

# Fisheries Restoration Grant Program 2013 Proposal Solicitation Notice

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Coho salmon, Elk River tributary to Humboldt Bay  
Photographer: Bob Pagliuco

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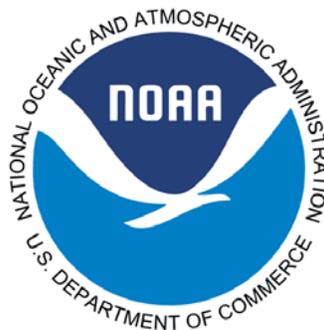
February 1, 2013

California Department of Fish and Wildlife  
Wildlife and Fisheries Division  
Fisheries Branch



In partnership with

National Oceanic and Atmospheric Administration's  
Pacific Coastal Salmon Recovery Fund



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# Fisheries Restoration Grant Program

## 2013 Proposal Solicitation Notice

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### PART I: INTRODUCTION

The California Department of Fish and Wildlife (CDFW) Fisheries Restoration Grant Program (FRGP) is soliciting proposals for projects that restore, enhance, or protect anadromous salmonid habitat in the coastal watersheds of California or projects that lead to restoration, enhancement, or protection of anadromous salmonid habitat. The intent of this Proposal Solicitation Notice (PSN) is to solicit and fund projects that are consistent with California Department of Fish and Game's (DFG) *Steelhead Restoration and Management Plan for California*, DFG's *Recovery Strategy for California Coho Salmon*, National Oceanic and Atmospheric Administration's (NOAA) *Southern California Steelhead Recovery Plan* Final Version January 2012, NOAA's *South-Central California Steelhead Recovery Plan* Public Review Draft September 2012, NOAA's *Recovery Plan for the Evolutionarily Significant Unit of Central California Coast Coho Salmon* Final Version September 2012, and NOAA's *Recovery Plan for the Southern Oregon Northern California Coast Evolutionarily Significant Unit of Coho Salmon* Public Review Draft January 2012. Since 1981, there has been a collaborative effort with more than 600 stakeholders to restore declining anadromous salmonid habitat. Over the last 30 years, the FRGP has invested over \$250 million and supported over 3,500 salmonid restoration projects.

#### ***Funding Prospects for Fiscal Year 2013/2014***

Fiscal Year 2013/2014 funding for the FRGP is expected to be similar to 2012/2013 in regards to federal funding, approximately \$13 million from the Pacific Coastal Salmon Recovery Fund. Funding for proposals submitted under this PSN are subject to availability of funds and approval of the Budget Act for the 2013/2014 Fiscal Year. Visit <http://www.dfg.ca.gov/fish/Administration/Grants/FRGP/FundSummary.asp> to view projects that have been funded in previous years. In the 2012-2013 grant cycle, the Fisheries Restoration Grant Program received 174 proposals requesting over \$48 million. (See Appendix F for funding sources.)

#### **Geographic Division for 2013 Funds:**

Southern California/South-Central steelhead: Up to \$9 million will be spent for the restoration and recovery of the Southern California and South-Central California Coast steelhead DPSs, which range from San Diego to Monterey counties. See Table 1: Focus Table.

Central California Coast (CCC) coho salmon and Bay Area steelhead: Up to \$9 million will be spent for the restoration and recovery of CCC coho salmon and steelhead occupying streams entering San Francisco Bay. See Table 1: Focus Table.

Northern California coho salmon: Up to \$9 million will be spent for the restoration and recovery of Southern Oregon/Northern California Coastal (SONCC) coho salmon. See Table 1: Focus Table.

If there are an insufficient number of eligible projects in each division to meet these objectives, remaining funding will be distributed to the highest scored projects statewide.

### ***Climate Change***

Current scientific evidence supports the necessity 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 rise and natural ecosystems are altered. The *2009 California Climate Adaptation Strategy* (California Natural Resources Agency) includes as a guiding principal to “Give priority to adaptation strategies that initiate, foster, and enhance existing efforts that improve economic and social well-being, public safety and security, public health and environmental justice, species and habitat protection, and ecological function.” As a near-term action, the Strategy states that for Habitat Protection, “State agencies should identify key habitats that may require more protections as a result of climate change impacts and should plan additional buffer areas where necessary to allow for climate change phenomena...”. For nearly three decades, projects funded by the CDFW FRGP have enhanced salmonid species’ adaptation potential by restoring and preserving habitat. The realization of climate change places 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.

### ***Aquatic Invasive Species***

Do not let your restoration project be a vector for invasive species, such as New Zealand mud snail, that will irreversibly degrade the stream rather than improve it! Personnel and equipment conducting work in streams can unknowingly transmit invasive species. Personal field gear and heavy equipment working in the stream must be properly decontaminated before moving to a new location even within the same watershed. For general information, see CDFW’s Invasive Species Program web site at <http://www.dfg.ca.gov/Invasives/>. For field guidance and decontamination protocols, see <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=43333>.

## PART II: REQUIRED SUBMISSION PROCEDURES FOR ALL APPLICATIONS

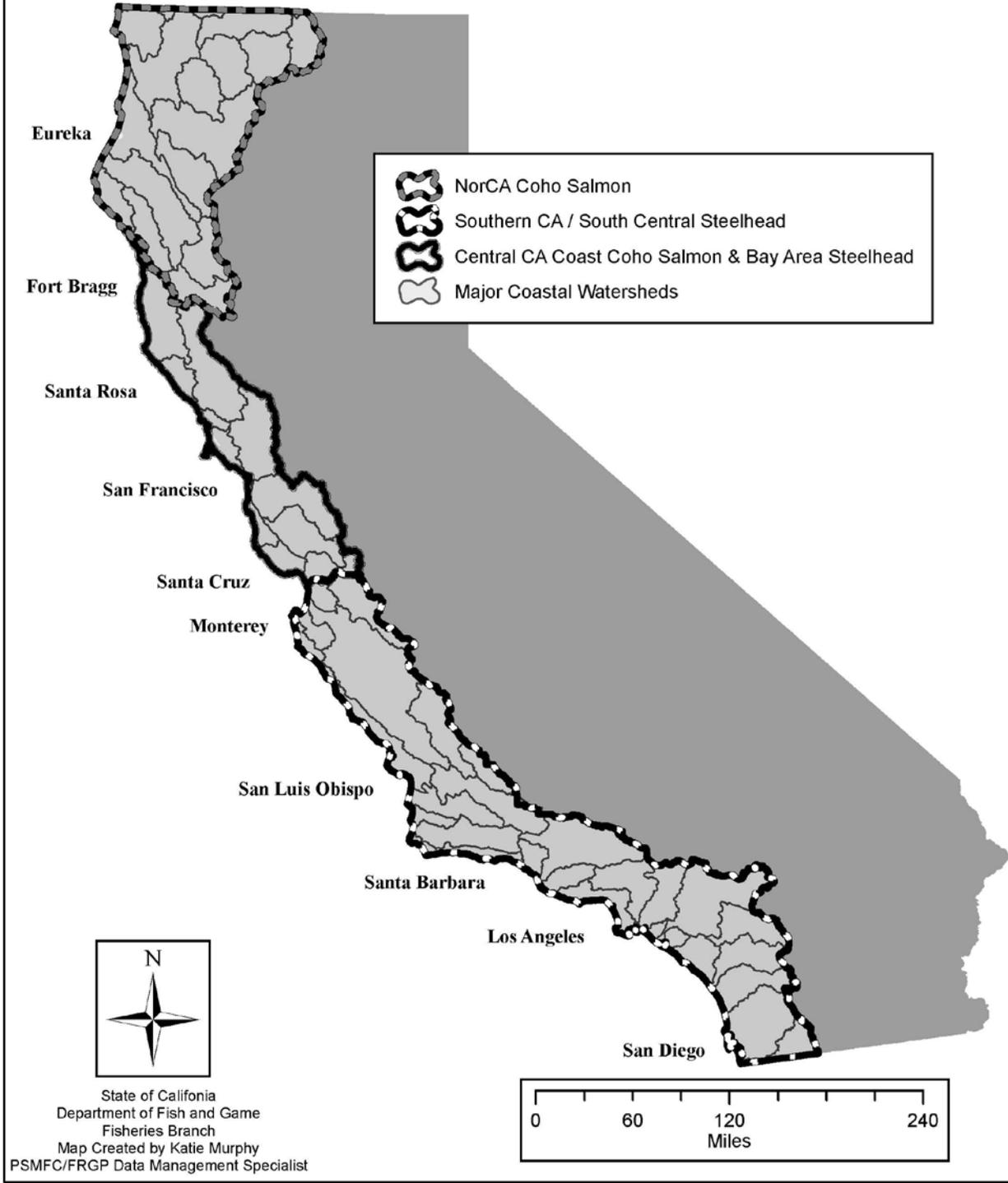
### ***Project Types***

The FRGP will accept proposal applications for the types of projects listed below. Funding is limited to Coastal Watersheds within the focus of this PSN (excluding the Central Valley upstream from the Carquinez Bridge, see Map 1). The applicant will identify the primary project type that best describes the proposed project. CDFW has developed a two-letter coding system for project types. A list of these codes is shown below and described in detail in Part VI.

AC	AmeriCorps Program only	PD*	Project Design
FP*	Fish Passage at Stream Crossings	PI	Public Involvement and Capacity Building
HA	Habitat Acquisition and Conservation Easements	PL*	Watershed Evaluation, Assessment, and Planning
HB*	Instream Barrier Modification for Fish Passage	RE	Cooperative Rearing
HI*	Instream Habitat Restoration	SC*	Fish Screening of Diversions
HR*	Riparian Restoration	TE*	Private Sector Technical Training and Education
HS*	Instream Bank Stabilization	WC*	Water Conservation Measures
HU*	Watershed Restoration (Upslope)	WD*	Water Measuring Devices (Instream and Water Diversion)
MD	Monitoring Status and Trends	WP	Water Purchase/Lease
MO	Monitoring Watershed Restoration		
OR	Watershed and Regional Organization		

*\*These types of 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.** See Appendix G, Business and Professions Code.*

# Fisheries Restoration Grant Program Geographic Project Scope California Coastal Watersheds



**Map 1 – Area covered by FRGP.**

## ***Eligibility Criteria***

Entities eligible to apply for grants from the FRGP are limited to public agencies, Native American Indian Tribes, and nonprofit organizations. Grant proposals from private individuals or for-profit enterprises will not be accepted. Private individuals and for-profit enterprises interested in submitting restoration proposals are encouraged to work with a public agency, nonprofit organization, or Native American Indian Tribe.

No project that is a 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.

## ***Application Proposal Package***

Applications should be submitted on-line, this is the preferred method of submission. However, applicants who do not have access to the on-line process may submit a paper application.

### **On-Line Application Proposal Package**

Grant applications should be submitted on-line at <https://nrmsecure.dfg.ca.gov/frgpproposal/Default.aspx>. Instructions for using the on-line process can be found in Appendix A. When using the on-line application process you are still required to provide all materials requested in this PSN and comply with all requirements listed in this PSN for your project type.

All applicants are strongly encouraged to use the on-line submittal for the following reasons. 1) It will help ensure a **complete** proposal application submission which eliminates the potential for being disqualified for an incomplete proposal application submission. 2) It eliminates the need to submit multiple paper copies and a CD. 3) All applicants who submit on-line will receive a confirmation email with the proposal number and the date of submission. 4) A complete application in PDF format will be available to the applicant.

## **Paper Application Proposal Package**

A complete paper proposal package must include:

- A completed **2013** Application Form (see Appendix B for the instructions and the Application Form).
- Supplemental or specialized information (see Part VI for specific requirements).

Applicants must provide **5 complete paper copies** of each proposal package submitted, with the appropriate **2013** Proposal Application Form in front and supplemental information attached. One complete copy on CD (one proposal per CD) in Word, RTF, or PDF format must also be submitted with the paper copies. The electronic copy on CD should be all in one file. All supplemental information should be pasted into the main application document. All proposals will be evaluated based on the paper copy, therefore all maps, diagrams, tables, etc. should be legible and complete. Entire proposals, including the budget, should be a minimum of 12 point standard font (such as Arial) on plain white paper. Each page of the proposal should be numbered in sequential order. Double-sided pages are encouraged. **Do not bind proposals in plastic, cover stock, folders, or any other binding.** Staple once or binder-clip each plain-paper proposal copy in the upper left corner. Do not include transmittal letters or letters of support with your proposal package, as they will be discarded. In preparing a proposal, pay attention to the requirements listed in this PSN. **Proposals that do not meet the requirements will be rejected.**

### ***Proposal Due Date***

In order to be considered for 2013/2014 funding, **all** proposals are due by **March 15, 2013, at 3:00 p.m.**

Paper Application: All proposals submitted by mail must have a U.S. Postal Service postmark no later than March 15, 2013. Proposals delivered by any other means (FEDEX, UPS, etc.), including hand-delivery in person, must be delivered no later than **Friday, March 15, 2013 at 3:00 p.m.** to FRGP staff at the following address:

Fisheries Restoration Grant Program  
CA Department of Fish and Wildlife  
830 "S" Street  
Sacramento, CA 95811

## ***Public Information***

Under Fish and Game Code, Section 1501.5 and Public Resources Code, Section 6217.1, the 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.

## PART III: FOCUS

There are two separate focuses in this PSN: the FRGP Focus and the Steelhead Report and Restoration Card (SHRRC) Focus. Applicants must indicate which focus their application is being submitted under. See below for a description of the FRGP Focus and see page 22 for a description of the SHRRC Focus.

Proposals submitted under the 2013 FRGP PSN must be within **one** of these two focuses. Applicants cannot submit the same application under both focuses. If you have any questions about the FRGP Focus contact regional CDFW staff. If you have any questions about the SHRRC Focus contact Farhat Bajjaliya. See Appendix D for contact information.

### ***FRGP Focus***

There are four criteria to the 2013 FRGP PSN Focus. All four criteria must be met in order for a proposal to be accepted for consideration under the FRGP Focus.

1. Species Criteria: The proposed project must benefit coho salmon or steelhead. Only these two species are included in this Focus.
2. Geographic Criteria: The proposed project must be within one of the listed focus HUC watersheds. There are restrictions in some watersheds; refer to the "Focus" column in Table 1. The maps in Appendix I are a guideline to help locate your project within a watershed, focus determination for a project will be based on the Focus Table below, not on the maps in Appendix I.
3. Project Type Criteria: The proposed project must be for one of the project types listed in Table 1. Only the project types listed in Table 1 will be accepted.
4. Recovery or Restoration Criteria: The proposed project must address one task in one of the six plans listed below. It is the applicants' responsibility to ensure they have selected the correct task for their proposal. CDFW technical staff will determine how well the proposal meets the identified task. **If applicant does not meet the task or list the appropriate task, the application will be rejected.** See the "State and Federal Recovery/Restoration Plans" section in Part V for additional information and links regarding these plans.

*Steelhead Restoration and Management Plan for California* (DFG 1996), task list for 2013 is available on-line at

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=58603>. This list has been

updated from the 2012 list. Applicants must provide the task number in the proposal if choosing a task from this plan.

*Recovery Strategy for California Coho Salmon* (DFG 2004), task list is available on-line at [http://nrm.dfg.ca.gov/coho/coho\\_tasks.aspx](http://nrm.dfg.ca.gov/coho/coho_tasks.aspx). Applicants must provide the task number in the proposal if choosing a task from this plan.

*Southern California Steelhead Recovery Plan* NOAA Final Version: January 2012 available on-line at [http://swr.nmfs.noaa.gov/recovery/SC\\_Steelhead/index.htm](http://swr.nmfs.noaa.gov/recovery/SC_Steelhead/index.htm). For this Plan specific recovery action tasks 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. Applicants must provide the recovery action number in the proposal if choosing a task from this plan.

South-Central California Steelhead Recovery Plan NOAA Public Review Draft: September 2012 available on-line at:

<http://swr.nmfs.noaa.gov/recovery/index.htm>

For this Plan specific recovery action tasks 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. Applicants must provide the specific recovery action number in the proposal if choosing a task from this plan.

*Recovery Plan for Evolutionarily Significant Unit of Central California Coast Coho Salmon* Final Plan September 2012 available on-line at

[http://swr.nmfs.noaa.gov/recovery/ccc\\_coho/](http://swr.nmfs.noaa.gov/recovery/ccc_coho/). Eligible recovery actions from this plan are the ESU, Diversity Strata, or Watershed specific recovery actions provided in Volume II of the CCC Coho plan. Applicants must reference the specific **recovery strategy number** located in the **Excel tables** for the ESU, Diversity Stratum, or Watershed/Population. The unique **recovery strategy numbers for watersheds** are located in the focus population and supplemental population **Excel tables found at the end of each watershed/population Chapter** (e.g., Albion). These recovery action tasks must be referenced by a unique recovery strategy number (e.g., Albion task number AIR-CCC-1.1.1.1); only one recovery strategy number can be referenced. Applicants must provide the recovery strategy number in the proposal if choosing a task from this plan.

*Recovery Plan for the Evolutionarily Significant Unit of Southern*

*Oregon/Northern California Coast Coho Salmon* Public Draft Version: January 2012 (SONCC Plan) available on-line at

[http://www.swr.noaa.gov/recovery/soncc\\_draft/SONCC\\_Coho\\_DRAFT\\_Recovery\\_Plan\\_January\\_2012.htm](http://www.swr.noaa.gov/recovery/soncc_draft/SONCC_Coho_DRAFT_Recovery_Plan_January_2012.htm) (see volume II). Eligible recovery actions from this plan are the specific recovery actions steps by watershed listed in the individual

watershed recovery action tables found in Chapters 7 through 45 of the SONCC Plan. These tasks must be referenced by a unique recovery action step number (e.g. SONCC-HBT.2.2.3.2) and only one action step can be referenced. Applicants must provide the specific recovery action step number in the proposal if choosing a task from this plan.

The above focus criteria are not independent of each other. The proposal must meet all of the above criteria. A proposal for **coho** salmon must be within one of the watersheds listed as a focus for coho, must be one of the project types listed for that watershed, and must address a task in the *Recovery Strategy for California Coho Salmon*, *Recovery Plan for Evolutionarily Significant Unit of Central California Coast Coho Salmon*, or *Recovery Plan for the Evolutionarily Significant Unit of Southern Oregon/Northern California Coast Coho Salmon*. A proposal for **steelhead** must be within one of the watersheds listed as a focus for steelhead, must be one of the project types listed for that watershed, and must address a task in either the *Steelhead Restoration and Management Plan for California*, *South-Central California Steelhead Recovery Plan*, or the *Southern California Steelhead Recovery Plan*. See Table 1: Focus Table. The maps in Appendix I are a guideline to help locate your project within a watershed, focus determination for a project will be based on the Focus Table below not on the maps in Appendix I.

Focus Example: A Riparian Restoration (HR project type) proposal for Santa Rosa Creek - HUC 12 watershed that would benefit steelhead and has identified a task from *Steelhead Restoration and Management Plan for California* would comply with all focus criteria.

**Table 1: Focus Table**

Map Number (See Appendix I)	Watershed	Focus  <i>Proposals will be considered for designated project types benefiting the target species in the focus streams and watersheds listed below.</i>	Species		Project Type																			
			coho	steelhead	A	F	H	H	H	H	H	H	M	M	O	P	P	P	R	S	T	W	W	W
					C	P	A	B	I	R	S	U	D	O	R	D	I	L	E	C	E	C	D	P
22	Smith River - 8		X		X	X		X	X	X	X	X	X	X		X		X		X	X		X	
22	Smith River – 8	Smith River Plain	X		X	X		X	X	X	X	X	X	X	X	X		X		X	X		X	
22	Smith River – 8	Wilson Creek	X		X			X	X		X				X	X				X				
22	Turwar Creek - 10, Tectah Creek - 10, Blue Creek - 10	Lower Klamath	X		X	X		X	X	X	X	X	X	X		X		X		X	X	X	X	
22	Indian Creek - 10, Thompson Creek - 10, Elk Creek - 10, Clear Creek - 10, Ukonom Creek - 10, Rock Creek - 10, Bluff Creek - 10, Dillon Creek - 10	Mid-Klamath	X		X	X		X	X	X	X	X		X	X	X		X		X	X	X	X	
21	Upper Klamath - 8	Upper Klamath (below Iron Gate Dam)	X		X	X		X	X	X	X	X		X		X		X		X	X	X	X	
21	Scott River - 4	Scott River	X		X	X		X	X	X	X	X	X	X	X	X		X		X	X	X	X	
21	Shasta River - 8	Shasta River (below Dwinnel Dam)	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	
21	Salmon River - 8	Salmon River	X		X	X		X	X	X			X		X		X			X	X	X	X	
20	Weaver Creek - 10, Canyon Creek - 10, NF Trinity River - 10, Big French Creek - 10	Upper Trinity (below Lewiston Dam)	X		X	X		X	X		X	X		X		X			X	X	X	X	X	
20	New River - 10, Big French Creek - 10, Horse Linto Creek - 10	Lower Trinity	X		X	X		X	X		X	X		X	X	X		X		X	X	X	X	
20	SF Trinity - 8	SF Trinity	X		X	X		X	X		X	X		X		X		X		X	X	X	X	









Map Number (See Appendix I)	Watershed	Focus <i>Proposals will be considered for designated project types benefiting the target species in the focus streams and watersheds listed below.</i>	Species		Project Type																		
			coho	steelhead	A C	F P	H A	H B	H I	H R	H S	H U	M D	M O	O R	P D	P I	P L	R E	S C	T E	W C	W D
14	Upper & Lower San Gregorio Creek - 12	San Gregorio Creek and tributaries	X		X				X	X		X	X	X		X	X	X		X	X	X	X
13	Gazos Creek - 12	Gazos Creek and tributaries	X		X				X			X	X	X		X		X			X	X	
13	Waddell - 12	Waddell Creek and tributaries	X		X				X			X	X		X		X	X			X	X	
13	Scott Creek -12	Scott Creek and tributaries	X		X				X	X		X	X	X	X	X	X	X		X	X	X	
13	San Vicente Creek - 12	San Vicente Creek and tributaries	X		X				X	X		X	X		X		X	X			X	X	
13	San Vicente Creek - 12	Laguna Creek and tributaries	X		X				X	X			X		X		X	X					X
13	San Lorenzo River - 10	San Lorenzo River and tributaries	X		X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
13	Soquel Creek - 12	Soquel Creek and tributaries	X		X				X	X		X	X	X	X	X	X	X		X	X	X	X
13	Aptos Creek - 12	Aptos Creek and tributaries	X		X		X		X	X		X	X	X			X	X			X	X	
12	Forsythe Creek – Russian River - 12	Forsythe Creek and tributaries		X	X	X		X				X			X					X	X	X	
12	East Fork Russian River – Russian River - 12	York Creek		X	X	X		X				X			X					X	X	X	
12	McNab Creek – Russian River - 12	McNab Creek and tributaries		X	X	X		X				X			X					X	X	X	



Map Number (See Appendix I)	Watershed	Focus	Species		Project Type																			
			coho	steelhead	A C	F P	H A	H B	H I	H R	H S	H U	M D	M O	O R	P D	P I	P L	R E	S C	T E	W C	W D	W P
9	Metcalf Canyon-Coyote Creek, Silver Creek, Upper Penitencia Creek, Lower Penitencia Creek, San Francisco Bay Estuaries - 12	Coyote Creek and tributaries downstream of Lake Anderson		X	X	X		X	X	X						X		X						
9	Stevens Creek, San Francisco Bay Estuaries - 12	Stevens Creek and tributaries		X	X	X	X	X	X	X			X			X								
9	San Francisco Bay Estuaries, Pueblo Lands of San Jose, El Portrero de Santa Clara, Los Gatos Creek, Guadalupe River, Canoas Creek, Alamitos Creek - 12	Guadalupe River and tributaries downstream of reservoirs and barriers (excluding Los Gatos, Ross and Canoas Creeks)		X	X	X		X	X	X						X		X						
9	San Francisquito Creek - 12	San Francisquito mainstem and tributaries downstream of Searsville Dam		X	X	X	X	X	X	X			X	X		X		X		X		X	X	X
9	San Pedro Creek – Frontal Pacific Ocean - 12	San Pedro Creek; North and South Forks		X	X	X		X	X	X	X		X	X		X		X		X		X	X	X

Map Number (See Appendix I)	Watershed	Focus	Species		Project Type																			
			coho	steelhead	A	F	H	H	H	H	H	H	M	M	O	P	P	P	R	S	T	W	W	W
	<i>The HUC watershed system is used. The number following the name indicates the HUC level.</i>	<i>Proposals will be considered for designated project types benefiting the target species in the focus streams and watersheds listed below.</i>			C	P	A	B	I	R	S	U	D	O	R	D	I	L	E	C	E	C	D	P
9	Arroyo Leon - 12	Pilarcitos Creek and tributaries downstream of Stone Dam		X	X	X		X	X	X	X		X	X		X		X		X		X	X	X
9	Purisima Creek – Frontal Pacific Ocean - 12	Lobitos Creek		X	X	X		X								X								
9	Purisima Creek – Frontal Pacific Ocean - 12	Tunitas Creek, Dry Creek and East Fork Tunitas Creek		X	X	X		X	X	X	X		X	X		X		X						
9	Gazos Creek – Frontal Ano Nuevo Bay - 12	Whitehouse Creek		X	X	X		X					X	X		X		X						
8	Corralitos, Lower Uvas, Lower and Upper Pajaro - 12	Upper Pajaro below confluence with Llagas Creek		X	X	X		X					X	X	X	X		X				X	X	X
7	Arroyo Seco -10	Arroyo Seco mainstem		X	X	X	X			X						X						X		X
7	Potrero Canyon, Las Gazas, San Clemente, Danish - 12	Mainstem Carmel and tributaries downstream of Los Padres Dam		X	X	X		X	X					X		X						X		X
7	San Jose Creek - 12	San Jose Creek mainstem and tributaries to San Jose Creek only		X	X	X	X	X		X	X			X		X						X		X
7	Bixby Creek - Frontal Pacific Ocean HUC12	Garrapata Creek		X	X			X	X					X		X				X				
7	Big Sur River - 12			X	X	X		X					X			X		X				X		X

Map Number (See Appendix I)	Watershed	Focus  <i>Proposals will be considered for designated project types benefiting the target species in the focus streams and watersheds listed below.</i>	Species		Project Type																				
			coho	steelhead	A	F	H	H	H	H	H	H	M	M	O	P	P	P	R	S	T	W	W	W	
					C	P	A	B	I	R	S	U	D	O	R	D	I	L	E	C	E	C	D	P	
6	Arroyo de la Laguna - 12 (San Luis Obispo County)	Arroyo de la Cruz		X						X															
6	San Simeon Creek -12			X	X		X			X												X	X	X	
6	Santa Rosa Creek -12	Mainstem		X	X		X			X	X		X	X		X	X					X	X	X	
5	Chorro Creek Frontal Morro Bay 12	Mainstem and all tributaries		X	X		X			X				X		X	X					X	X		
5	Chorro Creek Frontal Morro Bay 12	Pennington Creek		X		X										X	X					X			
5	Upper and Lower San Luis Obispo Creek - 12	Mainstem		X	X	X	X			X	X			X		X	X					X			
5	Pismo Creek - 12	Mainstem, West Coral de Piedra, Canada Verde		X	X	X	X			X	X					X	X					X	X	X	
5	Arroyo Grande Creek - 10	Mainstem downstream of Lopez Dam		X	X	X		X	X	X	X					X	X					X		X	
4	Santa Maria/Sisquoc River - 8	Region 4 & 5 mainstem and tributaries		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X
4	Santa Ynez River - 8	Lower Santa Ynez River and its tributaries below Bradury Dam		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X
4	Jalama Creek-Frontal Santa Barbara Channel - 10	Jalama Creek		X	X	X		X	X	X	X		X		X	X	X	X		X	X	X	X	X	



Map Number (See Appendix I)	Watershed	Focus <i>Proposals will be considered for designated project types benefiting the target species in the focus streams and watersheds listed below.</i>	Species		Project Type																		
			coho	steelhead	A C	F P	H A	H B	H I	H R	H S	H U	M D	M O	O R	P D	P I	P L	R E	S C	T E	W C	W D
4	San Pedro Creek Frontal Santa Barbara Channel - 10	Carpinteria		X	X	X		X	X		X		X	X	X	X	X		X	X	X	X	X
4	San Pedro Creek Frontal Santa Barbara Channel - 10	Rincon		X	X	X		X	X		X	X	X		X	X	X		X	X	X	X	X
3	Ventura River - 10	Ventura River including all tribs		X	X	X	X	X	X			X	X	X	X	X	X		X	X	X		X
3	Santa Clara River - 8	Santa Clara River and all south flowing tributaries west of Boquet Canyon		X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X
2	Big Sycamore Canyon - 10	Arroyo Sequit, Trancas, Zuma		X	X	X	X	X	X			X		X	X	X	X			X	X	X	
2	Malibu Creek - 10	Malibu Creek		X	X	X	X	X	X			X		X	X	X	X			X	X		X
2	Garapito Creek - 12	Topanga Creek		X	X		X	X	X			X			X		X				X	X	X
1	Santa Ana - 8	Santa Ana River and its tributaries		X	X							X		X	X	X	X			X	X		
1	San Juan Creek - 10	San Juan Creek and tributaries		X	X	X	X	X	X			X		X	X	X	X			X	X		X
1	San Mateo Creek - 10	San Mateo Creek and tributaries		X	X	X		X	X	X		X	X	X	X	X	X			X	X		X
1	Santa Margarita - 10	Santa Margarita and tributaries		X	X	X	X	X	X			X		X	X	X	X		X	X	X		X
1	San Luis Rey - Escondido - 8	San Luis Rey River and tributaries below Lake Henshaw		X	X	X		X	X	X			X		X	X	X		X	X	X	X	X

## ***Steelhead Report and Restoration Card (SHRRC) Focus***

The SHRRC program is an entity of the Department's Fisheries Branch and focuses solely on funding steelhead centric projects located within anadromous coastal and inland watersheds having a specific location code linked to the SHRRC. Any watershed within a delineated location code is eligible for funding (See Table 2). No projects behind barriers impeding anadromy can be funded.

There is approximately \$150,000 available for the SHRRC Focus for this grant cycle. Funding for proposals submitted under this PSN are subject to availability of funds and approval of the Budget Act for 2013/2014 Fiscal Year. Because grantable revenue is generated through the sale of Steelhead Report Cards, proposals submitted under the SHRRC Focus are required to address benefits (direct or indirect) to anglers.

Projects not meeting the FRGP focus may submit proposals under the SHRRC Focus. Follow the directions below in the SHRRC Focus Criteria section, and on the application form, to indicate a submission under the SHRRC Focus. It is the applicants responsibility to be clear as to which Focus a proposal is being submitted under. A single proposal cannot be submitted under both Focuses.

Proposals submitted for SHRRC Focus consideration are required to follow all the requirements set out in this PSN. Evaluation of the proposals will follow this PSN process and timeline. Technical review will be facilitated by the SHRRC program coordinator. Technical experts will be identified based on knowledge of the steelhead species as well as the watershed within the proposed project area. If a proposal passes the SHRRC technical review phase, proposals will receive peer review by the California Advisory Committee on Salmon and Steelhead Trout's steelhead subcommittee. Both technical and peer review will be conducted using the score sheets in Appendix E.

For questions regarding the SHRRC Focus, contact Farhat Bajjaliya at (916) 327-8855, [farhat.bajjaliya@wildlife.ca.gov](mailto:farhat.bajjaliya@wildlife.ca.gov).

### **Objectives of the SHRRC program**

The primary objectives of the SHRRC program are to:

- Restore watershed processes and functions, modify or remove barriers to migration, protect and restore steelhead instream habitat, as well as to increase long-term effectiveness of restoration efforts by monitoring and maintaining projects.
- Encourage local government and community based partnerships through the support of watershed organizations and cooperative efforts.
- Identify watershed priorities and restoration projects through evaluation and planning.

- Support public school watershed education, technical workshops, and conferences.

Proposals submitted for SHRRC Focus consideration must address at least one of the programs objectives and comply with the focus criteria listed below.

### **SHRRC Focus Criteria**

There are four criteria to the SHRRC Focus. All four criteria must be met in order for a proposal to be accepted for consideration under the SHRRC Focus.

#### 1. Species Criteria: (Box 17, Section 1 of application)

- Steelhead

#### 2. Geographic Criteria: (Box 24, Section 1 of application)

Projects located within watersheds covered by the SHRRC location codes are eligible for funding, see Table 2 below. Projects must be located below anadromous barriers. Map 23 in Appendix I serves as a visual aid for the location of the watersheds with the corresponding location code. The map in Appendix I is a guideline to help locate your project within a watershed, focus determination for a project will be based on Table 2 below, not on the map in Appendix I.

#### 3. Project Type Criteria: Only one project type per proposal may be selected and only from the list below. (Box 1, Section 1 of application)

- Fish Passage at Stream Crossings (FP)
- Instream Barrier Modification for Fish Passage (HB)
- Instream Habitat Restoration (HI)
- Riparian Restoration (HR)
- Instream Bank Stabilization (HS)
- Monitoring Status and Trends (MD)
- Cooperative Rearing (RE)
- Fish Screening of Diversions (SC)
- Water Conservation Measures (WC)
- Water Measuring Devices (Instream and Water Diversion) (WD)
- Private Sector Technical Training (TE)
- Public School Watershed and Fishery Conservation Education Projects (ED)

#### 4. Objective Criteria: (Summary in Box 18, Section 1 of application; complete details in project description)

Proposals for SHRRC funds submitted through this PSN are required to address how the project will benefit anglers (directly or indirectly). Enter "Angler Benefit" in Box 20, Section 1 of the application in place of a recovery task.

Table 2: SHRRC Location Codes

<b>Code</b>	<b>Description of the Location Code</b>
2a	Smith River
2b	Smith River, North Fork
2c	Smith River, Middle Fork
2d	Smith River, South Fork
3	Coastal rivers and streams entering the ocean between the Smith River and the Klamath River
4a	Klamath River from Iron Gate Hatchery to Trinity River confluence
4a1	Shasta River
4a2	Scott River
4a3	Salmon River
4b	Klamath River from Trinity River confluence to Ocean
5a	Trinity River, South Fork
5b	Hayfork Creek
6a	Trinity River
6b	New River
7a	Coastal rivers and streams entering the ocean between the Klamath River and Redwood Creek
7b	Redwood Creek
7c	Stone Lagoon
7d	Big Lagoon
7e	Coastal rivers and streams entering ocean between Big Lagoon and the Mad River
8a	Mad River from Ruth Reservoir Dam to Deer Creek, including Deer Creek
8a1	Mad River between Deer Creek and Cowan Creek, closed to fishing
8b	Mad River from Cowan Creek to Mad River Hatchery fish ladder, including Cowan Creek
8c	Mad River from Mad River Hatchery fish ladder to ocean
9	Coastal rivers and streams entering the ocean between the Mad River and Eel River
10	Eel River
11	Van Duzen River
12	Eel River, South Fork
13	Eel River, Middle Fork
14	Coastal rivers and streams entering the ocean between the Eel River and Mattole River
15	Mattole River
16	Coastal rivers and streams entering the ocean between the Mattole River and Noyo River
17	Noyo River
18	Coastal rivers and streams entering the ocean between the Noyo River and Navarro River
19	Navarro River
20	Coastal rivers and streams entering the ocean between the Navarro River and Gualala River

<b>Code</b>	<b>Description of the Location Code</b>
21	Gualala River
22	Coastal rivers and streams entering the ocean between the Gualala River and Russian River
23a	Russian River from East and West forks to Dry Creek confluence
23b	Russian River from Dry Creek confluence to Ocean
24	Coastal rivers and streams entering the ocean between the Russian River and the Golden Gate
25	Tributaries to the San Pablo and San Francisco Bays, excluding the Sacramento River
26a	Sacramento River from Deschutes Road Bridge to Red Bluff Diversion Dam
26a1	Battle Creek
26b	Sacramento River from Red Bluff Diversion Dam downstream to Hwy 20 Bridge near Meridian
26b1	Antelope, Deer, and Mill Creeks
26b2	Big Chico Creek
26b3	Butte Creek
26c	Sacramento River from Hwy 20 Bridge near Meridian downstream to Business 80 Bridge
26c1	Feather River
26c2	Yuba River
26c3	American River
26d	Sacramento River from Business 80 Bridge downstream to the Carquinez Bridge
26d1	Putah Creek
27a	San Joaquin River
27b	Merced River
27c	Tuolumne River
27d	Stanislaus River
27e	Mokelumne River
27f	Calaveras River
28	Coastal rivers and streams entering the ocean between the Golden Gate and the San Lorenzo River
29	San Lorenzo River
30a	Coastal rivers and streams entering the ocean between the San Lorenzo River and the Pajaro River, including Pajaro River
30b	Coastal rivers and streams entering the ocean between Pajaro and Salinas rivers, including Salinas River
30b1	Arroyo Seco River
30c	Coastal rivers and streams entering the ocean between the Salinas River and the Carmel River
31	Carmel River
32a	Coastal rivers and streams entering the ocean between the Carmel River and the Big Sur River, including Big Sur River
32b	Coastal rivers and streams entering the ocean between the Big Sur River and Willow Creek, including Willow Creek

<b>Code</b>	<b>Description of the Location Code</b>
32c	Coastal rivers and streams entering the ocean between Willow Creek and Santa Rosa Creek, including Santa Rosa Creek
32d	Coastal rivers and streams entering the ocean between Santa Rosa Creek and San Luis Obispo Creek, including San Luis Obispo Creek
33a	Coastal rivers and streams entering the ocean between San Luis Obispo Creek and the Santa Maria River
33b	Santa Maria River South, including Santa Maria River, closed to fishing

## **PART IV: REQUIRED PROVISIONS FOR ALL PROPOSAL APPLICATIONS**

### ***General Guidelines***

**Please read this PSN document carefully.** It is a legal document. Proposal applicants are encouraged to work closely with local CDFW staff in the planning and development of proposals well in advance of the proposal deadline. See Appendix D for a list of CDFW contacts.

Workshops highlighting changes to the proposal application submission process will be held throughout the state. Locations and dates will be posted on CDFW's webpage at <http://www.dfg.ca.gov/news/pubnotice/> and on the FRGP webpage at <http://www.dfg.ca.gov/fish/Administration/Grants/FRGP/Solicitation.asp>.

Forms used in this PSN can be found and downloaded on the internet at <http://www.dfg.ca.gov/fish/Administration/Grants/FRGP/Solicitation.asp>.

If selected, the project proponent shall comply with all applicable state laws, rules, regulations, and local ordinances specifically including but not limited to environmental, procurement, safety laws, rules, regulations, and 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) with the applicable requirements of the Business and Professions Code (Appendix G).

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

### ***Project Description***

Project proposals must include a description of each of the following:

- (a) the proposed project location and extent (physical linear or area measure) of project site,
- (b) the cause(s) of the existing problem at the appropriate scale (e.g. reach, watershed, etc.),
- (c) each restoration element being proposed and how each element will be implemented (e.g. methods/techniques used, materials and equipment used, dewatering, etc.),

- (d) a clear understandable link of how the proposed project elements will address the current problem(s) at the appropriate scale,
- (e) measurable and quantifiable objectives that will be included in the grant agreement if the proposal is funded,
- (f) any specific information required for each Project Type as listed in Part VI,
- (g) a clear list of tasks to be accomplished,
- (h) who will conduct the work (contractor and subcontractors if known); if personnel are not discussed in the project description, they cannot be included in the budget,
- (i) a timeline for completing the project elements/tasks,
- (j) a description of the project deliverables, and
- (k) gallons of fuel (gasoline and diesel) used to complete the project: indicate the total number of gallons of gasoline and/or diesel that will be used by the applicant and/or subcontractors in carrying out the entire project (this information is required for environmental compliance).

Projects should treat causes and not just the symptoms of anadromous fish habitat degradation. 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 merely consists of a list of proposed activities, without descriptive narrative does not constitute sufficient detail.

### ***Project Budget***

All applicants must submit a detailed budget. (If submitting a paper application, you must use the budget form in Appendix B, Section 8. If any other budget template is submitted other than the one in Appendix B, Section 8, the proposal will be rejected. A sample budget is included in Appendix B.

Project proposals must include a detailed line item budget broken down in three categories: Personnel Services, Operating Expense, and Administrative Overhead. Line item expenditures in each category should include cost detail (i.e. unit costs, number of units, etc.) whenever possible. Large, undefined lump sums in the budget limit the ability of reviewers to evaluate the proposed project and are unacceptable and will be considered unresponsive. If subcontractor costs are extremely detailed and will result in an excessively long budget, a lump sum may be entered **only if accompanied by a detailed breakdown in supplemental information.**

During the proposal review, CDFW will perform a cost analysis using the detailed project description and budget. The budget must identify 1) the amount being requested from CDFW, 2) the amount of the applicant's cost share, including cash or in-

kind services, 3) the amount for each partner's cost share, including cash or in-kind services and 4) the total cost for each line item. The project budget should be sufficiently detailed regarding the work required to achieve the project objectives and to allow for a cost analysis of proposed work. The cost analysis is based on the total project cost, which includes the amount requested from FRGP plus any cost share from other funding sources. All costs listed on the budget should be justified and described in the project description.

CDFW recognizes that project proposals for the same project type may vary in cost due to the size of the stream, accessibility, statewide variation in costs for heavy equipment and labor, or a variety of other factors. Project cost analysis will be based on costs for comparable existing projects and professional cost analysis by CDFW staff.

When compiling the budget remember to include costs for necessary pre-surveys (e.g. biological or geomorphic surveys) and costs to ensure that aquatic invasive species are not spread between sites. For general information on how to prevent the spread of aquatic invasive species, see CDFW's Invasive Species Program web site at <http://www.dfg.ca.gov/Invasives/>. For field guidance and decontamination protocols, see <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=43333>.

An important aspect of project cost effectiveness is the employment of individuals at a pay scale commensurate with the tasks to be performed. For example, some fieldwork can be subcontracted to well-trained field technicians at a lower pay scale than senior consultants. A competitive grant would employ field technicians to do basic field tasks, where appropriate.

The Budget Justification section can be used to breakout benefits or other costs contained in a relatively high hourly rate for subcontractors. This justification section should also be used to explain the need for senior consultants or other personnel with specialized skills for basic fieldwork.

### **Prevailing Wage**

Projects that are awarded grants by the CDFW, depending on the type of project undertaken, may be required to pay prevailing wages. Typically, the types of projects that are subject to the prevailing wage requirements are public works projects. Existing law defines "public works" as, among other things, construction, alteration, demolition, installation, or repair work done under contract and paid for in whole or in part out of public funds.

California Fish and Game Code, Section 1501.5 exempts grants with public agencies, nonprofit organizations, or Native American Indian Tribes that exceed \$50,000 in cost,

excluding the cost of gravel, from the prevailing wage requirements. Assembly Bill 2690 amended Labor Code, Section 1720.4 to exclude most work performed by volunteers from the prevailing wage requirements. Grants with CDFW for public works undertaken by public agencies, nonprofit organizations, or Native American Indian Tribes for less than \$50,000 in cost, excluding the cost of gravel, are subject to prevailing wage laws (Labor Code section 1720 et seq.).

Any questions of interpretation regarding the Labor Code should be directed to the Director of the Department of Industrial Relations, the State Department having jurisdiction in these matters. You may also refer to the Department of Industrial Relations (DIR) website at <http://www.dir.ca.gov>.

### **Personnel**

Personnel Services Costs must be broken down into a minimum of three columns, as described in Appendix B, Section 8. Staff benefits include but are not limited to vacation, sick leave, medical insurance, and retirement. These items cannot have a separate line item in the budget.

For projects that include students, FRGP will only pay the salary of the student while working on the project. FRGP will not pay tuition.

### **Cost Share Requirements**

Proposals providing cost share in the form of cash or services for the execution of the project must specify the source and dollar amount of any proposed cost share. To be eligible cost share must be used during the term of the grant. CDFW/NOAA staff time or equipment cannot be used as cost share. Any equipment purchased with previous FRGP funds cannot be used as cost share. ***Project proposals must provide information specifically identifying any matching or cost share requirements from a federal funding source or other entity. If a proposal is funded by FRGP, the FRGP funding cannot be used as match for other Federal programs.***

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

For projects where in-kind cost share will be used, the proposal must include a completed "In-Kind Detail" table.

## **Purchase of Equipment**

CDFW policy does not normally allow for purchases of equipment. However, under certain circumstances and with adequate justification, the CDFW may approve the purchase of equipment. Any equipment approved under this PSN shall remain the property of the State of California and shall be returned to the State. For grant agreement purposes, equipment is defined as all moveable articles of non-expendable property which has:

- A. A normal useful life including extended life due to repairs of one (1) year or more.
- B. An identity which does not change with use (i.e., it is not consumed by use or converted by fabrication into some other form of property).
- C. A unit cost of \$5,000.00 or more; and
- D. Used to conduct business in accordance with the grant agreement.

Any electronic equipment (such as computers, cameras, GPS units, etc.) regardless of cost, purchased with grant funds are the property of the State and must be returned to the State.

## **Administrative Overhead**

Administrative overhead is limited to 20% of the amount requested from the FRGP. Any amount over 20% will not be funded. Administrative overhead includes but is not limited to workers compensation insurance, utilities, offices space rental, phone, and copying which is directly related to completion of the proposed project. Costs for subcontractors and purchase of equipment cannot be included in the administrative overhead.

Regardless of the overhead percentage being proposed, the grantee will explain the methodology utilized to determine rate and provide detailed calculations in support of the overhead rate. The rate will be adjusted due to any errors found in the calculation.

## **PART V: DEFINITIONS OF REQUIRED SUPPLEMENTAL INFORMATION**

Following are definitions for the required supplemental information indicated in Part VI. Not all of the following are required for each project type. See Part VI for the requirements for each project type.

### ***Design Plan Criteria***

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

1. 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.
  - 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.
2. 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.
3. 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.
4. 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.

These design plan criteria, as applicable, are to be included in the “Intermediate Plan” (i.e., ~65% design level plans) submitted with the proposal for specific project types. See Part VI 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.

- Instream and ditch/pump hydraulic calculations showing 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, headgates, etc.
- Design drawings showing structural dimensions in plan, elevation, longitudinal profile, cross-sectional views, and important component details.

## **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, *California Salmonid Stream Habitat Restoration Manual*, 4th edition, California Department of Fish and Game.)

- Target species, life stages, and migration timing at project site.
- Calculation of lower and upper fish passage stream flows for each species life stage and project design flow.
- Water surface profiles at existing conditions for upper and lower fish passage stream flows and the project design flow.
- Water surface profiles with proposed boulder weirs for upper and lower fish passage stream flows, and project design flow.
- Spacing of drops over, cross-sectional shape of, and pool depths above and below boulder weirs.
- Rock sizing calculations.
- Geotechnical information as necessary to ensure project design is structurally appropriate.
- If specific low flow notches are planned, calculations of depths and velocities within notches.
- When a boulder weir project includes a water diversion component, ditch/pump hydraulic calculations showing 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, headgates, etc.
- Design drawings showing site 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.
- 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. Additional information can be found at <http://swr.nmfs.noaa.gov/hcd/fishscrn.pdf>, [http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin\\_ScreenCriteria.asp](http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp), <http://www.dfg.ca.gov/fish/REsources/HabitatManual.asp>.

- Target species and life stages to be protected at proposed screening site (e.g. will steelhead fry be present?).
- Fish screen structure placement (e.g. on-stream, in-canal, in-reservoir, or pumped).
- Evidence of infeasibility for an on-stream screen if an in-canal or in-reservoir project is proposed.
- Applicable approach velocity and sweeping velocity criteria.
- Records of diversion flows **and** stream flows, including maximums and minimums, during irrigation season.
- Stream flow vs. depth rating curve at diversion intake.
- Water depth and approach velocity calculations in front of the fish screen throughout range of diversion flows.
- Sweeping velocity calculations at several locations along the length of the screen throughout range of diversion and bypass flows.
- Evidence that flow uniformity criterion will be met.
- Screen exposure time calculation.
- Velocity calculations between end of screen and bypass entrance.
- Flow depth calculations within bypass conduit **and** in stream at bypass outlet at minimum bypass flow.
- Velocity calculations in stream at bypass outlet.
- Drop height and impact velocity calculation at bypass outlet, if applicable.
- Estimated bypass flow needed to meet fish screen criteria (cuffs).
- Fish screen area calculation performed in accordance with CDFW Fish Screening Criteria (6/19/00).
- For paddle wheel driven cleaning systems, fish screen area calculations showing passive screening criteria are met when paddle wheel driven wipers no longer operate.
- Description of fish screen cleaning mechanism, including proposed frequency of cleaning.
- Description of fish screen openings, including porosity and dimensions of round, square, or slotted openings.
- Assessment of sediment transport/scour conditions at fish screen for on channel installations.

- Specific information describing the type of corrosion-resistant screening material, bypass control/pipe and other materials that will directly affect fish.
- Design drawings showing site 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.
- Any additional information which may be required to show that screen will meet current CDFW/NMFS screening criteria.
- Operation and maintenance plan which includes preventive and corrective maintenance procedures, inspection and reporting requirements, maintenance logs, etc.
- Post construction evaluation and monitoring plan.

### **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:

- 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.
- Improvement of hydrologic connection between floodplains and main channels.
- Creation of new, self-maintaining side channel or off-channel habitat that mimics or replicates naturally formed and maintained fluvial features, that doesn't replace or displace other functioning floodplain or riverine environments.
- 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 woody debris (LWD) structures or LWD and 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** 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, result in no harm to the aquatic community or otherwise detrimentally affect 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 site-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**

- 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;

- Site 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; and
- 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, etc.). Describe how the proposed off-channel feature is anticipated to change and adjust over time.

### **Biological Assessment**

- A narrative description of the evidence that this type of habitat is limited (e.g., site-specific habitat typing; investigations of changes in land use and stream form);
- The biological imperative for a project that intervenes on behalf of the stream to correct anthropogenic changes to channel form and function;
- The habitat objective relative to the target species and life stages (e.g., spawning habitat, high flow winter refugia, summer rearing habitat);
- 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., centrachids);
- 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.

### **Site Hydrology and Hydraulics**

- Availability, sources, and quality of water across seasons and especially during periods of low flow;
- 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;
- 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;
- Calculation of the tidal prism for the purpose of determining an appropriate channel geometry for projects in tidally influenced areas.

### **Site Physiography**

- 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.);
- Description of existing stream geomorphology, hydrology, shallow earth and geologic relations in and beneath areas of proposed excavation;
- 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);
- Qualitative description of sediment supply, composition, and mode of transport through the project reach, and areas that may be impacted by the project within, and 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, etc.). Assess likely design life of improvements if sediment issues are significant;
- 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**

- 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);
- Description of the volume of material to be excavated, how it will be utilized, or how and where it will be disposed of;
- Description and plan for of any woody debris/boulder weir control features proposed; and
- 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 not limited to the following:

- Pre- and post-project photo monitoring;
- Pre- and post-construction and design flow surveys of constructed inlet and outlet structures, including any other critical hydraulic features;
- A description of, if and/or when the off-channel features became active and/or disconnected from the main channel;
- 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;
- 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 FRGP grant and at a date after each monitoring season agreed upon by the project applicant and the CDFW-FRGP biologist. 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 FRGP grants across all project types.

### **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, *California Salmonid Stream Habitat Restoration Manual*, 4th edition, California Department of Fish and Game.)

- Target species, life stages and migration timing at project site.
- Calculation of lower and upper fish passage stream flows for each species life stage and design flow.
- Water surface profiles at existing conditions for upper and lower fish passage stream flows and design flow.

- Water surface profiles with proposed boulder weirs for upper and lower fish passage stream flows and design flow.
- Rock and engineered streambed material sizing calculations for both bed and banks.
- Geotechnical information as necessary to ensure project design is structurally appropriate.
- Calculations of depths and velocities along length of individual rock chutes.
- If at a water diversion, ditch/pump hydraulic calculations showing rock chutes provide sufficient head to divert maximum diversion flow + bypass flow at minimum stream flow considering head losses at flow measurement devices, fish screens, pipes, open ditches, headgates, etc.
- Design drawings showing site 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.
- 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, *California Salmonid Stream Habitat Restoration Manual*, 4th edition, California Department of Fish and Game.)

- Target species, life stages, and migration timing at project site.
- Calculation of lower and upper fish passage stream flows and design flows.
- Water surface profiles at existing conditions for upper and lower fish passage stream flows and design flows.
- Water surface profiles with proposed boulder weirs for upper and lower fish passage stream flows and design flows.
- Rock and engineered streambed material sizing and thickness calculations for bed and banks.
- Geotechnical information as necessary to ensure project design is structurally appropriate.
- Calculations of depths and velocities along length of roughened channel at the upper and lower fish passage and design flows.
- Calculations of the overall drop and slope along the roughened channel.
- If at a water diversion, ditch/pump hydraulic calculations showing 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.

- Design drawings showing site 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.
- Post-construction evaluation and monitoring plan.

## ***Environmental Compliance***

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). Applicants who receive funding for projects which are **not** described in the *California Salmonid Stream Habitat Restoration Manual, 4th edition (California Department of Fish and Game)* 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.

For funded projects which are described in the *California Salmonid Stream Habitat Restoration Manual, 4th edition (California Department of Fish and Game)*, CDFW may act as lead agency for CEQA and ESA. The project description should include sufficient information for the CDFW to complete the CEQA documents. Pursuant to the Guidelines for the CEQA in the California Code of Regulations (CCR), Title 14, Chapter 3, Article 5, Section 15064.4, the FRGP 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, the FRGP 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.**

In all cases, it is the applicant's responsibility to develop project proposals that will avoid significant environmental impacts. **This includes budgeting sufficient time and/or funds in your proposal and project budget for required threatened and endangered species surveys and required reasonable measures that may be needed to complete the proposed project.** All applicants are strongly urged to work closely with appropriate CDFW staff to ensure all potential environmental concerns associated with the proposed

project are considered. Email addresses and telephone numbers of CDFW personnel and regional headquarter physical addresses are included in Appendix D.

No project that is a 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.

### ***Fish Collecting / Handling Permits***

Monitoring or research projects which 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, an MOU enacted between CDFW and the applicant authorizing a limited level of take for scientific purposes (pursuant to Fish and Game Code (FGC) Section 2081(a)) must also be in effect before any fish sampling may be initiated; contact the local CDFW District Biologist with regards to establishing an MOU. Applicants will be required to demonstrate current ESA take coverage in order to obtain a CESA MOU. Applicants submitting proposals for MD projects involving fish collection should incorporate a sufficient time frame in their proposed project to allow securing a CDFW SCP and CESA MOU, as well as applicable ESA permits. Applicants may include the fee cost as a line item in the proposed project budget and should include any costs they may require to comply with permit reporting requirements in their project budget as well.

Information on collecting and research take permits is available online at [http://www.dfg.ca.gov/wildlife/nongame/research\\_permit/index.html](http://www.dfg.ca.gov/wildlife/nongame/research_permit/index.html).

The SCP application may be obtained at [http://www.dfg.ca.gov/wildlife/nongame/research\\_permit/scp/scp\\_aplic\\_procs.html](http://www.dfg.ca.gov/wildlife/nongame/research_permit/scp/scp_aplic_procs.html).

### ***Fish Passage and Screen Criteria and Testing Requirements***

Fish passage and screening projects that are constructed with FRGP funding must meet criteria as outlined in the following documents.

- California Department of Fish and Game. 2000. *Fish Screening Criteria*

- 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 Salmonid Stream Habitat 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 Salmonid Stream Habitat 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.

### ***Lake and Streambed Alteration Permits (1602)***

Fish and Game Code Section 1609 authorizes the CDFW to recover the total cost it incurs to administer and enforce its Lake and Streambed Alteration Program. The permit information and fee schedule are available at <http://www.dfg.ca.gov/habcon/1600/forms.html>. **Applicants may include the fee cost as a line item in the proposed project budget.**

### ***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). See Appendix G. Projects described in Parts X and XII of the *California Salmonid Stream Habitat Restoration Manual, 4th edition (California Department of Fish and Game)* 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 number, and their affiliations must be listed in the proposal application.**

Project review and approval by CDFW and/or NOAA Fisheries engineering staff does not imply Department 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.

## **Permits**

Proposals that conduct fishery habitat restoration activities using methods described in the *California Salmonid Stream Habitat Restoration Manual* (Flosi et al 1998, 2003, 2006 and 2009) may be covered by the FRGP's programmatic permits. The two FRGP's programmatic permits are the Section 404 and 401 permits of the Clean Water Act (CWA). If projects do not comply with the implementation methods described in the *California Salmonid Stream Habitat Restoration Manual* 4<sup>th</sup> Edition, then the applicant is responsible for obtaining their own coverage of Section 404 and 401 permits. The applicant is encouraged to work with CDFW Regional staff to determine if the project is eligible for the FRGP programmatic permit coverage.

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 all the required permits are obtained. Examples of other permits that may be required are the Lake and Streambed Alteration Agreement(s) (<http://www.dfg.ca.gov/habcon/1600/>) and fish collecting/handling permits ([http://www.dfg.ca.gov/habcon/cesa/incidental/incid\\_perm\\_proced.html](http://www.dfg.ca.gov/habcon/cesa/incidental/incid_perm_proced.html)) from CDFW. The Construction General Storm Water permit ([http://www.swrcb.ca.gov/water\\_issues/programs/stormwater/construction.shtml](http://www.swrcb.ca.gov/water_issues/programs/stormwater/construction.shtml)) from the Regional Water Resource Control Boards (which may include provisions for dewatering), coastal development permit(s) from the California Coastal Commission (<http://www.coastal.ca.gov/cdp/cdp-forms.html>), and other permits from local/state governments or municipalities.

## ***Project Location Topographic Map***

The location map submitted with the proposal to indicate the project location should only have the current proposal project location and must follow the specifications listed below. **Specific requirements for how to define and map project sites for each project type are listed in Part VI under each project type.** Please do not include past or alternate funded projects on the location map for your proposal. You may submit a separate map with this information.

**SITE:** A project site is defined as a point, line (reach), or polygon that spatially describes a work area where specific restoration activities take place. Many projects employ multiple treatment types within a given work site. With multiple treatment types (point, line, or polygon) a project may need to be divided into more than one site. For example - a project that includes instream restoration and riparian treatments in a contiguous area would require two sites: 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, stream bank stabilization structures, and a log jam barrier removal, but still be considered as one linear site, provided the distance between any two individual features is less than 1/2 mile. Similarly, the area of riparian habitat where Himalayan blackberry are to be removed and conifer trees planted would be considered one polygon site.

**FEATURE:** A feature is a distinct physical implementation at a location within a project work site intended to interact with the environment to improve anadromous salmonid habitat. Features consist of one or more restoration treatments. Within one project site there can be numerous features. For implementation monitoring, features are divided by treatment type and location. However, functional groups of structures or treatments 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 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.

**POINT SITES** describe work that occurs at one or more discrete locations that are more than 1/2 mile from each other.

**LINE (LENGTH) SITES** 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 SITES** 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.

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 must be labeled with project title, grantee 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 (see Appendix C for an example quad map).

All proposals for habitat restoration (which includes upslope restoration) must also include a detailed plan-view diagram with scale (see Appendix C for an example plan view diagram) depicting all pertinent features of the project site. The diagram will show the stream channel or other area of work, structure locations, revegetation areas, and distance to each project structure from a reference point, and other significant project and existing features. Applicants may use “typical” drawings if multiple similar physical improvements are proposed.

After a proposal is approved for funding, project work sites may require modification for a variety of reasons. Site modification must be approved in writing by the assigned CDFW grant manager. The project proponent will be required to provide final site descriptions and latitude/longitude coordinates to be incorporated into an agreement before it may be executed.

### ***Provisional Landowner Access Agreement***

Proposed projects for any on-the-ground work must be submitted with written provisional consent documents signed by landowners or authorized land managing authorities unless applicant is the landowner (the landowner should be indicated in the proposal application). A sample Provisional Landowner Access Agreement is in Appendix C. Provisional consent documents must include:

- Statement that landowner(s) or land manager are aware of the proposed project;
- Landowner or land manager gives consent for pre-project evaluation by

- CDFW and NOAA fisheries staff;
- Landowner or land manager gives provisional consent for the grantee to complete the proposed project with CDFW oversight and visitation;
- Landowner name(s) or land manager contact information; and
- Signature of landowner(s) or land manager.

### ***Quality Assurance / Quality Control (QA/QC) Plan***

Requirements for Monitoring (MD and MO) Project Proposals. Establishing quality assurance and quality control procedures for a monitoring project 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 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. Additional information on QA/QC can be found on the U.S. Environmental Protection Agency website:

<http://www.epa.gov/volunteer/stream/132.html>.

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):

- Project goal, objectives, and application;
- Project setting;
- Scope of work and time frame required;
- Study design;
- List of sampling protocols;
- Personnel requirements and roles;
- Schedule of primary activities, including QA/QC;
- Training that addresses:
  - 1) safety practices for field sampling activities,
  - 2) identification of fish species likely to be encountered,
  - 3) proper handling of fish and,
  - 4) proper use of sampling gear and instruments;
- Data collection control that addresses:

- 1) independent sampling of a percentage of previously sampled units,
  - 2) independent observers participating in electrofishing (the FRGP does not recommend adding electrofishing due to the potential for added stress on fish);
- Data management that addresses:
    - 1) metadata description,
    - 2) data entry and storage,
    - 3) independent data verification of a percentage of the original entries,
    - 4) data analysis,
    - 5) chain of custody for data.

### ***Riparian Revegetation / Riparian Restoration Plan***

For projects which 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. The species used should be in the composition 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 appropriately covered to prevent delivery of sediment to a stream (i.e. mulching/seeding).

All Riparian Restoration (HR) applications must submit 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:**

- Location of the restoration site(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 site.
- Site suitability evaluation: This section shall provide the rationale behind selecting the restoration site 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 site(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 site suitability decisions should be included in the plan.

- **Site 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, and any other pertinent information regarding implementation of the project. Any necessary site prep work (i.e. heavy equipment work, stabilization, soil work, etc.) shall be described in this section of the plan. Exposed soils should be appropriately covered to prevent delivery of sediment to a stream (i.e. mulching/seeding). Other restoration work to be completed during project implementation shall also be described in sufficient detail to allow for proper evaluation.
- **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. 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.
- **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 which species to be planted in each location, spacing between plants, and total acreage planned for revegetation.
- **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.

- **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 would be implemented if intermediate thresholds are 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.
- **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.
- **Adaptive management and contingency measures:** This section shall describe the projects 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.

### ***State and Federal Recovery / Restoration Plans***

To assist in recovery of CESA and ESA listed coho salmon and steelhead populations and their habitat in California, proposals must address recommendations/tasks from the *Steelhead Restoration and Management Plan for California*, the *Recovery Strategy for California Coho Salmon*, the *Southern California Steelhead Recovery Plan*, the *South-Central California Steelhead Recovery Plan*, the *Recovery Plan for Evolutionarily Significant Unit of Central California Coast Coho Salmon*, or the *Recovery Plan for the Evolutionarily Significant Unit of Southern Oregon/Northern California Coast Coho Salmon*.

**Steelhead:**

The DFG *Steelhead Restoration and Management Plan for California* (DFG 1996, <http://www.dfg.ca.gov/fish/Administration/Grants/FRGP/MoreInfo.asp>) includes broad recommendations that were not ranked. Recommendations/tasks have since been updated based on the status of steelhead populations coast wide. The 2013 updated list contains the most recent changes to the Recovery Strategy and must be used for task selection instead of the Management Plan in order to comply with this PSN. The 2013 updated steelhead task list can be found on-line at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=58603>. If the proposal will cover a task from the *Steelhead Restoration and Management Plan for California* 2013 updated task list, the task number must be listed on the 2013 Application. CDFW/NOAA technical staff will determine if the proposal meets the identified task. If you have any questions regarding the DFG steelhead plan or updated task list, you may contact Jonathan Nelson at (916) 445-4506, [jonathan.nelson@wildlife.ca.gov](mailto:jonathan.nelson@wildlife.ca.gov).

NOAA's *Southern California Steelhead Recovery Plan* (Final January 2012) is available on-line at [http://swr.nmfs.noaa.gov/recovery/SC\\_Steelhead/index.htm](http://swr.nmfs.noaa.gov/recovery/SC_Steelhead/index.htm). For this Plan, specific tasks 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. CDFW/NOAA technical staff will determine if the proposal meets the identified task. If the proposal will cover a task from the *Southern California Steelhead Recovery Plan*, the task number must be entered on the 2013 Application. If you have any questions regarding the NOAA steelhead plan, you may contact Mark Capelli at (805) 963-6478, [mark.capelli@noaa.gov](mailto:mark.capelli@noaa.gov).

South-Central California Steelhead Recovery Plan NOAA (Public Review Draft: September 2012) available on-line at:  
<http://swr.nmfs.noaa.gov/recovery/index.htm>.

For this Plan specific tasks 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, Tables 11-4 to 11-10; San Luis Obispo Terrace BPG, Tables 12-4 to 12-14. CDFW/NOAA technical staff will determine if the proposal meets the identified task. If the proposal will cover a task from the *South-Central California Steelhead Recovery Plan*, the task number must be entered on the 2013

Application. If you have any questions regarding the NOAA steelhead plan, you may contact Mark Capelli at (805) 963-6478, mark.capelli@noaa.gov.

### **Coho Salmon:**

Tasks from the DFG *Recovery Strategy for California Coho* (DFG 2004) that are acceptable for compliance with this PSN are listed in an online database, available at [http://nrm.dfg.ca.gov/coho/coho\\_tasks.aspx](http://nrm.dfg.ca.gov/coho/coho_tasks.aspx). This site 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. CDFW/NOAA technical staff will determine if the proposal meets the identified task. If the proposal will cover a task from the *Recovery Strategy for California Coho Salmon* database, the task number must be listed on the 2013 Application. If you have any questions regarding the coho salmon recovery strategy or task database, you may contact Joe Pisciotto at (916) 324-6902, joe.pisciotto@wildlife.ca.gov.

NOAA's *Recovery Plan for Evolutionarily Significant Unit of Central California Coast Coho Salmon* (Final September 2012) is on-line at [http://swr.nmfs.noaa.gov/recovery/ccc\\_coho/](http://swr.nmfs.noaa.gov/recovery/ccc_coho/). Eligible recovery actions from this plan are the ESU, Diversity Strata, or specific recovery actions by watershed listed in the individual watershed recovery actions tables found in Volume II of the plan. These recovery actions must be referenced by a unique recovery strategy number (e.g. AIR-A-2.1, etc.) found in the **Excel tables** and only one recovery strategy number can be referenced. CDFW/NOAA technical staff will determine if the proposal meets the identified task. If the proposal will cover a recovery action task from the *Recovery Plan for Evolutionarily Significant Unit of Central California Coast Coho Salmon*, the unique recovery strategy number must be listed on the 2013 Application. If you have any questions regarding the NOAA CCC Coho plan, you may contact Charlotte A. Ambrose at (707) 575-6068, charlotte.a.ambrose@noaa.gov.

The *Recovery Plan for the Evolutionarily Significant Unit of Southern Oregon/Northern California Coast Coho Salmon* Public Draft (January 2012) is available on-line at [http://www.swr.noaa.gov/recovery/soncc\\_draft/SONCC\\_Coho\\_DRAFT\\_Recovery\\_Plan\\_January\\_2012.htm](http://www.swr.noaa.gov/recovery/soncc_draft/SONCC_Coho_DRAFT_Recovery_Plan_January_2012.htm) (see volume II). Eligible recovery actions from this plan are the specific recovery actions by watershed listed in the individual watershed recovery action tables found in Chapters 7 through 45 of the Plan. These tasks must be referenced by a unique recovery action step number (e.g. SONCC-HBT.2.2.3.2) and only one action step can be referenced.

CDFW/NOAA technical staff will determine if the proposal meets the identified task. If you have any questions regarding the SONCC Plan, you may contact Julie Weeder at (707) 825-5168, [julie.weeder@noaa.gov](mailto:julie.weeder@noaa.gov).

### ***Stream Dewatering and Fish Exclusion / Relocation***

Applicants of projects that require channel dewatering and/or fish exclusion will be responsible for securing dewatering and/or fish exclusion supplies (screens, nets, pumps, etc.) and services (biologist with appropriate state and federal permits to relocate fish). The related expenses must be listed in the proposed project budget.

### ***Water Law***

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 would 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 the Department 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, please 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.

1. A Statement of Water Diversion and Use that has been filed with the SWRCB. For applicants who have not filed a Statement of Water Diversion and Use, a copy of that form may be obtained at [http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/diversion\\_use/index.shtml](http://www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/index.shtml). ***The Department will not accept a Statement of Water Diversion and Use unless it has been filed with the SWRCB.***

2. The average volume of water (in acre feet) diverted each month during the period of use at each point of diversion; the average volume of water applied at the place of use each month during the period of use from each point of diversion; a table that shows the number of acres irrigated for each parcel within the place of use; 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; all data, calculations, and any other information used to estimate the “duty of water”; the average irrigation requirements for the crops and/or pasture land 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 Resource’s Bulletin 113; the method(s) used to apply the water to the crops and/or pasture land at the place of use; the type(s) of soil at the place of use; and 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***

A legible 8.5” X 11” photocopy of the watershed showing the following:

- Topographic relief in hillshade;
- All streams in the watershed, label mainstem and any tributaries where work is proposed;
- Scale of the map;
- North arrow or other direction icon;
- Inset of the location of the watershed in the county.

Do not include roads and other features to clutter the map. **Aerial photos do not satisfy this requirement.** See example in Appendix C.

### ***Watershed Assessments / Habitat Inventory***

In order to better focus restoration efforts, the CDFW encourages applicants to address limiting factors for salmonids that have been identified in existing watershed assessments and planning documents. A number of watershed assessments specific to California are available on the CDFW’s website for the *Coastal Watershed Planning and Assessment Program (CWPAP)* at <http://coastalwatersheds.ca.gov>. These products include watershed assessment reports with background information, findings, limiting factor analysis, and improvement recommendations that should provide additional guidance to applicants. For more information, contact Scott Downie at [scott.downie@wildlife.ca.gov](mailto:scott.downie@wildlife.ca.gov) or (707) 725-1070 or David Kajtaniak at [david.kajtaniak@wildlife.ca.gov](mailto:david.kajtaniak@wildlife.ca.gov) or (707) 725-1052.

## PART VI: FRGP PROPOSAL PROJECT TYPES

This section of the PSN describes the specific requirements for each project type. In addition to the information required under Parts II and IV, Information requested under each project type must be submitted in detail with the proposal application. Forms and examples of supplemental information are in Appendix C. See Part V for definitions of supplemental information.

### ***Americorps (AC)***

1. Eligible projects are from Americorps programs which deal with environmental projects and issues that assess, conserve, restore, monitor and enhance coastal California anadromous watersheds. Proposals can be from existing Americorps programs or for establishing new Americorps programs. Information about the Americorps program can be found at <http://www.americorps.gov/Default.asp>.
2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. References for documents prepared/distributed, in the format: Author, date, title, name, source, source address;
  - b. Description of the location where exhibits/posters are displayed;
  - c. Description of media materials prepared, and when and where used;
  - d. Number of plans/designs for restoration/conservation actions developed as a result of this project;
  - e. Acres of land affected by landowner plans/designs for restoration/conservation actions;
  - f. Dollar amount of donations made to restoration/conservation activities as a result of this project;
  - g. Number of volunteers committed to restoration/conservation activities as a result of this project;
  - h. If the project results in habitat protection or restoration actions:
    - i. Number of restoration projects proposed;
    - ii. Type(s) of treatments applied, indicate the FRGP Proposal Project Types;
    - iii. Acres of salmonid habitat protected/restored;
    - iv. Number of watersheds protected/restored;
    - v. Dollar value of habitat treatments applied;
  - i. Miles assessed that contain anadromous salmonids;
  - j. Number of fish passage barriers assessed.

3. Each proposal must describe in detail the following additional specific information in the project description.
  - a. Number of outreach/educational events;
  - b. Number of students educated;
  - c. Number of schools/institutions reached;
  - d. Number of educational documents completed/distributed;
  - e. Number of interpretive exhibits/posters prepared;
  - f. Number of interpretive signs prepared;
  - g. Number of different locations where exhibits/signs/posters displayed;
  - h. Number of media materials prepared;
  - i. Number of workshop/training events;
  - j. Number of participants in workshop/training events;
  - k. Number of landowners reached by projects;
  - l. Miles of stream assessed;
  - m. Miles of road assessed;
  - n. Acres of habitat assessed; and
  - o. If the project involves reviewing or evaluating restoration projects, number of restoration proposals reviewed/evaluated.
  
4. Applicants for this project type must include the following supplemental information:
  - a. Watershed or County Map. The project should be shown on a map that shows the watershed, county, or other appropriate boundary. **Aerial photos do not satisfy this requirement.**

## **THE ED PROJECT TYPE IS ONLY AVAILABLE THROUGH THE SHRRC FOCUS**

### ***Public School Watershed and Fishery Conservation Education Projects (ED)***

1. Eligible education projects are those which will assist public school education programs with instruction in watershed and anadromous fishery conservation. Any education materials should be developed using the National Project for Excellence in Environmental Education guidelines ([http://www.naaee.org/npeee/materials\\_guidelines/](http://www.naaee.org/npeee/materials_guidelines/)). Education proposals must teach or use CDFW acceptable methods and correspond to current California Department of Education Content Standards (<http://www.cde.ca.gov/ci/>) and/or National Science Content Standards (<http://nap.edu/readingroom/books/nses/>). Applicants are encouraged to tie their projects to the California Department of Fish and Game's Natural Resources Education Messages (<http://www.dfg.ca.gov/oceo/newsletter/2005/nremall.htm>).

2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Results and analysis of the evaluation plan;
  - b. Number of students educated;
  - c. Number of workshops/training event;
  - d. Number of outreach/education documents completed and distributed
  - e. Number of schools and other institutions reached
  - f. Name of education/outreach document.
  
3. Each proposal must describe in detail the following additional specific information in the project description;
  - a. Each proposal must include a detailed outline of concepts to be taught at specific grade level(s). Activities should address conditions of the local watershed and promote personal responsibility for watershed stewardship with the overarching goal of students, families, and communities understanding the nature of the salmonid resource and the effects of their own and others' actions;
  - b. An estimate of the percentage of instruction time focused on salmonids;
  - c. The number of students, teachers, and community folks trained (e.g. students taught);
  - d. An estimated population of the target community;
  - e. An estimate of the amount of time spent with participants (i.e. 8 one-hour class visits or a one-day three-hour long environmental education fair).
  
4. Applicants for this project type must include the following supplemental information:
  - a. Watershed Map;
  - b. Evaluation plan that will be used to evaluate the program's effectiveness in meeting specific objectives for both teachers and students. Describe in detail how gains in student knowledge will be measured. In addition, describe how the teacher(s) will be able to demonstrate whether the project has met their expectations and will be able to make programmatic recommendations that may impact design of future projects. This evaluation plan must provide the means to measure the project's success, such as pre- and post-testing, performance standards, or an assessment rubric (include examples of the surveys/tests to be used);
  - c. A list of activities and the curriculum being used in the project and, if developing new activities or curriculum, a summary outlining the subject matter.

## ***Fish Passage at Stream Crossings (FP)***

1. Eligible fish passage projects are those that are specifically limited to barriers to immigration or emigration. The FP category includes any human-made crossing over or through a stream channel such as paved roads, unpaved roads, railroads, trails and paths, fair-weather Arizona crossings, bridges, and box, pipe, or concrete culverts and baffles. This project type does not include the construction of new fish ladders or upgrading/maintenance of existing fish ladders. Baffles are a series of flow obstructions placed in a culvert or flume to improve fish passage by increasing water depth at lower flows and/or decreasing water velocity at higher flows. Dams are not included in this project type, they are included in HB. For road crossings or modification proposals, the proponent must (a) perform a fish passage barrier analysis as outlined in Part IX of the *California Salmonid Stream Habitat Restoration Manual, 4th edition (California Department of Fish and Game)* and (b) test the project post construction at two life stage design flows (e.g. fall/winter flows for adult salmonids and summer flows for juveniles).

This project type does not include pre-project planning. If the proposal is for the implementation phase of a project previously funded by an FRGP Project Design grant, which includes 100% plan development as a project deliverable, then funding for final design plans will not be allowed. Proposals developed through other funding sources must, at a minimum, include completed intermediate plans (i.e., design plans at ~65% level of development) with the proposal submittal. Proposals for pre-project planning and development should be submitted under Project Design (PD). Implementation projects not subject to an earlier review through the planning process must be reviewed and approved by CDFW/NOAA Fisheries engineering staff prior to funding consideration. 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 technical staff prior to development of 30 percent plans. Project review and approval by CDFW/NOAA Fisheries engineering staff does not imply Department or NOAA 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.

2. If the proposal is funded, Final Plans (100% plans) approved by CDFW/NOAA Fisheries technical/engineering staff will be required before implementation of the project.
3. Each proposal must describe in detail the following additional specific information in the project description;

- a. Miles of stream treated (include only the actual length of stream *treated* by the project, not the length of stream *affected* by the project);
  - b. Total number of stream crossings/culverts treated to improve fish passage;
  - c. Type(s) of crossings treated, select from: culvert; bridge; or ford;
  - d. Miles of stream made more accessible by treating stream crossings (accessible to next barrier or to upstream end of anadromy);
  - e. Number of culverts replaced/improved;
  - f. Number of bridges installed/improved;
  - g. Number of rocked fords placed;
  - h. Number of road crossings removed;
  - i. Indicate type of required listed species surveys which will be done and type of protocols to be used;
  - j. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: Author, date, title, name, source, source address;
  - k. Indicate if fish relocation is needed. Refer to "Stream Dewatering and Fish Exclusion / Relocation" definition in Part V.
4. Applicants for this project type must include the following supplemental information:
- a. Intermediate Plan. If a design element within the intermediate plan is thought to be unnecessary, provide the rationale for not including it.
  - b. Project Location Topographic Map: The project must 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. Lines for in stream work must be labeled with a label plus an arrow marked "U" pointing at the upstream end of the site and an arrow marked "D" pointing at the downstream end. The stream where work is being done needs to be labeled on every map submitted. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Locations on each side of the bank need to be differentiated. Project should be represented as point(s) or line(s) along streams, according to the following guidelines:
    - i. Features that are more than ½ mile apart will be shown as separate points on the map.
    - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed.
    - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage.
  - c. Provisional Landowner Access Agreement;
  - d. Water Right Verification: 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 a project that addresses issues related to the diversion, use, storage, or purchase of water; and
  - e. Photographs of proposed project site.

## ***Habitat Acquisition and Conservation Easements (HA)***

1. Eligible acquisition projects are those which will allow the acquisition of conservation easements or fee title to riparian buffer strips and flood plains along coastal rivers and streams to protect key salmon and steelhead habitat. All real property shall be acquired from a willing seller and in compliance with current laws governing relocation and acquisition of real property by public agencies. Disbursement of grant funds may be subject to prior approval of fair market value by the State Department of General Services. The conservation easement must name the State of California, Department of Fish and Wildlife (CDFW), or its designee, as an express third party beneficiary entitled to all of the rights and remedies of the easement holder under the easement. If a fee title or easement holder dissolves or elects to transfer its interest, that interest shall be transferred to CDFW, or its designee, if CDFW elects. Copies of all baseline information, reports and notices pursuant to or in connection with the conservation easement must be provided to CDFW. No amendment or modification of the conservation easement shall be effective unless approved in writing by CDFW.
2. All supplemental information required (see #4 below) is to be submitted with the proposal. There is no additional information required after funding.
3. Each proposal must describe in detail the following additional specific information in the project description:
  - a. Type of acquisition (conservation easement or fee title) and evidence of the owner's willingness to sell. Only acquisitions for which there is a willing seller will be considered;
  - b. The current owner, address, legal description, and assessor's parcel number(s) of the subject property;
  - c. A detailed narrative describing of the subject property (i.e. how many linear stream miles/acres will be acquired), how the acquisition will protect and enhance anadromous salmonid habitat on the subject property (e.g. what types of habitat will be protected, including over-summering, spawning, rearing, etc.), and how any potential adverse impacts from surrounding land uses will be prevented. For fee title acquisitions, the narrative must also describe how and over what time-period, the habitat protection and enhancement on the property will be assured;
  - d. Description of the parcel in relation to other public/conservation land holdings in the area;
  - e. Any known title restrictions or encumbrances that could adversely affect the proposed use, any permits or approvals from private parties or governmental authorities required for the acquisition, and any significant legal issues associated with the acquisition;
  - f. For an easement a description of existing baseline information, such as what baseline information will be established (including who will be responsible,

- anticipated costs and funding sources), and who will hold, monitor, and enforce the easement (including anticipated costs and funding sources);
- g. A narrative describing how the property will be managed and maintained (including who will be responsible, anticipated costs and funding sources), and whether or not public access will be provided;
  - h. Any known or suspected hazardous substances that could adversely affect the subject property;
  - i. The budget should quantify acquisition costs such as preliminary title reports, appraisals, negotiations, escrow, etc.;
  - j. Acres of land protected by the acquisition or easement;
  - k. Miles of stream protected by the acquisition or easement, and
  - l. Are water rights included in the purchase?
4. Applicants for this project type must include the following supplemental information:
- a. Project Location Topographic Map: The project must 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. Lines for in stream work must be labeled with a label plus an arrow marked "U" pointing at the upstream end of the site and an arrow marked "D" pointing at the downstream end. The stream where work is being done needs to be labeled on every map submitted. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Locations on each side of the bank need to be differentiated. Project should be represented as point(s) or line(s) along streams, according to the following guidelines:
    - i. Features that are more than ½ mile apart will be shown as separate points on the map.
    - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed.
    - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage.
  - b. Provisional Landowner Access Agreement.
  - c. A deed or acquisition agreement document that demonstrates the applicant's ownership or right to acquire the interest being proposed.
  - d. Labeled photographs of the subject property.
  - e. Regional Assessor's site-specific maps showing the location and boundaries of the subject property.
  - f. Prior to final review by the TRT (August 1<sup>st</sup>), a full narrative appraisal of the proposed interest (conservation easement or fee title), prepared pursuant to the "Uniform Standards for Professional Appraisal Practices" of the Appraisal Standards Board and compliance with Department of General Services Real Property Services Section specifications. The grant award shall be considered conditional, contingent upon an appraisal that is acceptable to CDFW.

## ***Instream Barrier Modification for Fish Passage (HB)***

1. Eligible instream barrier projects are limited to 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, and log debris accumulations. This project type does not include the construction of new fish ladders or upgraded/maintenance of existing fish ladders. It is recommended that proposals under this category include the baseline data discussed in Parts II and III, of the *California Salmonid Stream Habitat Restoration Manual, 4th edition* (California Department of Fish and Game).

This project type is for implementation only and does not include funding for pre-project planning. Proposals for pre-project planning and development should be submitted under Project Design (PD). If the proposal is for the implementation phase of a project previously funded by an FRGP Project Design grant, which includes 100% plan development as a project deliverable, then funding for final design plans will not be allowed. Proposals developed through other funding sources must, at a minimum, include completed intermediate plans (i.e., design plans at ~65% level of development) with the proposal submittal.

2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Post longitudinal profile for projects where channel grade is to be restored or otherwise modified by the project.
  - b. Final Plans (100% plans) approved by CDFW/NOAA Fisheries technical/engineering staff, will be required before implementation of the project.
  - c. If project includes the removal of a diversion dam, flashboard dam, wood or concrete dam: design documents, final costs, and final plans will be entered in the Clearinghouse for Dam Removal Information (CDRI) at <http://library.ucr.edu/wrca/collections/cdri/>.
3. Each proposal must describe in detail the following additional specific information in the project description;
  - a. Miles of stream treated (include only the actual length of stream *treated* by the project, not the length of stream *affected* by the project);
  - b. Number of barriers treated for fish passage;
  - c. Type(s) of barriers treated, select from: diversion dam; push-up dam; wood or concrete dam; grade control structures (weirs); logs; or debris;
  - d. Each project element (pertinent natural features and specific work areas) shall be assigned a unique station number that reflects its measured distance from the

- project start location. For example, a logjam proposed for modification 250 feet downstream from a bridge designated as the project starting point would have a “station number” of 250. A scaled map with all pertinent features and work site station shall be included as part of the proposal.
- e. Miles of stream made more accessible by removing barriers (accessible to next barrier or to upstream end of anadromy);
  - f. Number of fishway chutes/pools installed;
  - g. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: Author, date, title, name, source, source address;
  - h. Indicate type of required listed species surveys which will be done and type of protocols to be used; and
  - i. Indicate if fish relocation is needed. Refer to “Stream Dewatering and Fish Exclusion / Relocation” definition in Part V.
4. Applicants for this project type must include the following supplemental information;
- a. Intermediate Plan. If a design element within the intermediate plan is thought to be unnecessary, provide the rationale for not including it.
  - b. Conceptual Plan: If an intermediate plan is determined to be unnecessary, provide a conceptual plan. Projects where channel grade is to be restored or otherwise modified by the proposed project must also include a longitudinal profile and scaled plan and elevation view diagrams showing the proposed work.
  - c. Project Location Topographic Map: The project must 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. Lines for in stream work must be labeled with a label plus an arrow marked "U" pointing at the upstream end of the site and an arrow marked "D" pointing at the downstream end. The stream where work is being done needs to be labeled on every map submitted. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Locations on each side of the bank need to be differentiated. If there are multiple sites along a stream length, make sure that the individual sites are numbered or labeled. If this makes the map too busy to easily read, then multiple maps will be necessary. Project should be represented as point(s) or line(s) along streams, according to the following guidelines:
    - i. Features that are more than ½ mile apart will be shown as separate points on the map.
    - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed.
    - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage.
  - d. Provisional Landowner Access Agreement.
  - e. Water Right Verification: 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 a project that addresses issues related to the diversion, use, storage, or purchase of water.
  - f. Photographs of proposed project site.

## ***Instream Habitat Restoration (HI)***

1. Eligible instream habitat restoration projects are limited to work in the stream channel (bankfull) and along the stream bank. Instream habitat restoration includes installation of instream structures such as boulder clusters, weirs, log and root wad structures. It is recommended that proposals under this category include the baseline data discussed in Parts II and III, of the *California Salmonid Stream Habitat Restoration Manual, 4th edition (California Department of Fish and Game)*.

If the applicant is seeking funds to monitor an instream habitat restoration project (HI) as a component of the proposal, they must also **include all the required information for a monitoring watershed restoration project (MO)**. The funding requested for the monitoring element of the proposal must also be clearly identified and detailed in the budget.

2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Post longitudinal profile for projects where channel grade is to be restored or otherwise modified by the project.
3. Each proposal must describe in detail the following additional specific information in the project description. Instream structure proposals must specifically define the number and types (complexity) of proposed structures, and the materials and labor needed for completing the structure.
  - a. Total miles of instream habitat treated, count stream reach only once, even if it has multiple treatments;
  - b. If the project is for channel reconfiguration and connectivity:
    - i. Type of channel reconfiguration and connectivity, select from: creation/connection to off-channel habitat, creation of instream pools, channel bed restored, or meanders added;
    - ii. Miles of stream treated for channel reconfiguration and connectivity;
    - iii. Miles of off-channel stream created;
    - iv. Number of instream pools created for channel reconfiguration;
  - c. If the project is for channel structure placement:
    - i. Type of materials used for channel structure placement, select from: individual logs (unanchored), individual logs (anchored), logs fastened together (logjam), rocks/boulders (unanchored), rocks/boulders (fastened or anchored), stumps with roots attached (root wads), weirs, deflectors/barbs, or other engineered structures;
    - ii. Miles of stream treated with channel structure placement;
    - iii. Number of instream pools created by structure placement;

- iv. Number of structures placed in channel;
  - d. If the project is for spawning gravel placement:
    - i. Miles of stream treated with spawning gravel placement;
    - ii. Cubic yards of spawning gravel placed;
  - e. If the project is for removal of aquatic non-native invasive plants:
    - i. Miles of stream treated for removal of aquatic non-native invasive plants;
    - ii. Species scientific name(s) of plants removed;
  - f. Each project element (pertinent natural features and specific work areas) shall be assigned a unique station number that reflects its measured distance from the project start location. For example, a logjam proposed for installation 250 feet downstream from a bridge designated as the project starting point would have a "station number" of 250. A scaled map with all pertinent features and work site station shall be included as part of the proposal,
  - g. Indicate type of required listed species surveys which will be done and type of protocols to be used; and
  - h. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: Author, date, title, name, source, source address.
4. Applicants for this project type must include the following supplemental information;
- a. Intermediate Plan. If a design element within the intermediate plan is thought to be unnecessary, provide the rationale for not including it.
  - b. Conceptual Plan: If an intermediate plan is determined to be unnecessary, provide a conceptual plan. Projects where channel grade is to be restored or otherwise modified by the proposed project must also include a longitudinal profile and scaled plan and elevation view diagrams showing the proposed work.
  - c. Project Location Topographic Map: The project must 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. Lines for in stream work must be labeled with a label plus an arrow marked "U" pointing at the upstream end of the site and an arrow marked "D" pointing at the downstream end. The stream where work is being done needs to be labeled on every map submitted. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Locations on each side of the bank need to be differentiated. If there are multiple sites along a stream length, make sure that the individual sites are numbered or labeled. If this makes the map too busy to easily read, then multiple maps will be necessary. Project should be represented as point(s) or line(s) along streams, according to the following guidelines:
    - i. Features that are more than ½ mile apart will be shown as separate points on the map.
    - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed.
    - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage.
  - d. Provisional Landowner Access Agreement.
  - e. Photographs representative of proposed project site.

## ***Riparian Restoration (HR)***

1. Eligible riparian restoration projects are for riparian restoration of bare or partially denuded banks adjacent to the stream and within the riparian 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. See 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 shall be defined as the area between a stream and the adjacent upland identified by soil characteristics and distinctive vegetation. It includes wetlands and those portions of floodplains and valley bottoms that support riparian vegetation.
2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. An agreement that the landowner or proponent will maintain the livestock exclusion fence(s) for a period of 10 years and totally exclude livestock from the riparian zone. Maintenance will include repair of fences to a level that will effectively exclude livestock from the livestock exclusion project area. Maintenance will not include damage that exceeds 50 percent of the fence due to natural disaster.
3. Each proposal must describe in detail the following additional specific information in the project description;
  - a. Each proposal must also demonstrate how the project would be instrumental in restoring the natural function of the riparian corridor using appropriate successional stage native species.
  - b. For projects that include fencing, the applicant must construct a wildlife friendly fence (consult with local CDFW staff for guidance). Fencing shall have a minimum set back of 35 feet from the edge of the stream bank.
  - c. Miles of stream treated overall, count stream reach only once, even if it has multiple treatments.
  - d. Miles of riparian stream bank treated, measure both sides of the bank if appropriate.
  - e. Total acres of riparian area treated.
  - f. If the project involves riparian planting:
    - i. Number of plants;
    - ii. Provisions made for annual survival monitoring and replanting/reseeding;
    - iii. Provisions for watering;
    - iv. Acres of riparian area planted;
    - v. Species scientific names of plants planted.

- g. If the project involves livestock exclusion:
    - i. Miles of fence installed/repared;
    - ii. Type of fencing material proposed;
    - iii. Acres of riparian area protected by fencing;
    - iv. Number of water gap installations.
  - h. If the project involves plant removal/control:
    - i. Acres of riparian area treated for removal of non-native invasive plants;
    - ii. Species scientific names of plants removed.
  - i. Indicate type of required listed species surveys which will be done and type of protocols to be used; and
  - j. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: Author, date, title, name, source, source address.
4. Applicants for this project type must include the following supplemental information:
- a. Riparian Restoration Plan.
  - b. Project Location Topographic Map: The project must be shown on an appropriately scaled, USGS (or equivalent) 7.5 minute contoured topographic quadrangle map that shows the location being acquired. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Show the extent of the riparian work being conducted, using an outline of the area. All contiguous work areas should be included in a single outline. Non-contiguous work areas should be shown as separate outlines (ex: right and left bank planting exercises should be separated into two sites).
  - c. Provisional Landowner Access Agreement
  - d. Fence Maintenance Plan: Maintenance will include repair of fences to a level that will effectively exclude livestock from the livestock exclusion project area for a period of 10 years. Include a maintenance schedule and indicate who will be responsible for the fence maintenance.
  - e. Photographs representative of project site.

### ***Bank Stabilization (HS)***

1. Eligible bank stabilization projects include stabilization of eroding, collapsing, or otherwise de-stabilized banks. It is recommended that proposals under this category include the baseline data discussed in Parts II and III, of the *California Salmonid Stream Habitat Restoration Manual, 4th edition (California Department of Fish and Game)*.
2. All supplemental information required (see #4 below) is to be submitted with the proposal. There is no additional information required after funding.
3. Each proposal must describe in detail the following additional specific information in the project description.

- a. Miles of stream treated overall; count stream reach only once, even if it has multiple treatments;
  - b. Type of materials used for stream bank stabilization, select from: logs; rocks/boulders; rock barbs; log barbs; revetments; or vegetation;
  - c. Miles of stream bank treated, measure both sides of the bank if appropriate;
  - d. Indicate type of required listed species surveys which will be done and type of protocols to be used;
  - e. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: Author, date, title, name, source, source address.
  - f. If the project involves bioengineering, the proposal must identify and describe the type of treatment and define linear feet of bank stabilized and riparian species planted.
  - g. Indicate if fish relocation is needed. Refer to "Stream Dewatering and Fish Exclusion / Relocation" definition in Part V.
4. Applicants for this project type must include the following supplemental information:
- a. Intermediate Plan. If a design element within the intermediate plan is deemed unnecessary, then provide the rationale to support this determination.
  - b. Conceptual Plan: If an intermediate plan is determined to be unnecessary, provide a conceptual plan and an explanation for why a conceptual level of plan development is appropriate. 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.
  - c. Project Location Topographic Map: The project must 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. Lines for in stream work must be labeled with a label plus an arrow marked "U" pointing at the upstream end of the site and an arrow marked "D" pointing at the downstream end. The stream where work is being done needs to be labeled on every map submitted. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Locations on each side of the bank need to be differentiated. If there are multiple sites along a stream length, make sure that the individual sites are numbered or labeled. If this makes the map too busy to easily read, then multiple maps will be necessary. Project should be represented as point(s) or line(s) along streams, according to the following guidelines:
    - i. Features that are more than ½ mile apart will be shown as separate points on the map.
    - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed.
    - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage.
  - d. Provisional Landowner Access Agreement.
  - e. Photographs of project site.

## ***Watershed Restoration – Upslope (HU)***

1. Eligible watershed restoration projects include: road treatments, road decommissioning, upland erosion and sediment control, upland agriculture management, and upland livestock management practices that will reduce sediment to stream channels. Upslope erosion assessments and the method for determining sediment saved from delivery to a stream channel must use the protocol described in Part X, of the *California Salmonid Stream Habitat Restoration Manual, March 2006 (California Department of Fish and Game)* or a CDFW approved alternate method. Road treatments, road decommissioning, and other sediment delivery actions must meet the criteria for the specific action as described in Part X, of the *California Salmonid Stream Habitat Restoration Manual, March 2006 (California Department of Fish and Game)*. HU projects are only for sites which are expected to erode and deliver sediment to an anadromous fish bearing stream(s). FRGP staff assigned to evaluate projects will consider current and anticipated land use when evaluating biological soundness of projects.

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 coho salmon and steelhead in the entire hydrologic basin. Upslope restoration work that is beyond the riparian area must focus on correction of major problems affecting the watershed.

This project type does not include pre-project planning or assessments: 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.

2. If the proposal is funded the following will be required before implementation of the project.
  - a. The landowner or responsible party must sign an access agreement stating they agree to maintain the erosion control project for a period of not less than 10 years. Maintenance will consist of repair to the road or stream crossing to a level that will effectively reduce sediment from entering the stream. In the event of an act of nature which results in partial or complete failure of the project, the landowner or applicant 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 wind storms.

3. Each proposal must describe in detail the following additional specific information in the project description;
  - a. Total miles of road treated;
  - b. Total acres of upslope area treated;
  - c. If project involves road treatment:
    - i. Miles of road treated for road drainage system improvements;
    - ii. Miles of road decommissioned/abandoned;
  - d. If project involves upland erosion and sediment control:
    - i. Type(s) of upland erosion and sediment control, select from erosion control structures, planting, or slope stabilization;
    - ii. Number of erosion/sediment control installations;
    - iii. Species - scientific names of plants planted;
  - e. If project involves upland livestock management:
    - i. Type(s) of upland livestock management, select from livestock watering schedules, or livestock water development;
    - ii. Number of livestock water installations;
  - f. If project involves vegetation removal or control:
    - i. Acres of upslope area treated for vegetation removal/control;
    - ii. Species - scientific names of plants removed/controlled;
  - g. Cubic yards of sediment prevented from entering the stream;
  - h. Number of stream crossing treated;
  - i. Indicate type of required listed species surveys which will be done and type of protocols to be used; and
  - j. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: Author, date, title, name, source, source address.
4. Applicants for this project type must include the following supplemental information. (Note: Individual site sheets need to be available upon request for field review but do not need to be included with the proposal.)
  - a. Conceptual Plan (Road log). The road log must include; site name, feature number, feature type, estimated excavation volume (cubic yards), and proposed treatment.
  - b. Project Location Topographic Map: The project must 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. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Locations on each side of the bank need to be differentiated. Individual sites along a given road need to be clearly labeled. If the area is too dense to clearly read the labels, then multiple maps should be submitted to clearly show all sites where work is being completed. Project should be

represented as point(s) or line(s) along the road network, according to the following guidelines:

- i. Features that are more than ½ mile apart will be shown as separate points on the map.
  - ii. Features less than ½ mile apart should be combined into one line on the road where work is being performed.
  - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage.
- c. Watershed Map.
  - d. Provisional Landowner Access Agreement.

### ***Monitoring Projects (MD)***

1. Eligible monitoring projects for consideration under this PSN are projects that monitor the status and trends of anadromous salmonid populations and/or their habitat (MD). This project type includes both baseline and status/trend monitoring. Baseline monitoring is intended to measure existing conditions of salmonid habitat, watershed processes, and/or populations. Baseline data can be used to identify factors limiting species recovery and for restoration and recovery planning purposes. A wide array of indicators might be included in baseline sampling. Status and trend monitoring can be used to assess the response of salmonid habitat and populations to watershed restoration efforts, and in population viability analysis for assessing the recovery of ESA listed species. Status and trend monitoring periodically samples a set of parameters in a given area in order to measure changes over time. Proposals for status and trend monitoring must fully document compliance with the protocols described in Fish Bulletin 180, California Coastal Salmonid Population Monitoring: Strategy, Design, and Methods, DFG 2011.

Monitoring or research projects which 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), an MOU enacted between CDFW and the applicant authorizing a limited level of take for scientific purposes (pursuant to Fish and Game Code (FGC) Section 2081(a)) must also be in effect before any fish sampling may be initiated. Contact the local CDFW District Biologist with regards to establishing an MOU. Applicants will be required to demonstrate current Federal Endangered Species Act (ESA) take coverage in order to obtain a CESA MOU. Applicants submitting proposals for MD project types involving fish collections should incorporate sufficient time in their proposed project to allow securing a CDFW SCP and CESA MOU, as well as applicable ESA permits. Applicants should include in their project proposal an estimated project budget which includes costs they may require to obtain the permit and comply with permit reporting requirements. Information on collecting and research take permits is available online at

[http://www.dfg.ca.gov/wildlife/nongame/research\\_permit/index.html](http://www.dfg.ca.gov/wildlife/nongame/research_permit/index.html). The SCP application may be obtained at [http://www.dfg.ca.gov/wildlife/nongame/research\\_permit/scp/scp\\_aplic\\_procs.html](http://www.dfg.ca.gov/wildlife/nongame/research_permit/scp/scp_aplic_procs.html)

2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. Failure to provide data, analyses, and scientific reporting will result in the grantee becoming ineligible for future funding consideration until the required products are delivered to CDFW. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The grantee will be required to submit information to the grant manager as follows;
  - a. In addition to the final report, annual reports in scientific format (Abstract, Introduction, Methods, Results, Discussion) will be required;
  - b. Final manuscript suitable for publication in a scientific journal;
  - c. Field sampling database, in Excel or Access;
  - d. Data compilations and analytical products, in Excel or Access;
  - e. Names of reports prepared, in the format: Author, date, title, name, source, source address;
  - f. All data collected and created is a required deliverable and will become the property of the California Department of Fish and Wildlife, 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 (<http://bios.dfg.ca.gov/metadata.asp>) and FGDC metadata standards ([http://www.fgdc.gov/metadata/documents/workbook\\_0501\\_bmk.pdf](http://www.fgdc.gov/metadata/documents/workbook_0501_bmk.pdf)).
  
3. Each proposal must describe in detail the following additional specific information in the project description;
  - a. Research or management questions and hypotheses addressed;
  - b. Overall project goals, and measurable project objectives;
  - c. Spatial and temporal monitoring scales;
  - d. Study design and the parameters to be monitored;
  - e. Sampling scheme to be utilized;
  - f. Sampling protocol to be utilized, including appropriate report or literature citation (for example, Fish Bulletin 180, California Coastal Salmonid Population Monitoring: Strategy, Design, and Methods, DFG 2011);
  - g. Analyses to be employed;
  - h. Miles of stream monitored;
  - i. Acres of habitat monitored;
  - j. Type of monitoring conducted, select from: adult salmonid population monitoring, salmonid smolt or fry production monitoring, biological monitoring (other than salmon), redd counts, carcass counts, water quality monitoring, water quantity (flow) monitoring, or habitat condition monitoring;

- k. Describe the comprehensive monitoring strategy/program of which the project is a part, if applicable;
  - l. Describe how the proposed status and trend monitoring addresses specific component(s) of the Coastal Monitoring Plan (as described in *Fish Bulletin 180, California Coastal Salmonid Population Monitoring: Strategy, Design, and Methods, DFG 2011*). If proposed monitoring is not described in Fish Bulletin 180 explain how the work would meet a critical information gap necessary for population recovery;
  - m. Number of organizations cooperating with the project as part of a comprehensive monitoring strategy;
  - n. Name(s) of organizations cooperating with the project as part of a comprehensive monitoring strategy;
  - o. Number of reports prepared on key management or restoration data, information and needs;
  - p. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: Author, date, title, name, source, source address;
  - q. Geospatial project reference sites and data sampling locations;
  - r. Photographs of data sampling locations, paper and electronic copies.
  - s. Describe the project's appropriateness for initial or continued grant support under the FRGP;
  - t. Literature Cited section;
  - u. Indicate type of required listed species surveys which will be done and type of protocols to be used;
  - v. Under a separate heading labeled 'Long-term Plan for Funding' state the following:
    - i. If proposed project is a continuation of ongoing monitoring, how many years the proposed monitoring program has been in existence and who funded the monitoring;
    - ii. If proposal is for ongoing monitoring, include a brief abstract of findings/progress to date in the project description and refer to any reports included in supplemental information;
    - iii. If proposed work is new, include a brief description of applicant's work that demonstrates ability to collect and analyze fisheries data and refer to example of data with analysis to be attached in the Supplemental Information section;
    - iv. The number of years of data necessary to address the research or management question: and
    - v. If extended monitoring is needed, describe a long-term plan for funding, including ways to reduce program costs and/or development of partnerships with other entities.
4. Applicants for this project type must include the following supplemental information:
- a. Project Location Topographic Map: The monitoring site location(s) must be shown on a USGS (or equivalent) 7.5 minute contoured topographic quadrangle map, using points, lines, or areas that best describes the work being done. Site location should be shown. USGS Quad names for all areas shown on the map

need to be clearly labeled on every map submitted. Monitoring proposals where sample locations are subject to a random selection scheme must provide an appropriately scaled map depicting the sample frame region.

- b. Provisional Landowner Access Agreement for fixed sampling sites.
- c. Proposals for monitoring projects must include a brief (one to two pages) description of projects QA/QC plan. If funding is awarded a complete QA/QC plan must be submitted before the Grant will be executed;
- d. If proposal is for ongoing monitoring - attach a copy of last year's report including data summary and analysis;
- e. If proposal is for new monitoring – attach an example of applicant's work including sample data analysis that demonstrates applicant's ability to collect and analyze anadromous fisheries population data.

### ***Monitoring Watershed Restoration (MO)***

1. Eligible watershed restoration monitoring projects are those which will address one or more of the following tasks: 1) assess grant compliance, implementation quality, and document the location and as-built condition of restoration features constructed (Implementation monitoring), 2) determine if restoration treatments and features have produced the desired habitat conditions and/or watershed processes (effectiveness monitoring), 3) determine whether the hypothesized responses of habitat, watershed processes, and/or populations to restoration activities were correct (validation monitoring).

Monitoring or research projects which 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), an MOU enacted between CDFW and the applicant authorizing a limited level of take for scientific purposes (pursuant to Fish and Game Code (FGC) Section 2081(a)) must also be in effect before any fish sampling may be initiated. Contact the local CDFW District Biologist with regards to establishing an MOU. Applicants will be required to demonstrate current Federal Endangered Species Act (ESA) take coverage in order to obtain a CESA MOU. Applicants submitting proposals for MO project types involving fish collections should incorporate sufficient time in their proposed project to allow securing a CDFW SCP and CESA MOU, as well as applicable ESA permits. Applicants should include in their project proposal an estimated project budget which includes costs they may require to obtain the permit and comply with permit reporting requirements. Information on collecting and research take permits is available online at [http://www.dfg.ca.gov/wildlife/nongame/research\\_permit/index.html](http://www.dfg.ca.gov/wildlife/nongame/research_permit/index.html). The SCP application may be obtained at [http://www.dfg.ca.gov/wildlife/nongame/research\\_permit/scp/scp\\_aplic\\_procs.html](http://www.dfg.ca.gov/wildlife/nongame/research_permit/scp/scp_aplic_procs.html)

2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Final manuscript suitable for publication in a scientific journal;
  - b. Field sampling database, in Excel or Access;
  - c. Data compilations and analytical products, in Excel or Access;
  - d. Names of reports prepared, in the format: Author, date, title, name, source, source address;
  - e. All data collected and created is a required deliverable and will become the property of the California Department of Fish and Wildlife, 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 (<http://bios.dfg.ca.gov/metadata.asp>) and FGDC metadata standards ([http://www.fgdc.gov/metadata/documents/workbook\\_0501\\_bmk.pdf](http://www.fgdc.gov/metadata/documents/workbook_0501_bmk.pdf)).
  
3. Each proposal must describe in detail the following additional specific information in the project description;
  - a. Research or management questions and hypotheses addressed;
  - b. Overall project goals, and measurable project objectives;
  - c. Spatial and temporal monitoring scales;
  - d. Study design and the parameters to be monitored;
  - e. Sampling scheme to be utilized;
  - f. Sampling protocol to be utilized, including appropriate report or literature citation (for example, *Protocols for Monitoring the Response of Anadromous Salmon and Steelhead to Watershed Restoration in California*, Duffy 2005);
  - g. Analyses to be employed;
  - h. Miles of stream monitored;
  - i. Acres of habitat monitored;
  - j. Type of monitoring conducted, select from: post-project implementation or design compliance monitoring, restoration effectiveness monitoring, or restoration validation monitoring;
  - k. Describe the comprehensive monitoring strategy/program of which the project is a part, if applicable;
  - l. Describe the component of the comprehensive monitoring strategy that the project addresses;
  - m. Number of organizations cooperating with the project as part of a comprehensive monitoring strategy;
  - n. Name(s) of organizations cooperating with the project as part of a comprehensive monitoring strategy;
  - o. Number of reports prepared on key management or restoration data, information and needs; and
  - p. If the project is identified in an assessment or recovery plan, provide the name of

the plan/assessment, in the format: Author, date, title, name, source, source address.

- q. Literature Cited section;
- r. Under a separate heading labeled 'Long-term Plan for Funding' state the following:
  - i. If proposed project is a continuation of ongoing monitoring, how many years the proposed monitoring program has been in existence;
  - ii. If proposed work is new, refer to a brief description of applicant's previous work that demonstrates ability to summarize and interpret data similar to the proposed project to be attached in the Supplemental Information section;
  - iii. If proposal is for ongoing monitoring, include a brief abstract of findings/progress to date in the project description and refer to any tables or figures included in supplemental information;
  - iv. The number of years of data necessary to address the management question;
  - v. If extended monitoring is needed, describe a long-term plan for funding, including ways to reduce program costs and/or seeking partnerships with other entities.

4. Applicants for this project type must include the following supplemental information:

- a. Project Location Topographic Map: The project must 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. Lines for in stream work must be labeled with a label plus an arrow marked "U" pointing at the upstream end of the site and an arrow marked "D" pointing at the downstream end. The stream where work is being done needs to be labeled on every map submitted. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Locations on each side of the bank need to be differentiated. Project should be represented as point(s) or line(s) along streams, according to the following guidelines:
  - i. Features that are more than ½ mile apart will be shown as separate points on the map.
  - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed.
  - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage.
- b. Watershed Map.
- c. Provisional Landowner Access Agreement.
- d. Proposals for monitoring projects must include a brief (one to two pages) description of projects QA/QC plan. If the proposal is funded, a complete QA/QC plan must be submitted before the Grant can be executed.
- e. If proposal is for new monitoring, attach a brief description/example of applicant's previous work that demonstrates the ability to summarize and interpret data similar to the proposed project;
- f. If proposal is for ongoing monitoring, attach a brief abstract of findings/progress to date with summary table or figure.

## ***Watershed Organization (OR)***

1. Eligible watershed and public organization proposals are those that will assist locally based organizations to generate landowner/public support for projects that address recovery tasks and demonstrate immediate benefit to anadromous salmonids in local watersheds. Examples include but 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.**
  
2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Number of plans/designs for restoration/conservation actions developed as a result of this project;
  - b. Acres of land affected by landowner plans/designs for restoration/conservation actions;
  - c. Dollar amount of donations made to restoration/conservation activities as a result of this project;
  - d. Number of volunteers committed to restoration/conservation activities as a result of this project;
  - e. If the project results in habitat protection or restoration actions:
    - i. Number of restoration projects proposed;
    - ii. Type(s) of treatments applied, indicate the FRGP Proposal Project Type(s);
    - iii. Acres of salmonid habitat protected/restored;
    - iv. Number of watersheds protected/restored; and
    - v. Dollar value of habitat treatments applied.
  
3. Each proposal must describe in detail the following additional specific information in the project description.
  - a. Number of public meetings and the description of meeting format;
  - b. Number of public meeting attendees and their relationship to the watershed (e.g. landowners, local agencies, etc.);
  - c. Number of landowners reached by project and a description of how landowners will/are contacted;
  - d. Need for organization and how it will enhance other efforts within the local and regional area;
  - 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.
4. Applicants for this project type must include the following supplemental information:
    - 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.**
    - b. Status Report: For existing groups, the Status Report must describe the process by which the group has achieved past measurable and quantifiable tasks (e.g. meetings, outreach, etc.), and how the group's efforts have resulted or will result in on-the-ground restoration efforts. The Status Report must also include a list of all completed and in-progress educational and outreach activities and on-the-ground restoration projects completed by the group, whether funded by FRGP or not. The Status Report will be used to evaluate the group's effectiveness.

### ***Project Design (PD)***

1. Eligible design proposals for developing project designs for restoration activities are those that would improve, protect, or enhance habitat for salmonids (e.g. fish barrier modification or removal, bank stabilization, habitat restoration, fish screens, etc.). A PD proposal can be a feasibility study or for project design development. A project design development proposal must include an options analysis, a basis of design report, 30%, 65% and 90% plans and 100% design as a project deliverable.
2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Number of restoration projects proposed as a result of this project;
  - b. Name(s) of restoration project(s) proposed as a result of this project;
  - c. Description(s) of restoration project(s) proposed as a result of this project;
  - d. Type(s) of treatments applied, indicate the FRGP Proposal Project Type(s);
  - e. Acres of salmonid habitat protected/restored;
  - f. Number of watersheds protected/restored; and
  - g. Dollar value of habitat treatments applied.
3. In addition to the above required information, each proposal must describe in detail the following information in the project description:
  - a. A detailed description of the project and how it resolves a limiting factor(s) for coho salmon or steelhead.

- b. Identify all necessary surveys (e.g. longitudinal profiles, water surface profiles, soils, hydrology, geomorphology, scour analysis) required to complete the design;
  - c. Identify all county, state, and federal permits needed for the project;
  - d. Identify qualified specialists (e.g. in fish passage, hydrology, geology) already consulted or to be consulted in the development of the plan;
  - e. Number of restoration projects proposed as a result of this project;
  - f. Acres of habitat proposed for protection/restoration as a result of this project;
  - g. Provide the name of the plan/assessment in which the need for the project is identified in the format: Author, date, title, name, source, source address; and
  - h. Scope of plan, including extent, purpose, and application.
4. Applicants for this project type must include the following supplemental information:
- a. Existing Condition Sketch: For design of structure(s) include documentation and sketch of existing conditions. If known, include proposed treatments and alternatives.
  - b. Project Location Topographic Map: The project location must be shown on an appropriately scaled, USGS (or equivalent) 7.5 minute contoured topographic quadrangle map that shows an outline of the area in which the work is being conducted. Planning proposals where sample locations are subject to a random selection scheme must provide an appropriately scaled map depicting the sample frame region. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted.
  - c. Watershed Map.
  - d. Provisional Landowner Access Agreement.
  - e. Water Right Verification: 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 a project that addresses issues related to the diversion, use, storage, or purchase of water.
  - f. Photographs of the proposed project site.

### ***Public Involvement and Capacity Building (PI)***

1. Proposals for Public Involvement and Capacity Building (PI) within multiple county/regional/watershed areas directed towards salmon and steelhead habitat restoration efforts.
2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Number of plans/designs for restoration/conservation actions developed as a result of this project;

- b. Acres of land affected by landowner plans/designs for restoration/conservation actions;
  - c. Dollar amount of donations made to restoration/conservation activities as a result of this project;
  - d. Number of volunteers committed to restoration/conservation activities as a result of this project;
  - e. If the project results in habitat protection or restoration actions:
    - i. Number of restoration projects proposed;
    - ii. Type(s) of treatments applied, indicate the FRGP Proposal Project Type(s);
    - iii. Acres of salmonid habitat protected/restored;
    - iv. Number of watersheds protected/restored; and
    - v. Dollar value of habitat treatments applied.
3. Each proposal must describe in detail the following additional specific information in the project description.
- a. A detailed description of the regional need for the organization and how it will lead to the recovery of salmon and steelhead.
  - b. 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.
  - c. A complete description of measurable/quantifiable tasks.
  - d. Number of public meetings and the description of meeting format;
  - e. Number of public meeting attendees and their relationship to the watershed (e.g. landowners, local agencies, etc.);
  - f. Number of landowners reached by project and a description of how landowners will/are contacted;
  - g. Need for organization and how it will enhance other efforts within the local and regional area;
  - h. Description of education/outreach about the watershed and salmonid issues;
  - i. 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.
4. Applicants for this project type must include the following supplemental information:
- 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.**
  - b. Status Report: For existing groups, the Status Report must describe the process by which the group has achieved past measurable and quantifiable tasks (e.g. meetings, outreach, etc.), and how the group's efforts have resulted or will result in on-the-ground restoration efforts. The Status Report must also include a list of all completed and in-progress educational and outreach activities and on-the-ground restoration projects completed by the group, whether funded by FRGP or not. The Status Report will be used to evaluate the group's effectiveness.

## ***Watershed Evaluation, Assessment, and Planning (PL)***

1. Eligible watershed planning projects are for developing watershed plans, ranch implementation plans, conducting watershed assessment, instream flow studies, and databases which 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, etc.). 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.

**Develop Watershed Plan:** Proposals in this category must describe a complete and detailed process of watershed evaluation and assessment that culminates into an integrated and comprehensive plan. The plan should contain site-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 FRGP will determine whether or not the project is worth completing. Both social and landscape elements associated with restoration of the watershed must be addressed.

**Develop 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.

**Conducting 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 Studies:** The identification of acceptable instream flows in particular waters includes technical considerations, involving physical opportunities and/or 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 10,000 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) site 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.

2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Miles assessed that contain anadromous salmonids;
  - b. Miles assessed that are in need of restoration;
  - c. Miles assessed to establish regulations or protective measures for salmonids;
  - d. Acres assessed that are in need of restoration;
  - e. Number of potential fish passage barriers assessed;
  - f. Number of barriers to fish passage identified; and
  - g. Number of plan assessments completed.
  - h. If the proposal is for Database Support, the final report must include either the completed dataset or a link to a publicly accessible website where the data are available.
  - i. For Watershed Plans, a final Watershed Plan must be submitted with the final report.
  
- 3a. Each proposal must describe in detail the following information in the project description;
  - a. Acres of land area affected by the planning/assessment activity;
  - b. If the project involves restoration planning or coordination:

- i. Type(s) of planning activities conducted, select from: coordination on implementation of a recovery plan; coordination of watershed conservation and restoration; watershed council support; support to local entities or agencies involved in salmonid restoration planning and coordination; conducting habitat restoration scoping and feasibility studies; evaluation/prioritization of restoration plans and projects; designing and maintaining restoration data systems; engineering/design work for restoration projects; or developing restoration/action plans;
- ii. Name of the plan developed by the project, in the format Author, date, title, name, source, source address;
- iii. Describe extent, purpose and application of the plan;
- c. If the project involves stream surveys or assessments:
  - i. 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;
  - ii. Name of the assessment document developed by the project, in the format Author, date, title, name, source, source address;
  - iii. Acres of habitat assessed to determine habitat conditions affecting salmonids;
  - iv. Miles of stream assessed;
  - v. Miles of road assessed;
- d. If the project involves watershed habitat surveys or assessments:
  - i. Type(s) of assessment activities conducted, select from: riparian condition; road condition/inventory; wetlands; estuarine habitat conditions; LiDAR or other remote mapping; landscape mapping; invasive species; floodplain mapping; overall watershed condition assessment or mapping; stream typing; or instream flow studies;
  - ii. Name of the assessment document developed by the project, in the format Author, date, title, name, source, source address;
  - iii. Acres of habitat assessed to determine habitat conditions affecting salmonids;
  - iv. Miles of stream assessed; and
  - v. Miles of road assessed.

3b. In addition to the above required information each proposal must describe in detail the following additional specific information in the project description;

**Watershed Plan proposals must include the following:**

- a. 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;
- b. 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);
- c. Identify types of surveys to be completed and a reference to the survey methodology used to assess the physical characteristics of the watershed.

**Ranch Implementation Plan proposals must include the following:**

- a. 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;
- b. 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);
- c. Identify types of surveys to be completed and a reference to the survey methodology used to assess the physical characteristics of the stream.

**Assessments proposals must include the following:**

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

**Instream Flow Study Proposals must include at least the following:**

- a. Hydrology and geology: A description of historical (i.e., unaltered) hydrological conditions;
- b. Description of surface flow via a water budget, including reach-by-reach gains and losses;
- c. Fluvial geomorphologic description of stream system;
- d. Biology: Reasonably comprehensive species inventory and distribution information (all taxonomic levels);
- e. Life-history understanding for all species identified as present;
- f. Macro and micro-habitat characterization for aquatic species;
- g. Assessment (and monitoring) of fish condition;
- h. Study/modeling, uses, and limitations;
- i. Water quality protection and pertinent standards (e.g., Basin Plan standards, Total Maximum Daily Loads, etc.).
- j. Study goals, the method(s) to be employed, study/modeling, uses, and limitations;
- k. A description of existing/planned 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 10,000 considerations.

**Database Support Proposals:** Describe the data standards used in developing the database, and how data will be managed and stored once the FRGP grant ends.

4. Applicants for this project type must include the following supplemental information:

- a. Project Location Topographic Map: The project location must be shown on an appropriately scaled, USGS (or equivalent) 7.5 minute contoured topographic quadrangle map that shows an outline of the area in which the work is being conducted. Planning proposals where sample locations are subject to a random selection scheme must provide an appropriately scaled map depicting the sample frame region. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted.
- b. **Or** a Watershed Map 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.**
- c. Provisional Landowner Access Agreement: If part of proposal is to gain landowner access, describe how this will be done.

### ***Cooperative Fish Rearing (RE)***

1. Eligible cooperative fish rearing projects are for artificial propagation programs designed to restore depleted stocks of salmonids that comply with the directives of the joint California Department of Fish and Wildlife and NMFS Hatchery Operations Review Committee. These projects must meet all of the legal and policy requirements of the Fish and Game Code Section 1200-1206 (Appendix G). 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*. ([http://www.dfg.ca.gov/fish/documents/SAL\\_SH/SAL\\_Coho\\_Recovery/ReportToCommission\\_2004/21.H\\_RecommendedGuidelinesForRecoveryHatcheries.pdf](http://www.dfg.ca.gov/fish/documents/SAL_SH/SAL_Coho_Recovery/ReportToCommission_2004/21.H_RecommendedGuidelinesForRecoveryHatcheries.pdf).) These proposals must also include a proposed five year management plan that follows guidelines in “Cooperative Fish Production in California” (found in the *California Salmonid Stream Habitat Restoration Manual, Part 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.
2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Demonstrate fish survival at facility;
  - b. Demonstrate adult return.

3. Each proposal must describe in detail the following additional specific information in the project description;
  - a. General guidelines of establishment and operation including but not limited to: methods of rearing, marking, and release; and planned release sites;
  - b. Include essential program elements;
  - c. Purpose of rearing is supplementing ESA listed salmonid spawning;
  - d. Number of fry/smolt released (by species);
  - e. Name(s) of the habitat restoration project(s) complemented by this project, if applicable;
  - f. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: Author, date, title, name, source, source address; and
  - g. Provide a list and current status of each permit, CEQA, NEPA, etc.
  
4. Applicants for this project type must include the following supplemental information:
  - a. Project Location Topographic Map: The project must 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. Lines for in stream work must be labeled with a label plus an arrow marked "U" pointing at the upstream end of the site and an arrow marked "D" pointing at the downstream end. The stream where work is being done needs to be labeled on every map submitted. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Locations on each side of the bank need to be differentiated. Project should be represented as point(s) or line(s) along streams, according to the following guidelines:
    - i. Features that are more than ½ mile apart will be shown as separate points on the map;
    - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed;
    - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage;
  - b. Watershed Map;
  - c. Provisional Landowner Access Agreement;
  - d. Five-year management plan following the guidelines stated above;
  - e. If extended fish rearing (greater than 5 years) also include a long term plan; and
  - f. Photographs of water source, rearing site(s), and anticipated release sites if applicable.

### ***Fish Screening of Diversions (SC)***

1. Eligible projects for fish screens must meet CDFW and NMFS screening criteria found in the *California Salmonid Stream Habitat Restoration Manual, 4th edition*,

*Appendix S, (California Department of Fish and Game).* 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 for this project type. This project type will not fund design completion. Proposals for pre-project planning and design should be submitted under Project Design (PD) Project Type.

2. If proposal is funded the following will be required before implementation of the project.
  - a. Final Plans (100% plans) approved by CDFW/NOAA Fisheries technical/engineering staff, will be required before implementation of the project.
  - b. A 10-year Lake and Streambed Alteration Agreement defining the implementation, operation and maintenance of the fish screen according to design standards.
    - i. For fish screen projects, a written agreement must be provided by the applicant from the landowner or responsible party.
    - ii. Notwithstanding Fish and Game code, Section 6027, the agreement must state that the fish screen will be operated whenever water is being diverted and the possibility of entrainment of salmonids exists.
    - iii. It shall also identify the party responsible for maintaining the screen to ensure that it is functioning as designed.
    - iv. The landowner or responsible party must operate and maintain the fish screen project for a period not less than 10 years.
    - v. The landowner or responsible party will operate the fish screen to effectively prevent the entrainment of fish whenever water is being diverted and the possibility of entrainment of salmonids exists.
    - vi. The landowner or responsible party will maintain the fish screen and bypass return so that they are functioning as designed and are meeting NMFS criteria for fish screens (criteria at time of construction).
    - vii. This shall include regular inspection during operating periods (at least bi-weekly), lubrication, replacement of worn parts, and removal of debris which may affect the operation of the screen.
    - viii. In the event of an act of nature which 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 wind storms.

- ix. The agreement shall be for a period of 10 years following completion.
  - x. If proposal is funded the project will be required to be tested at two lifestage design flows (e.g., fall/winter flows for adult salmonids and summer flows for juveniles).
3. Each proposal must describe in detail the following additional specific information in the project description;
- a. Miles of stream treated;
  - b. Number of new fish screens installed;
  - c. Flow rate in cubic feet per second (cfs) of diversions with new screens installed;
  - d. Number of fish screens modified or replaced;
  - e. Flow rate in cubic feet per second (cfs) of diversions with fish screens modified/replaced;
  - f. Acre-feet per year of water protected by screens;
  - g. Indicate type of required listed species surveys which will be done and type of protocols to be used; and
  - h. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: Author, date, title, name, source, source address.
4. Applicants for this project type must include the following supplemental information:
- a. Intermediate Plan. If a design element within the intermediate plan is thought to be unnecessary, please provide the rationale for not including it.
  - b. Project Location Topographic Map: The project must 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. Lines for in stream work must be labeled with a label plus an arrow marked "U" pointing at the upstream end of the site and an arrow marked "D" pointing at the downstream end. The stream where work is being done needs to be labeled on every map submitted. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Locations on each side of the bank need to be differentiated. Project should be represented as point(s) or line(s) along streams, according to the following guidelines:
    - i. Features that are more than ½ mile apart will be shown as separate points on the map;
    - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed;
    - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage;
  - c. Provisional Landowner Access Agreement; and
  - d. Water Right Verification: 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.

## ***Private Sector Technical Training and Education Project (TE)***

1. Eligible technical training and education projects are for the support of private sector training and education in the field of anadromous salmonid habitat analysis and restoration. Proposals may include those for:
  - 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;
  - Scholarship funding for attending workshops and conferences that teach restoration techniques;
  - Operation of nonprofit restoration technical schools; and
  - Production of restoration training and education workshops and conferences.
  
2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Number of plans/designs for restoration/conservation actions developed as a result of this project;
  - b. Acres of land affected by landowner plans/designs for restoration/conservation actions;
  - c. Dollar amount of donations made to restoration/conservation activities as a result of this project;
  - d. Number of volunteers committed to restoration/conservation activities as a result of this project;
  - e. If the project results in habitat protection or restoration actions:
    - i. Number of restoration projects proposed;
    - ii. Type(s) of treatments applied, indicate the FRGP Proposal Project Type(s);
    - iii. Acres of salmonid habitat protected/restored;
    - iv. Number of watersheds protected/restored; and
    - v. Dollar value of habitat treatments applied.
  
3. Each proposal must describe in detail the following additional specific information in the project description;
  - 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. Number of educational documents completed/distributed; and
  - h. Number of landowners reached by project.

4. Applicants for this project type must include the following supplemental information:
  - a. Watershed map;
  - b. Provisional Landowner Access Agreement; and
  - c. Evaluation plan that will be used to evaluate the program's effectiveness in meeting specific objectives for participants. Describe in detail how gains in participant knowledge will be measured. Describe also how the participant will be able to demonstrate whether the project has met their expectations and will be able to make programmatic recommendations that may impact design of future projects. This evaluation plan must provide the means to measure the project's success, such as pre- and post-testing, performance standards, or an assessment rubric. It is mandatory that the successful grant recipient submit the results and analysis of their evaluation within a final report at the end of the project period.

### ***Water Conservation Measures (WC)***

1. Eligible water conservation projects are those that provide more efficient use of water extracted from stream systems and result in an increase in flows that benefit aquatic species. Off-channel water storage, changes in the timing 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. Pre-project planning for application submittal should include the necessary steps to quantify existing consumptive uses and water savings expected due to project implementation. This information, outlined in sections 3 and 4 below, is necessary for a "ready-for-submittal" 1707 application to the State Water Resources Control Board. Proposals to develop this information should be submitted under the Watershed Evaluation, Assessment and Planning (PL) project category. Water conserved by projects considered for funding by the FRGP shall be dedicated to the stream for anadromous salmonid benefits through a mechanism such as a Forbearance Agreement, an Instream Flow Lease, or a formal dedication or transfer of water rights through Chapter 10, Section 1707 of the California Water Code (1707 petition).
2. If the proposal is funded, the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;

- a. The length of the stream reach that is improved;
  - b. A comparison between pre-and post-project flows, measured in cubic feet per second (cfs);
  - c. A description of stream improvement (e.g. how much year-round fish-bearing stream has been enhanced).
3. Each proposal must describe in detail the following additional specific information in the project description:
- a. Describe when and where flow is a limiting factor for anadromous fish; describe which life history stages are limited by flow; describe how much flow will be needed to improve growth, survival, adult migration and smolt outmigration.
  - b. Describe any instream flow studies that have been conducted. Include a copy of the study in the Supplemental Information.
  - c. Describe how the proposed project will result in water conservation that will directly benefit the anadromous fishery/stream ecosystem. Describe the amount of water that will be made available and how that water will address fish needs as measured by improvements to water quantity and quality (i.e., increased instream flow, expected change in temperature and chemistry) in relation to critical times of the year (i.e., improve conditions for migration, spawning or rearing). Be as specific as possible. For water quantity, state the expected range of additional yield over what reach(es) and season. For water quality, state which parameters and the expected range(s) of approved values over what reach(es) and season.
  - d. Describe the reach of stream that will be enhanced by the proposed project (which might only extend downstream to the next diversion). If other diversions occur within the dedicated reach, describe how the project will be monitored to assure that the project is providing enhanced conditions and that flow remains in the system and is not being diverted by downstream users (i.e. existing restrictions on downstream users, agreements with adjacent landowners/water groups). Describe what entity will conduct the monitoring and any funding sources to assure that monitoring is completed.
  - e. Start date of dedicated flow left instream, end date of dedicated flow left instream, and total number of days that flow was dedicated to instream use.
  - f. Flow rate in cfs of water conserved (i.e., maintained in the stream), stream stage changes.
  - g. If groundwater will be used as a substitute for the surface water being conserved, demonstrate that the water being pumped will not impact the project stream reach, and that the use of this groundwater will not result in a loss of surface water flow in the project river.
  - h. Indicate type of required listed species surveys that will be performed and type of protocols to be used;
  - i. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: author, date, title, name, source, source address.
  - j. Demonstrate a valid right for the water that is proposed for dedication, transfer or conservation by providing documentation of the type of water right held (e.g.,

claimed under pre-1914 appropriative or riparian rights, established through post-1914 appropriative rights, adjudicated water rights, etc.) and the volume of water the diversion is authorized to divert from the stream.

- k. Document the water right priority within the dedicated reach. Verify that 1) the water being proposed for conservation is senior enough to provide water for instream flow during the dedication period, and that 2) the conserved water will not be subsequently removed from the stream by either upstream water right holders, or downstream water rights holders within the dedicated reach.
- l. Based on the water right and its priority, describe any variances between the water right held and the amount of water realized as the result of higher priority water right use (such as when natural flows are insufficient to fulfill all of the existing appropriations in a particular year and the most junior (recent) water right holders must refrain from diversion until the rights of the senior holders are fulfilled).
- m. Validate the requested change in water right with the court and the State Water Resources Control Board (SWRCB) if the right is included in an adjudication. Verify if a Supplemental Decree is required from the court.
- n. Water conservation projects that will utilize Chapter 10, Section 1707 of the California Water Code to dedicate the water conserved to instream beneficial use must describe how the 1707 dedication process will be accomplished as part of this project, including the data needed to apply for and successfully complete the transaction with the SWRCB (and the court if the dedicated water right has been adjudicated), how these data will be developed, and the time line estimated for the dedication process. An early consultation/coordination meeting with the SWRCB, and the CDFW Water Rights Coordinator in the region where the dedication will occur, will be necessary in order to accomplish this task.
- o. Describe all of the water right changes needed to implement the project and any communications or coordination with the SWRCB. Provide a copy of the SWRCB Petition for Change Involving Water Transfers - Instream Flow Dedication form and any supplemental documentation for water dedicated through the 1707 petition.
- p. For water conservation projects that utilize forbearance agreements or instream flow leases: Describe the local organization that will be responsible for developing the agreement and/or lease, and its experience and organizational capacity to develop such agreements and to coordinate post-project water monitoring and water use in the watershed.

NOTE: Forbearance Agreements and Instream Flow Leases are used to dedicate water, not the water right, to instream flow purposes and are established directly with water rights holders independently of the State Water Resources Control Board water rights process. To date, forbearance agreements and instream flow leases have been limited to watersheds where there are established organizations with the capacity to coordinate and develop agreements and leases, water monitoring, and water use.

- 4. Grant applications for this project type must include the following supplemental information. This information will allow the Department 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. Project Location Map: The project must be shown on an appropriately scaled, USGS (or equivalent) 7.5 minute contoured topographic quadrangle map that shows the watershed, county, or other appropriate boundary and the representative point must be provided. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. The location map should depict the affected stream reach, show the relevant point or points of diversion and provide the latitude and longitude of each diversion point and the relevant places of use. This information should be consolidated on a single map to the extent multiple water rights or points of diversion are involved in the project. Project should be represented as point(s) or line(s), according to the following guidelines:
  - i. Features that are more than ½ mile apart will be shown as separate points on the map;
  - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed;
  - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage
- b. Provisional Landowner Access Agreements.
- c. Water Use Verification: Include copies of all water right reports filed with the SWRCB (Initial and Supplemental Statements of Water Diversion and use, Progress Reports by Permittee, and Reports of Licensee), Watermaster, or any other reporting entity for the last 5 year period. 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 section 1241). Use a spreadsheet to:
  - i. Document the quantity and seasonality of existing water use (including consumptive water use. If the 1707 petition includes a Section 1725 Petition for Temporary Transfer of Water/Water Rights, the water dedicated to instream flow will be limited to the amount of water that would have been stored or consumptively used);
  - ii. Quantify the continuous rate of diversion (in cfs) as it occurs throughout the day for each day of diversion over the past 5 years and provide adequate documentation.
- d. For water right permit holders: If water has not been fully put to beneficial use, describe when the permit is scheduled to go to license or provide documentation of any Petition(s) for Extension of Time that have been filed.
- e. Provide an estimate of the water losses due to delivery/distribution inefficiencies such as evapotranspiration, conveyance losses, and/or percolation into the ground based on the amount of water diverted compared to the water realized for use at the point of delivery (record of use);
- f. Identify any plans or programs for future water needs, and how this water will be obtained.

NOTES: (1) Water right holders with junior water rights must yield to diverters with more senior water rights, and thus may not be able to legally divert or transfer water in dry years or dry periods. Therefore, depending on the water year, a junior appropriative right dedication may not yield any actual flow increases to the stream. Diverters should review their water rights in relation to actual flows, and the seniority of upstream and downstream diverters, to determine how much water could actually be transferred through a Section 1707 dedication or realized through a forbearance or short-term lease agreement.

(2) In some instances junior water rights holders have rights against making changes in how the river conveys water (i.e. a senior water rights holder may be denied a request to change how they exercise their water right if it adversely affects a junior water right holder's ability to exercise their right). Also, changes to stream flow could impact upstream users depending on the point of flow measurement and permit/license conditions. For example, if the point for measuring bypass flow for an upstream permit/license is below the applicant's project diversion, then there is a possibility that the project may impact the upstream user's water right if it will result in changes to the bypass flow. Applicant must verify with the SWRCB that the proposed project is feasible.

### ***Water Measuring Devices (Instream and Water Diversion) (WD)***

1. Eligible water measuring device projects are those that will install, test and maintain instream and water diversion measuring devices. Project designs must follow guidelines described in the *Water Measurement Manual, third edition (United States Bureau of Reclamation)* [http://www.usbr.gov/pmts/hydraulics\\_lab/pubs/wmm/wmm.html](http://www.usbr.gov/pmts/hydraulics_lab/pubs/wmm/wmm.html). 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.
2. If the proposal is funded the following information will be required with the Final Report of the grant agreement. This information is provided so that the applicant is able to budget for these deliverables in the proposal as necessary. The required information is as follows;
  - a. Stream/Diversion Gauge Evaluation report, including as-built plans of the measuring device, its location (lat/long; decimal degrees, NAD 83), and intended use (stream flow or diversion measurement); and

- b. An operation/maintenance agreement defining who keeps a weir or gauge operating.
3. Each proposal must describe in detail the following additional specific information in the project description:
  - a. Number of water flow gauges installed; and
  - b. Indicate type of required listed species surveys which will be done and type of protocols to be used.
4. Applicants for this project type must include the following supplemental information:
  - a. Intermediate Plan. If a design element within the intermediate plan is thought to be unnecessary, please provide the rationale for not including it;
  - b. Conceptual Plan. If an intermediate plan is determined to be unnecessary provide a conceptual plan;
  - c. Project Location Topographic Map: The project must be shown on an appropriately scaled, USGS (or equivalent) 7.5 minute contoured topographic quadrangle map that shows the point(s) of water measuring device(s). USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Project should be represented as point(s) or line(s), according to the following guidelines:
    - i. Features that are more than ½ mile apart will be shown as separate points on the map;
    - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed;
    - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage;
  - d. Watershed Map;
  - e. Provisional Landowner Access Agreement; and
  - f. Water Right Verification: 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.

### ***Water Purchase / Lease (WP)***

1. Eligible water purchase projects are those that include the purchase, lease, or acquisition of water rights, both short and long-term, that will protect and improve water quality and quantity. This category includes water conservation purchases or leases that will result in quantifiable amounts of water being made available in streams for fish use.
2. If proposal is funded, 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. Funding for the appraisal may be included in the

water purchase proposal or can be included as a component of a planning project. The grant award shall be considered conditional, contingent upon an appraisal that is acceptable to CDFW. All real property shall be acquired from a willing seller and in compliance with current laws governing relocation and acquisition of real property by public agencies. Disbursement of grant funds may be subject to prior approval of fair market value by the State Department of General Services. The acquisition must name the State of California, Department of Fish and Wildlife, or its designee, as an expressed third party beneficiary entitled to all of the rights and remedies of the easement holder under the easement, and provide that if the property holder dissolves or elects to transfer the ownership, its interest shall be transferred to CDFW, or its designee, if CDFW elects. Copies of all baseline information, reports and notices pursuant to or in connection with the acquisition must be provided to CDFW. No amendment or modification of the acquisition shall be effective unless approved in writing by CDFW.

3. Each proposal must describe in detail the following additional specific information in the project description:
  - a. Type of acquisition and evidence of the owner's willingness to sell. Only acquisitions for which there is a willing seller will be considered;
  - b. A narrative describing who will manage the acquisition, how the acquisition will be managed, and how the water rights purchase, lease, or easement will protect and enhance salmonid habitat;
  - c. A narrative describing current use, diversion, basis for determining the amount of flow available, how the proposed additional flow will be measured, and the mechanism that would be used to track downstream travel of water purchased or leased. Describe any facilities that may require removal or renovation for flows to enter the stream;
  - d. A survey of surrounding landowners and downstream users and a narrative describing how the water rights purchase or lease will impact downstream users, and how surrounding land use and downstream impacts will be mitigated. Also include any rights or claims downstream users may have to flow. If the proposal is based on cooperative lease or purchase agreements, a list of project cooperators must be provided;
  - e. Signed affidavit from water rights owner verifying verification that the water right has been maintained continuously;
  - f. A narrative describing who will hold and monitor the water rights purchase or lease, establish baseline information, and maintain monitoring records;
  - g. Miles of stream protected for adequate flow;
  - h. Flow rate in cfs of water leased/purchased;
  - i. Start date of return flow to the stream;
  - j. End date of return flow to the stream;
  - k. Number of days that flow was returned to the stream;
  - l. Acre-feet of water leased/purchased; and

- m. If the project is identified in an assessment or recovery plan, provide the name of the plan/assessment, in the format: Author, date, title, name, source, source address.
4. Applicants for this project type must include the following supplemental information:
- a. Project Location Topographic Map: The project must be shown on an appropriately scaled, USGS (or equivalent) 7.5 minute contoured topographic quadrangle map that shows the point(s) of diversion. USGS Quad names for all areas shown on the map need to be clearly labeled on every map submitted. Project should be represented as point(s) or line(s), according to the following guidelines:
    - i. Features that are more than ½ mile apart will be shown as separate points on the map;
    - ii. Features less than ½ mile apart should be combined into one line on the stream where work is being performed;
    - iii. If the features are closer than ½ mile apart BUT are on different drainages, the project should be represented as multiple sites, by stream/drainage;
  - b. Watershed Map;
  - c. Provisional Landowner Access Agreement;
  - d. Water Right Verification: Written verification for a project that addresses issues related to the diversion, use, storage, or purchase of water, of the right to divert, use, store, or sell or transfer the water; and
  - e. Narrative Appraisal: Prior to final review by the TRT (August 1), a full narrative appraisal of the proposed interest (water), prepared pursuant to the "Uniform Standards for Professional Appraisal Practices" of the Appraisal Standards Board and compliance with Department of General Services Real Property Services Section specifications. Submit two copies of the appraisal to 830 "S" Street, Sacramento, CA 95811. The grant award shall be considered conditional, contingent upon an appraisal that is acceptable to CDFW.