Fisheries Restoration Grant Program Guidelines

Bridge replacement on Quiota Creek, a tributary to the Santa Ynez River, Santa Barbara County
Photo Credit: Fisheries Division, Cachuma Operations and Maintenance Board

California Department of Fish and Wildlife

Ecosystem Conservation Division

Watershed Restoration Grants Branch

In partnership with

National Oceanic and Atmospheric Administration's

Pacific Coastal Salmon Recovery Fund

Program Overview

The California Department of Fish and Wildlife (CDFW) solicits proposals for projects that restore, enhance, or protect anadromous salmonid habitat in watersheds of California or projects that lead to process-based restoration, enhancement, or protection of anadromous salmonid habitat, as well as contribute to the objectives of the California's Salmon Strategy for a Hotter, Drier Future, California Water Resilience Portfolio, California Water Action Plan, State Wildlife Action Plan, and fulfillment of CDFW's mission.

The *Fisheries Restoration Grant Program Guidelines (Guidelines)* contains the information necessary to prepare a complete, fundable proposal. Applicants are encouraged to read this document carefully.

This document is divided into five parts.

Part I provides a general introduction to the Fisheries Restoration Grant Program, as well as its focuses, funding, and relationship to climate change, wildfires, and invasive species.

Part II lists eligible project types and outlines proposal submission procedures, eligibility, and other proposal requirements. In addition, Part II gives guidance for proposal preparation and submission.

Part III provides an overview of the funding available and criteria, including the geographic focus with eligible watersheds.

Part IV provides additional detail on the requirements of the eligible project types. Each project type is composed of four sections: 1) description of eligible projects 2) required Project Type Information, 3) required Supplementary Documents, and 4) information required if the project is funded.

Part V provides definitions and descriptions of required information. References to these definitions appear in parentheses throughout the project descriptions in Part IV, and applicants are strongly encouraged to adhere to these definitions and descriptions when compiling the information for their proposal.

There are four appendices (Appendix A-D) with additional information that guides applicants through the application process and assists with preparation of a proposal. All dates within these Guidelines refer to the Proposal Solicitation Notice (PSN) year.

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Part I: Introduction

The California Department of Fish and Wildlife (CDFW), through the Fisheries Restoration Grant Program (FRGP), supports projects that restore, enhance, and protect anadromous salmonid habitat in anadromous watersheds of California or projects that lead to process-based restoration, enhancement, or protection of anadromous salmonid habitat, as well as contribute to the objectives of the California's Salmon Strategy for a Hotter, Drier Future, State Wildlife Action Plan, California Water Action Plan, and the fulfillment of CDFW's Mission.

Climate Change Considerations

Current scientific evidence supports the need to address climate change impacts. Climate change is expected to alter the behavior and distribution of ocean and coastal species as air and water temperatures change and natural ecosystems are altered. The 2025 California's Salmon Strategy for a Hotter, Drier Future specifies six priorities and 71 actions to build healthier, thriving salmon populations in California. The priorities include (1) Remove Barriers and Modernize Infrastructure for Salmon Migration (2) Restore and Expand Habitat for Salmon Spawning and Rearing (3) Protect Water Flows and Water Quality in Key Rivers at the Right Times to Support Salmon (4) Modernize Salmon Hatcheries (5) Transform Technology and Management Systems for Climate Adaptability and (6) Strengthen Partnerships. The *2018 California Climate Adaptation Strategy* (Strategy)(California Natural Resources Agency) includes, as a guiding principle, to "Prioritize restoration or enhancement of areas with highly or moderately vulnerable ecosystems and with appropriate species and genetic stock to increase the likelihood of population persistence into the future." As a near-term action, the *Strategy* states that for Habitat Protection, "State agencies should continue to work with partner organizations and the broader conservation community to clearly define climate-smart restoration and enhancement, describe what they look like in various ecosystem types, and differentiate

between climate-smart restoration and business-as-usual restoration." The draft 2024 California Climate Adaptation Strategy encourages, "river restoration efforts to enhance the ability of California's lands and watersheds to support thriving wildlife and be resilient in dry and critically dry years." For more than four decades, projects funded by FRGP have enhanced salmonid species survivability potential by restoring and preserving habitat. The understanding of climate change effects place a great urgency on CDFW and its partners to accelerate and continue restoring and preserving habitat that will be resilient to current and future impacts.

FRGP will evaluate how the proposed project has considered climate change effects. For example, how has the project created new habitat that enhance salmonids to be more resilient to climate change effects or how has infrastructure been designed to withstand changing weather events or sea level rise. FRGP will evaluate the extent each project incorporates considerations of climate change in project planning and implementation, such as through incorporation of specific design elements that address climate change impacts. FRGP will evaluate the degree to which the project is expected to increase the survival of salmon and steelhead and improves the resiliency of at-risk habitat and infrastructure. FRGP will assess whether the project has addressed environmental sustainability and allows the proposed project to be robust against climate change effects. .

Environmental Justice

The Department seeks to award projects that consider environmental justice, particularly for communities that disproportionally experience climate change-related consequences. Environmental justice, as defined by the Environmental Protection Agency, is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. FRGP encourages applicants to review, get familiar with, and use environmental justice tools such as the EJSCREEN to minimize

adverse impacts to environmental justice communities (https://ejscreen.epa.gov/mapper/).

California Wildfires

Wildfires have extraordinary impacts on watersheds and forestlands. Canopy, understory, and ground cover are lost, soils change to repel water rather than absorb it, and stable root structures are compromised. The damages resulting from wildfires pose a serious threat to society and salmonid habitat. Mudslides and sediment transport can adversely impact infrastructure and stream habitat. The process of recovery can take years in a wildfire impacted area, but restoration can speed up the process.

Projects that address substantial ecological impacts to watersheds and salmonids caused by wildfire and wildfire suppression will be prioritized among projects with comparable review scores.

Invasive Species

Restoration projects should not be vectors for invasive species, such as New Zealand mud snail, sudden oak death, etc. Personal field gear and heavy equipment used while working in a stream must be properly decontaminated before moving the gear or equipment to a new location even within the same watershed. See Part V: Definitions "Invasive Species Prevention Plan" for required compliance and links to examples of Invasive Species Prevention Plans.

Part II: Solicitation Summary and Proposal Guidance

Eligible Project Types

Proposal applications will be accepted for the types of projects listed below. Eligible project types are listed below within the NOAA Pacific Coastal Salmon Recovery Fund (PCSRF) Priorities. CDFW has developed a two-letter coding system for project types below, which are described in detail in Part IV.

Multiple project types can be chosen. However, only applicable project types pertaining to a proposal should be chosen because specific required project type information is needed for each project type selected. See Part IV: Project Type Requirements. Typically, only the project's primary purpose should be chosen. For example, if a project has riparian plantings associated an instream work it is not an HR (Riparian Restoration) project.

Priority 1 Project Types

Projects that restore, enhance, or protect anadromous salmonid habitat in anadromous watersheds through implementation or design projects that lead to implementation. Approximately 65% of the PCSRF grant award will fund Priority 1 Projects.

FP*+	Fish Passage at Stream Crossings
HB*+	Instream Barrier Modification for Fish Passage
HI*+	Instream Habitat Restoration
HR*+	Riparian Restoration
HS*+	Instream Bank Stabilization
HU*+	Watershed Restoration (Upslope)
PD*	Project Design (100% design)

RE+	Cooperative Rearing
SC*+	Fish Screening of Diversions
WC*+	Water Conservation Measures

Priority 2 Project Types

Projects that consist of watershed-scale or larger effectiveness monitoring (e.g., intensively monitored watershed project). Such projects provide monitoring of habitat restoration actions at the watershed or larger scales and the physical, biological and chemical response, and projects conducting watershed-scale or larger restoration planning (e.g., strategic action plans). CDFW's Fisheries Branch leads efforts that monitor status and trends and directly contribute to population viability assessments for ESA -listed anadromous salmonids. Approximately 25% of the PCSRF grant award will fund Priority 2 activities.

MO	Monitoring Watershed Restoration (Large-scale)
PL*	Watershed Evaluation (Large-scale)

Priority 3 Project Types

Projects that support implementation projects through planning, outreach, and/or education. Approximately 10% of the PCSRF grant award will fund Priority 3 Projects. Proposals for required FRGP programmatic permit effectiveness monitoring are ineligible.

MO	Monitoring Watershed Restoration (Project-scale)
OR	Watershed and Regional Organization
PD*	Project Design (Feasibility study)
PI	Public Involvement and Capacity Building (Includes AmeriCorps projects)
PL*	Watershed Evaluation, Assessment, and Planning (Project-Scale)

TE*	Private Sector Technical Training and Education	WD*+	Water Measuring Devices (Instream and Water Diversion)

*Projects may require the services of a licensed professional engineer or licensed professional geologist to comply with the requirements of the Business and Professions Code section 6700 et seq. (Professional Engineers Act) and section 7800 et seq. (Geologists and Geophysicists Act). **If a proposed project requires the services of licensed professionals, these individuals and their affiliations must be identified in the proposal application. If this information cannot be provided with the application, an explanation must be provided.**

+If the proposal is funded, all implementation project types must have all designs and plans 100% completed prior to grant execution.

Proposals for large projects, with more than one implementation project type (FP, HB, HI, HR, HS, HU, RE, SC, WC or WD) may submit independent proposals for each project type, if there is reason to separate or phase a project, hereinafter referred to as Companion Projects. Applicants considering submitting a Companion Project proposal must contact their CDFW Regional Lead (see FRGP Contacts) for consultation prior to submission. Most projects will not be Companion Projects. Companion Projects are separate, standalone projects that if completed together can realize efficiencies through cost and time savings. In addition to all required elements, Companion Projects must submit, as Supplementary Documents, a Companion Budget and Companion Project Summary that succinctly itemizes the cost savings and efficiencies of completing all project types at the same time. A project can be submitted as a Companion Project if an individual project type of the total project's footprint (area), scope (overall tasks and actions), or budget (overall budget items) makes up more than 35% of any one of these factors.

Companion Projects will be scored as individual projects by their individual project type. If more than one Companion Proposal is

awarded, they will be combined into one grant agreement, utilizing the submitted Companion Budget and Companion Project Summary.

A proposal may include more than one project type and not be a Companion Project. If a proposal has more than one project type, an applicant must provide each project type's Required 'Project Type Information' and Supplementary Documents in the application. Incomplete applications will not be considered for funding.

Eligibility Criteria

Eligible applicants are limited to state and local government agencies, public entities, California Native American Tribes, and nonprofit organizations. Private individuals and for-profit enterprises interested in submitting restoration proposals are encouraged to work with an eligible entity. No project that is required mitigation or used for mitigation under the California Environmental Quality Act (CEQA), California Endangered Species Act (CESA), Federal Endangered Species Act (ESA), National Environmental Policy Act (NEPA), California Forest Practices Act (FPA) or Section 404 of the Clean Water Act (CWA) will be considered for funding. No project that is under an enforcement action by a regulatory agency will be considered for funding.

Application Proposal Package

Applicants may submit an FRGP concept-proposal application at CDFW WebGrants if they would like a consultation about their project with FRGP staff. The concept-proposal application is not required to apply for the full application. FRGP encourages new and experienced applicants, as well as those applying for project design (PD) projects to participate in the concept-proposal and consultation phase. FRGP will be able to provide full application and project guidance during this phase.

Concept-Proposal Information

Concept-proposals must be submitted on-line at CDFW WebGrants. This is the only method of submission. Some instructions for using the on-line process are located on the FRGP PSN website.

During the concept-proposal application phase applicants may consult or discuss with FRGP staff about the project. A complete concept-proposal includes a brief overview of the project plus required attachments such as budget, project worksite maps, and photographs, etc. Responses to concept-proposal questions should be succinct and clear. Budgets are for FRGP to understand the cost of the project scope(s). A budget template is available here: Concept Proposal Budget Template. Concept-proposals will be used to understand the project for the project consultation. It will be reviewed using criteria in Appendix B but will not be scored. Staff will only use the criteria to help provide project feedback.

The concept-proposal process also helps FRGP to engage and understand the spectrum of projects seeking funding from FRGP. It also offers an opportunity to assess project options and permitting needs for the project.

Grace Period

To minimize disqualifying projects during Administrative and Technical Reviews, proposals will be afforded a 1-day grace period to add missing required Supplementary Documents. A missing document is characterized as being blatantly incorrect or absent; documents are not reviewed for content during Administrative Review. The grace period is meant to allow applicants to supply requested information by the following business day (5pm) during the Administrative Review and Technical Review Periods. The process for such grace period is as follows:

1. Proposals missing no more than two (2) Supplementary Documents shall be considered eligible for the grace period. Proposals with more than two missing documents will not be eligible to submit the Supplementary Documents during the grace period.
2. The FRGP Program staff will contact the applicant of the proposals with two or less missing document and request the document(s).
3. The Applicant is given until the next business day (5pm) to submit requested document(s)at WebGrants.
4. Applicants who supply the requested information within the grace period will not have a deduction on their scoresheet.

Awarded Proposals

Proposals will be awarded around December. Awarded proposals must provide the following information to CDFW before grant agreements can be executed. The information is provided here so the applicant may plan and if necessary, budget accordingly. More details can be found in Appendix C.

1. An authorizing resolution from your governing body that confirms its approval of the projects and grant monies (if applicable).
2. Payee Data Record form (STD. 204).
3. 501(c)(3) Certification (for non-profit organizations).
4. Final Landowner Agreements.
5. Drug-Free Workplace Certification (STD. 21).
6. A current (non-expired) federal Negotiated Indirect Cost Rate Agreement (NICRA) if not using the de minimis rate.
7. Federal Funding Accountability and Transparency Act 2006 Contractor Certification (DFW 868). Any project receiving federal funds as part of the grant award is required to complete this form.
8. Subrecipient Risk Assessment (DFW 870). The California Department of Fish and Wildlife (CDFW) is required by the

Office of Management and Budget Guidance Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (§ 200.331 (b)) to evaluate each subrecipient's risk of noncompliance with Federal statutes, regulations, and the terms and conditions of the subaward for purposes of determining the appropriate subrecipient monitoring.

Therefore, any project receiving federal funds as part of the grant award is required to complete a Subrecipient Risk Assessment (DFW 870).

9. NOAA performance measures for each worksite. Performance measures are not required in the FRGP application, but if awarded the grantee will be required to update WebGrants with proposed worksite performance measures. Performance measures are detailed at the end of each Project Type section and may also be reviewed in the PCSRF Data Dictionary.
10. Update the budget in WebGrants to reflect the proposed Detailed Project Budget Spreadsheet. Applicants should only input budget category subtotals in WebGrants but provide an itemized Detailed Project Budget Spreadsheet as a Supplementary Document.

Work shall commence after the grantee has received a fully executed Grant Agreement and a Notice to Proceed. This is anticipated to happen as early as March of the following year.

Public Information

Under Fish and Game Code, Section 1501.5 and Public Resources Code, Section 6217.1, CDFW is authorized to collect information from grant applicants in order to process, track, and ensure completion of funded projects. All information requested on this application is mandatory unless otherwise indicated. An applicant's name and address may be provided to the public, if requested. Other personal information submitted on this application may be released to governmental entities involved with the funding of the project, to law

enforcement agencies pursuant to a court order, or for official natural resources management purposes.

Applicant Tribal Informal Consultation and Collaboration

CDFW recognizes the importance of applicant informal consultation and collaboration with California Native American tribes and that such consultation and collaboration will support the development and/or implementation of the best possible projects. Applicants should budget sufficient time and/or funds in their proposals to support tribal involvement throughout the project, as they would for subcontractors. Applicant informal consultation with a California Native American Tribe does not satisfy or replace CDFW's AB 52 tribal consultation obligations for projects covered by FRGP's CEQA MND.

All projects must include a Tribal Informal Consultation and Collaboration Description. For planning, design, effectiveness monitoring and outreach project types (PL, PD, PI, MO, and OR), applicants must describe reasonable steps they will take to identify, consult, and seek collaboration with California Native American tribes that are culturally and traditionally affiliated with the project's geographic area during the project. For implementation projects (FP, HB, HI, HR, HS, HU, RE, SC, and WC), applicants must describe the steps they have taken to identify, consult, and seek collaboration with California Native American Tribes that are culturally and traditionally affiliated with the project's geographic area while developing the project and where appropriate, how the results of that consultation and potential collaboration are reflected in the project design and/or implementation workplan. Applicants must provide this information in the Tribal Informal Consultation and Collaboration Section of the Landowner Access and Permit Form in their proposal application at WebGrants. However, applicants should carefully avoid including in their application any confidential information that a tribe has shared with them. **Please contact the FRGP Permit Coordinator (see FRGP Contacts) early regarding any questions.**

Applicants should get tribal contact information from the Native American Heritage Commission (NAHC) by filling out the Native American Contact List and Sacred Lands File Search form and emailing it to: NAHC@nahc.ca.gov. With this form, you are requesting from NAHC a search of the Sacred Lands File (SLF) database and a contact list of tribes that are culturally or traditionally affiliated with the project's geographic area. The more information you provide about the project location including, but not limited to, County(s), Quad Name(s), and Public Land Survey System information (Township, Range, and Sections) the more refined SLF search results will be provided. To locate the project quadrangle names, here is a worksite you can use: USGS Maps – topoView. CDFW recommends that when applicants initially contact tribes to request informal tribal consultation, applicants specify that their requests are for informal tribal consultation and not SB 18 or AB 52 formal consultation.

Proposal Development Planning

Applicants are encouraged to work closely with local CDFW and NOAA FRGP staff in the planning and development of proposals in advance of the solicitation release. See FRGP Contacts for a list of CDFW and NOAA contacts.

Workshops highlighting the grant application process and updates to the application submission requirements will be held throughout the state. Locations and dates will be posted on CDFW's Public Meetings and Notices website and on the FRGP Proposal Solicitation Notice website. Sign up to get notifications about upcoming workshops.

Additional information and forms used in examples of Supplementary Documents for applications can be found and downloaded from the FRGP Guidance Tools website.

All information requested in this Solicitation is mandatory unless otherwise indicated.

Failure to submit any required attachment or complete all required application components will make the proposal incomplete. Incomplete proposals will not be reviewed or considered for funding.

If the project is selected for funding, the project proponent shall comply with all applicable federal, state, and local laws, rules, regulations, and/or ordinances. As may be necessary, the grantee shall be responsible for obtaining the services of appropriately licensed professionals to comply with the applicable requirements of the Business and Professions Code including but not limited to section 6700 et seq. (Professional Engineers Act) and/or section 7800 et seq. (Geologists and Geophysicists Act).

If the project is selected for funding and the project proponent fails to perform in accordance with the provisions of the enacted grant agreement, CDFW retains the right, at its sole discretion, to interrupt or suspend the work for which the monies are appropriated or to terminate the grant agreement.

Prevailing Wage

State grants may be subject to California Labor Code requirements, which include prevailing wage provisions. Certain State grants administered by the California Wildlife Conservation Board and the California Department of Fish and Wildlife are not subject to Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 of the Labor Code. For more details, please refer to California Fish and Game Code Section 1501.5 and to the Department of Industrial Relations (DIR) website. Grantee shall pay prevailing wage to all persons employed in the performance of any part of the project if required by law to do so.

Project applicants who intend to pay prevailing wage should indicate this in the project proposal so that associated costs can be considered during the proposal review process.

Indirect Costs

Indirect costs (administrative overhead) are those that cannot be directly assigned to a particular grant activity, but are necessary to the operation of the organization and the performance of the grant project. Indirect costs include operating and maintaining facilities, accounting services, and administrative salaries that cannot be recovered in other budget categories.

In accordance with the Federal Uniform Grant Guidance 2017 (2 CFR part 200) applicants have two options for requesting indirect costs:

1. Use their federal Negotiated Indirect Cost Rate Agreement (NICRA). Federal approval documentation must be included with the proposal as a Supplementary Document.

OR

2. Use a de minimis rate of ten percent (10%) of the Subrecipient's Modified Total Direct Costs (MTDC). The MTDC base cannot include any distorting costs such as equipment, rent, capital expenditures, or any sub-awards, contracts, or consultants beyond the first $25,000. Simple documentation electing to use the de minimis rate must be included with the proposal as a Supplemental Document.

Where the applicant does not have a federally approved rate, any indirect costs incurred over 10% are not eligible for reimbursement. MTDC includes all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first $25,000 of each subaward. MTDC excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs, and the portion of each subaward in excess of $25,000 as stated in 2 CFR section 200.68. Workers' compensation insurance is an allowable fringe benefit as stated in 2 CFR section 200.431.

Subcontractors are subject to the same federal requirements as the applicants. See Federal Uniform Grant Guidance at 2 CFR Part 200.

For information on applying for federal approval of indirect costs contact Lamar Revis at lamar.revis@NOAA.gov. For more information on indirect costs see 2 CFR Part 200.

Build America, Buy America Act

On November 15, 2021, President Biden signed into law the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, which includes the Build America, Buy America Act. Pub. L. No. 117-58, §§ 70901-52. The IIJA requires that as of May 14, 2022 - no federal funds made available for a Federal financial assistance program for infrastructure, including each deficient program, may be obligated for a project unless all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States.

FRGP projects are to comply with Build America, Buy America Act. Applicants should plan and budget their project accordingly to comply with IIJA. https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdfIf the project is funded, the grantee shall certify compliance with the IIJA. For more information see the Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure.

Effective January 10, 2025, through January 9, 2030, tribes awarded projects at or below $2.5 million are granted a waiver from the requirements of section 70914 of the Build America, Buy America Act. The 5-year final waiver also applies to eligible unspent funds from grants awarded to tribes prior to the effective date of the waiver.

Generative Artificial Intelligence (GenAI) Requirements

The State of California seeks to realize the potential benefits of GenAI, through the development and deployment of GenAI tools, while balancing the risks of these new technologies. GenAI is defined in SAM section 4819.2, as "the class of AI models that emulate the structure and characteristics of input data to generate derived synthetic content. This can include images, videos, audio, text, and other digital content."

In March 2024, the California Department of General Services and the Department of Technology issued Technology Letter (TL) 24-01 regarding Executive Order (EO) N-12-23 on Generative Artificial Intelligence (GenAI). The letter incorporated the mandatory GenAI language and GenAI Disclosure and Factsheet (STD 1000) in competitive solicitations, regardless of whether the project involves providing a good or service with GenAI.

Applicants to FRGP must notify the Program/State in the application if their project or solution or service includes, or makes available, any GenAI technology, including GenAI from third parties or subcontractors.

The State has developed a GenAI Disclosure & Factsheet (STD 1000) to be completed by the applicant. Failure to disclose GenAI to the Program/State and submit the GenAI Disclosure & Factsheet will result in disqualification of the application and may void any resulting grant. The Program/State reserves its right to seek any and all relief it may be entitled to as a result of such non-disclosure.

Upon receipt of an applicant's GenAI Disclosure & Factsheet, the Program/State reserves the right to incorporate GenAI Special Provisions into the final grant or reject applications that present an unacceptable level of risk to the Program/State.

Cost Share

Cost share means the portion of project costs not paid by FRGP. Cost share is not required. The amount of cost share does affect an applicant's review score as outlined in the scoresheet instructions. Proposals providing cost share in the form of cash or in-kind services for the execution of the project must specify the source and dollar amount of all proposed cost share. Proposals must clearly specify the material(s) and/or activity(ies) that will be used for cost share. **If a proposal is funded, the claimed cost share cannot be used as match for any other program or entity.** Cost share must be confirmed by the dates listed below to be counted for scoring purposes. Confirmed means secured and available to be expended on the proposed project and within the proposed duration of the project.

Cost share can be either money or resources other than money (in-kind contributions, i.e., labor or materials), provided by the applicant and/or the applicant's partners (e.g., private companies, nonprofit organizations, public agencies, and/or other entities) involved in the implementation of the proposed project. In-kind contributions must be applied directly to the project in order to be considered cost share. When including existing equipment or vehicles in cost share, they must be prorated based on the life of the equipment/vehicles. To be eligible, cost share must be used during the term of the grant. Cost share definitions are as follows:

Cost share not suitable: Projects, personnel, or supplies and equipment previously funded by CDFW; resources expended prior to the term of the grant; salaries of permanently funded employees working for CDFW or NOAA Fisheries; indirect charges; mitigation funds and funds used in enforcement actions; cost share funds that will not be confirmed by December 1 of the PSN year; cost share being used as match for other grants or entities.

Hard cost share: All hard cost share must be **Non-Federal** sourced money or in-kind contributions that do not come from a federal source. Hard cost share can be provided by the applicant and/or the

applicant's partners involved in the implementation of the proposed project. Hard cost must be confirmed prior to August 1 of the PSN year.

Soft cost share: All soft cost share is **Federal** sourced money or in-kind contributions that come from a federal source. Soft cost share can be provided by the applicant and/or the applicant's partners involved in the implementation of the proposed project. Cost share funds (cash or in-kind) that will be confirmed after August 1 of the PSN year up until December 1 of the PSN year can only be counted as soft cost share regardless of funding source.

If a proposal is funded, verification of the proposed cost share is required to complete the grant agreement and all cost share must be secured before the grant agreement can be executed. Project proponents failing to comply with these requirements will be considered non-responsive and ineligible for funding. A certification form, provided by CDFW, will be required for all non-federal cost share. If the project is funded, **all** cost share must be included in the Final Budget. Supporting documentation may be required for cost share expenses.

Advance Payments

Assembly Bill 590 authorizes CDFW to allow advanced payments to qualified nonprofit grantees, not to exceed 25 percent of the total award, upon determination that an advanced payment is essential for the effective implementation of a grant funded project. To be considered for an advanced payment, nonprofit grantees must satisfy the following requirements under California Government Code §11019.3(c)(2):

1. Grantee must submit documentation supporting the need for advanced payment (e.g., invoices indicating the nonprofit does not have sufficient cash or credit to make payments

before state reimbursement, contracts, estimates, payroll records, financial records, etc.)
2. Grantee must demonstrate good standing as a nonprofit under section 501 (c)(3) of the Internal Revenue Code.
3. Grantee must submit an itemized budget for the eligible costs to be funded by an advanced payment.

Items 1-3 will be submitted during the application stage. Upon receipt of an advanced payment, grantees must meet additional requirements, including:

1. Deposit funds into a federally insured account of the recipient entity that provides the ability to track interest earned and withdrawals. Interest earned shall be reported to CDFW and deducted from future reimbursements.
2. Establish procedures to minimize the amount of time that elapses between the transfer of funds and the expenditure of those funds.
3. Provide progress reports on the expenditure of advance funds, including a summary of work completed, proof of expenditure.
4. Return any unused funding provided as advance payment but not expended within the grant term to CDFW.

NOAA Species in the Spotlight and Federal Endangered Species

Applications for Priority 1 project types helping to stabilize relevant NOAA Species in the Spotlight anadromous salmonids and Federal Endangered southern California steelhead to prevent their extinction are encouraged.

California is home to the Central California Coast Coho Salmon and Sacramento River Winter Run Chinook Salmon. Both species are two of nine species considered by NOAA to be among the most at risk of extinction. More information about NOAA's Species in the Spotlight initiative can be found here and in the species specific Priority Action

Plans Central California Coast Coho and Sacramento River Winter Run Chinook Salmon. Additionally, California is home to the southern California steelhead, a Federal and State Endangered species at high risk for extinction. More information can be found in the Southern California Steelhead Recovery Plan.

Part III: Focus Tools

Funding for the Fisheries Restoration Grant Program (FRGP) comes from the National Oceanic and Atmospheric Administration's (NOAA) Pacific Coastal Salmon Recovery Fund (PCSRF).

1. **Species Criteria:** Refer to the regional focus tables. Not all species are priorities in all watersheds. NMFS Recovery Plan population priorities are designated by species and will be considered in the ranking of proposals or prioritization of funding. Focus Species are:
    a. Coho Salmon
    b. Steelhead
    c. Chinook Salmon
2. **Watershed and Detailed Watershed:** The Regional Focus Watershed Tables (Focus Tables) list priority watersheds. There are more specific priorities in some watersheds; refer to the "Detailed Watershed" column in the Focus Tables. Maps of the watersheds are located here: FRGP Regional Focus Watershed Interactive Map and can be found on the FRGP PSN website. These maps are a guideline to help locate your project within a watershed. Focus watershed determination for a project will be based on Focus Tables, not on the maps. Projects that are proposed outside of the listed watersheds will have to further justify why that project location is important for species recovery in the application. There is a minor penalty for projects outside of CDFW's and NOAA's priorities but understand there maybe value in completing the proposed project.
3. **Project Type Criteria:** The proposed project should meet the requirements for one of the project types listed in the Focus Tables. Not all project types are priorities in all watersheds. (See Part II for a definition of project type codes and Part IV for project type descriptions.)

4. **Recovery or Restoration Criteria:** To assist in the recovery of CESA- and ESA-listed Coho Salmon, steelhead, and Chinook Salmon populations and their habitat in California, the proposed project must address at least **one** recovery action (NMFS recovery plans) or task (CA Coho recovery plan) in one of the eight recovery plans listed below. **It is the applicants' responsibility to select and enter the most appropriate recovery action or task for their proposal.**

Geographic Division

There are five CDFW geographic regions eligible for funding:

1. Northern Region
2. North Central Region
3. Bay Delta Region
4. Central Region
5. South Coast Region

The map of CDFW regions is available at https://wildlife.ca.gov/Regions. No individual region shall receive more than 30% of the available grant funds before funding quality projects from the other CDFW regions. Other regions' projects will be assessed before more than 30% of funds are given to any region.

Map 1: General Overview of FRGP Geographic Focus

Additional Funding

If additional funds from state or federal sources become available during this current year's Public Solicitation Notice, funds may be used to fund FRGP proposals. The project must meet the criteria set by the funding source. FRGP will review proposals to determine eligibility and allocate appropriate funding, when available. Prior to executing the agreement for the grant(s), FRGP will confirm the fund terms and conditions are commensurate with the project scope and timeline.

Recovery/Restoration Plans

1. The DFG *Recovery Strategy for California Coho Salmon* (DFG 2004) includes recovery tasks that are acceptable for compliance with the guidelines. The Coho Salmon Recovery Tasks Database contains the most recent changes to the Recovery Strategy and must be used for task selection instead of the document. To see all tasks listed, do not check the high priority box. To see range-wide tasks, click the "Run Range-wide Report" button at the bottom of the web page. Applicants must provide the task number in the proposal if choosing a task from this plan. If you have any questions regarding the Coho Salmon recovery strategy or task database, contact Stephen Swales at Stephen.swales@wildlife.ca.gov.

2. *The Steelhead Restoration and Management Plan for California* (DFG 1996) includes broad recommendations that were not ranked. Recommendations/tasks have since been updated based on the status of steelhead populations coast wide. The updated 2013 *Steelhead Recovery Task List* contains the most recent changes and **must** be used for task selection instead of the Management Plan in order to comply with the guidelines. Applicants must provide the task number in the proposal if choosing a task from this plan. If you have any questions regarding the DFG steelhead plan or task list, contact Jon Nelson at, jonathan.nelson@wildlife.ca.gov.

3. *Recovery Plan for the Evolutionarily Significant Unit of Southern Oregon/Northern California Coast Coho Salmon* Public Final: September 2014 (SONCC Plan) The updated recovery actions for each population area can be found in the "2022 FRGP SONCC Recovery Actions" Excel table, available at: https://wildlife.ca.gov/Grants/FRGP/Guidance. The link will download a searchable Excel file that lists all current Federal recovery action steps for California's SONCC coho salmon populations. Applicants must provide a specific Step ID number (e.g., SONCC-HBT-2.2.3.2) from this updated table if choosing a task from this plan. If you have any questions regarding the SONCC Plan, you may contact Julie Weeder at julie.weeder@noaa.gov.

4. *Coastal Multispecies Final Recovery Plan, North Central California Coast Recovery Domain: California Coastal Chinook Salmon, Northern California Steelhead, Central California Coast Steelhead* NOAA: October 2016. Action steps for each species can be found in the "Supporting Materials" links for each area/species found on the website above. The link will download an Excel file with recovery actions from the recovery plan. The recovery actions for ESU/DPS level and population level are found in their own unique worksheet tab. The population tabs are organized by diversity strata and then alphabetically within each stratum. The ESU/DPS or population recovery action step must be referenced by the unique Action Step ID number (e.g., GarcR-NCSW-1.1.1.1). Applicants must provide the specific recovery Action ID number at the Action Step level in the proposal if choosing a task from this plan. If you have any questions regarding the Coastal Multispecies Plan, you may contact Erin Seghesio erin.seghesio@noaa.gov or Julie Weeder julie.weeder@noaa.gov.

5. *Recovery Plan for Evolutionarily Significant Unit of Central California Coast Coho Salmon* Final Plan September 2012 (CCC Plan). An excel workbook of all the recovery actions can be found under the "Supporting Materials" link. Eligible recovery actions from this plan are the specific action steps for the

species level (ESU), Diversity Strata, and Watershed (i.e., population). The ESU, Diversity Stratum, and watersheds have their own unique worksheet tab. The watershed tabs are organized alphabetically. If choosing a task from the CCC Coho Salmon Recovery Plan, applicants must reference the unique Action Step ID number associated with the specific action step in an eligible watershed (e.g., Albion River AlR-CCC-1.1.1.1). If you have any questions regarding the NOAA CCC Coho plan, you may contact Erin Seghesio at erin.seghesio@noaa.gov.

6. *Recovery Plan for the Evolutionarily Significant Units of Sacramento River Winter-Run Chinook Salmon and Central Valley Spring-Run Chinook Salmon and the Distinct Population Segment of California Central Valley Steelhead* NOAA Final: July 2014. Specific recovery actions listed by watershed can be found under the "Spreadsheet of Recovery Actions" link. These actions must be referenced by the unique recovery Action ID number (e.g., MIC- 1.4). Applicants must provide the specific recovery Action ID number in the proposal if choosing a task from this plan. If you have any questions regarding the Central Valley Plan, you may contact Brian Ellrott at Brian.Ellrott@noaa.gov.

7. *South-Central California Steelhead Recovery Plan* NOAA Final: December 2013. For this plan, specific recovery action may only be drawn from the following tables: Interior Coast Range BPG, Tables 9-4 to 9-6; Carmel River Basin BPG, Tables 10-4; Big Sur Coast BPG, Table 11-4 to 11-10; San Luis Obispo Terrace BPG, Tables 12-4 to 12-14; South-Central California Steelhead Research and Monitoring, Adaptive Management, Table 13-1. Applicants must provide the specific recovery action number in the proposal if choosing a recovery action from this plan. If you have any questions regarding the NOAA steelhead plan, you may contact Mark Capelli at mark.capelli@noaa.gov.

8. *Southern California Steelhead Recovery Plan* NOAA Final Version: January 2012. There is no separate excel table of recovery actions. For this Plan, specific recovery actions may only be drawn from the following tables: Monte Arido BPG, Tables 9-4 to 9-7; Conception Coast BPG, Tables 10-4 to 10-13; Santa Monica Mountains BPG, Tables 11-4 to 11-8; Mojave Rim BPG, Tables 12-4 to 12-6; Santa Catalina Gulf Coast BPG, Tables 13-4 to 13-13; Southern California Steelhead Research, Monitoring, and Adaptive Management, Table 14-1. Applicants must provide the recovery action number in their proposal application if choosing a recovery action from this plan. If you have any questions regarding the NOAA steelhead plan, you may contact Mark Capelli at mark.capelli@noaa.gov.

Proposal Review Criteria

All proposals will be reviewed using the scoresheets in Appendix B of these Guidelines. Proposals that pass Administrative Review will be reviewed by 3-4 technical reviewers. Proposal reviewers develop a single review scoresheet called the Consensus Scoresheet. Proposals will be ranked for funding by their Consensus Scoresheet score.

In the event limited funding is available for equally scored projects, requesting relatively comparable amounts, the following tiebreakers may be used: 1. The project that scores the highest in Benefits. 2 The project that scores the highest in Need. 3. The Region with least amount of funded projects.

Regional Focus Watersheds Tables and Reference Documents

An online mapping tool depicting focus watersheds is available here: FRGP Regional Focus Watershed Interactive Map and on the Proposal Solicitation Notice website. The Region Focus Watershed Table lists priority watersheds by the HUC Watershed, and the Detailed Watershed lists any restrictions in the HUC Watershed. Salmonid recovery species priorities are designated in the Species column and will be considered in the ranking of proposals or prioritization of funding. Prioritized project types within a watershed are listed in the Project Type(s) Column.

Below each region's Focus watershed Table is a table of reference documents in a Reference Document Table. Reference documents are intended to help the applicant understand CDFW's and NOAA's priorities and assist with applicant's responses in the application. Links to the documents are provided in the Link to Document column, if available. When not available a contact email is listed. Please reach out to that contact for a copy of that reference document.

Project Type Abbreviations: FP = Fish Passage at Stream Crossings, HB = Instream Barrier Modification for Fish Passage, HI = Instream Habitat Restoration, HR = Riparian Restoration, HS = Bank Stabilization, HU = Watershed Restoration – Upslope, MO = Monitoring Watershed Restoration, OR = Watershed and Regional Organization, PD = Project Design, PI = Public Involvement and Capacity Building, PL = Watershed Evaluation, Assessment and Planning, RE = Cooperative Fish Rearing, SC = Fish Screening of Diversions, TE = Private Sector Technical Training and Education Project, WC = Water Conservation Measures, WD = Water Measuring Devices (Instream and Water Diversions)

Region 1 Focus Watersheds Table

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R1 01	Upper Klamath HUC 8	Upper Klamath River mainstem and tributaries (above the site of former Iron Gate Dam, to the Oregon border)	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, SC, TE, WC, WD
R1 02	Upper Klamath HUC 8	Upper Klamath River mainstem and tributaries (below the site of former Iron Gate Dam)	Coho, Steelhead, Chinook	FP, HB, HI, HR, MO, PD, PI, PL, SC, TE, WC, WD
R1 03	Lower Klamath HUC 8	Mid-Klamath tributaries in the following HUC 10 watersheds: Indian Creek, Thompson Creek, Elk Creek, Clear Creek, Ukonom Creek, Rock	Coho, Steelhead, Chinook	HB, HI, HR, MO, PD, PI, PL, SC, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
		Creek, Bluff Creek, Dillon Creek		
R1 04	Scott HUC 8	Scott River mainstem and tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, PL, SC, TE, WC, WD
R1 05	Shasta HUC 8	Shasta River mainstem and tributaries (below Dwinnel Dam)	Coho, Steelhead, Chinook	FP, HB, HI, HR, MO, PD, PI, PL, SC, TE, WC, WD
R1 06	Salmon HUC 8	Salmon River and tributaries	Coho, Steelhead, Chinook	HB, HI, HR, HU, MO, PD, PI, PL, TE
R1 07	Smith HUC 8	Smith River mainstem, estuary, tributaries, and Smith River Plain	Coho	FP, HB, HI, HR, MO, PD, PI, PL, TE

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R1 08	Smith HUC 8	Wilson Creek mainstem, estuary and tributaries	Coho, Steelhead, Chinook	HB, HI, MO, PD, PI, PL, TE
R1 09	Lower Klamath HUC 8	Lower Klamath River estuary and tributaries in the following HUC 10 watersheds: Turwar Creek, Tectah Creek, Blue Creek	Coho, Steelhead, Chinook	FP, HB, HI, HU, MO, PD, PI, PL, TE
R1 10	Trinity HUC 8	Lower Trinity River mainstem and tributaries in the following HUC 10 watersheds; New River, Big French Creek – Trinity River, Horse Linto Creek – Trinity River	Coho, Steelhead, Chinook	FP, HB, HI, HU, MO, PD, PI, PL, SC, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R1 11	Trinity HUC 8	Upper Trinity River mainstem and tributaries in the following HUC 10 watersheds: Weaver Creek – Trinity River, Canyon Creek, North Fork Trinity River (below Lewiston Dam)	Coho, Steelhead, Chinook	FP, HB, HI, MO, PD, PI, PL, SC, TE, WC, WD
R1 12	South Fork Trinity HUC 8	South Fork Trinity mainstem, Hayfork Creek mainstem and tributaries	Coho, Steelhead, Chinook	HB, HI, HU, MO, PD, PI, PL, SC, TE, WC, WD
R1 13	Mad-Redwood HUC 8	Mad River mainstem, estuary and tributaries (below Ruth Lake Dam)	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, PL, TE, WC
R1 14	Redwood Creek HUC 10	Redwood Creek mainstem, estuary, and tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, PL, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R1 15	Little River HUC 10	Little River mainstem, estuary and tributaries	Coho, Steelhead, Chinook	FP, HB, HI, MO, PD, PI, PL, TE
R1 16	Humboldt Bay - Frontal Pacific Ocean HUC 10	Humboldt Bay including the bay, estuary and tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, PL, TE
R1 17	Mattole River HUC 10	Mattole River mainstem, estuary and tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, MO, PD, PI, PL, TE, WC, WD
R1 18	Lower Eel HUC 8	Van Duzen River mainstem, Lower Eel River mainstem and estuary, and tributaries in the following HUC 10 watersheds; Larabee Creek, Lower Van Duzen River, Price Creek-Eel River, Salt River-Eel River, Upper Van Duzen	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
		River, Yager Creek HUC 10		
R1 19	South Fork Eel HUC 8	South Fork Eel River mainstem and the following tributaries:, Elder Creek, Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek and Hollow Tree Creek	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, TE, WC, WD
R1 20	Lower Eel HUC 8	Eel River mainstem, Woodman Creek and its tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, TE, WC, WD
R1 21	Middle Fork Eel HUC 8	Middle Fork Eel River mainstem, Beaver Creek and Balm of Gilead Creek	Steelhead, Chinook	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R1 22	Upper Eel HUC 8	Middle Eel River mainstem and tributaries in the following HUC 10 watersheds: Tomki Creek, Outlet Creek, Bucknell Creek - Eel River	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, TE, WC, WD
R1 23	Usal Creek HUC 12	Usal Creek mainstem, estuary and tributaries	Coho, Steelhead	HB, HI, HR, HU, MO, PD, PI, PL, TE
R1 24	Cottaneva Creek HUC 12	Cottaneva Creek mainstem, estuary and tributaries	Coho	HB, HI, HR, HU, MO, PD, TE
R1 25	Juan Creek-Frontal Pacific Ocean HUC 12	Juan Creek and Howard Creek mainstems, including estuaries	Coho, Steelhead	HB, HI, HR, MO, PD, TE

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R1 26	Wages Creek HUC 12	Wages Creek mainstem, estuary and tributaries	Coho, Steelhead	HB, HI, HR, MO, PD, TE
R1 27	Ten Mile River HUC 10	Ten Mile River mainstem, tributaries and estuary	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, TE, WC
R1 28	Pudding Creek HUC 12	Pudding Creek mainstem, estuary and tributaries	Coho, Steelhead	FP, HB, HI, HR, MO, PD, PI, PL, TE, WC
R1 29	Noyo River HUC 10	Noyo River mainstem, estuary and tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, PL, TE, WC
R1 30	Hare Creek-Frontal Pacific Ocean HUC 12	Caspar Creek and Hare Creek mainstems, estuaries, and tributaries	Coho, Steelhead	FP, HB, HI, HR, MO, PD, PI, PL, TE, WC

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R1 31	Big River HUC 10	Big River mainstem, estuary and tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, PL, TE, WC
R1 32	Albion River HUC 12	Albion River mainstem, estuary and tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HU, MO, PD, PI, PL, TE, WC
R1 33	Lower Navarro River, North Fork Navarro River, North Branch North Fork Navarro River, South Branch North Fork Navarro River, Upper Navarro River and Indian Creek HUC 12 watersheds	Lower Navarro River mainstem, estuary and tributaries; North Fork Navarro River mainstem and tributaries; Mill Creek mainstem and tributaries; Indian Creek mainstem and tributaries; and Floodgate Creek mainstem	Coho, Steelhead	FP, HB, HI, HR, HU, MO, PD, PI, PL, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R1 34	Lower Garcia River and Middle Garcia River HUC 12 watersheds	Garcia River mainstem, estuary and tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, MO, PD, PI, PL, TE, WC, WD
R1 35	North Fork Gualala River HUC 12	North Fork Gualala River mainstem and tributaries	Coho, Steelhead	FP, HB, HI, HR, MO, OR, PD, PI, PL, TE, WC, WD
R1 36	South Fork Gualala River-Gualala River HUC 12	Gualala River estuary	Coho, Steelhead	FP, HB, HI, HR, HU, MO, PD, PI, PL, TE
R1 37	Battle Creek HUC 8	Battle Creek HUC 8	Steelhead, Chinook	HB, HI, HR, HU, MO, PD, PI, PL, WC, WD
R1 38	Mainstem Sacramento River (Below Keswick Dam)	Mainstem Sacramento River (Below Keswick Dam, located in Region 1)	Steelhead, Chinook	HB, HI, HR, MO, PD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R1 39	McCloud River HUC 8	McCloud River HUC 8	Steelhead, Chinook	PD, PL, RE
R1 40	Deer Creek HUC 10	Deer Creek HUC 10	Steelhead, Chinook	HB, HI, HR, HU, MO, PD, SC, WC
R1 41	Mill Creek HUC 10	Mill Creek HUC 10	Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, SC, WC

Region 1 Reference Documents

Document Name	Stream, Watershed, or Area	Link to document or contact email
South Fork Eel River SHaRP Plan (2021)	The following streams and their tributaries: SF Eel River headwaters (Elder Creek), Bull Creek,	https://media.fisheries.noaa.gov/2021-05/SFER-SHaRP-Plan-FullPlan-FINAL-508.pdf?null

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek	
SONCC Coho Salmon Status Review (2024)	The following streams and their tributaries: Upper Klamath River, Mid-Klamath River, Scott River, Shasta River (below Dwinnel Dam), Salmon RIver, Upper Trinity River (below Lewiston Dam), South Fork Trinity River, Hayfork Creek, Mainstem Eel River, Middle Fork Eel River (Tomki, Outlet, Bucknell Creeks), South Fork Eel River [SF Eel River headwaters (Elder	Not yet available, please contact Trevor.Tollefson@wildlife.ca.gov for updates

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek] The following streams, their tributaries, and their estuaries: Smith River, Wilson Creek, Lower Klamath River, Mad River below Ruth Lake Dam, Redwood Creek, Little River, Humboldt Bay and its tributaries, Mattole River, Lower Eel River (Eel River estuary, Van Duzen River, Salt River, mainstem Eel River from Fernbridge	

Document Name	Stream, Watershed, or Area	Link to document or contact email
	to confluence with Dean Creek).	
SONCC Coho Salmon Federal Recovery Plan (2014)	The following streams and their tributaries: Upper Klamath River, Mid-Klamath River, Scott River, Shasta River (below Dwinnel Dam), Salmon River, Upper Trinity River (below Lewiston Dam), South Fork Trinity River, Hayfork Creek, Mainstem Eel River, Middle Fork Eel River (Tomki, Outlet, Bucknell Creeks), South Fork Eel River [SF Eel River headwaters (Elder Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian	https://www.fisheries.noaa.gov/resource/document/final-recovery-plan-southern-oregon-northern-california-coast-evolutionarily

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Creek, Standley Creek, and Hollow Tree Creek] The following streams, their tributaries, and their estuaries: Smith River, Wilson Creek, Lower Klamath River, Mad River below Ruth Lake Dam, Redwood Creek, Little River, Humboldt Bay and its tributaries, Mattole River, Lower Eel River (Eel River estuary, Van Duzen River, Salt River, mainstem Eel River from Fernbridge to confluence with Dean Creek)	

Document Name	Stream, Watershed, or Area	Link to document or contact email
NC Steelhead Status Review (2024)	The following streams and their tributaries: Mainstem Eel River, Middle Fork Eel River (Tomki, Outlet, Bucknell Creeks), South Fork Eel River [South Fork Eel River headwaters (Elder Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek] The following streams, their tributaries, and their estuaries: Smith River, Wilson Creek, Mad River below Ruth Lake Dam, Redwood Creek, Little River, Humboldt Bay and its	https://www.fisheries.noaa.gov/s3//2024-07/nc-steelhead-5-yr-review-2024.pdf

Document Name	Stream, Watershed, or Area	Link to document or contact email
	tributaries, Mattole River, Lower Eel River (Eel River estuary, Van Duzen River, Salt River, mainstem Eel River from Fernbridge to confluence with Dean Creek)	
NC Steelhead Federal Recovery Plan (2016)	The following streams and their tributaries: Mainstem Eel River, Middle Fork Eel River (Tomki, Outlet, Bucknell Creeks), South Fork Eel River [South Fork Eel River headwaters (Elder Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek]	https://www.fisheries.noaa.gov/resource/document/final-coastal-multispecies-recovery-plan-california-coastal-chinook-salmon

Document Name	Stream, Watershed, or Area	Link to document or contact email
	The following streams, their tributaries, and their estuaries: Smith River, Wilson Creek, Mad River below Ruth Lake Dam, Redwood Creek, Little River, Humboldt Bay and its tributaries, Mattole River, Lower Eel River (Eel River estuary, Salt River, Van Duzen River, mainstem Eel River from Fernbridge to confluence with Dean Creek)	
CC Chinook Salmon Status Review (2024)	The following streams and their tributaries: Mainstem Eel River, Middle Fork Eel River (Tomki, Outlet, Bucknell Creeks),	Not yet available, please contact Trevor.Tollefson@wildlife.ca.gov for updates

Document Name	Stream, Watershed, or Area	Link to document or contact email
	South Fork Eel River [South Fork Eel River headwaters (Elder Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek] The following streams and their estuaries: Smith River, Mad River below Ruth Lake Dam, Redwood Creek, Little River, Humboldt Bay and its tributaries, Mattole River, Lower Eel River (Eel River estuary, Van Duzen River, Salt River, mainstem Eel River from Fernbridge to	

Document Name	Stream, Watershed, or Area	Link to document or contact email
	confluence with Dean Creek)	
CC Chinook Salmon Federal Recovery Plan (2016)	The following streams and their tributaries: Mainstem Eel River, Middle Fork Eel River (Tomki, Outlet, Bucknell Creeks), South Fork Eel River [South Fork Eel River headwaters (Elder Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek] The following streams, their tributaries, and their estuaries: Smith River, Mad River below Ruth Lake Dam,	https://www.fisheries.noaa.gov/resource/document/final-coastal-multispecies-recovery-plan-california-coastal-chinook-salmon

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Redwood Creek, Little River, Humboldt Bay and its tributaries, Mattole River, Lower Eel River (Eel River estuary, Van Duzen River, Salt River, mainstem Eel River from Fernbridge to confluence with Dean Creek)	
Sacramento River Winter-run Chinook, Central Valley Spring-run Chinook, Central Valley Steelhead Federal Recovery Plan (2014)	The following streams and their tributaries: Mainstem Sacramento River (Below Keswick Dam), Battle Creek, McCloud River, Deer Creek, and Mill Creek.	https://www.fisheries.noaa.gov/resource/document/recovery-plan-evolutionarily-significant-units-sacramento-river-winter-run
CCC Coho Salmon Status Review (2023)	The following streams, their tributaries, and their estuaries: Usal	https://media.fisheries.noaa.gov/2023-05/5-year-status-review-ccc-coho.pdf

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Creek, Cottaneva Creek, Juan Creek, Howard Creek, Wages Creek, Ten Mile River, Pudding Creek, Noyo River, Caspar Creek, Hare Creek, Big River, Albion River, Navarro River, Garcia River,North Fork Gualala, South Fork Gualala River, Russian River mainstem downstream of Coyote Dam, Russian River tributaries from Maacama Creek to estuary.	
CCC Coho Salmon Recovery Plan (2012)	The following rivers/creeks and their tributaries: North Fork Gualala, and South Fork Gualala Rivers.	https://www.fisheries.noaa.gov/resource/document/recovery-plan-evolutionarily-significant-unit-central-california-coast-coho

Document Name	Stream, Watershed, or Area	Link to document or contact email
	The following streams, their tributaries, and their estuaries: Usal Creek, Cottaneva Creek, Juan Creek, Howard Creek, Wages Creek, Ten Mile River, Pudding Creek, Noyo River, Caspar Creek, Hare Creek, Big River, Albion River, Navarro River, Garcia River, Russian River mainstem downstream of Coyote Dam, Russian River tributaries from Maacama Creek to estuary.	

Document Name	Stream, Watershed, or Area	Link to document or contact email
Recovery Strategy for California Coho Salmon (2004)	The following streams and their tributaries: Upper Klamath River, Mid-Klamath River, Scott River, Shasta River (below Dwinnel Dam), Salmon RIver, Upper Trinity River (below Lewiston Dam), South Fork Trinity River, Hayfork Creek, Mainstem Eel River, Middle Fork Eel River (Tomki, Outlet, Bucknell Creeks), South Fork Eel River [SF Eel River headwaters (Elder Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek].	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=99401&inline

Document Name	Stream, Watershed, or Area	Link to document or contact email
	The following streams, their tributaries, and their estuaries: Smith River, Wilson Creek, Lower Klamath River, Mad River below Ruth Lake Dam, Redwood Creek, Little River, Humboldt Bay and its tributaries, Mattole River, Lower Eel River (Eel River estuary, Van Duzen River, Salt River, mainstem Eel River from Fernbridge to confluence with Dean Creek), Usal Creek, Cottaneva Creek, Juan Creek, Howard Creek, Wages Creek, Ten Mile Creek, Pudding Creek, Noyo River,	

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Caspar Creek, Hare Creek, Big River, Albion River, Navarro River, Garcia River, North Fork Gualala River, South Fork Gualala River, Russian River mainstem downstream of Coyote Dam, Russian River tributaries from Maacama Creek to estuary.	
Priority Action Coho Team Report and Addendum	The following streams and their tributaries: North Fork Gualala River, South Fork Gualala River. The following streams, their tributaries, and their estuaries: Usal Creek, Cottaneva	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=177167&inline

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Creek, Juan Creek, Howard Creek, Wages Creek, Ten Mile Creek, Pudding Creek, Noyo River, Caspar Creek, Hare Creek, Big River, Albion River, Navarro River, Garcia River, Russian River mainstem downstream of Coyote Dam, Russian River tributaries from Maacama Creek to estuary.	
Klamath Reservoir Reach Restoration Prioritization Plan (2022)	First seven miles of Klamath River above former Cape Horn Dam (extent of	https://psmfc.maps.arcgis.com/home/item.html?id=46234bcb8c414523a57aa803e3819031

Document Name	Stream, Watershed, or Area	Link to document or contact email
	SONCC coho salmon distribution)	
Smith River Plain Stream Restoration Plan (2018)	Smith River Plain (Del Norte County): Mainstem Smith River, unnamed estuary tributary, Tillas Slough, Islas Slough, Yontocket Slough/Tryon Creek, Rowdy Creek, Morrison Creek, and Stotenburg Creek	https://smithriveralliance.org/wp-content/uploads/2019/03/SmithR-Restoration-Plan_FINAL.pdf
South Fork Eel River Watershed Assessment (CDFW 2014)	South Fork Eel River headwaters (Elder Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley	Part 1: http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=175818 , Part 2: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=175820

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Creek, and Hollow Tree Creek	
Lower Eel River Watershed Assessment (CDFW 2010)	Eel River estuary, Van Duzen River, Salt River, mainstem Eel River from Fernbridge to confluence with Dean Creek	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=175824
Salt River Watershed Assessment (CDFW 2005)	Salt River, its tributaries and the Salt River estuary	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=175825
Van Duzen River Watershed Assessment (CDFW 2013)	Van Duzen River and its tributaries	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=175823
Redwood Creek Watershed Assessment	Redwood Creek, its tributaries and the	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=197187

Document Name	Stream, Watershed, or Area	Link to document or contact email
(Humboldt) (CDFW 2006)	Redwood Creek estuary	
Mattole River Watershed Assessment (2003)	Mattole River, its tributaries and the Mattole River estuary	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=10479
Mendocino Coast SHaRP Plan (202x)	Ten Mile River, Noyo River, Big River, Navarro River, and Garcia River	Not yet available, please contact Trevor.Tollefson@wildlife.ca.gov for updates
Big River Watershed Assessment (2006)	Big River, its tributaries and the Big River estuary	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=178740
Albion River Watershed Assessment (2004)	Albion River, its tributaries and the Albion River estuary	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=178748

Document Name	Stream, Watershed, or Area	Link to document or contact email
Action Plan for the Scott River Sediment and Temperature Total Maximum Daily Loads (2018)	Scott River and its tributaries	https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/scott_river/
North Coast Salmon Project: Assessment of Restoration Projects Funded from 2004 to 2018 Supporting Coho Salmon Recovery in Four Focus Areas Along California's North Coast	Mendocino Coast (The following streams, their tributaries, and their estuaries: Ten Mile River, Noyo River, Big River, Navarro River, and Garcia River) South Fork Eel River (The following rivers/creeks and their tributaries: South Fork Eel River headwaters (Elder Creek), Bull	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=193854&inline

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek)	
Fisheries Restoration Framework for the Eel River Watershed and Phase 1 Scope of Work	The following strreams and their tributaries: Mainstem Eel River, Middle Fork Eel River (Tomki, Outlet, Bucknell Creeks), South Fork Eel River [SF Eel River headwaters (Elder Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek], Russian River mainstem downstream of Coyote Dam, Russian	https://pottervalleyproject.org/wp-content/uploads/2021/12/Eel-Restoration-Framework_November-2021.pdf

Document Name	Stream, Watershed, or Area	Link to document or contact email
	River tributaries from Maacama Creek to estuary. The following streams, their tributaries, and their estuaries: Lower Eel River (Eel River estuary, Van Duzen River, Salt River, mainstem Eel River from Fernbridge to confluence with Dean Creek), Russian River estuary.	
Stream Habitat Inventory Reports	The following streams and their tributaries: Upper Klamath River, Mid-Klamath River, Scott River, Shasta River (below Dwinnel Dam), Salmon RIver, Upper Trinity River	Document Library Link to Stream Habitat Inventory Reports

Document Name	Stream, Watershed, or Area	Link to document or contact email
	(below Lewiston Dam), South Fork Trinity River, Hayfork Creek, Mainstem Eel River, Middle Fork Eel River (Tomki, Outlet, Bucknell Creeks), South Fork Eel River [South Fork Eel River headwaters (Elder Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek]. The following streams, their tributaries, and their estuaries: Smith River, Wilson Creek, Lower Klamath River, Mad River below Ruth Lake Dam, Redwood	

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Creek, Little River, Humboldt Bay and its tributaries, Mattole River, Lower Eel River (Eel River estuary, Van Duzen River, Salt River, mainstem Eel River from Fernbridge to confluence with Dean Creek), Usal Creek, Cottaneva Creek, Juan Creek, Howard Creek, Wages Creek, Ten Mile River, Pudding Creek, Noyo River, Hare Creek, Caspar Creek, Big River, Albion River, Navarro River, Garcia River, North Fork Gualala River, South Fork Gualala River, Russian River mainstem downstream	

Document Name	Stream, Watershed, or Area	Link to document or contact email
	of Coyote Dam, Russian River tributaries from Maacama Creek to estuary.	
Total Maximum Daily Load (California State Water Resources Control Board)	Locations listed below that 1. have a sediment TMDL and 2. HU is a project type in the focus table, and/or 3. have a temperature TMDL and 2. project types to address water temperature are indicated in the focus table. The following streams and their tributaries: Upper Klamath River, Mid-Klamath River, Scott River, Shasta	Total Maximum Daily Load (TMDL) | California State Water Resources Control Board

Document Name	Stream, Watershed, or Area	Link to document or contact email
	River (below Dwinnel Dam), Salmon RIver, Upper Trinity River (below Lewiston Dam), South Fork Trinity River, Hayfork Creek, Mainstem Eel River, Middle Fork Eel River (Tomki, Outlet, Bucknell Creeks), South Fork Eel River [SF Eel River headwaters (Elder Creek), Bull Creek, Redwood Creek, Sproul Creek, Indian Creek, Standley Creek, and Hollow Tree Creek]. The following streams, their tributaries, and their estuaries: Smith River, Wilson Creek,	

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Lower Klamath River, Mad River below Ruth Lake Dam, Redwood Creek, Little River, Humboldt Bay and its tributaries, Mattole River, Lower Eel River (Eel River estuary, Van Duzen River, Salt River, mainstem Eel River from Fernbridge to confluence with Dean Creek), Usal Creek, Cottaneva Creek, Juan Creek, Howard Creek, Wages Creek, Ten Mile River, Pudding Creek, Noyo River, Caspar Creek, Hare Creek, Big River, Albion River, Navarro River, Garcia River, North Fork Gualala River, South Fork	

Document Name	Stream, Watershed, or Area	Link to document or contact email
	Gualala River, Russian River mainstem downstream of Coyote Dam, Russian River tributaries from Maacama Creek to estuary. "	

Region 2 Focus Watersheds Table

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R2 1	Yuba River HUC 8	Yuba River (below Englebright)	Steelhead, Chinook	HB, HI, HR, HU, MO, PD, PL, SC, TE
R2 2	Calaveras River HUC 10	Calaveras River (below New Hogan)	Steelhead, Chinook	FP, HB, HI, HR, MO, PD, PI, PL, SC, TE, WC, WD
R2 3	Butte Creek HUC 8	Butte Creek	Steelhead, Chinook	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, SC, TE, WC, WD
R2 4	Honcut Headwaters - Lower Feather HUC 8	Feather River below Oroville Dam and Honcut Creek	Steelhead, Chinook	FP, HB, HI, HR, MO, OR, PD, PI, PL, SC, TE, WD

R2 5	Big Chico Creek HUC 10	Big Chico Creek	Steelhead, Chinook	FP, HB, HI, MO, PD, PI, PL, SC, TE, WC, WD
R2 6	Upper Eel River HUC 8	Eel River and Tributaries above Lake Pillsbury including the following HUC 10 watersheds: Corbin Creek and Rice Fork Creek	Steelhead, Chinook	FP, HB, OR, PD
R2 7	Mainstem Sacramento River (Below Keswick)	Mainstem Sacramento River in Region 2	Steelhead, Chinook	FP, HB, HI, HR, MO, PD, PI, PL, RE, SC, TE, WC
R2 8	Lower American River HUC 12	lower American River below Nimbus Dam	Steelhead, Chinook	HI, HR, MO, PD, PI, PL, TE, WC, WD

Region 2 Reference Documents

Please contact the CDFW Region 2 representative, Michelle Forsha (Michelle.Forsha@Wildlife.ca.gov), for questions and assistance with the reference documents below.

Document Name	Stream, Watershed, or Area	Link to document
Recovery Plan for Central Valley Salmon and Steelhead (2014)	All Central Valley watersheds from the upper Sacramento to the San Joaquin	https://www.fisheries.noaa.gov/resource/document/recovery-plan-evolutionarily-significant-units-sacramento-river-winter-run

Document Name	Stream, Watershed, or Area	Link to document
Central Valley Flood Plan Protection (2022)	All Central Valley watersheds from the upper Sacramento to the San Joaquin	https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Flood-Management/Flood-Planning-and-Studies/Central-Valley-Flood-Protection-Plan/Files/CVFPP-Updates/2022/Central_Valley_Flood_Protection_Plan_Update_2022_ADOPTED.pdf
Feather River Regional Flood Management Plan (2014)	Feather River and tributaries	https://www.yubawater.org/DocumentCenter/View/3223/Feather-River-Region-Regional-Flood-Management-Plan?bidId=
Lower Sacramento River/Delta North Regional Flood Management Plan (2014)	Sacramento River and tributaries below Knights Landing to the Delta	https://www.yolocounty.org/home/showdocument?id=28753
Mid & Upper Sacramento Regional Flood Management Plan (2014)	Sacramento River tributaries from Chico to Knights Landing	https://musacrfmp.com/documents/
California Salmon Strategy for a Hotter, Drier Future: Restoring Aquatic Ecosystems in the Age of Climate Change	California	https://www.gov.ca.gov/wp-content/uploads/2024/01/Salmon-Strategy-for-a-Hotter-Drier-Future.pdf

Region 3 Focus Watersheds Table

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R3 01	South Fork Gualala River Gualala River, Rockpile Creek, Upper Wheatfield Fork Gualala River, Buckeye Creek, House Creek, Marshall Creek, Lower Wheatfield Fork Gualala River HUC 12	South Fork Gualala River watershed including its tributaries, and excluding Buckeye Creek watershed	Steelhead	FB, HB, HI, HR, HU, MO, PD, PI, PL, TE
R3 02	Buckeye Creek HUC 12	Buckeye Creek watershed including its tributaries; USGS, National Watershed Boundary Dataset, Hydrologic Unit Code level 12, Name: Buckeye Creek	Coho, Steelhead	FB, HB, HI, HR, HU, MO, PD, PI, PL, TE, WC, WD
R3 03	Russian Gulch-Frontal Pacific Ocean HUC 12	Russian Gulch watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HU, MO, PD, PI, PL, TE

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R3 04	Russian HUC 8	Mainstem Russian River downstream of Coyote Dam (East Branch confluence) and including the Russian River estuary	Steelhead, Chinook	FP, HB, HI, MO, OR, PD, PI, PL, RE, TE, WC
R3 05	Willow Creek-Russian River HUC 12	Willow Creek watershed including its tributaries, Sheephouse Creek watershed including its tributaries, Freezeout Creek watershed including its tributaries, and Jenner Gulch watershed including its tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, RE, SC, TE, WC, WD
R3 06	Ward Creek-Austin Creek HUC 12	Mainstem Austin Creek, and Kidd Creek watershed including its tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, MO, PD, PI, RE, TE, WC, WD
R3 07	Ward Creek-Austin Creek HUC 12	Austin Creek watershed including its tributaries upstream of the confluence with East Austin Creek	Coho, Steelhead, Chinook	FP, HB, HI, HR, MO, PD, PI, RE, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R3 08	East Austin Creek HUC 12	East Austin Creek watershed including its tributaries; USGS, National Watershed Boundary Dataset, Hydrologic Unit Code level 12, Name: East Austin Creek	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, RE, TE, WC, WD
R3 09	Dutch Bill Creek-Russian River HUC 12	Dutch Bill Creek watershed including its tributaries, Hulbert Creek watershed including its tributaries, and Fife Creek watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HR, HU, MO, PD, PI, PL, RE, TE, WC, WD
R3 10	Green Valley Creek HUC 12	Green Valley Creek watershed including its tributaries, and Atascadero Creek watershed including its tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, PL, RE, SC, TE, WC, WD
R3 11	Porter Creek Mark West Creek HUC 12	Mark West Creek watershed including its tributaries. This includes and is not limited to Windsor Creek, the Laguna de Santa Rosa, and Santa Rosa Creek.	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, PL, RE, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R3 12	Porter Creek-Russian River HUC 12	Porter Creek (tributary to the Russian River) watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HR, MO, PD, PI, RE, TE, WC, WD
R3 13	West Slough-Dry Creek HUC 12	Mainstem Dry Creek downstream of Warm Springs Dam	Coho, Steelhead, Chinook	FP, HB, HI, MO, OR, PD, PI, PL, RE, TE
R3 14	Mill Creek HUC 12	Mill Creek (tributary to Dry Creek) watershed including its tributaries; USGS, National Watershed Boundary Dataset, Hydrologic Unit Code level 12, Name: Mill Creek	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, RE, TE, WC, WD
R3 15	West Slough-Dry Creek HUC 12	Grape Creek watershed including its tributaries, and Wine Creek watershed including its tributaries	Coho, Steelhead, Chinook	FP, HB, HI, HR, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 16	Pena Creek HUC 12	Pena Creek watershed including its tributaries; USGS, National Watershed Boundary Dataset, Hydrologic Unit Code level 12, Name: Pena Creek	Coho, Steelhead, Chinook	FP, HB, HI, HR, HU, MO, PD, PI, RE, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R3 17	Maacama Creek, Franz Creek HUC 12	Maacama Creek watershed including its tributaries, and excluding Redwood Creek watershed	Steelhead, Chinook	FP, HB, HI, HR, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 18	Maacama Creek HUC 12	Redwood Creek (tributary to Maacama Creek)	Coho, Steelhead	FP, HB, HI, HR, MO, PD, PI, PL, RE, TE, WC, WD
R3 19	Upper Russian River, Headwaters Russian River, Big Sulphur Creek, Middle Russian River HUC 10	The anadromous waters of Russian River tributary watersheds upstream of Maacama Creek	Steelhead, Chinook	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, RE, SC, TE, WC, WD
R3 20	Salmon Creek HUC 12	Salmon Creek (tributary to the Pacific Ocean) watershed including its tributaries; USGS, National Watershed Boundary Dataset, Hydrologic Unit Code level 12, Name: Salmon Creek	Coho, Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, RE, SC, TE, WC, WD
R3 21	Walker Creek HUC 10	Walker Creek watershed including its tributaries, and excluding the watershed above Soulajule Dam	Coho, Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, RE, SC, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R3 22	Olema-Lagunitas Creek HUC 12, San Geranimo Creek-Lagunitas Creek HUC 12	Lagunitas Creek watershed including its tributaries, and excluding the watershed above Peters Dam, and excluding the watershed above Seeger Dam	Coho, Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, RE, SC, TE, WC, WD
R3 23	Bolinas Lagoon HUC 12	Pine Gulch Creek watershed including its tributaries	Coho	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, RE, SC, TE, WC, WD
R3 24	Redwood Creek-Frontal Pacific Ocean HUC 12	Redwood Creek (tributary to the Pacific Ocean) watershed including its tributaries	Coho	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, RE, SC, TE, WC, WD
R3 25	Corte Madera Creek-Frontal San Francisco Bay Estuaries HUC 10	Corte Madera Creek watershed including its tributaries	Steelhead	FP, HB, HI, HR, MO, OR, PD, PI, PL, SC, WC, WD
R3 26	Novato Creek, San Pablo Bay Estuaries, Miller Creek-Frontal San Pablo Bay Estuaries HUC 12	Novato Creek watershed including its tributaries, and excluding the watershed above Stafford Dam	Steelhead	FP, HB, HI, HR, MO, OR, PD, PI, RE, SC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R3 27	Adobe Creek-Frontal San Pablo Bay Estuaries, San Pablo Bay Estuaries, San Antonio Creek HUC 12	Mainstem Petaluma River, and San Antonio Creek watershed including its tributaries, and Washington Creek watershed including its tributaries, and Adobe Creek watershed including its tributaries, and Lichau Creek watershed including its tributaries	Steelhead	FP, HB, HI, HR, MO, OR, PD, PI, PL, RE, SC, TE, WC, WD
R3 28	San Pablo Bay Estuaries, Schell Creek-Frontal San Pablo Bay Estuaries, Tolay Creek-Frontal San Pablo Bay Estuaries, Fowler Creek, Lower Sonoma Creek, Upper Sonoma Creek HUC 12	Sonoma Creek watershed including its tributaries upstream of Railroad Slough; and Tolay Creek watershed including its tributaries (USGS, National Watershed Boundary Dataset, Hydrologic Unit Code level 12, Name: Tolay Creek-Frontal San Pablo Bay Estuaries)	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, SC, TE, WC, WD
R3 29	Upper Napa River, Middle Napa River, Dry Creek, Rector Creek-Conn Creek, Carneros Creek-Frontal San Pablo	Napa River watershed and it's tributaries; excluding the San Pablo Bay Estuaries, American Canyon Creek-Frontal San Pablo Bay Estuaries,	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, SC, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
	Bay Estuaries, Tulucay Creek-Frontal San Pablo Bay Estuaries HUC 12	the watershed above Milliken Dam, the watershed above Rector Dam, the watershed above Conn Dam, the watershed above the dams forming Bell Canyon Reservoir, and the watershed above Kimball Dam		
R3 30	Green Valley Creek, Wooden Valley Creek-Suisun Creek HUC 12	Green Valley Creek watershed including its tributaries and excluding the watershed above Green Valley Falls (Dam), and including Suisun Creek watershed and its tributaries excluding the watershed above the Lake Curry Dam	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, SC, TE, WC, WD
R3 31	Suisun Bay HUC 10	USGS, National Watershed Boundary Dataset, Hydrologic Unit Code level 12, Name: Suisun Bay Estuaries	Steelhead, Chinook	HI, HR, MO, OR, PD, PI, PL, SC, TE, WC

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R3 32	Mainstem Sacramento River (Below Keswick) in Region 3	The Mainstem of the Sacramento River below the American River confluence	Steelhead, Chinook	FP, HB, HI, HR, HS, MO, PD, PI, PL, SC, TE, WC
R3 33	Delta/Yolo Bypass	The Delta Legal boundary as established under the Delta Protection Act and the Yolo Bypass from Fremont Weir southward to the Delta boundary	Steelhead, Chinook	FP, HB, HI, HR, MO, OR, PD, PI, PL, RE, SC, TE, WC
R3 34	Arroyo de la Laguna, Arroyo Mocho, Arroyo Las Positas, Arroyo Valle, Alameda Creek HUC 10; San Francisco Bay Estuaries, Plummer Creek-Frontal San Francisco Bay Estuaries HUC 12	Alameda Creek watershed including its tributaries, and excluding the watershed above Calaveras Dam, excluding the watershed above James H. Turner Dam, and excluding the watershed above Del Val Dam	Steelhead	FP, HB, HI, HR, MO, OR, PD, PI, PL, WC, WD
R3 35	Lower Coyote Creek-Frontal San Francisco Bay Estuaries, Agua Caliente Creek-Frontal San	Mainstem Coyote Creek below Anderson Dam, and including the Upper Penitencia Creek watershed, and including USGS,	Steelhead	FP, HB, HI, HR, PD, PI, PL, SC, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
	Francisco Bay Estuaries, San Francisco Bay HUC 10	National Watershed Boundary Dataset, Hydrologic Unit Code level 12, Name: Metcalfe Canyon-Coyote Creek		
R3 36	Guadalupe River-Frontal San Francisco Bay Estuaries HUC 10	Guadalupe River watershed including its tributaries, excluding Los Gatos Creek watershed, Ross Creek watershed, and Canoas Creek watershed, excluding the watershed above Guadalupe Dam, and excluding the watershed above Calero Dam	Steelhead	FP, HB, HI, HR, PD, PI, SC, WC, WD
R3 37	Stevens Creek HUC 12	Stevens Creek watershed and tributaries excluding the watershed above Stevens Creek Dam	Steelhead	FP, HB, HI, HR, MO, PD, PI, SC, WC, WD
R3 38	San Francisquito Creek HUC 12	San Francisquito creek watershed including its tributaries, and excluding the	Steelhead	FP, HB, HI, HR, MO, PD, PI, SC, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
		watershed above Searsville Dam		
R3 39	Arroyo Leon HUC 12	Arroyo Creek watershed including its tributaries and excluding the watershed above Stone Dam	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 40	La Honda Creek, San Gregorio Creek HUC 12	San Gregorio Creek watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 41	Pescadero Creek HUC 10	Pescadero Creek watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 42	Gazos Creek-Frontal Ano Nuevo Bay HUC 12	Gazos Creek watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 43	Gazos Creek-Frontal Ano Nuevo Bay HUC 12	Whitehouse Creek watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R3 44	Waddell Creek HUC 12	Waddel Creek watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 45	Scott Creek HUC 12	Scott Creek watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 46	San Vicente Creek-Frontal Pacific Ocean HUC 12	San Vicente Creek watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 47	San Vicente Creek-Frontal Pacific Ocean HUC 12	Laguna Creek watershed including its tributaries	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 48	San Lorenzo River HUC 10	San Lorenzo Creek watershed including its tributaries and excluding the watershed above Newell Creek Dam	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R3 49	Soquel Creek HUC 12	Soquel Creek watershed including its tributaries; USGS, National Watershed Boundary Dataset, Hydrologic Unit Code level 12, Name: Soquel Creek	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 50	Aptos Creek HUC 12	Aptos Creek watershed including its tributaries; USGS, National Watershed Boundary Dataset, Hydrologic Unit Code level 12, Name: Aptos Creek	Coho, Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, RE, TE, WC, WD
R3 51	Corralitos, Lower Uvas, Lower and Upper Pajaro HUC 12	Pajaro River watershed and its tributaries, including Carnadero Creek watershed, excluding the watershed above Uvas Dam, and excluding the other watersheds at and above the confluence with San Benito River	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, TE, WC, WD

Region 3 Reference Documents

Document Name	Stream, Watershed, or Area	Link to document or contact email
CCC Coho Salmon Status Review (2023)	All coastal watersheds from Aptos Creek (Santa Cruz County) to Punta Gorda (Humboldt County)	https://media.fisheries.noaa.gov/2023-05/5-year-status-review-ccc-coho.pdf
CCC Coho Salmon Recovery Plan (2012)	All coastal watersheds from Aptos Creek (Santa Cruz County) to Punta Gorda (Humboldt County)	https://www.fisheries.noaa.gov/resource/document/recovery-plan-evolutionarily-significant-unit-central-california-coast-coho
Recovery Strategy for California Coho Salmon (2004)	All coastal watersheds in California from Aptos Creek (Santa Cruz County) to the Smith River (Del Norte County)	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=99401&inline
Priority Action Coho Team Report and Addendum	All coastal watersheds from Aptos Creek (Santa Cruz County) to Punta Gorda (Humboldt County)	https://psmfc.maps.arcgis.com/home/item.html?id=46234bcb8c414523a57aa803e3819031

Document Name	Stream, Watershed, or Area	Link to document or contact email
CCC steelhead Recovery Plan (2016)	All watersheds from the upper Russian River (Sonoma County) through the San Francisco Bay to Aptos Creek (Santa Cruz County)	https://media.fisheries.noaa.gov/dam-migration/2016-multispecies-recovery_plan-vol4.pdf
Recovery Plan for Central Valley Salmon and Steelhead (2014)	All Central Valley watersheds from the upper Sacramento to the San Joaquin	https://www.fisheries.noaa.gov/resource/document/recovery-plan-evolutionarily-significant-units-sacramento-river-winter-run
Priority Action Coho Team Report and Addendum	All coastal watersheds from Aptos Creek (Santa Cruz County) to Punta Gorda (Humboldt County)	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=177167&inline
Priority Action Coho Team Addendum	All coastal watersheds from Aptos Creek (Santa Cruz County) to Punta Gorda (Humboldt County)	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=223744&inline
Lower Russian River SHaRP Plan (2024)	Dutch Bill Creek, Green Valley Creek, Mill Creek, Willow Creek in lower Russian River watershed	https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=225720

Document Name	Stream, Watershed, or Area	Link to document or contact email
Lagunitas Creek SHaRP Plan (2022)	Lagunitas Creek	https://www.fisheries.noaa.gov/west-coast/habitat-conservation/identifying-salmon-habitat-restoration-priorities-lagunitas-creek

Region 4 Focus Watersheds Table

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R4 1	Lower Stanislaus River HUC 10	Stanislaus River (below Goodwin)	Steelhead, Chinook	HB, HI, HR, OR, PD, PL, SC, WC
R4 2	Peaslee Creek - Tuolumne River HUC 10	Tuolumne River (below La Grange)	Steelhead, Chinook	HB, HI, HR, OR, PD, PL, SC, WC
R4 3	Ingalsbe Slough-Merced River HUC 10	Merced River (below Crocker Huffman)	Steelhead, Chinook	HB, HI, HR, OR, PD, PL, SC, WC
R4 4	San Joaquin River (below Friant Dam)	San Joaquin River (below Friant Dam)	Steelhead, Chinook	FP, HB, HI, HR, OR, PD, PL, SC, WC
R4 5	Carmel River HUC 10	Mainstem Carmel River (below Los Padres Dam)	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, TE, WC, WD
R4 6	Portrero Canyon-Carmel River HUC 12	Potrero Creek	Steelhead	FP, HB, HI, HR, PD, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R4 7	San Clemente Creek -Carmel River HUC 12	San Clemente	Steelhead	FP, HB, PD, WC, WD
R4 8	Cachagua Creek HUC 12	Cachagua	Steelhead	FP, HB, PD, WC, WD
R4 9	San Jose Creek HUC 12	San Jose Creek Mainstem including Estuary	Steelhead	FP, HB, HI, HR, MO, PD
R4 10	San Jose Creek HUC 12	Seneca Creek	Steelhead	FP, HB, HU, PD
R4 11	San Jose Creek HUC 12	Van Winkley	Steelhead	HU
R4 12	Bixby Creek - Frontal Pacific Ocean HUC 12	Garrapata Creek	Steelhead	FP, HB, HR, HU, PD, PI, PL
R4 13	Bixby Creek - Frontal Pacific Ocean HUC 12	Rocky Creek	Steelhead	HU, PD, PI, PL
R4 14	Bixby Creek - Frontal Pacific Ocean HUC 12	Bixby Creek	Steelhead	PD, PI, PL
R4 15	Little Sur River HUC 12	Little Sur River	Steelhead	FP, HB, HU, MO, OR, PD, PL, WD
R4 16	Big Sur River HUC 12	Big Sur River Mainstem	Steelhead	FP, HB, MO, OR, PD, PI, WC
R4 17	Salinas HUC 8	Salinas River Mainstem and tributaries including the San Antonio and Nacimiento Rivers	Steelhead	FP, HB, HI, HR, MO, OR, PD, PI, PL, TE, WC
R4 18	Arroyo Seco HUC 10	Arroyo Seco mainstem and tributaries including Tassajara, Piney, Reliz,	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, SC, TE, WC

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
		Horse, Lost Valley, and Vaqueros Creeks		
R4 19	Paso Robles Creek HUC 12, Santa Rita Creek HUC 12	Paso Robles Mainstem and tributaries including Santa Rita, Willow, and Jack Creeks	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, WC
R4 20	Graves Creek-Salinas River HUC 12	Graves Creek Mainstem	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, WC
R4 21	Atascadero Creek HUC 12	Atascadero Creek Mainstem and tributaries including Hale and Eagle Creeks	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, WC
R4 22	Santa Margarita Creek HUC 12	Santa Margarita Creek Mainstem and tributaries including Tassajara, Trout, and Yerbabuena Creeks	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, WC
R4 23	San Carpoforo Creek HUC 12	San Carpoforo Creek	Steelhead	OR, PI, PL, WC, WD
R4 24	Arroyo de la Laguna HUC 12, Burnett Creek HUC 12	Arroyo de la Cruz and tributary Burnett Creek	Steelhead	FP, HB, HR, HU, OR, PD, PI, PL, WC
R4 25	Pico Creek HUC 12	Pico Creek	Steelhead	WC, WD
R4 26	Little Pico Creek-Frontal Pacific Ocean	Little Pico Creek	Steelhead	WC, WD
R4 27	San Simeon Creek HUC 12	San Simeon Creek Mainstem	Steelhead	FP, HB, HR, OR, PD, PI, PL, WC, WD
R4 28	San Simeon Creek HUC 12	VanGordon Creek	Steelhead	FP, HB, PD, PI, PL, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R4 29	San Simeon Creek HUC 12	Steiner Creek	Steelhead	PI, PL, WC
R4 30	Santa Rosa Creek HUC 12	Santa Rosa Creek Mainstem	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, WC, WD
R4 31	Santa Rosa Creek HUC 12	Perry Creek	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, WC, WD
R4 32	Chorro Creek HUC 12	Chorro Creek Mainstem	Steelhead	FP, HB, HI, HR, HU, MO, PD, PL, TE, WC, WD
R4 33	Chorro Creek HUC 12	San Bernardo Creek	Steelhead	FP, HB, HR, HS, HU, MO, PD, PL, WC, WD
R4 34	Chorro Creek HUC 12	San Luisito Creek	Steelhead	FP, HB, HR, HS, HU, MO, PD, PL, WC, WD
R4 35	Chorro Creek HUC 12	Pennington Creek	Steelhead	FP, HB, HR, HS, HU, MO, PD, PL, WC, WD
R4 36	Chorro Creek HUC 12	Dairy Creek	Steelhead	FP, HB, HR, HS, HU, MO, PD, PL, WC, WD
R4 37	Los Osos Creek HUC 12	Los Osos Creek	Steelhead	HR, HS, HU, MO, PD, PL, WC, WD
R4 38	Upper and Lower San Luis Obispo Creek HUC 12	San Luis Obispo Creek Mainstem and all tributaries	Steelhead	FP, HR, HS, HU, MO, OR, PD, PI, PL, WC, WD
R4 39	Pismo Creek HUC 12	Pismo Creek Mainstem	Steelhead	FP, HB, HI, HR, HU, OR, PD, PI, PL, WC, WD
R4 40	Lower Arroyo Grande Creek HUC 12	Arroyo Grande Creek Mainstem downstream of Lopez Dam	Steelhead	FP, HB, HI, HR, HS, HU, OR, PD, PI, PL, SC, WC, WD

Region 4 Reference Documents

Document Name	Stream, Watershed, or Area	Link to document or contact email
NMFS Recovery Plan for Central Valley Salmon and Steelhead (2014)	All Region 4 Central Valley Watersheds listed in the focus table	https://www.fisheries.noaa.gov/resource/document/recovery-plan-evolutionarily-significant-units-sacramento-river-winter-run
NMFS 5-Year Review: South-Central California Coast Steelhead (2023)	All Region 4 Coastal Watersheds listed in the focus table	https://repository.library.noaa.gov/view/noaa/55492
NMFS Recovery Plan for South Central Steelhead (2013)	All Region 4 Coastal Watersheds listed in the focus table	https://repository.library.noaa.gov/view/noaa/17275
CA Fish Passage Assessment Database	All Region 4 Watersheds listed in the focus table	https://apps.wildlife.ca.gov/bios6/?al=ds69 https://www.calfish.org/ProgramsData/HabitatandBarriers/CaliforniaFishPassageAssessmentDatabase.aspx
Updated Statewide 2013 Task List for the Steelhead Restoration and Management Plan for California (DFG 1996)	All Region 4 Watersheds listed in the focus table	https://wildlife.ca.gov/Grants/FRGP/Guidance#580984201-guidance-documents
Arroyo Grande Creek Watershed Management Plan Update. 2009	Arroyo Grande Creek Watershed	https://creeklands.org/projects/arroyo-grande-creek-watershed-management-plan/
Big Sur River Watershed Management Plan	Big Sur River	https://www.rcdmonterey.org/images/docs/publications/big-sur-watershed-management-plan.pdf

Document Name	Stream, Watershed, or Area	Link to document or contact email
Assessment of Steelhead Passage Barriers in Portions of Four Tributaries to the Carmel River. 2014	Carmel River and Tributaries downstream of Los Padres Dam	Suzanne.Deleon@wildlife.ca.gov
Carmel River Watershed Assessment and Action Plan. 2016 Update	Carmel River and Tributaries downstream of Los Padres Dam	https://www.rcdmonterey.org/images/docs/publications/carmel-river-watershed-assessment-action-plan-2016.pdf
CDFW Big Sur River Steelhead Habitat Assessment. Nelson, 2014	CDFW Big Sur River Steelhead	Suzanne.Deleon@wildlife.ca.gov
Morro Bay Watershed Steelhead Restoration Planning Stream Inventory Report (Chorro Creek) (2001)	Chorro Creek and tributaries	https://www.coastalrcd.org/files/7b2a3761d/Chorro+Creek+Stream+Inventory+Report+2001.pdf
Stream Inventory Report (Pennington Creek) (2001)	Chorro Creek and tributaries	https://www.coastalrcd.org/files/8e39b2e44/Pennington+Creek+Stream+Inventory+Report+2001.pdf
Steelhead Restoration Planning Project for the Morro Bay Watershed. 2002	Chorro Creek and tributaries	https://www.coastalrcd.org/files/26d4ca2aa/Morro+Bay+Steelhead+Trout+Restoration+Plan.pdf
Morro Bay Watershed Stream Crossing Inventory and Fish Passage Evaluation. 2003	Chorro Creek and tributaries	https://www.coastalrcd.org/files/aa8fb4686/Morro+Bay+Watershed+Stream+Crossing+Inventory+and+Fish+Passage+Evaluation.pdf
Steelhead Restoration Planning Project for the Morro Bay Watershed submitted to Coastal San Luis Resource Conservation District by John Dvorsky, Swanson	Chorro Creek and tributaries	Suzanne.Deleon@wildlife.ca.gov

Document Name	Stream, Watershed, or Area	Link to document or contact email
Hydrology & Geomorphology. 2003		
CDFW Garrapata Creek Steelhead Population Assessment. Nelson, 2005	Garrapata Creek	Suzanne.Deleon@wildlife.ca.gov
Garrapata Creek Watershed Assessment and Restoration Plan. Prepared by the Garrapata Creek Watershed Council. 2006	Garrapata Creek	Suzanne.deleon@wildlife.ca.gov
Garrapata Creek Watershed Steelhead Barrier Assessment. Report to the California Department of Fish and Game and Garrapata Watershed Council. The Watershed Institute, California State University Monterey Bay. Publication No. WI-2005-02. 76 pp. Casagrande, J. and D.P. Smith. 2005.	Garrapata Creek	Suzanne.Deleon@wildlife.ca.gov
Little Sur DFG Stream Survey. Nelson, 2003.	Little Sur River	Suzanne.Deleon@wildlife.ca.gov
Habitat Restoration Plan for the Lower Tuolumne River Corridor (2000)	lower Tuolumne River	Suzanne.Deleon@wildlife.ca.gov
Merced River Corridor Restoration Plan Baseline Studies. Vol 1 and Vol 2 (2001)	Merced River	Suzanne.Deleon@wildlife.ca.gov

Document Name	Stream, Watershed, or Area	Link to document or contact email
Merced River Corridor Restoration Plan. Stillwater Sciences. 2002	Merced River	Suzanne.Deleon@wildlife.ca.gov
Pismo Creek/Edna Area Watershed Management Plan. 2009	Pismo Creek/Edna Area	https://www.coastalrcd.org/files/0ff6eda3c/Pismo+Creek-Edna+Area+Watershed+Management+Plan.pdf
San Luis Obispo County Stream Crossing Inventory and Fish Passage Evaluation. Prepared for Greenspace the Cambria Land Trust by the California Conservation Corps. 2005	Pismo Creek/Edna Area, Santa Rosa Creek, Chorro Creek, San Luis Obispo Creek	Suzanne.Deleon@wildlife.ca.gov
Watershed Fisheries Report and Early Actions. A Study of the Upper Salinas River and Tributaries. 2002	Salinas River and tributaries	https://us-ltrcd.specialdistrict.org/files/335ec4a34/Watershed_Fisheries_Report.pdf
San Antonio and Nacimiento Rivers Watershed Management Plan. 2008	Salinas River and tributaries	Suzanne.Deleon@wildlife.ca.gov
CDFW Stream Inventory Report Seneca Creek. Nelson, J.N. 2006.	San Jose Creek and Tributaries	Suzanne.Deleon@wildlife.ca.gov
CDFW Stream Inventory Report San Jose Creek. Nelson, J.N. 2006.	San Jose Creek and Tributaries	Suzanne.Deleon@wildlife.ca.gov
San Jose Creek Watershed Assessment. 2012 Balance Hydrologics	San Jose Creek and Tributaries	Suzanne.Deleon@wildlife.ca.gov

Document Name	Stream, Watershed, or Area	Link to document or contact email
San Luis Obispo Creek Watershed Enhancement Plan. 2002	San Luis Obispo Creek	https://www.coastalrcd.org/files/5e0924bea/San+Luis+Obispo+Creek+Watershed+Enhancement+Plan+%282002%29.pdf
San Luis Obispo Creek Steelhead Trout habitat Inventory and Investigation. 2008	San Luis Obispo Creek	Suzanne.Deleon@wildlife.ca.gov
San Simeon Creek Steelhead Habitat and Population Survey. Nelson, 2005	San Simeon Creek	Suzanne.Deleon@wildlife.ca.gov
Assessment of Long Term Water Needs and Alternatives	San Simeon Creek	Suzanne.Deleon@wildlife.ca.gov
Santa Rosa Creek Watershed Management Plan. 2012	Santa Rosa Creek	https://www.us-ltrcd.org/files/a64815a77/SRCWMP_FINAL_Feb2012_Compiled.pdf
Upper Salinas River Watershed Action Plan. 2004	Upper Salinas River	https://www.us-ltrcd.org/files/35194b753/USLS+RCD+Watershed+Action+Plan.pdf

Region 5 Focus Watersheds Table

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R5 1	Santa Maria/Sisquoc River HUC 8	Region 4 & 5 mainstem & tribs	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 2	Santa Ynez River HUC 8	Santa Ynez River and tribs	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R5 3	Jalama Creek-Frontal Santa Barbara Channel HUC 10	Gaviota Creek and tributaries	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, WC, WD
R5 4	Jalama Creek-Frontal Santa Barbara Channel HUC 10	Jalama Creek and tributaries	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, WC, WD
R5 5	Jalama Creek-Frontal Santa Barbara Channel HUC 10	Canada de Santa Anita	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, WC, WD
R5 6	Jalama Creek-Frontal Santa Barbara Channel HUC 10	Arroyo Hondo Creek	Steelhead	FP, HB, HR, HU, MO, OR, PD, PI, PL, WC
R5 7	Jalama Creek-Frontal Santa Barbara Channel HUC 10	Tecolote Creek	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, WC, WD
R5 8	Jalama Creek-Frontal Santa Barbara Channel HUC 10	Refugio Creek	Steelhead	MO, PD, PL
R5 9	Jalama Creek-Frontal Santa Barbara Channel HUC 10	El Capitan	Steelhead	FP, HB, MO, PD, PL, SC
R5 10	San Pedro Creek Frontal Santa Barbara Channel HUC 10	San Ysidro	Steelhead	HB, HI, MO, PD, PL
R5 11	Jalama Creek-Frontal Santa Barbara Channel HUC 10	Dos Pueblos	Steelhead	MO, PD, PL
R5 12	San Pedro Creek Frontal Santa Barbara Channel HUC 10	Goleta Slough & tribs (Atascadero, Maria Ygnacio, San	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
		Jose, and San Pedro)		
R5 13	San Pedro Creek Frontal Santa Barbara Channel HUC 10	Mission and tributaries	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 14	San Pedro Creek Frontal Santa Barbara Channel HUC 10	Montecito and tributaries	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 15	San Pedro Creek Frontal Santa Barbara Channel HUC 10	Carpinteria and tributaries	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 16	San Pedro Creek Frontal Santa Barbara Channel HUC 10	Rincon and tributaries	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 17	Ventura River HUC 10	Ventura River including tribs	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 18	Santa Clara River HUC 8	Santa Clara River and tribs	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 19	Big Sycamore Canyon HUC 10	Big Sycamore Canyon Creek	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC
R5 20	Big Sycamore Canyon HUC 10	Arroyo Sequit, Trancas, Zuma	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC
R5 21	Malibu Creek HUC 10	Solstice Creek	Steelhead	MO, PD, PL, WC, WD
R5 22	Malibu Creek HUC 10	Las Flores Canyon Creek	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC
R5 23	Malibu Creek HUC 10	Malibu Creek	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC
R5 24	Garapito Creek HUC 12	Topanga Creek	Steelhead	FP, HB, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R5 25	San Gabriel River HUC 8	San Gabriel River and tribs (West Fork San Gabriel, East Fork San Gabriel)	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 26	Los Angeles River HUC 8	Arroyo Seco River	Steelhead	FP, HB, HI, HR, HS, MO, OR, PD, PI, PL, SC, WC, WD
R5 27	Los Angeles River HUC 8	Los Angeles River and tributaries	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 28	Lower Santa Ana River HUC 10	Santa Ana River and tributaries	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 29	San Juan Creek HUC 10	San Juan Creek and tribs	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 30	Aliso Creek HUC 10	Aliso Creek and Tributaries	Steelhead	FP, HB, HI, HR, HS, PD, PL, WD
R5 31	San Mateo Creek HUC 10	San Mateo Creek and tribs	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 32	San Onofre Creek Frontal Gulf of Santa Catalina HUC 10	San Onofre Creek and tribs	Steelhead	FP, HB, HR, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 33	Santa Margarita HUC 10	Santa Margarita River and tribs	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 34	San Dieguito HUC 10	San Dieguito River and tribs	Steelhead	FP, HB, HI, HR, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 35	Lower San Diego River HUC 10	San Diego River and tribs	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 36	Lower Sweetwater River HUC 10	Sweetwater River and tribs	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD
R5 37	Otay River HUC 10	Otay River and tribs	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD

Regional ID	HUC Watershed	Detailed Watershed	Species	Project Type(s)
R5 38	Cottonwood-Tijuana HUC 8	Tijuana River and tribs, Cottonwood Creek and tribs	Steelhead	FP, HB, HI, HR, HS, MO, OR, PD, PI, PL, SC, WC, WD
R5 39	San Luis Rey-Escondido HUC 8	San Luis Rey River and tribs	Steelhead	FP, HB, HI, HR, HS, HU, MO, OR, PD, PI, PL, SC, WC, WD

Region 5 Reference Documents

Please contact the CDFW region 5 representative, Kyle Evans (kyle.evans@wildlife.ca.gov), for questions and assistance with the reference documents below.

Document Name	Stream, Watershed, or Area	Link to document or contact email
NMFS Southern California Steelhead Recovery Plan	From Santa Maria River to Tijuana River	https://repository.library.noaa.gov/view/noaa/15988
NMFS 5-Year Status Review for Southern California Steelhead	From Santa Maria River to Tijuana River	https://repository.library.noaa.gov/view/noaa/55493
CDFW Aliso Creek Watershed Report 2021	Aliso Creek	kyle.evans@wildlife.ca.gov
Santa Monica Mountains Steelhead Habitat Assessment Final Project Report 2006	Arroyo Sequit, Big Sycamore, Las Flores, Trancas, Zuma, Malibu, Solstice, Topanga	kyle.evans@wildlife.ca.gov
Assessment of Steelhead Habitat and Migration Barriers within Watersheds Impacted by the Thomas, Whitter, and Topanga Wildfires	El Capitan, San Ysidro	kyle.evans@wildlife.ca.gov
The Projects for Enhancing Steelhead Runs in San Ysidro Creek	San Ysidro	kyle.evans@wildlife.ca.gov

El Capitan Creek Stream Inventory Report	El Capitan	kyle.evans@wildlife.ca.gov
Steelhead Assessment and Recovery Opportunities in Southern Santa Barbara County	Jalama Creek-Frontal Santa Barbara Channel HUC 10 and San Pedro Creek Frontal Santa Barbara Channel HUC 10	kyle.evans@wildlife.ca.gov

Part IV: Project Type Requirements

This Part of the guidelines describes the specific requirements for each project type. In addition to the information required under Part II and III, information requested under each project type listed here must be submitted with the proposal application. Required project type information must be provided for all predominate project types within your proposal. Applicants shall identify the project type(s) in the application that best describe(s) the proposed project. Forms and examples of Supplementary Documents can be found on the FRGP Guidance Tools website. See Part V for more information and definitions of Supplementary Documents.

Implementation project types must have all designs and plans 100% completed prior to grant execution, if the proposal is funded. Projects that have not been designed to meet all requirements of the *California Salmonid Stream Habitat Restoration Manual, 4th Edition* (CA Restoration Manual) or other approved guidelines and manuals for salmon and steelhead habitat restoration will have the responsibility of developing the appropriate documentation for CEQA, ESA, and CESA compliance, including financial assurances under CESA (See Environmental Compliance and Permitting in Part V).

Project proposal descriptions must have sufficient detail to be used in a grant agreement statement of work (if funded), to complete California Environmental Quality Act (CEQA) compliance, and necessary permits. A description, which only consists of a list of proposed activities, without descriptive narrative does not constitute sufficient detail.

The Project Statement form must contain the following information: Project Description, Materials, and Description of Activities by Task including Description of Activities, Deliverables, and Start Date.. The combined subsections (which comprise the Project Statement) must include a complete description of the project, including what is being funded by cost share (cash and in-kind services).

Description of Activities

Task must include a list of all actions to be accomplished and a detailed description of the activities required to complete each task (e.g. type of equipment, methodology, type of work, personnel, etc.). Include all tasks for the project, both those covered by requested funds and those covered by cost share. Clearly identify which tasks will be funded by the project and cost share respectively. If an item or expense is not included in this section, it cannot be included in the budget.

The Timeline should be linked to each task. The timeline must include estimated completion dates of all tasks, deliverables, and steps of implementation. At a minimum for each task in the timeline, provide annual benchmarks for multiple year projects and quarterly benchmarks for one-year projects. All tasks, including submission of the final invoice and final report, must occur within the project timeframe.

The Deliverables must include by task:

- complete list of what will be delivered from the project,
- complete list of quantifiable expected results of the project,
- list and description of all reports, maps, databases, and other products to be prepared and delivered,
- all specific deliverables required for each Project Type as described below,
- periodic status reports, annual reports, and,
- Final Report, including a final budget.

Fish Passage at Stream Crossings (FP)

Eligible fish passage projects are those that are specifically limited to removing barriers to migration. The FP category includes any human-made crossing over or through a stream channel such as paved or

unpaved roads, railroads, trails and paths, fair-weather Arizona crossings, bridges, culverts, baffles, old infrastructure, or any other anthropogenic built means to cross a water way.

This project type does not include the construction of new fish ladders or upgrading or maintaining existing fish ladders. Dams are not included in this project type; they are included in project type HB. For proposals focusing on road crossings or modification, the proponent must provide evidence of the extent to which the crossing is a barrier to salmon and/or steelhead.

This project type does not include pre-project planning or design. It is strictly for constructing implementation projects. Proposals must, at a minimum, include complete Intermediate Plans (i.e., design plans at 65% level of development). Proposals for pre-project planning and development should be submitted under the project design (PD) category. Regardless of whether pre-project planning is done through a PD project or outside of the FRGP, project applicants are encouraged to engage in discussion with CDFW or NOAA Fisheries technical staff prior to development of 30% plans. If an FP proposal is funded, final 100% plans accepted by CDFW and NOAA Fisheries technical and engineering staff will be required prior to grant execution.

Applicants intending to be covered by FRGP's programmatic permits are required to review the Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for FP Applications

All FP proposals must include the following specific information in the Required Project Type Information:

A. Number of miles of stream treated (only the actual length of stream treated by the project, not the length of stream affected by the project).

B. Number of feet of aquatic habitat disturbed (sum of individual feature lengths).

C. Square footage of instream features installed within bankfull channel (footprint of features).

D. Type and number of blockages or barriers removed or altered. culvert, bridge, ford, or logs.

E. Evidence of the extent to which the crossing is a barrier to salmon and/or steelhead.

F. Number of miles, per worksite, of stream made accessible upstream of each barrier removed.

G. Quantity of habitat made available and how this metric was determined.

H. Quality of habitat made available and how this metric was determined.

I. Type of required listed species surveys that will be done, and protocols to be used.

J. Need for species relocation, if applicable (see definition Part V).

K. Extent to which the proposed project will meet CDFW and NOAA Fisheries fish passage criteria (see CA Restoration Manual, Part IX, Appendix A and B; and Volume II, Part XII).

L. Presence or absence of other downstream barriers, including how this was determined and existence of treatment plans for downstream barriers.

M. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management Practices To Minimize Adverse Effects To Pacific Lamprey *(Entosphenus tridentatus)*.

Required Supplementary Documents for FP Applications

All FP proposals must also include the following Supplementary Documents:

A. Intermediate Plans. If a design element in the Intermediate Plans is determined to be unnecessary, a rationale for not including it must be provided.

B. Project Location Topographic Map (see definition Part V).

C. Watershed (or County) Map (see definition in Part V).

D. Signed Provisional Landowner Access Agreement (see definition Part V).

E. Water Law Compliance Documents. If a water right is involved with the project, written verification of the right to divert, use, store, sell, or transfer the water is required for any project that addresses issues related to the diversion, use, storage, or purchase of water.

F. Photographs (see definition Part V).

G. Invasive Species Prevention Plan (see definition Part V).

H. Program Permit Requirements – Appendix D. A completed project permitting information table. Instructions and a template are located in Appendix D.

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. Post-implementation longitudinal profile for projects where channel grade is to be restored or otherwise modified.

C. Post implementation test of the project at two life stage design flows (e.g., fall/winter flows for adult salmonids, summer flows for juveniles, etc.).

D. A water quality monitoring report for projects:

a. Performing any in-water work;

b. Project activities that result, or may result, in discharge to surface waters;

c. or Project activities that result in the creation of a visible turbidity in surface waters.

Here is an example monitoring report.

E. All biological and cultural resources surveys

If the project includes dewatering and/or species exclusion/ relocation, a CDFW Incidental Take Permit is required to be submitted to the CDFW grant manager before each species relocation activity.

Performance Measures for FP Projects

Category C: Habitat Restoration

Data ID	Metric
C.0.b	Total stream length treated/protected (miles)
C.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'
C.0.d.1	Type(s) of monitoring undertaken during the project period (choose from list)
C.0.d.2	Descriptor(s) of the location of project monitoring (choose from list)
C.2.a	Dollars allocated/spent on salmonid passage improvement
C.2.b.1	Total amount of stream upstream of the passage impediment made accessible (miles)
C.2.b.3	Type of Barrier that impeded passage. Select: diversion dam, push-up dam, wood or concrete dam, culvert, bridge, ford, logs, debris, boulders, rock barriers, or landslide.
C.2.b.4	Number of blockages/impediments/barriers impeding passage
(None)	Length of aquatic habitat disturbed (feet)
(None)	Area/footprint of instream features installed within bankfull channel (square feet)

Sub-Category: Fish Passage Improvement – Additional by Work Type

Data ID	Metric
C.2.f	***Culvert Installed or Improved***
C.2.f.2	Number of culverts installed/improved
C.2.f.3	Stream length made accessible upstream of the culvert installation/repair (miles)
C.2.g	***Bridge Installed or Improved***
C.2.g.2	Number of bridges installed/improved
C.2.g.3	Stream length made accessible upstream of the bridge installation/repair (miles)
C.2.h	***Rocked Ford - Road Stream Crossing***
C.2.h.2	Number of rocked fords placed
C.2.h.3	Stream length made accessible upstream of the rocked ford placement (miles)
C.2.i	***Road Stream Crossing Removal***
C.2.i.2	Number of road crossings removed
C.2.i.3	Stream length made accessible upstream of the road stream crossing removal (miles)

Instream Barrier Modification for Fish Passage (HB)

Instream barrier projects are defined as work in the stream channel (bankfull) and along the stream bank. Instream barriers include grade control structures (weirs), flashboard dams, dams, debris basins, water diversion structures, log debris accumulations, old infrastructure, or any anthropogenic barrier to fish. This project type does not include the construction of new fish ladders or upgrading or maintenance of existing fish ladders. It is recommended that proposals under the HB project type include the baseline data discussed in Parts II and III of the CA Restoration Manual. For barrier modification and removal proposals, the proponent must provide evidence of the extent to which the structure is a barrier to salmon or steelhead.

This project type does not include pre-project planning or design. It is strictly for constructing implementation projects. Proposals must, at a minimum, include complete intermediate plans (i.e., design plans at 65% level of development). Proposals for pre-project planning and development should be submitted under the project design (PD) category. Regardless of whether pre-project planning is done through a PD project or outside of the FRGP, project applicants are encouraged to engage in discussion with CDFW or NOAA Fisheries technical staff prior to development of 30% plans. If an HB proposal is funded, final 100% plans accepted by CDFW and NOAA Fisheries technical and engineering staff will be required prior to grant execution.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for HB Applications

All HB proposals must include the following specific information in the Required Project Type Information:

A. Number of miles of stream treated (only the actual length of stream treated by the project, not the length of stream affected by the project)

B. Number of feet of aquatic habitat disturbed (sum of individual feature lengths).

C. Square footage of instream features installed within bankfull channel (footprint of features).

D. Type and number per worksite of blockages or barriers removed or altered. Select from: diversion dam, push-up dam, wood or concrete dam, culvert, bridge, ford, logs, debris, boulders, rock barriers, or landslide.

E. Evidence of the extent to which the crossing is a barrier to salmon and/or steelhead.

F. Number of miles, per worksite, of stream made accessible upstream of each barrier removed.

G. Quantity of habitat made available and how this metric was determined

H. Quality of habitat made available and how this metric was determined.

I. All of the following, by work worksite (if applicable):

   a. Number of fishway chutes or pools installed.

   b. Acres of estuarine nearshore habitat treated.

   c. Miles of dikes modified or removed, and acres of available habitat created.

   d. Number of tide gates altered or removed and resulting acres of habitat opened to fish passage.

   e. Number of estuarine culverts modified or removed, and acres of fill material removed.

J. Type of required listed species surveys that will be done, and protocols to be used.

K. Need for species relocation, if applicable (see definition Part V).

L. Extent to which the proposed project will meet CDFW and NOAA Fisheries fish passage criteria (see CA Restoration Manual, Part IX, Appendix A and B; and Volume II, Part XII).

M. Presence or absence of other downstream barriers, including how this was determined and existence of treatment plans for downstream barriers.

N. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management Practices To Minimize Adverse Effects To Pacific Lamprey *(Entosphenus tridentatus)*.

Required Supplemental Documents for HB Applications

All HB proposals must also include the following Supplementary Documents:

A. Intermediate Plans. If a design element in the Intermediate Plans is determined to be unnecessary, a rationale for not including it must be provided (see definition Part V).

B. Conceptual Plans, if Intermediate Plans are determined to be unnecessary (see definition Part V). Projects where channel grade is to be restored or otherwise modified by the proposed project must also include a longitudinal profile, scaled plan, and elevation view diagrams showing the proposed work (see definition Part V).

C. Project location topographic map (see definition Part V).

D. Watershed map (see definition in Part V).

E. Signed provisional landowner access agreement (see definition Part V).

F. Water law compliance documents. If a water right is involved with the project, written verification of the right to divert, use, store, sell, or transfer the water is required for any project that addresses issues related to the diversion, use, storage, or purchase of water.

G. Photographs (see definition Part V).

H. Invasive species prevention plan (see definition Part V).

I. A completed project permitting information table. Instructions and a template are located in Appendix D.

If Funded

If the HB proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. Post-implementation longitudinal profile for projects where channel grade is to be restored of otherwise modified.

C. Post implementation test of the project at two life stage design flows (e.g., fall/winter flows for adult salmonids, summer flows for juveniles, etc.).

D. If project includes removal of a diversion dam, flashboard dam, or wood or concrete dam, the design documents, final costs, and final plans will be entered in the Clearinghouse for Dam Removal Information (CDRI).

E. A water quality monitoring report for projects:

   a. Performing any in-water work;

   b. Project activities result, or may result, in discharge to surface waters;

   c. or Project activities result in the creation of a visible turbidity in surface waters.

   Here is an example monitoring report.

F. First Winter Observations Summary (see definition in Part V).

G. All biological and cultural resources surveys

If project includes dewatering and/or species exclusion/relocation, a CDFW Incidental Take Permit is required to be submitted to the CDFW grant manager before each species relocation activity.

Performance Measures for HB Projects

Category C: Habitat Restoration

Data ID	Metric
C.0.b	Total stream length treated/protected (miles)
C.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'
C.0.d.1	Type(s) of monitoring undertaken during the project period (choose from list)
C.0.d.2	Descriptor(s) of the location of project monitoring (choose from list)
(None)	Length of aquatic habitat disturbed (feet)
(None)	Area/footprint of instream features installed within bankfull channel (square feet)
(None)	Number of culverts replaced or repaired?
(None)	Size of dams removed (cubic yards)?
(None)	Number of dams removed?
(None)	Number of miles of restored access to unoccupied salmonid habitat (from dam removal) ?

Sub-Category: Fish Passage Improvement – All

Data ID	Metric
C.2.a	Dollars allocated/spent on salmonid passage improvement
C.2.b.1	Total amount of stream upstream of the passage impediment made accessible (miles)
C.2.b.3	Type of Barrier that impeded passage. Select: diversion dam, push-up dam, wood or concrete dam, culvert, bridge, ford, logs, debris, boulders, rock barriers, or landslide.
C.2.b.4	Number of blockages/impediments/barriers impeding passage

Sub-Category: Fish Passage Improvement – Additional by Work Type

Data ID	Metric
C.2.c	***Fish Passage Blockages Removed or Altered***
C.2.c.2	Number of blockages/impediments/barriers removed or altered
C.2.d	***Fishway Chutes or Pools Installed***
C.2.d.2	Number of fishway chutes/pools installed

Sub-Category: Estuarine/Nearshore – All

Data ID	Metric
C.9.a	Dollars allocated/spent on Estuarine/Nearshore projects
C.9.b	Total amount of estuarine area treated (acres)

Sub-Category: Estuarine/Nearshore – Additional by Work Type

Data ID	Metric
C.9.d	***Dike or Berm Modification/Removal***
C.9.d.2	Length of dike(s) removed (miles)
C.9.e	***Tidegate Alteration/Removal***
C.9.e.2	Number of tidegates altered/removed
C.9.f	***Culvert Modification/Removal***
C.9.f.2	Number of culverts modified/removed

Instream Habitat Restoration (HI)

Eligible instream habitat restoration (HI) projects are limited to implementation work in stream channels and floodplains. Project design and planning will not be funded under this project type. HI includes installation of large wood, root wads, beaver dam analogs, Post Assisted Log Structures, boulder features and weirs, gravel augmentation, side channel construction, and floodplain connectivity projects such as off-channel features and floodplain grading projects (See Part V).

HI projects must consider historical and present-day land use practices and infrastructure as well as the geomorphic setting of the project reach. It is important to consider what opportunities are present to restore the geomorphic function of the stream. Projects should be designed with physical and biological processes in mind and structures should mimic natural self-sustaining examples to the extent possible. Restoring the geomorphic function in the project reach will provide benefits to salmonids beyond cover. These benefits include increased pool frequency and depth, increased or sorted spawning gravels, increased aggradation leading to floodplain connectivity, velocity and temperature refugia, increased sinuosity, and an increase in available food from additional benthic macroinvertebrate productivity that occurs on inundated floodplains.

It is recommended that proposals under this category include the baseline data discussed in Parts II and III of the CA Restoration Manual.

An HI proposal must have a clearly identified goal and describe the specific measurable objective(s) the project will achieve in order to meet that goal. There are planning documents referenced in Parts III-11 through III-14 and Part V-106 that can help guide applicants toward appropriate goals and objectives. Methods and techniques for implementing instream habitat improvement projects are found in the CA Restoration Manual or other approved guidelines and manuals for salmon and steelhead habitat restoration.

HI projects that include wood loading and non-engineered log and boulder features (similar in size and design to those identified in Part VII of the CA Restoration Manual) must include Conceptual Plans as described in Required Supplemental Documents in this section. All other HI projects must include completed Intermediate Plans (i.e., design plans at ~65% level of development as described in Part V of this document) with their proposal. For treatments requiring Intermediate Plans at the proposal phase, Final Plans (100% plans) accepted by CDFW/NOAA Fisheries technical/engineering staff will be required prior to grant execution, if funded. Regardless of whether planning is done through an FRGP funded Project Design (PD) or outside of the FRGP, applicants are encouraged to engage in discussion with CDFW or NOAA technical staff prior to development of 30% plans.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for HI Applications

All HI proposals must include the following specific information in the Required Project Type Information:

A. The total linear length in feet, downstream to upstream, where the project will take place. If work is taking place on multiple streams, supply this information separately for each stream proposed for implementation.

B. The length of aquatic habitat to be disturbed in feet. This is the stream length to be excavated, stream length to be dewatered, or the linear length of a stream channel where work will take place. For projects with multiple project locations, this is the combined linear length where disturbance will occur. If work is taking place on multiple streams, supply this information for each stream separately.

C. Area (feet^2) of instream features to be installed within the bankfull channel or the channel area to be excavated. See Appendix D for instructions on measuring instream features. If work is taking place on multiple streams, supply this information for each stream separately.

D. If the treatment/project is identified in a stream habitat survey, or watershed assessment provide the name of the survey/assessment in the format: Author, date, title, name, source, and source address. Do not include NOAA or State recovery plans here.

E. If attaining permits outside of FRGP, indicate type of required listed species surveys that will be completed and the protocols to be used.

F. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management Practices To Minimize Adverse Effects To Pacific Lamprey *(Entosphenus tridentatus)*.

In addition to the above general requirements, the following specific information for certain treatment types must be included in the application's Required Project Type Information (on the Project Justification form).

G. **Channel Feature Placement and Wood Loading** treatments must be described in detail the following specific information for each worksite:

1. Number of instream features to be installed or modified.

2. Target habitat metric specific to your project objective (e.g., amount of large wood per project reach, key log pieces per reach, primary pool depths, primary pool lengths). Discuss why the target metric was selected and how it will be met. Target metrics should be based on the best available scientific literature where applicable. Cite the document in which the stated habitat metric is justified if appropriate. If the referenced literature is not easily

accessible, please provide the document or relevant excerpt(s) as a supplemental document.

3. Quantity of existing target habitat in the proposed reach for comparison to target metric (e.g., number of large wood pieces currently in the reach, average pool shelter rating, length and area of existing side channel habitat).
4. Average bankfull width of the project reach (see CA Restoration Manual, Part III).
5. Type of materials to be used for channel feature placement. Select from: individual logs (unanchored), individual logs (anchored), logs fastened together (complex feature), stumps with roots attached (root wads), rocks/boulders (unanchored), rocks/boulders (fastened or anchored), log or boulder weirs, deflectors/barbs, or other engineered features.
6. Quantity of material to be installed (e.g. total pieces of large wood or cubic yards of boulders).

H. **Channel Reconfiguration and Connectivity** treatments must describe in detail the following specific information for each project worksite:

1. Type of channel to be reconfigured and connected. Select from: creation/connection to off-channel habitat, creation of instream pools, channel bed restored, or meanders added.
2. Target habitat metric specific to your project objective (e.g. number of off-channel features, area of off-channel features/connected floodplain, inundation frequency, fish capacity, weighted useable area).
3. Miles of stream to be treated for channel reconfiguration and connectivity.
4. Miles of off-channel stream to be created.
5. Acres of off-channel or floodplain to be connected.

6. Number of instream pools to be created for channel reconfiguration.

I. **Spawning Gravel Augmentation** treatments must describe in detail the following specific information for each project worksite:

1. Target habitat metric specific to your project objective.
2. Miles of stream to be treated with spawning gravel placement.
3. Cubic yards of spawning gravel to be placed.

J. **Aquatic Non-native Invasive Plant Removal** treatments must describe in detail the following specific information for each project worksite:

1. Target metric specific to your project objective.
2. Miles of stream to be treated for removal of aquatic non-native invasive plants.
3. Acres of plants to be removed/controlled.
4. Scientific name(s) of plant species to be removed.

K. **Predator/competitor Removal** treatments must describe in detail the following specific information for each project worksite:

1. Target metric specific to your project objective.
2. Scientific names and number of predator/competitor species to be removed.
3. Miles of stream to be treated for predator removal/control.
4. Describe the methods to be used to control/remove predators or competitors.

Required Supplementary Documents for HI Applications

All HI proposals must also include the following Supplementary Documents:

A. Intermediate Plans and applicable design plan criteria (see Part V). Most boulder, complex large wood structures, large wood structures in high-risk settings, off-channel or side-channel projects, floodplain connectivity, and gravel augmentation projects should be at the Intermediate Plan level in the proposal. If a design element in the Intermediate Plan is determined to be unnecessary, a rationale for not including it must be provided.

B. Conceptual plan and applicable design plan criteria (see Part V) if an Intermediate Plan is determined to be unnecessary. HI projects that include wood loading and non-engineered log and boulder features must include a Conceptual Plan for all features to be implemented (see **Sketch Requirements** in Part V - Large Wood Projects Design Plan Criteria). Generic drawings referred to as "typicals", which do not represent the proposed feature or worksite, are not acceptable.

C. Projects where channel grade is to be restored or otherwise modified by the proposed project must also include a longitudinal profile, scaled plan, and elevation view diagrams showing the proposed work.

D. Project location topographic map (see definition in Part V).

E. Watershed map (see definition in Part V).

F. Signed provisional landowner access agreement (see definition in Part V).

G. Photographs (see definition in Part V). Where multiple similar features (e.g., Large Wood structures) are proposed, representative photographs of the features and their target habitat will suffice.

H. An Invasive Species Prevention Plan (see definition in Part V).

I. A completed project permitting information table. Instructions and a template are located in Appendix D.

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. As-built drawings that include feature placement, design changes where applicable, alignment, sizes, and quantity of material added.

C. Before and after photos of individual feature locations. A representative sample of up to 10 features should be supplied in the final report with a complete set of before and after photos delivered electronically.

D. Pre- and Post-project longitudinal profiles and cross-sections where channel grade is restored or otherwise modified by the project.

E. A water quality monitoring report for projects:

   a. Performing any in-water work;

   b. Project activities result, or may result, in discharge to surface waters;

   c. or Project activities result in the creation of a visible turbidity in surface waters.

   Here is an example monitoring report.

F. First Winter Observations Summary (see definition in Part V).

G. All biological and cultural resources surveys

If project includes dewatering and/or species exclusion/relocation, a CDFW Incidental Take Permit is required to be submitted to the CDFW grant manager before each species relocation activity.

Performance Measures for HI Projects

Category C: Habitat Restoration

Data ID	Metric
C.0.b	Total stream length treated/protected (miles)
C.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'
C.0.d.1	Type(s) of monitoring undertaken during the project period (choose from list)
C.0.d.2	Descriptor(s) of the location of project monitoring (choose from list)
(None)	Length of aquatic habitat disturbed (feet)
(None)	Size (acres) of off channel habitat features enhanced or created?
(None)	Size (length) of off channel habitat features enhanced or created?
(None)	Size (depth) of off channel habitat features enhanced or created?

Sub-Category: Instream Habitat – All

Data ID	Metric
C.4.a	Dollars allocated/spent on instream habitat
C.4.b	Total length of instream habitat treated (miles)

Sub-Category: Instream Habitat – Additional by Work Type

Data ID	Metric
C.4.c	***Channel Reconfiguration & Connectivity***
C.4.c.2	Types of Change (choose from list)
C.4.c.3	Total length of stream treated for channel reconfiguration/connectivity (miles)
C.4.c.4	Total length of off-channel stream created (miles)
C.4.c.6	Number of instream pools created/added
(None)	Area of off-channel or floodplain connected
C.4.d	***Channel Structure Placement***
C.4.d.2	Channel structure materials (choose from list)
C.4.d.3	Total length of stream treated for channel structure placement (miles)
C.4.d.5	Number of pools expected to be created
C.4.d.7	Number of structures placed in channel

Data ID	Metric
(None)	Area of streambed created (acres)
C.4.f	***Spawning Gravel Placement***
C.4.f.2	Total length of stream treated with spawning gravel placement (miles)
C.4.f.3	Gravel volume added to stream (cubic yards)
C.4.g	***Aquatic Plant Removal/Control***
C.4.g.2	Species of aquatic plants removed/controlled (scientific name)
C.4.g.3	Total length of stream treated for plant removal/control (miles)
(None)	Area of plants removed/controlled (acres)
C.4.i	***Predator/Competitor Removal***
C.4.i.2	Species of predators or competitors controlled/removed (scientific name)
C.4.i.3	Describe methods used to control/remove predators or competitors
C.4.i.4	Number of predators/competitors removed/controlled
C.4.i.5	Total length of stream treated (miles)

Sub-Category: Estuarine/Nearshore – All

Data ID	Metric
C.9.a	Dollars allocated/spent on Estuarine/Nearshore projects
C.9.b	Total amount of estuarine area treated (acres)

Sub-Category: Estuarine/Nearshore – Additional by Work Type

Data ID	Metric
C.9.c	***Channel Modification***
C.9.d	***Dike or Berm Modification/Removal***
C.9.d.2	Length of dike(s) removed (miles)
C.9.g	***Removal of Existing Fill Material***
C.9.j	***Estuarine Plant Removal/Control***
C.9.j.2	Species of plants removed (scientific name)
(None)	Area of plants removed/controlled (acres)
C.9.j.3	Amount of estuarine area treated for invasive species (acres)
C.9.p	***Exclusion Devices***
C.9.r	***Estuarine Planting***
C.9.r.2	Species of plants planted (scientific name)
C.9.r.3	Amount of estuarine area planted (acres)

Riparian Restoration (HR)

Eligible riparian restoration (HR) projects are those that restore bare or partially denuded banks adjacent to the stream and within the stream corridor. Also included is eradication of non-native, invasive vegetation species and revegetation with native endemic riparian species. This project type does not allow funding for developing a riparian restoration plan. Refer to the project type 'Watershed Assessment, Evaluation and Planning' (PL) if a plan needs to be developed for a future riparian restoration project. The riparian area is defined as the area between a stream and the adjacent upland area identified by soil characteristics and distinct vegetation. It includes wetlands and those portions of floodplains and valley bottoms that support riparian vegetation. If an HR proposal is funded, final 100% plans accepted by CDFW and NOAA Fisheries technical and engineering staff will be required prior to grant execution.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for HR Projects

All HR proposals must include the following specific information in the Required Project Type Information:

A. Demonstration of how the proposal would be instrumental in restoring the natural function of the riparian corridor using appropriate successional stage native species.

B. For projects that include fencing, a wildlife-friendly fence must be constructed. See the FRGP Guidance Tools website for guidelines.

C. Number of miles of stream treated (only the actual length of stream treated by the project, not the length of stream

affected by the project). Count stream reach only once, even if it has multiple treatments.

D. Number of feet of aquatic habitat disturbed (sum of individual feature lengths).

E. Square footage of instream features installed within bankfull channel (footprint of features).

F. For each worksite, the following must be provided:

1. Miles of riparian stream bank treated, measuring both sides of the bank if appropriate.
2. Total acres of riparian area treated (including fencing, excluding invasive species treatments).
3. Number of riparian plants planted.
4. Planting densities.
5. Provisions made for annual survival monitoring and replanting or reseeding.
6. Provisions for watering.
7. Acres of riparian area planted.
8. Scientific names of plant species planted.
9. Miles of fencing installed or repaired.
10. Type of fencing material used.
11. Acres of riparian area protected by fencing.
12. Acres of riparian area treated for removal of non-native invasive plants.
13. Scientific names of non-native invasive plant species removed.

G. For projects involving streambank stabilization, provide the following for each worksite:

1. Type of streambank stabilization materials used. Select from: logs, rocks/boulders, rock barbs, log barbs, revetments, or vegetation.
2. Miles of streambank stabilized, counting both sides of the bank if appropriate.

H. Identification of any worksites that include wetlands, and number of wetland acres treated.

I. Type of required listed species surveys that will be done and protocols to be used.

J. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management Practices To Minimize Adverse Effects To Pacific Lamprey (*Entosphenus tridentatus*).

Required Supplementary Documents for HR Projects

All HR proposals must also include the following Supplementary Documents:

A. Project location topographic map (see definition in Part V).

B. Watershed map (see definition in Part V).

C. Signed provisional landowner access agreement (see definition in Part V).

D. Fence Maintenance Plan. A plan detailing fence maintenance.

E. Riparian Restoration Plan (see definition in Part V).

F. Photographs (see definition in Part V).

G. An Invasive Species Prevention Plan (see definition in Part V).

H. A completed project permitting information table. Instructions and a template are located in Appendix D.

If Funded

If the HR proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to

the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. An agreement that the landowner or proponent will maintain the livestock exclusion fencing for a period of at least ten years and completely exclude livestock from the riparian zone. Maintenance must include repair of fencing to a level that will effectively exclude livestock from the livestock exclusion project area. Maintenance does not need to include damage exceeding 50% of the fencing due to natural disaster.

C. A water quality monitoring report for projects:

   a. Performing any in-water work;

   b. Project activities result, or may result, in discharge to surface waters;

   c. or Project activities result in the creation of a visible turbidity in surface waters.

   Here is an example monitoring report.

D. First Winter Observations Summary (see definition in Part V).

E. All biological and cultural resources surveys

If project includes dewatering and/or species exclusion/relocation, a CDFW Incidental Take Permit is required to be submitted to the CDFW grant manager before each species relocation activity.

Performance Measures for HR Projects

Category C: Habitat Restoration

Data ID	Metric
C.0.b	Total stream length treated/protected (miles)
C.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'

Data ID	Metric
C.0.d.1	Type(s) of monitoring undertaken during the project period (choose from list)
C.0.d.2	Descriptor(s) of the location of project monitoring (choose from list)
(None)	Length of aquatic habitat disturbed (feet)
(None)	Length of stream bank (feet) stabilized or planted with riparian species?

Sub-Category: Instream Habitat – All

Data ID	Metric
C.4.a	Dollars allocated/spent on instream habitat
C.4.b	Total length of instream habitat treated (miles)

Sub-Category: Instream Habitat – Additional by Work Type

Data ID	Metric
C.4.e	***Streambank Stabilization***
C.4.e.2	Types of material used (choose from list)
C.4.e.3	Total length of streambank treated (miles)

Sub-Category: Riparian Habitat – All

Data ID	Metric
C.5.a	Dollars allocated/spent on riparian habitat
C.5.b.1	Total length of riparian streambank treated (miles)
C.5.b.2	Total amount of riparian area treated (acres)

Sub-Category: Riparian Habitat – Additional by Work Type

Data ID	Metric
C.5.c	***Riparian Planting***
C.5.c.2	Species of plants planted (scientific name)
(None)	Number of plants planted
C.5.c.3	Amount of riparian area planted (acres)
C.5.d	***Fencing***
C.5.d.2	Total length of fence installed (miles)
(None)	Area protected by fencing (acres)
C.5.f	***Water Gap Development***
C.5.f.2	Number of water gap installations

Data ID	Metric
(None)	Length of riparian stream bank protected (miles, count both sides of stream if applicable)
C.5.h	***Riparian Plant Removal/Control***
C.5.h.2	Species of plants treated/removed (scientific name)
C.5.h.3	Amount of riparian area treated for invasive species (acres)
C.5.j	***Debris/Structures Removal***

Sub-Category: Wetland – All

Data ID	Metric
C.8.a	Dollars allocated/spent on wetland projects
C.8.b	Total amount of wetland area treated (acres)

Sub-Category: Wetland – Additional by Work Type

Data ID	Metric
C.8.c	***Wetland Planting***
C.8.c.2	Species of plants planted (scientific name)
C.8.c.3	Amount of wetland area planted (acres)
C.8.d	***Wetland Plant Removal/Control***
C.8.d.2	Species of plants removed (scientific name)
C.8.d.3	Amount of wetland treated for invasive species (acres)
C.8.e	***Wetland Improvement/Restoration***
C.8.e.2	Amount of wetland area improved/restored (acres)

Bank Stabilization (HS)

Eligible bank stabilization (HS) projects include stabilization of eroding, collapsing, or otherwise destabilized banks. It is recommended that proposals under this category include baseline data discussed in Parts II and III of the CA Restoration Manual. If an HS proposal is funded, final 100% plans accepted by CDFW and NOAA Fisheries technical and engineering staff will be required prior to grant execution.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for HS Projects

All HS proposals must include the following specific information in the Required Project Type Information:

A. Description of previous bank stabilization in the vicinity of the project location.

B. Number of miles of stream treated (only the actual length of stream *treated* by the project, not the length of stream *affected* by the project).

C. Number of feet of aquatic habitat disturbed (sum of individual feature lengths).

D. Square footage of instream features installed within bankfull channel (footprint of features).

E. For each worksite, the following must be provided:

   a. Types(s) of stream bank stabilization material used. Select: logs, rocks/boulders, rock barbs, log barbs, revetments, or vegetation.

   b. Miles of stream bank treated, measuring both sides of the bank if appropriate.

   c. Total acres of riparian area treated.

d. Total acres of riparian plants planted, including number and types of riparian plants used.

e. Miles of fence installed or repaired.

f. Type of fencing material.

g. Acres of riparian area protected by fencing.

h. Acres of riparian area treated for removal of non-native invasive plants.

i. Scientific names of non-native invasive plant species removed.

F. Type of required listed species surveys that will be done and protocols to be used.

G. .

H. If the project involves bioengineering, the proposal must identify and describe the type of treatment and define linear feet of bank stabilized and riparian area treated.

I. Indication if species relocation is needed (see "Stream Dewatering and Species Exclusion/Relocation" definition in Part V).

J. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management Practices To Minimize Adverse Effects To Pacific Lamprey *(Entosphenus tridentatus)*.

Required Supplementary Documents for HS Projects

All HS proposals must also include the following Supplementary Documents:

A. Intermediate Plans (see Part V). If a design element in the Intermediate plans is determined to be unnecessary, a rationale for not including it must be provided.

B. Project location topographic map (see definition in Part V).

C. Watershed map (see definition in Part V)

D. Signed provisional landowner access agreement (see definition in Part V).

E. Photographs (see definition in Part V).

F. An Invasive Species Prevention Plan (see definition in Part V).

G. A completed project permitting information table. Instructions and a template are located in Appendix D.

If Funded

If the HS proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. A water quality monitoring report for projects:

   a. Performing any in-water work;

   b. Project activities result, or may result, in discharge to surface waters;

   c. or Project activities result in the creation of a visible turbidity in surface waters.

   Here is an example monitoring report.

C. First Winter Observations Summary (see definition in Part V).

D. All biological and cultural resources surveys

If project includes dewatering and/or species exclusion/relocation, a CDFW Incidental Take Permit is required to be submitted to the CDFW grant manager before each species relocation activity.

Performance Measures for HS Projects

Category C: Habitat Restoration

Data ID	Metric
C.0.b	Total stream length treated/protected (miles)
C.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'
C.0.d.1	Type(s) of monitoring undertaken during the project period (choose from list)
C.0.d.2	Descriptor(s) of the location of project monitoring (choose from list)
(None)	Length of aquatic habitat disturbed (feet)
(None)	Length of stream bank (feet) stabilized or planted with riparian species?

Sub-Category: Instream Habitat – All

Data ID	Metric
C.4.a	Dollars allocated/spent on instream habitat
C.4.b	Total length of instream habitat treated (miles)

Sub-Category: Instream Habitat – Additional by Work Type

Data ID	Metric
C.4.e	***Streambank Stabilization***
C.4.e.2	Types of material used (choose from list)
C.4.e.3	Total length of streambank treated (miles)

Sub-Category: Riparian Habitat – All

Data ID	Metric
C.5.a	Dollars allocated/spent on riparian habitat
C.5.b.1	Total length of riparian streambank treated (miles)
C.5.b.2	Total amount of riparian area treated (acres)

Sub-Category: Riparian Habitat – Additional by Work Type

Data ID	Metric
C.5.c	***Riparian Planting***
C.5.c.2	Species of plants planted (scientific name)
C.5.c.3	Amount of riparian area planted (acres)
C.5.d	***Fencing***
C.5.d.2	Total length of fence installed (miles)

Data ID	Metric
C.5.h	***Riparian Plant Removal/Control***
C.5.h.2	Species of plants treated/removed (scientific name)
C.5.h.3	Amount of riparian area treated for invasive species (acres)

Sub-Category: Estuarine/Nearshore – All

Data ID	Metric
C.9.a	Dollars allocated/spent on Estuarine/Nearshore projects
C.9.b	Total amount of estuarine area treated (acres)

Sub-Category: Estuarine/Nearshore – Additional by Work Type

Data ID	Metric
C.9.i	***Regrading of Slope***
C.9.k	***Shoreline armor removal***
C.9.k.2	Length of shoreline treated *(miles)*

Watershed Restoration - Upslope (HU)

Eligible watershed restoration projects include road treatments, road decommissioning, and upland erosion and sediment control that will reduce sediment delivery to the stream channel. Upslope erosion assessments and the method for determining sediment saved from delivery to the stream channel must use the protocol described in Part X of CA Restoration Manual or a CDFW-approved alternative method. Road treatments, road decommissioning, and other sediment prevention actions must meet the criteria for the specific action as described in Parts X of the CA Restoration Manual. HU projects are only for worksites that are expected to erode and deliver sediment to an anadromous fish-bearing stream. CDFW staff assigned to evaluate projects will consider current and anticipated land use when evaluating the biological merit of the project.

A separate proposal is required for each watershed restoration project. Each proposal must demonstrate how the project would be instrumental in restoring the natural function of the watershed. Sub-watersheds within a hydrologic basin that are not contiguous may be submitted under a single watershed restoration project proposal if restoration of these non-contiguous sub-watersheds will, in conjunction with other restoration being undertaken in the hydrologic basin or on its own, correct the major problems affecting anadromous salmon and steelhead in the entire hydrologic basin. Upslope restoration work that is beyond the riparian area must focus on the correction of major problems affecting the watershed.

This project type does not include pre-project planning or assessment. Planning, assessments, or re-assessments should already be complete for this project type. Proposals for pre-project planning and development should be submitted under the Watershed Evaluation, Assessment, and Planning (PL) project type or the Project Design (PD) project type.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for HU Projects

All HU proposals must include the following specific information in the Required Project Type Information:

A. Total number of miles of road treated.

B. Total number of acres of upslope area treated.

C. For each worksite, the following must be provided:

   1. Cubic yards of sediment prevented from entering the stream.
   2. Miles of road treated for road drainage system improvements.
   3. Miles of road decommissioned or abandoned.
   4. Number of upslope stream crossings treated (not for fish passage).
   5. Number of springs and landslides treated.
   6. Type and number of upland erosion or sediment delivery control used. Select from: erosion control structures, planting, or slope stabilization.
   7. Scientific names of plant species planted.

D. If project involves non-native vegetation removal or control, indicate per worksite:

   1. Acres of upslope area treated for vegetation removal or control.
   2. Scientific names of plant species removed or controlled.

E. Type of required listed species surveys that will be done and protocols to be used.

F. If the project is identified in an assessment or watershed plan, provide the name of the assessment or plan, in the format: Author, date, title, name, source, and source address. Do not include NOAA or State recovery plans here.

G. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management Practices To Minimize Adverse Effects To Pacific Lamprey *(Entosphenus tridentatus)*.

Required Supplementary Documents for HU Projects

All HU proposals must also include the following Supplementary Documents:

A. Conceptual plan (road log) (see definition in Part V). The road log must include feature number, feature name, and feature location (by distance from a designated fixed point); name or identity of the stream where direct sediment delivery is expected; statement that stream is focus species-bearing; stream order; feature number and type; estimated excavation volume (cubic yards); estimated hydrologically connected sediment savings (cubic yards); priority of potential sediment delivery (high, medium, or low); and proposed treatment at each feature. All subsequent road logs prepared for the project must follow the identification parameters (feature number, feature name, feature location, stream name, etc.) to provide consistent representation of the project area for the purpose of comparing features proposed with features implemented.

B. Project location topographic map (see definition in Part V).

C. Watershed map (see definition in Part V).

D. Signed provisional landowner access agreement (see definition in Part V).

E. Photographs (see definition in Part V). Photographs must show 'high' and 'moderate' sediment delivery features (e.g., road crossings, culverts) and include a representative photograph of each road segment proposed for surface treatment.

F. An Invasive Species Prevention Plan (see definition in Part V).

G. A completed project permitting information table. Instructions and a template are located in Appendix D.

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. First Winter Observations Summary (see definition in Part V).

Performance Measures for HU Projects

Category C: Habitat Restoration

Data ID	Metric
C.0.b	Total stream length treated/protected (miles)
C.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'
C.0.d.1	Type(s) of monitoring undertaken during the project period (choose from list)
C.0.d.2	Descriptor(s) of the location of project monitoring (choose from list)
C.6.a	Dollars allocated/spent on upland habitat/sediment
C.6.b.1	Total amount of upland area encompassed by the project (acres)
C.6.b.2	Total length of road treated (miles)
C.6.b.3	Sediment volume prevented from entering stream over the next 10 years (cubic yards)

Data ID	Metric
(None)	Length of aquatic habitat disturbed (feet)
(None)	Area/footprint of instream features installed within bankfull channel (square feet)

Sub-Category: Upland Habitat & Sediment – Additional by Work Type

Data ID	Metric
C.6.c	***Road Drainage System Improvements & Reconstruction***
C.6.c.2	Total length of road treated (miles)
C.6.d	***Road Closure/Abandonment***
C.6.d.2	Length of road closed/eliminated (miles)
C.6.e	***Erosion Control Structures***
C.6.e.2	Area treated with erosion/sediment control installations (acres)
C.6.e.3	Number of erosion/sediment control installations
C.6.f	***Planting for Erosion & Sediment Control***
C.6.f.2	Species of plants planted (scientific name)
C.6.f.3	Area treated with planting for erosion & sediment control (acres)
C.6.g	***Slope Stabilization***
(None)	Area of slope stabilization structures installed (acres)
C.6.h	***Upland Vegetation Management***
C.6.h.2	Species of plants treated or removed (scientific name)
C.6.h.3	Area treated with vegetation treatment or removal (acres)
C.6.k	***Trail or Campground Improvement***

Monitoring Watershed Restoration (MO)

Eligible restoration monitoring projects are those that will address one or more of the following tasks: 1) **Effectiveness Monitoring** - determine if restoration treatment and features have produced the desired habitat response and/or physical watershed processes; or 2) **Validation Monitoring** - determine if restoration treatment and features have produced the desired salmonid species response. Protocols for monitoring should be described in the proposal application. Some protocols are available at FRGP Guidance Tools website.

Monitoring projects that involve fish collections must possess a current CDFW Scientific Collecting Permit (SCP) before any fish sampling may be initiated. If the project may result in either a direct or incidental take of fish listed under the California Endangered Species Act (CESA), a Memorandum of Understanding (MOU) enacted between CDFW and the applicant authorizing a limited level of take for scientific purposes (pursuant to Fish and Game Code – FGC § 2081(a)) must also be in effect before any fish sampling is initiated. Applicants are advised to contact the local CDFW Environmental Scientist with regards to establishing an MOU (see FRGP Contacts). Applicants will be required to demonstrate current Federal Endangered Species Act (ESA) take coverage in order to obtain a CESA MOU. Applicants should include in their project proposal an estimated project budget that includes costs required to obtain the permit(s) and comply with permit reporting requirements. Information on collecting take permits and application is available at the CDFW SCP website.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for MO Projects

All MO proposals must include the following specific information in the Required Project Type Information:

A. Management questions and hypotheses addressed.

B. Overall project goals, measurable project objectives, and specific tasks to meet the objectives.

C. Spatial and temporal monitoring scales.

D. Study design: include parameters to be monitored, sampling scheme or plan, and sampling protocol(s). Specify how the study design will track changes from the restoration treatment vs background (i.e., Before After Control Impact). Additionally, specify how biological estimates will be supported with data or science.

E. Methods of Analysis.

F. Name of the habitat restoration project complemented by this monitoring project.

G. Name of the watershed assessment that identifies this monitoring project, in the format: Author, date, title, source, and source address. Do not include NOAA or State recovery plans here

H. Name and number of organizations cooperating with this project. If multiple organizations are involved in the monitoring project, clearly state the role of each organization (e.g., monitoring, data analysis, reporting, coordination, administration).

I. Number of reports prepared on key management or restoration data and name of the reports prepared, in the format: Author, date, title, source, and source address. A report must include a section that discusses the critical aspects of the success or failure of evaluated project(s), and/or any trends.

J. Type of monitoring conducted, select from: restoration effectiveness monitoring or restoration validation monitoring.

K. Miles of stream monitored for each monitoring type.

L. Acres of habitat monitored for each monitoring type.

M. Describe the comprehensive monitoring strategy/program of which the project is a part, if applicable.

N. Describe the component of the comprehensive monitoring strategy that the project addresses.

O. Number of reports prepared on key management or restoration data, information and needs, and name of each report in citation format.

Required Supplementary Documents for MO Applications

All MO proposals must also include the following Supplementary Documents:

A. Project location topographic map (see definition in Part V). Regional or watershed-scale monitoring proposals with more than one location can submit a single watershed map on which locations are clearly indicated instead of multiple topographic maps.

B. Watershed (or County) Map (see definition in Part V).

C. Signed Provisional Landowner Access Agreement (see definition in Part V).

D. Quality Assurance/Quality Control (QA/QC) Plan (see definition in Part V). Proposals for monitoring projects must include a brief (one to two pages) description of the project's QA/QC plan. If funding is awarded, a complete QA/QC plan must be submitted before the Grant will be executed.

E. An Invasive Species Prevention Plan (see definition in Part V).

F. Proposals for monitoring projects must include an example in Additional Attachments/ Documentation or provide a link to previous work by the applicant demonstrating applicant's ability to collect and analyze anadromous fish habitat data (effectiveness monitoring) or fish population data (for validation monitoring).

G. List of literature cited in Additional Attachments/Documentation.

If Funded

If the proposal is funded the following information will be required. This information is provided so the applicant is able to budget for these deliverables in the proposal as necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. Final manuscript in scientific format suitable for publication in a scientific journal (Abstract, Introduction, Methods, Discussion, Literature Cited).

C. Information must be submitted in a format to be presented at a restoration conference (i.e. PowerPoint). Efforts must be made to include project proponents and CDFW in the presentation. Posters do not meet this presentation requirement.

D. Develop at least one, two-page reports explaining the project background, project need, unique design aspects, key features, and results. Reports must be reviewed by CDFW prior to being final.

E. Field sampling database, in Excel or Access.

F. Data compilations and analytical products, in Excel or Access.

G. Names of reports prepared, in the format: Author, date, title, name, source, and source address.

H. All data collected and created is a required deliverable and will become the property of CDFW, and not of the grantee. A condition of final payment shall include the delivery of all related data. Spatial data should be delivered in an ESRI-useable format where applicable and documented with metadata in accordance with minimum BIOS metadata standards and FGDC metadata standards.

Performance Measures for MO Projects

Category E: Research & Monitoring

Data ID	Metric
E.0.b	Name of the habitat project complemented, project ID number, and project sponsor. If project does not complement a habitat project, enter 'None'
E.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'
E.0.d.1	Number of cooperating organizations.
E.0.d.2	Name(s) of cooperating organizations.
E.0.e.1	Number of reports prepared on key management or restoration data.
E.0.e.2	Name of report(s) prepared (Author, date, title, source, source address. Endnote citation format).
E.1.a	Dollars allocated/spent on salmonid monitoring
E.1.b.1	Total length of stream monitored (miles)
E.1.b.2	Total amount of upland/watershed area monitored (acres)
E.1.b.3	Total area of water area monitored (square miles)

Sub-Category: Monitoring – Additional by Work Type

Data ID	Metric
E.c.1.3	***Biological Instream Monitoring (other than salmon)***
E.1.c.3.a	Length of stream monitored (miles)
E.1.c.8	***Water Quality Monitoring***
E.1.c.8.a	Length of stream monitored for water quality (miles)
E.1.c.9	***Water Quantity (flow) Monitoring***
E.1.c.9.a	Length of stream monitored for water quantity (miles)
E.1.c.12	***Post-Project Implementation or Design Compliance Monitoring***
E.1.c.12.a	Length of stream monitored post-project (miles)
E.1.c.12.c	Area monitored post-project (acres)
E.1.c.13	***Restoration Effectiveness Monitoring***
E.1.c.13.a	Length of stream monitored for restoration effectiveness (miles)
E.1.c.13.c	Area monitored for restoration effectiveness (acres)
E.1.c.14	***Restoration Validation Monitoring***
E.1.c.14.a	Length of stream monitored for restoration validation (miles)
E.1.c.14.c	Area monitored for restoration validation (acres)

Watershed and Regional Organization (OR)

Eligible watershed and regional organization proposals are those that will assist locally based organizations to generate landowner or public support for projects that address recovery tasks and demonstrate immediate benefit to anadromous salmonids in local watersheds. Examples include, but are not limited to, the initial outreach and inventories associated with barrier remediation, providing flows to keep fish in good condition, instream habitat improvements, etc. Priority will be given to watersheds with no previous organization effort. This project type is not intended to fund ongoing organization over the long term, but to provide the initial funding to build landowner support for restoration purposes.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for OR Projects

All OR proposals must include the following specific information in the Required Project Type:

A. Need for organization and how it will enhance other efforts within the local and regional area.

B. Description of education or outreach about the watershed and salmonid issues.

C. Number and description of any planning or implementation projects that will be developed, and a description of how they will be accomplished under the project or promoted by the project.

D. Name and description of the plan developed or implemented, in the format: Author, date, title, name, source, and source address.

E. Acres encompassed by planning or assessment.

F. Acres of habitat protected/restored/proposed for restoration.

G. If the project includes outreach and education, the following must be included:

   a. Number of restoration or protection projects proposed.

   b. Type(s) of restoration project treatment proposed. Select from: fish screening, fish passage, instream flow, instream habitat, riparian habitat, upland habitat, water quality, wetland, estuarine/nearshore, or none.

   c. Number of education or outreach documents completed and distributed.

   d. Name of education or outreach document(s).

   e. Number of media materials prepared.

   f. Description of media material and where/when it was used.

   g. Number of interpretive signs used.

   h. Number of locations where interpretive signs were displayed.

   i. Describe where the interpretive signs were posted.

   j. Number of outreach events (public meetings) conducted or sponsored by this project and description of meeting format.

   k. Number of outreach event (public meeting) attendees and their relationship to the watershed (e.g., landowners, local agencies).

H. If landowners are recruited, indicate the following:

   a. Number of landowners reached and a description of how landowners will be contacted.

   b. Number of plans or designs developed.

   c. Acres of land affected by landowner planning/implementation of restoration/conservation activities.

Required Supplementary Documents for OR Projects

All OR proposals must also include the following Supplementary Documents:

A. Watershed (or County) Map (see definition in Part V). The project must be shown on a scaled map that shows the watershed, county, or other appropriate boundary. **Aerial photos do not satisfy this requirement.**

B. Status Report (see definition in Part V).

C. Invasive Species Prevention Plan if field trips or field work are part of project (see definition in Part V).

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

Performance Measures for OR Projects

Category B: Planning

Data ID	Metric
B.0.b.1	Area affected by planning and assessment activities (acres)
B.1.a	Dollars allocated/spent on planning & coordination

Sub-Category: Restoration Planning & Coordination – Additional by Work Type

Data ID	Metric
B.1.b.3	***Coordination of Watershed Conservation & Restoration Efforts***
B.1.b.3.a	Name of plan that was implemented (Author, date, title, name, source, source address. Endnote citation format)
B.1.b.3.b	Description and scope of the plan implemented including extent, purpose, and application of the plan

Category F: Outreach & Education

Data ID	Metric
F.0.b.1	Amount of salmonid habitat protected/restored/proposed for restoration as result of project (acres)
F.0.b.2	Number of watersheds protected/restored/proposed for restoration as result of project (5th field HUC)
F.0.c	Type of treatments applied or expected to be applied (proposed) [list]
F.0.d	Estimated value of treatments applied or expected to be applied (proposed) (dollars)
F.0.e	Number of restoration projects proposed as result of project

Sub-Category: Outreach/Education – All

Data ID	Metric
F.1.a	Dollars allocated/spent for outreach/education
F.1.b	Number of volunteers committed to restoration activities
F.1.c	Amount of donations made for habitat restoration activities (dollars)

Sub-Category: Outreach/Education – Additional by Work Type

Data ID	Metric
F.1.d	***Outreach Documents/Reports Prepared***
F.1.d.1	Number of documents prepared
F.1.d.2	Name of document(s) prepared (Author, date, title, source, source address. Endnote citation format)
F.1.f	***Media Material Prepared***
F.1.f.1	Number of media materials prepared
F.1.f.2	Describe media material and where/when used
F.1.g	***Interpretive Signs Prepared***
F.1.g.1	Number of signs prepared
F.1.g.2	Number of different locations where signs were displayed
F.1.g.3	Describe where signs were posted
F.1.h	***Outreach Events Conducted***
F.1.h.1	Number of outreach/education events

Sub-Category: Landowner Recruitment Projects – All

Data ID	Metric
F.2.a	Dollars allocated/spent for landowner recruitment
F.2.b.1	Amount of habitat restored/conserved (acres)

Data ID	Metric
F.2.c.2	Number of landowners contacted
F.2.c.3	Number of plans/designs developed as result of landowner recruitment

Project Design (PD)

Eligible proposals for developing project designs for restoration activities are those that would protect or improve habitat for salmonids (e.g., fish barrier modification or removal, bank stabilization, fish screens, water conservation). A PD proposal can be a feasibility study (less than 100% design delivered) or a design development project. A proposal that results in less than 100% design plans is eligible for Priority 3 funding and a proposal resulting in 100% design and/or construction-ready plans is eligible for Priority 1 funding. A proposal seeking 100% design and/or construction-ready plans must include all of the following to the appropriate degree: an options analysis, a basis of design report, and 30%, 65%, 90%, and 100% designs as project deliverables. The proposed timeline must clearly identify expected delivery dates for each design phase. Plan for 30-day CDFW review period of each design phase: 30, 65, 90, & 100%. If a proposal is awarded and during design the project is determined to be unfeasible, inadequate, or simply won't work as planned the Grantee may withdraw the grant without any negative impact.

Proposals for water conservation planning will undertake the analyses necessary to develop projects that enhance instream flow, including the permits and agreements for the project (petitions to dedicate instream flow [pursuant to Water Code – WAT § 1707], forbearance agreements, or instream flow leases).

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for PD Projects

All PD proposals must include the following specific information in the Required Project Type Information:

A. A detailed description of the project and how it resolves, remediates, and/or addresses a limiting factor for Chinook salmon, Coho salmon, or steelhead.

B. A list of all necessary surveys (e.g., longitudinal profiles, water surface profiles, soils, hydrology, geomorphology, scour analysis) required to compete the design. Projects in or near wetlands are required to conduct wetland delineation during the design process. (see Environmental Compliance and Permitting). Projects shall also conduct required threatened and endangered species, cultural, archeological, paleontological surveys to inform design constraints. For more information on surveys, monitoring, and protective measures that a funded project may need to complete, see past Mitigated Negative Declarations (MND) for the Fisheries Habitat Restoration Project at the MND Public Notice website.

C. A list of all county, state, and federal permits needed for the project.

D. A list of qualified specialists (e.g., water law, fish passage, hydrology, geology) already consulted in the development of the plan.

E. The number of restoration projects proposed as a result of this project.

F. The number of acres encompassed by planning/assessment.

G. A description of the quality and quantity of the habitat in the vicinity of the proposed project. If available, name the specific survey. Contact regional FRGP staff for some available surveys.

H. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management Practices To Minimize Adverse Effects To Pacific Lamprey *(Entosphenus tridentatus)*.

In addition to the above general requirements, the following specific information for certain treatment types must be included in the application's Required Project Type Information (on the Project Justification form).

A. **Water conservation planning projects**

1. Goals and objectives of the project and identification of the salmonid species and life stages that will benefit from the project.
2. Updated project map with points of diversion, water distribution system, places of use, and locations of tailwater return.
3. Any infrastructure changes and construction activities necessary to complete the project.
4. Permits or water rights changes required to complete the project (e.g., water rights permit, water rights change, Lake and Streambed Alteration Agreement (LSAA)); provide a draft of each and fee estimate.
5. List of legal tools to ensure objectives of project will be met (e.g., forbearance agreements, lease agreements); draft of each.
6. Water Accounting and Consumptive Use Analysis (as described in Part V): A thorough understanding of the amount of water diverted from the stream, lost, used, and returned to the stream based on direct measurements
7. Instream Benefits and Impacts Analysis (as described in Part V): A defensible model of how the available water will benefit the focus species and life stage, as well as a consideration of any negative environmental impacts of the project.
8. Monitoring plan that describes data to be collected, how it relates to project objectives, who will collect it, and how it will be disseminated.
9. Pre-consultation meeting with State Water Resources Control Board (SWRCB) Division of Water Rights and CDFW.
10. Water right(s) information:
    a. Type(s) of water rights involved, i.e., riparian rights, pre- or post-1914 appropriative rights, or adjudicated rights.

b. Quantity and season of use allowed for the water right, including any information about carriage water, rotation schedule, and any limitations on diversion rates.

c. Map of place of use

d. Proof of validity of the water right. Provide an Initial Statement of Water Diversion and Use, plus Supplemental Statements of use for the most recent five years (if available).

e. Additional data on water diversion. If available, provide monthly averages for the last 5 years; more frequent time steps and longer duration data should be provided if available.

f. Priority of water right. Include schematic of stream with locations of all water rights, their type, their priority, and their quantity.

g. If applicable, description of alternate source of water that will be used to offset the flow left instream. Provide evidence that the alternate water source will not impact instream flow.

11. Legal tools:

    a. Describe the tools that will be used to reallocate flow to the stream, i.e., instream dedication (pursuant to Water Code – WAT § 1707), forbearance agreement, or instream flow lease, and why those tools are appropriate.

    b. If an instream dedication will be used and a consumptive use analysis is likely to be necessary, discuss how consumptive use analysis will be completed.

12. A landowner and water user outreach plan.

13. Potential threats to achieving project objectives (e.g., probability of water rights protests, other potential resource impacts from reallocating flow back to the stream).

B. **Water conservation planning projects with infrastructure changes or construction elements**

1. Describe changes and how they further the project objective.
2. Design plan development. For projects with no instream elements (except headgates), provide 65% and 100% plans for review. For projects with instream elements, provide 30%, 65%, 90%, and 100% plans and calculations for review. Submit a Basis of Design Report detailing all project elements and design decisions. Note: some water conservation projects won't require any construction elements but planning for these projects can still be funded using the PD project type.

C. **Water conservation planning projects involving water rights permitting and changes**

1. If the project has the potential to impact other water users, a consumptive use analysis, as part of the water accounting, must be performed.
2. Pre-consultation meeting with SWRCB Division of Water Rights and CDFW.

Required Supplementary Documents for PD Projects

All PD proposals must also include the following Supplementary Documents:

A. Project location topographic map (see definition in Part V)

B. Watershed (or County) Map (see definition in Part V)

C. Signed Provisional Landowner Access Agreement (see definition in Part V)

D. Water Law Compliance Documents (see definition in Part V)

E. Photographs (see definition in Part V). Where multiple similar features (e.g., Large Wood structures) are proposed, representative photographs of these features and their target habitat will suffice.

F. Existing Conditions Sketch. The existing conditions sketch shall clearly depict existing worksite conditions, show the worksite layout, and highlight any important worksite features. This can be an aerial photo with markers to explain the conditions or a hand drawing of the worksite to give proposal reviewers a good understanding of the worksite.

G. An Invasive Species Prevention Plan if field trips or field work are part of project (see definition in Part V)

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. The Final Plan or Study must be submitted with the final report.

C. For water conservation project plans, a final draft petition for water rights change, forbearance agreement, or water lease. If applicable, 100% plans, specifications, cost estimate, and final report must be submitted. The final report must include the Water Accounting and Consumptive Use Analysis (if applicable), the Instream Benefit and Impact Analysis, the updated project map, the basis of design report, and the monitoring plan.

Performance Measures for PD Projects

Category B: Planning

Data ID	Metric
B.0.b.1	Area affected by planning and assessment activities (acres)
B.1.a	Dollars allocated/spent on planning & coordination
(None)	Restoration projects proposed as a result of this project (number)

Sub-Category: Restoration Planning & Coordination – Additional by Work Type

Data ID	Metric
B.1.b.8	***Conducting Habitat Restoration Scoping & Feasibility Studies***
B.1.b.8.a	Name of plan that was implemented (Author, date, title, name, source, source address. Endnote citation format). If no Plan implemented, enter "None"

Data ID	Metric
B.1.b.8.b	Description and scope of the plan implemented including extent, purpose, and application of the plan. If no Plan implemented, enter "None"
B.1.b.11	***Engineering/Design Work for Restoration Projects***
B.1.b.11.a	Name of plan that was implemented (Author, date, title, name, source, source address. Endnote citation format). If no Plan implemented, enter "None"
B.1.b.11.b	Description and scope of the plan implemented including extent, purpose, and application of the plan. If no Plan implemented, enter "None"

Public Involvement and Capacity Building (PI)

Eligible proposals for public involvement and capacity building will take place within multiple county/regional/watershed areas and are directed towards salmon and steelhead habitat restoration efforts. This includes proposals for AmeriCorps programs that deal with environmental projects and issues that assess, conserve, restore, monitor, and enhance coastal California anadromous watersheds. Information about the AmeriCorps program can be found on their website.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for PI Projects

All PI proposals must include the following specific information in the Required Project Type Information:

A. For AmeriCorps projects, describe in detail the process by which outreach is conducted, corps member worksites are selected, and members are placed across the state.

B. A detailed description of the regional need for the organization and how it will lead and enhance to the recovery of salmon and steelhead.

C. A description of the extent to which the proponent will work with others to achieve the organization's goals and how it might enhance other efforts within the geographic extent of the organization.

D. A complete description of measurable/quantifiable tasks.

E. Description of education/outreach about the watershed and salmonid issues.

F. Number and description of any planning or implementation projects that will be developed and a description of how they will be accomplished under the project or promoted by the project.

G. Name and Description of the plan developed/implemented, in the format: Author, date, title, name, source, and source address.

H. Acres encompassed by planning/assessment.

I. Acres of habitat protected/restored/proposed for restoration.

J. If the project includes outreach and education:

   a. Number of restoration or protection projects proposed.

   b. Type(s) of restoration project treatment. Select from: fish screening, fish passage, instream flow, instream habitat, riparian habitat, upland habitat, water quality, wetland, estuarine/nearshore, or none.

   c. Number of outreach/education documents completed and distributed.

   d. Name of education/outreach document(s).

   e. Number of media materials prepared.

   f. Description of media material and where/when it was used.

   g. Number of interpretive signs used.

   h. Number of locations where interpretive signs were displayed.

   i. Describe where the interpretive signs were posted.

   j. Number of outreach events (public meetings) conducted or sponsored by this project and description of meeting format.

   k. Number of outreach event (public meeting) attendees and their relationship to the watershed (e.g., landowners, local agencies).

K. If landowners are recruited, indicate proposed:

   a. Number of landowners reached and a description of how landowners will be/are contacted.

   b. Number of plans or designs developed.

c. Acres of land affected by landowner planning/implementation of restoration/conservation activities.

d. Acres of land affected by landowner planning/implementation of restoration/conservation activities.

Required Supplementary Documents for PI Projects

All PI proposals must also include the following Supplementary Documents:

A. Watershed (or County) Map (see definition in Part V). The project must be shown on a scaled map that shows the watershed, county, or other appropriate boundary. Aerial photos do not satisfy this requirement.

B. Status Report (see definition in Part V).

C. Invasive Species Prevention Plan if field trips or field work are part of project (see definition in Part V).

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

Performance Measures for PI Projects

Category B: Planning

Data ID	Metric
B.0.b.1	Area affected by planning and assessment activities (acres)

Data ID	Metric
B.1.a	Dollars allocated/spent on planning & coordination

Sub-Category: Restoration Planning & Coordination – Additional by Work Type

Data ID	Metric
B.1.b.3	***Coordination of Watershed Conservation & Restoration Efforts***
B.1.b.3.a	Name of plan that was implemented (Author, date, title, name, source, source address. Endnote citation format)
B.1.b.3.b	Description and scope of the plan implemented including extent, purpose, and application of the plan
B.1.b.4	***Watershed Council Support***
B.1.b.4.a	Name of plan that was developed or implemented (Author, date, title, name, source, source address. Endnote citation format). If no Plan developed or implemented, enter "None"
B.1.b.4.b	Description and scope of the plan developed/implemented including extent, purpose, and application of the plan. If no Plan developed or implemented, enter "None"
B.1.b.6	***Support to Local Entities or Agencies***
B.1.b.6.a	Name of plan that was developed or implemented (Author, date, title, name, source, source address. Endnote citation format). If no Plan developed or implemented, enter "None"
B.1.b.6.b	Description and scope of the plan developed/implemented including extent, purpose, and application of the plan. If no Plan developed or implemented, enter "None"

Category F: Outreach & Education

Data ID	Metric
F.0.b.1	Amount of salmonid habitat protected/restored/proposed for restoration as result of project (acres)
F.0.b.2	Number of watersheds protected/restored/proposed for restoration as result of project (5th field HUC)
F.0.c	Type of treatments applied or expected to be applied (proposed) (choose from list)
F.0.d	Estimated value of treatments applied or expected to be applied (proposed) (dollars)
F.0.e	Number of restoration projects proposed as result of project

Sub-Category: Outreach/Education – All

Data ID	Metric
F.1.a	Dollars allocated/spent for outreach/education

Data ID	Metric
F.1.b	Number of volunteers committed to restoration activities
F.1.c	Amount of donations made for habitat restoration activities (dollars)

Sub-Category: Outreach/Education – Additional by Work Type

Data ID	Metric
F.1.d	***Outreach Documents/Reports Prepared***
F.1.d.1	Number of documents prepared
F.1.d.2	Name of document(s) prepared (Author, date, title, source, source address. Endnote citation format)
F.1.f	***Media Material Prepared***
F.1.f.1	Number of media materials prepared
F.1.f.2	Describe media material and where/when used
F.1.g	***Interpretive Signs Prepared***
F.1.g.1	Number of signs prepared
F.1.g.2	Number of different locations where signs were displayed
F.1.g.3	Describe where signs were posted
F.1.h	***Outreach Events Conducted***
F.1.h.1	Number of outreach/education events

Sub-Category: Landowner Recruitment Projects – All

Data ID	Metric
F.2.a	Dollars allocated/spent for landowner recruitment
F.2.b.1	Amount of habitat restored/conserved (acres)
F.2.c.2	Number of landowners contacted
F.2.c.3	Number of plans/designs developed as result of landowner recruitment

Watershed Evaluation, Assessment and Planning (PL)

Eligible watershed planning projects are for developing watershed plans, ranch implementation plans, conducting watershed assessment, instream flow studies, and databases that benefit or coordinate information about salmonids and/or restoration and management of their habitat. A watershed is all land enclosed by a continuous drainage basin that drains to, or contributes to, a stream, lake, or other body of water (e.g., ocean). Watersheds can vary in scale to include multiple sub-watersheds or may be as small as a headwater or first order stream. It is a common area that flows to a larger stream or into the ocean inhabited now or in the past, individually or by any combination of Coho Salmon or steelhead trout.

Planning work in sub-watersheds within a hydrologic basin that are not contiguous may be submitted under a single watershed restoration planning project proposal if restoration of these non-contiguous sub-watersheds will, in conjunction with other restoration being undertaken in the hydrologic basin or on its own, correct the major problems affecting the entire hydrologic basin.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Watershed Plan

Proposals to develop a watershed plan must describe a complete and detailed process of watershed evaluation and assessment that culminates in an integrated and comprehensive plan. The plan should contain worksite-specific and prioritized recommendations that will address key limiting factors in the watershed that, when implemented, will lead to restoration of salmon and anadromous trout habitat. If the total landowner access secured does not support the proposed area to be evaluated or assessed for the plan, the project budget will be modified to reflect the reduced effort. If landowner access fails to

support at least 50% of the intended scope of the project, then CDFW will determine whether the project is worth completing. Both social and landscape elements associated with restoration of the watershed must be addressed.

Ranch Implementation Plan

Proposals to develop ranch implementation plans that will identify opportunities to increase anadromous salmonid populations may be included under watershed planning. These plans will cover specific ownerships or portions of a watershed that lend themselves to property-specific planning.

Watershed Assessment

Proposals for partial watershed assessment and evaluation, such as road erosion surveys and stream surveys, should be based on an already completed watershed planning document that is acceptable to CDFW.

Instream Flow Study

Proposals for instream flow studies focus on identification of acceptable instream flows in particular waters and include technical considerations, involving physical opportunities and constraints as well as biological processes and needs. These considerations vary significantly between different waters and in different locations, depending upon the degree and complexity of prior water resource development and upon the complexity of the affected ecosystems. The proposed project must demonstrate outreach to the State Water Resources Control Board relative to water rights considerations, and to CDFW Water Branch instream flow study staff if the project stream is subject to PRC § 10000 and/or FGC § 5937 code considerations. The key elements of the study plan that CDFW would have to support include, but are not limited to, 1) worksite selection and

representation strategy, 2) selection of target flows for assessment, and 3) selection and/or development of habitat suitability criteria.

Database Support

Proposals for database support include the creation or management of data systems that compile information regarding salmonids, salmonid habitat, and habitat management/restoration. Data systems should contribute to the assessment of existing salmonid populations and habitat and/or the prioritization of future restoration and recovery actions.

Required Project Type Information for PL Projects

All PL proposals must include the following specific information in the Required Project Type Information:

A. Acres of land area affected by the planning/assessment activity.

B. Name of the plan developed by the project, in the format Author, date, title, name, source, and source address.

C. Describe extent, purpose, and application of the plan.

D. Type(s) of assessment activities conducted. Select from: salmonid presence/absence survey, instream habitat condition assessment, habitat use by salmonids, instream flow study, or fish passage barrier inventory.

E. Name of the assessment document developed by the project, in the format Author, date, title, name, source, and source address.

F. Acres of habitat assessed to determine habitat conditions affecting salmonids.

G. Miles of stream assessed.

H. Miles of road assessed.

I. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management

Practices To Minimize Adverse Effects To Pacific Lamprey (*Entosphenus tridentatus*).

In addition to the above general requirements, the following specific information for certain project types must be included in the proposal.

A. **Watershed Plan**

1. Describe the area of the watershed and estimate the percentage of the area relative to the size of the watershed to be included in the evaluation and assessment for plan development.
2. If the proposed project is intended to complete a watershed plan or augment a reach-level plan, provide the title and date of completion of the existing document and estimate the percentage of the watershed the work proposed will include that is in addition to the previously completed effort (if evaluation and assessment work has already been completed to CDFW satisfaction, the plan may include, or reference, already completed work to satisfy this element).
3. Identify types of surveys to be completed and include a reference to the survey methodology used to assess the physical characteristics of the watershed.

B. **Ranch Implementation Plan**

1. Describe the area of the ranch and estimate the percentage of the area relative to the size of the ranch to be included in the evaluation and assessment of plan development.
2. If the proposed project has been identified in a completed document, provide the title and date of completion of the existing document and estimate the percentage of the work proposed that is in addition to the previously completed effort (if evaluation and assessment work has already been completed to CDFW satisfaction, the plan may include, or reference, already completed work to satisfy this element).

3. Identify types of surveys to be completed and a reference to the survey methodology used to assess the physical characteristics of the stream.

C. **Watershed Assessment**

1. Reference to a documented plan calling for the assessment and evaluation work, and include additional project proposal elements that will result in a complete watershed restoration plan.
2. Types of surveys to be completed and a reference to the survey methodology used.

D. **Instream Flow Study**

1. Hydrology and geology: A description of historical (i.e., unaltered) hydrological conditions.
2. Description of surface flow via a water budget, including reach-by-reach gains and losses.
3. Fluvial geomorphologic description of stream system.
4. Biology: Reasonably comprehensive species inventory and distribution information (all taxonomic levels).
5. Life-history understanding for all species identified as present.
6. Macro and micro-habitat characterization for aquatic species.
7. Assessment (and monitoring) of fish condition.
8. Study goals, the method(s) to be employed, study/modeling, uses, and limitations.
9. Water quality protection and pertinent standards (e.g., Basin Plan standards, Total Maximum Daily Loads).
10. Documentation of current/planned outreach efforts to the State Water Resources Control Board relative to water rights considerations, and to CDFW Water Branch instream flow study staff if the project stream is subject to PRC § 10000 considerations.

E. **Database Support**

1. Describe the data standards used in developing the database, and how data will be managed and stored once the grant ends.

Required Supplementary Documents for PL Projects

All PL proposals must also include the following Supplementary documents:

A. Project location topographic map (see definition in Part V).

B. Alternatively, a Watershed (or County) Map. The project must be shown on a scaled map that shows the watershed, county, or other appropriate boundary. Aerial photos do not satisfy this requirement (see definition Part V).

C. Signed Provisional Landowner Access Agreement (see definition in Part V).

D. An Invasive Species Prevention Plan (see definition in Part V).

E. Reference Documents. Provide the documents or a web link to planning documents, reference document for survey methodology, or prior document that addressed social issues as required and applicable.

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

Performance Measures for PL Projects

Category B: Planning

Data ID	Metric
B.0.b.1	Area affected by planning and assessment activities (acres)

Sub-Category: Restoration Planning & Coordination – All

Data ID	Metric
B.1.a	Dollars allocated/spent on planning & coordination

Sub-Category: Restoration Planning & Coordination – Additional by Work Type

Data ID	Metric
B.1.b.10	***Designing or Maintaining Restoration Data Systems***
B.1.b.10.a	Name of plan that was implemented (Author, date, title, name, source, source address. Endnote citation format). If no Plan implemented, enter "None"
B.1.b.10.b	Description and scope of the plan implemented including extent, purpose, and application of the plan. If no Plan implemented, enter "None"
B.1.b.12	***Developing Restoration/Action Plan***
B.1.b.12.a	Name of plan that was developed (Author, date, title, name, source, source address. Endnote citation format)
B.1.b.12.b	Description and scope of the plan developed including extent, purpose, and application of the plan

Sub-Category: Salmonid Habitat Assessment/Inventory – All

Data ID	Metric
B.2.a	Dollars allocated/spent on assessments and surveys

Sub-Category: Salmonid Habitat Assessment/Inventory – Additional by Work Type

Data ID	Metric
B.2.b	***Watershed Assessment***
B.2.b.2	Name of document(s) produced (Author, date, title, name, source, source address. Endnote citation format)
(None)	Number of watershed plans/assessments completed
B.2.c	***Instream Survey***
B.2.c.1	Type of Instream survey/assessment data collected (choose from list)
B.2.c.2	Stream length assessed to determine habitat condition and/or presence/absence of salmonids (miles)

Data ID	Metric
B.2.c.3	Stream miles containing salmonids (miles)
B.2.c.4	Stream miles needing restoration (miles)
B.2.c.5	Stream miles assessed to establish regulations or protective measures (miles)
B.2.c.6	Number of passage impediments/barriers identified
(None)	Potential barriers assessed for passage status (number)
B.2.d	***Habitat Survey***
B.2.d.1	Type of habitat survey/assessment data collected (choose from list)
B.2.d.2	Amount of habitat assessed (acres)
B.2.d.3	Amount of habitat needing treatment (acres)

Cooperative Fish Rearing (RE)

Eligible cooperative fish rearing projects are artificial propagation projects designed to supplement and restore depleted populations of ESA-listed salmonids. All projects must comply with the directives of the joint CDFW and NMFS Hatchery Operations Review Committee. CDFW only provides grants to projects supporting federal and State conservation hatchery programs and CDFW's Chinook Salmon fisheries enhancement program. These projects must meet all of the legal and policy requirements of FGC § 1200-1206. Proposals for new rearing projects must include detailed justification for estimated production costs. New and existing programs must follow the guidelines outlined in Appendix H of the *Recovery Strategy for California Coho Salmon.*

These proposals must also include a proposed Five-Year Management Plan that follows guidelines in "Cooperative Fish Production in California" in the CA Restoration Manual *Volume 1, Appendix B*. Proposals for established programs must have an approved Five-Year Management Plan. Proposals for continued operation of established programs must contain summaries of production costs for the past five years or for the life of the project if it has operated for less than five years. The FRGP will only fund the management and operation of fish rearing projects and will not fund design or construction of rearing facilities, or purchase of equipment. Proposed fish marking must be in accordance with CDFW and Pacific Fishery Management Council (PFMC) standards. Proposals that do not conform to CDFW and PFMC standards are ineligible for funding.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for RE Projects

All RE proposals must include the following specific information in the Required Project Type Information:

A. General guidelines of establishment and operation including, but not limited to, methods of rearing, marking and release of fish, and fish release locations.

B. Essential program elements.

C. Number of fish released, by species and life stage.

D. Number of fish marked, and the purpose of marking, by species.

E. Name of the habitat restoration project(s) complemented by this project, if applicable.

F. Current status of all applicable permits (e.g., CEQA, NEPA).

Required Supplementary Documents for RE Projects

All RE proposals must also include the following Supplementary Documents:

A. Project location topographic map (see definition in Part V).

B. Watershed map (see definition in Part V).

C. Signed provisional landowner access agreement (see definition in Part V).

D. Photographs (see definition in Part V).

E. Five-Year Management Plan, following the guidelines stated above.

F. An Invasive Species Prevention Plan (see definition in Part V).

G. A completed project permitting information table. Instructions and a template are located in Appendix D.

H. A long-term plan in Additional Attachments/ Documentation, if fish rearing has continued, or will continue, for more than five years.

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. Data on fish survival at rearing facility.

C. Data on adult fish returns.

Performance Measures for RE Projects

Category D: Salmonid Hatcheries

Data ID	Metric
D.0.b	Name of the habitat project complemented, project ID number, and project sponsor. If project does not complement a habitat project, enter 'None'
D.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'

Sub-Category: Hatchery Production – All

Data ID	Metric
D.1.a	Dollars allocated/spent for production of salmonids

Sub-Category: Hatchery Production – Additional by Work Type

Data ID	Metric
D.1.b	***Salmonids Reared/Released***
D.1.b.2	Salmonid species reared/released (choose from list)
D.1.b.2	Number of hatchery fry/smolt reared/released (per species)
D.1.b.3	Purpose of production (choose from list)

Data ID	Metric
D.1.d	***Salmonids Outplanted***
D.1.d.2	Salmonid species outplanted (choose from list)
D.1.d.2	Number of salmonids outplanted (per species)
D.1.e	***Native/Wild Broodstock Collection/Relocation***
D.1.e.2	Salmonid species collected (choose from list)
D.1.e.2	Number of salmonids collected (per species)

Sub-Category: Fish Marking – All

Data ID	Metric
D.2.a	Dollars allocated/spent for hatchery salmonid marking or tagging

Sub-Category: Fish Marking – Additional by Work Type

Data ID	Metric
D.2.b	***Salmonids marked***
D.2.b.2	Salmonid species marked or tagged (choose from list)
D.2.b.2	Number of salmonids marked or tagged
D.2.b.3	Purpose of marking or tagging (choose from list)
D.2.c	***Fish Marking - Equipment or Technology Improvement***
D.2.c.2	Describe the equipment or technology
D.2.c.3	Dollars allocated/spent for marking equipment or technology

Fish Screening of Diversions (SC)

Eligible projects for fish screens must meet CDFW and NMFS screening criteria found in the CA Restoration Manual, Appendix S. A fish screen is a fish protection device installed at or near a water diversion that physically prevents entrainment, injury, or death of targeted aquatic species. A fish screen is designed to prevent fish from swimming or being drawn into an aqueduct, cooling water intake, dam, or other diversion on a river, lake, or waterway where water is taken for human use. Besides simply preventing fish from passing, fish screens are designed to minimize stress and injury that occur when fish impact the screen or are subjected to changes in water velocity and direction caused by the diversion. Fish screens physically preclude fish from entering the diversion and do not rely on avoidance behavior like electrical or sonic fish barrier technology. Fish screens are categorized by 1) diversion type (gravity vs. pump), and 2) debris cleaning function ("active" or automatic vs. "passive" or manual cleaning). This project type does not include pre-project planning; planning should already be complete. This project type will not fund design completion. Proposals for pre-project planning and design should be submitted under Project Design (PD) Project Type.

Required Project Type Information for SC Projects

All SC proposals must include the following specific information in the Required Project Type Information:

A. Miles of stream treated, count one side of the stream only (include only the actual length of stream treated by the project, not the length of stream affected by the project).

B. Feet of aquatic habitat disturbed (sum of the individual feature lengths).

C. Square feet of instream features installed within bankfull channel (footprint of features).

D. Number of new fish screens installed.

E. Flow rate in cubic feet per second (cfs) of diversions with new screens installed.

F. Number of fish screens modified or replaced.

G. Flow rate in cubic feet per second (cfs) of diversions with fish screens modified/replaced.

H. Acre-feet per year of water protected by screens.

I. Indicate the type of required listed species surveys that will be performed and type of protocols to be used and the species and life stages that will benefit from the project.

J. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management Practices To Minimize Adverse Effects To Pacific Lamprey *(Entosphenus tridentatus)*.

Required Supplementary Documents for SC Projects

All SC proposals must also include the following Supplementary Documents:

A. Intermediate Plans If a design element within the Intermediate Plans is thought to be unnecessary, please provide the rationale for not including it (see definition in Part V).

B. Project Location Topographic Map (see definition in Part V).

C. Signed Provisional Landowner Access Agreement (see definition in Part V).

D. Water Law Compliance Documents: Written verification of the right to divert, use, store, sell or transfer the water, for a project that addresses issues related to the diversion, use, storage, or purchase of water. Copies of Statement of Water Diversion and Use that has been filed with the SWRCB (minimum last 3 years or up to the last 10 years). For applicants who have not filed a Statement of Water Diversion and Use, a copy of that form may be obtained at the California Water Boards' website. CDFW will

not accept a Statement of Water Diversion and Use unless it has been filed with the SWRCB.

E. Photographs (see definition in Part V). Include photographs of worksite where fish screen will be installed, as well as representative photographs of habitat immediately upstream and downstream of the proposed fish screen worksite.

F. An Invasive Species Prevention Plan (see definition in Part V).

G. A completed project permitting information table. Instructions and a template are located in Appendix D.

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. Final Plans (100% plans) accepted by CDFW/NOAA Fisheries technical/engineering staff, will be required before implementation of the project.

C. A water quality monitoring report for projects:

   a. Performing any in-water work;

   b. Project activities result, or may result, in discharge to surface waters;

   c. or Project activities result in the creation of a visible turbidity in surface waters.

   Here is an example monitoring report.

D. All biological and cultural resources surveys

E. First Winter Observations Summary (see definition in Part V).

F. A 10-year Lake and Streambed Alteration Agreement defining the implementation, operation, and maintenance of the fish screen according to design standards.

   a. For fish screen projects, a written agreement must be provided by the applicant from the landowner or responsible party.

   b. Notwithstanding FGC § 6027, the agreement must state that the landowner or responsible party will operate the fish screen whenever water is being diverted and the possibility of entrainment of salmonids exists.

   c. It shall identify the party responsible for maintaining the screen to ensure that it is functioning as designed.

   d. The landowner or responsible party must operate and maintain the fish screen project for a period not less than 10 years.

   e. The landowner or responsible party will maintain the fish screen and bypass return so that they are functioning as designed and are meeting National Marine Fisheries Service criteria for fish screens (criteria at time of construction).

   f. Maintenance shall include regular inspection during operating periods (at least biweekly), lubrication, replacement of worn parts, and removal of debris that may affect the operation of the screen.

   g. In the event of an act of nature that results in partial or complete failure of the project, the landowner or proponent will not be held responsible for costs incurred after the act of nature. Acts of nature include, but are not limited to, floods, earthquakes, volcanic eruptions, and windstorms.

   h. If proposal is funded the project will be required to be tested at two life stage design flows (e.g., fall/winter flows for adult salmonids and summer flows for juveniles).

If project includes dewatering and/or species exclusion/relocation, a CDFW Incidental Take Permit is required to be submitted to the CDFW grant manager before each species relocation activity.

Performance Measures for SC Projects

Category C: Habitat Restoration

Data ID	Metric
C.0.b	Total stream length treated/protected (miles)
C.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'
C.0.d.1	Type(s) of monitoring undertaken during the project period (choose from list)
C.0.d.2	Descriptor(s) of the location of project monitoring (choose from list)
C.1.a	Dollars allocated/spent on fish screening
(None)	Length of aquatic habitat disturbed (feet)
(None)	Area/footprint of instream features installed within bankfull channel (square feet)

Sub-Category: Fish Screening – Additional by Work Type

Data ID	Metric
C.1.c	***Fish Screens Installed***
C.1.c.2	Number of new screens installed
C.1.c.3	Amount of flow influenced by screen(s) installed (cfs)
C.1.d	***Fish Screens Replaced or Modified***
C.1.d.2	Number of screens replaced, repaired, or modified

Private Sector Technical Training and Education Project (TE)

Eligible technical training and education projects provide support for private sector training and education in the field of anadromous salmonid habitat analysis and restoration. Proposals may include those for:

A. Teaching private landowners about practical means of improving land and water management practices that, if implemented, will contribute to protection and restoration of salmon and anadromous trout stream habitat.
B. Scholarship funding for attending workshops and conferences that teach restoration techniques.
C. Operation of nonprofit restoration technical schools.
D. Production of restoration training and education workshops and conferences.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for TE Projects

All TE proposals must include the following specific information in the Required Project Type Information:

A. Information on how the project addresses needs of the local watershed.
B. Target audience(s).
C. Overview of training focus, goals, and objectives.
D. Description of partners and/or local stakeholder support.
E. Number of workshop/training events.

F. Number of participants in workshop/training events.

G. Name and number of educational documents completed/distributed.

H. Number of exhibits/posters prepared.

I. Number of media materials prepared.

J. Description of media material and where/when it was used.

K. Number of landowners reached by project.

L. Description of how the proposed project promotes watershed stewardship, land and water management practices, training, and education with the goal of having landowners, resource professionals, restorationists, and communities increase their technical knowledge to better preserve and restore focus species habitat.

Required Supplementary Documents for TE Projects

All TE proposals must also include the following Supplementary Documents:

A. Watershed map (see definition in Part V).

B. Status Report (see definition in Part V).

C. Signed provisional landowner access agreement (see definition in Part V).

D. Evaluation (see definition in Part V)

E. An Invasive Species Prevention Plan if field trips or field work are part of project (see definition in Part V).

F. An Evaluation Plan (see definition in Part V).

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is

provided here so the applicant is able to budget for these deliverables in the proposal if necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

Performance Measures for TE Projects

Category F: Outreach & Education

Data ID	Metric
F.0.b.1	Amount of salmonid habitat protected/restored/proposed for restoration as result of project (acres)
F.0.b.2	Number of watersheds protected/restored/proposed for restoration as result of project (5th field HUC)
F.0.c	Type of treatments applied or expected to be applied (proposed) (choose from list)
F.0.d	Estimated value of treatments applied or expected to be applied (proposed) (dollars)
F.0.e	Number of restoration projects proposed as result of project
F.1.a	Dollars allocated/spent for outreach/education
F.1.b	Number of volunteers committed to restoration activities
F.1.c	Amount of donations made for habitat restoration activities (dollars)

Sub-Category: Outreach/Education – Additional by Work Type

Data ID	Metric
F.1.d	***Outreach Documents/Reports Prepared***
F.1.d.1	Number of documents prepared
F.1.d.2	Name of document(s) prepared (Author, date, title, source, source address. Endnote citation format)
F.1.e	***Exhibits/Posters Prepared***
F.1.e.1	Number of exhibits/posters prepared
F.1.f	***Media Material Prepared***
F.1.f.1	Number of media materials prepared
F.1.f.2	Describe media material and where/when used
F.1.i	***Workshops/Training Events***
F.1.i.1	Number of workshop/training sessions
F.1.i.2	Number of workshop/training participants
F.1.j	***Presentation at Educational Institutions***
F.1.j.1	Number of schools & other institutions reached
F.1.j.2	Number of students educated

Water Conservation Measures (WC)

Eligible water conservation projects are those that provide more efficient use of water extracted from stream systems and result in an increase of instream flow and/or improvement of instream water quality that benefit aquatic species. The project should be consistent with and contribute to the implementation of the *California Water Action Plan, California Water Resilience Portfolio, California Climate Strategy, etc*. Off-channel water storage, changes in the timing or rate of diversion or source of water supply, moving points of diversion, irrigation ditch lining, piping, stock-water systems, and agricultural tailwater recovery/management systems are included in this category when the water savings are quantified and dedicated for instream beneficial flows. CDFW will only fund water conservation projects that include an instream dedication of 100% of the water saved due to project implementation and in a manner to support fish during water-limited seasons. Water conserved by projects considered for funding shall be dedicated to the stream for anadromous salmonid benefits through a mechanism such as a forbearance agreement, an instream flow lease, and/or a formal dedication or transfer of water rights pursuant to Water Code – WAT § 1707 (1707 petition). Please note that one of the parties in the lease or forbearance agreement must be an organization with the capacity to coordinate and develop agreements and leases, and experience performing habitat monitoring and measuring water use. If any of the items below have not been developed, then the applicant should consider applying under the PL project type in order to develop the information necessary for a WC proposal.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for WC Projects

All WC proposals must include the following specific information in the Required Project Type Information:

A. Total miles of stream treated, count one side of stream only (include only the actual length of stream *treated* by the project, not the length of stream *affected* by the project).

B. Feet of aquatic habitat disturbed (sum of individual feature lengths).

C. Square feet of instream features installed within bankfull channel (footprint of the features).

D. Explain how the proposed project is consistent with and contributes to the implementation of the *California Water Action Plan* or *California Climate Strategy*.

E. State the goals and objectives of the project and identify the salmonid species and life stages that will benefit from the project.

F. Project map with points of diversion, water distribution system, places of use, and locations of tailwater return.

G. Quantity and season of use allowed for by the water right. Include any information about carriage water, evapotranspiration rates, static ditch loss results, rotation schedule, and any limitations on diversion rates.

H. Identify any infrastructure changes/construction activities necessary to complete the project.

I. Identify permits and/or water rights changes required to complete the project (e.g., water rights permit, water rights change, LSAA); provide a draft, ready for submittal, of each and a fee estimate.

J. Status of LSAA agreement for existing diversion.

K. List of legal tools to ensure objectives of project will be met (e.g., forbearance agreements, lease agreements); draft, ready for signature, of each.

L. Provide a monitoring plan that describes data to be collected, how it relates to project objectives, and how it will be disseminated.

M. Describe any existing instream flow studies that have been conducted on the proposed stream. Include a copy of the study as supplemental documents.

N. Indicate the type of required listed species surveys that will be performed and type of protocols to be used and the species and life stages that will benefit from the project.

O. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management Practices To Minimize Adverse Effects To Pacific Lamprey *(Entosphenus tridentatus)*.

Required Supplementary Documents for WC Projects

All WC applications for this project type must include the following supplemental documents. This information will allow CDFW to evaluate the water conservation cost-to-fisheries benefit and will be necessary to develop the materials for the instream flow dedication regardless of the mechanism chosen to formalize the commitment:

A. Intermediate Plans (see definition in Part V).

B. Conceptual Plans, if Intermediate Plans are determined to be unnecessary (see definition in Part V).

C. Project location topographic map (see definition in Part V).

D. Signed provisional landowner access agreement (see definition in Part V).

E. Water law compliance documents:

   a. Describe the kinds of water rights involved, i.e., riparian rights, pre- or post-1914 appropriative rights, and/or adjudicated rights.

b. Quantity and season of use allowed for by the water right. Include any information about carriage water, rotation schedule, and any limitations on diversion rates.

c. Proof of validity of the water right. Provide an Initial Statement of Water Diversion and Use, plus Supplemental Statements of use for the most recent five years (if available).

d. Additional data on water diversion. If available, provide monthly averages for the last 5 years; more frequent time steps and longer duration data should be provided if available.

e. Priority of water right. Include schematic of stream with locations of all water rights, their type, their priority, and their quantity.

f. If applicable, description of alternate source of water that will be used to offset the flow left instream. Provide evidence that the alternate water source will not impact instream flow.

g. Provide sufficient information to confirm that pre- or post-1914 water rights remain valid and have not been subject to more than five years of consecutive non-use (Water Code § 1241).

F. Photographs (see definition in Part V). Photos should include any planned off-channel water storage worksites, current and future points of diversion, irrigation ditches to be lined, piping, stock-water systems, and agricultural tailwater recovery/management systems.

G. An Invasive Species Prevention Plan (see definition in Part V).

H. A completed project permitting information table. Instructions and a template are located in Appendix D.

I. Instream Benefits and Impacts Analysis (see definition in Part V).

J. Water Accounting and Consumptive Use Analysis (a consumptive use analysis may not be applicable to all projects) (see definition in Part V).

If Funded

If the proposal is funded, the following information will be required with the final report of the grant agreement. This information is provided so the applicant is able to budget for these deliverables in the proposal as necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards. NOTE: In order to provide the requested information, the grant agreement must extend one year beyond the end of construction.

A. Actual performance measures per worksite, as shown below.

B. The first year of monitoring results that are called for in the project monitoring plan provided in the proposal.

Performance Measures for WC Projects

Category C: Habitat Restoration

Data ID	Metric
C.0.b	Total stream length treated/protected (miles)
C.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'
C.0.d.1	Type(s) of monitoring undertaken during the project period (choose from list)
C.0.d.2	Descriptor(s) of the location of project monitoring (choose from list)
C.3.a	Dollars allocated/spent on instream flow improvements
C.3.b	Total length of stream protected for adequate flow (miles)
C.3.c	Change (increase) in flow of water (cfs)
(None)	Length of aquatic habitat disturbed (feet)
(None)	Area/footprint of instream features installed within bankfull channel (square feet)

Sub-Category: Instream Flow – Additional by Work Type

Data ID	Metric
C.3.e	***Irrigation Practice Improvement***
C.3.e.2	Volume of water conserved per year (acre-feet)
C.3.e.4	Start date of action or agreement
C.3.e.5	End date of action or agreement (if permanent, enter 12/31/9999)
C.3.g	***Maintaining Adequate Flow or Reducing Withdrawals***
C.3.g.2	Amount of water conserved per year (cfs)

Water Measuring Devices (Instream and Water Diversions) (WD)

Eligible water measuring device projects are those that will install, test, and maintain instream and water diversion measuring devices. The project should be consistent with and contribute to the implementation of the *California Water Action Plan* or *California Climate Strategy*. Project designs must follow guidelines described in the Water Measurement Manual, third edition (United States Bureau of Reclamation).

The instream gauges must be installed so they do not impede fish passage in anadromous streams. The WD project type does not provide funding for monitoring or water management purposes, although testing/rating of the measuring system may be allowed or required as a part of a funded agreement. A separate monitoring (MO) or planning (PL) proposal should be prepared for extensive or long-term monitoring purposes. Consideration of the intended use of the water measuring devices will be included in the technical merit and biological soundness evaluation of proposals in the WD category.

Applicants intending to be covered by FRGP's programmatic permits are required to review Environmental Compliance and Permitting section (see definition in Part V).

Required Project Type Information for WD Projects

All WD proposals must include the following specific information in the Required Project Type Information:

A. Explain how the proposed project is consistent with and contributes to the implementation of the *California Water Action Plan* or *California Climate Strategy*.

B. Number of water flow gauges installed.

C. Indicate the type of required listed species surveys that will be performed and type of protocols to be used and the species and life stages that will benefit from the project.

D. Address how the project will aid in the protection and conservation of Pacific Lamprey through the Pacific Lamprey *Entosphenus tridentatus* Assessment and Best Management Practices To Minimize Adverse Effects To Pacific Lamprey (*Entosphenus tridentatus*)

Required Supplementary Documents for WD Projects

All WD applications for this project type must include the following Supplementary Documents. This information will allow CDFW to evaluate the water conservation cost-to-fisheries benefit and will be necessary to develop the materials for the instream flow dedication regardless of the mechanism chosen to formalize the commitment:

A. Intermediate Plans (see definition in Part V).

B. Conceptual Plans, if Intermediate Plans are determined to be unnecessary (see definition in Part V).

C. Project Location Topographic Map (see definition in Part V).

D. Watershed Map (see definition in Part V).

E. Signed Provisional Landowner Access Agreement (see definition in Part V).

F. Water Law Compliance Documents: Written verification of the right to divert, use, store, sell or transfer the water, for a project that addresses issues related to the diversion, use, storage, or purchase of water.

G. Photographs (see definition in Part V). Include photographs of worksite where water measuring device will be installed, as well as representative photographs of habitat immediately upstream and downstream of the proposed worksite.

H. An Invasive Species Prevention Plan (see definition in Part V).

A completed project permitting information table in Program Permit Requirements – Appendix D. Instructions and a template are located in Appendix D.

If Funded

If the proposal is funded the following information will be required with the final report of the grant agreement. This information is provided so the applicant is able to budget for these deliverables in the proposal as necessary. Additionally, funded projects must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards.

A. Actual performance measures per worksite, as shown below.

B. Stream/diversion gauge evaluation report, including as-built plans of the measuring device, its location (lat/long, decimal degrees, and NAD 83), and intended use (stream flow or diversion measurement).

C. An operation/maintenance agreement defining who keeps a weir or gauge operating.

D. A water quality monitoring report for projects:

   a. Performing any in-water work;

   b. Project activities result, or may result, in discharge to surface waters;

   c. or Project activities result in the creation of a visible turbidity in surface waters.

   Here is an example monitoring report.

E. First Winter Observations Summary (See definition in Part V).

F. All biological and cultural resources surveys

If project includes dewatering and/or species exclusion/relocation, a CDFW Incidental Take Permit is required to be submitted to the CDFW grant manager before each species relocation activity.

Performance Measures for WD Projects

Category C: Habitat Restoration

Data ID	Metric
C.0.b	Total stream length treated/protected (miles)
C.0.c	Name of the Plan, Watershed Assessment, or Recovery Plan that identifies the need for this project (Author, date, title, source, source address. Endnote citation format). If project was not identified in a Plan, enter 'None'
C.0.d.1	Type(s) of monitoring undertaken during the project period (choose from list)
C.0.d.2	Descriptor(s) of the location of project monitoring (choose from list)
C.3.a	Dollars allocated/spent on instream flow improvements
C.3.b	Total length of stream protected for adequate flow (miles)
C.3.c	Change (increase) in flow of water (cfs)
(None)	Length of aquatic habitat disturbed (feet)
(None)	Area/footprint of instream features installed within bankfull channel (square feet)

Sub-Category: Instream Flow – Additional by Work Type

Data ID	Metric
C.3.d	***Water Flow Gauges***
C.3.d.2	Number of water flow gauges installed

Part V: Definitions of Required Information

(Supplemental and Other Terms)

Following are definitions for required information throughout this document. The definitions are listed in alphabetical order and include required supplemental documents indicated in Part IV. Not all of the following are required for each project type. See Part IV for the requirements for each project type.

Design Plan Criteria

Project design consists of several phases that, depending on the agency or locality, may have different names, but generally the process advances as follows:

A. Conceptual Plans (or ~30% plans):

- Conceptual plans, along with the Conceptual Report, should indicate the general location of any activities and project elements, show overall layout of the project location, and identify any constraints (e.g., infrastructure elements or geologic hazards).
- Conceptual plans should show the stream channel or other area of work, feature locations, equipment access locations, revegetation areas, distance to each project structure from a reference point, and other significant project and existing features.
- The Conceptual Report and Plans should demonstrate that the project is feasible and reflect a preferred alternative. Alternatives analysis often compares a number of concept level plans.

B. Intermediate Plans (or ~65% plans):

- These plans should show detailed plan views and profiles of any improvements and standard details.
- Individuals reviewing Intermediate Plans should be able to interpret exactly where the project will be built and where project impacts will occur.

C. Draft Plans (or ~90% plans):

- These plans should incorporate revisions to the Intermediate Plans and add details that are required for construction, such as survey notes, instructions for erosion and sediment control, staging areas, access, and the like.

D. Final Plans (or 100% plans):

- These plans should incorporate any revisions to the Draft Plans and should represent the final set of design documents. These are the plans used for construction bids.

After a grant is executed, any project worksite(s)that may require modification for any reason must be approved in writing by the assigned CDFW grant manager.

The following design plan criteria, as applicable, are to be included in the "Intermediate Plan" submitted with the proposal for specific project types. See Part IV for specific requirements for each project type. Descriptions (i.e., a Basis of Design Report including a narrative that outlines the set of conditions, needs, and requirements taken into account in designing the project) and Intermediate Plans for these project categories should be sufficient for the review required by CDFW/NOAA Fisheries geotechnical/engineering staff.

At-Grade Diversions Design Plan Criteria

The following information should be included in the design plans for at-grade diversions and submitted with proposals:

A. Instream and ditch/pump hydraulic calculations showing that there is sufficient head to divert maximum diversion flow and bypass flow at minimum stream flow considering head losses at flow measurement devices, fish screens, pipes, open ditches, head gates, etc.

B. Design drawings showing structural dimensions in plan, elevation, longitudinal profile, cross-sectional views, and important component details.

Bank Protection Design Plan Criteria

The following information should be included in the design plans for bank protection and submitted with proposals:

A. Calculation of design flow and 100-year flow.

B. Water surface profiles and average channel velocities for design and 100-year flows.

C. Geotechnical assessment may be necessary to ensure project design is structurally appropriate.

D. Design calculations, i.e., shear stress; rock sizing; root strength and suitability of selected vegetation; and determination of spur, groin, bendway weir dimensions, spacing, angle, etc.

E. Alternatives analysis and justification for using rock slope protection, if applicable.

F. Design drawings showing worksite topography, control points, dimensions of the bank protection in plan, elevation, longitudinal profile, cross-sectional views, important component details, and planting plans.

Bridge and Bottomless Culverts Design Plan Criteria

The following information should be included in the design plans for bridges and bottomless culverts and submitted with proposals. Note: review pertains to impacts to stream and aquatic environment, but not structural integrity or bridge loading.

A. Identify and apply applicable fish passage technique: stream simulation, hydraulic design, not applicable, etc.

B. Calculation of 100-year flow and any other design flow

C. Water surface profiles and average channel velocities for the design flows and the 100-year flow.

D. Description of geomorphic setting of bridge and why bridge design is appropriate for the setting

E. Potential for debris loads or jams at bridge worksite

F. Scour analysis

G. Justification for increases in water surface elevation or velocities near the bridge (if any) and the use of any scour protection.

H. Geotechnical assessment may be necessary to ensure project design is structurally appropriate.

I. Design drawings showing worksite topography, control points, dimensions of bridge/culvert structure in plan, elevation, longitudinal profile, cross-sectional views, and important component details.

J. HEC-RAS model files including boundary conditions and other model parameters.

Boulder Weirs Design Plan Criteria

The following information should be included in the design plans for boulder weirs and submitted with proposals (see Parts IX and XII, CA Restoration Manual or other approved guidelines and manuals for salmon and steelhead habitat restoration).

A. Target species, life stages, and migration timing at project worksite.

B. Calculation of lower and upper fish passage stream flows for each species life stage and project design flow.

C. Water surface profiles at existing conditions for upper and lower fish passage stream flows and project design flow.

D. Water surface profiles with proposed boulder weirs for upper and lower fish passage stream flows and project design flow.

E. Spacing of drops over, cross-sectional shape of, and pool depths above and below boulder weirs.

F. Rock sizing calculations.

G. Geotechnical information as necessary to ensure project design is structurally appropriate.

H. If specific low flow notches are planned, calculations of depths and velocities within notches.

I. When a boulder weir project includes a water diversion component, include ditch/pump hydraulic calculations showing that boulder weirs provide sufficient head to divert maximum diversion flow and bypass flow at minimum stream flow considering head losses at flow measurement devices, fish screens, pipes, open ditches, head gates, etc.

J. Design drawings showing worksite topography, control points, structural dimensions in plan, elevation, longitudinal profile, and cross-sectional views along with important component details, including construction notes on the placement of bed material and boulders.

K. Post-construction evaluation and monitoring plan.

Fish Screen Design Plan Criteria

The following information should be included in the design plans and submitted with proposals that include a fish screen.

A. Target species and life stages to be protected at proposed screening worksite (e.g., will steelhead fry be present?).

B. Fish screen structure placement (e.g., on-stream, in-canal, in-reservoir, or pumped).

C. Evidence of infeasibility for an on-stream screen if an in-canal or in-reservoir project is proposed.

D. Applicable approach velocity and sweeping velocity criteria.

E. Records of diversion flows **and** stream flows, including maximums and minimums, during irrigation season.

F. Stream flow vs. depth rating curve at diversion intake.

G. Water depth and approach velocity calculations in front of the fish screen throughout range of diversion flows.

H. Sweeping velocity calculations at several locations along the length of the screen throughout range of diversion and bypass flows.

I. Evidence that flow uniformity criterion will be met.

J. Screen exposure time calculation.

K. Velocity calculations between end of screen and bypass entrance.

L. Flow depth calculations within bypass conduit **and** in stream at bypass outlet at minimum bypass flow.

M. Velocity calculations in stream at bypass outlet.

N. Drop height and impact velocity calculation at bypass outlet, if applicable.

O. Estimated bypass flow needed to meet fish screen criteria (cuffs).

P. Fish screen area calculation performed in accordance with *CDFW Fish Screening Criteria* (6/19/00) found in the CA Restoration Manual.

Q. For paddle wheel driven cleaning systems, fish screen area calculations showing passive screening criteria are met when paddle wheel driven wipers no longer operate.

R. Description of fish screen cleaning mechanism, including proposed frequency of cleaning.

S. Description of fish screen openings, including porosity and dimensions of round, square, or slotted openings.

T. Assessment of sediment transport/scour conditions at fish screen for on-channel installations.

U. Specific information describing the type of corrosion-resistant screening material, bypass control/pipe, and other materials that will directly affect fish.

V. Design drawings showing worksite topography and dimensions of fish screen structure in plan, elevation, longitudinal profile, and cross-sectional views along with important component details. Drawings should show smooth joints at bypass pipe bends and screen faces flush with adjacent walls and/or piers.

W. Any additional information that may be required to show that screen will meet current CDFW/NMFS screening criteria.

X. Operation and maintenance plan that includes preventive and corrective maintenance procedures, inspection and reporting requirements, maintenance logs, etc.

Y. Post construction evaluation and monitoring plan.

Additional information can be found at:

- California Salmonid Stream Habitat Restoration Manual
- Juvenile Fish Screen Criteria for Pump Intakes
- Anadromous Salmonid Passage Facility Design
- Fish Screening Criteria for Anadromous Salmonids

Large Wood Projects Design Plan Criteria

Natural unaltered riparian zones supply large wood to a stream through various processes. Large wood provides an instream structural element important to salmonid habitat. Unfortunately, there are few examples of riparian zones or streams that are unaltered by human land use activities in California. This has left a legacy of many streams deficient in the large wood that is necessary to create and maintain salmonid habitat. To facilitate the reestablishment of stream processes, the addition of large wood to streams is a restoration

technique that benefits streams on a range of scales in a variety of settings. Large wood projects aim to restore channel function, provide habitat to salmonids, and add nutrients to the stream.

The following design plan criteria lays out guidance for a range of techniques for adding large wood back into streams. The following terms are defined for use of this guidance.

Large wood is defined as all wood pieces greater than 12 inches in diameter and a minimum of 20 feet (CDFW 2002)

Key Piece Logs for design criteria are pieces of large wood that are independently stable within the bankfull channel and are able to trap other pieces of wood and debris.

- Length: for logs with root wads attached, length of a key piece must be 1.5 times the bankfull width of the stream. If no root wad is attached, the length of the log must be 2 times the bankfull width (ODFW 2010).
- Diameter: should be equal to or greater than ½ the bankfull depth (ODFW 2010) or 12 inches, whichever is greater.
- Species: In coastal Northern California, the preferred wood species are old growth redwood or Douglas fir.

Low-risk projects include projects where there is low-risk to public safety, infrastructure, or private property.

High-risk projects include all large wood projects, regardless of the size of stream or length of wood, in areas where public safety, infrastructure, or private property are at risk. Licensed engineers must design, approve and stamp projects that fall into the high-risk category.

Simple structures include structures with key piece logs with no added stability, key piece logs wedged between live trees, and structures with key piece logs or large wood pinned to live trees or anchored to bedrock in the bed or streambanks.

Complex structures are structures that are stabilized by soil, rocks, boulders, posts, or piles.

Data Requirements (all large wood projects)

A. Purpose and Worksite Selection Statement. What is the purpose of the project and where will it be constructed. An important element in this statement is how the structures will fit, affect, and be affected by the existing channel configuration. Clearly define the project goals.

B. Risk and Uncertainty Analysis. Both the RiverRAT approach (Skidmore, et al, 2011) and Washington manual (Cramer, 2012) include good discussions regarding risk and uncertainty. It is expected that designers will fully embrace those discussions and recommendations.

a. Property ownership along channel reach.

b. Recreational activities (boating, swimming, and fishing).

c. Floodplain partitioning (property boundaries, levees, roads, etc.).

d. Existing onsite and existing infrastructure (structures, pipelines, over-head utilities).

e. Existing riparian, wetland, and floodplain habitat areas that could be impacted.

C. As-built map and details to support future inspection monitoring.

D. Inspection monitoring program outlining post-project monitoring. Post-project monitoring is required for high risk projects and for projects building complex structures. It is optional for low-risk projects utilizing simple structures. Post-project monitoring is limited to inspecting the structures after the first winter for changes such as storm damage, missing key pieces, and counts of both large and small wood pieces accumulated on the structure. Biological, habitat, or geomorphic post-project monitoring can be submitted under the MO project type.

Biological Assessment (all projects)

A. Document the biological imperative to modify the channel form and function. (watershed assessment or habitat inventory)

B. Target species and life stages intended to benefit from the project and their current utilization of the project reach.

C. Habitat objective relative to the target species and life stages (e.g., spawning habitat vs. winter refugia vs. summer rearing).

D. Potential impacts to existing habitat areas.

E. Predatory species that may benefit from the project.

Worksite Characterization

A. Simple structures in low-risk settings

a. Overall slope of the stream channel for the project reach. A general range of <1%, 1-3%, 3-6%, or >6% is acceptable.

b. Description of evidence that recent storms have engaged the floodplain. Evidence might include fine sediment deposits on floodplain, racked leaves and debris in branches, and lines of pine needles and leaves on the ground.

c. Qualitative assessment of stream stability to determine if the stream is stable, aggrading or degrading. If the stream is aggrading or degrading, determine the cause of the instability. Look for fresh sediment deposits or flat channel bottoms to show aggradation. Look for bare bank toes with exposed roots or bank slope failures to show degradation.

d. A description of substrate composition i.e., sand, gravel, cobble, bedrock etc. and a qualitative assessment of scour potential, as indicated by residual pool depths and depth of alluvial cover.

e. A description of the streambank composition, layering, bedding, geometry and potential for erosion.

f. A description of the type and extent of riparian vegetation with attention paid to potential anchor points, potential future natural recruitment of large wood, and long-term bank stability.

g. If using on-worksite wood, locate and catalog the available wood.

h. A description and sketch of construction access if using heavy equipment

B. Complex structures or high-risk settings (additional analyses)

a. Scaled map and description of fluvial geomorphologic features (channel plan form, existing bars, pools, riffles) and riparian vegetation.

b. Quantitative assessment of the bed material gradation and thickness of alluvium in the project reach. Note: A geotechnical investigation, with logged borings or trenches, analyzed by a licensed Geotechnical Engineer or Professional Geologist, is required for high-risk projects that will rely on piles or posts to anchor wood structures.

c. Qualitative assessment of streambank and floodplain stability (i.e., how erodible are these features and what is the avulsion potential?).

d. Qualitative description of sediment supply, composition, and transport (i.e., likelihood and relative significance of aggradation or degradation).

e. Gradation of bed material at several locations in the project reach.

f. Scaled topographic map showing survey points, cross-sections, and longitudinal profiles from the survey data. It is helpful to put the maps onto an aerial photograph.

g. Extend the longitudinal profile at least five bankfull widths upstream of the most upstream large wood structure and at least five bankfull widths downstream of the furthest downstream large wood structure.

h. At a minimum, include scaled cross-sections near each intended structure location. Extend the cross-sections beyond the active channel to include the floodplain. Include an estimate of the bankfull depth on the cross-section plot. Estimate channel roughness at each section and take a photograph of the cross-section location.

Hydrology & Hydraulics (complex structures and high-risk settings)

A. Water supply, quality, and sources through the seasons.

B. Calculation of design flow based on the risk and uncertainty analysis: For complex large wood structures in a low-risk environment, design for the 25-year recurrence interval (USBR and ACOE 2016). Design high-risk projects to withstand the 100-year recurrence interval flow (USBR and ERDC 2016).

C. Water surface profiles and average channel velocities for design flow.

D. If the goal of the project is to split streamflow for a particular purpose (e.g., a side channel), include hydraulic calculations demonstrating that the obstruction provides sufficient head to divert maximum diversion flow and bypass flows at minimum stream flows is required.

E. Hydraulic model (open source models strongly preferred) files including boundary conditions and other model parameters.

Engineering Design and Structural Stability Analyses (for complex structures and high-risk settings)

A. Reasons for selecting the structure types (e.g., bar apex vs. flow deflector).

B. Local scour analysis at each structure. The importance of bed scour associated with these structures cannot be overstated because such scour has the potential to undermine the structure and cause it to collapse. Use the report 'HEC 18 – Evaluating Scour at Bridges' (Federal Highway Administration 2012) to understand the types of scour and their related analyses.

C. Factor of safety stability analysis (force balance): driving forces of buoyancy, drag, lift, and incipient motion vs. resisting forces of passive earth pressure, surcharge weight, and skin friction.

a. Low-Risk Settings using Complex Structures: For the vertical, buoyant forces, the FOS is 1.5. For the horizontal sliding forces, the FOS is 1.25. Finally, the FOS for rotation and overturning is also 1.25.

b. High-Risk Settings: For vertical, buoyant forces, the FOS is 2.0. For horizontal, sliding forces, the FOS is 1.75. Finally, the FOS for rotation and overturning is also 1.75.

D. Material design life.

E. Design drawings showing worksite topography, control points, structural dimensions in plan, elevation, cross-sectional views, and important component details. Plan view must be of sufficient channel length to show structure alignment with respect to the existing channel.

Sketch Requirements (for simple structures in low-risk settings)

Sketch drawings should include feature locations, material types and quantities, and channel dimensions. A cover page with feature totals for the project, per stream, average bankfull channel width and gradient for the stream reach, and a key to the symbols found in sketches should be included. Sketches should include the following:

A. A feature number and location code following Project Location Topographic Map protocol (Part V). Each feature shall be assigned a unique station number that reflects its measured distance from an identified landmark.

a. A plan view of the feature including the following:

b. An arrow showing streamflow direction

c. Bankfull width

d. Log orientation, lengths, and diameters

e. Anchoring locations

f. Existing habitat conditions (e.g., habitat type, residual pool depth, primary cover type, existing large wood, dominant substrate)

g. Feature logs individually numbered (i.e., 1, 2, 3, etc.)

h. Existing features such as logs or boulders labelled with an "E"

B. Clear, hand-drawn sketches are acceptable.

C. Goal of the feature (e.g., increase shelter complexity, increase pool depth, sort substrate, aggrade the channel, increase sinuosity, increase frequency of floodplain or side-channel inundation).

D. Linear length of channel to be treated by feature (feet).

E. Length of aquatic habitat disturbed at feature location (feet).

F. Area of the feature built within bankfull width and height (square-feet).

G. Identify the source location for wood and boulders and provide the quantity, size, and type of materials that make up each feature including wood species and hardware.

H. Labor required to complete each feature (hours).

I. Plan view sketches.

Off-Channel/Side Channel Habitat Design Plan Criteria

Off-channel or side channel habitat projects must be maintained through natural processes to be considered for funding. These types of projects include the following:

A. Re-connection of existing and naturally formed but abandoned side channel or alcove habitats to restore fish access lost as the result of anthropogenic activities. Re-connection of side channels refers to restoration of hydraulic and hydrologic connection to the main channel by restoring the relative elevation of the channel to the mainstem or removing flow blockages such as levees and sediment plugs.

B. Improvement of hydrologic connection between floodplains and main channels.

C. Creation of new, often, self-maintaining side channel or off-channel habitat that mimics or replicates naturally formed and maintained fluvial features, which does not replace or displace other functioning floodplain or riverine environments.

D. Re-connection of still water floodplain features that have been isolated from the meandering channel by anthropogenic activities. Oxbow lakes, features of meandering channels that naturally evolve from fully aquatic to increasingly terrestrial habitat, often represent distinct, biologically rich ecosystems worthy of conservation regardless of their utility to anadromous fishes. Projects that propose altering such habitat will be required to demonstrate the ecological imperative for doing so.

This project type is not intended to provide for regular maintenance of a constructed channel feature that would not otherwise be formed and maintained by the stream itself. However, it is recognized that the success of some projects may depend on the reconnection to or recovery of natural stream-wide processes. Projects developed as part of such larger-scale stream recovery are likely to evolve over time and may require periodic intervention to maintain or enhance the functional use of the off-channel habitat feature. Anticipated project maintenance associated with overarching stream recovery efforts should be described, planned for accordingly, and may be considered for funding.

The use of appropriately designed large wood structures and/or boulder weirs as water level control structures, or that are intended to redirect flow are acceptable project components.

Projects that will not be considered for funding include those where the constructed habitat would be used as a point of water diversion, or that involve the installation of a flashboard dam, head gate, or other mechanical structure to guarantee project performance.

Proposals must provide design plans at the 65% level that fully describe the project elements and how those elements will operate to produce or ultimately result in the establishment of a naturally

sustainable habitat feature. The outline of Design Plan Criteria that follows includes the information generally required for the adequate review of this project type and to ensure the project will result in the construction of sustainable habitat, with no harm to the aquatic community or otherwise detrimental effect to existing ecosystem values. The project applicant should submit this information with the design plans. **If a listed item is considered unnecessary, the rationale for excluding it should be provided.** Conversely, while this list attempts to cover the key parameters for most projects, there may be worksite-specific conditions and opportunities to provide better and sustainable habitat that cannot be easily translated into a simple checklist, and the project applicant should expand on this list as they feel appropriate.

Concept Description

A. Description of the type of off-channel or side channel feature to be constructed, its dimensions, bathymetry, and over what range of stream flows the habitat will be connected to the stream.

B. Worksite constraints and project limits (e.g., existing infrastructure, preservation of floodplain conditions, property limits), including risk to infrastructure or other properties due to increased flow through a project side channel or reconnected floodplain.

C. Description of how geomorphic and hydraulic processes will maintain habitat. Include a description of how flow will enter and exit the off-channel feature (e.g., hydraulic connections to main channel, groundwater inflow). Describe how the proposed off-channel feature is anticipated to change and adjust over time.

Biological Assessment

A. A narrative description of the evidence that this type of habitat is limited (e.g., worksite-specific habitat typing, investigations of changes in land use and stream form).

B. The biological imperative for a project that intervenes on behalf of the stream to correct anthropogenic changes to channel form and function.

C. The habitat objective relative to the target species and life stages (e.g., spawning habitat, high flow winter refugia, summer rearing habitat).

D. The target species and life stages intended to benefit from the project and their current utilization of the project reach, including predatory species (e.g., centrarchids).

E. If the off-channel feature is designed to receive water intermittently (e.g., functional only for a specific time period for the purpose of providing high flow winter refugia), provide a description of what, if any, features or behaviors will reduce or prevent stranding of the target or any other aquatic or semi-aquatic species.

Worksite Hydrology and Hydraulics

A. Availability, sources, and quality of water across seasons and especially during periods of low flow.

B. Description of shallow groundwater-surface water relationships if project performance is linked with or depends on groundwater contributions. The description should include evidence of a) the connection between stream flow and groundwater, and b) the annual change in shallow groundwater or water table elevations.

C. Calibrated water level rating curves developed through modeling, direct measurements, and/or gage records of the main channel near upstream and downstream ends of project channel across the range of design flows.

D. Calculation of the tidal prism for the purpose of determining an appropriate channel geometry for projects in tidally influenced areas.

Worksite Physiography

A. An assessment of existing habitat elements (i.e., water temperature; dissolved oxygen; salinity; habitat type: pool, riffle, flatwater; estimate of instream shelter and shelter components; water depth; dominant substrate type, etc.).

B. Description of existing stream geomorphology, hydrology, shallow earth, and geologic relations in and beneath areas of proposed excavation.

C. A qualitative assessment of the vertical and lateral stability of the main channel relative to the pre- and post-project potential for an abrupt change in the course of the project stream (avulsion).

D. Qualitative description of sediment supply, composition, and mode of transport through the project reach, and areas that may be impacted by the project within, upstream, and downstream of the project area. Assess if project is likely to be impacted by aggradation or degradation (e.g., accumulation of fine sediments, blockage of entrance or exits). Assess likely design life of improvements if sediment issues are significant.

E. Projects that propose to reestablish stream flow through disconnected water bodies, such as oxbow lakes, must include an assessment of the still water habitat values that may be detrimentally impacted or lost altogether by the reestablishment of surface flow.

Engineering and Implementation

A. Topography and cross-sections of project area should include the river and floodplain, identification of critical hydraulic features, and be an integral part of the project monitoring plan (See Monitoring Requirements below).

B. Description of the volume of material to be excavated, how it will be utilized, or how and where it will be disposed of.

C. Description of and plan for any woody debris/boulder weir control features proposed.

D. Description of how stream flow and/or groundwater will be managed during project construction.

Monitoring Requirements for Off-Channel Habitat Features

Projects to increase off-channel and side channel habitat are relatively new to California, and the biological and geomorphic merits of these projects have not yet been demonstrated by broad scale monitoring. As appropriate to such experimental projects, all off-channel habitat proposals must include physical and biological monitoring appropriate to the targeted species and targeted time period of project use. The monitoring plan must be developed in coordination with local CDFW-FRGP biologists, cover the first and second post-construction seasons, and should include but are not limited to the following:

A. Pre- and post-project photo monitoring.

B. Pre- and post-construction and design flow surveys of constructed inlet and outlet structures, including any other critical hydraulic features.

C. A description of, if and/or when the off-channel features became active and/or disconnected from the main channel.

D. Biological surveys of the functional use of the constructed habitat by the target species during the targeted life stage and the anticipated time period of use.

E. Water quality monitoring (e.g., dissolved oxygen, temperature, salinity, turbidity, or other water quality attributes that might be indicated as an area of concern in the project reach).

The monitoring reports will necessarily be submitted after closure of the grant and at a date after each monitoring season agreed upon by

the project applicant and the CDFW-FRGP Environmental Scientist. Failure of a good faith effort by the project manager to conduct project monitoring and to provide the monitoring reports specified will detrimentally affect the award of future grants across all project types.

Removal of Small Dams (permanent and flashboard) Design Plan Criteria

The CA Restoration Manual does not cover the removal of small dams, however guidelines and minimization measures have been developed in this proposed action. Types of small dams included by FRGP's programmatic permits are permanent, flash board, and seasonal dams that are NOT considered high risk. Implementing these types of projects may require the use of heavy equipment (e.g., self-propelled logging yarders, mechanical excavators, backhoes, and explosives). Small dam removals that are considered high risk are those that:

1. Mobilize contaminated sediment
2. Potentially impact infrastructure during or following removal
3. Negatively affect valuable limited habitat
4. Expose problematic bedrock or sediment layers (e.g., slaking clays)
5. Require more than 5 vertical feet total of grade control to avoid the conditions described in Items 2 through 4
6. Affect storage of flood flows

These high-risk removals may be considered for funding under FRGP but will have to seek separate permitting. Dam removals covered by FRGP's programmatic permits must not contain any of the risks listed above.

Data Requirements and Analysis

A. Soil boring in the impoundment upstream of the dam and larger grab samples of any suspicious layers for contaminant analysis.

B. Analysis of bank stability and bed erosion with regards to impacting infrastructure on the overbanks, including bed material samples and cross-sections surveys.

C. Analysis of debris and sediment to be transported downstream that may impact infrastructure and habitat.

D. Analysis of the potential to trigger a headcut that may impact upstream infrastructure and habitat, including a survey of the longitudinal profile within the expected zone of adjustment.

E. A map of any exposure of bedrock or cohesive layers within the expected zone of adjustment and test of those materials for problematic characteristics.

F. Analysis of the impact on peak flood flows and flooding extents/channel capacity by removing the dam.

G. A habitat inventory survey (CA Restoration Manual, *Part III, Habitat Inventory Methods*) that maps and quantifies all upstream and downstream spawning areas that may be affected by sediment released by removal of the small dam,

H. Analysis of fish passage for appropriate species and life stages.

Rock Chutes Design Plan Criteria

The following information should be included in the design plans for rock chutes and submitted with proposals (see Parts IX and XII, CA Restoration Manual).

A. Target species, life stages, and migration timing at project worksite.

B. Calculation of lower and upper fish passage stream flows for each species life stage and design flow.

C. Water surface profiles at existing conditions for upper and lower fish passage stream flows and design flows.

D. Water surface profiles with proposed boulder weirs for upper and lower fish passage stream flows and design flows.

E. Rock and engineered streambed material sizing calculations for both bed and banks.

F. Geotechnical information as necessary to ensure project design is structurally appropriate.

G. Calculations of depths and velocities along length of individual rock chutes.

H. If at a water diversion, include ditch/pump hydraulic calculations showing that rock chutes provide sufficient head to divert maximum diversion flow and bypass flow at minimum stream flow considering head losses at flow measurement devices, fish screens, pipes, open ditches, headgates, etc.

I. Design drawings showing worksite topography, control points, structural dimensions in plan, elevation, longitudinal profile, cross-sectional views, and important component details, including construction notes on placement of bed material and boulders.

J. Post-construction evaluation and monitoring plan.

Roughened Channels Design Plan Criteria

The following information should be included in the design plans for roughened channels and submitted with proposals (see Parts IX and XII, CA Restoration Manual).

A. Target species, life stages, and migration timing at project worksite.

B. Calculation of lower and upper fish passage stream flows and design flows.

C. Water surface profiles at existing conditions for upper and lower fish passage stream flows and design flows.

D. Water surface profiles with proposed boulder weirs for upper and lower fish passage stream flows and design flows.

E. Rock and engineered streambed material sizing and thickness calculations for bed and banks.

F. Geotechnical information as necessary to ensure project design is structurally appropriate.

G. Calculations of depths and velocities along length of roughened channel at the upper and lower fish passage and design flows.

H. Calculations of the overall drop and slope along the roughened channel.

I. If at a water diversion, include ditch/pump hydraulic calculations showing that roughened channel provides sufficient head to divert maximum diversion flow and bypass flow at minimum stream flow considering head losses at flow measurement devices, fish screens, pipes, open ditches, headgates, etc.

J. Design drawings showing worksite topography, control points, structural dimensions in plan, elevation, longitudinal profile, cross-sectional views, and important component details, including construction notes on the placement of bed material and boulders.

K. Post-construction evaluation and monitoring plan.

Worksite Terminology

Worksite is defined as a point, line (reach), or polygon that spatially describes a work area where specific restoration activities take place. If there are multiple worksites (spaced a ½ mile or more apart) for the project, then location and metrics should be entered for each worksite. For projects that apply to a large geographic scale (e.g., statewide or watershed wide), a single point lat/long will need to be reported. The point could be a 'central' point location for the project; the lat/long of the city where the project staff conduct the work; or a lat/long that designates the geographic area where most of the work is focused. Many projects employ multiple treatment types (features) within a given worksite. With multiple treatment types (point, line, or polygon) a project may need to be divided into more than one

worksite. Features must be at least ½ mile apart to be designated as separate worksites. For example: a project that includes instream restoration and riparian treatments in a contiguous area (within ½ mile of each other) would be one worksite with one lat/long, however the project map would show a line for the instream activities and a polygon for the riparian plantings. Another example: a reach of stream may have several treatments, such as instream habitat structures, off-channel habitat features, and floodplain connectivity grading, but still be considered as one linear area, provided the distance between any two individual features is less than ½ mile. The project map would show one linear worksite. Similarly, the area of riparian habitat where Himalayan blackberry are to be removed and conifer trees planted would be considered one polygon worksite.

Feature is a distinct physical implementation at a location within a project worksite intended to interact with the environment to improve anadromous salmonid habitat. Features consist of one or more restoration treatments. Within one project worksite there can be numerous features. For implementation monitoring, features are divided by treatment type and location. However, functional groups of structures or treatments within one habitat unit can be grouped as one feature. For example, a group of tightly spaced willow baffles should be considered one feature. It is impractical to separate each baffle because they interact and work together as a group for the same objective at the same location. A string of closely spaced (within ½ mile of each other) grade control weirs is another example of a group of structures of the same type functioning together. However, willow baffles and riprap bank stabilization at the same location would need to be separated into different features because they have different objectives.

Project and Feature Numbering

A unique station number is needed for each project element (pertinent natural features and specific work areas) that reflects its measured distance (in feet) from the project start location. For example, a large wood feature proposed for installation 50 feet and

150 feet upstream of a bridge designated as the project starting point would have a station number of 0+50 and 1+50, respectively. A scaled map with all pertinent feature stations must be included as part of the proposal.

Point Worksites describe work that occurs at one or more discrete locations that are more than ½ mile from each other.

Line (Length) Worksites are a continuous line along which associated treatments are implemented. Lines must either follow the path of a stream or a road where work is taking place.

Area Worksites are described by the outline of a polygon on the landscape. These areas may be relatively small, such as the planting area for a riparian project, or relatively large, such as a watershed in which a planning project is taking place.

Environmental Compliance and Permitting

Applicants that wish to be covered through FRGP permitting are encouraged to reach out to FRGP's Regulatory Coordinator (see FRGP Contacts) as early as possible to consult on potential coverage and requirements.

All funded proposals must comply with the California Environmental Quality Act (CEQA), Federal Endangered Species Act (ESA) of 1973, and California Endangered Species Act (CESA). Projects that have not been designed to meet all requirements of the *California Salmonid Stream Habitat Restoration Manual, 4th Edition* (CA Restoration Manual) or other approved guidelines and manuals for salmon and steelhead habitat restoration will have the responsibility of developing the appropriate documentation for CEQA, ESA, and CESA compliance, including financial assurances under CESA. An approved or certified CEQA document will be required in order to execute the project, and CDFW will act as a responsible agency under CEQA.

Projects that are designed to be consistent with the CA Restoration Manual, and for which no CEQA documentation has yet been prepared, will be included within the environmental document prepared by CDFW as a lead agency for CEQA. Projects seeking to use other approved guidelines and manuals for salmon and steelhead habitat restoration must confirm permit coverage with FRGP's Permit Coordinator (see FRGP Contacts). Qualifying projects may also seek CEQA coverage through the Statutory Exemption for Restoration Projects (SERP). CEQA Lead agencies for such projects must obtain concurrence from CDFW Director, that the project meets qualifying criteria set forth in Public Resources Code section 21080.56, subdivisions (a) to (d). The SERP provides CEQA statutory exemption for fish and wildlife restoration projects pursuant to Section 21080.56 of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). For more information on the new SERP process, please see CDFW's Cutting the Green Tape SERP webpage at https://wildlife.ca.gov/Cutting-Green-Tape/SERP or email CDFW staff at RestorationPermitting@wildlife.ca.gov for questions.

Projects may also obtain ESA coverage as needed through the U.S. Army Corps of Engineers' programmatic Section 7 consultation for its FRGP regional general permit. If necessary, CESA permitting will be handled on a project-by-project basis.

The project description should include sufficient information for CDFW to complete the CEQA documents. Pursuant to the guidelines for CEQA in the California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, Article 5, Section 15064.4, CDFW must determine the greenhouse gas (GHG) emission of projects it funds, permits, or implements to assess the impacts on the environment. The majority of the GHG emissions are presumed to come from fuel consumption; therefore, CDFW will calculate the GHG emissions based on the amount of fuel (diesel and gasoline) consumption per project it funds, permits, or implements and will provide the results in the CEQA document. Therefore, the applicant must provide in the application an estimate of the amount of fuel that will be consumed during the implementation of the entire project.

Eligible proposed projects must avoid significant environmental impacts. Applicants should budget sufficient time and/or funds in the proposal to complete required migratory bird, candidate, threatened, and endangered species surveys, biological monitoring, and required reasonable measures that are protective and avoid causing harm to cultural, archeological, paleontological, and biological resources, including native species and their habitat. CDFW recommends resource surveys are completed during project design to account for appropriate avoidance and/or protective measures. For more information on surveys, monitoring, and protective measures that a funded project may need to complete, see past Mitigated Negative Declarations (MND) for the Fisheries Habitat Restoration Project at the MND Public Notice website. All applicants are strongly urged to work closely with appropriate CDFW staff prior to submission to ensure all potential environmental concerns associated with the proposed project are considered.

No project that is required mitigation or used for mitigation under the CEQA, CESA, ESA, National Environmental Policy Act (NEPA), California Forest Practices Act (FPA), or Section 404 of the Clean Water Act (CWA) will be considered for funding. No project that is under an enforcement action by a regulatory agency will be considered for funding.

Proposals that conduct fishery habitat restoration activities using methods described in the CA Restoration Manual or other approved guidelines and manuals for salmon and steelhead habitat restoration may be covered by the FRGP's Clean Water Act Section 404 (RGP 12(north coast), RGP 16 (Central Valley), or RGP 78 (south coast)) and Section 401 programmatic permits. **The applicant is responsible for reviewing the permits and incorporating their required conditions into their proposal. Certain activities (such as fish screens, infiltration galleries, large dam removals, etc.) are ineligible for FRGP programmatic permit coverage. Please contact the FRGP Regulatory Coordinator (see FRGP Contacts) early if you have any questions.**

Permits can be found here:

- 404
    - RGP-12
    - RGP-16
    - RGP-78
- 2022's 401 (Sample annual permit is provided here for information purposes only. Funded applicants will follow their award year's 401 Certification which may contain different minimization measures and conditions)

Projects working in-water or dewatering waterways are required to monitor and report water quality during dewatering activities. Parameters such as, but not limited to, dissolved oxygen, temperature, conductivity, and turbidity shall be reported. For more information and example monitoring report please contact the Regulatory Coordinator in FRGP Contacts. Water quality monitoring can be conducted with a handheld device. The cost of purchasing such device can be included in the budget, where applicable. If the project is seeking coverage under any of FRGP's programmatic permits, Appendix D has additional information and requirements that shall apply. If projects do not comply with the implementation methods described in the CA Restoration Manual or other approved guidelines and manuals for salmon and steelhead habitat restoration, then the applicant is responsible for obtaining its own Section 404 and 401 permitting coverage. The applicant is encouraged to work with CDFW Support Staff prior to submission of their proposal application to determine if the project is eligible for the FRGP programmatic permit coverage.

Projects working in or near wetlands must delineate the wetland's boundary using the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual and Supplements as outlined in State Wetland Definition and Procedures for Discharges of Dredged of Fill Material to Waters of the State. Project Design (PD) applications, proposing work

in or near wetlands should include a wetland delineation task in the proposal to be eligible for inclusion to FRGP implementation permitting. Completed wetland delineation plans must be included in the application for implementation projects working in or near wetlands to receive implementation permitting through FRGP.

Monitoring or research projects that involve fish collecting/handling must possess a current CDFW Scientific Collecting Permit (SCP) before any fish sampling may be initiated. If the project may result in either a direct or incidental take of fish listed under the CESA, a Memorandum of Understanding (MOU) enacted between CDFW and the applicant authorizing a limited level of take for scientific purposes (pursuant to FGC § 2081(a)) must also be in effect before any fish sampling may be initiated. Contact the local CDFW Environmental Scientist with regards to establishing an MOU (see FRGP Contacts). Applicants will be required to demonstrate current ESA take coverage in order to obtain a CESA MOU. Applicants submitting proposals involving fish collection should incorporate a sufficient timeframe in their proposed project to allow securing a CDFW SCP and CESA MOU, as well as applicable ESA permits. Applicants may include the cost of the fee as a line item in the proposed project budget. Required cost to comply with permit reporting requirements may also be included. Permitting costs line items must be placed in the proposed project budget under "Operating Expenses: Other."

Projects working in or near the Coastal Zone may need a Coastal Development Permit (CDP). FRGP has coordinated with the California Coastal Commission to develop a Master CDP that will allow FRGP to apply and hold a CDP on behalf of eligible FRGP funded projects. Applicants with projects in or near the Coastal Zone should confirm permit coverage with FRGP's Regulatory Coordinator (see FRGP Contacts). Specific project permit information will be collected if a project is awarded. Interested grantees should be prepared to supply this additional CDP information to be covered by FRGP's Master CDP.

Other permits that may be required to implement the restoration project must be obtained by the applicant. Furthermore, it is the

applicant's responsibility to ensure that all the required permits are obtained prior to project implementation. If the project includes dewatering and/or species exclusion/relocation, a CDFW incidental take permit or CDFW Habitat Restoration and Enhancement Act (HRE) approval must be submitted to the CDFW grant manager before each species relocation activity.

Examples of other permits that may be required are the Lake and Streambed Alteration Agreement(s), the Construction General Storm Water permit from the Regional Water Resource Control Boards (which may include provisions for dewatering), Coastal Development permit(s) from the California Coastal Commission or Federal Consistency Determination from the California Coastal Commission, and other permits from local/state governments or municipalities. Projects working in tidally influenced areas are encouraged to reach out to NOAA Support Staff contacts (see FRGP Contacts), **before submitting a proposal to FRGP,** to discuss the project and possible Coastal Act coverage under NOAA's Restoration Center's Federal Consistency Determinations.

Projects that will not exceed five acres or 500 linear feet of stream bank or coastline may be eligible for coverage under the State Water Resources Control Board's Amended General 401 Water Quality Certification Order for Small Habitat Restoration Projects. Further, if a project is eligible for coverage under the Amended General 401 Water Quality Certification Order for Small Habitat Restoration Projects, that project may also be eligible for CDFW's Habitat Restoration and Enhancement Act approval.

Evaluation Plan

The Evaluation Plan will be used to assess the program's effectiveness in meeting specific objectives for participants. The plan should describe in detail the following:

A. Stated education goal(s) for the project.

B. Stated quantified educational objectives for the project.

C. Performance standards.

D. Syllabus or course description.

E. Reference learning standards or support documents (i.e., CA Restoration Manual, or other guiding document).

F. Pre- and post-project student evaluation (testing), or other assessment rubric.

G. Report outline for communicating how well the project met stated educational goal(s) and objectives.

H. Feedback loop for adjusting curriculum to better meet goal(s) and objectives of future efforts.

It is mandatory that the successful grant recipient submit the results and analysis of their evaluation within the final report at the end of the project period.

First Winter Observations Summary

Provide a summary of observations made of the project throughout the first winter after implementation. The summary should include the largest flow and/or storm precipitation event that occurred in the project area, photos or time-lapse photos/video (some during an event if safely possible), observations about how the project is moving towards meeting objectives of the project goal(s), how the features have changed from as-built, and any lessons learned. Information shared as part of this deliverable will not be used to evaluate the grantee or project partners. Proposals seeking to complete effectiveness monitoring to determine if restoration treatments and features have produced the desired ecological condition or watershed processes should be submitted separately as an MO project type. Those MO proposals should be submitted concurrently with the partnering implementation projects.

Fish Passage and Screen Criteria and Testing Requirements

Fish passage and screening projects that are constructed with CDFW funding must meet criteria as outlined in the following documents.

- *California Department of Fish and Game. 2002.* Culvert Criteria for Fish Passage*. (This document is also included in Part IX Appendix A of the CA Restoration Manual.)*

- *National Marine Fisheries Service – Southwest Region. 1997.* Fish Screening Criteria for Anadromous Salmonids*.*

- *National Marine Fisheries Service – Southwest Region. 2001.* Guidelines for Salmonid Passage at Stream Crossings*. (This document is also included in Part IX Appendix B of the CA Restoration Manual.)*

A project must be tested at a flow within the range of design flows prior to the end of the grant funding. Performance of a project throughout its design life is the responsibility of the grantee.

Focus Species Observation

List last focus species observation in the project area with citation (e.g., 2 young-of-the-year Coho Salmon observed 2,000 feet upstream from the confluence with Humboldt Bay, *Stream Inventory Report Freshwater Creek, California Department of Fish and Game 2004*).

Instream Benefits and Impacts Analysis

An Instream Benefits and Impacts Analysis is required for all PD (Project Design) and WC (Water Conservation) proposals, except:

A. In watersheds where the largest diversion is less than 1 cfs.

B. For projects that address one or multiple diversions that individually do not exceed 1 cfs and cumulatively do not exceed 2 cfs.

C. In cases where the goal of the project is to increase summer base flow or water quality.

D. For projects that have an acceptable Streamflow Improvement Plan that includes sufficient information on:

- Watershed conditions (land use, geology, soils, groundwater and hydrology)
- Human water needs (including water rights information)
- Aquatic resources and habitat
- Flow improvement strategies
- Permitting and long-term considerations

The Instream Benefits and Impacts Analysis starts with establishing specific goals and objectives for the project reach. These goals and objectives could range from setting a minimum depth of flow over a shallow riffle or setting a minimum pool depth, increasing the time where the flow in the stream remains on the surface, or increasing the time that the pools in the reach persist, to improving temperature or dissolved oxygen during low flows. The goals should be tied to limiting factors for the species and life stages of interest. The objectives should be established quantifiable metrics such that they can be monitored for project performance. The Instream Benefits and Impacts Analysis is based on instream flows that are determined in the Water Accounting and Consumptive Use Analyses (see below).

The next step is to show that the project goals fit the stream environment and the ways that fish are using it. The goals should fit within the habitat of the project reach. For example, if the reach is primarily used for spawning, then the project goals should focus on additional flow improving spawning habitat. However, other goals may be appropriate if the additional flow is sufficient to allow fish to use

the reach at different times or life stages or if habitat restoration is planned for the project reach.

The analysis should provide information through direct measurements or calculations showing the degree to which the flow left instream will achieve the project objectives. For example, if increasing the duration of flow connectivity is the goal of the project and the objective is to show that the flow left instream provides another month of connectivity, it may be necessary to make a series of flow measurements near the point where the flow would be left instream and observe how far down the flow remains on the surface for a given flow. Comparing these flows to the amount of water available to leave instream as a result of the project will help predict the benefits of the project.

To determine the full benefits of the project, the distance that the flow left instream remains in the stream must be determined. The analysis should determine the distance between where the flow is left instream and the next downstream water user, if there is one. If a WAT § 1707 instream flow dedication is being used to keep the water instream past downstream users, the analysis should report the distances downstream of these users and how the flow will be monitored at these locations. Another way the flow left in the stream could be lost is through infiltration to the groundwater. Direct flow measurements, groundwater level observations, and observing flow connectivity through the affected reach are techniques that can provide specific to general information about flow losses to infiltration. The technique selection is based on the degree to which infiltration could affect the outcome of the project.

Water conservation projects can also affect water quality. In some cases, water quality in the stream is not an issue and therefore does not need to be assessed. However, if the water being left instream or added to the stream is being released from a reservoir, then it may be necessary to calculate the impacts to the overall water quality. Conversely, if the goal of the project is to improve water quality, water quality calculations may be necessary. The level of analysis

required depends on the relative quality and quantity of water being left instream versus that of the flow already in the stream.

Switching the source of diversion water or switching the season of diversion could have negative impacts on the stream. Switching to groundwater pumping could reduce instream flows and negate the benefits of the project. If groundwater pumping is proposed, it must be shown that the source of groundwater is an aquifer that is not connected to the stream. Switching to off-channel storage in the winter is unlikely to affect the channel forming flows and migration flows, but the timing and magnitude of the diversion flows should be compared to the storm hydrographs to be sure.

Invasive Species Prevention Plan

For all projects, the applicant must include, as part of supplemental documents, a plan describing the specific decontamination protocols proposed for use before, during, and after the project to prevent the spread of invasive species. Restoration projects should not be vectors for invasive species, such as New Zealand mud snail or sudden oak death syndrome. Personal field gear and heavy equipment working in the stream must be properly decontaminated before starting a project and before moving to a new location even within the same watershed. For general information on preventing the spread of invasive species, see CDFW's Invasive Species Program website. For decontamination protocols for Sudden Oak Death Syndrome (SODS) see the California Oak Mortality Task Force. For an example Invasive Species Prevention Plan see the FRGP Guidance Tools website.

Licensed Professionals

Project types listed below may require the services of a licensed professional engineer or licensed professional geologist to comply with the requirements of the Business and Professions Code section 6700 et seq. (Professional Engineers Act) and/or section 7800 et seq. (Geologists and Geophysicists Act). Projects described in Parts X and

XII of the CA Restoration Manual are likely to need a licensed professional.

- *FP Fish Passage at Stream Crossings*
- *HB Instream Barrier Modification for Fish Passage*
- *HI Instream Habitat Restoration*
- *HR Riparian Restoration*
- *HS Instream Bank Stabilization*
- *HU Watershed Restoration (Upslope)*
- *PD Project Design*
- *PL Watershed Planning*
- *SC Fish Screening of Diversions*
- *TE Private Sector Technical Training and Education*
- *WC Water Conservation Measures*
- *WD Water Measuring Devices*

If a proposed project requires the services of licensed professionals, these individuals, their license numbers, and their affiliations must be listed in the proposal application. If this information cannot be provided with the application, the selection criteria for choosing the licensed professional(s) must be provided.

Project review and approval by CDFW and/or NOAA Fisheries engineering staff does not imply CDFW or NOAA Fisheries responsibility or liability for the performance of this aspect or any other aspect of the project. Such liabilities and assurances of performance are the responsibility of the applicant and/or their engineering contractor.

Multi-Benefit Projects

Multi-benefit projects are defined as projects that provide more than one benefit or serve more than one purpose. For FRGP, this is both benefiting present and historical native species, more than one impairment (Sediment supply, barrier, habitat), and more than one project type.

Nature-Based

Nature-based solutions use natural systems, mimic natural processes, or work in tandem with traditional approaches to address specific hazards. Examples can be found at the Naturally Resilient Communities website.

Photographs

Photographs submitted with the proposal should include photos of the entire project worksite, as well as photos showing detailed project features, existing conditions at proposed project location, and existing conditions in the vicinity of the project location. All photos should include explanations with worksite number, worksite description, and other identifying information. The number of photographs should be sufficient to enable a reviewer to evaluate the proposed project and its features in adequate detail without a worksite visit. Where multiple similar features (e.g., Large Wood structures) are proposed, representative photographs of these features and their target habitat will suffice.

Process-Based

Process-based restoration aims to re-establish the physical, chemical, and biological processes that sustain ecosystems. Four process-based principles ensure that ecosystem restoration will be guided toward sustainable actions: (1) restoration actions should address the root causes of degradation, (2) actions must be consistent with the physical and biological potential of the worksite, (3) actions should be at a scale commensurate with environmental problems, and (4) actions should have clearly articulated expected outcomes for ecosystem dynamics.

Additionally, there are four design criteria for process-based restoration projects, framed on the fundamental parameters of space, energy, materials, and time. (1) Space criterion: Project actions increase the spatial extent of fluvial processes and connectivity lost because of human alterations. (2) Energy criterion: Project actions capitalize on natural energy within the system to do the work of restoration and minimize the use of external mechanical energy. (3) Materials criterion: Projects use geomorphically appropriate materials to encourage channel evolution and avoid overly stabilizing project elements. (4) Time criterion: Achieve habitat objectives over time via restored geomorphic and biologic processes.

Project Location Topographic Map

The Project Location Topographic Map should clearly depict where the project is occurring on the landscape. The project should be shown on an appropriately scaled, USGS (or equivalent) 7.5-minute contoured topographic quadrangle map that shows each location where work is being done. **Aerial photos do not satisfy this requirement.** All maps should be labeled with project title, applicant name, USGS quad name, and stream name, and be positioned so that relevant map information such as stream names, towns, main roads, water bodies, etc. are not obscured. **Please submit Project Location Topographic Maps as a JPEG file type**. **If reviewers are unable to easily**

read the Project Location Topographic Map applicants may be deducted points in the scoresheet.

You may submit a separate map with past project information as a supplemental document.

Provisional Landowner Access Agreement

Prior to funding a project, CDFW and NOAA fisheries staff conduct a pre-project worksite review. The applicant is responsible for ensuring when submitting an application that there is adequate authorization for access to the worksite for this review. If the applicant owns all of the land on which the proposed project will be conducted, then the applicant must indicate this in the proposal. If the applicant does not own all of the lands for the project worksite, then the applicant must submit documentation that the landowner or land manager of the property has provided written authorization for CDFW and NOAA fisheries staff to enter the property for a pre-project worksite review. For projects that are conducted on lands owned by multiple owners the applicant must submit written authorization from each landowner or land manager. If an applicant does not have the required documentation, then the applicant must explain how it expects to secure any missing written authorization from a landowner or land manager prior to the pre-project worksite review.

Adequate authorization can be demonstrated by providing a provisional landowner access agreement covering all of the lands for the project worksite. A sample provisional landowner access agreement can be found on the FRGP Guidance Tools website. At a minimum, the applicant must provide written documentation of the following:

A. Landowner or land manager consents to access for pre-project evaluation by CDFW and NOAA fisheries staff.

B. Landowner or land manager gives provisional consent for the grantee to complete the proposed project with CDFW oversight and visitation.

C. Contact information for the landowner or land manager.

D. Signature of landowner or land manager.

Qualified Nonprofit Organization

A qualified nonprofit organization means any nonprofit public benefit corporation formed pursuant to the Nonprofit Corporation Law (Division 2 [commencing with Section 5000] of Title 1 of the Corporations Code) qualified to do business in California and qualified for exempt status under Section 501(c)(3), 501(c)(4), or 501(c)(5) of the Internal Revenue Code.

Quality Assurance / Quality Control (QA/QC) Plan

Establishing quality assurance and quality control procedures is required for Monitoring (MO) projects and helps ensure acceptable levels of accuracy and precision for the data collected and analytical procedures applied. Quality Assurance (QA) encompasses the broad plan for maintaining quality in all aspects of the project and should include a description of how the project will be undertaken, study design, proper documentation and instructions for sampling protocols, training of personnel, data management and analysis, and specific quality control measures. Quality Control (QC) consists of the steps you will take to determine the validity of specific sampling and analytical results. A quality assessment of the overall precision and accuracy of the project data should be included with interim and final project reports.

Proposals for monitoring projects must include a brief (one to two pages) description of the project QA/QC plan. If funding is awarded, a complete QA/QC plan must be submitted before the Grant can be executed. The QA/QC description should include, but is not limited to,

the following elements (please provide some detail and not just a copy of the outline below):

A. Project goal, objectives, and application
B. Project setting
C. Scope of work and time frame required
D. Study design
E. List of sampling protocols
F. Personnel requirements and roles
G. Schedule of primary activities, including QA/QC
H. Training that addresses:
    - Safety practices for field sampling activities
    - Identification of fish species likely to be encountered
    - Proper handling of fish and
    - Proper use of sampling gear and instruments
I. Data collection control that addresses:
    - Independent sampling of a percentage of previously sampled units
    - Independent observers participating in electrofishing
J. Data management that addresses:
    - Metadata description
    - Data entry and storage
    - Independent data verification of a percentage of the original entries
    - Data analysis
    - Chain of custody for data

Recognized Tribe

Recognized Tribe means those entities recognized as eligible to receive service from the United States Bureau of Indian Affairs, as listed in the Federal Register, and those tribes designated in the list of non-recognized tribes for California by the Native American Heritage Commission.

Reference Documents

Reference Documents are those documents that justify, substantiate, or otherwise support aspects of the proposed project, describe the capabilities to conduct the work, or provide recently completed work. These documents should be included in the proposal application, unless the applicant can provide a direct electronic link to the reference document. Specifications for the types of reference documents required are listed under each project type where this supplemental document is required.

Riparian Revegetation / Riparian Restoration Plan

For projects that result in disturbance within the riparian corridor or other hydrologically linked upland areas that may deliver sediment to a class I or II channel, the grantee will be required to replant disturbed and compacted areas with native plant species at a ratio of 2 plants to 1 plant removed. Projects should use a composition of species that will result in mature riparian vegetation found in the region. Unless otherwise specified in the agreement, the standard for success is 80% survival of plantings or 80% annual survival of ground cover for broadcast planting of seed after a period of three years. Exposed soils will be covered using CDFW approved techniques to prevent delivery of sediment to a stream (i.e., mulching/seeding).

All riparian restoration (HR) applications must include a completed riparian restoration plan. The plan shall be prepared by persons with

expertise in California ecosystems and native plant revegetation techniques.

The following items should be included in all HR project riparian restoration plans:

A. Location of the restoration worksite(s): This section shall include a regional map, general map illustrating planting locations (polygons), location of any other existing or proposed restoration actions in the general vicinity, ownership information, and directions to the worksite.

B. Worksite suitability evaluation: This section shall provide the rationale behind selecting the restoration worksite including information on the soils, hydrology (including risk of scour by high flows, characterization of water table depths, and water availability for irrigation if proposed), and native riparian species present at a nearby reference worksite(s). This information should be based on fieldwork completed during the planning and design phases for the project. Any reports, data, and other information that support worksite suitability decisions should be included in the plan.

C. Worksite preparation and installation methods: This section shall provide a description of the methods that will be used to install the plants with a detailed discussion of each plant species and type of planting stock (container, stem cutting, pole cutting, bare-root stock, etc.), time of the year when the planting will occur, planting densities based on plant type (trees, bushes, herbaceous, etc.), and any other pertinent information regarding implementation of the project. Any necessary worksite prep work (heavy equipment work, stabilization, soil work, etc.) shall be described in this section of the plan. Exposed soils should be appropriately covered (mulching/seeding) to prevent delivery of sediment to a stream. Other restoration work to be completed during project implementation shall also be described in sufficient detail to allow for proper evaluation.

D. Materials: This section shall provide a list of appropriate successional stage native plant species, size of specimens for each species, number of plants, the source of plant materials, and fertilizers, if any, for the project. Projects should use a composition of species that will result in mature riparian vegetation found in the region. Information regarding the need for plant protection and the materials necessary to accomplish protection shall be included. If fertilizer is proposed, discuss the rationale including the pros/cons of fertilizer use. If erosion control fabric and/or structures are proposed, they are required to be and should be identified as plastic-free. Information regarding the prevention and spread of native plant diseases shall be included. Provide information on native riparian plant diseases, host plants, disease resistant plants, and how these influenced selection of native plant species for the project.

E. Schematic: This section shall include a detailed planting design that depicts exactly where the plants will go in the restoration area. Include the number of plants and the species to be planted in each location, spacing between plants, and total acreage planned for revegetation.

F. Maintenance of plants: This section shall include a description of methods that will be used to maintain plants in good condition, control non-native vegetation, prevent plant disease, and prevent herbivory of the plantings, including a discussion of how maintenance actions will be triggered by changes in plant health over time. If the planting will be irrigated, this section shall include an irrigation plan that includes the type of irrigation, the pros/cons of use, and the watering regime that will be used to successfully establish the plantings. The irrigation plan should be designed to discourage the growth of invasive plants while encouraging deep rooting of planted materials to ensure maximum survival following the plant establishment period.

G. Success criteria: This section shall include the performance criteria that will be used to evaluate project success. Performance criteria should be developed for species diversity, structural diversity, overall vegetative cover by species (if

important) and how cover will be measured (absolute vs. relative), density (by species), plant vigor, and survivorship. In addition, intermediate thresholds (incremental progress toward performance criteria) should be developed in conjunction with an adaptive management plan that triggers remedial activities that will be implemented if intermediate thresholds were not being met. This will allow the revegetation specialist to increase the likelihood that performance criteria are met by the end of the monitoring period. Unless otherwise specified in the agreement, the standard for success is 80% survival of plantings or 80% annual survival of ground cover for broadcast planting of seed after a period of three years.

H. Monitoring methods: This section shall include a detailed description of how the project will be monitored to evaluate whether performance criteria are being met. This section should include a detailed description of the methods used for data collection, sample size, data entry and storage, statistical analyses to be performed, photo point locations, and a description of the monitoring report format.

I. Adaptive management and contingency measures: This section shall describe the project's adaptive management strategies and what actions shall be implemented if the monitoring data indicates that the performance criteria may not be met. This section shall identify the party responsible for implementing remedial measures and the source(s) of funding to complete actions.

Riparian Road

Riparian Roads are considered roads that pass through a riparian zone consisting of riparian vegetation and/or the location where riparian vegetation would presumably grow if the roads were removed.

Status Report

The Status Report must explain an applicant's status and past work.

For existing groups funded by FRGP the Status Report shall describe: 1) the group's accomplishments including completed past FRGP deliverables, 2) a list of all completed and in-progress educational and outreach activities and on-the-ground restoration projects, 3) completed watershed planning and assessments, and 4) how the group's efforts have resulted or will result in on-the-ground restoration efforts.

For existing groups new to FRGP funding the Status Report shall describe: 1) how the group was formed, 2) the entities comprising the group, 3) the group's goals, and 4) the group's objectives and what has been achieved to date.

Stream Dewatering and Species Exclusion/Relocation

Proposals for projects that require channel dewatering and/or species exclusion/relocation should include a plan for how these aspects of the project will be accomplished. Grantees will be responsible for securing needed supplies (e.g., 1/8" hardware cloth screens, dip nets, aquarium nets, portable aerators, plastic buckets, pumps) and services. Applicants should plan to include personnel and/or subcontractor time to ensure adequate staffing to effectively dewater and/or exclude/relocate species. The roles of staff and/or subcontractors participating in dewatering or species exclusion/relocation should be clearly described in the project setup.

If the project is funded, the grantee will notify the CDFW grant manager a minimum of ten working days before the project worksite is dewatered and the stream flow diverted. The notification will provide a reasonable time for CDFW personnel to oversee the implementation of the water diversion plan and the safe removal and relocation of

salmonids and other native aquatic species from the project area. The grantee will implement the following measures to minimize harm and mortality to listed species as well as other native aquatic species:

- Species relocation and dewatering activities will only occur between June 15 and October 31 of each year.
- The grantee will minimize the amount of wetted stream channel dewatered at each individual project worksite to the fullest extent possible as approved by the CDFW grant manager and pursuant to conditions in the USACE Regional General Permit, NMFS Biological Opinion, and the project's Lake and Streambed Alteration Agreement or Habitat Restoration and Enhancement Act approval.
- Additional measures to minimize injury and mortality of salmonids during species relocation and dewatering activities will be implemented as described in Volume II Part IX, pages 52 and 53 of the CA Restoration Manual.
- Only qualified fisheries biologists that are approved by USFWS and permitted by CDFW under a California Endangered Species Act (CESA) Memorandum of Understanding (MOU) shall handle and relocate CESA-listed species.
- All electrofishing will be performed by a qualified fisheries biologist under the supervision of CDFW and conducted according to the National Marine Fisheries Service *Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act*, June 2000.

NMFS Approved fisheries biologists will provide species relocation data via the grantee to the CDFW grant manager on a form provided by CDFW.

Water Accounting and Consumptive Use Analysis

A Water Accounting and Consumptive Use Analysis forms the basis of the Instream Benefits and Impacts Analysis described previously. It is

required for all PD (Project Design) and WC (Water Conservation) proposals, except:

- In watersheds where the largest diversion is less than 1 cfs.
- For projects that address one or multiple diversions that individually do not exceed 1 cfs and cumulatively do not exceed 2 cfs.
- In cases where the goal of the project is to increase summer base flow or water quality.
- For projects that have an acceptable Streamflow Improvement Plan that includes sufficient information on:
    1. Watershed conditions (land use, geology, soils, groundwater, and hydrology)
    2. Human water needs (including water rights information)
    3. Aquatic resources and habitat
    4. Flow improvement strategies
    5. Permitting and long-term considerations

A Water Accounting and Consumptive Use Analysis is a necessary part of a water conservation project in order to verify the amount of water that will be left in stream. To get started, it is necessary to have measurements of the amount of flow being diverted. For some projects, this data has already been collected. However, for other projects, it is necessary to collect this data in order to start the accounting. Monthly diversion volumes and maximum diversion rates are the most useful data. Annual variations of diversion flows depending on water year type (wet versus dry) should be calculated from the measurements or estimated based on hydrologic analyses and anecdotal information.

Many water conservation projects involve replacing unlined ditches with pipelines or lined ditches to reduce or eliminate conveyance losses. FRGP requires that all of the water savings realized from these improvements be left instream. Conveyance losses need to be included in the Consumptive Use Analysis, if required, for determining

if there is injury to another water user. Determining conveyance losses requires direct flow measurements at several points along the ditch on at least a monthly basis during the diversion season. Additionally, the fate of the lost water should be determined when a Consumptive Use Analysis is required. It is necessary to determine if the water returns to the stream, enters the water user's property either as a beneficial use or not, enters another owner's property either as a beneficial use or not, or infiltrates to an aquifer disconnected from the stream.

For projects where it is desired to dedicate water to the stream past another water user's point of diversion, a Consumptive Use Analysis is likely to be necessary. To determine the volume of water used consumptively, it will be necessary to determine evaporation and transpiration rates, the amount of water that may infiltrate to a disconnected aquifer, the amount of water that drains to a location outside the watershed, and if any other conditions prevent the water from being available to downstream users.

Some water conservation projects also involve tailwater returns. In cases where Consumptive Use Analyses are necessary, it is necessary to map locations of tailwater return and provide monthly measurements of the quantity of tailwater return flow. If tailwater returns to the stream upstream of another water user's point of diversion, then that water user will be able to divert that water. Other water conservation projects with a focus on improving instream water quality seek to reduce or eliminate tailwater returns. For these projects, it is also necessary to locate tailwater returns and measure tailwater quantity and quality in order to demonstrate the benefits of the project.

Water Accounting calculations are also needed for rainwater collection and off-channel storage projects, such as tanks and ponds. For these projects, the storage capacity proposed needs to be compared to the volume of water used. This will help determine how much water will still need to be diverted from the stream. Additionally, the variability in precipitation or streamflow based on dry years and

wet years needs to be considered in whether the storage will be completely filled.

The Water Accounting and Consumptive Use Analysis should provide a summary of the water able to be left instream by month.

Water Law Compliance

Funded proposals that address stream flows and water use shall comply with the California Water Code, as well as any applicable Fish and Game Codes. Any proposal that will require a change to water rights, including but not limited to bypass flows, point of diversion, location of use, purpose of use, off-stream storage, etc., shall demonstrate an understanding of the State Water Resources Control Board (SWRCB) permit processes, timelines, and costs necessary for project approvals by the SWRCB and the ability to meet those timelines within the term of a grant. In addition, any proposal modifying water rights for an adjudicated stream shall identify the required legal process for change as well as associated legal costs.

Prior to a water right purchase or lease, an appraisal of the value of the water right, conducted in compliance with Department of General Services Real Property Services Section specifications, must be completed.

An applicant must demonstrate to CDFW that they have a legal right to divert water by submitting a copy of a water right permit or license on file with the SWRCB, or some other document that evidences the right. **If a water right is not involved in the project, include an explanation.** Applicants who divert water based on a riparian or pre-1914 water right must document their right to divert by submitting the information outlined below with their proposal.

A. A Statement of Water Diversion and Use that has been filed with the SWRCB (minimum last 3 years or up to the last 10 years). For applicants who have not filed a Statement of Water Diversion

and Use, a copy of that form may be obtained at the SWRCB website. **CDFW will not accept a Statement of Water Diversion and Use unless it has been filed with the SWRCB.**

B. The average volume of water (in acre feet) diverted each month during the period of use at each point of diversion.

C. The average volume of water applied at the place of use each month during the period of use from each point of diversion.

D. A table that shows the number of acres irrigated for each parcel within the place of use.

E. The average amount of water (in acre feet) applied per acre each month calculated by dividing the flow (in acre feet) at the place of use into the number of acres irrigated.

F. All data, calculations, and any other information used to estimate the "duty of water".

G. The average irrigation requirements for the crops and/or pastureland at the place of use. Information regarding average irrigation requirements may be available from the Natural Resource Conservation Service, U.C. Extension, or in the Department of Water Resources Bulletin 113.

H. The method(s) used to apply the water to the crops and/or pastureland at the place of use.

I. The type(s) of soil at the place of use.

J. A map that depicts the place of use, the boundaries of each parcel, each stream or river from which the water is diverted, and the location of each point of diversion on the stream or river.

Watershed Map

The Watershed Map should clearly depict where the project is occurring relative to the larger Focus watershed. Please make the Watershed Map a legible 8.5" X 11" map of the watershed showing the following basic map features:

A. Topographic relief in hillshade
B. Streams in the watershed; label mainstem and any tributaries where work is proposed
C. Scale of the map
D. North arrow or other direction icon
E. Inset of the location of the watershed in the county

If reviewers are unable to determine the location of the watershed applicants may be deducted points in the scoresheet. Please submit Watershed Maps as a JPEG file type. Do not include roads and other features to clutter the map. **Aerial photos do not satisfy this requirement.**

Appendix A: References and Resources

Program

CDFW's Public Meetings and Notices

FRGP Solicitation Documents

FRGP Guidance Tools

PCSRF Performance Measure Data Dictionary (select "Definitions" at top right)

CDFW WebGrants

Plans and Guides

Adams, Peter B., L.B. Boydstun, Sean P. Gallagher, Michael K. Lacy, Trent McDonald, and Kevin E. Shaffer. *Fish Bulletin 180: California Coastal Salmonid Population Monitoring: Strategy, Design, and Methods.* State of California, Resources Agency, Department of Fish and Game, 2011. (PDF)

California Department of Fish & Game. *Culvert Criteria for Fish Passage*. State of California, Resources Agency, Department of Fish and Game, 2002. (PDF)

California Department of Fish & Game. *Recovery Strategy for California Coho Salmon*. State of California, Resources Agency, Department of Fish and Game, 2004. (PDF)

Coho Salmon Recovery Tasks (Website)

California Department of Transportation. *Fish Passage Design for Road Crossings*. 2007, Updates 2014. (PDF)

California State Water Resources Control Board. State Wetland Definition and Procedures for Discharges of Dredged of Fill Material to Waters of the State. 2019. (PDF)

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Pacific Fisheries Management Council standards

State Wildlife Action Plan

California Natural Resources Agency, Sacramento Valley Salmon Resiliency Strategy June 2017(PDF)

Codes and Regulations

California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, Article 5, Section 15064.4: Greenhouse Gas Emissions Impacts

California Employment Development Department wage data

California Endangered Species Act (CESA)

California Environmental Quality Act (CEQA)

California Forest Practices Act (FPA), AKA, Z'Berg-Nejedly Forest Practice Act or California Forest Practice Rules (PDF)

California Law

- Business and Professions Code (BPC) Section 6700 et seq. (Professional Engineers Act)
- BPC Section 7800 et seq. (Geologists and Geophysicists Act)
- Fish and Game Code (FGC) Section 1501.5
- FGC Section 2081(a)
- FGC Section 5937
- FGC Section 6027
- Public Resources Code (PRC) Section 6217.1
- PRC Section 10000
- Water Code (WAT) Section 1707

Clean Water Act (CWA)

- Section 401
- Section 404

Code of Federal Regulations

Federal Uniform Grant Guidance 2 CFR section 200

Modified Total Direct Cost (MTDC) 2 CFR section 200.68

Workers' Compensation 2 CFR section 200.431

Davis-Bacon Labor Rates

Department of Industrial Relations (DIR) – Prevailing Wage

Department of Transportation Labor Surcharge and Equipment Rental Rates

Federal Endangered Species Act (ESA)

National Environmental Policy Act (NEPA)

Nonprofit Corporation Law (Division 2 [commencing with Section 5000] of Title 1 of the Corporations Code)

Permitting

CDFW Document Library – previous years' permit documents

CDFW Scientific Collecting Permit (SCP)

California Rapid Assessment Method

Coastal Development Permit(s) from the California Coastal Commission

Habitat Restoration and Enhancement Act

Lake and Streambed Alteration Agreement

Mitigated Negative Declaration

NMFS Biological Opinions

State Water Resources Control Board (SWRCB) Amended General 401 Water Quality Certification Order for Small Habitat Restoration Projects

SWRCB Construction General Storm Water permit

SWRCB Division of Water Rights

SWRCB Statement of Water Diversion and Use

U.S. Army Corps of Engineers (USACE) CWA Section 404 permitting

USACE Regional General Permits (PDFs)

- RGP 12 (North Coast counties of Alameda, Contra Costa, Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito, San Francisco, San Luis Obispo (northeast, non-coastal), San Mateo, Santa Clara, Santa Cruz, Siskiyou, Solano, Sonoma, and Trinity)

- RGP 16 (Portions of the following Central Valley counties: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kings, Madera, Mariposa, Merced, Nevada, Placer, Sacramento, San Benito, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, and Yuba)

RGP 78 (South Coast counties of Los Angeles District: Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, and Ventura)

Other

AmeriCorps

Clearinghouse for Dam Removal Information (CDRI)

CDFW Aquatic Invasive Species Disinfection/Decontamination Protocols

CDFW BIOS metadata standards

CDFW Invasive Species Program

California Natural Diversity Database

Department of Water Resources *Bulletin 113 – Crop Water Use in California* (PDF)

FCC's coordinates converter

FGDC metadata standards (PDF)

National Marine Fisheries Service

Species in the Spotlight: NOAA's Species in the Spotlight

Sudden Oak Death Syndrome: Decontamination Protocols Professional Sanitation Guide (PDF)

Sudden Oak Death Syndrome: Sanitation and Reducing Spread

Appendix B: Proposal Evaluation and Scoring Protocols

Concept-Proposal Review

FRGP staff will conduct a concept proposal review of all submitted proposals prior to project consultations. If any "No" box is checked below, the applicant will be asked to explain during the project consultation.

Proposal Number & Type: _____	Yes	No	N/A
1. Is the application complete (i.e., does it include all required parts)?	☐	☐	☐
2. Does the application meet all eligibility criteria?	☐	☐	☐
3. **Project Background**: Does the applicant clearly explain existing worksite conditions and the problem at the project location well?	☐	☐	☐
4. **Project Status:** Does the applicant clearly explain project status and any past funded work?	☐	☐	☐
5. **Project Objectives:** Are the proposed habitat restoration objectives likely to result in the described outcomes for the benefit of the focus species?	☐	☐	☐
6. **Ecological Process Considerations:** Did the applicant demonstrate that the project tried to incorporate multi-benefit, process-based, and nature-based restoration principles considering existing worksite constraints? (i.e., even in an environment with infrastructure constraints, did the applicant consider multi-benefit, process-based, and nature-based restoration principles)?	☐	☐	☐
7. **Project Outcomes:** Are the major deliverables clearly described and have a reasonable estimated deliverable timeline for the project?	☐	☐	☐
8. **Project Priority:** The project is identified as a priority in the watershed by being listed in a watershed specific plan or addressing a limiting factor in a watershed specific plan?	☐	☐	☐
9. **Budget** Is the budget reasonable and realistic?	☐	☐	☐
10. Is this project a meaningful and substantial contribution to salmonid habitat restoration and species recovery?	☐	☐	☐

Proposal Number & Type: _____	Yes	No	N/A
11. Is the proposal free of significant flaws (engineering, biological, or otherwise) that would make the project ineffective?	☐	☐	☐
Questions and Comments. If a question was answered with a "no" please provide a rational.			

Administrative Review

FRGP staff will conduct an administrative review on all proposals. The review will determine if the proposal is complete and meets all the submission requirements. If any "No" box is checked below, the proposal will be considered incomplete and rejected from further consideration.

Proposal Number & Type: _____	Yes	No	N/A
Proposed project is within the Solicitation focus.	☐	☐	☐
The proposal **as written** addresses the identified Recovery Task and can accomplish the Task in part or in whole.	☐	☐	☐
1. Intermediate Plans included. (Project Types: FP, SC)	☐	☐	☐
2. Conceptual Plans included. (Project Types: HU)	☐	☐	☐
3. Intermediate or Conceptual Plans included. (Project Types: HB, HI, HS, WC, WD	☐	☐	☐
4. Project Location Topographic Map included. (Project Types: FP, HB, HI, HR, HS, HU, MO, PD, PL, RE, SC, WC, WD) (.JPEG)	☐	☐	☐
5. Watershed (or County) Map included. (Project Types: FP, HB, HI, HR, HS HU, MO, OR, PD, PI, PL, RE, TE, WD) (.JPEG)	☐	☐	☐
6. Provisional Landowner Access Agreement/Provisional Resolution. (Project Types: FP, HB, HI, HR, HS, HU, MO, PD, PL, RE, SC, TE, WC, WD)	☐	☐	☐
7. Applicable Detailed Project Budgets (including subcontractors). (Project Type: All)	☐	☐	☐
8. Federal Approved Indirect Rate Letter included. (Project Type: All)	☐	☐	☐
9. Water Law Compliance documents included. (Project Types: FP, HB, PD, SC, WC, WD)	☐	☐	☐

Proposal Number & Type: _____	Yes	No	N/A
10. Photographs included. (Project Types: FP, HB, HI, HR, HS, HU, PD, RE, SC, WC, WD)	☐	☐	☐
11. Status Report included. (Project Types: OR, PI, TE)	☐	☐	☐
12. Fence Maintenance Plan included. (Project Type: HR)	☐	☐	☐
13. Riparian Restoration Plan included. (Project Type: HR)	☐	☐	☐
14. Quality Assurance and Quality Control (QA/QC) Plan included. (Project Types: MO)	☐	☐	☐
15. Existing Conditions Sketch included. (Project Type: PD)	☐	☐	☐
16. Five-Year Management Plan. (Project Type: RE)	☐	☐	☐
17. Evaluation Plan included. (Project Types: TE)	☐	☐	☐
18. Invasive Species Prevention Protocols included. (Project Types: All)	☐	☐	☐
19. Reference Documents included. (Project Type: MO, PL)	☐	☐	☐
20. Program Permit Information Table – Appendix D. (Project Type: FP, HB, HI, HR, HS, HU, SC, WC, WD) (.xlsx)	☐	☐	☐
21. Instream Benefits and Impact Analysis included. (Project Type: PD, WC)	☐	☐	☐
22. Water Accounting and Consumptive Use Analysis included. (Project Type: PD, WC)	☐	☐	☐
23. GenAI Disclosure and Factsheet (STD 1000) (If Applicable)	☐	☐	☐
24. This proposal requires the Grace Period for further review.	☐	☐	
Grace Period Conditions: If receiving this review during the Grace Period please supply the missing document(s), marked "No", to WebGrants before the deadline or the proposal will be considered incomplete and rejected from further consideration.			

CDFW and NMFS Engineering and Geotechnical Level Review

Proposal #: _____ Project Title: ___

CDFW or NMFS Review Engineer / Geologist: _____

Question	YES	NO	N/A	Comments
1. Are the problems to be addressed correctly identified and adequately characterized?	☐	☐	☐	
2. Does the design approach, including the O&M, address the identified problems?	☐	☐	☐	
3. Are the techniques proposed appropriate for the channel type (according to the CA Restoration Manual, Part III or accepted methods)?	☐	☐	☐	
4. Are the proposed project materials the appropriate size, type, and species for the stream zone (active channel and floodplain) and watershed?	☐	☐	☐	

Question	YES	NO	N/A	Comments
5. Does the proposal identify all necessary surveys and investigations required to complete the design?	☐	☐	☐	
6. Does the Intermediate or Conceptual Plan Report describe the set of conditions, constraints, and requirements necessary for project design and are the plans >65 percent plan development for the following project categories: FP, HB, HS, WD (and some HI and HU)?	☐	☐	☐	
7. Are any refinements that need to be made to the design reasonable to make between the 65% and 100% design? Does the project proponent / designer seem willing to, capable of, and have funds for making the necessary changes before the project is executed (if funded)?	☐	☐	☐	
8. If the project is likely to require future consultation or evaluation of a conceptual/intermediate plan as it is being developed is this consultation able to be accommodated in the proposed project timeline and budget?	☐	☐	☐	

Question	YES	NO	N/A	Comments
9. Is the project likely to require the participation of a licensed engineer or geologist and is the licensed professional identified or the selection criteria for the licensed professional provided?	☐	☐	☐	
10. Do the licensed engineers and/or geologists have the experience and expertise required for project success (e.g., demonstrated experience on similar projects; technical expertise appropriate to the project; communication, coordination, and logistical capabilities)?	☐	☐	☐	
11. From an engineering/geotechnical perspective, should the proposal be considered for funding? Note: If any of the above questions were answered "NO", then the proposal should not be considered for funding at this time. If there are other engineering / feasibility reasons why the proposal should not be funded, state them here.	0 ☐	DNF ☐	NA ☐	

Engineer/Geotechnical Review Point Deductions (0, DNF, or NA): _____

FRGP Priority 1 Project Types - Scoresheet Instructions

Projects that restore, enhance, or protect anadromous salmonid habitat through construction or design projects that lead to construction

Use Not Applicable (N/A) where appropriate as determined through FRGP Guidelines.

1. **Qualifications:** Does the proposal demonstrate the Project Team (applicant, subcontractors, tribes, partners and anyone who contributes to the project completion) have the qualifications, experience, license and capacity to successfully perform the proposed tasks with minimal CDFW oversight?

   Scoring Considerations:

   - Applicant has demonstrated their ability to complete projects on time and to be cooperative.
   - Subcontractor(s) has demonstrated their ability to complete projects on time and to be cooperative.
   - Subcontractor selection criteria are clear, informative, adequate and justifiable.
   - If applicable, past project deliverables have conformed to FRGP requirements.
   - Qualifications and licenses are appropriate for the tasks proposed.
   - Landowners have provided access and are supportive of the goals and objectives. For design projects, landowner support has been demonstrated and there are details for securing 100% landowner support.

   Scoring Tiers

   Tier 1

   7 - 10 points — Project Team has extensive experience successfully implementing many previous projects similar in scope and scale according to proposed timeline. Subcontractor selection criteria are clear. If applicable, past project deliverables have conformed to FRGP requirements. Full or significant landowner support has been demonstrated and project goals and objectives can be achieved.

   Tier 2

   3 - 6 points — Project Team has moderate experience successfully implementing projects as proposed or Project Team has little experience completing projects of this type but appears well qualified to complete all deliverables. Project Team had issues meeting previous project timelines or proposed deliverables. Subcontractor selection criteria require some clarification. Some landowner support has been demonstrated with details provided for securing full support to meet the goals and objectives.

   Tier 3

   0 - 2 points — Project Team has limited or no experience with projects as proposed, and qualifications appear inadequate. Selection criteria are

inadequate and need extensive clarification. Landowner support is unclear, or additional landowner support must be obtained to meet the project goals and objectives.

Do Not Fund — Project Team is unqualified or unlicensed or has been uncooperative. Selection criteria are not provided. Landowner support has not been demonstrated and there is no detailed description included describing how support will be secured.

2. **Project Information:** Does the proposal include the Project Type details as required in the Application and the Guidelines?
   Scoring Considerations:
   - Project Information including Project Description, Description of Activities and Required Project Type Information is complete, clear and detailed.
   - Project Type Supplementary Documents conform to Guidelines.
   - Proposal demonstrates a clear and reasonable plan for post-project data collection as required in the Guidelines, when applicable.

   Scoring Tiers

   Tier 1

   7 - 10 points — Project Information is clear, adequate and generally conforms to Guideline requirements. Supplementary Documents conform to Guidelines. The plan for post-project data collection is clear and reasonable.

   Tier 2

   3 - 6 points — Project Information is missing minor details, or one Supplementary Document does not conform to all Guideline requirements. Some clarity is needed to evaluate the proposal, understand the project or write an agreement. The plan for post-project data collection may not clearly support evaluation of project success.

   Tier 3

   0 - 2 points — Project Information is missing major/important details or multiple Supplementary Documents do not conform to Guidelines. Extensive clarification is needed to evaluate the proposal, understand the project or write and agreement. The plan for post-project data collection does not support evaluation of project success.

   Do Not Fund — Project Information or Supplementary Documents are significantly flawed and do not follow Guideline requirements. The proposed project does not include required post-project data collection.

3. **Budget:** Is the budget appropriate for the work and deliverables proposed, including detailed costs? Overall, is the project cost-effective?
   Scoring Considerations:
   - The proposed project is cost-effective relative to the expected benefits.
   - Line items are cost-effective.

- The proposal clearly describes all project costs including personnel, operating, equipment, materials, rentals, subcontractors and Indirect Costs.
- Applicant budget is clear and detailed for all expenses.
- Subcontractor budgets are clear and detailed for all expenses.
- Expenses are justified where necessary.
- All expenses are allowable.

Scoring Tiers

Tier 1

7 - 10 points — Applicant and subcontractor(s) budgets are cost-effective for the expected benefits, generally clear and well-justified. All expenses are allowable.

Tier 2

3 - 6 points — Budget is acceptable but less cost-effective for the expected benefits and needs further clarification or justification. Some expenses are not allowable, and budget will need correction.

Tier 3

0 - 2 points — Budget has line items that are not cost-effective, not clear nor well justified, but the project will provide some benefit to the focus species.

Do Not Fund — Budget is not cost-effective, not clear and there is little or no justification. Large expenses are not allowable and prohibit the completion of the project.

4. **Cost Share:** Cost share means the portion of project costs not paid by FRGP.
   Scoring Considerations:
   - Cost share not suitable: Projects, personnel, or supplies and equipment previously funded by CDFW; resources expended prior to the term of the grant; salaries of permanently funded employees working for CDFW or NOAA Fisheries; indirect charges; mitigation funds and funds used in enforcement actions; cost share funds that will not be confirmed by December 1 of the PSN year; cost share being used as match for other grants or entities.

   - Hard cost share (HCS): All hard cost share must be Non-Federal sourced money or in-kind contributions that do not come from a federal source. Hard cost share can be provided by the applicant and/or the applicant's partners involved in the implementation of the proposed project. Hard cost must be confirmed prior to July 1 of the PSN year.

   - Soft cost share (SCS): All soft cost share is Federal sourced money or in-kind contributions that come from a federal source. Soft cost share can be provided by the applicant and/or the applicant's partners involved in the implementation of the proposed project. Cost share funds (cash or in-kind) that will be confirmed after July 1 of the PSN year up until December 1 of

the PSN year can only be counted as soft cost share regardless of funding source.

Total Cost Share (TCS) = (HCS) + (0.5)(SCS)
Total Cost Share Percentage (**TCS%**) = (TCS / Total Project Cost* (TPC) (100)

**Total Project Cost (TPC) includes the amount requested, the cost share amounts, and other projects costs not eligible for cost share.*

TCS%	40+	36-39	32-35	28-31	24-27	20-23	16-19	12-15	8-11	4-7	0-3
Points	10	9	8	7	6	5	4	3	2	1	0

5. **Project Need:** To what extent does the project address high priority limiting factors to focus species recovery, in locations needed for focus species recovery?
   Scoring Considerations:
   - The Project Background details the root causes of habitat degradation and demonstrates the need for the proposed treatments.
   - The project addresses agency priorities (location, project type, species) identified in the FRGP Focus Table or otherwise addresses a high priority action needed to protect, conserve, or recover the focus species.
   - The project targets high priority habitat features, habitat types or habitat conditions known to limit the focus species at any or all life stages.
   - The project is guided by recommendations from supporting documents cited in the FRGP Focus Tools including regional recovery plans, watershed assessments, habitat inventory assessments, or other equivalent documents to address limiting factors.

   Scoring Tiers

   Tier 1

   14 - 20 points — Proposal details the root cause of the habitat degradation and demonstrates the need for the proposed treatment(s). The project targets agency priorities (location, project type, species) identified in the FRGP Focus Table. The project targets high priority habitat features, habitat types or habitat conditions known to limit the focus species at any or all life stages. The project is guided by recommendations cited in the FRGP Focus Tools.

   Tier 2

   7 - 13 points — Proposal details the root cause of the habitat degradation and demonstrates the need for the proposed treatment(s). The project does not target agency priority locations or project types identified in the FRGP Focus Table. The project targets documented limiting factor(s) for the focus species by addressing high priority habitat features, habitat types or habitat conditions in a location important to the focus species. The project is guided by recommendations cited in the FRGP Focus Tools.

Tier 3

0 - 6 points — Proposal partially details the root cause of the habitat degradation and inadequately demonstrates the need for the proposed treatment(s). The project does not target agency priorities (locations, project types, species) identified in the FRGP Focus Table. The project generally addresses limiting factor(s) for salmonids but does not target a focus species, high priority habitat features, habitat types or conditions or is not in a location important to recovery of the focus species. The project is not guided by inventory or assessment recommendations.

Do Not Fund — The need for the project has not been demonstrated or is not a salmonid habitat restoration project.

6. **Approach:** Does the proposal clearly show the most effective approach has been developed using the best available science to meet the project goal(s) and objective(s)?

Scoring Considerations:

- Proposed project goal(s) and objective(s) are clear and measurable in addressing limiting factors to focus species recovery.
- Proposed project strives for a durable, persistent, and maintenance-free project to the extent practicable.
- Required maintenance or monitoring plan ensures longevity of the habitat improvement(s).
- Project deliverables, sequencing, timing, methods, techniques and materials are appropriate and well understood.
- Sufficient analysis and documentation demonstrate a high likelihood that the benefits will be realized in an expedited timeframe as described in Project Objectives.
- Protocols are described in the CDFW Restoration Manual or other approved guidelines.
- Project addresses all available opportunities for eliminating or reducing the need for retreatment or additional treatment within the treatment area, excluding low-tech process-based restoration.

Scoring Tiers

Tier 1

12 - 15 points — Project goals and objectives are clear and address the limiting factor(s). Treatments are durable, persistent, maintenance-free or the included maintenance/monitoring plan ensures longevity of the habitat improvement(s). Project deliverables, sequencing, methods, techniques and materials are appropriate and well understood. There is sufficient analysis to demonstrate a high likelihood that benefits will be realized within an expedited timeframe. Protocols are described in the CDFW Restoration Manual or other approved guidelines. Approach maximizes efficiency within the treatment

area, minimizing the potential need for additional treatment or retreatment.

Tier 2

8 - 11 points — Project goals and objectives are clear and address the limiting factor(s). Treatments may be less durable, less persistent or require some maintenance. Maintenance or monitoring may not efficiently or effectively support the habitat improvements. Project deliverables and sequencing is clear, but methods, techniques and materials are less than optimal or are experimental, and appropriateness is uncertain. The likelihood that benefits will be realized is supported by minimal analysis. Approach is less efficient within the treatment area and there may be a need for additional treatment or retreatment.

Tier 3

4 - 7 points — Project goals and objectives need clarification to determine if limiting factor(s) are being addressed. Treatments are less durable or persistent and will require maintenance. Maintenance or monitoring may not efficiently or effectively support the habitat improvement(s). Project deliverables, sequencing, methods, techniques or materials are less than optimal or experimental, and appropriateness is uncertain. Project supporting analysis does not demonstrate a high likelihood that benefits will be realized. Approach is less efficient within the treatment area and need for additional treatment or retreatment is likely.

Tier 4

0 - 3 points — Project goals and objectives do not directly address limiting factor(s). Treatments are not durable or persistent and will require maintenance. Maintenance or monitoring plans do not efficiently or effectively support the habitat improvement(s). Project deliverables, sequencing, methods, techniques or materials are not clear, appropriate or understood. Project supporting analysis is lacking or demonstrates low likelihood that benefits will be realized. Approach is inefficient within the treatment area and there will be a need for additional treatment or retreatment.

Do Not Fund — Approach is inappropriate or is unlikely to result in desired outcomes.

7. **Benefits:** Will the project provide substantial benefits to focus species through improvements in stream habitat and watershed function?

   Scoring Considerations:

   - Habitat gains (metrics) will be significant for the project location, including but not limited to, habitat made available, increase in time that important habitats are accessible, improved physical habitat target values, off-channel habitat created, improvements in fish passage and accessible habitat.
   - The project contributes to focus species recovery.

- The project will restore ecosystem processes to the extent possible.
- The project addresses the effects of climate change on salmonid habitat.

Scoring Tiers

Tier 1

20 - 25 points — Project will achieve significant gains in quality or quantity of habitat accessible to the focus species thereby contributing to species recovery. Project maximizes ecosystem complexity and recovery of ecosystem processes to the extent possible. Project directly addresses effects of climate change on focus species' habitat and/or vulnerable ecosystems. The project uses best management practices to improve resilience to climate change, including infrastructure design.

Tier 2

14 - 19 points — Project will achieve moderate gains in quality or quantity of habitat accessible to the focus species thereby contributing to species recovery. Project improves ecosystem complexity and supports recovery of ecosystem processes to the extent possible. Project will moderately address effects of climate change on focus species' habitat and/or vulnerable ecosystems. The project uses best management practices to moderately improve resilience to climate change, including infrastructure design.

Tier 3

8 - 13 points — Project will achieve minor gains in quality or quantity of habitat accessible to the focus species thereby contributing to species recovery to a lesser degree. Project improves or maintains ecosystem complexity and supports recovery of ecosystem processes to the extent possible. Project will minimally address effects of climate change on focus species' habitat and/or vulnerable ecosystems. The project uses best management practices to minimally improve resilience to climate change, including infrastructure design.

Tier 4

0 - 7 points — Project may achieve limited gains in quality or quantity of habitat accessible to the focus species thereby contributing to species recovery to a lesser degree. Project maintains but does not improve ecosystem complexity to the extent possible. Project does not support recovery of ecosystem processes. The project addresses climate change indirectly by avoiding adverse environmental impacts by using best management practices or does not address climate change.

Do Not Fund — Habitat gains for the focus species will not be achieved through the proposed project. Project reduces or impairs ecosystem complexity. The project does not address climate change.

FRGP Priority 2 and 3 Project Types – Scoresheet Instructions

Projects that support anadromous salmonid habitat restoration projects through planning, outreach, education, and/or monitoring

Use Not Applicable (N/A) where appropriate as determined through FRGP Guidelines.

1. **Qualifications:** Does the proposal demonstrate the Project Team (applicant, subcontractors, tribes, partners and anyone who contributes to the project completion) have the qualifications, experience, license and capacity to successfully perform the proposed tasks with minimal CDFW oversight?

   Scoring Considerations:

   - Applicant has demonstrated their ability to complete projects on time and to be cooperative.
   - Subcontractors have demonstrated their ability to complete projects on time and to be cooperative.
   - Subcontractor selection criteria are clear, informative, adequate and justifiable.
   - If applicable, past project deliverables have conformed to FRGP requirements.
   - Qualifications and licenses are appropriate for the tasks proposed.
   - The Project Team's past activities have effectively planned, informed, prioritized or provided tools to implement restoration for focus species.
   - Landowner collaboration has been demonstrated or landowners have provided access and are supportive of the objectives and goals.

   Scoring Tiers

   Tier 1

   7 - 10 points Project Team has extensive experience successfully implementing many planning, outreach, education, or monitoring projects similar in scope and scale, according to proposed timeline. Past project deliverables have conformed to FRGP requirements. Project Team's past activities led to on-the-ground restoration projects, 100% Design Plans or contributed to restoration prioritization planning efforts.

Subcontractor selection criteria are clear. Landowner collaboration has been demonstrated or majority of landowner support is demonstrated, with details for securing 100% of landowner support.

Tier 2

3 - 6 points — Project Team has moderate experience successfully implementing planning, outreach, education, or monitoring projects as proposed or Project Team has little experience completing projects of this type but appears well qualified to complete all deliverables. Project Team had issues meeting previous project timelines or proposed deliverables. Project Team's past activities led to delayed habitat improvement, developed less than 100% designs or contributed to unprioritized planning efforts. Subcontractor selection criteria require some clarification. Some landowner collaboration or support has been demonstrated with details provided for securing full support to meet the goals and objectives.

Tier 3

0 - 2 points — Project Team has limited or no experience with projects as proposed, and qualifications appear inadequate. Project Team's past activities have not led to immediate project implementation nor contributed to a planning effort nor initiated designs. Project Team has previous issues meeting project deliverables or timelines. Selection criteria are inadequate and need extensive clarification. Landowner collaboration or support is unclear, or additional landowner support must be obtained to meet the project goals and objectives.

Do Not Fund — Project Team is unqualified or unlicensed or has been uncooperative. Project Team has failed to meet project deliverables. Selection criteria are not provided. Project Team's past activities did not lead to restoration, planning or increased knowledge of focus species. Landowner collaboration or support has not been demonstrated and there is no detailed description included describing how landowner collaboration or access will be secured.

2. **Project Information:** Does the proposal include the Project Type details as required in the Application and the Guidelines?
   Scoring Considerations:

- Project Information including Project Description, Description of Activities and Project Type Required Information is complete, clear and detailed.
- Project Type Supplementary Documents conform to Guidelines.
- The Evaluation Plan (TE) or Status Report (OR, PI) is included and details all specific requirements as listed in the Guidelines.
- Proposal addresses California Water Action Plan or California Climate Strategy (WD).
- For flow studies, contact with the State Water Board is demonstrated (PL).

Scoring Tiers

Tier 1

7 - 10 points — Project Information is clear, adequate and generally conforms to Guideline requirements. Supplementary Documents conform to Guidelines. The Evaluation Plan or Status Report is included and details all specific requirements. Proposal describes in detail how it supports the California Water Action Plan or California Climate Strategy. State Water Board contact has been demonstrated.

Tier 2

3 - 6 points — Project Information is missing minor required details, or one Supplementary Document does not conform to all Guideline requirements. The Evaluation Plan or Status Report is included and is missing one specific requirement. Proposal discusses linkage to one of the plans (California Water Action Plan or California Climate Strategy) but only generally describes how it supports the plan. State Water Board contact has been demonstrated.

Tier 3

0 - 2 points — Project Information is missing major/important required details or multiple Supplementary Documents do not conform to Guidelines. The Evaluation Plan or Status Report is included and is missing two specific requirements. Proposal discusses implementing one of the plans (California Water Action Plan or California Climate Strategy) with no description of how it supports the plan. State Water Board contact has been demonstrated.

Do Not Fund — Project Information or Supplementary Documents are significantly flawed and do not follow Guideline requirements. The Evaluation Plan or Status Report is not included or is missing three more specific requirements. Proposal makes no

reference to either California Water Action Plan or California Climate Strategy. State Water Board contact has not been demonstrated.

3. **Budget:** Is the budget appropriate for the work and deliverables proposed, including detailed costs? Overall, is the project cost-effective?
   Scoring Considerations:
   - The proposed project is cost-effective relative to the expected benefits.
   - Line items are cost-effective.
   - The proposal clearly describes all project costs including personnel, operating, equipment, materials, rentals, subcontractors and Indirect Costs.
   - Applicant budget is clear and detailed for all expenses.
   - Subcontractor budgets are clear and detailed for all expenses.
   - Expenses are justified where necessary.
   - All expenses are allowable.

   Scoring Tiers

   Tier 1

   7 - 10 points — Applicant and subcontractor(s) budgets are cost-effective for the expected benefits, generally clear and well-justified. All expenses are allowable.

   Tier 2

   3 - 6 points — Budget is acceptable but less cost-effective for the expected benefits and needs further clarification or justification. Some expenses are not allowable, and budget will need correction.

   Tier 3

   0 - 2 points — Budget has line items that are not cost-effective, not clear nor well justified, but the project will provide some benefit to the focus species.

   Do Not Fund — Budget is not cost-effective, not clear and there is little or no justification. Large expenses are not allowable and prohibit the completing of the project.

4. **Cost Share:** Cost share means the portion of project costs not paid by FRGP.

Scoring Considerations:

- Cost share not suitable: Projects, personnel, or supplies and equipment previously funded by CDFW; resources expended prior to the term of the grant; salaries of permanently funded employees working for CDFW or NOAA Fisheries; indirect charges; mitigation funds and funds used in enforcement actions; cost share funds that

will not be confirmed by December 1 of the PSN year; cost share being used as match for other grants or entities.

- Hard cost share (HCS): All hard cost share must be Non-Federal sourced money or in-kind contributions that do not come from a federal source. Hard cost share can be provided by the applicant and/or the applicant's partners involved in the implementation of the proposed project. Hard cost must be confirmed prior to July 1 of the PSN year.

- Soft cost share (SCS): All soft cost share is Federal sourced money or in-kind contributions that come from a federal source. Soft cost share can be provided by the applicant and/or the applicant's partners involved in the implementation of the proposed project. Cost share funds (cash or in-kind) that will be confirmed after July 1 of the PSN year up until December 1 of the PSN year can only be counted as soft cost share regardless of funding source.

Total Cost Share (TCS) = (HCS) + (0.5)(SCS)
Total Cost Share Percentage (**TCS%**) = (TCS / Total Project Cost* (TPC)(100)

**Total Project Cost (TPC) includes the amount requested, cost share amounts, and other projects costs not eligible for cost share.*

TCS%	40+	36-39	32-35	28-31	24-27	20-23	16-19	12-15	8-11	4-7	0-3
Points	10	9	8	7	6	5	4	3	2	1	0

5. **Project Need:** To what extent does the project address high priority limiting factors to focus species recovery, in locations needed for focus species recovery?
   Scoring Considerations:
   - The Project Background details the root causes of habitat degradation and demonstrates the need for planning, outreach, education, or monitoring which will lead to treatments or support of focus species' habitat restoration.
   - The project addresses agency priorities (location, project type, species) identified in the FRGP Focus Table or otherwise addresses a high priority action needed to protect, conserve, or recover the focus species.
   - This planning, outreach or education effort supports restoration projects that target high priority habitat features, habitat types or

habitat conditions known to limit the focus species at any or all life stages.

- The project is guided by recommendations from supporting documents cited in the FRGP Focus Tools including regional recovery plans, watershed assessments, habitat inventory assessments, or other equivalent documents to address limiting factors.

Scoring Tiers

Tier 1

14 - 20 points Proposal details the root cause of the habitat degradation and demonstrates the need for planning, outreach, technical education, or monitoring that will lead to treatments or support of the focus species' habitat restoration. The project targets agency priorities (location, project type, species) identified in the FRGP Focus Table. The project supports projects that target high priority habitat features, habitat types or habitat conditions known to limit the focus species at any or all life stages. The project is guided by recommendations cited in the FRGP Focus Tools.

Tier 2

7 - 13 points Proposal details the root cause of the habitat degradation and demonstrates the need for planning, outreach, technical education, or monitoring that will lead to treatments or support of the focus species' habitat restoration. The project does not target agency priority locations or project types identified in the FRGP Focus Table. The project supports projects that target documented limiting factor(s) for the focus species and supports treatment of high priority habitat features, types, or conditions in a location important to the focus species. The project is guided by recommendations cited in the FRGP Focus Tools.

Tier 3

0 - 6 points Proposal partially details the root cause of the habitat degradation and inadequately demonstrates the need for planning, outreach, technical education or monitoring that will lead to treatments or support of focus species' habitat restoration. The project does not target agency priorities (locations, project types, species) identified in the FRGP Focus Table. The project generally addresses limiting factor(s) for salmonids but does not target a focus species, high priority habitat features, habitat types, or conditions or is not in a location important to recovery of the focus species. The

project is not guided by inventory or assessment recommendations.

Do Not Fund — The need for the project has not been demonstrated or is not a salmonid habitat restoration project.

6. **Approach:** Does the proposal clearly show the most effective approach has been developed using the best available science to meet the project goal(s) and objective(s)?

   Scoring Considerations:

   - Proposed project goal(s) and objective(s) are clear and measurable in addressing limiting factors to focus species recovery.
   - Approach is clearly described and appropriate (all project types) including but not limited to the specific aspects below for select project types:
     - For MO, the scientific study accurately assesses what is attempting to be measured for project success monitoring (MO);
     - For OR and PI, the outreach and recruitment efforts to develop, maintain, and sustain ongoing partnerships;
     - For OR, a plan for working in one or more new watersheds;
     - For PI (AmeriCorps only), a description of outreach and member site selection.
     - For TE, a plan for addressing limiting factors in local watershed(s);
     - For WD, a plan for selecting a location to install an instream flow gauge.
   - Project deliverables, sequencing, timing, methods, techniques, and materials are appropriate and well understood.
   - Protocols are described in the CDFW Restoration Manual or other approved guidelines.

   Scoring Tiers

   Tier 1

   10 - 15 points — Project goal(s) and objective(s) are clear and measurable in addressing the limiting factor(s). The project approach is clear and appropriate. Project deliverables, sequencing, methods, techniques, and materials are appropriate and well understood. Protocols are described in the CDFW Restoration Manual or other approved guidelines.

   Tier 2

   5 - 9 points — Project goal(s) and objective(s) are clear and measurable in addressing the limiting factor(s). The project approach is less clear or appropriate. Project deliverables, sequencing,

methods, techniques and materials are are less than optimal. Protocols proposed do not follow CDFW Restoration Manual or other approved guidelines but appear appropriate.

Tier 3

0 - 4 points Project goal(s) and objective(s) need clarification to determine if limiting factor(s) are being effectively addressed. The project approach is severely lacking in either clarity or appropriateness. Project deliverables, sequencing, methods, techniques, and materials are not clear and may not be appropriate. Protocols proposed do not follow CDFW Restoration Manual or other approved guidelines and may be less appropriate.

Do Not Fund Approach is inappropriate or is unlikely to result in desired outcomes.

7. **Benefits:** Will the project provide substantial benefits to focus species and their habitat through planning, outreach, education or monitoring?

   Scoring Considerations:

   - Does the project plan, inform, prioritize, or provide tools to implement needed restoration.
   - The project will support actions that will contribute to focus species recovery.
   - The project will incorporate concepts of ecosystem processes to the extent possible.
   - The project addresses the effects of climate change on salmonid habitat through resulting plans, reports, priorities and tools.

   Scoring Tiers

   Tier 1

   20 - 25 points Project will effectively plan, inform, prioritize, or provide tools to implement needed restoration for focus species. Project will provide extensive support of actions that will contribute to focus species recovery. The project will incorporate concepts of ecosystem processes to the extent possible. The project uses best management practices to improve resilience to climate change, including infrastructure design.

   Tier 2

   14 - 19 points Project will adequately plan, inform, prioritize, report and provide tools to implement needed restoration for focus species. Project will provide moderate support of actions that will contribute to focus species recovery. The project will incorporate concepts of ecosystem processes to the extent possible. The project uses best management practices to

	moderately improve resilience to climate change, including infrastructure design.
Tier 3	
8 - 13 points	Project will minimally plan, inform, prioritize, report and provide tools to implement needed restoration for focus species. Project will provide limited support of actions that will contribute to focus species recovery. The project may not incorporate concepts of ecosystem processes to the extent possible. The project uses best management practices to minimally improve resilience to climate change, including infrastructure design.
Tier 4	
0 - 7 points	Project will ineffectively plan, inform, prioritize, report and provide tools to implement needed restoration for focus species. Project does not provide support of actions that will contribute to focus species recovery. The project may not incorporate concepts of ecosystem processes to the extent possible. The project addresses climate change indirectly by avoiding adverse environmental impacts by using best management practices or does not address climate change.
Do Not Fund	Project will not plan, inform, prioritize, report and provide tools to implement needed restoration for focus species. Project will not contribute to focus species recovery. The project does not incorporate concepts of ecosystem processes to the extent possible. The project does not address climate change.

Cost Analysis Evaluation

Evaluation of project cost analysis will include the following:

1. Comparison of wages, equipment rates, material costs, and other project costs for similar completed and proposed project work within similar geographic regions.
2. Review of labor costs identified by Department of Industrial Relations General Prevailing Wage Determinations, Davis-Bacon labor rates, and recent California Employment Development Department wage data.
3. Review of regional equipment rental cost information (including the most current version of California Department of Transportation's (CalTrans) *Labor Surcharge and Equipment Rental Rates* publication).
4. Restoration costs, labor requirements, and production rates identified in Appendix I of the *Recovery Strategy for California Coho Salmon*, DFG 2004.

Cost analysis evaluation will consider project logistics (e.g., worksite remoteness, accessibility, coordination required with multiple land holdings), review of production rates/labor requirements in the regional area, and benefit to the recovery of anadromous salmonids.

Appendix C: Funding Approval Submissions

If a proposal is funded, the grantee must submit additional information before a grant agreement is prepared and executed. Special requirements for various agreements are explained below. The applicable forms described in this appendix are for informational purposes only. **Do not submit these forms with your proposal.** When applicants are notified that their project has been approved for funding, they shall supply the information and/or complete, sign, and return the forms provided if not already on file.

1. **Final Resolution of Project Approval.** If the applicant is a public entity, such as a Resource Conservation District, city, county, water agency, etc. that has a governing body, then a resolution of project approval from the governing body will be a requirement of entering into an agreement. It is suggested that the governing body be made aware of the proposal and be prepared to submit the resolution when returning the signed agreement. Nonprofit organizations do not fall into this category.
2. **Certification of Non-Federal Contributions: In-kind/Third Party.** Applicants that have identified nonfederal cost share will be asked to sign and submit a certification that allows FRGP to use those funds as federal match. Supporting documentation of cost share expenses must be maintained by the grantee and a summary will be required as part of the Final Report of the grant.
3. **Payee Data Record** form (STD. 204). The State of California is required to file reportable payment information with the Internal Revenue Service (IRS) and the Franchise Tax Board (FTB) in accordance with Section 6041 of the IRS code and Section 18802 of the State's Revenue and Taxation Code.
4. **501(c)(3) Certification** for non-profit organizations.
5. **Federal Taxpayer ID Number**
6. **Final Landowner Agreements** will be required for all projects that require access to private or public lands. Agreements must include reasonable access by the grantee and CDFW or its representatives for oversight of project implementation,

inspection, monitoring, and post-project evaluation for a period of 10 years following completion of the project. CDFW and its representatives shall have access to the project worksite at least once every 12 months from the start date of the grant for 10 years, or an appropriate term negotiated prior to grant execution. CDFW shall provide advance notice to landowners prior to accessing the project worksite. Agreements should also outline the terms of maintenance for the project for a 10-year period. Additional landowner agreement requirements apply by project type.

7. **Drug-Free Workplace Certification** (STD. 21) will be required for all grants regardless of grant dollar amount. Federal and State agencies and public entities such as Resource Conservation Districts are excluded from this requirement.
8. **Current (non-expired) federal Negotiated Indirect Cost Rate Agreement (NICRA)** if not using the de minimis rate.
9. **Federal Funding Accountability and Transparency Act 2006 Contractor Certification** (DFW 868)**.** Any project receiving federal funds as part of the grant award is required to complete this form. The form will be included in the grant package.
10. **Subrecipient Risk Assessment** (DFW 870). The California Department of Fish and Wildlife (CDFW) is required by the Office of Management and Budget Guidance Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (§ 200.331 (b)) to evaluate each subrecipient's risk of noncompliance with Federal statutes, regulations, and the terms and conditions of the subaward for purposes of determining the appropriate subrecipient monitoring.
11. **NOAA performance measures for each worksite.** Performance measures are not required in the application, but if awarded the grantee will be required to update WebGrants with proposed worksite performance measures (see Part IV: Project Type Requirements for performance measures).
12. **Proof of Liability Insurance**

General Terms and Conditions

Successful applicants must agree to the appropriate terms and conditions for their entity type. In accordance with AB 20, awarded University of California and California State University applicants must agree to the UTC-220 - University Terms & Conditions - Exhibit "C" for University of California and California State University Agreements (UTC-116 Exhibit C). All other awarded entities must agree to the applicable CDFW General Grant Provisions: Exhibit 1a, Exhibit 1b, Exhibit 2. UTC-220 Exhibit C and the CDFW General Grant Provisions include information regarding audits, amendments, liability insurance and rights in data.

Once the grant is awarded and the grant is executed, actions of the grantee that may lead to suspension or cancellation of the grant agreement include, but are not limited to:

- Failing to commence work within one year of execution date of the grant.
- Withdrawing from the grant program.
- Failing to complete proposed water right changes/dedications.
- Failing to submit required documentation within the time periods specified in the grant agreement.
- Failing to submit evidence of environmental or permit compliance as specified by the grant agreement.
- Changing project scope without prior approval from CDFW.
- Failing to complete the project.
- Failing to demonstrate sufficient progress.
- Failing to comply with pertinent laws.

Appendix D: Permit Requirements

Proposals that conduct fishery habitat restoration activities using methods described in *California Salmonid Stream Habitat Restoration Manual, 4th Edition* (California Department of Fish and Game) ("CA Restoration Manual") or other approved guidelines and manuals for salmon and steelhead habitat restoration may be covered by the FRGP's programmatic permits. The two FRGP programmatic permits are the Section 404 (RGP 12 or RGP 78) and the 401 permits of the Clean Water Act (CWA). To be covered by these programmatic permits, the applicant must incorporate the following information with their grant application. The applicant is responsible for reviewing these permits and incorporating the permit conditions into their project. Previously issued permits can be found in the CDFW Document Library.

Project information needed for programmatic permits

The following information must be completed in the Permit Requirements Template and submitted as an Excel (.xlsx) file as a supplemental document. The proposal shall include proposed or target values. If a project is funded actual values will be submitted on completed projects.

Waterbody Name	Stream type	Wild and Scenic River	First named downstream tributary	Affected Resource (Riparian, Streambed, and/or Upslope)	Duration of Direct Impact (Permanent, Temporary)	F/E	Fill/Excavation		Indirect Impacts (yes or no)	Total Area Restored			CRAM
							Acres	Linear Feet		Restoration Method	Acres	Linear Feet	

- ***Waterbody Name:*** *The stream, wetland, or other waterbody the project will directly impact.* Create a separate row for each stream's impact type (Permanent or Temporary). Typically, most projects have both permanent and temporary impacts.

- ***Stream Type:*** *Indicate if the stream type is perennial or intermittent/seasonal.*

- ***Wild and Scenic River:*** *Is the project located on a Wild and Scenic River? Y/N.*

- ***First Named Downstream Waterbody:*** *List the first named downstream waterbody of which the affected waterbody is a tributary.*

- ***Affected Resource(s):*** *Resources that the project will impact – riparian zone, instream (indicate if it is within the ordinary highwater mark), wetland, and/or upslope. If the project impacts multiple resources, use a separate line for each. For the purposes of this appendix the riparian zone starts at the ordinary high-water mark and includes any riparian habitat as determined by CDFW. If no typical riparian vegetation is present, the riparian zone extends to the top of bank. Impacts may result from performing the restoration activity itself (excavating within a channel), or through accessing the worksite (driving equipment through the riparian zone), or from adjacent work areas that result in a direct discharge. Many projects affect both riparian zones and stream channel. For upslope projects, only report the values for stream crossings or other areas that are likely to result in a direct discharge to waters. Discharges due to ineffective erosion control or other factors are violations.*

- ***Duration of Direct Impact(s):*** *Indicate if the direct impact(s) to the resource(s) will be permanent and/or temporary. If the project involves both temporary and permanent impacts, use separate lines.*

    - *Examples:* Culvert removal/replacement with natural bottom bridge is a temporary stream impact. Fence installation in riparian zone is a permanent riparian impact. Placement of instream wood structures or other channel modifications are permanent stream impacts. Placement of water storage tanks is a permanent riparian impact.

Removal of invasive riparian vegetation and planting of native riparian vegetation are temporary riparian impacts.

- ***F/E:*** *Indicate if impact to stream is from fill material = F or from excavation = E, or N/A if impact is upslope (unless it is likely to result in a direct discharge to waters).*

- ***Fill Material****: Material placed in waters of the U.S. where the material has the effect of either replacing any portion of a water of the United States with dry land or changing the bottom elevation of any portion of a water. Examples include wood, rock, sand, construction debris, and materials used to create any structure or infrastructure in waters of the U.S.*

- ***Excavation****: The removal or alteration of sediment, substrate, or soil in shallow waters or under no-flow conditions where impacts to beneficial uses are best described by the area of the discharge. Examples include earthwork preliminary to discharge, removal of sediment to increase channel capacity, or other flood control and drainage maintenance activities (e.g., debris removal, detention basin maintenance, and erosion control of slopes along open channels and other drainage facilities). Projects to improve navigation in deep water are not classified as excavation.*

- ***Record*** *temporary and/or permanent impact size to the aquatic resource from fill/excavation in acres* ***and*** *linear feet.*

- ***Acres****: Measure and record the area of impact to the nearest thousandth of an acre (note: 0.001 acre = 43.56 square feet).*

- ***Linear feet****: Measure and record the length of the impact to the nearest linear foot. When a project impacts a stream channel, measure the length of stream channel impacted along the length of the thalweg of the affected stream reach. For polygonal projects that don't have a clear linear aspect, record the longest side of impact that best characterizes the shape and extent of the impact.*

- **Note:** For most projects, the restoration area and impact area amounts will NOT exactly match; an example when this could occur would be riparian invasive vegetation removal projects.

- ***Indirect Impact(s):*** *Indicate if there will be indirect impacts. If indirect impacts are anticipated, identify what they will be. An indirect impact is any reasonably foreseeable impact outside of the direct impact area that is expected to occur as a result of the project, and that will have an adverse effect on an aquatic resource. Indirect impacts should not be included in the Individual Direct Impact Information.*

- ***Area Restored****: Record the restoration amount in acres* ***and*** *linear feet following the same guidelines as quantifying fill/excavation impacts. (Area Restored values must always be reported for* ***all*** *Affected Resource types.)*

- ***Restoration Method:*** *Choose from one of the following underlined types. Note that the total area (acres) and length (linear feet) should be reported for each restoration type. Use a separate line for each restoration type if the project results in more than one.*

- ***Establishment (or creation)****: The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at a worksite. Establishment results in a gain of aquatic resource area and function. An example is the creation of a new self-maintaining side channel or off-channel habitat.*

- ***Re-Establishment****: The manipulation of the physical, chemical, or biological characteristics of a non-aquatic worksite (i.e., not a stream, wetland, or riparian area in its pre-project state) with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions. Examples include reconnecting or recreating side channels/braids that have been hydrologically*

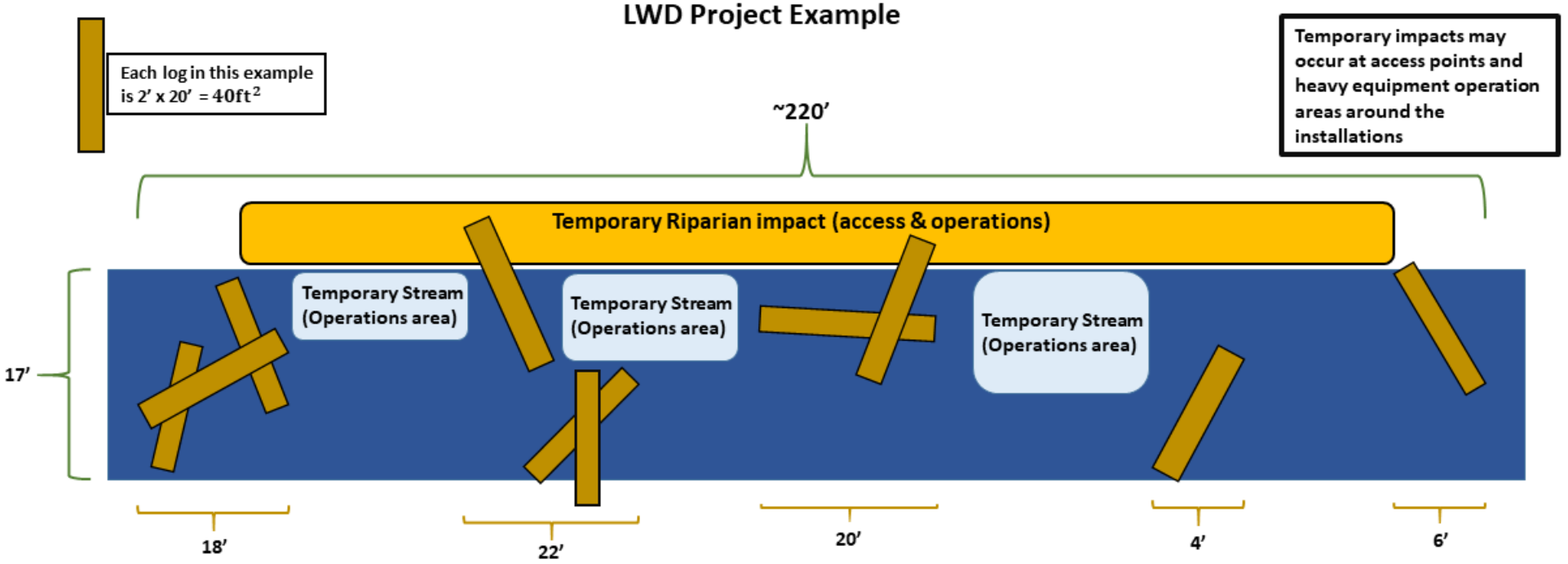
disconnected, reconnecting an incised channel with its floodplain, or restoring wetlands at the worksite of former wetlands.

- ***Rehabilitation**: The manipulation of the physical, chemical, or biological characteristics of a worksite with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function but does not result in a gain in aquatic resource area. Examples include fish passage remediation or instream barrier modifications (the area/reach of a stream that is being rehabilitated due to fish passage remediation), road decommissioning (depending on work being done), or riparian planting.*

- ***Enhancement**: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific targeted aquatic resource function(s). Enhancement results in the gain of selected aquatic resource functions(s) but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area. Examples include placement of wood in stream, forbearance projects, or removal of invasive species.*

- ***CRAM (California Rapid Assessment Method):** If CRAM has been done, list assessment Name & ID and CRAM score. Information on completed assessments can be found at the CRAM website.*

LWD Project Example



Permanent impact length = Sum of LWD feature lengths
(18'+22'+20'+4'+6' = 70')

Permanent impact area = Sum of log areas
($40ft^2$ x 10 logs = $400ft^2$)

Temporary stream impact = Area and length of temporary access route and heavy equipment work-area's area below OHWM

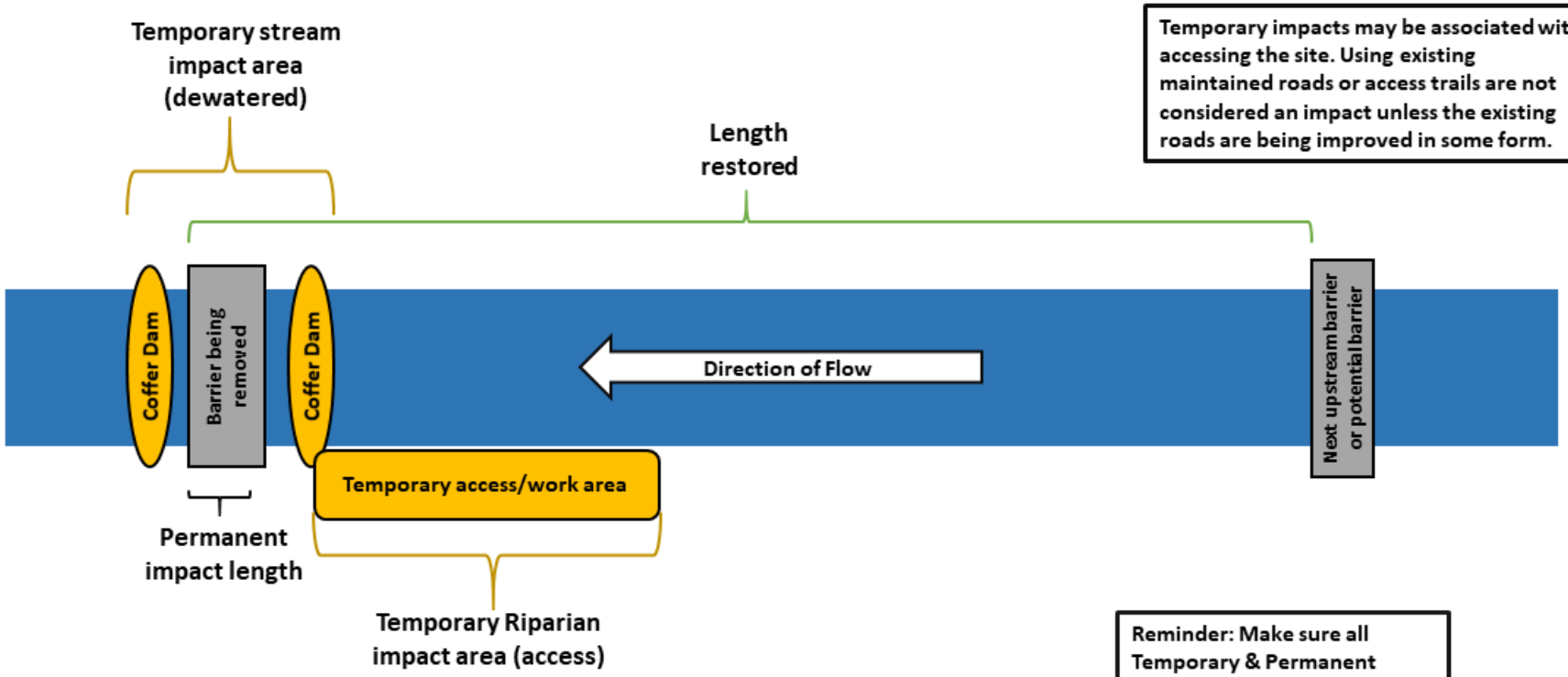
Temporary riparian impact= Area and length of temporary access route and work area above OHWM

Restored Length = Length of reach in which the LWD was installed (220')

Restored area = (Length restored) x (average stream width)
(220' x 17' = 7480)(estimates are OK for area)

NOTE:
$43.56ft^2$ = 0.001 acres

Barrier Removal Project Example

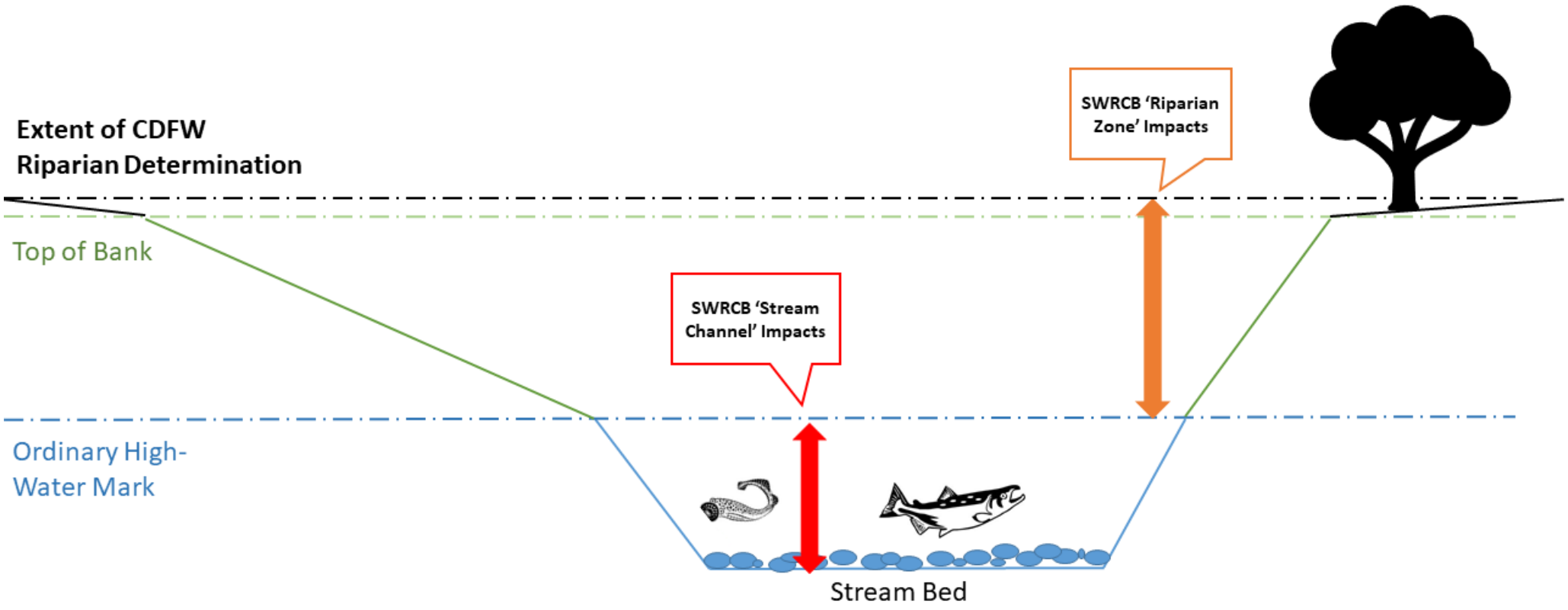


Temporary stream impacts = (Area dewatered) – (Area of permanent impact)

Temporary impacts to riparian zone = (Temporary access area) – (Area of permanent impact)

Restored Area = (Length restored) x (Average width of stream)

Typical SWRCB Impact Areas



SWRCB Wetland Reporting

Impacts to wetlands should be avoided when practicable.

In the example below the Temporary Equipment Operation Area (TEOA) could be moved to the other side of the stream; if moving the TEOA would result in a reduction of environmental impacts. If moving to the other side would impact a listed species, then temporarily impacting a wetland could be the least environmentally damaging option.

Quantify the wetland impact values by following the guidance for 'polygonal projects that don't have a clear linear aspect' on page F3.

- Ground disturbance (i.e. vehicle traffic and stockpiling materials) within a wetland constitutes an impact to that wetland.
- If the impact area will be restored to pre-project conditions, then the impact is **temporary**. Otherwise, the impact would be considered **permanent**.
- Wetlands may occur above or below the Ordinary High-Water Mark.