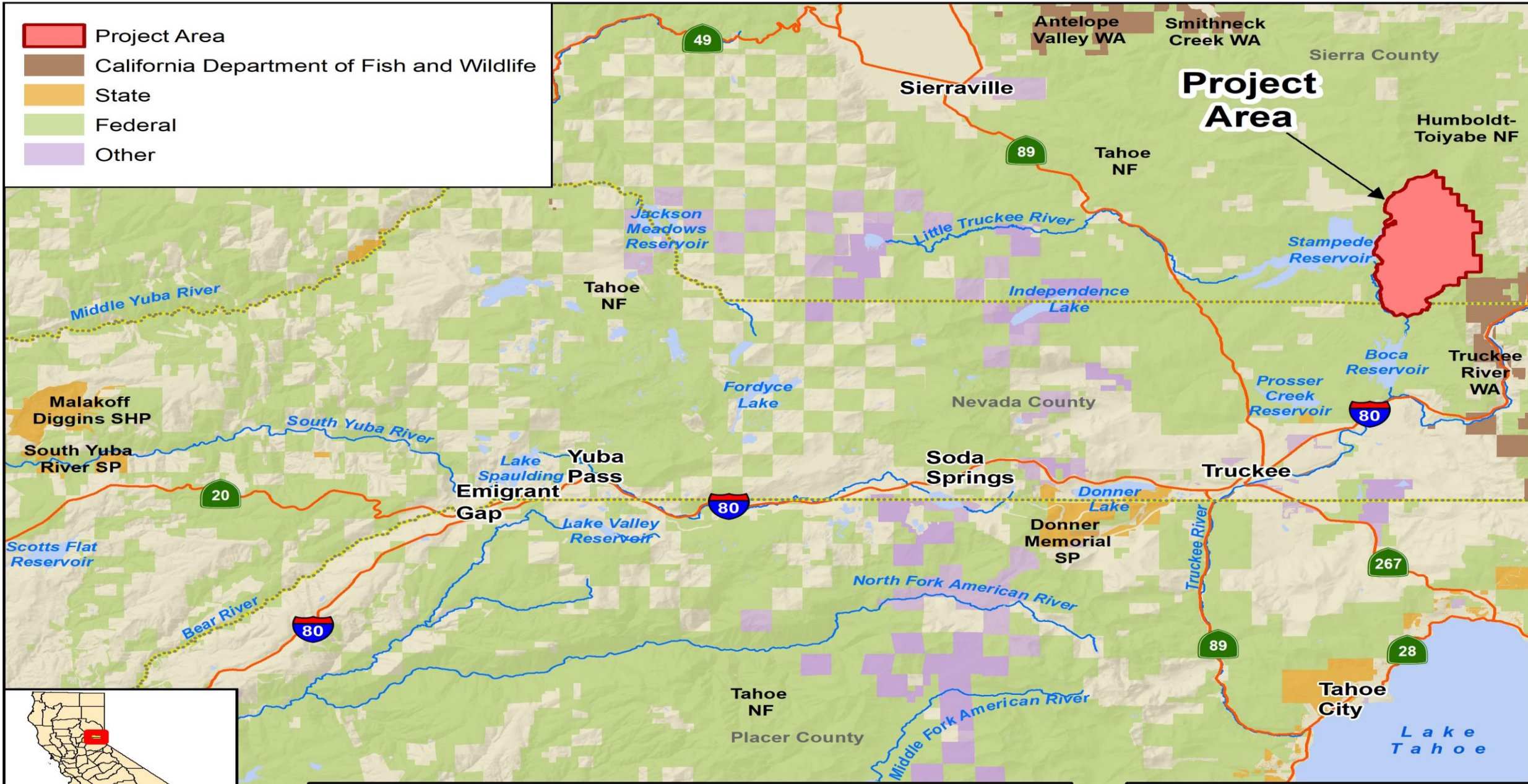


## 32. Mad River Estuary Public Access Enhancement

Slide 3

- Complete design for restoration and public access components
- Construct a 700' ADA trail to a new coastal overlook
- Construct 3 resting sites with benches
- Install a low post-and-cable fence
- Install 4 interpretive signs- estuary, land use, and Wiyot culture

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



**Project Area**

**Ladybug Forest Health and Fuels Reduction  
Sierra County**



5 Miles





## 33. Ladybug Forest Health and Fuels Reduction

Slide 1

- Stampede Reservoir regulates water flow to downstream populations of threatened Lahontan cutthroat and endangered Cui-ui fish species.



## 33. Ladybug Forest Health and Fuels Reduction

Slide 2

- Dense stands in Ladybug mastication unit 23



### 33. Ladybug Forest Health and Fuels Reduction

Slide 3

Conifer encroachment around the Hoke Valley riparian area.

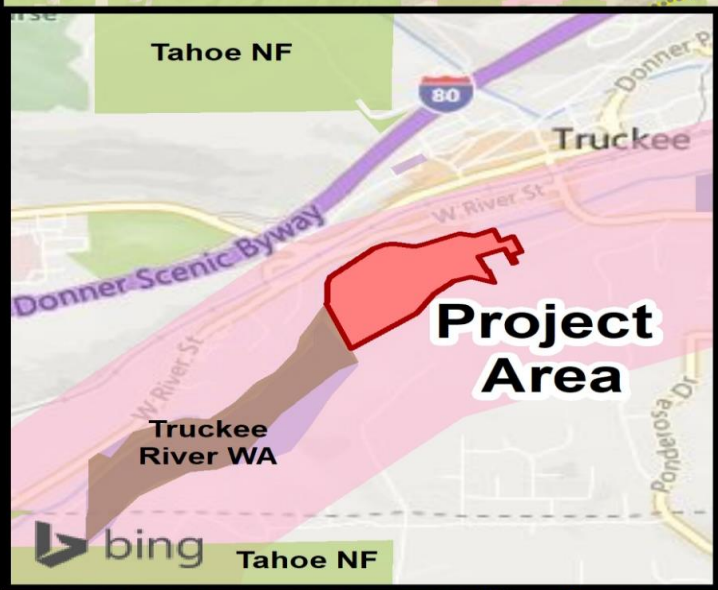


### 33. Ladybug Forest Health and Fuels Reduction

Slide 4

Unmaintained U.S. Forest  
Service logging road  
adjacent to Unit 53

- Project Area
- TNC Conservation Priority Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other

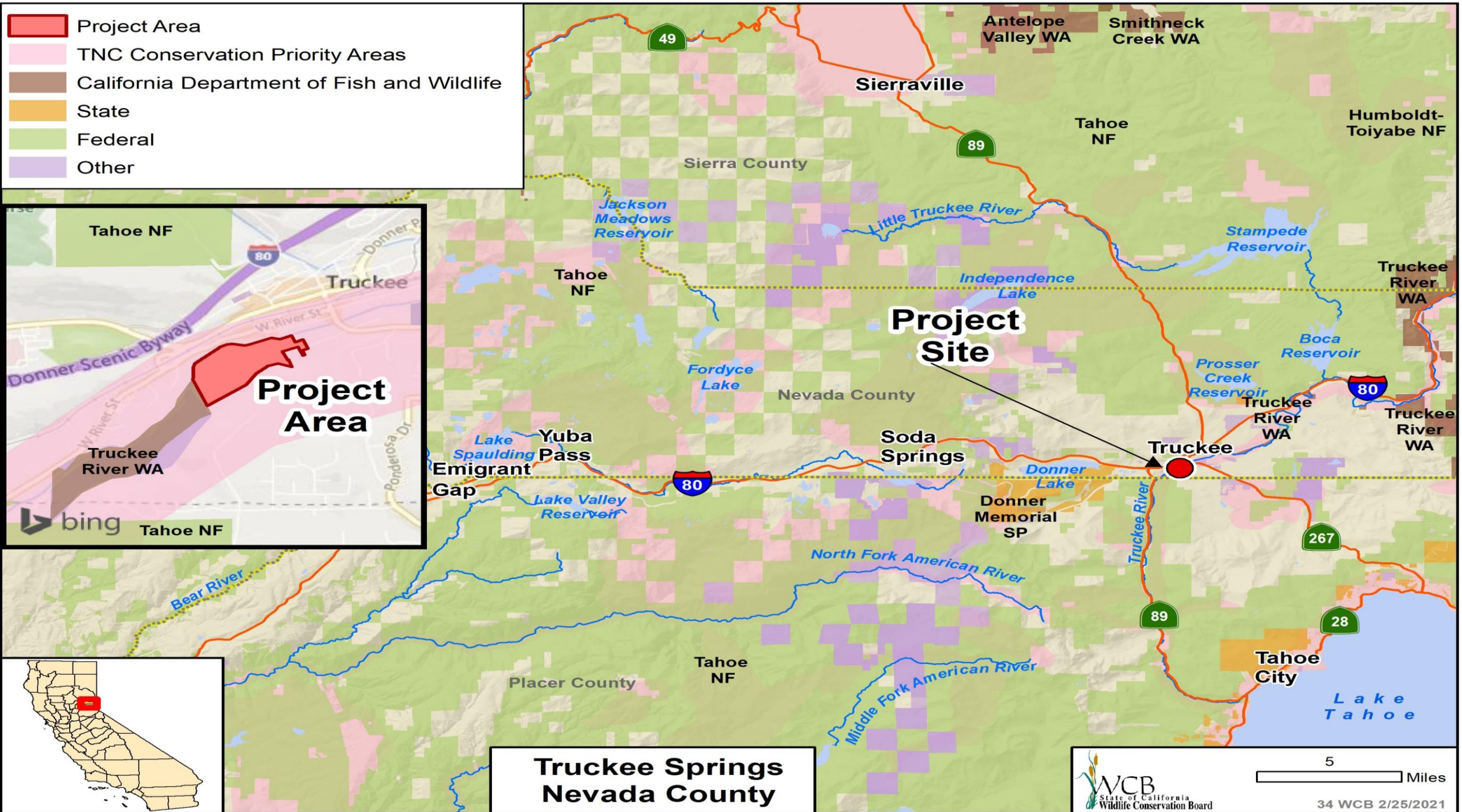


**Truckee Springs  
Nevada County**

WCB  
State of California  
Wildlife Conservation Board

5 Miles

34 WCB 2/25/2021



An aerial photograph of Truckee Springs, California. The image shows a river with white-water rapids flowing through a lush green forest. In the background, there are mountains with patches of snow under a blue sky with scattered clouds. A small town is visible on the right side of the river.

# 34. Truckee Springs

Slide 1

View of Truckee Springs looking west.



# 34. Truckee Springs

Slide 2

Truckee Springs and the Truckee River.

Photo by Bill Stevenson



## 34. Truckee Springs

Slide 3

Snow covered Truckee Springs.

Photo by Bill Stevenson





## 34. Truckee Springs

Slide 4

Watercolor of the proposed pedestrian bridge by Jen Mahoney.



## 34. Truckee Springs

Slide 5

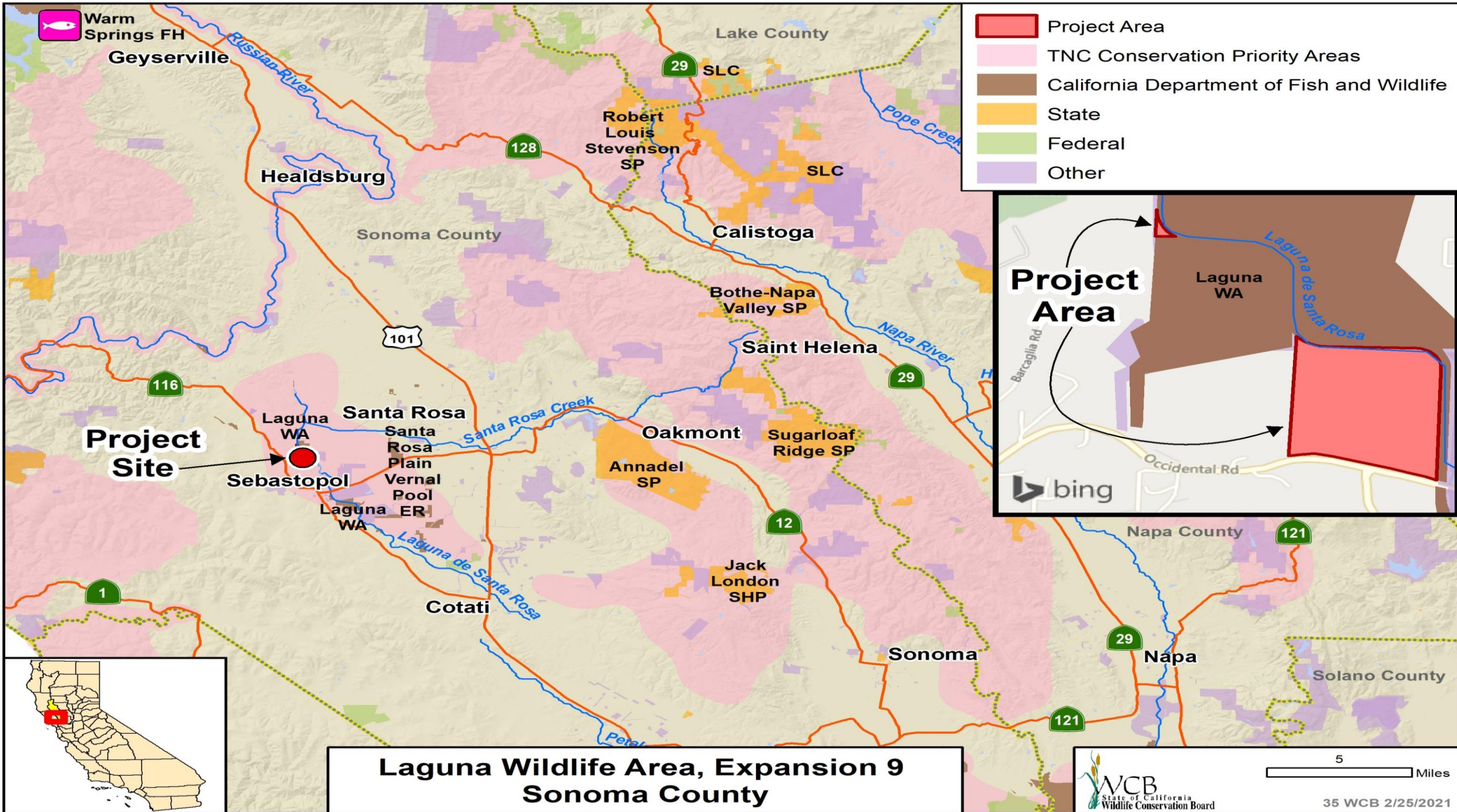
Anglers in the Truckee  
River at Truckee Springs.



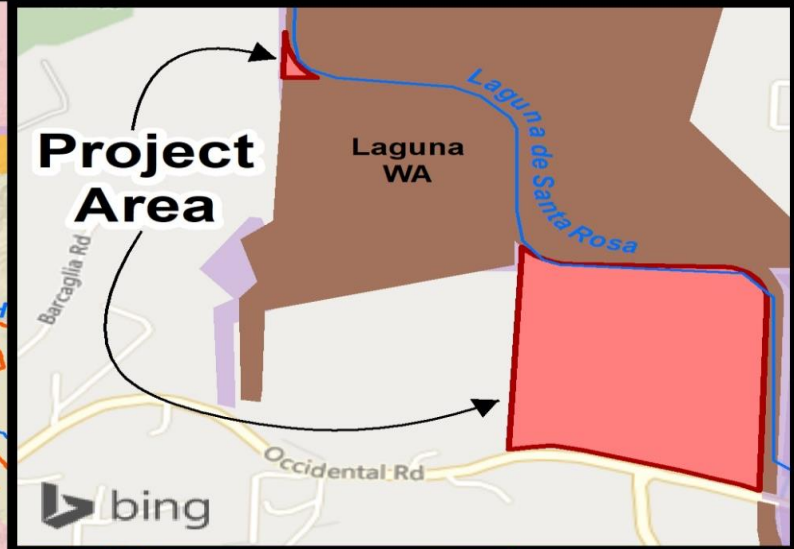
# 34. Truckee Springs

Slide 6

TDLT board member and cyclist Levi Leipheimer exploring Truckee Springs.



- Project Area
- TNC Conservation Priority Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other



**Laguna Wildlife Area, Expansion 9  
Sonoma County**



## 35. Laguna Wildlife Area, Expansion 9

Slide 1

Main entrance drive to the subject property off Occidental Road.



## 35. Laguna Wildlife Area, Expansion 9

Slide 2

Southerly view across  
the subject property.



## 35. Laguna Wildlife Area, Expansion 9

Slide 3

Northerly view of riparian  
area along the Laguna de  
Santa Rosa stream.



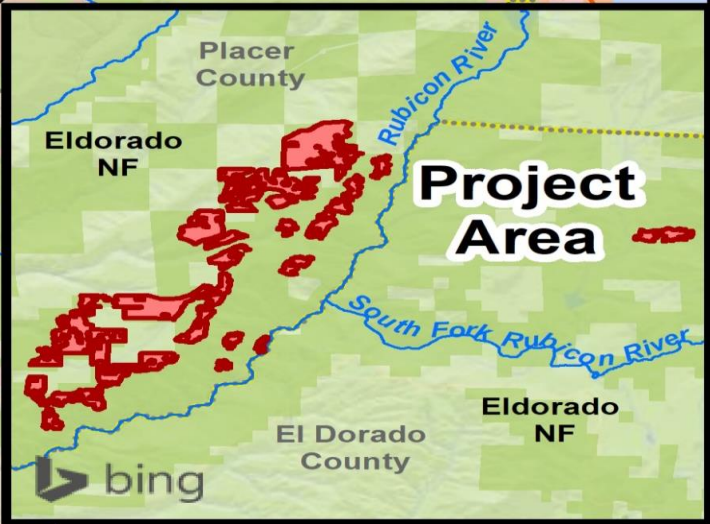
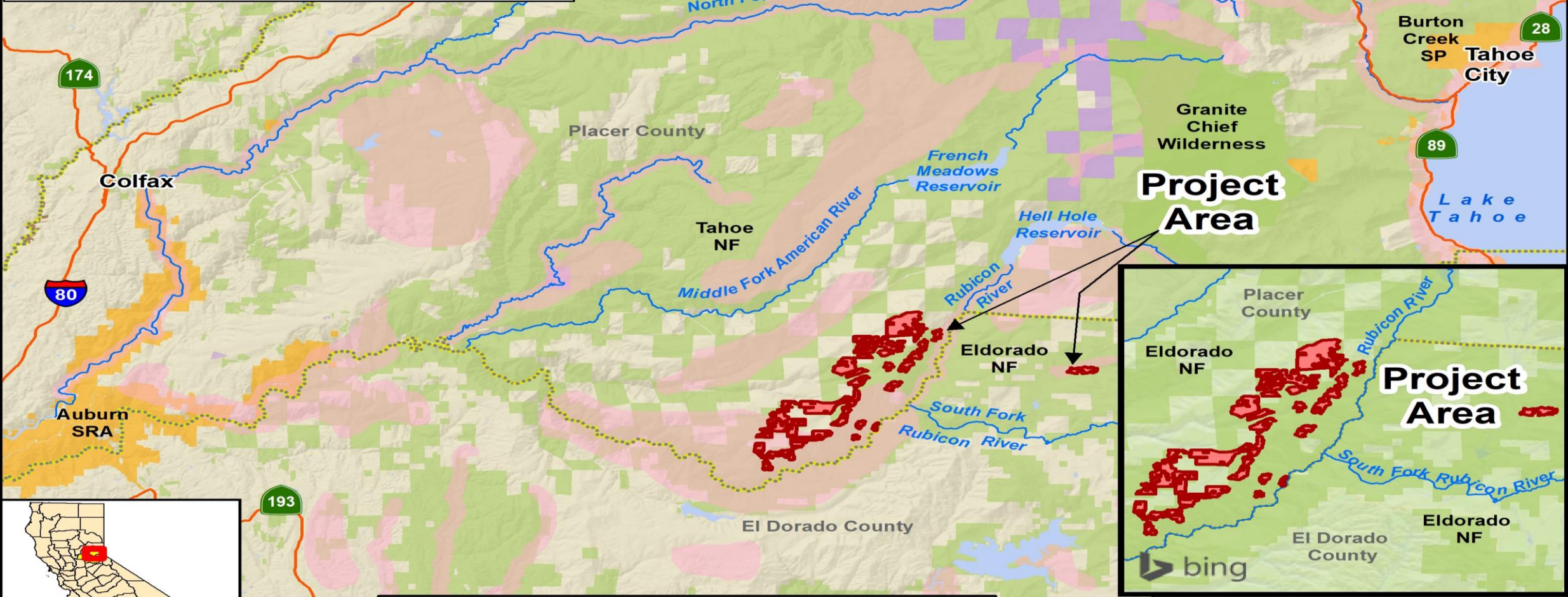
## 35. Laguna Wildlife Area, Expansion 9

Slide 4

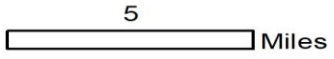
North facing view from the  
center of the property.



- Project Area
- TNC Conservation Priority Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other



**King Fire Forest Restoration  
El Dorado & Placer Counties**



# 36. King Fire Forest Restoration

Slide 1

---

Panoramic view of  
Rubicon Canyon.

Photo: Dana Walsh, El Dorado  
National Forest



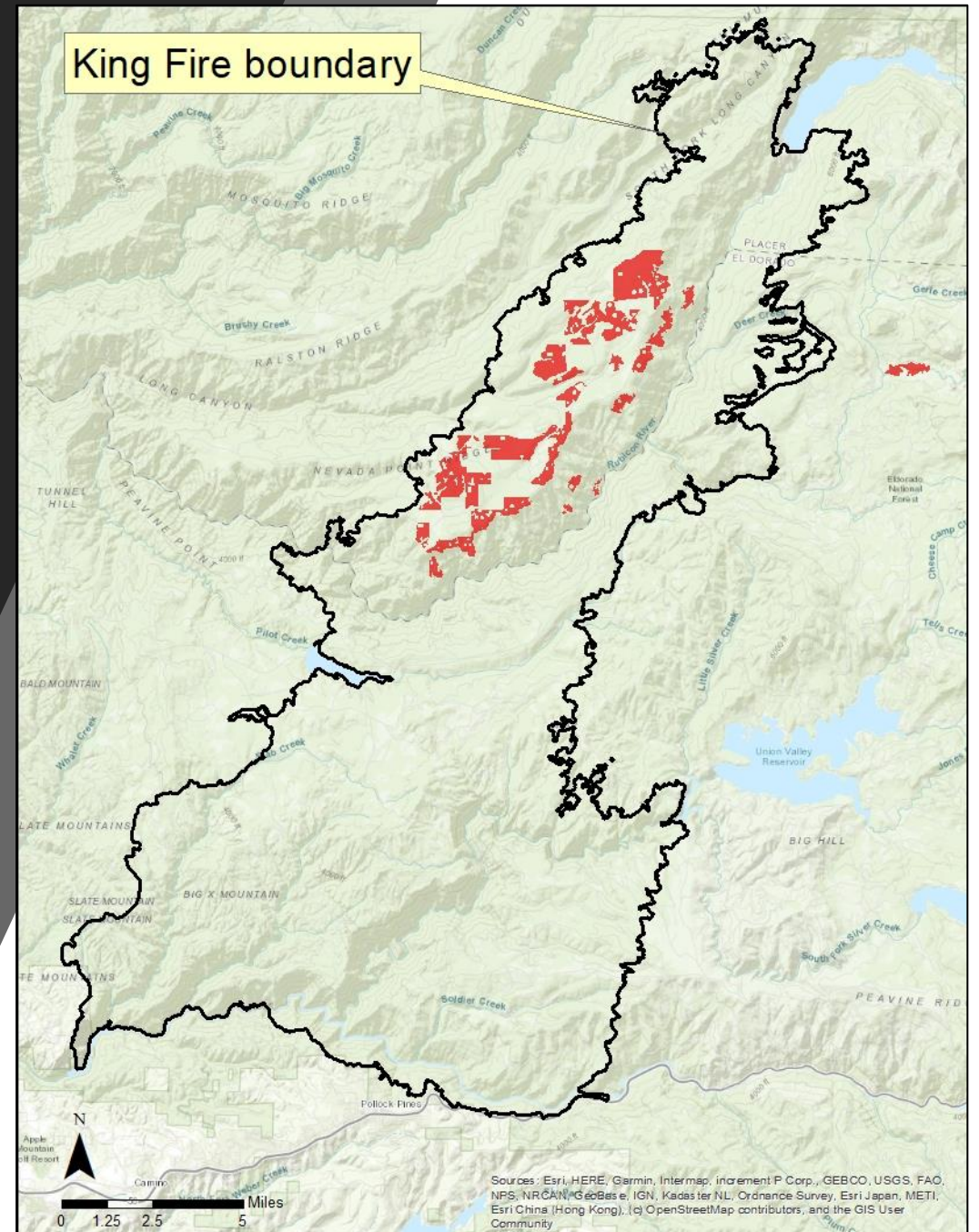
# THE KING FIRE

FIVE YEAR REPORT



# 36. King Fire Forest Restoration

Slide 2





## 36. King Fire Forest Restoration

Slide 3

High severity burn area with shrub growth.

Photo: Luis Vidal, Sierra Corps Fellow



## 36. King Fire Forest Restoration

Slide 4

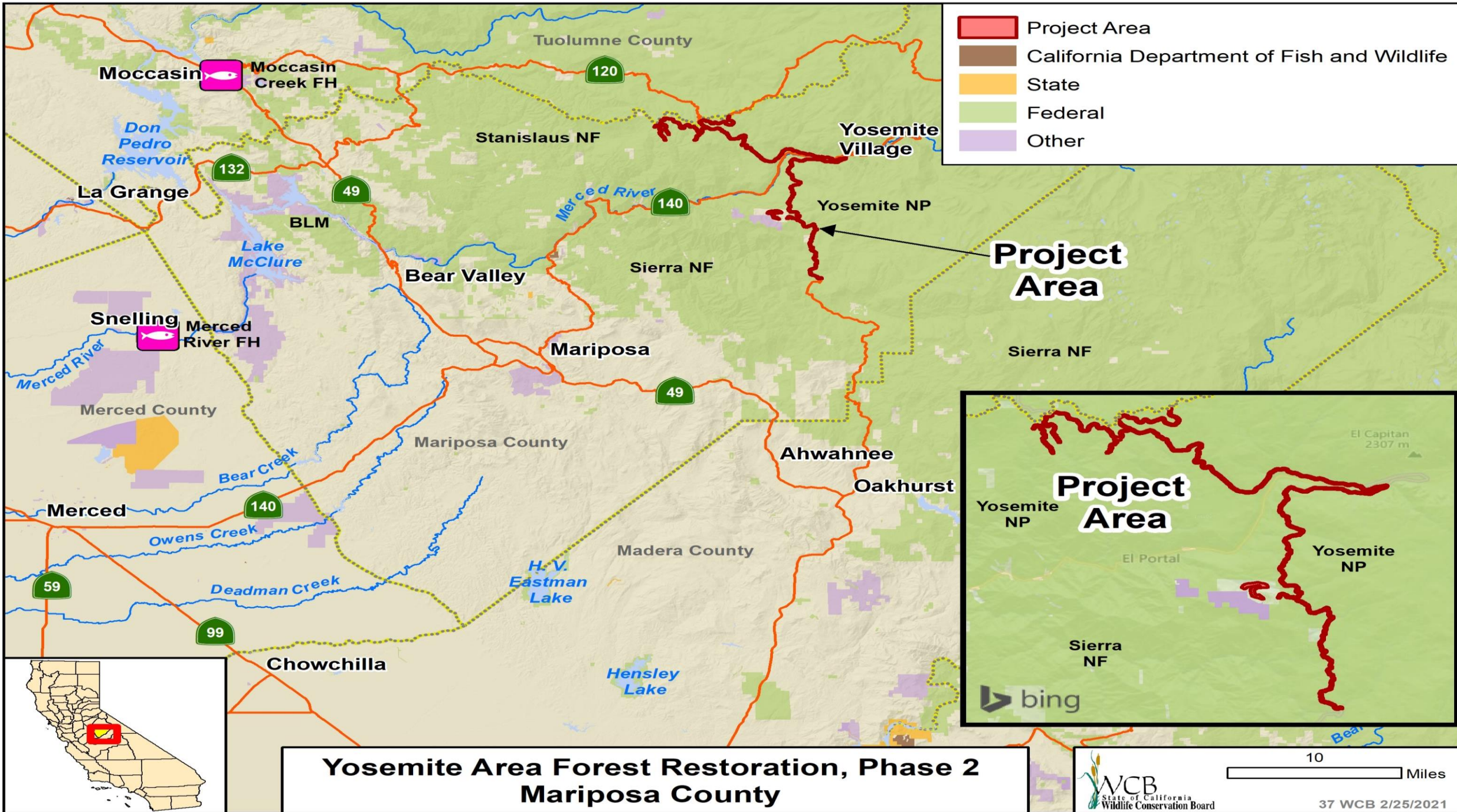
- Stream channel with suppressed riparian vegetation from conifer encroachment.
- Photo: Eric Nacita, Eldorado National Forest



## 36. King Fire Forest Restoration

Slide 5

- Reforestation site within King Fire Burn Scar.
- Photo: Dana Walsh, Eldorado National Forest



**Yosemite Area Forest Restoration, Phase 2  
Mariposa County**



# 37. Yosemite Area Forest Restoration, Phase 2

Slide 1

Tree mortality near Merced Grove.

Photo: Garrett Dickman, Yosemite National Park





# 37. Yosemite Area Forest Restoration, Phase 2

Slide 2

Fire-killed giant sequoia (Pier Fire)

Photo: Garrett Dickman, Yosemite National Park

# 37. Yosemite Area Forest Restoration, Phase 2

Slide 3

Monitoring and protecting giant sequoias.

Photo: Garrett Dickman, Yosemite National Park





## 37. Yosemite Area Forest Restoration, Phase 2

Slide 4

Biomass removal near Wawona.

Photo: Lloyd Hanebury, Grey-Green Vegetation Management



## 37. Yosemite Area Forest Restoration, Phase 2

Slide 5

Biomass removal near Wawona.

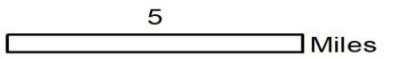
Photo: Lloyd Hanebury, Grey-Green Vegetation Management



- Project Area
- TNC Conservation Priority Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other



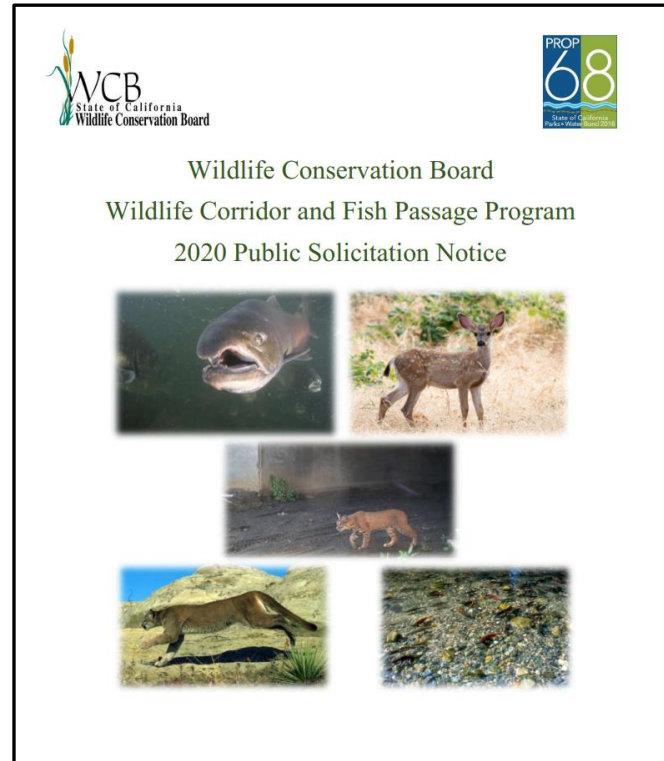
**Butano Creek Channel Stabilization and  
Habitat Enhancement  
San Mateo County**



# 2020 Wildlife Corridor and Fish Passage Solicitation

California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68)

- \$30 million for projects to construct, repair, modify, or remove transportation infrastructure or water resources infrastructure improving passage for wildlife or fish
- Four Categories of Projects:
  - Wildlife Corridor – Implementation
  - Wildlife Corridor - Planning
  - Fish Passage – Implementation
  - Fish Passage - Planning



- Pre-Application Concept Paper followed by a Full Application for selected projects
- Timeline
  - May 18, 2020: Solicitation Released
  - June 11, 2020: Pre-Applications Due
  - August 7, 2020: Full Applications Due
  - September 23, 2020: Final Selection

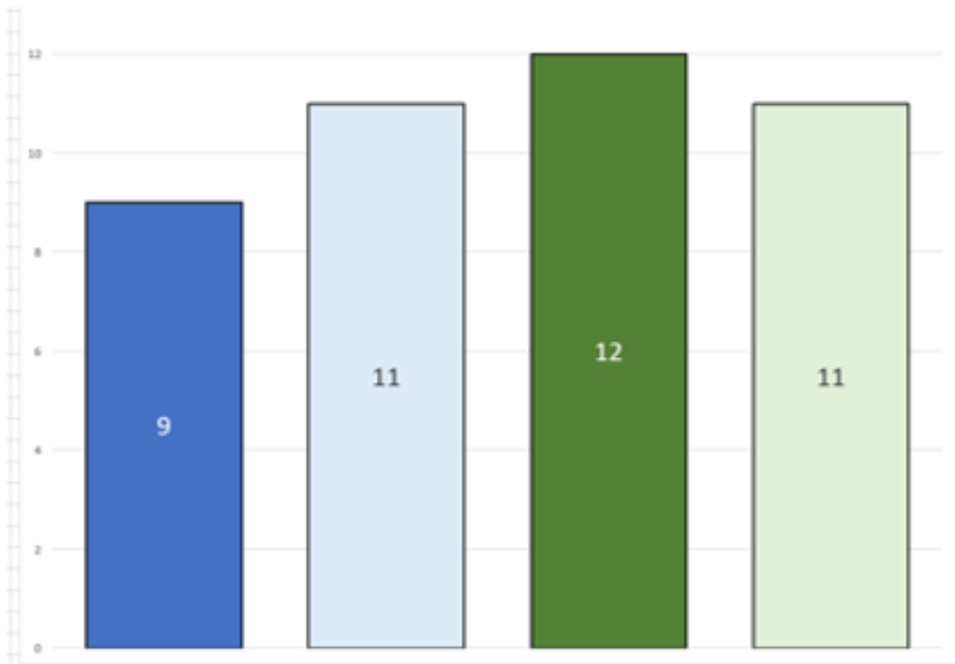
# 2020 Wildlife Corridor and Fish Passage Solicitation

California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68)

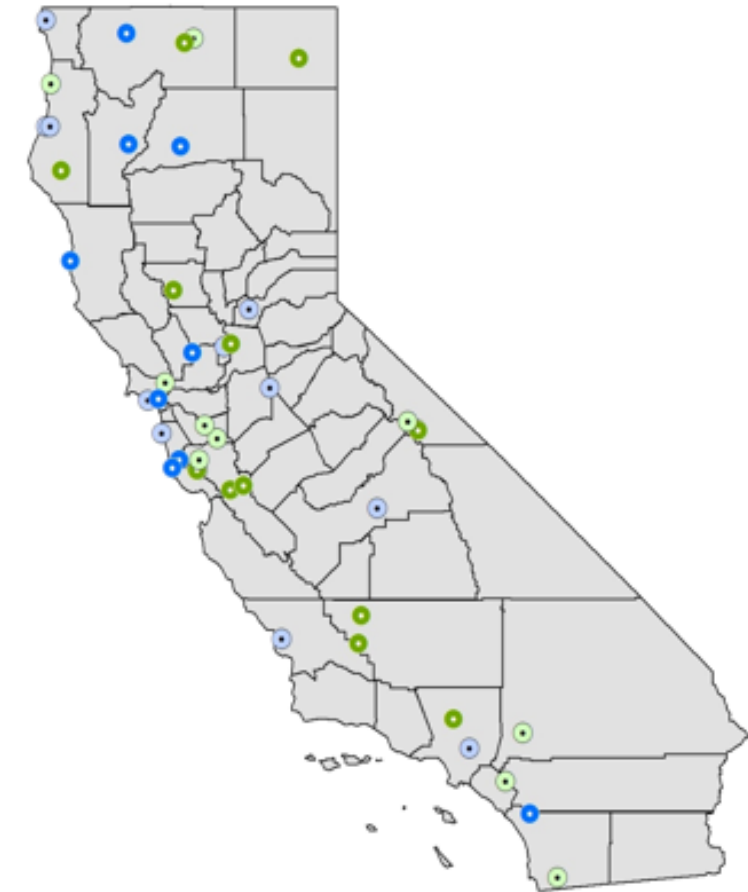
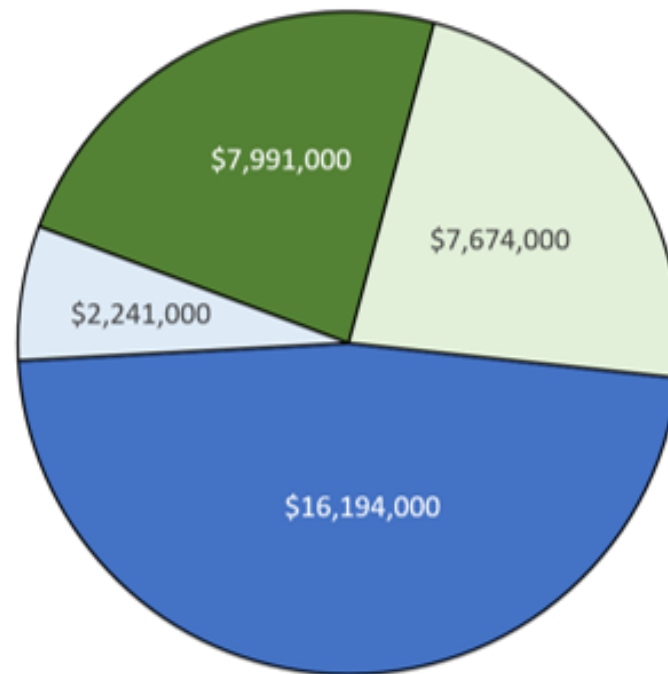
Slide 1

## Pre-Application Response

43 Pre-Applications Received



\$34,100,000 in Requests



Fish Passage - Implementation

Fish Passage - Planning

Wildlife Corridor - Implementation

Wildlife Corridor - Planning



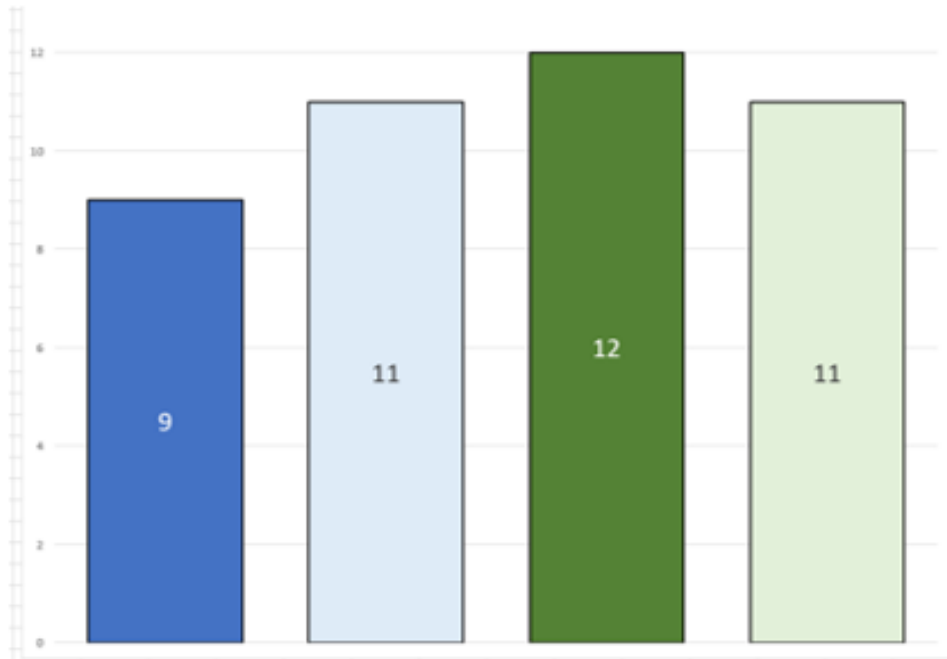
# 2020 Wildlife Corridor and Fish Passage Solicitation

California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68)

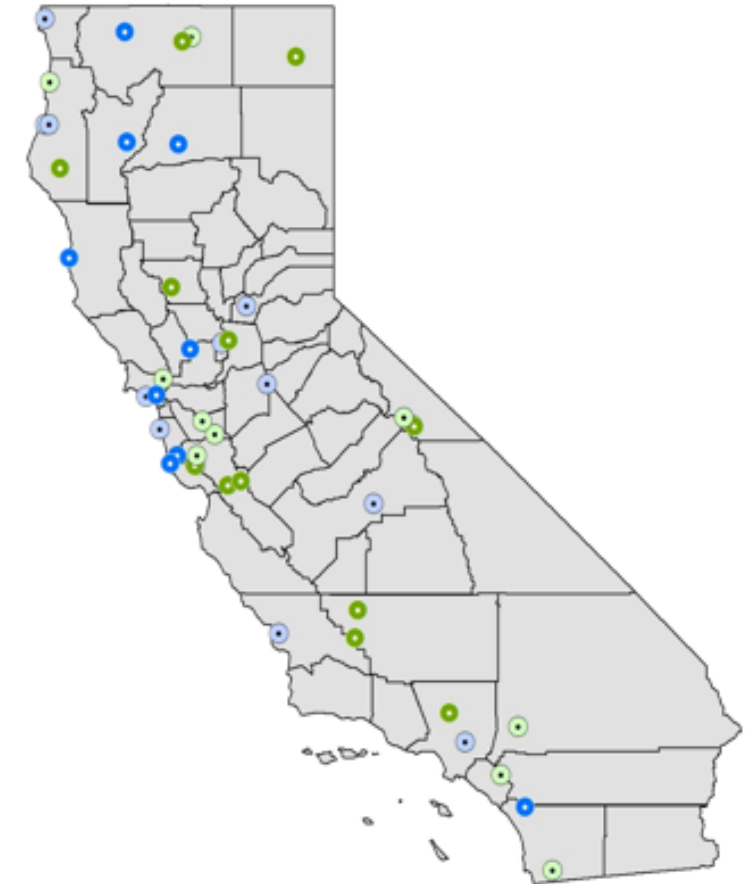
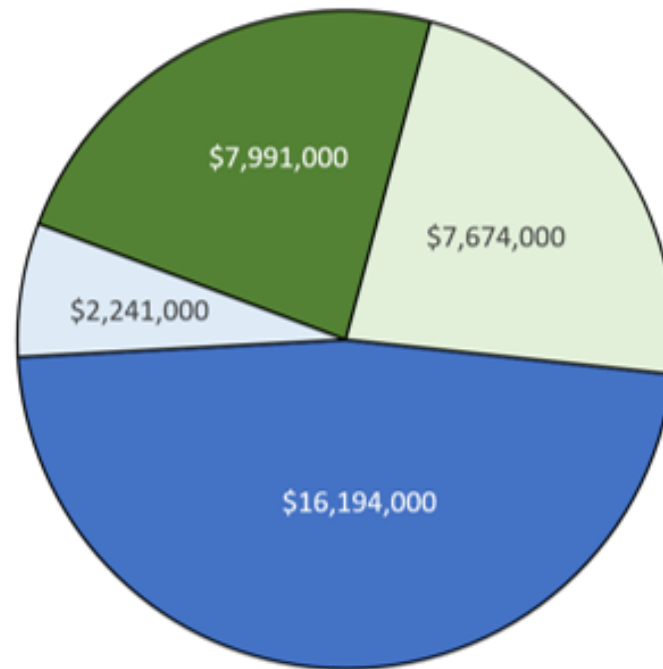
Slide 2

## Full-Application Response

43 Pre-Applications Received



\$34,100,000 in Requests



Fish Passage - Implementation

Fish Passage - Planning

Wildlife Corridor - Implementation

Wildlife Corridor - Planning

# 2020 Wildlife Corridor and Fish Passage Solicitation

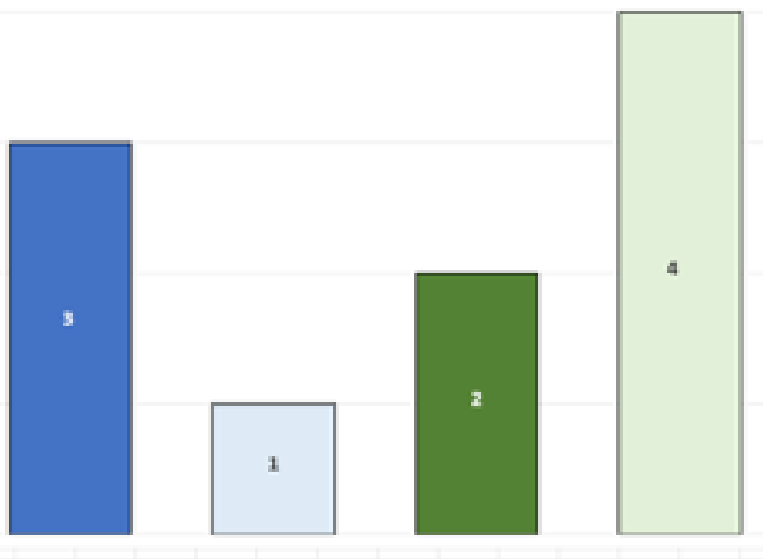
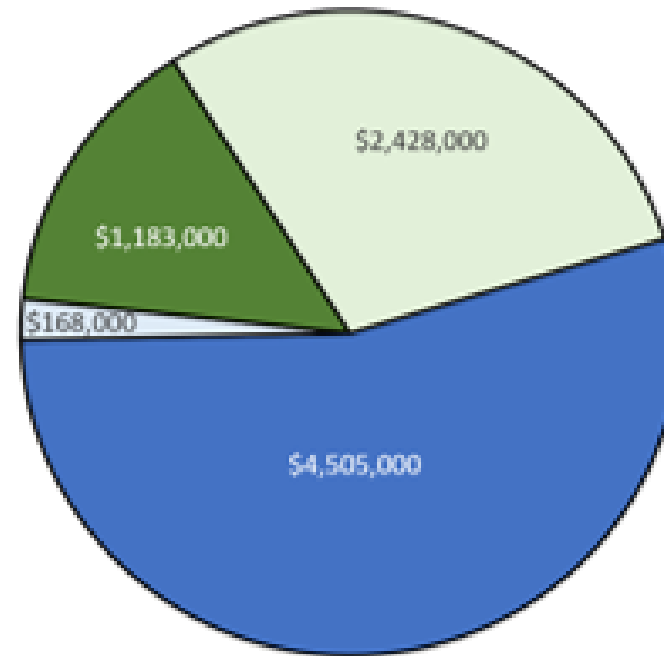
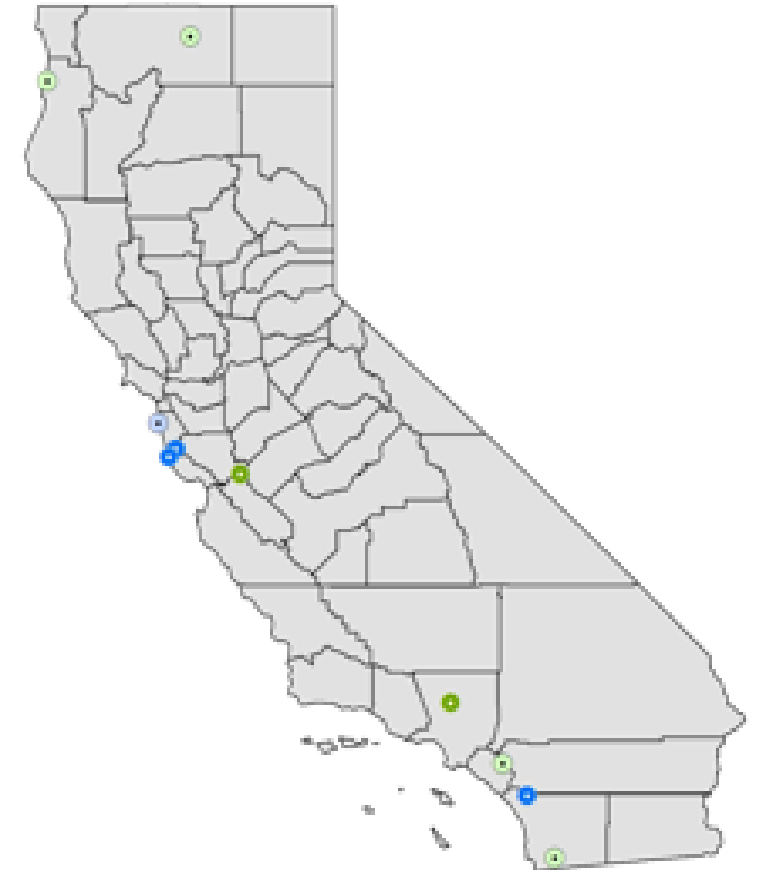
California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68)

Slide 3

## Final Selection

10 Projects Selected

\$8,284,000 in Requests



Fish Passage - Implementation

Fish Passage - Planning

Wildlife Corridor - Implementation

Wildlife Corridor - Planning

# 38. Butano Creek Channel Stabilization and Habitat Enhancement

Slide 4

## Butano Creek Watershed

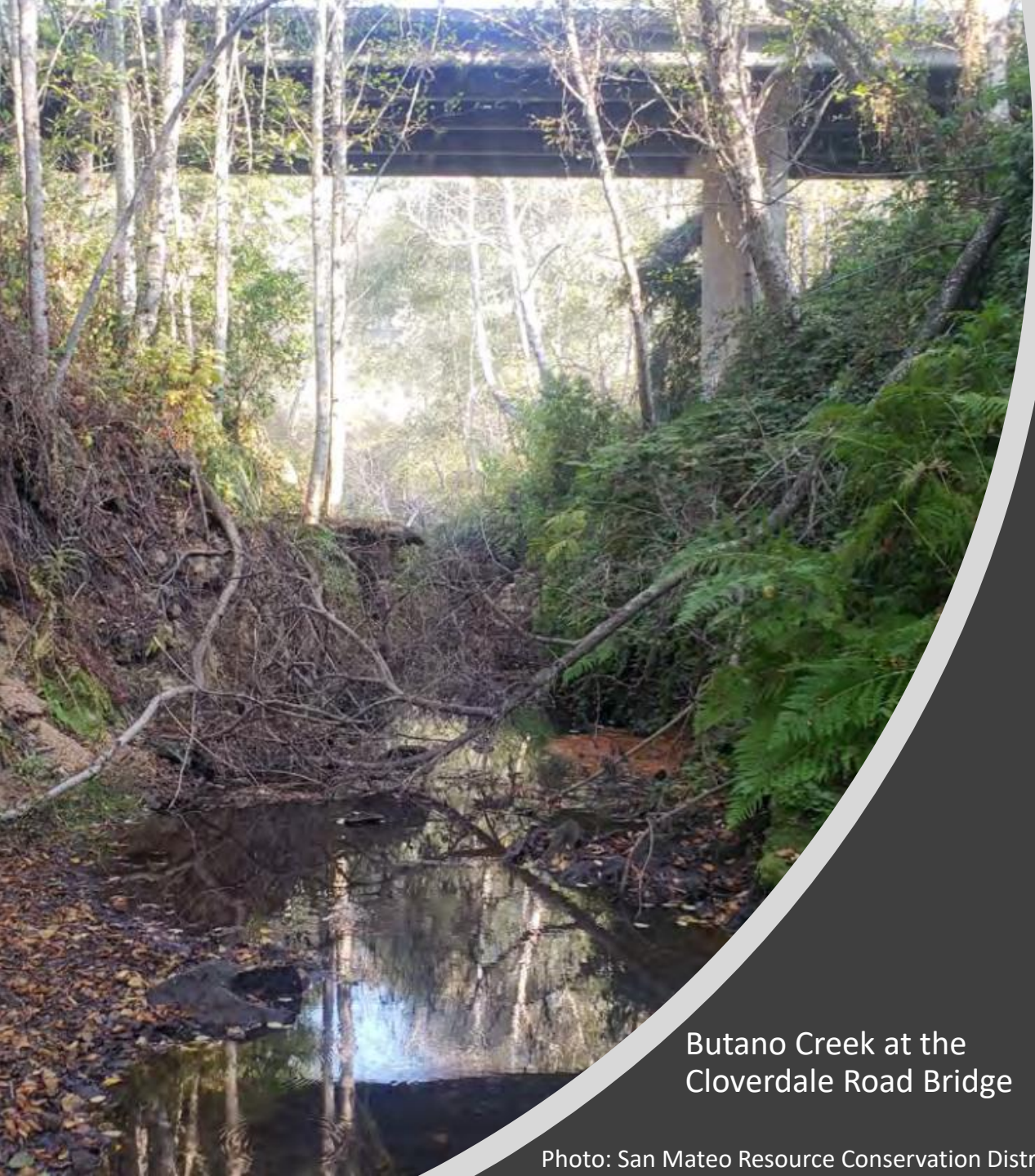
- Central California Coast Coho Evolutionarily Significant Unit (Federal and State Endangered)
- Central California Coast (CCC) steelhead Distinct Population Segment (Federal and State Endangered)
- One of two San Mateo County watersheds for coho recovery in Central Coast Coho Recovery Plan
- The Project reach of Butano Creek is designated as Critical Habitat for the CCC steelhead DPS.



Butano Creek



Butano Creek Watershed



## 38. Butano Creek Channel Stabilization and Habitat Enhancement

Slide 5

### **Cloverdale Road Bridge**

- Constructed in 1963
- Re-aligned a 120 feet section of Butano Creek

### **Long-term channel degradation and local scour**

- Up to 11 feet of local incision at the bridge site
- Increased sedimentation and
- Accelerated chronic channel incision
- Exacerbated bank failure

Butano Creek at the  
Cloverdale Road Bridge

**Designated as 'Scour Critical' by Caltrans**

# 38. Butano Creek Channel Stabilization and Habitat Enhancement

Slide 6

## Stream Channel Impacts

- Reduction in the amount of gravel bars, riffles, and side channels
- Isolated of channels from their floodplains
- Substantial reduction in the amount of large woody debris in channels

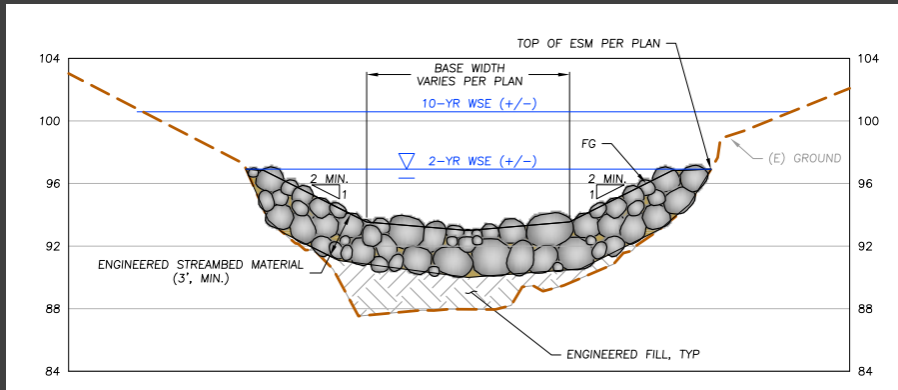
## Habitat Impacts

- Reduced high flow refugia, habitat, and passage for salmonids
- Increase in the sedimentation rate in the Pescadero lagoon and marsh

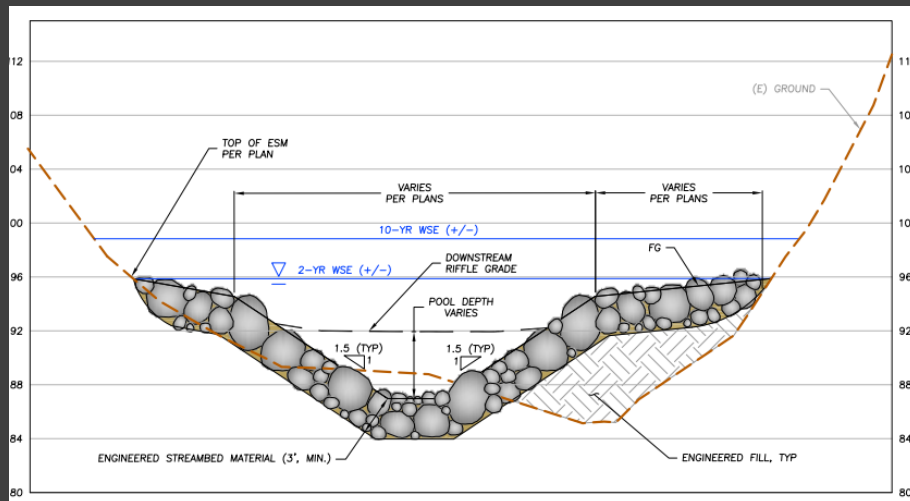


# 38. Butano Creek Channel Stabilization and Habitat Enhancement

Slide 7



Riffle Cross-Section



Pool Cross-Section

## Project Goals

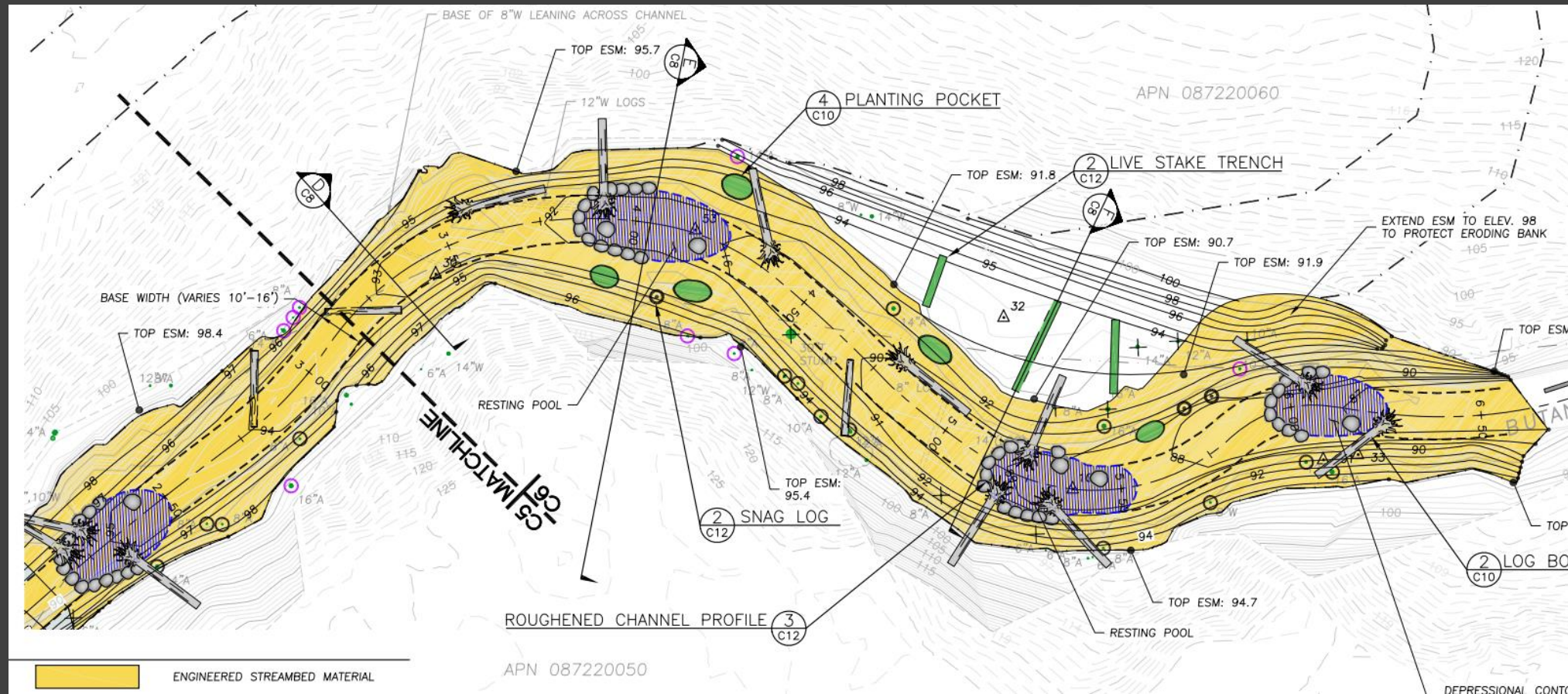
- Improve fish passage for anadromous fish, including coho salmon and steelhead
- Increase connectivity between the channel and floodplain
- Enhance aquatic habitat for California red-legged frog

## Project Elements

- Raise the channel bed with engineered streambed material (ESM) along a 625-ft reach of Butano Creek.
- Create Four 50-ft-long habitat enhancement pools
- Install large woody debris downstream of the bridge.
- Plant willow stakes along the banks to provide additional channel stability
- Repair a recent bank failure

# 38. Butano Creek Channel Stabilization and Habitat Enhancement

Slide 8



Overview of Project Site

# 38. Butano Creek Channel Stabilization and Habitat Enhancement

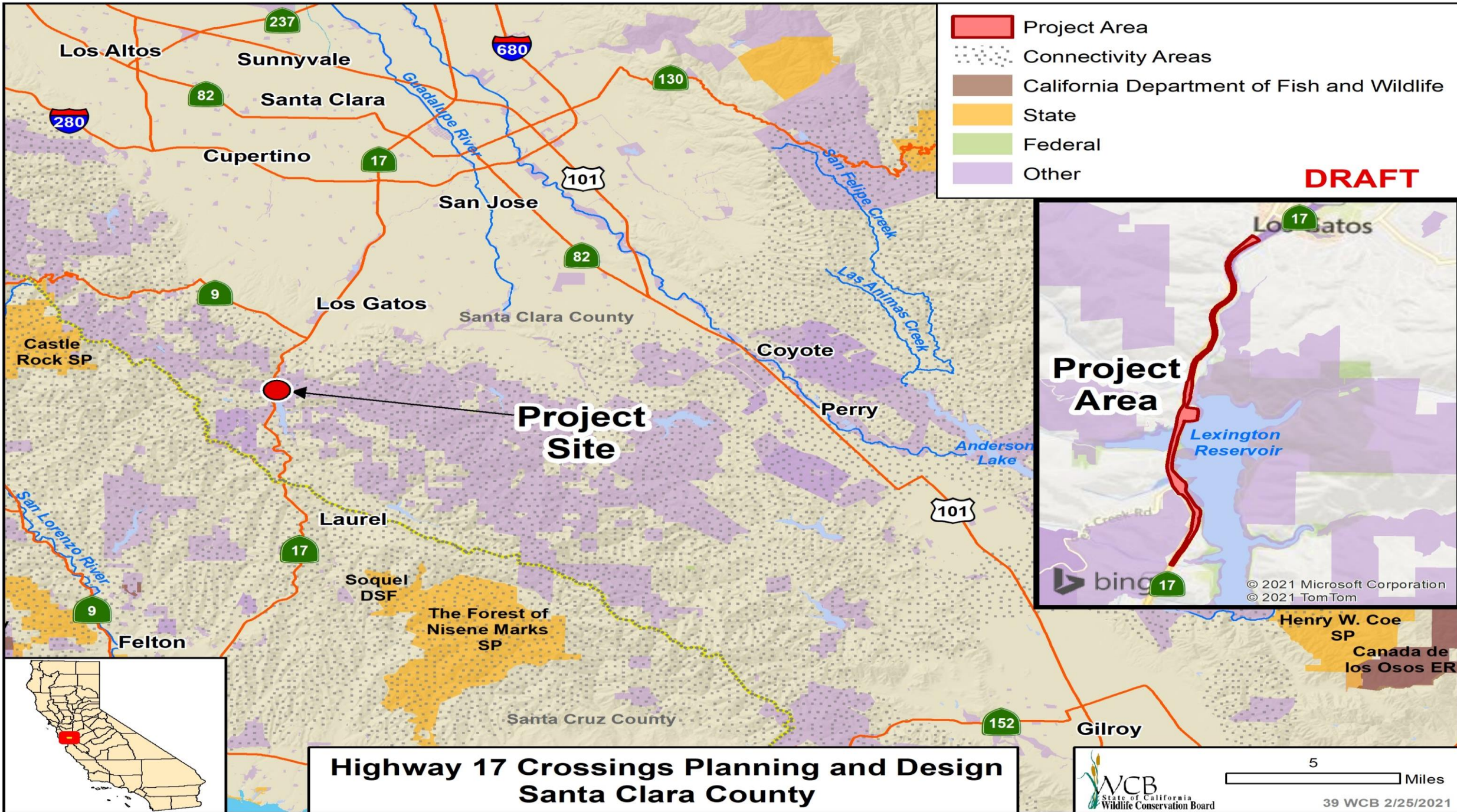
Slide 9

## Project Benefits

- Improve spawning habitat within the 625 linear feet of the project reach
- Provide access to at least 3 miles of suitable spawning habitat.
- Increase habitat complexity within the Project reach for multiple life stages of anadromous fish species
- Improve riparian habitat for sensitive species
- Reduce fine sediment delivery to the Pescadero Lagoon.

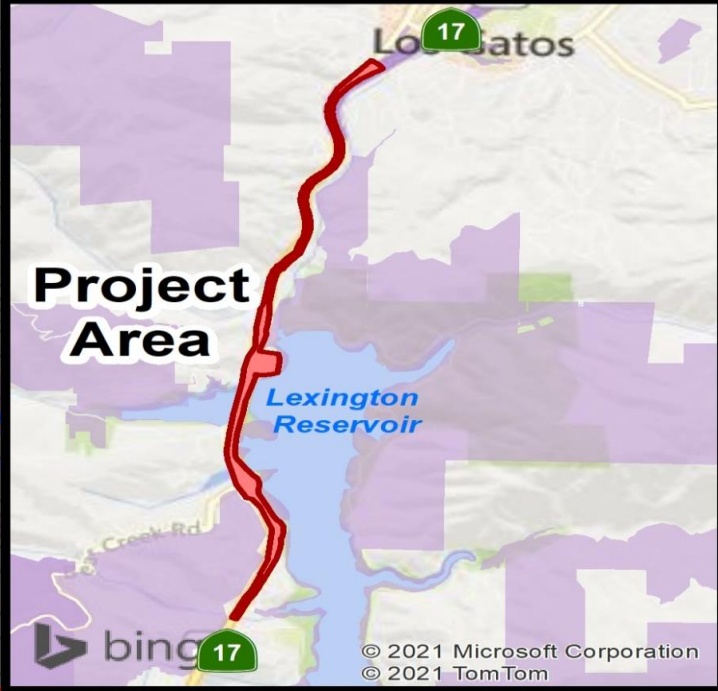






- Project Area
- Connectivity Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other

**DRAFT**



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**Highway 17 Crossings Planning and Design  
Santa Clara County**



5 Miles

# 39. Highway 17 Crossings Planning and Design

Slide 1



## Lexington Reservoir

- Surrounding land uses are primarily open space preserves, county parks and water utility lands
- Rich in biodiversity
- Several listed species

## Highway 17

- Wildlife roadkill hotspot
- Vehicle hazard
- Gap in regional trails

## 2020 CDFW Wildlife Movement Barrier Priority List



## 39. Highway 17 Crossings Planning and Design

Slide 2

### Mountain lions in the Santa Cruz Mountains

- Reduced habitat connectivity
- Poor genetic diversity and small effective population size of 33-66 adult mountain lions
- California Fish and Game Commission is considering California Endangered Species Act listing

Other listed species known to occur within two miles of the Project area are also impacted by decreased connectivity

# 39. Highway 17 Crossings Planning and Design

Slide 3

## Regional trail gap

- 50 miles of the Bay Area Ridge Trail
- 22 miles of the Juan Bautista de Anza National Historic Trail

14 miles of north-south trails that parallel the highway and connect to other regional trail systems

- Los Gatos Creek Trail
- A planned connection to the Guadalupe River Trail and Bay Trail in San Jose
- Planned trail system for Bear Creek Redwoods Open Space Preserve



## 39. Highway 17 Crossings Planning and Design

Slide 4



Potential Wildlife Undercrossing Location



Artist Conception of Recreational Trails Overcrossing

### Planning, Designs and Environmental Review

- Wildlife undercrossing with up to 5.4-miles of directional fencing
- A recreational trails overcrossing

### Environmental/technical studies and reports

### Designs

- Preliminary, 35%, 65%, 95%, and 100%

### Environmental Review

- CEQA Initial Study with Proposed Mitigated Negative Declaration
- NEPA Categorical Exclusion

# 39. Highway 17 Crossings Planning and Design

Slide 5



California red-legged frog



Western pond turtle

## Project Goals

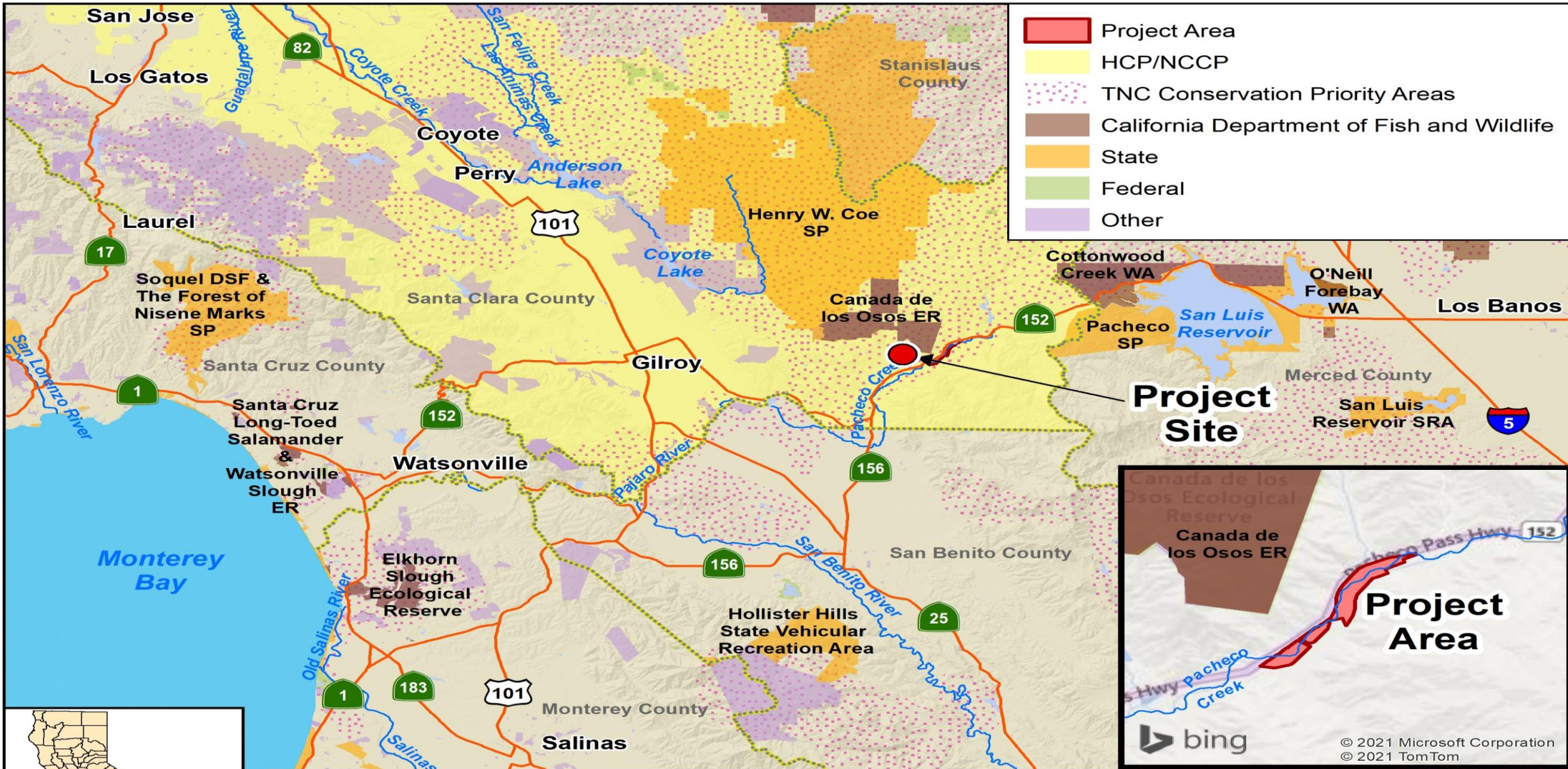
- Facilitate wildlife movement between approximately 30,000 acres of protected critical habitat area
- Reduce wildlife mortality due to vehicle collision
- Connect public open space and parklands on either side of Highway 17 and bridge a substantial regional trail gap



Santa Cruz black salamander



California giant salamander



**SR-152 at Pacheco Creek Wildlife Connectivity and Corridor Enhancement  
Santa Clara County**



5 Miles

40 WCB 2/25/2021



# 40. SR-152 at Pacheco Creek Wildlife Connectivity and Corridor Enhancement

Slide 1

## The Diablo Range

- Mostly open space
- Dominated by grasslands and oak woodlands
- Significant amount of riparian and seasonal wetland habitats

## Several protected areas

- Fragmented

## Impaired wildlife mobility

- Roads
- Urban encroachment



Photo: Oleg Alexandrov



# 40. SR-152 at Pacheco Creek Wildlife Connectivity and Corridor Enhancement

Slide 2

## State Route 152 (Pacheco Pass)

- Four lanes wide
- Connects U.S. 101 near Gilroy to I-5 near Los Banos

## CDFW's 2020 Wildlife Movement Barrier Priorities list

## Bay Area Critical Linkages Project

- Diablo Range to Inner Coast Linkage

## Other Plans:

- Santa Clara Valley Habitat Conservation Plan
- California Essential Habitat Connectivity Plan
- Santa Clara County Regional Conservation Investment Strategy (draft)

## Bay Area Critical Linkage



Wildlife Permeability and Hazards across Highway 152 Pacheco Pass:  
Establishing a Baseline to Inform Infrastructure and Restoration.



February 2020

PREPARED BY PATHWAYS FOR WILDLIFE FOR THE SANTA CLARA  
HABITAT AGENCY.

## 40. SR-152 at Pacheco Creek Wildlife Connectivity and Corridor Enhancement

Slide 3

“Wildlife Permeability and Hazards Across Highway 152 Pacheco Pass” wildlife connectivity study

- CDFW Local Assistance Grant

Recommendations for wildlife connectivity enhancements

- Improve highway safety

Implementation of four of these recommendations:

- Rip-rap improvements
- Bank improvements
- Pacheco Creek restoration
- Directional fencing

40. SR-152 at Pacheco Creek Wildlife  
Connectivity and Corridor Enhancement  
Slide 4

**Rip-rap Modifications at  
the Pacheco Creek Bridge**

- Rip-rap acts as a barrier to wildlife movement when bridges become flooded and banks are not available for use.
- Removal of the rip-rap was not advised because it was put in for bridge structural integrity.
- Fill in the rip-rap rocks with a sandy substrate to create a surface wildlife can walk along.



# 40. SR-152 at Pacheco Creek Wildlife Connectivity and Corridor Enhancement

Slide 5

## Bank Improvements at the Pacheco Creek Bridge

- Bank is not available for wildlife to pass under the bridge during flooding.
- Removal of dead trees, shrubs, and invasive vegetation along the banks
- Increase bank access at higher slope areas



# 40. SR-152 at Pacheco Creek Wildlife Connectivity and Corridor Enhancement

Slide 6

## Riparian Habitat Restoration and Enhancement

- 17 acres sycamore alluvial woodland
- Visual screen for wildlife species that are sensitive to human presence
- Will direct wildlife away from SR-152

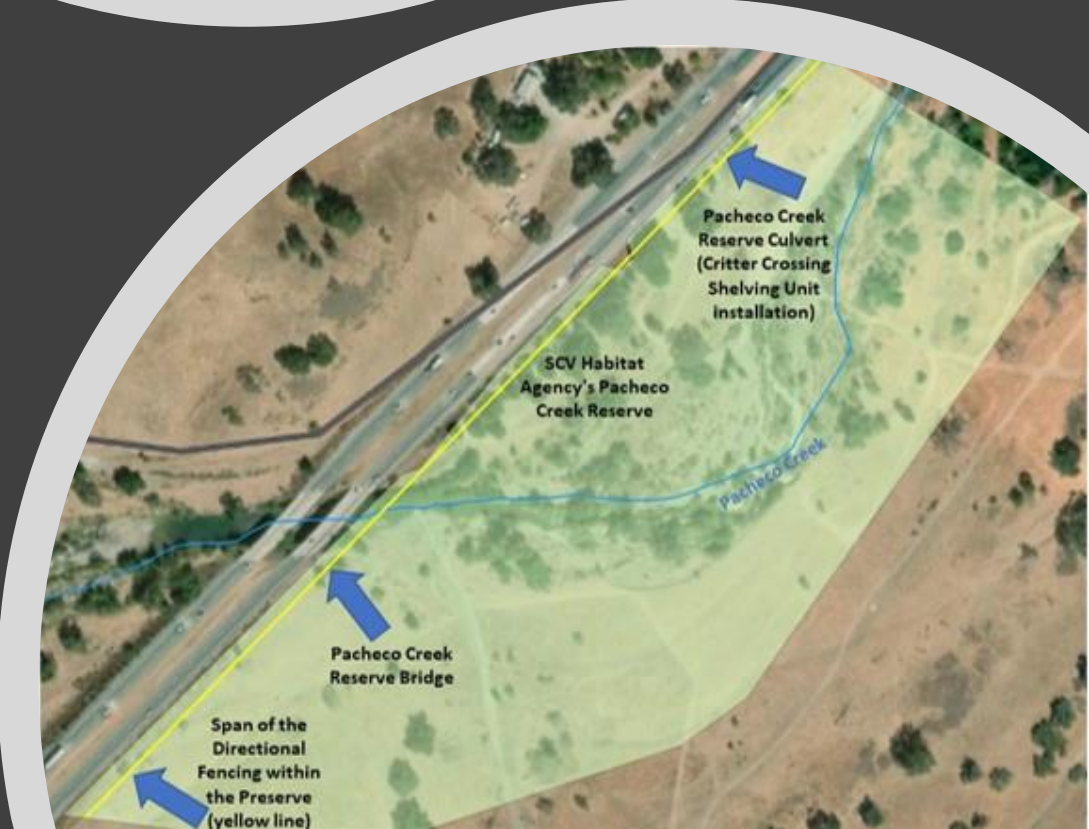


# 40. SR-152 at Pacheco Creek Wildlife Connectivity and Corridor Enhancement

Slide 7

## Directional Fencing

- 1.5 miles long
- Installed between the Pacheco Creek culvert with the Critter Crossing Shelving unit to the Pacheco Creek Reserve Bridge
- Guide wildlife to the structures and keep them off the highway



Photos: The Santa Clara Valley Habitat Agency

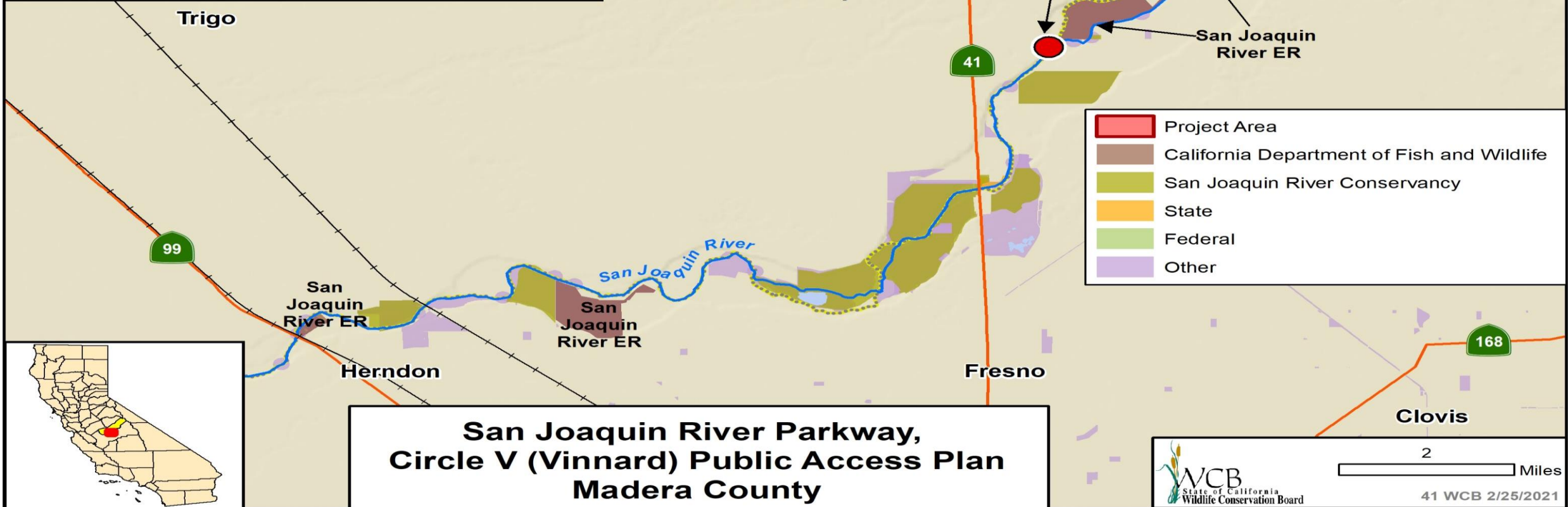
# 40. SR-152 at Pacheco Creek Wildlife Connectivity and Corridor Enhancement

Slide 8

## Pre-Project Monitoring

- 3,125 attempted and successful crossings
- Mountain lion, deer, badger, coyote, bobcat, gray fox, raccoon, striped skunk, and opossum
- The same species found during roadkill surveys
- Increased while the bridges and culverts were flooded





**San Joaquin River Parkway,  
Circle V (Vinnard) Public Access Plan  
Madera County**



2 Miles

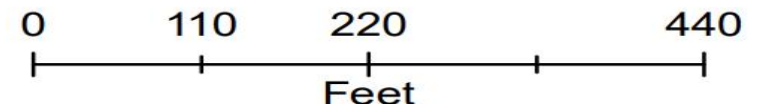


Avenue 11

049-062-002

**Legend**

 Circle V Ranch




N



# Vinnard Property Terrain

## Legend

 Vinnard



Google Earth

200 ft



# 41. San Joaquin River Parkway, Circle V (Vinnard) Public Access Plan

Slide 3

## PLANNING TASKS

- Inventory and analysis
- Outreach
- Design
- Environmental review



The property supports riparian and oak woodland habitat that provide resources for traditional cultural practices.

Photo Credit: Laura Gromis



# 41. San Joaquin River Parkway, Circle V (Vinnard) Public Access Plan

Slide 4

## COLLABORATORS



*Advocates for Indigenous California Language Survival*

**FRESNO**  **STATE**

Lyles College of Engineering



Two residences built in the 1960s will be reused and designed into highly efficient office and meeting spaces with low operational costs.  
Photo Credit: Laura Gromis

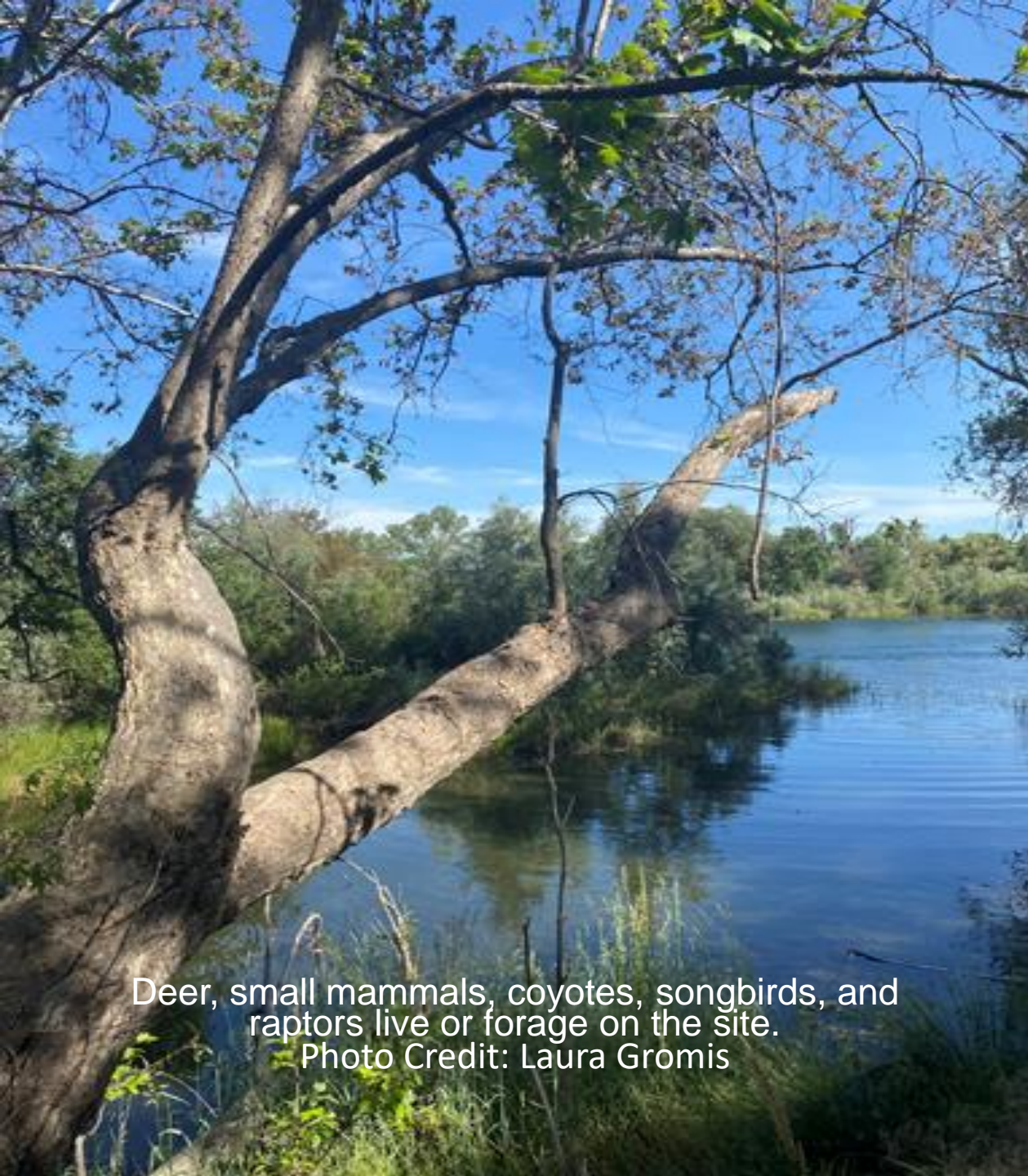


## 41. San Joaquin River Parkway, Circle V (Vinnard) Public Access Plan

Slide 5

### OUTCOMES

- Stakeholder and community meetings and tours
- Site surveys (aerial, Geotech, plant), analysis, reporting
- Design plans
- CEQA filings
- Business Plan
- Visioning document



## 41. San Joaquin River Parkway, Circle V (Vinnard) Public Access Plan

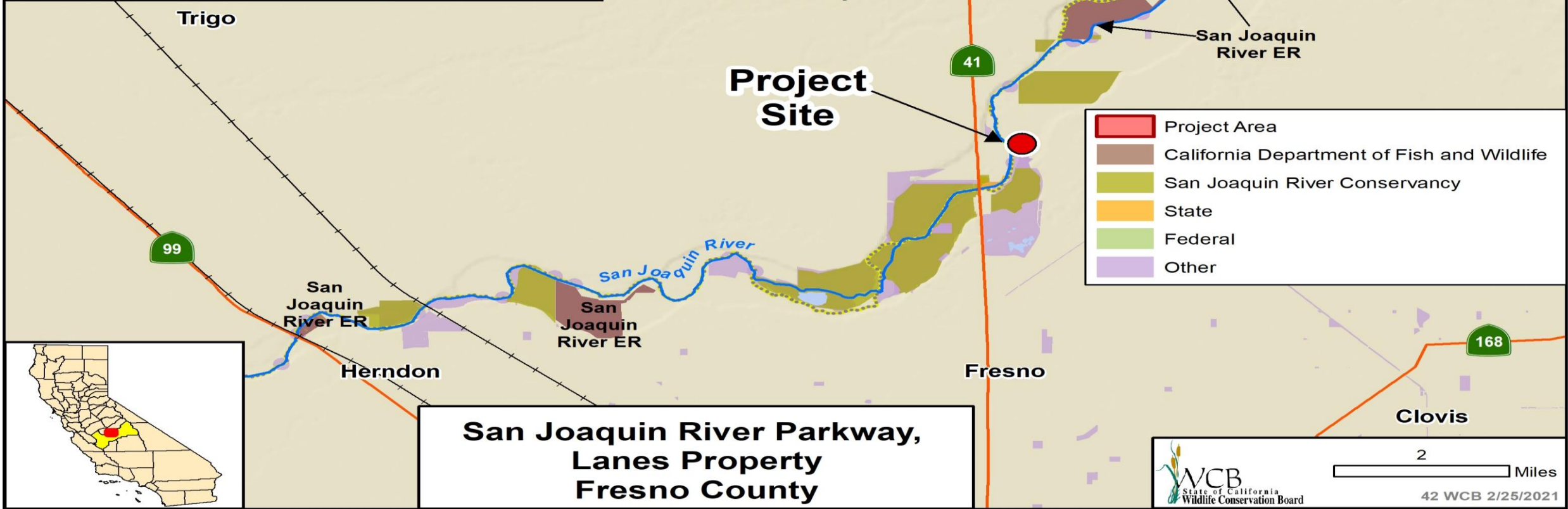
Slide 6

### THE BIG PICTURE

Advances the SJR Parkway Master Plan, but at its core facilitates:

- Communication and engagement with local tribes
- Public access
- Educational values

Deer, small mammals, coyotes, songbirds, and raptors live or forage on the site.  
Photo Credit: Laura Gromis



**Project Area**

**Project Site**

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

**San Joaquin River Parkway,  
Lanes Property  
Fresno County**



2 Miles

42 WCB 2/25/2021



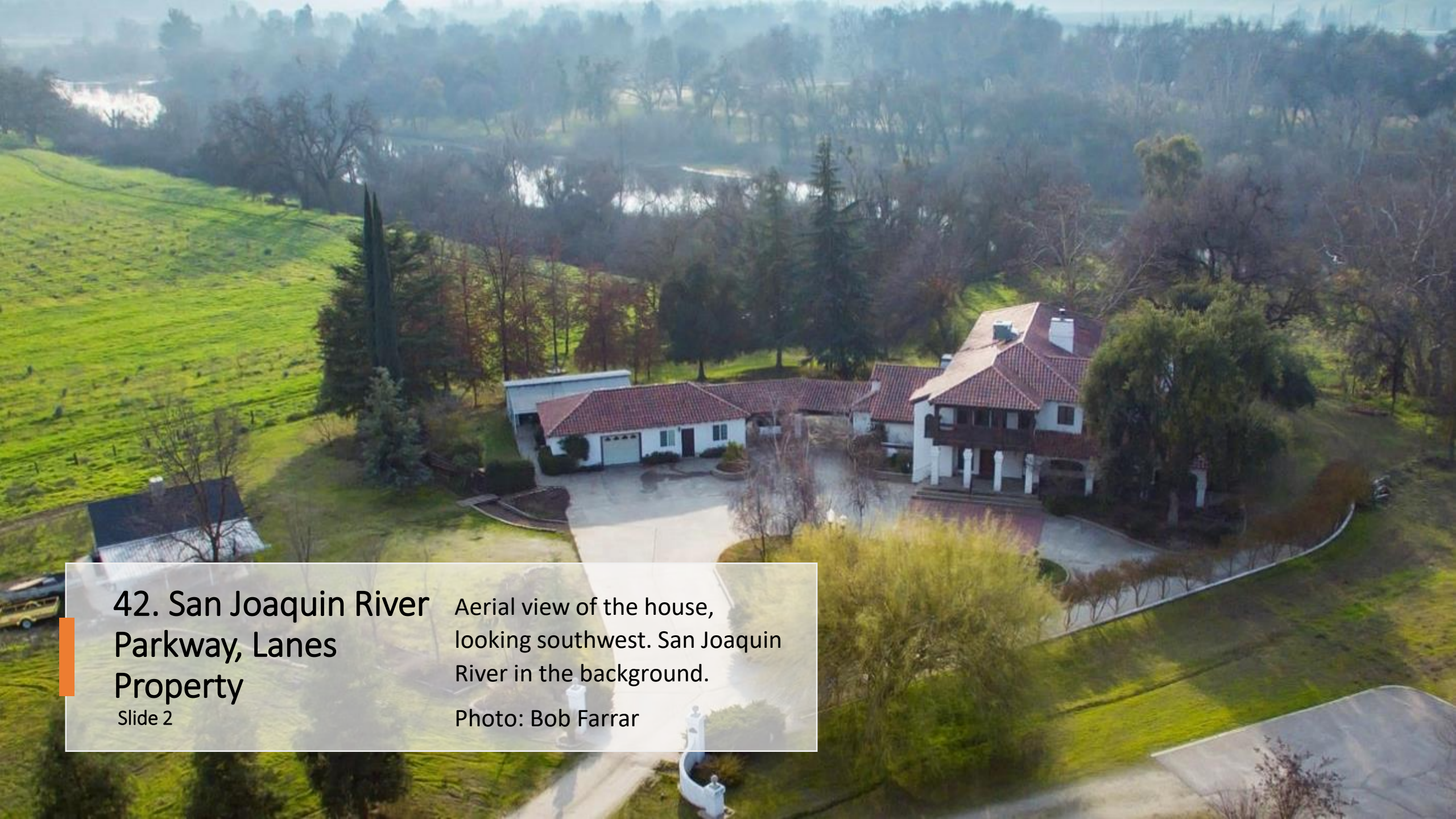
# 42. San Joaquin River Parkway, Lanes Property

Slide 1

Aerial view of the Property,  
looking southwest from N.  
Lanes Rd.

Photo: Bob Farrar





**42. San Joaquin River  
Parkway, Lanes  
Property**

Slide 2

Aerial view of the house,  
looking southwest. San Joaquin  
River in the background.

Photo: Bob Farrar



## 42. San Joaquin River Parkway, Lanes Property

Slide 3

Property has a Mediterranean style single family home with attached carport and converted garage.

Photo: Bob Farrar



## 42. San Joaquin River Parkway, Lanes Property

Slide 4

Aerial view of the Property,  
looking northeast. Property has  
approximately 900 feet of river  
frontage.

Photo: Bob Farrar

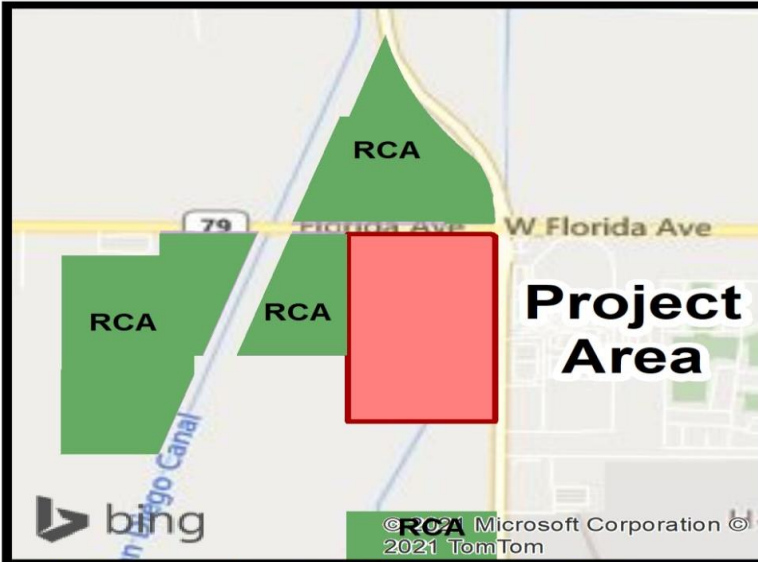
# 42. San Joaquin River Parkway, Lanes Property

Slide 5

View of the San  
Joaquin River from the  
Property.

Photo: Bob Farrar





- Project Area
- HCP/NCCP
- Regional Conservation Authority
- California Department of Fish and Wildlife
- State
- Federal
- Other




**Western Riverside MSHCP (2019) Woods Canyon  
Riverside County**

WCB  
State of California  
Wildlife Conservation Board

5 Miles


43 WCB 2/25/2021

A wide landscape view of a grassy field with hills in the background under a clear blue sky. The foreground is a mix of green grass and brown soil. In the middle ground, there are several small buildings and a road. The background features rolling hills and mountains under a clear blue sky.

43. Western  
Riverside MSHCP  
(2019) Woods  
Canyon

Slide 1

View looking west.



43. Western  
Riverside MSHCP  
(2019) Woods  
Canyon

Slide 2

View looking south



# 43. Western Riverside MSHCP (2019) Woods Canyon

Slide 3

View looking north





**Blue Diamond Acquisition  
Sacramento County**



# 44. Blue Diamond Acquisition

Slide 1

View looking southwest of property.



# 44. Blue Diamond Acquisition

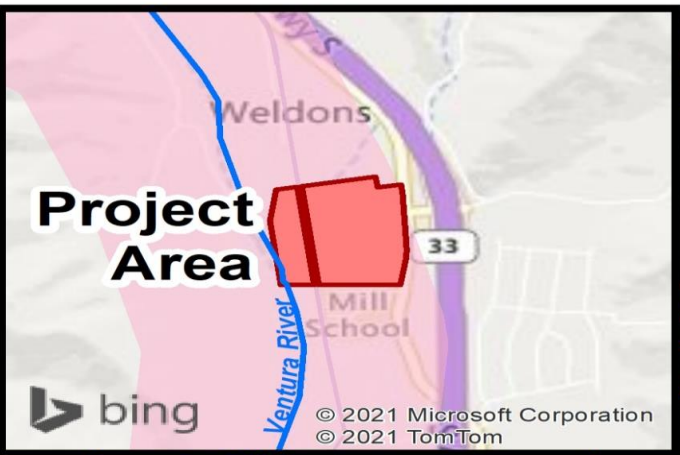
Slide 2

Southwest view of property.

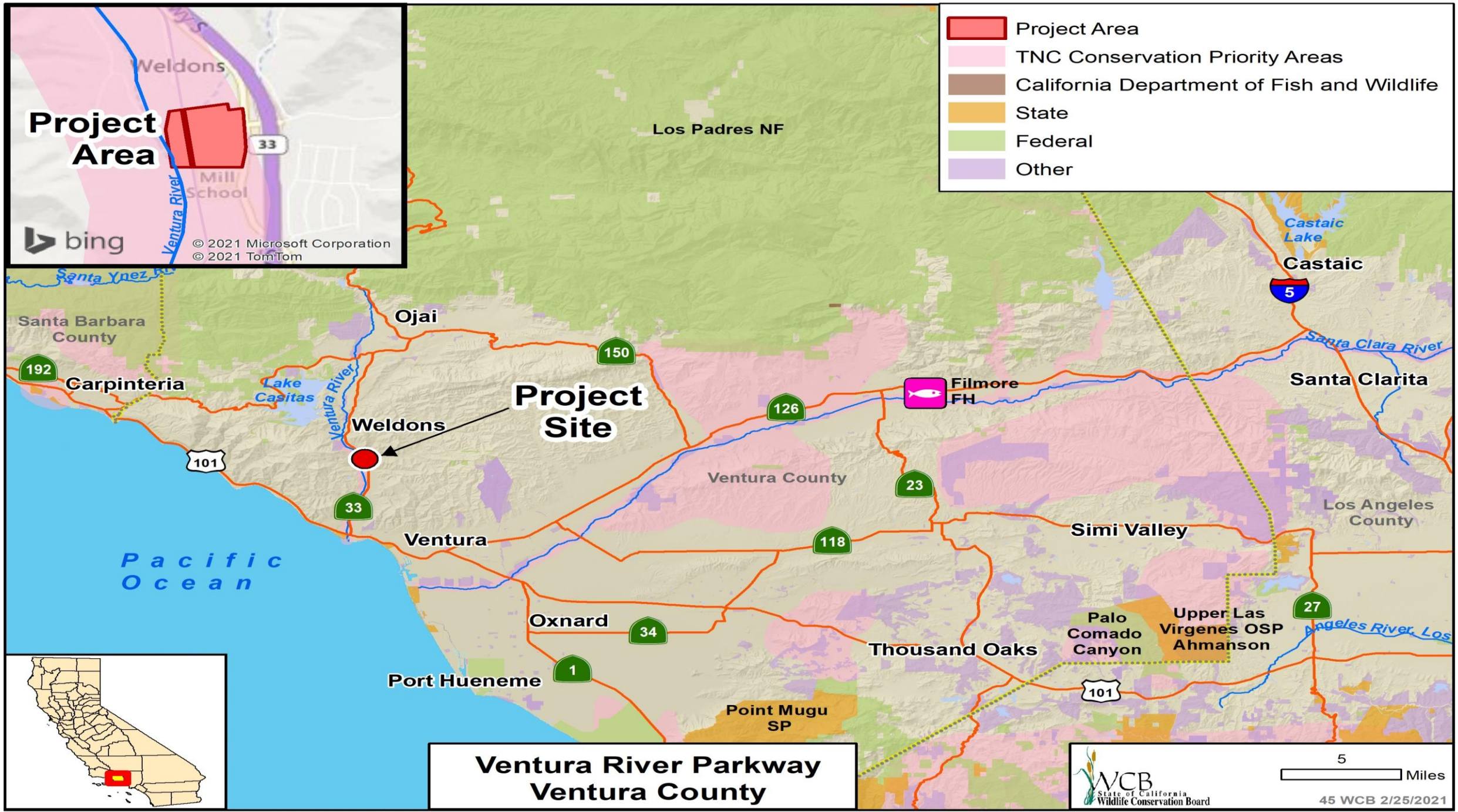


# 44. Blue Diamond Acquisition

Slide 3



- Project Area
- TNC Conservation Priority Areas
- California Department of Fish and Wildlife
- State
- Federal
- Other



**Ventura River Parkway  
Ventura County**



5 Miles



## 45. Ventura River Parkway

Slide 1

- Entrance to Project Site and general location of proposed seasonal creek.





## 45. Ventura River Parkway

Slide 3

Interior view of the project site  
looking northwest.





# 45. Ventura River Parkway

Slide 4

The Ventura River , near the project site.



**Stay Safe and Healthy, Enjoy Your Day!**

Golden Gate Monarch Butterfly Habitat  
Photo credit: Stephan Meyer