



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Mike Kehoe
Governor

Jake Buxton
Director

Public Comment Period: October 6, 2026 – October 21, 2026

SENT VIA EMAIL TO: samantha.l.hollenberg@usace.army.mil

RE: Upper St. Francois HUC 8 Watershed (08020202) flooding-emergency water quality certification

Dear U.S. Army Corps of Engineers:

The Missouri Department of Natural Resources' Water Protection Program authorizes this Clean Water Act (CWA) Section 401 Water Quality Certification (WQC) to accompany the U.S. Army Corps of Engineers' (USACE) Permit for Nationwide Permit (NWP) 41 for "Reshaping Existing Drainage Ditches."

This WQC shall apply to projects proposing to reclaim and stabilize streambanks within the Upper St. Francois HUC 8 Watershed (08020202) that were damaged due to flooding in July of 2026.

The proposed projects do not comply with the state of Missouri's 2026 programmatic general WQC condition 11; therefore, an individual WQC is required. General condition 11 states that Programmatic WQC is denied for any NWP issued on a water that is listed in the Section 305(b) Integrated Water Quality Report that has been most recently approved by the EPA for: organic sediment, inorganic sediment, sedimentation/siltation, suspended solids, lead, cadmium, zinc, metals, aquatic macroinvertebrate bioassessments, fishes bioassessments, habitat assessment-streams, habitat loss, physical substrate habitat alterations, or unknown impairments [10 CSR 20-7.031(4-5)]. The Section 305(b) Integrated Water Quality Report includes both the 303(d) impaired waters list and approved Total Maximum Daily Loads.

The department's geospatial data is available upon request, and all published data is available on the Missouri Spatial Data Information Services website at <https://msdis.missouri.edu/>. Additional information to identify the project location, including stream reaches with listed impairments or special water designations, may be obtained from the department's Water Protection Program by phone at 573-522-4502, or on publicly available mapping information at the Missouri Accessible Permitting Information Tool at <https://modnr.maps.arcgis.com/apps/webappviewer/index.html?id=87ebef4af15d438ca658ce0b2bbc862e>.



This WQC is being issued under Section 401 of Public Law 95-217, the CWA of 1977 and subsequent revisions. Pursuant to Section 121.7(d), this office certifies the proposed project will comply with Missouri water quality requirements, provided the following conditions are met:

1. Missouri Water Quality Standards antidegradation requirements dictate all appropriate and reasonable Best Management Practices (BMPs) related to erosion and sediment control, project stabilization, and prevention of water quality degradation are applied and maintained [10 CSR 20-7.031(3)(D)]; for example, preserving vegetation, streambank stability, and basic drainage.

BMPs shall be properly installed prior to conducting authorized activities and maintained, repaired, and/or replaced as needed during all phases of the project to limit the amount of discharge of water contaminants to waters of the state. The project shall not involve more than normal stormwater or incidental loading of sediment caused by project activities so as to comply with Missouri's general water quality criteria [10 CSR 20-7.031(4)].

2. A stream's pattern, profile, and dimension, including but not limited to sinuosity, slope, and channel width, shall be maintained as much as practicable. Streambed gradient shall not be adversely impacted during project construction. No project shall accelerate bed or bank erosion. This will ensure compliance with the Missouri Water Quality Standards general criterion requiring waters to be free from physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)]. Changes intended within the scope of the proposed project as designed and/or modeled are allowable.
3. Only clean, nonpolluting fill shall be used. The following materials are not suitable where contact with water is expected and shall not be used due to their potential to cause violations of the general criteria of Missouri's Water Quality Standards [10 CSR 20-7.031(4)]:
 - a. Earthen fill, gravel, and broken concrete where the material does not meet the Suitable Material specifications stated in the "Missouri 2021 Nationwide Permit Regional Conditions" (<https://www.mvr.usace.army.mil/Portals/48/docs/regulatory/2022%20Nationwide%20Permits/ENCL2%202022%20MO%20Regional%20Conditions.pdf?ver=-4e6YQZU7fqQ56Quyg26zA%3D%3D>) in locations where erosive flows are expected to occur on a regular basis, such as streambanks and/or lake shorelines.
 - b. Asphalt.
 - c. Concrete with exposed rebar.
 - d. Tires, vehicles or vehicle bodies, and construction or demolition debris are solid waste and are excluded from placement in the waters of the state.

- e. Liquid concrete, including grouted riprap, if not placed in forms as part of an engineered structure.
 - f. Any material that would result in violation of Missouri Water Quality Standards general criteria [10 CSR 20-7.031(4)] or specific criteria [10 CSR 20-7.031(5)].
4. Waste concrete or concrete rinsate shall be disposed of in a manner that does not result in any discharge to the jurisdictional water ways. This will ensure compliance with the Missouri Water Quality Standards general criteria requiring waters be free from unsightly bottom deposits [10 CSR 20-7.031(4)(A)]; substances resulting in toxicity to human, animal, or aquatic life [10 CSR 20-7.031(4)(D)]; and physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
 5. Clearing of vegetation and trees shall be the minimum necessary to accomplish the activity except for the removal of invasive or noxious species and placement of ecologically beneficial practices. This will ensure compliance with the Missouri antidegradation requirement for BMPs [10 CSR 20-7.031(3)(D)].
 6. Disturbed riparian area, banks, upland, etc., shall be restored to a stable condition to protect water quality as soon as possible. Seeding, mulching, and needed fertilization should be initiated immediately and completed within three days of final contouring. To ensure erosion of soil and deposition of sediment in waters of the state are not occurring from this project, on-site inspections of these areas should be conducted as necessary until successful revegetation and stabilization have been achieved. This will ensure compliance with the Missouri antidegradation requirement for BMPs [10 CSR 20-7.031(3)(D)].
 7. Any stockpiled material shall be managed with appropriate BMPs or removed from the site and placed beyond the high bank on a non-wetland site. This will ensure compliance with the Missouri Water Quality Standards antidegradation requirement that waters of the state shall be maintained and protected [10 CSR 20-7.031(3)] and general criterion requiring waters to be free from physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].
 8. Care shall be taken to keep machinery out of the water way as much as possible. If work in the water way is unavoidable, it shall be performed during low-flow conditions and in a way that minimizes the duration and amount of any disturbance to banks, substrate, and vegetation to prevent increases in turbidity. This will ensure compliance with the Missouri Water Quality Standards antidegradation requirement for BMPs [10 CSR 20-7.031(3)(D)] and general criteria [10 CSR 20-7.031(4)].
 9. Fuel, oil and other petroleum products, equipment, construction materials, and any solid waste shall not be stored below the ordinary high water mark at any time or in the adjacent flood-prone areas beyond normal working hours. All precautions shall be taken to avoid the release of wastes or fuel to streams and other adjacent waters as a result of this operation. This will ensure compliance with the Missouri Water Quality Standards

antidegradation requirement for BMPs [10 CSR 20-7.031(3)(D)] and Missouri Water Quality Standards general criteria requiring waters be free from substances preventing beneficial uses [10 CSR 20-7.031(3)(A)]; substances causing unsightly color or turbidity [10 CSR 20-7.031(4)(C)]; and physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(H)].

10. Petroleum products spilled into any water or on the banks where the material may enter waters of the state shall be cleaned up immediately and disposed of properly. Any such spills of petroleum shall be reported as soon as possible, but no later than 24 hours after discovery to the department's Environmental Emergency Response phone line at 573-634-2436 or website at <http://dnr.mo.gov/env/esp/esp-eer.htm>. This will ensure compliance with Missouri Environmental Improvement Authority [Section 260.015, RSMo] to provide for the conservation of state water resources by the prevention of pollution and proper methods of disposal and Missouri Water Quality Standards general criteria requiring waters be free from substances that prevent maintenance of beneficial uses; cause unsightly color, turbidity, or toxicity; and/or impair the natural biological community [10 CSR 20-7.031(4)(A), -(B) -(H)].
11. Due to the potential re-entrainment of sediments contaminated by metals, precautions shall be taken with excavated material to prevent the re-entrainment and deposition of contaminants. Unless materials excavated from the bed and bank of the stream are tested and show metal contamination levels below the 150 percent of the Probable Effects Concentration (PEC), there shall be no deposition or disposal of excavated bed or bank materials into the river unless it is capped with riprap and/or geotextile fabrics immediately after clearing and grading. Excess excavated bed and bank materials not tested to show contamination levels below the 150 percent of the Probable Effects Concentration (PEC) and not capped and stabilized, shall be disposed of at an appropriate off-site disposal facility. Work shall be done as quickly as possible, during low flows and water levels, and when precipitation is not anticipated. The table below lists the applicable PEC thresholds for lead. This condition represents Missouri requirements based on the CWA Section 305(b) report and Missouri Water Quality Standards. This will ensure compliance with the Missouri Antidegradation requirement for maintenance and protection of designated uses [10 CSR 20-7.031(3)] and general water criteria [10 CSR 20-7.031(4)(D), (F), and (G)].

Pollutant	PEC	150% PEC	Units
Arsenic, As	33	49.5	mg/kg
Cadmium, Cd	4.98	7.47	mg/kg
Chromium, Cr	111	166.5	mg/kg
Copper, Cu	149	223.5	mg/kg
Nickel, Ni	48.6	72.9	mg/kg
Lead, Pb	128	192	mg/kg
Zinc, Zn	459	688.5	mg/kg
naphthalene	561	841.5	µg/kg
phenanthrene	1,170	1,755	µg/kg
pyrene	1,520	2,280	µg/kg
benzo(a)anthracene	1,050	1,575	µg/kg
chrysene	1,290	1,935	µg/kg
benzo(a)pyrene	1,450	2,175	µg/kg
total polycyclic aromatic hydrocarbons (PAH);	22,800	34,200	µg/kg
total PCBs	676	1,014	µg/kg
chlordan	17.6	26.4	ug/kg
Sum DDE	31.3	46.95	ug/kg
lindane (gamma-BHC)	4.99	7.485	ug/kg

This WQC is based on the plans as submitted, reviewed, and certified in compliance with the procedures defined in 40 CFR Part 121. Should any project modifications occur, please contact the department to determine whether the WQC remains valid or needs to be modified.

Where the project proponent becomes aware that it failed to submit any relevant facts in a WQC request, or submitted incorrect information in a WQC request or in any report to the department, it shall promptly submit such facts for information.

Land disturbance activities disturbing one or more acres of total area for the entire project or less than one acre for sites that are part of a common promotional plan of development or sale may require a stormwater permit. This will ensure compliance with CWA Section 402 National Pollutant Discharge Elimination System Permit requirements under Missouri Clean Water Law [Section 644.026.1, RSMo]. Instructions on how to apply for and receive the online land disturbance permit are located at <https://dnr.mo.gov/data-e-services/water/electronic-permitting-epermitting>; for technical assistance contact the ePermitting hotline at 573-526-2082 or toll free at 855-789-3889. Questions regarding permit requirements may be directed to the department's Land Disturbance Permit Coordinator at 573-526-1139.

The department encourages, but does not require, the permittee to consider environmentally friendly design techniques to include stormwater management strategies that maintain or restore the original site hydrology through infiltration, evaporation, or reuse of stormwater. Designs might include creating vegetated swales or rain gardens and using porous pavement. More information can be found at these websites: <https://www.epa.gov/green-infrastructure> and http://www.lid-stormwater.net/lid_techniques.htm.

Although not required by the department, bioengineering methods are encouraged to be utilized for bank stabilization when practicable to minimize the amount of sediment and other pollutants entering the water ways. As opportunity allows, limit the amount of rock or other hard points while increasing the amount of native vegetation or a combination of rock and vegetation.

The department encourages, but does not require, the use of native vegetation to protect impacted areas from future water quality concerns. Native vegetation has evolved with Missouri's geology, climate, and wildlife to occur within a region as a result of natural processes rather than human intervention. For areas where direct impacts to streams are to be avoided, the department recommends a minimum riparian buffer strip width of 50 ft as measured from top of bank.

Pursuant to Chapter 644, RSMo, commonly referred to as the Missouri Clean Water Law, and fee regulations under 10 CSR 20-6.011(2)(H)1., this WQC shall be valid only upon payment of a fee of \$150. The enclosed invoice contains the necessary information on how to submit your fee. Payment must be received within 15 business days of receipt of this WQC.

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to Section 621.250, RSMo. To appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Contact information for the AHC is: Administrative Hearing Commission, United States Post Office Building, Third Floor, 131 West High Street, P.O. Box 1557, Jefferson City, MO 65102; phone: 573-751-2422; fax: 573-751-5018; and website: <https://ahc.mo.gov>.

This WQC is part of the USACE's permit. Water Quality Standards must be met during any operations authorized. If you have any questions, please contact Lauren Roberts by mail at Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176; phone at 573-522-3524; or email at 401@dnr.mo.gov. Thank you for working with the department to protect our aquatic resources.

Sincerely,

WATER PROTECTION PROGRAM

Heather Peters
Director

HP:lrj

Enclosure