FRGP Project Type Overview

FRGP accepts proposals for the project types listed in each year's PSN (see FRGP's Solicitation page for the most recent PSN). Applicants must identify the project type(s) that best describes the proposed project, which is carried over to the grant (if awarded). FRGP has developed a two-letter coding system for project types, described below.

Fish Passage at Stream Crossings (FP)


Eligible fish passage (FP) projects are specifically limited to removing barriers to migration. FP projects include any human-made crossing over or through a stream channel (such as paved roads, unpaved roads, railroads, trails or paths, fair-weather Arizona crossings, bridges, culverts, baffles, old infrastructure, or any other anthropogenic built means to cross a water way). FP projects focusing on road crossings must provide evidence of the extent to which the crossing a barrier to anadromous salmonids.

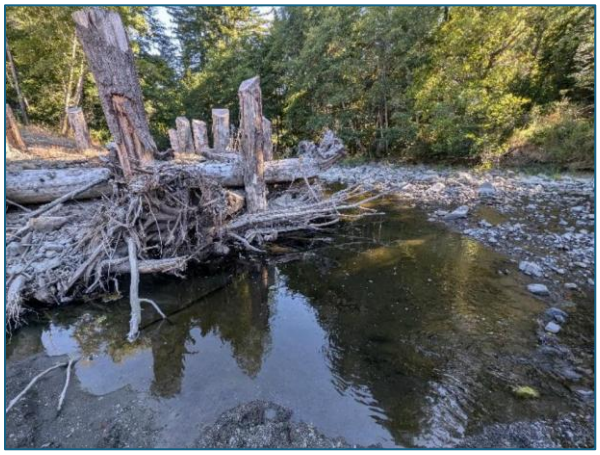
FP projects do not include the construction of new fish ladders or upgrading/maintaining existing fish ladders. Dams are not included under FP projects.

Instream Barrier Modification for Fish Passage (HB)


Eligible instream barrier (HB) projects are limited to work in the stream channel (bankfull) and along the stream bank. HI projects include instream barriers (such as grade control structures [weirs], flashboard dams, dams, debris basins, water diversion structures, and log debris accumulations). HB projects focusing on barrier modification and removal provide evidence of the extent to which the structure is a barrier to anadromous salmonids.

HB projects do not include the construction of new fish ladders or upgrading/maintaining existing fish ladders.

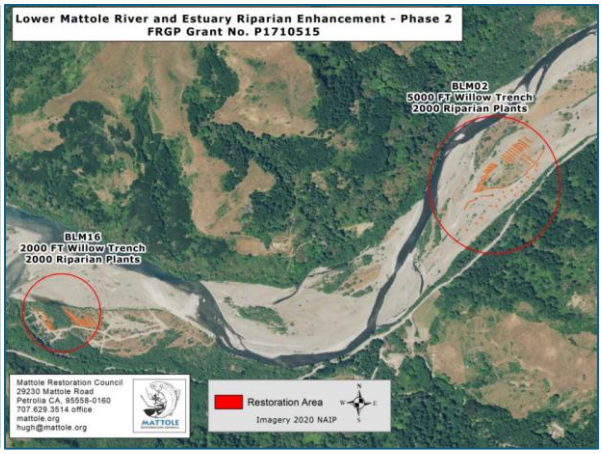
Instream Habitat Restoration (HI)

Eligible instream habitat (HI) projects are limited to work in the stream channel (bankfull) and floodplains. HI projects include the installation of large wood, root wads, beaver dam analogs, Post Assisted Log Structures, boulder features and weirs, gravel augmentation, side channel construction, and floodplain connectivity projects (such as off-channel features and floodplain grading projects).

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

Riparian Restoration (HR)



Eligible riparian restoration (HR) projects restore bare or partially denuded banks adjacent to the stream and within the stream corridor. HR projects eradicate non-native, invasive vegetation species and revegetate with native/endemic, riparian species.

The riparian area is defined as the area between a stream and the adjacent upland area identified by soil characteristics and distinct vegetation. It includes wetlands and portions of floodplains and valley bottoms that support riparian vegetation.

Instream Bank Stabilization (HS)

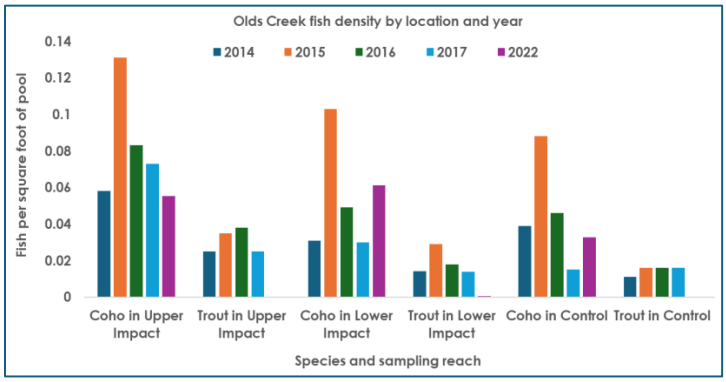
Eligible bank stabilization (HS) projects include stabilization of eroding, collapsing, or otherwise destabilized banks.

Watershed Restoration - Upslope (HU)

Eligible upslope restoration (HU) projects reduce sediment delivery to the stream channel and include road treatments, road decommissioning, and upland erosion and sediment control. HU projects are only for worksites that are expected to erode and deliver sediment to an anadromous fish-bearing stream. Any upslope restoration work beyond the riparian area must focus on correcting major problems affecting the watershed.

Upload erosion assessments and the method for determining sediment saved from delivery to the stream channel must use the protocol described in the CA Restoration Manual, Part X (or a CDFW-approved alternative method). HU projects must meet the criteria for the specific action described in the CA Restoration Manual, Part X.

Monitoring Watershed Restoration (MO)

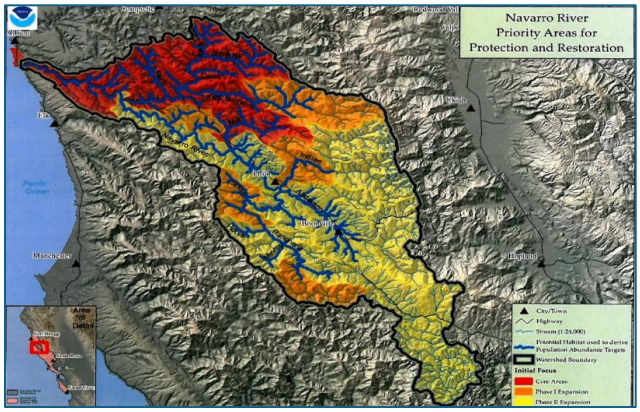


Eligible restoration monitoring (MO) projects address Effectiveness Monitoring (to determine if restoration treatment and features have produced the desired habitat response and/or physical watershed processes) and/or Validation Monitoring (to

determine if restoration treatment and features have produced the desired salmonid species response).

MO projects that involve fish collections must possess a current CDFW Scientific Collecting Permit before fish sampling may occur. If the MO project may result in a direct or incidental take of CESA-listed fish, a Memorandum of Understanding between CDFW and the grantee authorizing a limited level of take for scientific purposes must also be in effect (pursuant to Fish and Game Code §2081(a)). Grantees must demonstrate current ESA take coverage to obtain a CESA MOU.

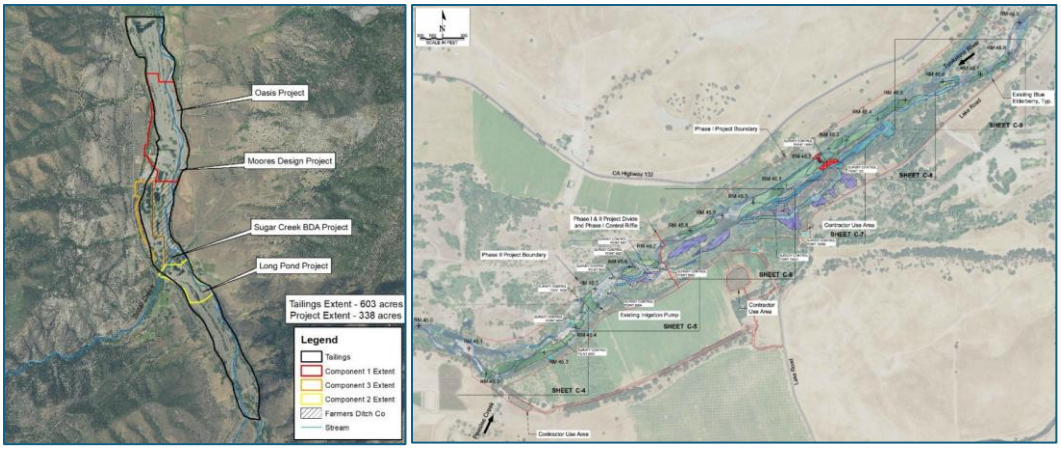
Watershed and Regional Organization (OR)



Eligible watershed and regional organization (OR) projects assist locally based organizations in generating landowner or public support for projects that address recovery tasks and demonstrate immediate benefit to anadromous salmonids in local watersheds. Priority is given to watersheds with no previous organization efforts.

Examples of OR projects include but are not limited to: (1) the initial outreach and inventories associated with barrier remediation, (2) providing flows to keep fish in good condition, (3) instream habitat improvement. OR projects are not intended to fund ongoing organization efforts over the long term, but rather to provide the initial funding to build support for restoration purposes.

Project Design (PD)



Eligible project design (PD) projects develop designs for restoration activities that would protect or improve habitat for salmonids (e.g., fish barrier modification/removal, bank stabilization, fish screens, water conservation).

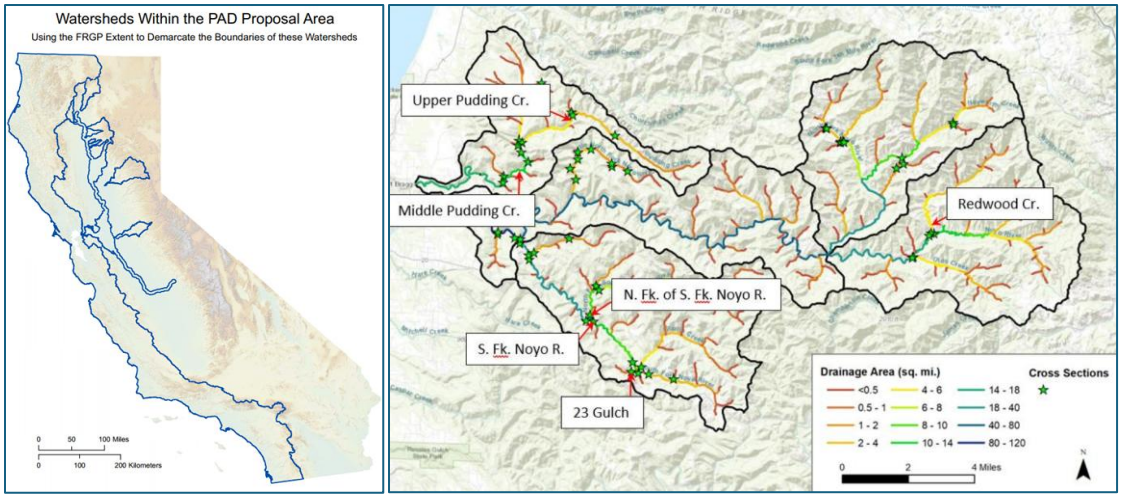
PD projects may be feasibility studies (less than 100% design delivered) or design development projects. A design development project must include an options analysis, a basis of design report, 30% design plans, 65% design plans, 90% design plans, and 100% final design plans as deliverables.

PD projects for water conservation planning/design must undertake the analyses necessary to develop projects that enhance instream flow, including the permits and agreements for the project (e.g., petitions to dedicate instream flow pursuant to Water Code §1707, forbearance agreements, instream flow leases).

Public Involvement and Capacity Building (PI)

Eligible public involvement and capacity building (PI) projects take place within multiple counties/regions/watershed areas and are directed towards salmonid habitat restoration efforts. PI projects include AmeriCorps programs that deal with environmental projects and issues that assess, conserve, restore, monitor, and enhance coastal California anadromous watersheds.

Watershed Evaluation, Assessment, and Planning (PL)

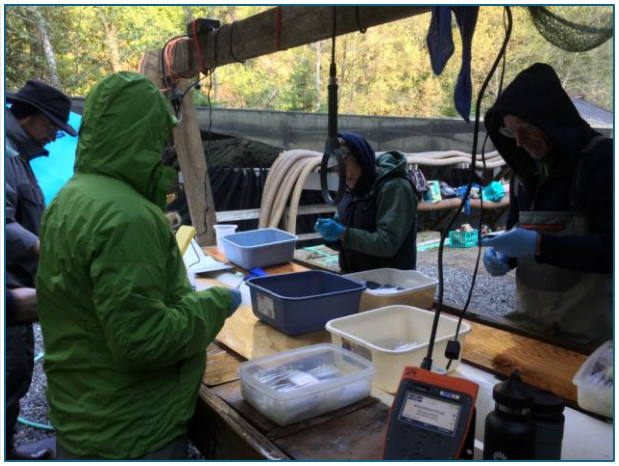


Eligible watershed evaluation, assessment, and planning (PL) projects develop watershed plans, develop ranch implementation plans, conduct watershed assessments, conduct instream flow studies, and create/manage databases which benefit or coordinate information about salmonids and/or restoration and management of their habitat.

A watershed is defined as all land enclosed by a continuous drainage basin that drains to, or contributes to, a stream, lake, or other body of water. It is a common area that flows to a larger stream or into the ocean and is inhabited now (or in the past) by any combination of ESA-listed salmonids.

Watersheds can vary in scale from a headwater or first order stream to including multiple sub-watersheds. Planning work in non-contiguous sub-watersheds within a hydrologic basin may be submitted under a single PL project if restoration of the non-contiguous sub-watersheds will correct major problems affecting the entire hydrologic basin.

Cooperative Rearing (RE)

Eligible cooperative fish rearing (RE) projects are artificial propagation projects designed to supplement and restore depleted populations of ESA-listed salmonids. All projects must comply with the directives of the joint CDFW and NMFS Hatchery Operations Review Committee. RE projects must meet all legal and policy requirements of Fish and Game Code §1200-1206. New and established programs must follow the guidelines outlined in the *Recovery Strategy for California Coho Salmon*, Appendix H.

CDFW only funds projects supporting federal and state conservation hatchery programs and CDFW's Chinook Salmon fisheries enhancement program. CDFW will not fund the design or construction of rearing facilities or the purchase of equipment, only the management and operation of RE projects.

Fish Screening of Diversions (SC)


Eligible fish screen (SC) projects install fish protection devices at or near a water diversion that physically prevents entrainment, injury, or death or targeted aquatic species. SC projects must meet CDFW and NMFS screening criteria found in the CA Restoration Manual, Appendix S.

Fish screens are 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. Fish screens physically preclude fish from entering the diversion and do not rely on avoidance behavior, such as electrical or sonic fish barrier technology. Besides preventing fish from passing, fish screens are designed to minimize stress and injuries that occur when fish impact the screen or are subjected to changes in water velocity and direction caused by the diversion.

Fish screens are categorized by: (1) diversion type (gravity vs. pump) and (2) debris cleaning function ("active" or automatic vs "passive" or manual cleaning).

Private Sector Technical Training and Education (TE)

Eligible technical training and education (TE) projects provide support for private sector training and education in the field of anadromous salmonid habitat analysis and restoration.

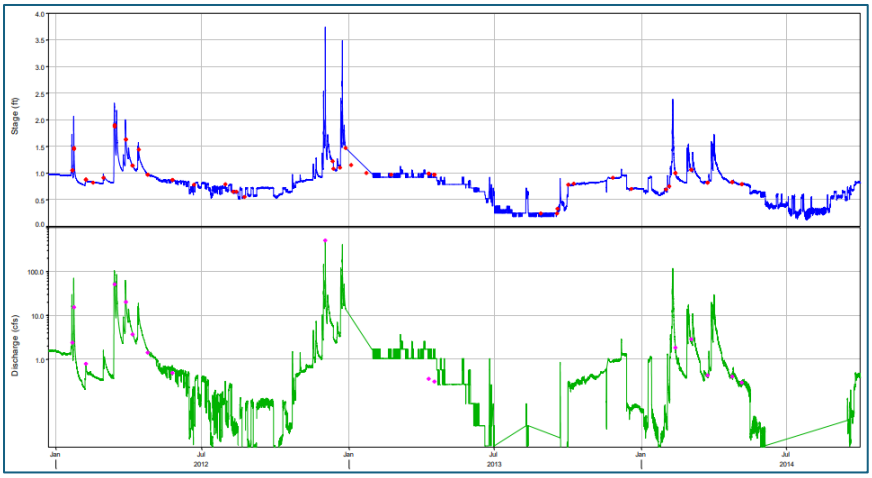
Examples of TE projects include but are not limited to: (1) operation of nonprofit restoration technical schools, (2) the production of restoration training and education workshops and conferences, (3) scholarship funding for attending workshops and conferences that teach restoration techniques, and (4) teaching private landowners about land/water management practices that contribute to salmonid habitat protection and restoration.

Water Conservation Measures (WC)

Eligible water conservation (WC) projects 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/source of water supply, moving points of diversion, irrigation ditch lining, piping, stock-water systems, and agricultural tailwater recovery/management systems are considered WC projects when the water savings are quantified and dedicated for instream beneficial flows. WC projects should be consistent with and contribute to the implementation of the *California Water Action Plan*, *California Water Resilience Portfolio*, *California Climate Adaptation Strategy*, etc.

FRGP only funds WC projects that include an instream dedication of 100% of the water saved due to project implementation and in a manner to support fish during water-limited seasons. Water conserved by funded projects must be dedicated to the stream for anadromous salmonid benefits through a mechanism (such as a forbearance agreement, an instream flow lease, and/or a formal dedication/transfer of water rights pursuant to Water Code §1707).

Water Measuring Devices - Instream and Water Diversion (WD)



Eligible water measuring device (WD) projects install, test, and maintain instream and water diversion measuring devices. WD projects should be consistent with and contribute to the implementation of the *California Water Action Plan* or the California Climate Adaptation Strategy. WD project designs must follow the guidelines described in the U.S. Bureau of Reclamation's *Water Measurement Manual*.

Instream gauges must be installed so they do not impede fish passage in anadromous streams. WD projects do not provide funding for monitoring or water management purposes, although testing/rating of the measuring system may be allowed or required as part of a funded agreement. Consideration of the intended use of the water measuring devices will be evaluated during CDFW review of proposals.