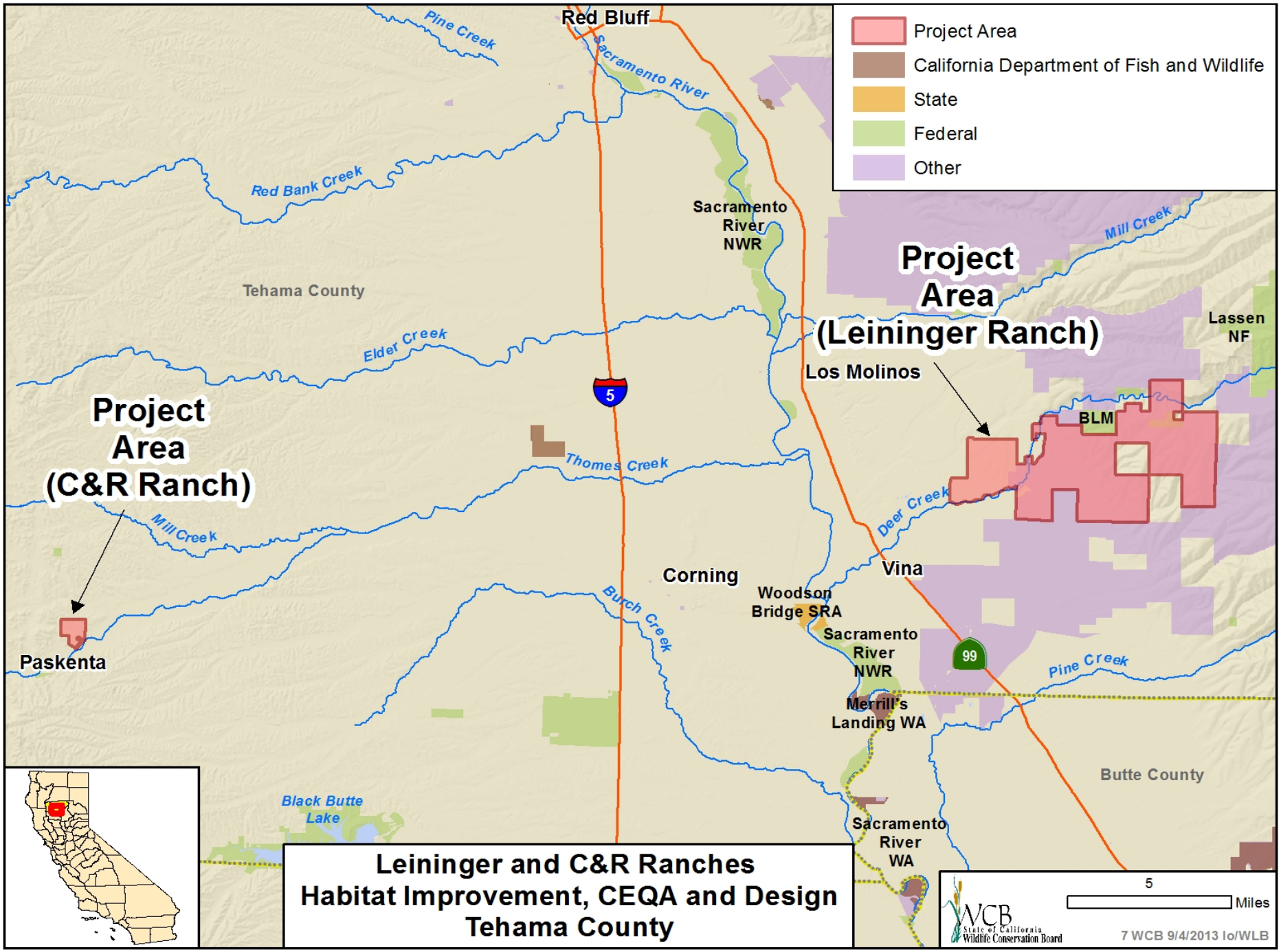
September 4, 2013
Wildlife Conservation Board Meeting
1:00 PM, State Capitol, Room 2040
Sacramento, California 95814



Leininger and C&R Ranches
Habitat Improvement, CEQA and Design
Tehama County

#7. Leininger and C&R Ranches Habitat Improvement, CEQA and Design

- Leininger Ranch: Design, permitting and CEQA to improve existing stock ponds

#7. Leininger and C&R Ranches Habitat Improvement, CEQA and Design

- Leininger Ranch: Design for habitat improvement at existing springs

#7. Leininger and C&R Ranches Habitat Improvement, CEQA and Design

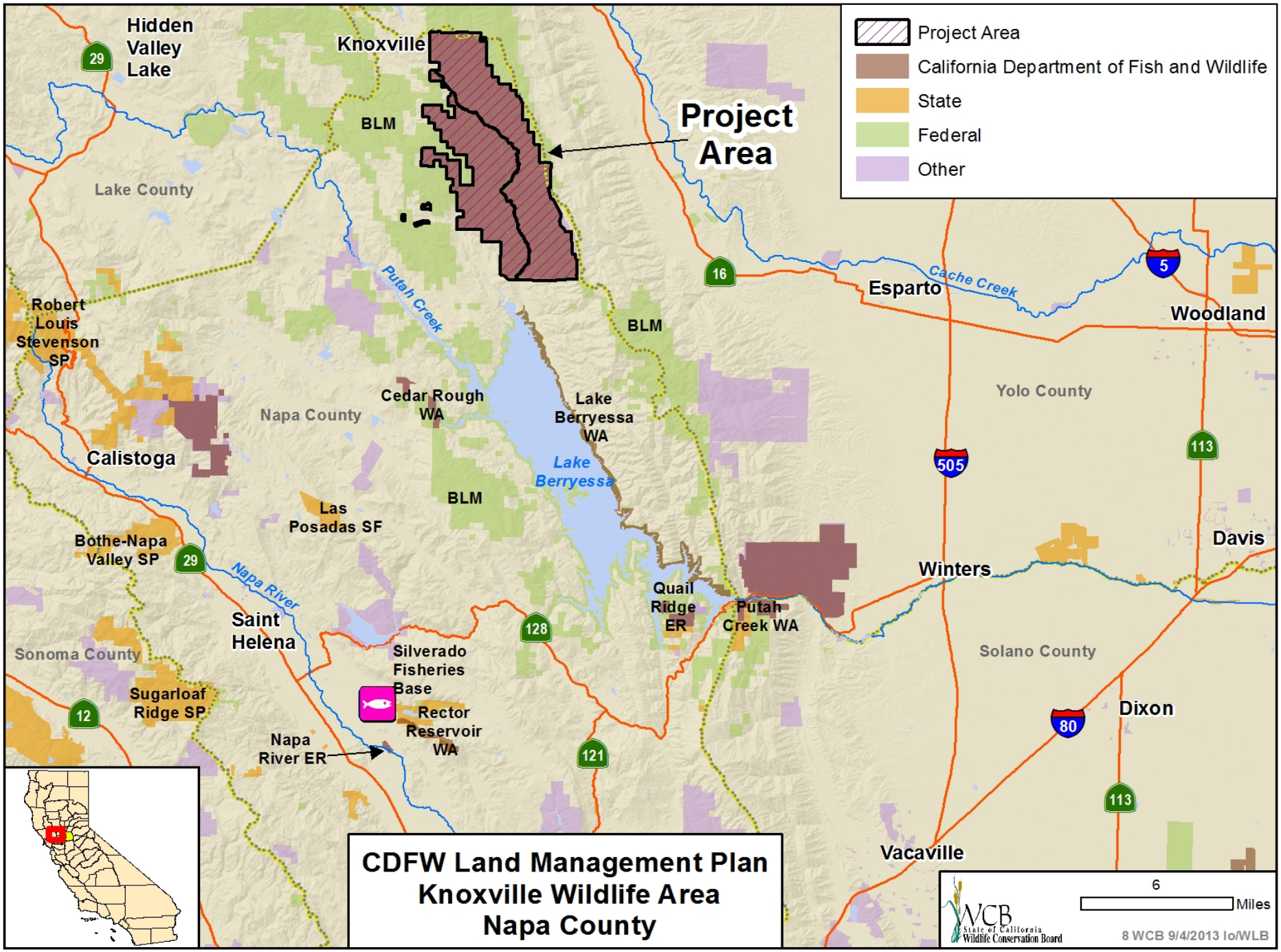
- C&R Ranch: Design and site assessment for several native plant hedgerow sites

#7. Leininger and C&R Ranches Habitat Improvement, CEQA and Design

- C&R Ranch: Recent plantings. Design for additional native grass plantings near stream banks

#7. Leininger and C&R Ranches Habitat Improvement, CEQA and Design

- C&R Ranch: Design and site assessment for pond area habitat improvement



CDFW Land Management Plan
Knoxville Wildlife Area
Napa County

#8. CDFW Land Management Plan Knoxville Wildlife Area

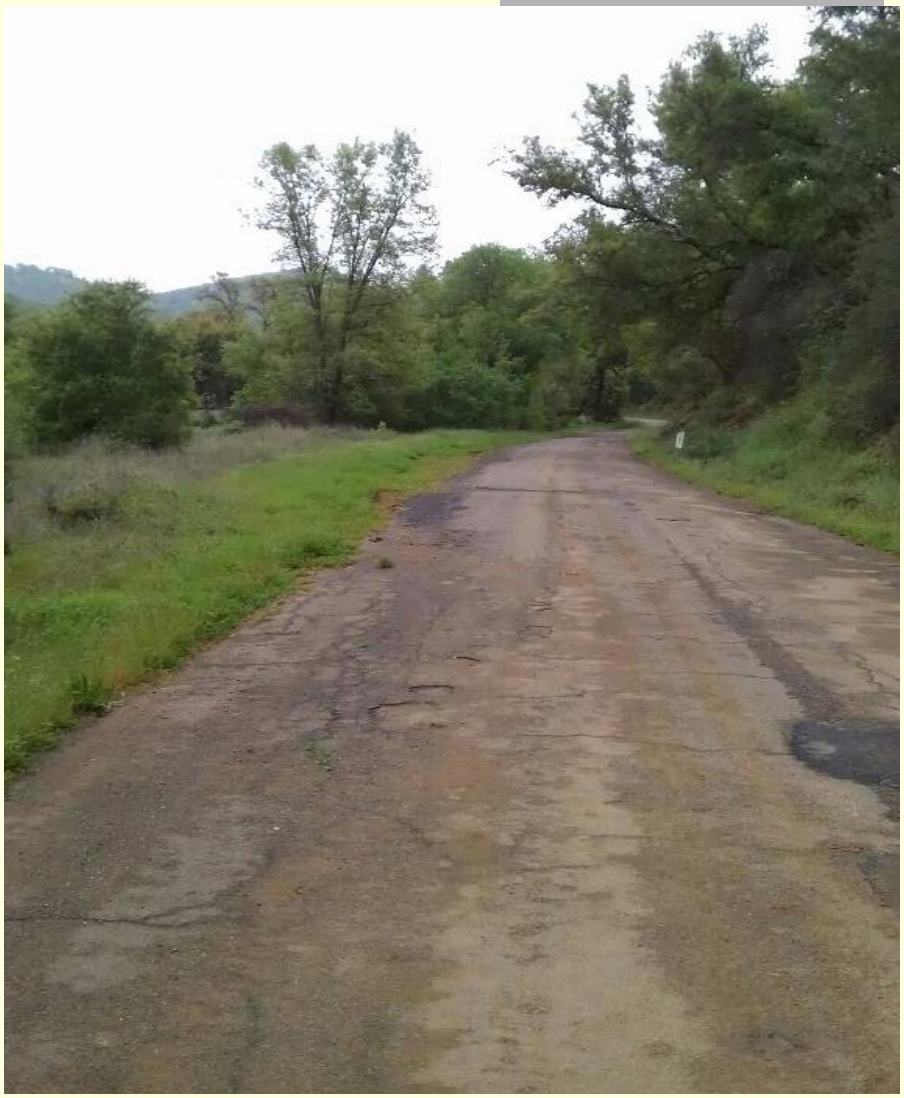
- Knoxville Wildlife Area

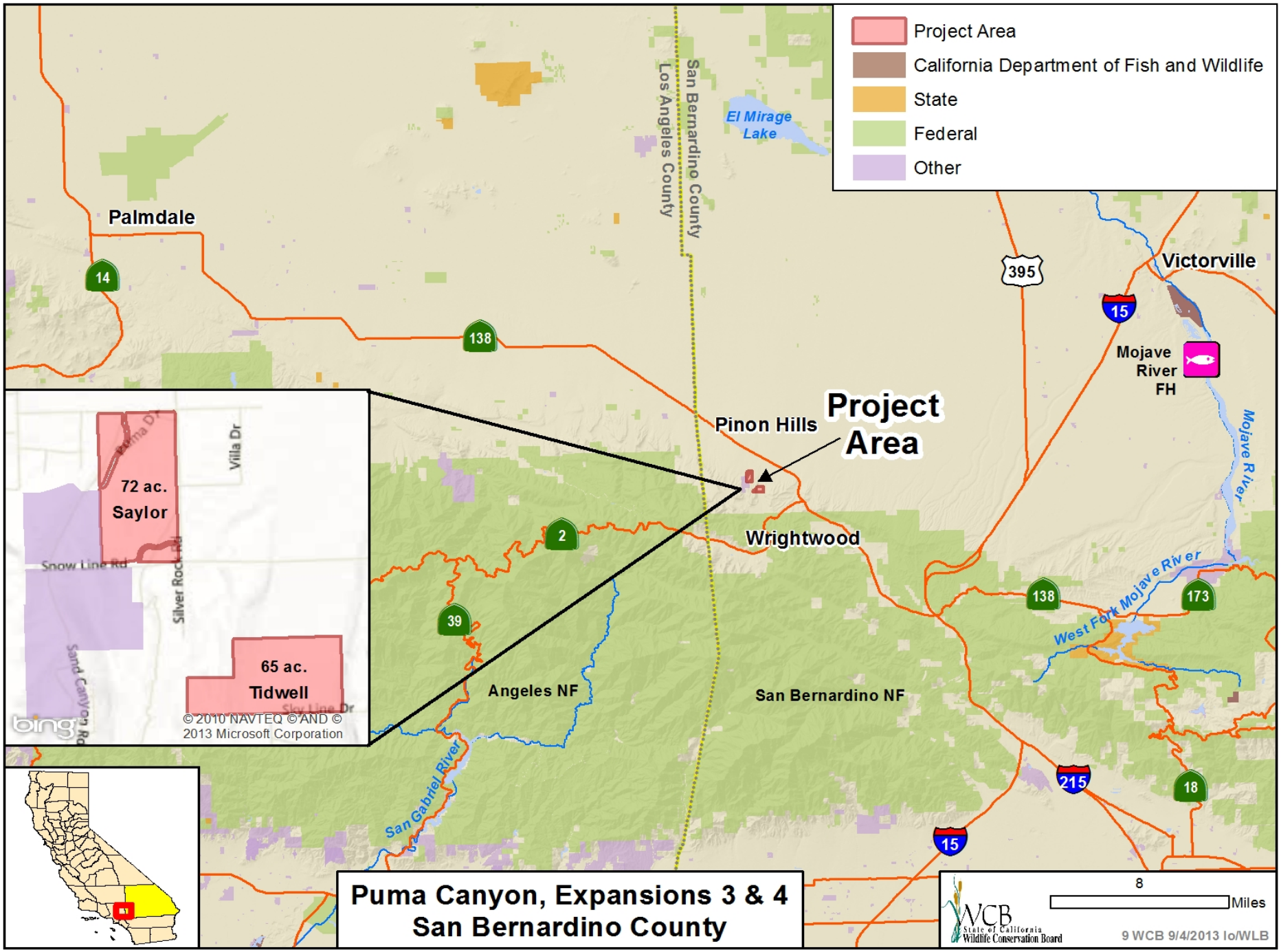
#8. CDFW Land Management Plan Knoxville Wildlife Area

- Knoxville Wildlife Area

#8. CDFW Land Management Plan Knoxville Wildlife Area

- Knoxville Road





Puma Canyon, Expansions 3 & 4
San Bernardino County

#9. Puma Canyon, Expansions 3 and 4

- Puma Canyon, Joshua Trees

#9. Puma Canyon, Expansions 3 and 4

- Puma Canyon, Manzanita, Cholla cactus, Joshua Tree and Pinyon Pine

#9. Puma Canyon, Expansions 3 and 4

- Puma Canyon, Leopard Lizard

#9. Puma Canyon, Expansions 3 and 4

- Puma Canyon, Short Joint Beavertail in bloom, special status species

#9. Puma Canyon, Expansions 3 and 4

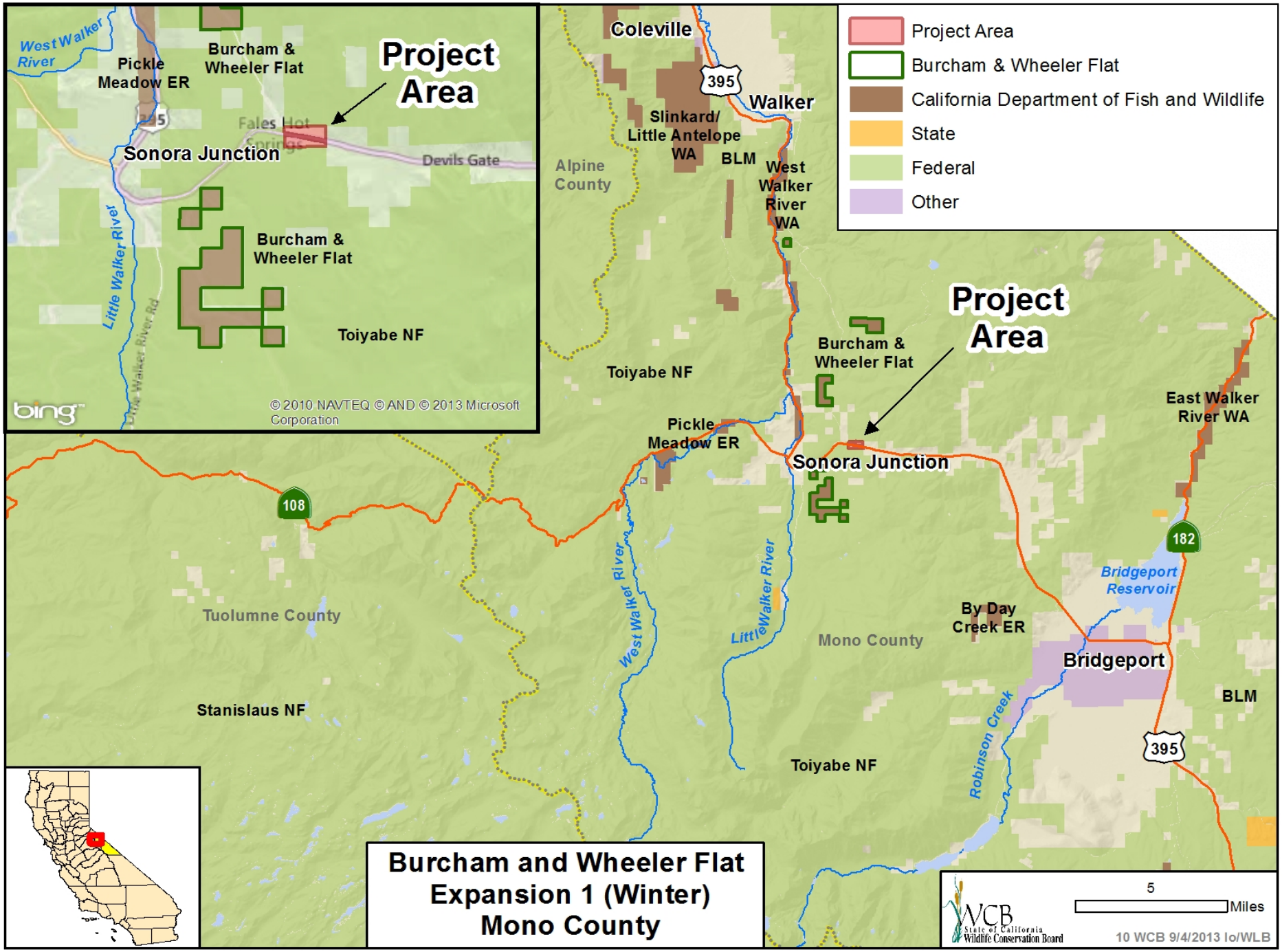
- Puma Canyon, Cholla cactus in bloom

#9. Puma Canyon, Expansions 3 and 4

- Puma Canyon, San Diego Horned Lizard, species of concern

#9. Puma Canyon, Expansions 3 and 4

- Yucca in bloom


Project Area
Burcham & Wheeler Flat
California Department of Fish and Wildlife
State
Federal
Other
West Walker River
Pickle Meadow ER
Burcham & Wheeler Flat
Project Area
Sonora Junction
Fales Hot Springs
Devils Gate
Little Walker River
Burcham & Wheeler Flat
Toiyabe NF
© 2010 NAVTEQ © AND © 2013 Microsoft Corporation
bing
Coleville
395
Walker
Slinkard/ Little Antelope WA
BLM
West Walker River WA
Alpine County
Toiyabe NF
Burcham & Wheeler Flat
Project Area
East Walker River WA
Pickle Meadow ER
Sonora Junction
108
182
Bridgeport Reservoir
Tuolumne County
West Walker River
Little Walker River
By Day Creek ER
Mono County
Bridgeport
BLM
Stanislaus NF
Robinson Creek
395
Toiyabe NF
Burcham and Wheeler Flat
Expansion 1 (Winter)
Mono County
WCB
State of California
Wildlife Conservation Board
5
Miles
10 WCB 9/4/2013 Io/WLB

#10. Burcham and Wheeler Flat, Expansion 1 (Winter)

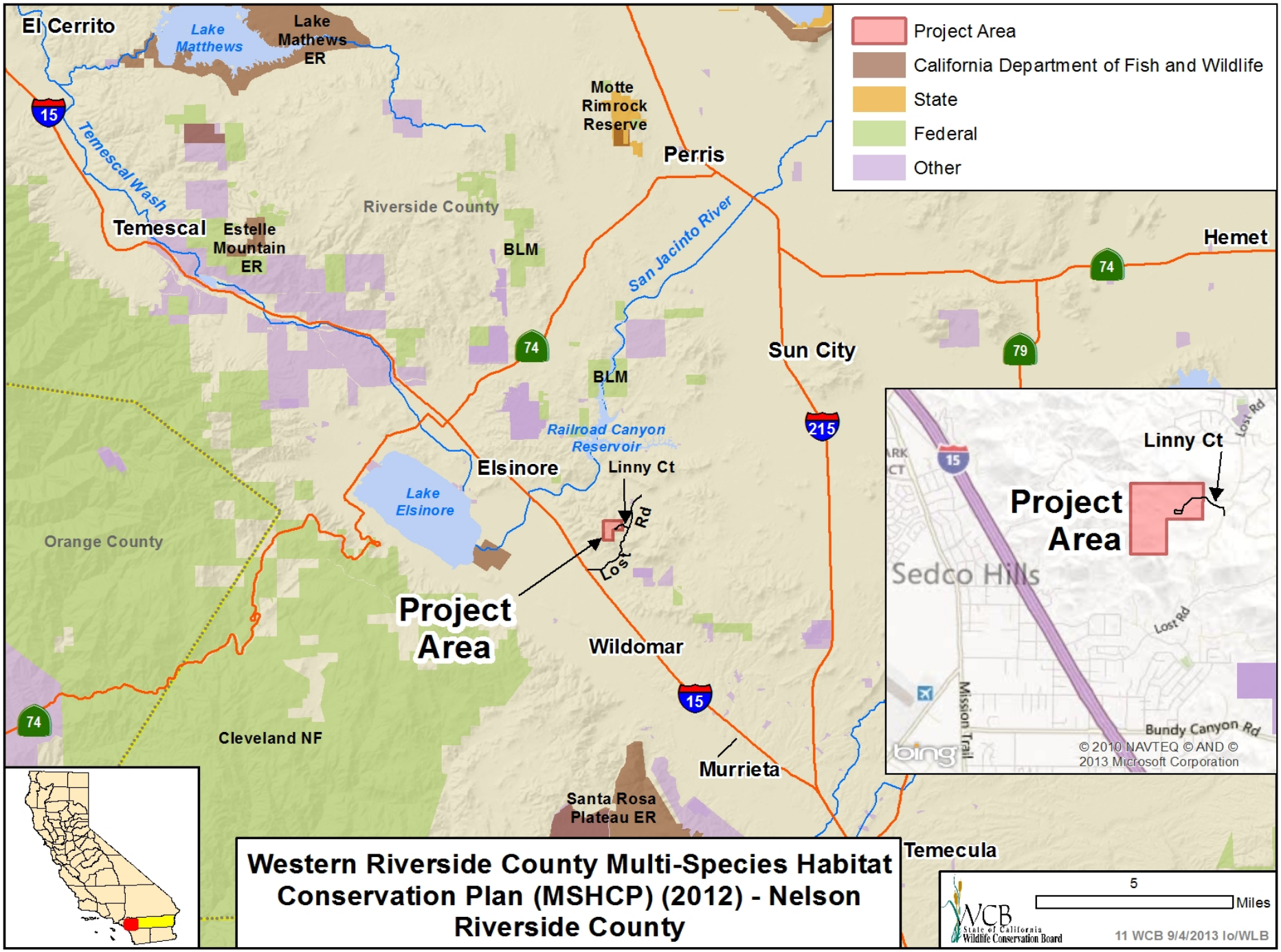
- Burcham and Wheeler Flat Winter Property

#10. Burcham and Wheeler Flat, Expansion 1 (Winter)

- Sage Grouse Lek

#10. Burcham and Wheeler Flat, Expansion 1 (Winter)

- Sage Grouse



Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) (2012) - Nelson Riverside County

#11. Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) (2012) - Nelson

- The Nelson property is characterized by rolling to steep terrain with elevated hillsides split by a narrow valley that extends from the northeast corner to the center of the property.

#11. Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) (2012) - Nelson

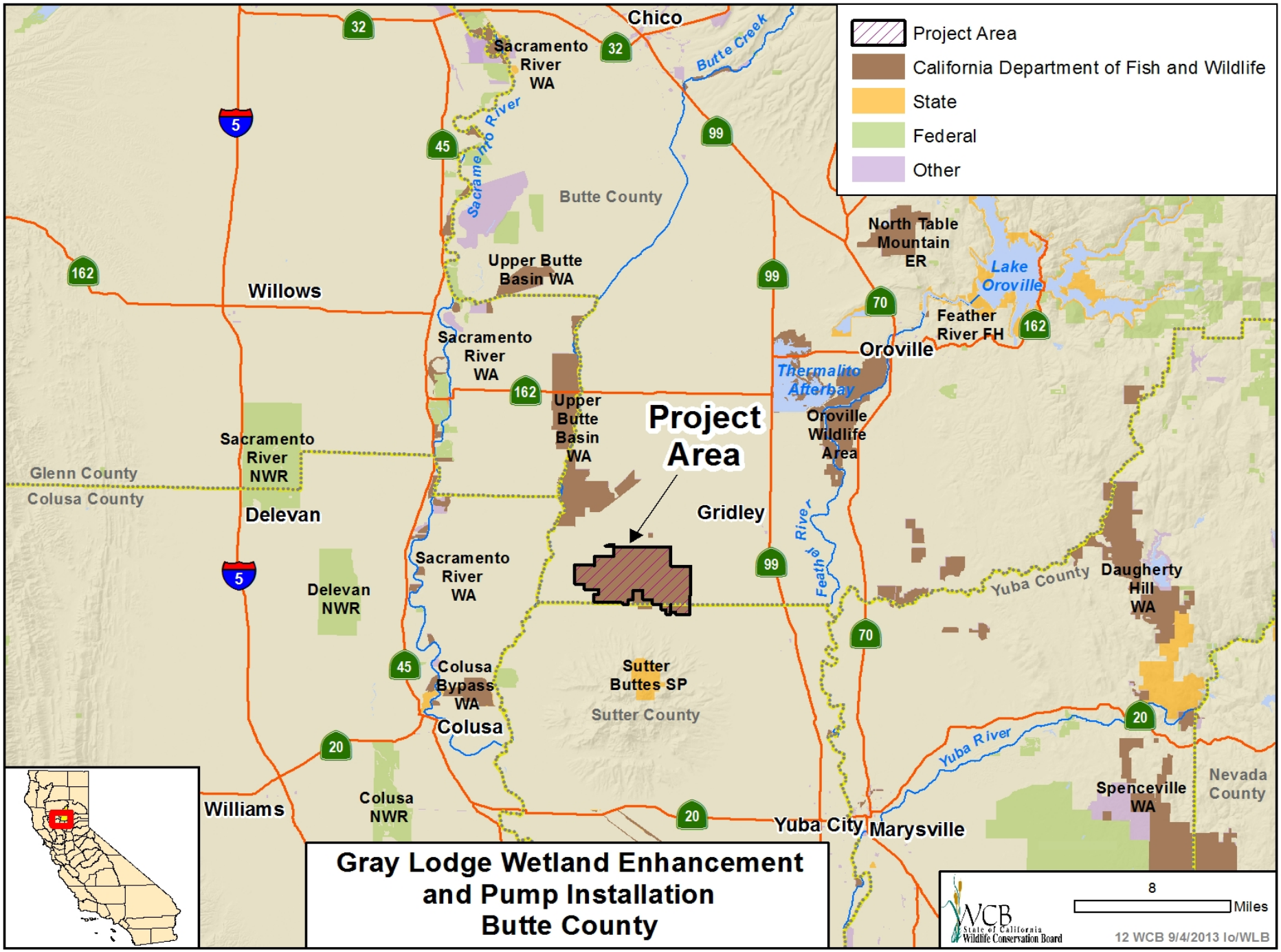
- Vegetation on the property is moderate to heavy over most of the site with numerous boulders and rock outcroppings

#11. Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) (2012) - Nelson

- The only visible improvements on the site are dirt roads and an old abandoned water well

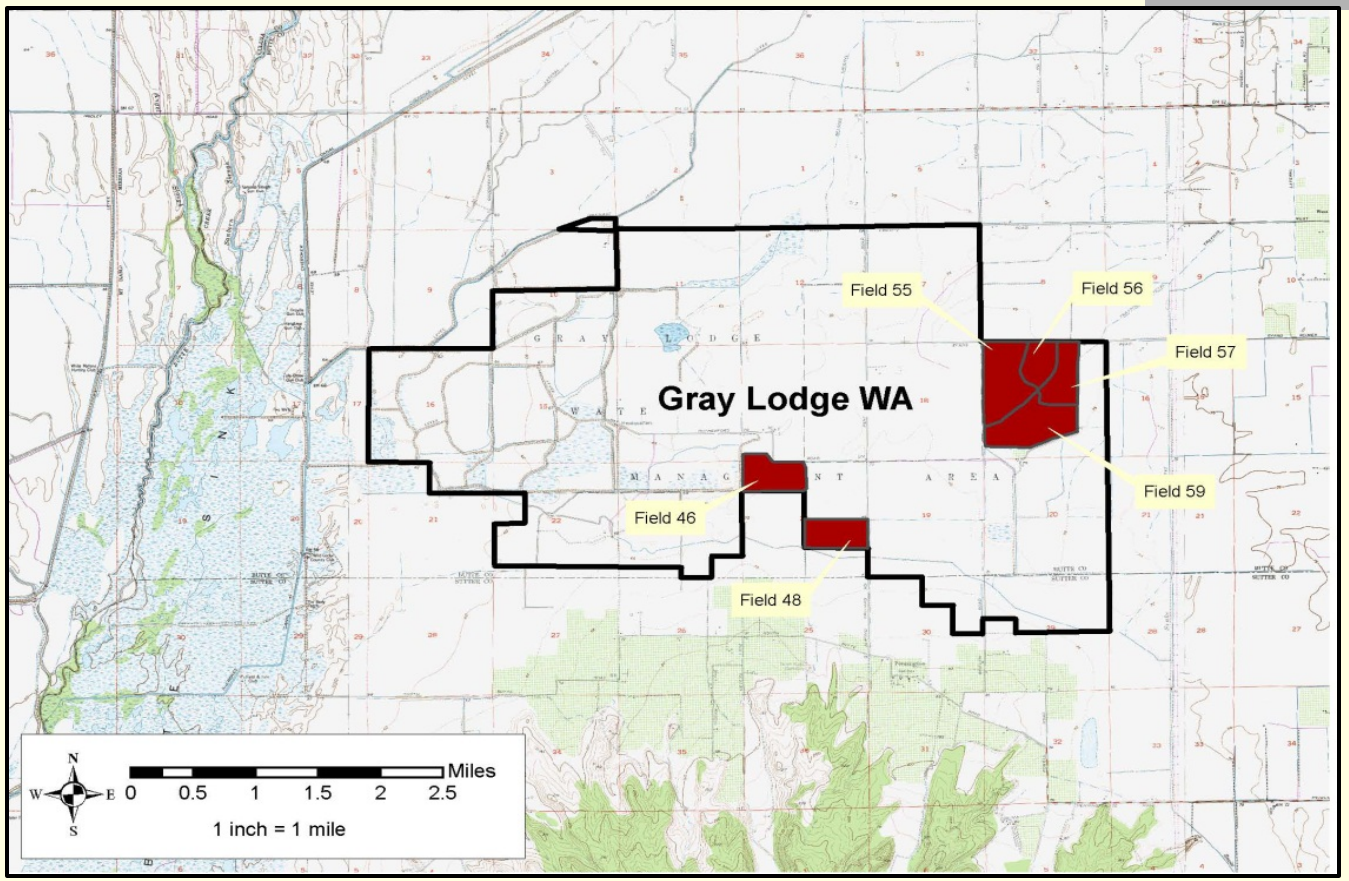
#11. Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) (2012) - Nelson

- The Nelson property is situated in an area known as the Western Core/Linkage. This linkage is necessary for maintaining ecological processes in a rapidly urbanizing landscape. View of the city of Wildomar as seen from the property, which lies in close proximity to freeways, major surface streets and suburban development.



Gray Lodge Wetland Enhancement and Pump Installation Butte County

#12. Gray Lodge Wetland Enhancement and Pump Restoration



- Project will enhance the wetland fields highlighted above

#12. Gray Lodge Wetland Enhancement and Pump Restoration

- Selected areas will be recontoured to improve water distribution and water use efficiency as well as provide proper drainage capabilities to prevent mosquito production.

#12. Gray Lodge Wetland Enhancement and Pump Restoration

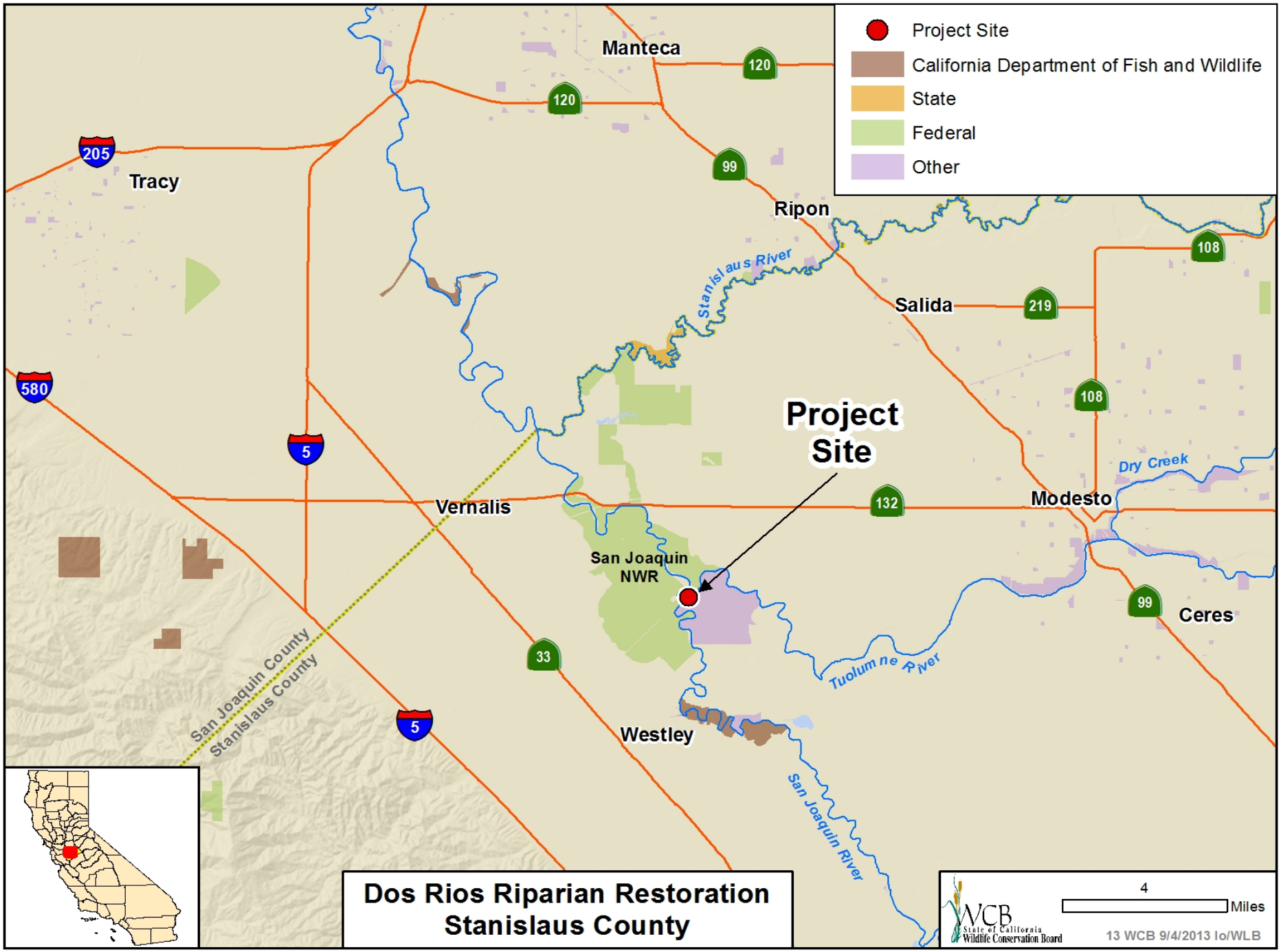
- Selected areas will be recontoured to improve water distribution and water use efficiency as well as provide proper drainage capabilities to prevent mosquito production.

#12. Gray Lodge Wetland Enhancement and Pump Restoration

- This remnant levee will be removed to improve water distribution and wetland management capabilities.

#12. Gray Lodge Wetland Enhancement and Pump Restoration

- A well was drilled as part of a previous project and this project will install the pump, motor, and electrical service to make it functional.



Dos Rios Riparian Restoration
Stanislaus County

#13. Dos Rios Riparian Restoration

- San Joaquin River at western property boundary, with USFWS San Joaquin NWR across river.

#13. Dos Rios Riparian Restoration

- Tuolumne River just upstream from confluence with the San Joaquin River forms the northern boundary of Dos Rios Ranch.

#13. Dos Rios Riparian Restoration

- Federal Levee surrounding the project site at Dos Rios Ranch.

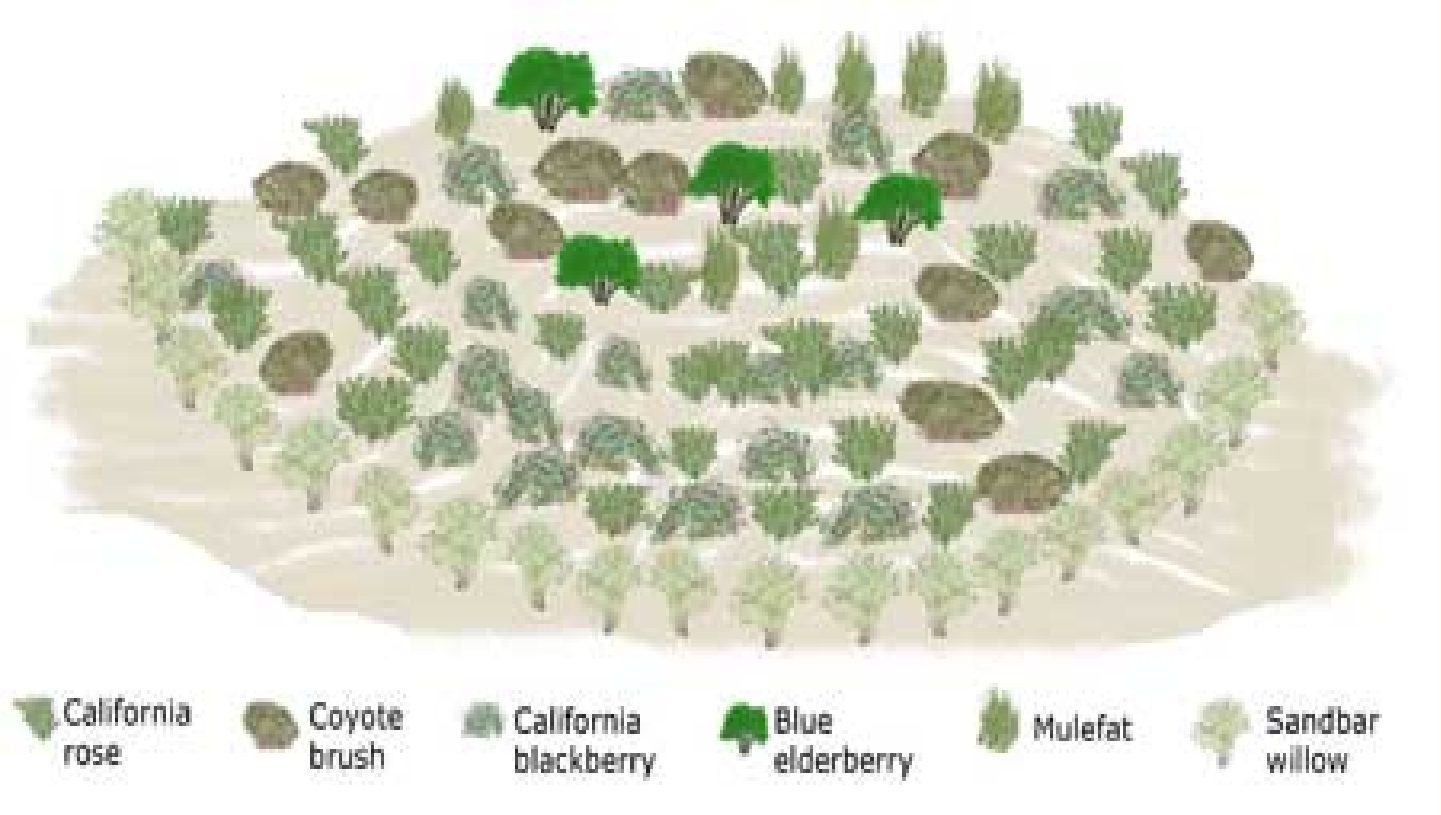
#13. Dos Rios Riparian Restoration

- Dos Rios Riparian Restoration project site with surrounding remnant riparian habitat.

#13. Dos Rios Riparian Restoration

- Current initial restoration efforts at Dos Rios.

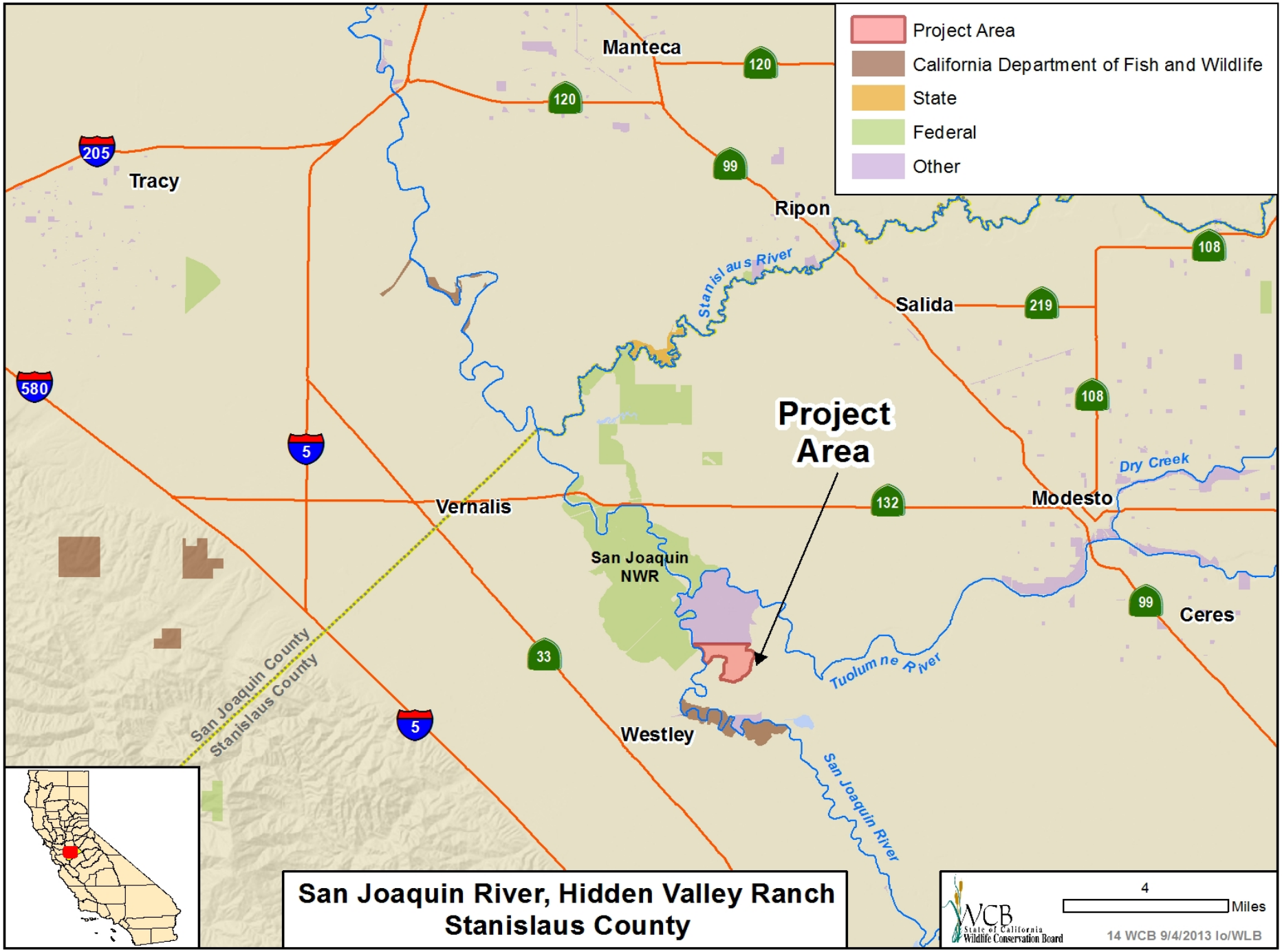
#13. Dos Rios Riparian Restoration



- Riparian Brush Rabbit refugia, nesting and forage habitat will be created.

#13. Dos Rios Riparian Restoration

- State and Federally listed Riparian Brush Rabbit.



San Joaquin River, Hidden Valley Ranch
Stanislaus County

#14. San Joaquin River, Hidden Valley Ranch

- Looking south from the confluence of the Tuolumne and San Joaquin Rivers, the San Joaquin River meanders between the San Joaquin River National Wildlife Refuge (right) and Hidden Valley and Dos Rios Ranch (left).

#14. San Joaquin River, Hidden Valley Ranch

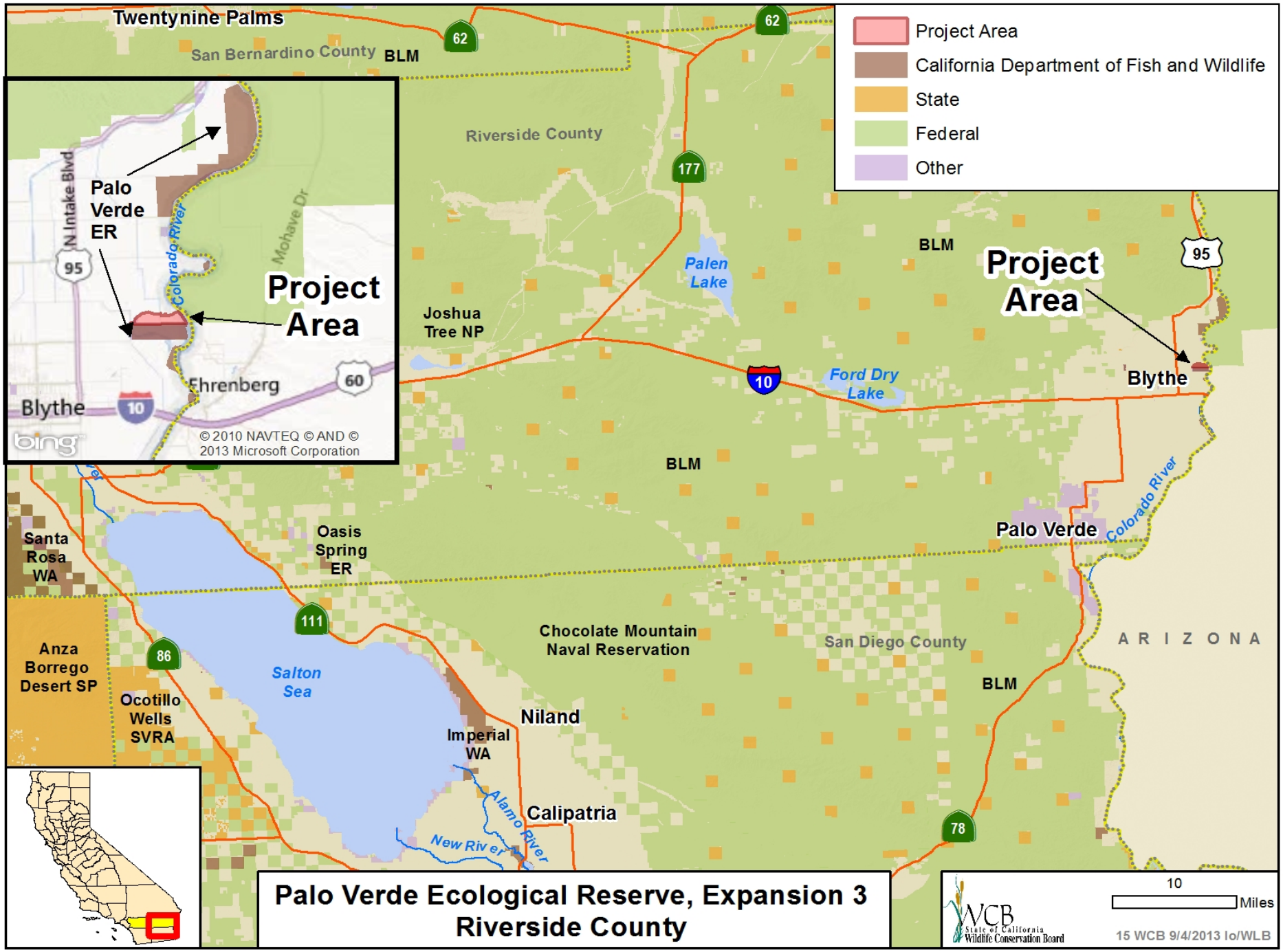
- Flood events in this area damage farm fields by depositing sediment and eroding infrastructure. This photo shows the property in the foreground and Dos Rios Ranch and the San Joaquin River National Wildlife Refuge in the background.

#14. San Joaquin River, Hidden Valley Ranch

- The fields of this property are laser-leveled and farmed with annual crops including feed corn and winter wheat. Friendly farming methods will be used to benefit wildlife including the Sawinson's hawk, wintering waterfowl and sandhill cranes.

#14. San Joaquin River, Hidden Valley Ranch

- The banks of the San Joaquin River at this property have been stabilized over the years with waste concrete.



Palo Verde Ecological Reserve, Expansion 3
Riverside County

#15. Palo Verde Ecological Reserve, Expansion 3

- Interior view of property

#15. Palo Verde Ecological Reserve, Expansion 3

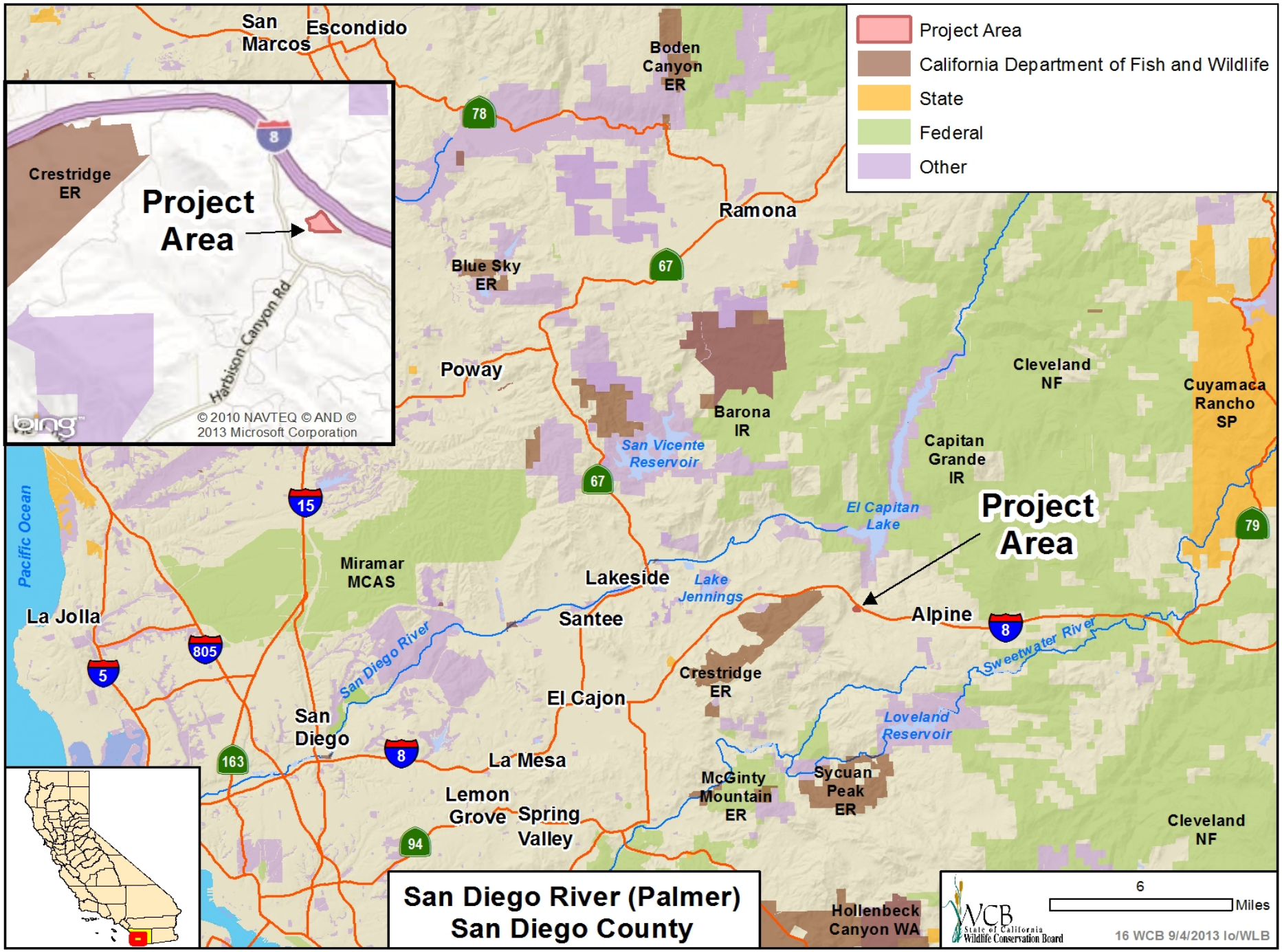
- Vegetation found in wildlife corridor

#15. Palo Verde Ecological Reserve, Expansion 3

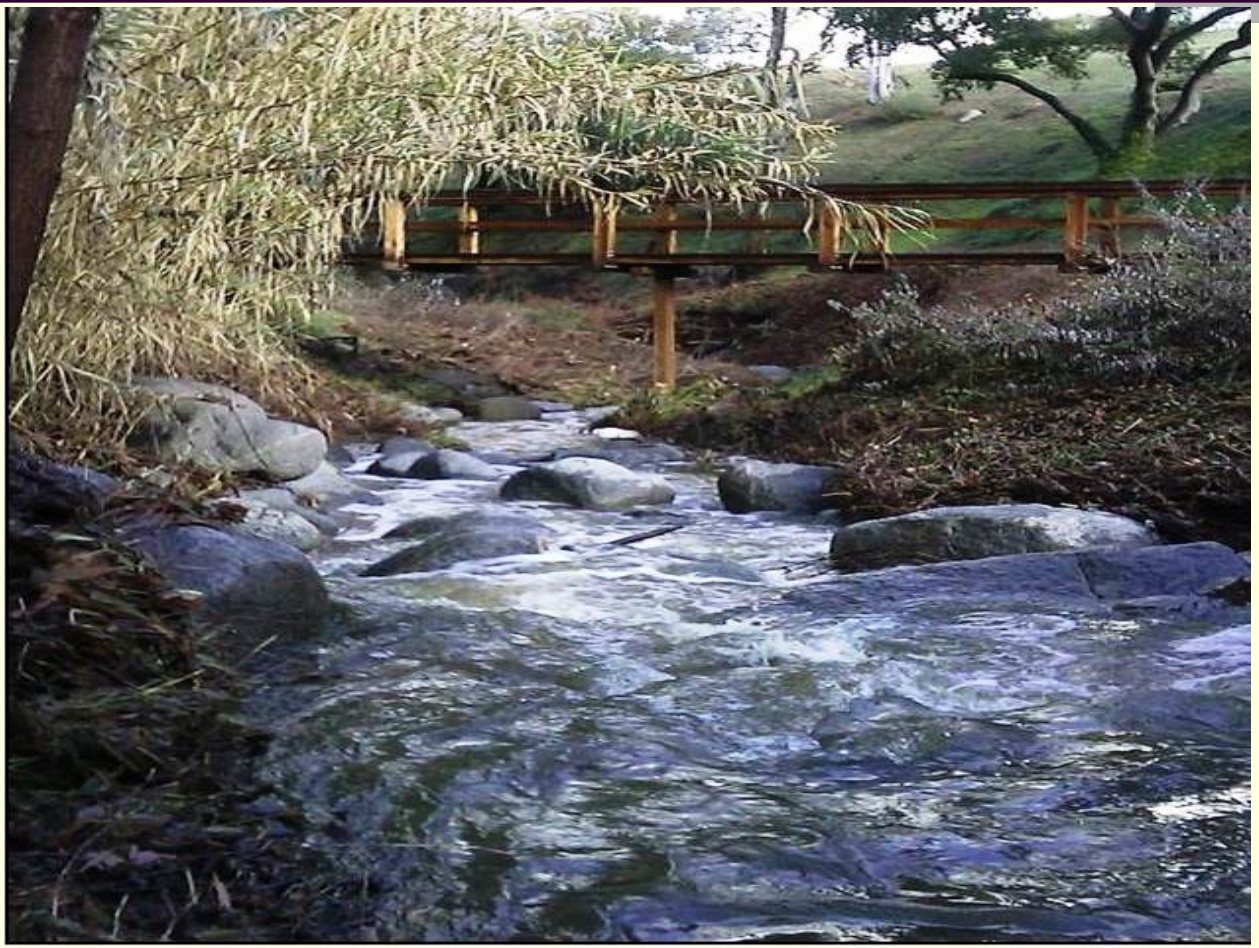
- Elf Owl

#15. Palo Verde Ecological Reserve, Expansion 3

- Bonytail chub

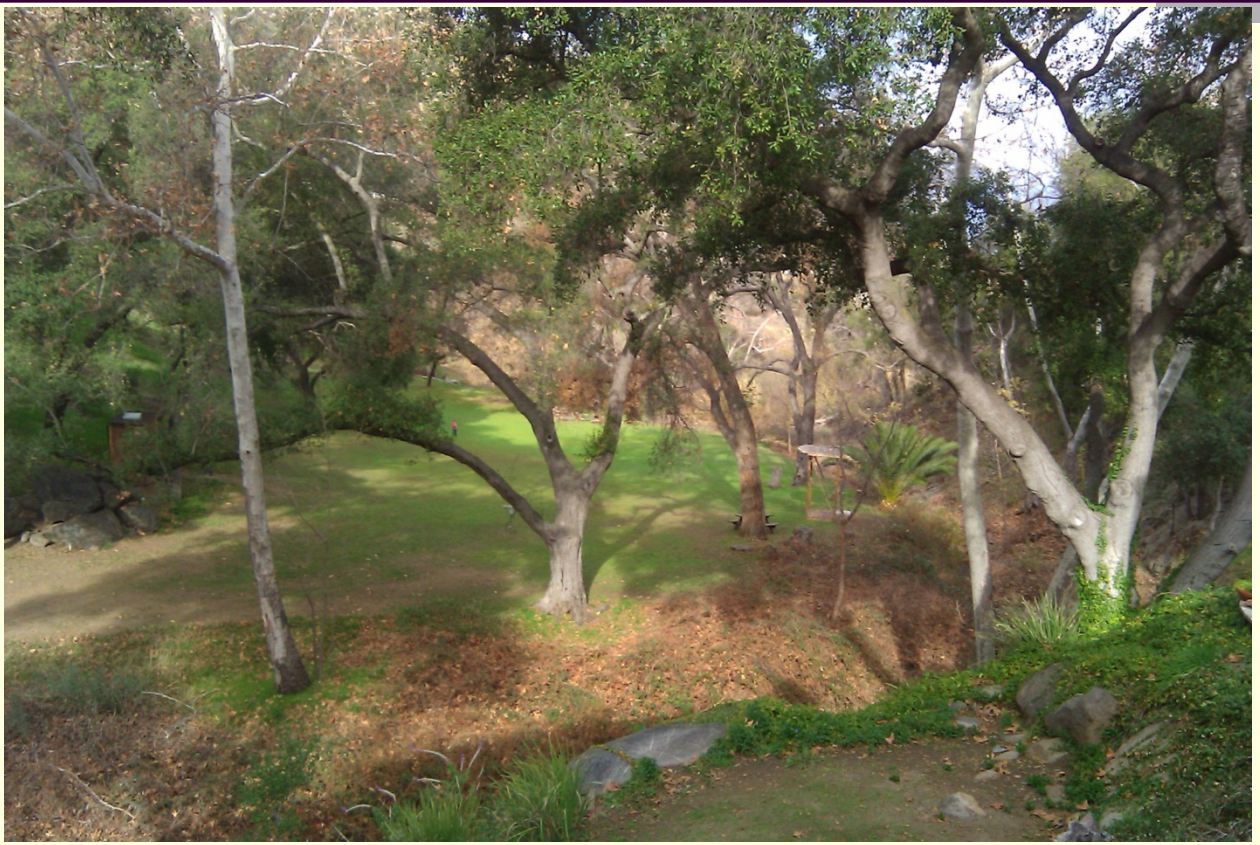

Project Area
California Department of Fish and Wildlife
State
Federal
Other
San Marcos
Escondido
Boden Canyon ER
Ramona
Blue Sky ER
Poway
Barona IR
San Vicente Reservoir
Cleveland NF
Cuyamaca Rancho SP
Capitan Grande IR
El Capitan Lake
Project Area
Pacific Ocean
Miramar MCAS
Lakeside
Lake Jennings
Santee
Alpine
La Jolla
San Diego River
Sweetwater River
Crestridge ER
El Cajon
Loveland Reservoir
San Diego
La Mesa
McGinty Mountain ER
Sycuan Peak ER
Lemon Grove
Spring Valley
Cleveland NF
Hollenbeck Canyon WA
Crestridge ER
Project Area
Harbison Canyon Rd
© 2010 NAVTEQ © AND © 2013 Microsoft Corporation
San Diego River (Palmer)
San Diego County
6
Miles
WCB State of California Wildlife Conservation Board
16 WCB 9/4/2013 lo/WLB

#16. San Diego River (Palmer)



- Creek on property

#16. San Diego River (Palmer)



- Stand of trees near creek

#16. San Diego River (Palmer)

- Undercrossing of interstate 8 as seen from the property

#16. San Diego River (Palmer)

- Rear view of house on property

Endangered Habitats League

1991

NCCP Policy, Land Use, Funding

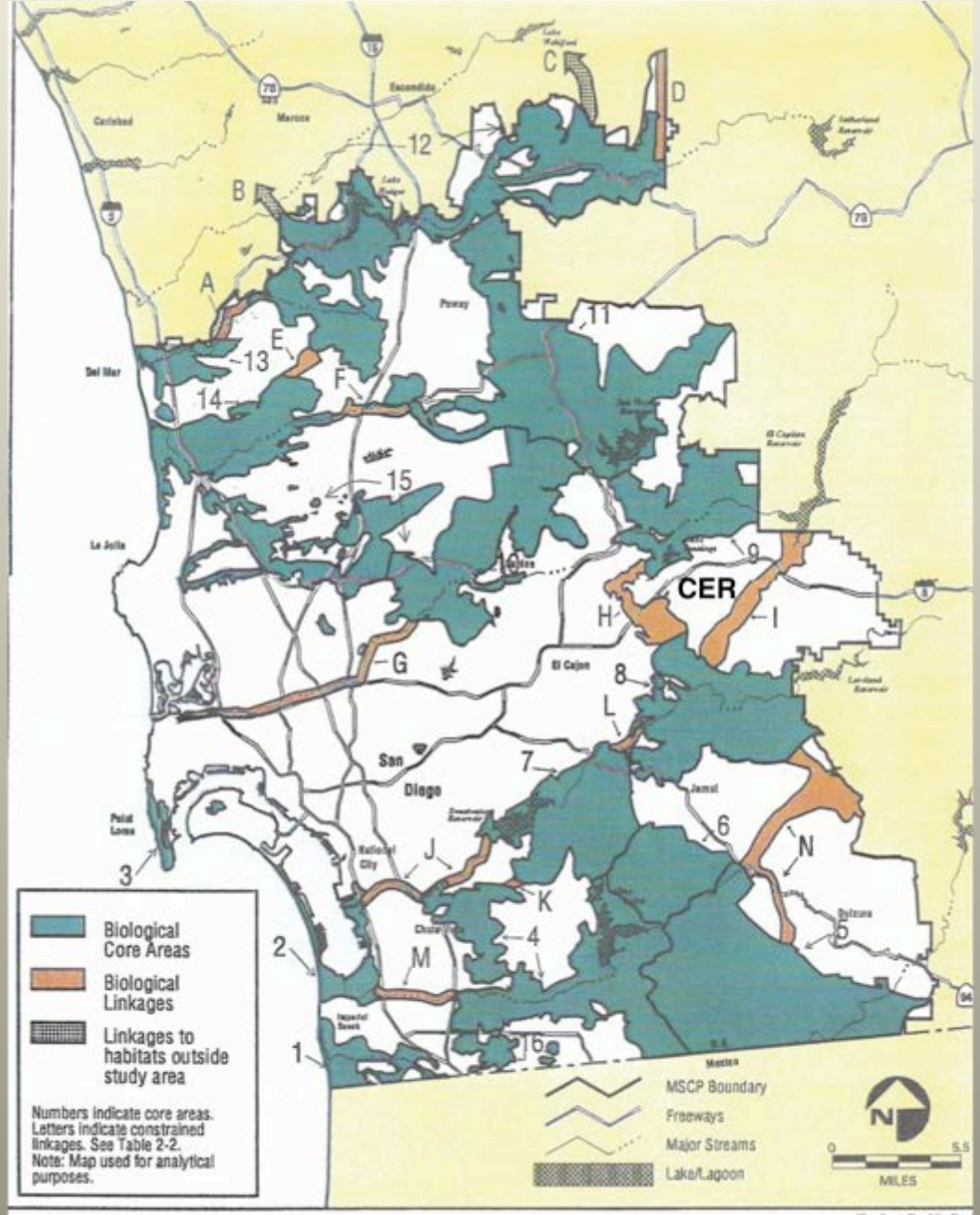
Endangered Habitats Conservancy

2005

Acquisition, Management, Monitoring

EHL

EHC



OGDEN

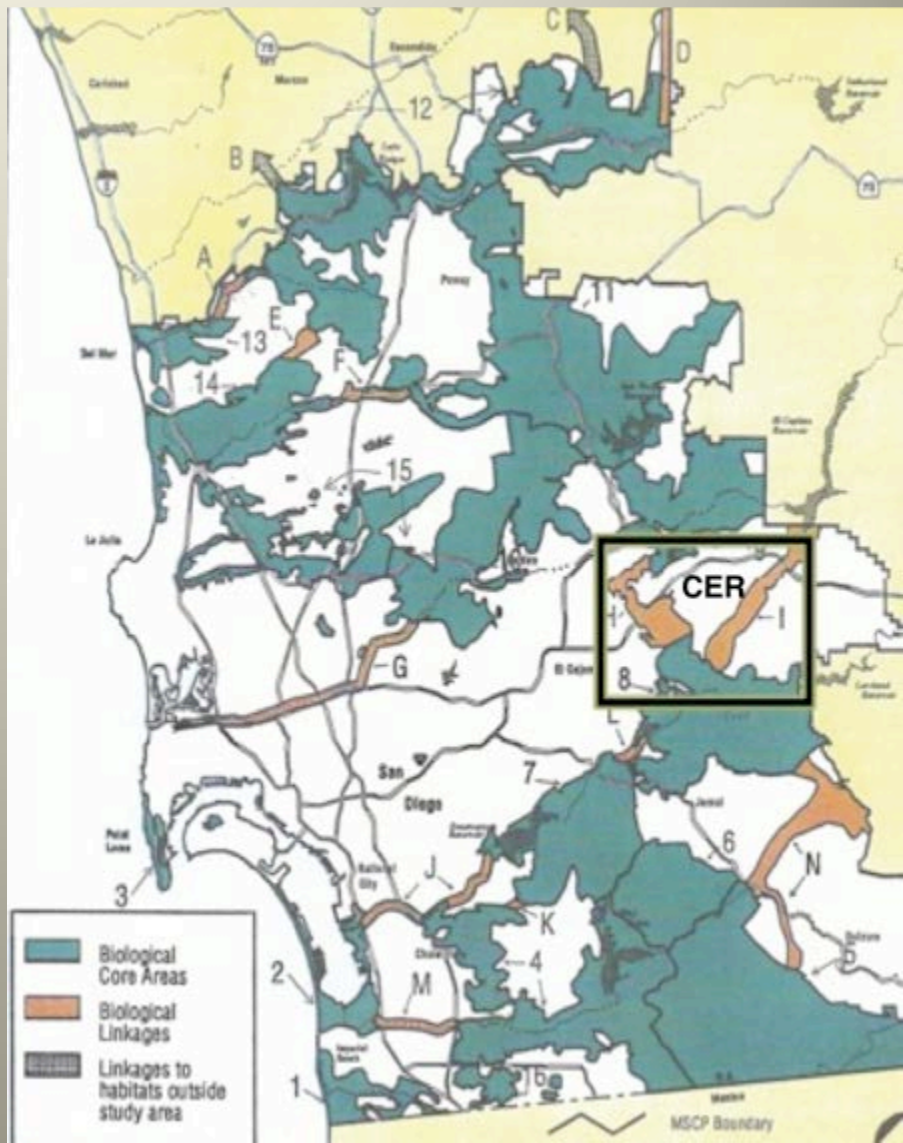
Generalized Core Biological Resource Areas and Linkages

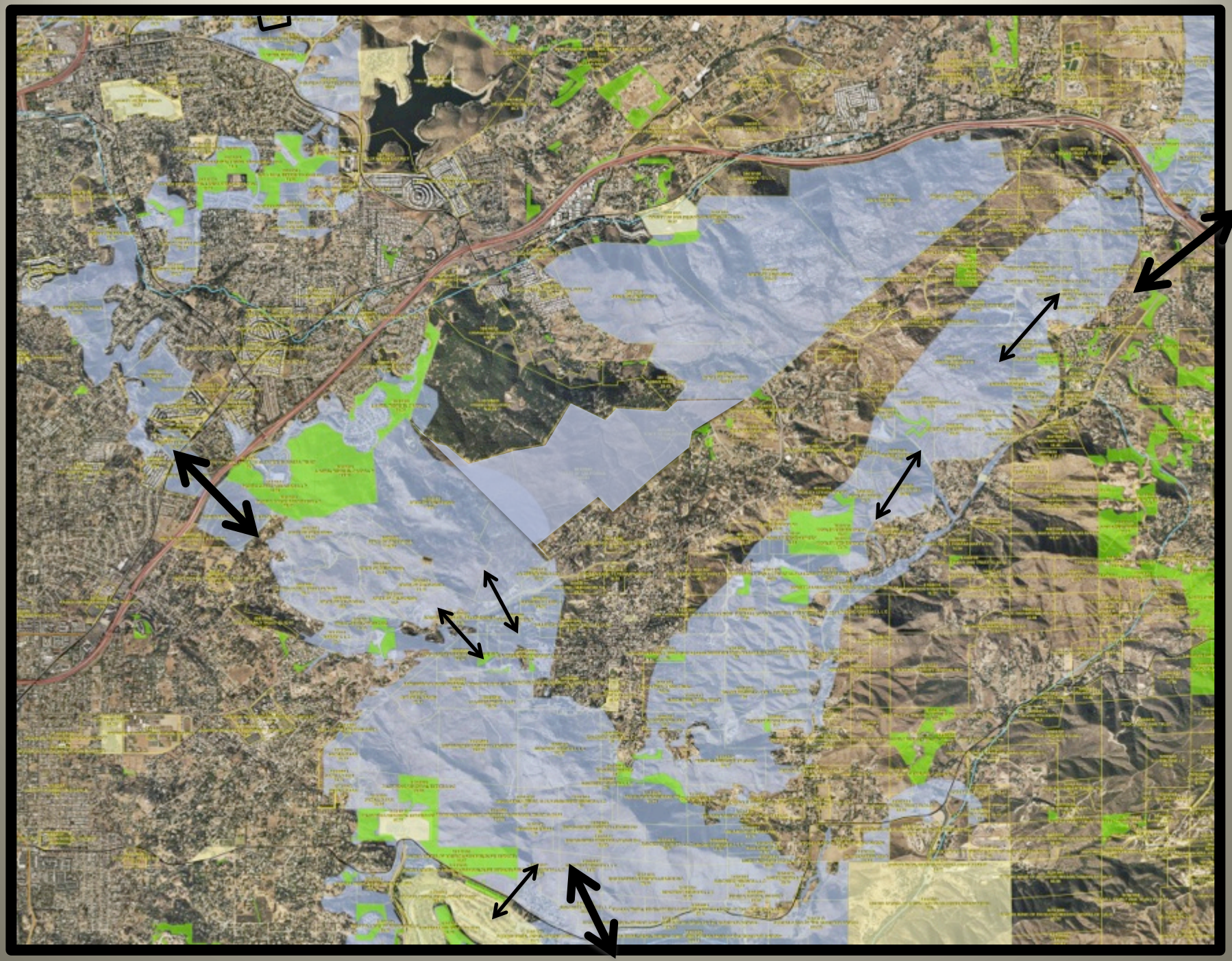
FIGUR

2-2

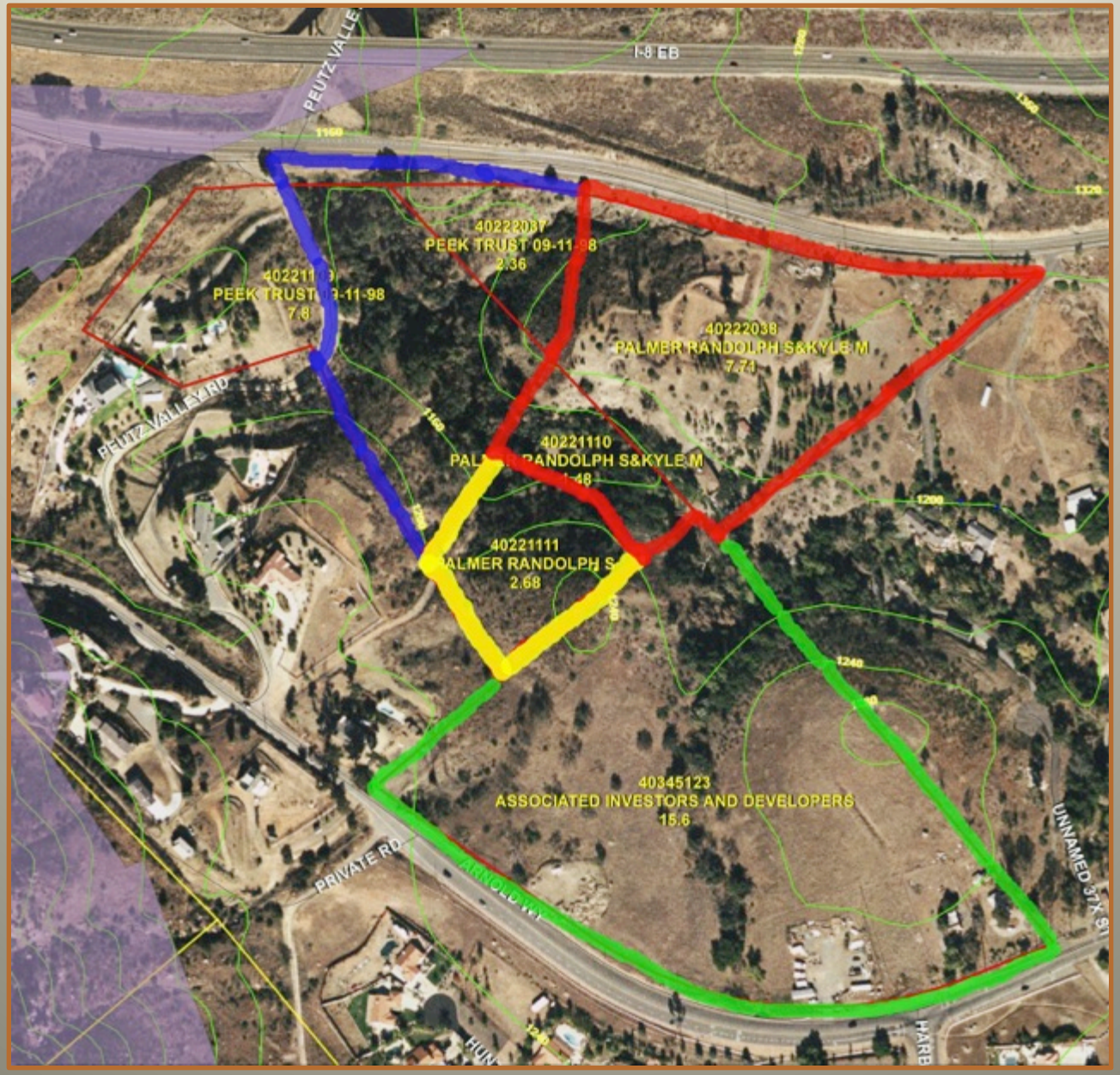
Crestridge Ecological Reserve Complex

- Key connection between MSCP north and south
- 13 mscp covered species
- Core area for Lakeside ceanothus, Hermes copper butterfly, Engelmann oak woodlands
- Movement corridor for birds, mammals, insects, and plant dispersal
- Genetic link for Quino checkerspot butterfly, Hermes copper butterfly, San Diego thornmint





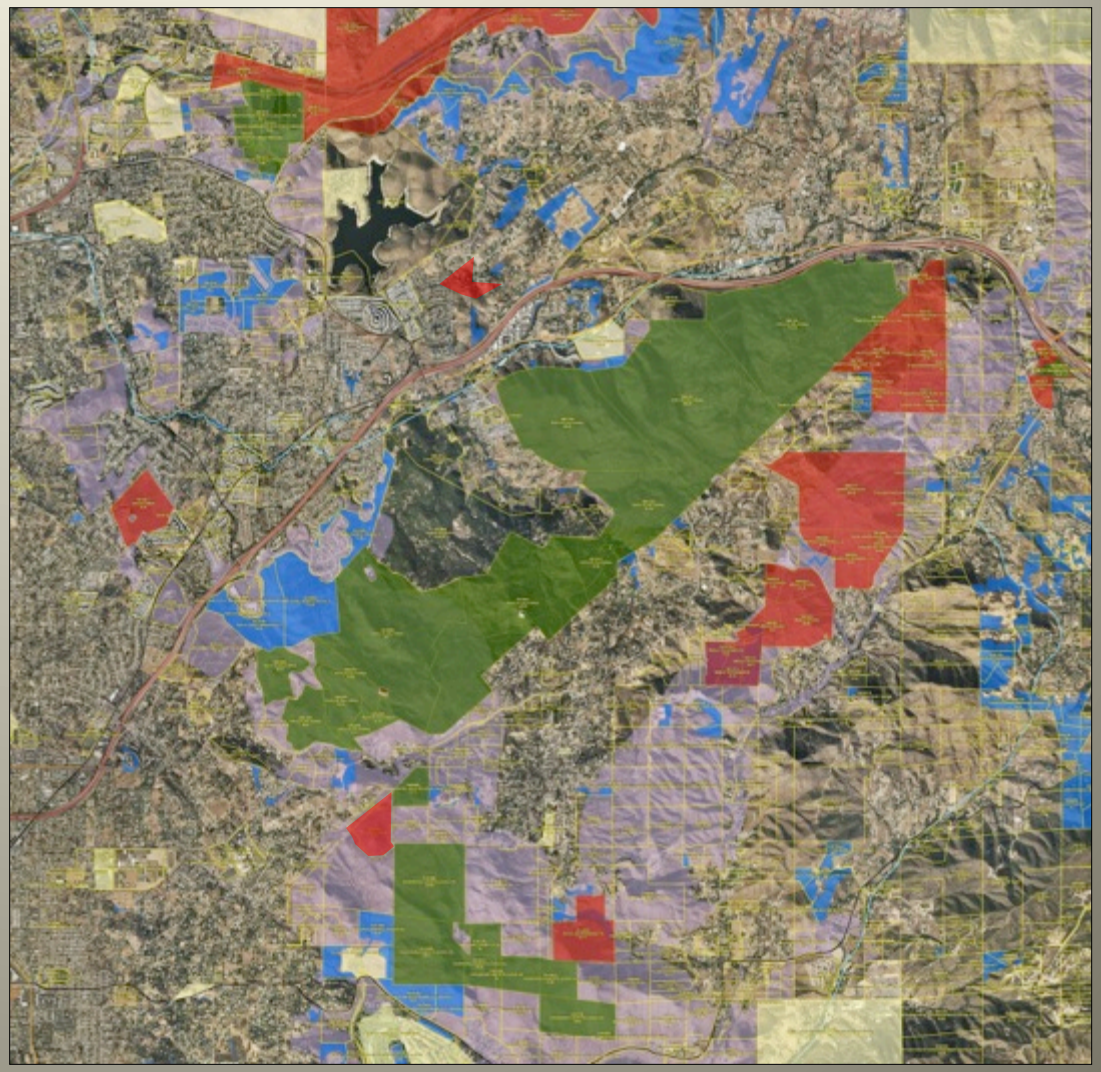
Palmer Wildlife Linkage Complex



Crestridge Ecological Reserve Complex

80% ASSEMBLY COMPLETED:

- 1999 @ 2,400 acres
- 2006-2013 @ 4,000 acres (9 acquisitions)
- 2013 @ 350 acres (3 acquisitions)
- 20XX @ 5,000 acres



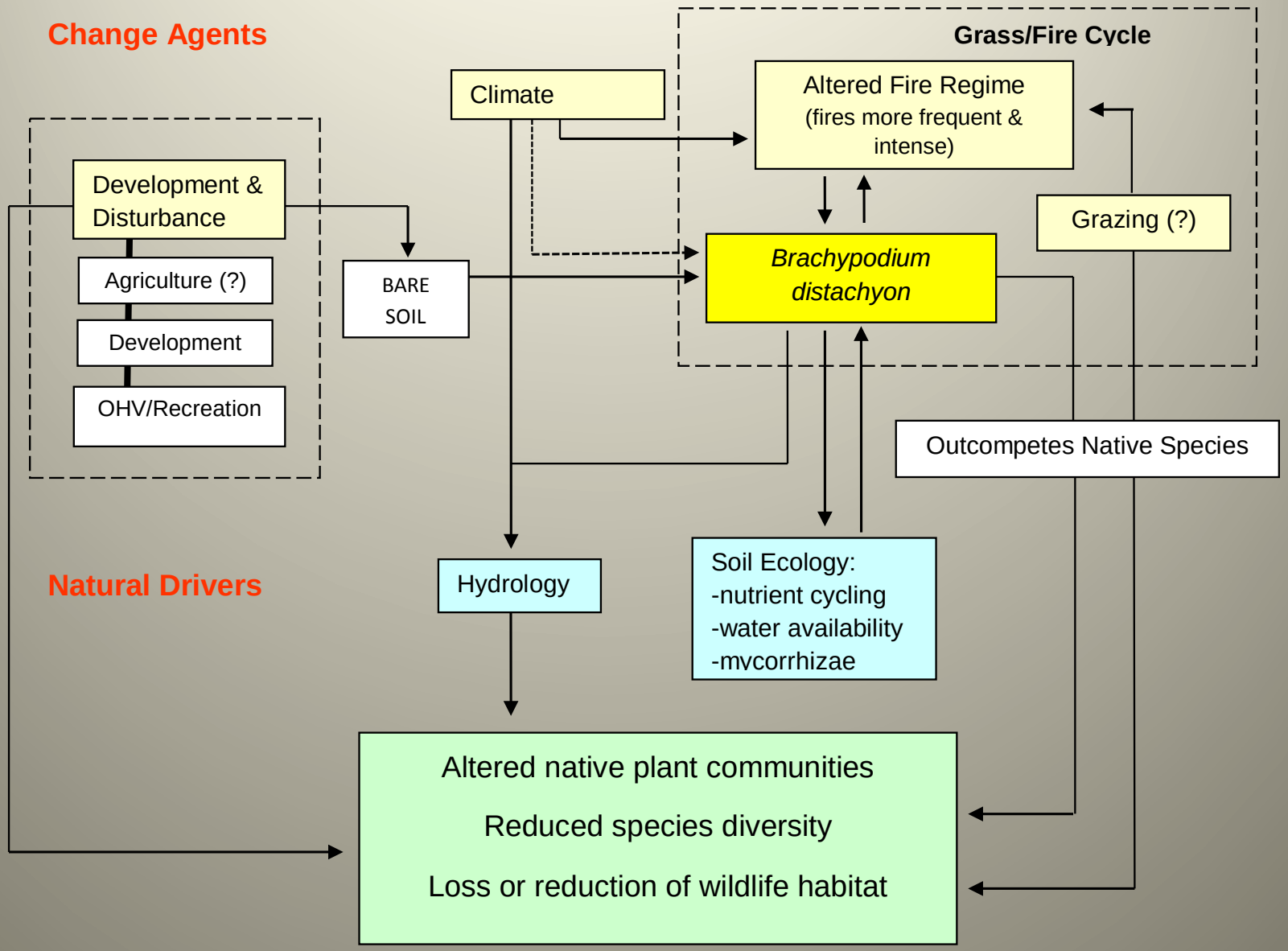
CBI—Science Partner

- **Covered species monitoring and adaptive management**
- **Science-based protocols and templates for management**
- **Data collaboration (local, regional, state)**

Science-based Monitoring

- Surveys and monitoring
- Oak tree inventories
- Invasives control
- Habitat restoration
- Pollinator studies
- Wildlife movement/corridors studies

Conceptual Models



Invasives Management Program

- **Regional Invasive Species Framework**
  - Risk assessment
  - Treatment strategy

- **Preserve-level Prioritization**
  - Impact, extent, threats to conservation targets
  - Targeted invasives control
  - Model for preserve-level implementation of regional invasive species strategy

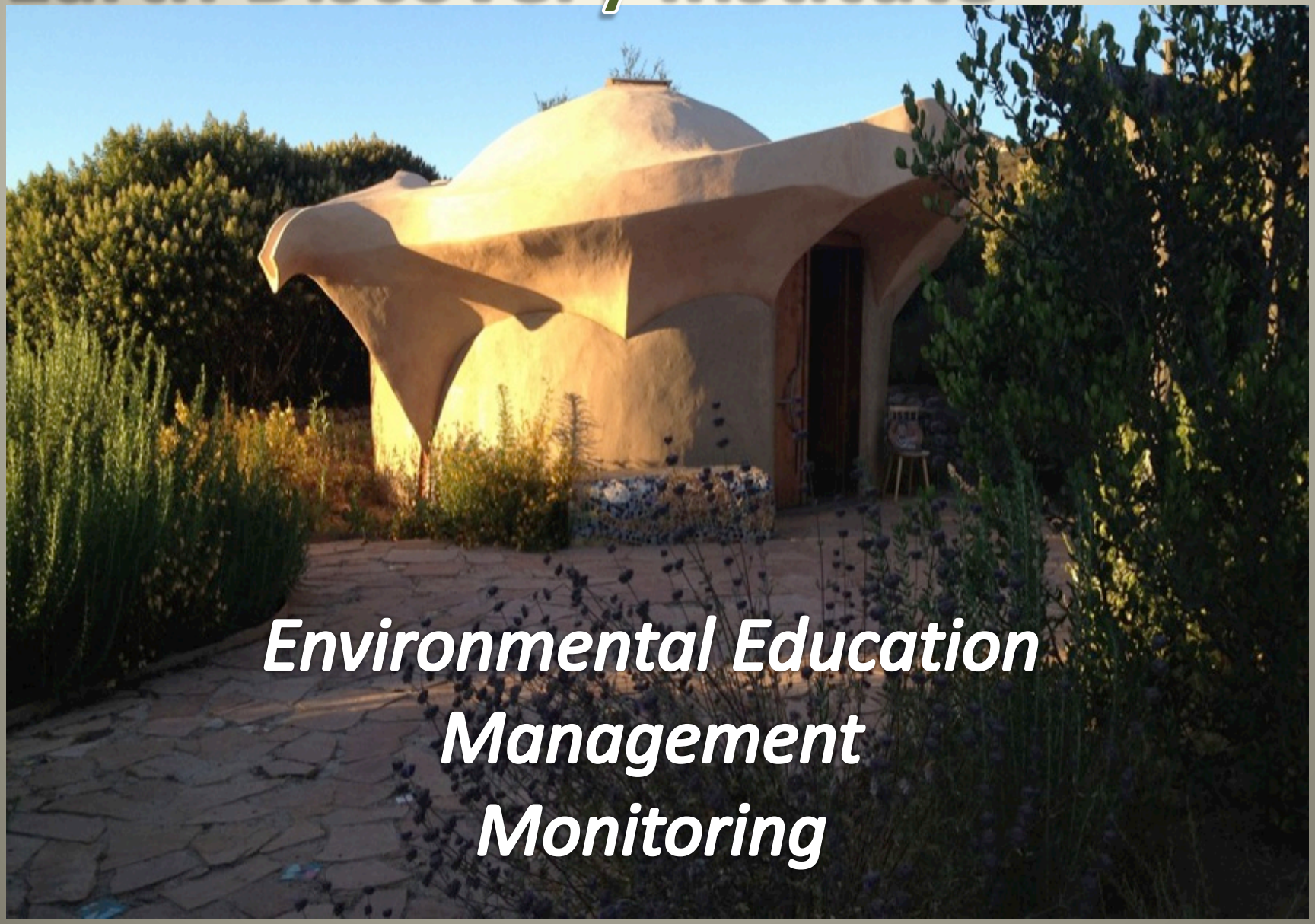
Regional Implications

- Informs regional management/monitoring strategy
  - Protocols (monitoring, seed collection)
  - Species status (post-burn data)
- Establishes seed bank
  - Proactive conservation measure
  - Model for management unit/regional seed bank

Regional Implications cont.

- Preserve- management unit, and regional level issue
- Regional management plan
  - effective treatment/restoration strategies
- Data collaboration and analysis
  - predictive modeling
  - risk assessments
  - prioritize funding for control

Earth Discovery Institute



ENVIRONMENTAL SERVICE-LEARNING

EDI's education program serves up to 3,000 students annually

- 2,300 at Crestridge ER
- 700 at Sweetwater Marsh NWR, San Diego NWR
- With EMP support, adding Rancho Jamul ER as location in 2013-14 school year

Environmental "Service-Learning"

Driven by the habitat management plan and state science curriculum standards

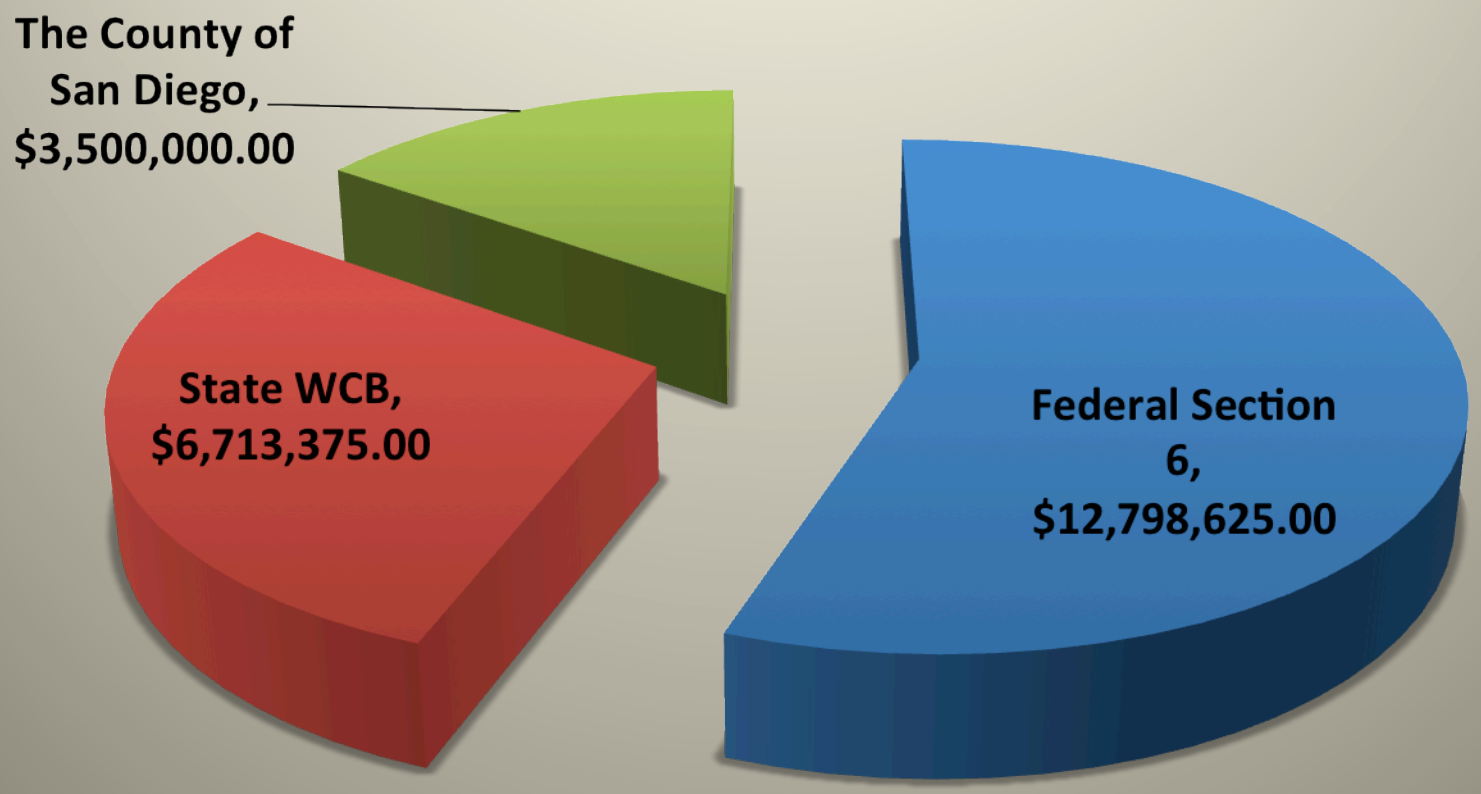
Community Outreach

- **Public interface to recreational users & neighbors**
- **Working with law enforcement & fire agencies**
- **Community eyes on the reserve**

Earth Discovery Institute

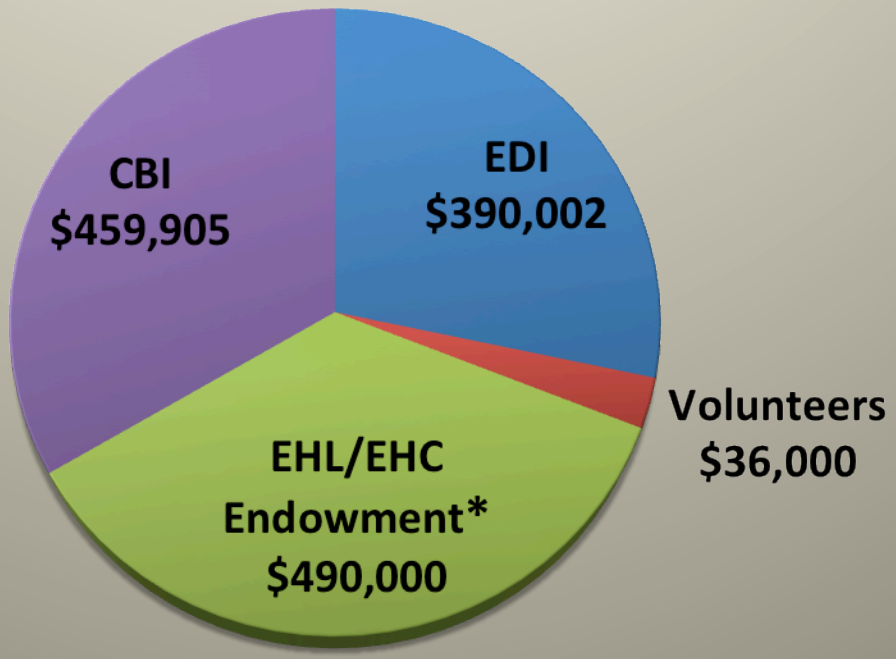
- **Helps land managers meet conservation goals**
- **Increases cost-effectiveness through training of volunteers**
- **Creates community support for conservation**
- **Minimizes public liability through signage, communication, and fire safety**

Crestridge Ecological Reserve Complex Land Acquisitions



Crestridge Ecological Reserve Complex Management, Monitoring, Education and in-kind NGO Contributions

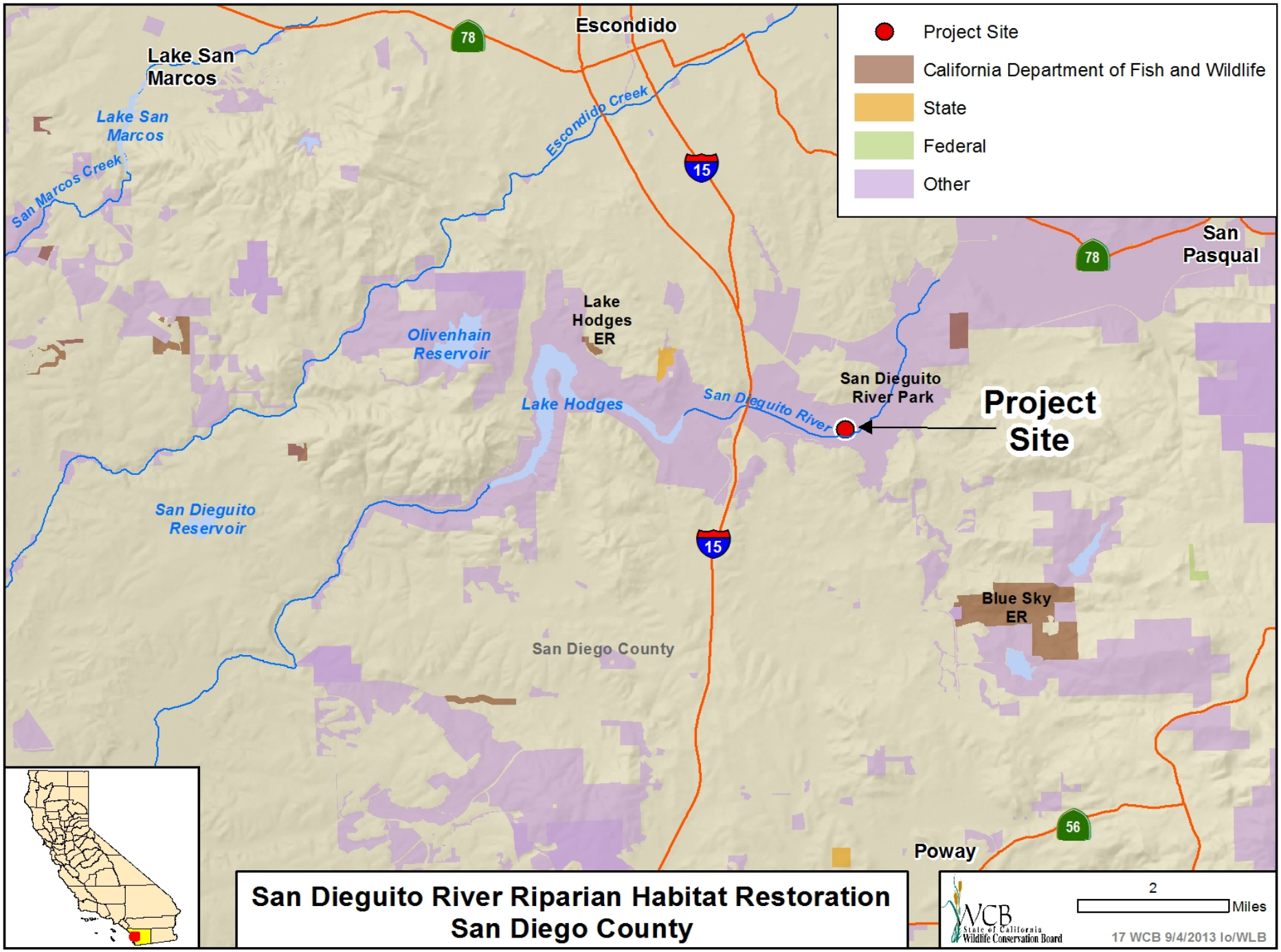
2010 - 2013 $1,375,907.00



* EHL Negotiated Endowment

Thank You!

California Gnatcatcher Photo courtesy of ponyrcr via whatbird.com



San Dieguito River Riparian Habitat Restoration
San Diego County

#17. San Dieguito River Riparian Habitat Restoration

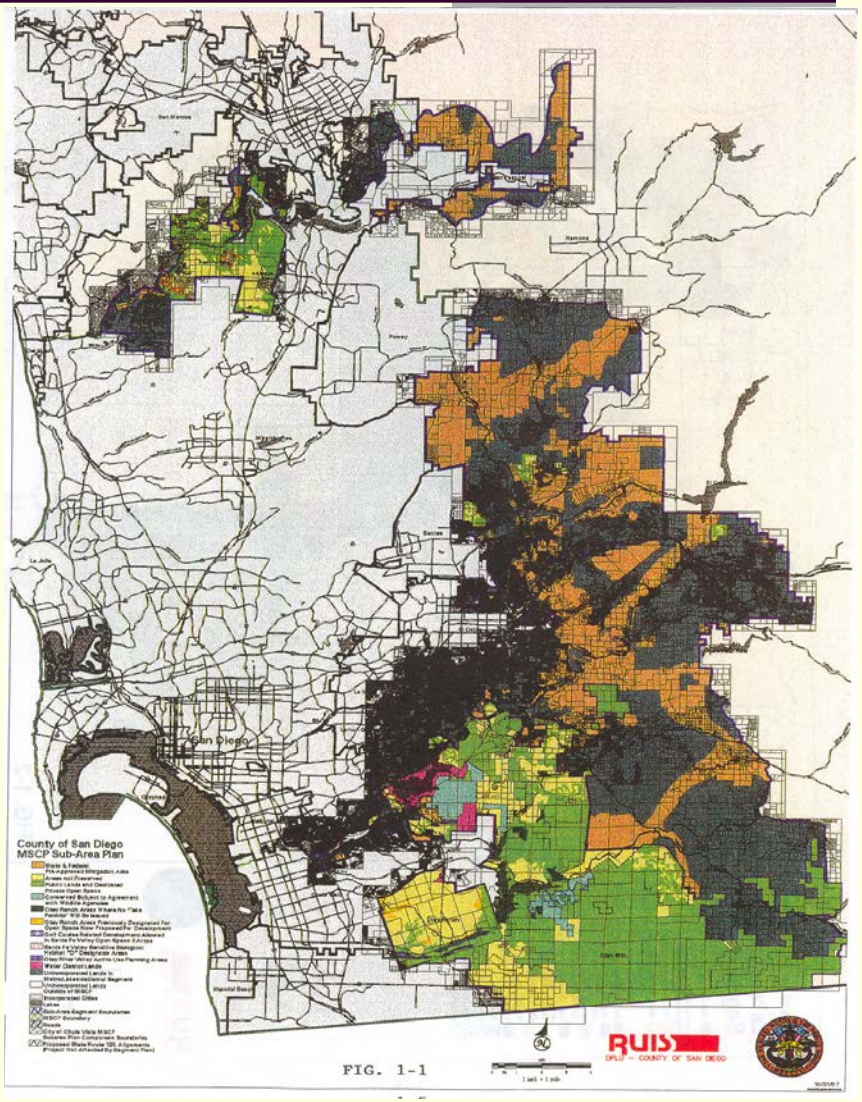
- View looking east toward watershed headwaters, with decadent invasive weeds in foreground.

#17. San Dieguito River Riparian Habitat Restoration

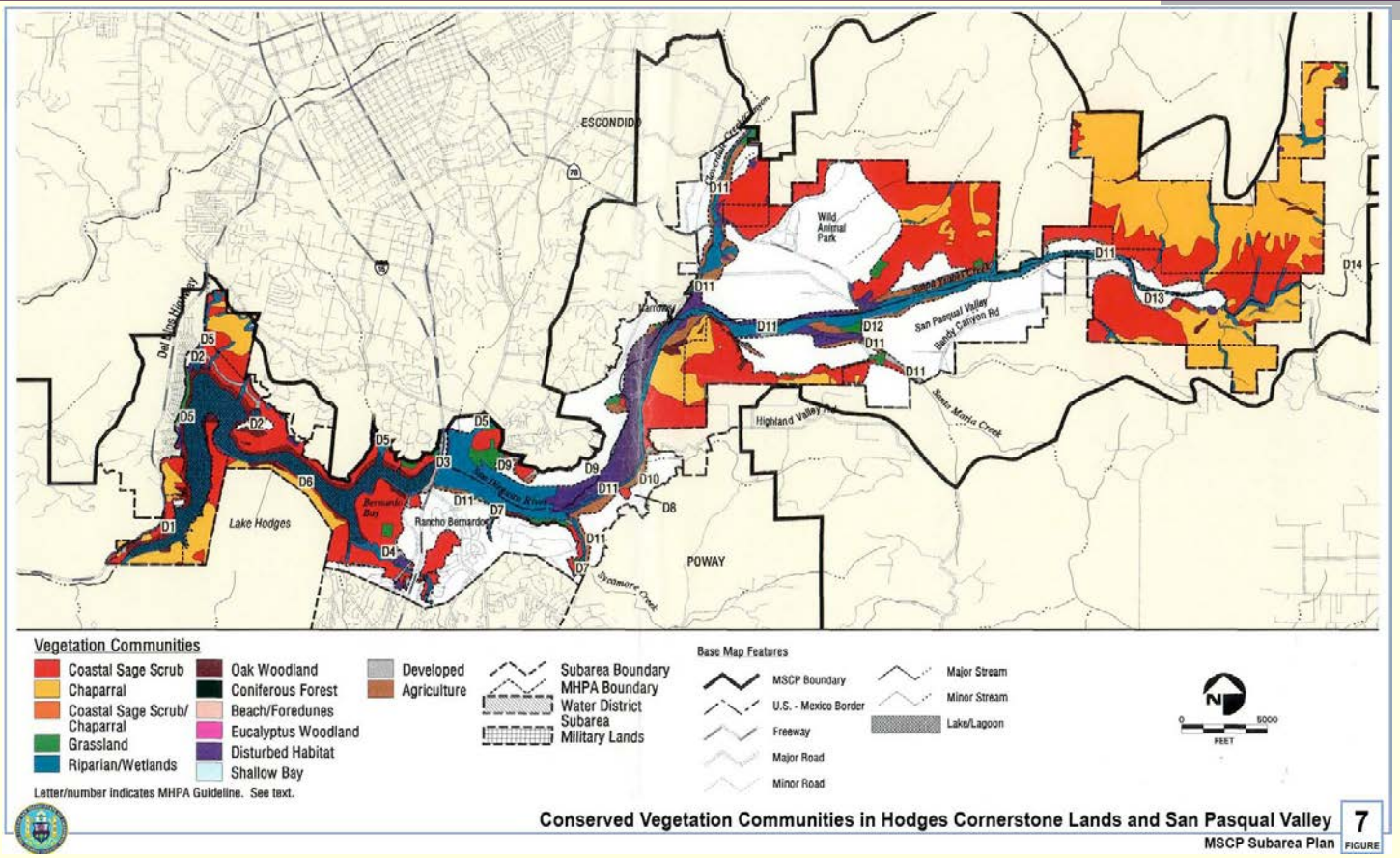
- View looking south toward southern boundary.

#17. San Dieguito River Riparian Habitat Restoration

- San Diego MSCP Covered Area



#17. San Dieguito River Riparian Habitat Restoration



- San Diego MSCP Pasqual Valley Subarea Map

#17. San Dieguito River Riparian Habitat Restoration

- California Gnatcatcher