

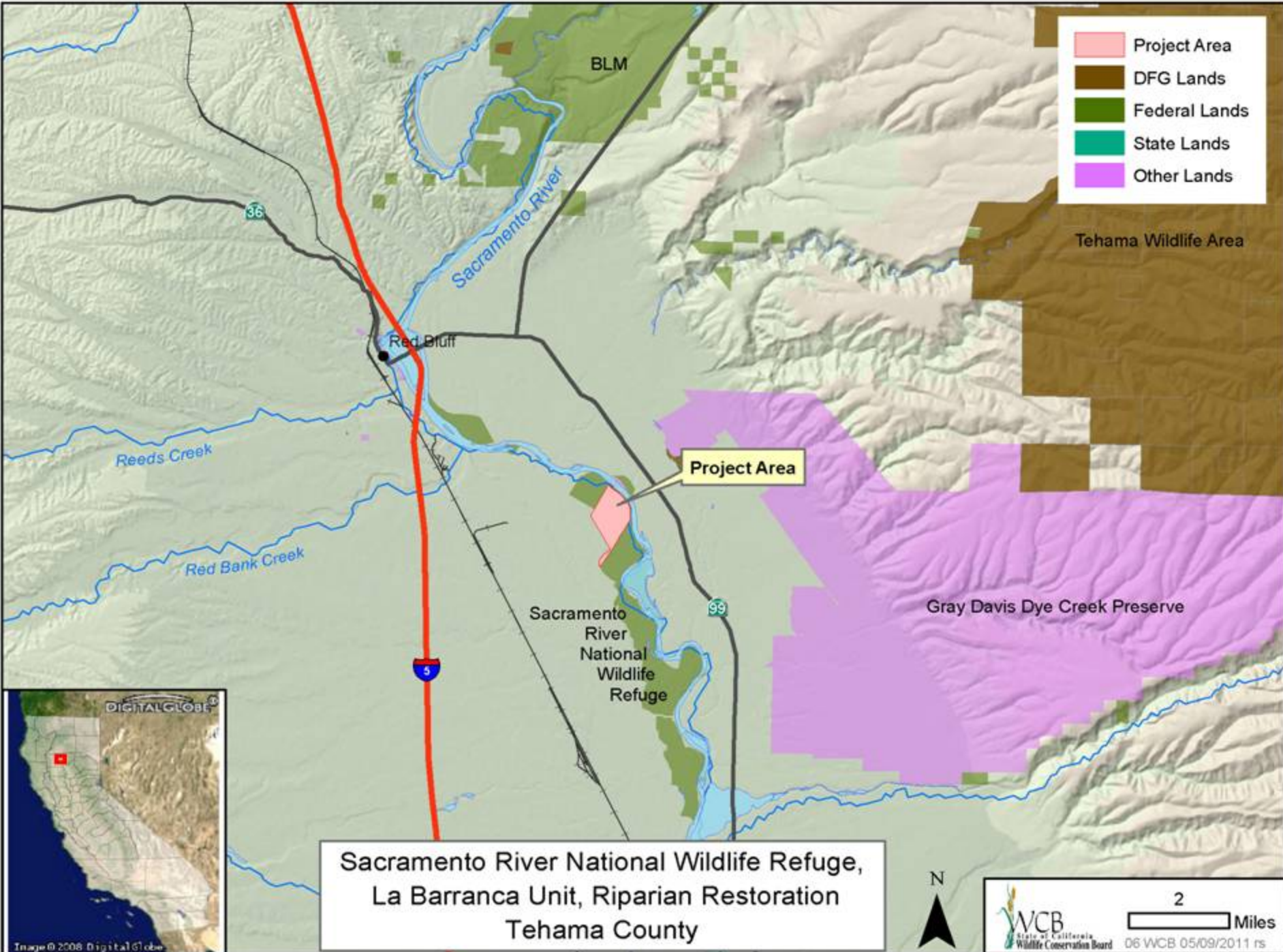
June 2, 2011, Wildlife Conservation Board Meeting
10:00 AM, State Capitol, Room 112
Sacramento, California 95814



Looking down on Thomas property:

View from Krieger Peak, San Luis Obispo County

- Project Area
- DFG Lands
- Federal Lands
- State Lands
- Other Lands



#6. Sacramento River National Wildlife Refuge,
La Barranca Unit, Riparian Restoration
Tehama County



■ Walnut Orchard and nearby Remnant Habitat

#6. Sacramento River National Wildlife Refuge,
La Barranca Unit, Riparian Restoration
Tehama County



- Nearby restored habitat across road from proposed project.

#6. Sacramento River National Wildlife Refuge,
La Barranca Unit, Riparian Restoration
Tehama County



■ Decadent Orchard

#6. Sacramento River National Wildlife Refuge,
La Barranca Unit, Riparian Restoration
Tehama County

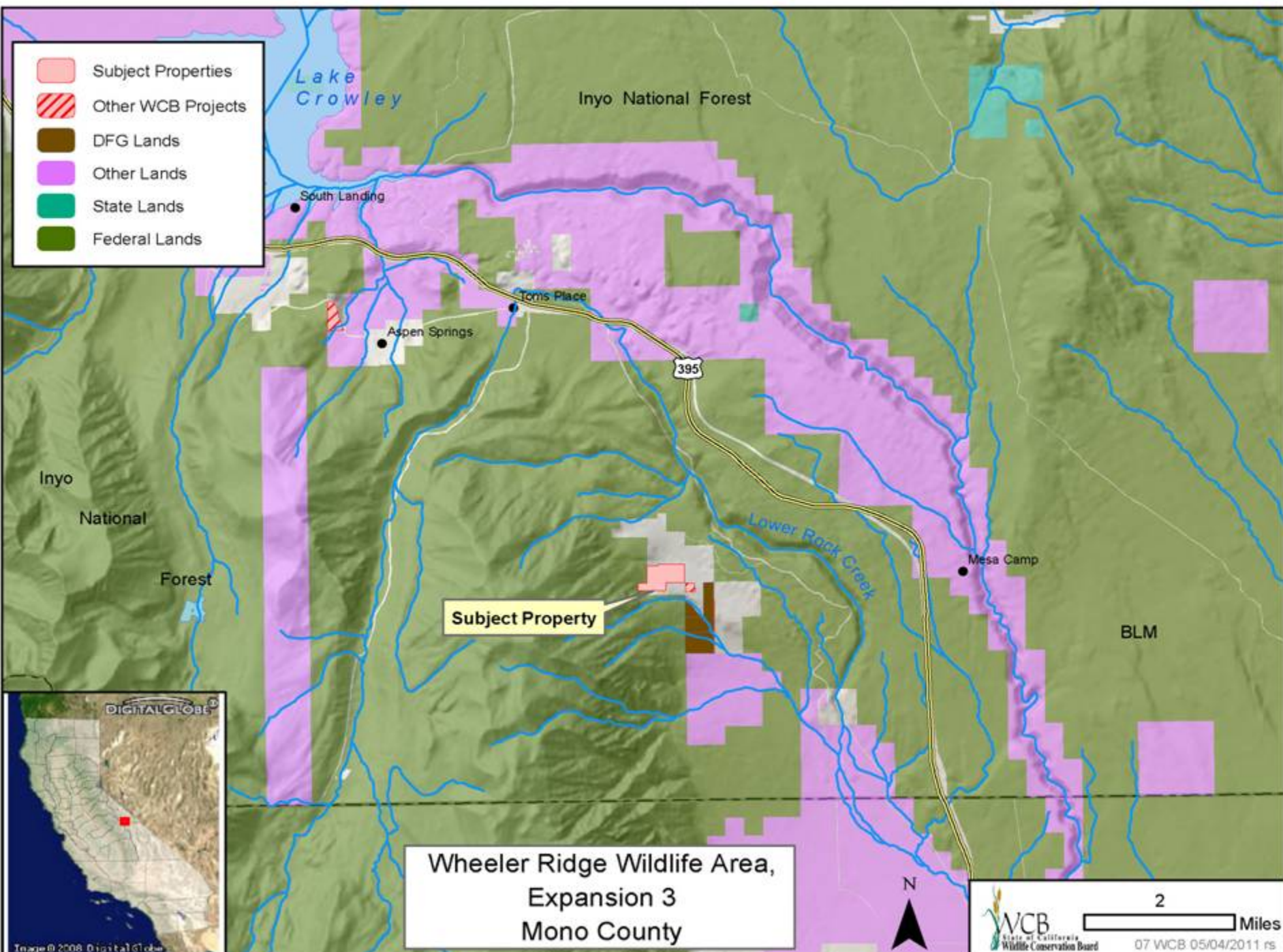


■ Decadent Orchard and Restored Habitat

#6. Sacramento River National Wildlife Refuge,
La Barranca Unit, Riparian Restoration
Tehama County



■ Remnant Riparian Habitat



#7. Wheeler Ridge Wildlife Area, Expansion 3 Mono County



- Looking south past Tom's Place and the wintering valley for the Mule Deer.

#7. Wheeler Ridge Wildlife Area, Expansion 3 Mono County



- Looking west at Wheeler Ridge.

#7. Wheeler Ridge Wildlife Area, Expansion 3 Mono County



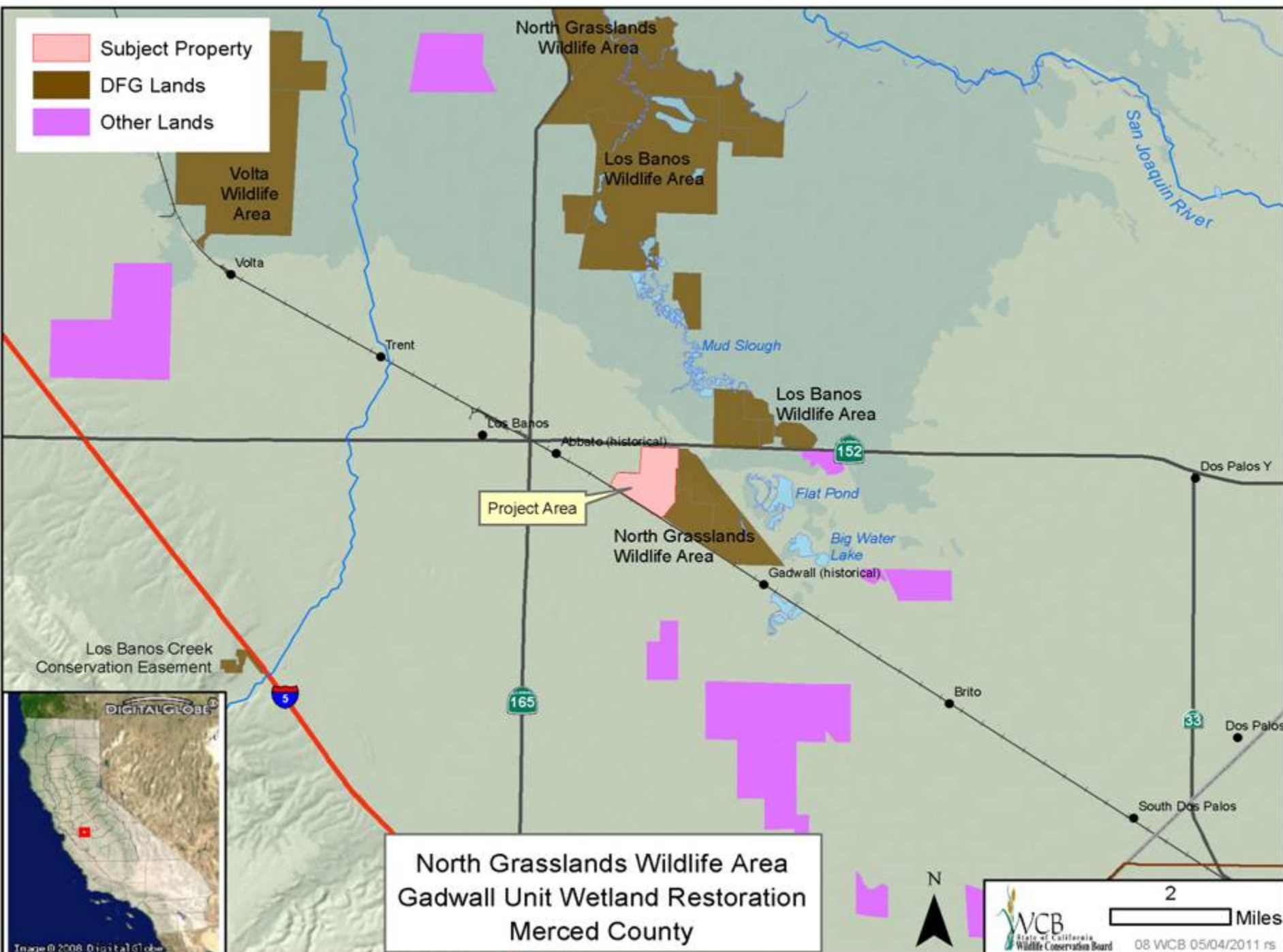
- Looking southwest at deer range habitat which is being subdivided into 2 acre lots for residential development.

#7. Wheeler Ridge Wildlife Area, Expansion 3 Mono County



- Mule deer crossing the valley.

- Subject Property
- DFG Lands
- Other Lands



North Grasslands Wildlife Area
Gadwall Unit Wetland Restoration
Merced County



2 Miles

08 WCB 05/04/2011 rs

#8. North Grasslands Wildlife Area
Gadwall Unit Wetland Restoration
Merced County



- Old ditches will be filled in and recontoured with natural topography. All concrete-lined ditches will have the concrete recycled for use as road base.

#8. North Grasslands Wildlife Area
Gadwall Unit Wetland Restoration
Merced County

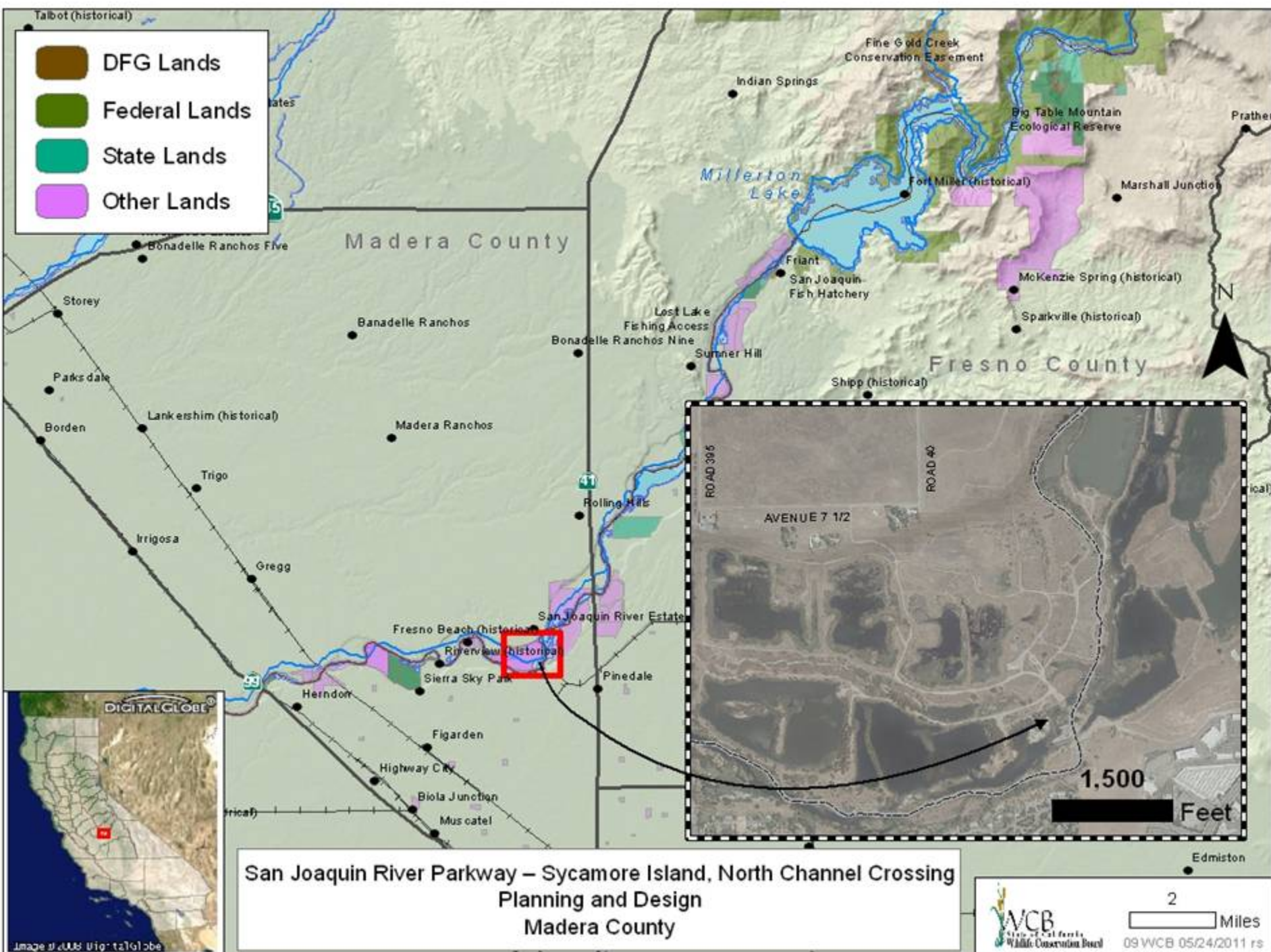


- Project will get rid of old infrastructure, including what is left of a dilapidated fence. Project will restore the native topography and native grasslands.

#8. North Grasslands Wildlife Area
Gadwall Unit Wetland Restoration
Merced County



- Project will restore wetland and upland function and topography and will be managed as part of the North Grasslands Wildlife Area, Gadwall Unit.



#9. SJR Parkway, Sycamore Island
North Channel Crossing, Planning and Design
Madera County



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

#9. SJR Parkway, Sycamore Island
North Channel Crossing, Planning and Design
Madera County



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

#9. SJR Parkway, Sycamore Island
North Channel Crossing, Planning and Design
Madera County



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

#9. SJR Parkway, Sycamore Island
North Channel Crossing, Planning and Design
Madera County



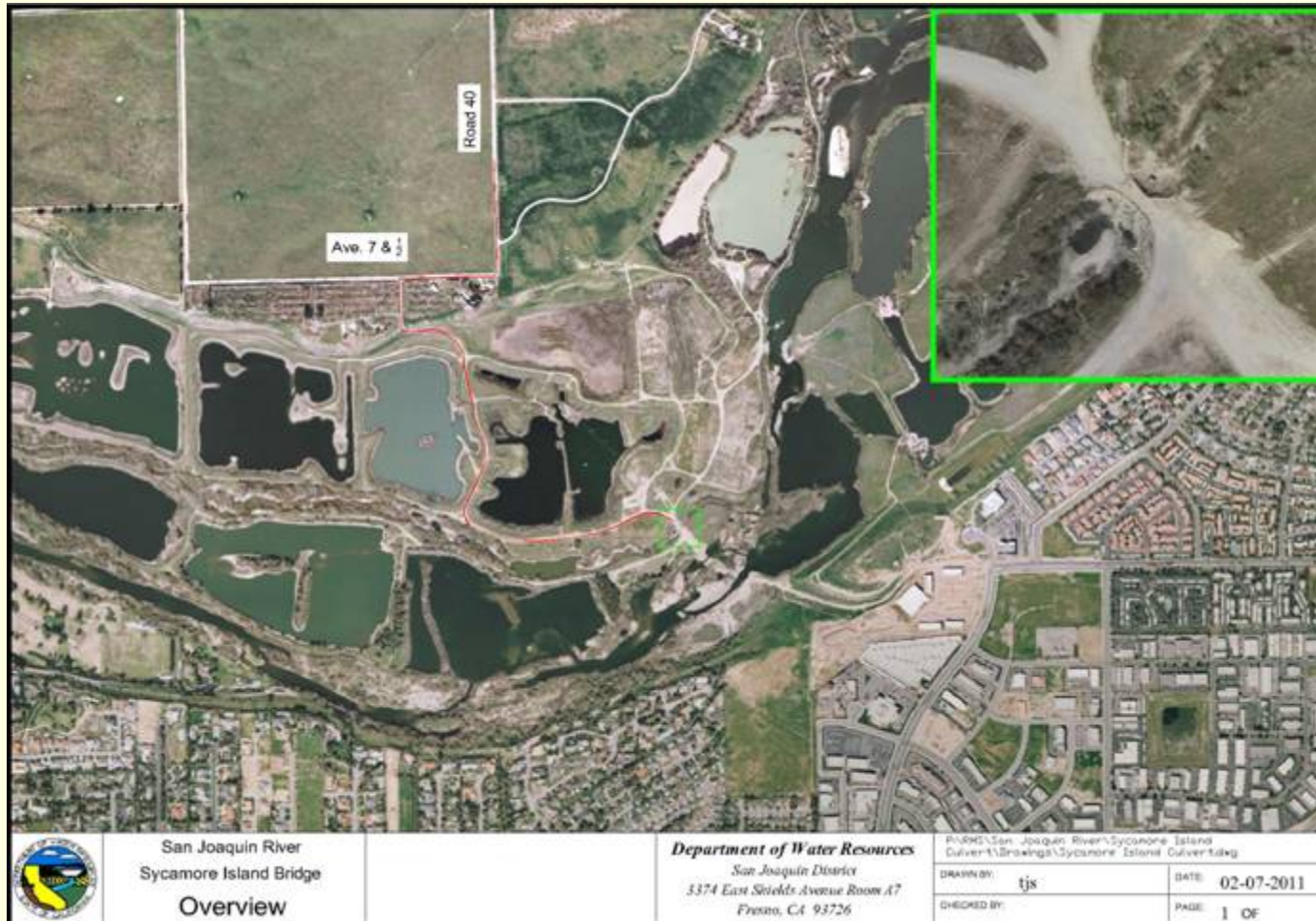
- Scour hole downstream of culvert. Picture taken Feb. 10, 2011.

#9. SJR Parkway, Sycamore Island
North Channel Crossing, Planning and Design
Madera County

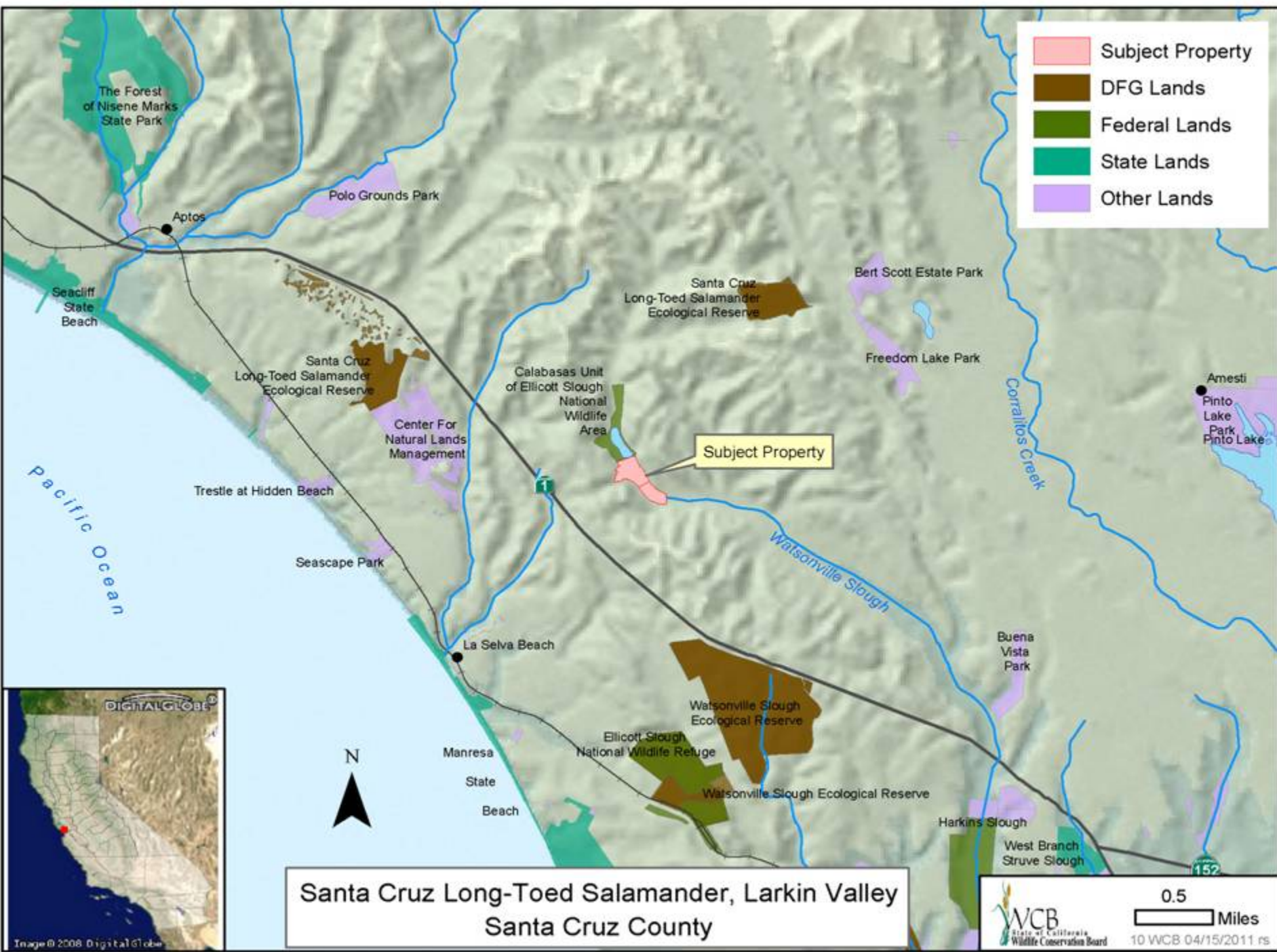


■ North Channel Culvert Crossing on February 25, 2011.

#9. SJR Parkway, Sycamore Island
North Channel Crossing, Planning and Design
Madera County



■ Project Location



Santa Cruz Long-Toed Salamander, Larkin Valley
Santa Cruz County

#10. Santa Cruz Long-Toed Salamander, Larkin Valley Santa Cruz County



- Typical upland habitat found on property .

#10. Santa Cruz Long-Toed Salamander, Larkin Valley Santa Cruz County

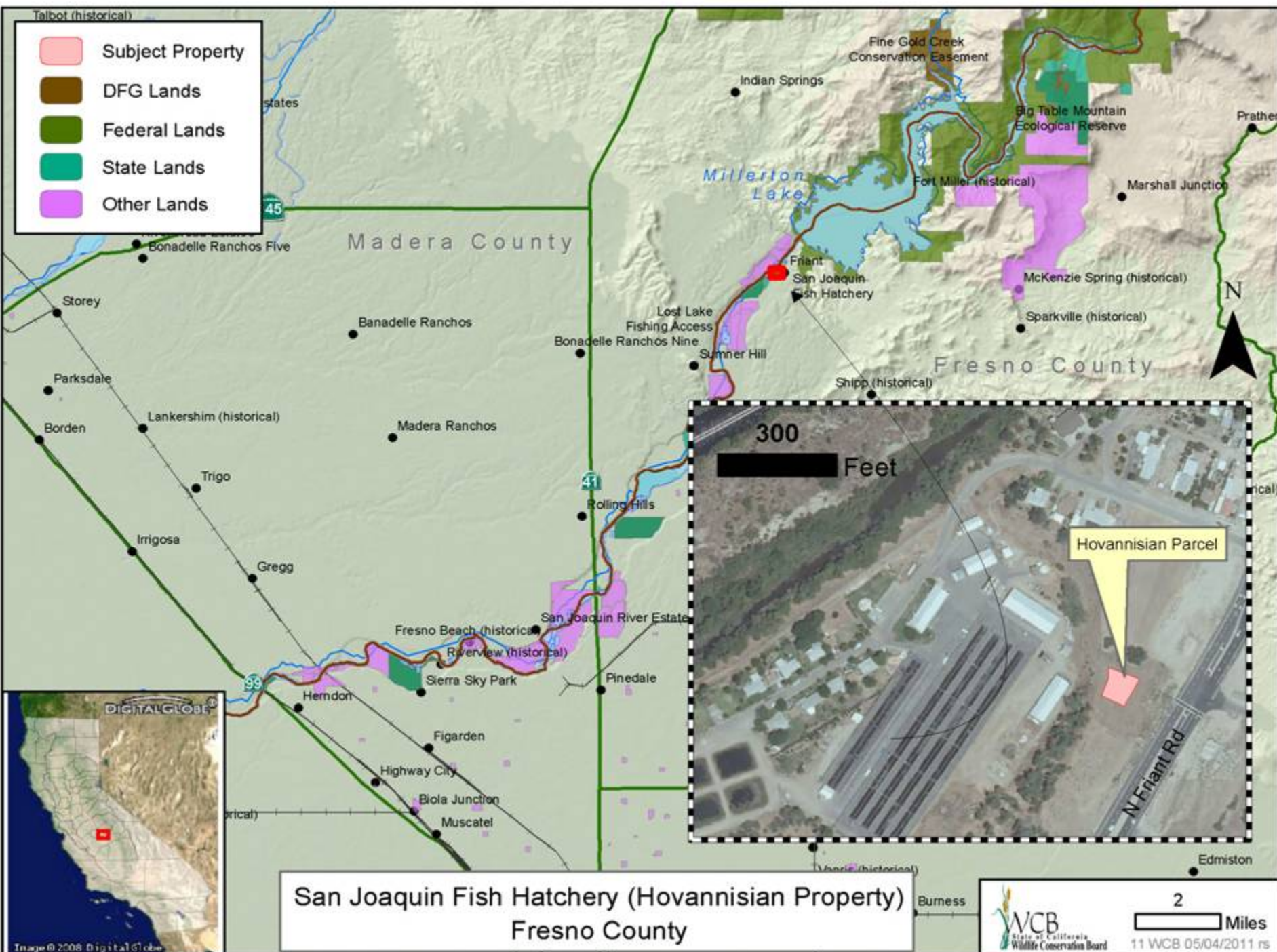


- Lower meadow/riparian area found on property.

#10. Santa Cruz Long-Toed Salamander, Larkin Valley Santa Cruz County



- Typical stream vegetation found on property.



#11. San Joaquin Fish Hatchery (Hovannisian Property) Fresno County



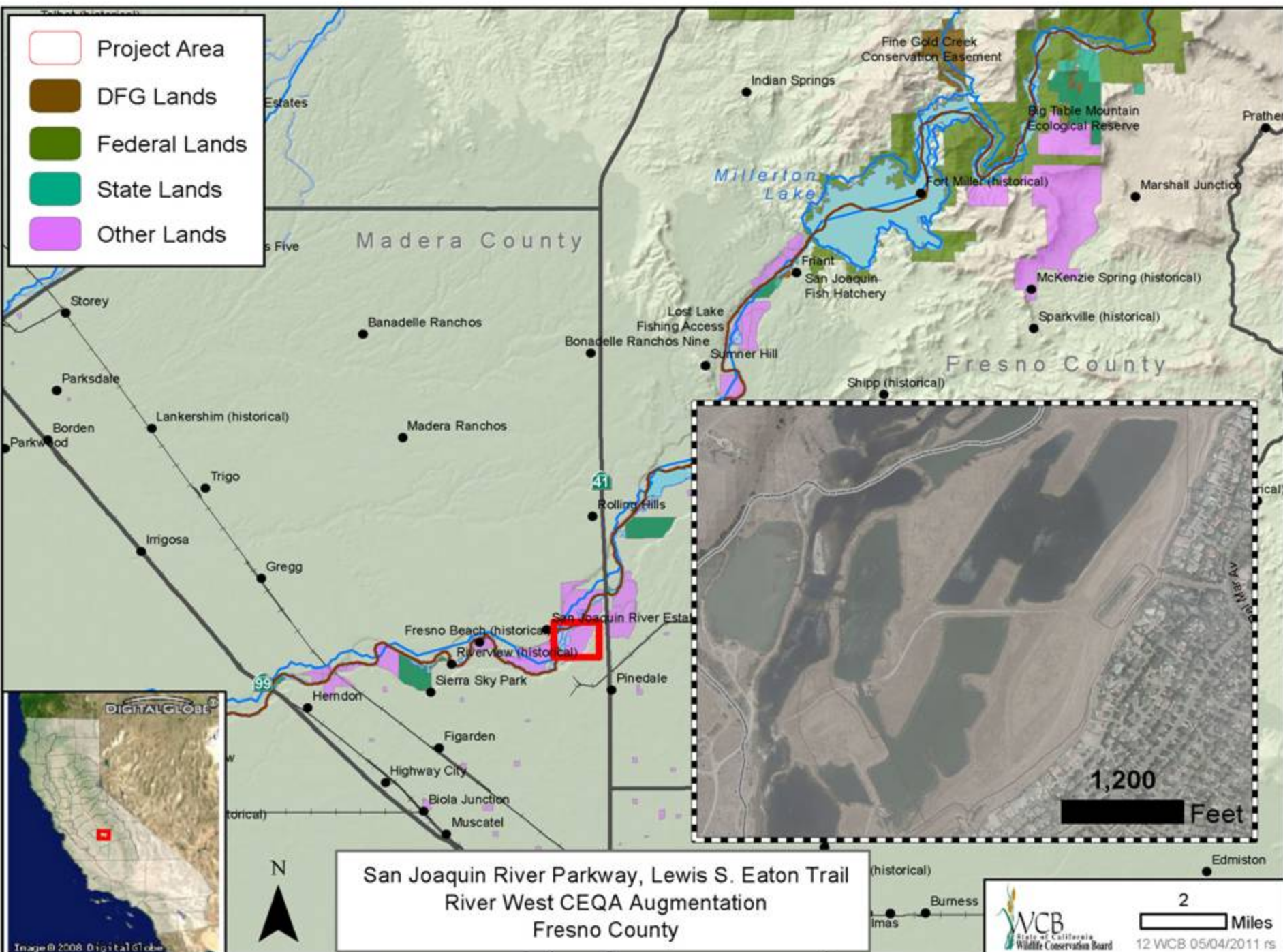
- Subject property looking north to the fish hatchery.

#11. San Joaquin Fish Hatchery (Hovannisian Property) Fresno County



■ Aerial view of the subject site and fish hatchery.

-  Project Area
-  DFG Lands
-  Federal Lands
-  State Lands
-  Other Lands



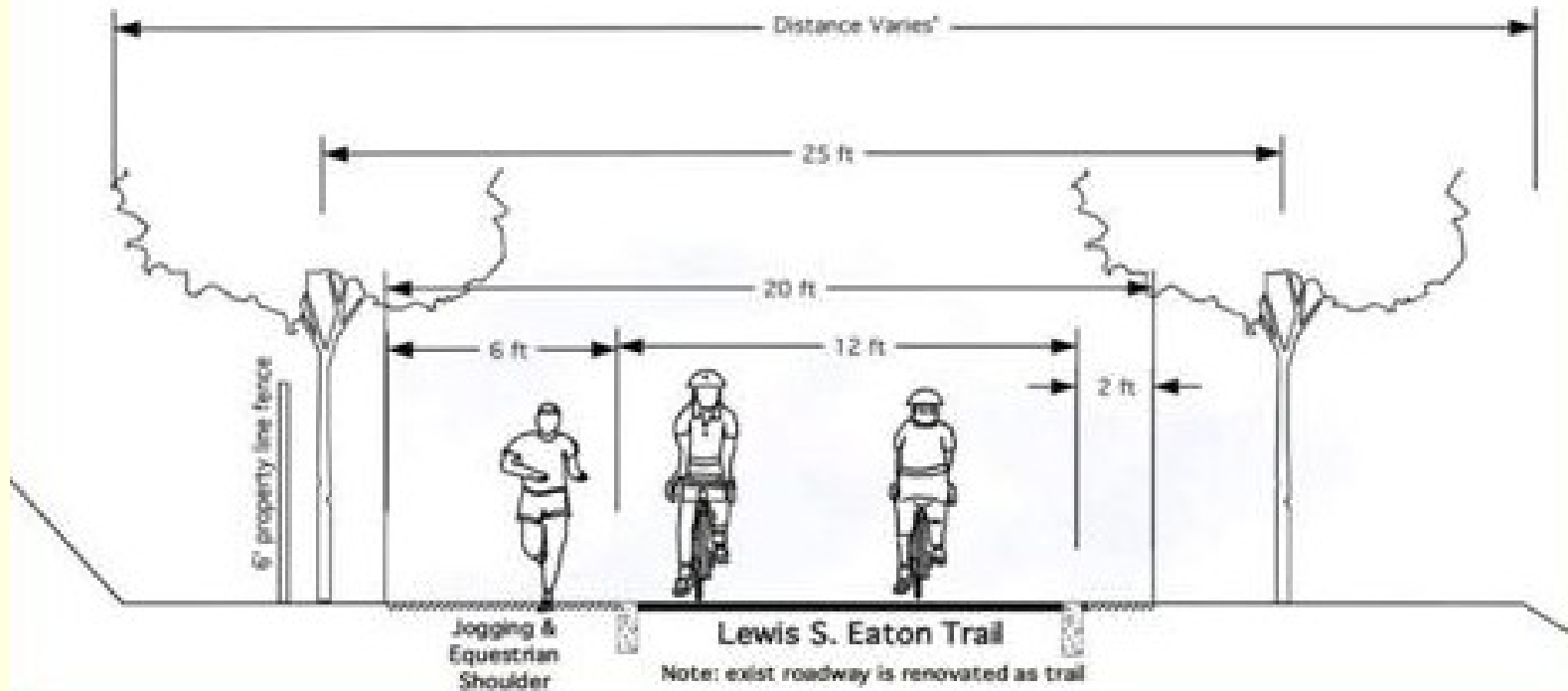
San Joaquin River Parkway, Lewis S. Eaton Trail
River West CEQA Augmentation
Fresno County

#12. San Joaquin River Parkway, Lewis S. Eaton Trail River West CEQA Augmentation Fresno County



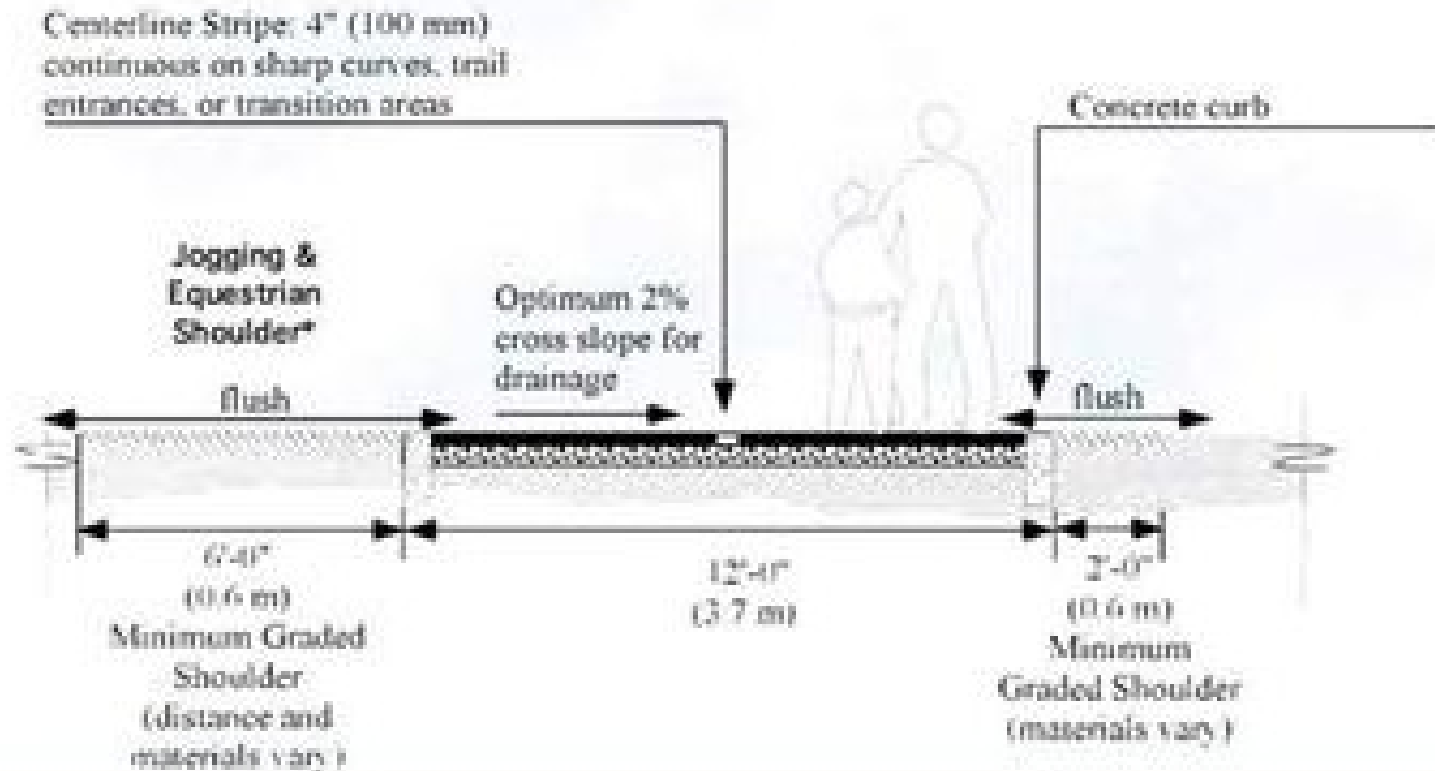
- Overview of the proposed project.

#12. San Joaquin River Parkway, Lewis S. Eaton Trail
River West CEQA Augmentation
Fresno County



- Proposed design and trail use.

#12. San Joaquin River Parkway, Lewis S. Eaton Trail
River West CEQA Augmentation
Fresno County



- Proposed Trail Design.

#12. San Joaquin River Parkway, Lewis S. Eaton Trail
River West CEQA Augmentation
Fresno County



- From the parkway looking south at Riverview Drive, proposed public access.

#12. San Joaquin River Parkway, Lewis S. Eaton Trail
River West CEQA Augmentation
Fresno County



- View towards parkway and private access road from Riverview Drive.

#12. San Joaquin River Parkway, Lewis S. Eaton Trail
River West CEQA Augmentation
Fresno County



■ View of River West from Spano Park.

- Subject Property
- DFG Lands
- Other Lands
- State Lands
- Federal Lands

Subject Property

Cathedral City

Thousand Palms

Coachella Valley Ecological Reserve

Palm Springs

Rancho Mirage

Palm Desert

Thousand Palms Conservation Area (Gabison)
Riverside County



1 Mile
14 WCB 05/04/2011 rs



#14. Thousand Palms Conservation Area (Gabison)
Riverside County



■ Looking east.

#14. Thousand Palms Conservation Area (Gabison)
Riverside County



■ Looking North.

#14. Thousand Palms Conservation Area (Gabison)
Riverside County

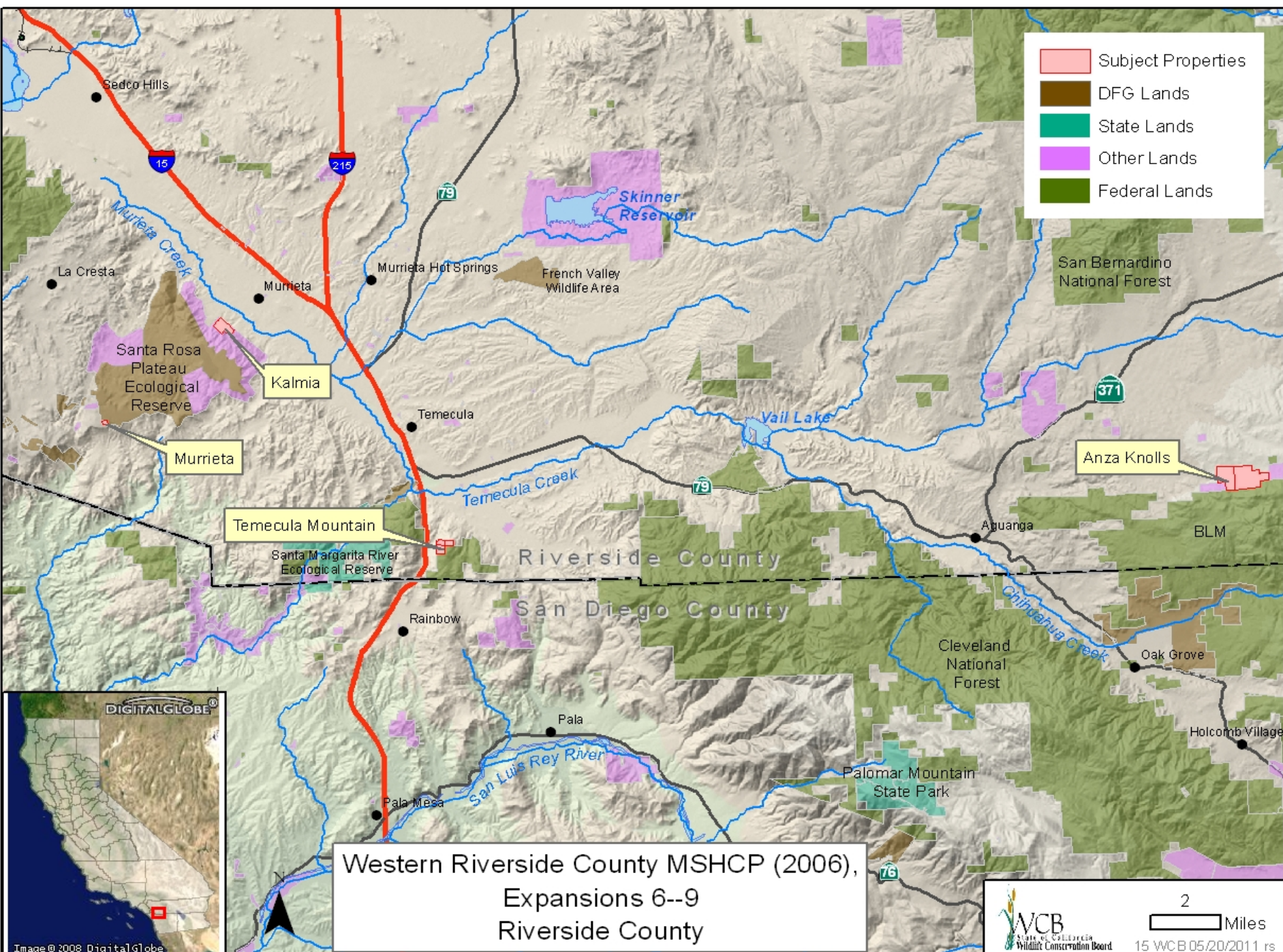


- Looking north and the blowsand habitat.

#14. Thousand Palms Conservation Area (Gabison)
Riverside County



- Residential development across the street.



- Subject Properties
- DFG Lands
- State Lands
- Other Lands
- Federal Lands

Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County



■ Looking East on the Anza Knolls Property

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County



■ Looking South on the Anza Knolls Property

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County



■ Looking Southwest on the Anza Knolls Property

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County



■ Looking East on the Temecula Mountain Property

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County



■ Looking East on the Temecula Mountain Property

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County



■ Looking North on the Kal Mia Property.

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County



■ Looking South on the Kal Mia Property.

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County



■ Looking West on the Kal Mia Property.

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County



■ Looking East at the Vernal Pools on the Murrieta 180 Property.

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County

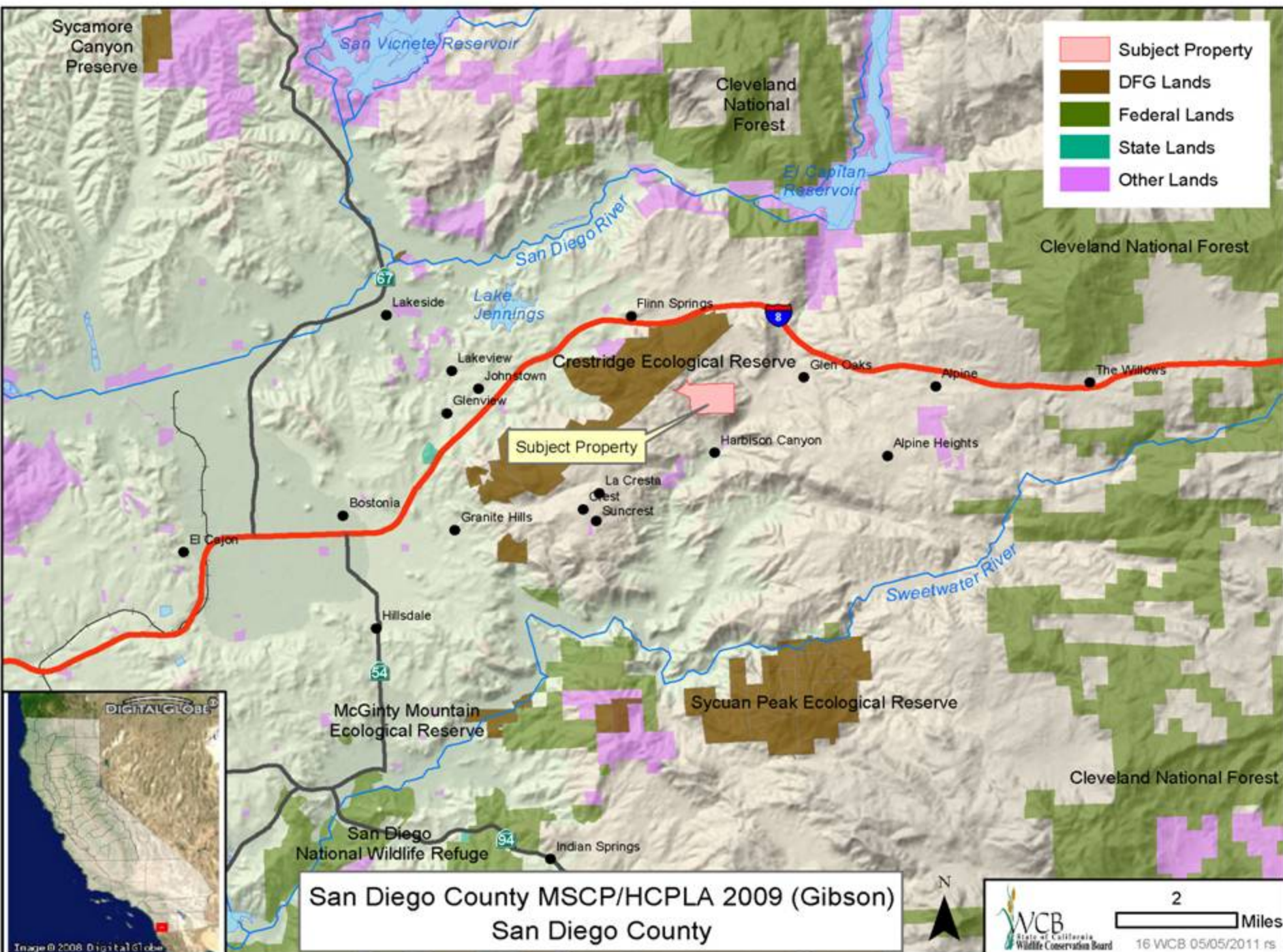


■ Looking South at the Vernal Pools on the Murrieta 180 Property.

#15. Western Riverside County MSHCP (2006),
Expansions 6--9
Riverside County



■ Looking Southwest at the Vernal Pools on the Murrieta 180 Property.



- Subject Property
- DFG Lands
- Federal Lands
- State Lands
- Other Lands

San Diego County MSCP/HCP/LA 2009 (Gibson)
San Diego County



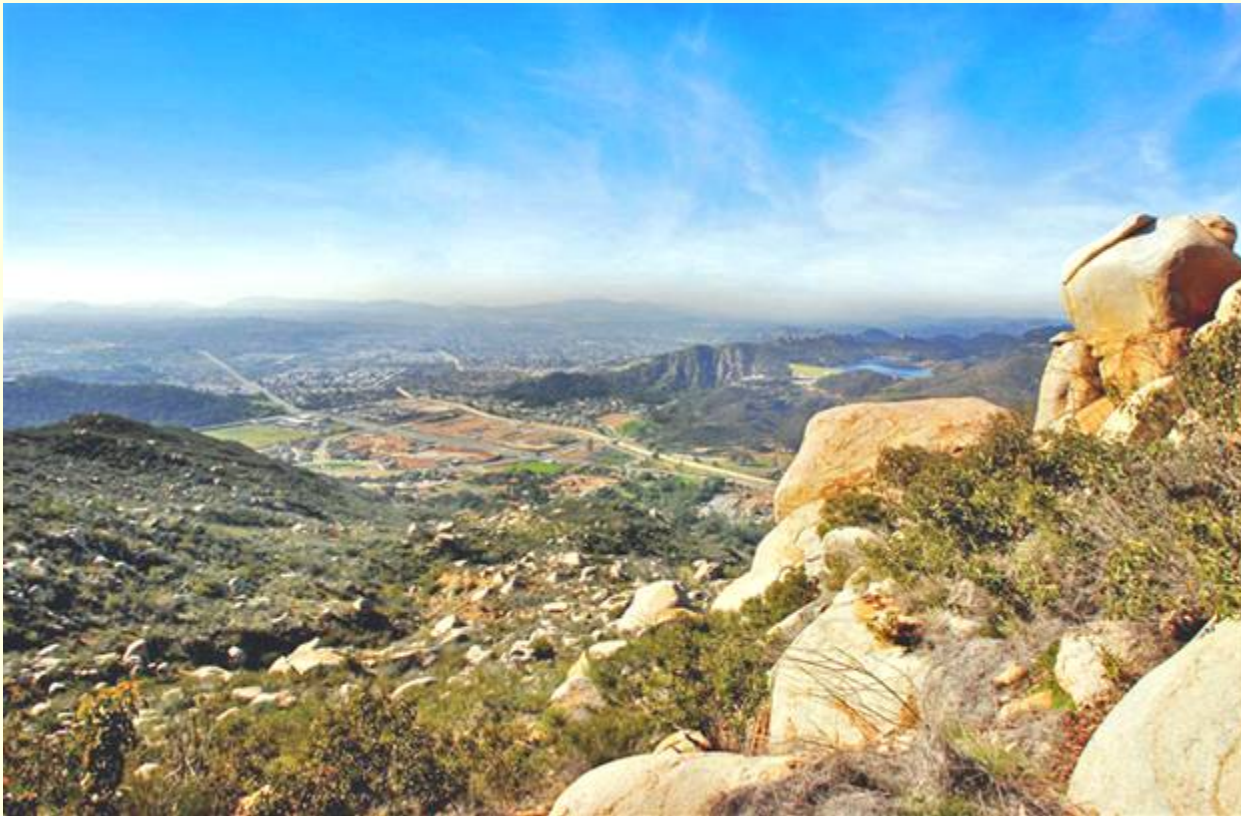
2 Miles



16 WCB 05/05/2011 rs



#16. San Diego County MSCP/HCPLA 2009 (Gibson)
San Diego County



- Typical habitat found on property.

#16. San Diego County MSCP/HCPLA 2009 (Gibson)
San Diego County

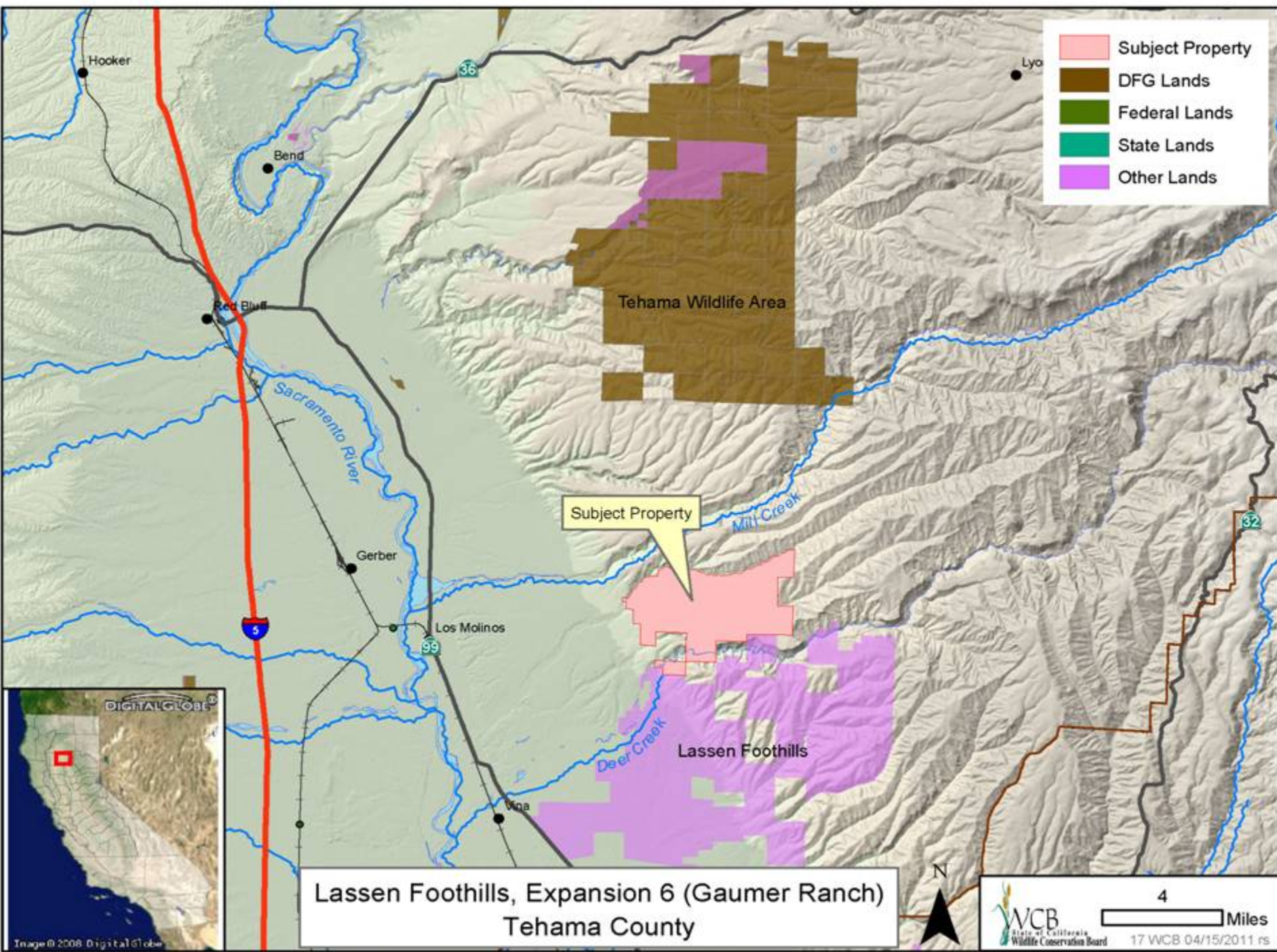


- California gnatcatcher

#16. San Diego County MSCP/HCPLA 2009 (Gibson)
San Diego County



- Typical habitat found on property.



#17. Lassen Foothills, Expansion 6 (Gaumer Ranch)
Tehama County



- Looking west towards I-5 over Deer Creek.

#17. Lassen Foothills, Expansion 6 (Gaumer Ranch)
Tehama County



- Looking east toward Mt. Lassen.

#17. Lassen Foothills, Expansion 6 (Gaumer Ranch)
Tehama County

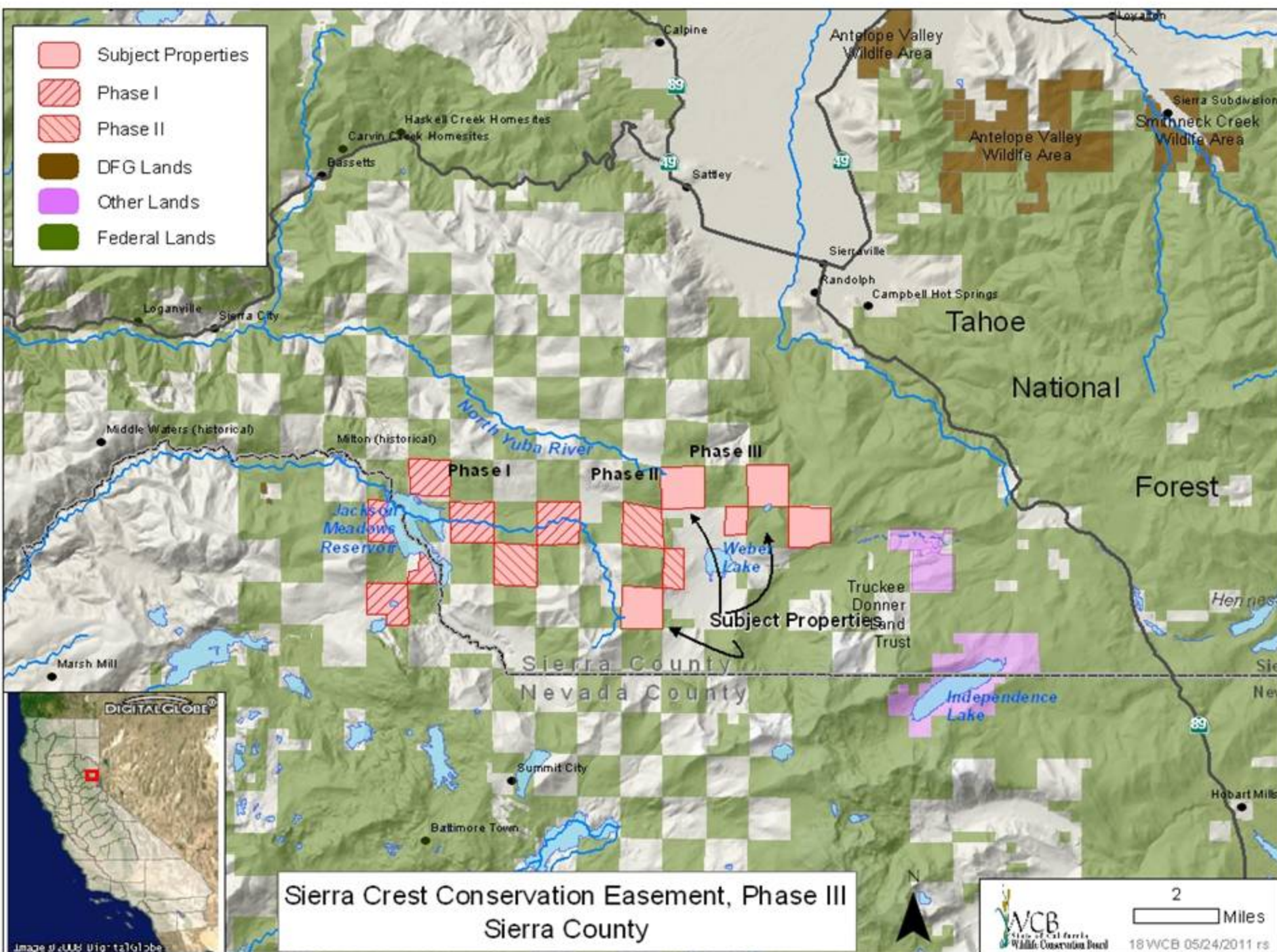


- Various geological outcroppings within the ranch.

#17. Lassen Foothills, Expansion 6 (Gaumer Ranch)
Tehama County



- Looking down on the Deer Creek riparian habitat.



#18. Sierra Crest Conservation Easement, Phase III
Sierra County



■ Jackson Meadows Reservoir

#18. Sierra Crest Conservation Easement, Phase III
Sierra County



■ Webber Lake

#18. Sierra Crest Conservation Easement, Phase III
Sierra County



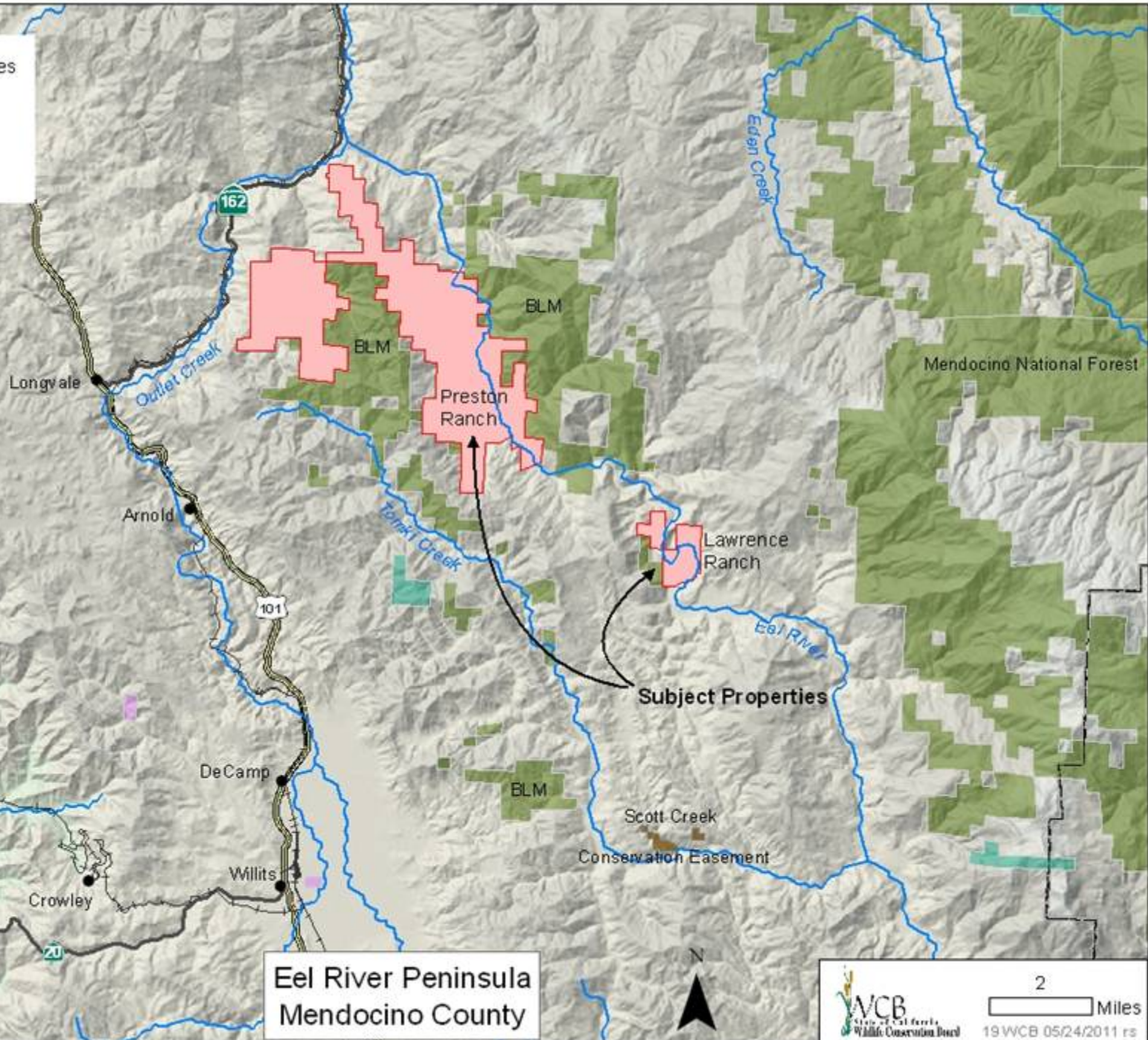
■ Lake of the Woods (Photo by Rich Reid)

#18. Sierra Crest Conservation Easement, Phase III
Sierra County



■ Forest View

- Subject Properties
- Other Lands
- State Lands
- Federal Lands



#19. Eel River Peninsula
Mendocino County



- Looking west over the Preston Ranch.

#19. Eel River Peninsula
Mendocino County



- Looking down on to Bloody Run Creek in the Preston Ranch.

#19. Eel River Peninsula
Mendocino County



- Looking at the main fork of the Eel River on Lawrence Ranch.

#19. Eel River Peninsula
Mendocino County



- One of the many ponds found at the project.

#19. Eel River Peninsula
Mendocino County



- Looking at Black Bear on the property.

- Subject Property
- DFG Lands
- Federal Lands
- State Lands
- Other Lands

Mendocino County
Sonoma County

Upper White Oak Ranch
Subject Property
Moffit Ranch

Clover Springs
Lake Sonoma Wildlife Area
Lake Sonoma Recreation Area

Stewart's Point

Salt Point State Park

Baxter Ranch
Sonoma County

BLM

Austin Creek State Recreation Area



2 Miles
20 WCB 05/05/2011 rs



#20. Baxter Ranch
Sonoma County



#20. Baxter Ranch Sonoma County



- Redwood Trees on Property that will be protected.

#20. Baxter Ranch Sonoma County



■ View of Tree Tops

#20. Baxter Ranch Sonoma County



- Scenic view of property.

#20. Baxter Ranch Sonoma County

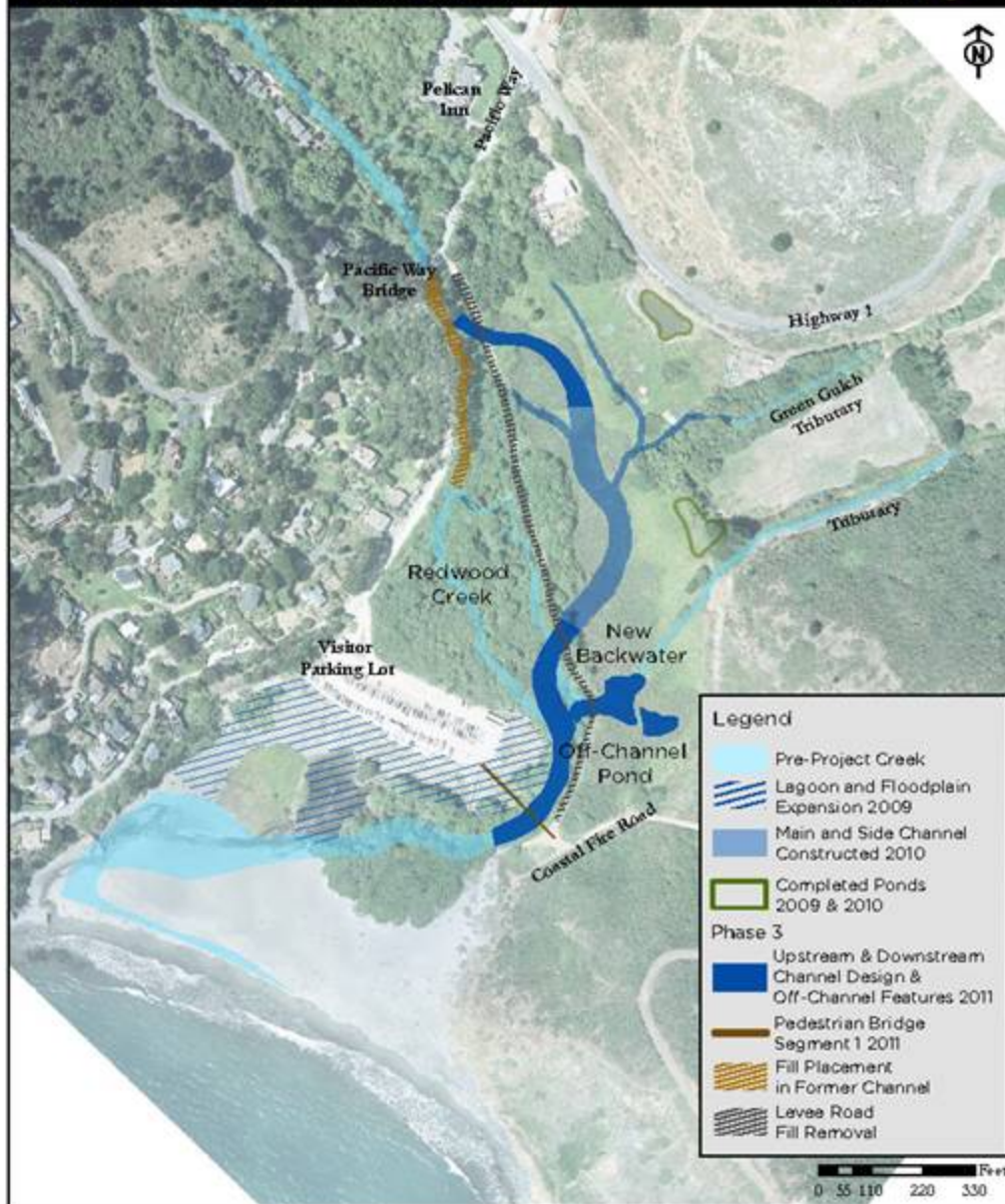


- View of Property from Property Owner's Residence.



Phase 3
Redwood Creek Restoration at Muir Beach
Golden Gate National Recreation Area

2011/04/21



#21. Lower Redwood Creek Restoration Marin County



- Ongoing restoration on small tributary to Redwood Creek running through valley in the midground.

#21. Lower Redwood Creek Restoration Marin County



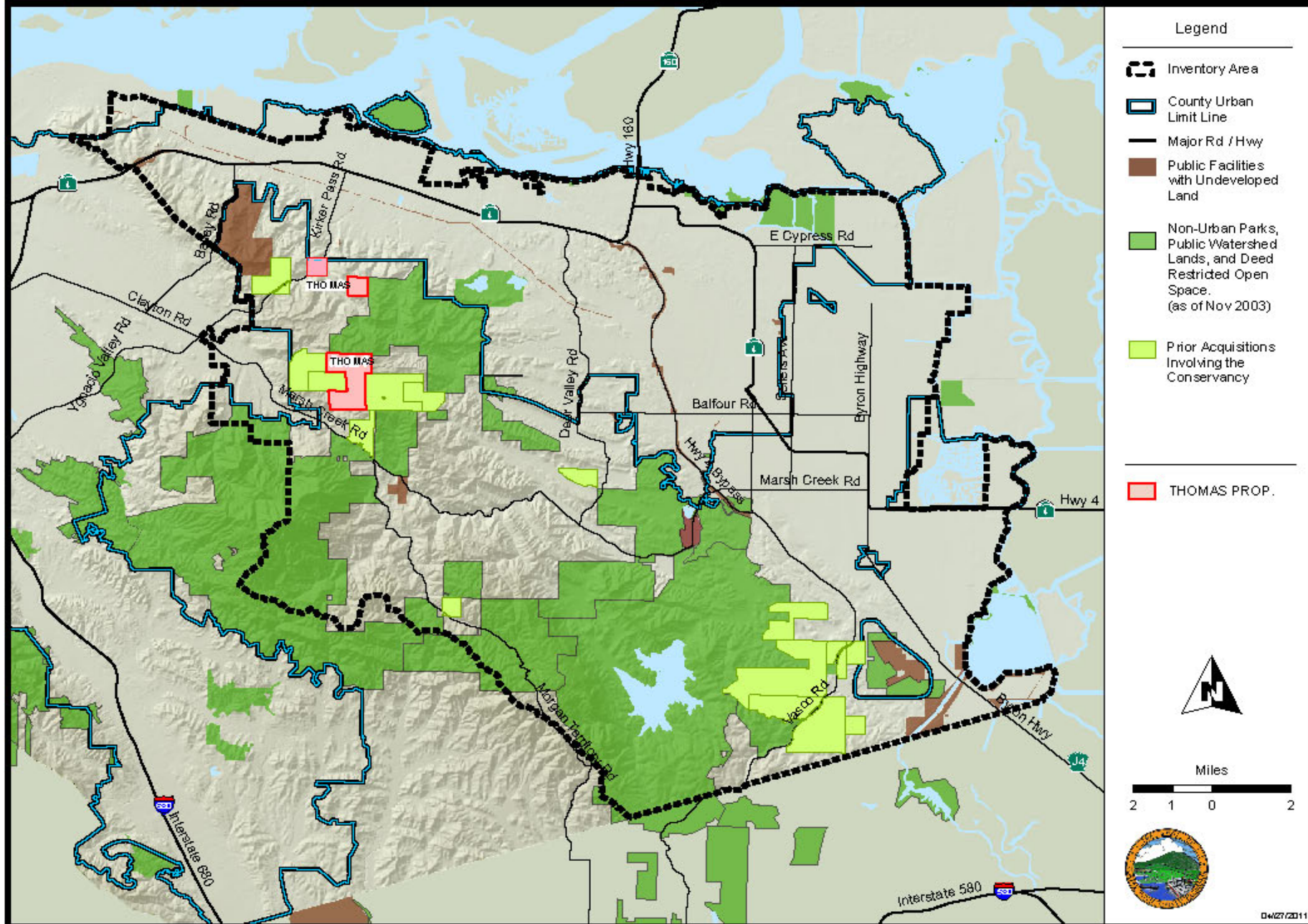
- The new channel, partially excavated in Phase II, will be completed in Phase III.

#21. Lower Redwood Creek Restoration Marin County



- This levee will be removed to connect channel to floodplain.

Figure 1: Thomas Properties - Regional Context



#22. San Joaquin Multi-Species Conservation Plan (Thomas) Contra Costa County



■ Looking down on the Thomas property from Krieger Peak.

#22. San Joaquin Multi-Species Conservation Plan (Thomas) Contra Costa County



- Representative photo of Oak trees found on the Thomas Property.

#22. San Joaquin Multi-Species Conservation Plan (Thomas) Contra Costa County

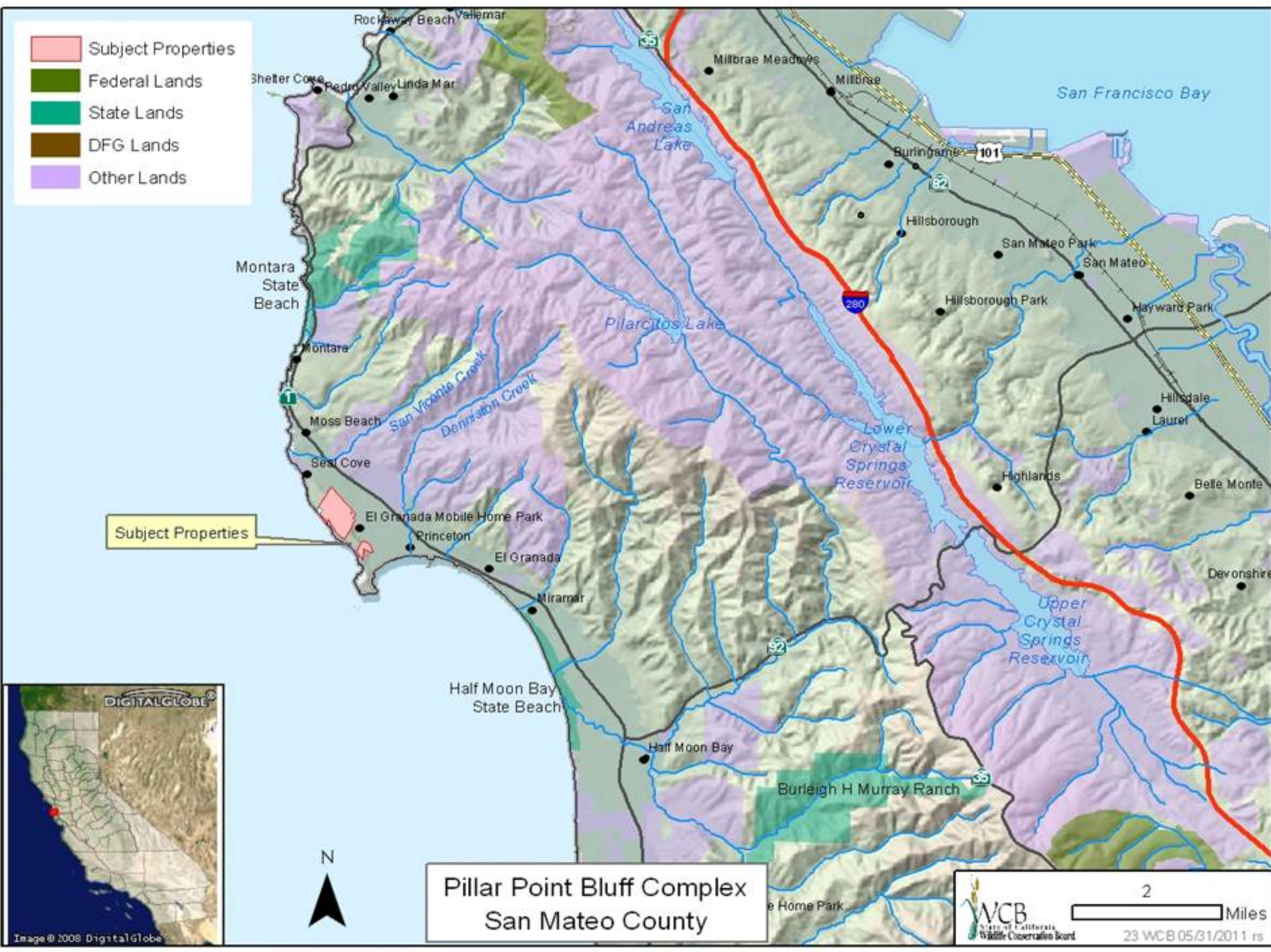
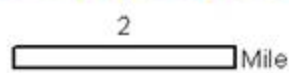


■ Looking south at the Thomas Property.

- Subject Properties
- Federal Lands
- State Lands
- DFG Lands
- Other Lands

Subject Properties

Pillar Point Bluff Complex San Mateo County



#23. Pillar Point Bluff Complex
San Mateo County



■ Beach view from property.

#23. Pillar Point Bluff Complex San Mateo County

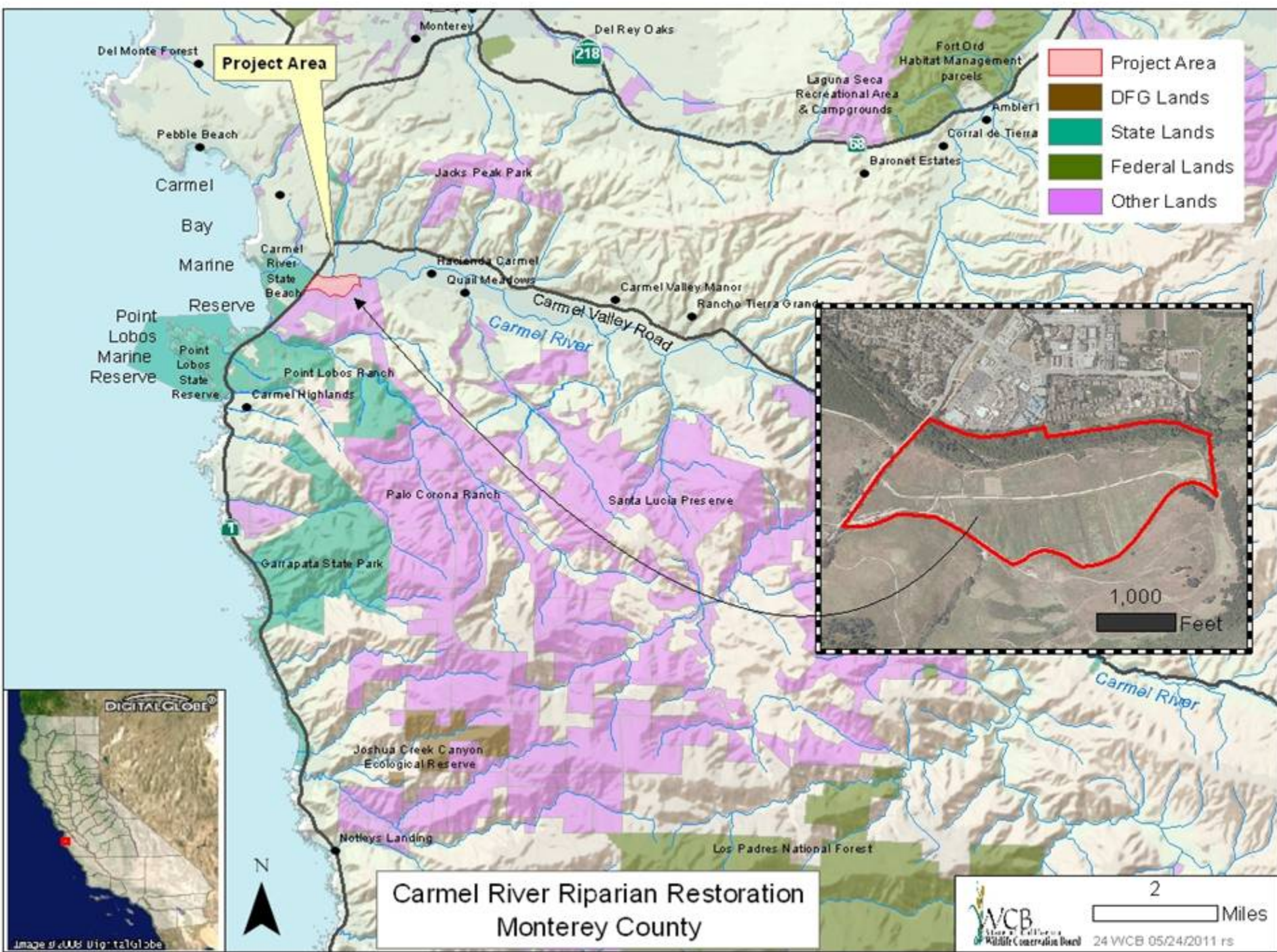


- Information sign on property.

#23. Pillar Point Bluff Complex San Mateo County



- Vegetation and wildlife found on property.



#24. Carmel River Riparian Restoration Monterey County



- City of Carmel and mouth of the Carmel River.

#24. Carmel River Riparian Restoration Monterey County



- Carmel River floodplain to be restored.

#24. Carmel River Riparian Restoration Monterey County



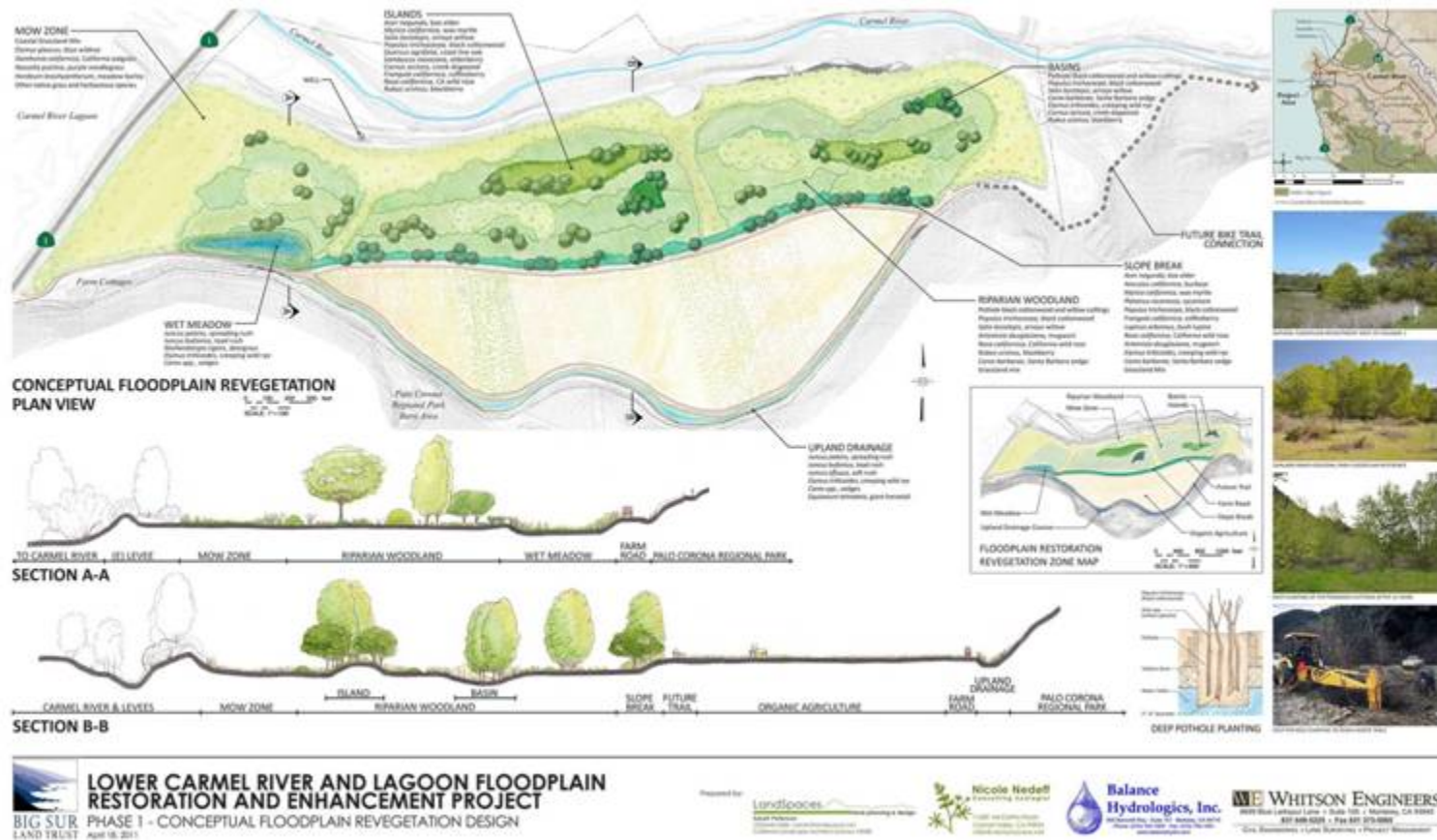
- Project site looking south. Project will restore the riparian floodplain of the Carmel River.

#24. Carmel River Riparian Restoration Monterey County

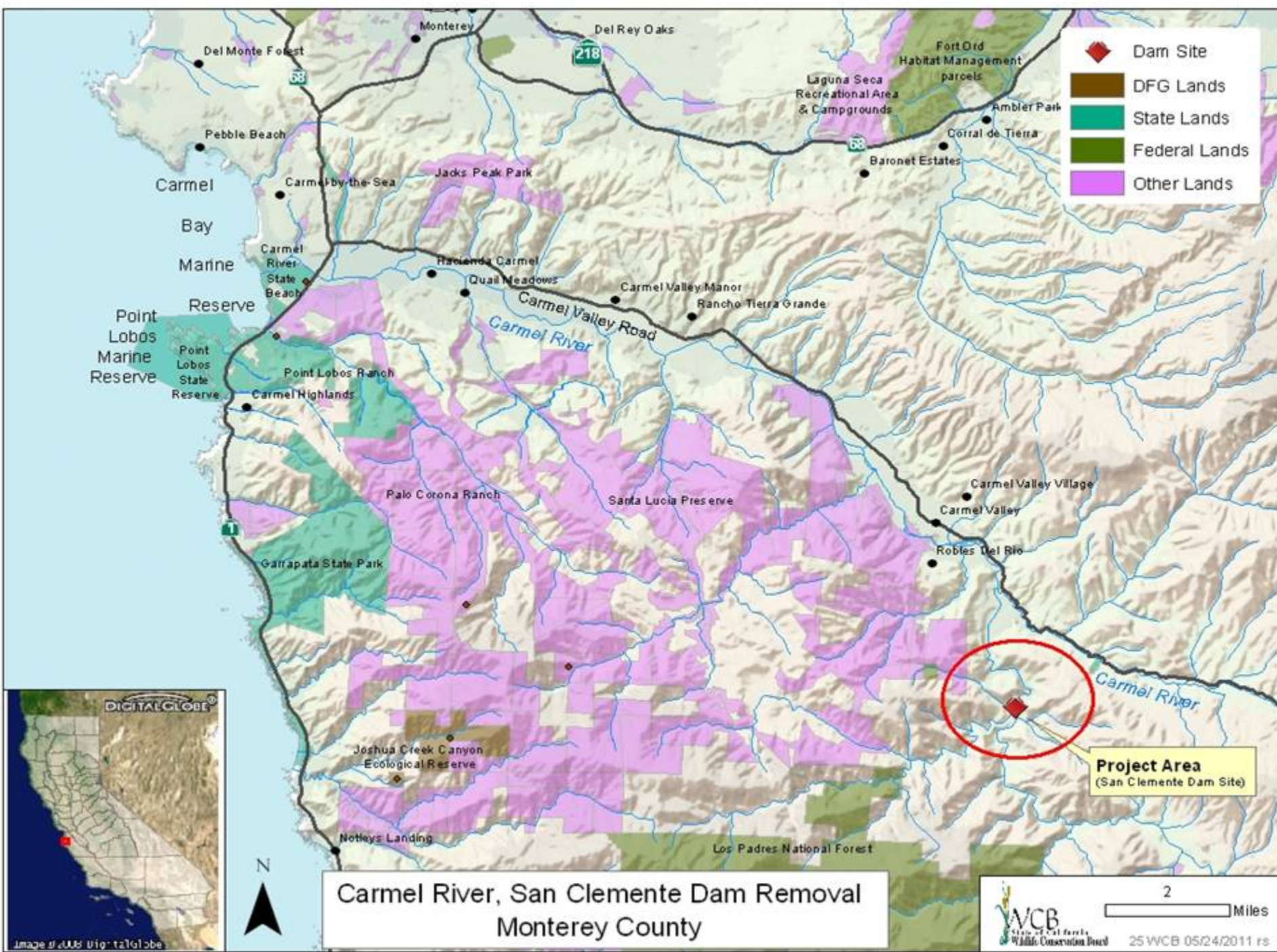


- Organic farming will remain on these 50 acres, restoration will take place in adjacent floodplain (bare soil to the right of the crops).

#24. Carmel River Riparian Restoration Monterey County



- Restored floodplain conceptual plan.



#25. Carmel River, San Clemente Dam Removal Monterey County



- San Clemente Dam Removal Project

#25. Carmel River, San Clemente Dam Removal Monterey County



- Dam declared unsafe.

#25. Carmel River, San Clemente Dam Removal Monterey County



- Accumulated Sediment

#25. Carmel River, San Clemente Dam Removal Monterey County



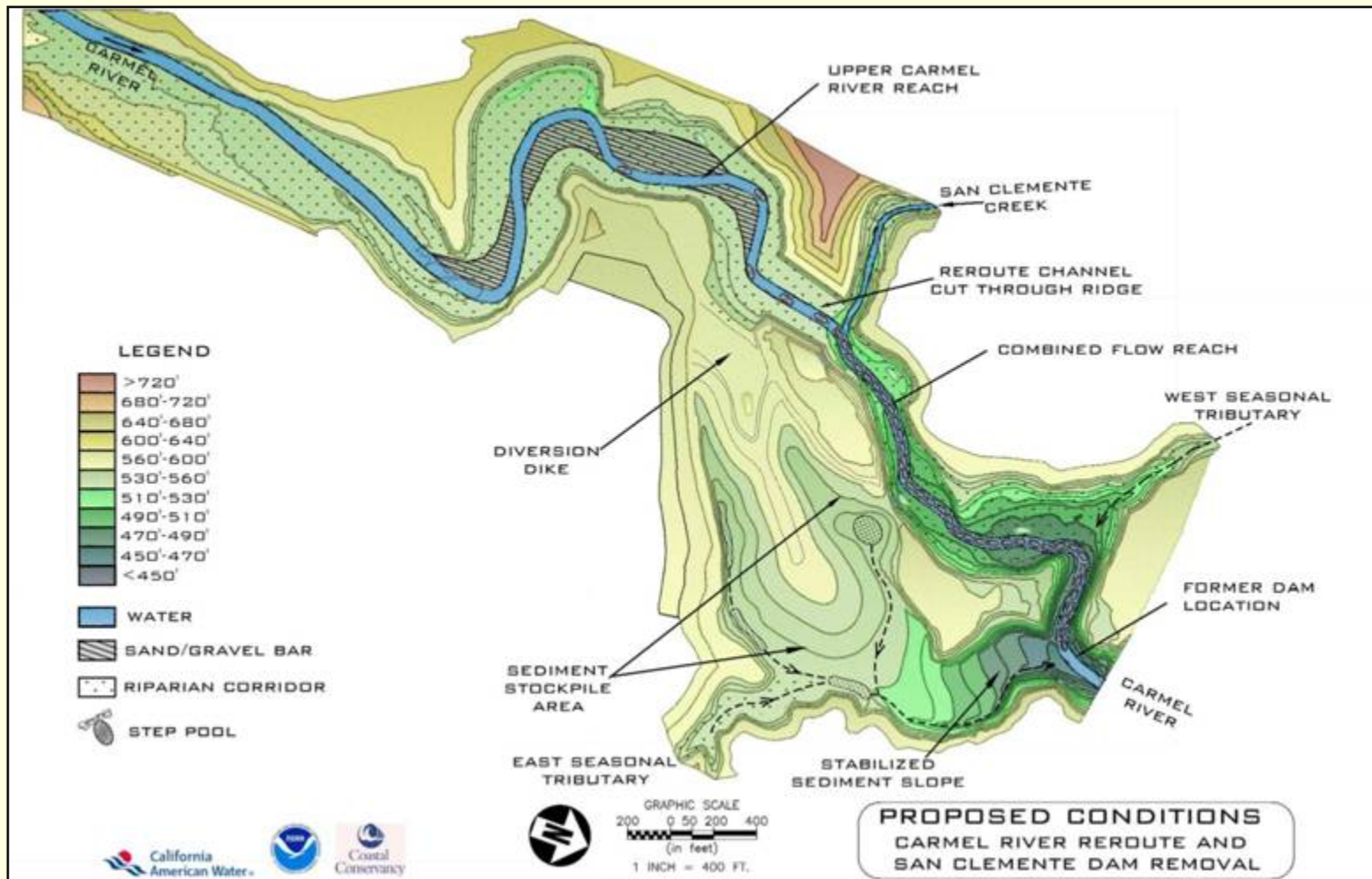
- Benefits of dam removal.

#25. Carmel River, San Clemente Dam Removal Monterey County

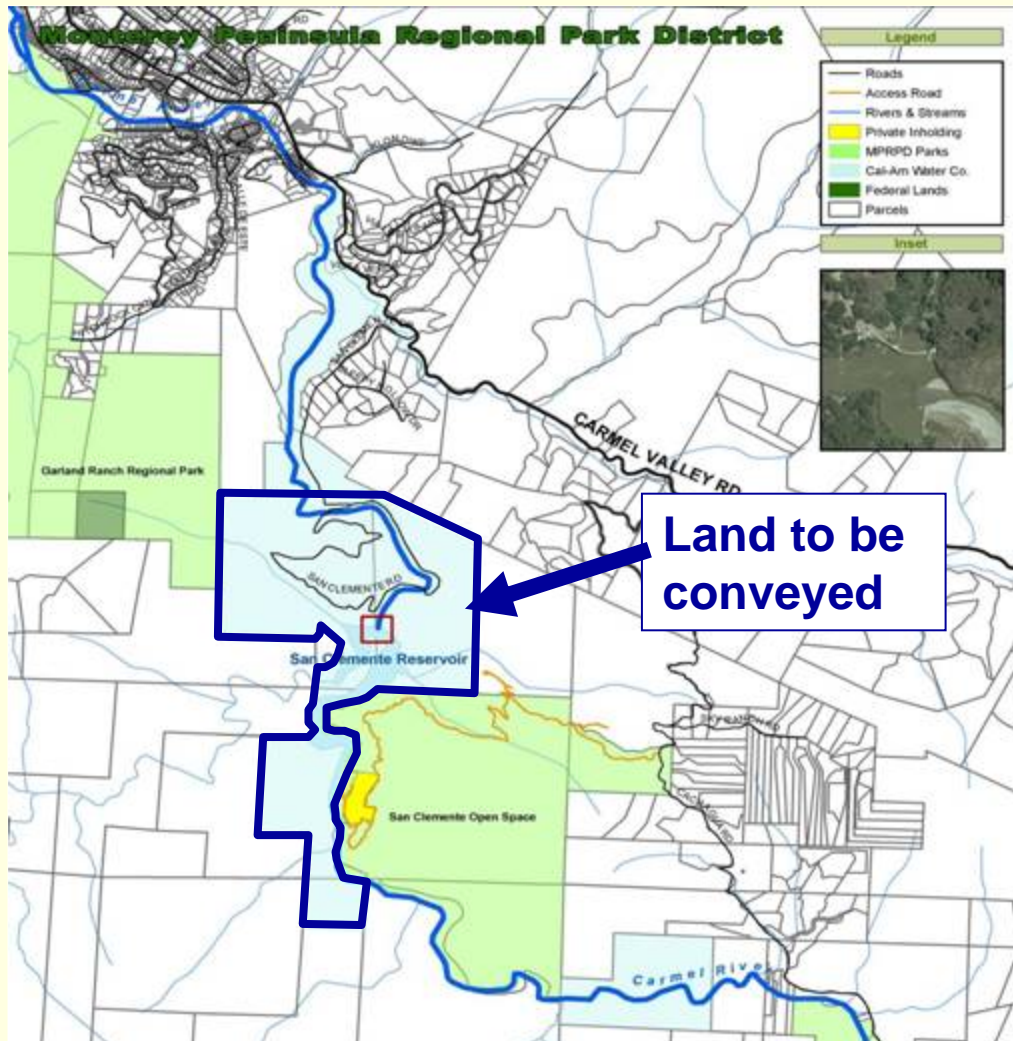


■ Project Components

#25. Carmel River, San Clemente Dam Removal Monterey County



#25. Carmel River, San Clemente Dam Removal Monterey County



#25. Carmel River, San Clemente Dam Removal
Monterey County



- Subject Property
- Federal Lands
- State Lands
- Other Lands

Santa Margarita

Santa Margarita Lake

Los Padres National Forest

Pozo Road

Subject Property

Santa Lucia Wilderness

Machesna Mountain Wilderness

Los Padres National Forest

Garcia Mountain Wilderness

Laguna Lake

Lopez Lake

101

Pismo Beach

Grover City

Grover Beach

Arroyo Grande

Oceano

Bolsa Chica Lake

Nick Ranch Conservation Easement
San Luis Obispo County

WCB
State of California
Wildlife Conservation Board

2.5

Miles

26 WCB 05/05/2011 rs

#26. Nick Ranch Conservation Easement San Luis Obispo County



- Chaparral Habitat with Garcia Mountains / Santa Lucia Wilderness in the background.

#26. Nick Ranch Conservation Easement San Luis Obispo County



- Cross fencing separates two pastures to facilitate grazing rotation around a watering trough. Blue Oak & Valley Oak habitat with Pine Mountain in the distant background.

#26. Nick Ranch Conservation Easement San Luis Obispo County



- Grass-fed beef in pasture with Machesna Wilderness in the background.

#26. Nick Ranch Conservation Easement San Luis Obispo County



- Soto Creek, a tributary to the upper Salinas River.

#26. Nick Ranch Conservation Easement San Luis Obispo County



■ Stock Watering Pond



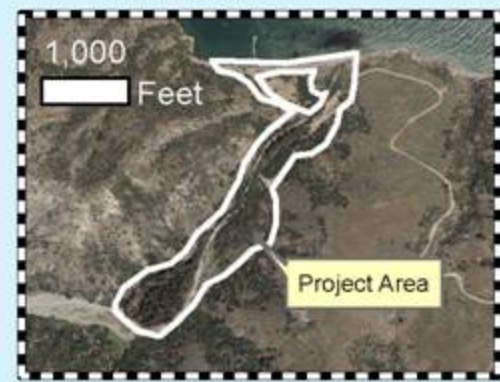
San Miguel Island Marine Reserve

Santa Rosa Island

Santa Cruz Island Reserve

Anacapa Island Marine Reserve

Point Mugu State Park
Leo Carillo State Park



Santa Barbara Island Marine Reserve



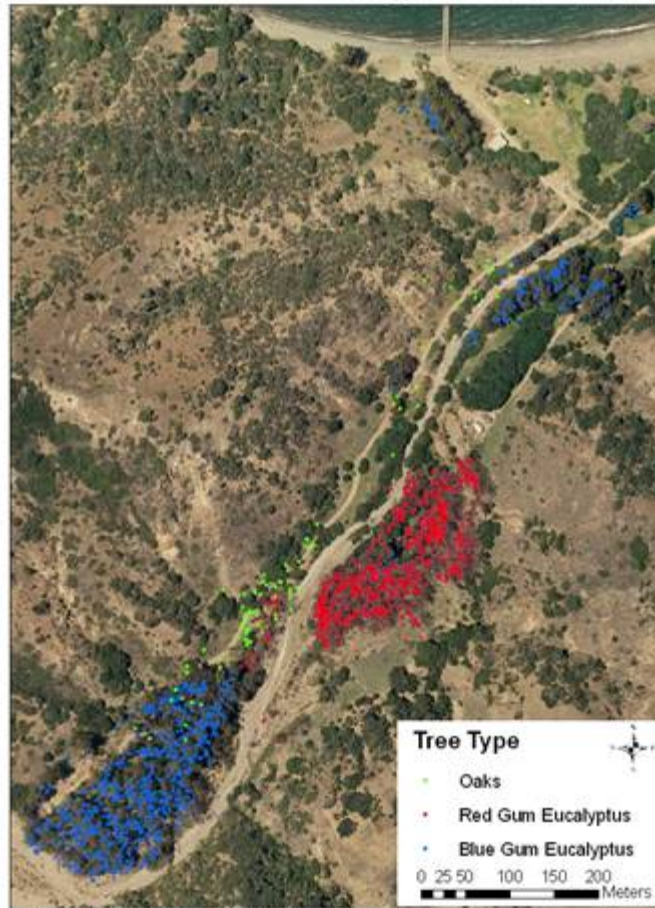
Santa Cruz Island Riparian Restoration Santa Barbara County

#27. Santa Cruz Island Riparian Restoration Santa Barbara County

Channel Islands National Park
Prisoner's Wetland Restoration
Santa Cruz Island

Trip #23
Sept 2-9, 2008
Eucalyptus Locations

November 1, 2008
Oak Locations



Produced by Melissa Hayashida, Channel Islands NP GIS

#27. Santa Cruz Island Riparian Restoration
Santa Barbara County



- Looking south from the coastal bluff along Cañada del Puerto Creek circa 1880. Note Southern Riparian Woodland in creek bottom upstream in the upper center of the photograph.

#27. Santa Cruz Island Riparian Restoration Santa Barbara County



- Looking south from the coastal bluff along Cañada del Puerto Creek 2007. Escaped invasive eucalyptus (red gums and blue gums) fill the creek bottom. This project will remove the more invasive red gum eucalyptus. The berm separating Cañada del Puerto creek from its coastal floodplain and wetland will be removed as part of the NPS restoration work at this site.

#27. Santa Cruz Island Riparian Restoration
Santa Barbara County



■ Eucalyptus

#27. Santa Cruz Island Riparian Restoration
Santa Barbara County



- Prisoner's harbor wetlands restoration site.

#27. Santa Cruz Island Riparian Restoration
Santa Barbara County



- Wetlands growing in greenhouse for restoration.



Wildlife Connectivity Mapping

Department of Fish and Game
June 2, 2011



Wildlife Connectivity Mapping: Background

Habitat connectivity

- provides paths for movement in the landscape
 - Finding food, cover, mates
 - Migration
 - Adaptation to climate change
- Barriers to connectivity
 - roads, development, habitat conversion



Wildlife Connectivity Mapping: Purpose

- Identify natural connectivity areas to prioritize for conservation
 - Allow movement required for species survival and reproduction
 - Maintain migration corridors
 - Adaptation to climate change
- Identify critical road crossing locations



2010 California Essential Habitat Connectivity (CEHC) Project

- Joint DFG-Caltrans project
- Identified >2000-acre “natural landscape blocks”
- Connected blocks >10,000 acres in size
- Used least-cost modeling based on ecological integrity



The need for fine-scale connectivity mapping

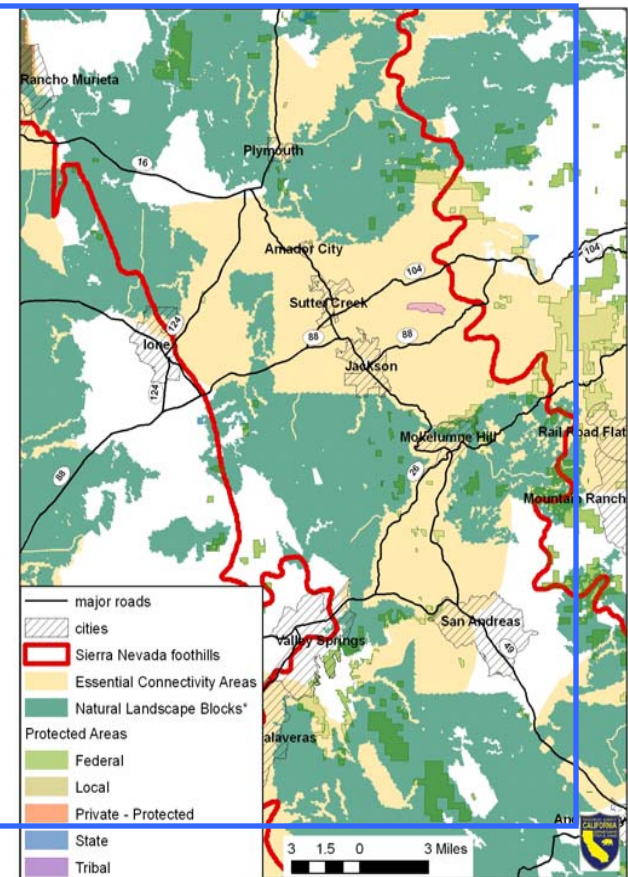
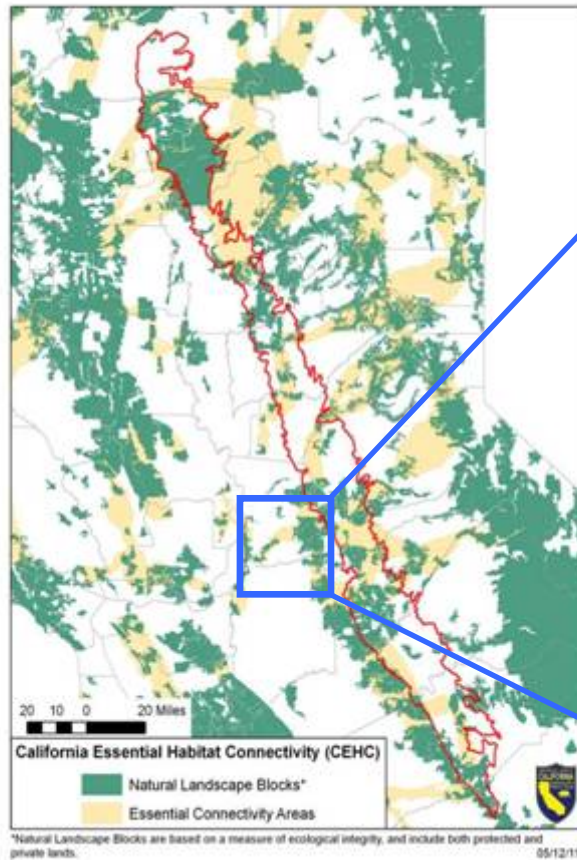
CEHC statewide overview	Fine-scale model needed for regional habitat acquisition planning
Natural Landscape Blocks >2000 acres	Include habitat areas <2000 acres that are essential for the survival and movement of some species
Connect blocks >10,000 acres	At the local level, need to provide connectivity between natural habitat areas <10,000 acres in size
Least-cost modeling based on ecological integrity	Species-specific habitat and movement modeling provide a view of essential connectivity areas important to high priority species

Northern Sierra Nevada Foothills

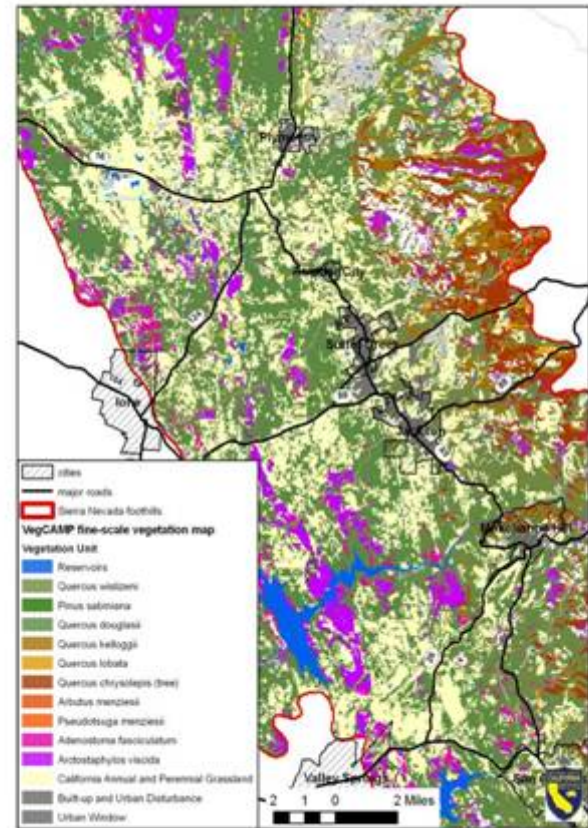
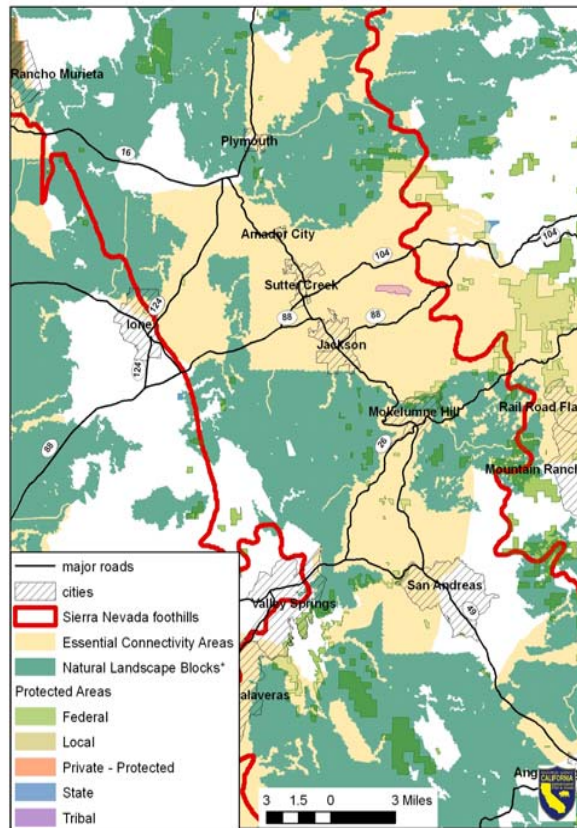
- High priority for fine-scale connectivity modeling
 - Provides important connectivity and migration corridors for large species (e.g., deer)
 - 85% in private ownership
 - High development pressure
 - Intersected by major highways
 - Completed fine-scale vegetation map



CEHC in the Sierra Nevada foothills

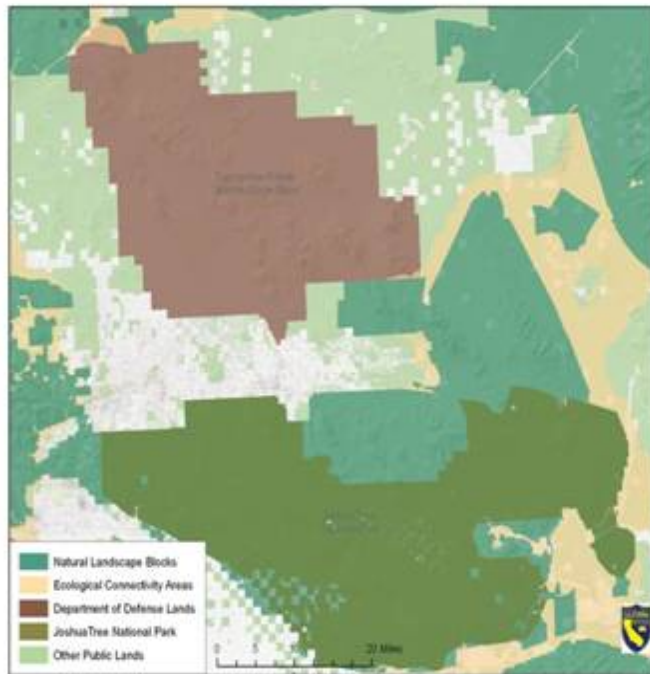


Using fine-scale vegetation maps for connectivity modeling

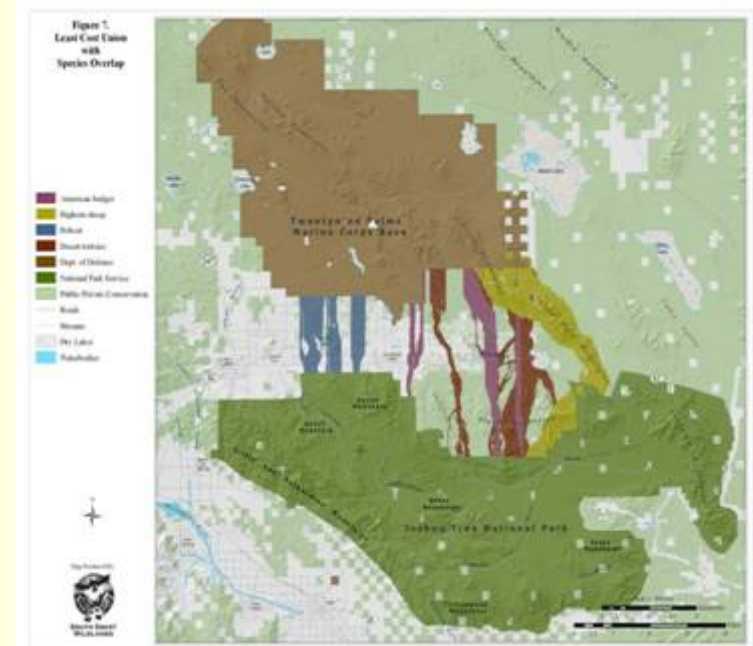


Wildlife Connectivity Mapping

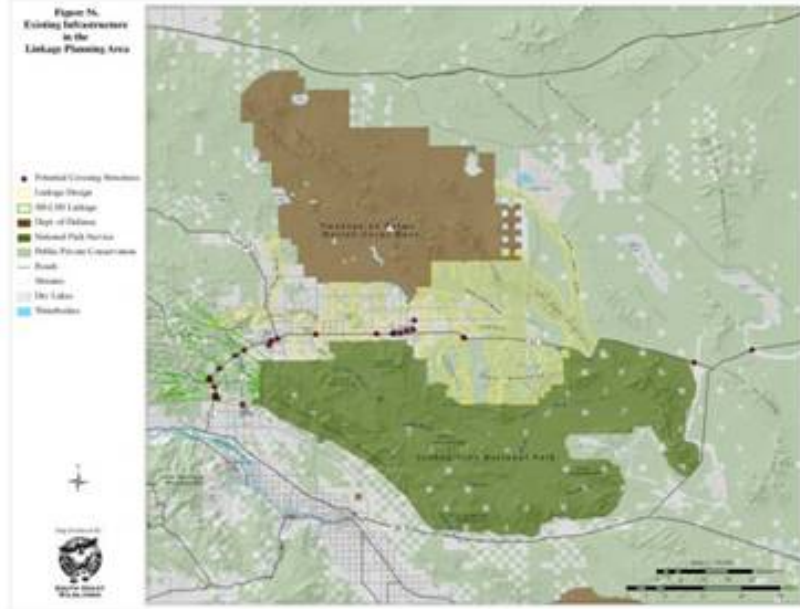
CEHC coarse-scale connectivity model



Fine-scale, species-specific connectivity model



Road-crossings



- Species-specific modeling allows the identification of important road crossings

Wildlife Connectivity Mapping Proposal

- Develop fine-scale corridor models in the Sierra Nevada Foothills USDA Ecoregion Section
 - Identify focal species and develop habitat models
 - Model essential connectivity areas based on species-specific traits and movement needs
- Establish guidance materials on minimum standards for fine-scale connectivity modeling needed to meet the Department's mission and mandates
- Provide guidance for use by the Department and other regional planners on local-scale connectivity and corridor needs for different geographic regions, taxonomic groups, and species