

COASTAL CONSERVANCY

Staff Recommendation
August 22, 2019

Three Creeks Parkway Restoration Project

Project No: 18-051-01
Project Manager: Avra Heller

RECOMMENDED ACTION: Authorization to disburse up to \$450,000 to American Rivers for the Three Creeks Parkway Restoration Project, to restore 4,000 linear feet of riparian channel and twelve and a half acres of riparian and floodplain habitat and improve portions of the Marsh Creek Regional Trail along the Marsh Creek flood control channel in Brentwood, Contra Costa County, and the adoption of findings pursuant to the California Environmental Quality Act.

LOCATION: Marsh Creek, Brentwood, Contra Costa County

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

- Exhibit 1: [Project Location](#)
 - Exhibit 2: [Project Design and Photos](#)
 - Exhibit 3: [CEQA Documentation](#)
 - Exhibit 4: [Project Letters](#)
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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160–31165 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed four hundred and fifty thousand dollars (\$450,000) to American Rivers for the Three Creeks Parkway Restoration Project, to restore 4,000 linear feet of riparian channel and twelve and a half acres of riparian and floodplain habitat and improve portions of Marsh Creek Regional Trail along the Marsh Creek flood control channel in Brentwood, Contra Costa County, subject to the following conditions:

1. Prior to commencement of the project, American Rivers shall submit for the review and written approval of the Executive Officer of the Conservancy the following:
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- a. A detailed work program, schedule, and budget.
 - b. The names and qualifications of any contractors retained in carrying out the project.
 - c. A plan for acknowledgement of Conservancy funding, and Proposition 1 as the source of that funding.
 - d. Evidence that all permits and approvals required to implement the project have been obtained.
 - e. Evidence that American Rivers has entered into all agreements necessary to implement, operate, and maintain the project with all applicable project partners, landowners, and easement holders.
2. Prior to commencing the project, American Rivers shall enter into and record agreements that the Executive Director determines are required or necessary to protect the public interest in the project.
 3. In implementing the project, American Rivers shall ensure compliance with all applicable impact avoidance, minimization and mitigation measures and monitoring and reporting requirements for the project that are identified in the Initial Study and Mitigated Negative Declaration (IS/MND) and associated Mitigation Monitoring and Reporting Plan (MMRP) for the Three Creeks Parkway Restoration Project, adopted by the Contra Costa County Board of Supervisors on September 27, 2016, as well as Addendum I which was included in the Notice of Determination filed on March 29, 2019, and with any mitigation measures, monitoring, and reporting requirements required by permits, approvals or additional environmental documentation for the project.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 4.5 of Division 21 of the Public Resources Code, regarding the San Francisco Bay Area Conservancy Program.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. The Conservancy has independently reviewed and considered the IS/MND and associated MMRP for the Three Creeks Parkway Restoration Project, adopted by the Contra Costa County Board of Supervisors on September 27, 2016, as well as Addendum 1 to that document, which was prepared in December of 2017. These documents were incorporated into the Contra Costa County Public Works Department Notice of Determination dated March 29, 2018, which is attached to the accompanying staff recommendation as Exhibit 3. The Conservancy finds that the project as mitigated avoids, reduces or mitigates any possible significant environmental effects to a level of less-than-significant and that there is no substantial

evidence that the project will have a significant effect on the environment as that term is defined by 14 Cal. Code Regs. §15382.”

4. American Rivers is a nonprofit organization existing under section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code.”

PROJECT SUMMARY:

Staff recommends that the Conservancy disburse up to \$450,000 to American Rivers to implement the Three Creeks Parkway Restoration Project (“the project”), a multi-benefit project that will improve water quality in Marsh Creek and the San Francisco Bay Delta and provide improved habitat for a diversity of avian, fish, reptile and mammalian species. The project consists of widening a flood control channel, creating a floodplain, removing non-native vegetation, and restoring native vegetation along stretches of the Marsh Creek. The project also includes relocating and improving 4,000 linear feet of the Marsh Creek Regional Trail, and construction of a pedestrian undercrossing under Central Avenue to reduce traffic and improve safety.

The Marsh Creek watershed, located in eastern Contra Costa County, is uniquely situated between the Delta and Mt. Diablo, providing an important ecological corridor in a rapidly urbanizing area. Marsh Creek flows 30 river miles from the eastern slope of Mt. Diablo through the cities of Brentwood and Oakley to the San Joaquin Delta at Big Break. American River’s vision for Marsh Creek is a stream of clean, cold water, surrounded by stands of native trees and a spread of grasses and wildflowers—a vital and healthy habitat corridor between the Delta at Dutch Slough and Mt. Diablo State Park. Over the past decade, American Rivers has been working to achieve this vision through a variety of activities including organizing community members, implementing restoration and fish passage projects, and restoring a two-acre site along the creek. Unfortunately, 6.5 miles of the creek are still confined to a denuded, trapezoidal flood control channel with steep banks vegetated with non-native grasses and no riparian canopy.

Like many urban creeks, water quality in lower Marsh Creek is impaired by pollutants such as mercury, diazinon, E. coli, and toxic sediment. Previous studies have also identified excessive temperature, nitrates, and low dissolved oxygen as water quality problems. Improving water quality in Marsh Creek is particularly critical to providing ecological services to over 1,100 acres of planned tidal marsh restoration at the mouth of Marsh Creek, including the restoration of Dutch Slough.

Much of Marsh Creek’s aquatic and riparian habitat is severely limited, with little complexity, no floodplain wetlands and no shade. The existing engineered channel does not filter or neutralize contaminants, and the Contra Costa Flood Control District’s annual mowing program prevents growth of wood vegetation. High velocities during annual peak flow events, which are greatly increased by runoff from newly urbanized surfaces, presumably flush most of the egg and larval stages of aquatic species downstream. Poor water quality from urban runoff is made worse by the lack of wetlands, shade, and microbial activity in the channel.

Relatively high temperatures combined with low-dissolved oxygen levels likely contributed to five major fish kills on Marsh Creek over the last nine years.

The project consists of widening 4,000 linear feet of the Marsh Creek flood control channel, creating a new floodplain along the low flow channel, and restoring 12.5 acres by planting native riparian and upland vegetation. The project includes relocation of the existing creek side trail (a segment of the Marsh Creek Regional Trail) and construction of a pedestrian underpass under Central Avenue that will improve safety for trail users.

Restoration of 4,000 linear feet of creek channel will establish an active channel width-to-depth ratio that effectively transports sediment throughout the reach without excessive aggradation or deposition. The channel bed will be designed to improve in-stream habitat complexity. Laying back the creek banks throughout the project's reach will allow for bank stabilization and will reconnect the creek to a more natural floodplain system. This modified floodplain will improve both water quality and aquatic species' habitat by encouraging the deposition of sediments on the terrace rather than in the stream bed, and will reduce the speed of water flow, which will reduce the flushing of aquatic species' eggs and larvae downstream.

Laying the slope back will widen the creek corridor throughout the project area, translating to plantable space. 12.5 acres of riparian and upland habitat will be restored and planted with native vegetation. This new area of native vegetation will increase bank stability, encourage groundwater recharge, and in alignment with the RWCQB regulatory mandates, use natural bio-filtration methods to treat runoff and improve water quality. Native vegetation will also create improved habitat for native birds and pollinators, critical players in the full restoration of Marsh Creek's riparian habitat.

In order to create room for the creek setback, the project will reestablish a segment of Marsh Creek Regional Trail in a new footprint. Native trees will be planted along the path creating a wooded creek-side trail. The project will also create a new pedestrian underpass under Central Avenue that will greatly improve trail users' safety.

To ensure the success of the project, American Rivers' science team will oversee the development and implementation of an adaptive management and monitoring plan designed to measure the project's success at achieving the following ecological and social goals: 1) increase the area of frequently inundated floodplain and native vegetation alongside the Marsh Creek flood control channel; 2) improve water quality in Marsh Creek and discharging to the Bay-Delta estuary; 3) provide habitat for a diversity of native avian, fish, reptile, and mammal species, including Swainson's hawks and other species covered by the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), and 4) improve trail user satisfaction. American Rivers will monitor progress toward the ecological and social objectives in accordance with best scientific practices and monitoring guidelines and requirements and will prepare and distribute annual monitoring reports. The monitoring plan will measure the survival, vigor, and diversity of the vegetation planted on the restoration site including the presence of unwanted invasive species; channel stability, erosion, and floodplain aggradation over time; the area, frequency, timing and duration of inundation on restored floodplain; changes in

water quality parameters including macroinvertebrate richness, water temperature, nutrients, methylmercury, and dissolved mercury; the presence and diversity of species using the restored site; and public opinion regarding the value of the restoration. The District will monitor the project to ensure channel stability and flood conveyance capacity. American Rivers and the District have designed the project to accommodate maximum vegetation roughness while meeting flood conveyance objectives to obviate or minimize the need for future channel maintenance for flood conveyance.

The project will be maintained for a minimum of 20 years. Some aspects of the project will be maintained by American Rivers, and American Rivers will enter into agreements with land owners, easement holders, and other project partners including the District, the City, EBRPD, and the Carmel Estates HOA to maintain other aspects of the project.

Site Description: The project site is located in Brentwood, on a 4,000-foot stretch of creek channel that encompasses the confluences of Marsh, Sand, and Deer Creeks – hence the name “Three Creeks Parkway.” The reach upstream of Dainty Ave. was expanded and revegetated in the 1990s, but the entire creek downstream of the site, with the exception of a 900-foot, recently restored site in Oakley, is characterized by a denuded, trapezoidal channel.

The Contra Costa Flood Control District holds a 100-foot-wide right-of-way along the entire creek corridor. Along many portions of Marsh Creek, residential subdivisions back onto the District’s right-of-way, making creek widening very difficult, but this proposed 4,000-foot section of the creek still has several opportunities for creating a wider, creek-oriented parkway. The vast majority of the project will occur on property the District holds rights-of-way or drainage easements over, or properties which they own in fee. The District is the lead agency for the project under CEQA and will grant formal permission for the project in the form of an encroachment permit.

Three elements of the project will occur outside of the properties the District holds easements over or owns outright. These elements will require permission from the various landowners. First, a portion of the flood control channel widening will occur on private property owned by the Carmel Estate Homeowner’s Association (HOA) in what is now a water quality basin on the HOA property. The second property, the “Griffith Parcel” which is located on the west bank of the Marsh Creek flood control channel between Deer and Sand Creeks, will serve as a staging area and as a temporary stockpile for sediment dredged in the construction of this project. The Flood Control District is also in the process of purchasing a construction and maintenance access agreement across the Griffith parcel. No restoration work will occur on the Griffith Parcel. Thirdly, some restoration will occur on small parcels of City owned property between Dainty Avenue and Central Boulevard.

American Rivers and the District have met multiple times with the City of Brentwood, Carmel Estates HOA and the owner(s) of the Griffith Parcel. All landowning parties have indicated their support for the project and preliminarily agreed to make the necessary portions of their property available for the project. American Rivers expects to obtain all final legal assurances from the various landowners in 2019.

Grantee Qualifications: American Rivers is a national non-profit organization that works to restore the country's critical river and watershed basins. American Rivers has been developing aspects of the Three Creeks Parkway Restoration Project since 2004. In 2002, the Natural Heritage Institute (NHI), received a Conservancy grant to create the "Corridor Width Report," and the "Parcel Inventory and Conceptual Stream Corridor Master Plan for Marsh, Sand and Deer Creek," which guided this project's design. NHI staff then negotiated an agreement in 2004 with the City of Brentwood and a creek-side landowner/developer to accommodate creek restoration with a setback and linear park between Sand Creek and the Railroad. American Rivers' staff subsequently took over the project and negotiated the agreements needed to expand the project's scope and funding to its current level.

The Contra Costa Flood Control District is responsible for most of the major drainage facilities in the County and it controls the majority of the project area. American Rivers and the District have been jointly planning and raising funds for the project since July of 2015. Through that partnership the project has now obtained preliminary permission from private property owners to expand the project on the left bank into the Carmel Estates water quality basin and along the critical Hancock property between Sand and Deer Creek.

American Rivers and the Contra Costa Flood Control District have spent years collecting data on the biota, channel conditions and vegetation along Marsh Creek. In 2012, American Rivers used the same proposed restoration approach to restore a two-acre floodplain in Oakley with a unique assemblage of plants native to east Contra Costa County. American Rivers' documentation of salmon utilization of Marsh Creek dates back to the mid-1990s. The project team will continue to monitor water quality, channel habitat, and vegetation success after the project is constructed.

Created in 1934, the EBRPD, has been constructing, operating, and maintaining parks, trails and open space in the East Bay for over 80 years. The District currently manages over 121,397 acres of open space and recreation areas in Contra Costa and Alameda Counties. EBRPD manages and maintains Marsh Creek Regional Trail and will continue to maintain the Trail alongside the restoration project future public access work.

Project History: The Conservancy funded a series of conservation and management plans for the restoration of Marsh Creek, including a grant to the City of Brentwood for the 2001 *Past, Present and Future of the Marsh Creek Watershed* report, (revised 2003), as well as a grant to the Natural Heritage Institute for the 2002 (revised 2015) *Corridor Width Report, and the Parcel Inventory and Conceptual Stream Corridor Master Plan for Marsh, Sand and Deer Creek*, which was later incorporated into the City of Brentwood's Parks, Trails and Recreation Master Plan. In 2011, the Coastal Conservancy, as well as the CA Department of Fish and Wildlife funded the *East Contra Costa County Historical Ecology Study*, a critical document used for the design of the proposed project.

PROJECT FINANCING

Coastal Conservancy	\$450,000
US Environmental Protection Agency	\$1,376,623
Contra Costa Flood Control District	\$2,472,793
Pamilla Project Owner, LLC / Pulte Home Corporation	\$1,000,000
Delta Conservancy	\$1,827,702
California Department of Water Resources	\$744,404
California Natural Resources Agency	\$496,731
Project Total	\$8,368,253

The expected source of funding for this authorization is an appropriation to the Conservancy from the “Water Quality, Supply, and Infrastructure Improvement Act of 2014” (Proposition 1, Division 26.7 of the Water Code, § 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with Section 79730) and may be used “for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state” (Section 79731). Section 79732(a) identifies the specific purposes of Chapter 6, of which the following pertain to this project: subsection (a)(3): restore river parkways and urban river greenways; subsection (a)(4): protect and restore aquatic, wetland and migratory bird ecosystems including fish and wildlife corridors; subsection (a)(9): protect and restore urban watershed health to improve watershed storage capacity, protection of life and property, storm water resource management and greenhouse gas reduction; subsection (a)(11): protect or restore natural system functions that contribute to water supply, water quality, or flood management; and finally, assist in the recovery of endangered species by improving watershed health and instream flows (subsection (a)(12)).

As required by Proposition 1, the proposed project provides multiple benefits. As described above, this project will restore 4,000 feet of flood plain channel, revegetate 12.5 acres of varied riparian and upland habitat, improve water quality in Marsh Creek and the Delta; and improve a highly used, regionally significant recreational trail.

The proposed project was selected through the sixth-round (Bay Area Urban Greening) competitive grant process under the Conservancy’s *Proposition 1 Grant Program Guidelines* adopted in June 2015 (see § 79706(a)). The proposed project meets each of the evaluation criteria in the Proposition 1 Guidelines as described in the “Project Summary” and in the “Consistency with Conservancy’s Project Selection Criteria & Guidelines” sections of this report.

American Rivers has organized a wide variety of other funding sources for this project. The organization has secured a total of \$7,918,253 for this project, including a \$1,376,623 grant from the US EPA’s SF Bay Water Quality Improvement Fund (\$485,780 of which the

Conservancy considers as matching funds for purposes of project scoring under the Conservancy's Proposition 1 Guidelines), two separate Delta Conservancy grants totaling \$1,827,702, \$2,472,793 from Contra Costa Flood Control District, \$744,404 from the California Department of Water Resources' Urban Streams Restoration Program, \$496,731 from the California Natural Resources Agency California River Parkways Program, and \$1,000,000 from the Pamilla Project Owner, LLC / Pulte Home Corporation.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project is undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resource Code Sections 31160-31165, to address resource goals in the San Francisco Bay Area. Section 31162 of the Public Resources Code authorizes the Conservancy to undertake projects and award grants in the nine-county San Francisco Bay Area, including Contra Costa County, that achieve the goals of the San Francisco Bay Area Conservancy Program. All of the proposed project area is within Contra Costa County. The proposed project will serve to achieve the objectives described in:

Section 31162(a), which authorizes the Conservancy to improve public access around the bay, coast, ridgetops, and urban open spaces through trail systems and related facilities. This project will install pedestrian and cycling improvements along Marsh Creek Trail.

Section 31162(b), which authorizes the Conservancy to protect, restore, and enhance natural habitats, connecting corridors, watersheds, scenic areas, and other open-space resources of regional significance. The proposed project will assist in the enhancement of natural habitat for a variety of listed species in the San Francisco Bay Area.

Section 31163(c), which mandates that the Conservancy use specific criteria to develop priority projects within the San Francisco Bay Area Conservancy Program. The project meets the selection criteria under 31163(c), in that it: 1) is supported by and is consistent with adopted regional plans including the Conservancy funded 2001 Past, Present and Future of the Marsh Creek Watershed (revised 2003), the 2002 (revised 2015) Corridor Width Report, and the Parcel Inventory and Conceptual Stream Corridor Master Plan for Marsh, Sand and Deer Creek, which was later incorporated into the City of Brentwood's Parks, Trails and Recreation Master Plan. The project is also consistent with creek restoration recommendations identified in the East Contra Costa County HCP/NCCP; the Contra Costa Flood Control District's 50 Year Plan – From Channels to Creeks; and the Delta Stewardship Council's Strategic Plan, and the Delta Plan; 2) serves a regional constituency by improving water quality discharged into the Bay-Delta, enhancing recreational opportunities along an important connector trail in east Contra Costa County, improving a critical habitat corridor linking Mt. Diablo to the Delta, and restoring riparian and flood plain habitat which may support state and federally protected regional species including Swainson's hawks and western pond turtles; 3) can be implemented in a timely manner; 4) provides the opportunity to implement this multi-benefit project that would be lost or have to be significantly scaled down if the project cannot be implemented in the near future; and 5) will include significant matching funds from the Delta Conservancy.

CONSISTENCY WITH CONSERVANCY'S [2018-2022 STRATEGIC PLAN](#)

GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 12, Objective F**, of the Conservancy's 2018-2022 Strategic Plan, the proposed project will enhance riparian habitats and other watershed functions and process for the benefit of wildlife.

Consistent with **Goal 13, Objective I** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will improve a regionally significant public trail. The existing Marsh Creek trail is heavily used and connects the Science Center at Big Beak Regional Park on the Delta Shoreline to the John Marsh House at Marsh Creek State Park.

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Promotion and implementation of state plans and policies:**
 - a. *California @ 50 Million: The Environmental Goals and Policy Report* (Governor's Office of Planning and Research, 2015) – The Project is consistent with the California @ 50 Million report's pillar of natural resource stewardship. By widening Marsh Creek and restoring its floodplain and native vegetation, this project will follow the report's strategic recommendation to "build resilience into natural systems and prioritize natural and green infrastructure solutions" (pg. 23).
 - b. *CA Wildlife Action Plan* (California Department of Fish and Wildlife, 2015) – The Project is in the Bay Delta-Central Coast Province of the CA Wildlife Action Plan. The restoration will enhance and restore habitats in the region for breeding, foraging and future climate-change related shifts in habitat for a variety of focal species identified in the Plan including Swainson's hawk, the western pond turtle, and the silvery legless lizard.
 - c. *Habitat Conservation Plans/Natural Community Conservation Plans*. The project will restore native vegetation along the creek, which will advance the goals of the East Contra Costa County Habitat Conservation Plan/Natural Community

Conservation Plan (HCP/NCCP) to recover several endangered species in the region, including Swainson's hawk and western pond turtle.

4. **Support of the public:** This project has received broad public support, including support from California Assemblymember Jim Frazier, Contra Costa County Supervisor Diane Burgis, the Contra Costa County Flood Control District, the City of Brentwood, the East Bay Regional Park District, and the Friends of Marsh Creek Watershed. See "Project Letters," Exhibit 4. Wilton Rancheria responded to the Conservancy's Tribal Consultation letter, and subsequent conversations led to the Rancheria's request that a tribal monitor be hired to conduct site visits during the project's construction in addition to the CEQA-required licensed archeologist. \$49,500 of this total grant has been set aside for that purpose.
5. **Location:** The property is located in the City of Brentwood in Contra Costa County, within the jurisdiction of the San Francisco Bay Area Conservancy Program.
6. **Need:** This project is ready to proceed. If Coastal Conservancy funds are not secured, the project may have to be delayed unless and until additional funding is located.
7. **Greater-than-local interest:** The project will improve water quality discharged to the Bay-Delta estuary, enhance recreational opportunities along a popular trail in east Contra Costa County, and improve a habitat corridor that links Mt. Diablo to the Delta. Restoration of riparian and floodplain habitat will improve water quality in Marsh Creek and the estuary and provide a natural amenity along the most heavily used section of regional trail that connects the Science Center at Big Break on the Delta shoreline, through Oakley and Brentwood, and on to the John Marsh house at Marsh Creek State Park. The trail through the site is used by cyclists who sometime travel from the Delta to Mt. Diablo as well as a variety of pedestrians making local trips including school-aged children, parents with very young children, and exercising adults. Finally, the project will improve Marsh Creek's functionality as a wildlife corridor between two biologically important landscape features – Mt. Diablo and the Sacramento-San Joaquin Delta. Numerous native special status species including Swainson's hawk, chinook salmon, western pond turtle, burrowing owl, and river otters currently use Marsh Creek and are expected to benefit from the project.
8. **Sea level rise vulnerability:** The project is located approximately six miles inland from the Bay shoreline, at an elevation well above sea level, and is not expected to be directly impacted by sea level rise.

Additional Criteria

9. **Leverage:** See the "Project Financing" section above.
10. **Readiness:** There has been a multi-agency, multi-year planning process to bring the Three Creeks Parkway Restoration Project to readiness for implementation. CEQA was completed in 2018 and American Rivers has secured funding for project monitoring and ongoing maintenance of the project. Permit applications to resource agencies have been submitted, and some permits have been secured. The project partners expect to begin project construction in May of 2020.

11. **Realization of prior Conservancy goals:** See “Project History” above.
12. **Return to Conservancy:** See the “Project Financing” section above.
13. **Cooperation:** As elaborated upon above, this project is complex and involves a variety of partners, most importantly, the Contra Costa County Flood Control and Water Conservation District, EBRPD, City of Brentwood, Carmel Estates HOA, and a private land owner (Hancock).
14. **Vulnerability from climate change impacts other than sea level rise:** The Project will increase regional resilience to climate change by accommodating larger runoff events, providing shade along a creek, improving a wildlife corridor, and using native plants to improve habitat, reducing the irrigation demand of traditional landscaping. There are currently no trees at all along Marsh Creek and the adjacent regional trail. The project will strive to create a nearly continuous shade canopy along all 4,000 feet of trail and at least 2,400 linear feet of creek. The project will also enable the creek channel to convey water flows from larger flood events that are expected to occur as a result of climate change.
15. **Minimization of greenhouse gas emissions:** Over the short term, project construction will result in short-term emissions associated with ground disturbance and use of construction equipment and vehicles, but these emissions will not exceed the applicable BAAQMD thresholds of significance for construction emissions of criteria pollutants. Project proponents will implement BMPs to control fugitive dust and other construction-phase emissions. Over the long term, the project will be a sink for greenhouse gases and sequester atmospheric carbon and nitrogen. There are no plans to seek carbon credits for the restoration work on site.

CEQA COMPLIANCE:

Staff has independently reviewed and considered the Initial Study and Mitigated Negative Declaration (IS/MND) and associated Mitigation Monitoring and Reporting Plan (MMRP) for the Three Creeks Parkway Restoration Project, adopted by the Contra Costa County Board of Supervisors on September 27, 2016, as well as Addendum I to that document which was prepared in December of 2017. Contra Costa County Public Works Department submitted a Notice of Determination incorporating both documents on March 29, 2018. (Please see the MMRP on pgs. 121-137 of Exhibit 3.) The MND found potentially significant impacts under the categories of air quality, biological resources, cultural resources, geology and soils, and noise. The potential impacts are summarized below along with their proposed mitigation measures:

Air Quality

The construction contractor(s) will implement a variety of BMPs to reduce air quality impacts. These practices will include: watering exposed surfaces (parking areas, staging areas, soil stockpiles, unpaved access roads, etc.); covering all loose material that is hauled off-site; removing visible mud and dirt tracked out to adjacent public roads with wet power vacuum street sweepers at least once daily; prioritizing the completion of paving roadways, driveways, and sidewalks; limiting vehicle speeds on unpaved roads to 15mph; keeping all

construction equipment maintained and tuned; reducing idling time to a max 5 minutes; all diesel-powered equipment larger than 50 horsepower on site for more that two continuous days shall meet US EPA emissions standards for Tier 2 engines; and finally posting a publicly visible sign with Lead Agency's point of contact for dust complaints, as well as a contact number for the air District. All of the measure listed here and in the MMRP will be included in related construction contracts.

Biological Resources

To avoid and minimize impacts to California red-legged frog, Pacific (Western) pond turtle, and silvery legless lizard during construction activities, the project will implement the following measures:

- The project proponent shall apply for coverage under the HCP/NCCP. Participation in the HCP/NCCP, including implementation of appropriate avoidance and minimization measures and payment of applicable fees would provide the project proponent with incidental take coverage for California red-legged frog, Pacific (Western) pond turtle, and silvery legless lizard.
- Seasonal Avoidance. If required by the Streambed Alteration Agreement or Water Quality Certification, work shall be limited to the dry season, from April 15 to October 15.
- Minimize Nighttime Work. If required by the Streambed Alteration Agreement or Water Quality Certification, nighttime construction shall be restricted to avoid effects on nocturnally active species such as California red-legged frog.
- Environmental Awareness Program. Prior to the commencement of construction activities, a qualified biologist shall present an environmental awareness program to all construction personnel working on site. At a minimum the training should include a description of special-status species that could be encountered, their habitats, regulatory status, protective measures, work boundaries, lines of communication, reporting requirements, and the implications of violations of applicable laws.
- Wildlife Exclusion Fencing. Prior to the start of construction, wildlife exclusion fencing (WEF) shall be installed consistent with the HCP/NCCP to isolate the work area from any habitats potentially supporting special-status animals or through which such species may move. The final project plans shall indicate where and how the WEF is to be installed. The bid solicitation package special provisions shall provide further instructions to the contractor about acceptable fencing locations and materials. The fencing shall remain throughout the duration of the work activities, be regularly inspected and properly maintained by the contractor. Fencing and stakes shall be completely removed following project completion.
- Erosion Control. Graded areas will be protected from erosion using a combination of silt fences, fiber rolls, and erosion control netting. All fill and erosion control materials will be certified to be non-toxic and weed free. Additionally, plastic mono-filament netting shall not be used within the project area. Acceptable materials will include coconut coir matting, hydroseeding, blown straw, and other organic mulching materials.

To minimize impacts to Chinook salmon and steelhead, the following measures will be implemented:

- Seasonal avoidance. In-stream work will be limited from June 1 – October 31.
- If in-stream construction or dewatering is required, a qualified biologist will be retained to implement the following measures:
 - a. A preconstruction aquatic survey will be conducted
 - b. Present an environmental awareness program on site, and monitor all in-stream activities.
 - c. If dewatering is proposed – monitor the installation of coffer dams, and check for stranded aquatic wildlife. Dewatering pumps will be fitted with intake screens fitted with mesh no greater than 5mm, and BMPs will be installed to minimize sediment transport during the installation of the dams.
 - d. Native (non-special-status fish spp.) will be relocated up or down stream of the coffer dams. All non-native spp. will be euthanized according to CDFW guidance. If listed salmonids are present NMFS shall be consulted to determine appropriate measures to ensure conformance with ESA. All wildlife encounters will be documented and reported to CDFW.

In order to avoid impacts to nesting Swainson’s hawk, white-tailed kite, burrowing owls, loggerhead shrike, and other bird species protected under the Migratory Bird Treaty Act (MBTA) and California’s Fish and Game Code (CFGC), a series of mitigation measures will be implemented:

- A qualified biologist will be retained to implement all measures below including presenting an environmental awareness program prior to construction which will include descriptions of special-status species that could be encountered, their habitats, regulatory status, protective measures, work boundaries, and implications of violation of various applicable laws.
- Swainson’s hawk is federally listed and is covered under the HCP/NCCP. Every effort should be taken to ensure that no take occurs. Those steps will include:
 - a. Project proponent will apply for coverage under the HCP/NCCP
 - b. Prior to any ground disturbance during nesting season (March 15 - September 15), no more than one month prior to construction the qualified biologist will conduct a preconstruction survey will determine if there are any active Swainson’s hawk nests within 1,000 ft. of the project site.
 - c. If an active nest is present construction activities are not permitted within 1,000 feet of occupied nest. The qualified biologist can coordinate with CDFW and USFWS as to whether specific conditions warrant a smaller buffer.
 - d. Construction activities can proceed prior to September 15 if biologist determines that the young Swainson’s hawks have fledged.

White-tailed kite is a state-listed fully protected species, not covered under the HCP/NCCP. Loggerhead shrike is a state species of special concern; it is not covered under the HCP/NCCP. Incidental take of these birds is not allowed. Burrowing owl is a State species of concern and a

covered species under the HCP/NCCP, to ensure that no take occurs the measures outlined below will be implemented:

- Prior to the removal or significant pruning of any trees, the qualified biologist will inspect them for the presence of raptor nests. This is required year-round. CDFW will be notified if a suspected raptor nest is discovered, and that agency will determine pursuant to CFGC Section 3503.5 whether the tree can be removed.
- Prior to any ground disturbance during nesting season (February 1 – August 31), no more than two weeks prior to construction, the qualified biologist will conduct a preconstruction survey and will determine if there are any active white-tailed kite or other migratory raptor nests within 250 ft. of the project site, and whether there are any active nests of loggerhead shrikes or other migratory passerine nests within 100 ft. of the project site. The biologist will also conduct a survey of all suitable burrowing owl habitat that will be impacted by the project. The survey shall be performed no more than 30 days prior to construction to determine if there are any active burrowing owl nests within 500 ft. of the project site.
- Construction activities are not permitted within the 250 ft. perimeter (or 100-foot perimeter for loggerhead shrike and other passerines) of an occupied nest. However, should site-specific conditions warrant a smaller buffer, the qualified biologist will coordinate with CDFW and/or USFWS to determine appropriate buffer size. Burrowing owl nest sites must be flagged and protected by a designated disturbance-free buffer zone of at least 250 ft.
- Construction activities can proceed prior to August 31 if the biologist determines that the young birds have fledged.
- Burrowing owls may be passively excluded from occupied burrows outside of breeding season (i.e. September 1- January 31) in consultation with CDFW. Passive exclusion is achieved by installing one-way doors on burrow entrances. Doors should be in place for at least 48 hours and monitored to ensure that the nest has been abandoned before construction commences.

In order to avoid, minimize and compensate for unavoidable impacts on waters of the U.S./waters of the State a variety of measures will be implemented. Staff is highlighting some of the measures below, a full list of measures can be found in the MMRP in Exhibit 3 (pg. 129-133).

- Contra Costa County Flood Control and Water Conservation District will obtain coverage under the HCP/NCCP and include BMPs in all relevant construction contracts. Those BMPs will include:
 - a. Grading will be restricted to an elevation above the Ordinary High Water Mark, and long-term impacts will be minimized by limiting the use of hardened structures in preference of bio-engineering solutions as much as is practicable.
 - b. Prior to construction the project will secure all necessary authorizations and permits.
 - c. BMPs will be incorporated into all work within and adjacent to the stream channel and riparian habitat, including:

- Construction staff will be trained by a qualified biologist in avoidance and minimization measures
- If dewatering is necessary, water released downstream of work areas must be as clean or cleaner than water flowing into the work area. The MMRP elaborates on specific methods to filter and settle sediment before releasing the water downstream (Exhibit 3, pg. 130).
- Grading or construction near channels will be isolated with silt fencing and other BMPs to prevent sedimentation. BMPs will be regularly inspected.
- Equipment working in channels must be in good working order and free of leaks of fuel, oil, and hydraulic fluids. Drip pans will be placed under vehicles and equipment over waterways, and spill and cleanup materials will be kept onsite.
- Newly graded earthen channel slopes will be revegetated with a native seed mix developed by a qualified restorationist. Seed mixtures applied for erosion control shall not contain invasive nonnative species and must be composed of native species or sterile nonnative species. Mulch will also be applied to all bare surfaces. Mulch and seed mix must be applied prior to the first winter-season rains.

Cultural Resources

To prevent impacts on cultural resources, the District will retain a qualified archaeologist who will implement the measures identified in the MMRP (Exhibit 3, pg. 133-135).

- A qualified archeologist will train all construction crew workers in reasons for archeological monitoring, regulatory policies and procedures, basic identification of archeological resources, and protocol to follow in case such resources are discovered, conduct initial monitoring, and determine the appropriate level of monitoring for the duration of the project.
- The archeologist will be present on the project site to monitor ground disturbing activities and inspect excavated soils to identify any cultural resources and human remains.
- Should any previously unknown historic or prehistoric resources be discovered, all work within 25 feet of these materials will be stopped until the qualified archeologist has evaluated the potential significance of the finds, and consulted with the lead agency on appropriated mitigation to protect the resources.
- In the event that human remains, or possible human remains, are encountered during project-related ground disturbance, in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of

the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

- The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the California Native American Heritage Commission (NAHC) within 24 hours. The Commission has various powers and duties, including the appointment of a Most Likely Descendant (MLD) to the project. The MLD, or in lieu of the MLD, the NAHC, has the responsibility to provide guidance as to the ultimate disposition of any Native American remains.
- Paleontological resources. Prior to project construction, construction crews will be informed of the potential for encountering significant paleontological resources. Should such resources be discovered all work will stop in the area of the discovery until qualified paleontologist has assessed the significance of the find and has implemented appropriate measures to protect or scientifically remove the find.

Geology and Soils

The proposed project shall comply with all recommendations specified in Section 3.3 of the May 2015 Geotechnical Report prepared by ENGEO.

Noise

To avoid any detrimental noise impacts, the project contractor will ensure that construction activities will be limited to the hours established in the Brentwood Municipal Code, namely Mon-Fri 8am-5pm, and Saturday 9am-4pm.

Staff concurs that there is no substantial evidence that the proposed project will have a significant effect on the environment. Staff therefore recommends that the Conservancy find that the project as mitigated avoids, reduces or mitigates the possible significant environmental effects to a level of less-than-significant and that there is no substantial evidence that the project will have a significant effect on the environment as that term is defined by 14 Cal. Code Regs. §15382.

Upon approval of the project, Conservancy staff will file a Notice of Determination.