

Photo 5. First boulder weir (looking upstream) 3/13/14



Photo 6. Third (lower) boulder weir (looking upstream) 12/16/13



Photo 7. Just downstream of the first boulder weir (looking downstream) 3/13/14



Photo 9. Culvert inlet and pool (looking downstream) 12/16/13



Photo 10. ~75 upstream of project extent (looking downstream) 3/13/14



COMMITTEES APPROPRIATIONS BUSINESS AND PROFESSIONS HEALTH NATURAL RESOURCES RULES

SELECT COMMITTEES CHAIR: DIGITAL DIVIDE IN RURAL CALIFORNIA CAREER TECHNICAL EDUCATION AND BUILDING A 21⁵⁷ CENTURY WORKFORCE WINE

August 16, 2016

Douglas Bosco California Coastal Conservancy 1330 Broadway, 13th Floor Oakland, CA 94612-2530

Assembly California Legislature



JIM WOOD ASSEMBLYMEMBER, SECOND DISTRICT STATE CAPITOL P.O. BOX 942849 SACRAMENTO, CA 94249-0002 (916) 319-2002 FAX (916) 319-2102

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200 S SCHOOL STREET, SUITE D UKIAH, CA 95482 (707) 462-5770 FAX (707) 463-5773

RE: Five Counties Salmonid Conservation Program (5C) Sharber-Peckham Creek Migration Barrier Removal Project

Dear Mr. Bosco:

I write in support of the Five Counties Salmonid Conservation Program (5C) project to replace an undersized, fish migration barrier culvert on Sharber-Peckham Creek in Salyer, California.

The project will introduce water conservation measures that will retain water in the stream while improving community water needs. An approximately 15' by 12' multi-plate arch will replace the existing 4' diameter culvert on Quinby Road allowing passage of all life stages of Coho salmon. Additionally, implementation of water conservation efforts will assure summer habitat for young salmon. I support the 5C in its efforts to implement salmon conservation projects in Northern California communities.

Thank you for your consideration of this important project. If you have any questions, please do not hesitate to contact me.

Respectfully,

JIM WOOD, Assemblymember, 2nd District

Cc: Mark Lancaster



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Trinity County Board of Supervisors Bill Burton

Supervisor District Four P.O. BOX 1613, WEAVERVILLE, CALIFORNIA 96093 PHONE (530) 623-1217 FAX (530) 623-8365

September 7, 2016

Michael Bowen California Coastal Conservancy 1330 Broadway, 13th Floor Oakland, CA 94612-2530

Subject: Letter of Support for Five Counties Salmonid Conservation Program (5C) Sharber-Peckham Creek Migration Barrier Removal Project

Dear Mr. Bowen:

As the Trinity County District 4 Supervisor I represent the residents of Trinity County along the Trinity River from Junction City to the Humboldt County line. I wish to express my support for the Five Counties Salmonid Conservation Program (5C) efforts to remove the undersized culvert on Sharber-Peckham Creek at Quinby Road in Salyer.

This project is located on one of the only low gradient streams in the middle reach of the Trinity River. Coho salmon and steelhead utilize the stream up to the Quinby Creek crossing where the undersized culvert represents an upstream migration barrier. The project will replace the existing 4' wide culvert with an approximately 15' x 12' arch plate that will not only open up habitat but improve access for residents.

Our community values the recreational and natural heritage of the salmon fisheries in the river. This project will help restore and protect the salmon population in our local watershed by replacing a fish passage barrier with structure that will allow for full fish migration.

Respectfully,

Bill Burton

Trinity County Board of Supervisors District 4

Cc: Mark Lancaster

COASTAL CONSERVANCY

Staff Recommendation September 29, 2016

FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE BARRIER REMOVAL: SHARBER-PECKHAM CREEK

Project No. 08-146-04 Project Manager: Michael Bowen

RECOMMENDED ACTION: Authorization to disburse up to \$68,545 to the Northwest California Resource Conservation and Development Council ("Council") to implement a fish passage barrier removal and water quality improvement project on Sharber-Peckham Creek in Trinity County.

LOCATION: Trinity River watershed near Salyer, Trinity County.

PROGRAM CATEGORY: Resource Enhancement

<u>EXHIBITS</u>

Exhibit 1: Project Map and Designs

Exhibit 2: Project Letters

Exhibit 3: 2015 Fisheries Restoration Grant Program Mitigated Negative Declaration (Sharber)

RESOLUTION AND FINDINGS:

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Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251 through 31270 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of up to sixty-eight thousand five hundred and forty-five dollars (\$68,545) to the Northwest California Resource Conservation and Development Council ("Council") to implement a fish passage barrier removal and water quality improvement project on the Sharber-Peckham Creek ("Project"), subject to the following conditions:

1. Prior to the disbursement of Conservancy funds, the Council shall submit for review and approval by the Executive Officer of the Conservancy:

- A. A work program, including a schedule and budget.
- B. The names of all contractors to be retained.

- 2. In carrying out the project, the Council shall comply with all applicable conditions and mitigation measures for the project that are identified in the 2015 Fisheries Restoration Grant Program Mitigated Negative Declaration, as adopted by the California Department of Fish and Wildlife on February 17, 2015, attached to the accompanying staff recommendation as Exhibit 3, and any conditions, mitigation or other measures required by any permit or approval for the project.
- Prior to commencing the project, the Council shall record an agreement with the Conservancy and the landowner pursuant to Public Resources Code section 31116(c) sufficient to protect the public interest in 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 the current Project Selection Criteria and Guidelines.
- 2. The proposed authorization is consistent with the purposes and objectives of Chapter 6 of Division 21 of the Public Resources Code, regarding resource enhancement.
- 3. The Conservancy has independently reviewed and considered the 2015 Fisheries Restoration Grant Program Mitigated Negative Declaration, as adopted on February 17, 2015 by the California Department of Fish and Wildlife pursuant to the California Environmental Quality Act, which is attached to the accompanying staff recommendation as Exhibit 3 and which adequately describes the proposed project, and finds that there is no substantial evidence that the proposed project as mitigated will have a significant effect on the environment, as defined in 14 California Code of Regulations Section 15382.
- 4. The Northwest California Resource Conservation & Development Council is a nonprofit organization existing under section 501(c)(3) of the Internal Revenue Service, and whose purposes are consistent with Division 21 of the Public Resources Code."

PROJECT SUMMARY:

Staff recommends the Conservancy authorize the disbursement of up to \$68,545 to the Northwest California Resource Conservation and Development Council Five Counties Program ("Council") to implement the Sharber-Peckham Creek fish passage improvement project near Salyer in Trinity County (Exhibit 1). This authorization will enable the Council to implement a high priority fish passage barrier project that has languished for more than twenty years.

Most of the Sharber-Peckham Creek watershed is inaccessible to salmonid fish species (coho, chinook, steelhead) and Pacific lamprey due to an undersized, perched road culvert. The road crossing is within 0.1 mile of the stream's confluence with the Trinity River and blocks access to 1.2 miles of habitat. The 3 foot jump at the culvert outlet combined with the steep pipe gradient (4.9%) creates a jump and velocity barrier within the pipe. Observations of adult coho and steelhead congregating at the outlet of the culvert attempting to move upstream have been documented for more than 20 years by US Forest Service fisheries biologists. This project is

listed as one of the highest priority recovery actions listed for the Lower Trinity population unit in the Southern Oregon-Northern California Coho (SONCC) Recovery Plan.

This project will replace the undersized 4' diameter corrugated metal pipe (CMP) culvert with a 12' by 14' multi-plate horizontal ellipse embedded CMP culvert. The new crossing will allow for fish passage on all migration flows. The project will improve bedload and sediment routing to the Trinity River as well as safety and access to area residences.

Site Description:

Sharber-Peckham Creek is tributary to mainstem Sharber Creek. Sharber-Peckham Creek is a unique sub-watershed within the Trinity River watershed. Most of the tributary streams in the middle reach of the river system are very high gradient and are migration barriers for coho and/or too steep gradient for rearing and spawning habitat. The lower 1.2 miles of Sharber-Peckham Creek however is a low gradient channel (<2%), suitable for spawning and rearing, with a broad floodplain formed in the ancient Trinity River channel. The ~2 mile former river meander (Sharber-Peckham Creek and Sharber Slough to the west) became side channels of the river when the river cut through a narrow ridge. The broad channel and floodplain area are heavily forested and the stream is fed by a number of springs and seeps that provide cold water refugia habitat in the summer as well as spawning and overwinter habitat.

The majority of the watershed is within the Six Rivers National Forest. Three larger private parcels in the uppermost watershed and 20 parcels in the lowest reaches account for less than 20% of the watershed area. The project is located at the lowest portion within a 16 parcel subdivision. All parcels in the subdivision are accessed from the road that forms the barrier (Galaxy Drive). Although many parcels draw water from Sharber-Peckham Creek, it has maintained year round flows for at least 40 years, until the late summer 2015 when the combination of drought and diversion dried up sections of the lowest reaches. Landowner water conservation education efforts are planned for the community as a parallel project to this effort.

In addition to being one of the few low gradient channels in the lower 2/3 of the Trinity River system, Sharber-Peckham Creek is believed to be an important wild salmon nursery site with little hatchery genetic influence. The NOAA Fisheries Southwest Fisheries Science Center Lab in Santa Cruz collected tissue samples from juvenile coho salmon in Sharber-Peckham Creek in July 2015 (and previously in 2003) as part of a CA coast-wide coho salmon genetics study. Efforts to preserve the wild salmon genetics are among the highest priority elements of the state and federal coho recovery plans. Coho habitat in this section of the river system is considered especially important because of the effects of Lewiston Hatchery reared salmonids straying and influencing wild salmon genetics. While the upper 20 miles of the Trinity River (Douglas City to Lewiston Dam reach) has more miles of lower gradient streams suitable for coho, the proximity of these reaches to the hatchery increases the number of hatchery stray adults spawning with wild fish. Sharber-Peckham Creek is ~ 70 miles downstream of the dam and hatchery fish straying appears to be minimal.

The Southern Oregon Northern California Coho Recovery Plan states:

"An unnamed tributary (known to U.S. Forest Service biologists as Sharber-Peckham Creek) has one of the strongest populations of coho salmon in the Lower Trinity River. Between the area spanning the Hoopa Tribe reservation and the North Fork Trinity River, Sharber-Peckham Creek is the single greatest producer of coho salmon in the Lower Trinity River. The Sharber-Peckham Creek area is spring-fed, has side channel and overwintering habitat, and is low gradient. The

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coho salmon here are found mainly in an unnamed tributary that emanates from springs between Sharber-Peckham and Quinby creeks near the Forest Service boundary. This unnamed tributary is perennial and during winter, part of Sharber Creek is diverted into this unnamed tributary. This diversion is part of an old mining activity. The rearing habitat is split between Forest Service and private property. The spawning habitat is on private property. Coho are probably using Sharber Creek, but it is overgrown with brush, is difficult to survey, and likely doesn't have the spring support for rearing as does Sharber-Peckham Creek." (SONCC Recovery Plan, p. 38-23).

Project History:

For at least twenty years US Forest Service fisheries biologists have documented this site as a barrier to fish passage. In 2005 the USFS Six Rivers National Forest proposed and designed a road crossing for this site to remedy the problem. Unfortunately, landowners did not accept the design because of concerns that the design, if installed, would require regular maintenance. The USFS and NMFS approached the Council's Five Counties Program ("5C Program") in 2013 to work with the landowners on a new design capable of alleviating maintenance concerns. Utilizing funding remaining from a previous Coastal Conservancy design grant awarded November 6, 2008 (Project No. 08-146), the 5C Program initiated a new design process. In addition, the 5C Program pursued and received in kind technical support from both NMFS and USFS staff for hydraulic analysis and surveying, respectively. In 2014 the flow capacity review was completed by NMFS and partial funding for implementation was obtained from California Department of Fish and Wildlife (CDFW) through the Fisheries Restoration Grant Program.

Subsequently, the 5C Program applied to the Conservancy for matching funds through the Proposition 1, Round 3 solicitation for projects. The 5C Program ranked well in that review process, and staff is recommending the Board approve the requested grant.

The Conservancy has invested heavily in both the design and implementation of fish passage improvement projects throughout California, and particularly on the North Coast. Prior grants to the Council alone have resulted in the reopening of more than 100 miles of high quality salmon and steelhead habitat formerly blocked by poorly constructed road-stream crossings. This in turn has resulted in numerous observations of salmon in previously inaccessible areas such as in Ryan Creek (Eel River) and Lindsay Creek (Mad River).

PROJECT FINANCING

Coastal Conservancy	\$68,545
CDFW – Fisheries Restoration Grant Program	\$102,749
Fish Passage Forum – Fish Habitat Partnership	\$39,998
U.S. Fish and Wildlife Service	\$85,938
Project Total	\$297,230

The expected source of Conservancy funds for this project is the fiscal year 2015/16 appropriation to the Conservancy from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, Water Code § 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with § 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 identifies specific purposes of Chapter 6 and includes: protect and restore aquatic, wetland and migratory bird ecosystems, including fish and wildlife corridors; protect and restore coastal watersheds, including, but not limited to bays, marine estuaries, and nearshore ecosystems; and assist in the recovery of endangered, threatened or migratory species by improving watershed health, instream flows, fish passage and coastal or inland wetland restoration.

The proposed project will help achieve the above-identified Chapter 6 purposes and provides multiple benefits. By removing antiquated and fish-blocking barriers, the project will restore historic access to spawning and rearing habitat, while also improving water quality and reducing the risk of a culvert failure that could deliver significant quantities of sediment into coastal watersheds.

The proposed project was selected through a competitive grant process under the Conservancy's *Proposition 1 Grant Program Guidelines* adopted in June 2015 ("Prop 1 Guidelines"). (See § 79706(a)). The proposed project meets each of the evaluation criteria in the Prop 1 Guidelines as described in further detail in this "Project Financing" section, the "Project Summary" section and in the "Consistency with Conservancy's Project Selection Criteria & Guidelines" section of this report.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed authorization is undertaken pursuant to Chapter 6 of Division 21 of the Public Resources Code, as follows:

Pursuant to §31251, the Conservancy may award grants to local public agencies and nonprofit organizations for the purpose of enhancement of coastal resources which, because of humaninduced events, or incompatible land uses, have suffered loss of natural and scenic values. Consistent with this section, the proposed authorization provides funds to the Council to enhance coastal fishery resources disturbed by incompatible land uses, such as inappropriate culvert installation or legacy landslide events resulting from historic timber operations.

Pursuant to §31251.2(a), "In order to enhance the natural or scenic character of coastal resources within the coastal zone, the Conservancy may undertake a project or award a grant . . . to enhance a watershed resource that is partly outside of the coastal zone. . . ." Consistent with this section, the Council applied for funding from the CDFW to implement the project, and the CDFW awarded funds due to the priority of the proposed action and the potential for matching funds from the Conservancy. In so doing, CDFW, which operates inside and outside of the coastal zone, requested Conservancy assistance to implement this habitat restoration project they are funding that is located outside the coastal zone, but that is in a watershed that reaches the Coastal Zone. This assistance was sought in order to implement a priority project intended to enhance and benefit salmon populations known to travel many miles upstream of the coastal zone boundary in order to fulfill their life history patterns. Indeed, salmon depend on unimpeded access to high quality habitat both within and outside of the coastal zone in order to survive. If salmon and other highly prized aquatic resources are to be maintained and restored to historic levels, projects to improve salmon habitat must be undertaken both within and outside the coastal zone. Section 31251.2 also requires the review and approval of the California Department of Fish

and Wildlife. The Department is a frequent co-funder of Council projects, and supported the implementation of this project.

Pursuant to §31253, "[t]he Conservancy may provide up to the total of the cost of any coastal resource enhancement project" Consistent with this section, staff has proposed the funding amount in light of the fiscal resources of the applicant, the urgency of the matter, and the application of other factors relevant to project eligibility, as detailed in the "Consistency with Conservancy's Project Selection Criteria & Guidelines" section, below.

CONSISTENCY WITH CONSERVANCY'S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 5**, **Objective E** of the Conservancy's 2013-2018 Strategic Plan, the proposed authorization will implement one project to improve barriers to fish passage and provide instream habitat and favorable water temperatures.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed authorization 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. **Promotion and implementation of state plans and policies:** The proposed project is consistent with the following state plans and policies concerning restoration of riparian habitat and increasing natural production of the coastal salmon populations that depend upon that habitat for certain life history stages.
 - a. The proposed project is consistent with the themes for habitat restoration identified in the *Steelhead Restoration and Management Plan for California*. Specifically, that plan advises that "(h)abitat improvement projects should be focused on the many areas throughout the State where steelhead habitat is severely degraded and restoration work is sorely needed" (p. 74). Providing unimpeded access to support the growth and survival of juvenile salmonids is one of the highest priority habitat improvement actions known.
 - b. More recently, and more specifically, the proposed project is consistent with the California Fish and Wildlife issued *Recovery Strategy For California Coho Salmon* in that Sharber-Peckham Creek is identified as a "key population to maintain or improve" within the Lower Trinity River of the Klamath Basin.
 - c. As discussed under Site Description, above, the federal National Marine Fisheries Service 2014, Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon (Oncorhynchus kisutch)

dedicates significant attention to the Sharber-Peckham Creek, and specifically calls for removing this barrier as a high priority (pg. 38-27, SONCC-LTR.5.1.36)

- d. Finally, the project is consistent with the California Water Action Plan, a collaborative effort of the California Natural Resources Agency, the California Environmental Protection Agency, and the California Department of Food and Agriculture. This plan was developed to meet three broad objectives: more reliable water supplies, the restoration of species and habitat, and a more resilient, sustainably manager water resources system. It lays out the state's challenges, goals and actions needed to put California's water resources on a safer, more sustainable path. The plan identifies ten overarching strategies to protect our resources, include two particular to this project that the Conservancy can help implement: 4) Protect and restore important ecosystems (restore coastal watersheds and strategic coastal estuaries to restore ecological health and nature system connectivity to benefit local water systems and help defend against sea level rise, eliminate barriers to fish migration) and 7) Increase flood protection (encourage flood projects that plan for climate change and achieve multiple benefits). By removing a barrier to fish passage while increasing flood protection by designing a project that increases flood routing through the project area, the project is consistent with this report.
- 3. Consistency with purposes of the funding source: See the "Project Financing" section above.
- 4. **Support of the public:** The proposed project enjoys the support of the County of Trinity, U.S. Congressman Jared Huffman, State Senator Mike McGwire, Assemblyman Jim Wood, and many resource agencies including the Department of Fish and Wildlife, NOAA Fisheries and others. (See Exhibit 2).
- 5. Location: The project site is outside the coastal zone, but will benefit numerous coastal resources by providing coastal salmon populations with sufficient access throughout a watershed to fulfill their life history patterns.
- 6. Need: Without this grant funding, the Council could not proceed with the project, and the existing and majority funds for implementation would revert.
- 7. Greater-than-local interest: The project helps fulfill the objectives of state and federal species recovery plans, and is therefore of greater-than-local interest.
- 8. Sea level rise vulnerability: Located well outside the coastal zone, the proposed project suffers no vulnerability from sea level rise.
- 9. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
- 10. Consistency with purposes of the funding source: See the "Project Financing" section above.

Additional Criteria

11. Urgency: The Council's FRGP contract expires December 31, 2016. Construction season typically ends in October due to permitting requirements. Therefore, the Council's funding

available for this project will revert if the Council is unable to complete the project this construction season.

12. Resolution of more than one issue: The proposed remediation of a longstanding fish passage barrier will be completed in a manner that relieves adjacent property owners from excessive maintenance obligations at the site.

- 13. Leverage: See the "Project Financing" section above.
- 14. Conflict resolution: The Council addressed a local design concern and completed a design capable of addressing fish passage needs. As they have done in the past, the Council effectively harmonizes the demands of the Endangered Species Act with the realities of upgrading and maintaining transportation infrastructure. This compatibility may seem intuitive, but it is not, and the conflict between the two frequently prevents otherwise good projects from proceeding.
- 15. **Readiness**: The Council retains its ability and desire to commence and complete the project timely.
- 16. Realization of prior Conservancy goals: "See "Project History" above."
- 17. **Cooperation**: The proposed project includes the cooperation of NMFS, the County of Trinity and the Conservancy, who helped develop and fund the design work that enabled the project proponents to go to construction this season with available funds.
- 18. Vulnerability from climate change impacts other than sea level rise: The project site has been selected as a priority in part due to its hospitability to pacific salmon populations in an era of climate change. Sharber-Peckham Creek with its predictably cool perennial flow offers refuge from hot and dry conditions downstream, thereby enabling juvenile salmonids to relocate to higher altitude and more hospitable conditions within the watershed as conditions change. Moreover, the new design will be better able to transport large storm flows and debris torrents that will likely occur periodically due to increased forest fire occurrence and resulting erosion.
- 19. Minimization of greenhouse gas emissions: The project construction will cause few greenhouse gas emissions. The applicant is committed to ensuring that the contractors will employ best management practices (e.g. low idling rates) during project construction so as to minimize greenhouse gas emissions. The applicant will also make every effort to source construction materials locally. Tree planting will be included as part of the project to increase carbon sequestration rates beyond those occurring with the current Himalayan blackberry dominated riparian zone. Monitoring will be done by visual inspection of number of trees and growth rates over time.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The proposed project is located in the Klamath-Trinity watershed, and is therefore reviewable under the LCPs for Del Norte and Humboldt County. The project is consistent with the applicable LCPs as follows:

Del Norte County

The authorization is consistent with the relevant portions of the Del Norte County Local Coastal . Program (LCP), which was certified by the Coastal Commission on October 12, 1983. It is due

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to the diversity in life history patterns of anadromous fish species that the Del Norte LCP acknowledges the importance of coastal streams and riparian vegetation systems as Sensitive. Coastal Habitat, necessary to both the aquatic life and the quality of water courses. Under the LCP, Chapter VI, the following provisions are made:

"The County shall maintain all existing species of fish, wildlife, and vegetation for their economic, intrinsic and ecological values as well as providing adequate protection of rare and endangered species." (App., p. 55)

"The County should establish riparian corridors along local streams, creeks, and sloughs to maintain their aesthetic appeal, wildlife habitat, control of erosion...." (App., p. 56)

"The County encourages programs (e.g., fish hatcheries, habitat rehabilitation) designed to improve the quality of coastal fisheries and other marine resources." (App., p. 57)

"All surface and subsurface waters shall be maintained at the highest level of quality to insure the safety of public health and the biological productivity of coastal waters." (App.: p. 58)

This recommendation's goal of improving anadromous fish habitat by removing barriers to fish passage, and providing access to historic habitat, thereby maintaining and enhancing the aquatic resources of the county, is consistent with the LCP.

Humboldt County

The authorization is consistent with the relevant portions of the Humboldt Bay Local Coastal Program (LCP), which was certified by the Coastal Commission on October 14, 1982, and which states:

"The biological productivity and the quality of coastal waters, (and) streams . . . appropriate to maintain optimum populations of marine organisms . . . shall be maintained, and, where feasible, restored...." (LCP, 3-55)

"New development within stream channels shall be permitted when there is no less environmentally damaging feasible alternative, where the best feasible mitigation measures have been provided to minimize environmental effects, and shall be limited to . . . wetlands, fishery, and wildlife enhancement and restoration projects. . . ." (LCP, 3-56)

The proposed authorization will prepare projects designed to re-create riparian habitat where it has been lost; restore the natural meander and in stream habitat of the project area; improve sediment flushing by restoring natural geomorphologic processes; and open up previously unavailable habitat; therefore the proposed authorization is consistent with the LCP Policy stated above.

COMPLIANCE WITH CEQA:

The California Environmental Quality Act ("CEQA") and federal consultation process for this project fall within the streamlined programmatic CEQA compliance process of the California Department of Fish and Wildlife Fisheries Restoration Grant Program (the project was partially funded under FRGP). The project also falls within the U.S. Army Corps of Engineers Regional General Permit for the FRGP program. The CDFW is the CEQA lead agency.

Replacement of the undersized 4' diameter corrugated metal pipe (CMP) culvert with a 12' by 14' multi-plate horizontal ellipse embedded CMP culvert will allow for fish passage on all migration flows. The project will improve bedload and sediment routing to the Trinity River as well as safety and access to area residences. Riparian planting and restoration along the stream will also measurably improve habitat with no material risk of adverse effect to the environment. In addition to these long-term beneficial effects, by design and approach, this project construction work will not impact the endangered fish species because best management practices identified in the CDFW's Restoration Manual and in permit terms established by NOAA Fisheries and CDFW will be employed by the grantee and its contractors.

Environmental Review

In January 2015, the California Department of Fish and-Wildlife (CDFW), as lead agency, adopted a mitigated negative declaration (MND) (State Clearinghouse (SCH) No. 2014122048) for the Project and filed a Notice of Determination (NOD) at the SCH on January 21, 2015. The Conservancy is a responsible agency under CEQA (Pub. Resources Code, § 21069). The Conservancy has reviewed and considered the environmental document and finds that the environmental document prepared by CDFW addresses the project's environmental effects. CDFW also adopted a Mitigation Monitoring and Reporting Program (MMRP) for all mitigation measures that were identified in the MND to reduce potential significant impacts to less-thansignificant. (Pub. Resources Code, § 21081.6, subd. (a)(1); Cal. Code Regs., tit. 14, § 15074, subd. (d).)

Incorporation by Reference

Pursuant to CEQA, these Findings of Facts (Findings) support the award of funding based on the MND and the Council's application for funding. All CEQA project impacts, including those discussed in subsection C below, are analyzed in greater detail in the MND, which is incorporated herein by reference.

The MND is available in the offices of the CDFW and the Conservancy, and online at:

https://nrmsecure.dfg.ca.gov/documents/rss/RssHandler.ashx?cat=Fisheries--FRGPRegulatory

and at:

http://www.sbcountyplanning.org/PDF/boards/za/06-15-2015/15CDH-00000-00007/Attachment%20B%20-%20CDFW%20MND.pdf

Findings

The MND identifies potentially significant effects, but revisions to the project agreed to by CDFW prior to public review would avoid the significant effects, or reduce them to a less-thansignificant level; and there is no substantial evidence that the revised Fisheries Restoration Grant Program would result in a significant environmental effect. (Cal. Code Regs., tit. 14, § 15070.)

Potential Significant Impact to Biological Resources: The Project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Facts in Support of Finding: The project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special

status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. This impact will not occur because project activities are designed to improve and restore stream habitat, provide a long-term benefit to both anadromous salmonids and other fish and wildlife. The project will be implemented in a manner that will avoid short-term adverse impacts to rare plants and animals during construction. The mitigation measures that will be implemented to avoid short-term impacts to rare plants and animals are described in the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (Appendix C of the MND) and the MMRP (Appendix B of the IS/MND). The biological resources section of the MMRP proposes mitigation measures that are sufficient to reduce impacts to biological resources to a level that is less than significant. These measures include the following sections of the MMRP: IV. Biological Resources A. (1) through (19); IV. Biological Resources B. (1) through (14); and Biological Resources C. (1) through 10).

Potential Significant Impacts to Cultural Resources: The project could result in significant impacts to cultural resources as a result of construction activities. Ground-disturbance will be required to implement the project at certain locations that, despite efforts to identify cultural resources, have the potential to affect these resources. The procedure for a programmatic evaluation of archeological resources is provided in Appendix E of the 2015 MND.

Facts in Support of Finding: Potential for inadvertent impacts will be avoided through various mitigation measures including, but not limited to:

CDFW shall contract with an archaeologist(s) or other historic preservation professional that meets The Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61, and 48 FR 44716) to complete cultural resource surveys at any sites with the potential to be impacted prior to any ground disturbing activities. Paleontological survey protocols are listed in Appendix D to the MND.

If cultural and/or paleontological resource sites are identified at a project location, CDFW will require one or more of the following protective measures to be implemented before work can proceed: a) fencing to prevent accidental disturbance of cultural resources during construction, b) on-site monitoring by cultural and/or paleontological resource professionals during construction to assure that cultural resources are not disturbed, c) redesign of proposed work to avoid disturbance of cultural resources.

Potential Significant Impact to Geology and Soils: The Project could result in substantial soil erosion or the loss of topsoil.

Facts in Support of Finding: The project will not result in substantial soil erosion or the loss of topsoil. Implementation of the project will contribute to an overall reduction in erosion and sedimentation. Restoring historic land surface profiles, conducting riparian vegetation plantings, and installing erosion reduction structures will prevent chronic erosion and sediment delivery to streams. Road improvements and decommissioning will involve moving large quantities of soil from road fills and stream crossings to restore historic land surface profiles and prevent chronic erosion and sediment delivery to streams. The potential for substantial soil loss associated with these construction activities will be avoided through implementation of the mitigation measures in the geology and soils section of the MMRP (VI. Geology and Soils, (1) - (13)). These mitigation measures will help the project avoid temporary increases in soil erosion and loss of topsoil. The project and proposed mitigation measures in the MMRP are sufficient to reduce impacts to Geology and Soils to a level that is less than significant.

Potential Significant Impact from Hazards and Hazardous Materials:

The project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Facts in Support of Finding: The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The hazards and hazardous materials section of the MMRP (VIII. Hazards and Hazardous Materials, (1) - (14)) proposes mitigation measures that will avoid impacts or reduce impacts from hazards and hazardous materials to a level that is less than significant.

Potential Significant Impact to Hydrology and Water Quality: The Project could violate water quality standards or waste discharge requirements, or otherwise substantially degrade water quality.

Facts in Support of Finding: The project would not violate water quality standards or waste discharge requirements, or substantially degrade water quality. There is the potential for minor short-term increases in turbidity during installation of instream structures or removal of culverts; however, the hydrology and water quality section of the MMRP (IX. Hydrology and Water Quality, (1) - (11)) proposes mitigation measures that will reduce impacts to hydrology and water quality to a level that is less than significant. Some minor short-term increases in turbidity may occur as the streambed around instream structures adjusts during the first high stream flow event following project completion but this is not expected to produce an increase over background turbidity that substantially degrades water quality.

Staff has independently reviewed and considered the MND and has determined that the proposed project is within the scope of the MND and is adequately described in the MND. Staff recommends that the Conservancy find that there is no substantial evidence that the proposed project as mitigated will have a significant effect on the environment.

Staff will file a Notice of Determination upon approval of the project.

Exhibit 1: Project Location Map



8





PLANS FOR CONSTRUCTION OF

SHARBER-PECKHAM CREEK CROSSING REPLACEMENT

2016

COMPLETE DESIGN SUBMITTAL

TITLE PAGE 1 LEGEND AND SYMBOLS 2 3 EXISTING PLAN VIEW DESIGN PLAN VIEW 4 5 DESIGN PROFILE VIEW WITH EG CULVERT PROFILE VIEW 6 CULVERT CROSS SECTION AT INLET 7 ROCK DISTRIBUTION AND PLACEMENT 8 WATER MANAGEMENT 9

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CRE CRE PECKHAN SYMBOLS AND LEGEND SHARBER-

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ROAD EDGE	FENCE L'N	DETOUR R	ARMORED	UTLITES	ELEVATION	AL GNMEN	LWITS OF	CONTROL	WELL IN T

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	CORRUGATED CONTROL POIL EXISTING/NEW ELEVATION EXISTING/NEM	FLOW DIRECT NCH OR NCH WAXIMUM/MININ	RELATIVE DEN ROCK SLOPE STATION	HORIZONTAL: V PERCENT





EXTERN B

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SHARBER-PECKHAM CREEK

DESIGN PROFILE VIEW WITH EG



EXERT

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Installation Specifications:

Installation of the Contech Multi-Plate Eilipse Pipe shall be in accordance with Contech specifications.

installation of Streambed Materiai and bank lining rack shall be in accordance with page 8 and shall not begin until structural backfill has been placed.

Minimum overhead height for normal highway loads for the Contech Multi-Plate Ellipse Pipe is 2 ft. If heavy equipment is to travel over the pipe during construction, a temporary overhead height of 4 ft. is required for the duration of heavy equipment travel.

Material Specifications:

Sand bedding shall conform to 19-3.02E-2 of Caltrans, 2010.

Structural backfill shall conform to 19-3.02 of Caltrans, 2010.

Embankment backfill shall conform to Caltrans 19-3.028.

Streambed Material shall be as specified on page 8.



SHARBER-PECKHAM CREEK



Installation Specifications:

Installation of the Contech Multi-Plate Ellipse Pipe shall be in accordance with Contech specifications.

Installation of Streambed Material and Rock Steps shall be in accordance with page ____ and shall not begin until structural backfill has been placed.

The Contractor must compact impervious material where erosion of backfill material or seepage through backfill material may occur. This approach is particularly important at culvert inlets and outlets.

Minimum overhead height for normal highway loads for the Contech Multi-Plate Ellipse Pipe is 2 ft. If heavy equipment is to travel over the pipe during construction, a temporary overhead height of 4 ft. is required for the duration of heavy equipment travel.

Material Specifications:

Sand bedding shall conform to 19-3.02E-2 of Caltrans, 2010.

Structural backfill shall conform to 19-3.02 of Caltrans, 2010.

Embankment backfill shall conform to Caltrans 19-3.028.

Streambed Material and Rock Ribbons shall be as specified on page ____.



HORIZONTAL DISTANCE [FT.]

SHARBER-PECKHAM CREEK

STREAMBED MATERIAL DISTRIBUTION

D100 = 11.80 IN D84 = 3.80 IN D50 = 1.25 IN D35 = 0.50 IN D28 = 0.08 IN

Installation Specifications:

multi-plate ellipse pipe will consist of the Streambed Material Distribution

Bankline and Rock Ribbon distributions

Streambed material shall be uniformly

mixed and installed such that it does

not stratify during installation. Do not

contaminate Streambed Material with

Fill voids with smaller material and

After installation, material shall be

flooded and further compacted. Continue flooding and compacting

until voids are filled and water

into the the live stream.

compact to obtain a low-permeability

remains flowing on the surface across

the entire length of installed material.

No water used during the flooding

proces shall be allowed to discharge

The streambed mix within the

incorporated as keystones.

with larger rocks from the Rock

D100 = 36.00 IN. D84 = 15.00 IN. D50 = 6.00 IN. D16 = 0.40 IN. D8 = 0.08 IN.

Installation Specifications:

ROCK BANKLINE MATERIAL DISTRIBUTION

Rock shall be placed in accordance with Caltrans, 2010 Section 72 and shall use "Method A" placement as specified in Caltrans, 2010 Section 72-2,03b. No filter cloth shall be installed.

All large rock shall be individually placed and secured by machine tamping. Rocks shall have a minimum of four contact points and be securely supported. Rocks shall not be cable together.

As large rocks are placed, voids shall be filled with smaller size of Rock Bankline gradation and compacted to obtain a low-permeability mass.

After installation, material shall be flooded and further compacted, voids that form during the flooding process shall be filled and the process repeated until not voids form.

No water used during the flooding process shall be allowed to discharge into the live stream.

ROCK RIBBON MATERIAL DISTRIBUTION

D100 = 27.00 IN. D50 = 13.00 IN.

Installation Specifications:

Rock shall be placed in accordance with Caltrans, 2010 Section 72 and using "Method A" placemeent as specified in Caltrans, 2010 Section 72-2.038.

All large rock shall be individually placed and secured by machine tamping. Rocks shall have a minimum of four contact points and be securely supported. Rocks shall not be cable together.

Rock Ribbons shall be made up of primarily D100 rock with D50 filling voids between the larger rock. Streambed material will be placed to make a low-permeability mass.

Grade shall be measured at the low-flow notch of each rock ribbon. Rock ribbons will inside the multi-plate ellipse pipe will be placed approximately 1 channel width, or 14.2 feet apart.

Rock Ribbons may have a one or two footer rock structure. All rock ribbons will be keyed into bank lines.

3 upstream rock ribbons are to be constructed at STA 0+73, 1+33, and 1+88. Three downstream Rock Ribbons are to be constructed at STA 3+00, 3+39, and 3+37. Five Rock Ribbons are to be constructed in the culvert at 14.2 ft. intervals.

GRADE







soil.

mass.

SHARBER - PECKHAM CREEK

WATER MANAGEMENT PLAN

SPECIFIC WATER MANAGEMENT NOTES:

AN ACCESS ROAD WILL BE CONSTRUCTED TO THE UPPER EXTEND OF THE PROJECT AREA SUFFICIENT FOR HEAVY EQUIPMENT TO CONSTRUCT THE WATER MANAGEMENT DAM, AN EXCAVATOR OR BACKHOE WILL BE USED TO DID A SUMP HOLE IN THE CREEK BOTTOM AND CONSTRUCT AN EARTHEN DAM AT THE BANKFULL CREEK LEVEL.

PLASTIC SHEETING WILL BE USED TO FACE THE EARTHEN DAM TO REDUCE INTERSTIAL FLOWS PAST THE DIVERSION, SANDBAGS OR ROCKS WILL BE USED TO SECURE THE PLASTIC

A PLASTIC PIPE SUFFICIENT TO CARRY ANTICIPATED STREAM FLOWS DURING CONSTRUCTION WILL BE INSTALLED IN THE FACE OF THE EARTHEN DAM. THE PIPE WILL BE STABILIZED WITH SAND BAGS AND/OR LARGE ROCKS.

A CHANNEL WILL BE EXCAVATED IN THE CROSSING REPLACEMENT AREA SUFFICENT FOR THE PLACEMENT OF THE DIVERSION PIPE, WHERE ADJACENT HEAVY EXUIPMENT USE, OR VULNERABLE TO DISTURBANCE/DAMAGE. THE PIPE WILL BE BURIED OR OTHERWISE PROTECTED.

THE PIPE WILL RUN FROM THE POINT OF DIVERION. THROUGH THE PROJECT SITE, AND EXIT AT A POINT IN THE LOWER PROJECT AREA SUFFICIENTLY DISTANT FROM CONSTRUCTION ACTIVITIES.

THE PIPE WILL BE SET AT SUCH A GRADE AS TO ALLOW FOR GRAVITY FLOW.

A ROCK ENERGY DISAPPITOR WILL BE PLACED AT THE OUTLET OF THE DIVERSION PIPE TO PREVENT EROSION

THE DIVERSION AND ALL PIPING WILL BE REMOVED WHEN IN-CREEK CONSTRUCTION IS COMPLETE



SHOULD THE GRAVITY DIVERSION BE INADEQUATE DURING ANY PRECIPITATION EVENT CAUSING INCREASE SURFACE FLOWS. THE PUMP DISCHARGE WILL FOLLOW THE GRAVITY DIVERSION SYSTEM. POWER WILL BE SUPPLIED BY THE PRIVATE SYSTEM LOCATED AT THE UPPER EXTENT OF THE PROJECT

A GAS POWERED PUMP WILL BE MADE AVAILABLE TO PUMP SUBSURFACE FLOWS FROM THE SUMP HOLE AND/OR EXCAVATION AREA. SUFFICIENT HOSE WILL BE MADE AVAILABLE TO PUMP WATER TO A STABLE LOCATION LOCATED OUTSIDE OF THE PROJECT AREA. ENERGY DISSAPATORS OR A WATER DISPERSAL SYSTEM WILL BE ATTACHED TO THE END OF THE HOSE TO PREVENT EROSION

FISH EXCLUSION NOTES:

SCREENS (3/32") WILL BE PLACED IN THE CREEK AT THE UPPER AND LOWER EXTENT OF THE PROJECT SUFFICIENT TO BLOCK ALL FISH PASSAGE DURING THE IN-CREEK CONSTRUCTION PERIOD, SCREENS WILL BE INSPECTED, CLEANED AND MAINTAINED DAILY AND AS NECESSARY, WEATHER REPORTS WILL BE MONITORED TO ASSURE ANY INCREASED CREEK FLOWS DO NOT COMPROM ISE SCREEN FUNCTION

THE SCREENS WILL BE REMOVED WHEN IN-CREEK CONSTRUCTION IS COMPLETE

COMMUNITY WATER SUPPY NOTES:

POTABLE WATER WILL BE SUPPLIED BY DELIVERY TO EXISTING PRIVATE WATER STORAGE TANKS LOCATED ON GALAZY DRIVE. DOMESTIC WATER WILL BE TRUCKED FROM SHARBER-PECKHAM CREEK OR THE TRINITY RIVER USING A TEMPORARY HOLDING TANK AND EXISTING WATER RIGHTS AND PERMITTING.

THE TEMPORARY TANK WILL BE REMOVED WHEN IN-CREEK CONSTRUCTION IS COMPLETE

10AD NAME: GALAXY ROAD/FOUNTAIN RANCH ROAD	DESIGNED BY: DC/ML	COUNCIL: FIVE COUNTIES SALMONID CONSERVATION PROGRAM
TOAD NO: PRVT/CO 445	DRAWN BY: DC	SHADRED. PECKHAM CREEK FISH PASSAGE PRO JECT
AGREEMENT NO:	REVIEWED BY: ML	
PLOT DATE: 03/19/2016	APPROVED BY:	WATER MANAGEMENT PLAN