

Rapid Permit Process for Stream Protection

The San Francisco Regional Water Quality Control Board (Water Board) is involved in the protection of San Francisco Bay area watersheds through a variety of programs and activities. These include the issuance of: Clean Water Act Section 401 water quality certifications of U.S. Army Corps Section 404 and Section 10 permits; Waste Discharge Requirements under the California Porter Cologne Water Quality Control Act; and NPDES municipal and construction stormwater general permits. The Water Board is also involved in the management and oversight of mitigation projects required as permit conditions and the management of State grants. The Water Board is developing a series of TMDLs (Total Maximum Daily Loads) for impaired waterbodies throughout the region. Over the past four years the Water Board has given numerous free workshops to a wide range of stakeholders involved in –stream and watershed management, including the development community, water and flood control districts, stormwater managers, consultants, watershed organizations and environmental organizations. As part of this educational effort the Water Board has published a technical circular to help permit applicants in particular, and the broad stakeholders in general, to better protect streams while engaged in management, development or restoration activities. This circular, [A Primer on Stream and River Protection For the Regulator and Program Manager](#), is available for download from the Water Board web-site or can be ordered by mail as detailed at the end of this flier.

This flier is a summary of the advice the Water Board provides in its workshops and in communications with individual permit applicants to assist them in submitting clear and complete descriptions of their project proposals. The following check list specifies the information we typically need to evaluate a project that contains work in and around streams. The permit applicant who uses this check list will increase the likelihood of a speedy permit review and approval, because the staff reviewing the permit will have the information they need to make an intelligent decision on the potential impacts and benefits of a project proposal. The level of detail used to address the requested information should vary based on the scope of the project

Check List

1. Describe the watershed and reach influences on your project area.

Locate the position of the reach in the watershed: headwaters, middle or lower portion; and identify its basic function within a watershed context as a sediment supply reach, transport or storage reach. Identify the upstream land uses affecting the project reach. Identify the human and natural causes of altered conditions that you want to manage for, such as landslides, fault zones fire impacted areas, reservoirs, stormwater runoff and land use encroachments on the channel corridor. How is the channel changing its shape or slope because it is adjusting to straightening or other alterations Are the reaches you are concerned with being affected by natural factors such as landslides, fault lines or located in a fire zone.? Are human influences such as culverts, bridges, weirs, or vegetation removal affecting the reach? What are the

dominant processes affecting the site such as excessive erosion or deposition or is there a balance between sediment supplies and water discharges? Provide estimates of frequently occurring discharges and larger flood flows, and their stages.

2 Describe the natural factors which are influencing the channel

in the reach you want to manage. Identify the landscape features which influence the stream such as alluvial fans or tides. Are the bed and bank materials composed of fine sediments, gravel, cobble, or bedrock? Describe if the channel and floodplain are unconfined by hillsides; confined, incised or entrenched; or incised with a widening floodplain. Determine the existing slope of the valley and the channel and channel sinuosity. Try to find information on the historic channel location, type and sinuosity. Describe the basic type of stream channel in the reach of concern such as a steep step-pool channel, bedrock confined, alluvial, multiple channels (braided), discontinuous channel, a meadow or tidal area channel. Describe if the vegetation is adequate to provide bank stabilization, shading of the stream, wildlife and or fish habitat. Is this site existing habitat for fish or other aquatic species?

3. Proposed project conditions

Describe any ecological restoration, flood damage reduction, stormwater management, weed removal, or other project objectives. Describe how your project will assist the stream to attain or protect an equilibrium condition so that the channel will erode and transport sediment, create and sustain in-stream habitat without creating conditions which may lead to excessive erosion and or deposition. Describe the dimensions of the stream's active channel- or bankfull channel that you plan to protect or restore to achieve a balanced sediment transport and storage. Describe how these dimensions are derived. Provide information on the drainage area of the watershed being drained to your project site.

4. Describe how the project protects and/or restores the floodplain.

5. Describe how the project protects and/or restores the native streamside vegetation.

6. Describe how the project protects or restores the stream channel slope by avoiding destabilizing grade control structures and/or by addressing an equilibrium channel length. Provide information on the valley slope and the proposed channel slope and sinuosity of the stream. If a step- pool channel is proposed describe the basis of the spacing between the steps.

7. Describe how the project restores stream banks

For projects that entail the restoration of stream banks, provide information on the shear stresses expected to act on the banks and what soil bioengineering systems are proposed to address the stabilization needs.

8. How will the project protect or restore aquatic habitat?

Describe aquatic species habitat which the project may manage for or enhance, including native and or exotic species. fish, reptiles and amphibians .Indicate how habitat diversity and complexity required for different life stages of these species will be protected or enhanced.

For many of the smaller scale projects it may only take a few pages of information to adequately describe this information. Large scale projects will require more analysis to cover these points. Owners of small parcels, as well as large project proponents may need to seek assistance from trained professionals to help address these informational needs. We expect the professionals to be able to provide drawings of cross-sections and profiles of the stream and proposed changes to complement the narrative information.

For projects which entail large scale impacts such as impoundments, gravel mining, dam removals, timber harvests, and large urban developments, more extensive plans, specifications and details are likely to be required to assure avoidance of impacts within these eight categories of concern.

Selected Resources To Use To Address Some of These Informational Needs:

A Primer On Stream and River Protection For The Regulator and Program Manager, Technical Reference Circular W.D.#1, San Francisco Regional Water Quality Control Board, April 2003. Web site: <http://www.swrcb.ca.gov/rwqcb2/Agenda/04-16-03/Stream%20Protection%20Circular.pdf>. Purchase from: Friends of The San Francisco Estuary, P.O. Box 791, Oakland, Ca. 94604 for \$12.00 (includes tax and postage.)

Stability Thresholds For Stream Restoration Materials, EMRRP Technical Notes Collection (ERDC TN-EMRRP-SR-29) U.S. Army Engineer Research and Development Center, Vicksburg, Ms. www.wes.army.mil/el/emrrp Craig Fischenich 2001.

Stream Bank and Shoreline Protection, Chapter 16 (1996) and Soil Bioengineering for Upland Slope Protection and Erosion Reduction, Chapter 18, (1992), Natural Resources Conservation Service Engineering Field Handbook.

California Salmonid Stream Restoration Manual, California Resources Agency, California Department of Fish and Game

Workshops for organizations or agencies which want more information on using the Primer for project planning or permitting may be arranged by contacting Ann Riley at alriley@waterboards.ca.gov or (510) 622-2300.