



GAVIN NEWSOM, Governor  
NATURAL RESOURCES AGENCY  
DEPARTMENT OF FISH AND WILDLIFE  
**WILDLIFE CONSERVATION BOARD**  
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Notice of Meeting  
WILDLIFE CONSERVATION BOARD  
Stream Flow Enhancement Program  
April 4, 2019, 10:00 a.m.  
Natural Resources Building, First Floor Auditorium  
1416 9th Street  
Sacramento, California 95814  
*Final Agenda*

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**\$499,955.00**  
This proposal is to consider the allocation for a scientific study grant to the University of California, Davis for a cooperative project with the University of California, Berkeley, that will apply the newly developing California Environmental Flows Framework to inform instream flow enhancements by defining target hydrologic regimes that meet ecological and geomorphic objectives for two critical watersheds: the Little Shasta River in northern California and San Juan Creek in southern California.
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**Humboldt County**  
**\$249,959.00**  
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6. [Oroville Wildlife Area Restoration Project, Phase II](#) 11  
**Butte County**  
**\$1,542,100.00**  
This proposal is to consider the allocation for an implementation grant to the Sutter Butte Flood Control Agency for a cooperative project with the California Department of Fish and Wildlife and California Department of Water Resources to reconnect the Feather River to approximately 400 acres of its historic floodplain, with actions to enhance connectivity and complexity within the existing interior channel system, in order to increase the frequency of floodplain inundation, improve fish passage, and provide new fish rearing habitat.
7. [Lower Perazzo Meadow Restoration](#) 14  
**Sierra County**  
**\$1,980,504.00**  
This proposal is to consider the allocation for an implementation grant to the Truckee River Watershed Council for a cooperative project with the California Department of Fish and Wildlife; U.S. Forest Service, Tahoe National Forest; and Bella Vista Foundation to enhance the hydrologic and biologic function within the Little Truckee River and associated Lower Perazzo Meadow.
8. [Porter Creek Stream Flow Enhancement, Phase II](#) 17  
**Sonoma County**  
**\$530,366.00**  
This proposal is to consider the allocation for a grant to The Regents of the University of California for a cooperative project with Trout Unlimited and the Sonoma County Resource Conservation District, to install a permanent gauge station below the release point from a previously constructed flow augmentation system, conduct a two-year monitoring study of fish and water quality responses to flow augmentation to determine the optimal flow-release schedule for fisheries benefits, and develop a long-term Stream Flow Enhancement Plan for Porter Creek to guide operation of the flow enhancement project in perpetuity.

9. [Butano Creek Stream Flow Improvement Planning](#) 20  
**San Mateo County**  
**\$466,696.00**  
This proposal is to consider the allocation for a planning grant to the San Mateo Resource Conservation District for a cooperative project with the California Department of Water Resources, Natural Resources Conservation Service, and Peninsula Open Space Trust to plan, design, and permit water storage and irrigation efficiency upgrades at four farms on Butano Creek that, when implemented, would result in increased instream flow, improved conditions for salmonids, and other ecosystem benefits.
10. [San Gregorio Creek Stream Flow Enhancement, Klingman-Moty Farm](#) 22  
**San Mateo County**  
**\$621,754.00**  
This proposal is to consider the allocation for an implementation grant to the San Mateo Resource Conservation District for a cooperative project with the California Department of Water Resources and State Coastal Conservancy for the purpose of improving instream flow conditions in San Gregorio Creek for salmonids during yearly low stream flow periods.
11. [Reducing Limiting Factors in the San Lorenzo River Lagoon](#) 25  
**Santa Cruz County**  
**\$2,215,000.00**  
This proposal is to consider the allocation for an implementation grant to the city of Santa Cruz for a cooperative project to address limiting factors in the lower San Lorenzo River system by constructing a water level control structure to prevent the need for artificial breaching of the lagoon.
12. [Salinas River Arundo Eradication Project, Phase IV](#) 29  
**Monterey County**  
**\$2,868,781.00**  
This proposal is to consider the allocation for an implementation grant to the Resource Conservation District of Monterey County for a cooperative project with the Natural Resources Conservation Service and the Monterey County Agricultural Commission to continue efforts to eradicate invasive giant reed, *Arundo donax* and enhance stream flows on privately-owned property along the Salinas River between Gonzales and King City in Monterey County.
13. [USFS Hot Springs-Montecito Creek - Section 1707 Project](#) 31  
**Santa Barbara County**  
**\$45,750.00**  
This proposal is to consider the allocation for an implementation grant to Los Padres ForestWatch for a cooperative project with the U.S. Forest Service Los Padres National Forest (LPNF) and Hicks Law, for the purpose of dedicating the LPNF's entire interest in a pre-1914 appropriative water right from the uppermost point of diversion on Hot Springs Creek, tributary to Montecito Creek, as instream flow pursuant to California Water Code Section 1707 and a recorded permanent forbearance agreement.

14. [Ventura Watershed Flow Enhancement and Water Resiliency](#) 33  
**Regional Framework**  
**Ventura County**  
**\$1,783,345.00**  
This proposal is to consider the allocation for a planning grant to the Ventura County Resource Conservation District for a cooperative project with Ojai Valley Inn, the city of Ojai, and the Thatcher School for the purpose of completing planning, permitting and outreach for 25 potential regional implementation-ready projects.

## Adjourn

### PERSONS WITH DISABILITIES

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## WILDLIFE CONSERVATION BOARD

Stream Flow Enhancement Program  
April 4, 2019, 10:00 a.m.

Natural Resources Building, First Floor Auditorium  
1416 9th Street  
Sacramento, California 95814

### 1. Roll Call

#### Wildlife Conservation Board Members

Charlton H. Bonham, Chair  
Director, Department of Fish and Wildlife  
Alina Bokde, Member  
Keely Bosler, Member  
Director, Department of Finance  
Diane Colborn, Member  
Mary Creasman, Member  
Fran Pavley, Member  
Eric Sklar, Member  
President Fish and Game Commission

#### Joint Legislative Advisory Committee

Senator Andreas Borgeas  
Senator Nancy Skinner  
Senator Henry Stern  
*Bill Craven, Alternate*  
Assemblymember Laura Friedman  
*Assemblymember Al Muratsuchi -Alternate*  
Assemblymember Eduardo Garcia  
*Assemblymember Miguel Santiago -Alternate*  
Assemblymember Monique Limon  
*Assemblymember Marc Levine -Alternate*

Executive Director  
John P. Donnelly

**2. California Stream Flow Enhancement Program FY 2018/19  
Informational**

The future of California's water supply faces many uncertainties. To address these uncertainties, the California Water Action Plan (CWAP) was developed as a framework for sustainable water management, to enhance the resilience of the water resource system, and to restore important species and habitat. The Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) authorized the Legislature to appropriate funds to address these challenges. The Wildlife Conservation Board (WCB) was allocated \$200 million for projects that enhance stream flow.

A total of \$41.2 million, including \$2.5 million designated for planning projects, was allocated to WCB for expenditure in Fiscal Year (FY) 2018/19 for the California Stream Flow Enhancement Program (SFEP) through a competitive grant process, in coordination with the California Department of Fish and Wildlife (CDFW), State Water Resources Control Board (SWRCB) and other partners. An additional \$46,685,560 of remaining funds from previous fiscal years is also available. Guided by the CWAP, funding is focused on projects that will lead to a direct and measurable enhancement to the amount, timing and/or quality of water, for anadromous fish; special status, threatened, endangered or at-risk species; or to provide resilience to climate change.

WCB released the 2018 SFEP Proposal Solicitation Notice (PSN) on July 2, 2018. This PSN closed on September 4, 2018, with a total of 30 proposals received, and \$35,686,061 in requested funds. The distribution of projects is identified in Table 1 (following page).

Proposals were reviewed through a multi-tiered process. First, submissions were required to pass an administrative review, where applications were evaluated on adherence to the SFEP's guidelines and completeness. Proposals that passed the administrative phase were then scored by a minimum of four reviewers, consisting of a CDFW regional specialist, SFEP staff, and other technical experts. Scores were based on the scoring criteria and standards delineated in the PSN. All proposals were presented to a Selection Panel for further assessment and discussion. The Selection Panel was made up of managers and staff from CDFW, WCB, and SWRCB. The Selection Panel met on January 10 and January 15, 2019 and developed a recommended list of projects based on numerous factors, including scoring, feasibility, durability, and how projects supported the specific goals of the SFEP Solicitation Package. Projects recommended for funding by the Selection Panel were reviewed by the WCB Executive Director in preparation for the April 4, 2019 Board meeting.

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**3. Table 1 Fund Allocation of Recommended SFEP Projects FY 2018/19**

Project Type	Number Proposals Received	Funds Requested	Number Projects Recommended for Funding	Proposed Allocation for Recommended Projects	WCB Funds Available for FY 2018/19
Planning	7	\$3,697,369	3	\$2,500,000	\$41,200,000
Implementation	16	\$26,225,658	6	\$9,273,889	
Acquisition	2	\$3,185,000	0		
Scientific Studies	5	\$2,578,034	2	\$1,030,321	
Remaining Funds					\$46,685,560
<b>Totals</b>	<b>30</b>	<b>\$35,686,061</b>	<b>11</b>	<b>\$12,804,210</b>	<b>\$87,885,560</b>

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**WCB PROGRAM**

The proposed projects will be funded through the California Stream Flow Enhancement Program. Projects will contribute to the following goals outlined in the WCB Strategic Plan:

Goal A.1 – Fund projects and landscapes that provide resilience for native wildlife and plant species in the face of climate change.

Goal A.2 – Fund projects and landscape areas that conserve, protect, or enhance water resources for fish and wildlife.

Goal A.3 – Fund projects that support the implementation of Natural Community Conservation Plans, Habitat Conservation Plans, and recovery of listed species.

Goal B.1 – Invest in projects and landscape areas that help provide resilience in the face of climate change, enhance water resources for fish and wildlife, and enhance habitats on working lands.

In addition, the proposed projects address one or more of the following strategic priorities outlined in the WCB Strategic Plan:

- Climate change resiliency and adaptation
- Water management best practices
- Species strongholds or refugia
- Habitat connectivity and corridors
- Threatened and endangered species
- Underserved communities

**4. Environmental Flow Recommendations to Support Flow Enhancement Implementation in Two California Watersheds Siskiyou/Orange County \$499,955.00**

This proposal is to consider the allocation for a scientific study grant to the University of California, Davis for a cooperative project with the University of California, Berkeley, that will apply the newly developing California Environmental Flows Framework (CEFF) to inform instream flow enhancements by defining target hydrologic regimes that meet ecological and geomorphic objectives for two critical watersheds: the Little Shasta River in northern California and San Juan Creek in southern California (Project).

**LOCATION**

Project activities will occur within two watersheds: the Little Shasta River and San Juan Creek. The Little Shasta River, a tributary to the Shasta River, is located in the Klamath Basin near the city of Montague in Siskiyou County. San Juan Creek originates in the southern Santa Ana Mountains, flowing through the San Juan Canyon and city of San Juan Capistrano, and discharges to the Pacific Ocean at Doheny State Beach, near Dana Point Harbor, in Orange County.

**PROJECT DESCRIPTION**

The Project plans to guide future enhancement of stream flows in two very different but regionally important and high priority fish-bearing streams using a functional flows approach as outlined in the CEFF. Each stream would benefit from the determination of a prescribed hydrologic regime that meets multiple ecologic and geomorphic objectives and can inform implementation of stream flow enhancement projects and associated stream restoration actions. The Project will also provide case studies for the application of CEFF that can be adapted for other watersheds throughout the State.

*Problem:*

Numerous agencies and programs are working to establish instream flow protections, generally expressed as daily, monthly, or annual minimum flows required to support ecosystem functions and species habitat requirements. However, there is little consensus on the best technical approach for developing flow recommendations, including:

- How to determine appropriate suite of ecological indicators;
- How to assess the stream's degree of alteration and desired future state;
- How to identify the most appropriate flow targets and metrics; and
- How to determine if management interventions are successful and determine the methods and metrics which should be used to gauge performance.

The Shasta River was historically one of the most productive salmon streams in California. Groundwater from cold, nutrient-rich springs provided nearly ideal aquatic habitat conditions that supported large Chinook and coho salmon populations. More than a century of aquatic and riparian habitat degradation along the Shasta River and its tributaries, including the Little Shasta River, resulted in dramatic declines in wild salmon populations, especially the federally threatened coho salmon. The observed decline of coho in the Shasta River coincided with the development of both surface and groundwater sources in support of irrigated agricultural activities throughout the Shasta Basin including the Little Shasta River. Water development led to reductions in the quantity and quality of cold-water habitats for rearing coho salmon. Historic adjudication of water rights omitted the water needs of native fish species, and as a result, surface water supplies have been



managed to prioritize agricultural and other water use. The quantity and quality of the remaining instream flow is insufficient to support a sustainable aquatic ecosystem in the Shasta River and many of its tributaries

The San Juan Creek watershed suffers from the effects of rapid urbanization that occurred over the past 50 to 70 years. Nevertheless, the watershed has supported the federally listed endangered California red-legged frog as well as federally listed bird species, such as the least Bell's vireo and southwestern willow flycatcher. The watershed historically supported southern California steelhead and is currently included in the recovery plan for the species. Steelhead have been reported in the lower watershed in recent years, but man-made obstructions impede access to upstream spawning and rearing habitats. A recently issued Water Quality Improvement Plan (WQIP), completed as a condition of the regional National Pollutant Discharge Elimination System stormwater permit, identified flow alteration and channel erosion as two of the top three stressors in the watershed (pathogens being the third). As part of the WQIP process, 170 miles of streams were surveyed, and 4.35 miles were identified as high priority restoration areas. The WQIP recommends that an evaluation of appropriate flow conditions occur in order to identify necessary flow enhancements that will support habitat restoration and geomorphic stability.

*Solution:*

CEFF provides a process for evaluating existing conditions of flows, identifying potential limiting factors, and developing recommendations for establishing ecologically relevant flow targets in light of competing water uses. CEFF has been developed in collaboration with the State Water Resources Control Board, the California Department of Fish and Wildlife, federal resource agencies, academic institutions, and non-profit organizations within the Environmental Flows Workgroup, a sub-group of the California Water Quality Monitoring Council.

The framework establishes targets for environmental flows on all streams in California based on their natural reference flow conditions, and then provides guidance on further refining these statewide flow criteria using site-specific hydrologic, geomorphic, and ecologic conditions. The need for stream flow criteria and stream flow enhancement in the Little Shasta River and San Juan Creek, two very different stream systems with dissimilar management constraints, provides an ideal opportunity to provide multi-objective functional flow targets for key fish-bearing streams. Additionally, the Project enables further refinement of CEFF for streams statewide and improves consistency and coordination among management agencies in assessing, implementing, and monitoring instream flows to protect aquatic life and beneficial uses throughout California.

**PROJECT COST**

<b>Funding</b>	
WCB	\$499,955
Other	\$167,194
<b>Total</b>	<b>\$667,149</b>

Project costs will be for: University of California, Davis researchers, and subcontractors (Southern California Coastal Water Research Project and The Nature Conservancy).

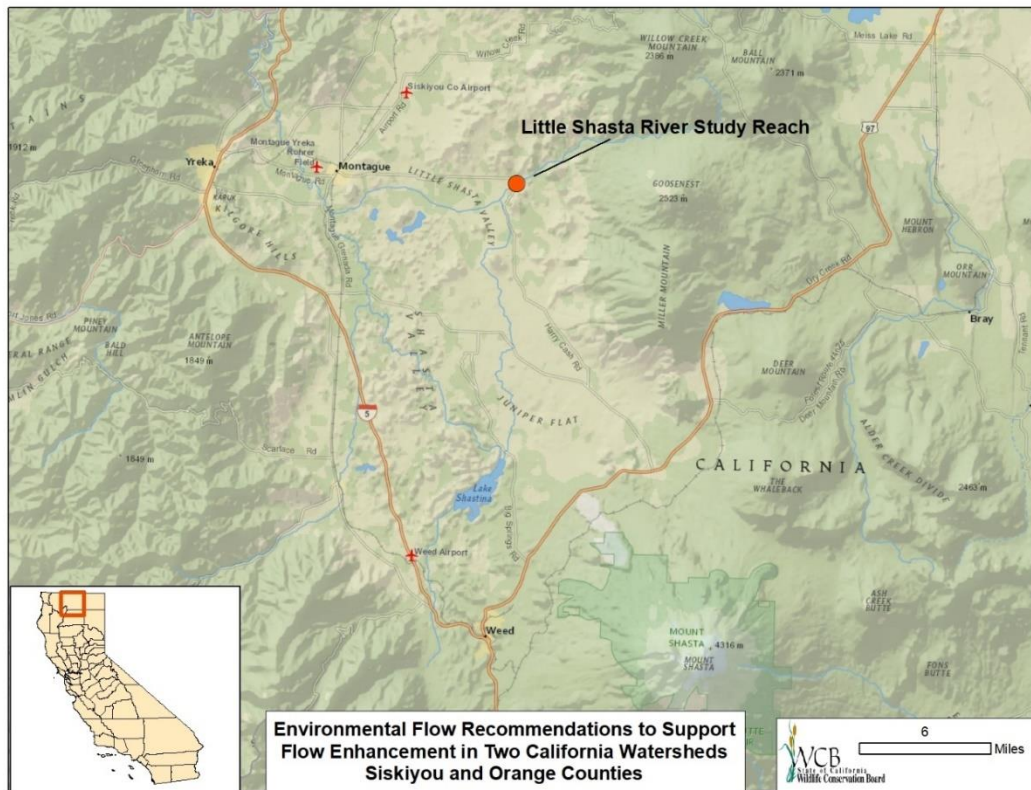
Funding sources include in-kind contributions from the University of California, Davis (applicant) and University of California, Berkeley.

### CEQA

The Project is statutorily exempt from the California Environmental Quality Act (CEQA) pursuant to the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15262), as it involves only feasibility and planning studies for possible future actions. Subject to approval of this proposal by WCB, the appropriate Notice of Exemption will be filed with the State Clearinghouse.

### STAFF RECOMMENDATION

Staff recommends that the Wildlife Conservation Board approve this project as proposed; allocate \$499,955 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.





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**5. Sproul Creek, South Fork Eel River, Flow Enhancement Planning  
Humboldt County  
\$249,959.00**

This proposal is to consider the allocation for a planning grant to the Salmonid Restoration Federation for a cooperative project with Stillwater Sciences to create an Implementation Plan for improving dry season stream flows in the Sproul Creek watershed, a South Fork Eel River sub-basin that is crucial to the recovery of steelhead and salmon (Project).

**LOCATION**

The Project area encompasses the Sproul Creek watershed, a sub-basin within the South Fork Eel River watershed, which is crucial to the recovery of steelhead and salmon, located near the community of Briceland in southern Humboldt County. Primary Project reaches include the Sproul Creek mainstem, Little Sproul Creek, Warden Creek, West Fork Sproul Creek, South Fork Sproul Creek, West Branch South Fork Sproul Creek, and Cox Creek.

**PROJECT DESCRIPTION**

*Problem:*

Dry season flows (June–October) in north coastal California watersheds have decreased over the past half century due to a combination of changes in climate, land use and associated consumptive water demand and vegetative cover. In watersheds most impacted by industrial and nonindustrial timber harvest, homesteading, and cannabis cultivation, diminished stream flow is having significant effects on juvenile salmon and steelhead and is also negatively impacting sensitive amphibian species. Water scarcity also impacts north coastal California communities that rely on naturally flowing springs, creeks, and rivers for domestic and agricultural water supply and fire suppression.

*Solution:*

The Project will prioritize site-specific and watershed-scale design of implementation projects that, based on the analyses conducted, will directly and cumulatively increase dry season flows and improve associated critical habitats for state and federally listed species. Sub-watershed scale implementation activities considered during this Project may include a combination of water storage and forbearance, groundwater recharge, and targeted forest management practices such as selective thinning. Outcomes and lessons learned from this Project will provide invaluable information that can be used regionally as a framework for developing watershed-scale flow enhancement projects and adaptively managing existing water infrastructure to achieve instream flow objectives.

Associated Project activities will include conducting low flow monitoring, identifying and assessing the most suitable locations for flow enhancement projects, providing public outreach and technical assistance, and completion of intermediate (65%) designs and initial permitting for the highest priority flow enhancement project identified in the Implementation Plan.

PROJECT COST

<b>Funding</b>	
WCB	\$249,959
Other	\$31,284
<b>Total</b>	<b>\$281,243</b>

Project costs include project management, public outreach and technical assistance, low flow monitoring, watershed assessments, a Flow Enhancement Implementation Plan, and site-specific designs and permitting for at least one high priority site.

Other funding sources include in-kind contributions from the Salmonid Restoration Federation (applicant), Stillwater Sciences, and Hicks Law.

CEQA

The Project is statutorily exempt from the California Environmental Quality Act (CEQA) pursuant to the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15262), as it involves only feasibility and planning studies for possible future actions. Subject to approval of this proposal by WCB, the appropriate Notice of Exemption will be filed with the State Clearinghouse.

STAFF RECOMMENDATION

Staff recommends that the Wildlife Conservation Board approve this project as proposed; allocate \$249,959 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.



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**6. Oroville Wildlife Area Restoration Project, Phase II  
Butte County  
\$1,542,100.00**

This proposal is to consider the allocation for an implementation grant to the Sutter Butte Flood Control Agency for a cooperative project with the California Department of Fish and Wildlife and California Department of Water Resources to reconnect the Feather River to approximately 400 acres of its historic floodplain, with actions to enhance connectivity and complexity within the existing interior channel system, in order to increase the frequency of floodplain inundation, improve fish passage, and provide new fish rearing habitat (Project).

**LOCATION**

The Project site is the "D" Unit of the Oroville Wildlife Area (OWA), located along the east side of the Feather River, just west of State Route 70 and across the river from the Thermalito Afterbay outlet. The Project site is within the Sacramento River Watershed and less than one mile southwest of the town of Oroville.

**PROJECT DESCRIPTION**

The Oroville Wildlife Area (OWA) Restoration Project is a multi-benefit project featuring flood control and ecosystem restoration improvements. This grant (Phase II) would provide additional funding to complete construction of the two primary components of the overall Project, which are partially funded by Stream Flow Enhancement Program (2017) grant funds. The previously awarded Stream Flow Enhancement Program funding (Phase I) was expected to complete construction of these two components; however, all contractor bids received for construction were higher than the engineer's estimate. The Stream Flow Enhancement Program previously awarded funds to the Project to support restoration designs (2015) and project construction (2017).

*Problem:*

The project area is characterized by a highly disturbed floodplain that has been hydraulically disconnected from the Feather River by gold dredging and borrow pits excavated during construction of the Oroville Dam. The project area is disconnected from the Feather River during times of low flow by a 15- to 20-foot-high berm along the northeast boundary of the Project area. When flow is greater than 43,000 cubic feet per second (cfs), water flows into the project area through the outflow weirs, and when flows reach approximately 60,000 cfs, water spills through the inflow weir. The interior of the project area contains a network of channels and disconnected ponds. Gold dredging and drainage canals left behind extensive, isolated ridges and piles of rock. Use of the area for excavation during construction of the Oroville Dam leveled areas to an elevation of roughly three feet above the summer flow level of the Feather River. The leveled areas are pocked with water-filled sloughs and deep excavations. The bottoms of the interior canals and ponds are typically lower in elevation than the adjacent Feather River.

The historical ground disturbance has resulted in existing conditions that are conducive to colonization by invasive plant species, which results in associated low dissolved oxygen water content. Widespread invasive plant species present in the project area include water primrose, broom, giant reed, scarlet wisteria, purple loosestrife, tree-of-heaven, and others. In addition, there is potential for fish stranding to occur when fish enter the area during high flows and become stranded in the ponds and interior waterways as flows recede.

*Solution:*

Work will include the creation of roughly 150 acres of new, two-year floodplain habitat and approximately 400 acres of new three-year floodplain habitat. Project area canal berms will be modified to enhance floodplain connectivity. The Project will re-connect the Feather River to its historic floodplain, thereby increasing the mixing of shallow groundwater and surface water resulting in cooler stream temperatures during spring and summer when air temperatures increase. Additionally, the Project will increase channel complexity to provide better habitat and water quality and provide more frequently inundated floodplain rearing habitat for juvenile salmonids. Invasive plant species will be eradicated and wetland and fish rearing habitat improved.

1. Construction of Interior Channel Grading Improvements:

The Project would provide improvements to approximately 7,500 linear feet of existing channels in the interior of the OWA that are isolated from the Feather River. The purpose of the improvements is to connect isolated ponds to the existing interior channel system to convey floodwaters back to the main channel, enhance fish passage into and out of the area, provide new fish rearing/wetland habitat, and reduce the establishment of invasive plant species. Portions of berms would remain to provide refugia during flood events. Improvements are anticipated to include grading within the channels to connect them and removing the existing berms along either side of the channels.

2. Construction of Fish Barrier Berm:

The Project would construct approximately 3,000 linear feet of berm improvements in the southern portion of the project area which has been identified as a potential fish stranding hazard. The berm will also maintain existing wildlife habitat and recreational use of the site following the reconnection of the northern floodplain.

PROJECT COST

Funding	
WCB	\$1,542,100
Other	\$4,909,572
Total	\$6,451,672

Project costs will be for project construction activities.

Other funding sources include Sutter Butte Flood Control Agency (applicant), Department of Water Resources, and the California Department of Fish and Wildlife.

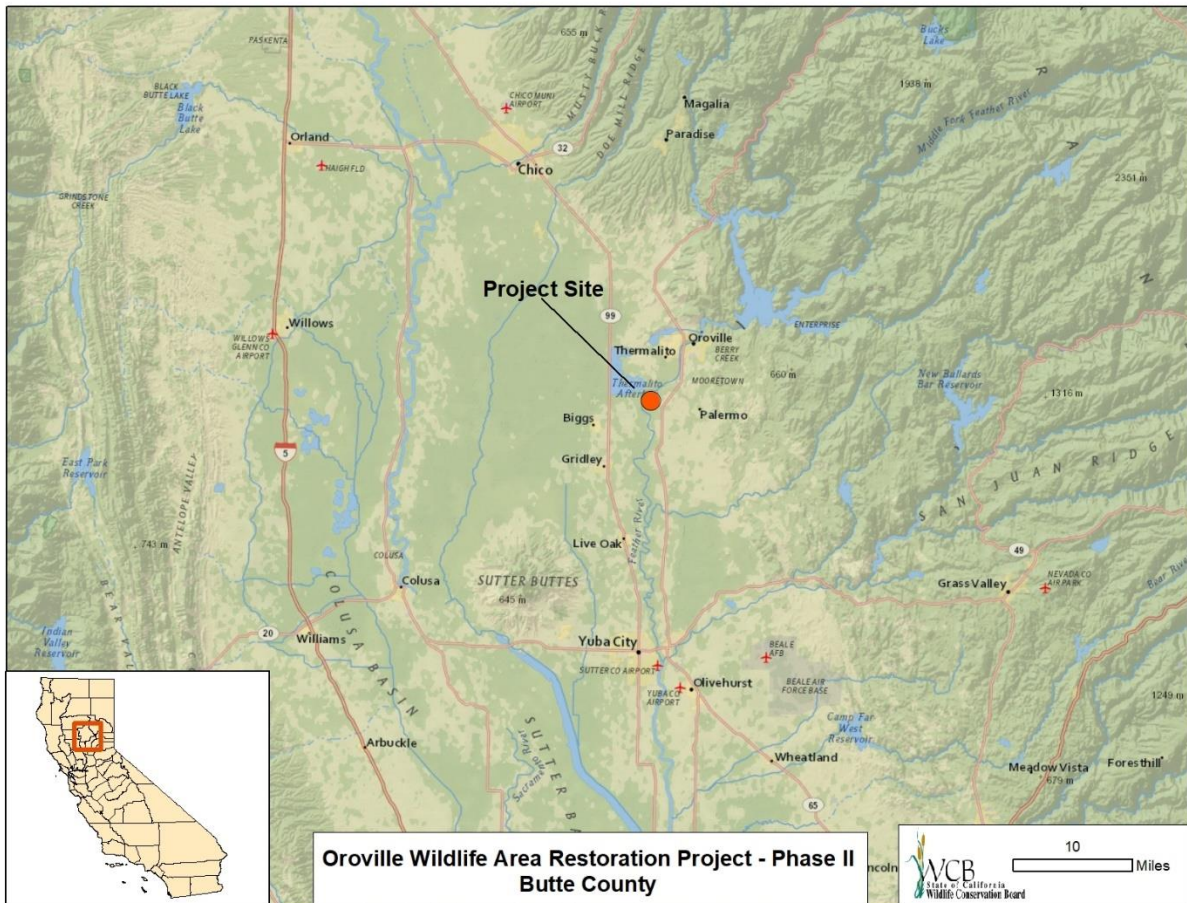
CEQA

The Sutter Butte Flood Control Agency, as lead agency, prepared a Mitigated Negative Declaration (MND) for the Project pursuant to the provisions of the California Environmental Quality Act (CEQA). Staff considered the MND and has prepared proposed, written findings documenting WCB's compliance with CEQA. Subject to approval of this proposal by WCB, the appropriate Notice of Determination will be filed with the State Clearinghouse.



### STAFF RECOMMENDATION

Staff recommends that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate \$1,542,100 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.



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**7. Lower Perazzo Meadow Restoration  
Sierra County  
\$1,980,504.00**

This proposal is to consider the allocation for an implementation grant to the Truckee River Watershed Council for a cooperative project with the California Department of Fish and Wildlife (CDFW), U.S. Forest Service, Tahoe National Forest (TNF), and Bella Vista Foundation to enhance the hydrologic and biologic function within the Little Truckee River (River) and associated Lower Perazzo Meadow (Project).

**LOCATION**

The Project is located at Lower Perazzo Meadow, approximately seven miles southeast of Sierraville in Sierra County, on lands owned by the Truckee Donner Land Trust (TDLT) and TNF. Restoration work will be completed on TDLT property, with pre- and post-project monitoring activities occurring on TDLT and TNF properties. The River flows through Lower Perazzo Meadow, and is a tributary to the Truckee River, a terminal river which ultimately flows to Pyramid Lake in Nevada.

**PROJECT DESCRIPTION**

The Project will restore the Lower Perazzo Meadow, a 50-acre degraded meadow, by returning the River to its natural remnant channels on the meadow surface.

The objectives of the restoration actions include:

- Restoring hydrologic functions that have been lost from the meadow and floodplain;
- Improving water quality;
- Eliminating excessive meadow and stream channel erosion;
- Increasing groundwater storage;
- Increasing frequency of floodplain inundation; and
- Improving riparian and wetland ecosystem conditions.

*Problem:*

A number of events and land use practices in the watershed and at the site have led to current-day degradation. The River was highly altered, starting in the 1860's, to support industrial-scale logging. The River was used to transport logs through a practice known as "river driving". This practice required extensive widening and deepening of the river so that downstream movement of logs could be maintained. Typically, river driving also required conversion of multiple channel systems to a single-thread meandering river system. Railroad and road grades were constructed on the meadow to support logging; affecting historic stream flow paths.

These disturbances likely converted Lower Perazzo Meadow from a multiple-channel braided system to a single-thread system with an oversized single channel. As a result, high flows have become concentrated in the single channel, leading to channel incision and widening, and reduced frequency and duration of floodplain inundation. Stream surveys documented extensive streambank instability through the Project area. Excessive erosion is prevalent along this 0.8-mile stream reach of the River.

Ongoing hydrologic monitoring demonstrates that the shallow groundwater table varies from 3 to 6 feet below the ground surface during the growing season, which is insufficient to support wet meadow/wetland habitat that historically occurred at this location. In

comparison, in restored areas of the Middle and Upper Perazzo Meadows, groundwater levels stay within 1 to 2 feet of the ground surface for the entire growing season. The lowered groundwater table significantly affects stream flow. In Upper Perazzo Meadow, calculations demonstrated that up to 50 percent of the August and September stream flow in the River comes from groundwater. Groundwater levels were elevated as much as 6 feet in areas of the Upper Meadow due to restoration. In the unrestored Lower Meadow, this groundwater storage function is lost, and the water flows out of the system earlier in the year.

*Solution:*

The primary mechanism through which the restoration of Lower Perazzo Meadow will enhance stream flow is re-engagement of the shallow groundwater table. This will be achieved through restoring the River to its natural channel system. Numerous remnant channels are present throughout Lower Perazzo Meadow and are appropriately sized to carry the flow of the River. These natural channels are less incised, more meandering than the current channel and will facilitate increased frequency and duration of floodplain inundation and interaction with the shallow groundwater table. Flow will be returned to the remnant channel system by filling most of the existing incised channel. The filled area will be shaped to match the natural grade of the surrounding meadow and the disturbed area will be revegetated with meadow species.

The stream channel and restored floodplain processes will feed water to the adjoining meadow soils during spring snowmelt. This water will be stored in the meadow soils as shallow groundwater and when stream flow decreases later in the season, the shallow groundwater will be metered back to the stream channel as surface water; improving base flow in the late season when it is needed most. In addition to stream flow benefits, the Project will also provide improved water quality through reduced erosion and decreased water temperature, restored natural stream channel pattern, increased floodplain connectivity, improved aquatic habitat diversity, improved habitat connectivity, increased carbon sequestration, and improved climate resilience.

**PROJECT COST**

<b>Funding</b>	
WCB	\$1,980,504
Other	\$420,545
<b>Total</b>	<b>\$2,401,049</b>

Project costs will be for project management, construction, revegetation, monitoring, adaptive management, stakeholder coordination, and outreach.

Other secured funding sources include Truckee River Watershed Council (applicant), CDFW, TNF, and Bella Vista Foundation.

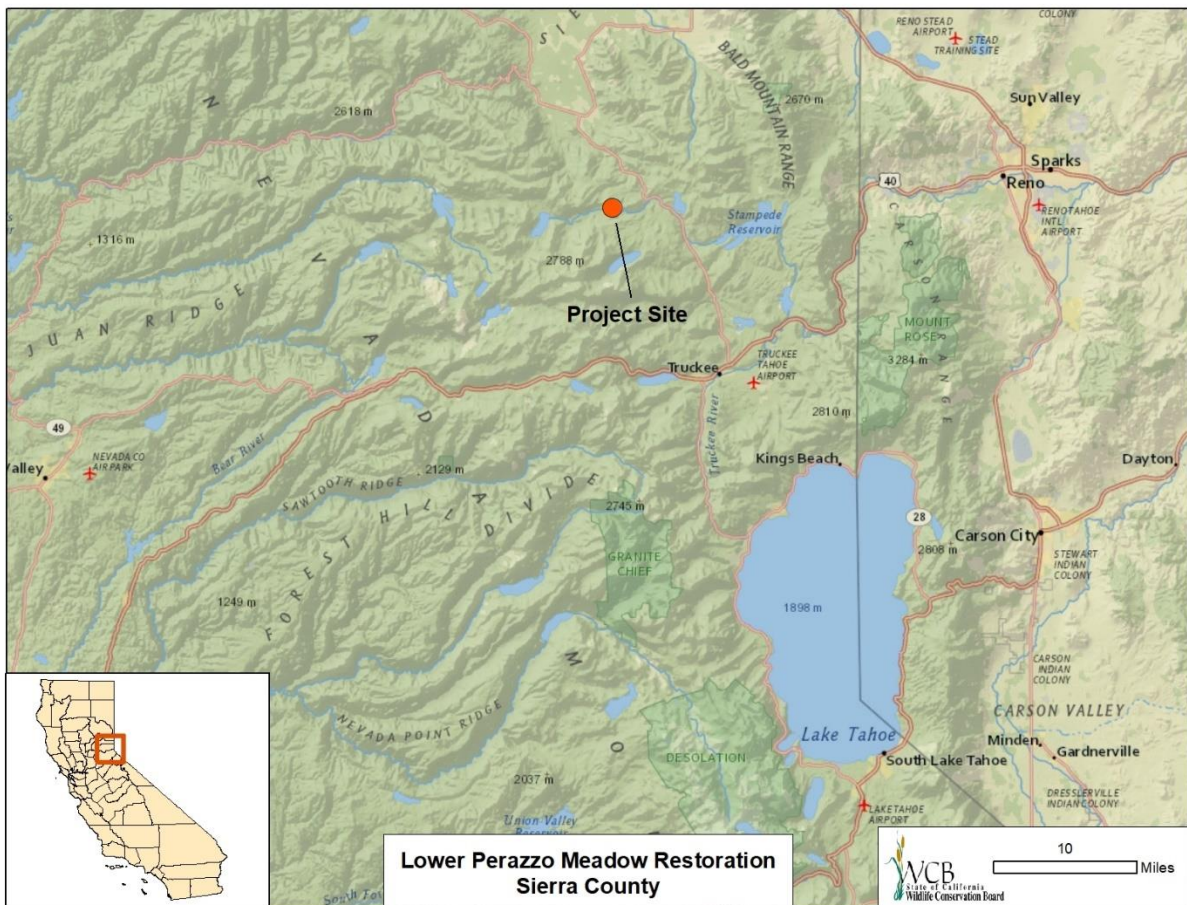
**CEQA**

As lead agency, the Lahontan Regional Water Quality Control Board, prepared a Mitigated Negative Declaration (MND) and an addendum to the MND for the Project pursuant to the provisions of the California Environmental Quality Act (CEQA). Staff considered the MND and addendum and has prepared proposed, written findings documenting the Wildlife Conservation Board's (WCB) compliance with CEQA. Subject to approval of this proposal

by WCB, the appropriate Notice of Determination will be filed with the State Clearinghouse.

### STAFF RECOMMENDATION

Staff recommends that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate \$1,980,504 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.



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**8. Porter Creek Stream Flow Enhancement, Phase II  
Sonoma County  
\$530,366.00**

This proposal is to consider the allocation for a grant to The Regents of the University of California for a cooperative project with Trout Unlimited and the Sonoma County Resource Conservation District, to install a permanent gauge station below the release point from a previously constructed flow augmentation system, conduct a two-year monitoring study of fish and water quality responses to flow augmentation to determine the optimal flow-release schedule for fisheries benefits, and develop a long-term Stream Flow Enhancement Plan for Porter Creek to guide operation of the flow enhancement project in perpetuity (Project).

**LOCATION**

The Project site is a private vineyard property owned by E & J Gallo Winery, adjacent to Porter Creek, located approximately 10 miles northwest of the city of Santa Rosa in Sonoma County. Porter Creek is a tributary to the Russian River.

**PROJECT DESCRIPTION**

The proposed Project builds on the Porter Creek Stream Flow Enhancement Project (Phase I), funded partially through the Stream Flow Enhancement Program in 2016. Phase I funded construction of a flow augmentation system which facilitates releases of excess water from the irrigation pond into Porter Creek, providing stream flow benefits to salmonids as well as opportunities to study environmental responses to water releases. These construction activities were completed in 2017. The current Project, Phase II, focuses on flow enhancement implementation.

*Problem:*

Phase II of the Project will expand upon the activities of the initial project in order to overcome critical knowledge gaps that currently constrain system operations. Phase I proposed the use of a U.S. Geological Survey stream flow gauge in an adjacent drainage (Austin Creek) as the reference for controlling the schedule of flow releases in Porter Creek. However, flow monitoring on Porter Creek from 2017 to 2018 indicates a weak correlation between Porter Creek and Austin Creek flows. In addition, Project proponents have identified a need for more fish monitoring to understand biological responses to flow releases during the summer rearing period, as well as monitoring of water quality conditions in the dry season. Additional information is needed to determine a flow release schedule that supports suitable habitat for Central California Coast coho salmon (federally and State listed endangered) and Central California Coast steelhead (federally listed as threatened) in the dry season.

*Solution:*

The proposed Project would leverage and expand activities initiated under the previous phase to achieve durable and effective long-term flow enhancement in Porter Creek of up to 150 acre-feet per year, for the benefit of coho salmon and steelhead. The specific objectives of Phase II are to (1) establish a permanent flow-monitoring station in Porter Creek that will inform operations and measure stream flow and habitat responses to enhancement efforts; (2) understand fish responses to changing habitat conditions during the low-flow season to guide flow release schedules; and (3) develop a long-term Stream Flow Enhancement Plan that provides the landowner with a clear, measurable, and

scientifically-defensible schedule of flow releases that maximizes benefits to smolts and rearing coho salmon and steelhead.

**PROJECT COST**

<b>Funding</b>	
WCB	\$530,366
Other	\$248,999
<b>Total</b>	<b>\$779,365</b>

Project costs will be for data collection and preparation of a Stream Flow Enhancement Plan.

Other funders include UC Berkeley (applicant), California SeaGrant, Trout Unlimited, Sonoma County Resource Conservation District, and E & J Gallo Winery.

**CEQA**

The Project is proposed as categorically exempt from the California Environmental Quality Act (CEQA) pursuant to the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, Sections 15304, Class 4, as a minor alteration to land, water and/or vegetation which does not involve the removal of healthy, mature, scenic trees; and 15306, Class 6, as basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. Subject to approval of this proposal by the Wildlife Conservation Board, the appropriate Notice of Exemption will be filed with the State Clearinghouse.

**STAFF RECOMMENDATION**

Staff recommends that the Wildlife Conservation Board approve this project as proposed; allocate \$530,366 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.



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**9. Butano Creek Stream Flow Improvement Planning  
San Mateo County  
\$466,696.00**

This proposal is to consider the allocation for a planning grant to the San Mateo Resource Conservation District (RCD) for a cooperative project with the California Department of Water Resources (DWR), Natural Resources Conservation Service, and Peninsula Open Space Trust to plan, design, and permit water storage and irrigation efficiency upgrades at four farms on Butano Creek that, when implemented, would result in increased instream flow, improved conditions for salmonids, and other ecosystem benefits (Project).

**LOCATION**

The Project includes activities on four farms located along a two-mile reach of lower Butano Creek, in the Pescadero-Butano watershed. The properties are located approximately two miles southeast of the town of Pescadero, in San Mateo County.

**PROJECT DESCRIPTION**

*Problem:*

Historically, the Pescadero-Butano watershed supported robust runs of steelhead and coho salmon, but these species experienced substantial declines over the past century. The Central California Coast Coho Salmon Recovery Plan (National Marine Fisheries Service, 2012) notes that populations in Pescadero Creek, of which Butano Creek is tributary, are at extreme risk of extirpation. One of the key factors is the lack of sufficient instream flows in the creek during summer and fall due to dry season water diversions. Water diversions during the summer rearing period magnify the impact of natural low flows with pronounced impacts to juvenile coho and steelhead survival.

*Solution:*

The Project will conduct planning activities to support future implementation of new water storage and irrigation efficiency projects on four farms that, when implemented, would result in increased instream flow, improved conditions for salmonids, and other ecosystem benefits. The RCD will work with each landowner to identify opportunities to decrease water demands and improve system efficiencies, develop designs, and update diversion reporting. The RCD will also develop necessary documents for California Water Code Section 1707 petitions to add instream flows as a beneficial use, the California Department of Fish and Wildlife Lake and Streambed Alteration Agreements, applications for water appropriation of winter water storage, and forbearance agreements/water management agreements where applicable. When implemented, the Project will result in permanent decreases in diversion rates and temporary forbearance of diversions during the critical low flow months (August 1 – October 31), which will enhance instream flows, improve conditions for coho salmon and steelhead, and provide other ecosystem benefits within Butano Creek.

**PROJECT COST**

<b>Funding</b>	
WCB	\$466,696
Other	\$75,503
<b>Total</b>	<b>\$542,199</b>

Project costs will be for: personnel services, project management, design work, and environmental assessment and permitting activities.



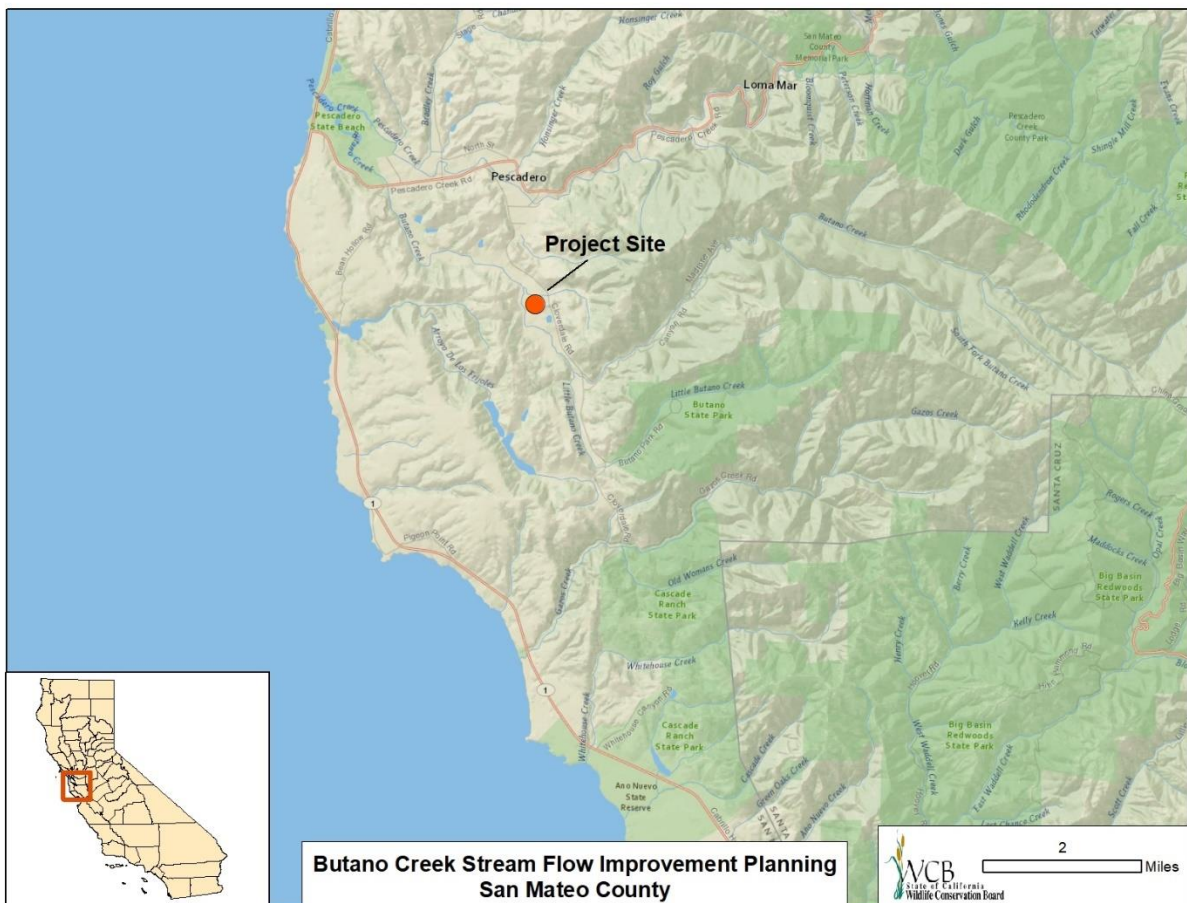
Other funding sources include the RCD (applicant), DWR, Natural Resources Conservation Service, and Peninsula Open Space Trust.

### CEQA

The Project is statutorily exempt from the California Environmental Quality Act (CEQA) pursuant to the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15262), as it involves only feasibility and planning studies for possible future actions. Subject to approval of this proposal by WCB, the appropriate Notice of Exemption will be filed with the State Clearinghouse.

### STAFF RECOMMENDATION

Staff recommends that the Wildlife Conservation Board approve this project as proposed; allocate \$466,696 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.



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**10. San Gregorio Creek Stream Flow Enhancement, Klingman-Moty Farm  
San Mateo County  
\$621,754.00**

This proposal is to consider the allocation for an implementation grant to the San Mateo Resource Conservation District for a cooperative project with the California Department of Water Resources (DWR) and State Coastal Conservancy for the purpose of improving instream flow conditions in San Gregorio Creek for salmonids during yearly low stream flow periods (Project).

**LOCATION**

The Project is located on San Gregorio Creek at Klingman-Moty Farm adjacent to Highway 84, east of the unincorporated community of San Gregorio in southern San Mateo County. The Project site is located approximately three miles upstream of San Gregorio Creek's terminus in the Pacific Ocean.

**PROJECT DESCRIPTION**

*Problem:*

San Gregorio Creek has been identified as a priority creek for protection and restoration by both State and federal agencies and has been designated critical habitat for the Central California Coast coho salmon (federally and State listed as endangered) and Central California Coast steelhead (federally listed as threatened). The coho and steelhead fisheries in San Gregorio Creek have been in decline for decades. One key factor is the lack of sufficient instream flows in the creek in summer and fall due to water withdrawals for agriculture. Water diversions during the summer rearing period magnify the impact of natural low flows with pronounced impacts to juvenile coho and steelhead survival.

The target flow rate identified for San Gregorio Creek to maximize juvenile salmonid survival is 4 cubic feet per second (cfs). Flows recorded at the U.S. Geological Survey gauge in San Gregorio Creek over the last 46 years show that 50 percent of the time flows reach 1 cfs in September, the month with the lowest average stream flow. Average stream flows for August, September, and October are 1.6, 1.1, and 2.8 cfs, respectively.

*Solution:*

Instream flow conditions in San Gregorio Creek will be improved for salmonids during low stream flow periods by creating a new water storage pond at Klingman-Moty Farm, allowing the farmer to reduce diversion rates during the spring/summer and eliminate diversions in late summer/early fall when stream flows are at their lowest level.

Construction of a new 18.5 acre foot (AF) pond will allow for the storage of enough water during the winter months to forgo diversions during the months with the lowest average stream flow. From August 1 through October 31 diversions from the creek would cease, with the reservoir supplying the remaining irrigation needs for the growing season. In conjunction with irrigation system efficiency upgrades currently underway at the Project site (completed with funding from DWR Integrated Regional Water Management Program funding), the Project has the potential to reduce irrigation demands by approximately 25 AF during the dry season each year. In conjunction with a recently completed water storage pond on the Repetto Farm (0.5 miles downstream) and a water storage pond that is currently being developed at Blue House Farm (1.5 miles downstream), with funding support from a WCB Stream Flow Enhancement Program grant (2017), there is currently the potential for three of the four largest agricultural dry season diversions to cease in the late summer/early fall if the Klingman-Moty Farm project is implemented. In total, these

three agricultural water storage and irrigation efficiency projects will reduce the instantaneous diversion rate in lower mainstem San Gregorio Creek by 1.16 cfs during spring months, and 1.62 cfs during the late summer and early fall months. The reduction in diversion rates from these three projects represents a significant advancement in protecting natural stream flows during the lowest average stream flow months.

#### PROJECT COST

<b>Funding</b>	
WCB	\$621,754
Other	\$387,335
<b>Total</b>	<b>\$1,009,089</b>

Project costs include project management, preparation of a Stormwater Pollution and Prevention Plan, project construction, and monitoring.

Other funding sources include DWR, State Coastal Conservancy, and in-kind contributions from the San Mateo Resource Conservation District (applicant).

#### CEQA

The Project is proposed as categorically exempt from the California Environmental Quality Act (CEQA) pursuant to the State CEQA Guidelines California Code of Regulations, Title 14, Chapter 3, Sections 15303, Class 3, as the construction or conversion of new, small facilities or structures; and 15333, Class 33, as the restoration, enhancement, or protection of small habitat restoration projects of less than five acres in size. Subject to approval of this proposal by WCB, the appropriate Notice of Exemption will be filed with the State Clearinghouse.

#### STAFF RECOMMENDATION

Staff recommends that the Wildlife Conservation Board approve this project as proposed; allocate \$621,754 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.



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**11. Reducing Limiting Factors in the San Lorenzo River Lagoon  
Santa Cruz County  
\$2,215,000.00**

This proposal is to consider the allocation for an implementation grant to the city of Santa Cruz (City) for a cooperative project to address limiting factors in the lower San Lorenzo River system by constructing a water level control structure to prevent the need for artificial breaching of the lagoon (Project).

**LOCATION**

The Project is located in the San Lorenzo River estuary and lagoon, adjacent to the Santa Cruz Beach Boardwalk. It occurs within the City in Santa Cruz County along the Pacific Coast of California, south of the San Francisco Bay Area and north of Monterey. The San Lorenzo River historically was one of the largest coho salmon and steelhead fisheries south of San Francisco. Its watershed drains 138 square miles, and the watershed was once a logging industry center, home to millions of redwood trees used extensively in the lumber industry.

**PROJECT DESCRIPTION**

The City was previously awarded \$458,750 by the Stream Flow Enhancement Program (2016) to fund construction of a temporary, removable head-driven culvert system to be installed during summer months and removed prior to the rainy season. Bids were solicited in March 2017; however actual project costs were substantially higher than anticipated, so the amount of funds awarded was insufficient. The proposed location of the culvert in the active river channel also presented certain unforeseen obstacles for construction and long-term functioning, along with high operations and maintenance costs. As such, the City withdrew its 2016 application in order to redesign the Project. The City also consulted with federal and state resource agencies and re-designed the culvert to address those issues. The redesigned concept has been modified to offer a more permanent solution in both location and functional design and will entail significantly lower operations and maintenance costs. As in-kind match for this grant, the City will dedicate approximately 0.5 cubic feet per second (cfs) of summer instream flows in two important cold-water tributaries in the lower watershed to address poor water quality and low stream flow conditions

*Problem:*

The San Lorenzo River and its tributaries have been listed by the National Marine Fisheries Service (NMFS) as critical habitat for the recovery of Central California Coast steelhead (federally listed as threatened) and Central California Coast coho salmon (federally and State listed as endangered). The watershed has been designated as a fully appropriated stream during the summer months. Salmonid habitat conditions are adversely affected by water diversions, and in response the City is currently leaving 8 cfs of flows instream (depending on the water year) to benefit salmonids. While these bypass flows produce important instream benefits, they produce equally important benefits for the San Lorenzo River estuary/lagoon.

A lagoon is most productive when it is either entirely freshwater or when the water column is a well-mixed combination of salt and fresh water. When the lagoon is stratified and static, the bottom saltwater layer acts as a solar collector that traps heat, raising water temperatures to a range that is lethal to both steelhead and their food source. The City's bypass flows are intended to benefit the functioning of the San Lorenzo River lagoon by

enabling the closed lagoon to convert to a mixed freshwater system in late spring and summer, which is necessary to produce the habitat conditions needed for rearing of juvenile steelhead.

The San Lorenzo River upstream of the estuary is a constricted flood control channel, which in the lower San Lorenzo River, has resulted in increased susceptibility to flooding for low-lying public and private infrastructure when the closed lagoon water elevation reaches about 7.0 feet. The lagoon closes as a result of the formation of a natural sandbar. Unauthorized and illegal breaching frequently occurs in response to the flooding of the beach and low lying properties. Freshwater bypass flows are lost to the ocean whenever breaching occurs. The breaching “resets” the time necessary for conversion to freshwater; and in dry years with repeated breaching, the lagoon remains stratified. Stratified conditions, as described above, create poor habitat conditions for steelhead and impact the productivity of steelhead throughout the entire watershed. In addition, unauthorized breaching of the sandbar can catastrophically flush steelhead and tidewater goby into the ocean prematurely, resulting in mortality of an unknown percentage of the population. NMFS lists artificial breaching of the San Lorenzo River lagoon as a key limiting factor for steelhead in the 2016 Final Coastal Multispecies Recovery Plan.

*Solution:*

The Project will directly address limiting factors in the San Lorenzo River estuary/lagoon by implementing the following activities:

1. Install a water level control structure in the lagoon to prevent unauthorized breaching: The Project consists of the installation of a water level control structure – a passive, head-driven pipe drain system – in the San Lorenzo River lagoon that will provide a stabilized water elevation of 5.0 feet. This elevation has been determined to provide habitat for salmonids and tidewater goby, a federally listed endangered species, and to lessen localized flooding while maintaining a closed lagoon for fisheries habitat.

The culvert system will consist of a 750-foot pipe built on the face of the San Lorenzo point headland with infiltration galleries and a junction box at the north end connected to a duckbill outlet at the ocean end. The culvert relies on the removal of water from the lagoon via overflow of surface waters through an adjustable weir and infiltration intake box. Outflows through the culvert will be driven by head difference between the closed lagoon and the ocean. The culvert can be adjusted to maintain higher or lower elevations in the lagoon, ranging from 5.0 feet to 7.0 feet in 0.5 foot increments, with an adjustable weir.

In addition, the culvert system is designed to preferentially discharge lagoon bottom water so as to maximize freshwater conversion of the lagoon area. Lagoon bottom water has been documented through water quality monitoring to be of lower quality and higher salinity. The system will be capable of extracting saltwater located at the bottom of the water column via the use of infiltration galleries. The culvert will work by gravity flow and will not require any pumping to function.

2. Dedicate bypass flows to increase water quantity and improve water quality instream and in the lagoon: As an in-kind match for this grant, the City will dedicate a total of approximately 0.5 cfs of summer instream flows during the low flow season in two important cold-water tributaries in the lower watershed to benefit anadromous

salmonid habitat during the critical low flow time of the year. The tributaries are Pogonip Creek and Redwood Creek. This dedication will involve the City's riparian water rights and will be formalized via a 20-year forbearance agreement between the City and the Resource Conservation District of Santa Cruz County.

#### PROJECT COST

<b>Funding</b>	
WCB	\$2,215,000
Other	\$630,000
<b>Total</b>	<b>\$2,845,000</b>

Project costs will be for engineering, including plans and specifications and permit compliance; and fabrication and construction activities.

Other funding sources include in-kind contributions from the City of Santa Cruz (applicant).

#### CEQA

As lead agency, the City of Santa Cruz, prepared a Mitigated Negative Declaration (MND) and an addendum to the MND for the Project, pursuant to the provisions of the California Environmental Quality Act (CEQA). Staff considered the MND and addendum and has prepared proposed, written findings documenting the Wildlife Conservation Board's (WCB) compliance with CEQA. Subject to approval of this proposal by WCB, the appropriate Notice of Determination will be filed with the State Clearinghouse.

#### STAFF RECOMMENDATION

Staff recommends that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate \$2,215,000 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.



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**12. Salinas River Arundo Eradication Project, Phase IV  
Monterey County  
\$2,868,781.00**

This proposal is to consider the allocation for an implementation grant to the Resource Conservation District of Monterey County (RCDMC) for a cooperative project with the Natural Resources Conservation Service (NRCS) and the Monterey County Agricultural Commission to continue efforts to eradicate invasive giant reed, *Arundo donax* (Arundo), and enhance stream flows on privately-owned property along the Salinas River between Gonzales and King City in Monterey County (Project).

**LOCATION**

The Project will span approximately 60 privately-owned parcels adjacent to the Salinas River, in the farming communities in and around Soledad, Greenfield, Gonzales and King City, in Monterey County.

**PROJECT DESCRIPTION**

*Problem:*

Arundo is a 20 to 30 feet tall, non-native reed that grows in dense stands capable of producing a wide range of negative impacts to natural ecosystems. The Salinas River is the second most Arundo-infested watershed in California. Recent reports show that this watershed has over 1,470 invaded acres. Arundo stands have very high biomass and leaf area per acre, which translates into significant water consumption in invaded riparian areas. Arundo plants in the Salinas River have been found to have extremely high transpiration rates of up to 23.2 acre-feet of water per acre per year, which is almost six times as great as that of native riparian plant vegetation.

*Solution:*

The Salinas River Arundo Eradication Program, Phase IV will control 415 acres of Arundo over 28 total river miles of the Salinas River to enhance stream flow and improve habitat for fish and wildlife, using a combination of Stream Flow Enhancement Program funding (215 acres) and NRCS Regional Conservation Partnership Program funding (200 acres). The program is fully permitted, and the first three phases have treated the upper 50 miles of river from San Luis Obispo County to Soledad. This fourth phase will treat the Arundo from Soledad towards Gonzales, downstream of the confluence with the Arroyo Seco River. The Project is expected to save up to 4,100 acre-feet of water per year by eliminating Arundo from the project area (these net water savings have been adjusted for replacement vegetation). As a result of this Project, more water will be available in the river and in backwater areas of the riparian zone for fish and wildlife, and for a longer duration. Additionally, fluvial processes will be restored and the stream channel will be allowed to assume a more natural, braided form. These benefits are sustainable over the long term as the Project is part of a top-to-bottom watershed-based eradication program.

**PROJECT COST**

<b>Funding</b>	
WCB	\$2,868,781
Other	\$2,256,007
<b>Total</b>	<b>\$5,124,788</b>

Project costs will be for project management, field supplies, permit compliance, weed removal, monitoring, and California Conservation Corps.

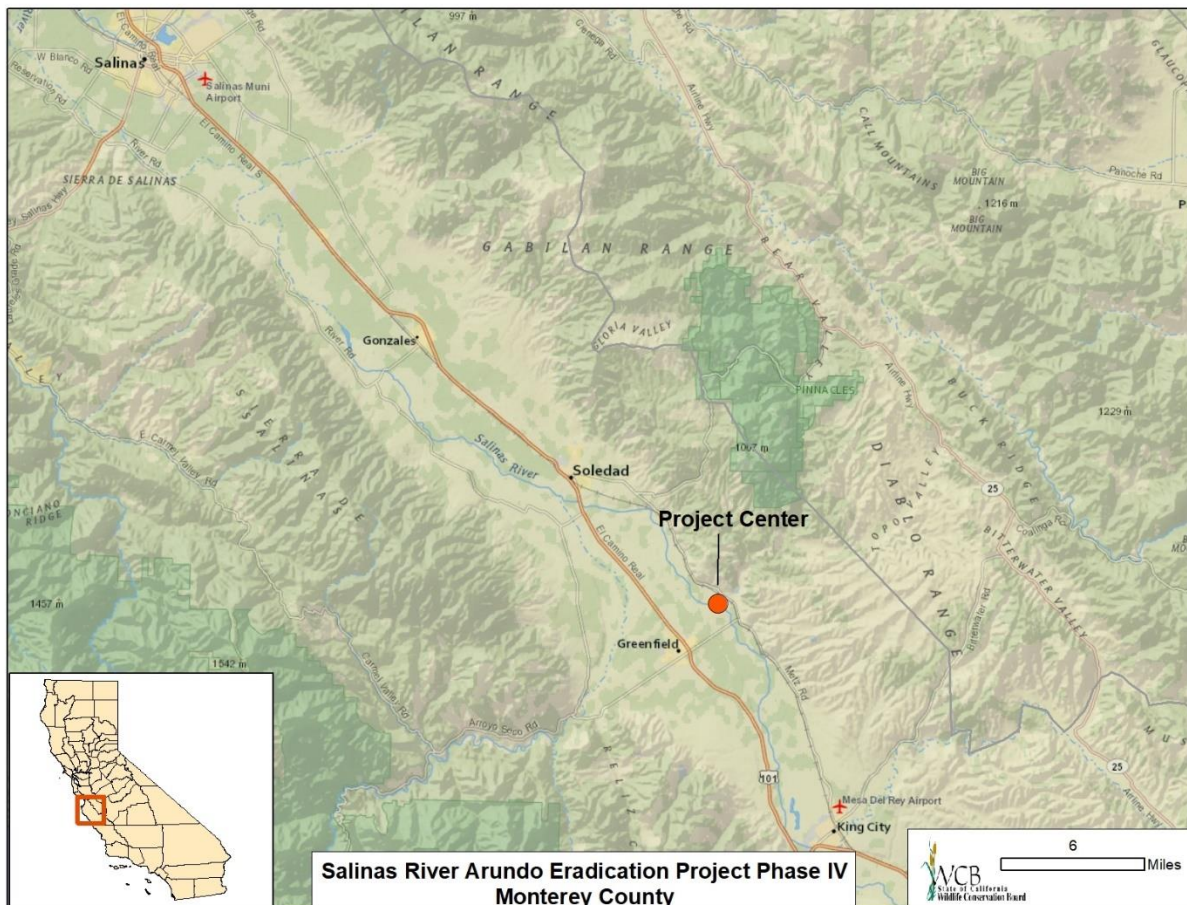
Other funding sources include the RCDMC (applicant), NRCS, Monterey County Agricultural Commissioner, Monterey County Water Resources Agency, Salinas River Stream Maintenance Program, and California State University Monterey Bay.

### CEQA

The RCDMC, as lead agency, prepared a Mitigated Negative Declaration (MND) for the Project pursuant to the provisions of the California Environmental Quality Act (CEQA). Staff considered the MND and has prepared proposed, written findings documenting the Wildlife Conservation Board's (WCB) compliance with CEQA. Subject to approval of this proposal by WCB, the appropriate Notice of Determination will be filed with the State Clearinghouse.

### STAFF RECOMMENDATION

Staff recommends that the Wildlife Conservation Board adopt the written findings and approve this project as proposed; allocate \$2,868,781 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.



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**13. USFS Hot Springs-Montecito Creek - Section 1707 Project  
Santa Barbara County  
\$45,750.00**

This proposal is to consider the allocation for an implementation grant to Los Padres ForestWatch for a cooperative project with the U.S. Forest Service Los Padres National Forest (LPNF) and Hicks Law, for the purpose of dedicating the LPNF’s entire interest in a pre-1914 appropriative water right from the uppermost point of diversion on Hot Springs Creek, tributary to Montecito Creek, as instream flow pursuant to California Water Code Section 1707 and a recorded permanent forbearance agreement (Project).

**LOCATION**

The Project is located within the LPNF on Hot Springs Creek, tributary to Montecito Creek, approximately two miles north of the community of Montecito in Santa Barbara County.

**PROJECT DESCRIPTION**

*Problem:*

Water storage, withdrawal, conveyance, and diversions for agriculture and municipal purposes have greatly reduced or eliminated historically accessible habitat for federally endangered southern California steelhead in the Santa Barbara County front range and subwatersheds. Modification of natural flow regimes has resulted in depleted flow necessary for migration, spawning and rearing, increased water temperatures, changes in fish community structures, and reduced gravel recruitment. Impaired stream flow conditions are a recognized barrier to the recovery of southern California steelhead. The effects of the 2017 Thomas Fire have exacerbated existing limiting factors in these watersheds, especially in Montecito creeks that were at the center of the devastating January 2018 rains and mudflows.

*Solution:*

Voluntary strategies can complement regulatory approaches to improve flow conditions by addressing these limiting factors related to combined surface flow diversion and groundwater pumping. The LPNF’s proposed dedication of its entire interest in a pre-1914 appropriative water right from the uppermost point of diversion on Hot Springs creek, tributary to Montecito Creek, as instream flow pursuant to California Water Code (CWC) Section 1707 and recorded permanent forbearance agreement, will voluntarily and proactively reduce 100 percent consumptive use of its existing surface appropriative right from a historic private in-holding within the LPNF. This CWC Section 1707 instream dedication will provide a non-regulatory, multi-beneficial use strategy for implementation and significant contributions to the enhancement of existing stream flow conditions in the headwaters of Hot Springs Creek.

**PROJECT COST**

<b>Funding</b>	
WCB	\$45,750
Other	\$31,000
<b>Total</b>	<b>\$76,750</b>

Project costs will be for project coordination, filing of a petition for instream flow dedication (CWC § 1707), preparation of a forbearance agreement, and outreach.

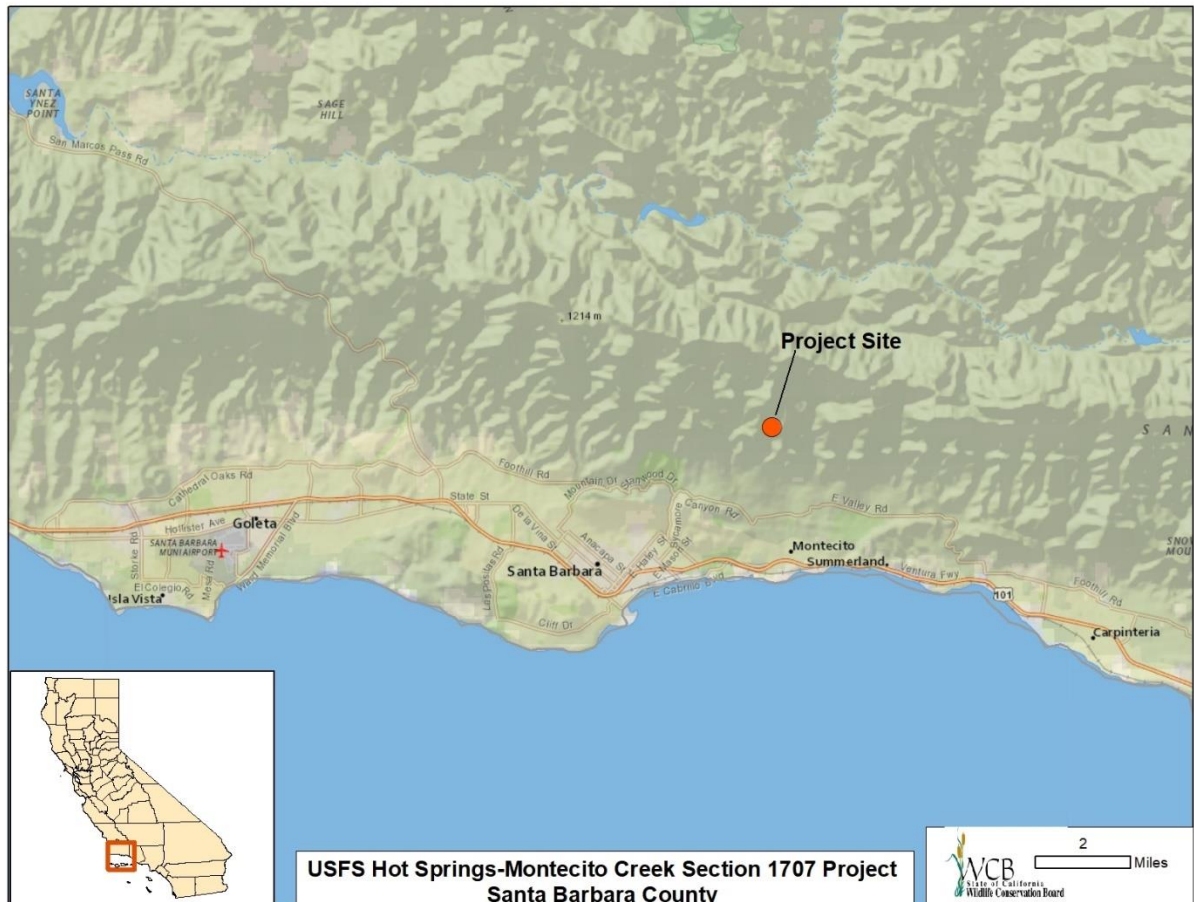
Other funding sources include the LPNF and Hicks Law.

## CEQA

The Project is proposed as categorically exempt from the California Environmental Quality Act (CEQA) pursuant to the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, Sections 15301, Class 1, as the repair or minor alteration of existing facilities involving negligible or no expansion of use; and 15304, Class 4, as a minor alteration in the condition of water which does not involve the removal of healthy, mature, scenic trees. Subject to approval of this proposal by WCB, the appropriate Notice of Exemption will be filed with the State Clearinghouse.

## STAFF RECOMMENDATION

Staff recommends that the Wildlife Conservation Board approve this project as proposed; allocate \$45,750 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.



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**14. Ventura Watershed Flow Enhancement and Water Resiliency**

**Regional Framework**

**Ventura County**

**\$1,783,345.00**

This proposal is to consider the allocation for a planning grant to the Ventura County Resource Conservation District for a cooperative project with Ojai Valley Inn, the city of Ojai, and the Thatcher School for the purpose of completing planning, permitting and outreach for 25 potential regional implementation-ready projects (Project).

**LOCATION**

The Project involves approximately 25 sites and landowners within the cities of Ojai and Ventura, and the upper Ventura River watershed, in Ventura County.

**PROJECT DESCRIPTION**

*Problem:*

The National Marine Fisheries Service designated the Ventura River watershed as critical habitat for federally endangered southern California steelhead. Fish passage barriers, water storage, withdrawal, conveyance, and diversions for agriculture and municipal purposes have greatly reduced or eliminated historically accessible habitat for steelhead throughout the Ventura River Watershed and its sub-watersheds. Modification of existing low-flow regimes has resulted in depleted flow necessary for migration, spawning, and rearing of southern California steelhead, changes in fish community structures, increased water temperatures, and reduced gravel recruitment. The effects of the 2017 Thomas Fire have likely exacerbated these limiting factors.

*Solution:*

The Project will develop an integrated voluntary strategy to complement the State Water Resources Control Board instream flow targets and address water and resource depletion in a landscape shaped by prolonged drought and unprecedented wildfire and erosional events. Building on the recent momentum of collaborations between key water agencies and local jurisdictions, this framework will coalesce and synthesize opportunities, thus optimizing efficiencies by streamlining efforts and interactions between organizations to maximize watershed resources for instream flow enhancements and water availability. Additionally, the Ventura Watershed Instream Flow Enhancement and Water Resiliency Regional Framework will be scalable and immediately applicable at the statewide level.

Twenty-five potential implementation projects across the Ventura watershed basin and the city of Ojai have been previously identified and conceptualized. The Project will complete 100 percent design plans and associated permitting that would, upon implementation, contribute an additional 4,555.28 acre feet per year or 6.24 cubic feet per second (cfs) to instream flow and multi-beneficial uses.

Example projects and partnerships (not an exhaustive list) are identified below:

- City of Ojai and its residents
  - Groundwater Recharge Projects
  - Rainwater and Greywater Incentive Program
- Ventura River Water District
  - Well Pumping Balance for Instream Flow Enhancements
  - Rainwater and Greywater/Ocean Friendly Gardens Incentive Program

- Ojai Valley Land Conservancy and Ventura Watershed Council
  - Ventura Watershed Arundo Removal
- Katz Orchard Farms
  - Irrigation Efficiency and Reduced Consumptive Use
- U.S. Forest Service
  - Fire Restoration Best Management Practices to Enhance Instream Flow
- Thatcher School
  - Peak Flow Pilot Project
  - Orchard Management Practices Laboratory
- Ojai Unified School District
  - Matilija Middle School (Rainwater Capture Demonstration)
  - Meiners Oaks Elementary (Stormwater Management Learning Lab)
- Ventura River Bike Path Improvements
  - Stormwater Recharge and Reduced Consumptive Use Projects
- Ojai Valley Inn
  - Stormwater Recharge and Reduced Consumptive Use Projects

**PROJECT COST**

<b>Funding</b>	
WCB	\$1,783,345
Other	\$1,024,640
<b>Total</b>	<b>\$2,807,985</b>

Project costs will be for project management, administrative costs, and subcontractors.

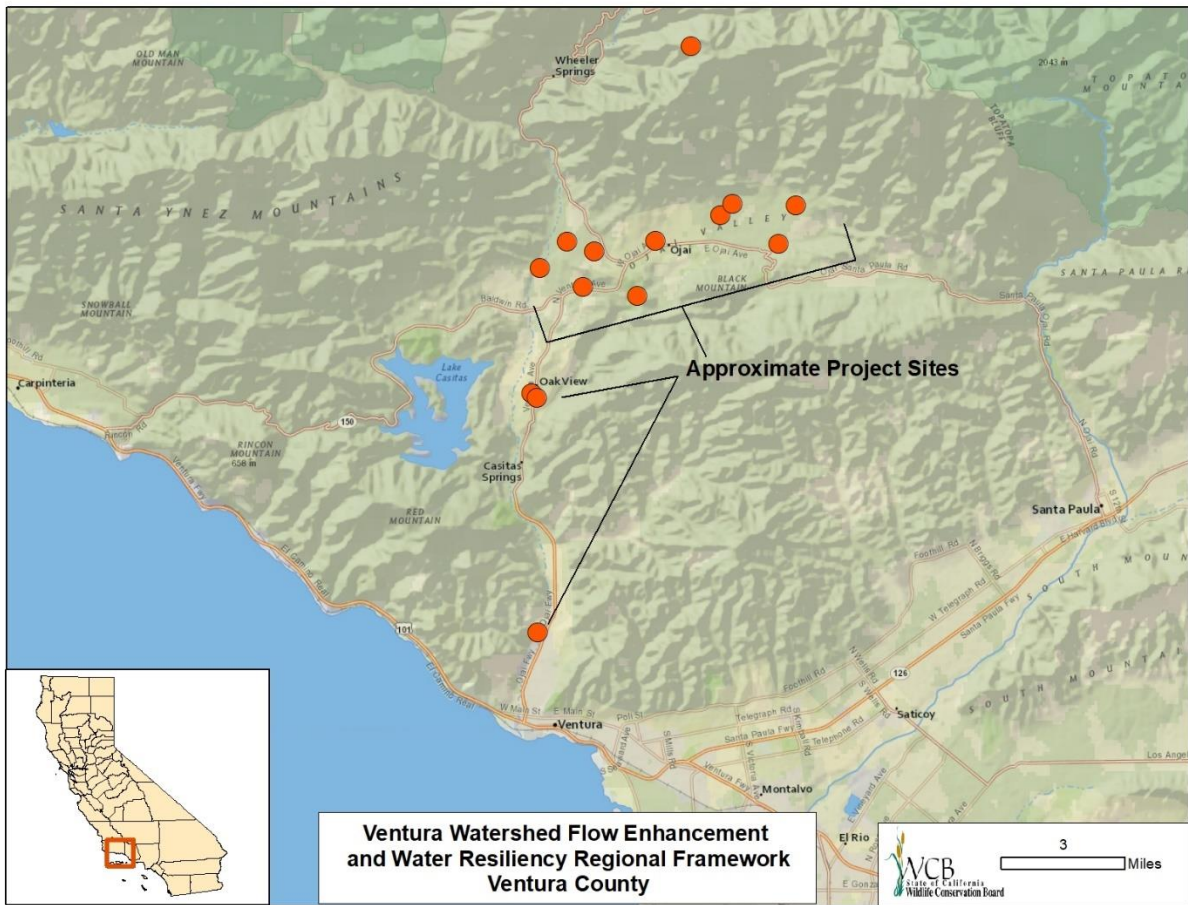
Other funding sources include, but are not limited to, city of Ojai, Ojai Unified School District, U.S Forest Service, Ojai Valley Inn, Ventura River Water District, Meiners Oaks Water District, The Thatcher School, Ojai Valley Land Conservancy, and Hicks Law.

**CEQA**

The Project is statutorily exempt from the California Environmental Quality Act (CEQA) pursuant to the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15262), as it involves only feasibility and planning studies for possible future actions. Subject to approval of this proposal by WCB, the appropriate Notice of Exemption will be filed with the State Clearinghouse.

**STAFF RECOMMENDATION**

Staff recommends that the Wildlife Conservation Board approve this project as proposed; allocate \$1,783,345 from the Water Quality, Supply and Infrastructure Improvement Fund of 2014 (Proposition 1), Water Code Section 79733; authorize staff to enter into appropriate agreements necessary to accomplish this project; and authorize staff and the California Department of Fish and Wildlife to proceed substantially as planned.



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