



US Army Corps
of Engineers

Regulatory Branch
333 Market Street
San Francisco, CA 94105-2197

SAN FRANCISCO DISTRICT

PUBLIC NOTICE

NUMBER: 27922N

DATE: June 25, 2003

RESPONSE REQUIRED BY: July 25, 2003

PERMIT MANAGER: Mark D'Avignon

PHONE: 415-977-8507

Email: mdavignon@spd.usace.army.mil

1. **INTRODUCTION:** The California Department of Fish and Game, 830 S Street Sacramento, California 95814, (Contact: Ms. Helen Birss (916) 327-8842) has applied for a Department of the Army Regional General Permit (RGP) to place fill materials into waters of the U.S. in association with the implementation of salmonid habitat enhancement projects through the California Department of Fish and Game's Fisheries Restoration Grant Program. This application is being processed pursuant to the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344).

2. **PROJECT DESCRIPTION:** As shown in the attached drawings, the applicant plans to carry out salmonid habitat enhancement projects in various streams and rivers throughout the following coastal California Counties: Alameda, Contra Costa, Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito, San Francisco, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Siskiyou, Solano, Sonoma, and Trinity. This proposed RGP would apply only to counties that are within the Regulatory jurisdictional boundaries of the Corps' San Francisco District. The Department of Fish and Game's salmonid habitat restoration activities typically occur in watersheds that have been subjected to significant levels of logging, road building, urbanization, mining, grazing, and other activities that have reduced the quality and quantity of stream habitat available for native anadromous fish species (i.e. chinook salmon, coho salmon, steelhead trout, and coast cutthroat trout).

The purpose of the proposed project is to restore anadromous fisheries habitat in non-tidal reaches of rivers and streams, improve watershed conditions impacting salmonid streams, and improve the survival, growth, migration, and reproduction of anadromous fish.

The California Department of Fish and Game, through the Fisheries Restoration Grant Program (FRGP), uses funds mandated to restore degraded anadromous fish habitat in coastal streams for a variety of salmonid habitat restoration projects. These restoration projects must be consistent with procedures found in the *California Salmonid Stream Habitat Restoration Manual*, Third Edition, February 1998. The FRGP manages an annual grant cycle initiated in the spring of each year.

The FRGP supports a variety of projects from sediment reduction to watershed education throughout coastal California. Projects selected for funding have two years to be implemented, and most of the habitat restoration activities take place during the dry summer season. The majority of this funding is awarded for habitat restoration projects that improve overhead cover, spawning gravels, and pool habitat; reduce or eliminate erosion and sedimentation impacts; screen diversions, and remove barriers to fish passage. These habitat restoration activities conform to mandates of the California Legislature in the Fish and Game Code and Public Resources Code. Funds are also awarded for indirect habitat restoration activities.

The proposed activities are designed to restore salmon and steelhead habitat with the goal of increasing populations of wild anadromous fish in coastal streams and watersheds. Habitat restoration activities and practices, covered in more detail below, include fish passage projects, bank stabilization treatments, upslope road decommissioning or repair, and replacement or modification of culverts that are barriers to fish passage. Proposed instream structures would provide predator escape and resting cover, increase spawning habitat, improve upstream and downstream migration corridors, improve pool to riffle ratios, and add habitat complexity and diversity. Some structures would be designed to reduce sedimentation, protect unstable banks, stabilize existing slides, provide shade, and create scour pools.

The RGP would authorize minor fill discharges of earth, rock, and wood associated with the habitat restoration activities. These activities conform to state law and are implemented consistent with the *California Salmonid Stream Habitat Restoration Manual* (Flosi et al., 1998). The most current version of the manual is available at: <http://www.dfg.ca.gov/nafwb/index.shtml>. General information on the FRGP is available at <http://www.dfg.ca.gov/nafwb/fishgrant.shtml>. The following paragraphs are a descriptive list of the proposed activities as depicted in the attached project drawings:

a. **Instream habitat improvements:** These may include cover structures (divide logs; digger logs; spider logs; and log, root wad and boulder combinations), boulder structures (boulder weirs; vortex boulder weirs; boulder clusters; and single and opposing boulder wing-deflectors), and log structures (log weirs; upsurge weirs; single and opposing log wing-deflectors; and Hewitt ramps). Techniques and practices are identified in Part VII of the *California Salmonid Stream Habitat*

Restoration Manual. Techniques for placement of imported spawning gravel are identified on page VII-46 of the *California Salmonid Stream Habitat Restoration Manual*.

b. **Unanchored large woody debris:** Woody debris may be used to enhance pool formation and improve stream reaches. First through third order streams are generally best suited. Logs selected for placement should have a minimum diameter of 12 inches and a minimum length 1.5 times the mean bankfull width of the stream channel reach type at the deployment site. Root wads would be selected with care and have a minimum root bole diameter of five feet and a minimum length of fifteen feet and at least half the channel type bankfull width. More information can be found on page VII-23 of the *California Salmonid Stream Habitat Restoration Manual*.

c. **Fish screens:** Screens would be used to prevent entrainment of juvenile salmonids in water diverted for agriculture, power generation, or domestic use, and are needed on both gravity flow and pump diversion systems. Guidelines for functional designs of downstream migrant fish passage facilities at water withdrawal projects are found in Appendix S of the *California Salmonid Stream Habitat Restoration Manual*. The appendix of the manual covers structure placement, approach velocity, sweeping velocity, screen openings, and screen construction.

d. **Fish passage at stream crossings:** Stream crossing projects include activities that provide fish friendly crossings where the crossing width is at least as wide as the active channel, culvert passes are designed to withstand a 100-year storm flow, and crossing bottoms are buried below the streambed. Examples include replacement of barrier stream crossings with bridges, bottomless arch culverts, embedded culverts, or fords. Guidelines for fish passage practices are covered in Part IX of the *California Salmonid Stream Habitat*

Restoration Manual. Baffled culvert (Washington baffles and steel ramp baffles), fishways (step and pool, Denil fishway, Alaskan steep pass and back-flooding weirs), and fish ladders are described in Part VII.

e. **Fish Passage Improvements:** These activities would include removal of obstructions (i.e. log jams, beaver dams, waterfalls and chutes and landslides). Suitable large woody debris removed from fish passage barriers that is not used by the project for habitat enhancement shall be left within the riparian zone so as to provide a source for future recruitment of wood into the stream. Logjam barriers are typically less than 10 cubic yards. Guidelines for fish passage improvements are covered in Part VII of the *California Salmonid Stream Habitat Restoration Manual*.

f. **Upslope restoration:** These activities reduce sediment delivery to anadromous streams including road decommissioning, road upgrading, and storm proofing roads (replacing high risk culverts with bridges, installing culverts to withstand the 100 year flood flow, installing critical dips, installing armored crossings, and removing unstable sidecasted and fill materials from steep slopes.). Guidelines for upslope restoration practices are covered in Part X of the *California Salmonid Stream Habitat Restoration Manual*.

g. **Watershed and stream bank stability activities:** These activities would reduce sediment from watershed and stream bank erosion. Examples include slide stabilization, stream bank stabilization, boulder stream bank stabilization structures, log stream bank stabilization structures, tree revetment, native material revetment, mulching, revegetation, willow wall revetment, brush mattress, checkdams, brush checkdams, waterbars, exclusionary fencing. Guidelines for watershed and streambank stability are covered in Part VII of the *California Salmonid Stream Habitat Restoration Manual*.

All habitat improvements shall be carried out in accordance with techniques in the *California*

Salmonid Stream Habitat Restoration Manual. The FRGP would include the following biological resource protection measures:

- § To avoid impacts to aquatic habitat the activities undertaken in the restoration program typically occur during the summer dry season. This is generally between July 1 and November 1 or the first rainfall.
- § Location of staging/storage areas for equipment, materials, fuels, lubricants, and solvents, will be located outside of the stream's high water channel and associated riparian area. The number of access routes, number and size of staging areas, and the total area of the work site activity shall be limited to the minimum necessary to complete the restoration action. To avoid contamination of habitat during restoration activities, trash will be contained, removed, and disposed of throughout the project.
- § Any equipment work within the stream channel shall be performed in isolation from the flowing stream. If there is any flow when the work is done, the contractor shall construct cofferdams upstream and downstream of the excavation site and divert all flow from upstream of the upstream dam to downstream of the downstream dam.
- § If it is necessary to divert flow around the work site, either by pump or by gravity flow, the suction end of the intake pipe shall be fitted with fish screens meeting Fish and Game and National Marine Fisheries Service criteria to prevent entrainment or impingement of small fish. Any turbid water pumped from the work site itself to maintain it in a dewatered state shall be disposed of in an upland location where it will not drain directly into any stream channel.

- § For minor actions, where the disturbance to construct coffer dams to isolate the work site would be greater than to complete the action (e.g. the placement of a single boulder cluster), measures will be put in place immediately downstream of the work site to capture suspended sediment.
- § The spread or introduction of invasive exotic plants will be avoided to the maximum extent possible.
- § Wildlife encountered during the course of construction, will be allowed to leave the construction area unharmed. Any red tree vole nests encountered at a work site will be flagged and avoided during construction.
- § Work sites containing western pond turtles, foothill yellow-legged frogs or tailed frogs will use exclusion measures to prevent take or injury to any individual pond turtles or frogs that could occur on the site.
- § Ground disturbance that has the potential to affect cultural resources will be avoided through implementation of mitigation measures, including completing cultural resource surveys, fencing, on-site monitoring, and redesigning proposed work to avoid disturbance of cultural resources.
- § Specific measures have been developed to avoid impacts to both State and Federally listed endangered, rare, or threatened species that could occur at specific work sites, and would be implemented as required by State and Federal regulations.

3. **Endangered Species:** The proposed Fisheries Restoration Grant Program RGP may potentially affect Federally listed threatened and endangered species including, but not limited to, California freshwater shrimp (*Syncaris pacifica*), coho salmon (*Oncorhynchus kisutch*), chinook salmon

(*Oncorhynchus tshawytscha*), steelhead (*Oncorhynchus mykiss*), coast cutthroat trout (*Oncorhynchus clarki clarki*), California red-legged frog (*Rana aurora draytonii*), California tiger salamander (*Ambystoma californiense*), least Bell's vireo (*Vireo bellii pusillus*), marbled murrelet (*Brachyrampus marmoratus*), and northern spotted owl (*Strix occidentalis caurina*). Before issuance of the proposed RGP, the Corps will consult with the National Marine Fisheries Service (NOAA Fisheries) and the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act of 1973, as amended, for any project related effects upon Federally listed threatened and endangered species and their critical habitat.

4. **STATE APPROVALS:** Under Section 401 of the Clean Water Act (33 U.S.C. Section 1341), an applicant for a Corps permit must obtain a State water quality certification or waiver before a Corps permit may be issued. The applicant has provided the Corps with evidence that he has submitted a valid request for State water quality certification to the San Francisco Bay Region Regional Water Quality Board. No Corps permit will be granted until the applicant obtains the required certification or waiver. A will be deemed to have occurred if the State fails or refuses to act on a valid request for certification within 60 days after the receipt of a valid request, unless the District Engineer determines a shorter or longer period is reasonable for the State to act.

Those parties concerned with any water quality issues that may be associated with this project should write to the Executive Officer, California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612, by the close of the comment period of this public notice.

The applicant has also contacted the California Coastal Commission to determine the need for a Coastal Zone Permit for the proposed FRGP.

5. ENVIRONMENTAL ASSESSMENT: The Corps of Engineers will assess the environmental impacts of the action proposed in accordance with the requirements of the National Environmental Policy Act of 1969 (Public Law 91-190), and pursuant to Council on Environmental Quality's Regulations, 40 CFR 1500-1508, and Corps of Engineers' Regulations, 33 CFR 230 and 325, Appendix B. Unless otherwise stated, the Environmental Assessment will describe only the impacts (direct, indirect, and cumulative) resulting from activities within the jurisdiction of the Corps of Engineers. The documents used in the preparation of the Environmental Assessment will be on file in the Regulatory Branch, Corps of Engineers, 333 Market Street, San Francisco, California.

6. EVALUATION OF ALTERNATIVES:

Evaluation of this activity's impacts includes application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b)(1) of the Clean Water Act (33 U.S.C. 1344(b)). An evaluation was made by this office under the 404(b)(1) guidelines and it was determined that the proposed project is water dependent. Evaluation of this activity's impact on the public interest will also include application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b)(1) of the Clean Water Act, 33 U.S.C. Section 1344(b).

7. PUBLIC INTEREST EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts that the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable

detriments. The decision whether to authorize a proposal, and if so the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general balancing process. That decision will reflect the national concern for both protection and utilization of important resources. All factors that may be relevant to the proposal must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

8. CONSIDERATION OF COMMENTS: The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

9. SUBMISSION OF COMMENTS: Interested parties may submit in writing any comments concerning this activity. Comments should include the applicant's name, the number, and the date of this notice and should be forwarded so as to reach this

office within the comment period specified on page one of this notice. Comments should be sent to the Regulatory Branch. It is Corps policy to forward any such comments that include objections to the applicant for resolution or rebuttal. Any person may also request, in writing, within the comment period of this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Additional details may be obtained by contacting the applicant whose address is indicated in the first paragraph of this notice, or by contacting Mark D'Avignon at telephone (415)-977-8507 or E-mail: mdavignon@spd.usace.army.mil. Details on any changes of a minor nature which are made in the final permit action will be provided on request.