DEPARTMENT OF FISH AND WILDLIFE
WILDLIFE CONSERVATION BOARD
Mailing Address: P.O. Box 944209
Sacramento, California 94244-2090
https://wcb.ca.gov
(916) 445-8448
Gavin Newsom, Governor
NATURAL RESOURCES AGENCY

Final Meeting Agenda

WILDLIFE CONSERVATION BOARD

August 27, 2026, 10:00 a.m.**
King Gillette Ranch
26800 Mulholland Hwy,
Calabasas, CA 91302

The Board meeting will also be available via Zoom. A recording will be posted after the meeting. Please note: *WCB offers a video link but cannot guarantee remote access. Please attend in person if you believe your participation is essential.*

Please click the link below to join the webinar.

Join the webinar

Phone one-tap:
+1408-961-3929,,87094498306# US
+1408-961-3927,,87094498306# US

Join via audio:
+1 408-961-3929 US; +1 408-961-3927 US;+1 408-961-3928 US; 1 855-758-1310 US Toll Free

Webinar ID: 870 9449 8306
International numbers available: https://wildlife-ca-gov.zoom.us/u/kbLC9ITAl3

Notice: We no longer require Speaker Cards. If you wish to comment on an agenda item, you will be provided with the opportunity to do so during the meeting. In person speakers will be asked to line up at the podium during the specified item. Similarly, on-line speakers will be asked to raise hands to enter the queue.

The Board will break for a 30-minute lunch at approximately 12pm.

****Members of the public are invited to join the Board on a tour of the Wallis Annenberg Wildlife Crossing on August 26, 2026, at 3pm. Space is limited. The tour involves walking on rocky terrain. Participants must provide their own transportation. Location and logistics will be provided to participants upon RSVP. Please use this link to RSVP.**

Attachments

Attachment A – Map of August 2026 Projects

PERSONS WITH DISABILITES

Persons with disabilities needing reasonable accommodation to participate in public meetings or other CDFW activities are invited to contact the Department's EEO Office at EEO@wildlife.ca.gov. Please make any such requests at the earliest possible time to help ensure that accommodations can be in place at the time of the meeting. If a request for an accommodation has been submitted but is no longer needed, please contact the EEO Officer immediately.

1. Roll Call

Wildlife Conservation Board Members
- Damon Nagami, Chair, Public Member
- Tina Thomas, Vice Chair, Public Member
- Karyn Gear, Public Member
- Meghan Hertel, Member
  Director, Department of Fish and Wildlife
- Fran Pavley, Public Member
- Michele Perrault, Member
  Legislative Director, Department of Finance
- Eric Sklar, Member
  President, Fish and Game Commission

Joint Legislative Advisory Committee
- Senator Catherine Blakespear
- Senator John Laird
- Senator Henry Stern
- Assemblymember Steve Bennett
- Assemblymember Diane Papan
- Assemblymember Rick Zbur

Executive Director
- Jennifer M. Norris, PhD

2. Approval of Agenda

3. Executive Director's Report

4. Board Member Updates and Reports

5. Funding Status - Informational

The following funding status depicts total Capital Outlay and Local Assistance appropriations by fund source and fund number:

GENERAL FUND (0001)	**$7,293,128.00**
August 2026 Board Meeting Allocation:	(0.00)
Total Project Development:	(0.00)
Projected Unallocated Balance:	**$7,293,128.00**
HABITAT CONSERVATION FUND (0262)	**$50,562,941.57**
August 2026 Board Meeting Allocation:	(11,920,000.00)
Total Project Development:	(18,605,044.00)
Projected Unallocated Balance:	**$20,037,897.57**
WATER SECURITY, CLEAN DRINKING WATER, COASTAL AND BEACH PROTECTION FUND OF 2002 (Proposition 50) (6031)	**$1,852,000.00**
August 2026 Board Meeting Allocation:	(0.00)
Total Project Development:	(0.00)
Projected Unallocated Balance:	**$1,852,000.00**
SAFE DRINKING WATER, WATER QUALITY AND SUPPLY, FLOOD CONTROL, RIVER AND COASTAL PROTECTION FUND OF 2006 (Proposition 84) (6051)	**$3,537,129.75**
August 2026 Board Meeting Allocation:	(0.00)
Total Project Development:	(0.00)
Projected Unallocated Balance:	**$3,537,129.75**
WATER QUALITY, SUPPLY, AND INFRASTRUCTURE IMPROVEMENT FUND (Proposition 1) (6083)	**$17,931,745.94**
August 2026 Board Meeting Allocation:	(0.00)
Total Project Development:	(1,600,000.00)
Projected Unallocated Balance:	**$16,331,745.94**
THE CALIFORNIA DROUGHT, WATER, PARKS, CLIMATE, COASTAL PROTECTION, AND OUTDOOR ACCESS FOR ALL ACT OF 2018 (Proposition 68) (6088)	**$26,757,168.38**
August 2026 Board Meeting Allocation:	(0.00)
Total Project Development:	(6,965,000.00)
Projected Unallocated Balance:	**$19,792,168.38**
SAFE DRINKING WATER, WILDFIRE PREVENTION,	

DROUGHT PREPAREDNESS, AND CLEAN AIR BOND ACT OF 2024 (Proposition 4) (6093)	**$258,304,061.0**
August 2026 Board Meeting Allocation:	(51,948,000.00)
Total Project Development:	(71,882,600.00)
Projected Unallocated Balance:	**$134,473,461.00**
TOTAL – ALL FUNDS	**$366,238,174.64**
Grand Total – August 2026 Board Meeting Allocation:	(63,868,000.00)
Grand Total - Project Development:	(99,052,644.00)
Grand Total Projected Unallocated Balance:	**$203,317,530.64**

Consent Items

Items 6-11 are part of the Consent Calendar

6. Recovery of Funds, Thursday, August 27, 2026

The following projects previously authorized by the Board are now completed, and some have balances of funds that can be recovered and returned to their respective funds. It is recommended that the following totals be recovered and that the projects be closed.

Table 1 - Recoveries by Fund

Fund Name	**Amount**
General Fund	$73,824.35
Habitat Conservation Fund	$4,213.33
Water Quality, Supply, and Infrastructure Improvement Fund of 2014	$27,201.50
The California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018	$55,344.08
Total Recoveries for All Funds	***$160,583.26***

Table 2 - General Fund

Project Name	Allocated	Expended	Balance
(CAL FIRE) Shackleford Forest CE	$35,000.00	$30,251.50	$4,748.50
Ackerson Meadow Restoration	$2,786,000.00	$2,760,976.15	$25,023.85
Curry Canyon Ranch	$20,000.00	$10,416.00	$9,584.00
Curry Canyon Ranch Conservation Easement	$20,000.00	$0.00	$20,000.00
Enhancing Wetlands at Goose Lake Augmentation	$127,000.00	$127,000.00	$0.00
Indian Joe Springs Ecological Reserve, Expansion 1	$30,000.00	$25,126.00	$4,874.00
Loyalton Ranch	$10,000.00	$8,246.00	$1,754.00
North Coast Range Fen Conservation Area (Wojcik)	$70,000.00	$67,454.00	$2,546.00
Sacramento River Wildlife Area Mile 164 - L (Felkins)	$40,000.00	$34,706.00	$5,294.00
Tomato Stand Fish Passage Implementation	$642,608.00	$642,608.00	$0.00
	Total Recoveries to General Fund		***$73,824.35***

Table 3 - Habitat Conservation Fund

Project Name	Allocated	Expended	Balance
Curry Canyon Ranch	$381,952.00	$381,952.00	$0.00
Curry Canyon Ranch Conservation Easement	$259,608.00	$259,608.00	$0.00
Erikson Ranch Wetland and Nesting Habitat Enhancement	$671,000.00	$666,786.67	$4,213.33
Grizzly Island Wildlife Area Waterfowl Breeding Habitat	$761,956.00	$761,956.00	$0.00
Indian Joe Springs Ecological Reserve, Expansion 1	$36,000.00	$36,000.00	$0.00
Loyalton Ranch	$5,500,000.00	$5,500,000.00	$0.00
North Coast Range Fen Conservation Area (Wojcik)	$559,000.00	$559,000.00	$0.00
Sacramento River Wildlife Area Mile 164 - L (Felkins)	$1,820,000.00	$1,820,000.00	$0.00
Total Recoveries to Habitat Conservation Fund			***$4,213.00***

Table 4 - Water Quality, Supply, and Infrastructure Improvement Fund of 2014

Project Name	Allocated	Expended	Balance
Evan’s Spring Analysis and Design, Phase 2	$283,119.00	$283,030.02	$88.98
McKee Creek Conservation and Stream Flow Enhancement (Restoration)	$139,377.00	$139,345.13	$31.87
Russian River Watershed Stream Gauging	$261,316.00	$253,962.13	$7,353.87
Salt Creek Floodplain Restoration Planning	$236,287.00	$231,958.55	$4,328.45
Tomato Stand Fish Passage Implementation	$144,392.00	$140,786.92	$3,605.08
USFS Hot Springs-Montecito Creek Section 1707 Project	$45,750.00	$33,956.75	$11,793.25
Total Recoveries to Water Quality, Supply, and Infrastructure Improvement Fund of 2014			***$27,201.50***

Table 5 - The California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018

Project Name	Allocated	Expended	Balance
Coyote Valley Wildlife Linkage Master Plan	$350,000.00	$350,000.00	$0.00
Enhancing Wetlands at Goose Lake	$962,000.00	$961,999.99	$0.01
Grizzly Island Wildlife Area Waterfowl Breeding Habitat	$538,044.00	$538,044.00	$0.00
Hawk Hill Visitor Access Improvements	$204,077.00	$204,077.00	$0.00
Marple Canyon Wildlife Crossing Enhancement	$245,500.00	$190,552.55	$54,947.45
Poplar Valley Meadow Restoration Planning	$110,000.00	$109,603.38	$396.62
Total Recoveries to The California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018			***$55,344.08***

7. Table Bluff ER Coastal Prairie Restoration, Augmentation **Restoration**
WCB Grant: $400,000 **Implementation**
Fund Source(s): Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4 – Existing Programs), Public Resources Code Section 93010 (SB 105, Sec. 94)
Grantee: Mattole Restoration Council
Landowner: California Department of Fish and Wildlife
Location: 4.5 miles northwest of Loleta
County: Humboldt

Project Highlights

- Located at the California Department of Fish and Wildlife's Table Bluff Ecological Reserve
- Habitats restored: 100 acres of coastal prairie, and 50 acres of Sitka spruce forest
- Key species: federally endangered western lily, various plants of cultural significance to the Wiyot Tribe
- Regional or Species Plan: USFWS Western Lily Recovery Plan
- Project will include an ADA accessible nature trail with signage in English and Spanish, including cultural education signage developed by the Wiyot Tribe

Priority Metrics

- Benefits Justice Communities: Yes, the project is located within a DAC per the climate bond mapping tool. The project will benefit the surrounding justice community by increasing fire resiliency, increasing public access and providing firewood to the Wiyot Tribe.
- Tribal Partnerships: Yes, the Wiyot Tribe provides nursery services, interpretation, and ethnobotanical research.
- Pathways to 30x30: Pathway 6, Expand and Accelerate Environmental Restoration and Stewardship
- WCB Strategic Plan Target: B2.1, B3.4, C1.1

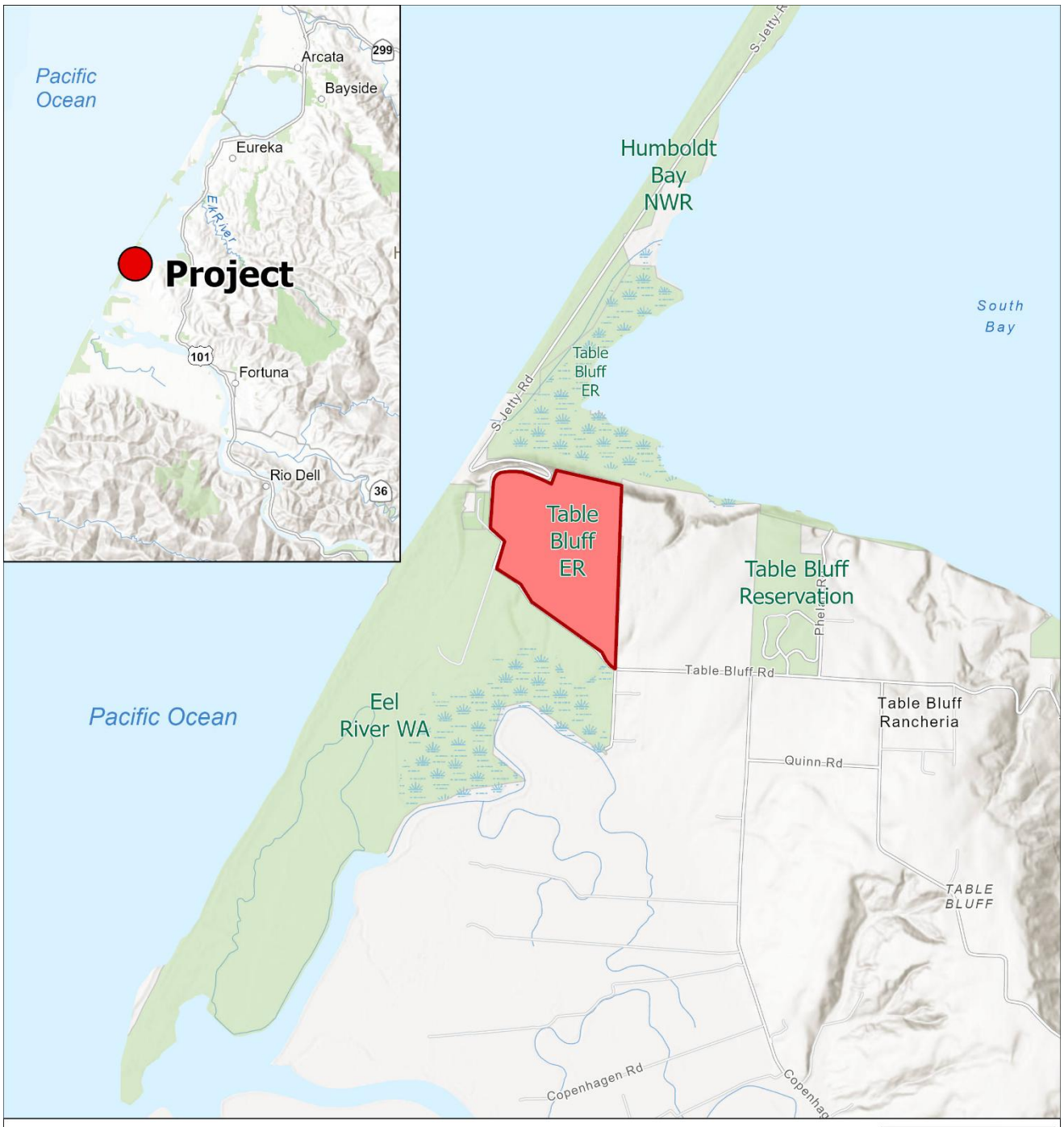


Table Bluff ER Coastal Prairie Restoration Augmentation

Humboldt County

California WILDLIFE CONSERVATION BOARD

Project

Protected Lands

Project Description

Table Bluff ER Coastal Prairie Restoration (Project) project is located at Table Bluff, a prominent uplifted coastal terrace dividing the fertile Eel River Valley from Humboldt Bay and is a central location for the Wiyot Tribe. Much of the Table Bluff coastal terrace was tilled and farmed for potatoes and other crops or grazed. Despite the long and persistent history of alteration, the Table Bluff Ecological Reserve (Reserve) supports one of the largest populations of federally and state endangered western lily and a remarkable concentration of culturally significant plants for the Wiyot Tribe. The Reserve was acquired as part of the Eel River Wildlife Area Ocean Ranch Coastal Wetlands for wetland maintenance and habitat protection with funding from WCB in 1986. The Project will implement coastal prairie restoration activities for the benefit of federally endangered western lily and other culturally important plants by:

- Thinning Sitka spruce canopy cover into the coastal prairie to increase western lily flowering and reproductive success.
- Planting native coastal prairie grasses and plants to restore former pasture.
- Enhancing culturally significant plant populations within the coastal prairie.
- Constructing an ADA accessible trail connecting Table Bluff ER, the Waluplh Lighthouse County Park, and the Ocean Ranch Unit of the Eel River Wildlife Area.

The Project was originally approved for funding in May 2023, but the project budget has since increased due to unexpected issues and a new opportunity for improved public access. A budget augmentation will improve project delivery by:

- Improving planting of western lily, native grasses, and culturally significant plants within the project area. Planting in Spring 2025 was delayed following inclement weather and logistical challenges. Seed germination was poor, necessitating reseeding in Fall 2025 which increased project costs. Additional funding will support nursery operations and additional supplies to complete another year of planting native coastal prairie plants within the former pasture at Table Bluff. This work will help create informed, science-based restoration plans for coastal prairie at and beyond Table Bluff.
- Creating a durable low maintenance public access trail that connects to the Waluplh Lighthouse County Park to the West, and the Ocean Ranch Unit of the Eel River Wildlife Area to the North. While coordinating with local and federal project partners, an opportunity was identified to re-design the Table Bluff public access trail from a self-contained trail loop to a combination loop and through hike trail that connects to other local conserved lands, providing a higher quality public access experience. Additional funding will allow for construction of a longer and more durable through hike trail. The more durable trail will require less maintenance than originally scoped and support increased trail use.

Long-Term Management

The California Department of Fish and Wildlife has adopted a Management Plan that guides management actions for the Project, including management of the Property. If at any time during the 25-year life of the Project, Grantee does not manage and maintain the project improvements, the Grant Agreement requires that it refund to the state of California an amortized amount of funds based on the number of years left on the Project life.

Project Funding

The proposed funding breakdown for the Project is as follows:

Project Task	WCB	Augmentation	Non-WCB Funds	Totals
Project Management	$149,931	$36,000	$82,800	$268,731
Thinning	$572,000	$20,000	$20,000	$612,000
Pilot Project	$402,246	---	$20,000	$422,246
Restoration	$892,157	$153,000	$10,000	$1,055,157
Public Access	$120,000	$138,000	$20,000	$278,000
Indirect Cost	$139,666	$53,000	---	$192,666
Contingency	$145,000	---	---	$145,000
Total	$2,421,000	$400,000	$152,800	$2,973,800

Non-WCB funders include:

- California Department of Fish and Wildlife - $136,800
- United States Fish and Wildlife Service - $16,000

Letters of Support or Opposition

Support:

- Adam Canter, Natural Resources Director, Wiyot Tribe Natural Resources Department
- Vicky Ryan, Acting Field Supervisor, United States Fish and Wildlife Service
- Michael Bowen, Project Development Specialist, California State Coastal Conservancy
- Tony LaBanca, Natural Communities Chair, California Native Plant Society
- Jean-Philippe “JP” Marié, President, California Native Grasslands Association
- Julia Michaels, PhD., Restoration Ecologist, Hedgerow Farms/Pacific Coast Seed
- Dave Imper, Volunteer, Eureka, CA

Opposition:

- None received

CEQA

The Project is proposed as exempt from the CEQA pursuant to the State CEQA Guidelines, Section 15304, Class 4, Minor Alterations to Land. Subject to approval of this proposal by the WCB, the appropriate NOE will be filed with the State Clearinghouse.

State Government

- Senate: Senator Mike McGuire, District 2
- Assembly: Assemblymember Chris Rogers, District 2

Staff Recommendation

Staff recommends that the WCB approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

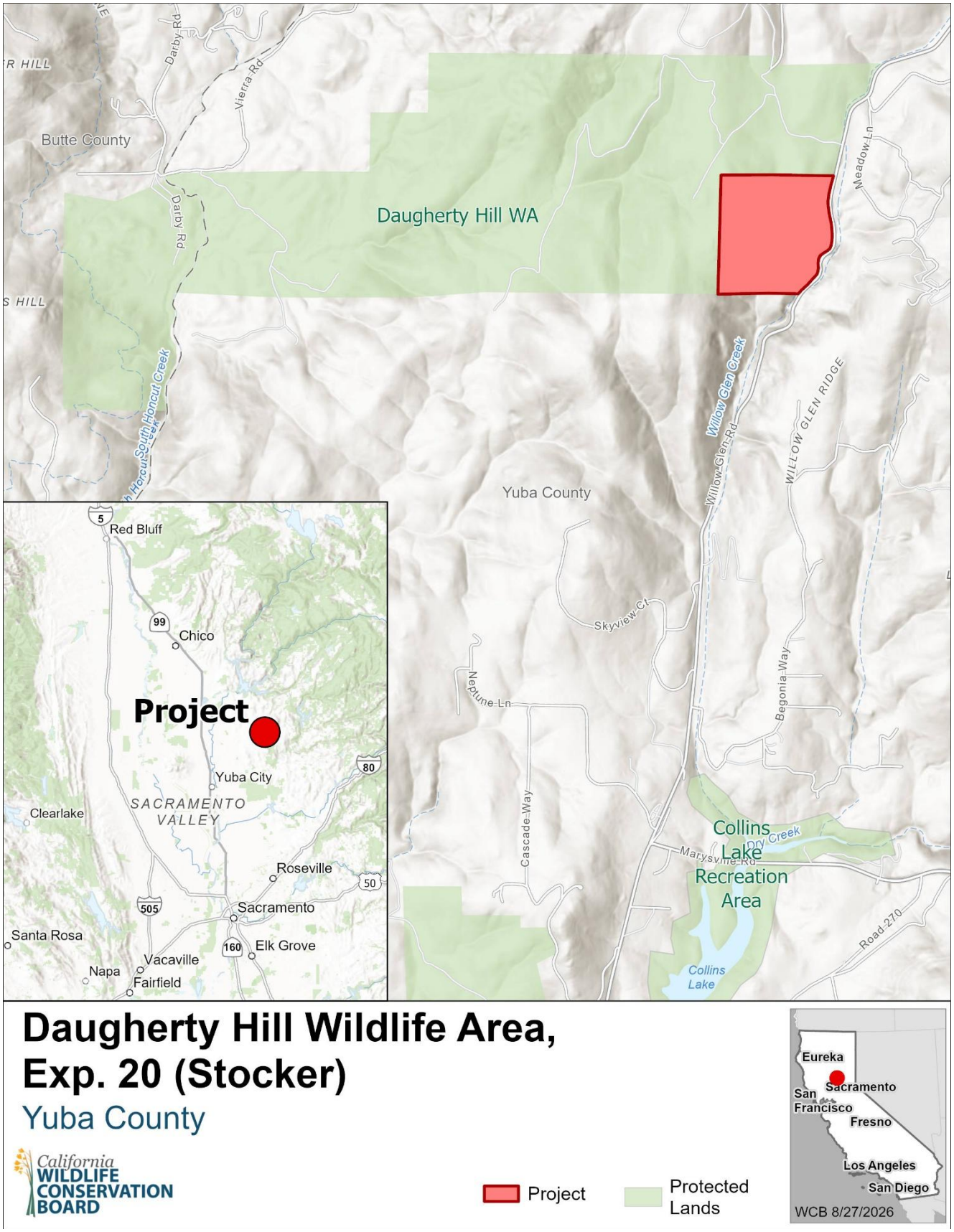
8. Daugherty Hill Wildlife Area, Expansion 20 (Stocker) **Acquisition**
Purchase Price: $697,000 **CDFW Fee**
Fund Source(s): Habitat Conservation Fund (Proposition 117), Fish and Game Code Section 2786(a)
Location: 4 miles southeast of Brownsville
County: Yuba
Acres: 155± (Property)

Property Highlights

- Expansion of CDFW's Daugherty Hill Wildlife Area, Darby Road Unit
- Protection and enhancement of blue oak, blue oak-foothill pine, annual grasslands, and mixed chaparral habitats for black-tailed deer, California quail, wild turkey, black bear, mourning dove, gray squirrel, mountain lion, and golden eagle
- Protection of this critical winter range for the Mooretown deer herd is imperative for the ongoing health of the herd

Priority Metrics

- Benefits Justice Communities: No
- Tribal Partnerships: No
- Pathways to 30x30: Pathway 2, Execute Strategic Acquisitions
- WCB Strategic Plan Target: B1.1, B2.1
- Public Access: Yes: wildlife viewing, hiking, and hunting



Daugherty Hill Wildlife Area, Exp. 20 (Stocker)

Yuba County

California WILDLIFE CONSERVATION BOARD

Project

Protected Lands

Long-Term Management
The Property will be owned and managed by CDFW as part of the Daugherty Hill Wildlife Area.

Project Funding
The Department of General Services approved fair market value is $697,000. The proposed funding breakdown is as follows:

Partners	Amount
WCB	$697,000
TOTAL Purchase Price	$697,000

Letters of Support or Opposition
Support:
- None received

Opposition:
- None received

CEQA
The project is exempt from CEQA pursuant to Public Resources Code 21080.28, Acquisition of an Interest in Land by a Public Agency, as an acquisition of an interest in land by a public agency for preservation of natural conditions existing at the time of transfer, including plant and animal habitats. Subject to Board approval of the project, staff will file the appropriate NOE with the State Clearinghouse and the county clerk.

State Government
- Senate: Senator Megan Dahle, District 01
- Assembly: Vacant, District 03

Staff Recommendation
Staff recommends that the WCB approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

9. Desert View Conservation Area Trails - Augmentation **Public Access Implementation**

WCB Grant: $707,000
Fund Source(s): Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4 – Existing Programs), Public Resources Code Section 93010 (SB 105, Sec. 94)
Grantee: County Service Area 20 Joshua Tree
Landowner: County Service Area 20 Joshua Tree
Location: ¼ mile east of Joshua Tree
County: San Bernardino

Project Highlights

- Augmentation of an existing grant
- Provides enhanced safety for visitors and wildlife at a popular conservation area
- Located within the Mojave Desert just outside of Joshua Tree National Park
- Key species: desert tortoise, big horn sheep, greater roadrunner, chuckwalla, kangaroo rat

Priority Metrics

- Benefits Justice Communities: Yes, project is located adjacent to SDAC communities within the town of Joshua Tree. This project will provide a no-cost recreational option for these communities, where users can hike, picnic and view wildlife.
- Tribal Partnerships: Yes, The Agua Caliente Band of Cahuilla Indians was involved in development of project design and advised on interpretive panels with Native American content.
- Pathways to 30x30: Pathway 4: Enhance Conservation of Existing Public Lands and Coastal Waters and Pathway 6: Expand and Accelerate Environmental Restoration.
- WCB Strategic Plan Target: B2.1, P2.2


29-Palms-Hwy
Joshua Tree
Sullivan Rd
Pueblo Trl
Onaga Trl
Joshua Tree NP
2839 ft
3828 ft
3709 ft
Doggie Trl
Turtle Rd
Single Tree Rd
Quail Springs Rd
Park Blvd
Overhill Rd
Kent Rd
Quail Wash
San Bernardino County
Victorville
SAN BERNARDINO MOUNTAINS
Project
Twentynine Palms
Ontario
Riverside
Banning
Palm Springs
Cathedral City
Corona
Indio
Menifee
Murrieta
Oceanside
Escondido
Pacific Ocean
6500 ft
Desert View Conservation Area Trails Augmentation
San Bernardino County
California WILDLIFE CONSERVATION BOARD
Project
Protected Lands
Eureka
Sacramento
San Francisco
Fresno
Los Angeles
San Diego
WCB 8/27/2026

Project Description

The Desert View Conservation Area Trails Augmentation Project (Project) site is home to numerous iconic desert species that are under threat due to extensive human disturbance and illegal activities. Visitors have participated in illegal shooting, dumping, campfires, overnight camping, off road vehicle activity, and poaching, including the tragic abuse and death of a desert tortoise. The Project will provide enhanced safety for wildlife and visitors by:

- Placing boulders and fencing barriers to keep visitors out of sensitive habitat.
- Upgrading trails with directional and wayfinding signage and markers, information kiosks, and steel mile marker posts.
- Establishing educational signage along trails, at the new observation desk, and in shaded “discovery shelters” to illustrate cultural, ecological and geological importance of the site in the past and present.
- Installing picnic benches, tables, and animal-proof trash receptacles.

The Project was originally approved for funding in November 2023. Due to increases in the cost of construction after going out to bid, the project budget increased, necessitating an augmentation request. This augmentation will ensure the project is completed successfully and as proposed.

Long-Term Management

County Service Area 20 Joshua Tree has adopted a Management Plan that guides management actions for the Project, including management of the Property. If at any time during the 25-year life of the Project, Grantee does not manage and maintain the project improvements, the Grant Agreement requires that it refund to the state of California an amortized amount of funds based on the number of years left on the Project life.

Project Funding

The proposed funding breakdown for the Project is as follows:

Project Task	WCB	Augmentation	Non-WCB Funds	Totals
Project Management	$180,000.00	---	---	$180,000.00
Design	$128,000.00	---	---	$128,000.00
Monitoring and Management Plans	$20,000.00	---	---	$20,000.00
Bid and Construction Support	$269,500.00	---	---	$269,500.00
Construction	$1,275,000.00	$707,000	---	$1,982,000.00
Contingency	$127,500.00	---	---	$127,500.00
Total	$2,000,000.00	$707,000	---	$2,707,000.00

Letters of Support or Opposition

Support:

- None received

Opposition:

- None received

CEQA

The County of San Bernardino, as lead agency, prepared an MND for the Project pursuant to the provisions of the CEQA. Staff considered the MND and prepared proposed, written findings documenting WCB's compliance with CEQA. Subject to approval of this proposal by the WCB, the appropriate Notice of Determination will be filed with the State Clearinghouse.

State Government

- Senate: Senator Rosilicie Ochoa Bogh, District 19
- Assembly: Assemblymember Greg Wallis, District 47

Staff Recommendation

Staff recommends that the WCB adopt the written findings and approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

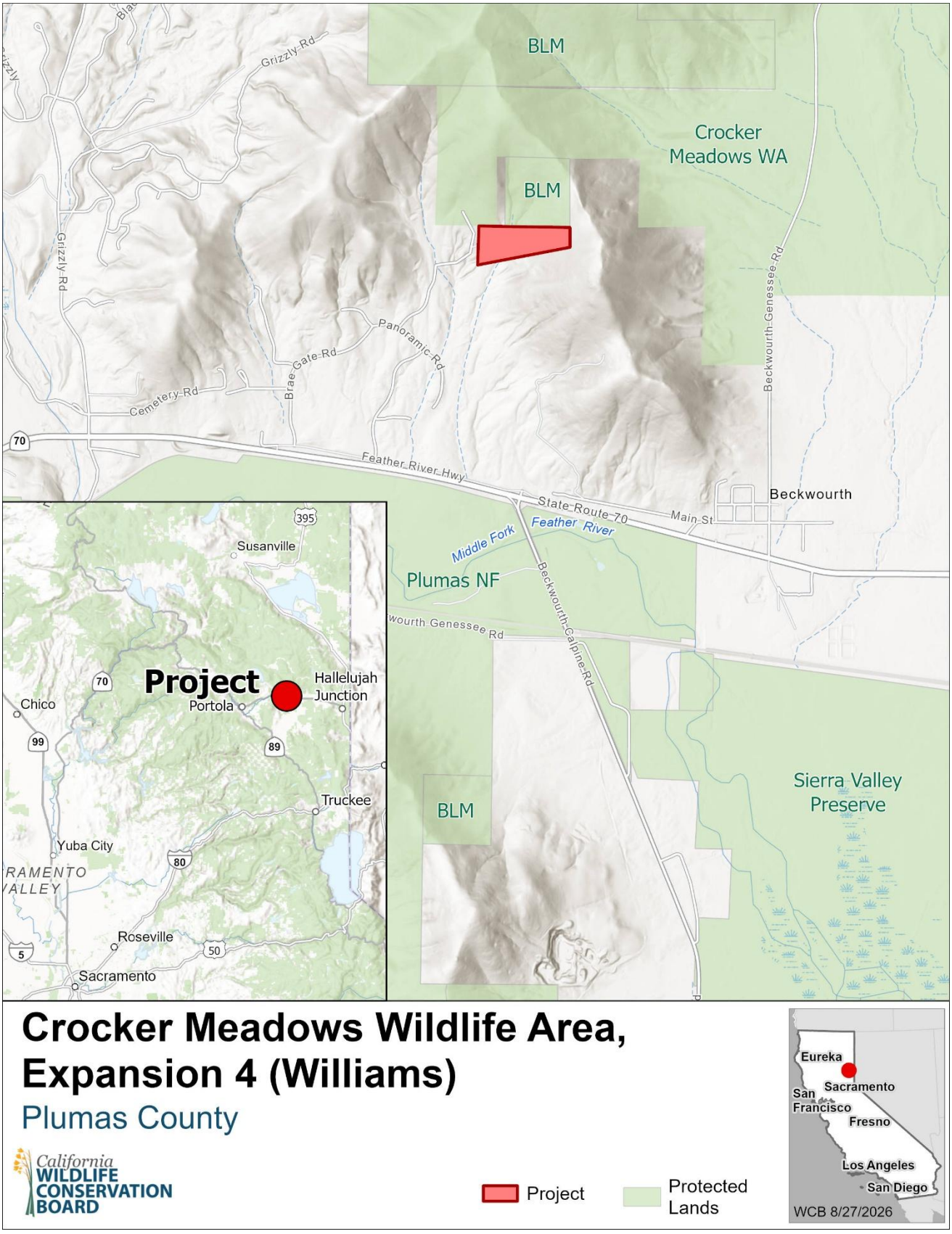
10. Crocker Meadows Wildlife Area, Exp. 4 (Williams) **Acquisition**
WCB Grant: $5,000 **Fee**
Fund Source(s): Habitat Conservation Fund (Proposition 117), Fish and Game Code Section 2786(b/c)
Location: Approximately 2 miles northwest of Beckwourth.
County: Plumas, County
Acres: 23± (Property)

Property Highlights

- The Property is adjacent to the existing Crocker Meadows Wildlife Area, which provides important winter and fawning habitat for the Doyle interstate deer herd. Crocker Meadows Wildlife Area is adjacent to public lands administered by the U.S. Forest Service and the U.S. Bureau of Land Management and other protected conservation properties are nearby.
- The Property is within the approved Sierra Valley Truckee River Conceptual Area Protection Plan.
- The Property contains migration corridors used by deer as they travel between seasonal ranges.
- Game species include black bear, California quail, mountain quail, gray squirrel, and sooty grouse. Other species that occur in the area include mountain lion, bobcat, and golden eagle.
- Habitats represented include montane hardwood and black oak woodlands and bitterbrush.
- Property includes a guzzler which CDFW plans to rehabilitate to provide year-round water for wildlife. Sellers will also grant an access easement over an adjacent property to allow CDFW to access and maintain the guzzler.

Priority Metrics

- Benefits Justice Communities: Yes. The Property is in a SDAC census tract and will provide public access benefits.
- Tribal Partnerships: No
- Pathways to 30x30: Pathway 2, Execute Strategic Acquisitions
- WCB Strategic Plan Target: B1.1, C1.2, P1.3
- Public Access: Yes, Property will be part of a publicly accessible wildlife area. The acquisition will provide expanded public access to recreational activities, including hunting, wildlife viewing and hiking.



Crocker Meadows Wildlife Area, Expansion 4 (Williams)

Plumas County

California Wildlife Conservation Board

Project

Protected Lands

Long-Term Management
The Property will be managed as part of the Crocker Meadows Wildlife Area.

Project Funding
The Department of General Services approved fair market value is $85,000, and the landowner has agreed a bargain sale of $5,000. The proposed funding breakdown is as follows:

Partners	Amount
WCB	$5,000
TOTAL Purchase Price	$5,000

Letters of Support or Opposition
Support:
- None received

Opposition:
- None received

CEQA
The project is exempt from CEQA pursuant to Public Resources Code 21080.28, Acquisition of an Interest in Land by a Public Agency, as an acquisition of an interest in land by a public agency for preservation of natural conditions existing at the time of transfer, including plant and animal habitats. Subject to Board approval of the project, staff will file the appropriate NOE with the State Clearinghouse and the county clerk.

State Government
- Senate: Senator Megan Dahle, District 1
- Assembly: Assemblymember Heather Hadwick, District 1

Staff Recommendation
Staff recommends that the WCB approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

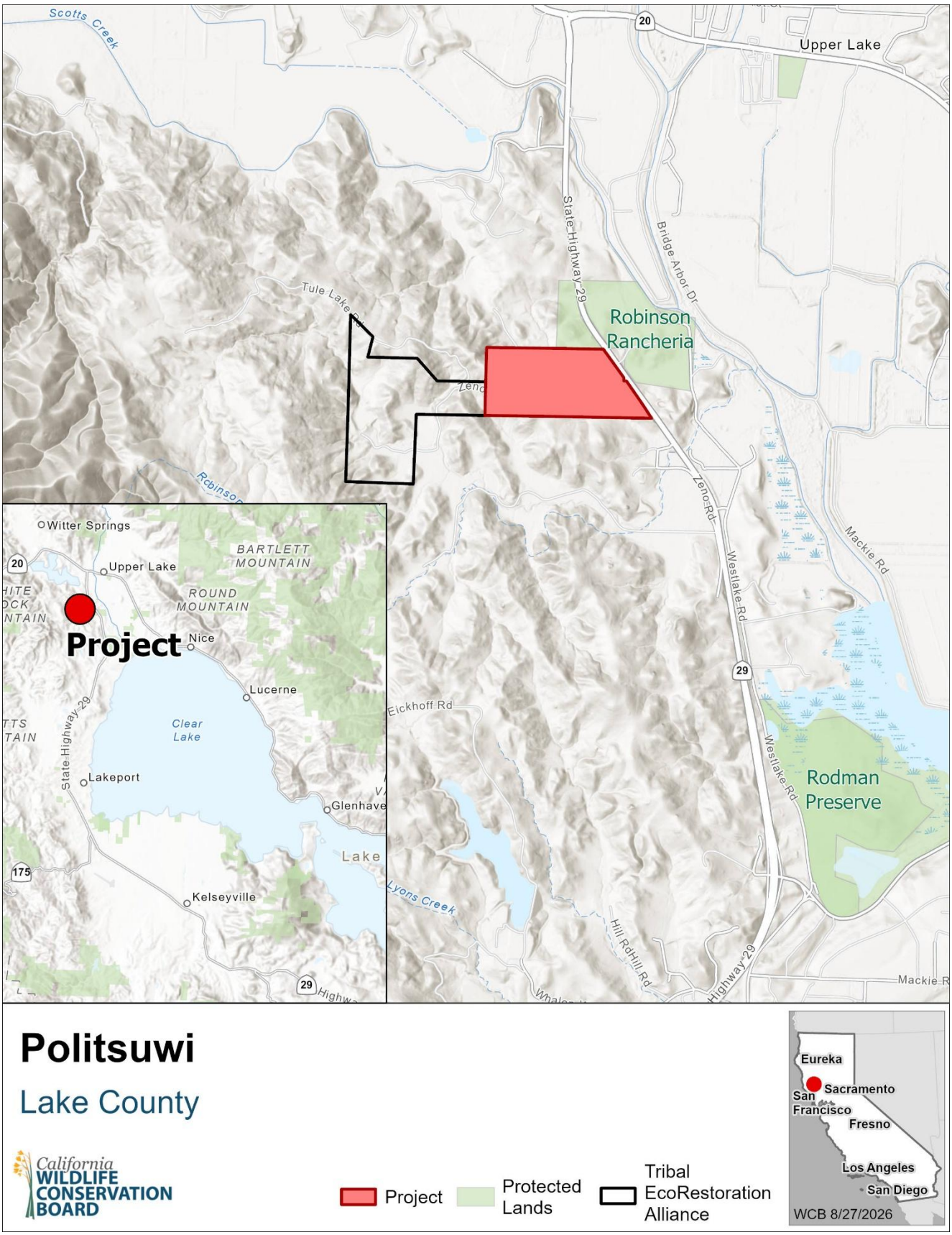
11. Politsuwi **Acquisitions**
WCB Grant: $700,000 **Fee**
Fund Source(s): Habitat Conservation Fund (Proposition 117), Fish and Game Code, Section 2786(a)
Grantee: Tribal EcoRestoration Alliance
Location: Five miles north of Lakeport
County: Lake County
Acres: 80± (Property)

Property Highlights

- The property adjacent to Tribal EcoRestoration Alliance's EcoCultural Stewardship Training and Demonstration Center will provide a "living classroom," that is an ecocultural stewardship training and demonstration site that integrates Tribal Ecological Knowledge with science-based restoration.
- Tribal EcoRestoration Alliance's core program includes training and workforce development, which has engaged over 1,200 participants since its inception. Tribal EcoRestoration Alliance also implements intertribal land stewardship projects on private, public, and Tribal land.
- Habitats represented: blue oak and valley oak woodlands, native and annual grasslands, fresh water emergent wetland, and riparian vegetation
- Key species: Osprey, western gray squirrel, black-tailed deer, and pollinator and songbird species

Priority Metrics

- Benefits Justice Communities: Yes. The project is in an SDAC and Tribal EcoRestoration Alliance provides training to the community through their programs.
- Tribal Partnerships: Yes. The project is in the ancestral lands of the Robinson Rancheria Pomo Indians of California, Scotts Valley Band of Pomo Indians, and Habematolel Pomo of Upper Lake, each of whom support this acquisition and work closely with Tribal EcoRestoration Alliance. Tribal EcoRestoration Alliance plans to include tribes in the planning and implementation of stewardship activities and provide land access to Tribal members, youth, and cultural practitioners.
- Pathways to 30x30: Pathway 1, Accelerate Regionally Led Conservation; Pathway 2, Execute Strategic Acquisitions
- WCB Strategic Plan Target: B1.1
- Public Access: No. However, the property will become part of Tribal EcoRestoration Alliance's EcoCultural Stewardship Training and Demonstration Site, where public programs are hosted throughout the year. Although there is no formal public access, the property provides public benefit through education, workforce training, cultural stewardship, and demonstration programs.


Scotts Creek
20
Upper Lake
State Highway 29
Bridge Arbor Dr
Tule Lake
Robinson Rancheria
Zeno
Robinson
Zeno Rd
Westlake Rd
Mackie Rd
29
Witter Springs
BARTLETT MOUNTAIN
ROUND MOUNTAIN
Project
Nice
Lucerne
Clear Lake
Lakeport
Glenhaven
Lake
175
Kelseyville
Eickhoff Rd
Rodman Preserve
Lyons Creek
Hill Rd
Highway 29
Mackie R
Politsuwi
Lake County
California WILDLIFE CONSERVATION BOARD
Project
Protected Lands
Tribal EcoRestoration Alliance
Eureka
Sacramento
San Francisco
Fresno
Los Angeles
San Diego
WCB 8/27/2026

Long-Term Management

Tribal EcoRestoration Alliance will provide long-term Indigenous-led management and stewardship of the Property as part of their EcoCultural Stewardship Training & Demonstration Center. Tribal EcoRestoration Alliance is authoring a long-term stewardship plan for the neighboring parcels, which will be expanded to include the Property. Tribal EcoRestoration Alliance will document and monitor their stewardship of the Property including with an existing partnership with UC Santa Cruz.

Project Funding

The Department of General Services approved fair market value is $700,000. The proposed funding breakdown is as follows:

Partners	Amount
WCB	$700,000
TOTAL Purchase Price	$700,000

Letters of Support or Opposition

Support:

- Brad Rasmussen, District 4 Supervisor, County of Lake
- Daniella Santana Cazares, Environmental Director, Habematolel Pomo of Upper Lake
- Eddie Crandell, District 3 Supervisor, County of Lake
- Eliot Hurwitz, Executive Director, Seigler Springs Community Redevelopment Association
- Frank Aebly, Ph.D., District Ranger, United States Forest Service
- Luis Santana, Fish and Wildlife Director, Robinson Rancheria Pomo Indians of California
- Patricia Franklin, Environmental Director, Scotts Valley Band of Pomo Indians

Opposition:

- None received

CEQA

The project has been reviewed for compliance with CEQA requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space and existing natural conditions, including plant or animal habitats. Subject to authorization by WCB, an NOE will be filed with the State Clearinghouse.

State Government

- Senate: Senator Mike McGuire, District 2
- Assembly: Assemblymember Cecelia Aguiar-Currey, District 4

Staff Recommendation

Staff recommends that the WCB approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

Presentation Items

12. Beaver Valley Headwaters Preserve (AP Ranch) **Acquisition**
WCB Grant: $11,500,000 **Fee**
Fund Source(s): Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4 – Existing Programs), Public Resources Code Section 93010 (SB 105, Sec. 94)
Grantee: The Wildlands Conservancy (TWC)
Location: 9 miles east of Callahan
County: Siskiyou
Acres: 14,177± (Property)

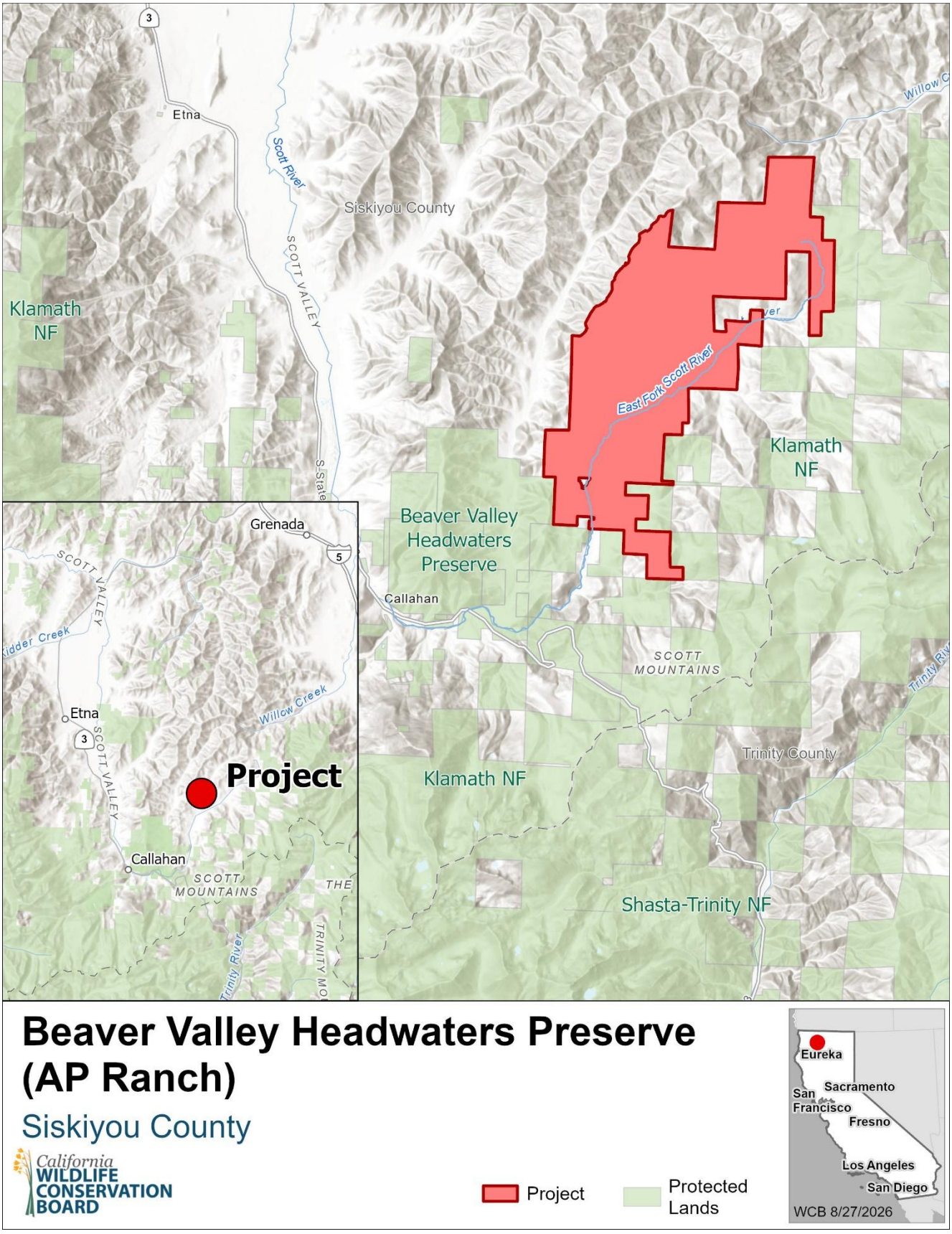
Property Highlights

- The proposed project expands the present day 6,095-acre Beaver Valley Headwaters Preserve by an additional 14,177± acres, bringing the lands to be protected by TWC to 20,273 acres, increasing habitat connectivity with the Klamath National Forest lands, and creating a 52,000-acre continuous landscape of habitat
- The Property holds multiple water rights under the Scott River Decree, supporting irrigation for approximately 1,389 acres of flood-irrigated meadows and contributing to wetland and riparian function throughout the headwaters
- TWC plans to enhance and restore lands once purchased, with a focus on improving fish habitat for salmonids including coho and Chinook salmon, and improve fish passage along 8 miles of the East Fork of the Scott River
- The Property provides housing and facilities to support property management and future public uses
- Habitats represented: flood-irrigated mountain meadows, riparian corridors, and mixed conifer forests
- Key species: coho and Chinook salmon, steelhead trout, elk, deer, black bear, mountain lion, beaver, and numerous bird species
- Regional or Species Plan: California Salmon Strategy for a Hotter, Drier Future: Restoring Aquatic Ecosystems in the Age of Climate Change, NOAA Fisheries Southern Oregon/Northern California Coast (SONCC) Coho Salmon Recovery Plan, California's Wildfire and Forest Resilience Action Plan

Priority Metrics

- Benefits Justice Communities: Yes, the Property is located within a DAC. TWC is committed to providing free, low-impact public access, trails, and environmental education opportunities.
- Tribal Partnerships: Yes, TWC engaged tribal governments throughout project development, and will continue that engagement into the planning process for future activities onsite.
- Pathways to 30x30: Pathway 2, Execute Strategic Acquisitions
- WCB Strategic Plan Target: B1.1, C1.1, C1.2, P1.2
- Public Access: Yes, TWC will allow permissive public access where compatible immediately after acquisition. Future, public hunting access through CDFW's SHARE program will be provided. After close of escrow TWC will determine and design

appropriate public access infrastructure, including trails, education programming, and low impact recreational facilities in coordination with the community.


Etna
Scott River
Siskiyou County
SCOTT VALLEY
Klamath NF
East Fork Scott River
Klamath NF
Beaver Valley Headwaters Preserve
Grenada
Callahan
SCOTT MOUNTAINS
Willow Creek
Etna
Project
Callahan
SCOTT MOUNTAINS
Trinity County
Klamath NF
Shasta-Trinity NF
Beaver Valley Headwaters Preserve (AP Ranch)
Siskiyou County
California WILDLIFE CONSERVATION BOARD
Project
Protected Lands
Eureka
Sacramento
San Francisco
Fresno
Los Angeles
San Diego
WCB 8/27/2026

Long-Term Management

The Property will be added to and managed alongside the existing Beaver Valley Headwaters Preserve, with an onsite staff living on the Preserve. TWC will develop and implement a comprehensive management plan with recommended best management practices, including conservation grazing and forest management practices to improve climate resilience, biodiversity, and reduce wildfire risk. The Property will be accessible to CDFW fisheries biologists and others for salmonid research. Additionally, TWC will complete a separate water management plan to determine what meaningful contributions to instream flow can be made and then will pursue the actions recommended to best protect and enhance the fish habitat.

Project Funding

The Department of General Services approved fair market value is $15,500,000. The proposed funding breakdown is as follows:

Partners	Amount
WCB	$11,500,000
TWC	$4,000,000
TOTAL Purchase Price	$15,500,000

Letters of Support or Opposition

Support:

- Russel A. Atterbery, Karuk Tribal Chairman, Karuk Tribe
- Sarah Schaefeer, Environmental Director, Quartz Valley Indian Reservation
- Natalie Kelly, District Ranger, U.S. Forest Service
- Wesley Stroud, Environmental Program Manager, California Department of Transportation, District 2
- Valery Quinto, Executive Officer, North Coast Regional Water Quality Control Board
- Rod Dowse, District Manager, Shasta Valley Resource Conservation District
- Ryan Walker, President, Siskiyou County Farm Bureau
- Allan S. Carver, County Superintendent, Siskiyou County Office of Education
- Damon Goodman, Shasta-Klamath Regional Director, California Trout
- Alexis Robertson, Acquisition Director, Siskiyou Land Trust

Opposition:

- None received

CEQA

The project has been reviewed for compliance with CEQA requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space and existing natural conditions, including plant or animal habitats. Subject to authorization by WCB, an NOE will be filed with the State Clearinghouse.

State Government

- Senate: Senator Megan Dahle, District 1
- Assembly: Assemblymember Heather Hadwick, District 1

Staff Recommendation

Staff recommends that the WCB approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

13. Big Springs Ranch Habitat Implementation **Restoration Implementation**

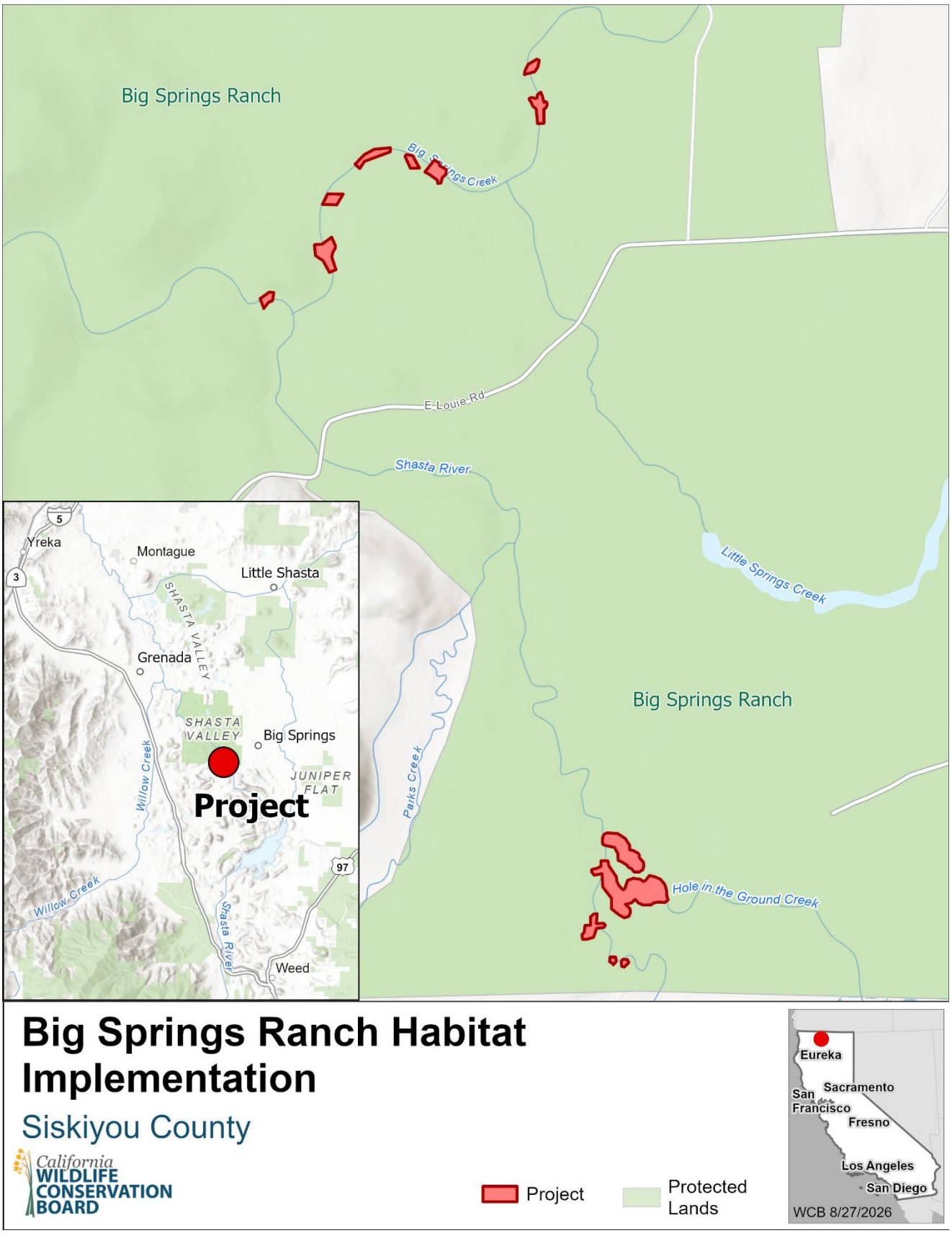
WCB Grant: $2,447,000
Fund Source(s): Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4 – Stream Flow Enhancement Program), Public Resources Code Section 91040(a) (SB 105, Sec. 97)
Grantee: California Trout, Inc.
Landowner: California Department of Fish and Wildlife
Location: Approximately 10 miles southeast of Grenada
County: Siskiyou County

Project Highlights

- Restore approximately 8 acres of habitat for migratory salmonids and waterfowl
- Create complex stream channels and reconnected floodplains with riparian and floodplain vegetation
- Key species: Coho salmon, Chinook salmon, steelhead, Pacific lamprey, migratory waterfowl

Priority Metrics

- Benefits Justice Communities: Yes. The Project is within an SDAC and the increase in fish populations will result in improved catch at the active subsistence fisheries operated by the Karuk and Yurok Tribes that are downstream of this Project site. The Project will also improve recreational fishing opportunities that are used as subsistence for underserved communities along the Klamath River and a wide range of businesses along the river.
- Tribal Partnerships: Yes. The Yurok Tribe, Karuk Tribe, and Quartz Valley Indian Reservation all serve on the Technical Advisory Committee for this project.
- Pathways to 30x30: Pathway 6, Expand and Accelerate Environmental Restoration and Stewardship
- WCB Strategic Plan Target: B2.2


Big Springs Ranch
Big Springs Creek
E Louie Rd
Shasta River
Little Springs Creek
Big Springs Ranch
Parks Creek
Hole in the Ground Creek
Yreka
Montague
Little Shasta
Grenada
SHASTA VALLEY
SHASTA VALLEY
Big Springs
JUNIPER FLAT
Project
Willow Creek
Willow Creek
Shasta River
Weed
5
3
97
Big Springs Ranch Habitat Implementation
Siskiyou County
California WILDLIFE CONSERVATION BOARD
Project
Protected Lands
Eureka
Sacramento
San Francisco
Fresno
Los Angeles
San Diego
WCB 8/27/2026

Project Description

This Big Spring Ranch Habitat Implementation (Project) will construct new instream and off channel habitat for salmonids, other native aquatic organisms, and migratory waterfowl. This work will include restoration elements such as enlarging spring alcoves, reconnecting oxbows, improving floodplain connectivity, strategic grading, installation of large wood and boulder instream habitat structures, creation of beaver dam analogs (BDAs), and riparian plantings. These elements will all increase channel complexity and habitat diversity, reconnect the creeks to their historic floodplains, and provide velocity refugia on two creeks, Big Springs Creek and Hole in the Ground Creek, which are tributaries to the Shasta River. The Project will implement stream restoration activities to enhance stream flow and habitat value by:

- Adding gravel to the streambed
- Installing large wood debris and boulder weirs to the creeks to create habitat complexity
- Installing BDAs to retain water and reconnect floodplain
- Planting native riparian vegetation
- Restoring approximately 8 acres of streambed, riparian and floodplain habitat, and benefiting approximately 26 river miles

Long-Term Management

California Trout, Inc. adopted a Management Plan that guides management actions for the Project, including management of the Project improvements. If at any time during the 25-year life of the Project, Grantee does not manage and maintain the Project improvements, the Grant Agreement requires that it refund to the state of California an amortized amount of funds based on the number of years left on the Project life.

Project Funding

The proposed funding breakdown for the Project is as follows:

Project Task	WCB	Non-WCB Funds	Totals
Lower Big Springs Creek Design, Environmental Compliance, and Implementation	$929,000	$500,000	$1,429,000
Lower Hole in the Ground Creek Design, Environmental Compliance, and Implementation	$817,000	$500,000	$1,317,000
Post-Construction Monitoring and Reporting	$389,000	---	$389,000
TAC and Stakeholder Coordination	$94,000	---	$94,000
Indirect Costs	$218,000	---	$218,000
Total	$2,447,000	$1,000,000	$3,447,000

Non-WCB funders include:

- California Department of Fish and Wildlife - $1,000,000

Letters of Support or Opposition

Support:

- Toz Soto, Senior Research and Policy Advisor, Karuk Tribe
- Michael Belchik, Senior Water Policy Analyst, Yurok Tribal Fisheries Department
- Robert Hawkins, Acting Regional Manager – Northern Region, California Department of Fish and Wildlife
- Valerie Quinto, Executive Officer, North Coast Regional Water Quality Control Board

Opposition:
- None received

CEQA
The North Coast Regional Water Quality Board, as lead agency, prepared a PEIR for the Project pursuant to the provisions of the CEQA. Staff considered the PEIR and prepared proposed, written findings documenting WCB's compliance with CEQA. Subject to approval of this proposal by the WCB, the appropriate Notice of Determination will be filed with the State Clearinghouse.

State Government
- Senate: Senator Megan Dahle, District 1
- Assembly: Assemblymember Heather Hadwick, District 1

Staff Recommendation
Staff recommends that the WCB adopt the written findings and approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

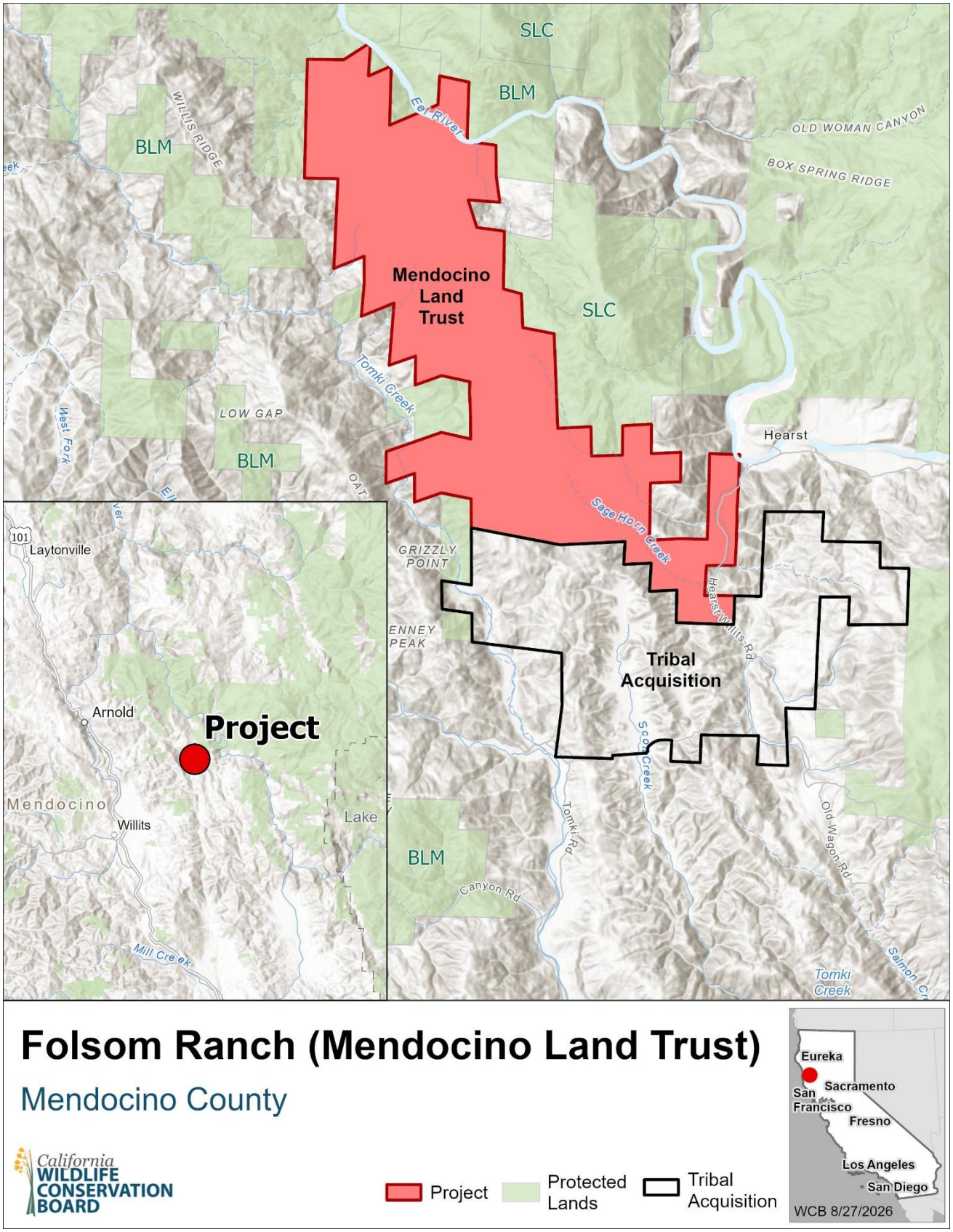
14. Folsom Ranch (Mendocino Land Trust) **Acquisition**
WCB Grant: $4,500,000 **Fee**
Fund Source(s): Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4 – Existing Programs), Public Resources Code Section 93010 (SB 105, Sec. 94)
Grantee: Mendocino Land Trust
Location: Approximately 10 miles northeast of the City of Willits
County: Mendocino County
Acres: 3,946± (Property)

Property Highlights

- Habitats represented: oak woodlands, grasslands, mature mixed conifer forests, and riparian areas of Eel River and Tomki Creek
- Key species: Tule elk, Coho and Chinook salmon, and steelhead
- The project includes development of multiple modes of public access, including a trailhead and parking area.
- The project will fill in a gap within a patchwork of public land and conservation easements across tens of thousands of acres in interior Mendocino County.
- Mendocino Land Trust (MLT) plans to transfer the property to the Bureau of Land Management (BLM) for permanent ownership and management. In the coming months, Land and Water Conservation Fund (LWCF) funds from BLM may become available for the acquisition. If that occurs, the funding amount provided by WCB will be reduced and BLM would become the Grantee. Therefore, close of escrow may be delayed for up to a year after Board approval to preserve the possibility of using LWCF funds in lieu of a portion or all the approved WCB funds.

Priority Metrics

- Benefits Justice Communities: Yes. The project will provide recreational access to the public in a disadvantaged community.
- Tribal Partnerships: Yes. This property is part of a larger 7,037-acre parcel, which is being split between MLT for this project and the Sherwood Valley Band of Pomo Indians (Sherwood), who will acquire the other 3,091± acres of the larger parcel with funding from California Natural Resources Agency. Sherwood entered a Memorandum of Understanding with the Cahto Tribe of the Laytonville Rancheria and the Potter Valley Tribe to manage their acreage collaboratively. MLT intends to collaborate with all three tribes in the management of the acreage owned by Mendocino Land Trust.
- Pathways to 30x30: Pathway 2, Execute Strategic Acquisitions; Pathway 4, Enhance Conservation of Existing Public Lands and Coastal Waters
- WCB Strategic Plan Target: B1.1
- Public Access: Yes. Trails, trailheads, and parking will be constructed following the acquisition.


SLC
BLM
Eel River
WILLIS RIDGE
BLM
OLD WOMAN CANYON
BOX SPRING RIDGE
Mendocino Land Trust
SLC
Tomki Creek
LOW GAP
West Fork
BLM
Hearst
Sage Horn Creek
GRIZZLY POINT
Hearst Willis Rd
ENNEY PEAK
Tribal Acquisition
101
Laytonville
Arnold
Project
Mendocino
Willits
Lake
BLM
Tomki Rd
Old Wagon Rd
Canyon Rd
Mill Creek
Tomki Creek
Folsom Ranch (Mendocino Land Trust)
Mendocino County
California WILDLIFE CONSERVATION BOARD
Project
Protected Lands
Tribal Acquisition
Eureka
Sacramento
San Francisco
Fresno
Los Angeles
San Diego
WCB 8/27/2026

Long-Term Management

As discussed above, MLT plans to transfer fee title to BLM in the future. As part of BLM's long-term management, it will prepare a Resource Management Plan, which will identify BLM's approach to management and public access. If BLM is unable to take fee title to the Property, MLT is prepared for long-term ownership and management.

Project Funding

The Department of General Services approved fair market value is $5,400,000. The proposed funding breakdown is as follows:

Partners	Amount
WCB	$4,500,000
Private Philanthropy	$900,000
TOTAL Purchase Price	$5,400,000

Letters of Support or Opposition

Support:

- Alecia Hamann, Executive Director, Friends of the Eel River
- Andrea Jones, Senior Director of Conservation, Audubon California
- Brian P. Bender, City Manager, City of Willits
- Carl Erquiaga, Nevada Field Representative, Theodore Roosevelt Conservation Partnership
- Darren Mierau, North Coast Director, California Trout
- Elyane Steanick, California Program Director, Conservation Lands Foundation
- Jim Wood, California State Assemblymember, 2nd District
- Joel Weltzien, California Chapter Coordinator, Backcountry Hunters & Anglers
- Lewis "Bill" Whipple, President, Round Valley Indian Tribes
- Luke Farmer, Regional Director, The Wildlands Conservancy
- Marc Deprey, Executive Director, Golden State Land Conservancy
- Marisela de Santa Anna, President, Peregrine Audubon Board of Directors
- Mary J. Norris, Chairwoman, Cahto Tribe of the Laytonville Rancheria
- Mary Small, Deputy Executive Director, California State Coastal Conservancy
- Maureen Mulheren, Chair, Mendocino County Boad of Supervisors
- Rob Andress, Lands Program Manager, Rocky Mountain Elk Foundation
- Salvador Rosales, Tribal Chairman, Potter Valley Tribe
- Stephanie Garrabrandt-Sierra, Executive Director, Mendocino County Resource Conservation District
- The Undersigned Organizations of the Power In Nature Coalition
- Valerie G. M. Nixon, President, Lake County Land Trust

Opposition:

- None received

CEQA

The Project has been reviewed for compliance with CEQA requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space and existing natural conditions, including plant or animal habitats. Subject to authorization by WCB, an NOE will be filed with the State Clearinghouse.

State Government

- Senate: Senator Mike McGuire, District 2
- Assembly: Assemblymember Chris Rogers, District 2

Staff Recommendation

Staff recommends that the WCB approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned

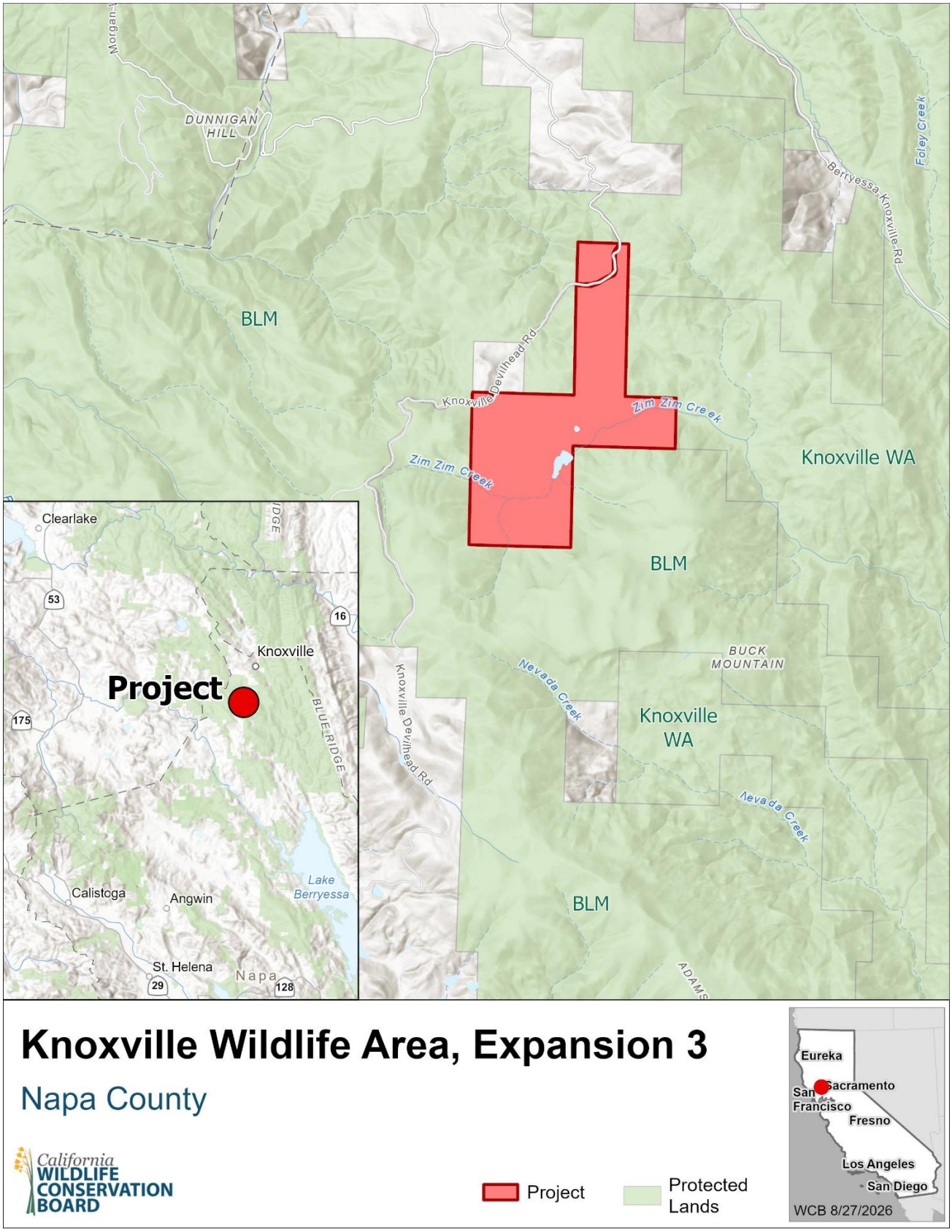
15. Knoxville Wildlife Area, Expansion 3 **Acquisition**
WCB Grant: $1,000,000 **Fee**
Fund Source(s): Habitat Conservation Fund (Proposition 117), Fish and Game Code Section 2786(a)
Grantee: Land Trust for Napa County (LTNC)
Location: 12 miles east of Middletown
County: Napa County
Acres: 436± (Property)

Property Highlights

- High priority conservation acquisition in the CDFW Blue-Ridge Berryessa Conceptual Area Protection Plan (2014).
- Property supports multiple conservation objectives, including the protection and enhancement of habitat for rare, threatened, and sensitive species; preservation of ecological connectivity and large mammal movement corridors; and expansion of opportunities for wildlife-dependent public recreation consistent with CDFW management goals.
- Habitats represented: grasslands, oak woodlands, serpentine chaparral, riparian, and cliff habitats present on the property.
- Protects a vulnerable section of the highest priority wildlife corridor in the North Bay.

Priority Metrics

- Benefits Justice Communities: No
- Tribal Partnerships: No
- Pathways to 30x30: Pathway 2, Execute Strategic Acquisitions
- WCB Strategic Plan Target: Plan B1.1, B2.1, P1.1
- Public Access: Yes, wildlife viewing, wildflower observation, birdwatching, hiking, and hunting.


DUNNIGAN HILL
Foley Creek
Berryessa Knoxville Rd
BLM
Knoxville Devilhead Rd
Zim Zim Creek
Zim Zim Creek
Knoxville WA
BLM
BUCK MOUNTAIN
Nevada Creek
Knoxville WA
Knoxville Devilhead Rd
Nevada Creek
BLM
Clearlake
53
16
Knoxville
Project
175
BLUE RIDGE
Lake Berryessa
Calistoga
Angwin
St. Helena
Napa
29
128
Knoxville Wildlife Area, Expansion 3
Napa County
California WILDLIFE CONSERVATION BOARD
Project
Protected Lands
Eureka
Sacramento
San Francisco
Fresno
Los Angeles
San Diego
WCB 8/27/2026

Long-Term Management

LTNC is acquiring the Property on behalf of CDFW, with the intent to transfer fee title ownership to CDFW in the future. The Property will be managed by CDFW as part of the Knoxville Wildlife Area.

Project Funding

The Department of General Services approved fair market value is $1,000,000. The proposed funding breakdown is as follows:

Partners	Amount
WCB	$1,000,000
TOTAL Purchase Price	$1,000,000

Letters of Support or Opposition

Support:

- None received

Opposition:

- None received

CEQA

The project has been reviewed for compliance with CEQA requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space and existing natural conditions, including plant or animal habitats. Subject to authorization by WCB, an NOE will be filed with the State Clearinghouse.

State Government

- Senate: Senator Christopher Cabaldon, District 3
- Assembly: Assemblymember Cecelia M. Agular-Curry, District 4

Staff Recommendation

Staff recommends that the WCB approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

16. Johnson Meadow Restoration **Restoration**
WCB Grant: $4,000,000 **Implementation**
Fund Source(s): Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4 – Existing Programs), Public Resources Code Section 93010 (SB 105, Sec. 94)
Grantee: Tahoe Resource Conservation District
Landowner: Tahoe Resource Conservation District
Location: South Lake Tahoe
County: El Dorado

Project Highlights

- 79 acres mountain meadow restoration
- Habitat benefits to western pearlshell mussel, Lahontan cutthroat trout, yellow warbler, mountain whitefish, Tahoe sucker
- Keystone project allowing future phases of restoration within Johnson Meadow
- Water quality improvement to the Upper Truckee River, Lake Tahoe's largest tributary watershed

Priority Metrics

- Benefits Justice Communities: Yes, the project is adjacent to DAC/SDAC areas and will enhance public access and increase climate resilience.
- Tribal Partnerships: No
- Pathways to 30x30: Pathway 6, Expand and Accelerate Environmental Restoration and Stewardship
- WCB Strategic Plan Target: B1.3, C1.1


Lake Tahoe
South Lake Tahoe
Lakeview Ave
Berkeley Ave
Sacramento Ave
Truckee Marsh
Upper Truckee River
Al Tahoe Blvd
Alpine Dr
Venice Dr
15th St
Michael Dr
Lake Tahoe Basin Management Unit
Emerald Bay Rd
Eloise Ave
12th St
Tahoe Island Dr
Tata Ln
James Ave
Lodi Ave
Sierra Blvd
Martin Ave
Trout Creek
Winnemucca Ave
4th St
Julie Ln
Dedi Ave
Bonanza Ave
Melba Dr
Golden Bear Trl
LAKE VALLEY
Lake Tahoe Airport
Pioneer Trl
Lake Tahoe Basin Management Unit
Lake Tahoe Basin Management Unit
SIERRA NEVADA MOUNTAINS
Donner
Truckee
Tahoe City
Lake Tahoe
Project
Echo Lake
South Fork American River
Kyburz
80
89
50
Johnson Meadow Restoration
El Dorado County
California WILDLIFE CONSERVATION BOARD
Project
Protected Lands
Eureka
Sacramento
San Francisco
Fresno
Los Angeles
San Diego
WCB 8/27/2026

Project Description

The Johnson Meadow property is a 206-acre meadow along the Upper Truckee River watershed. The Project area was degraded due to historic dairy operations as well as high flow channel downcutting and realignment. As a result, wetland function is disrupted which leads to water quality impacts, lowering of the water table, and upland encroachment into the floodplain.

The Johnson Meadow Restoration (Project) is the first phase of a larger restoration effort to reconnect the Upper Truckee River to its floodplain on the Johnson Meadow property in South Lake Tahoe. Highway 50, located on the northern border of the project area, bisects the historic floodplain and disrupts flows north towards Lake Tahoe.

The Project will construct a grade control structure and modify channel configuration to mitigate the risk of scour, erosion, and potential damage to the Highway 50 bridge as a result of channel realignment. The grade control structure allows for fish passage while safely conveying water from Johnson Meadow under the bridge in the Upper Truckee River channel. In addition to channel enhancement under the bridge, the grade control structure will improve hydrologic connectivity in the lower portion of the meadow. Project outcomes include 79 acres of restored meadow habitat, increased biodiversity and climate resilience, and will allow for future phases of restoration in Johnson Meadow. Project activities supporting these outcomes include:

- Channel realignment and creation of side channel
- Grade control structure installation
- Bank stabilization
- Revegetation of disturbed areas
- Removal of derelict utilities from Upper Truckee River channel

Long-Term Management

The Tahoe Resource Conservation District has adopted a Management Plan that guides management actions for the Project, including management of the Property. If at any time during the 25-year life of the Project, Grantee does not manage and maintain the project improvements, the Grant Agreement requires that it refund to the state of California an amortized amount of funds based on the number of years left on the Project life.

Project Funding

The proposed funding breakdown for the Project is as follows:

Project Task	WCB	Non-WCB Funds	Totals
Project Management	$191,116	$75,000	$266,116
Restoration	$3,654,037	$875,000	$4,529,037
Monitoring and Adaptive Management	$69,447	$70,000	$139,447
Indirect	$85,400	---	$85,400
Total	$4,000,000	$1,020,000	$5,020,000

Non-WCB funders include:

- Tahoe RCD - $20,000
- Tahoe Regional Planning Agency (Lake Tahoe Restoration Act) - $1,000,000

Letters of Support or Opposition

Support:

- Dionne Uzes, Acting Forest Supervisor - Lake Tahoe Basin Management Unit, U.S. Forest Service
- Elizabeth van Diepen, Engineering Geologist, Lahontan Regional Water Quality Control Board
- Julie W. Regan, Executive Director, Tahoe Regional Planning Agency
- Jason Vasques, Executive Director, California Tahoe Conservancy
- Laura Patten, Natural Resource Director, Keep Tahoe Blue
- Amy Berry, CEO, Tahoe Fund

Opposition:

- None received

CEQA

Tahoe Resource Conservation District, as lead agency, prepared a Notice of Exemption for the project pursuant to the provisions of CEQA. The Project is proposed as exempt from CEQA pursuant to the Statutory Exemption for Restoration Projects (SERP), Public Resources Code section 21080.56, as a project that meets all of the following conditions: (1) the Project is exclusively to conserve, restore, protect, or enhance, and assist in the recovery of California native fish and wildlife, and the habitat upon which they depend; or is exclusively to restore or provide habitat for California native fish and wildlife; (2) the Project may have public benefits incidental to the Project's fundamental purpose; (3) the Project will result in long-term net benefits to climate resiliency, biodiversity, and sensitive species recovery; and includes procedures and ongoing management for the protection of the environment; and (4) Project construction activities are solely related to habitat restoration. Staff considered the lead agency’s CEQA exemption and, subject to approval of this proposal by WCB, the appropriate NOE will be filed with the State Clearinghouse.

State Government

- Senate: Senator Marie Alvardo-Gil, District 4
- Assembly: Assemblymember Heather Hardwick, District 1

Staff Recommendation

Staff recommends that the WCB approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

17. Año Nuevo Island Seabird Habitat — Restoration

WCB Grant: $2,500,000 — **Implementation**

Fund Source(s): Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4 – Existing Programs), Public Resources Code Section 93010 (SB 105, Sec. 94)
Grantee: Oikonos – Ecosystem Knowledge
Landowner: California Department of Parks and Recreation
Location: 5 miles southwest of Pescadero
County: San Mateo County

Project Highlights

- Located on Año Nuevo Island, within Año Nuevo State Park
- Recognized as an Important Bird and Biodiversity Area of Global Priority by BirdLife International
- Habitat restored: 9 acres of seabird nesting habitat
- Key bird species: Rhinoceros Auklet, Cassin's Auklet, Pigeon Guillemot, Brandt's Cormorant, Pelagic Cormorant, and Black Oystercatcher
- Key pinniped species: Northern elephant seals, California sea lions, Stellar sea lions, harbor seals
- Regional or Species Plan: California Central Coast Joint Venture, USFWS Pacific Region Seabird Conservation Plan

Priority Metrics

- Benefits Justice Communities: No
- Tribal Partnerships: No
- Pathways to 30x30: Pathway 6, Expand and Accelerate Environmental Restoration and Stewardship
- WCB Strategic Plan Target: B2.1


Año Nuevo
Island
Reserve
Pacific Ocean
35
280
101
85
Sunnyvale
Cupertino
Saratoga
Pescadero
9
1
236
FRANKLIN
POINT
SANTA CRUZ MOUNTAINS
Boulder Creek
Ben Lomond
Scotts Val
Davenport
Santa Cruz
Project
Pacific
Ocean
Año Nuevo Island Seabird Habitat
San Mateo County
California
WILDLIFE
CONSERVATION
BOARD
Project
Protected
Lands
Eureka
Sacramento
San
Francisco
Fresno
Los Angeles
San Diego
WCB 8/27/2026

Project Description

The Año Nuevo Island Seabird Habitat (Project) project is located on Año Nuevo Island (ANI) a rare, predator-free refuge and an important biodiversity hotspot located off the San Mateo County coast. It supports four species of pinnipeds and more than seven species of seabirds, of which at least six species breed on the island. Each year ANI hosts over 20,000 seabirds, seals and sea lions. Once a U.S. Coast Guard Lighthouse Station for 76 years, the island's habitats were heavily altered, but today it is protected within Año Nuevo State Park, designated as a State Marine Conservation Area by CDFW, recognized as an Important Bird and Biodiversity Area of Global Priority by BirdLife International, and included within the Monterey Bay National Marine Sanctuary. Seabirds, pinnipeds, and their prey form an interconnected system that is essential to California's coastal biodiversity.

Nesting seabirds at ANI face increasing pressure from several sources including competition for nesting space and climate-related stressors such as hotter summer nesting seasons, stronger winter storms, sea level rise, and accelerated erosion made worse by historic disturbance and dense wildlife populations. The Project will maintain a core nesting area for burrow-nesting seabirds and provide durable, temperature-buffered nesting spaces to provide lasting, climate-resilient habitat that supports the reproductive success and long-term viability of sensitive seabird populations in California by:

- Replacing 200-meters of conservation fencing to protect a one-acre core nesting area.
- Constructing and installing 75 new ceramic nests.
- Retrofitting 45 existing ceramic nests with reflective sun shields.
- Conducting drone and thermal monitoring to document seabird populations, habitat condition and infrastructure performance.
- Installing a livestreamed burrow-cam system and interpretive display at the Año Nuevo State Park, providing an ADA accessible window into burrow-nesting seabird behavior.

Long-Term Management

The California Department of Parks and Recreation has adopted a Management Plan that guides management actions for the Project, including management of Año Nuevo Island. If at any time during the 20-year life of the Project, Grantee does not manage and maintain the project improvements, the Grant Agreement requires that it refund to the state of California an amortized amount of funds based on the number of years left on the Project life.

Project Funding

The proposed funding breakdown for the Project is as follows:

Project Task	WCB	Non-WCB Funds	Totals
Project Management	$939,000	$418,000	$1,357,000
Restoration	$1,252,000	$279,000	$1,531,000
Indirect Cost	$309,000	$248,000	$557,000
Total	$2,500,000	$945,000	$3,445,000

Non-WCB funders include:

- Oikonos – Ecosystem Knowledge - $650,000
- California Department of Parks and Recreation – $60,000

- Regents of the University of California, Santa Cruz - $80,000
- GoNative - $155,000

Letters of Support or Opposition

Support:

- Stan Kopacz, Supervising State Park Ranger, California State Parks, Santa Cruz District
- Connor Jandreau, Director and Partnerships Coordinator, California Central Coast Joint Venture
- Patrick W. Robinson, Ph.D., Director, Año Nuevo Reserve

Opposition:

- None received

CEQA

The California Department of Parks and Recreation, as lead agency, prepared a Notice of Exemption for the Project pursuant to the provisions of the CEQA. The Project is proposed as exempt from the CEQA pursuant to the State CEQA Guidelines: Section 15301 Class 1 Existing Facilities, Section 15302 Class 2 Replacement or Reconstruction, Section 15303 Class 3 New Construction or Conversion of Small Structures, and Section 15304 Class 4 Minor Alterations to Land. Subject to approval of this proposal by the WCB, as a Responsible Agency, the appropriate Notice of Exemption will be filed with the State Clearinghouse.

State Government

- Senate: Senator Josh Becker, District 13
- Assembly: Assemblymember Marc Berman, District 23

Staff Recommendation

Staff recommends that the WCB approve this Project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

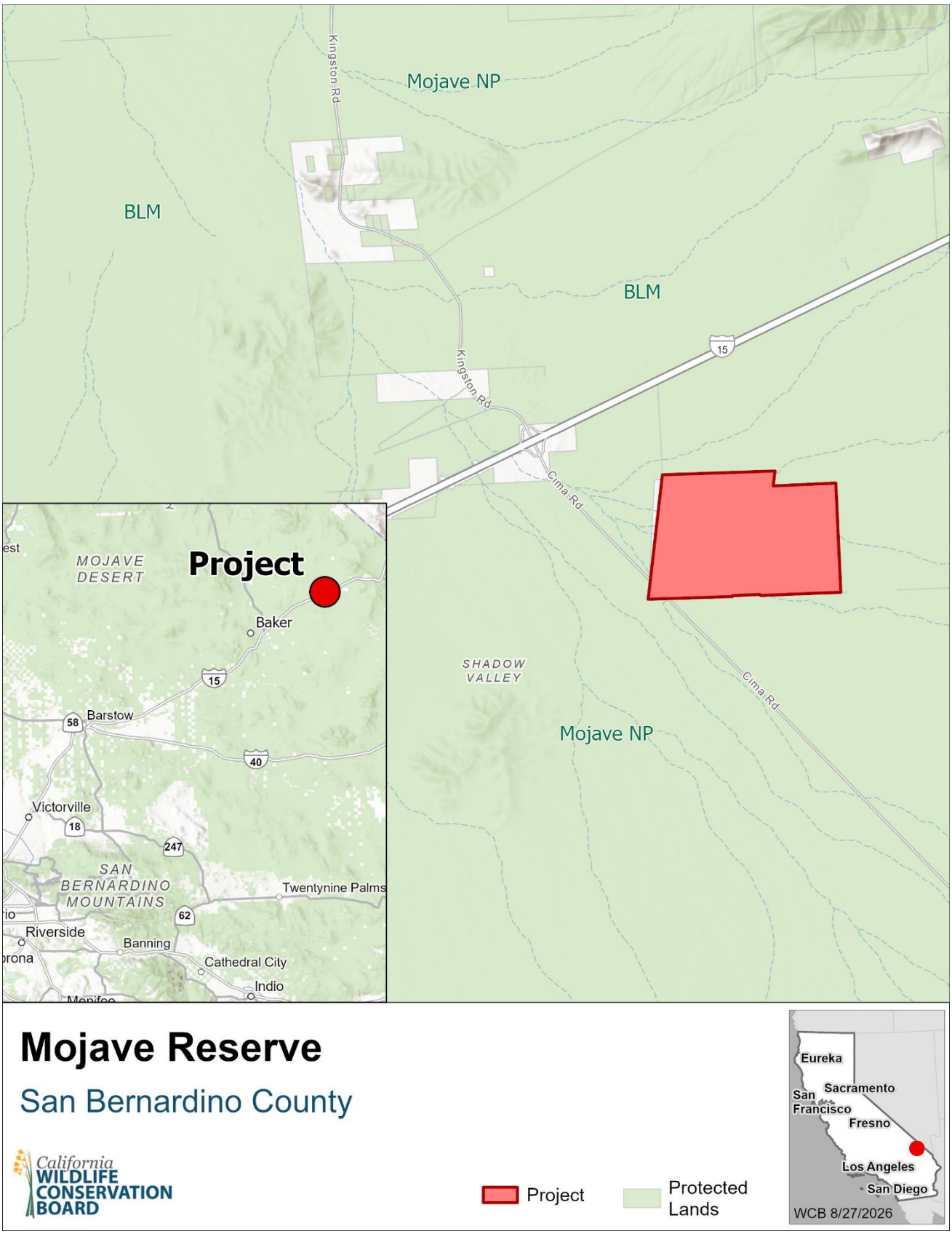
18. Mojave Reserve **Acquisition**
WCB Grant: $7,500,000 **Fee**
Fund Source(s): Habitat Conservation Fund (Proposition 117), Fish and Game Code Section 2786(b/c)
Grantee: Mojave Desert Land Trust (MDLT)
Location: 8 miles east of the community of Yucca Grove
County: San Bernardino
Acres: 1,093± (Property)

Property Highlights

- Privately owned and developable inholding within the vast Mojave National Preserve
- Key species: Mojave desert tortoise
- Habitats represented: creosote bush scrub, Joshua tree woodland, Madrean warm semi-desert wash woodland/scrub
- Located within the Ivanpah Critical Habitat Unit of the Eastern Mojave Recovery Unit for the Mojave Desert Tortoise
- Regional or Species Plan: Recovery Plan for the Mojave Population of the Desert Tortoise (USFWS 2011 & 2022), State Wildlife Action Plan (CDFW 2025)

Priority Metrics

- Benefits Justice Communities: Yes, Property is in a SDAC.
- Tribal Partnerships: No
- Pathways to 30x30: Pathway 2, Execute Strategic Acquisitions
- WCB Strategic Plan Target: B2.1, C1.1, C2.2, P2.1
- Public Access: Yes, the undeveloped portion of the Property will be open to the public for passive recreation, similar to the Mojave National Preserve that surrounds it.


Mojave NP
BLM
BLM
Kingston Rd
Kingston Rd
15
Cima Rd
Cima Rd
SHADOW VALLEY
Mojave NP
MOJAVE DESERT
Project
Baker
15
Barstow
58
40
Victorville
18
247
SAN BERNARDINO MOUNTAINS
Twentynine Palms
62
Riverside
Banning
Cathedral City
Indio
Mojave Reserve
San Bernardino County
California WILDLIFE CONSERVATION BOARD
Project
Protected Lands
Eureka
Sacramento
San Francisco
Fresno
Los Angeles
San Diego
WCB 8/27/2026

Long-Term Management

MDLT will develop and implement a comprehensive land management plan with a focus on the conservation and recovery of the Mojave desert tortoise and other sensitive species. Post-acquisition activities will include a use assessment and potential removal of existing structures and non-native trees.

Project Funding

The Department of General Services' approved fair market value is $7,500,000. The proposed funding breakdown is as follows:

Partners	Amount
WCB	$7,500,000
TOTAL Purchase Price	$7,500,000

Letters of Support or Opposition

Support:

- Raymond McPadden, Superintendent, Mojave National Preserve - National Park Service
- Inland Desert Working Group (multiple organizations), Power in Nature

Opposition:

- None received

CEQA

The Project has been reviewed for compliance with CEQA requirements and is proposed as exempt under CEQA Guidelines Section 15313, Class 13, as an acquisition of land for wildlife conservation purposes, and Section 15325, Class 25, as a transfer of an ownership interest in land to preserve open space and existing natural conditions, including plant or animal habitats. Subject to authorization by WCB, an NOE will be filed with the State Clearinghouse.

State Government

- Senate: Senator Rosilicie Ochoa Bogh, District 19
- Assembly: Assemblymember Tom Lackey, District 34

Staff Recommendation

Staff recommends that the WCB approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

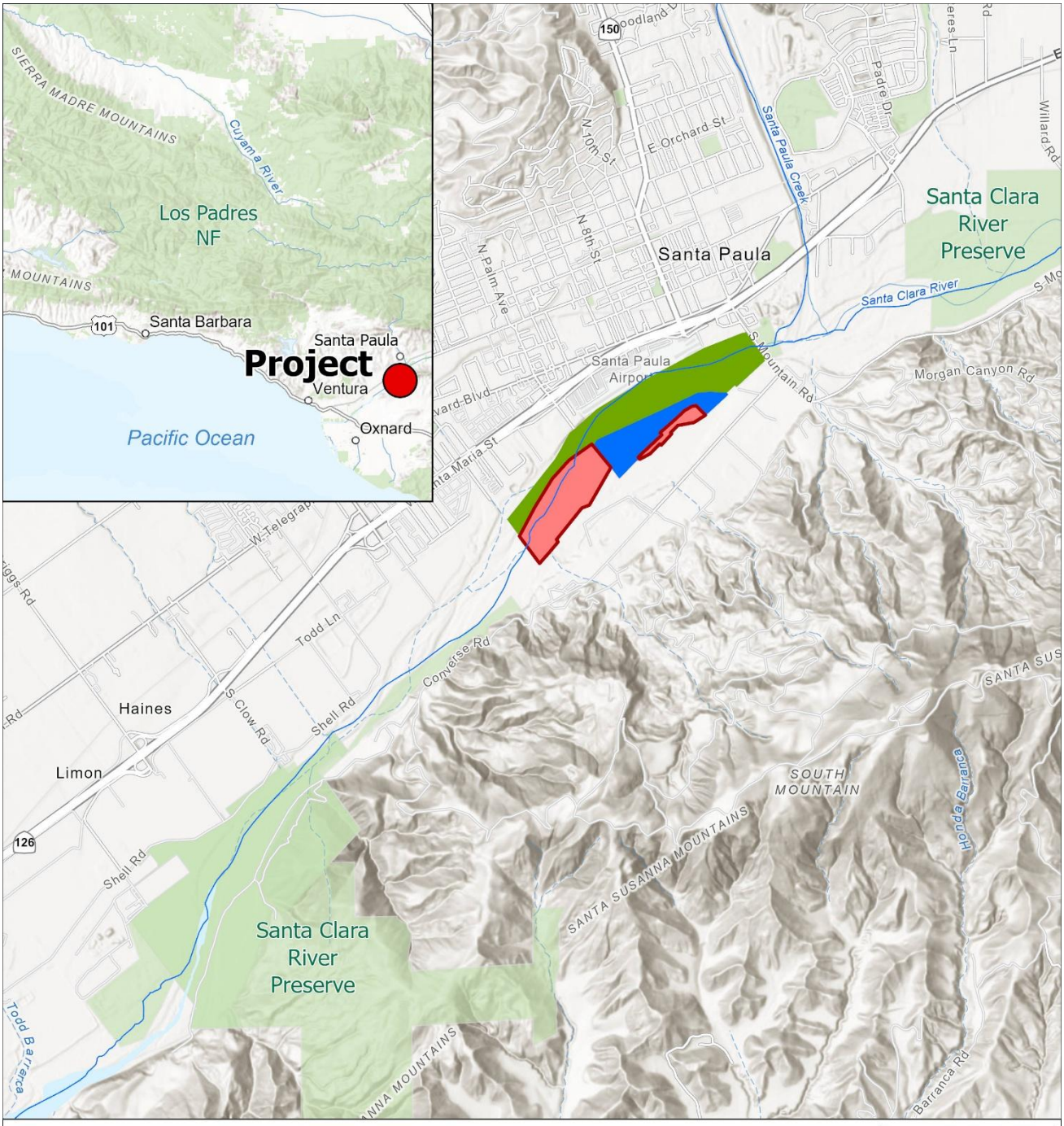
19. Santa Clara River Middle Reach Restoration **Restoration**
WCB Grant: $2,018,000 **Implementation**
Fund Source(s): Habitat Conservation Fund (Proposition 117), Fish and Game Code Section 2786(e/f)
Grantee: Santa Clara River Conservancy
Landowner: Private Landowner
Location: 0.5 mile south of Santa Paula
County: Ventura

Project Highlights

- The restored habitat will provide a key linkage in the middle of 700 acres that were restored upstream and downstream as part of the Santa Clara River Restoration Program
- Habitats restored: 4 acres of riparian forest and 66 acres of riparian scrub/woodland, with enhancement of topographic depressions that have the potential to support vernal pool habitat
- Key species: least Bell's vireo (LBVI), southwestern willow flycatcher (SWWF), monarch butterfly, special status reptiles
- Species Plan: LBVI Recovery Plan (USFWS 1998) and SWWF Recovery Plan (Finch, et al. 2002)

Priority Metrics

- Benefits Justice Communities: Yes, project is adjacent to a DAC and SDAC. and will increase resilience to climate, fire, and flood threats by removing highly flammable invasive species and improving flood conveyance and groundwater recharge.
- Tribal Partnerships: No
- Pathways to 30x30: Pathway 6, Expand and Accelerate Environmental Restoration and Stewardship; Pathway 8, Align Investments to Maximize Conservation Benefits
- WCB Strategic Plan Target: B1.1, 2.1, 2.2; C1.3, 2.1



Santa Clara River Middle Reach Restoration

Ventura County

California WILDLIFE CONSERVATION BOARD

CDFW Grant

DWR Grant

Project

Protected Lands

Project Description

The Santa Clara River Middle Reach Restoration (Project) site has a long history of human use and degradation: a portion of the Project area is a former golf course and other areas were intensively farmed as orchards and row crops. These past land uses introduced non-native species, altered the natural landform and hydrology, and degraded the riparian landscape. More recently, the site experienced repeated fires, reducing the regenerative capacity of the native plants on site. The Project will implement habitat restoration activities that increase biodiversity and climate resiliency, enhance an important wildlife dispersal corridor, connect a mosaic of habitat types across the 220-acre project site, and monitor ecosystem responses by:

- Collecting baseline data and site assessments to inform final restoration design
- Preparing the site for planting by significantly reducing invasive plant cover using integrated pest management practices (see herbicide questionnaire) and removing trash, debris, and man-made berms that alter drainage patterns
- Collecting native seeds and propagules from the watershed to curate a climate adapted plant palette, and planting this material along with purchased container stock
- Watering installed plants and hand weeding, which will be supported by local high school students and community groups
- Conducting annual monitoring to track project performance and response to restoration, including groundwater levels, vegetation cover, richness and height, and avian richness and density

Long-Term Management

The Santa Clara River Conservancy has adopted a Management Plan that guides management actions for the Project, including management of the restored property. If at any time during the 20-year life of the Project, Grantee does not manage and maintain the project improvements, the Grant Agreement requires that it refund to the state of California an amortized amount of funds based on the number of years left on the Project life.

Project Funding

The proposed funding breakdown for the Project is as follows:

Project Task	WCB	Non-WCB Funds	Totals
Project Management	$121,923	$75,335	$197,258
Habitat Restoration	$1,162,994	$506,032	$1,669,026
Maintenance and Monitoring	$610,083	$170,108	$780,191
Indirect	$123,000	---	$123,000
Total	$2,018,000	$751,475	$2,769,475

Non-WCB funders include:

- Santa Clara River Conservancy - $203,742
- California Department of Fish and Wildlife - $447,733
- California Department of Water Resources - $100,000

Letters of Support or Opposition

Support:

- Assemblymember Steve Bennett, 38th District, State Assembly
- Supervisor Kelly Long, 3rd District, Ventura County Board of Supervisors
- Alyssa Gomez, Restoration Project Associate, The Nature Conservancy

Opposition:

- None received

CEQA

The Ventura County Resource Conservation District, as lead agency, determined that the Project is statutorily exempt from CEQA pursuant to the Statutory Exemption for Restoration Projects (SERP), Public Resources Code section 21080.56, as a project that meets all of the following conditions: (1) the Project is exclusively to conserve, restore, protect, or enhance, and assist in the recovery of California native fish and wildlife, and the habitat upon which they depend; or is exclusively to restore or provide habitat for California native fish and wildlife; (2) the Project may have public benefits incidental to the Project's fundamental purpose; (3) the Project will result in long-term net benefits to climate resiliency, biodiversity, and sensitive species recovery; and includes procedures and ongoing management for the protection of the environment; and (4) Project construction activities are solely related to habitat restoration. Staff considered the lead agency’s CEQA exemption and, subject to approval of this proposal by WCB, the appropriate NOE will be filed with the State Clearinghouse

State Government

- Senate: Senator Steve Bennett, District 38
- Assembly: Assemblymember Monique Limon, District 21

Staff Recommendation

Staff recommends that the WCB approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

Herbicide use questionnaire

Please describe current vegetation conditions and composition at project site. Provide a description or list of the dominant native and invasive plant species, any rare or sensitive species, percent cover of invasive species, and if they occur in monocultures or mixed communities with natives.

The project site consists primarily of degraded riparian scrub habitat, with some riparian forest and seasonal wetland components. Vegetation is dominated by non-native annual and perennial invasive plant species, with invasive cover estimated at approximately 60–90% across much of the site. Invasive species occur both in dense monocultures and in mixed communities with remnant native vegetation.

Dominant non-native annual species include red and ripgut brome (*Bromus* spp.), short-pod mustard (*Hirschfeldia incana*), and poison hemlock (*Conium maculatum*). Common non-native perennial species include white sweet clover (*Melilotus albus*), perennial pepperweed (*Lepidium latifolium*), tamarisk (*Tamarix* spp.), castor bean (*Ricinus communis*), eucalyptus (*Eucalyptus* spp.), and ornamental palms. Remnant patches of giant reed (*Arundo donax)* are present at low densities following prior treatment.

Native vegetation occurs primarily as scattered individuals or small patches and includes riparian scrub and forest species such as willows (*Salix* spp.), Fremont cottonwood (*Populus fremontii*), mule fat (*Baccharis salicifolia*), big saltbush (*Atriplex lentiformis*), sages (*Salvia* spp.) and other native shrubs and herbaceous species typical of southern California riparian systems. While native species richness remains relatively high, native cover is suppressed by competition from invasive plants and recurrent fire. California black walnut (*Juglans californica*) is the only rare or sensitive plant species confirmed to occur at this site. Other rare and sensitive plant species including white cudweed (*Pseudognaphalium leucocephalum*), Leopold's rush (*Juncus acutus* ssp. *leopoldii*) have potential to occur at this site.

Please describe which herbicides and adjuvants will be used, including tank mix concentrations, application rates, and timing of application. Where applicable, identify selective herbicides that will be used to target specific plant life forms (grasses, broadleaf, woody, etc.).

In combination with manual and mechanical removal methods, an array of chemical herbicide application techniques will be implemented to effectively control non-native invasive plant species. Manual and mechanical removal methods will be used wherever possible. Herbicide applications will be targeted and selective, always following best management practices and integrated pest management to reduce herbicide use and minimize risk of non-target effects.

Quest – Spray adjuvant and water-conditioning agent that lowers pH level. Water at project sites, and in Southern California in general, is often basic (high pH or hard water) due to mineral content. Quest is used to neutralize water prior to herbicide application. For effective foliar spray application. Quest is added to foliar spray tank mixtures at a rate of 1.5 oz per gallon.

Agridex – Non-ionic spray surfactant and paraffin-based petroleum oil that improves herbicide penetration through plant cuticles. For effective foliar spray application, Agridex is added to foliar spray tank mixtures at a rate of 1-1.5oz per gallon.

Blue dye – Blue marker is added to herbicide mix so that the applicator can visualize where herbicide is sprayed. This helps reduce herbicide use by avoiding over-application, re-application, and drift.

Aquamaster – Broad-spectrum herbicide with glyphosate as the active ingredient. Approved for use in aquatic environments. Aquamaster is used in areas where manual methods are impractical because of the extent of the weed population or because native plants are present. It is also used when planting of natives will occur soon after application because of its short soil residence time (24 hours). For effective foliar spray application, Aquamaster is added to foliar spray tank mixtures at a rate of 1-3%. Aquamaster can also be used in its concentrated form (50-100%) to treat woody weed species like tree tobacco (*Nicotiana glauca*) and castor bean (*Ricinus communis*) using the cut stump method.

Chlorsulfuron 75 – Herbicide with chlorsulfuron as the active ingredient, primarily used to control broadleaf weeds such as perennial pepperweed (*Lepidium latifolium*) during the bolting growth phase. Chlorsulfuron is the only effective product for eliminating perennial pepperweed, but has a soil residual of several months. Not approved for use in aquatic environments. Chlorsulfuron is added to foliar spray tank mixtures at 1gram per gallon.

Fusilade II – Grass-specific herbicide with fluazifop-P-butyl as the active ingredient. Used to treat bermuda grass (*Cynodon dactylon*), red brome (*Bromus madritensis*), and annual grasses where tarping and other manual or mechanical methods are ineffective. Not approved for use in aquatic environments. Fusilade is added to foliar spray tank mixtures at 0.4-0.6 oz per gallon.

If your project will use glyphosate, have other herbicides been considered to eliminate glyphosate usage? If not, why was glyphosate chosen as the preferred herbicide?

Yes, additional herbicides have been considered and are being used for the project, such as imazapyr, chlorsulfuron, fluazifop, and triclopyr. In the case of imazapyr, which is used similarly to glyphosate to treat grasses and broadleaf weeds, the chemical has a long residual lifespan in the soil to deter future plant germination. Imazapyr damage has been observed on native vegetation (sometimes years later) in areas where planting occurred post-application. Additionally, many of the specialized herbicides used to treat grasses and broadleaf plants (Fusilade and Chlorsulfuron) are not approved for use in aquatic areas. Subsequently, glyphosate is a necessary tool to treat annual and broadleaf weeds in areas where planting will occur. Effective weed treatment in these areas is essential to prevent increased competition from non-native species and to ensure the survivorship of native plantings used for restoration.

If your project includes the use of a glyphosate product, have safer formulations (i.e. those registered for aquatic applications) or alternative herbicides been considered to reduce the potential for non-target environmental impacts? Please provide justification for the formulations and tank mixes selected as the preferred approach.

Only aquatically approved formulations of glyphosate are utilized for this project, and all tank mixes are carefully calibrated to apply the lowest effective concentrations necessary for the treatment of target non-native species. Herbicide selection prioritizes the safest available formulations, and applications are conducted with deliberate consideration of site-specific

environmental conditions to minimize potential impacts to non-target species and surrounding habitats.

If adjuvant(s) will be used in this project, are safer products that do not contain nonylphenol (often listed as "alkylphenol ethoxylate" on labels) being used to reduce the potential for non-target environmental impacts?

No adjuvants used for this project contain nonylphenol (alkylphenol ethoxylate) and are all approved for aquatic use.

Please describe any non-chemical treatments that will be used to minimize the amount and/or concentration of herbicides used at the project site. What negative effects might these treatments have on the biological community?

Additional non-chemical methods proposed for controlling target invasive weeds at the project site include flame-weeding (when weather conditions allow), mechanical mowing, mulching, hand-pulling, and hand-hoeing or tilling. Flame-weeding and mechanical mowing result in minimal soil disturbance and are not anticipated to cause substantial water quality impacts; however, these methods may result in incidental effects to adjacent non-target vegetation and may cause temporary disturbance or mortality to nearby pollinators and other wildlife.

Hand-pulling and hand-hoeing result in localized soil disturbance, which may expose buried non-native seed banks and could contribute to soil runoff and associated water quality concerns. These methods may also adversely affect sensitive biological soil crusts present in dryland ecosystems, including Southern California river systems. In addition, hand-pulling and hand-hoeing may cause direct physical disturbance to pollinators and other wildlife associated with targeted vegetation and may disturb ground-dwelling insects or small mammals.

Mulching is an effective method for suppressing weed germination, particularly around the base of newly installed plantings, and is associated with minimal environmental impacts. However, obtaining sufficient quantities of clean mulch for a project of this scale may be logistically challenging. Certain non-chemical control methods that rely on gasoline-powered equipment (e.g., mechanical mowing and mulch production) would also generate emissions that contribute to greenhouse gas production.

Please describe all herbicide application measures the project will employ to reduce negative impacts to water quality, non-target plant species, pollinators, and other wildlife species.

Herbicide application methods proposed for use at the project site include cut-and-daub or cut-and-spray, foliar spray, bend-and-spray, drill-and-fill, and spot-spray techniques. When implemented using best management practices, these methods are not anticipated to result in measurable water quality degradation or substantial impacts to non-target vegetation, pollinators, or other wildlife. All herbicide applications will be conducted in a deliberate and controlled manner, using highly targeted techniques to minimize the potential for off-site movement or non-target exposure. If conditions arise that could result in unintended impacts—such as herbicide drift affecting non-target species or potential disturbance to nearby wildlife—application activities will be suspended and reassessed prior to resuming work.

All herbicide application will be overseen by staff who possess California Qualified Applicator Licenses. Field personnel responsible for applying herbicides and monitoring contractor activities have degrees in biology and are trained in resource protection, plant identification, and wildlife monitoring. Surveys are conducted before and during treatment activities to identify sensitive biological resources and best management practices that can be applied to avoid impacts to native vegetation and wildlife.

Would removal of invasive weeds within the project area be possible using only non-chemical methods (hand-pulling, mowing, burning, etc.)? Please describe whether biocontrol has been considered and why or why not it was incorporated into the IPM approach for this project.

Relying solely on non-chemical methods to manage invasive weeds at the project site is not feasible. Many of the target species—such as giant reed and red brome—cannot be fully controlled or eradicated through non-chemical approaches alone. These species are already widespread, reproduce readily through seed or rhizome, and often reach large sizes, making complete mechanical removal impractical. Exclusive use of non-chemical methods would result in ongoing maintenance needs and substantial ecological and financial costs. Perennial pepperweed, in particular, is difficult to control due to its extensive underground rhizome network and seed production. Attempting to remove all roots mechanically would cause significant environmental disturbance and is unlikely to fully eradicate the plant. Herbicide treatments, however, can be translocated from the leaves to the roots, effectively targeting and killing the entire plant.

Please provide a total cost estimate for using only non-chemical removal methods for the invasive species where this approach would be possible. Please estimate both the project cost and long-term management costs, including an estimate of any additional personnel or contracts required.

A total cost estimate for the project using only non-chemical removal methods would range between $5,000,000-$7,000,000. A strictly non-chemical approach for the removal and management of invasive species at this project site would not be realistically possible due to the size of the project site and the extent of weed populations. The continued long-term management costs, level of disturbance of mechanical methods, and cost for additional personal and subsequent contracting would be prohibitive.

For California Department of Fish and Wildlife owned/managed properties only:
Have you worked with CDFW's Pest Control Advisor to develop an integrated past management plan that uses the safest and most effective herbicide formulation(s) and application method(s) for your project?

Not applicable. This project is not located on California Department of Fish and Wildlife owned or managed lands

20. Bowtie Park Public Access — Public Access Implementation

WCB Grant: $2,614,000
Fund Source(s): Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4 – Existing Programs), Public Resources Code Section 93010 (SB 105, Sec. 94)
Grantee: Department of Parks and Recreation
Landowner: Department of Parks and Recreation
Location: City of Los Angeles
County: Los Angeles

Project Highlights

- Project will provide equitable access to public open space and strengthen the connection between surrounding neighborhoods and the Los Angeles River
- Habitat creation and enhancement to support least Bell's vireo and Crotch's bumble bee
- Clockshop, State Parks' nonprofit partner, leads community outreach in English and Spanish, and will support educational programming
- Project will include ADA-compliant interpretive features

Priority Metrics

- Benefits Justice Communities: Yes, the Project is located within a Disadvantaged and Climate Vulnerable Community and will provide public open space along the Los Angeles River
- Tribal Partnerships: Yes, State Parks is working with three Tribal organizations on design, planting palette, cultural monitoring, and interpretive elements: Gabrielino Tongva Indians of California Tribal Council, Gabrieleño Band of Mission Indians – Kizh Nation, and San Gabriel Band of Mission Indians – Gabrieleño/Tongva
- Pathways to 30x30: Pathway 1, Accelerate Regionally Led Conservation
  WCB Strategic Plan Target: P2.1, P3.1


Griffith Park
Los Angeles River
Rio de Los Angeles SP
Rio de Los Angeles SP
Elysian Park
Glendale Fwy
Project
Palmdale
Santa Clarita
Simi Valley
Thousand Oaks
Los Angeleo
Santa Monica
Redondo Beach
Long Beach
Pacific Ocean
Bowtie Park Public Access
Los Angeles County
California WILDLIFE CONSERVATION BOARD
Project
Protected Lands
Eureka
Sacramento
San Francisco
Fresno
Los Angeles
San Diego
WCB 8/27/2026

Project Description

The Bowtie Park Public Access (Project) will develop approximately 14.8 acres of the 18-acre Bowtie parcel into publicly accessible open space that advances equitable recreation and cultural recognition, re-establishes native plant communities, and manages stormwater. The Bowtie parcel is located in Taylor Yard, a former railyard that was historically used for rail operations by Southern Pacific. It is adjacent to Rio de Los Angeles State Park and the G2 parcel of the former railyard. Together these projects are part of a larger vision known as the 100-Acre Partnership, led by the City of Los Angeles, Mountains Recreation and Conservation Authority, and California State Parks. The Bowtie and G2 parcels will be connected through the Paseo del Rio, a continuous riverfront trail and greenway.

The Nature Conservancy is leading the first phase of development at the Bowtie, a 3.2-acre demonstration wetland. Phases 2 and 3 will focus on soil remediation, habitat creation, public access infrastructure, and development of the Paseo del Rio. The Project will fund a portion of Phase 2, which will:

- Re-establish native plant communities to support pollinators and other wildlife, including the federally listed least Bell's vireo and Crotch's bumble bee, which is a candidate for State protection
- Improve water quality through removal of existing asphalt and replacement with permeable decomposed granite (DG) trails
- Construct an entry access driveway with bus drop-off, roundabout, and connections to the Paseo del Rio trail and bike path
- Install culturally inclusive, ADA-compliant interpretive features that connect visitors to the site's ecology and history

Long-Term Management

Department of Parks and Recreation adopted a Management Plan that guides management actions for the Project. If at any time during the 20-year life of the Project, Department of Parks and Recreation does not manage and maintain the Project improvements, the Grant Agreement requires that it refund to the state of California an amortized amount of funds based on the number of years left on the Project life.

Project Funding

The proposed funding breakdown for the Project is as follows:

Project Task	WCB	Non-WCB Funds	Totals
Project Management	$48,500	$430,000	$478,500
Habitat and Landscaping	$1,019,600	$6,200,000	$7,219,600
Interpretive Elements	$224,690	$500,000	$724,690
Public Access Infrastructure	$960,710	$12,540,000	$13,500,710
Design and Monitoring	---	$2,630,000	$2,630,000
Indirect Costs	$360,500	---	$360,500
Total	$2,614,000	$22,300,000	$24,914,000

Non-WCB funders include:
- California State Parks Waterway Connections Initiative - $11,000,000
- National Park Service Outdoor Recreation Legacy Partnership Grant - $5,000,000
- Santa Monica Mountains Conservancy - $2,800,000
- U.S. Department of Housing & Urban Development - $2,000,000
- Measure A, Los Angeles County - $1,500,000

Letters of Support or Opposition

Support:
- Alfred Mata, PE, Interim City Engineer, City of Los Angeles
- Brian Baldauf, Deputy Executive Director, Mountains Recreation and Conservation Authority

Opposition:
- None received

CEQA

The Department of Parks and Recreation, as lead agency, prepared a Mitigated Negative Declaration (MND) for the Project pursuant to the provisions of the CEQA. Staff considered the MND and prepared proposed, written findings documenting WCB's compliance with CEQA. Subject to approval of this proposal by the WCB, the appropriate Notice of Determination will be filed with the State Clearinghouse.

State Government

- Senate: Senator María Elena Durazo, District 26
- Assembly: Assemblymember Jessica M. Caloza, District 52

Staff Recommendation

Staff recommends that the WCB adopt the written findings and approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

Herbicide use questionnaire

Please describe current vegetation conditions and composition at project site. Provide a description or list of the dominant native and invasive plant species, any rare or sensitive species, percent cover of invasive species, and if they occur in monocultures or mixed communities with natives.

The Bowtie project area supports a highly disturbed urban riparian and upland mosaic adjacent to the Los Angeles River, with a mix of remnant native vegetation and extensive invasive plant infestations. Prior to implementation, invasive species comprised a substantial portion of vegetative cover, occurring both in dense monocultures and mixed stands with native species.

Dominant invasive species include perennial grasses and forbs typical of highly disturbed urban sites, with prevalence of fountain grass (*Pennisetum setaceum*), along with other non-native annual grasses and broadleaf weeds. In several areas, invasive species formed near-continuous cover, suppressing native recruitment and limiting habitat function.

Native vegetation occurs patchily throughout the site and includes early-successional riparian and upland native species, though native cover is generally fragmented and constrained by invasive competition. No direct impacts to listed rare or sensitive plant species are anticipated; however, the project area supports habitat values that warrant careful protection during maintenance activities.

Please describe which herbicides and adjuvants will be used, including tank mix concentrations, application rates, and timing of application. Where applicable, identify selective herbicides that will be used to target specific plant life forms (grasses, broadleaf, woody, etc.).

Herbicide use at the Bowtie project site is incorporated as part of an Integrated Pest Management (IPM) strategy and will be applied only when non-chemical methods alone are insufficient to achieve invasive species control objectives.

The primary herbicides proposed include:

- Glyphosate (Roundup Custom®) — an aquatic-approved formulation
- Imazapyr (Habitat® or Polaris®) — aquatic-approved formulation, used selectively

Glyphosate will be applied as a low-concentration foliar or cut-stump treatment targeting actively growing invasive species above the banks of the Los Angeles River. Imazapyr may be used selectively for species that are not effectively controlled by glyphosate alone (e.g., fountain grass), with strict limitations due to its longer soil residual.

Herbicide application rates, tank mixes, and timing will follow label requirements and best management practices, with treatments scheduled to coincide with periods of active invasive growth and minimal risk to non-target species. Spot treatment methods will be prioritized over broadcast application.

If your project will use glyphosate, have other herbicides been considered to eliminate glyphosate usage? If not, why was glyphosate chosen as the preferred herbicide?

Alternative herbicides were evaluated; however, glyphosate was selected because it provides the most effective and flexible control for the diverse suite of invasive species present while allowing precise, low-volume applications.

Glyphosate's efficacy across multiple life forms (annuals, perennials, grasses, and broadleaf species), combined with its lack of soil residual activity, makes it well-suited for post-restoration maintenance where native revegetation is a priority.

If your project includes the use of a glyphosate product, have safer formulations (i.e. those registered for aquatic applications) or alternative herbicides been considered to reduce the potential for non-target environmental impacts? Please provide justification for the formulations and tank mixes selected as the preferred approach.

> All glyphosate products used for this project will be aquatic-approved formulations (e.g., Roundup Custom®), selected specifically to reduce risks to water quality and non-target aquatic organisms. Alternative herbicides were considered, but aquatic-approved glyphosate provides the most environmentally protective option for work occurring adjacent to the Los Angeles River.

If adjuvant(s) will be used in this project, are safer products that do not contain nonylphenol (often listed as "alkylphenol ethoxylate" on labels) being used to reduce the potential for non-target environmental impacts?

> If adjuvants are required, only non-ionic surfactants that do not contain nonylphenol or alkylphenol ethoxylates will be used. Adjuvant selection will prioritize products designed to minimize non-target impacts while improving herbicide efficacy, thereby reducing overall herbicide volume.

Please describe any non-chemical treatments that will be used to minimize the amount and/or concentration of herbicides used at the project site. What negative effects might these treatments have on the biological community?

Non-chemical methods are the primary management tools for this project and include:

- Hand pulling
- Mechanical removal (cutting, weed-whacking)
- Biomass reduction prior to any chemical treatment
- Cultural methods to promote native establishment and competitive exclusion

While these methods reduce chemical reliance, they may result in short-term soil disturbance, temporary habitat disruption, and increased labor demands. These impacts will be mitigated through phased work, avoidance of sensitive periods for wildlife, and prompt stabilization and revegetation.

Please describe all herbicide application measures the project will employ to reduce negative impacts to water quality, non-target plant species, pollinators, and other wildlife species.

The project will implement multiple protective measures, including:

- Spot treatment only; no broadcast spraying
- No herbicide application directly to standing water
- Use of aquatic-approved formulations
- Application during low-wind conditions
- Avoidance of treatment within 24 hours of rainfall or runoff-generating events
- Coordination with biological monitoring where appropriate

These measures collectively minimize risks to water quality, pollinators, and wildlife.

Would removal of invasive weeds within the project area be possible using only non-chemical methods (hand-pulling, mowing, burning, etc.)? Please describe whether biocontrol has been considered and why or why not it was incorporated into the IPM approach for this project.

Exclusive reliance on non-chemical methods is **not feasible** for long-term invasive control at this site due to reinvasion pressure, perennial root systems, and the scale of infestation. While non-chemical methods are emphasized, limited herbicide use is necessary to prevent repeated disturbance cycles that would otherwise degrade habitat.

Biological control has been considered; however, no approved or effective biocontrol agents are currently available for the primary invasive species present, and therefore biocontrol is not incorporated into the IPM strategy.

Please provide a total cost estimate for using <u>only</u> non-chemical removal methods for the invasive species where this approach would be possible. Please estimate both the project cost and long-term management costs, including an estimate of any additional personnel or contracts required.

A non-chemical-only approach would substantially increase both initial project and long-term management costs due to the need for repeated treatments, increased labor, and ongoing reinfestation control. Long-term maintenance would require additional staffing or contracted labor indefinitely, making this approach cost-prohibitive and less environmentally sustainable over time.

For California Department of Fish and Wildlife owned/managed properties only:
Have you worked with CDFW's Pest Control Advisor to develop an integrated past management plan that uses the safest and most effective herbicide formulation(s) and application method(s) for your project?

Not applicable. This project is not located on California Department of Fish and Wildlife owned or managed lands.

21. Santa Ana River Wash Restoration — Restoration

WCB Grant: $3,280,000 — **Implementation**
Fund Source(s): Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4 – Existing Programs), Public Resources Code Section 93010 (SB 105, Sec. 94)
Grantee: San Bernardino Valley Conservation Trust
Landowner: San Bernardino Valley Water Conservation District
Location: 3.5 miles southeast of Highland
County: San Bernardino

Project Highlights

- Located within the Santa Ana Wash Plan HCP (Wash Plan) Preserve Boundary and the Bunker Hill Basin, a high priority basin for groundwater recharge
- Restores fluvial processes to Riversidian alluvial fan sage scrub habitat, a rare riparian system found primarily in Southern California
- Capitalizes on a unique post-disturbance restoration window following the 2024 Line Fire
- Key species: San Bernardino kangaroo rat (SBKR), California gnatcatcher, coastal cactus wren, Santa Ana River woolly star, and slender-horned spineflower
- Advances actions identified in the Recovery Implementation Strategy for SBKR (USFWS 2024)
- Habitats restored: 44 acres of alluvial terraces along Plunge Creek, 15 acres of floodplain, and 30 acres of alluvial fan sage scrub using hydrological and mechanical treatments

Priority Metrics

- Benefits Justice Communities: Yes, project is adjacent to an SDAC and will reduce fire threats, increase groundwater recharge, and use climate-adapted native plants.
- Tribal Partnerships: Yes, Yuhaaviatam of San Manual Nation will participate in formal cultural and natural resources consultation and field participation for seeding and planting events
- Pathways to 30x30: Pathway 1, Accelerate Regionally Led Conservation; Pathway 6, Expand and Accelerate Environmental Restoration and Stewardship
- WCB Strategic Plan Target: B1.1, 2.1, 2.2; C2.3

Santa Ana River Wash Restoration

San Bernardino County

Project Description

The Santa Ana River Wash Restoration (Project) site has experienced decades of flood control infrastructure, sand and gravel extraction, and groundwater recharge management that have altered the natural flood disturbance regime that historically created and maintained Riversidian alluvial fan sage scrub habitat. The result is a successional shift toward dense shrub canopies, accumulated vegetation litter and duff, and nonnative annual grass invasion that reduces available habitat for, and recruitment by, sensitive species that depend on the favorable conditions created by fluvial disturbance and successional dynamics. The Project will implement hydrological and mechanical treatments to restore and emulate natural disturbance that will create and maintain alluvial fan scrub habitat for the key species and improve climate resiliency for people and wildlife by reducing fire threats and increasing groundwater recharge in the Bunker Hill Basin that provides drinking water for over 700,000 residents in the San Bernardino Valley. New science for SBKR will be led by USGS and will inform the Project's restoration design and range-wide species recovery science. The Project will address these goals by:

- Installing splitter structures and pilot channels that will enhance 44 acres of fluvial terraces and rewet 15 acres of floodplain along Plunge Creek.
- Controlling nonnative annual grasses and thinning shrubs across 200 acres with mechanical and chemical treatments to reduce fire risk and create open habitat.
- Collecting, propagating, and bulking native seed, including seed of the slender-horned spineflower, with California Botanic Garden.
- Enhancing 30 acres of alluvial fan scrub habitat through light soil scraping, sand spreading, seeding, and cactus planting that will benefit all the key species and connect occupied habitat of two populations of SBKR.
- Validating dietary assay and species competition modeling for SBKR that will inform the seed mix to use and where mechanical treatments will benefit SBKR the most versus the more common Dulzura kangaroo rat.
- Conducting robust monitoring that documents baseline conditions, measures performance in groundwater recharge, geomorphic conditions, habitat lift, and SBKR Percent Area Occupied, and operationalizes adaptive management decisions.

Long-Term Management

The San Bernardino Valley Conservation Trust adopted a Management Plan that guides management actions for the Project, including management of the Wash Plan HCP Preserve. If at any time during the 20-year life of the Project, Grantee does not manage and maintain the project improvements, the Grant Agreement requires that it refund to the state of California an amortized amount of funds based on the number of years left on the Project life.

Project Funding

The proposed funding breakdown for the Project is as follows:

Project Task	WCB	Non-WCB Funds	Totals
Project Management	$315,000	$160,000	$475,000
Final Design	$295,000	$175,000	$470,000
Habitat Restoration	$2,060,000	$985,000	$3,045,000
Monitoring	$610,000	$335,000	$945,000
Total	$3,280,000	$1,655,000	$4,935,000

Non-WCB funders include:

- San Bernardino Valley Conservation Trust - $675,000
- US Fish and Wildlife Service - $75,000
- US Bureau of Land Management - $305,000
- San Bernardino County Flood Control District - $600,000

Letters of Support or Opposition

Support:

- Lynn R. Valbuena, Chairwoman, Yuhaaviatam of San Manual Nation
- Congressman Pete Aguilar, 33rd District, U.S. Congress
- Assemblymember Robert Garcia, 50th District, State Assembly
- Noel Castillo, P.E., Chief, Flood Control Engineer, San Bernardino County Flood Control District
- Ilene Anderson, Senior Scientist, Center for Biological Diversity
- Dan Silver, Executive Director, Endangered Habitats League

Opposition:

- None received

CEQA

The San Bernardino Valley Water Conservation District, as lead agency, prepared an EIR for the Project pursuant to the provisions of the CEQA. Staff considered the EIR and prepared proposed, written findings documenting WCB's compliance with CEQA. Subject to approval of this proposal by the WCB, the appropriate Notice of Determination will be filed with the State Clearinghouse.

State Government

- Senate: Senator Rosilicie Ochoa Bogh, District 19
- Assembly: Assemblymember Greg Wallis, District 47

Staff Recommendation

Staff recommends that the WCB adopt the written findings and approve this project as proposed, authorize staff to enter into appropriate agreements necessary to accomplish this project, and authorize staff and CDFW to proceed substantially as planned.

Herbicide use questionnaire

Please describe current vegetation conditions and composition at project site. Provide a description or list of the dominant native and invasive plant species, any rare or sensitive species, percent cover of invasive species, and if they occur in monocultures or mixed communities with natives.

The ~325-acre project area lies within the 1,659-acre Wash Plan HCP Preserve and encompasses active alluvial floodplain along the Santa Ana River mainstem and its principal tributary, Plunge Creek. The dominant vegetation is Riversidean Alluvial Fan Sage Scrub (RAFSS) at all successional stages — Pioneer, Intermediate, Intermediate/Mature, and Mature — interspersed with Non-Native Grassland (NNG), Mature RAFSS/NNG transitional polygons, riparian corridors associated with the Plunge Creek active channel, and small areas of developed/ruderal cover. Habitat quality is generally high, dominated by native cover, and supports five federally and/or state-listed Covered Species under the Wash Plan HCP.

Dominant native species (perennial cover):

- Santa Ana River woolly star (*Eriastrum densifolium* ssp. sanctorum) — federally and state endangered; present on site
- California buckwheat (*Eriogonum fasciculatum*)
- Scale-broom (*Lepidospartum squamatum*)
- California croton (*Croton californicus*)
- Brittlebush (*Encelia farinosa*)
- California sagebrush (*Artemisia californica*)
- Yerba santa (*Eriodictyon trichocalyx*)
- Desert wishbone bush (*Mirabilis laevis*)
- Cholla and prickly pear cactus (*Cylindropuntia* spp., *Opuntia* spp.) — supports cactus wren nesting habitat
- Riparian: arroyo willow, sandbar willow, black willow (*Salix lasiolepis, S. exigua, S. gooddingii*) and mulefat (*Baccharis salicifolia*)

Rare and sensitive species (HCP Covered Species and other special-status taxa):

- Santa Ana River woolly star (*Eriastrum densifolium* ssp. sanctorum) — federal/state endangered, CRPR 1B.1; present
- Slender-horned spineflower (*Dodecahema leptoceras*) — federal/state endangered, CRPR 1B.1; one of only eight remaining known locations range-wide
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*) — federally endangered, CDFW SSC; the entire project area is within USFWS-designated critical habitat
- Coastal California gnatcatcher (*Polioptila californica californica*) — federally threatened, CDFW SSC
- Cactus wren (*Campylorhynchus brunneicapillus*) — HCP Covered Species; cactus-nesting habitat present at Railroad Line Road

Dominant invasive species:

Annual non-native grasses (the principal invader threatening SBKR habitat suitability and native plant recruitment): cheatgrass (*Bromus tectorum*), red brome (*Bromus madritensis* ssp. *rubens*), ripgut brome (*Bromus diandrus*), Mediterranean grass (*Schismus barbatus*), wild oat (*Avena* sp.), and rat-tail fescue (*Festuca myuros*). Cheatgrass and red brome are both Cal-IPC "Red Alert" species with "severe" impact ranking.

Annual broadleaved invasives: Sahara mustard (*Brassica tournefortii*), short-pod mustard (*Hirschfeldia incana*), red-stemmed filaree (*Erodium cicutarium*), exotic goosefoots (*Chenopodium* spp.), and stinknet (*Oncosiphon piluliferum*). 2026 is a strong Sahara mustard year following early-season rainfall.

Perennial woody and herbaceous invasives (concentrated in and along the Plunge Creek active channel): tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), salt cedar/tamarisk (*Tamarix ramosissima*), Spanish broom (*Spartium junceum*), perennial pepperweed (*Lepidium latifolium*), and South African fountain grass (*Pennisetum setaceum*).
Distribution and percent cover. Invasive distribution is highly variable across the project area and is generally found as mixed communities with natives rather than as monocultures. Recent monitoring data within the existing 203-acre Plunge Creek Conservation Project provide an empirical baseline: across ten 50×50-meter SBKR habitat-protocol monitoring plots within active treatment areas, average non- native grass cover was 26% in 2025, with targeted *Bromus* species declining from 30% in 2022 to 21% in 2025 (a 28% reduction over four years of treatment). Individual monitoring plots have shown baseline non-native grass cover ranging from 77–90% in untreated/heavily infested areas down to 4–19% in successfully treated polygons. Pioneer and Intermediate RAFSS polygons typically support lower invasive cover (<25%); Mature RAFSS polygons support more variable cover; NNG and Mature/NNG transitional polygons support 25–65% non-native grass cover. Perennial woody invasives in the active channel occur as scattered individuals and patches rather than continuous monocultures, except for localized tamarisk thickets in former sedimentation basins

Please describe which herbicides and adjuvants will be used, including tank mix concentrations, application rates, and timing of application. Where applicable, identify selective herbicides that will be used to target specific plant life forms (grasses, broadleaf, woody, etc.).

All herbicide applications will be performed by Nakae & Associates under the supervision of a California- licensed Qualified Applicator (QAL/QAC) and a licensed Pest Control Adviser (PCA) recommendation. Treatments follow the Integrated Pest Management (IPM) framework established in the Wash Plan HCP (Section 5.2.2 and Appendix B), the Plunge Creek HMMP (2019, Section 5.3), and adaptive management practice refined over five years of on-site implementation by IERCD (2021–2024) and Nakae & Associates (2025–present). Herbicide selection is matched to target plant life form, site conditions, and proximity to sensitive resources, with the smallest effective dose and most selective product chosen for each application context.

Selective grass herbicide — non-native annual grass control:

Active ingredients and products: fluazifop-P-butyl (Fusilade DX, EPA Reg. No. 100-1070) and clethodim (Envoy Plus, EPA Reg. No. 59639-132). Both are ACCase-inhibitor graminicides; Nakae & Associates uses both products and selects between them based on target species, growth stage, and environmental conditions at the time of treatment.

Targets: annual non-native grasses (*Bromus* spp., *Schismus barbatus*, *Avena* sp., *Festuca myuros*). Both products are graminicide-selective and do not injure broadleaved native plants, providing strong selectivity for restoration in mixed communities.

Application rate and tank mix: Fusilade DX at 16–24 fl oz/acre or Envoy Plus at 9–16 fl oz/acre (label- rate ranges for warm-season annual grass control), in 20–40 gal/acre carrier, with crop-oil concentrate (COC) at 1% v/v. Final rates set per PCA recommendation and label-specific instructions for each treatment block.

Timing: January through April, applied to actively growing grasses prior to seed set; multiple passes within season as needed to address staggered germination cohorts.

Broad-spectrum herbicide — broadleaved invasives and perennial woody invasives:

Active ingredient and products: glyphosate. Roundup ProMax (EPA Reg. No. 524-579) is the standard terrestrial product used by Nakae & Associates. For any application within or adjacent to the Plunge Creek active channel and remnant wetted areas, Nakae substitutes Roundup Custom (EPA Reg. No. 524-343), the aquatic-registered glyphosate formulation, to provide the appropriate environmental safety profile (see Question 4).

Targets: Sahara mustard, short-pod mustard, exotic *Chenopodium* spp., perennial pepperweed, tree tobacco, castor bean, tamarisk, and Spanish broom.

Application methods and rates:

- Spot foliar spray for broadleaved annuals/biennials: 1–2% glyphosate solution applied with backpack sprayer, sufficient to wet foliage without runoff. Carrier volume varies by canopy density.
- Cut-stump treatment for woody perennials (tree tobacco, castor bean, tamarisk, Spanish broom): cut stem within 4 inches of the ground; immediately apply 25–50% glyphosate concentrate to the cambium with a paint dauber or wick applicator. This method delivers herbicide only to the target stem and uses a small fraction of the product volume that broadcast spraying would require.
- Broadcast spray is reserved for areas with continuous, dense annual broadleaved infestations (e.g., heavy Sahara mustard flushes in wet years) and is not used in spineflower or woolly star occurrences or buffer zones.

Timing: Annual broadleaved invasives — January through May at rosette to early bolting stage. Perennial woody invasives — fall (September–November), the most effective season for translocation of glyphosate to the root system. Treatment timing is adjusted annually based on phenology and wildlife agency-coordinated avoidance windows for active SBKR, CAGN, and cactus wren.

Adjuvants:

- Crop-oil concentrate (COC) with the grass-selective herbicide as required by the fluazifop-P- butyl label.
- Non-ionic surfactant (NIS) WITHOUT nonylphenol/alkylphenol ethoxylate — see Question 5 for product class detail.
- Spray indicator dye (e.g., Hi-Light Blue or equivalent) used in all foliar spot applications to ensure precise targeting and avoid double-coverage of non-target plants.

Specific product selections, exact tank mix concentrations, and application rates within the label-permitted ranges are confirmed by Nakae & Associates' licensed PCA at the time of each treatment and documented in the project's annual Pesticide Use Report submissions to the San Bernardino County Agricultural Commissioner

If your project will use glyphosate, have other herbicides been considered to eliminate glyphosate usage? If not, why was glyphosate chosen as the preferred herbicide?

Yes, alternative active ingredients were considered, and glyphosate was retained as the preferred broad- spectrum herbicide for a narrow set of treatment contexts (perennial woody species, dense annual broadleaf infestations) for the reasons below. The project does not rely on glyphosate as a default product; rather, the IPM hierarchy directs glyphosate use only where (a) the target is a broadleaved or woody invasive that is unresponsive to grass-selective products, and (b) non-chemical methods alone are insufficient to achieve the necessary level of control without unacceptable collateral impact to sensitive habitat (see Question 8).

Alternatives considered and why they were not adopted as the sole approach:

- Triclopyr (Garlon 3A/4) was considered for cut-stump treatment of woody perennials. While effective, triclopyr products carry higher aquatic and amphibian toxicity profiles than aquatic- registered glyphosate formulations, and the tamarisk and castor bean treatment locations are within or immediately adjacent to the Plunge Creek active channel. Roundup Custom (the aquatic-registered glyphosate formulation Nakae & Associates uses for in-channel work) provides comparable cut-stump efficacy with a substantially reduced risk profile to aquatic organisms.
- Imazapyr was considered for tamarisk control. Imazapyr is highly effective for tamarisk but exhibits significant soil persistence and lateral movement that can damage non-target native shrubs and trees in adjacent habitat through root uptake. The mosaic of native species at this site — including federally endangered woolly star within meters of treatment polygons — makes the spatial precision of cut-stump glyphosate preferable to soil-active imazapyr.
- Aminopyralid and clopyralid were considered for select broadleaf control. Both are selective on Asteraceae and Fabaceae but ineffective on the principal mustard targets (*Brassica*, *Hirschfeldia*), and aminopyralid carries persistence concerns for native wildflower seed banks.
- 2,4-D and other phenoxy herbicides were not selected due to volatility risk and poor

selectivity in mixed native–invasive stands.

Glyphosate was retained for the specific applications described in Question 2 because it (1) is non- selective, ensuring efficacy on the range of perennial woody and annual broadleaf targets present; (2) has a short environmental half-life (typically <30 days in soil), no significant root uptake by non-target plants, and no persistent metabolites of regulatory concern; (3) is available in formulations registered for aquatic and aquatic-adjacent use (see Question 4); (4) when applied via cut-stump or low-volume spot spray, allows the smallest volume of any candidate herbicide to achieve durable control; and (5) is the active ingredient explicitly identified in the Wash Plan HCP's annual habitat management cost estimate (Table 7-2) and used successfully on this site by IERCD and Nakae & Associates over five years of treatment with documented reductions in invasive cover and recovery of native cover.

If your project includes the use of a glyphosate product, have safer formulations (i.e. those registered for aquatic applications) or alternative herbicides been considered to reduce the potential for non-target environmental impacts? Please provide justification for the formulations and tank mixes selected as the preferred approach.

Yes. For all glyphosate applications within or adjacent to the Plunge Creek active channel, remnant wetted areas, splitter structures, and pilot channels associated with the Plunge Creek 2.0 design, Nakae & Associates uses Roundup Custom (EPA Reg. No. 524-343), the aquatic-registered formulation of Roundup, rather than the terrestrial-only Roundup ProMax used elsewhere on the project. (Note: Roundup Custom is the current branded name for the same aquatic-registered glyphosate formulation that was previously sold as Aquamaster; the two names refer to the same product and EPA registration.) Aquatic-registered formulations such as Roundup Custom omit the polyethoxylated tallowamine (POEA) surfactant present in older terrestrial Roundup formulations — the surfactant component, not glyphosate itself, is responsible for most of the documented aquatic toxicity (especially to amphibians) of legacy glyphosate products.

For terrestrial-only treatment locations away from any wetted feature (e.g., upland fluvial terrace and Mature RAFSS polygons in the Linkage Area), the standard terrestrial product is Roundup ProMax. Even in these contexts, the project standard is to default to Roundup Custom when within ~100 ft of any potentially wetted feature, conforming to a more conservative standard than label requirements alone.

Tank mix selection rationale: each mix is built around the smallest effective concentration of glyphosate for the application context (1–2% solution for foliar spot; 25–50% concentrate for cut-stump), paired with an aquatic-approved non-ionic surfactant (where required by the formulation) and an indicator dye for application precision. The project does not pre-mix glyphosate with other systemic herbicides because the broad-spectrum activity of glyphosate alone is sufficient for the perennial woody and dense annual broadleaf targets, and adding a second active ingredient would expand the non-target risk profile without improving control.

If adjuvant(s) will be used in this project, are safer products that do not contain nonylphenol (often listed as "alkylphenol ethoxylate" on labels) being used to reduce the potential for non-target environmental impacts?

Yes. Nakae & Associates uses NPE-free non-ionic surfactants for this project. No adjuvant containing nonylphenol or alkylphenol ethoxylate (NPE/APE) is used in any tank mix. Surfactants are selected from products formulated with safer alternative surfactant chemistries (e.g., alcohol ethoxylates or methylated seed oils). Where required for grass-selective herbicide efficacy, crop-oil concentrate (COC) products without alkylphenol surfactants are used. Adjuvant labels and Safety Data Sheets are screened by Nakae & Associates' PCA prior to procurement to confirm the absence of NPE/APE. Indicator dyes (e.g., Hi-Light Blue) and aquatic spray colorants used in the project are also NPE-free.

Please describe any non-chemical treatments that will be used to minimize the amount and/or concentration of herbicides used at the project site. What negative effects might these treatments have on the biological community?

Non-chemical treatments are integral to the project's IPM approach and substantially reduce the herbicide footprint compared to a chemical-only program. The Plunge Creek HMMP (Section 5.3) explicitly directs that hand removal be used around special-status plants, that herbaceous weeds be removed by hand before setting seed where feasible, and that chemical methods be reserved for control of perennial weed species and areas with large nonnative grass infestations. Non-chemical methods used in this project include:

- Hand pulling: Used for broadleaf invasives (Sahara mustard, short-pod mustard, filaree) within 30 m of known slender-horned spineflower populations and within delineated buffers around woolly star occurrences. IERCD removed approximately fifteen 42-gallon trash bags of mustard manually over four days in March 2021 from spineflower enhancement areas; the same approach is carried forward in this project.
- String-trimming/cutting: Used selectively on woody invasives prior to cut-stump treatment, with prior consent from the project biologist on a site-by-site basis.
- Mechanical and manual light soil scraping: A core element of the Mechanical Means component (Tasks 3.2–3.4 of the Workplan) at the 28-acre Plunge Creek South, 16-acre Plunge Creek Southwest, and 30-acre Linkage Area Mature RAFSS polygons. Light scraping addresses the surface annual grass and mustard seed bank, exposes mineral soil for native recruitment, and emulates the disturbance regime that historically maintained alluvial fan sage scrub. Scraping reduces the need for repeated foliar herbicide application in subsequent seasons.
- Sand spreading: Approximately 95 acres of native sand spreading on Mature RAFSS polygons (using County Plunge Creek post-Line Fire sediment as in-kind match, plus District Mill Creek sand) provides a clean substrate that suppresses re-invasion by annual grasses and re- establishes the fluvial substrate condition that woolly star and slender-horned spineflower require.
- Hydrological reset: The Plunge Creek 2.0 splitter structure and pilot channel restoration (Task 3.1) re-engages flood flows across the historic floodplain,

periodically scouring annual grass cover, depositing fresh sediment, and rejuvenating early-successional habitat. PC1.0 demonstrated that engineered storm response can convert 11.7 acres of formerly grass- dominated terrace into novel wetted/fluvial conditions in a single 600 cfs event. Hydrological reset is the most powerful long-term invasive grass suppression mechanism available at this site.

- Native cactus salvage and outplanting (Element 3): provides native structural cover that competes directly with invasives in restored polygons.

Potential negative effects of non-chemical treatments and how they are mitigated:

- Mechanical scraping and sand spreading involve heavy equipment access in sensitive habitat and can cause direct mortality of SBKR, woolly star, and other native species if not carefully sequenced. Mitigation: pre-treatment SBKR live-trapping by Origin Biological (USFWS- permitted SBKR biologist), pre-construction nesting bird surveys for CAGN and cactus wren, biological monitor present during all ground-disturbing activities, treatment limited to seasonal windows that avoid active SBKR breeding and avian nesting periods, and retention of “islands” of mature shrub structure to provide refugia.
- Hand pulling at large scale would generate significant trampling impact across SBKR critical habitat. Mitigation: hand pulling is restricted to small focused buffers around special-status

  plants where the trampling footprint is acceptable; broadcast hand pulling across hundreds of acres is not pursued.
- String trimming can scatter weed seed if used after seed set. Mitigation: timing is controlled to pre-bolt/pre-flower phenology, with biologist consent required for each use.
- Hydrological reset by design temporarily inundates and scours portions of the floodplain. This is a feature, not a defect — the disturbance is what creates and maintains alluvial fan sage scrub habitat — but it does cause short-term loss of vegetation in the scoured corridor. Mitigation: the splitter structure and pilot channel locations were designed by Stantec (PC1.0 designer) to engage abandoned/degraded portions of the historic floodplain rather than high-quality intact habitat, and the engineering process incorporates hydraulic modeling to ensure controlled, predictable scour patterns.

Burning and grazing — the two other large-area non-chemical methods evaluated in the Wash Plan HCP — are not proposed under this WCB project. Prescribed fire is not feasible at this location due to proximity to residential development north of Greenspot Road, fuel loads that would carry uncontrollably in Santa Ana wind conditions, and unacceptable air quality impacts in a designated nonattainment basin. Sheep grazing was tested under prior District programs and found impractical at the spatial scale and accessibility constraints of the project area, with risks to native shrub recruitment and SBKR burrows that outweigh benefits. Both remain in the long-term management toolbox under the HCP for adaptive use in specific contexts.

Please describe all herbicide application measures the project will employ to reduce negative impacts to water quality, non-target plant species, pollinators, and other wildlife species.

Applicator qualification and oversight.

- All herbicide applications performed by California-licensed Qualified Applicator (QAL/QAC); product selection by California-licensed PCA. The HMMP (Section 5.3) and Plunge Creek 1.0 installation contract require certification as a California Pest Control Applicator as a minimum qualification.
- Project biologist (Origin Biological, USFWS-permitted SBKR and CAGN biologist) provides on- site biological monitoring during applications in or near sensitive resource locations and approves treatment areas in advance.
- Treatment activities are coordinated with the SBVWCD Land Resources Manager/Lead Scientist (Milan Mitrovich) and Land IQ restoration ecologist (Travis Brooks/Melissa Riedel- Lehrke); annual treatment plans are documented and submitted with the Wash Plan Annual Report.

Water quality protection (consistent with §401 Water Quality Certification, WDID 362021-07).

- Aquatic-registered glyphosate formulations used for any application within or adjacent to the Plunge Creek active channel, remnant wetted areas, and splitter/pilot channel features (see Question 4).
- Equipment storage, fueling, and staging located on upland sites with no direct drainage into the HCP Preserve, riparian areas, or sensitive habitat, per the §401 Order. Spill prevention precautions taken; project-related spills reported per §401 protocols to USFWS, CDFW, Santa Ana Water Board, and applicable jurisdictional city or county and cleaned up immediately.
- Mixing, loading, and rinsing of equipment are performed only at approved upland staging areas with secondary containment.
- Applications are not made when rain is forecast within 24 hours, when winds exceed 10 mph, or when temperature exceeds product label restrictions (typically 90°F).
- Annual Pesticide Use Reports submitted to the San Bernardino County Agricultural Commissioner and integrated into the District's Wash Plan Annual Report submitted to USFWS and CDFW each November 1.

Non-target plant species protection.

- Selective herbicide products are used wherever target life form allows (grass-selective fluazifop- P-butyl for non-native grasses); broad-spectrum glyphosate is reserved for life-form contexts where selectivity is not achievable through chemistry.
- Spot foliar treatment with backpack sprayer is the default application method; broadcast spray is used only in dense, monotypic infestations of annual broadleaved invasives where spot treatment is not operationally feasible.

- Cut-stump treatment is the default for woody perennials, delivering herbicide only to the cut surface and minimizing non-target exposure to a few mL per stem.
- Indicator dye is used in all foliar spot applications to visualize coverage and prevent overspray onto natives.
- Buffer zones are maintained around all known special-status plant occurrences. For slender- horned spineflower, a 15-meter inner buffer (target invasive cover ≤3%) and an additional 15- meter outer buffer (target invasive cover ≤15%) are managed using primarily hand removal supplemented by selective grass herbicide. Following 2024 outplanting trials that demonstrated SHSF sensitivity to herbicide drift, herbicide treatment within active SHSF populations was postponed throughout 2025; the same precautionary approach will be applied in this project, with treatment timing adjusted around SHSF emergence and reproduction.
- Pre-treatment plant surveys are performed in any treatment polygon where listed plant occurrences are not already mapped.

Pollinator protection.

- Foliar herbicide applications avoid the peak bloom periods of native nectar-producing species (woolly star, California buckwheat, scale-broom, brittlebush) to the extent target weed phenology allows. Most invasive annual grass treatment occurs January–April, before the principal native pollinator bloom; perennial woody invasive cut-stump treatment occurs in fall after bloom completion.
- Glyphosate and fluazifop-P-butyl are not classified as acutely toxic to bees by U.S. EPA, but applications are nonetheless made early in the morning or late in the day when honey bees and native pollinators (including the project area's confirmed slender-horned spineflower pollinator, the native cuckoo wasp documented in the District's University of Redlands collaboration) are less active.
- No insecticides are used in conjunction with the herbicide program.

Wildlife protection (HCP Covered Species).

- All treatment activities are conducted under the HCP's avoidance and minimization measures (HCP Section 5.5) and the existing Section 10(a)(1)(B) Incidental Take Permit (USFWS TE78703D-0, May 2020), the Section 7 Streamlined Biological Opinion for the Plunge Creek 2.0

  component, the Safe Harbor Agreement (CDFW SHA No. 2089-2020-002-06), and the §401 Water Quality Certification (WDID 362021-07).
- SBKR pre-treatment trapping and burrow surveys are performed at the Mature RAFSS Linkage Area enhancement polygons by Origin Biological prior to any ground-disturbing activity; trapping informs treatment polygon configuration and protective measures.
- Pre-construction nesting bird surveys for cactus wren and CAGN are conducted prior to fall ground-disturbing work; herbicide application occurs outside nesting season for these species (typically March 15–August 31).

- Aquatic-registered glyphosate formulations protect downstream amphibian populations (the District's recharge basins host one of the larger Southern California Western spadefoot populations).

Treatment polygons are delineated to retain mature shrub structure as wildlife refugia rather than clearing entire blocks, and adaptive triggers in the monitoring program (Task 4) detect and respond to any unintended wildlife impacts.

Would removal of invasive weeds within the project area be possible using only non-chemical methods (hand-pulling, mowing, burning, etc.)? Please describe whether biocontrol has been considered and why or why not it was incorporated into the IPM approach for this project.

No, complete invasive weed control across the project area using only non-chemical methods is not feasible at the spatial scale, target species mix, and habitat sensitivity context of this project. The reasons are species-specific and site-specific:

Annual non-native grasses (200+ acres):

- Hand pulling at this scale would require crews of dozens of workers operating across SBKR critical habitat for weeks at a time during the growing season. The trampling and burrow- collapse impacts to SBKR — the species the treatment is intended to benefit — would substantially exceed any benefit. The project area supports the largest extant SBKR population in the watershed.
- Mowing on alluvial fan terrain is operationally constrained by boulder fields, mature shrub structure, and protected-species avoidance. Repeated mowing also tends to favor low-growing annual grasses over the deeper-rooted native shrubs, exactly the wrong outcome.
- Prescribed fire is not feasible (see Question 6): residential adjacency, fuel/wind conditions, and air quality regulation make safe prescribed burning at this site impractical.
- Sheep grazing was evaluated and found impractical at the spatial scale and operational complexity of the project area; grazing risks SBKR burrow collapse and damage to native shrub recruitment.

Annual broadleaved invasives (Sahara mustard, short-pod mustard, etc.):

- Hand pulling is feasible in small, localized buffers (and is in fact the primary method used within 30 m of slender-horned spineflower populations — see Question 6). At larger scales, hand pulling is bound by the same trampling-impact and labor constraints as for grasses. In strong Sahara mustard years (such as 2026), the species can establish across hundreds of acres in a single season; selective herbicide is the only realistic tool to prevent dominance and seed-bank reinforcement.

Perennial woody invasives (tree tobacco, castor bean, tamarisk, Spanish broom):

- Mechanical removal alone (cutting without herbicide) of these species reliably stimulates aggressive resprouting from roots and crowns, often producing more stems than were present before treatment. This has been documented in this watershed and

across California restoration practice. Cut-stump glyphosate treatment is the standard-of-practice in the California restoration community for durable control of these species, achieving 90–99% control in a single treatment cycle compared to <10% durable control with cutting alone.

Biocontrol consideration:

- Biocontrol agents have been considered for two of the project's target species but are not incorporated into the IPM approach for the reasons below.

Tamarisk leaf beetle (*Diorhabda* spp.). USDA-approved biocontrol agent for *Tamarix* spp. and established in some Southwestern U.S. river systems. Not adopted because: (a) the agent is not reliably established in the upper Santa Ana River watershed and intentional release would require USDA APHIS coordination and an environmental review process beyond the project schedule and scope; (b) *Diorhabda* defoliation has been documented to coincide with southwestern willow flycatcher nesting, raising concerns at sites with riparian-obligate listed birds; (c) the targeted tamarisk infestation at this site (within the Plunge Creek active channel) is small in extent and is more efficiently and predictably controlled by cut-stump treatment than by waiting for biocontrol establishment. Spanish broom — no USDA-approved biocontrol agent is currently registered in California. Tree tobacco, castor bean — no USDA-approved biocontrol agents are registered. Sahara mustard, *Bromus* spp., other annual grasses — no host-specific biocontrol agents are commercially available or USDA-approved for these species in California restoration contexts. Research efforts on annual grass biocontrol (e.g., the head smut fungus *Ustilago bullata* for cheatgrass) remain experimental.

- In summary: biocontrol is not currently a viable substitute for the project's herbicide use because (1) the principal target weeds have no USDA-approved biocontrol agent in California,
  (2) the one available agent (tamarisk leaf beetle) is not established locally and would not provide timely or predictable control at the scale required, and (3) the project's tamarisk footprint is small enough to be efficiently addressed by cut-stump treatment.

The IPM approach therefore integrates the maximum feasible application of non-chemical methods (mechanical scraping, sand spreading, hydrological reset, hand pulling around special-status plants, native seeding/cactus salvage to restore competitive native cover) with selective and spot-targeted herbicide use where chemical control is necessary to achieve durable invasive suppression. The herbicide footprint is minimized in the design; it is not eliminable without abandoning the restoration objectives or causing unacceptable collateral impact to the Covered Species the project is intended to recover.

Please provide a total cost estimate for using only non-chemical removal methods for the invasive species where this approach would be possible. Please estimate both the project cost and long-term management costs, including an estimate of any additional personnel or contracts required.

The project as scoped allocates approximately $1,050,000 to Nakae & Associates over the 3-year grant term for the integrated mechanical/manual/chemical invasive species management program (covering Elements 4 and 5 of the Mechanical Means component plus follow-on treatment in scraped/seeded enhancement areas) across approximately 200 acres of recurring

annual treatment plus the 74 acres of new active enhancement and the perennial exotic control in the Plunge Creek active channel. This figure reflects time-and-materials pricing structured for the project's mix of selective herbicide application, cut- stump perennial control, hand pulling within sensitive-species buffers, mechanical scraping support, and biological-monitor coordination.

Estimated cost for a hypothetical non-chemical-only program (where physically feasible):

- Annual non-native grass control (200+ acres): Hand pulling at industry-standard production rates of approximately 0.5–1.0 acre per crew-day for dense annual grass infestations would require approximately 180–360 crew-days per annual cycle. Restoration crew rates in Southern California currently run approximately $4,500–$6,000 per crew-day (5–person crew with biologist supervision). Annual grass-only hand pulling cost: approximately $810,000–$2,160,000 per year, or $2,430,000–$6,480,000 over the 3-year grant term. This range carries substantial uncertainty because hand pulling alone does not provide durable control; repeated re-treatment two to four times per growing season would likely be necessary, pushing the upper end of the range toward $5–10 million per cycle. These estimates do not account for the unacceptable trampling impact to SBKR critical habitat, which renders the approach infeasible regardless of cost.
- Annual broadleaved invasive control (Sahara mustard, etc., across overlapping 180+ acres): Approximately $300,000–$900,000 per year for hand pulling at scale, similarly subject to multiple-pass requirements and the same SBKR trampling constraint.
- Perennial woody invasive control (tree tobacco, castor bean, tamarisk, Spanish broom in the Plunge Creek active channel): Cutting alone (no herbicide) would require initial removal plus a minimum of 5–10 years of intensive resprout management to achieve plant mortality. Estimated cost: approximately $150,000–$300,000 over the grant term, with ongoing follow-on costs of $40,000–$80,000 per year in perpetuity to manage resprouts. Practical effectiveness would remain low without herbicide; durable control is unlikely.
- Hand pulling within sensitive-species buffers (already in the project scope as a non-chemical method, no incremental cost beyond what is budgeted).

Total estimated 3-year project cost for a non-chemical-only program: approximately $3,000,000– $8,000,000 (versus approximately $1,050,000 in the integrated IPM scope), with the upper end approached if multiple-pass treatment cycles are needed and if specialized contracts are required to coordinate the labor surge. Long-term management cost in perpetuity: approximately $300,000–$700,000 per year for non-chemical-only management of this acreage at maintenance level, versus approximately $50,000–$100,000 per year under integrated IPM (the District's current HCP annual habitat management herbicide line item is approximately $80,000–$110,000 across the entire 1,659-acre HCP Preserve).

Additional personnel/contracts that would be required:

- Approximately 2–3 additional restoration crews (10–15 additional crew personnel) for the duration of each annual treatment cycle, sourced through contracts with

regional restoration crew providers (e.g., conservation corps programs, vegetation management contractors).

- One additional full-time biological monitor to supervise the expanded labor footprint and document compliance with SBKR and listed plant avoidance (~$120,000 per year fully loaded).
- Logistical support for crew transport, water, sanitation, equipment storage at remote treatment sites.
- Expanded waste handling and offsite disposal of pulled biomass (mustard and other broadleaf material that would set seed if left on site).

Even setting aside cost, the foregoing analysis confirms that a non-chemical-only program is operationally infeasible at this site for the reasons described in Question 8: the trampling and disturbance impacts of the labor footprint required to substitute for selective herbicide use would harm the listed species the project is intended to recover, and durable control of perennial woody invasives without cut- stump herbicide is not practically achievable.

For California Department of Fish and Wildlife owned/managed properties only:
Have you worked with CDFW's Pest Control Advisor to develop an integrated past management plan that uses the safest and most effective herbicide formulation(s) and application method(s) for your project?

Not applicable. The project is located on lands owned and managed by the San Bernardino Valley Water Conservation District (SBVWCD) within the Wash Plan HCP Preserve, with a small portion of project benefit area on adjacent BLM-administered land. No portion of the project occurs on CDFW-owned or CDFW-managed property. The CDFW letter-of-support requirement (for projects on CDFW lands) is similarly N/A and is documented as such on the WCB Application Checklist. The project's IPM framework is developed in consultation with CDFW under the Wash Plan Habitat Conservation Plan and Implementing Agreement (USFWS TE78703D-0; CDFW Section 2081 coverage in process), the existing CDFW Safe Harbor Agreement (CDFW SHA No. 2089-2020-002-06), and ongoing coordination with CDFW Region 6 staff. Nakae & Associates engages a California-licensed Pest Control Adviser (PCA) for product selection and tank-mix specification; the District's land management team (Milan Mitrovich, Land Resources Manager/Lead Scientist) and Land IQ's restoration ecologist (Travis Brooks, Melissa Riedel-Lehrke) provide ongoing IPM oversight integrated with the HCP's adaptive management framework.

22. Public Forum for Items not on the Agenda

Adjourn

ATTACHMENT A – MAP OF August 27, 2026 PROJECTS