

**REGIONAL GENERAL PERMIT NO. 37
STREAM STABILIZATION PROJECTS
SACRAMENTO AND ALBUQUERQUE DISTRICT AREAS OF COLORADO**

EFFECTIVE DATE: TBD

EXPIRATION DATE: 5 years from the date of issuance

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. 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 Parks & Wildlife on a case-by-case basis.

NOTIFICATION AND APPROVAL PROCEDURES: 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 visit the Colorado Regulatory website: <http://www.nwo.usace.army.mil/html/od-tl/coloreg-home.htm>, or contact one of the following Colorado Regulatory offices:

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

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;
2. A well-defined purpose and need for the work, including a detailed statement as to why this stabilization methodology is the best available alternative to address the stability issue. Describe any erosion or unstable conditions. If possible, include photographs of the problem areas;
3. A legal description of the project location including section, township, range, and coordinates (latitude/longitude, UTM, etc.);
4. A set of drawings with the dimensions of the proposed work. These drawings are very important in order to give the Corps a clear understanding of the proposed work and also to check permit compliance later, if we approve the work. The drawings must show the following:
 - a. Project Location;
 - b. Plan or top view(s) of the proposed work;
 - c. Profile view for cross-channel structures; and
 - d. Typical cross-sectional or side view(s) of the work.

The drawings should be on 8.5-inch by 11-inch paper with all pertinent dimensions such as length, width and height of the structures or work. A bar scale would be useful on each drawing. For projects that include a grade control component, the applicant should also provide the average gradient of the stream reach (i.e., bankfull surface elevation difference between the upstream and downstream limits of the project reach); and

5. 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 CWA for the project and provide a copy of the WQC to the Corps:
 - a. Southern Ute Indian Lands. Water quality certifications 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, Wetlands and Watersheds Unit, 1595 Wynkoop Street, Denver, Colorado 80202-1129, or visit the webpage: <http://www.epa.gov/region8/water/wqc.html>.
 - b. Ute Mountain Ute Indian Lands. Water quality certifications 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, Towaoc, 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 as described below:

RIPRAP: Riprap is material placed along an eroding bank to armor it and reduce erosion. Riprap material must be durable angular rock or broken concrete free from large quantities of organic material and erodible material such as dirt and gravel. In order to use broken concrete, the applicant must demonstrate that soft engineering 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 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. The use of rounded river cobble or stone is not acceptable as riprap and is **not** authorized under this permit. Properly anchored trees and logs may be used in combination with large rock riprap. Proper anchoring of trees and logs is especially important because floatable materials can dislodge and move with currents, potentially causing downstream erosion and blockages. Rock-filled gabion baskets or cages may be approved under this permit in limited situations. Gabions are not generally effective in high velocity streams, streams with large bedloads, or streams where the water chemistry is deleterious to the gabion mesh.

This permit authorizes the placement of riprap provided:

1. The single and complete bank stabilization project using riprap is less than 1,000 feet in length along a stream bank;
2. The placement of riprap below the plane of the ordinary high water mark of the stream is limited to an average of two cubic yards or less of material per linear foot. This permit is intended for protecting existing bank lines and does not authorize total restoration of original bank lines;
3. The size of the riprap shall be large enough to withstand expected high flow velocities and turbulence to prevent the riprap from dislodging. If waste concrete pieces are used, all exposed rebar or other degradable substances shall be removed prior to placement. Concrete shall be broken into pieces prior to placement to prevent slabs from being carried away by high flows;
4. The maximum slope steepness for riprap installation should be one foot vertical for two feet horizontal. On a case-by-case basis, to accommodate a secondary interest of creating better trout habitat with overhanging banks, the Corps may approve riprap installation that exceeds the specified maximum slope steepness;
5. 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;

6. The upstream and downstream ends of the riprap blanket should be keyed or tied 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 below the top of bank to avoid creating levees which restrict the floodplain; and
7. Establishing a vegetative cover on disturbed surfaces by seeding, transplanting, or other appropriate means is very important, highly recommended, and may in some instances, 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.

DROP STRUCTURES: A drop structure is a designed placement of rocks, boulders and/or logs placed in a stream to act as a low level dam or weir. Drop structures are designed to promote stream bed stability by decreasing the grade of the stream bed, which decreases velocity and reduces stream bank erosion; however, there are a number of approaches to stream stabilization which may result in fewer impacts to the aquatic resources. In order to construct drop structures under this permit, applicants must submit a written statement to the Corps demonstrating that the stream is degrading and explaining why such degradation is unacceptable and why grade control is the preferred solution to the problem.

This permit authorizes the construction of drop structures provided:

1. Drop 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. The reason for this limit is that the majority of drop structures constructed in Colorado generally do not need to exceed 2 feet in height above the pre-construction stream bottom elevation to promote stream bank and stream bed stability. In all cases, the height of the drop should be based on the specific stream characteristics. In addition to the total structure height, there should be at least one area near the center of a drop structure where fish may pass over the structure with 18 inches or less of drop and an adequate acceleration pool located immediately downstream. In special cases, the Corps may waive the 2-foot limit if the applicant demonstrates that the proposed project will not inhibit fish passage;
2. Materials acceptable for drop structure construction include large boulders, large angular stone, logs, or a combination of the preceding. CAUTION: Logs can be more susceptible to damage from high flows and may need more frequent maintenance;
3. Material size shall be large enough to withstand expected high flow velocities and associated turbulence;

4. Drop structures shall be constructed in an inverted "V" formation with the apex of the "V" directed upstream or at an angle to the current which will direct overtopping flows to the middle of the stream and not against adjacent stream banks;
5. All drop structures shall be tied or keyed into the existing stream bed (e.g., footers) and stream banks and protected by large rock anchored several feet into the bed and banks in order to prevent the structures from scouring and undercutting during high flows;
6. Construction equipment should access the stream at the fewest possible locations immediately upstream of the proposed work site to minimize disturbance to the aquatic environment;
7. Construction or placement of rock for a drop 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 drop structures. Rocks placed at the bank should not extend above the bankfull elevation of the stream;
8. Due to the varied widths of streams wherein drop 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. The structure should not impede or block boat passage. As a precaution to recreational boaters and rafters, a sign(s) should be placed upstream of the structure(s) to give boaters and rafters ample warning of the structure's presence. The center portion of a drop should be lower to concentrate flows and facilitate boat passage and prevent entrapment of recreationists; and
10. Typical drop structures may not be approved for certain stream types.

JETTIES: Jetties are structures placed along a stream bank to direct flow away from an eroding bank. Jetties may also be used to direct flow toward an in-stream sand/gravel bar or shoal to cause it to scour. Acceptable materials for jetties include large angular rock, large boulders, large concrete chunks without protruding rebar, and logs or trees alone or in combination with the preceding fill materials. Generally, jetties 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 are **not** acceptable for jetties.

This permit authorizes the construction of jetties provided:

1. The maximum extension of any jetty 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. Jetties shall be spaced along the bank to prevent scouring or scalloping of the bank between the structures;
3. The angle of the jetty and the bank line should not be greater than 30 degrees. Most often, the angle should be only 15-20 degrees to avoid excessive maintenance requirements;

4. Jetties may be triangular or linear (single-wing) in shape. Single wing jetties may only be directed upstream. CAUTION: Single-wing jetties may be more susceptible to damage from high flows and require more frequent maintenance than triangular ones;
5. Construction materials must be of sufficient size to withstand expected high velocities and turbulence. Rounded river cobble and stone, and dirt fill are not suitable for jetties. In order to use broken concrete, the applicant must demonstrate that soft engineering 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 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;
6. Jetties must be securely anchored into the bank for several feet to protect against undercutting and circumvention of the structure by high flows;
7. Trees for jetty construction should not be obtained from a riparian or wetland source, if practicable (see Special Condition No. 3). Proper anchoring of trees and logs is especially important. If unraveled, these materials can cause serious downstream erosion damage (e.g., block bridge openings, form new channel bars, etc.); and
8. The length of stream bank, where jetties will be built, must not exceed 1,000 feet as measured from the first to last jetty.

All work authorized by this permit shall be completed in accordance with the plan(s) approved by the Corps and the terms and conditions specified below. The applicant must notify the Corps, in writing, and receive written approval from the Corps PRIOR to beginning work authorized by this permit.

General Conditions:

1. Upon receiving approval to perform work under this permit, the permittee will have three years to complete the work, unless specified otherwise in a Corps verification letter. If more time is required, the permittee must seek an extension of time from the Corps. Requests for time extensions should be submitted to the Corps at least 45 days prior to the 3-year completion date. Upon completion of the work, the permittee will submit a signed certification to the Corps. The Certification of Compliance shall include:
 - a. A statement that the work was done in accordance with the Corps authorization including any general or specific conditions;
 - b. A statement that any required mitigation was done in accordance with the permit conditions; and
 - c. The signature of the permittee certifying the completion of the work and mitigation.

2. The permittee must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. The permittee 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 20 below.
3. 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.
4. The permittee must take precautions to avoid and minimize temporary impacts and protect wetlands from damage during access and construction. The permittee will 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. This permit does not authorize the loss of greater than 1/3 acre of wetland.
5. An activity may not substantially disrupt the movement of those species of aquatic life indigenous to a water body, including those species which normally migrate through the area.
6. 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. When work authorized by this permit 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.
7. If the permittee discovers any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, all work must stop and the Corps must be immediately notified. 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.
8. 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.

9. If a conditioned water quality certification is issued for the project, (i.e., for projects located within the exterior boundaries of the 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 statute.
10. 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.
11. 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.
12. 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.
13. Any dredged or fill material shall not consist of unsuitable material [e.g., trash, debris, waste metal products, bituminous concrete (asphalt), car bodies, etc.] and must be free from toxic pollutants in toxic amounts.
14. All in-stream work should generally be performed during low water periods and the use of heavy equipment in stream beds, especially in live or flowing water, should be minimized. However, brown trout (*Salmo trutta*) begin spawning activity as early as mid-September when the hydrograph is generally receding. Depending on the location of a project, care must be taken so that low flow work does not adversely impact natural recruitment of native fisheries. Additionally, special conditions may be imposed for projects that would impact aquatic species of tribal or state concern.

15. Any 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.
16. Activities occurring 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, is not authorized by this permit.
17. An activity may not impair reserved tribal rights including, but not limited to, reserved water rights and treaty fishing and hunting rights.
18. 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.
19. The permittee must allow representatives from the Corps to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of the permit.
20. If the permittee sells the property associated with a permit verification, the permittee may transfer the permit verification to the new owner by submitting a letter to the appropriate Corps district 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.
 - 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.
 - c. Significant new information surfaces that the Corps did not consider before verifying that your 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 you 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 District Engineer, has signed below.

Allan Steinle, Chief
Albuquerque District Regulatory Division

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.

Animas River. From Lightner Creek to Rivera Crossing Bridge.

Blue River. From Dillon Reservoir Dam downstream to the confluence with the Colorado River (34 miles).

Colorado River. From Fraser River downstream to the confluence with Troublesome Creek (20 miles).

Fryingpan River. From Ruedi Reservoir Dam downstream to the confluence with the Roaring Fork River (14 miles).

Gore Creek. From Red Sandstone Creek downstream to Eagle River (4.5 miles).

Gunnison River. From the upper boundary of the Black Canyon of the Gunnison National Monument downstream to the confluence with the North Fork of the Gunnison River (26 miles).

North Delaney Lake. Ten miles west of Walden.

North Platte River. From the Routt National Forest boundary to the Wyoming border (5.3 miles).

Rio Grande. From Farmers' Union Canal upstream to the upper boundary of Collier State Wildlife Area (22.5 miles).

Roaring Fork River. From the confluence with Crystal River downstream to the confluence with the Colorado River (12 miles).

South Platte River. The Middle Fork of the South Platte River downstream from U.S. Route 285, the South Fork of the South Platte River downstream from the outlet at Antero Reservoir, and from the confluence of the Middle and South Forks of the South Platte River downstream to the inlet of Spinney Mountain Reservoir.

From the outlet of Spinney Mountain Reservoir downstream to the inlet of Eleven Mile Canyon Reservoir.

From Cheesman Reservoir Dam downstream to the confluence with the North Fork of the South Platte River (19.5 miles).

Spinney Mountain Reservoir. On the South Platte River, five miles upstream from Eleven Mile Canyon Reservoir.