



Wildlife Conservation Board
August 24, 2023, 10:00 am Board Meeting
First Floor Auditorium, CNRA Headquarters Building

Luginbuhl Ranch



Item 2. Public Forum



Item 3. Funding Status - Informational

Hart Ranch-Soda Springs

General Fund

Allocation

FY 2023/24

Fish & Wildlife Resources - Climate Change Impacts on Wildlife	\$61,750,000
Program Delivery (Climate Change Impacts on Wildlife)	\$3,250,000
Western Joshua Trees Conservation (planning with CDFW)	\$5,000,000
Subtotal Water Resilience Package (AB 102)	\$70,000,000
Nature-Based Solutions grants - 60%	\$54,150,000
Nature-Based Solutions grants - 40% to biodiversity conservation adjacent/directly benefitting climate-vulnerable communities, DAC or California Native American tribes	\$36,100,000
Program Delivery (NBS Program)	\$4,750,000
Resource Conservation Investment Strategies	\$3,000,000
Cascades and High Sierra Upper Watersheds Program	\$16,000,000
Land Acquisition and Habitat Enhancement Program -Southern CA	\$16,000,000
Subtotal Nature-Based Solutions (AB 102)	\$130,000,000
San Joaquin Valley Floodplain Restoration (Back from FY 22-23)	\$40,000,000
Subtotal AB 103 (BB Jr.)	40,000,000
Total	\$240,000,000



Item 4. Presentation – Starr Ranch

Land Management Without Chemicals Audubon Starr Ranch Sanctuary

Wildlife Conservation Board

August 24 2023

Sandra A. DeSimone

Director Research, Education and Land Management



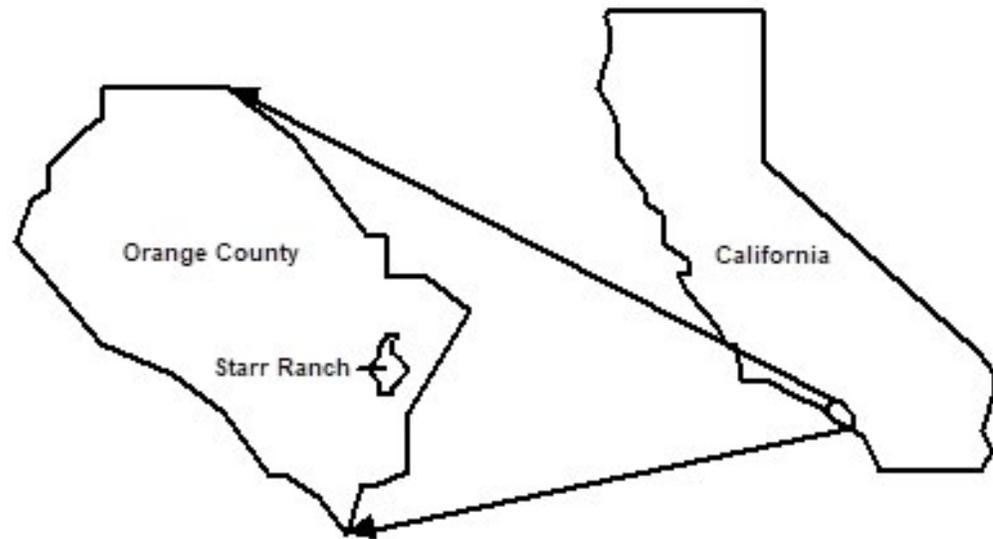
 **Audubon** CALIFORNIA

Starr Ranch Vegetation

Habitat Types

-  Oak Woodland
-  Coastal Sage Scrub
-  Riparian Woodland
-  Grassland
-  Chaparral





Starr Ranch Land Management

- *Influenced practice on 200,000 acres preserved land - Ventura to San Diego Counties (visitation and solicited advice)*
- *“cutting edge” (U.S. Fish and Wildlife Service)*





Research Land Management Education



Research

Land Management

Education

Innovation

Integration

Sustainability



Innovation: Land Management

Strip Planting

No chemicals

Adaptive Management





Highest priority upland nonnative: artichoke thistle, *Cynara cardunculus*

6-9 ft deep taproot SPINY

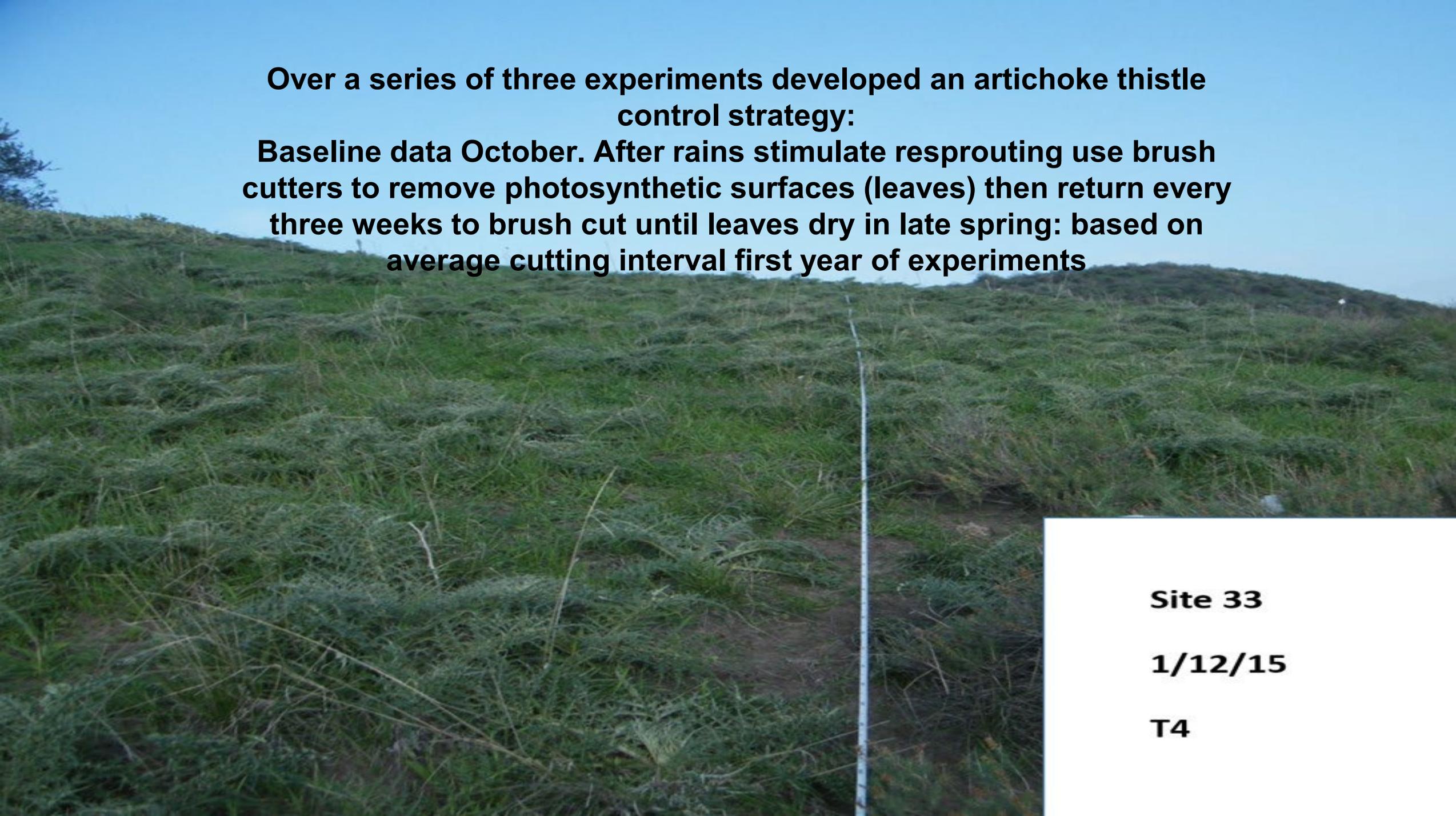
Aboveground leaves, flowering stalk die back during summer drought

Roots survive

Invaded 720 acres disturbed grassland

Over a series of three experiments developed an artichoke thistle control strategy:

Baseline data October. After rains stimulate resprouting use brush cutters to remove photosynthetic surfaces (leaves) then return every three weeks to brush cut until leaves dry in late spring: based on average cutting interval first year of experiments



Site 33

1/12/15

T4





#28m
pp 1
03/20/01



UPLANDS: TOP STARR RANCH SEVEN (ALWAYS REMOVE)

CYNCAR (artichoke thistle)



CIRVUL (bull thistle)



PLALAN (English plantain)



~~Helminthotheca echioides (Ox-Tongue)~~



~~Oxalis pes-caprae (sourgrass)~~



~~Salsola tragus (tumbleweed)~~



~~Aegilops spp. (barbed goatgrass)~~



3 "P"s of Nonchemical Land Management: Persistence Patience Perseverance

January						
<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
	1 NEW 15 10 1 4	2	3	4	6	6
⁷	8 NEW 30 9 21	9	10	11	12	13
14	15 NEW14 11 *7	16	17	18	19	20
21	22 New 15 17S 5	23	24	25	26	27
28	29 NEW 30 10 1 4	30	31			

2018

Two Fundamental and Interrelated Land Management Practices

- 1. Non-chemical Weed Control*
- 2. Accept Some Non-natives in “Hybrid Ecosystems”*

* **Hybrid ecosystem: nonnatives and natives**

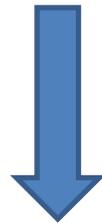
Novel ecosystem: nonnative dominated (from disturbance)

Initial phases of a new nonnative introduction

Go for it! (remove) Early Detection

Established nonnative populations

Does the established nonnative have positive or neutral effects on observable wildlife: **songbirds and small mammals** ?



Hybrid Ecosystem

Hybrid Ecosystem Decision Making

Coastal Sage Scrub Restoration





Baseline season one



End season one



Season two



Season seven



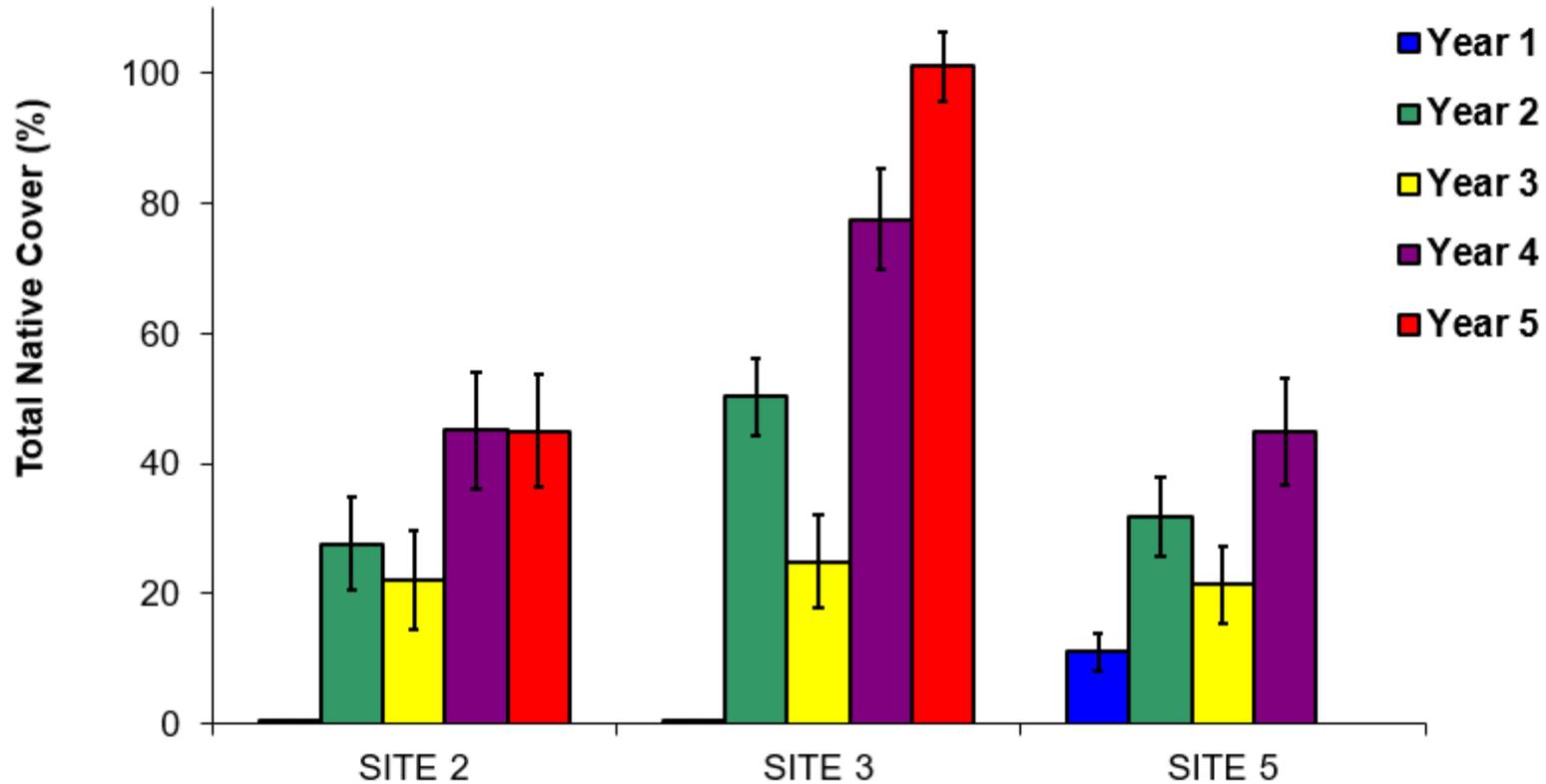
Nonnative annual grass control → dicot eruption



Strategy: Accept Nonnative Annual Grasses

**Strategy: Target nonnative dicot (forb, non grass) invasives,
Leave nonnative annual grasses,
Monitor effects on native plants and wildlife**

Total Native Cover in Buffers Between Strips n = 20



No nonnative annual grass control

DeSimone Ecological Restoration 2011.

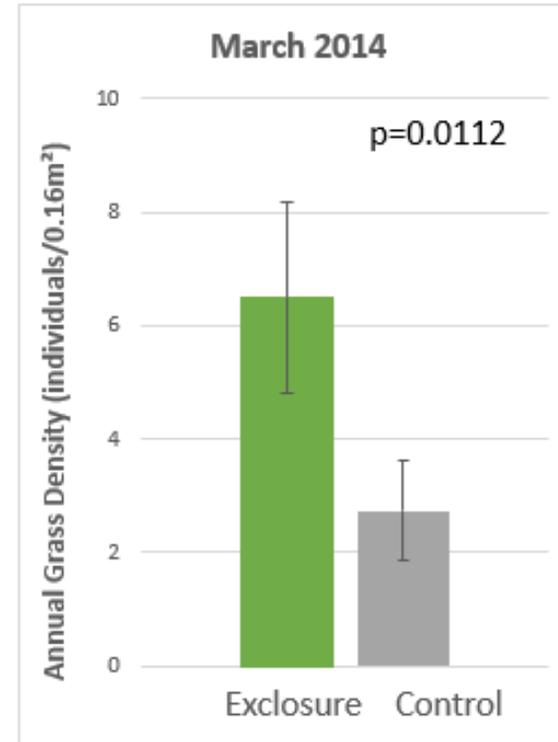
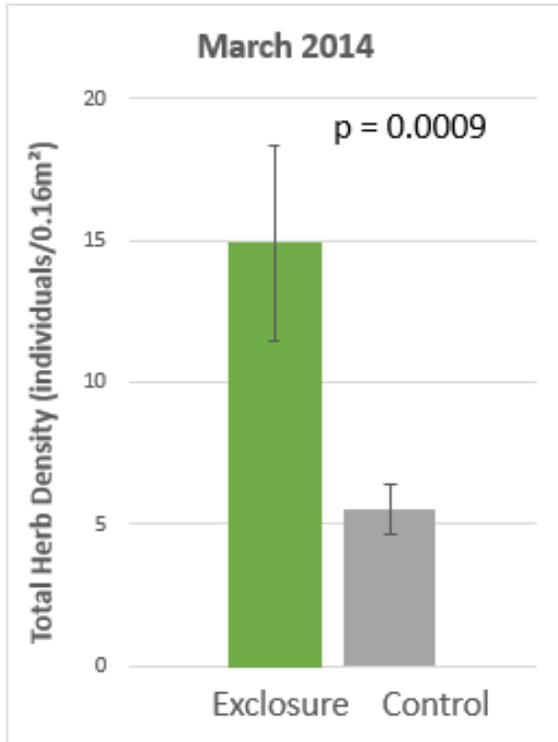
Annual grasses disappear over time in restoration sites
Mechanism: annual grasses “disappear”?

Is there an effect of herbivores on nonnative grasses in buffers?

**Exclosure Experiment: cages in unplanted buffers between
planted shrub strips**



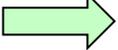
Exclosure Experiment: Results







Conclusions (CSS Restoration):

- Neutral effects nonnative annual grasses on wildlife = “accept”
- Hybrid ecosystem  native shrub-dominated
- **Mechanism (the process): herbivory (rodents, birds, rabbits)**



Conclusions (general)

1. With persistence and diligence, a non-chemical approach to invasive species control can be efficient and effective.

2. Monitoring is ongoing

Hybrid ecosystem concepts have

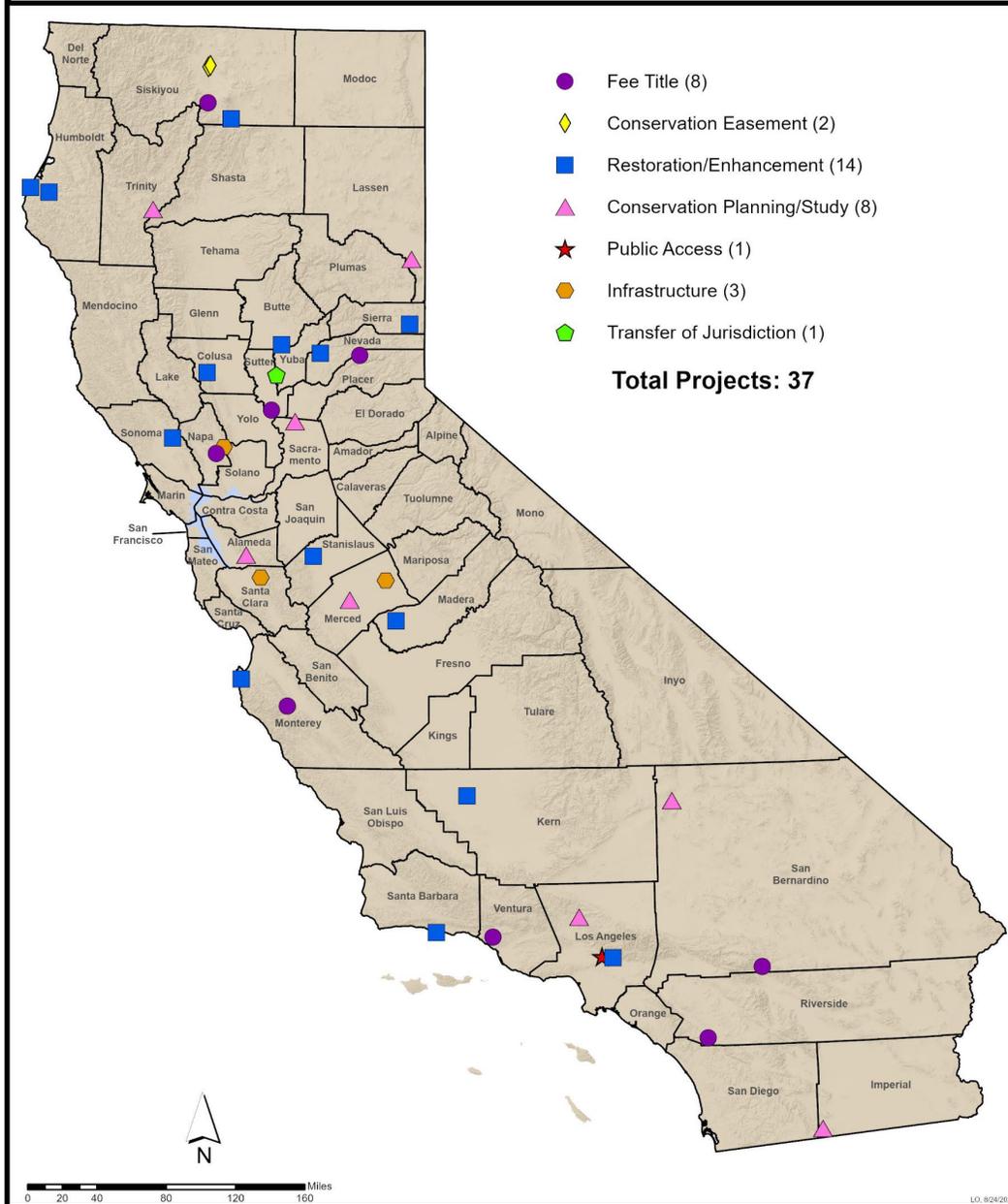
stimulated us to view nonnative species through a new lens

reduce workload while also

accomplishing goal – habitat for birds and other wildlife.







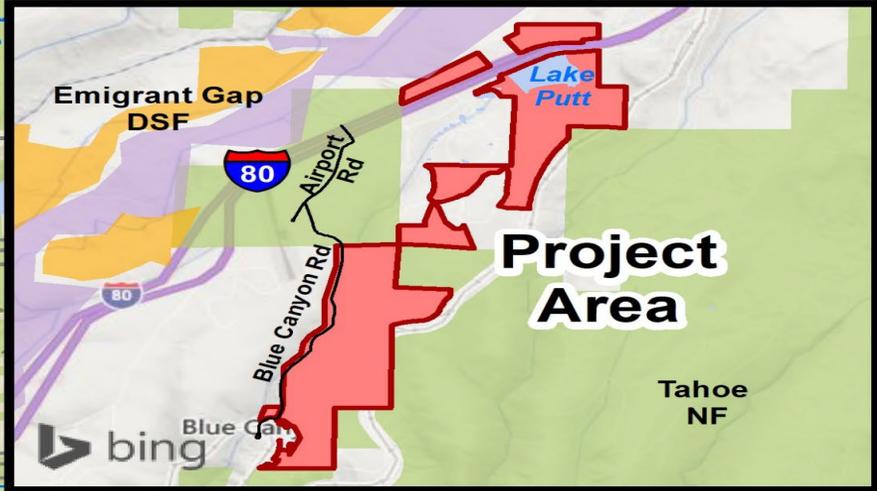
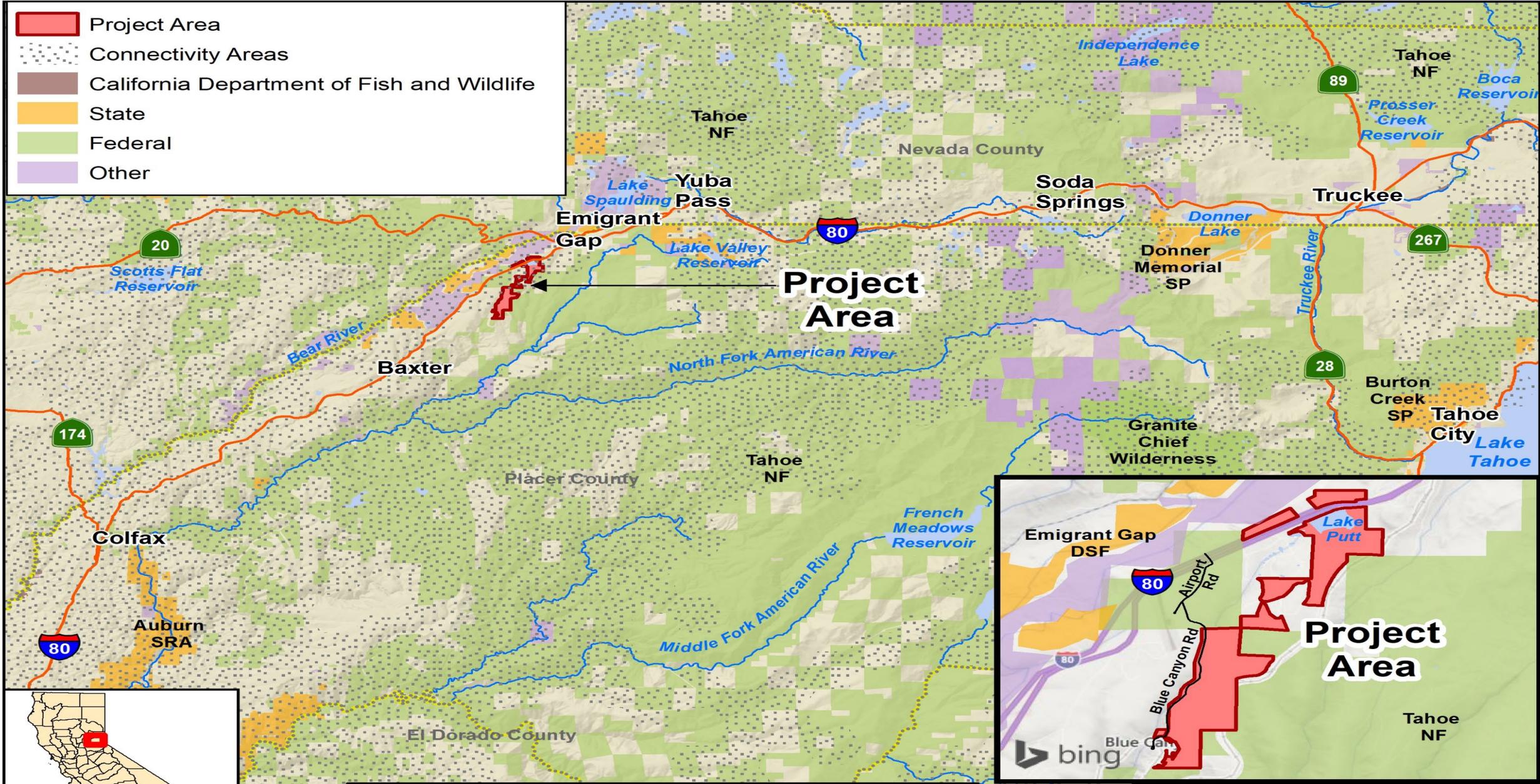
Wildlife Conservation Board Meeting August 24, 2023 Project Map



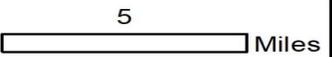
Consent Items 5-29

Tahoe Forest - Leidesdorff

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



**Tahoe Forest Gateway (Leidesdorff)
Placer County**





15. Tahoe Forest Gateway (Leidesdorff)

Slide 1

Lake Putt

Photo credit: 40 Acre Conservation League

15. Tahoe Forest Gateway (Leidesdorff)

Slide 2

View to Canyon Creek

Photo credit: 40 Acre Conservation League

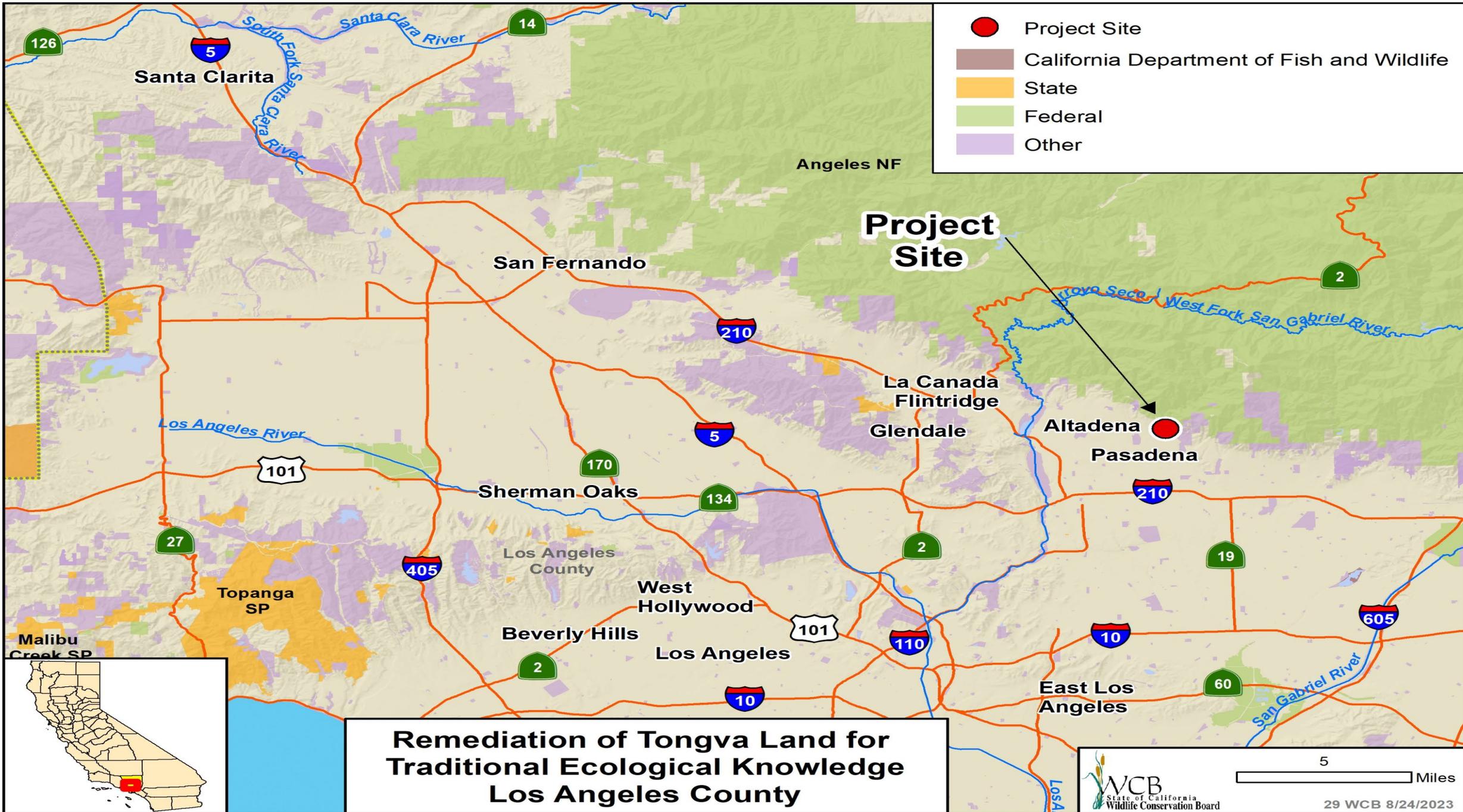


Consent Items 5-28 Motion, Excluding Items 25 and 28



Presented Items 29-44

Big Morongo Springs



**Remediation of Tongva Land for
Traditional Ecological Knowledge
Los Angeles County**



29. Remediation of Tongva Land for Traditional Ecological Knowledge

Slide 1

Tongva Taraxat Paxaava Conservancy

- First community-owned gathering space for the Tongva since 1771
- Overlooks Eaton Canyon
- Historically coastal sage scrub habitat
- Currently overgrown with invasive trees and plants

Project Elements:

- Removal of non-native trees
- Treatment of the remaining stumps with a non-chemical method that relies on fire
- Clearing an understory dominated by decorative species
- Restoration of native habitat with indigenous-based scientific methods



Looking towards Eaton Canyon

Meyiiha!

Tongva Taraxat Paxaavxa Conservancy
(*tar-a-haat paah-haava*)



Samantha Morales Johnson,
Kimberly Morales Johnson, Ian Schiffer,
Cheyenne Reynoso
Samantha@Tongva.Land

The Tongva community have always been connected to and continue to build relationships as stewards of our homelands and waters. Surviving three waves of genocide, the Tongva community's landbase and proposed reservation site at Tejon Ranch was stolen, resulting in landlessness for our tribe. Currently, our indigenous sage-scrub ecosystem is threatened by development and invasive species. This displacement and extraction of resources from our lands and communities has created a huge deficit in access to native plants and green spaces.



The Tongva Taraxat Paxaavxa Conservancy is a Tongva-led 501c3 created to steward lands in Tovaangar (LA) including Huhuunga, place of the bears, the first acre of land returned to Tongva people. This 1.1-acre parcel of land was previously hoarded and we have cleared 29-32 tons of debris. Currently, most of the acre is overgrown with non-native species. WCB Funding would go to the removal of these non-native plants, including over 200 non-native trees, and employ Tongva people.

After nearly 200 years, the Tongva community has land in Los Angeles County



Herbicide-free eucalyptus removal method

Stump Burning will be performed by Tongva people with assistance from LA County firemen, retirees, and LA County Forestry. The TTPC Land Return Coordinator (LRC) will collect data on stump burning efficiency depending on the burn method and size of the tree. Larger stumps may be ground.

Time, trunk diameter, fuel, and pre-cutting method will all be logged by LRC to determine burn method success rate. Findings can be used later to restore future sites of land return, with burn certified tribal organizations and restoration projects.

Some lumber will be kept for future site restoration including adobe building, playground space, sitting area, etc.

Soil restoration

As sections of non-native species are removed, the soil will be tested, then re-seeded and re-inoculated with local fungi species. Depending on soil quality, annual flowers like California native sunflower will be maintained until soil it is improved.

Tree removal will also clear up space for a nursery, which is included in our application.



Thank you for helping us grow :)



More about us at Tongva.Land
Samantha@Tongva.Land

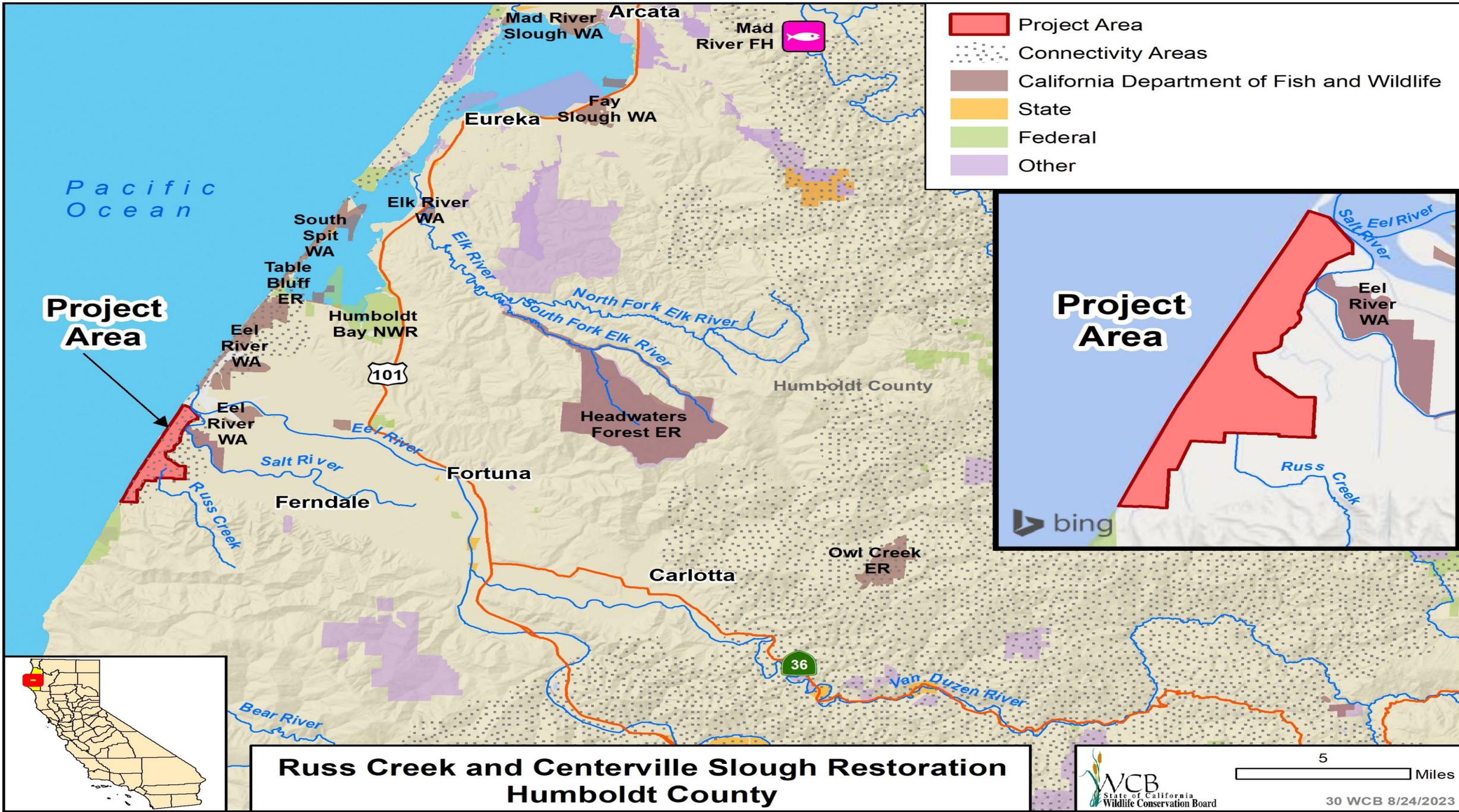
29. Remediation of Tongva Land for Traditional Ecological Knowledge

Slide 8



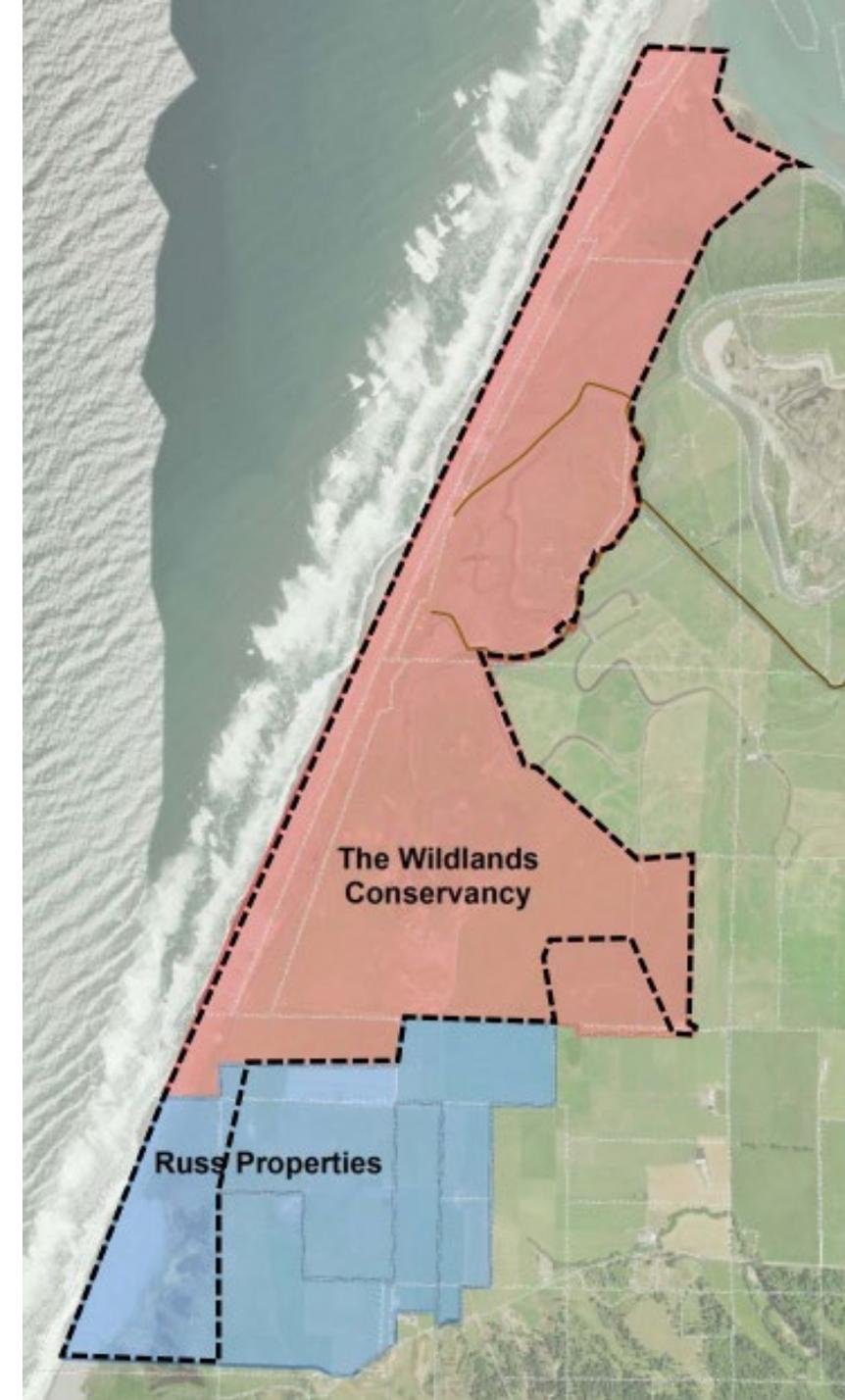
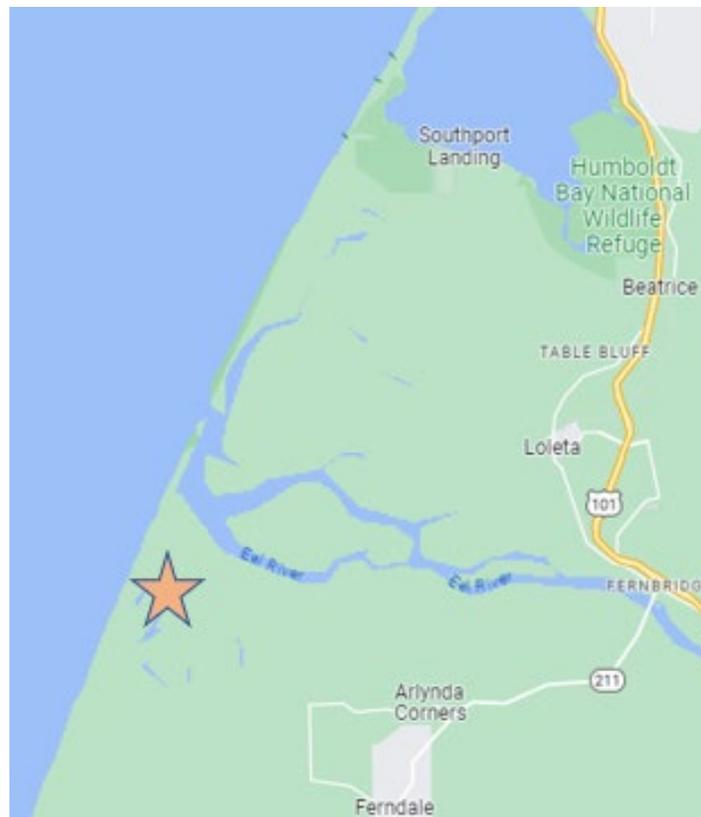
Ecological Benefits

- Restoration of sensitive coastal sage scrub habitat
- Fire fuel reduction
- Removal of invasive species seed source
- Extension of Eaton Canyon habitat
- Case study for non-herbicide invasive plant removal
- Development of a nursery and seed collection operation
- Template for future restoration of tribal lands



30. Russ Creek and Centerville Slough Restoration

Slide 1





30. Russ Creek and Centerville Slough Restoration

Slide 3



Flood and wave overwash events

Existing Conditions

Wave overwash into Centerville Slough & dune failure with sand migration inland across agricultural lands.



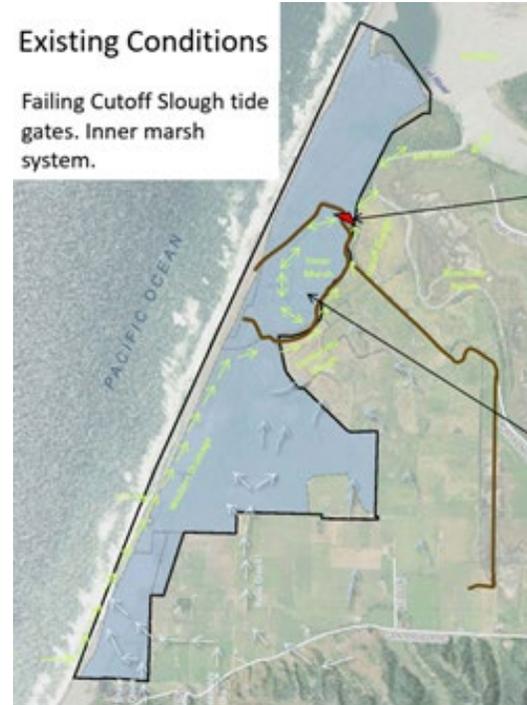
Existing Conditions

Russ Creek's interior channel and ditching



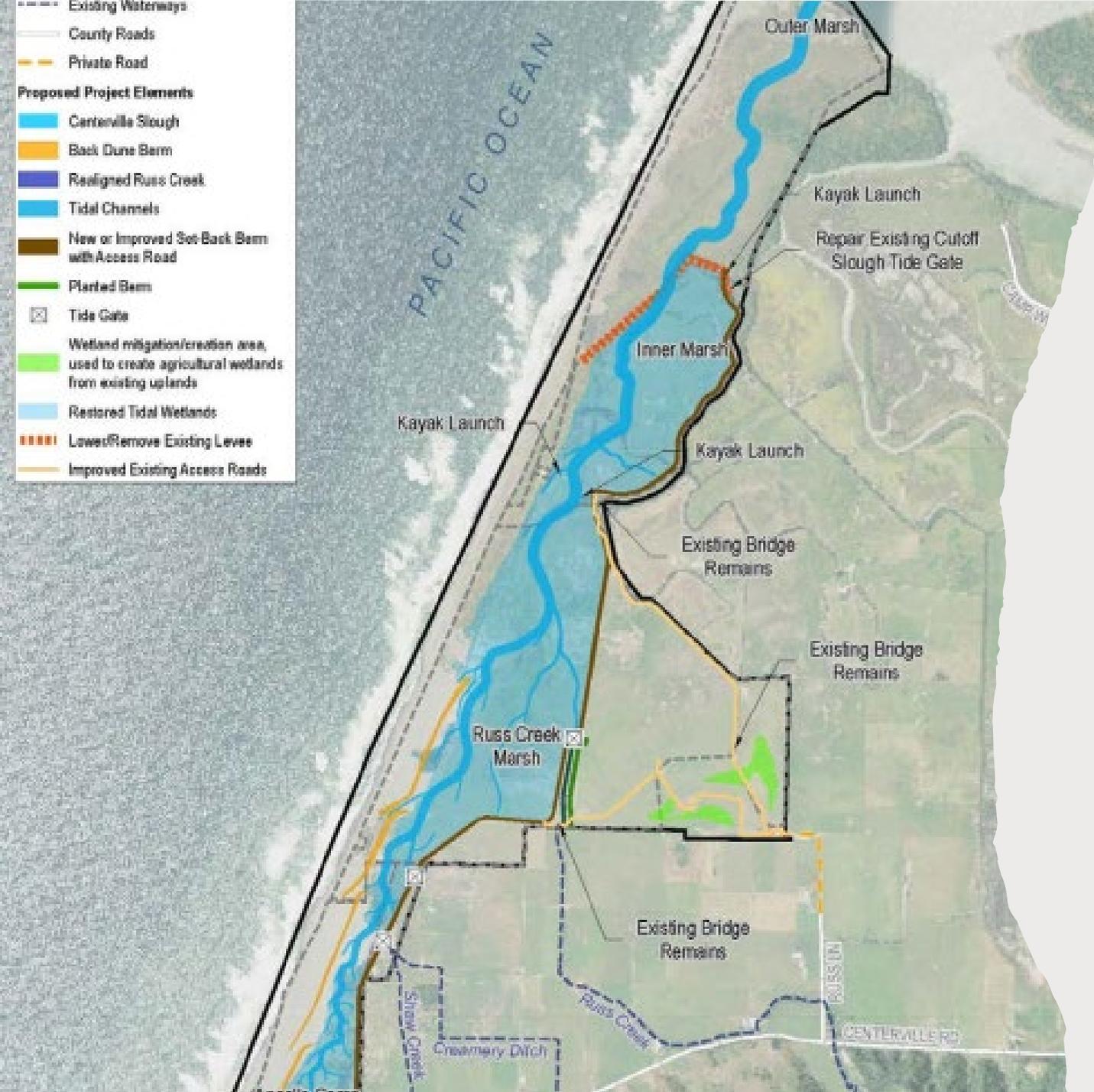
Existing Conditions

Failing Cutoff Slough tide gates. Inner marsh system.



30. Russ Creek and Centerville Slough Restoration

Slide 4



30. Russ Creek and Centerville Slough Restoration

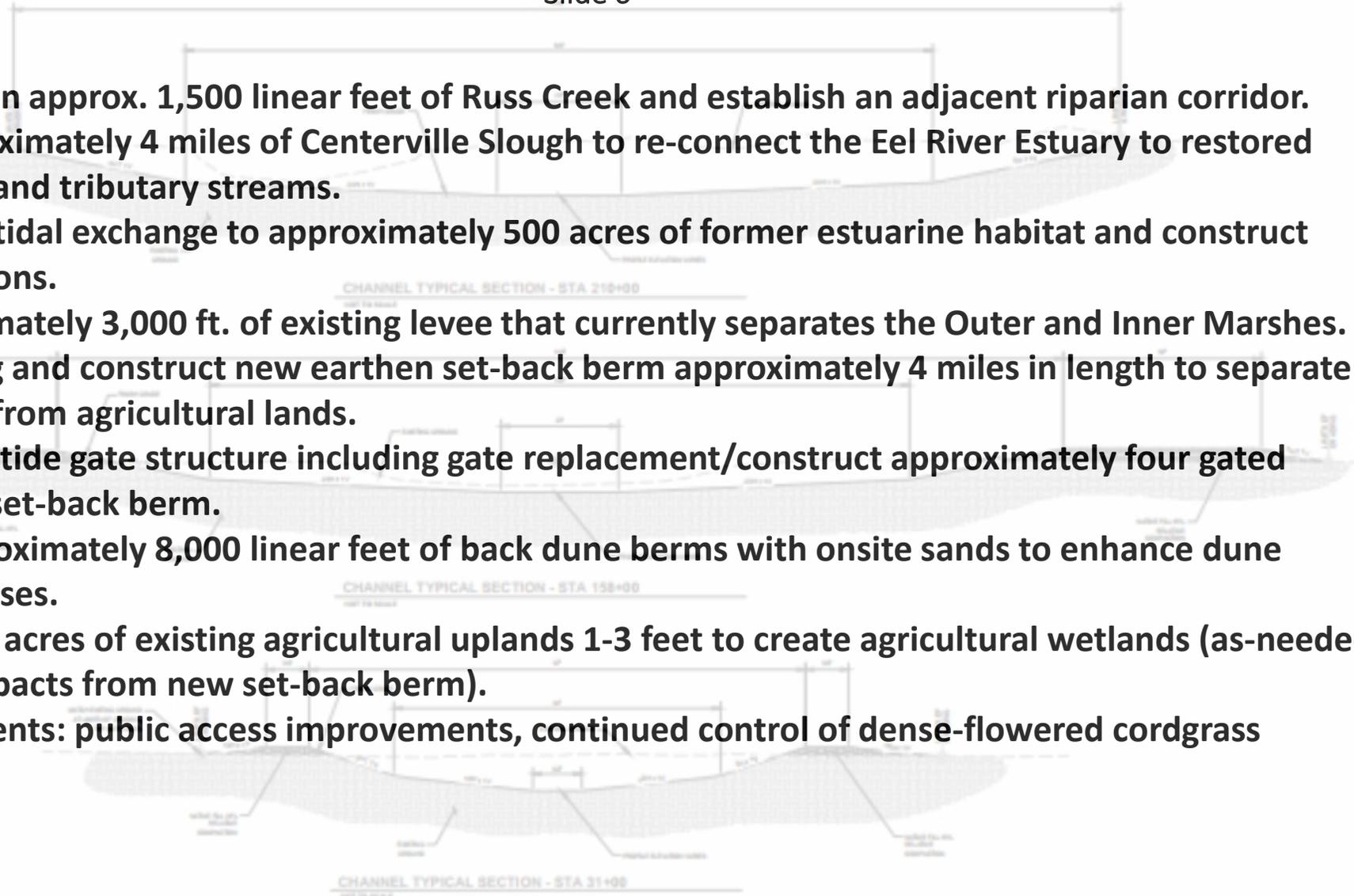
Slide 5

Purpose: Enhance existing tidal wetlands and restore marginal, diked pasture to a mosaic of natural habitats including estuarine and tidal slough channels, freshwater streams, and agricultural pastures, all within the context of promoting the resilience of the Project Area and viability of adjacent agricultural lands.

30. Russ Creek and Centerville Slough Restoration: Components

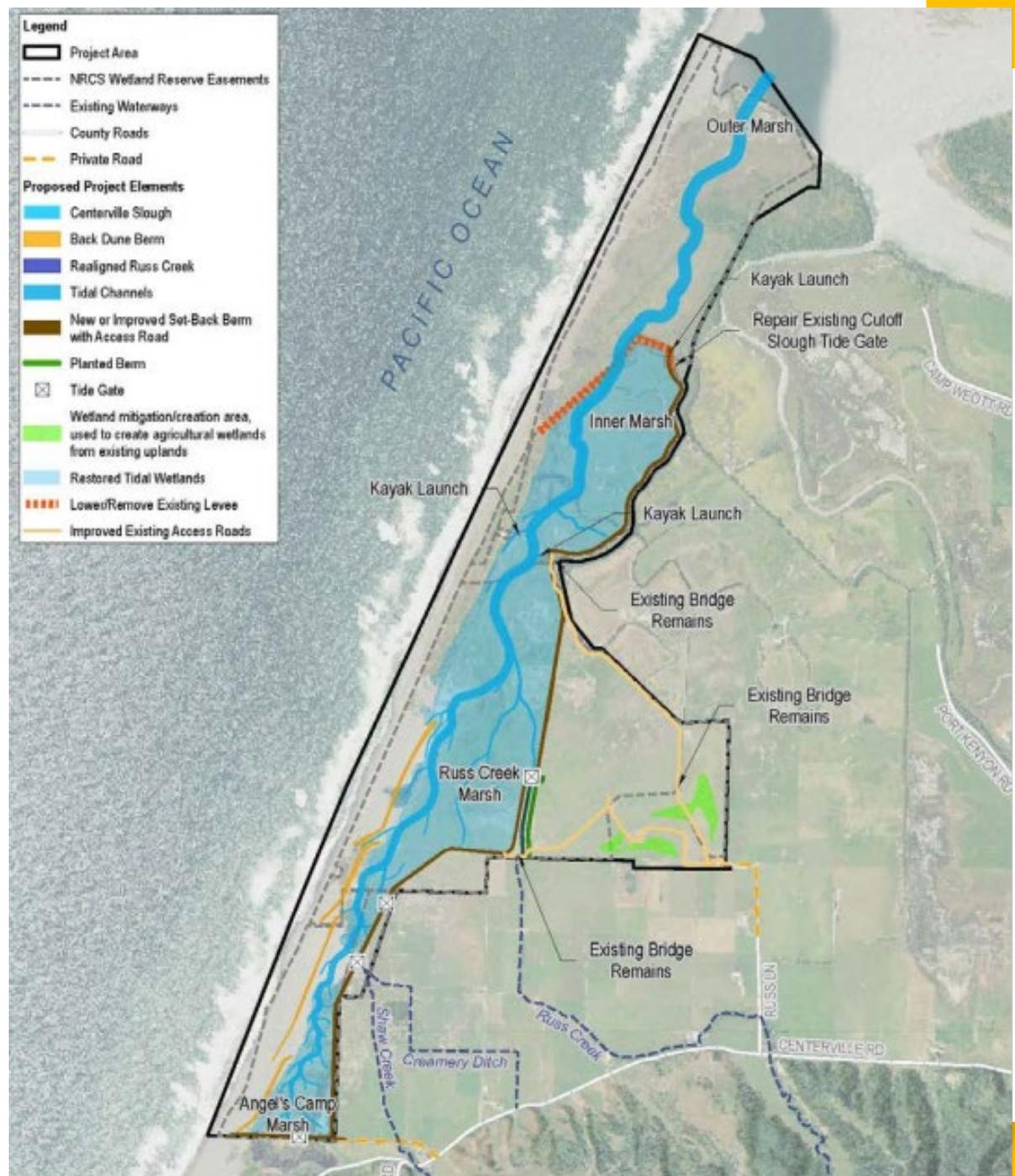
Slide 6

- Excavate/realign approx. 1,500 linear feet of Russ Creek and establish an adjacent riparian corridor.
- Excavate approximately 4 miles of Centerville Slough to re-connect the Eel River Estuary to restored tidal wetlands and tributary streams.
- Reconnect full tidal exchange to approximately 500 acres of former estuarine habitat and construct inter-tidal lagoons.
- Lower approximately 3,000 ft. of existing levee that currently separates the Outer and Inner Marshes.
- Elevate existing and construct new earthen set-back berm approximately 4 miles in length to separate tidal wetlands from agricultural lands.
- Repair existing tide gate structure including gate replacement/construct approximately four gated culverts along set-back berm.
- Construct approximately 8,000 linear feet of back dune berms with onsite sands to enhance dune building processes.
- Lower up to 40 acres of existing agricultural uplands 1-3 feet to create agricultural wetlands (as-needed to offset fill impacts from new set-back berm).
- Other components: public access improvements, continued control of dense-flowered cordgrass (*Spartina*)



30. Russ Creek and Centerville Slough Restoration

Slide 7



31. Cortina Ridge Sawato Kamitlitarro Wildlife Crossing

Slide 1

Cache Creek Tule Elk Herd

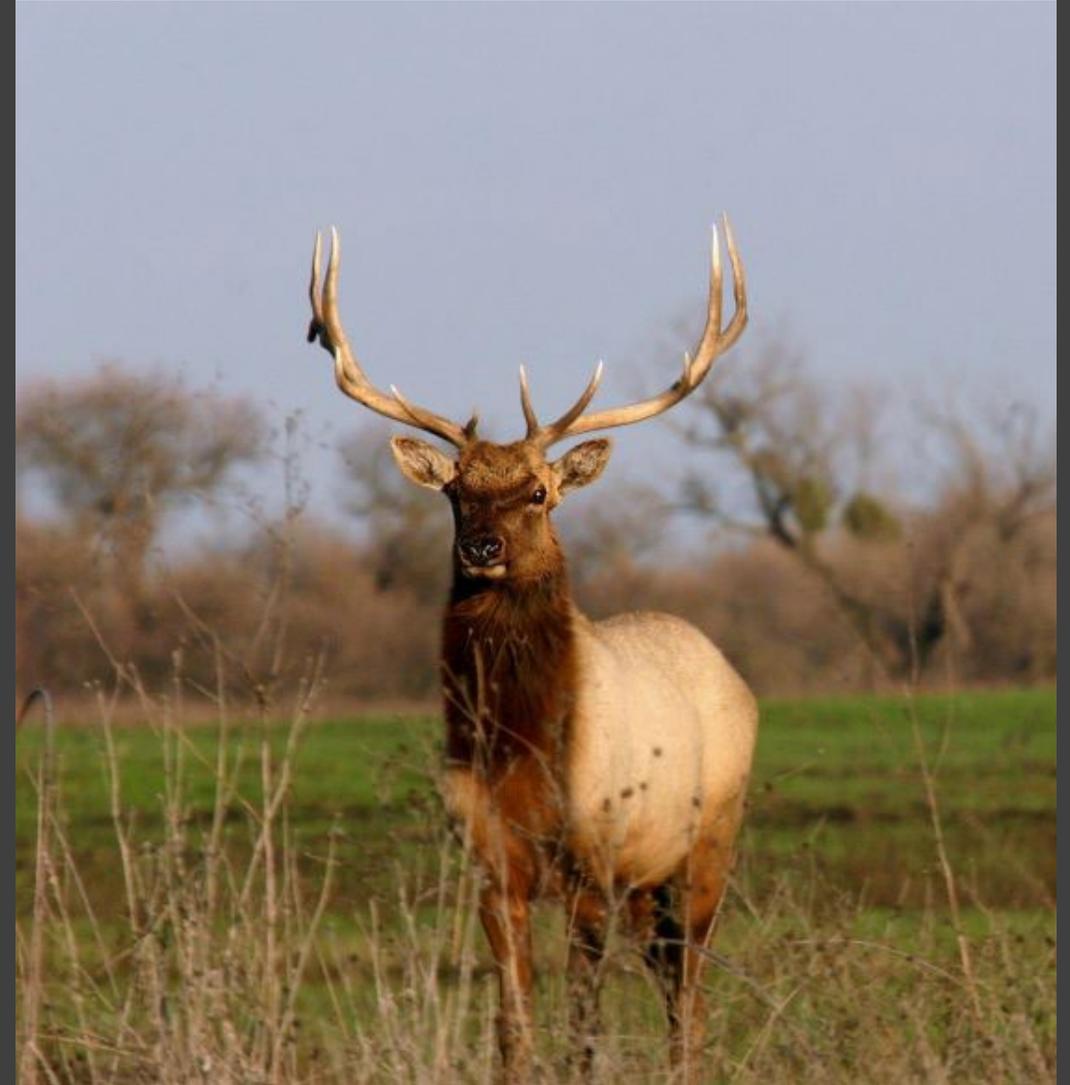
- Oldest free ranging herd of elk in California

1964 - State Route 20 paved and widened

Cache Creek herd is now subdivided

- Cortina Ridge subherd to the south and east
- Antelope Valley subherd to the north and west

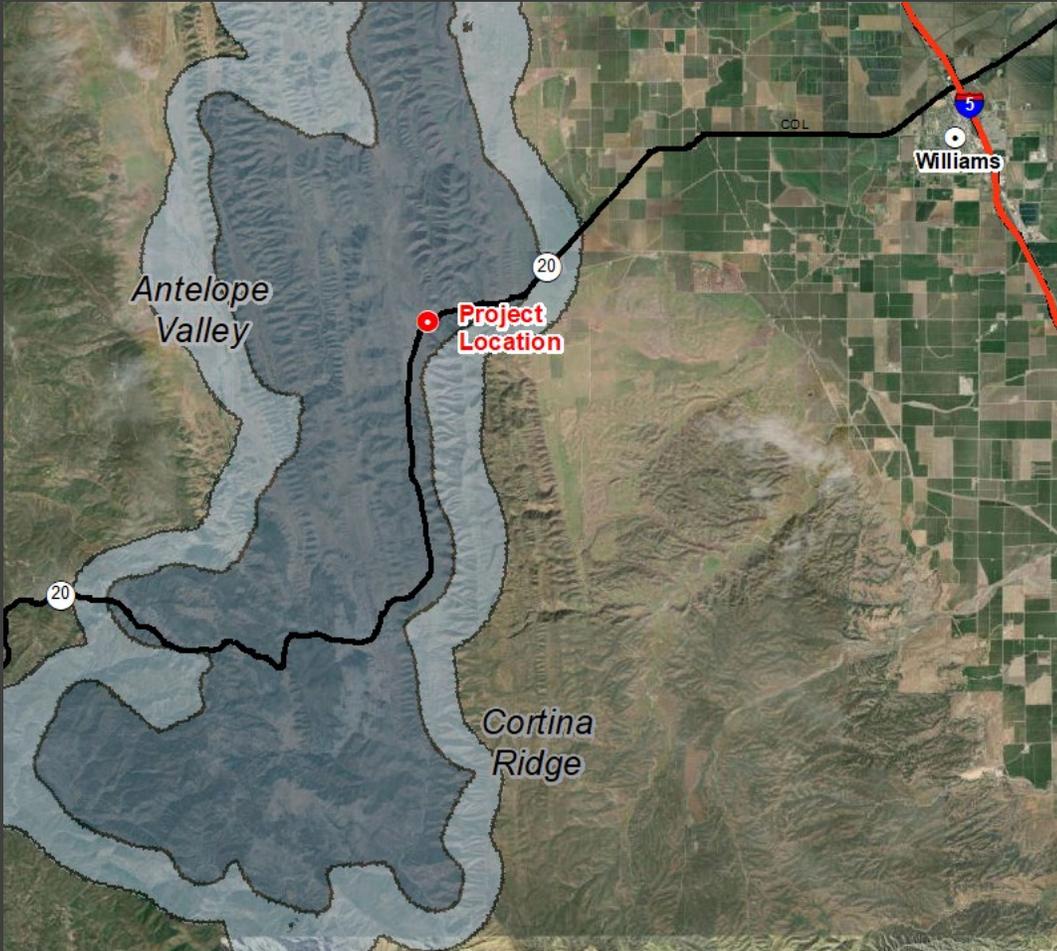
2022 CDFW Priority Barrier



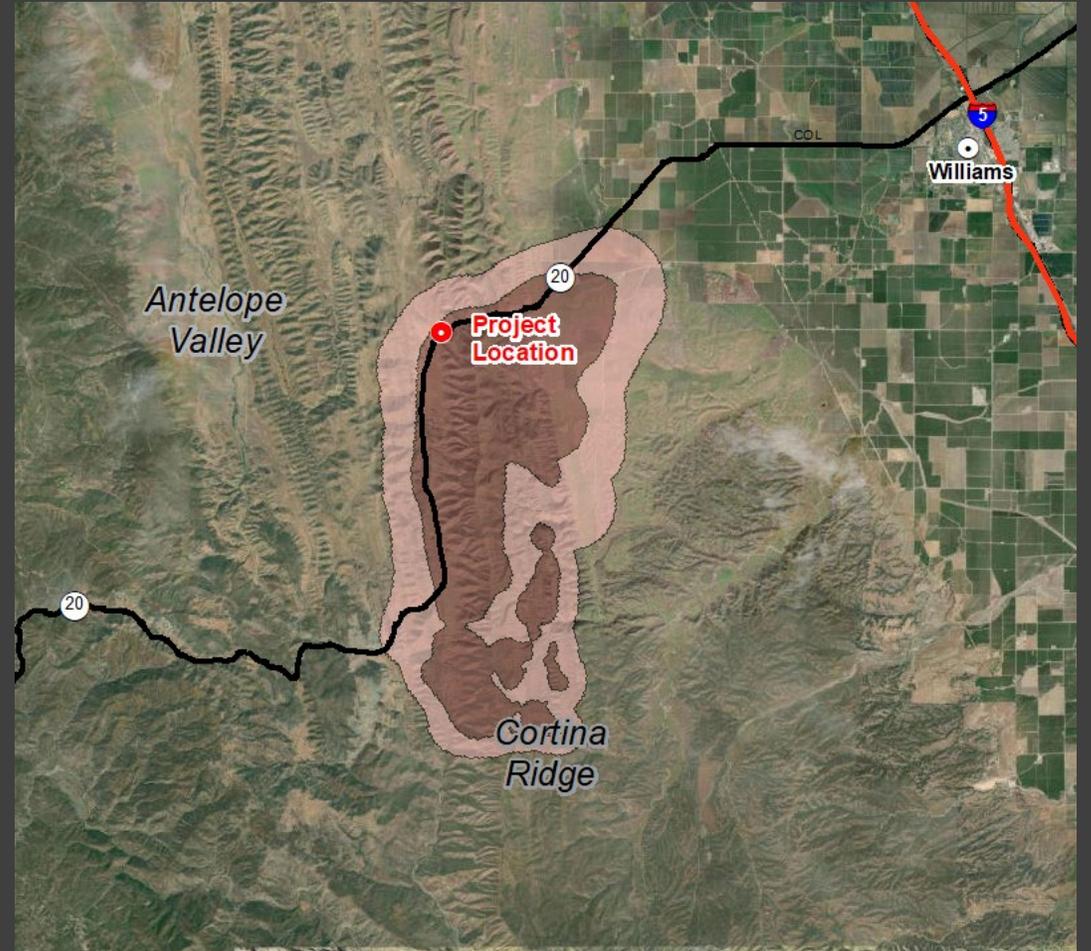
31. Cortina Ridge Sawato Kamititarro Wildlife Crossing

Slide 2

CDFW Radio Collar Data



Antelope Valley Subherd



Cortina Ridge Subherd

31. Cortina Ridge Sawato Kamitlitarro Wildlife Crossing

Slide 3

WCB Projects Near Project Site



Acquisitions:

- 2002 - Bear Valley Conservation Area
128,896 acres
- 2006 - Cache Creek Conservation Area
3,140 acres
- 2016 - Epperson Place Ranch Conservation Easement
1547 acres
- 2018 - Keegan Ranch Conservation Easement
2507 acres
- 2019 - Whiskey Hill Conservation Easement
2,607 acres
- 2020 - Telegraph Ridge Conservation Easement
2,415 acres

Restoration:

- 2008 - Bear Creek Watershed Habitat Restoration
483 acres of riparian habitat

31. Cortina Ridge Sawato Kamitlitarro Wildlife Crossing

Slide 4



SR 20 at project site

Photo: Caltrans

31. Cortina Ridge Sawato Kamitlitarro Wildlife Crossing

Slide 5



Looking northwest towards Antelope Valley



Looking southeast towards Cortina Ridge

31. Cortina Ridge Sawato Kamitlitarro Wildlife Crossing

Slide 6

Proposed Project

Single span bridge:

- 107' length
- 100' width
- 18' vertical clearance

2 feet of earthen fill on the bridge deck for vegetation growth

Wildlife glare screening and cattle fencing



Wildlife Overcrossing Conceptual Drawing

31. Cortina Ridge Sawato Kamitlitarro Wildlife Crossing

Slide 7



Black Bear



Tule Elk



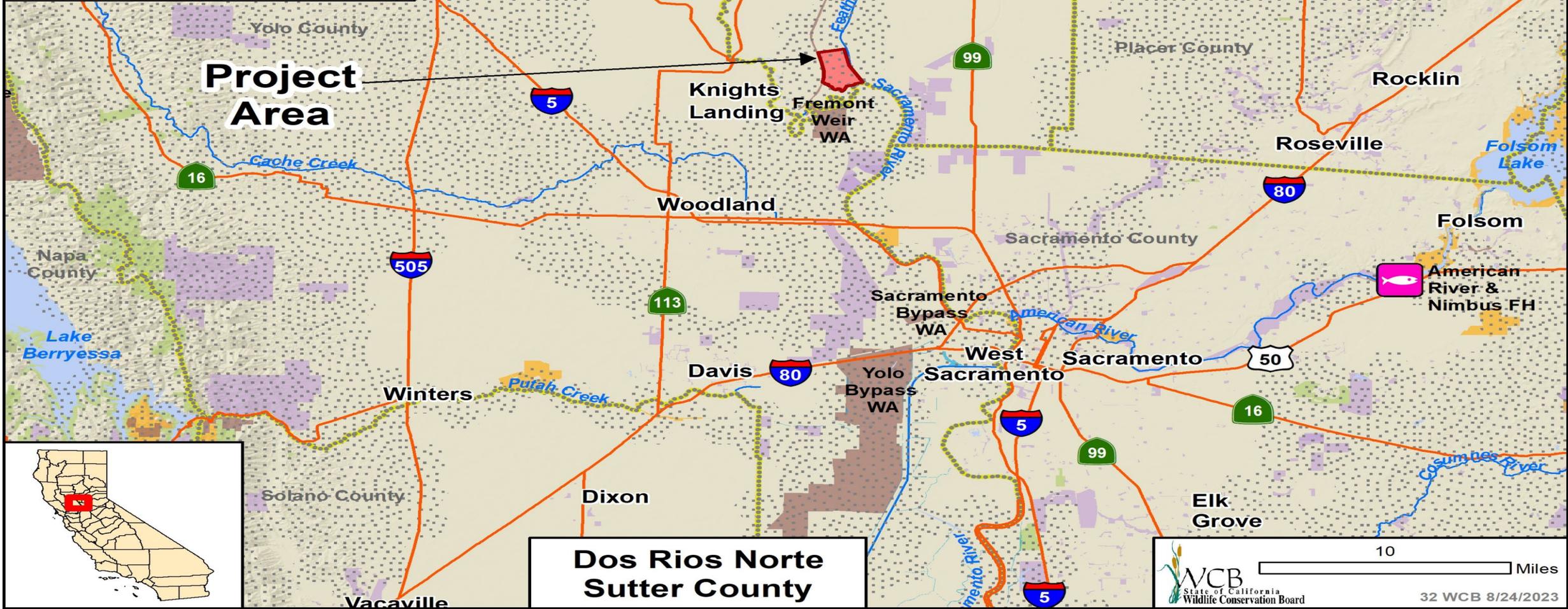
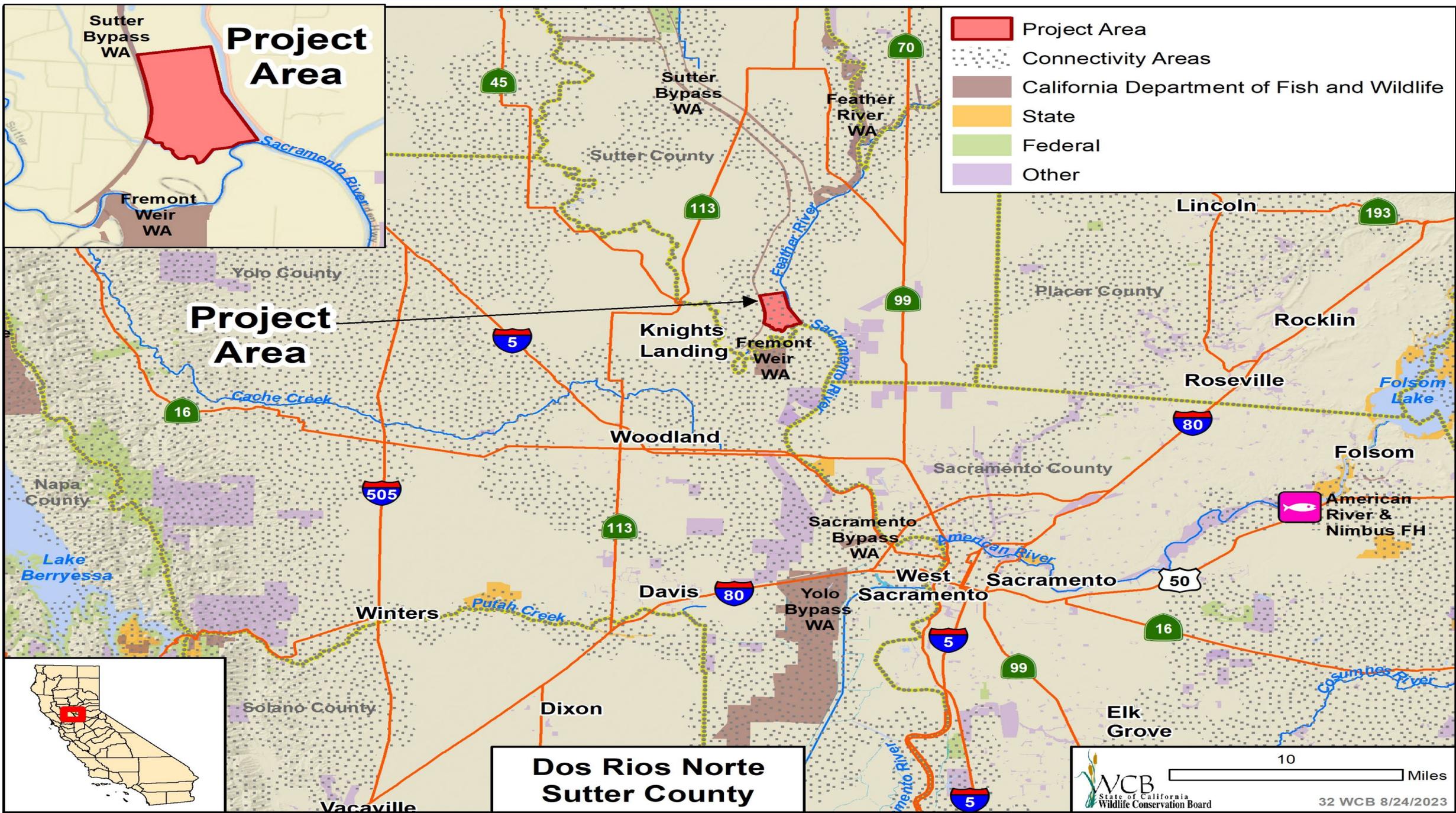
Mountain Lion



Mule Deer



Badger





32. Dos Rios Norte

Slide 1

- This photo was taken on the east side of the property from the vantage point of a pump stand on the Feather River. Upstream of this site on the Feather River lies the Feather River Wildlife Area and eventually, Oroville Dam.
- Photo Courtesy of River Partners.

32. Dos Rios Norte

Slide 2

View of the Butte Slough that borders the western boundary of the site. This photo was taken while crossing Butte Slough.

Photo Courtesy of River Partners.





32. Dos Rios Norte

Slide 3

These photos were taken from the same position, about 9 months apart at the southern border of the property looking down the Sacramento River to its confluence with the Feather River.

Photos Courtesy of River Partners.



32. Dos Rios Norte

Slide 4

- Representative photo of agricultural fields. The site was recently harvested of tomatoes prior to taking this photo. River Partners will utilize existing irrigation designs in considering restoration potential of several fields at the Dos Rios Norte site.
- Photo Courtesy of River Partners.

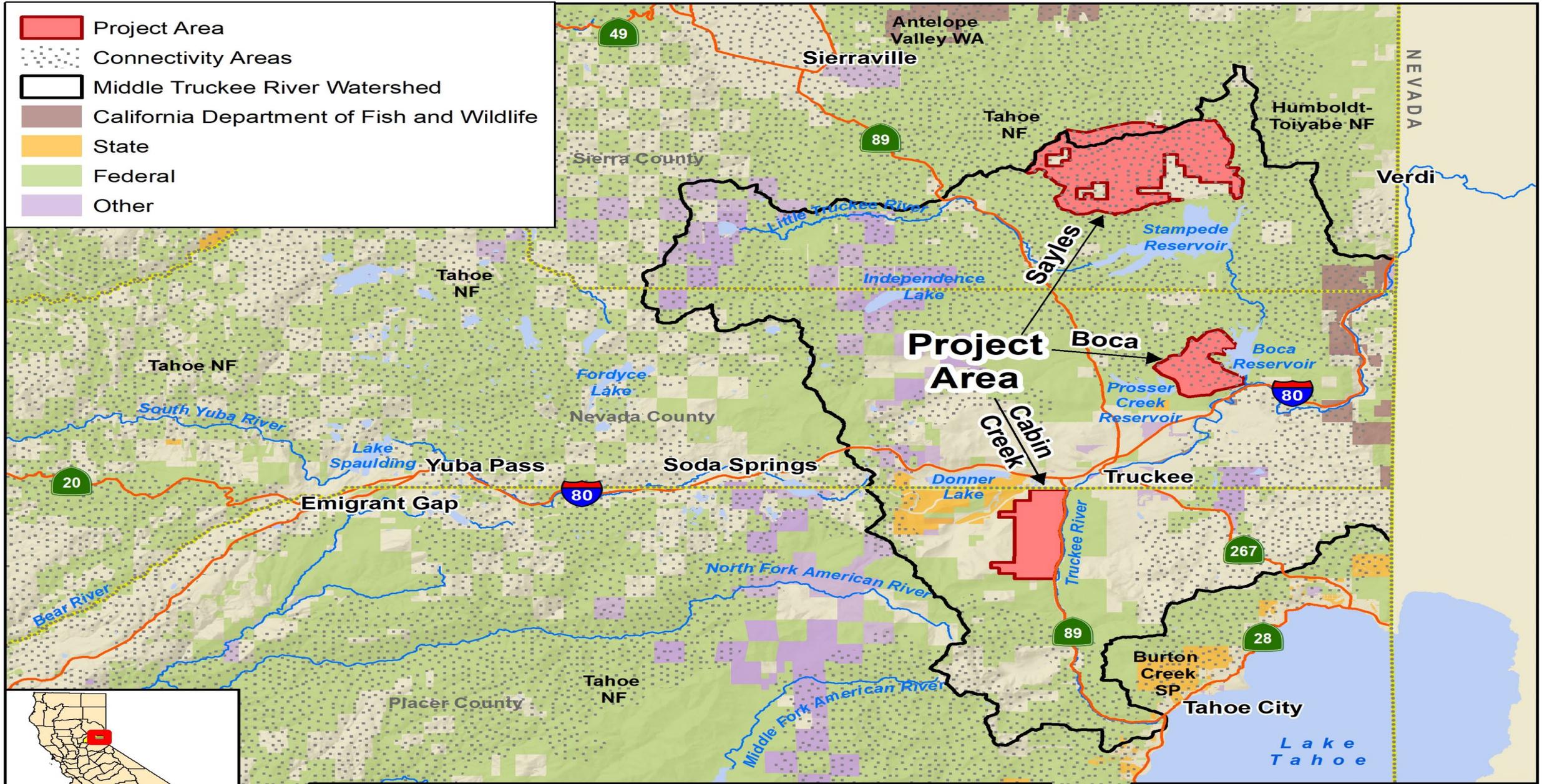
32. Dos Rios Norte

Slide 5

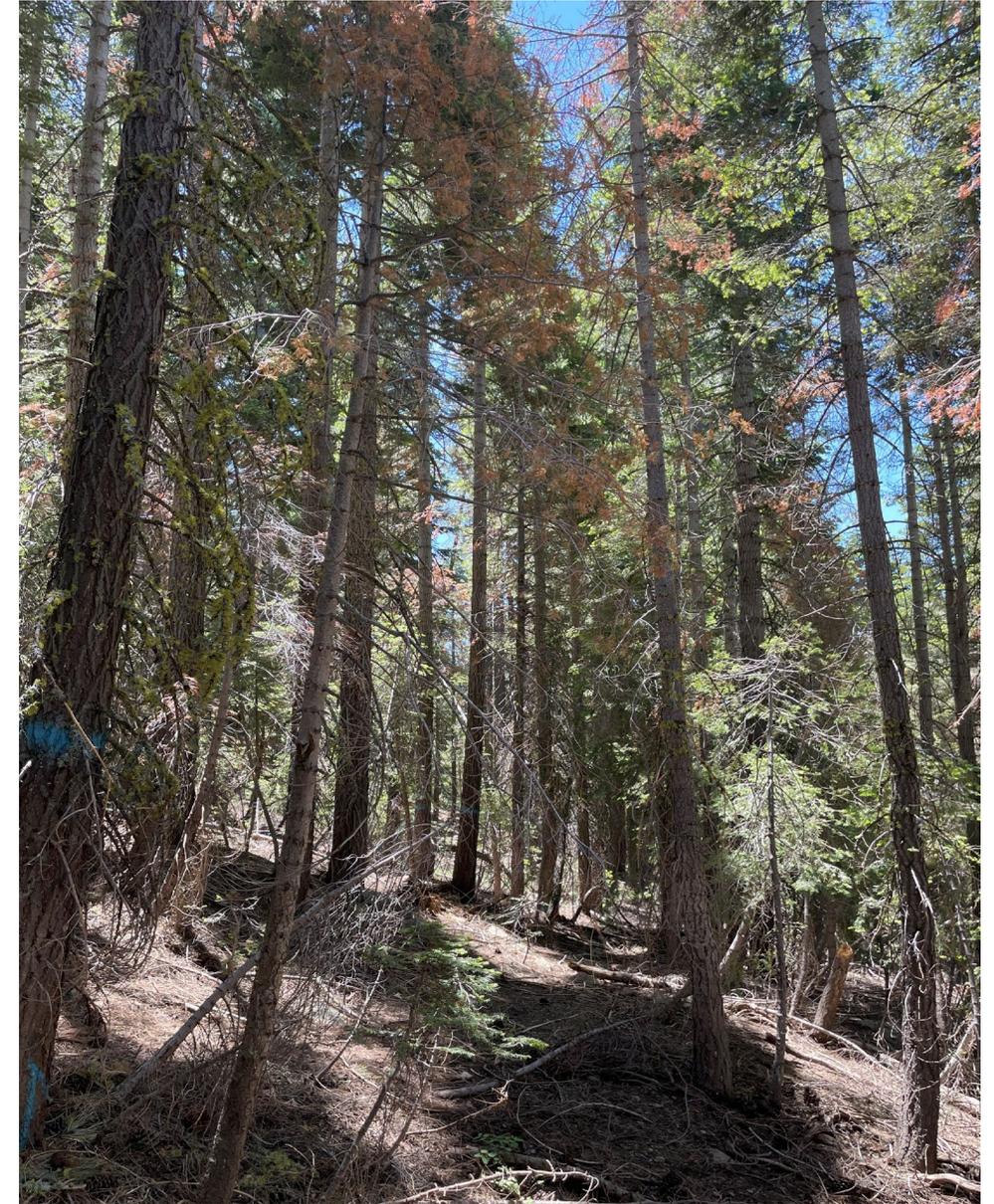
- View of the Sacramento River from the southern boundary of the property. This site flooded in winter 2022, experiencing bank erosion and deposition in some places. These features and natural river processes will be promoted through River Partners conservation ownership.
- Photo Courtesy of River Partners.



- Project Area
- Connectivity Areas
- Middle Truckee River Watershed
- California Department of Fish and Wildlife
- State
- Federal
- Other



Middle Truckee Watershed Forest Health Multiple Counties



33. Middle Truckee Watershed Forest Health

Slide 1

Existing Conditions

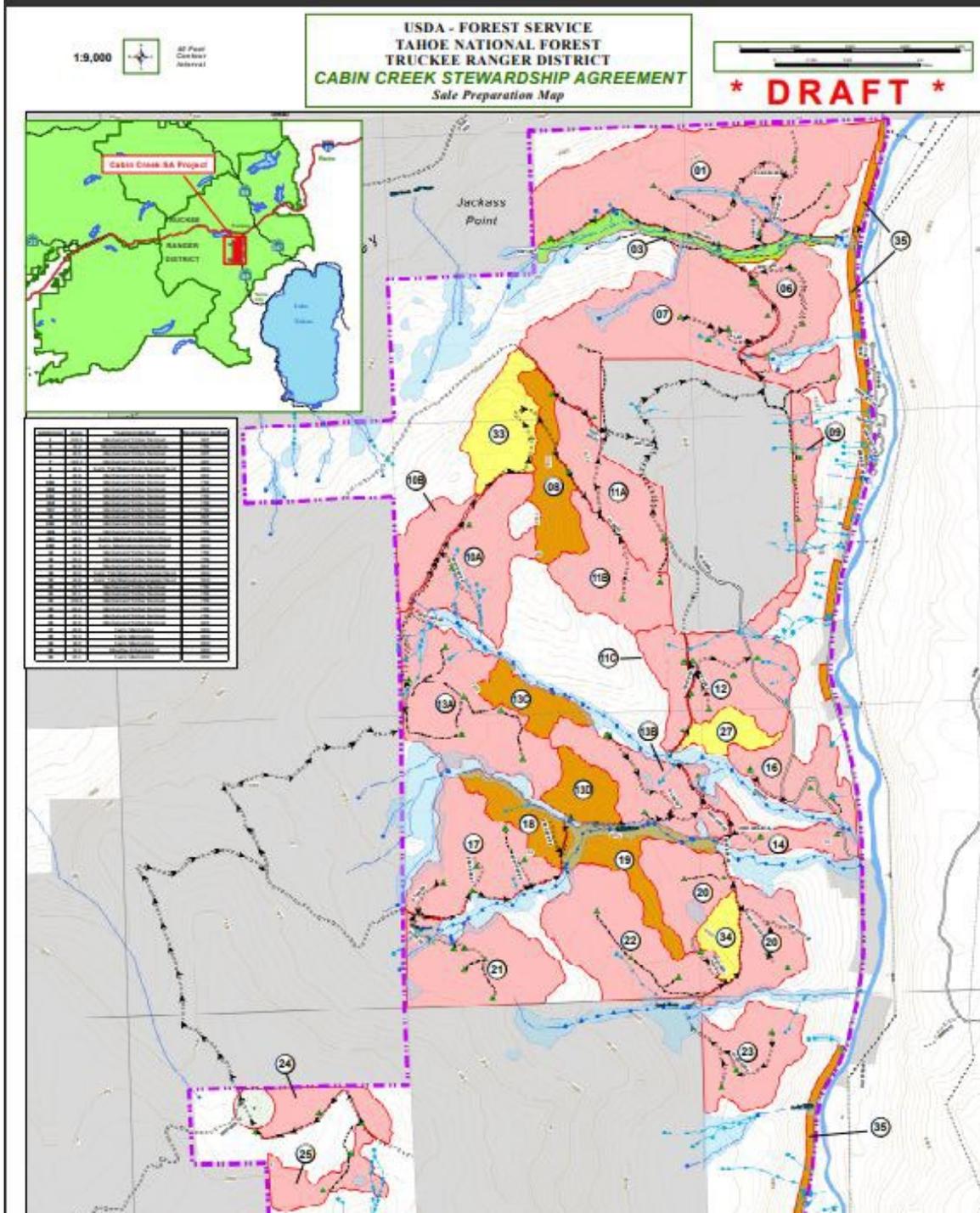
- Lack of disturbance has created densely stocked forests
- Stand conditions are increasing tree mortality
- High fuel loads increase the risk of habitat loss to catastrophic fire

33. Middle Truckee Watershed Forest Health

Slide 2

Cabin Creek Implementation

- Vegetation & road treatments to increase habitat quality and resilience
- Benefits Spotted Owl & Northern Goshawk
- Community protection



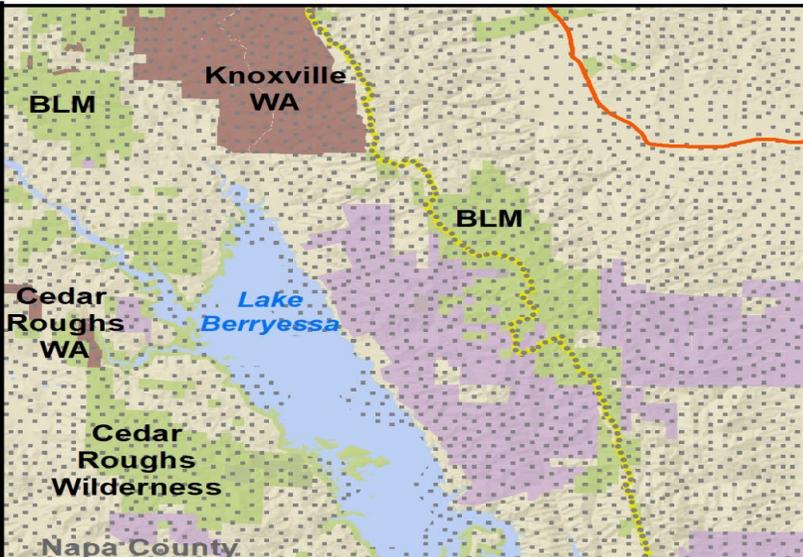
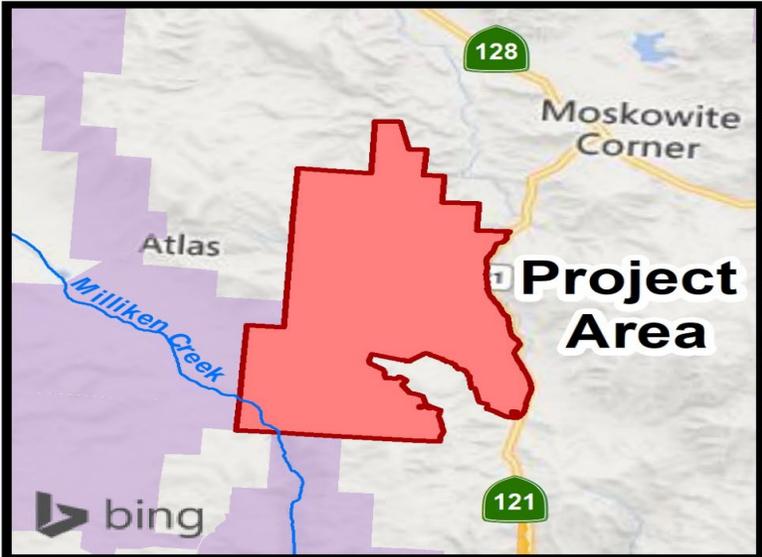
33. Middle Truckee Watershed Forest Health

Slide 4

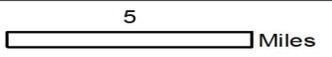
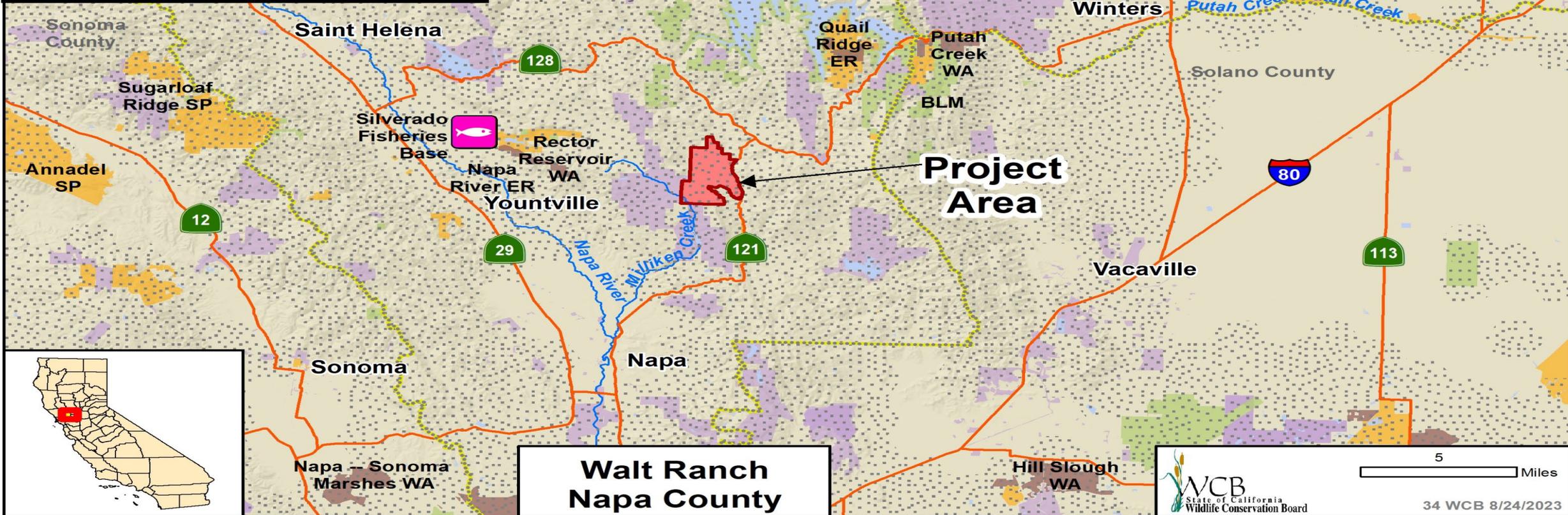
Outcomes

- 1,924 acres of forest health enhancement
- Reduced risk of catastrophic wildfire impacts to forests and communities
- Sensitive species habitat enhancement
- Implementation-ready projects on 4,000 acres
- Increased pace and scale of forest treatments





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



34. Walt Ranch

Slide 1



Left: Chamise / chaparral | Right: Meadow

Photo credit: Land Trust of Napa County

34. Walt Ranch Slide 2



- Rare plants: Jepson's leptosiphon (left) and Narrow-flowered California brodiaea (right)
- Photo credit: Land Trust of Napa County

34. Walt Ranch Slide 3

- Elevation gradient on Walt Ranch, looking southwest, San Francisco Bay in the top left corner
- Photo credit: Land Trust of Napa County

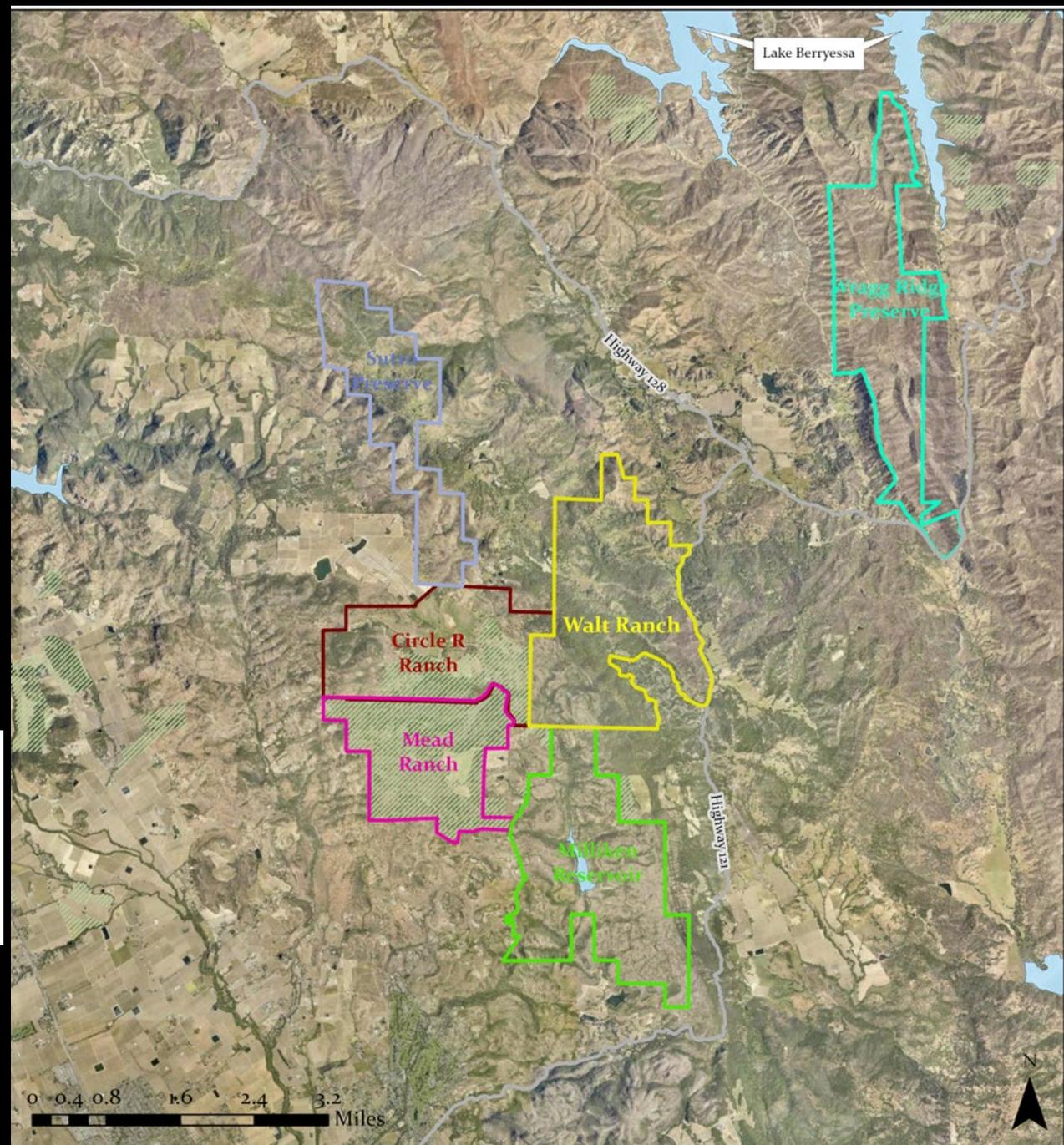
34. Walt Ranch

Slide 4

Walt Ranch and Nearby Protected Lands

- Walt Ranch
- Milliken Reservoir
- Mead Ranch
- Wragg Ridge Preserve
- Sutro Preserve
- Circle R Ranch
- Conservation Easement
- Water
- Road

Data Sources:
CLN GIS Database 2.0.1
Napa Co. GIS
Map is approximate only.
Use for reference purposes.
Created LTNC 10/22



34. Walt Ranch

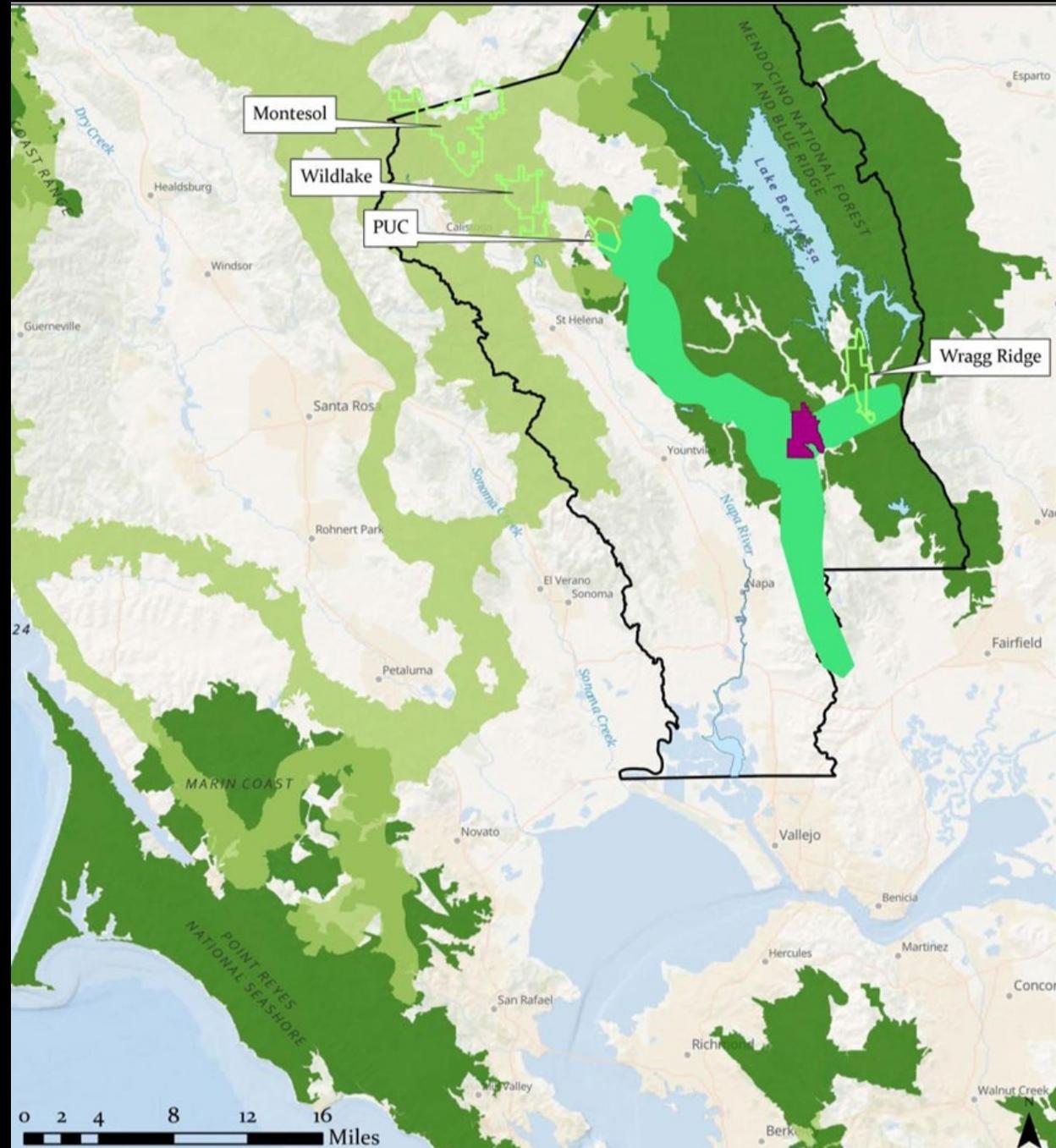
Slide 5

Walt Ranch and Wildlife Corridors

- Wildlife Corridor
- Large Landscape Blocks
- Linkages
- Walt Ranch
- Water
- Napa County

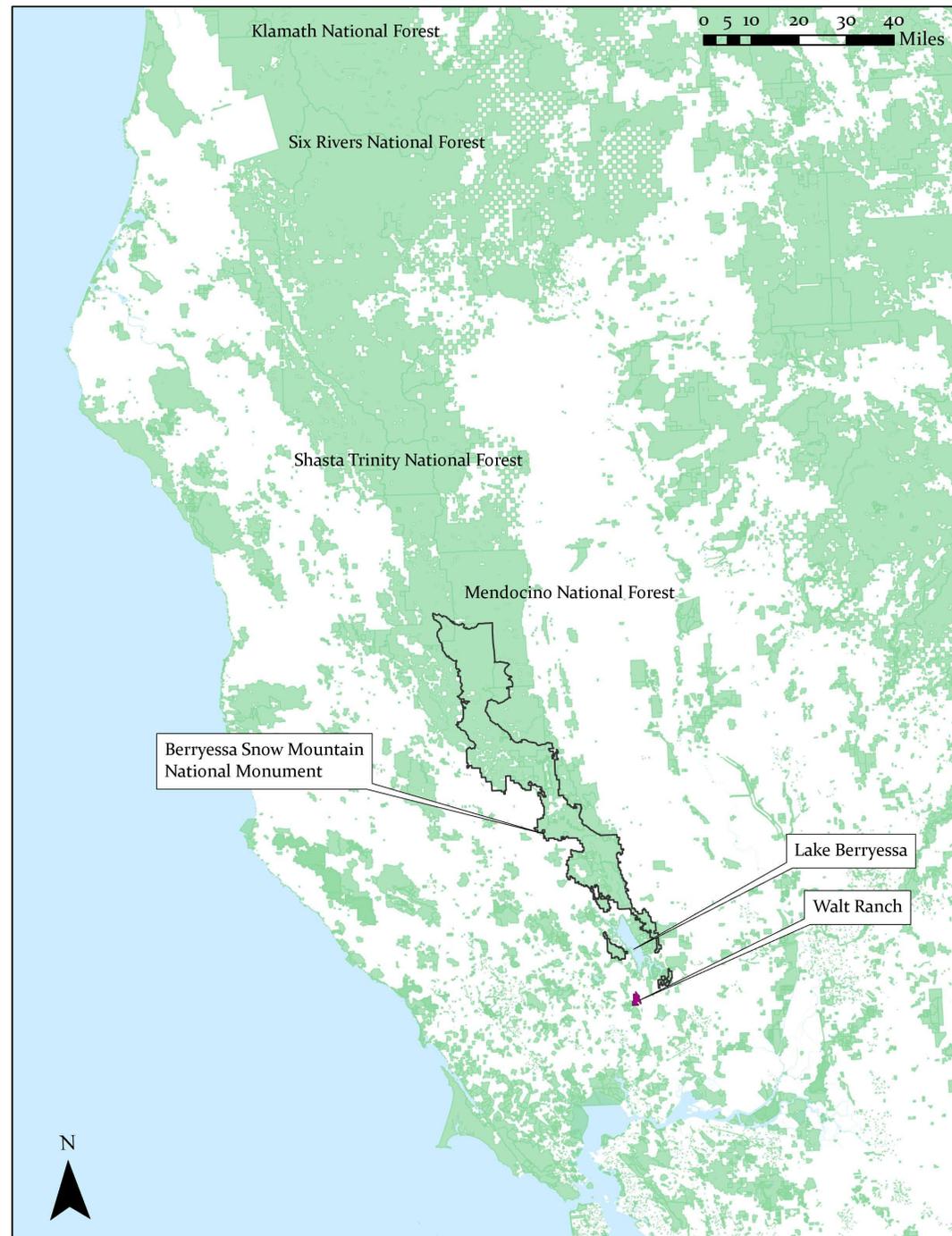
Data Sources:
CLN GIS Database 2.0.1
Napa Co. GIS

Map is approximate only.
Use for reference purposes.
Created LTNC 10/22



34. Walt Ranch

Slide 6





Oak woodlands on Walt Ranch
Photo credit: Land Trust of Napa County

34. Walt Ranch
Slide 7

\$40 million SJV Floodplain Restoration

SB179 Budget Act of 2022 19.58(b)(2)(A)(i)

"These funds shall be for the River Partners for the development and delivery of multi-benefit floodplain reconnection and habitat restoration projects in the San Joaquin and Tulare Basins. Eligible expenditures may include, but are not limited to, acquisition, planning and permitting, and scientific research supporting project implementation, including ground-based geophysics, habitat restoration benefitting dwindling wildlife, and habitat maintenance."



RIVER PARTNERS

www.riverpartners.org

Julie Rentner
(209) 639-2012



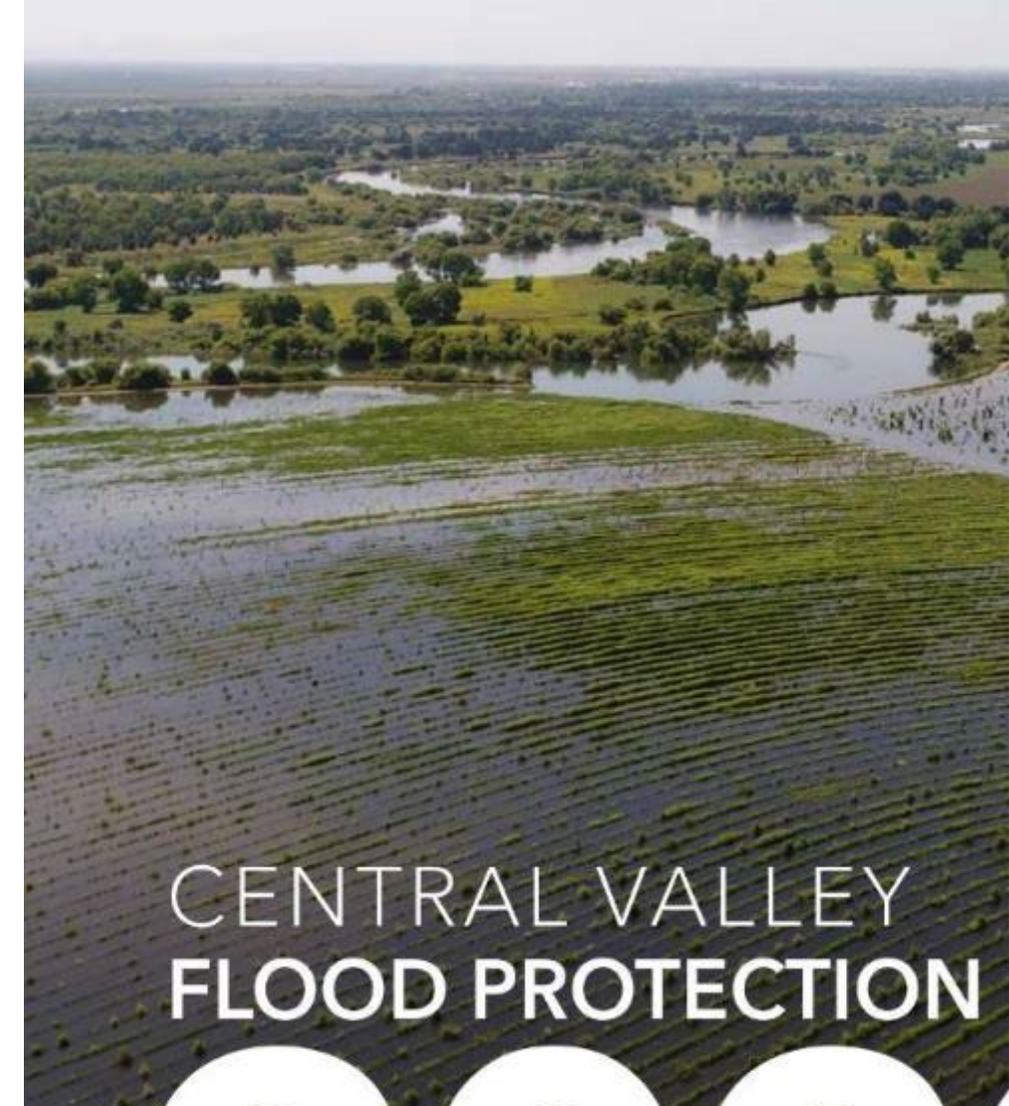
\$40 million SJV Floodplains Program

SB179 Budget Act of 2022 19.58

- 1,000 acres floodplain **land protection** including 3,000 acre-feet of permanent water demand reduction
 - Modesto to Bakersfield along 5 rivers: San Joaquin, Merced, Fresno, Kings, Kern
 - 10 floodplain restoration projects advanced through **planning, analysis and permitting**
 - 6 floodplain restoration projects advanced through **implementation and maintenance**
 - 8 **research partnerships** advancing groundwater recharge and climate resilience
 - **Leverage** to secure >\$60 million additional funds from federal and private sources
- 





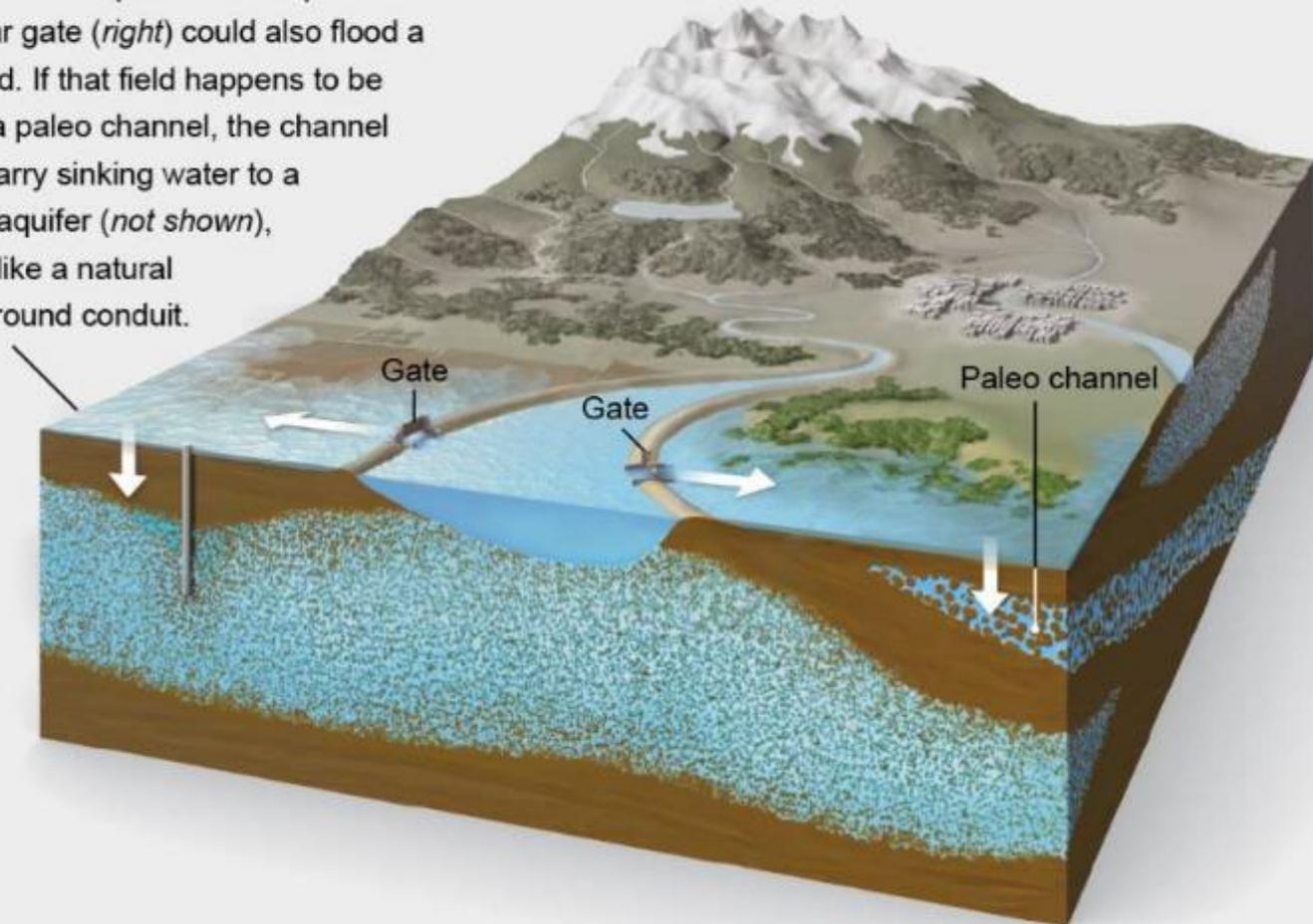


CENTRAL VALLEY FLOOD PROTECTION

2022

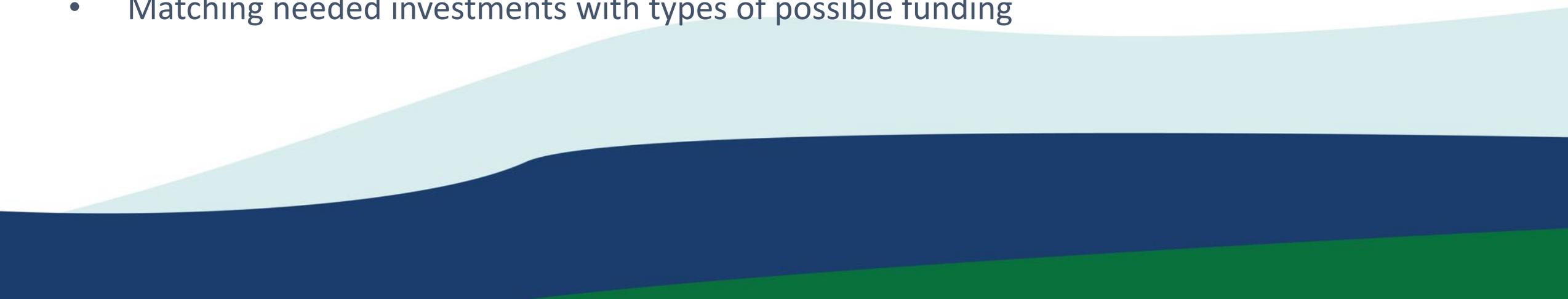
UPDATE

A gate in a levee (*left*) can release high river water onto a farm field so it percolates down to replenish the aquifer. A similar gate (*right*) could also flood a wild field. If that field happens to be above a paleo channel, the channel could carry sinking water to a distant aquifer (*not shown*), almost like a natural underground conduit.

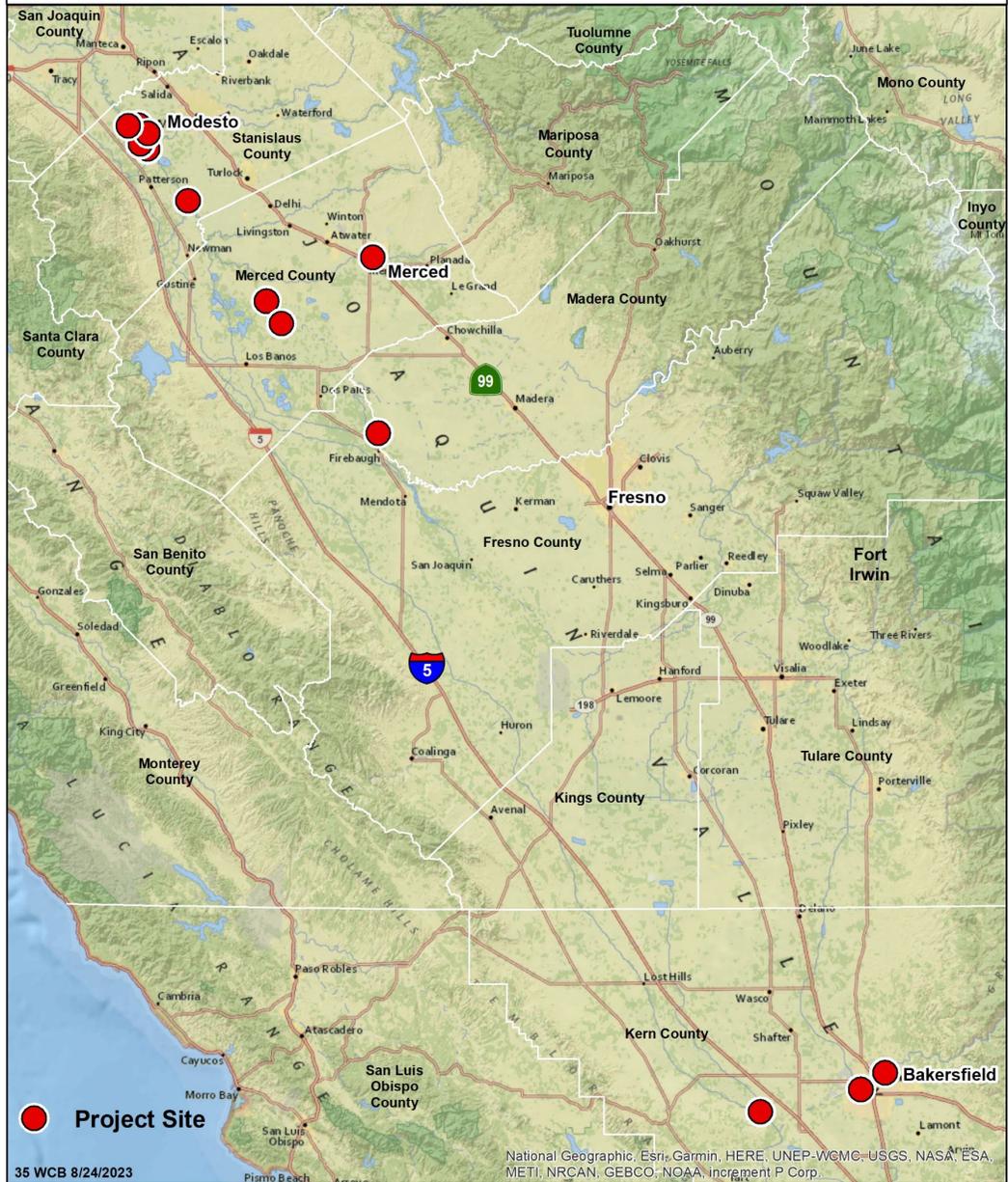


Prioritization

San Joaquin Valley Floodplains

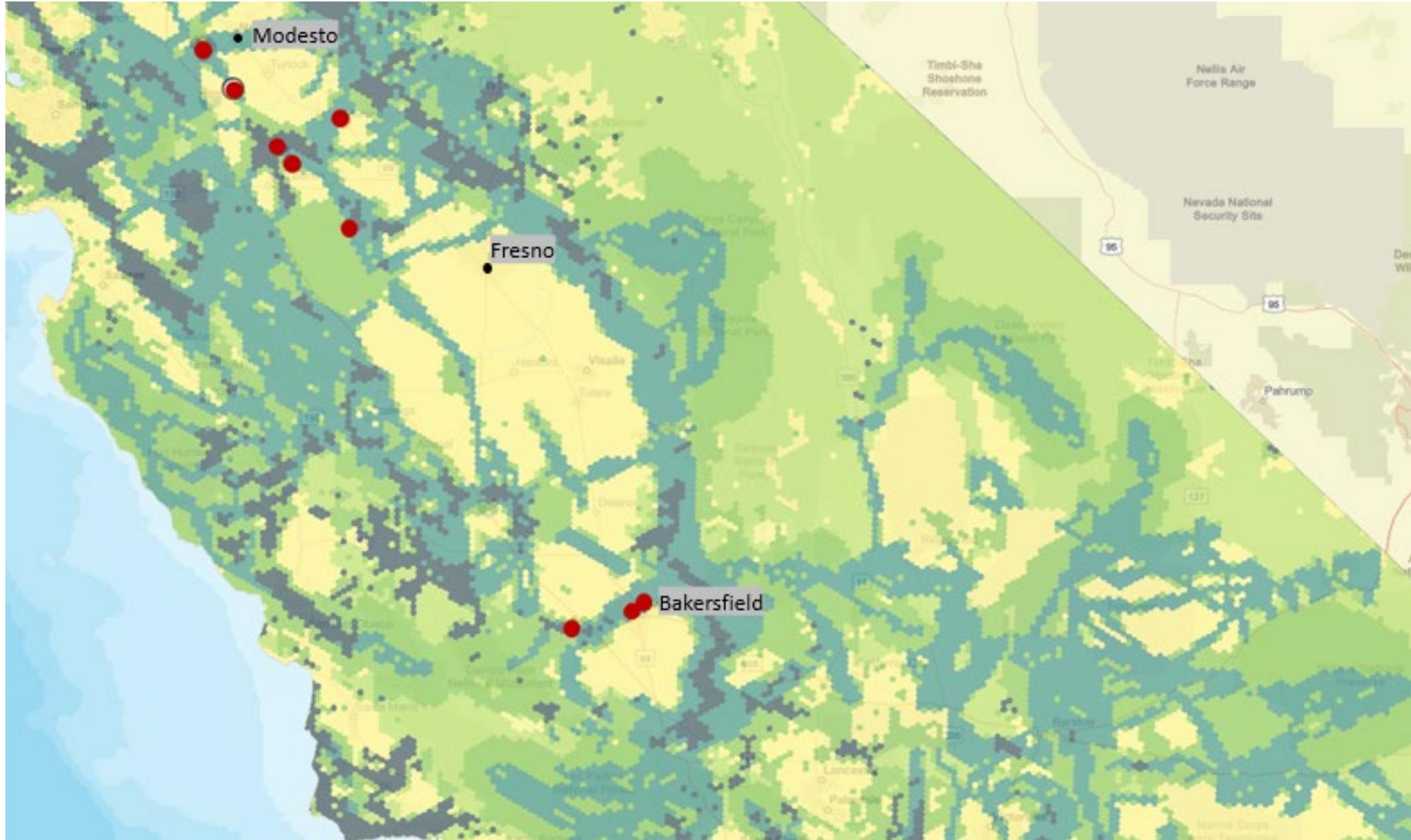
- 22 years of community engagement, project development and partnerships
 - Pipeline of projects that are ready for funding that exceeds \$280million in 30 projects from Stockton to Bakersfield
 - Working to include funding for these multi-benefit projects in state and federal programs
 - Advancing the most shovel-ready projects with the largest positive effects on:
 - **Wildlife habitat restoration**
 - **Flood risk reduction**
 - **Groundwater recharge and water conservation**
 - **Cultural preservation and community enrichment**
 - Matching needed investments with types of possible funding
- 

The San Joaquin and Tulare Basin Planning Project Multiple Counties



35. San Joaquin and Tulare Basin Planning Project Map

Slide 1



35. San Joaquin and Tulare Basin Planning Project

Slide 2

Project Need

- San Joaquin and Tulare Basin highly human altered, especially by agricultural use
- Issues:
 - Limited flood conveyance
 - Drought & fire
 - Habitat loss
 - Corridor fragmentation
- Highly invaded landscapes, limited native vegetation

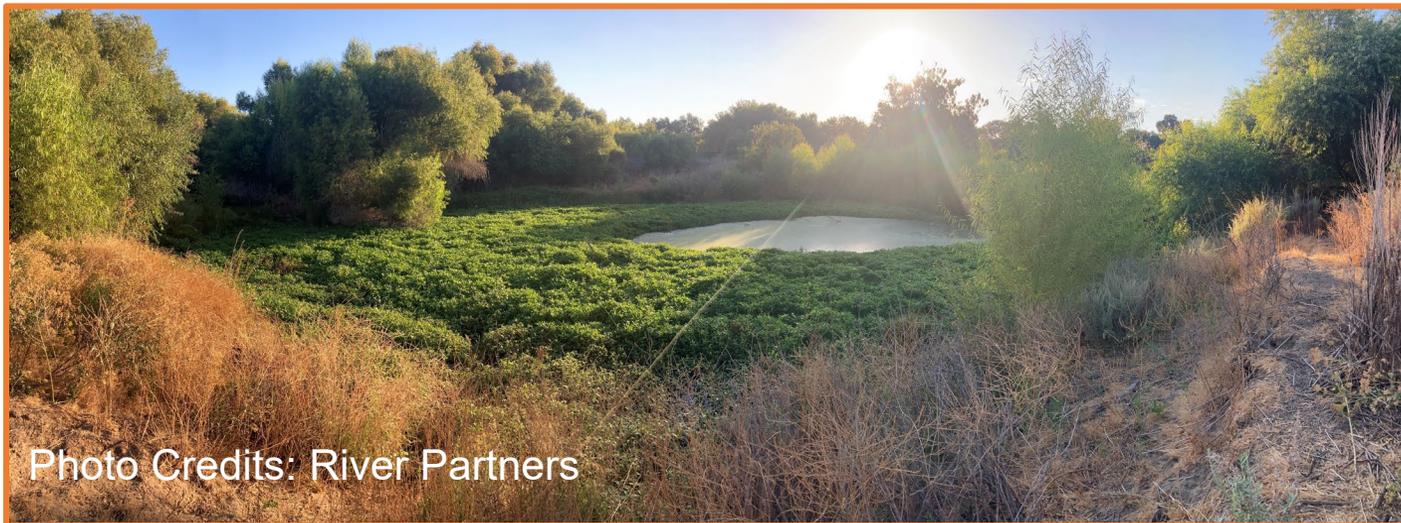
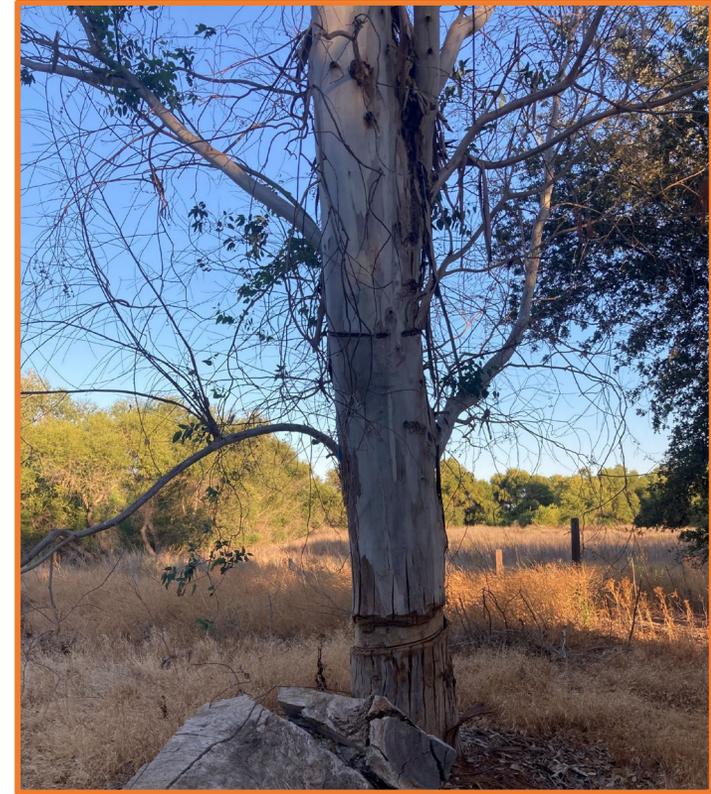


Photo Credits: River Partners



35. San Joaquin and Tulare Basin Planning Project

Slide 3

Project Goals

- Complete planning, permitting, and design plans for at least 3,000 acres of floodplain restoration projects.
- Design and conduct Before-After Control-Impact Monitoring.
- Identify and meet seed/plant needs for at least 10 floodplain restoration projects.
- Assess potential for groundwater recharge.



Photo Credits: River Partners

35. San Joaquin and Tulare Basin Planning Project

Slide 4

Solution

- Submit permit/permit applications and complete CEQA for each restoration site.
 - Develop restoration plan for each site.
- Develop BACI Monitoring
 - Compare pre-restoration conditions at project sites to know age post-restoration sites.
 - Develop monitoring plan for each
- Assess native seed availability and develop collection and amplification methods for up to 50 new species.
 - Collect seeds
 - On-farm amplification
- Research Groundwater Dependent Ecosystems
 - Two research projects
 - Evaluate recharge potential & reliance of vegetation



Photo Credits: River Partners

San Joaquin and Tulare Basin Planning Project

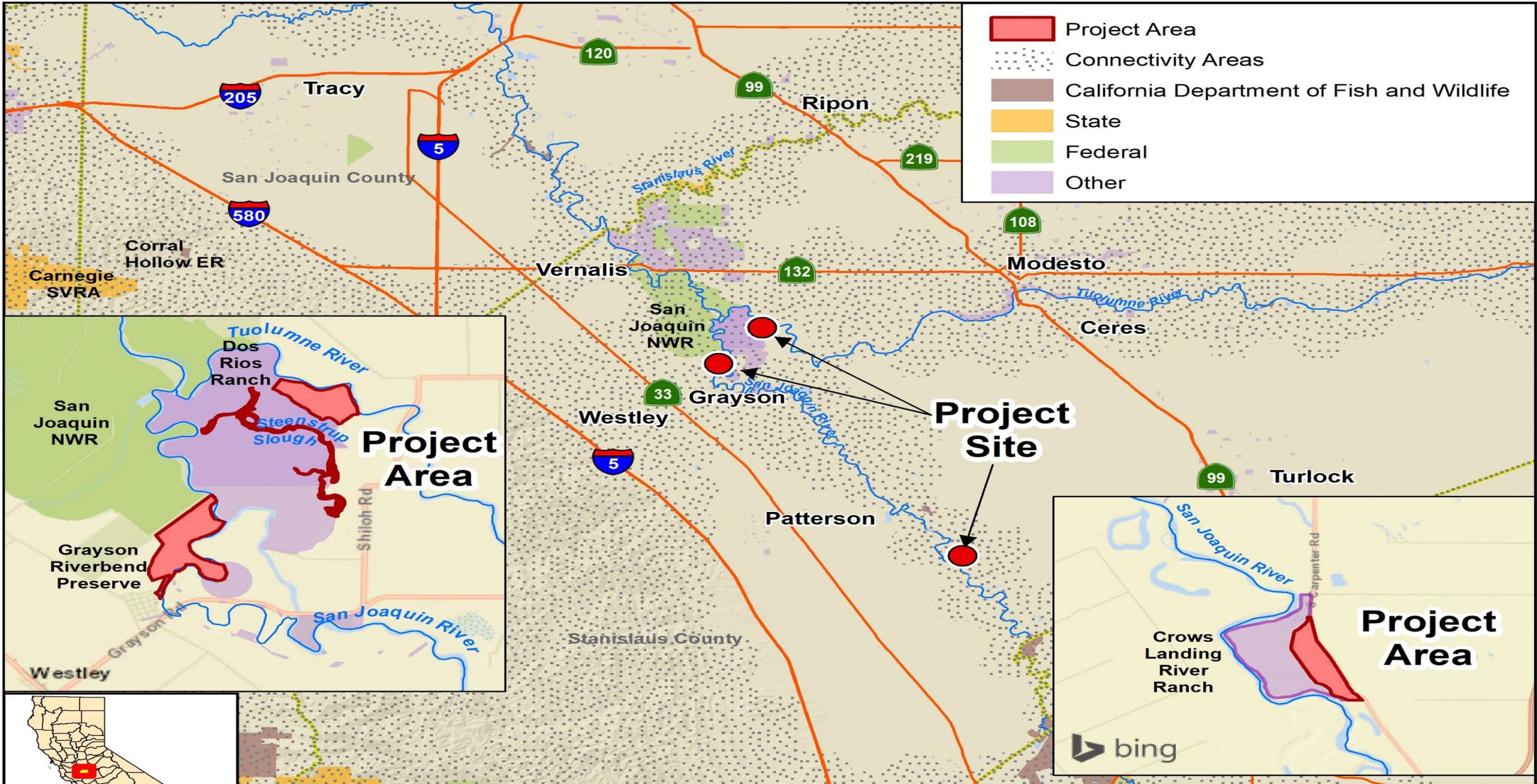
Slide 5

Project Outcomes

- 3,000+ acres of shovel-ready projects to create self-sustaining riparian habitat along 2 major rivers
 - Increased native plant diversity
 - Restored habitat for wildlife
- Determine best practices for native seed production and amplification
 - Produce quality seed
- Gain understanding of ecosystem reliance on groundwater



Photo Credits: River Partners



**San Joaquin River Floodplain Restoration Complex
Stanislaus County**



6 Miles

36. San Joaquin River Floodplain Restoration Complex

Slide 1

PROJECT NEED

Dos Rios and Grayson

2022-23 winter flooding caused significant damage to recent public investments in floodplain restoration and fish and wildlife habitat restoration.



Photo credit: River Partners



Photo credit: River Partners

36. San Joaquin River Floodplain Restoration Complex

Slide 2

PROJECT NEED

Crows Landing River Ranch

- Native habitat removed nearly a century ago.
- Property acquired for conservation and regional flood management improvements.
- Dairy facilities and infrastructure prevent habitat restoration from occurring on dry side of the levee.



Photo credit: River Partners



Photo credit: River Partners

36. San Joaquin River Floodplain Restoration Complex

Slide 3

PROJECT GOAL

Establish over 400 acres of sustainable wildlife habitat along the San Joaquin River for riparian obligate species and pollinators.



36. San Joaquin River Floodplain Restoration Complex

Slide 4

PROJECT SOLUTIONS

Dos Rios and Grayson

- Repair flood-damaged roads and irrigation systems at Grayson.
- Replant up to 330 acres of riparian vegetation using adaptive management.
- Enhance Steenstrup Slough at Dos Rios to prevent invasion by common reed.
- Maintain and monitor 400 acres of habitat for 2.5 years



36. San Joaquin River Floodplain Restoration Complex

Slide 5

PROJECT SOLUTIONS

Crows Landing River Ranch

- Remove dairy buildings and infrastructure
- Clean dairy lagoon
- Collect baseline data
- Develop planting palette and layout
- Prepare 75 acres for planting
- Restore oak woodland and riparian scrub communities
- Complete annual qualitative and quantitative performance monitoring



36. San Joaquin River Floodplain Restoration Complex

Slide 6

PROJECT OUTCOMES

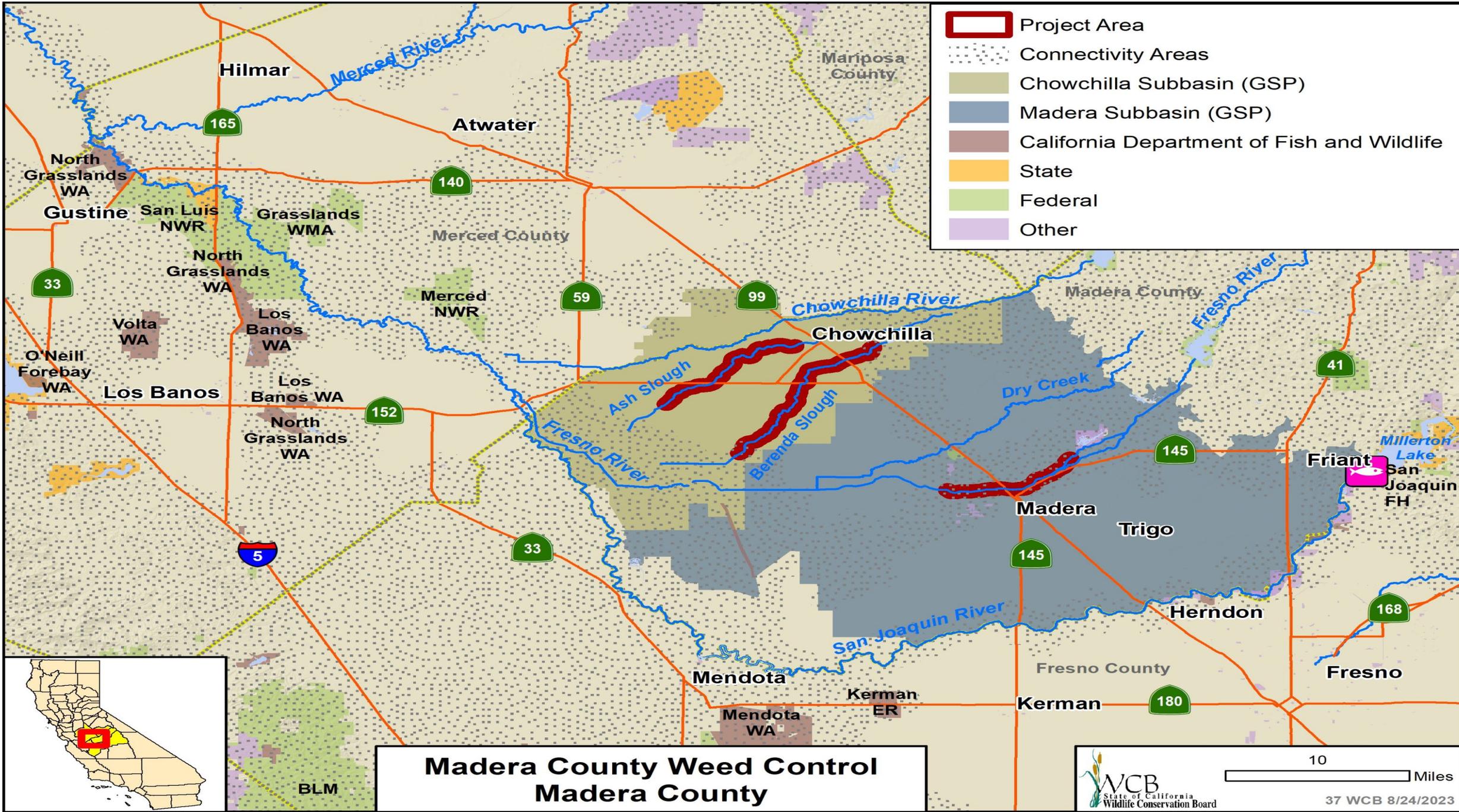
- 330 acres of established native habitat at Dos Rios and Grayson.
- 75 acres of new native habitat and 7 acres of enhanced open water feature at Crows Landing.
- Conversion of Crows Landing from carbon source to carbon sink.
- Reduced chemical inputs and exposure
- Monitoring data that will inform adaptative management of each site.



Photo credit: River Partners



Photo credit: River Partners



Madera County Weed Control

Madera County



10 Miles

37 WCB 8/24/2023

37. Madera County Weed Control

Slide 1

Project Need

- Madera and Chowchilla subbasins invaded by dense stands of Arundo
- Dense Arundo provides little to no habitat value for wildlife
- Arundo is water intensive, placing strain on the critically over drafted Madera County water basin.
- Arundo limits flood conveyance
- Arundo poses high fire risk when wet or dry
- Arundo can easily spread



Photo Credit: WCB



Photo Credit: Madera County Flood Control



Photo Credit: WCB



Photo Credit: WCB

37. Madera County Weed Control

Slide 2



Project Goals

- Decrease Arundo density and cover
 - 10% ≤
 - Build ecosystem resilience

37. Madera County Weed Control

Slide 3

Solution

- Treat 100-200 acres of riparian habitat
- Monitor and adaptively manage
 - Remove biomass
 - Apply herbicide to resprout
- Minimize Chemical Impact
 - Avoid Elderberry
 - No use when wind ≥ 7 mph
 - Adherence to labeling and laws
 - Crop oil on target plants
- Contribute weed mapping, management, and monitoring data



Photo Credit: River Partners

37. Madera County Weed Control

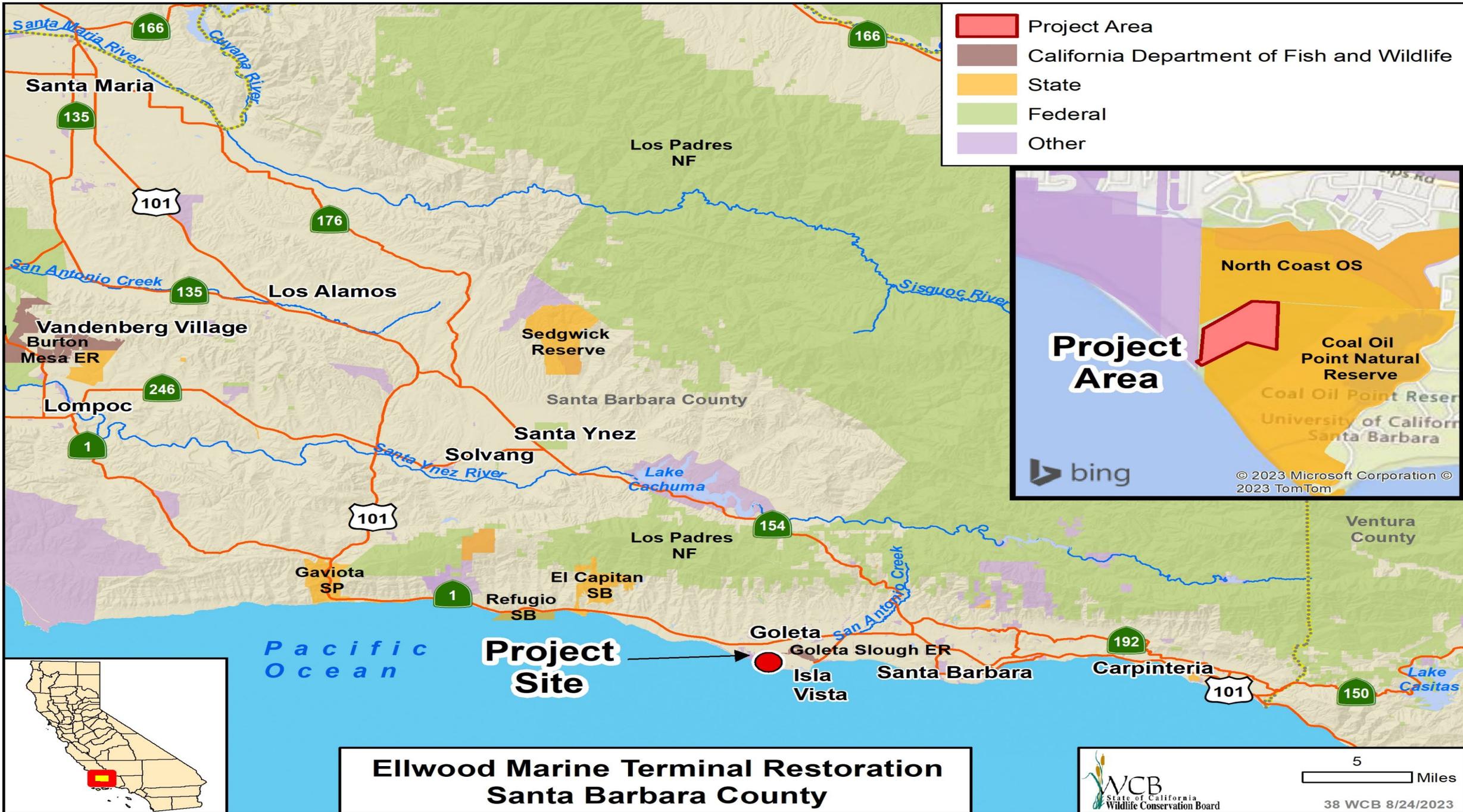
Slide 4

Project Outcomes

- First step in eradication of 100-200 acres of Arundo and restoration of native habitat throughout the Chowchilla and Madera subbasins.
 - leverage support and methods to garner additional funding
- Resilient landscape to drought, fire and flooding.



Photo Credit: WCB



**Ellwood Marine Terminal Restoration
Santa Barbara County**



5 Miles

38. Ellwood Marine Terminal Restoration

Slide 1

Ellwood Marine Terminal

- 19-acre site
 - Marine terminal with tanks, ballast ponds, pumps and piping
 - Decommissioned in 2014 and
 - Scheduled to be demolished and remediated in 2023-24.
- Adjacent to protected lands
 - Upper Devereux Slough
 - Coal Oil Point Reserve (COPR)
 - City of Goleta's Sperling Preserve
- Currently dominated by invasive plants
 - Non-native annual grasses
 - Pampas grass
 - Fennel
 - Eucalyptus



Project Site

38. Ellwood Marine Terminal Restoration

Slide 2



Decommissioned Marine Terminal Infrastructure

38. Ellwood Marine Terminal Restoration

Slide 3



Vernal pool



Perennial bunch grass

Habitat restoration:

Vernal pools (1.53 ac)

Perennial bunch grass (3.63 ac)

Coastal sage scrub (9.37 ac)

Oak woodlands (2.06 ac)

Coastal grassland (0.5 ac)

Coastal dunes (0.28 ac)



Coastal sage scrub



Coastal dunes

38. Ellwood Marine Terminal Restoration

Slide 4

- Restore freshwater seep connection to COPR
- Connect to California Coastal Trail
- Access for native Chumash
- Sensitive species habitat



38. Ellwood Marine Terminal Restoration

Slide 5

Western pond turtle



Photo: CDFW

Belding's Savannah Sparrow



Photo: CDFW

Burrowing owl



Photo: CDFW

California red-legged frog



Photo: National Park Service

White-tailed kite

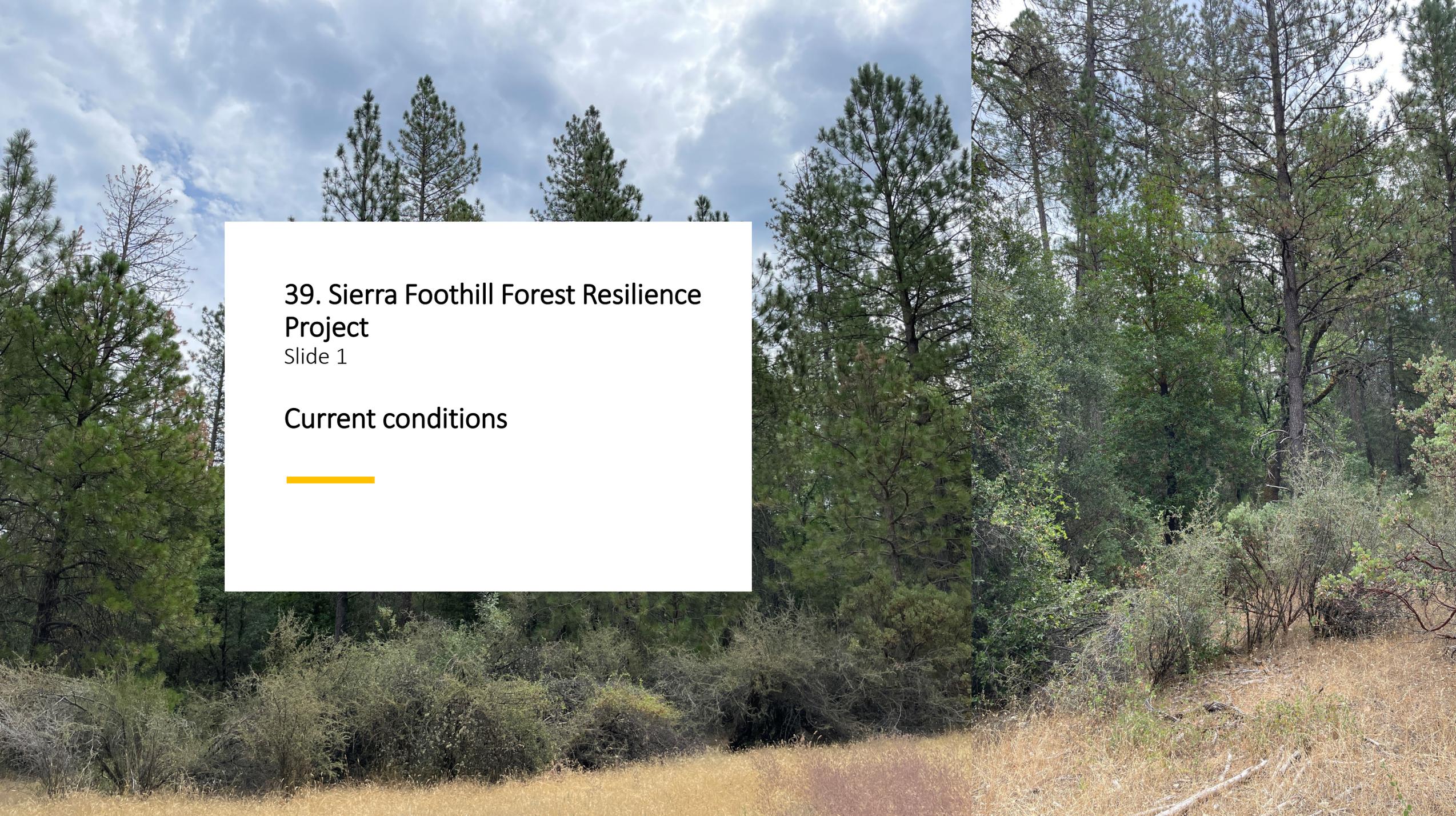


Photo: U.S. National Audubon Society

Belted kingfisher



Photo: U.S. National Park Service



39. Sierra Foothill Forest Resilience Project

Slide 1

Current conditions

39. Sierra Foothill Forest Resilience Project

Slide 2

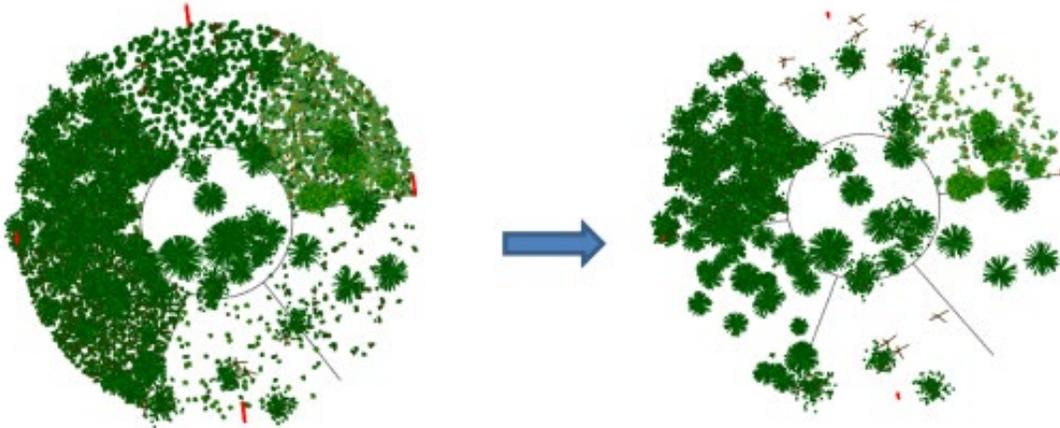
Objectives:

- Reduction of fuels on target private and public lands;
- Post-fire habitat restoration, invasive plant management, and native revegetation;
- Community engagement, working directly with private landowners to achieve shared management goals and Community Toolkit follow-up from the planning phase;
- Implement a WCB-funded planning phase



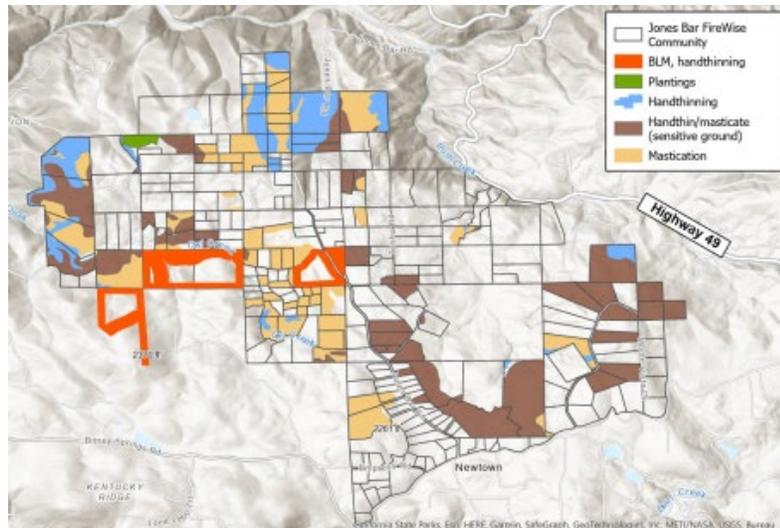
39. Sierra Foothill Forest Resilience Project: Addressing Climate Impacts

Slide 3



Simulation of forest canopy cover, pre- and post thinning.

- Incorporate fuel reduction, forest ecological integrity, and habitat complexity
- Landscape-scale forest restoration and management across public/private land ownership
- Native plant selection for projected conditions under climate change
- Increase soil organic carbon

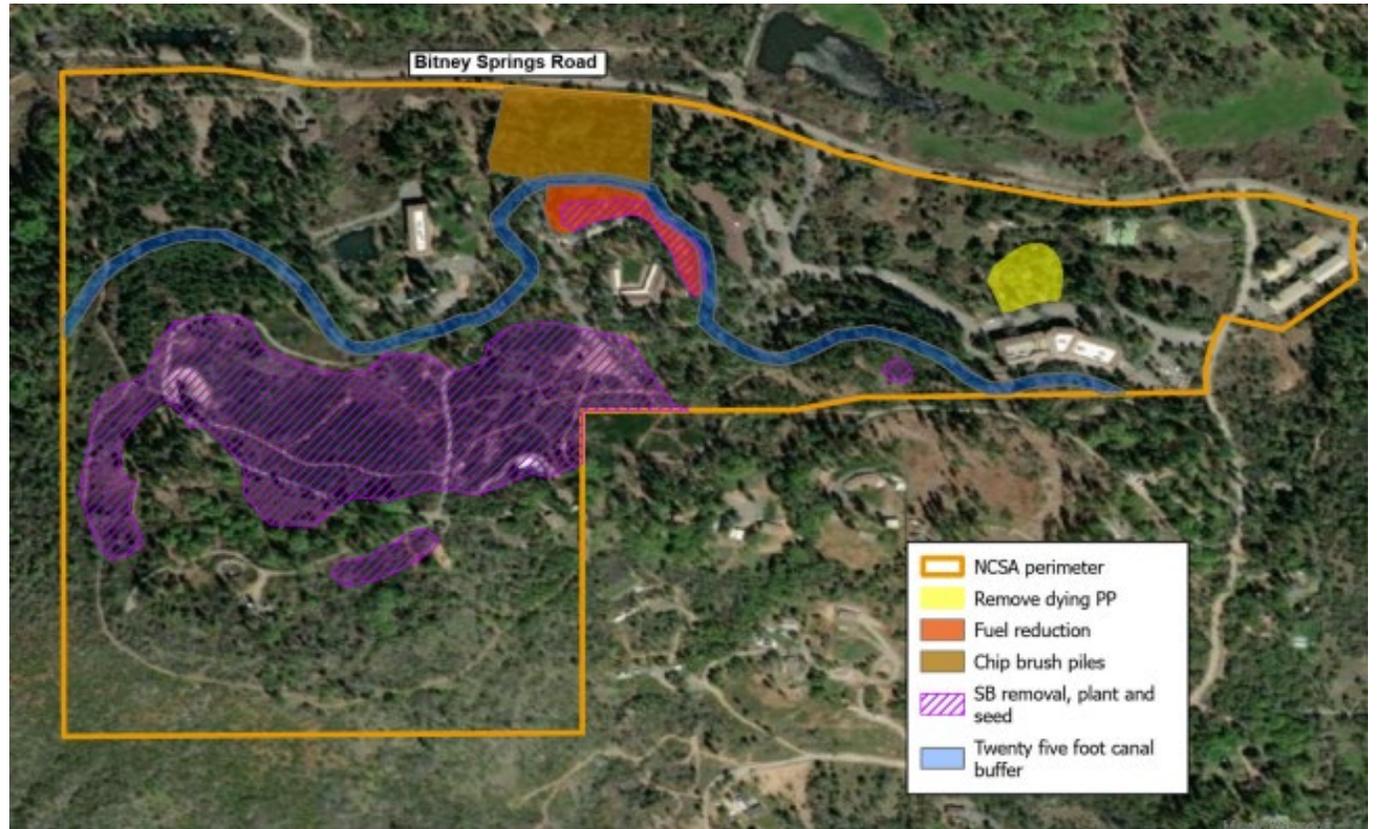


Images courtesy of Sierra Streams Institute

39. Sierra Foothill Forest Resilience Project

Slide 4

Nevada City School
of the Arts



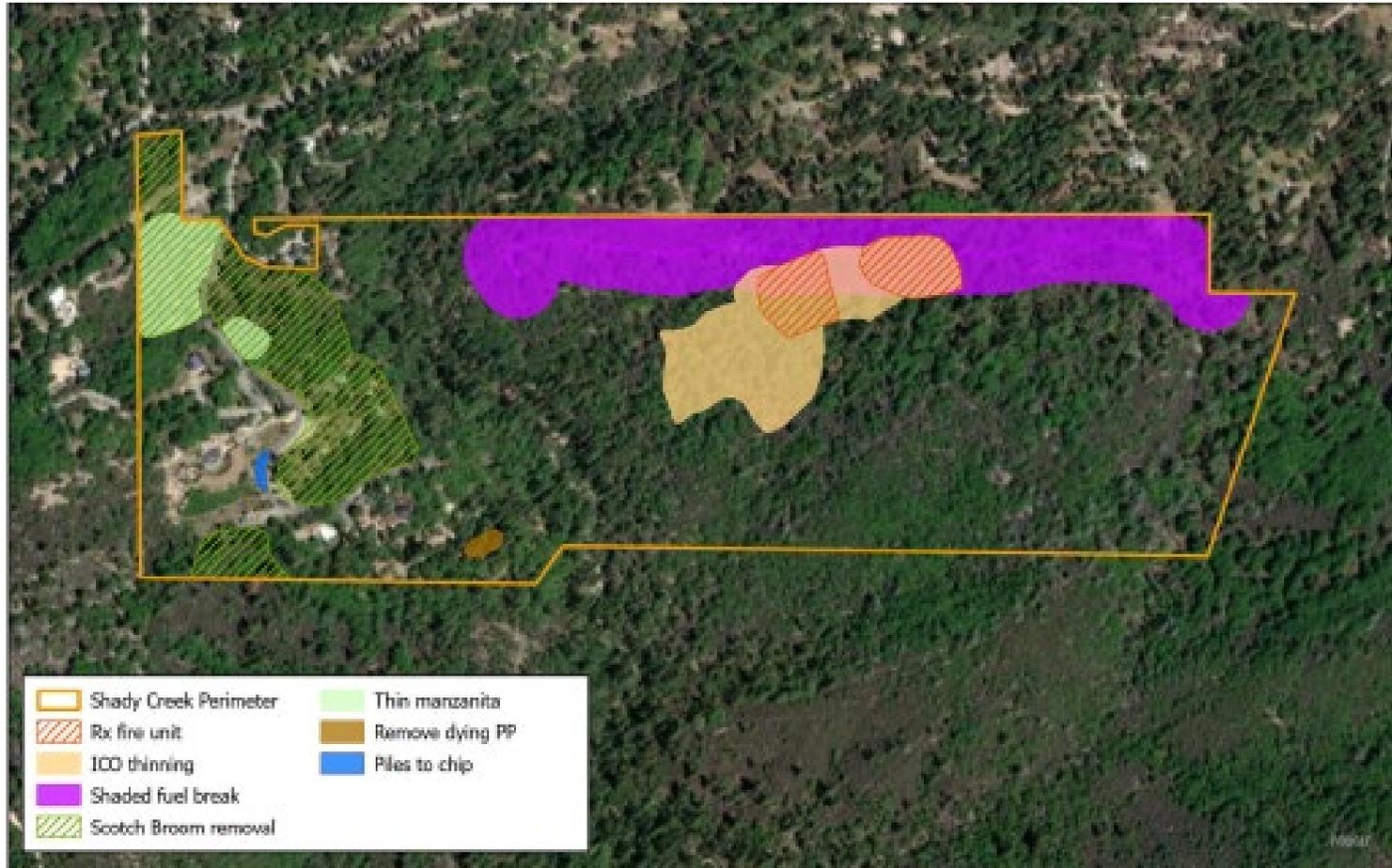
Recommended
Treatments



39. Sierra Foothill Forest Resilience Project

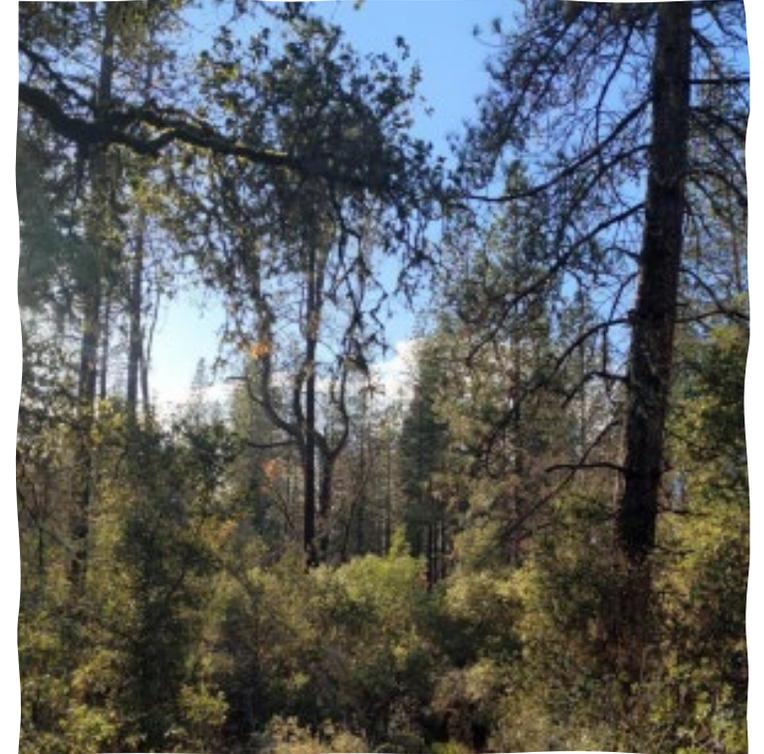
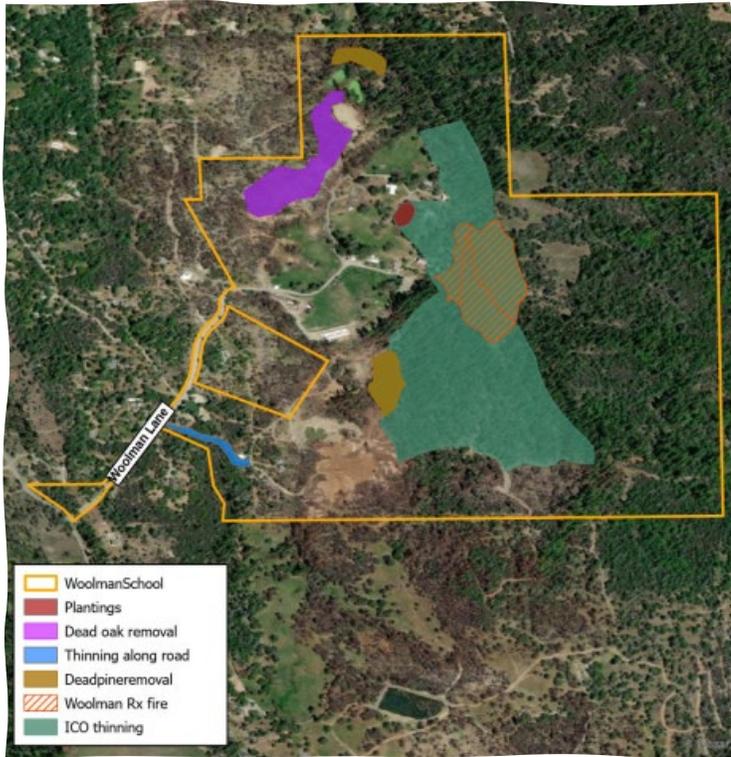
Slide 5

Shady Creek Outdoor School



Recommended Treatments
Above: Proposed area for
thinning and prescribed burn

Images courtesy of Sierra Streams Institute



39. Sierra Foothill Forest Resilience Project

Slide 6

Woolman Outdoor School

Recommended Treatments

39. Sierra Foothill Forest Climate Resilience

Slide 7

Recommended Treatments

Top: Small diameter oak and brush at BLM site.

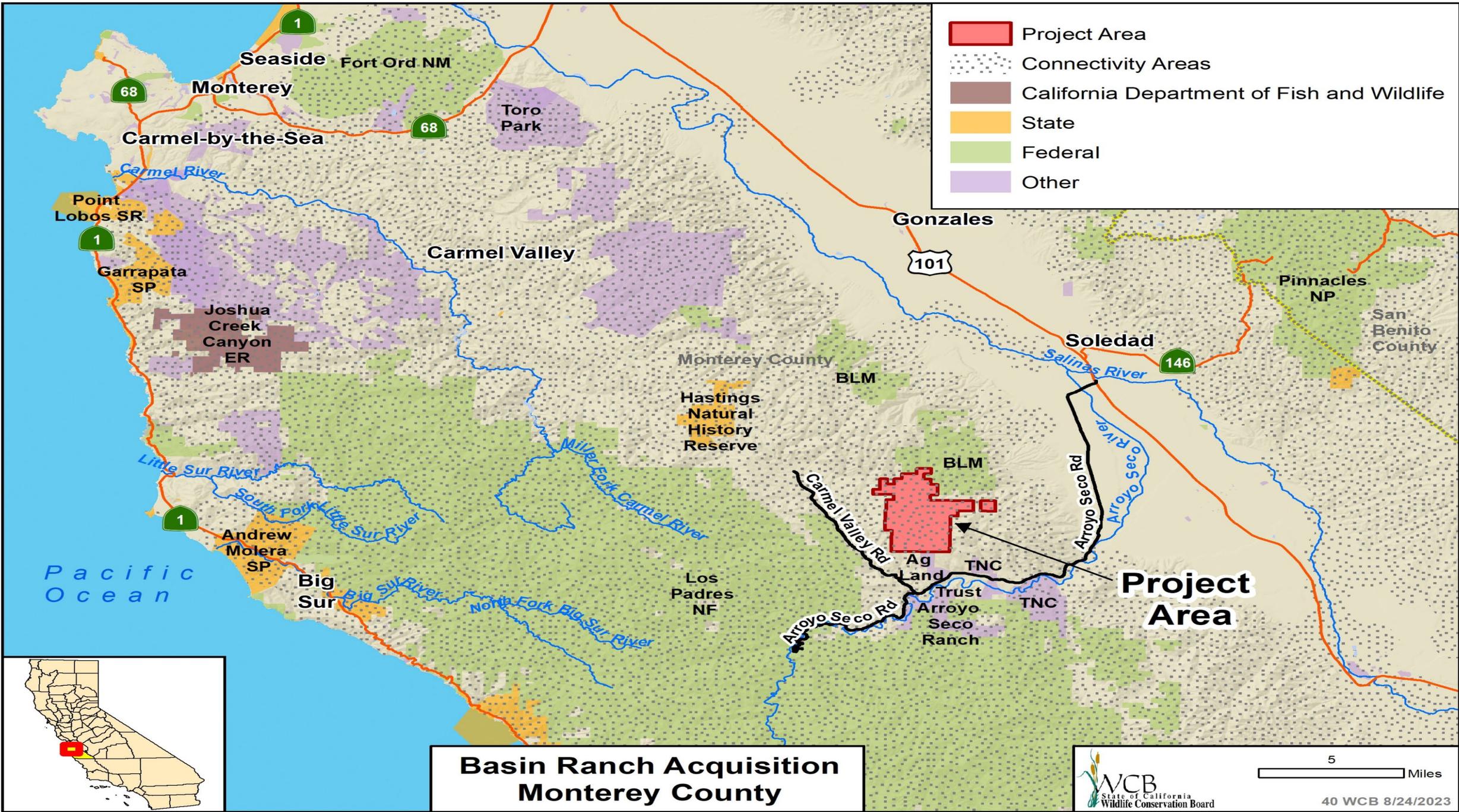
Bottom: Pleasant Fire (August 2022) scar – proposed
planting site



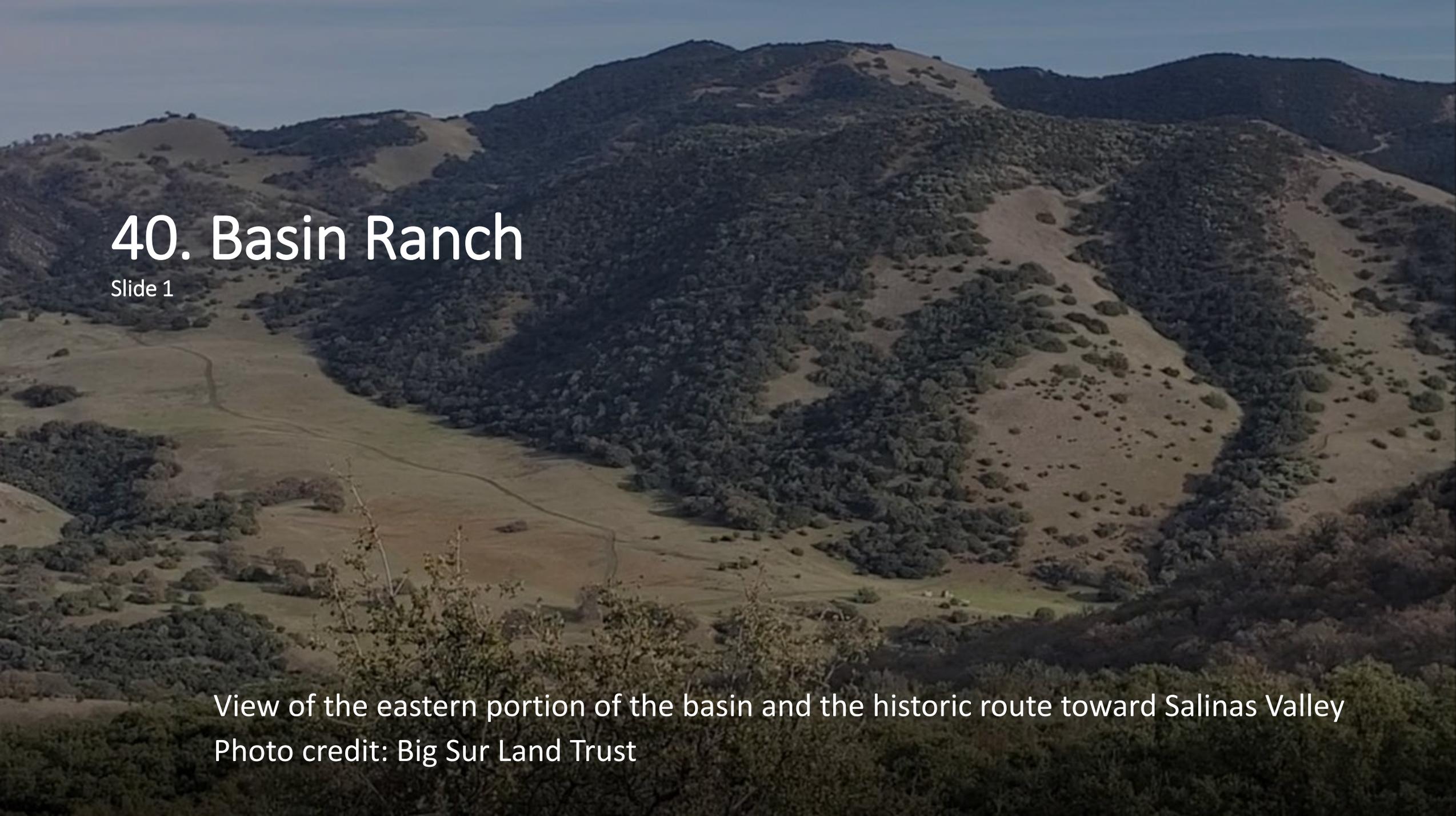


39. Sierra Foothill Forest Resilience Project

Slide 8



**Basin Ranch Acquisition
Monterey County**



40. Basin Ranch

Slide 1

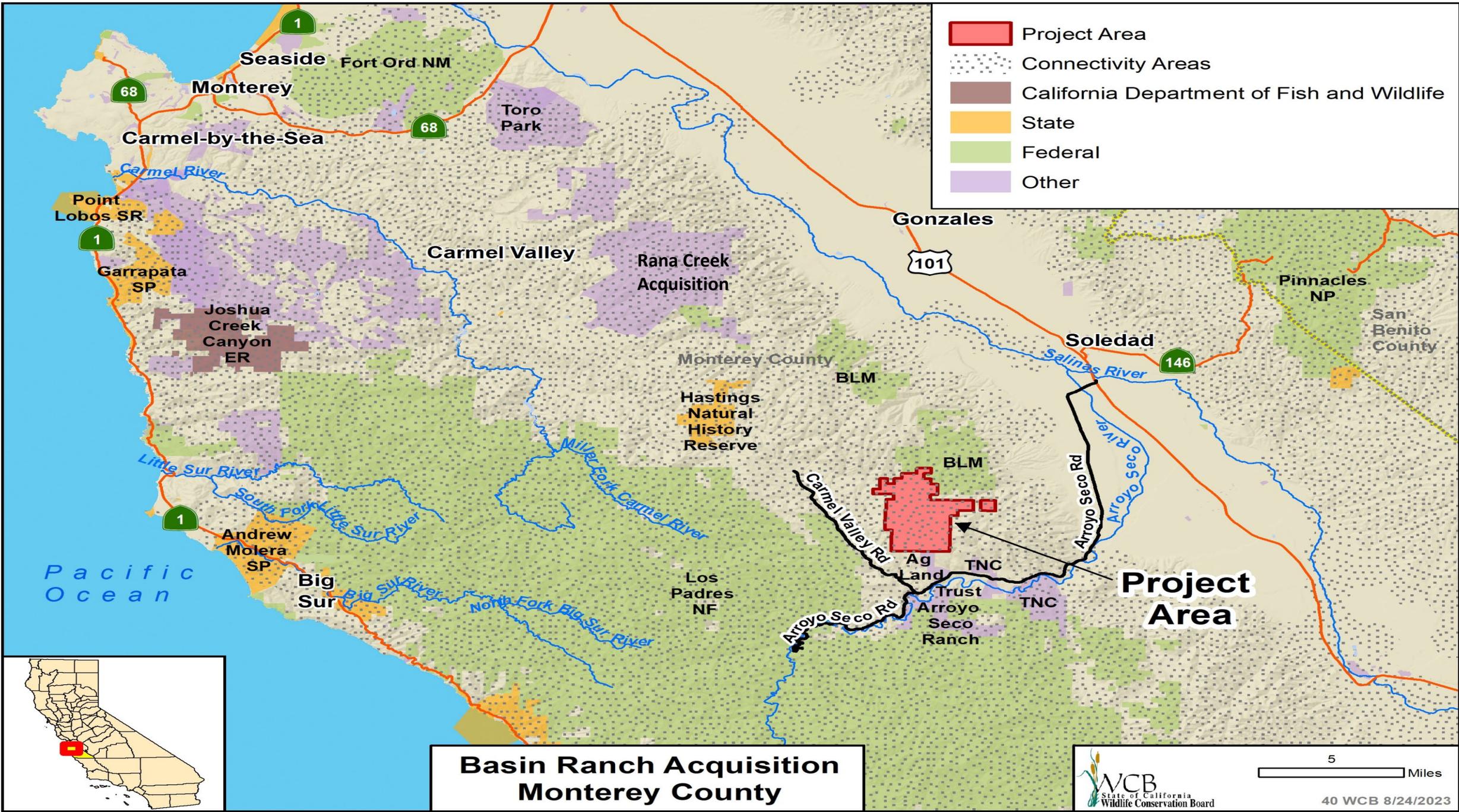
View of the eastern portion of the basin and the historic route toward Salinas Valley
Photo credit: Big Sur Land Trust

40. Basin Ranch

Slide 2

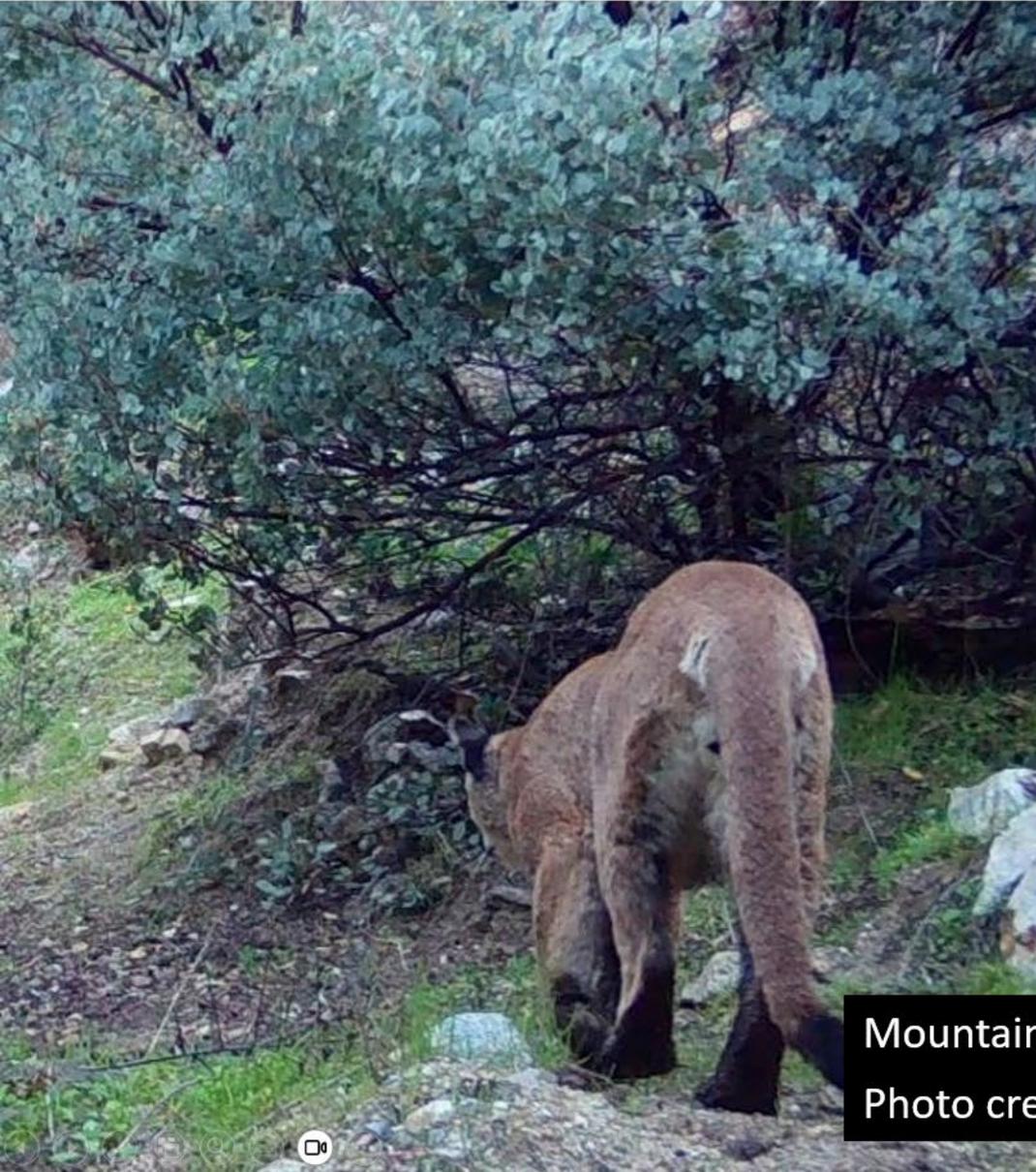


Facing west toward the Sierra de Salinas range
Photo credit: Kendall Webster



40. Basin Ranch

Slide 4



Mountain lions caught on wildlife cameras
Photo credit: Big Sur Land Trust

40. Basin Ranch
Slide 5



Left: Bobcat with prey | Right: American badger
Photo credit: Big Sur Land Trust

40. Basin Ranch

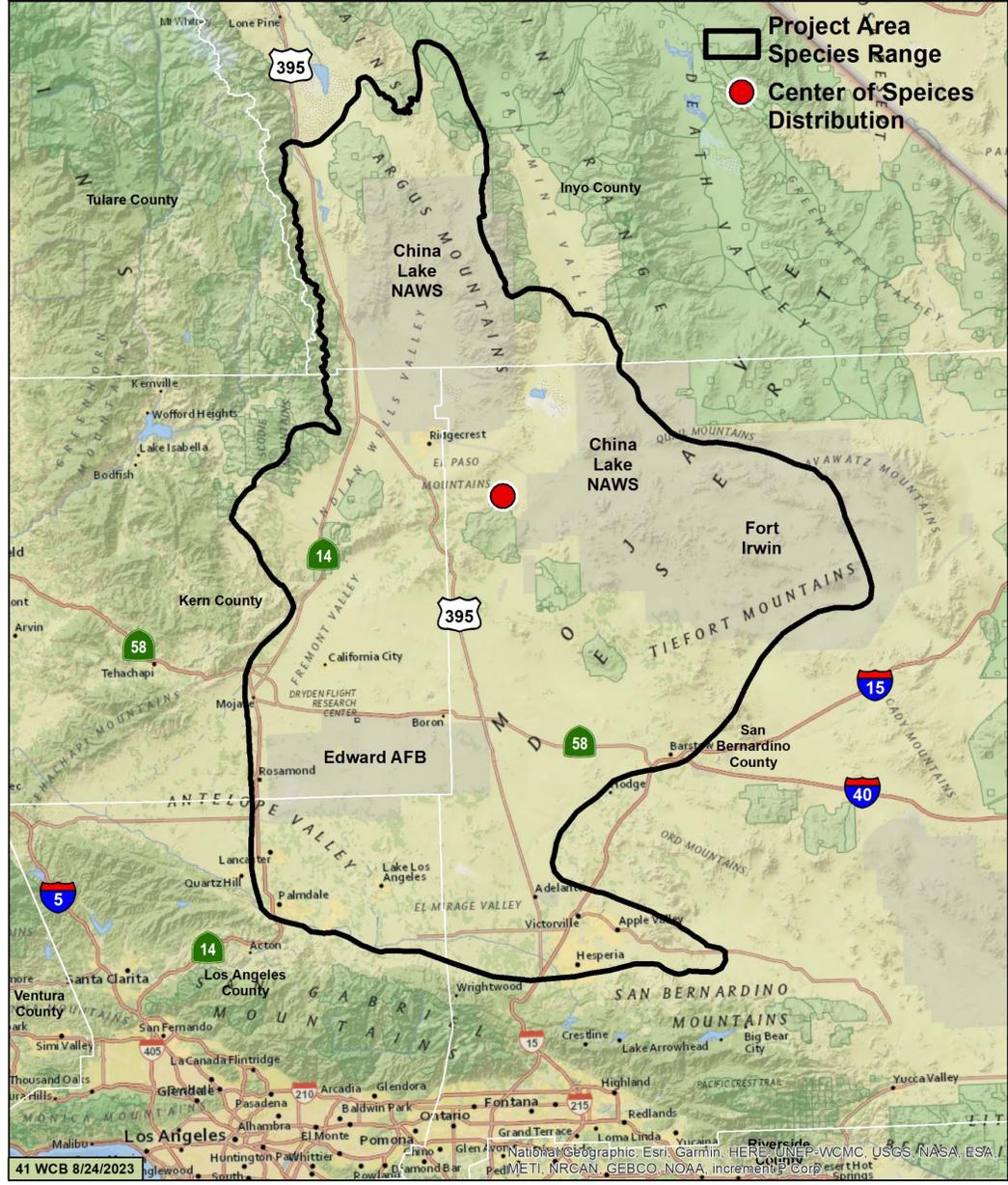
Slide 6

Facing southwest

Photo credit: Kendall Webster



Mohave Ground Squirrel Management Actions Multiple Counties



41. Mohave Ground Squirrel Management Actions

Slide 1



Photo: Freya Reder

41. Mohave Ground Squirrel Management Actions

Slide 2

Mohave Ground Squirrel

Life History

- Small geographical range
- Difficult to study because they are only above ground a few months of the year.
- Does not reproduce if there isn't enough food
- Solitary
- Most easy-going of the ground squirrels



Photo: Freya Reder

41. Mohave Ground Squirrel Management Actions

Slide 3

Project Details

Why is this study important?

- Population size and distribution of MGS unknown
- Listing
 - USFWS – listing not warranted partially because of lack of population data



Photo: Kathy Simon

41. Mohave Ground Squirrel Management Actions

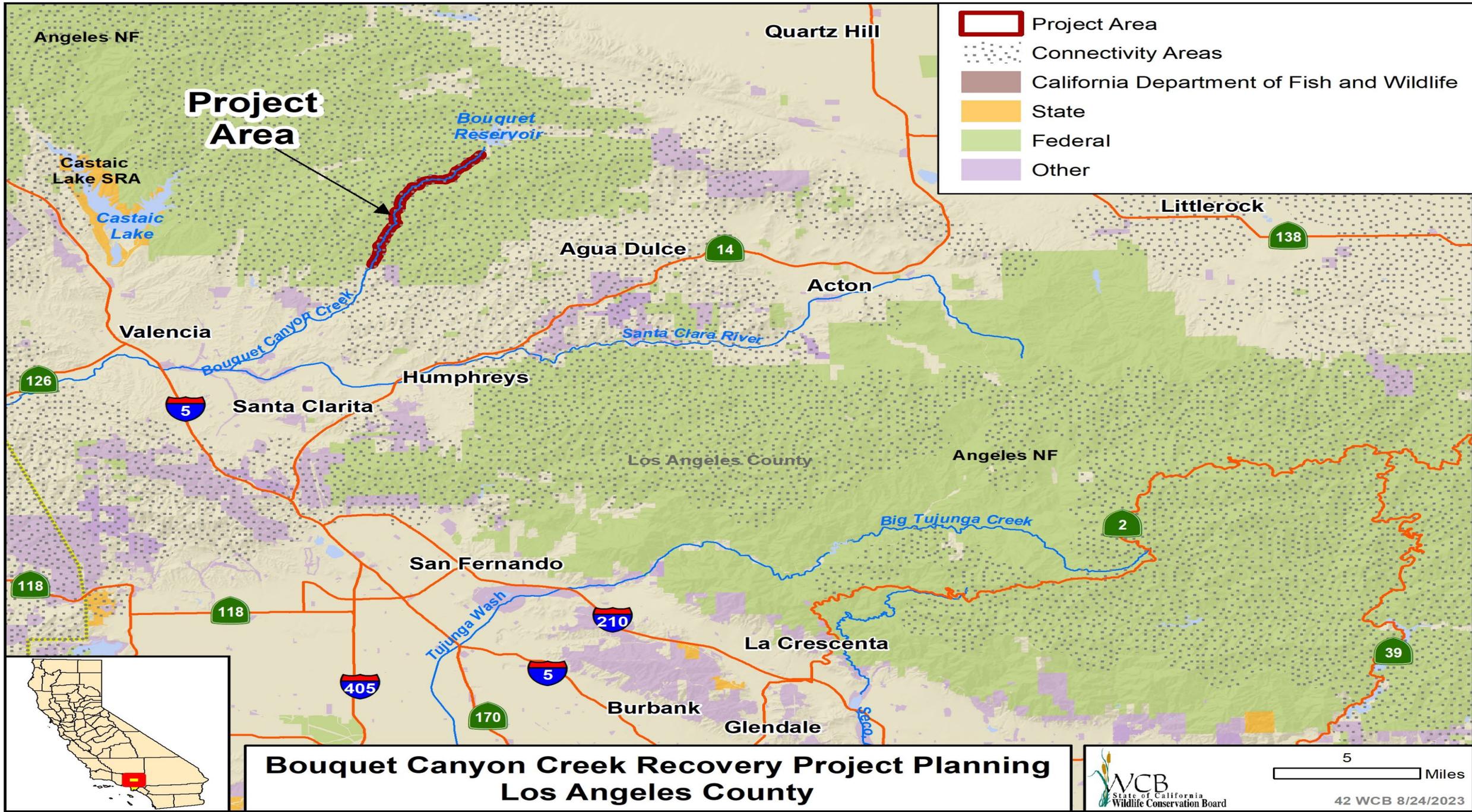
Slide 4

Project Details

Study:

- Pilot study
- Long-term monitoring
- Study Objective: survey protocol and population assessment





**Bouquet Canyon Creek Recovery Project Planning
Los Angeles County**



5 Miles

42 WCB 8/24/2023

42. Bouquet Canyon Creek Recovery Project Planning

Slide 1

Bouquet Canyon Creek
within the project area.





42. Bouquet Canyon Creek Recovery Project Planning

Slide 2

Left: Burned area showing reduced vegetation cover and sediment buildup.

Right: Flooded entrance to the Zuni Day Use Area.



42. Bouquet Canyon Creek Recovery Project Planning

Slide 3

Left: Invasive Arundo along the lower reach of Bouquet Canyon Creek.

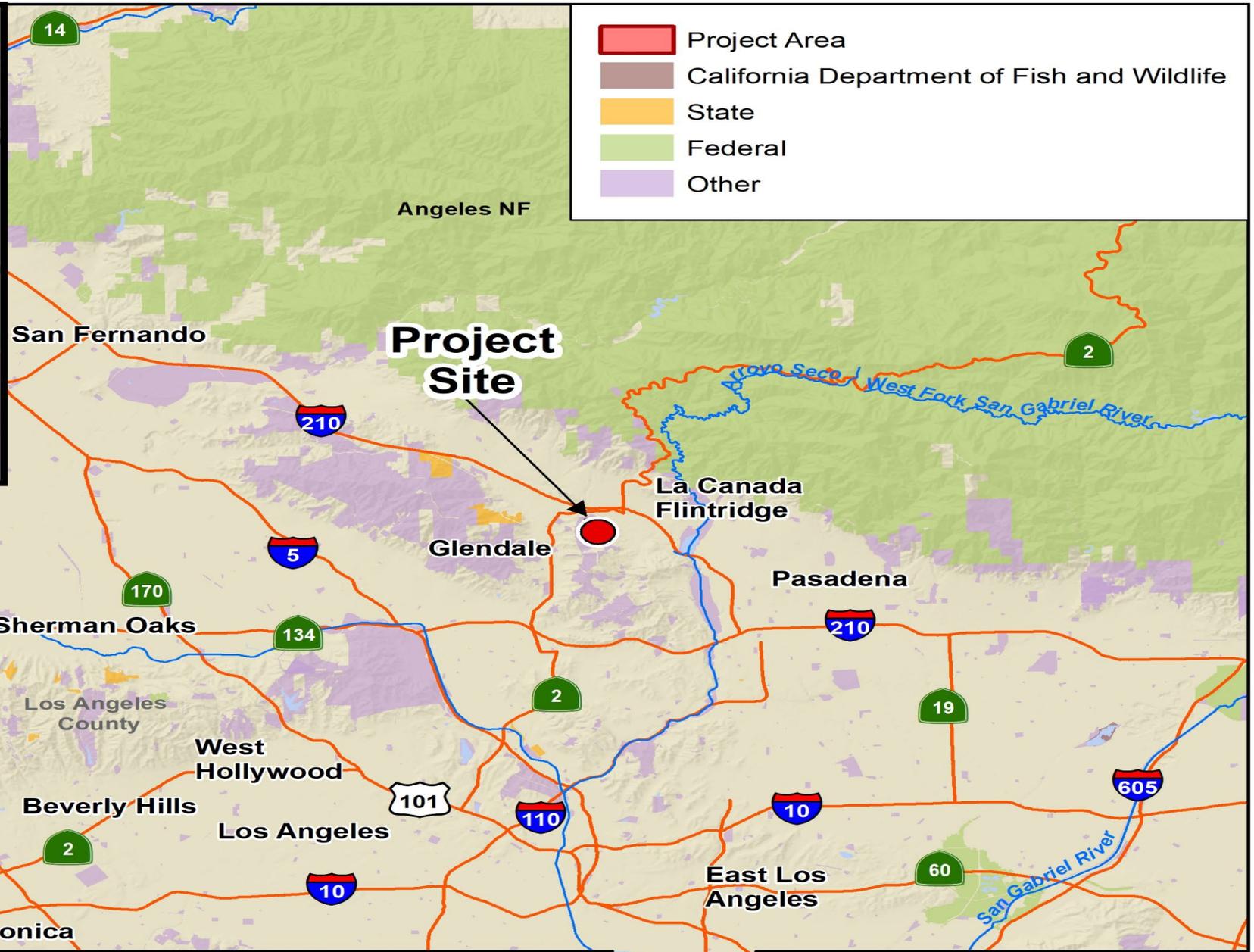
Right: Damaged asphalt with temporary concrete repair to slow roadway degradation.



42. Bouquet Canyon Creek Recovery Project Planning

Slide 4

Upper Bouquet Falls Waterfall at the Bouquet Canyon Day Use Area.



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



**Descanso Gardens Lake Area Access
Los Angeles County**

5 Miles

WCB
State of California
Wildlife Conservation Board

43 WCB 8/24/2023



43. Descanso
Gardens Lake
Area Access
Slide 1

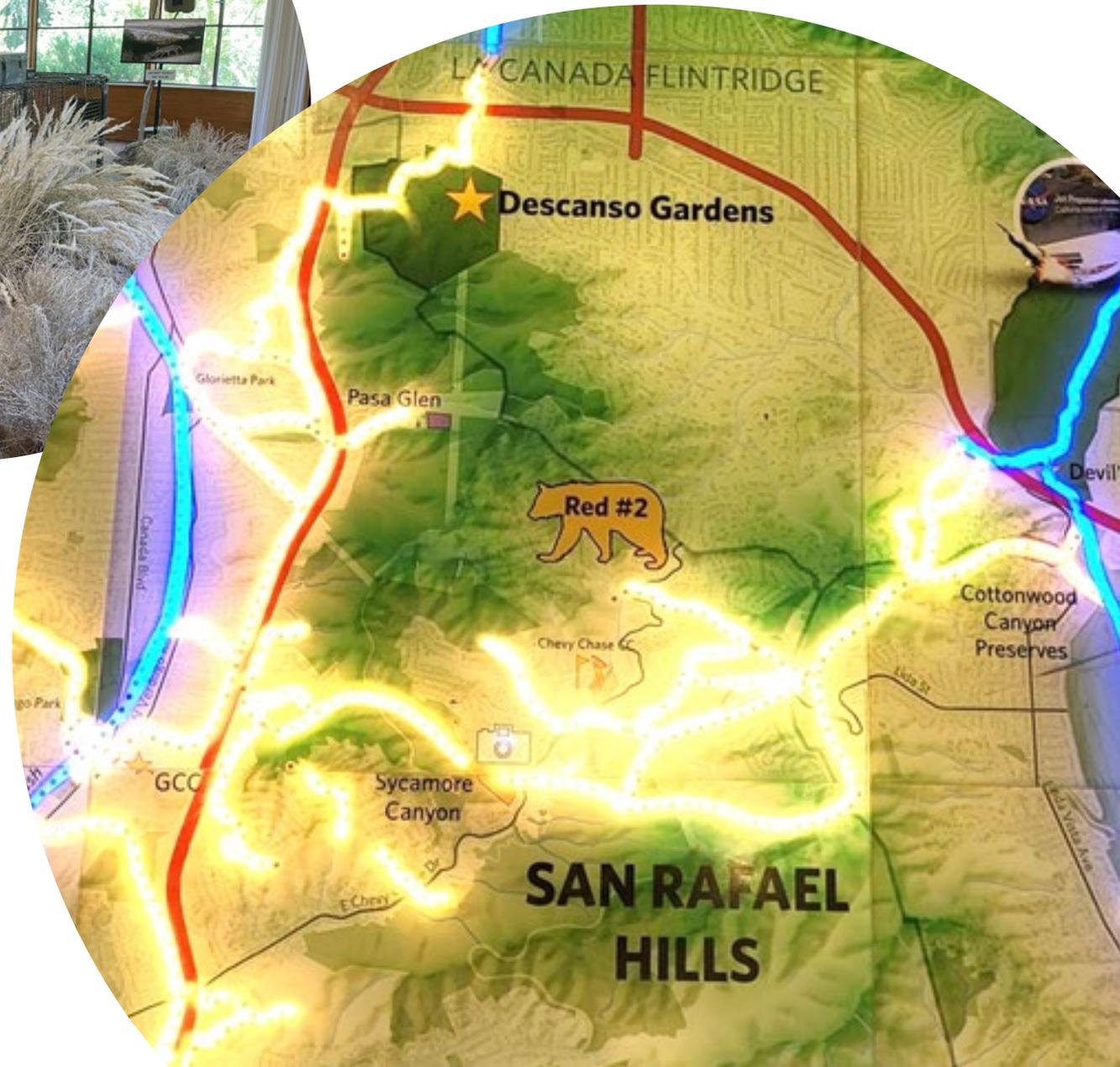
- Descanso Gardens' collections include a Japanese Garden, Rose Garden, Oak Woodland, and California Native Gardens.



43. Descanso Gardens Lake Area Access

Slide 2

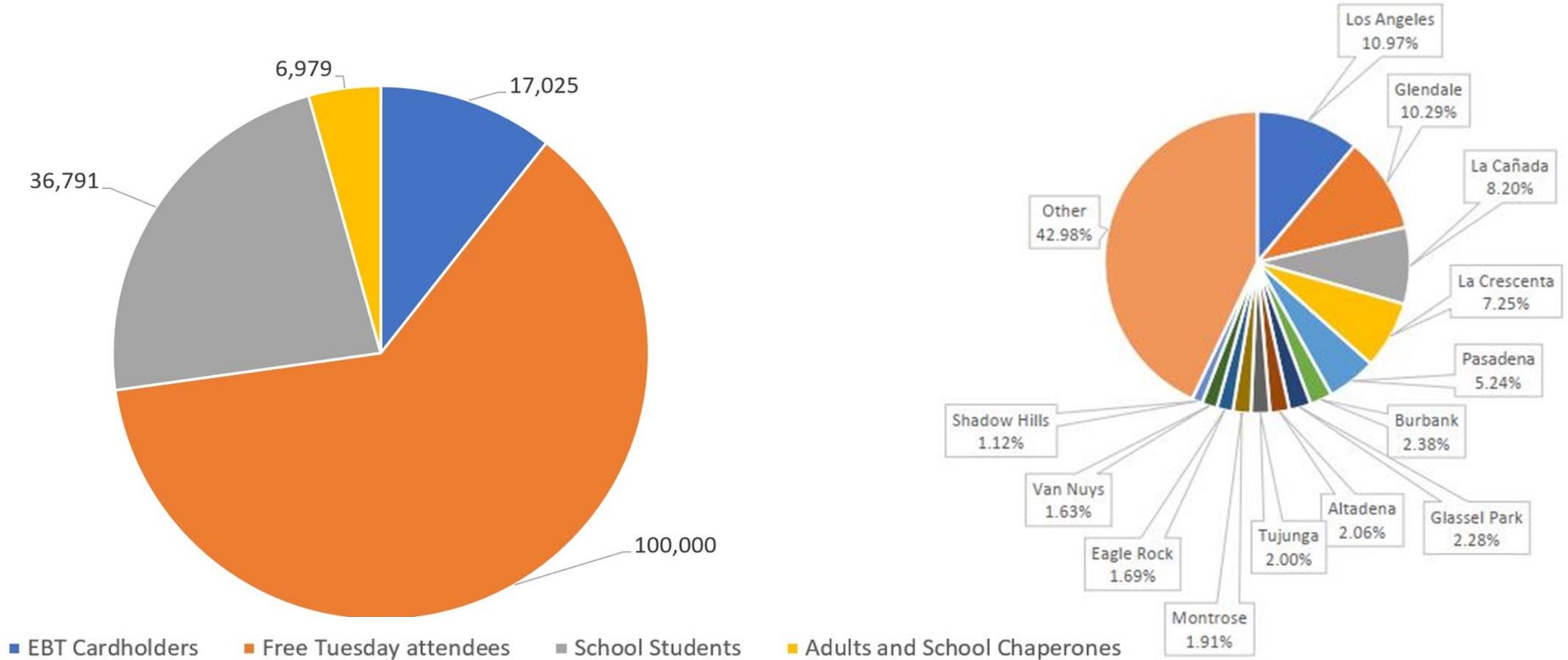
- The exhibits in the Boddy House educate young visitors about the wildlife corridors around Descanso Gardens and the greater Los Angeles area.
- Bottom: Interactive floor map shows terrestrial (yellow) and aquatic (blue) corridors.
- Top: Example camera trap allows children to crawl through and be captured on video as if they are a mountain lion.



43. Descanso Gardens Lake Area Access

Slide 3

- Free admission provided in 2018-2022 - Total: 160,785 visitors
- 2021 Visitation by City - 57% of visitors represent Los Angeles County



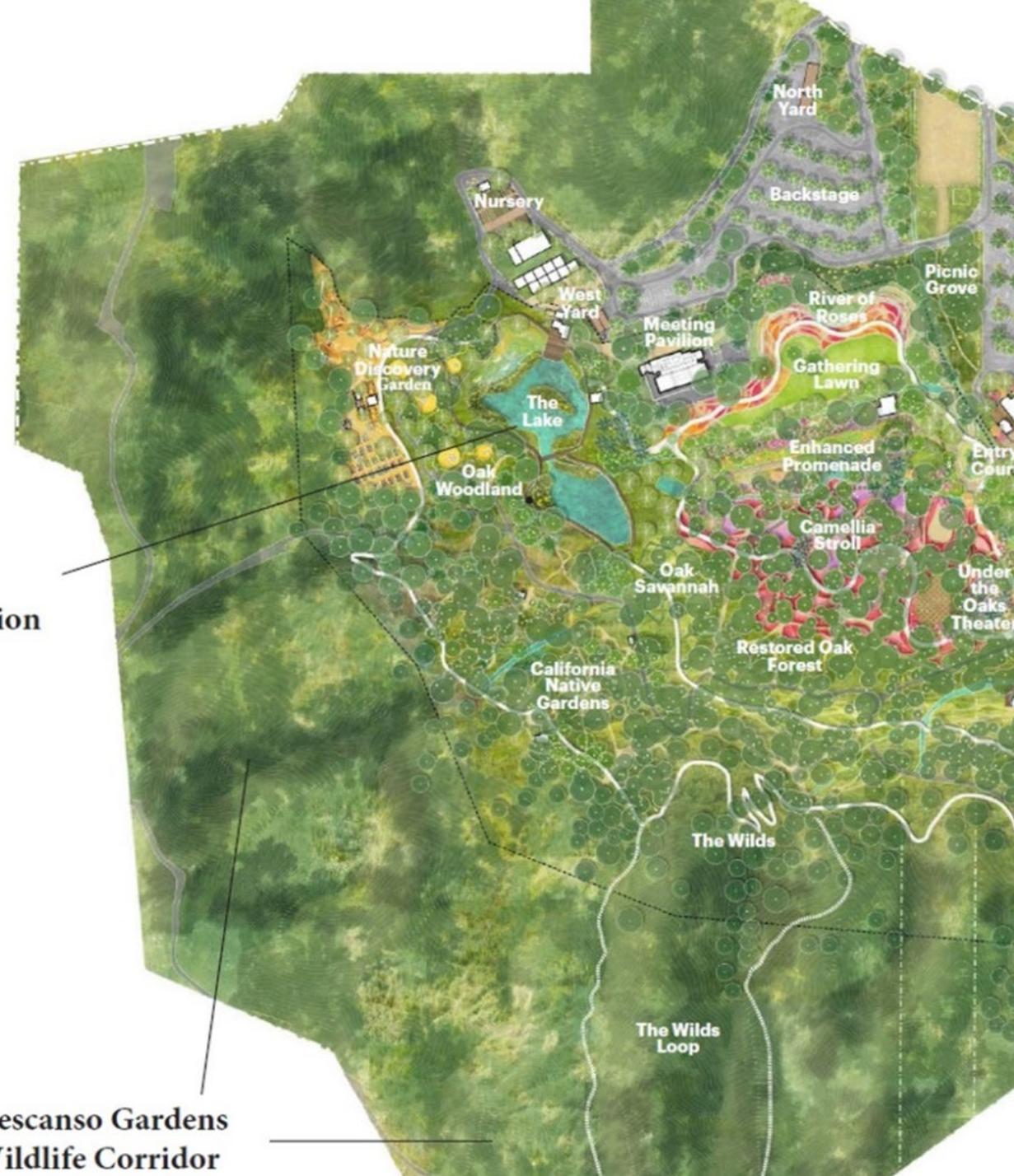
43. Descanso Gardens Lake Area Access

Slide 4

- Map of Descanso Gardens and location of the Lake Area. Courtesy of Descanso Gardens Foundation.

The Lake
Rehabilitation
Project

Descanso Gardens
Wildlife Corridor



43. Descanso Gardens Lake Area Access

Slide 5



- Above: Current condition of the Lake Area. Aging infrastructure and years of drought have impacted the habitat value of the lakes.
- Left: Pathways around the lake are in poor condition, do not support ADA access, and do not complete a loop around the lake. Courtesy of Descanso Gardens Foundation.

43. Descanso Gardens Lake Area Access

Slide 6



- Accessible path system will include a boardwalk and two bridges to provide access for wildlife viewing as well as connect the Lake Area with the new restrooms and interpretive installations. Courtesy of Descanso Gardens Foundation.

Existing Service Loop

- » Dimension: 12' width

ADA Accessible Path System

- » Dimension: 4'-8' width with 5% max. slope
- » Material: stable, firm and slip resistant

Existing Accessible Path

- » Accessible Path of Travel around Lake

P Potential ADA Drop-off Zone

- » Adjacent to the service loop, restrooms, Nest Rooms and the lake

1 ADA compliant lake overlook

2 ADA compliant lake bridge

3 ADA compliant waterfall bridge

4 ADA access to existing ramp at bird observation house



43. Descanso Gardens Lake Area Access Slide 7

- Existing bird observation deck. The ramp will be adjusted to a gentler grade and the future boardwalk will be adjacent to the building. Courtesy of Descanso Gardens Foundation.
- Bird species information is updated seasonally, and docents are stationed in the observation deck.



43. Descanso Gardens Lake Area Access

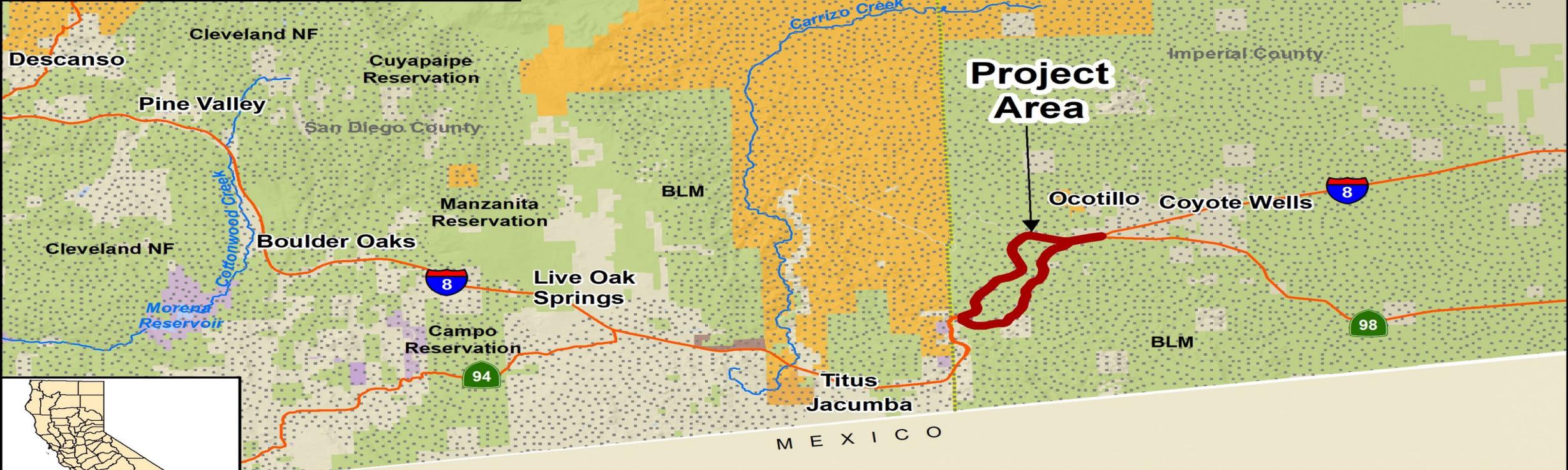
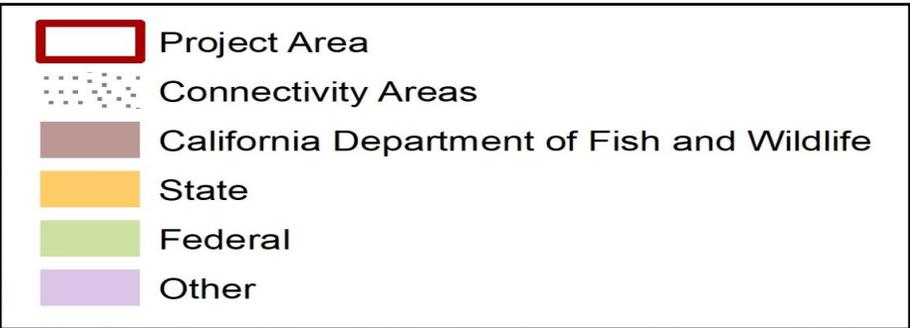
Slide 8

- The new restroom will be connected to Descanso Gardens' existing Membrane Bio-Reactor (MBR) for wastewater recycling.

Left: Location of new restroom and pathways through the children's nature area are shown in blue.



Renderings of proposed children's interactive nature area and "nest rooms".
Courtesy of Descanso Gardens Foundation.



**I-8 Peninsular Bighorn Sheep Crossing Planning
Imperial County**

44. I-8 Peninsular Bighorn Sheep Crossing Planning

Slide 1

Peninsular Mountain ranges

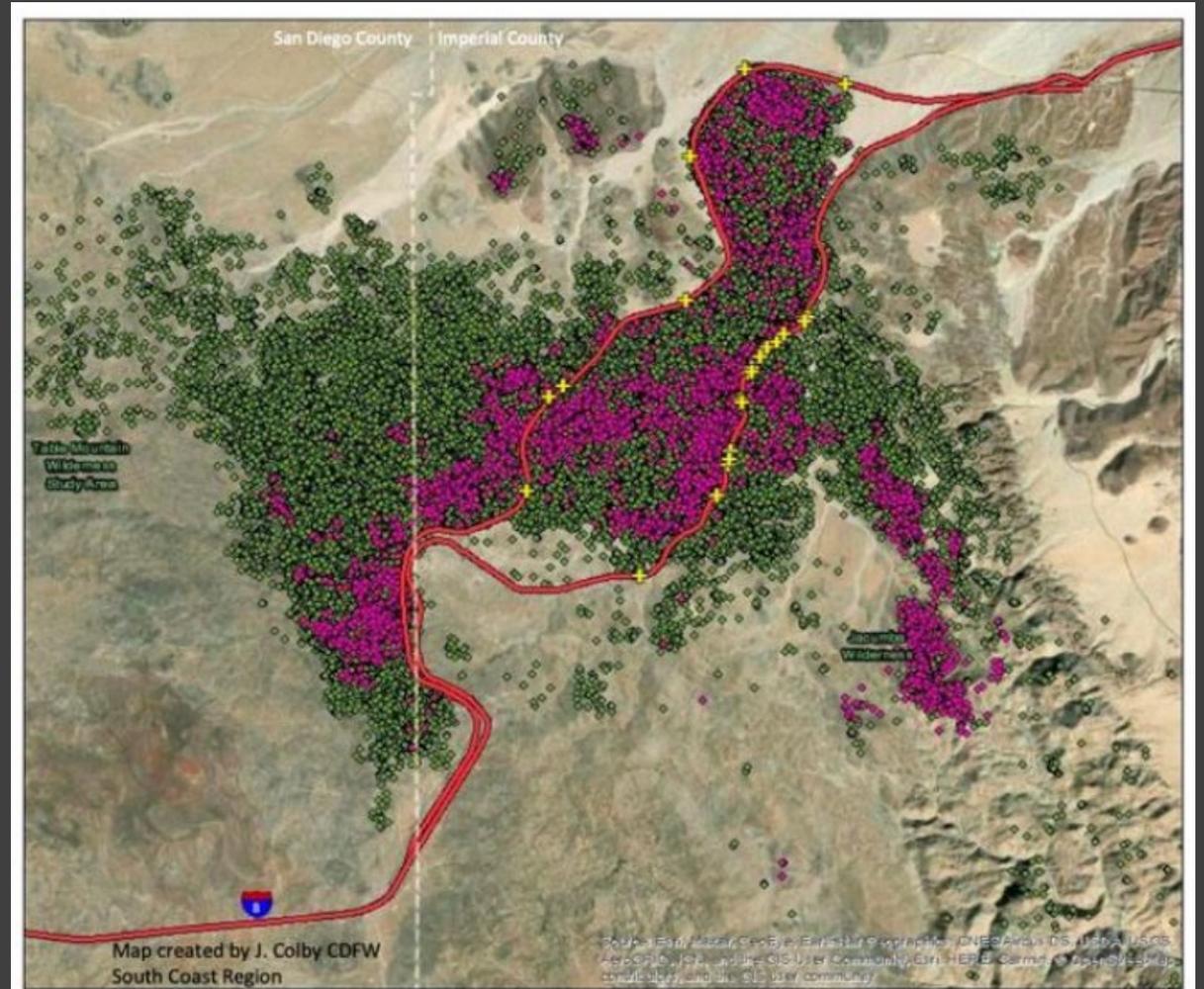
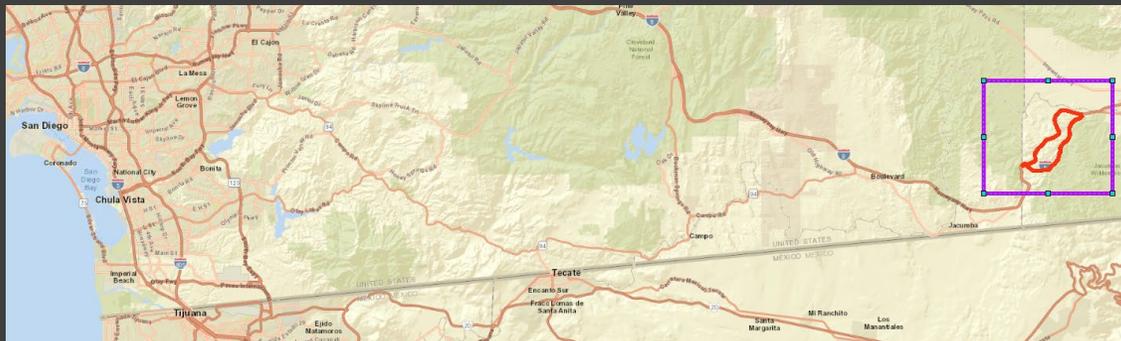
- Eastern San Diego and Riverside and western Imperial Counties
- Endangered Peninsular Bighorn Sheep

Interstate 8 near San Diego/Imperial border

- In-Ko-Pah ewe group uses the area for giving birth and raising lambs
- CDFW Top Priority Barrier

Other species of concern

- Mountain lion, mule deer, bobcat, coyote, ringtail, western spotted skunk, ray fox, and desert kit fox



In-Ko-Pah Ewe Group GPS data

2.5 Kilometers

- Peninsular bighorn sheep roadkill data Nov 2012 to Jan 2023
- GPS data for 20 ewes Oct 2009 - May 2022
- 2021 & 2022 Lamb-Rearing Season GPS data for 3 ewes



44. I-8 Peninsular Bighorn Sheep Crossing Planning

Slide 2



Peninsular Mountain Range

44. I-8 Peninsular Bighorn Sheep Crossing Planning

Slide 3



Interstate 8 in project area

44. I-8 Peninsular Bighorn Sheep Crossing Planning

Slide 4



Interstate 8 underpasses

44. I-8 Peninsular Bighorn Sheep Crossing Planning

Slide 5

Project Elements

- Coordinate with stakeholders
- Collect existing available data on wildlife use of existing structures
- Identify potential overpass/underpass locations
- Conceptual designs for 3 selected wildlife overcrossing/undercrossing locations
- Preferred alternative(s)
 - Caltrans documentation
 - 35% and 65% design plans
 - CEQA compliance



Peninsular Bighorn Sheep



45. Board Member Updates



46. Executive Director's Report

WCB

*HIGH LEVEL
OUTREACH AND
COMMUNICATION
PLAN*

Mark Topping

Public Information Officer



GETTING THE WORD OUT

Social Media

Storytelling

Internal Communication

External Communication

Community Outreach



SOCIAL MEDIA

TRADITIONAL SOCIAL MEDIA CHANNELS

- Facebook, Instagram, LinkedIn, X/Twitter
- Frequent posting cycle; post photos, videos, and share links
- Cross-promote with partners

VIDEO SOCIAL MEDIA CHANNELS

- Instagram Stories and Reels, TikTok, YouTube
- Stories and reels featuring compelling video content
- Reach non-followers

SOCIAL MEDIA EXPECTATIONS AND GOALS

- Educate the public about WCB and its programs
- Build awareness through follower engagement
- Drive traffic to website; increase variety of application pool

VISUAL STORYTELLING



Grantees/Partners

Show our partners at work



Project Sites

Show off our stunning project sites



Public

Spotlight the citizens who use these lands



Habitat/Wildlife

Share photos and videos of the unique habitat and wildlife

INTERNAL COMMUNICATION

WCB CONNECTIONS

- Digital newsletter
- Update Board on project progress
- Recruiting
- Website improvements



*CALIFORNIA NATURAL RESOURCES
BUILDING, HOME TO WCB*

EXTERNAL COMMUNICATION

CONFERENCES

- Attend conferences
- Disseminate brochures and digital materials
- Produce a video about WCB

DIGITAL TOOLS

- Write news releases; pitch story ideas to news media
- E-Mail and newsletter
- Flashback video series
- Produce a monthly podcast

PARTICIPATION

- Arrange in-person meetings with community leaders
- Identify potential volunteer opportunities
- Sponsorships

COMMUNITY OUTREACH

- Build relationships
- Face-to-face meetings with environmental justice groups
- Engage in authentic dialog, listening to what these individuals have to say
- Plan events and meet-and-greets in disadvantaged and severely disadvantaged communities
- Meet with tribal leaders





THANK YOU

Please send any feedback or suggestions to:
Mark Topping, WCB Public Information Officer
Mark.Topping@wildlife.ca.gov
<https://wcb.ca.gov>

The graphic features a dark background with several social media icons and text. At the top left is a green Linktree logo with a QR code below it. To the right are the LinkedIn and Facebook logos. Below the QR code is the text 'Wildlife Conservation Board'. At the bottom left is the official WCB logo, which includes a stylized plant and the text 'WCB State of California Wildlife Conservation Board'. To the right of the logo are the Instagram and YouTube logos. Below these logos are the social media handles '@wildlifeconservationboard' and '@wildlifeconservationboard4859'. At the very bottom of the graphic is the website URL 'https://wcb.ca.gov'.

BLOCK GRANT UPDATE – FULL REPORT OUT AT FEB 2024 MEETING

Building Wildlife-Friendly Resilience in Working Landscapes – Point Blue Roots Program

- 77 small grants selected in April (\$10,000 - \$500,000)
- Project types included riparian restoration, hedgerow plantings, beaver dam analogs, wildlife-friendly fencing, monarch & pollinator plantings, bird/bat boxes & raptor perches, cover crops, oak plantings
- 74% of applicants qualifying as disadvantaged by one or more criteria.

Climate Smart Meadow Restoration – Sierra Meadow Partnership

- Twenty-one projects selected for funding, totaling \$10.69 million
- Leveraged \$4.87 million
- 3,500 acres of Sierra meadow habitat will be restored, and an additional 1,800 acres will be ready for restoration in the near future.

Climate Resilience Through Habitat Restoration- CARCD

- CARCD and RCDs have entered into 17 implementation contracts
- CARCD has signed contracts with all 42 RCDs and all 5 partners for non-implementation-related activities (e.g.: outreach, permitting, materials supply)
- CARCD has developed a centralized project tracking and invoicing process



47. Executive Session (Not Open to the Public)



Stay Safe and Healthy, Enjoy the Rest of Your Day!
Next Board meeting – November 15, 2023