



**US Army Corps  
of Engineers** ®  
Fort Worth District

# Public Notice

**Number:** CESWF-18-LOP-3

**Activity:** Surface Coal Mining Activities

**Date:** November 14, 2018

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This public notice is to inform you of the issuance of a revised Letter of Permission CESWF-18-LOP-3 for Surface Coal Mining Activities on November 6, 2018.

## Regulatory Program

Since its early history, the U.S. Army Corps of Engineers has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the U.S. Army Corps of Engineers Regulatory Program.

## Section 10

The U.S. Army Corps of Engineers is directed by Congress under Section 10 of the Rivers and Harbors of 1899 (33 USC 403) to regulate *all work or structures in or affecting the course, condition or capacity of navigable waters of the United States*. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

## Section 404

The U.S. Army Corps of Engineers is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the *discharge of dredged and fill material into all waters of the United States, including wetlands*. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

## Contact

U.S. Army Engineer District  
Regulatory Division  
PO Box 17300  
Fort Worth, TX 76102-0300  
(817)886-1731

## **REVISED LETTER OF PERMISSION PROCEDURE**

### **SURFACE COAL MINING ACTIVITIES**

**SUBJECT:** Interested parties are hereby notified that, in accordance with Title 33 CFR 325.2(e)(1), published in the Federal Register on November 13, 1986, the U. S. Army Corps of Engineers (USACE), Fort Worth District is issuing this revised Letter of Permission (LOP) procedure for authorizing the work described herein within the Fort Worth District. The purpose of this procedure is to expedite Section 404 authorization for the activities described below when they would not pose substantial adverse individual or cumulative impacts on the aquatic environment. Each LOP issued will include the general conditions identified herein by reference and case-specific provisions intended to protect the environment, including natural and cultural resources. Work that does not comply with these provisions may require evaluation as a standard individual permit. However, compliance with the revised LOP procedure, including the general conditions, does not guarantee authorization of the work by LOP. Work or structures that will have unacceptable impacts on the public interest would not be authorized. Activities requiring Department of the Army authorization that are not specifically covered by this LOP are prohibited unless authorized by a separate permit.

**SCOPE OF WORK:** Work that may be authorized by this revised LOP procedure includes surface coal mining and reclamation operations provided the activities are already authorized by the Department of the Interior (DOI), Office of Surface Mining (OSM) or by the approved state program (currently the Railroad Commission of Texas (RCT)) under Title V of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). Impacts to waters of the U.S. authorized by LOP using this procedure would be limited to 25 total acres of wetland, of which forested wetlands would be limited to a subtotal of 12.5 acres. The limit on stream impacts has been removed.

**APPLICATION NUMBER:** The revised LOP has been designated CESWF-18-LOP-3.

**DATE ISSUED:** November 14, 2018

**LOCATION:** The provisions of this LOP would be applicable to all waters of the U.S., including all navigable waters of the U.S., within the regulatory boundaries of the Fort Worth District of the USACE, within the state of Texas (see "Location of Work" and Appendixes B and C of the enclosed LOP.)

**STATE WATER QUALITY CERTIFICATION:** Texas Commission on Environmental Quality (TCEQ) has certified pursuant to Section 401 of the Clean Water Act, and Title 31, Texas Administrative Code Section 279.1-.13 that the work authorized by this LOP would comply with State water quality standards.

**THREATENED AND ENDANGERED SPECIES:** No authorization would be granted under this revised LOP for an activity that is likely to jeopardize the continued existence of an endangered or threatened species as identified under the Endangered Species Act, or for an activity that is likely to destroy or adversely modify the critical habitat of such species. Any activity that may affect an endangered or threatened species would require review by the USACE and consultation with the U. S. Fish and Wildlife Service.

**NATIONAL REGISTER OF HISTORIC PLACES:** The USACE will take into account the impact of activities authorized by this revised LOP on cultural resources listed, or eligible for listing, in the National Register of Historic Places (NRHP). If known or previously unknown cultural resources are encountered

during work authorized by this permit, the permittee shall notify the appropriate USACE district and the resources shall be avoided until the USACE can assess their eligibility for listing in the NRHP. Sites determined to be eligible for listing in the NRHP shall be mitigated in consultation with the USACE. Cultural resources include prehistoric and historic archeological sites, and areas or structures of cultural interest that occur in the permit area.

**OTHER AGENCY AUTHORIZATIONS:** This LOP does not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law. The permittee is responsible for obtaining any additional federal, state, or local permits or approvals that may be required, including, but not limited to:

1. When streambed materials such as sand, shell, gravel and marl would be disturbed or removed from state-owned waters in Texas, the permittee may be required to obtain a permit from the Texas Parks and Wildlife Department (TPWD), 4200 Smith School Road, Austin, Texas 78744. All activities occurring on lands owned or managed by the TPWD require a signed agreement from that agency prior to commencing operations.
2. All activities in Texas located on lands under the jurisdiction of the Texas General Land Office (GLO), 1700 North Congress Avenue, Austin, Texas 78701-1495, must have prior approval from that office. The placement of structures onto state-owned streambeds, state-owned uplands, or coastal state-owned lands in Texas may require the issuance of a lease or easement from the GLO.
3. Any work that would be conducted on lands or in waters under the jurisdiction of any river authority or other operating agency may require a permit from that agency.
4. Projects involving government property at USACE reservoirs require submission of detailed design information to the reservoir manager and USACE approval for the proposed activity to occur on government property, including a real estate consent to easement.
5. Activities within a 100-year floodplain may require a floodplain development permit from the local floodplain administrator or, in Texas, the TCEQ Flood Management Unit, (512) 239-4771 (see also general condition 31). In addition, evidence that the project meets non-encroachment restrictions in regulatory floodways may be required.
6. In accordance with the federal Clean Water Act and Texas statute, a point source discharge of pollutants from an outfall structure associated with activities other than oil and gas exploration, development, and production must be authorized, conditionally authorized, or specifically exempted from regulation under the terms of the Texas Pollutant Discharge Elimination System (TPDES) program through the TCEQ, Water Quality Division (MC-150), P. O. Box 13087, Austin, Texas 78711-3087. In accordance with the federal Clean Water Act and Texas Statute, a point source discharge of pollutants from an outfall structure associated with oil and gas exploration, development, and production must be authorized, conditionally authorized, or specifically exempted from regulation by the U. S. Environmental Protection Agency (USEPA), Region 6, Water Quality Protection Division (6WQ), 1445 Ross Avenue, Dallas, Texas 75202, and the Railroad Commission of Texas, Oil and Gas Division, 1701 North Congress Avenue, P. O. Box 12967, Austin, Texas 78711-2967, respectively.
7. Activities such as clearing, grading, and excavation that would disturb one or more acres of land may require a National Pollutant Discharge Elimination System (NPDES) storm water management permit from the USEPA, Region 6, Water Quality Protection Division (6WQ), 1445 Ross Avenue,

Dallas Texas 75202 or a TPDES storm water management permit from the TCEQ, Water Quality Division (MC-150), P. O. Box 13087, Austin, Texas 78711-3087.

8. The use of scrap tires for bank stabilization and erosion control requires notification of the TCEQ Waste Tire Recycling Program, P. O. Box 13087, Austin, Texas 78711-3087.

9. Activities associated with the exploration, development, or production of oil, gas, or geothermal resources, including the transportation of oil or gas prior to the refining of such oil or the use of such gas in manufacturing or as a fuel, as described in Texas Natural Resource Code Annotated §91.101, may require authorization from the Railroad Commission of Texas, P.O. Box 12967, Austin, Texas 78711-2967, the Federal Energy Regulatory Commission, 3125 Presidential Parkway, Suite 300, Atlanta, Georgia 30340, and/or the Texas General Land Office, 1700 North Congress Avenue, Austin, Texas 78701-1495.

10. The construction, operation, maintenance, or connection of facilities at the borders of the U.S. are subject to Executive control and must be authorized by the President, Secretary of State, or other delegated official. Activities that would require such authorization and would affect an international water in Texas, including the Rio Grande, Amistad Reservoir, Falcon Lake, and all tributaries of the Rio Grande, may require authorization from the International Boundary and Water Commission, located at The Commons, Building C, Suite 310, 4171 North Mesa Street, El Paso, Texas 79902.

11. Activities outside the USACE permit area that may affect a federally-listed endangered or threatened species or its critical habitat could require permits from the U.S. Fish and Wildlife Service (FWS) to prevent a violation of the Endangered Species Act under Section 9. For further information, contact the U. S. Fish and Wildlife Service in Arlington: 2005 NE Green Oaks Boulevard, Suite 140, Arlington, Texas 76006, (817) 277-1100, <http://arlingtontexas.fws.gov> ; Austin: 10711 Burnet Road, Suite 200, Austin, Texas 78758, (512) 490-0057, <http://ifw2es.fws.gov/austintexas/> ; Corpus Christi: 6300 Ocean Drive, Corpus Christi, Texas 78412, (512) 994-9005, <http://ifw2es.fws.gov/corpuschristitexas/> ;or Houston: 17629 El Camino Real, Suite 211, Houston, Texas 77058, (713) 286-8282, <http://ifw2es.fws.gov/clearlaketexas> .

12. Activities may affect state-listed rare, threatened, or endangered species. For a rare, threatened, and endangered species review in the State of Texas, submit projects to: Wildlife Habitat Assessment Program, Texas Parks and Wildlife Department (TPWD), 4200 Smith School Road, Austin, Texas 78744.

13. Activities in the recharge zone of the Edwards Aquifer require a Water Pollution Abatement Plan and activities in the contributing zone of the Edwards Aquifer that disturb more than 5 acres of land under Edwards Aquifer rules. For further information contact the Edwards Aquifer Authority, 1615 North St. Mary's Street, San Antonio, Texas 78215.

**APPLICATION PROCEDURES:** Applications requesting authorization from the USACE under this LOP must be in writing and include a description of the project, proposed construction schedule, and the name, address and telephone number of a point of contact who can be reached during normal business hours. The information may be assembled and submitted in a format convenient to the applicant. All pages, including maps, drawings, figures, sheets, etc., must be on 8 ½ by 11-inch paper or fold easily to 8 ½ x 11-inch dimensions. The detail of the information should be commensurate with the size and environmental impact of the project. The description of the project must include at least the following information:

1. The purpose of, and need for, the project.

2. A delineation, determination, and characterization of wetlands and other waters of the U.S. in the area that would be affected by the proposed work, and a description of the project's likely impact on the aquatic environment. Delineations of wetlands must be conducted using the "Corps of Engineers Wetland Delineation Manual", USACE Waterways Experiment Station Wetlands Research Program Technical Report Y-87-1, dated January 1987 (on-line edition available at (<http://www.swf.usace.army.mil/pubdata/environ/regulatory/jurisdiction/wlman87.pdf>), including all supplemental guidance (currently includes guidance dated October 7, 1991, and March 6, 1992) and the appropriate Regional Supplements (Arid West, Atlantic and Gulf Coastal, and Great Plains) available at [http://www.usace.army.mil/CECW/Pages/reg\\_supp.aspx](http://www.usace.army.mil/CECW/Pages/reg_supp.aspx). In addition, include the width and depth of the water body and the waterward distance of any structures from the existing shoreline.
3. A vicinity map, or maps, on copies of 7.5-minute U. S. Geological Survey (USGS) quadrangle maps, county maps, scaled aerial photographs, or other suitable maps, clearly showing the location of all temporary and permanent elements of the project, including the entire route of the project for utility lines and any associated borrow pit(s), disposal site(s), staging area(s), etc. This map, or maps, or an additional map, or maps, must show the project area in relation to nearby highways and other roads, and other pertinent features. A ground survey is not required to obtain this information. Identify all base maps, e.g. Fort Worth, Texas 7.5-minute USGS quadrangle, etc. Clearly identify and number the location of each proposed utility line crossing of a water of the U.S. and any appurtenant structure(s) in waters of the U.S.
4. Mine plan including plan, profile, and cross-section views of all work (fills, excavations, structures, etc.), both permanent and temporary, in, or adjacent to, waters of the U.S., including wetlands, and a description of the proposed activities and structures, such as the dimensions and/or locations of roads (both temporary and permanent), sediment ponds, diversions, mine through areas, mine facilities, coffer dams, equipment ramps, borrow pits, disposal areas, staging areas, haul roads, and other project related areas within the USACE permit area(s). The permit area(s) includes all waters of the U.S. affected by activities associated with the project, as well as any additional area of non-waters of the U.S. in the immediate vicinity of, directly associated with, and/or affected by, activities in waters of the U.S. The USACE permit area(s) typically include(s) the geographic extent of earth disturbance associated with the proposed mine, in addition to any areas of indirect effects to waters of the U.S. Each impact site associated with the overall project should include the following site-specific information when applicable:
  - a. a brief characterization of the crossing area including type (stream, forested wetland, non-forested wetland, etc.), function, value;
  - b. distance between ordinary high water marks;
  - c. length, width, and area of waters of the U.S. directly and indirectly affected (temporary and permanent);
  - d. nature of proposed work (dredging , filling, etc.);
  - e. proposed method of crossing (bore, trench, etc.);
  - f. the source, type, and volumes of dredged and/or fill material to be discharged; and
  - g. anticipated duration of any temporary impacts.
5. A written discussion of the alternatives considered and the rationale for selecting the proposed alternative as the least environmentally damaging practicable alternative. Practicable alternatives that do not involve a discharge into a special aquatic site, such as wetlands, are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise. The application must also include documentation that the amount of area impacted is the minimum necessary to accomplish the project.

6. An assessment of the adverse and beneficial effects, both permanent and temporary, of the proposed work and documentation that the work would result in no more than a minimal adverse impact on the aquatic environment.
7. Documentation that the amount of area impacted is the minimum necessary to accomplish the project and, in cases where the activity would result in a change to pre-construction contours and/or drainage patterns, a description of the anticipated impacts of the changes, the reason(s) that the changes are necessary, and documentation that the changes would not result in more than minimal adverse impact on the aquatic environment.
8. A mitigation plan presenting appropriate and practicable measures planned: a) to avoid and minimize adverse impacts to the aquatic environment, particularly associated with temporary elements of the proposed project, and b) to compensate for the remaining unavoidable adverse impacts to the aquatic environment. If compensatory mitigation for unavoidable adverse impacts to the aquatic environment is not proposed, the application must include documentation that the proposed work would have minimal adverse impact on the aquatic environment without compensatory mitigation, why compensatory mitigation would be inappropriate and/or impracticable, and that compensatory mitigation should not be required. The mitigation plan must include a description of proposed appropriate and practicable actions that would restore, enhance, protect and/or replace the functions and values of the aquatic environment unavoidably lost in the permit area because of the proposed work. See Appendix D for more information.
9. An assessment documenting whether any species listed as endangered or threatened under the Endangered Species Act might be affected by, or found in the vicinity of, the USACE permit area(s) for the proposed project. Coordination with the FWS concerning the potential impact of the entire project on endangered and threatened species is encouraged. See contact information, including website addresses, for FWS offices in "OTHER AGENCY AUTHORIZATIONS" section above.
10. A discussion documenting whether any cultural resources, particularly those historic properties listed, or eligible for listing, in the National Register of Historic Places (NRHP), would be affected by, or are in the vicinity of, the USACE permit area(s) for the proposed project.
11. The applicant should include relevant information on hydrology and hydraulics.
12. Early coordination with the USACE, well before an application is submitted, is beneficial in many cases.
13. Address LOP applications to: U.S. Army Corps of Engineers, Fort Worth District, ATTN: CESWF-DE-R, P.O. Box 17300, Fort Worth, TX 76102-0300, telephone: (817) 886-1731, website address: <http://www.swf.usace.army.mil/regulatory>

**EVALUATION PROCEDURES:** As part of the evaluation process, , the USACE shall conduct a public interest evaluation and coordinate with the appropriate resource agencies, including USEPA, USFWS, TPWD, TCEQ and the RCT. Coordination with the agencies will include agency review and input on the applicant's proposed compensatory mitigation plan. The USACE strongly encourages pre-application coordination with these agencies through the USACE. Additionally, the USACE shall coordinate with the Louisiana Department of Wildlife and Fisheries (LDWF) for any proposal for LOP authorization which is located adjacent to, or may discharge into, any waterway that has a direct connection to waters of the state of Louisiana.

Work may not proceed prior to written notification that the USACE has issued an LOP. It is the applicant's responsibility to insure that the authorized project meets the terms and conditions set forth herein; failure to abide by them will constitute a violation of the Clean Water Act. Projects outside the scope of this LOP may be considered for authorization by individual permit.

This LOP procedure shall become effective on the date of the signature of the District Engineers, or their authorized representative.

**CONDITIONS OF THE LETTER OF PERMISSION:** In addition to limitations discussed in the scope of work, projects authorized by LOP are subject to the conditions contained in Appendix A.

**BY AUTHORITY OF THE SECRETARY OF THE ARMY:  
FOR THE DISTRICT ENGINEER:**

Kenneth N. Reed  
Colonel, U.S. Army  
District Commander  
Fort Worth District

## APPENDIX A

### CONDITIONS FOR LETTER OF PERMISSION CESWF-18-LOP-3

#### SURFACE COAL MINING ACTIVITIES

1. In verifying authorization under this Letter of Permission (LOP), the Department of the Army has relied in part on the information provided by the permittee. If, subsequent to verifying authorization, such information proves to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part.
2. Structures and activities authorized by this LOP shall comply with all terms and conditions herein. Failure to abide by such conditions invalidates the authorization and may result in a violation of the law, requiring restoration of the site or other remedial action.
3. This LOP is not an approval of the design features of any authorized project or an implication that such project is adequate for the intended purpose: a Department of the Army permit merely expresses the consent of the Federal Government to conduct the proposed work insofar as public rights are concerned. This LOP does not grant any property rights or exclusive privileges; does not authorize any injury to the property or rights of others; and does not authorize any damage to private property, invasion of private rights, or any infringement of federal, state or local laws or regulations. This LOP does not relieve the permittee from the requirement to obtain a local permit from the jurisdiction within which the project is located.
4. This LOP may be modified or suspended in whole or in part if it is determined that the individual or cumulative impacts of work that would be authorized using this procedure are contrary to the public interest. The authorization for individual projects may also be summarily modified, suspended, or revoked, in whole or in part, upon a finding by the District Engineer that such action would be in the public interest.
5. Modification, suspension or revocation of the District Engineer's authorization shall not be the basis for any claim for damages against the U.S.
6. This LOP does not authorize interference with any existing or proposed federal project, and does not entitle the permittee to compensation for damage or injury to the structures or activities authorized herein that may result from existing or future operations undertaken by the U.S. in the public interest.
7. No attempt shall be made by permittees to prevent the full and free public use of any navigable water of the U.S.
8. Permittees shall not cause any unreasonable interference with navigation.
9. Permittees shall make every reasonable effort to conduct the activities in a manner that will minimize any adverse impact of the work on water quality, fish and wildlife, and the natural environment, including adverse impacts to migratory waterfowl breeding areas, spawning areas, and trees, particularly hard-mast-producing trees such as oaks and hickories. Permittees shall normally maintain existing buffers around waters of the U.S. and create and/or expand buffers around waters of the U.S. when practicable. Compensatory mitigation plans for projects in, or near, streams, other open waters, or wetlands shall normally include provisions for the establishment, maintenance, and legal protection in the form of conservation easements, of vegetated buffers to those waters.

10. Permittees shall allow the District Engineer and his authorized representative(s) to make periodic inspections at any time deemed necessary to ensure that the activity is being performed in accordance with the terms and conditions of this LOP.

11. Permittees must evaluate the effect that the proposed work would have on historic properties listed, or eligible for listing, in the National Register of Historic Places (NRHP) prior to the initiation of work. Historic properties include prehistoric and historic archeological sites, and areas or structures of cultural interest that occur in the permit area. If a known historic property would be encountered, the permittee shall notify the USACE and shall not conduct any work in the permit area that would affect the property until the requirements of 33 CFR Part 325, Appendix C, and 36 CFR Part 800 have been satisfied. If a previously unknown historic property is encountered during work authorized by this LOP, the permittee shall immediately notify the USACE and avoid further impact to the site until the USACE has verified that the requirements of 33 CFR Part 325, Appendix C, and 36 CFR Part 800 have been satisfied.

12. Materials to be placed into waters of the U.S. are restricted to clean native soils and concrete, sand, gravel, rock, other coarse aggregate, and other suitable material. All material used shall be free of toxic pollutants in toxic quantities and/or acid forming constituents.

13. Permittees shall coordinate all construction activities in federally-maintained channels and/or waterways for required setback distances with the USACE prior to application for a permit.

14. Permittees shall place all heavy equipment working in wetlands on mats, or take other appropriate measures to minimize soil disturbance.

15. Activities that are likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Endangered Species Act, or that are likely to destroy or adversely modify the critical habitat of such species are not authorized. Permittees shall notify the District Engineer if any listed species or critical habitat might be affected by, or is in the vicinity of, the project and shall not begin work until notified by the District Engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized.

16. Permittees shall use and maintain appropriate erosion and siltation controls in effective operating condition during construction, and permanently stabilize all exposed soil at the earliest practicable date using native vegetation to the maximum extent practicable. Permittees shall remove all excess material and temporary fill and structures placed in waters of the U.S., including wetlands, to upland areas and stabilize all exposed slopes and stream banks immediately upon completion of construction. Permittees shall return all areas affected by temporary fills and/or structures to preconstruction conditions or better, including revegetation with native vegetation. All material removed must be placed at least 100 feet from any water of the U.S., including wetlands, and adequately contained to prevent the return to any water of the U.S., including wetlands.

17. Permittees shall not significantly disrupt the movement of those species of aquatic life indigenous to the water body or those species that normally migrate through the project area.

18. Permittees shall not permanently restrict or impede the passage of normal or expected high flows unless the primary purpose of the activity is to temporarily impound water or for authorized detention ponds for stormwater management.

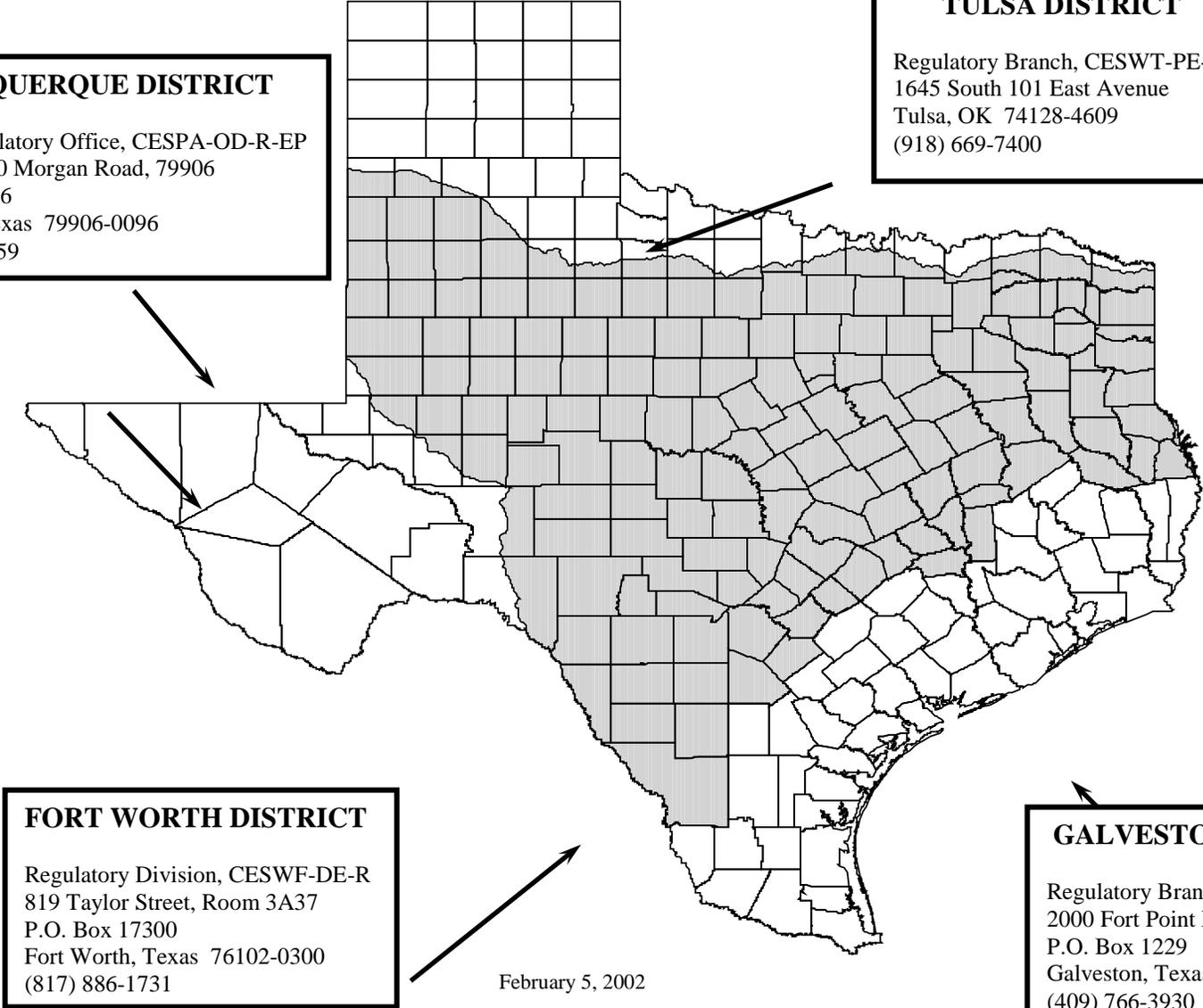
19. Permittees shall properly maintain all structures and fills to ensure public safety.

20. Permittees shall ensure that projects have no more than minimal adverse impacts on public water supply intakes.
21. Permittees shall design facilities to be stable against the forces of flowing water, wave action, and the wake of passing vessels.
22. Permittees shall mark intake and/or outfall structures and other fills and structures in navigable waters, when appropriate, so that boaters will notice their presence.
23. This permit does not authorize work in a park, wildlife management area, refuge, sanctuary, or similar area administered by a federal, state or local agency without that agency's approval.
24. Permittees are responsible for compliance with all terms and conditions of this LOP for all activities within the Department of the Army permit area of a project authorized by this LOP, including those taken on behalf of the permittee by other entities such as contractors and subcontractors. Permittees assume all liabilities associated with fills and impacts that are incurred by individuals and/or organizations working under contracts with the permittee. Before beginning the work authorized herein, or directing a contractor to perform such work, permittees shall ensure that all parties read, understand and comply with the terms and conditions of this permit. The USACE strongly encourages preconstruction meetings with all construction activities of the project.
25. Permittees shall conduct dredging and excavation activities with land based equipment rather than from the water body whenever practicable.
26. Permittees must comply with Federal Emergency Management Agency (FEMA), or FEMA-approved local floodplain development requirements in the placement of any permanent above-grade fills in waters of the U.S., including wetlands, within the 100-year floodplain. The 100-year floodplain will be identified through FEMA's Flood Insurance Rate Maps or FEMA-approved local floodplain maps. A permanent above-grade fill is a discharge of dredged or fill material into waters of the U.S., including wetlands, that results in a substantial increase in ground elevation and permanently converts part or all of the water body to dry land. Structural fills authorized by Nationwide Permits 3, 25, 36, etc., are not included.
27. Invasive and Exotic Species. Best management practices are required where practicable to reduce the risk of transferring invasive plant and animal species to or from project sites. Information concerning state specific lists and threats can be found at: <http://www.invasivespeciesinfo.gov/unitedstates/tx.shtml>. Best management practices can be found at: <http://www.invasivespeciesinfo.gov/toolkit/prevention.shtml>. Known zebra mussel waters within can be found at: <http://nas.er.usgs.gov/queries/zmbyst.asp>.

**APPENDIX B**

**ALBUQUERQUE DISTRICT**  
El Paso Regulatory Office, CESP-OD-R-EP  
Building 6380 Morgan Road, 79906  
P.O. Box 6096  
Fort Bliss, Texas 79906-0096  
(915) 568-1359

**TULSA DISTRICT**  
Regulatory Branch, CESWT-PE-R  
1645 South 101 East Avenue  
Tulsa, OK 74128-4609  
(918) 669-7400



**FORT WORTH DISTRICT**  
Regulatory Division, CESWF-DE-R  
819 Taylor Street, Room 3A37  
P.O. Box 17300  
Fort Worth, Texas 76102-0300  
(817) 886-1731

**GALVESTON DISTRICT**  
Regulatory Branch, CESWG-PE-R  
2000 Fort Point Road  
P.O. Box 1229  
Galveston, Texas 77553-1229  
(409) 766-3930

February 5, 2002

## APPENDIX C

### NAVIGABLE WATERS OF THE U.S.

For purposes of Section 10 of the Rivers and Harbors Act of 1899, the following sections of rivers, including their lakes and other impoundments, are considered to be navigable waters of the U.S. that fall within the jurisdiction of the Fort Worth, Albuquerque, and Tulsa districts of the U.S. Army Corps of Engineers in the states of Texas and Louisiana.

**ANGELINA RIVER:** From the Sam Rayburn Dam in Jasper County upstream to U. S. Highway 59 in Nacogdoches and Angelina counties and all U. S. Army Corps of Engineers lands associated with B. A. Steinhagen Lake in Tyler and Jasper counties, Texas.

**BIG CYPRESS BAYOU:** From the Texas-Louisiana state line in Marion County, Texas, upstream to Ellison Creek Reservoir in Morris County, Texas.

**BRAZOS RIVER:** From the point of intersection of Grimes, Washington, and Waller counties upstream to Whitney Dam in Hill and Bosque counties, Texas.

**COLORADO RIVER:** From the Bastrop-Fayette county line upstream to Longhorn Dam in Travis County, Texas.

**NECHES RIVER:** U. S. Army Corps of Engineers lands associated with B. A. Steinhagen Lake in Jasper and Tyler counties, Texas.

**RED RIVER:** From Denison Dam on Lake Texoma upstream to Warrens Bend which is 7.25 miles northeast of Marysville, Texas, and from the U. S. Highway 71 bridge north of Texarkana, Texas, to the Oklahoma-Arkansas Border.

**RIO GRANDE:** From the Zapata-Webb county line upstream to the point of intersection of the Texas-New Mexico state line and Mexico.

**SABINE RIVER:** From the point of intersection of the Sabine-Vernon parish line in Louisiana with Newton County, Texas upstream to the Sabine River-Big Sandy Creek confluence in Upshur County, Texas.

**SULPHUR RIVER:** From the Texas-Arkansas state line upstream to Wright Patman Dam in Cass and Bowie counties, Texas.

**TRINITY RIVER:** From the point of intersection of Houston, Madison, and Walker counties upstream to Riverside Drive in Fort Worth, Tarrant County, Texas.

## APPENDIX D

### MITIGATING ADVERSE IMPACTS TO WATERS OF THE U.S.

U.S. Army Corps of Engineers (USACE) evaluation of a project proposal submitted for authorization under this permit includes a determination of whether the applicant has taken sufficient measures to **mitigate** the project's likely adverse impacts to the aquatic ecosystem (See USACE Final Rule for Compensatory Mitigation for Losses of Aquatic Resources dated April 10, 2008 [http://www.usace.army.mil/CECW/Documents/cecwo/reg/news/final\\_mitig\\_rule.pdf](http://www.usace.army.mil/CECW/Documents/cecwo/reg/news/final_mitig_rule.pdf), and USACE district websites for more detailed information.) Applicants should employ the following three-step sequence in mitigating likely adverse project impacts: 1) take appropriate and practicable measures to **avoid** potential adverse impacts to the aquatic ecosystem; 2) employ appropriate and practicable measures to **minimize** unavoidable adverse impacts to the aquatic ecosystem; and 3) undertake appropriate and practicable measures to **compensate** for adverse impacts to the aquatic ecosystem that cannot be reasonably avoided or minimized. **Compensatory mitigation**, then, is the restoration, enhancement, creation, or preservation of wetlands and other waters of the U.S. to compensate for adverse impacts to the aquatic ecosystem that cannot reasonably be avoided or minimized.

Compensatory mitigation should replace those aquatic system functions that would be lost or impaired because of the proposed activity. The appropriate type and amount of compensatory mitigation depends on the nature and extent of the project's likely adverse impact on those functions performed by the aquatic area(s) that would be impacted. These functions include, but are not limited to, flood storage and conveyance; providing habitat for fish, aquatic organisms, and other wildlife, including endangered species; sediment and erosion control; groundwater recharge; nutrient removal; water supply; production of food, fiber, and timber; and recreation. Compensatory mitigation should also be commensurate with the scope and degree of the anticipated impacts and be practicable in terms of cost, existing technology, and logistics, in light of the overall project purpose.

Mitigation banking is the preferred method of providing compensatory mitigation. However, mitigation options such as permittee responsible in-kind and out-of-kind may be appropriate when mitigation bank options are not available or not practicable. In-kind is preferable to out-of-kind and should occur as close to the location of the adverse impacts as practicable, generally in the same watershed. In some cases, it is appropriate to provide partial compensation through the use of a mitigation bank while also providing the remainder as permittee-responsible on-site or an off-site location. The preservation of existing wetlands is appropriate as compensatory mitigation only in exceptional situations and will require high ratios of preservation.

Compensatory mitigation plans using a mitigation bank should include the bank which has been selected and the calculation of the credits. Permittee responsible mitigation requires a thorough description of the proposed mitigation area; a description of all proposed work and structures such as grading, fills, excavation, plantings, and water level control structures; plan and cross-section drawings of pertinent work and structures; a statement explaining how adverse impacts to local hydrology will be minimized; and a proposal for monitoring the success of the proposed mitigation plan, in addition to other factors and guidance that can be found on the Fort Worth District website <https://www.swf.usace.army.mil/Missions/Regulatory/Permittee-Responsible-Mitigation/>. Generally, monitoring should continue for at least five years after mitigation activities are completed, providing at release of monitoring targeted TXRAM scores, planting survival, and other ecological success requirements have been achieved. Longer monitoring timeframes will be required for difficult to replace resources, such as forested wetlands. To achieve long-term success of a mitigation plan, an appropriate real estate arrangement, in the form of a conservation easement held by an accredited 501©(3) land trust, and financial assurances will be required.