PUBLIC NOTICE

US Army Corps of Engineers®

LOS ANGELES DISTRICT

PROPOSED REGIONAL GENERAL PERMIT
Regional General Permit No. 68:
Bioengineered Bank Stabilization

File No.: SPL-2007-169-MWV
Comment Period: September 7, 2007 through October 7, 2007
Project Manager: Matthew Vandersande (805) 585-2151 matthew.w.vandersande@usace.army.mil

Activity:

This Regional General Permit (RGP) would authorize discharges of dredged or fill material into waters of the United States, including wetlands, and work or structures in navigable waters of the United States for the construction and maintenance of bioengineered bank stabilization. The purpose of this RGP is to provide a mechanism for the expedited approval of bank stabilization structures that meet certain bioengineering criteria established in this permit by the Corps of Engineers, Los Angeles District. Unlike traditional or conventional bank stabilization, bioengineered bank stabilization does not rely on a hard revetment or armoring to prevent erosion at a particular site. Instead, bioengineered bank stabilization structures utilize vegetation in combination with bank reshaping, biodegradable geotextile materials, and in some cases a minimal amount of rock or wood to strengthen the soil and dissipate erosive energy. This authorization would apply to anyone proposing to construct or maintain a bioengineered structure in a manner that is consistent with the terms and conditions of this RGP. For more information and a description of the bioengineered techniques proposed for authorization by this RGP see page 3 of this notice.

Location:

In any jurisdictional waters of the United States located within Arizona and the California portion of the Los Angeles District of the U.S. Army Corps of Engineers, including the coastal drainages of San Luis Obispo County, all of Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, Orange, San Diego and Imperial counties, the eastern slopes of Inyo County, the eastern slopes of Mono County to the Conway Summit above Mono Lake, and the southern slopes of the Tehachapi Mountains in Kern County. In the event of future modifications to District boundaries, this permit would also apply in any areas so revised.

Authorities:

This permit would be issued or denied under Section 404 of the Clean Water Act of 1972 (33 U.S.C. 1344) and Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403). Interested parties are invited to provide their views on the proposed work, which will become a part of the record and will be considered in the decision. Comments should be mailed to:

U.S. Army Corps of Engineers, Los Angeles District
Regulatory Division - Ventura Field Office
ATTN: CESPL-CO-R-SPL-2007-169-MWV
2151 Alessandro Drive, Suite 110
Ventura, California 93001

Alternatively, comments can be sent electronically to: matthew.w.vandersande@usace.army.mil

Evaluation Factors:

The decision whether to issue this RGP will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, the evaluation of the activity will include application of the Environmental Protection Agency (EPA) Guidelines (40 CFR 230) as required by Section 404 (b)(1) of the Clean Water Act for discharges of dredged or fill material.

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.

Preliminary Review of Selected Factors:

EIS Determination - A preliminary determination has been made that an environmental impact statement is not required for the proposed RGP.

Water Quality - Section 401 of the Clean Water Act requires that proof of water quality certification be provided to the Corps of Engineers for any project which requires a Section 404 permit. The Corps of Engineers requests that the California State Water Resources Control Board (CSWRCB), Arizona Department of Environmental Quality (ADEQ), U.S. Environmental Protection

Agency (EPA) (for Tribal land), and Tribes with Section 401 authority to issue either a blanket certification for this RGP or an overlapping Section 401 General Permit to cover the proposed activities. By issuance of this Public Notice, we are requesting a formal response from the CSWRCB, ADEQ, EPA, and appropriate Tribes.

Coastal Zone Management - The Corps of Engineers believes that the activities authorized under this RGP would comply with and would be conducted in a manner that is consistent with the California Coastal Act. The District Engineer hereby requests the California Coastal Commission's concurrence.

Historic Properties - Activities authorized under this RGP would generally occur in active stream channels and therefore would likely not affect historic properties included in or eligible for inclusion in the National Register of Historic Places. However, the Corps of Engineers recognizes that such resources potentially occur on or within floodplains, and they may be impacted by activities authorized under this RGP. Therefore, prospective permittees must investigate the potential impact of their proposed project on historic and cultural resources, and provide this information to the Corps of Engineers prior to use of this RGP. The Corps of Engineers will determine on a case-by-case basis if a proposed project may affect a property included in or eligible for inclusion in the National Register of Historic Places, and if necessary conduct a Section 106 consultation with the State Historic Preservation Officer or Tribal Historic Preservation Officer.

Endangered Species - Activities authorized under this RGP would occur on streambanks that have recently been eroded and that would therefore be unlikely to provide suitable habitat for federally listed endangered or threatened species. However, riparian areas are generally considered one of the nation's most valuable aquatic resources and are recognized as critical habitat for many federally listed endangered or threatened species (e.g., southern steelhead, California red-legged frog, least Bell's vireo, southwestern willow flycatcher). Therefore, prospective permittees must investigate the potential impact of their proposed project on federally listed endangered or threatened species, species proposed for listing as endangered, or designated critical habitat and provide this information to the Corps of Engineers prior to use of this RGP. The Corps of Engineers will determine on a case-by-case basis if a proposed project may affect a federally listed endangered or threatened species or designated critical habitat, and if necessary conduct a Section 7 consultation with the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

Public Hearing - Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

Project Description:

Bioengineered bank stabilization is defined as integrating living woody and herbaceous materials with organic and inorganic materials to increase the strength and structure of the soil (Bentrup and Hoag 1998). Bank stabilization structures that utilize bioengineering techniques avoid and minimize many of the direct and indirect impacts to aquatic resources that are commonly associated with traditional or conventional engineered structures. While a bioengineered bank stabilization structure can effectively reduce erosion at a particular site, it cannot overcome poor land management practices in the watershed that contribute to channel instability. Bioengineered bank stabilization structures are suitable for most low order streams where the channel is not rapidly aggrading or degrading, and there is sufficient space to reshape the eroding bank to an appropriate angle. These structures are generally not suitable for high order streams where erosive forces are large and critical infrastructure,

such as a utility line, are at risk. Because there are numerous bioengineering techniques available and most require longer periods of time to become established than traditional bank stabilization, it is important that each structure is carefully designed with a comprehensive understanding of the site and the watershed conditions (see the references below for additional information).

This RGP would authorize the discharges of dredged or fill material into waters of the United States, including wetlands, and work or structures in navigable waters of the United States for construction and maintenance of bioengineered bank stabilization. Bioengineered bank stabilization structures are designed with an understanding of the geomorphology and fluvial characteristics of the site. All bioengineered structures incorporate living plants to increase the strength of the soil as well as dissipate erosive stream energy. Bioengineered bank stabilization techniques may utilize a minimal amount of hard materials such as rock, but are not intended to replace traditional hard engineering techniques when warranted by site conditions (traditional engineering techniques may be authorized under other permitting procedures, such as nationwide permit 13).

For a bank stabilization structure to be considered as bioengineered under this RGP, it must include certain techniques and may include others. The following bioengineering techniques are **required** in order to qualify for this RGP:

1. The permittee shall grade the streambank within the work area to produce a more stable slope. At a minimum, the bank shall be contoured to a 2:1 (H:V) slope from approximately the current location of the toe to the new top of bank. This RGP does not authorize reclamation of the historic bank location (i.e., the permittee shall not "move" the bank back into the waterway). The slope may be steeper (i.e., greater than a 2:1 (H:V) slope) in a narrow transitional zone between the project site and the existing bank, or for short distances between constructed terraces.

2. The permittee shall plant the effected streambank with native vegetation. Planting wetland and riparian vegetation along the toe of the bank may include excavation and backfilling below the ordinary high water mark (e.g., when installing brush layering to reach the saturated soil layer). The bank shall be planted at a density and configuration sufficient to dissipate the energy associated with high flows and to develop a dense root structure. Vegetation planted along the top of bank should be planted at a width and density to prevent erosion from overland flows. The planting palette should be comprised of local native riparian species and take into consideration the relative wetness of the soil at a particular elevation on the bank. The use of non-native invasive plant species is prohibited under this RGP.

The following bioengineering techniques are not required, but are authorized under this RGP:

3. The permittee may install a biodegradable geotextile mat (e.g., a coconut-fiber fabric known as coir), a biodegradable geotextile roll (e.g., a coir roll, fiberschine), clean soil, jute netting, root wads, tree logs, willow wattles, native riparian poles, a brush trench, a vegetative geogrid (i.e., a biodegradable fabric encapsulated soil system with willow cuttings placed between each soil layer), or native brush mattress. These erosion control measures may be secured using wooden stakes, rope, twine, or in the case of root wads and tree logs large diameter cables and boulders, but not materials made of small diameter wire or plastic. Root wads, tree logs, or other materials that could wash downstream would only be authorized after the applicant demonstrates that the materials would be properly secured to the bank.

4. The permittee may place, at a maximum, a single row of ungrouted rocks along the toe of the bank. The rock shall be of a size and specific gravity necessary to prevent displacement during expected high flows (generally greater than 1 foot in diameter, but less than 3 feet in diameter). A trench keyed into the toe of the bank to secure a biodegradable geotextile fabric using approximately cobble-sized rocks may be up to 3 feet wide along the toe of the bank. Gabions, concrete, and grouted rock riprap are not authorized under this RGP. Construction debris, broken concrete, brick, or similar materials may not be discharged into waters of the United States under this RGP.

5. The permittee may place, at a maximum, a single row of ungrouted rocks along the face of the bank, perpendicular to the flow path, at the up- and downstream boundary of the stabilization structure (i.e., a rock refusal keyed into the bank to prevent flanking of the structure). The rock shall be of a size and specific gravity necessary to prevent displacement during expected high flows (generally greater than 1 foot in diameter, but less than 3 feet in diameter). A trench keyed into the slope of the bank to secure a geotextile fabric using cobble-sized rocks may be up to 3 feet wide along the face of the bank perpendicular to the flow path.

6. The permittee may construct flow deflection structures (e.g., groins, spur dikes, J-hooks) in waters of the United States using ungrouted rocks, live pole plantings, or tree logs. Flow deflection structures shall not extend more than 30 percent into the channel from the toe of the stabilized streambank (e.g., in a channel measuring 20 feet wide between the toe of each bank at the project site, the structure could extend up to 6 feet into the channel). Properly designed J-hooks may be placed up to 2/3 of the width of the channel. The width of the structure shall be commensurate with the site conditions and length of the structure (i.e., a 10-foot-long structure would be approximately 4 feet wide at its base). The structure shall slope down from its highest point on the bank to the existing grade of the channel bed at the terminus of the structure. The structure shall not exceed the height of the bank. Flow deflection structures shall only be placed in front of streambanks that are stabilized in accordance with terms #1 and #2 above. The flow deflection structures should be spaced along the bank according to commonly accepted design methods (see Fischenich and Allen 2000) that take into account the width of the channel and the length of the structure. Generally, one flow deflection structure would be constructed per equivalent channel width in front of the stabilized bank (i.e., to stabilize a 40-foot-long section on the outside bend of a meander in a stream that is 20 feet wide, there would be 3 flow deflection structures, each spaced 20 feet apart). In the Colorado River, flow deflection structures may only be installed for the purpose of establishing wetland vegetation. The Corps of Engineers will authorize the use of flow deflection structures on a case-by-case basis and after a review of the dimensions, orientation, and need for the structures.

While not part of a stabilization structure, it may be necessary to temporarily dewater the work area or construct a temporary access path during construction to prevent adverse impacts to water quality.

7. The permittee may install a temporary water diversion prior to construction or maintenance of the bioengineered bank stabilization structure using sandbags (or gravelbags), visqueen, and adequately sized pipes. Alternatively, the permittee may use a portable structural cofferdam (i.e., a steel support frame covered with a flexible waterproof membrane) or sheet piling. This diversion may be accomplished by either installing two cofferdams across the creek (one located upstream and the other downstream of the project site), or by installing a cofferdam parallel with the channel to isolate the project site from flowing water. The permittee shall

ensure the water diversion does not contribute to increased turbidity downstream of the project site. The permittee shall remove the temporary water diversion immediately after construction is complete and restore the disturbed area to its preconstruction contours.

8. The permittee may dewater the work area during construction or maintenance of the bioengineered bank stabilization structure. The permittee shall ensure that all water pumped from the work site is discharged into an upland contained sedimentation basin or storage tank. Sedimentation basins should be constructed using silt fencing, hay bales, or similar materials that remove suspended sediments from the dewatering activity. The permittee shall restore all areas excavated for dewatering to their preconstruction contours.

9. The permittee may construct a temporary access path within the project area to facilitate construction or maintenance of the bioengineered bank stabilization structure. The access path must be the minimum width and length necessary to complete the project and may not be used to move heavy equipment, such as tracked excavators, into the waterway. The access path shall be restored to preconstruction contours, stabilized, and replanted with native vegetation, or be incorporated into the bioengineered bank stabilization structure during construction.

Proposed General Conditions:

1. **Time Period Covered:** The time limit for completing work authorized by this RGP would end five years after the RGP is issued. The Corps maintains the discretion to reissue, modify, rescind, or exclude certain activities or areas from this RGP.

2. **Notification:** To properly design a bioengineered bank stabilization structure requires an assessment of current site conditions (e.g., flow patterns, shear stresses, sediment transport dynamics, vegetation characteristics, etc.), watershed conditions, and a careful selection of available bioengineering techniques. Therefore, an application for this RGP must demonstrate that the necessary assessments have been conducted.
    a. The applicant must notify the District Engineer (DE) and shall not begin the activity until after receiving a written Notice to Proceed (NTP) from the DE. The Corps of Engineers encourages pre-application meetings to facilitate processing of the application. The NTP may include site-specific special conditions imposed by the DE to avoid and minimize adverse impacts to waters of the United States. The notification must be in writing and include the following information:
        i. The name, address and telephone number of the applicant and the designated point of contact and their address and telephone number;
        ii. The location of the proposed project in detail, including the identification of the waterbody(ies) (this should include a copy of a U.S. Geologic Survey [USGS] topographic map, Thomas Guide map, or hand-drawn location map with suitable landmarks);
        iii. Color photographs of the site (including views up- and downstream of the site);
        iv. A description of the current site conditions, including factors in the watershed that may be contributing to the erosion problem;
        v. A description of the proposed bank stabilization structure (including demonstration of compliance with the required project description items #1 and 2, as well as consistency with optional project description items #3, 4, 5, 6, and 9), methods and materials of construction, an explanation of how the proposed

structure would address the erosion problem, and a description of the direct and indirect adverse environmental effects the project would cause;

vi. Detailed drawings (plan view and cross-section) of the proposed structure. The drawings shall include the current location of the toe and top of each bank, the height of the banks, the low-flow path of the stream (i.e., the channel thalweg), and a description of vegetation currently growing at the site;

vii. For proposed flow deflection structures, the applicant must include a thorough assessment of flow conditions (e.g., flow velocities for different flow events, sediment transport dynamics), stream morphology, and the intended modifications the structure would have on those flow conditions; and

viii. If the site would need to be dewatered, notification must include a detailed dewatering plan in accordance with project description items #7 and 8.

b. The standard Application for Department of the Army Permit (Form ENG 4345), available from the District's Website at (www.spl.usace.army.mil/co/co5.html#reg), may be used as the notification and must include all of the information required in General Condition 2.a. (i) through (viii) above. A letter or facsimile transmission may also be used.

3. **Impact Area:** There are no length or area restrictions for structures constructed or maintained in accordance with the terms and conditions of this RGP, but the applicant must demonstrate a need to stabilize the bank and impact waters of the United States. If the Corps of Engineers determines that the proposed project would have greater than minimal impacts, individually or cumulatively, to waters of the United States then the project would not be eligible for authorization by this RGP, and would need to be authorized under a Standard Individual Permit.

4. **Mitigation: C**ompensatory mitigation is not required for bioengineered bank stabilization structures conducted in compliance with this RGP.

5. **Suitable Material**: No discharge of dredged or fill material may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, tires, etc.) and material discharged must be free from pollutants in toxic amounts. (See Section 307 of the Clean Water Act)

6. **Timing:** The installation of bioengineered structure should be timed to occur either in the spring soon after the wet season to utilize available soil moisture or in the fall prior to the winter rains when stream flows are the lowest. Because the same winter rains that provide moisture may also wash out recently planted vegetation, it is essential to employ erosion control measures (e.g., biodegradable geotextile fabric) when the structure is constructed in the fall. The permittee shall construct or conduct maintenance of the bioengineered bank stabilization structure between 15 April and 15 November.

7. **Construction:** Bioengineered bank stabilization projects tend to be less expensive than traditionally-engineered structures, but require additional specialized labor to construct.
   a. The permittee shall operate all heavy equipment from the top of bank. If adjacent wetlands are present at the top of bank, then all heavy equipment shall be operated on Corps-approved construction mats, and the site restored to pre-project conditions;
   b. The permittee shall not conduct any work in flowing water;
   c. No mechanized equipment, rubber-tired vehicles, track vehicles, or other equipment shall be stored, staged, or fueled in waters of the United States, including wetlands.

d. The permittee shall ensure that all contractors receive a copy of this RGP and are made aware of the conditions and restrictions it contains;
e. The permittee shall allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of the permit.

8. **Maintenance:** In general, bioengineered bank stabilization structures require maintenance and monitoring until the planted vegetation has become established.
   a. The permittee shall monitor and maintain the bioengineered bank stabilization structure for at least three years after construction to ensure the integrity of the structure and successful growth of the planted vegetation. Maintenance of any structure authorized by this RGP must be conducted in accordance with the terms and conditions of the authorization. Maintenance that requires deviations from the original design may require a separate or additional authorization. Reports shall be submitted to the Corps in accordance with the published guidelines and requirements (see http://www.spl.usace.army.mil/regulatory/mmg_2004.pdf);
   b. If the Corps of Engineers determines that the project is contributing to adverse effects to public or private property, or poses a threat to public safety, then corrective measures shall be required.

9. **Erosion and Siltation Controls**: Every effort must be made to ensure that any dredged or excavated material is not likely to be washed back into any waters of the United States. When feasible, erosion and siltation controls, such as siltation or turbidity curtains, sedimentation basins, or straw (or hay) bales or other means designed to minimize turbidity in the watercourse above background levels existing at the time of construction, shall be used and maintained in effective operating condition during construction unless conditions preclude their use, or if conditions are such that the proposed work would not increase turbidity levels above the background level existing at the time of the work. All exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be stabilized at the earliest practicable date to preclude additional damage to the project area through erosion or siltation.

10. **Water Quality Certification:** If the CSWRCB, ADEQ, EPA or the appropriate Tribes elect not to certify this RGP within their jurisdiction, then the permittee shall obtain an individual Water Quality Certification in accordance with Section 401 of the Clean Water Act.

11. **Coastal Zone Management:** For those projects affecting uses or resources of the coastal zone, the Federal Coastal Zone Management Act (CZMA) requires that the permittee obtain concurrence from the California Coastal Commission (CCC) that the project is consistent with the State's certified Coastal Management Program. Because a coastal permit issued by a local agency does not satisfy the federal consistency requirements of the CZMA, the permittee should also contact the Federal Consistency Coordinator for the CCC at (415) 904-5289 to determine the appropriate procedures. For any activity outside the coastal zone, but with the potential to affect coastal uses or resources, or for any activity conducted by a federal agency, the permittee should contact the Federal Consistency Coordinator for the CCC at (415) 904-5289 to determine the appropriate procedures.

12. **Endangered Species:** No activity is authorized under this RGP which is likely to jeopardize the continued existence of a federally threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which

is likely to destroy or adversely modify the critical habitat of such species. Federal agencies shall provide to this office, in writing, their ESA compliance determination with the notification. Non-federal permittees shall notify the DE if any listed species or critical habitat might be affected or is in the vicinity of the project and shall not begin work on the activity until notified by the DE that the requirements of the ESA have been satisfied and that the activity is authorized. Information on the location of threatened and endangered species and their critical habitat can be obtained from the U.S. Fish and Wildlife Service and National Marine Fisheries Service. The Corps of Engineers may require focused endangered species surveys be performed prior to verification of compliance with this RGP.

13. **Essential Fish Habitat:** No activity is authorized which may adversely affect Essential Fish Habitat (EFH) until the DE has complied with the provisions of Section 305(b)(2) of the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act). The prospective permittee must notify the DE if the authorized activity may affect any EFH, and shall not begin the activity until notified by the DE that the requirements of the Magnuson-Stevens Act have been satisfied and that the activity is authorized.

14. **Historic Properties:** No activity is authorized which may adversely affect historic properties included in or eligible for inclusion in the National Register of Historic Places until the DE has complied with the provisions of 33 CFR 325, Appendix C. The prospective permittee must notify the DE if the authorized activity may affect any historic properties included in or eligible for inclusion in, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the DE that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Site-specific information on the location and existence of known historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). Federal permittees should follow their own procedures for compliance with the requirements of the National Historic Preservation Act. Federal agencies shall provide to this office, in writing, their compliance determination with the notification. If any previously unknown historic or archeological remains are discovered while accomplishing the activity authorized by this RGP, the Corps office that verified use of the RGP must immediately be notified. The Corps of Engineers will initiate the federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for inclusion in the National Register of Historic Places.

15. **Wild and Scenic Rivers:** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while that river is in an official study status, unless the appropriate Federal agency with direct management responsibility for that river has determined in writing that the proposed activity would not adversely effect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., FWS, National Park Service, USDA Forest Service, Bureau of Land Management, etc.). Currently the only designated Wild and Scenic River systems in the Los Angeles District are the main stem of Sespe Creek from its confluence with Rock Creek and Howard Creek downstream to where it exits Section 26, T5N, R20W, and the Sisquoc River from its origin to the Los Padres National Forest boundary in California.

16. **Agency Coordination:** In addition to acquiring 401 Water Quality Certification and, in the coastal zone, CZMA consistency, permittees shall take steps to secure, as appropriate, a Streambed Alteration Agreement with the California Department of Fish and Game for bioengineered bank stabilization activities. For projects in Ventura, Santa Barbara, Orange, Los Angeles and San Diego Counties, the application should be sent to Department of Fish and Game, 4949 Viewridge Ave., San Diego, California 92123. For projects in Inyo, Mono, San Bernardino and Riverside Counties, packages should be sent to 330 Golden Shore, Suite 210, Long Beach, California 90802. Addresses can be verified at www.dfg.ca.gov.

17. **Navigation:** No activity may cause more than minimal adverse effects to navigation. Activities shall not interfere with the public's right to free navigation on all navigable waters of the United States. You understand and agree that, if future operations by the United States require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, you will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expenses to the United States. No claim shall be made against the United States on account of any such removal or alteration. For projects occurring in navigable waters of the United States, the permittee shall notify the Commander Eleventh Coast Guard District POW, BLDG 50-6 Coast Guard Island, Alameda, California, 94501-5000, (510) 437-2968, at least two weeks prior to start of activity and 30 days if buoys are to be placed. The notification should include the following information:
    a. The location of the work site;
    b. The size and type of equipment that will be performing the work;
    c. Name and radio call signs for working vessels, if applicable;
    d. Telephone number for on-site contact with project engineers; and
    e. The schedule for completing the project.

18. **Tribal Rights:** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights. For projects proposed on tribal lands, the permittee shall submit an approval letter from the tribe with their notification package and shall obtain Section 401 Water Quality Certification, or waiver thereof, from the U.S. Environmental Protection Agency.

19. **Proper Maintenance**: Any structure or fill authorized by this RGP shall be maintained, including maintenance to ensure public safety, unless it is later determined that the structure is further contributing to other adverse conditions to private or public property. In such situations, corrective measures will be taken to rectify these adverse conditions, including removal and/or redesign of the original emergency corrective action, or appropriate mitigation as determined through coordination with you and the appropriate federal and state agencies.

20. **Aquatic Life Movements**: No activity may substantially disrupt the movement of those species of aquatic life indigenous to the water body, including those species that normally migrate through the area.

References:

Hoag, J.C. 1998. Establishment Techniques for Woody Vegetation in Riparian Zones of the Arid and Semi-arid West. USDA, Natural Resources Conservation Service, Plant Materials Center, Aberdeen,

ID. http://www.plant-materials.nrcs.usda.gov/pubs/idpmcarestwoody.pdf

FISRWG. 1998. Stream Corridor Restoration: Principles, Processes, and Practices. By the Federal Interagency Stream Restoration Working Group (FISRWG). http://www.nrcs.usda.gov/technical/stream_restoration/

Bentrup, Gary, and J. Chris Hoag. 1998. The Practical Streambank Bioengineering Guide. USDA, Natural Resources Conservation Service, Plant Materials Center, Aberdeen, ID. http://plant-materials.nrcs.usda.gov/idpmc/streambank.html

Fischenich, J.C., and H. Allen. 1999. Stream Management. ERDC/EL SR-W-00-1, U.S. Army Engineer Research and Development Center, Waterways Experiment Station, Vicksburg, MS. http://el.erdc.usace.army.mil/elpubs/pdf/srw00-1/srw00-1.pdf

Fischenich, C. 2001. Stability Thresholds for Stream Restoration Materials. EMRRP Technical Notes Collection, ERDC TNEMRRP-SR-29, U.S. Army Engineer Research and Development Center, Vicksburg, MS. http://el.erdc.usace.army.mil/emrrp/pdf/sr29.pdf

For additional information please call Dr. Matthew Vandersande of my staff at (805) 585-2151. This public notice is issued by the Regulatory Division.