Regional General Permit 37

U.S. ARMY CORPS OF ENGINEERS BUILDING STRONG®

STREAM STABILIZATION PROJECTS
SACRAMENTO AND ALBUQUERQUE DISTRICT AREAS OF COLORADO

EFFECTIVE DATE: October 2, 2012 EXPIRATION DATE: October 2, 2017

In accordance with Section 404 of the Clean Water Act (33U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), the U.S. Army Corps of Engineers (Corps) hereby authorizes certain limited discharges of dredged and fill material associated with stream stabilization in the Sacramento and Albuquerque District areas of Colorado. Whitewater/kayak parks, stream channelization, or structures that create barriers to floating recreational craft are not authorized by this Regional General Permit (RGP).

LOCATION: This RGP is applicable to waters of the United States, including, but not limited to, rivers, creeks, lakes, ponds, reservoirs and other waterways that are located within the geographical boundaries of the Sacramento and Albuquerque Districts in the State of Colorado.

Certain waterways are given special consideration. These special aquatic resources include, but are not limited to, occupied and critical habitat for fish species protected by the Endangered Species Act. The Corps will also carefully review applications for work under this RGP in streams designated as Gold Medal Waters (attached). Our review may include consultation with the Colorado Department of Parks & Wildlife (CPW) on a case-by-case basis.

NOTIFICATION AND APPROVAL PROCEDURES: All work authorized by this permit shall be completed in accordance with the plan(s) approved by the Corps and shall comply with the terms and conditions specified below and any special conditions required on a case-by-case basis. The applicant must notify the Corps, in writing, and receive written approval from the Corps PRIOR to beginning work authorized by this permit.

Written notification requesting approval and concurrence with the requirements of the RGP must be sent to the Corps office that services the area of the project location. For assistance in determining the appropriate regulatory office, please contact one of the Regulatory offices below or visit the Colorado Regulatory website: http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/Colorado/GeographicResponsibility.aspx.

Colorado West Branch (Sacramento District)
400 Rood Avenue, Room 224
Grand Junction, CO 81501
Phone: (970) 243-1199

Southern Colorado Branch (Albuquerque District)
200 South Santa Fe Avenue, Suite 301
Pueblo, CO 81003
Phone: (719) 543-9459

Durango Regulatory Office (Albuquerque and Sacramento Districts)
1970 East 3rd Avenue, Suite 109
Durango, CO 81301
Phone: (970) 259-1764

NOTE: Construction of activities authorized by this permit has the potential to cause exposure of groundwater, which may require a well permit from the Colorado Division of Water Resources, or changes in surface water distribution, which could impact the distribution of appropriated water resources and cause injury to vested water rights. Consultation with the Colorado Division of Water Resources (DWR) is strongly recommended for any project that could cause exposure of groundwater or impact the distribution of water resources. To initiate consultation with the DWR or to obtain additional information pertaining to water rights or well permits, please visit the DWR website at http://water.state.co.us/Home/Pages/default.aspx or contact the local water commissioner.

For engineering standards and other information related to stream stabilization activities described in this permit, including material sizing and methods for keying structures into stream bed and banks, please refer to the City of Denver Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual located at http://www.udfcd.org/downloads/down_critmanual_volI.htm.

Anyone proposing to perform work authorized by this permit must provide the following information, in writing, to the Corps prior to beginning work:

1. Name, address and telephone number of the applicant responsible for the work, the owner of the affected lands (if different than the applicant), and the contractor(s) that will be performing the work, if applicable. The applicant must demonstrate written permission to enter upon and perform work on property not belonging to the applicant;

2. A description of the project location including section, township, range, and coordinates (latitude/longitude, UTM, etc.) at both ends of the work area;

3. A written well-defined purpose and need for the work, including a detailed statement explaining the erosion or unstable conditions, why such degradation is unacceptable, and why the chosen stabilization methodology is the best available alternative to address the issue. **If the preferred alternative does not incorporate bioengineering techniques, the written statement must also include a discussion on the alternative techniques that were considered and why they were found not to be practicable;**

4. Pre-construction photos depicting the physical setting (to be compared to post-construction site conditions from the same photo points). Photos should contain figure labels with time, date, bearing, and a general description of the site;

5. A set of drawings of the proposed work on 8 ½" x 11" paper (refer to the map standards located at http://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/publicnotices/SPD-RG_map-drawing-standards_final_20120806v3.pdf). The drawings must include the following elements:

    a. Location map, including name of the waterway, and coordinates of each structure;

    b. Plan view of all work, including staging area(s) and access point(s), clearly identifying types and locations of structures/impacts, along with dimensions, a scale bar, a north arrow, and

approximate extents of aquatic resources within the project area. To aid in visual understanding, this plan can be overlaid on a recent aerial image of the project site. The plan should also include information such as the existing and proposed bank slopes, width/depth ratio of the channel, sinuosity, and sediment size distribution;

c. Cross-sectional and profile views of the existing stream channel and the proposed structures, including dimensions (length, width and height of the structures or work), and clear delineation of the limits of the ordinary high-water mark;

d. A wetland delineation of the project site. The wetland delineation report must be submitted in accordance with the wetland delineations protocols for the individual Corps District that covers the project area; and

e. For projects that include a grade control component, the average gradient of the stream reach (i.e., bankfull surface elevation difference between the upstream and downstream limits of the project reach).

6. If the project is located on the following Indian Lands, the applicant must obtain an individual water quality certification (WQC) under Section 401 of the Clean Water Act and provide a copy of the WQC to the Corps:

a. Southern Ute Indian Lands. WQCs for projects located on Southern Ute Indian Lands must be obtained from the U.S. Environmental Protection Agency (EPA). For assistance, contact the EPA at: EPA, EPR-EP, Aquatic Resources Protection and Accountability Unit, 1595 Wynkoop Street, Denver, Colorado 80202-1129, 303-312-6909, or visit the webpage: http://www.epa.gov/region8/water/wqc.html.

b. Ute Mountain Ute Indian Lands. WQCs for projects located on Ute Mountain Ute Indian Lands must be obtained from the Ute Mountain Ute Tribe. For assistance, contact the Ute Mountain Ute Environmental Programs Department, 520 Sunset Blvd. or P.O. Box 448, Towoac, Colorado 81334, 970-564-5430 (fax 970-565-2651), or visit the webpage: http://www.utemountainuteenvironmental.org.

SCOPE OF WORK: This RGP authorizes certain discharges of dredged and fill material for stream bank and stream bed stabilization work, including but not limited to those described below:

BANK STABILIZATION: Bank stabilization activities typically include grading of the bank to the appropriate slope based on hydrology, in conjunction with the placement of riprap material and/or installation of bioengineering techniques. Acceptable riprap material includes durable angular rock and large boulders. Bioengineering techniques incorporate the use of primary materials found in the natural riparian environment, such as live willow stakes, tree revetments, and log crib structures. Proper anchoring of trees and logs is especially important because floatable materials can dislodge and move with currents, potentially causing downstream erosion and blockages. The use of rounded river cobble or stone, sand, gravel and other similar erodible materials is not acceptable for bank stabilization and is **not** authorized under this permit (unless used as backfill to support larger materials). Rock-filled gabion baskets or cages may be approved under this permit in limited situations; however, gabions are not generally effective in high velocity streams, streams with large bedloads, or streams were the water chemistry is deleterious to the gabion mesh.

This permit authorizes bank stabilization activities provided the following criteria are met:

1. The single and complete bank stabilization project shall not exceed 1,000 feet in length along a stream bank. NOTE: For projects that include bank stabilization in multiple locations, each independent section of bank stabilization shall be considered a single and complete project;

2. The average stream width measured below the plane of ordinary high water shall be at least 20 feet. Bank stabilization projects in streams smaller than 20 feet wide may be authorized under Nationwide Permit (NWP) No. 13 for Bank Stabilization;

3. The placement of riprap material below the plane of ordinary high water shall not exceed an average of two cubic yards per linear foot of bank line. This permit is intended for protecting existing bank lines and does not authorize total restoration of original bank lines;

4. The size of the riprap shall be large enough to withstand expected high flow velocities and turbulence to prevent the riprap from dislodging;

5. In most cases, the slope steepness for riprap installation should not exceed one foot vertical for two feet horizontal. In special cases, to accommodate a secondary interest of creating better fish habitat with overhanging banks, or where stabilization is needed in confined urban areas, the Corps may approve bank stabilization that exceeds the specified maximum slope steepness;

6. Use of a filter between the bank revetment and soil may be necessary to prevent the soil from moving through the revetment, to prevent the revetment from sinking into the soil, and/or to permit natural seepage from the stream bank, thus preventing build-up of excessive groundwater pressure. A filter may be composed of fabric, sand, gravel, or graded rock. If a filter is used, the applicant should seek technical assistance to ensure that the filter will be properly matched with the riprap blanket and the soil;

7. The upstream and downstream ends of the riprap blanket shall be keyed into the bank to prevent stream currents from unraveling the riprap. The toe of the riprap shall also be buried in order to prevent scouring and subsequent slumping of the riprap material. All riprap must be terminated at the least impacting practical height – in all cases, below the top of bank – to avoid creating levees that would restrict the floodplain; and

8. Establishing a vegetative cover on disturbed surfaces by seeding, transplanting, or other appropriate means is very important, highly recommended, and in some instances, may be required by the Corps. Herbaceous and woody vegetation landward of the riprap and interspersed within the riprap will improve the stability of the bank protection.

GRADE CONTROL STRUCTURES (Cross-vanes; diagonal or perpendicular; J-hook vanes; W-weirs; K-sills; K-dams): Grade control structures are designed to promote stream bed stability by decreasing the grade of the stream bed, which decreases velocity and reduces stream bank erosion. These structures generally span the river, or two-thirds of the river, and are anchored into the bank at the bankfull bench elevation to prevent erosion. These structures are generally installed at a 20 to 30 degree angle from the bank facing upstream with the lowest rock elevation being the apex of the structure. Structures that cross the entire channel, including cross-vanes, K-sills, and K-dams, must be installed at an elevation to allow fish passage over them. K-sills and K-dams are generally only authorized for channels with a slope range of 0.2 to 0.4, an entrenchment ratio of 1.4 to 2.2, a width/depth ratio greater than 12, and a sinuosity greater than 1.2. However, they may also be

authorized in low bed load channels that are dominated by cobble and have a slope less than 0.02, an entrenchment ratio greater than 2.2, a width/depth ratio greater than 12, and a sinuosity greater than 1.2. Trapezoidal weirs are excluded from this class of structures since they generally lead to lateral bank scour under high flows. Drop Structures must be properly anchored into the stream banks to prevent movement during high flows. Generally, anchoring must be accomplished by utilizing rocks larger than the stream's bed load and/or by burying significant portions of the log/timber into the bank.

This permit authorizes the construction of grade control structures provided the following criteria are met:

1. Grade control structures shall be constructed so that the maximum change (increase) in the ordinary low water surface elevation upstream of the drop does not exceed 2 feet in height above the ordinary low water surface elevation immediately downstream of the drop. However, in all cases, the height of the drop shall be designed based on the specific stream characteristics, which in most cases will warrant a drop much less than 2 feet. In special cases, the Corps may waive the 2-foot drop limit if the applicant demonstrates that the proposed project will not inhibit fish passage or cause public safety issues. In order for the Corps to waive the drop limit, the notification must include a statement justifying the need for a greater drop.

2. In addition to the total structure height, there shall be at least one area of the structure with 18 inches or less of drop and an adequate acceleration pool located immediately downstream to allow for fish passage. However, drop limitations vary greatly between fish species, and much smaller drops are typically required to ensure passage of smaller native fishes. Furthermore, there are several common approaches to incorporating fish passage in drop structures, including an inverted "V" formation, half round, double "W" and exclusion of rock at the apex, depending on the desired objective(s). Because of the varying species requirements and the wide range of designs that may be employed, all projects involving drop structures with a fish passage component shall be evaluated on a case-by-case to ensure that the structures will not impede passage of fishes native to the stream.

3. Materials acceptable for grade control structures include large angular rock, large boulders, logs, or a combination of the preceding. CAUTION: Logs can be more susceptible to damage from high flows and may need more frequent maintenance;

4. Material size shall be large enough to withstand expected high flow velocities and associated turbulence;

5. All grade control structures shall be keyed into the existing stream bed (e.g., footers) and stream banks and protected by large rock anchored into the bed and banks in order to prevent the structures from scouring and undercutting during high flows. The distance that grade control structures are keyed into the bank shall be based on the size of the material used for the specific project and associated with the stream's hydrograph;

6. Construction or placement of rock for a grade control structure should start at both banks and proceed toward the middle of the stream. A backhoe or front-end loader, preferably with an opposing "thumb" on the bucket to manipulate the rocks, is best for constructing grade control structures. Rocks placed on the banks shall not extend above the bankfull elevation of the stream

unless the applicant demonstrates that the placement of rock above the bankfull elevation is appropriate based on the channel hydraulics;

7. Construction equipment shall access the stream at the fewest possible locations, usually from a point located immediately upstream of the proposed work site, to minimize disturbance to the aquatic environment and riparian areas;

8. Due to the varied widths of streams wherein grade control structures may be useful in stabilizing stream banks and stream beds, a specific limitation on the volume of discharged material is not being employed;

9. Grade control structures shall not impede or block boat passage. On streams where such navigation may occur, structures shall be constructed so that the center portion of the drop is lower than the sides in order to concentrate flows, facilitate boat passage, and prevent entrapment of recreationists. Additionally, on such streams, signs shall be placed upstream of the structures to give boaters and rafters ample warning of the structures' presence; and

DEFLECTORS (jetties, weirs, barbs, etc): Deflectors are structures placed along a stream bank to direct flow away from an eroding bank. Deflectors may also be used to direct flow toward an in-stream sand/gravel bar or shoal to cause it to scour. Generally, deflectors are **not** effective on curves having a radius of less than 200 feet and a single jetty is usually not sufficient. River cobble, sand, gravel and other similar erodible materials (unless used as backfill and supported by larger materials) are **not** acceptable for deflector structures.

This permit authorizes the construction of deflector structures provided:

1. The maximum extension of any deflector into a waterway shall not exceed 25% of the channel width. Flows shall not be directed to erode the opposite bank of the waterway;

2. Deflectors shall be spaced along the bank to prevent scouring or scalloping of the bank between the structures;

3. The angle of the deflector and the bank line shall not be greater than 30 degrees. Most often, the angle should be only 15-20 degrees to avoid excessive maintenance requirements;

4. Deflectors may be triangular or linear (single-wing) in shape. Single wing deflectors shall only be directed upstream unless the applicant demonstrates that a downstream orientation is more appropriate for the situation (e.g., to enhance a side channel or increase the depth of a stable undercut bank). CAUTION: Single-wing deflectors may be more susceptible to damage from high flows and require more frequent maintenance than triangular ones;

5. Materials acceptable for deflectors include large angular rock, large boulders, logs, or a combination of the preceding. Materials must be of sufficient size to withstand expected high velocities and turbulence. Rounded river cobble and stone, and dirt fill are not suitable materials for deflectors;

6. Deflectors must be securely anchored into the bank in order to protect against undercutting, circumvention, or dislocation of the structures by high flows. CAUTION: Logs are especially

susceptible to damages during high flows and must be adequately anchored with large rock or steel cables to prevent them from becoming dislodged. If unraveled, these materials can cause serious downstream erosion damage (e.g., block bridge openings, form new channel bars, etc.);

7. Trees for deflector construction shall not be obtained from a riparian or wetland source, if practicable (see General Condition No. 7); and

8. The length of stream bank where deflectors will be built shall not exceed 1,000 feet as measured from the first to last jetty per section of stream stabilized, provided that each series of deflectors is independent from the others. For projects involving construction of more than one series of deflectors, each independent series of structures shall be considered separate and complete project.

GENERAL CONDITIONS:

1. Upon receiving approval to perform work under this permit, the permittee shall have three years to complete the work, unless specified otherwise in the Corps verification letter. If more time is required, the permittee must request an extension of time from the Corps. Requests for time extension shall be submitted to the Corps at least 45 days prior to expiration of the 3-year verification. Upon completion of the work, the permittee shall submit a signed Certification of Compliance form to the Corps. The certification shall include:

    a. A statement that the work was done in accordance with the Corps authorization, including any special conditions;

    b. A statement that the required compensatory mitigation, if applicable, was done in accordance with the permit conditions; and

    c. The signature of the permittee certifying the completion of the work and mitigation.

2. For all projects that include a design-build component, the permittee shall submit a complete set of as-built drawings to the Corps within 90 days following the completion of work.

3. The permittee, or current landowner, must maintain the activity authorized by this permit in good condition and in compliance with the terms and conditions of this permit. The permittee, or current landowner, is not relieved of this requirement if the activity is abandoned. A good faith transfer to another party who will assume responsibility for the structure(s) may be approved under the terms of General Condition 22 below.

4. Material may not be placed in any location or manner that will impair surface water flows into or out of any wetlands. Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, wet meadows, willow/alder thickets, and similar areas. Some of the typical plants found in wetlands are sedges, rushes, bulrushes, cattails, alders and willows.

5. The permittee must take precautions to avoid and minimize temporary impacts and protect wetlands from damage during access and construction. The permittee shall restore wetlands to pre-construction conditions for all impacts associated with temporary fill activities.

Compensatory mitigation shall be required for all wetland losses that exceed 1/10 acre. For wetland losses of 1/10 acre or less, the Corps may determine on a case-by-case basis that compensatory mitigation is required. For projects requiring compensatory mitigation, please refer to the Mitigation and Monitoring Guidelines located at http://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/Mitigation/SPA%20Final%20Mitigation%20Guidelines_OLD.pdf. This permit does not authorize the loss of greater than 1/3 acre of wetlands.

6. An activity shall not substantially disrupt the movement of those species of aquatic life indigenous to a water body, including species that normally migrate through the area.

7. Destruction of riparian or riverine vegetation, especially mature cottonwoods, shall be avoided to the maximum extent practicable. The permittee is cautioned that cottonwoods may be locally very important for bald eagles, which are protected under the Bald and Golden Eagle Act. If the authorized work causes damage to riparian vegetation that is not directly covered by a permanent feature, these scarred areas shall be replanted with a mixture of native trees, shrubs, forbs and grasses. Seeding, sprigging, or other means of planting native woody and herbaceous plants is highly recommended and advantageous to further stabilize stream banks. For further information on planting, please contact the local Natural Resources Conservation Service or Corps office.

8. If the permittee discovers any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, the permittee shall stop work and immediately notify the Corps. The Corps will initiate the coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National register of Historic Places.

9. Activities authorized under this permit shall not jeopardize the continued existence of a 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.

   As appropriate, the Corps will consult with the U.S. Fish and Wildlife Service (USFWS) on specific requests to perform work under this permit if the project may affect a threatened or endangered species, or critical habitat.

   Consultation may conclude with the identification of conservation recommendations by the USFWS in non-jeopardy Biological Opinion (BO). At the Corps' discretion, these recommendations will be incorporated into the permit decision, and the Corps will enforce compliance with accepted recommendations. If the USFWS renders a jeopardy BO and reasonable and prudent alternatives cannot be implemented to avoid the unacceptable impacts, the project will require an individual Department of the Army permit. Authorization of an activity under this permit does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a BO with "incidental take" provisions, etc.) from the USFWS, both lethal and non-lethal "takes" of protected species are in violation of the ESA.

10. If a conditioned water quality certification is issued for the project, (i.e., for projects located on Southern Ute or Ute Mountain Ute Tribal Lands) the permittee must comply with the conditions

specified in the certification as special conditions to this permit. In Colorado, excluding Indian lands, regional general permits are unconditionally certified by statue.

11. This permit does not authorize discharges of dredged or fill material associated with channelization, ditching, mechanized land clearing, cutting off meanders, or blocking off channels.

12. Activities associated with stream bed stabilization shall not block river systems used for navigation, including, but not limited to, rafting, canoeing, body surfing, boarding, and boating, or create a hazard that may increase the potential for entrapment or other potential dangers to humans while navigating such streams. An activity may not cause more than a minimal adverse effect on navigation.

13. The use of grout is not allowed by this permit unless after a case-by-case review the Corps makes a written determination that the use of grout would not cause more than minor impacts to the aquatic resource.

14. The use of broken concrete is not allowed by this permit unless the applicant demonstrates that methods utilizing native or non-manmade materials are not practicable (with respect to cost, existing technology, and logistics). In order to prevent relocation of broken concrete downstream during high flows, the size of broken concrete pieces, when allowed, shall not be smaller than 12 inches or larger than 48 inches in any dimension, and the longest dimension may be no more than three times that of the narrowest dimension. The use of broken concrete with exposed rebar is prohibited. Pre-cast concrete blocks may be used as riprap contingent upon case-by-case approval by the Corps.

15. Dredged or fill material shall not consist of unsuitable material (e.g., trash, debris, waste metal products, asphalt, car bodies, tires, etc.) and must be free from toxic pollutants in toxic amounts.

16. In most cases, all in-stream work shall be performed during low water periods, and the use of heavy equipment in stream beds, especially in live or flowing water, shall be minimized to the maximum extent practicable. However, some species of fish, such as brown trout (*Salmo trutta*), brook trout (*Salvelinus fontinalis)*, and Kokanee salmon (*Oncorhynchus nerka)*, begin spawning activity earlier in the year (as early as mid-September) when the hydrograph is generally receding. In every case, depending on the location of a project, care must be taken so that work does not adversely impact natural recruitment of fisheries. Additionally, special conditions may be required for projects that would impact aquatic species of tribal or state concern.

17. Discharges of dredged or fill material shall not occur in close proximity of a public water supply intake, shall not limit the ability of any existing diversion structure to appropriate water, and shall not adversely impact a stream gauging station.

18. Activities shall not impair reserved tribal rights including, but not limited to, reserved water rights and treaty fishing and hunting rights.

19. This permit does not authorize any activities 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 the river is in an official study status, or in a river reach designated by a federal land management agency management plan as "suitable" for inclusion in the system.

20. Activities in breeding areas for migratory waterfowl must be avoided to the maximum extent practicable. On a case-by-case basis, the Corps may restrict the timing of construction in order to avoid and minimize impacts to migratory waterfowl during the breeding season.

21. The permittee must allow representatives from the Corps to inspect the authorized work at any time deemed necessary to ensure that it is being or has been accomplished in compliance with the terms and conditions of the permit.

22. Permit compliance is the responsibility of the current property owner. If the permittee sells the property associated with the permit verification, the permittee may transfer the verification to the new owner by submitting a letter to the appropriate Corps office to validate the transfer. A copy of the permit verification must be attached to the letter, and the letter must contain the following statement and signature:

    "When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____ _____

Transferee Date

Further Information:

1. Congressional Authorities. This permit authorizes work in accordance with:

    a. Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
    b. Section 404 of the Clean Water Act (33 U.S.C. 1344)

2. Limits of this authorization:

    a. This permit does not obviate the need to obtain other federal, state, or local authorizations required by law.

    b. This permit does not grant any property rights or exclusive privileges.

    c. This permit does not authorize interference with any existing or proposed federal projects.

3. Limits of Federal Liability. In issuing this permit, the federal government does not assume any liability for the following:

    a. Damages to the permitted project, or uses thereof, as a result of other permitted or unpermitted activities or from natural causes;

    b. Damages to the permitted project, or uses thereof, as a result of current or future activities undertaken by or on behalf of the United States in the public interest;

c. Damages to persons, property, or other permitted or unpermitted activities or structures caused by the activity authorized by this permit;

d. Design or construction deficiencies associated with the permitted work; and

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on applicant's data. The determination by the Corps that a verification based upon this permit is not contrary to the public interest will be made in reliance on the information provided by the applicant.

5. Re-evaluation of permit decisions. The Corps may reevaluate its decision on this permit at any time the circumstances warrant (33 CFR 325.7(a)). Circumstances that could require a reevaluation include, but are not limited to, the following:

   a. Failure to comply with the terms and conditions of this permit;

   b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate; or

   c. Significant new information surfaces that the Corps did not consider before verifying that the project is authorized by this permit.

   Such re-evaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring the permittee to comply with the terms and conditions of the permit and for the initiation of legal action where appropriate.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of our decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

   This permit becomes effective when the federal official, designated to act for the Sacramento and Albuquerque District Engineers, has signed below.

Allan Steinle, Chief
Albuquerque District Regulatory Division

14 Aug 13
Date

GOLD MEDAL WATERS

The following list of important spawning areas has been defined as Gold Medal Waters by the State of Colorado for those areas within the Corps' Sacramento and Albuquerque Districts.

NOTE: This list of Gold Medal Waters is subject to change. For the most current list, please refer to the Colorado Parks and Wildlife (CPW) Colorado Fishing Brochure available on the CPW website (http://wildlife.state.co.us) or contact any CPW or Corps office in Colorado.

GOLD MEDAL LAKES:

North Delaney Butte Lake in Jackson County.

Steamboat Lake in Routt County.

GOLD MEDAL STREAMS:

Animas River from Lightner Creek to Rivera Crossing Bridge.

Blue River from Dillon Reservoir Dam to Green Mountain Reservoir inlet; and From Green Mountain Reservoir dam to Colorado River confluence.

Colorado River from Fraser River to Troublesome Creek confluence.

Fryingpan River from Ruedi Reservoir dam to Roaring Fork River confluence.

Gore Creek from Red Sandstone Creek to Eagle River confluence.

Gunnison River from 200 yards downstream of Crystal Reservoir dam to the North Fork of the Gunnison River.

North Platte River from the south boundary of Routt National Forest to the Wyoming border.

Rio Grande from State Highway 149 Bridge at South Fork downstream to the Rio Grande canal diversion structure.

Roaring Fork River from the Fryingpan River downstream to the Colorado River confluence.

Additional Resources

A Function-Based Framework for Stream Assessment & Restoration Projects, EPA 843-K-12-006, http://water.epa.gov/lawsregs/guidance/wetlands/upload/A_Function-Based_Framework.pdf.

Allen, Hollis H. and Fischenich, Craig. Brush Mattresses for Streambank Erosion Control, May 1, 2001.

Natural Channel Design Review Checklist, EPA 843-B-12-005, http://water.epa.gov/lawsregs/guidance/wetlands/upload/Natural_Channel_Design_Checklist_5_16_12.pdf.

ERDC TR TO HQUSACE. Initial Research into the Effects of Woody Vegetation on Levees Volume IV of V: Summary of Results and Conclusions, July 2011.

Fischenich, Craig. Stability Thresholds for Stream Restoration Materials, May 1, 2001.

Fischenich, J. Craig. Technical Considerations for Evaluating Riverine/Riparian Restoration Projects. Environmental Laboratory, U.S. Army Engineer Research and Development Center, ERDC/EL TR-WRAP-03-XX, April 2003.

Sotir, Robbin B. and Fischenich, J. Craig. Live Stake and Joint Planting for Streambank Erosion Control, November 2007.

Sylte, Traci and Fischenich, Craig. Rootwad Composites for Streambank Erosion Control and Fish Habitat Enhancement, May 2, 2000.

Winkler, Michael F. Defining Angle and Spacing of Bendway Weirs , ERDC/CHL CHETN-IX-12, December 1, 2003.