PUBLIC NOTICE



Permit No. GP-41 (MVM-2018-090) Issue Date: April 25, 2018 GP-41 Expiration Date: April 25, 2023

THE STATE OF MISSOURI
ISSUANCE OF REGIONAL GENERAL PERMIT (GP) 41 FOR
DISASTER RECOVERY AND REPAIR ACTIVITIES

The U.S. Army Corps of Engineers, Memphis District, **HAS ISSUED GP-41** for the protection and the repair of existing damaged structures, damaged land areas, and damaged fills that were previously authorized by a Department of the Army (DA) permit. GP-41 is issued under the authority of Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and/or Section 404 of the Clean Water Act (33 USC 1344). The GP-41 authorizes disaster recovery and repair activities within the Memphis District's regulatory boundary within the State of Missouri, provided that the project proponent, contractor, etc. complies with all general, special and water quality certification conditions included in GP-41. Additionally, GP-41 does not obviate the project proponent from obtaining other Federal, state, and/or local authorizations, required by law, prior to completing the authorized work described in GP-41. The limit of authorization of GP-41 is to those areas within the Memphis District's regulatory boundary in Missouri that have been declared a natural disaster area by the governor of State or by the President of the United States. Other Corps of Engineers Districts with regulatory authority in the State of Missouri will issue a similar Department of the Army permit that authorizes disaster recovery activities specific to each of those districts.

DURATION OF THE GENERAL PERMIT: The GP-41 is issued and is in effect for a period of five (5) years from the issuance date listed above unless it is specifically modified, suspended, or revoked prior to the expiration date. Prior to the expiration date, GP-41 will be considered for renewal. The GP-41 may be modified, suspended or revoked, in whole or in part, at any time if it is determined that the cumulative effects of the activities, authorized by GP-41, have a significant environmental impact or is otherwise determined to be contrary to the public interest.

APPLICANT: General Public

PROJECT LOCATION: In waters of the United States located in counties and/or municipalities within the Memphis District's regulatory boundary in the State of Missouri, which are declared disaster areas by the governor of the State Missouri and/or by the President of the United States of America.

AUTHORITY: Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344).

ACTIVITY: Excavation or placement of fill material for protection and/or repair of existing disaster damaged structures, damaged land areas and/or damaged fills as outlined in the GP-41. Authorized repair activities include the following:

- a. Repair of levees to preexisting elevation and cross-section, including breach closures and associated borrow operations.
- b. Repair of road culverts and/or bridges within the existing roadway/railway alignment including the placement of suitable stone (riprap) to protect embankments and abutments.
- c. In-kind repair of existing roadway or railway embankments and the replacement or the addition of suitable stone protection, at the damage site, including repair to previously authorized fill.
- d. In-kind repair of existing utility structures within the current footprint of that structure, including previously authorized fill.
- e. Placement of rock and/or earth materials for stream/ditch bank protection and/or stream/ditch bank restoration.
- f. Drainage channel/ditch restoration to pre-disaster capacity and flow line unless the flow line must be altered due to other damage associated with the disaster event.
- g. Restoration of creek channels to pre-disaster alignment and capacity.
- h. Construction of temporary roads and temporary fill required to facilitate the completion of any of the above listed activities. Temporary fill must be removed to the original soil surface after repair activities are completed.

Note: The maintenance of existing disaster damaged structures and/or damaged fills, which have been previously authorized, may be authorized by Nationwide Permit No. 3 or exempted by Part 323.4 of Federal Regulations 33 CFR 320-332. The repair of uplands damaged by storms, floods or other discrete events may be authorized by Nationwide Permit No. 45 upon notification and review by the Corps of Engineers.

NOTIFICATION PROCEDURES: Individuals proposing to perform activities in accordance with the criteria outlined in GP-41 must review the types of activities that require preconstruction notification (PCN) to the Corps of Engineers prior to commencing repair work. If a PCN is required, all information outlined in Appendix I of GP-41 must be submitted to the Corps of Engineers for review and the Corps must verify that the proposed repair work is authorized by GP-41. An ENG Form 4345 and complete instructions are available at: http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit/ This form may be used for the purpose of preconstruction notification.

All disaster repair activities supervised by the Corps of Engineers, pursuant to Public Law 84-99 or to Section 14 projects, and/or all repairs supervised by the United States Department of Agriculture, pursuant to any USDA Program authorized for disaster recovery can be completed without PCN to the Corps of Engineers. It is the responsibility of these federal agencies to comply with all environmental laws and Presidential Executive Orders. All completed disaster repair work, authorized by this permit, must be reported to the Memphis District, Corps of Engineers, Regulatory Branch, by the end of the calendar year in which the flood repair project is completed. The project report must include the location of the work, as-built drawings of the structure(s) and/or fill(s), and a discussion of the avoidance and minimization measures incorporated into the project and mitigation measures employed. Reports must be submitted to the Regulatory Branch (GP-41), U.S. Army Corps of Engineers, Federal Building, 167 N Main Street, Room B-202, Memphis Tennessee 38103-1894.

SECTION 401 WATER QUALITY CERTIFICATION: Conditions of the programmatic Section 401 Water Quality Certification issued by the Missouri Department of Natural Resources (MDNR), are conditions of the GP-41. General Condition 5 states: "If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit."

ADDITIONAL INFORMATION: Additional information about GP-41 may be obtained by writing to the following address: Regulatory Branch (GP-41), U.S. Army Corps of Engineers, Federal Building, 167 N Main Street, Room B-202, Memphis Tennessee 38103-1894 or by calling Tim Flinn at (901) 544-0738.

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Gregg W. Williams Chief Regulatory Branch

DEPARTMENT OF THE ARMY PERMIT

Permittee: General Public

Permit No. MVM-GP-41 (Permanent Protection/Repair of Flood Damaged Structures, Damaged Lands and/or

Issuing Office: U.S. Army Corps of Engineers, Memphis District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work, within the Memphis District's regulatory boundary, in accordance with the terms and conditions specified below.

Project Description: To excavate or place fill material for the permanent protection of and/or the repair of existing damaged structures, damaged land areas, and/or damaged fill areas, that are the result of the disaster event, as follows:

- a. Repair of levees to preexisting elevation and cross-section, including breach closures and associated borrow operations.
- b. Repair of road culverts and/or bridges within the existing roadway/railway alignment including the placement of suitable stone (riprap) to protect embankments and abutments.
- c. In-kind repair of existing roadway or railway embankments and the replacement or the addition of suitable stone protection, at the damage site, including repair to previously authorized fill.
- d. In-kind repair of existing utility structures within the current footprint of that structure, including previously authorized fill.
- e. Placement of rock and/or earth materials for stream/ditch bank protection and/or stream/ditch bank restoration.
- f. Drainage channel/ditch restoration to pre-disaster capacity and flow line unless the flow line must be altered due to other damage associated with the disaster event.
- g. Restoration of creek channels to pre-disaster alignment and capacity.
- h. Construction of temporary roads and temporary fill required to facilitate the completion of any of the above listed activities. Temporary fill must be removed to the original soil surface after repair activities are completed.

If the proposed work involves any activity included in the following list you must provide preconstruction notification (PCN) to the Memphis District, Corps of Engineers, prior to completing any of the listed work, and you must submit application materials as outlined in Appendix 1. Additionally, you must submit a mitigation plan, as outlined in the federal mitigation regulation found at

33 CFR 332, prior to completing any of the following disaster recovery/repair activities:

- Work that may affect a Corps of Engineers civil works project (Section 408 authorization, from the Corps, is required prior to commencing work);
- Excavating earth material (borrow) from forested wetlands, from potential migratory bird nesting areas, and/or from other offsite locations;
- Dredging or excavating material from any stream channel in Missouri, or placing fill material into any stream with known federally listed threatened or endangered species (see special condition "t" on page 7);
- Repair activities that require any clearing of trees, any soil excavation or other soil disturbance for construction of temporary roads;
- Flood repairs in areas with known exotic/sensitive species listed in special condition "e";
- Repair work that requires working in Exceptional State Waters and/or Special Aquatic Life Use Waters;
- Activities associated with the restoration of a stream channel back to the original, pre-flood, location.
- The repair of any structure that is beyond the scope of the originally authorized structure or moved to a different location.

All application materials and post construction reports must be submitted to the Memphis District Corps of Engineers, Regulatory Branch, 167 N. Main Street, Memphis, Tennessee 38103-1894.

All disaster repair activities supervised by the Corps of Engineers, pursuant to Public Law 84-99 or to Section 14

projects, and/or all repairs supervised by the United States Department of Agriculture, pursuant to any USDA Program authorized for disaster recovery can be completed without PCN to the Corps of Engineers. However, all completed disaster repair work, authorized by this permit, must be reported to the Memphis District, Corps of Engineers, Regulatory Branch, by the end of the calendar year in which the flood repair project is completed. The project report must include the location of the work, as-built drawings of the structure(s) and/or fill(s), and a discussion of the avoidance and minimization measures incorporated into the project and mitigation measures employed. Reports must be submitted to the U.S. Army Corps of Engineers, Federal Building, 167 N Main Street, Room B-202 (OD-R), Memphis, Tennessee 38103-1894 (ATTN: GP-41).

In addition, maintenance of existing disaster damaged structures and/or disaster damaged fills, which have been previously authorized, may be authorized by Nationwide Permit No. 3 or exempted by Part 323.4 of Federal Regulations 33 CFR 320-332. The repair of uplands damaged by storms, floods or other discrete events may be authorized by Nationwide Permit No. 45 upon notification and review by the Memphis District, Corps of Engineers - Regulatory Branch. Construction of new structures and/or fills, not in existence prior to the discrete flood event, are not authorized by this DA permit.

Project Location: In waters of the United States (rivers, lakes, streams and wetlands) within the Memphis District's regulatory boundary in the State of Missouri, that are declared flood disaster areas by the Governor of the state and/or by the President of the United States.

Permit Conditions:

General Conditions:

- 1. This general permit expires on April 22, 2023, unless it is modified, revoked or specifically extended, and the time limit for completing the authorized work ends on this date, unless your individual general permit verification letter specifies an earlier date. Provided the verification letter does not specify an earlier date, if you have started the work or are under contract to begin this activity before the general permit expires, you will have twelve (12) months from that expiration date to complete the activity under the present terms and conditions of this general permit.
- 2. You must maintain the activity authorized by this permit in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state 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.
- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned 401 water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the State of Missouri programmatic 401 certification is attached as they contain such conditions.
- 6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this permit.

Special Conditions: See continuation sheets, pages 5 through 8, of this document. In addition, review Appendix I for information required to be submitted to the Corps of Engineers if your project requires PCN before beginning work. Appendix I also contains the list of information you must submit after completing your project if a PCN is not required for your particular project.

Further Information:

- 1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - (x) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - (x) 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 authorization required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
- 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 to 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 of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
- 5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. 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 the project proponent in support of the permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation 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 to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170)

6. Extensions. General condition 1 establishes a time lin permit. Your signature below, as permittee, indicates the conditions of this permit.	•
<u>GENERAL PUBLIC - SIGNATURE NOT REQUIRED</u> (PERMITTEE)	(DATE WORK BEGAN)
This permit becomes effective when the Federal official below.	, designated to act for the Secretary of the Army, has signed
MICHAEL A. ELLICOTT	(DATE)
COLONEL, CORP OF ENGINEERS DISTRICT COMMANDER	
terms and conditions of this permit will continue to be b	re still in existence at the time the property is transferred, the inding on the new owner(s) of the property. To validate the ciated with compliance with its terms and conditions, have
(TRANSFEREE)	(DATE)

accomplish the corrective measures by contract or otherwise and bill you for the cost.

MVM-GP-41 Special Conditions:

- a. You must sign and return the attached "Compliance Certification" after the authorized work and any required mitigation is completed. Your signature will certify that you completed the work in accordance with this permit, including the general and the special conditions, and that any required mitigation was completed in accordance with the permit conditions.
- b. (Activities occurring in navigable waters under Section 10 of the Rivers and Harbors Act of 1899 only). The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- c. If the work, authorized by this permit, requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized project, the prospective permittee must submit a PCN as outlined on the first page of this permit. An activity that requires a Section 408 determination is not authorized by GP-41 until the Memphis District approves the Section 408 permission to alter, occupy, or use the Corps of Engineers project and the district engineer or their representative issues a written GP-41 verification.
- d. If any part of the authorized work is performed by a contractor, before starting work you must discuss the terms and conditions of this permit with the contractor; and, you must give a copy of this entire permit to the contractor.
- e. You must contact the Corps if any work is proposed in areas of listed sensitive species or in special status waters. The list of sensitive species in Missouri can be found at: http://www.mvm.usace.army.mil/Portals/51/docs/regulatory/Permits/permitapplicationinstructions.pdf.
- f. You must employ measures to prevent spilled fuels, lubricants, excessive suspended solids including dredged material, and/or wet concrete from entering the waters of the United States and formulate a contingency plan to be effective in the event of a spill.
- g. You must use clean, uncontaminated materials for fill in order to minimize excessive turbidity by leaching of fines, as well as to preclude the entrance of deleterious and/or toxic materials into the waters of the United States by natural runoff or by leaching. Use of small aggregate material less than 20 pounds per aggregate, such as creek gravel, for stabilization and erosion control is prohibited.
- h. You must excavate or fill in the watercourse so as to minimize increases in suspended solids and turbidity which may degrade water quality and damage aquatic life outside the immediate area of operation. Activities should be conducted during low water periods and must be conducted outside major spawning season for fish, unless a waiver is obtained from the Corps of Engineers. The list of waters with seasonal spawning restrictions in Missouri can be found at: http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2017/MORC2SpawningList.pdf.
- i. You must use the stream crossing guidelines for any temporary stream crossing constructed in a regulated waterway. The guidelines, for Missouri can be found at: http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2017/MORC1Streams.pdf. Stream crossings and use of construction machinery in waterways should be limited to the minimum extent necessary.

MVM-GP-41 Special Conditions (Continued):

- j. You must immediately remove and properly dispose of all debris during every phase of the project in order to prevent the accumulation of unsightly, deleterious and/or toxic materials in or near the water body. All construction debris must be disposed of in an upland site, outside the floodplain, and in such a manner that it cannot enter into a waterway or into a wetland.
- k. You must store all construction materials, equipment, and/or petroleum products, when not in use, above anticipated high water levels.
- l. You must restrict the clearing of timber and other vegetation to the absolute minimum required to accomplish the work. You must avoid the removal of mature trees to prevent potential impacts to bald eagle roost sites. If the work is adjacent to an active eagle nest, you must contact the U.S. Fish and Wildlife Service to determine if an eagle permit is needed. Work should be limited to one side of the channel only. However, work from both sides of the channel is permitted if it is demonstrated that it results in minimizing tree clearing. Vegetated riparian buffer areas should be included along both sides of any channel restoration project. All wooded areas cleared for site access must be allowed to return to forested habitat. You must contact the Corps of Engineers (PCN) prior to any timber clearing.
- m. Upon completion of earthwork operations, you must seed, replant or otherwise protect from erosion all fills in the water or on shore, and other areas on shore disturbed during construction. All plant material, including seed mixes, should be composed of native species. If seeding does not successfully stabilize the disturbed soil areas by the end of the first growing season, you must implement alternate measures, such as placing riprap, slope terracing with untreated railroad ties, gabions or concrete blocks, or additional vegetative plantings, to protect the disturbed areas from further erosion. Clearing, grading, and replanting should be planned and timed so that only the smallest area is in a bare soil condition. You must contact the Corps of Engineers prior to beginning work on any additional erosion control measures in order for the Corps to determine if additional authorization is required.
- n. You must dispose of excess concrete and wash water from concrete trucks and other concrete mixing equipment in an upland area above the ordinary high water mark and at a location where the concrete and wash water cannot enter the water body or an adjacent wetland area.
- o. You must not dispose of any construction debris or waste materials below the ordinary high water mark of any water body, in a wetland area, or at any location where the materials could be introduced into the water body or an adjacent wetland as a result of runoff, flooding, wind, or other natural forces.
- p. You must use only graded rock, quarry-run rock and/or clean concrete rubble for riprap. The material must be reasonably well graded, consisting of pieces varying in size from 20 pounds up to and including at least 150 pound pieces. Generally, the maximum weight of any piece should not be more than 500 pounds. Gravel and dirt should not exceed 15 percent of the total fill volume. If you use concrete rubble, you must break all large slabs to conform to the well graded requirement, and remove all exposed reinforcement rods, trash, asphalt, and other extraneous materials before you place the concrete rubble in the waters of the United States. Graded rock requirements can be altered provided approval is received from the Corps' Regulatory Branch prior to placement. Grouting the riprap material is prohibited.
- q. You must completely remove all temporary fills, including sand bags (to the extent practicable), in the waters of the United States within 30 days of the end of the flood emergency. If sand bags are needed for a longer duration until permanent repairs are made, you must request a waiver of this condition in writing.

MVM-GP-41 Special Conditions Continued:

- r. You must avoid impacts to wetlands to the fullest extent practicable. When wetlands impacts are unavoidable, borrow site selection will be based on the following order of preference: upland (non-wetland) sources, areas riverward of the levee previously used for borrow, currently farmed prior converted cropland, farmed wetlands, or other authorized excavation sites. You must mitigate for all unavoidable proposed wetland excavation or fill activities authorized by this permit. You must develop mitigation plans on a case-by-case basis which must be approved by the Corps. This permit does not authorize actions designed to drain or otherwise convert wetlands to other uses, nor actions where a practicable alternative to impacting wetlands is available unless the Corps of Engineers, in consultation with other resource agencies, determine that sediment removal from existing wetlands will restore wetland functions and create valued habitat diversity. All borrow areas should have 5:1 horizontal to vertical side slopes and the water depth should be three feet deep or less under normal circumstances.
- s. You must place all fills and structures in waterways such that they do not result in stream channel constriction, they do not cause redirection of flows in such a way as to cause upstream or downstream erosion, and/or they do not restrict aquatic organism movement, especially during periods of low flow. Channelization projects or shortening of waterways, other than restoration of creek channels to pre-flood alignment, are not authorized by this permit.
- t. No activity is authorized under this general permit which is likely to adversely affect a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which is likely to destroy or adversely modify critical habitat of such species. See Appendix II, paragraph No. 1 for permitting requirements if these species are likely to be present or their habitat would be adversely modified. A list of T&E Species in Missouri can be found at: http://ecos.fws.gov/tess-public/pub/stateListingAndOccurrenceIndividual.jsp?state=MO. Additional information, for Missouri, can be found at: http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwide-permits/2017/MORC7AquaticSpecies.pdf. Additionally, any work within the identified stream reaches, highlighted in Appendix III, requires a PCN to the Corps of Engineers.
- u. You must avoid activity in the proximity of a property listed in or eligible for listing in the National Register of Historic Places unless, after coordination with the Corps and the State Historic Preservation Office of the affected state and/or the Advisory Council on Historic Preservation, a determination of "no effect" or "no adverse effect" is made in accordance with criteria established by 36 CFR 800. If an inadvertent discovery of any cultural or archaeological resource occurs during construction activities you must immediately stop work and contact this office and you must suspend work in the area until a determination of eligibility for listing in the National Register of Historic Places is determined and any necessary consultation under Section 106 of the National Historic Preservation Act is completed. In the case of discovering human remains, you must immediately stop work and contact local law enforcement and you must contact the Missouri Department of Natural Resources, Historic Preservation Office at 573-751-7858.
- v. You must NOT undertake any activity that results in a new structure or replacement of a previously authorized structure that increases the scope or the design of the original structure. Small changes that do not affect elevations, such as the reconstruction of a levee around a scour hole at pre-existing elevations, that do not convert wetland to upland (non-wetland) or a different wetland use beyond what is unavoidable such as to go around a scour hole, may be authorized upon notification to the Corps. Levee breach repairs constructed on new alignments must be setback farther from the stream channel than the original alignment.
- w. You must contact the Missouri Department of Natural Resources, Water Protection Program, P.O. Box

MVM-GP-41 Special Conditions Continued:

176, Jefferson City, Missouri 65102-0176, in order to determine the need for a state permit for land disturbance, return water, or other activities that normally require such permits. Use of GP-41 shall not be construed or interpreted to imply that the requirements for all other federal, state, and/or local permits are replaced or superseded by this permit. Any national pollutant discharge elimination system (NPDES) permits, general permits for land disturbance, or any other permit requirements must be obtained and complied with.

x. You must notify the Corps of Engineers if one of the following common exotic species occurs in the project area. The zebra mussel (*Dreissena polymorpha*), Eurasian watermilfoil (*Myriophyllum spicatum*), purple loosestrife (Lythrum salicaria), Johnson grass (Sorghum halepense), sericia lespedeza (Lespedeza cuneata), salt cedar (Tamarix spp.), and reed canary grass (Phalaris arundinacea). You must take appropriate actions to prevent the spread of any exotic animal species and noxious and invasive plant species. The following link for Missouri: http://www.nwk.usace.army.mil/Portals/29/docs/regulatory /nationwidepermits/2017/MOInvasivePlants.pdf provides a list of plant species that shall not be used on any project unless this requirement is waived by the district engineer based on a case specific analysis of the planting plan. Best management practices should be used to reduce the risk of transferring invasive plant and animal species to or from the project site. Best management practices can be found at: http://www.invasivespeciesinfo.gov/toolkit/prevention.shtml. The following best management practice can help prevent the spread of these species. Clean and certified weed-free seed should be used for plantings. Equipment brought on the project site should be washed to remove dirt, seeds and plant parts. If the equipment has been used in a body of water in the last 30 days, it shall be washed at a commercial carwash or dried for five or more days before using the equipment in another body of water. In addition, before transporting equipment from the project site all water, mud, plants and animals shall be removed. Waters that the zebra mussel is known to inhabit in Missouri can be found at the following website: http://nas.er.usgs.gov/queries/zmbyst.asp.

y. Section 401 Water Quality Certification for GP-41 has been issued by the State of Missouri. You must comply with the conditions of the 401 certification when performing any authorized work. to determine if there are additional conditions that may apply to the particular project.

General Permit GP-41 Appendix I

Criteria for Authorization by General Permit MVM-GP-41

- 1. This general permit authorizes activities proposed by the general public, railroads, transportation departments, pipeline and utility companies, and government agencies.
- 2. If you propose to work under the authority of this General Permit and the project requires a PCN as outlined in the permit, you must notify the Memphis District, Corps of Engineers, within two (2) years of the end of the flood event (when the nearest river gauge drops below flood stage for two months), and receive authorization prior to starting work within the Corps regulatory jurisdiction. This two year period may be waived by the district engineer provided the individual/entity can demonstrate a delay based on available funding, contracting, or other similar delays. You must submit the following information:
 - a. Submit a completed application form ENG 4345 or a letter which includes all information required by form ENG 4345. The ENG 4345 is available at: http://www.mvm.usace.army.mil/Portals/51/docs/regulatory/Permits/permitapplicationinstructions.pdf.
 - b. Provide a complete description of the proposed work, including a statement describing compensatory mitigation to replace aquatic resources lost as a result of the project or a statement justifying why compensatory mitigation is not required, and a proposed plant list to restore all disturbed areas that result from the construction activities so that we can clearly and readily determine whether or not the proposed work complies with this GP and determine if compensatory mitigation is warranted. If required, compensatory mitigation plans must be in accordance with the mitigation regulations found at 33 CFR 332. Additionally, all wetland and stream mitigation credits proposed at the mitigation site must be determined using the current version of the Missouri Stream Mitigation Method, or the Missouri Wetland Mitigation Method documents. The credit worksheets for the assessment methods must be included in the submitted mitigation plan.
 - c. Describe and illustrate the location of the disaster repair activities on an aerial photograph. The activity must be in counties where a current disaster declaration is issued by the Governor of the State of Missouri or the President of the United States. Include an 8 1/2" x 11" map with the location of the proposed project clearly marked, including the Section, Township, and Range and the latitude and longitude (decimal degrees) of the specific work site.
 - d. Submit an 8 1/2" x 11" drawing(s) showing the details of the proposed repair work. Include a list of plant materials proposed for restoration and/or erosion control. The plant list should include both the common name and the Latin binomial.
 - e. Discussion of possible alternatives and why the preferred alternative was selected.
 - f. Also, as project proponent, you must send copies concurrently to the following agencies. We will not necessarily solicit comments from these agencies unless warranted. These agencies may request that we take discretionary authority on the proposed work and require application for an individual permit if a significant issue is identified.

General Permit GP-41 Appendix 1 (continued)

1. For all repair projects, you must contact:

U.S. Environmental Protection Agency Watershed Planning and Implementation Branch 11201 Renner Boulevard Lenexa, Kansas 66219 (913) 551-7003 * Federal Emergency Management Agency Region VII 9221 Ward Parkway, Suite 300 Kansas City, Missouri 64114-3372 (816) 283-7063

2. For repair projects in Missouri, you must contact:

U.S. Fish and Wildlife Service Columbia Field Office 101 Park De Ville Drive, Suite A Columbia, Missouri 65203 (573) 234-2132

Missouri Department of Conservation Policy Coordination P.O. Box 180 Jefferson City, Missouri 65102-0180 (573) 522-4115 Missouri Department of Natural Resources Water Pollution Control Branch P.O. Box 176 Jefferson City, Missouri 65102 1-800-361-4827 or (573) 751-1300

Missouri Department of Natural Resources Historic Preservation Program P.O. Box 176 Jefferson City, Missouri 65102 (573) 751-7958

- 3. For projects NOT requiring pre-construction notification, a report of the completed repair activities must be submitted to the Corps that includes the work location (including an aerial photograph), as-built drawings of the structure(s) and/or fill(s), a list of plant materials (including Latin binomial name) incorporated into the project, and a discussion of the avoidance and minimization measures incorporated into the project and mitigation measures employed. The report must be submitted within 60 days of project completion.
- 4. We may reevaluate the cumulative impacts of this general permit at our discretion at any time. We will reevaluate cumulative impacts at least every five (5) years as part of the review process for the reissuance of GP-41.
- 5. The following is a list of damaged structures, damaged land areas, and/or damaged fills that are the result of the disaster event that are authorized to be repaired under this general permit:
 - a. Repair of levees to preexisting elevation and cross-section, including breach closures and associated borrow operations.
 - b. Repair of road culverts and/or bridges within the existing roadway/railway alignment including the placement of suitable stone (riprap) to protect embankments and abutments.
 - c. In-kind repair of existing roadway or railway embankments and the replacement or the addition of suitable stone protection at the damage site, including repair to previously authorized fill.

 In-kind repair of existing utility structures within the current footprint of that structure, including previously authorized fill.
 - d. Placement of rock and/or earth materials for stream/ditch bank protection and/or stream/ditch bank restoration. Drainage channel/ditch restoration to pre-disaster capacity and flow line unless the flow line must be altered due to other damage associated with the disaster event.
 - e. Restoration of creek channels to pre-disaster alignment and capacity.

^{*} You must contact FEMA for all proposed development located in the 100-year floodplain of a National Flood Insurance Program (NFIP) participating community in order to comply with local floodplain management regulations and secure a floodplain development permit from that community.

General Permit GP-41 Appendix 1 (continued)

- f. Construction of temporary roads and temporary fill required to facilitate the completion of any of the above listed activities.
- 6. The District Engineer may require an individual permit on a case-by-case basis for any activity authorized herein.
- 7. You must complete the authorized work within the five year issuance period of the GP. If you need additional time to complete repairs or if flood damage occurs within the last two years of the GP's expiration date applicants must contact the Memphis District, Corps of Engineers, for an extension of the authorization to complete the needed work. Contact should be made at least 60 days in advance of the GP expiration date.
- 8. Disaster repair activities, supervised by the U. S. Army Corps of Engineers, pursuant to Public Law 84-99, and/or supervised by the United States Department of Agriculture (USDA), pursuant to any USDA program authorized for disaster recovery, do not require a PCN to the Corps of Engineers, Regulatory Branch. It is the responsibility of these federal agencies to comply with all environmental laws and Presidential Executive Orders. However, agencies of the USDA and the Corps of Engineers must report all work completed under the authorization of GP-41 to the Memphis District, Regulatory Branch as outlined on page one of the permit. Submit reports to U.S. Army Corps of Engineers, Federal Building, 167 N Main Street, Room B-202 (OD-R), Memphis, Tennessee 38103-1894 (Attn: GP-41).

CORPS' REVIEW PROCEDURES FOR SECTION 7 COMSULTATION AND RESULTING AUTHORIZATION BY GENERAL PERMIT GP-41

- a. 1. **ENDANGERED SPECIES CONSULTATION**. The repair activity must not be located in areas containing potential habitat for federally listed species unless, following Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service (Service), a "not likely to adversely affect" determination is agreed upon between the Corps and the Service. If the proposed activity authorized under this permit is located in any area potentially supporting federally listed species or designated critical habitat, the following conditions must be met and will be coordinated by the appropriate Corps District: The Corps will coordinate with the Service to investigate potential species occurrence via the Service's Information for Planning and Conservation (IPaC) website at https://ecos.fws.gov/ipac. For each species on the Service's Official Species List, an effects determination must be made by the Corps. Concurrence from the Service must be obtained for "may affect" determinations, however "no effect" determinations do not require concurrence from the Service.
- b. As conditioned under the GP, additional project specific conditions must be imposed if, through informal consultation between the Service and the Corps, they are determined to be necessary to avoid the likelihood of adverse effects to listed species or designated critical habitat.
- c. In the event that the likelihood of adverse effects to listed species or designated critical habitat cannot be avoided, GP authorization will not be provided until such time as: i) formal consultation between the Service and the Corps is completed; ii) a non-jeopardy Biological Opinion is issued; and iii) the terms and conditions of any associated Incidental Take Statement are incorporated as enforceable conditions to the project authorization under GP-41.
- d. Conference via early interagency cooperation may also be necessary for species expected to become federally listed during the permit period. Conferences are required for proposed federal actions likely to jeopardize proposed species or destroy or adversely modify proposed critical habitat.
- 2. **PROJECT DOCUMENTATION AND COMPLIANCE**. The proposed repair activities must be documented by the project proponent and provided to the Corps of Engineers for review. If the repair project contains multiple sites then project documentation must be provided for each site. The documentation must include the T&E species of concern, any critical habitat effected, and a complete description of the timing and the work proposed at the location. This information will be utilized by the Corps to complete an effects determination and consult with the Service as appropriate.

COMPLIANCE CERTIFICATION

Special condition "a" of this permit document requires that you submit a signed certification regarding the completed work and any required mitigation. This certification page satisfies this condition if it is provided to the Memphis District at the address shown at the bottom of this page upon completion of the project. Submit a separate certification page for each individual authorized project

PERMIT NUMBER: General Pern	nit No. 41 (MVM-2018-090)
PERMITTEE (Enter individual/enti	ty name and mailing address):
· · · · · · · · · · · · · · · · · · ·	ude & longitude (decimal degrees) and Section, Township ar projects (ditches, streams, utilities, etc.) enter the latitude oints):
including any general or specific co	was done in accordance with the Corps authorization, onditions.
c. Your signature below, as permitte as certified in paragraph "a" and in	ee, indicates that you have completed the authorized project paragraph "b" above.
(PERMITTEE)	(DATE)
Return this certification to:	
Memphis District - ATTN: OD-R (GP-41)

Corps of Engineers
167 N. Main Street, Room B-202
Memphis, TN 38103-1894

APPENDIX III

Seasonal Restrictions for Activities Proposed in Fish Spawning Areas January 2017 - Listing Criteria Noted at Bottom of Table

ID	Stream Name	Downstream Boundary (From)	Upstream Boundary (To)	Closure Period	Listing Criteria	Length (Miles)	County
1	Baker Branch	the tributary (Unnamed Creek ⑦) confluence immediately downstream of CR-SW 1075	the upstream MDC boundary (Taberville Prairie CA)	15 May - 15 July	2,4,5	4.4	St. Clair
2	Barren Fork 1	its mouth (confluence with Tavern Creek)	MO-17	15 March - 15 June	2,4	2.9	Miller
3	Barren Fork 2	its mouth (confluence with Sinking Creek)	CR-A-D	15 Nov 15 Feb.	6	3.4	Shannon
4	Bass Creek	its mouth (confluence with Turkey Creek)	US-63	15 May - 15 July	2,5,7	4.4	Boone
5	Bear Creek	RT-A	the south section line (6, 33N, 24W)	15 March - 15 June	2,4	10.5	Cedar, Polk
6	Beaver Creek	Bull Shoals Lake (654' AMSL)	MO-76	15 March - 31 July	2,4	24.3	Taney
7	Big Buffalo Creek	Lake of the Ozarks (660' AMSL)	its headwaters	1 April - 30 June	2,5	10.8	Benton, Morgan
8	Big Cane Creek	the Missouri-Arkansas border	its source (convergence of Cane Creek & Little Cane Creek)	1 March - 15 June	2,7	4.2	Butler
9	Big Creek	its mouth (confluence with St. Francis River)	MO-143	15 March - 15 June	5,6	12.3	Wayne, Iron
10	Big Piney River	its mouth (confluence with Gasconade River)	MO-17	15 March - 15 June	2,4,6,7	84.8	Pulaski, Phelps, Texas
11	Big River	its mouth (confluence with Meramec River)	the upstream MDC boundary (Leadwood Access)	15 March - 15 June	2,6	108.4	Jefferson, Washington, St. Francois
12	Black River ①	the Missouri-Arkansas border	Clearwater Dam	1 Feb 15 June	2,4,6,7	91.8	Butler, Wayne
13	Black River ②	Clearwater Lake (498' AMSL)	its source (convergence of West Fork Black River & East Fork Black River)	1 April - 31 July	2,4	27	Reynolds
14	Blue River	the Missouri-Kansas border	RT-W (Bannister RD)	1 April - 30 June	4,7	10.8	Jackson
15	Blue Spring Branch	its mouth (confluence with Bois Brule Creek)	RT-M	1 Dec 31 March	2	6.3	Perry
16	Blue Springs Branch	its mouth (confluence with Blue Springs Creek)	its source (Blue Springs)	15 Nov 15 Feb.	6	0.2	Crawford
17	Blue Springs Creek	its mouth (confluence with Meramec River)	the confluence of Blue Springs Branch	15 Nov 15 Feb.	5,6	4.3	Crawford
18	Bonne Femme Creek	CR-Andrew Sapp RD	US-63	15 May - 15 July	2,5,7	9.8	Boone
19	Bourbeuse River	its mouth (confluence with Meramec River)	the confluence of Clear Creek	15 March - 15 June	2,4	139.6	Franklin, Crawford, Gasconade, Phelps
20	Brush Creek ①	its mouth (confluence with Shoal Creek)	its headwaters	15 March - 15 June	2,4,5	8.4	Caldwell
21	Brush Creek (2)	its mouth (confluence with Sac River)	the south section line (6, 35N, 24W)	(15 March - 15 June)	1,2	13.8	St. Clair, Cedar, Polk
22	Brushy Fork	its mouth (confluence with Barren Fork)	MO-17	15 March - 15 June	2,4	2	Miller
23	Cahoochie Creek	its mouth (confluence with Thomas Creek)	the west section line (3, 36N, 20W)	15 March - 15 June	2,4	2.8	Dallas, Hickory
24	Cane Creek ①	its mouth (convergence with Little Cane Creek & source of Big Cane Creek)	the north section line (11, 22N, 5E)	1 Feb 15 June	2	5.5	Butler

25	Cane Creek 2	MO-158	the confluence of Tenmile Creek	1 Feb 15 June	2	14.2	Butler
26	Castor River	its mouth (confluence with Castor River Diversion Channel)	CR-208	1 Feb 31 May	2,4	59.8	Bollinger, Wayne, Madison
27	Chariton River	US-136	the Missouri-Iowa border	1 March - 30 April	2,4,5,7	19	Schuyler, Putnam
28	Cinque Hommes Creek	the confluence of Bois Brule Creek	US-61	1 Dec 31 March	2	11.5	Perry
29	Clear Creek ①	its mouth (confluence with Fishing River)	RT-W	1 June - 31 August	2	23.2	Clay, Clinton
30	Clear Creek 2	its mouth (confluence with Lamine River)	its headwaters	15 May - 15 July	2	12.7	Cooper
31	Courtois Creek	its mouth (confluence with Huzzah Creek)	MO-8	15 March - 15 June	4,5,6	15.8	Crawford
32	Crabapple Creek	its mouth (confluence with Shoal Creek)	its headwaters	15 March - 15 June	2,4,5	9.3	Caldwell
33	Crane Creek	Quail Spur RD	CR-1240	15 Nov 15 Feb.	6	10	Stone, Lawrence
34	Crooked River	MO-10	its headwaters	15 March - 15 June	2,4	65.5	Ray, Caldwell, Clinton
35	Culley Creek	its mouth (confluence with Moniteau Creek)	the north section line (14, 46N, 17W)	15 May - 15 July	2	1.9	Cooper
36	Current River	the Carter-Ripley county line (downstream NPS boundary (Ozark National Scenic Riverways))	its source (convergence of Pigeon Creek & Montauk Spring Branch)	15 March - 15 June	2,5,6	112	Carter, Shannon, Texas, Dent
37	Des Moines River	its mouth (confluence with Mississippi River)	US-27	1 March - 15 June	2	14.8	Clark
38	Dousinbury Creek	its mouth (confluence with Niangua River)	(RT-JJ)	15 March - 15 June	2	0.8	Dallas
39	Draffen Branch	its mouth (confluence with Moniteau Creek)	CR-Harned RD	15 May - 15 July	2	3.3	Cooper
40	Dry Fork	its mouth (confluence with Meramec River)	MO-8	15 Nov 15 Feb.	6	5.8	Crawford, Phelps
41	East Fork Big Creek	its mouth (convergence with West Fork Big Creek & source of Big Creek)	the Missouri-Iowa border	15 March - 15 June	2,4	39.5	Harrison
42	East Fork Crooked River	its mouth (confluence with Crooked River)	its headwaters	15 May - 15 July	2,4	32.2	Ray, Caldwell
43	(East Fork Niangua River)	(its mouth (convergence with West Fork Niangua) River and source of Niangua River)	(the south section line (33, 32N, 18W)	15 March - 15 June	2,4	0.6	Webster
44	Eleven Point River	the Missouri-Arkansas border	the Middle Fork Eleven Point River confluence	15 March - 15 June	5,6	54.4	Oregon
45	Elk River	the Missouri-Oklahoma border	its source (convergence of Big Sugar Creek & Little Sugar Creek)	15 March - 15 June	4,6	24.7	McDonald
46	(Fiery Fork)	(its mouth (confluence with Little Niangua River)	(the tributary confluence immediately) upstream of CR-7-17H (Fiery Fork RD)	15 March - 15 June	2	3.6	Camden
47	First Nicholson Creek (East Drywood Creek)	the downstream MDNR boundary (Prairie State Park)	the most upstream crossing of CR-West Central RD	15 March - 15 June	4,5,7	4.1	Barton
48	Flat Creek	Table Rock Lake (915' AMSL)	MO-39	15 March - 15 June	2	16.1	Stone, Barry
49	Fleck Creek	the downstream MDNR boundary (Prairie State Park)	the first tributary (Unnamed Creek ®) confluence upstream	15 March - 15 June	4,7	1	Barton
50	Fourmile Creek	its mouth (confluence with Niangua River)	(RT-P)	15 March - 15 June	2	0.8	Dallas

51	Gans Creek	its mouth (convergence with Clear Creek & source of Little Bonne Femme Creek)	US-63	15 March - 15 June	5,7	5.4	Boone
52	Gasconade River	its mouth (confluence with Missouri River)	MO-5	15 March - 15 June	2,4,6,7	289.9	Gasconade, Osage, Maries, Phelps, Pulaski, Laclede, Wright
53	Grand River	its mouth (confluence with Missouri River)	the Thompson River confluence	1 March – 15 June	2,4	61.3	Carroll, Chariton, Livingston
54	Greasy Creek	its mouth (confluence with Niangua River)	the south section line (34, 33N, 20W)	15 March - 15 June	2,4	14.2	Dallas
55	Greer Spring Branch	its mouth (confluence with Eleven Point River)	its source (Greer Spring)	15 Nov 15 Feb.	4,6	1.4	Oregon
56	Grindstone Creek	its mouth (confluence with Grand River)	its headwaters	15 May - 15 July	2,4	42.5	Daviess, DeKalb, Clinton
57	Hickory Creek ①	MO-6	its headwaters	15 May - 15 July	2	8.6	Grundy, Daviess
58	Hickory Creek 2	its mouth (confluence with Shoal Creek)	CR-Monark DR	15 Feb 15 July	2	7.6	Newton
59	High Creek	the confluence of McElroy Creek	its headwaters	1 June - 31 August	2	10.7	Atchison
60	Howard Creek	its mouth (confluence with Smiley Creek)	its headwaters	15 May - 15 July	2	4.1	Cooper, Moniteau
61	Huzzah Creek	its mouth (confluence with Meramec River)	CR-Willhite RD	15 March - 15 June	4,5,6	35.8	Crawford
62	Jack Buster Creek	its mouth (confluence with Saline Creek)	RT-MM	15 March - 15 June	2	3.6	Miller
63	Jack's Fork	its mouth (confluence with Current River)	its source (convergence of North Prong Jack's Fork & South Prong Jack's Fork)	15 March - 15 June	5,6	46.7	Shannon, Texas
64	James River	Table Rock Lake (915' AMSL)	Lake Springfield Dam	15 March - 15 June	2,6	51.1	Stone, Christian, Greene
65	Joachim Creek	RT-A	RT-V	15 March - 15 June	6	18.3	Jefferson
66	Jones Creek	its mouth (confluence with Niangua River)	CR-Jones Creek RD	15 March - 15 June	2	0.3	Dallas
67	Kelley Branch	its mouth (confluence with Silver Fork)	RT-U	15 March - 15 July	2,4,7	6.6	Boone
68	Kenser Creek	its mouth (confluence with Tavern Creek)	MO-42	15 March - 15 June	2	0.3	Miller
69	La Barque Creek	its mouth (confluence with Meramec River)	its headwaters	15 March - 15 June	4,7	6.2	Jefferson
70	Lane Spring Branch	its mouth (confluence with Little Piney Creek)	its source (Lane Spring)	15 Nov 15 Feb.	6	0.2	Phelps
71	Little Black River	the east section line (25, 24N, 3E)	its source (convergence of North Prong Little Black River & South Prong Little Black River)	15 March - 15 June	2,4,5	8.6	Ripley
72	Little Maries Creek	its mouth (confluence with Maries River)	the south section line (33, 43N, 10W)	15 March - 15 June	2	3.4	Osage
73	Little Niangua River	(Lake of the Ozarks (660' AMSL)	(the east section line (26, 36N, 19W)	15 March - 15 June	1,2,4,7	46.8	Camden, Hickory, Dallas
74	Little Piney Creek	the confluence of Beaver Creek	the Phelps-Dent county line	15 Nov 15 Feb.	2,5,6	15.1	Phelps
75	(Little Pomme de Terre) (River)	(its mouth (confluence with Pomme de Terre) (River)	US-65)	15 March - 15 June	2	9.5	Polk, Greene
76	Little Saline Creek	its mouth (confluence with Saline Creek)	its headwaters	15 March - 15 June	2	9.8	Miller
77	(Little Wilson Creek	(its mouth (confluence with Pomme de Terre) (River)	CR-244 th ST	15 March - 15 June	2	2.1	Polk
78	Locust Creek	MO-6	US-136	1 March - 30 April	2,4,7	36.5	Sullivan, Putnam

79	Log Creek	its mouth (confluence with Shoal Creek)	its headwaters	15 March - 15 June	2,4,5	14.7	Caldwell
80	Lost Creek	the Missouri-Oklahoma border	RT-CC	1 May - 31 July	2	7.1	Newton
81	Macks Creek	(its mouth (confluence with Little Niangua River)	Coffey Hollow RD	15 March - 15 June	2	2.2	Camden
82	Maries River	its mouth (confluence with Osage River)	the south section line (26, 41N, 10W)	15 March - 15 June	2	37.4	Osage, Maries
83	Maze Creek	Stockton Lake (867' AMSL)	CR-231	15 March - 15 June	2	4	Dade
84	McElroy Creek	its mouth (confluence with High Creek)	the Missouri-Iowa border	1 June - 31 August	2	6.6	Atchison
85	Meramec River ①	CR-Thurman Lake RD (upstream boundary of Scott's Ford Access)	MO-8	15 Nov 15 Feb.	6	8.8	Crawford, Phelps
86	Meramec River ②	its mouth (confluence with Mississippi River)	MO-19	15 March - 15 June	2,4,5,6	205.8	St. Louis, Jefferson, Franklin, Crawford, Dent
87	Meyers Branch	its mouth (confluence with Tavern Creek)	its headwaters	1 May - 31 July	2,7	2.5	Callaway
88	Mill Creek ①	MO-111	its headwaters	15 March - 15 June	2,4	9.7	Atchison
89	Mill Creek 2	its mouth (confluence with Little Piney Creek)	the confluence of Deep Hollow Creek	15 Nov 15 Feb.	5,6	9.3	Phelps
90	Mill Creek ③	its mouth (confluence with Wet Glaize Creek)	MO-7	15 March - 15 June	7	4.9	Camden
91	Mineral Fork	its mouth (confluence with Big River)	RT-F	15 March - 15 June	4,6	14.9	Washington
92	Mississippi River	the Missouri River confluence	Mel Price Lock & Dam	1 April - 15 June	2	5.6	St. Charles
93	Moniteau Creek	MO-87	its headwaters	15 March - 15 July	2	30.9	Moniteau, Cooper
94	(Niangua River)	(Lake of the Ozarks (660' AMSL)	(its source (convergence of East Fork Niangua River & West Fork Niangua River)	15 March - 15 June	1,2,7	109	Camden, Dallas, Laclede, Webster
95	North Dry Sac River	(its mouth (confluence with Little Sac River)	the east section line (19, 31N, 21W)	15 March - 15 June	2,4	9.2	Polk, Greene
96	North Fork River	Norfork Lake (554' AMSL)	the Ozark-Douglas county line	15 Nov 15 Feb.	4,5,6	23.9	Ozark
97	North Little Tavern Creek	its mouth (confluence with Tavern Creek)	the Miller-Maries county line	15 March - 15 June	2	3.3	Miller
98	Osage Fork of the Gasconade River	its mouth (confluence with Gasconade River)	RT-F	15 March - 15 June	2,6,7	68.6	Laclede, Wright, Webster
99	Osage River	its mouth (confluence with Missouri River)	Bagnell Dam	15 March - 15 June	2,4,7	85.6	Cole, Osage, Miller
100	Panther Creek	its mouth (confluence with Brush Creek)	the St. Clair-Polk county line	15 March - 15 June	2	2.5	St. Clair
101	Piney Spring Branch	its mouth (confluence with Little Piney Creek)	its source (Piney Spring)	15 Nov 15 Feb.	6	0.2	Phelps
102	Pisgah Creek	its mouth (confluence with Moniteau Creek)	RT-W	15 May - 15 July	2	8.1	Cooper
103	Pomme de Terre River ①	Pomme de Terre Reservoir (839' AMSL)	RT-D	15 March - 15 June	4	12.4	Polk
104	Pomme de Terre River (2)	E 475 th RD	the first tributary confluence upstream of CR-Arrow Head RD	15 March - 15 June	1,2,4	31.8	Polk, Dallas, Greene, Webster
105	Roubidoux Creek ①	the north section line (10, 34N, 12W)	MO-32	15 March - 15 June	2	24.4	Pulaski, Texas
106	Roubidoux Creek 2	its mouth (confluence with Gasconade River)	the upstream MDC boundary (Roubidoux Creek CA)	15 Nov 15 Feb.	6	2.2	Pulaski

107	Sac River ①	from Harry S. Truman Reservoir (706' AMSL)	the west section line (14, 36N, 26W)	1 March - 1 June	4	3.2	St. Clair
108	Sac River 2	Stockton Lake (867' AMSL)	CR-34	15 March - 15 June	4	13	Dade, Green
109	Saint Francis River ①	the Missouri-Arkansas border	Wappapello Dam	1 Feb 31 June	2,4	113	Dunklin, Butler, Stoddard, Wayne
110	Saint Francis River 2	Wappapello Lake (355' AMSL)	MO-72	1 Feb 31 May	2,4,6	63.2	Wayne, Madison
111	Saline Creek	its mouth (confluence with Osage River)	US-54	15 March - 15 June	2	13.1	Miller
112	Salt Creek	its mouth (confluence with Missouri River)	its headwaters	1 June - 31 August	2,7	5.9	Howard
113	Shoal Creek	RT-D	its headwaters	15 May - 15 July	2,4,5	74.8	Livingston, Caldwell, Clinton
114	Silver Fork	US-63	RT-V	15 March - 15 July	2,4,7	9.6	Boone
115	Smiley Creek	its mouth (confluence with Moniteau Creek)	its headwaters	15 May - 15 July	2	8.2	Cooper, Moniteau
116	South Fabius River	US-24/US-61	the Marion-Shelby county line	15 March - 15 June	4,7	42.1	Marion
117	(South Fork Pomme de) (Terre River)	its mouth (confluence with Pomme de Terre River)	CR-J RD	15 March - 15 June	2	3.7	Greene, Webster
118	South Fork Turkey Creek	its mouth (convergence with North Fork Turkey Creek & source of Turkey Creek)	RT-H	15 March - 15 July	2,7	2.7	Boone
119	South Little Tavern Creek	(its mouth (confluence with Tavern Creek)	the confluence of Atwell Creek	15 March - 15 June	2,4	1.6	Miller
120	South Prong Little Black River	its mouth (convergence with North Prong Little Black River & source of Little Black River)	MO-21	15 March - 15 June	2,4,5	5.5	Ripley
121	Spring Creek	its mouth (confluence with Big Piney River)	the confluence of Bradford Branch	15 Nov 15 Feb.	5,6	7.9	Phelps
122	Spring River ①	RT-H	US-60	15 Nov 15 Feb.	2,4	14.1	Lawrence
123	Spring River 2	the Missouri-Kansas border	MO-43	15 April - 15 July	2,4	12.3	Jasper
124	Starks Creek	its mouth (confluence with Little Niangua River)	the north section line (22, 38N, 20W)	15 March - 15 June	2	2.2	Hickory
125	Sugar Creek ①	MO-146	its headwaters	15 March - 15 July	2,4	25.7	Grundy, Harrison
126	Sugar Creek ②	its mouth (confluence with Cuivre River)	RT-B	15 March - 15 June	4,5,7	13.5	Lincoln
127	Swan Creek	Bull Shoals Lake (654' AMSL)	the upstream USACE boundary	15 March - 15 June	2	4.6	Taney
128	Tavern Creek ①	its mouth (confluence with Missouri River	its headwaters	1 May - 31 July	2,7	8.4	Callaway
129	Tavern Creek (2)	its mouth (confluence with Osage River)	Bennett RD	15 March - 15 June	1,2,4	43.8	Miller
130	Tenmile Creek	its mouth (confluence with Cane Creek)	RT-B	15 March - 15 June	6	15.4	Butler, Carter
131	Thomas Creek	its mouth (confluence with Little Niangua River)	CR-Howard Chapel RD	15 March - 15 June	2,4	8.7	(Hickory, Dallas)
132	Thompson River	the south section line (11, 66N, 26W)	the Missouri-lowa border	15 March - 15 June	2,4	6.9	Harrison
133	Tombstone Creek	its mouth (confluence with Sugar Creek)	its headwaters	15 May - 15 July	2,4	10.9	Harrison, Daviess
134	Turkey Creek	its mouth (confluence with Boone Femme Creek)	its source (convergence of North Fork Turkey Creek & South Fork Turkey Creek)	15 March - 15 July	2,5,7	7.2	Boone
135	Turnback Creek	Stockton Lake (867' AMSL)	the Old Dilday Mill Dam	15 March - 15 June	4	13.4	Dade

136	Unnamed Creek ①	its mouth (confluence with Sugar Creek)	its headwaters	15 May - 15 July	2	5	Harrison
137	Unnamed Creek 2	its mouth (confluence with Sugar Creek)	its headwaters	15 May - 15 July	2	5.9	Harrison
138	Unnamed Creek ③	its mouth (confluence with Moniteau Creek)	its headwaters	15 May - 15 July	2	3.9	Cooper
139	Unnamed Creek 4	its mouth (confluence with Bass Creek)	the south section line (33, 47N, 12W)	15 May - 15 July	2	1.8	Boone
140	Unnamed Creek (5)	its mouth (confluence with Baker Branch)	its headwaters	15 May - 15 July	2,4	0.9	St. Clair
141	Unnamed Creek 6	its mouth (confluence with Baker Branch)	its headwaters	15 May - 15 July	2,4	3.5	St. Clair
142	Unnamed Creek 7	its mouth (confluence with Baker Branch)	its headwaters	15 May - 15 July	2,4	2.7	St. Clair
143	Unnamed Creek ®	its mouth (confluence with Fleck Creek)	CR-West Central RD	15 March - 15 June	4,7	2.5	Barton
144	Weaubleau Creek	the downstream MDC boundary (Kings Prairie Access)	the St. Clair-Hickory county line	15 May - 15 July	2,4	14	St. Clair
145	West Brush Creek	its mouth (confluence with Moniteau Creek)	RT-O	15 March - 15 July	2	3.4	Cooper, Moniteau
146	West Fork Big Creek	its mouth (convergence with East Fork Big Creek & source of Big Creek)	the Missouri-Iowa border	15 March - 15 June	2,4	38.7	Harrison
147	West Fork Crooked River	its mouth (confluence with Crooked River)	its headwaters	15 May - 15 July	2,4	21.5	Ray
148	(West Fork Niangua River	(its mouth (convergence with East Fork Niangua) (River & source of Niangua River)	the south section line (33, 32N, 18W)	15 March - 15 June	2	0.3	Webster
149	West High Creek	its mouth (confluence with High Creek)	the Missouri-Iowa border	1 June - 31 August	2	6.2	Atchison
150	Wet Glaize Creek	its mouth (convergence with Dry Auglaize Creek & source of Grand Glaize Creek)	the confluence of Mill Creek	15 March - 15 June	7	6.6	Camden
151	Whetstone Creek	its mouth (confluence with Loutre River)	I-70	15 March - 15 June	2,4,5,7	17.7	Montgomery, Callaway
152	Whitewater River	its mouth (confluence with Castor River Diversion Channel)	RT-K	1 Feb 31 May	2,7	40.7	Cape Girardeau, Bollinger
153	Wilkins Spring Branch	its mouth (confluence with Mill Creek)	its source (Wilkins Spring)	15 Nov 15 Feb.	6	0.2	Phelps

Spawning Season Listing Criteria – 1/2017

- 1. Stream reaches designated by the U.S. Fish and Wildlife Service as critical habitat for aquatic species of conservation concern.
- Determination of Threatened Status & Critical Habitat for Niangua Darter http://ecos.fws.gov/docs/federal_register/fr964.pdf
- 2. Stream reaches that have not been designated as critical habitat, but which may be considered critical to the maintenance or recovery of aquatic species of conservation concern.
 - Missouri Species and Communities of Conservation Concern Checklist January 2017 http://mdc.mo.gov/145
- 3. To be determined (TBD).
- 4. Remnant examples of historic habitats, especially in areas where streams have been severely impacted by channelization, levee construction, snagging, clearing or similar activities.
- 5. Designated Outstanding National or State Resource Waters as defined by the Missouri Department of Natural Resources when these waters support significant biological resources that may be impacted by activities during periods of spawning, incubation or rearing.
 - Rules of Department of Natural Resources, Division 20-Clean Water Commission, Chapter 7-Water Quality, 10 CSR 20-7 http://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf
- 6. Agency management areas (i.e., streams with special area regulations or where stocking occurs).
 - A Summary of Missouri Fishing Regulations (effective March 1, 2016) http://huntfish.mdc.mo.gov/sites/default/files/downloads/2016_FishRegs.pdf
- 7. Stream reaches with unique fish communities or unexpected high biodiversity due to the presence of species generally considered atypical to the area and, in the opinion of biologists, are of sufficient scarcity to require protection.